

**I-15 Express Lanes Project Southern
Extension (ELPSE)**
Project Approval and Environmental Document
(EA 0J0820)
Final Traffic Operations Analysis Report



RIVERSIDE
COUNTY
TRANSPORTATION
COMMISSION



FEHR & PEERS

February 17, 2022

History for I-15 ELPSE Traffic Operations Analysis Report

This section is intended to provide a brief history on the proposed Interstate 15 (I-15) Express Lanes Project Southern Extension (ELPSE) Project's Traffic Operations Analysis Report (TOAR) in support of the Project Approval and Environmental Document (PA/ED).

Caltrans approved the I-15 ELPSE TOAR on February 22, 2021.

Subsequent to the approval of the TOAR, the Riverside County Transportation Commission (RCTC) initiated the I-15 Corridor Operations Project (COP) (EA 0J0830) as a programmed project that is located within the limits of the ELPSE. At the time the I-15 COP consisted of the addition of an auxiliary lane on I-15 in the southbound direction from the Cajalco Road Loop On-Ramp to the Weirick Road Off-Ramp. The I-15 ELPSE was expected to perpetuate the auxiliary lane and associated mainline improvements. A memorandum was submitted to Caltrans to document the proposed I-15 COP being an existing facility in 2024 and its affects to the I-15 ELPSE operations in its opening and horizon years. This memo was intended to supplement the information from the approved February 2021 I-15 ELPSE TOAR and summarized traffic operations in the focus area of I-15 COP. The I-15 ELPSE team received comments on the memorandum in April 2021.

Construction of the I-15 Express Lanes Project (ELP) (EA 0J0800) was also completed and open to traffic in April 2021, with the new express lanes along I-15 from State Route (SR) 60 to Cajalco Road. In the existing configuration, four General Purpose (GP) lanes and one Express Lane (EL) approach the SB I-15 off-ramp to Cajalco Road. GP lane #4 traps at the SB I-15 off-ramp to Cajalco Road and prior to the Cajalco Road Overcrossing GP Lane #3 drops while the southbound EL transitions into the GP lane #1. Three GP lanes continue southbound on I-15 just south of Cajalco Road. The current configuration in conjunction with heavy traffic volumes contributes to a bottleneck in this area resulting in suboptimal traffic conditions during the peak evening hours.

In response to conditions associated with the I-15 ELP terminus, RCTC initiated the I-15 Interim Corridor Operations Project (ICOP) and revised the I-15 COP project description. Descriptions for both projects are listed below. Please note that neither of these projects were considered in the approved I-15 ELPSE TOAR (February 22, 2021).

- **I-15 Interim Corridor Operations Project (ICOP) EA 1M750** –In 2022, I-15 ICOP would provide temporary operational improvement to alleviate the bottleneck and improve traffic flow along SB I-15 until the construction of permanent improvements in 2025. The proposed interim improvement includes the addition of an auxiliary lane along SB I-15 from the Cajalco Road On-Ramp (PM 35.9) to the Weirick Road Off-Ramp (PM 36.8), a distance of 0.9 miles.
- **I-15 Corridor Operations Project (COP) EA 0J0830-** In 2025, I-15 COP would remove the existing Southbound I-15 lane-drop within the I-15/Cajalco Road Interchange (PM 37.4) and extend the number four (or outside) general purpose lane to merge with the I-15 Interim Corridor Operations Project (ICOP) auxiliary lane between the SB Cajalco Road On-Ramp and the SB Weirick/Dos Lagos Drive Off-Ramp. Three general purpose lanes would continue south of the Weirick Road/Dos Lagos Drive Off-Ramp on Southbound I-15. Additionally, the proposed nonstandard lane geometry, including lane and shoulder widths under the interim project, would be reconfigured to Caltrans standards when I-15 COP is constructed.

This additional lane constructed between the southbound Cajalco Road Loop On-Ramp and the Weirick Road/Dos Lagos Drive Off-Ramp affects the weaving requirements of I-15 ELPSE in this area and ensure 800 feet of weaving space per lane in the southbound direction with the ultimate auxiliary lane between the Cajalco Road Loop On-Ramp and the Weirick Road/Dos Lagos Drive Off-Ramp while maintaining access/egress to the express lanes in this area. To confirm that the Traffic Operations Policy Directive (TOPD) design requirements related to spacing needed to negotiate weaving maneuvers on the freeway system were met, the Project team discussed five design variations for

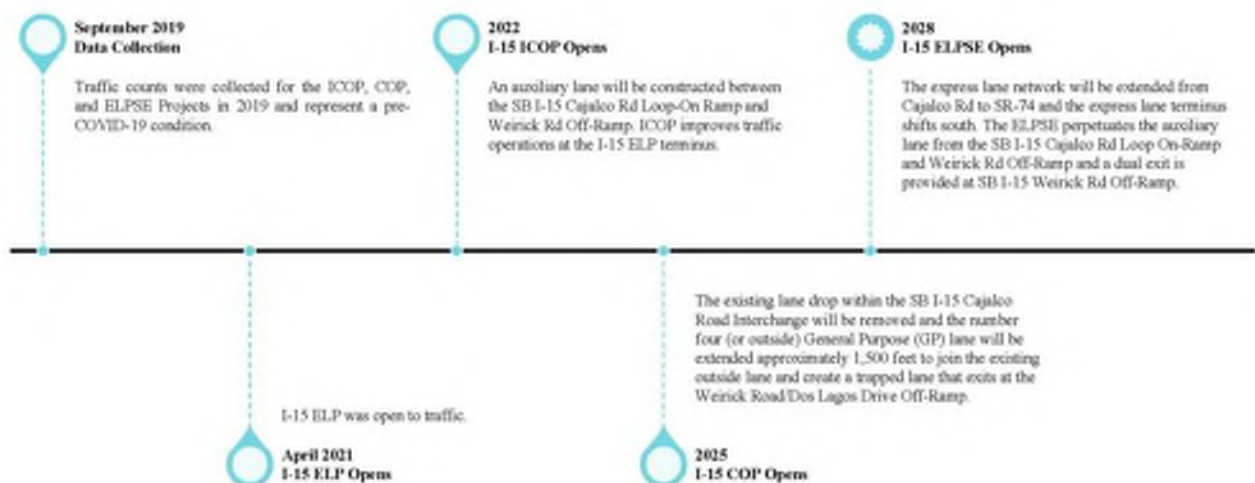
the southbound express lane access between Cajalco Road On-Ramp and Weirick Road Off-Ramp. A summary of benefits as it relates to each variation was prepared and the project team concurred on a design variation to incorporate into the Build Alternative.

These modifications in totality are enough such that an updated TOAR document is needed to document what is expected in the No-Build Alternatives and provide a more complete comparison of the benefits associated with the ELPSE project. As such, both the I-15 ELPSE No-Build and the Build Alternative scenarios needed reassessment to reflect the following:

- No-Build Alternative
 - Include improvements associated with I-15 ICOP by 2022
 - Include improvements associated with I-15 COP by 2025
 - Include the final construction of the I-15 ELP southbound terminus to reflect what was delivered (please note, the final delivery of ELP modified lane drops in the study area that were not reflected in the February 22, 2021 TOAR)
- Build Alternative
 - Include improvements associated with I-15 ICOP by 2022
 - Include improvements associated with I-15 COP by 2025
 - Modification to the Build Alternative: A dual lane exit would be provided at the SB Weirick Road Off-Ramp. I-15 ELPSE would revert the trap lane associated with the I-15 COP project back to an auxiliary lane because the express lane terminus no longer terminates in its own lane. The 2,000 Cajalco Road/Weirick Road express lane weave access was shifted to start 1,200' after the gore point of the Cajalco Road Loop On-Ramp. This would provide 3,200 feet for vehicles weaving to the express lanes from the Cajalco Road On-Ramp and 1,460 feet for vehicles weaving from the express lanes to the Weirick Road Off-Ramp (the weaving distance from the off-ramp would be 1,601 feet if measured to the gore point of the off-ramp to the end of the express lane opening).

Due to the magnitude of updates to the No-Build and Build Alternatives, the project team decided that the changes should be reflected in the I-15 ELPSE TOAR, not as a separate memorandum as was initially discussed with Caltrans. This would ensure that the approved I-15 ELPSE TOAR would be a complete standalone document containing the most accurate known information available moving forward. The timeline graphic below outlines key events and projects for I-15.

I-15 Timeline



The following table summarizes deliverables leading up to the Final Traffic Operations Analysis Report (TOAR) for I-15 Express Lanes Southern Extension (ELPSE) Project.

Deliverables Reference and Tracking:

Deliverable	Revisions	Date
Previous Caltrans – Approved Submittals		
Final Methodologies and Assumptions Report	-	September 25, 2019
Methodologies and Assumptions Report – Approved by Caltrans	-	October 29, 2019
Final Volumes Report	-	March 18, 2020
Volumes Report – Approved by Caltrans	-	April 30, 2020
Traffic Operations Analysis Report (TOAR) – Approved by Caltrans	-	February 22, 2021
Traffic Operations Analysis Report (TOAR) Submittals		
Draft TOAR	-	August 19, 2020
Draft TOAR	Responding to Caltrans comments on August TOAR	October 14, 2020
Draft TOAR	Adding additional access variations tested in Chapter 4	December 10, 2020
Draft TOAR	Revisions to the northbound Dos Lagos/Weirick Road & Cajalco Road express lane access design	January 7, 2021
Final TOAR- Approved by Caltrans February 22, 2021	Revision to the lane widths at the northbound Dos Lagos/Weirick Road & Cajalco Road express lane access	February 10, 2021
TOAR Update to incorporate I-15 Corridor Operations Project (COP) Programming (EA 0J0830) Memorandum	Revision to include I-15 COP in the ELPSE No-Build Alternative. Revisions to the Build Alternative southbound I-15 Cajalco Road/Weirick Road express lane weave zone access to meet TOPD design requirements related to spacing needed to negotiate weaving maneuvers on the freeway.	March 15, 2021
Comments for the TOAR Update Memorandum were received.	Both the No-Build and the Build Alternative scenarios required updates. The project team decided that the changes should be reflected in the TOAR (not a separate memorandum). This would ensure that the approved I-15 ELPSE TOAR would be a complete standalone document containing the Build Alternative moving forward.	April 14, 2021

Deliverables Reference and Tracking:

Deliverable	Revisions	Date
Draft TOAR	Southbound I-15 Interim Corridor Operations Project (ICOP) auxiliary lane and I-15 Corridor Operations Project (COP) trap lane between the Cajalco Road Loop On-Ramp and Weirick Road Off-Ramp in Opening Year and Design Year No-Build scenarios	November 12, 2021
	Dual Lane exit at the Weirick Road Off-Ramp under the Build scenarios	
	Update geometrics of southbound express lane access between Cajalco Road and Weirick Road to meet design requirements.	
Comments on the TOAR were received	Request for clarification on why the No-Build and Build Alternatives are being updated.	December 10, 2021
Draft TOAR	Added History for I-15 ELPSE Traffic Operations Analysis Report	January 18, 2022

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Executive Summary

This Executive Summary is intended to provide a brief introduction of the proposed Interstate 15 (I-15) Express Lanes Project Southern Extension (ELPSE) and a summary of general findings of the Traffic Operations Analysis Report (TOAR) in support of the Project Approval and Environmental Document (PA/ED)

Introduction

The Riverside County Transportation Commission (RCTC), in cooperation with the California Department of Transportation (Caltrans), is proposing to construct new lanes along Interstate 15 (I-15) between Post Mile (PM) 21.2 and PM 38.1 in Riverside County, California. The primary component of the I-15 Express Lanes Project Southern Extension (Project) would be the addition of two tolled express lanes in both the northbound and southbound directions within the median of I-15 from State Route 74 (SR-74) (Central Avenue) (PM 22.3) in the City of Lake Elsinore, through the unincorporated Riverside County community of Temescal Valley, to El Cerrito Road (PM 38.1) in the City of Corona, for a distance of approximately 15.8 miles. The proposed Project would also add a southbound auxiliary lane between both the Main Street (PM 21.2) Off-Ramp and SR-74 (Central Avenue) On-Ramp (approximately 0.75 mile), and the SR-74 (Central Avenue) Off-Ramp and Nichols Road On-Ramp (PM 23.9) (approximately 1 mile). Along with the lane additions, which would extend from PM 21.2 to 38.1, the proposed Project would include widening of 14 bridges, potential construction of noise barriers, retaining walls, drainage systems, and implementation of electronic toll collection equipment and signs. In addition, to accommodate the Express Lane access opening and weave distance requirements, the southbound I-15 Weirick Road Off-Ramp would be configured as a dual lane exit. Associated improvements for the toll lanes, including advance signage and transition striping, would extend approximately 2 miles from each end of the express lane limits to PM 20.3 in the south and PM 40.1 in the north. The proposed lane additions and supporting infrastructure are expected to be constructed primarily within the existing State right of way. This Project is included in the 2019 Federal Transportation Improvement Program (FTIP) as Project ID RIV170901. It is also included in the Southern California Association of Governments' (SCAG) Connect SoCal 2020–2045 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) as Project ID 3160001.

The FTIP and RTP listings for this Project were amended in April 2021 to accurately reflect the scope and limits of the Project as currently proposed. The amended FTIP and RTP listings will state the following:

IN WESTERN RIVERSIDE COUNTY - ON I-15, ADD 2 EXPRESS LANES IN EACH DIRECTION, GENERALLY IN THE MEDIAN, FROM SR-74 (CENTRAL AVENUE) (PM 22.3) IN THE CITY OF LAKE ELSINORE TO EL CERRITO ROAD (PM 38.1) IN THE CITY OF CORONA. CONSTRUCT SOUTHBOUND AUXILIARY LANE FROM MAIN STREET (PM 21.2) TO SR-74 (CENTRAL AVENUE) (PM 22.3) AND FROM SR-74 (CENTRAL AVENUE) (PM 22.3) TO NICHOLS ROAD (PM 23.9). SIGNAGE AND TRANSITION STRIPING EXTENDS TO PM 20.3 TO THE SOUTH AND PM 40.1 TO THE NORTH.

On southbound I-15 two projects would precede the I-15 ELPSE. These improvements would be constructed before the I-15 ELPSE opening year, 2028 and are considered exiting features in the opening year and design year analysis scenarios.

- **I-15 Interim Corridor Operations Project (ICOP) EA 1M750** –In 2022, I-15 ICOP would provide temporary operational improvement to alleviate the bottleneck and improve traffic flow along SB I-15 until the construction of permanent improvements in 2025. The proposed interim improvement includes the addition of an auxiliary lane along SB I-15 from the Cajalco Road On-Ramp (PM 36.75) to the Weirick Road Off-Ramp (PM 35.91), a distance of 0.84 miles.
- **I-15 Corridor Operations Project (COP) EA 0J0830**- In 2025, I-15 COP would remove the existing Southbound I-15 lane-drop within the I-15/Cajalco Road Interchange (PM 37.4) and extend the number four

(or outside) general purpose lane to merge with the I-15 Interim Corridor Operations Project (ICOP) auxiliary lane between the SB Cajalco Road On-Ramp and the SB Weirick/Dos Lagos Drive Off-Ramp. Three general purpose lanes would continue south of the Weirick Road/Dos Lagos Drive Off-Ramp on Southbound I-15

Purpose & Need

The project purpose is a set of objectives ELPSE intends to meet. The project need is the transportation deficiency that ELPSE was initiated to address.

Project Purpose

The purpose of the proposed project is to:

- Improve and manage traffic operations, congestion, and travel times along the corridor
- Expand travel mode choice along the corridor
- Provide an option for travel time reliability
- Provide a cost-effective mobility solution
- Expand and maintain compatibility with the express lane network in the region

Project Need

Existing traffic volumes often exceed current highway capacity along several segments of I-15 between SR-74 (Central Avenue) and El Cerrito Road. Due to forecasted population growth and the continued development to support the projected growth in the region, the I-15 corridor is expected to continue to experience increased congestion and longer commute times that are projected to negatively affect traffic operations along the freeway mainline.

The adopted SCAG 2016 RTP Growth Forecast estimates a 36.7-percent increase in population in Riverside County between 2015 and 2040. SCAG's recently adopted Connect SoCal (2020–2045 RTP/SCS) Growth Forecast estimates a 38.3-percent increase in population in Riverside County between 2020 and 2045, with the number of households and employment increasing by approximately 30.5 percent and 34.02 percent, respectively. In the City of Corona, the 2020–2045 RTP/SCS Growth Forecast estimates an 11.6-percent increase in population from 2016 to 2045 and an 11.7-percent increase in households. The 2020–2045 RTP/SCS also found of the top three counties where Los Angeles residents migrate, Riverside County places third. In 2017, the number of Los Angeles migrants to Riverside County was approximately 11,000. Additionally, based on the 2016–2040 RTP/SCS Final Growth Forecast by Jurisdiction, the City of Corona is estimated to experience a 3.7-percent increase in population between 2020 and 2045. According to the same source, the City of Lake Elsinore is projected to see a 76.8-percent increase in population. This projected growth is expected to place a high demand on existing transportation facilities and services.

Existing regional transit in Riverside County includes the Riverside Transit Agency (RTA) and Metrolink, which connects to various local transit services offered by municipalities (i.e., Corona Cruisers). RTA operates a weekday commuter bus service (Route 205/206) along I-15 and State Route 91 (SR-91) for passengers traveling between the City of Temecula in Riverside County and the City of Orange in Orange County. Within the proposed Project limits, this route offers stops at Dos Lagos, Temescal Canyon Road (Tom's Farms), and Nichols Road. Metrolink and Amtrak also operate within the northwestern portion of Riverside County but do not currently offer rail transit options that would serve the populations traveling through Temescal Valley between Corona and Lake Elsinore. Overall, regional transit options are limited for travelers south of Corona's city limits.

The Express Lanes Network in both Riverside and San Bernardino Counties has been growing rapidly in response to the increased inter-county travel demand. Development of an extensive regional express lanes network is a key strategy in the 2020–2045 RTP/SCS that aims to improve travel time reliability, provide travel choices, and ensure

existing freeway capacity is optimized within the SCAG region. In 2017, RCTC completed construction of the SR-91 Express Lanes in the City of Corona—the first Express Lanes constructed in Riverside County. RCTC’s I-15 Express Lanes Project (ELP), which extends the SR-91 Express Lanes Network north and south of SR-91 along I-15 through the Cities of Jurupa Valley, Eastvale, Norco, and Corona, opened to traffic in 2021. North of the I-15 ELP, in 2021 San Bernardino County Transportation Authority will break ground on the I-15 Corridor Project, which will construct Express Lanes in both directions along I-15 between Cantu-Galleano Ranch Road in the City of Jurupa Valley and Duncan Canyon Road in the City of Fontana. In addition to providing continuity of Express Lanes north of the I-15 ELP, the I-15 Corridor Project will connect to the I-10 Corridor Project (Phase 1), which is currently under construction and will add Express Lanes in each direction on I-10 between the Cities of Montclair and Upland. Once these projects are completed in 2021, the southern terminus of the Express Lanes Network in the Inland Empire will terminate at Cajalco Road on I-15.

As federal, state, and local funding becomes constrained and additional projects are developed to maintain the condition of existing roadways, it has become increasingly challenging for transportation agencies to develop, construct, operate, and maintain new projects that improve mobility in heavily congested corridors. Based on this situation, alternative funding streams like federal loans and revenue bonds can be utilized to fill the funding gaps. In some cases, if financial obligations are met on Express Lane projects, excess toll revenue can provide additional funding to invest in other improvements within the corridor.

Currently, north-south mobility options for motorists are limited through this portion of Riverside County. Besides local streets, the only parallel route for motorists is Interstate 215, which is over 10 miles east of I-15 and generally serves a different region within Riverside County. Under Existing Conditions (2019) during the AM peak hour, northbound I-15 experiences heavy congestion at the Cajalco Road interchange due to commuter traffic along the corridor. This heavy congestion during the AM peak hour results in a bottleneck at the Cajalco Road on-ramp that extends to the Indian Truck Trail off-ramp. Through the project limits, during the PM peak hour, the southbound direction experiences heavy congestion due to commuter traffic. The southbound I-15 bottleneck at the Cajalco Road on-ramp extends to the Magnolia Avenue on-ramp during the PM peak hour.

Study Area

The traffic study area covers approximately 22 miles on I-15, generally between the Franklin Street Overcrossing (to the south) and Hidden Valley Interchange (to the north). The ELPSE construction limits are on I-15 between SR-74 (Central Avenue RIV-15 PM 22.3) and El Cerrito Road (PM 38.1); however, the study area captures several miles upstream and downstream of the ELPSE limits to include the effects of upstream and downstream bottlenecks, as well as interactions with the current State Route 91 (SR-91) interchange connectors and the SR-91 Express Lane direct connectors.

The study locations consist of roadway segments, I-15 mainline segments and ramp junctions in the study area. The study locations were approved by the Project Development Team (PDT) including RCTC and Caltrans in October 29, 2019 as part of the *Interstate 15 Express Lanes Project Southern Extension PA/ED: Traffic Analysis and Travel Demand Forecasting Assumptions, Methodology and Approach EA:0J0820/ID 08-18000063 (September 2019)* which has been attached to this document in **Appendix A**.

Freeway Segments

Freeway general purpose lanes on I-15 between Franklin Street Overcrossing and Hidden Valley Parkway Interchange, including the freeway-to-freeway connectors at SR-91.

Freeway Ramps

The on- and off- ramps (including the freeway-to-freeway connectors) at 13 study interchanges.

Analysis Evaluation Criteria

The analysis evaluation criteria described below were used to determine acceptable traffic operating conditions and are based on the level of service (LOS) policies identified by Caltrans.

The Caltrans' *Guide for the Preparation of Traffic Impact Studies* (December 2002) states "Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" (see Appendix "C-3") on State highway facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS". For this study LOS D will be used as the threshold for freeway facilities analysis.

Project Alternatives

Two project alternatives are under evaluation in the PA/ED phase, including one No-Build Alternative (Alternative 1), and one Build Alternative (Alternative 2).

Alternative 1: No-Build Alternative

The No-Build Alternative assumes no improvements to I-15 beyond those listed in the 2016 SCAG RTP/SCS.

Existing Conditions: The existing lane configurations for the I-15 study area (generally three lanes in the NB and SB direction).

Opening Year (2030): The study area assumes SCAG RTP/SCS improvements that have a 2030 Opening Year.

Design Year (2050): The study area assumes SCAG RTP/SCS improvements that have a 2050 Opening Year.

Alternative 2: Build Alternative – Express Lanes

Alternative 2 would extend the I-15 ELP (I-15 Express Lanes Project from SR-60 to Cajalco Road) an additional 14.5 miles. The proposed new segment would extend roughly from State Route 74 (Central Avenue) in Lake Elsinore, through the unincorporated Riverside County community of Temescal Valley, to the El Cerrito interchange Corona. The proposed ELPSE includes additional attributes to the system, including SB auxiliary lanes from Nichols Road (PM 23.9) to SR-74 (Central Avenue) and from SR-74 (Central Avenue) to Main Street (PM 21.2 in Lake Elsinore) in addition to access locations, egress locations, and weave zones between the express lanes and general purpose lanes. The project also proposes a dual lane off-ramp in the southbound direction at Weirick Road/Dos Lagos Drive and would perpetuate an auxiliary lane between from Cajalco Road (PM 36.75) to Weirick Road/Dos Lagos Drive (PM 35.91). The ELPSE proposes to increase capacity by adding two tolled express lanes in both directions within the I-15 median to accommodate increasing traffic volumes in western Riverside County. Associated improvements, including advance signage and transition striping (extending two miles from each end of the express lane ELPSE limits) from PM 20.3 to the south and PM 40.1 to the north. The proposed lane improvements and supporting infrastructure would be constructed within the existing Caltrans right-of-way, with the express lane improvements occurring within the existing I-15 median.

Although ELPSE would have an anticipated opening year of 2028, an opening year of 2030 was used so that the study periods of the ELPSE are in five-year increments to be consistent with travel demand model forecasting year increments as directed by Caltrans staff. Once built, the ELPSE would improve traffic operations and travel times, enhance mobility by expanding travel choice through carpooling and mass transit, increase travel time reliability, manage long-term traffic congestion, provide a cost-effective mobility solution, and expand and maintain compatibility with the regional express lanes network.

Other ELPSE features include widening up to 15 bridges, creating multiple express lane entrance and exit points, as well as building noise barriers, retaining walls, drainage systems, and overhead gantries for electronic toll collection and monitoring equipment and signs.

Study Scenarios

The ELPSE alternatives were analyzed under both Opening Year 2030 and Design Year 2050 conditions. The study scenarios for traffic operations analysis include the following:

- Existing (2019) Conditions
- Opening Year (2030) No-Build Alternative
- Opening Year (2030) Build Alternatives
- Design Year (2050) No-Build Alternative
- Design Year (2050) Build Alternatives

Operational Analysis Findings

Existing Conditions

Under Existing (2019) Conditions, the AM peak direction is NB, which experiences significant congestion (LOS F) due to heavy commute traffic and existing construction activities in the corridor at the Cajalco Road interchange and for the I-15 ELP. The NB I-15 bottleneck at the Cajalco Road On-Ramp merge segment is active between 5:15 to 11:45 AM and extends to the Indian Truck Trail Off-Ramp during the peak hour.

The PM peak direction is SB, which also experiences significant congestion (LOS F) due to heavy commute traffic. The SB I-15 bottleneck at the Cajalco Road On-Ramp merge segment is active between 3:15 to 6:15 PM and extends to the Magnolia Avenue On-Ramp during the peak hour. The SB I-15 bottleneck at the El Cerrito Road Off-Ramp lane drop segment (after four general purpose lanes drops to three general purpose lanes at the El Cerrito Road Off-Ramp) is active during the shoulder hours between 2:15 to 3:15 PM and from 6:15 to 7:45 PM.

Opening Year (2030)

The No-Build Alternative has congestion on SB I-15 due to a bottleneck at the Cajalco Road On-Ramp during the PM peak hour and on NB I-15 due to a bottleneck at the WB (WB) Magnolia Avenue On-Ramp during the AM peak hour, where the weave between the Magnolia Avenue On-Ramp and SR-91 Off-Ramp breaks down but is outside the ELPSE limits.

In the Opening Year (2030), the Build Alternative would improve traffic operation service levels where the number of freeway mainline and ramp locations during the AM and PM peak hour operating at LOS E or worse would be reduced by 8% compared to the No-Build Alternative. The Build Alternative would serve approximately 2,089 more vehicles during the peak period, particularly those making longer trips, and reduce overall vehicle delay within the study limits by 4.4%.

The Build Alternative would resolve the localized 4.8 mile Cajalco Road On-Ramp bottleneck during the PM peak hour; it would reduce the queue length on NB I-15 upstream of the WB Magnolia Avenue On-Ramp bottleneck by approximately 0.5 miles during the AM peak hour.

Design Year (2050)

The No-Build Alternative has congestion on SB I-15 due to a bottleneck at the Magnolia Avenue On-Ramp during the PM peak hour. NB I-15 congestion occurs due to a bottleneck at the Weirick Road/Dos Lagos Drive On-Ramp during the AM peak hour and a second bottleneck occurs at WB Magnolia Avenue On-Ramp during the PM peak hour where the weave between the Magnolia Avenue On-Ramp and SR-91 ramps breaks down.

In the Design Year (2050), the Build Alternative would degrade traffic operation service levels at 14% of the freeway mainline and ramp locations during the AM and PM peak hour compared to the No-Build Alternative. The number of freeway mainline segments operating unacceptably increases primarily because the ELPSE shifts the bottlenecks downstream by providing additional throughput capacity (serves 3,646 more vehicles during the peak hour). With the increased capacity on the freeway system associated with the express lanes, more demand occurs and is served. The Build Alternative would serve longer trip lengths on the freeway because vehicles prefer to stay on I-15 rather than exit and divert to cut through or parallel local facilities. On average, trip lengths increase by 1.6 miles between the No-Build and Build Alternatives. The delay within the study area would reduce by 5.7% when accounting for local roadways.

The Build Alternative would further improve traffic operations between Cajalco Road and Weirick Road/Dos Lagos Drive Off-Ramp and resolve the bottleneck at the Magnolia Avenue On-Ramp during the PM peak hour and removes the NB I-15 bottleneck at Weirick Road/Dos Lagos Drive during the AM peak hour. The Build Alternative also serves vehicles making longer trips, some of which would otherwise use local streets to bypass the freeway, by increasing freeway capacity.

1. Introduction

The Riverside County Transportation Commission (RCTC), in cooperation with the California Department of Transportation (Caltrans), is proposing to construct new lanes along Interstate 15 (I-15) between Post Mile (PM) 21.2 and PM 38.1 in Riverside County, California. The primary component of the I-15 Express Lanes Project Southern Extension (Project) would be the addition of two tolled express lanes in both the northbound and southbound directions within the median of I-15 from State Route 74 (SR-74) (Central Avenue) (PM 22.3) in the City of Lake Elsinore, through the unincorporated Riverside County community of Temescal Valley, to El Cerrito Road (PM 38.1) in the City of Corona, for a distance of approximately 15.8 miles. The proposed Project would also add a southbound auxiliary lane between both the Main Street (PM 21.2) Off-Ramp and SR-74 (Central Avenue) On-Ramp (approximately 0.75 mile), and the SR-74 (Central Avenue) Off-Ramp and Nichols Road On-Ramp (PM 23.9) (approximately 1 mile). Along with the lane additions, which would extend from PM 21.2 to 38.1, the proposed Project would include widening of 14 bridges, potential construction of noise barriers, retaining walls, drainage systems, and implementation of electronic toll collection equipment and signs. In addition, to accommodate the Express Lane access opening and weave distance requirements, the southbound I-15 Weirick Road Off-Ramp would be configured as a dual lane exit. Associated improvements for the toll lanes, including advance signage and transition striping, would extend approximately 2 miles from each end of the express lane limits to PM 20.3 in the south and PM 40.1 in the north. The proposed lane additions and supporting infrastructure are expected to be constructed primarily within the existing State right of way. This Project is included in the 2019 Federal Transportation Improvement Program (FTIP) as Project ID RIV170901. It is also included in the Southern California Association of Governments' (SCAG) Connect SoCal 2020–2045 Regional Transportation Plan (RTP)/Sustainable Communities Strategy (SCS) as Project ID 3160001.

The FTIP and RTP listings for this Project were amended in April 2021 to accurately reflect the scope and limits of the Project as currently proposed. The amended FTIP and RTP listings will state the following:

IN WESTERN RIVERSIDE COUNTY - ON I-15, ADD 2 EXPRESS LANES IN EACH DIRECTION, GENERALLY IN THE MEDIAN, FROM SR-74 (CENTRAL AVENUE) (PM 22.3) IN THE CITY OF LAKE ELSINORE TO EL CERRITO ROAD (PM 38.1) IN THE CITY OF CORONA. CONSTRUCT SOUTHBOUND AUXILIARY LANE FROM MAIN STREET (PM 21.2) TO SR-74 (CENTRAL AVENUE) (PM 22.3) AND FROM SR-74 (CENTRAL AVENUE) (PM 22.3) TO NICHOLS ROAD (PM 23.9). SIGNAGE AND TRANSITION STRIPING EXTENDS TO PM 20.3 TO THE SOUTH AND PM 40.1 TO THE NORTH.

On southbound I-15 two projects would precede the I-15 ELPSE. These improvements would be constructed before the I-15 ELPSE opening year, 2028 and are considered exiting features in the opening year and design year analysis scenarios. The geometric exhibits for these major projects are included in **Appendix F**.

- **I-15 Interim Corridor Operations Project (ICOP) EA 1M750** –In 2022, I-15 ICOP would provide temporary operational improvement to alleviate the bottleneck and improve traffic flow along SB I-15 until the construction of permanent improvements in 2025. The proposed interim improvement includes the addition of an auxiliary lane along SB I-15 from the Cajalco Road On-Ramp (PM 36.75) to the Weirick Road Off-Ramp (PM 35.91), a distance of 0.84 miles.
- **I-15 Corridor Operations Project (COP) EA 0J0830**- In 2025, I-15 COP would remove the existing Southbound I-15 lane-drop within the I-15/Cajalco Road Interchange (PM 37.4) and extend the number four (or outside) general purpose lane to merge with the I-15 Interim Corridor Operations Project (ICOP) auxiliary lane between the SB Cajalco Road On-Ramp and the SB Weirick/Dos Lagos Drive Off-Ramp. Three general purpose lanes would continue south of the Weirick Road/Dos Lagos Drive Off-Ramp on Southbound I-15

Purpose & Need

The project purpose is a set of objectives ELPSE intends to meet. The project need is the transportation deficiency that ELPSE was initiated to address.

Project Purpose

The purpose of the proposed project is to:

- Improve and manage traffic operations, congestion, and travel times along the corridor
- Expand travel mode choice along the corridor
- Provide an option for travel time reliability
- Provide a cost-effective mobility solution
- Expand and maintain compatibility with the express lane network in the region

Project Need

Existing traffic volumes often exceed current highway capacity along several segments of I-15 between SR-74 (Central Avenue) and El Cerrito Road. Due to forecasted population growth and the continued development to support the projected growth in the region, the I-15 corridor is expected to continue to experience increased congestion and longer commute times that are projected to negatively affect traffic operations along the freeway mainline.

The adopted SCAG 2016 RTP Growth Forecast estimates a 36.7-percent increase in population in Riverside County between 2015 and 2040. SCAG's recently adopted Connect SoCal (2020–2045 RTP/SCS) Growth Forecast estimates a 38.3-percent increase in population in Riverside County between 2020 and 2045, with the number of households and employment increasing by approximately 30.5 percent and 34.02 percent, respectively. In the City of Corona, the 2020–2045 RTP/SCS Growth Forecast estimates an 11.6-percent increase in population from 2016 to 2045 and an 11.7-percent increase in households. The 2020–2045 RTP/SCS also found of the top three counties where Los Angeles residents migrate, Riverside County places third. In 2017, the number of Los Angeles migrants to Riverside County was approximately 11,000. Additionally, based on the 2016–2040 RTP/SCS Final Growth Forecast by Jurisdiction, the City of Corona is estimated to experience a 3.7-percent increase in population between 2020 and 2045. According to the same source, the City of Lake Elsinore is projected to see a 76.8-percent increase in population. This projected growth is expected to place a high demand on existing transportation facilities and services.

Existing regional transit in Riverside County includes the Riverside Transit Agency (RTA) and Metrolink, which connects to various local transit services offered by municipalities (i.e., Corona Cruisers). RTA operates a weekday commuter bus service (Route 205/206) along I-15 and State Route 91 (SR-91) for passengers traveling between the City of Temecula in Riverside County and the City of Orange in Orange County. Within the proposed Project limits, this route offers stops at Dos Lagos, Temescal Canyon Road (Tom's Farms), and Nichols Road. Metrolink and Amtrak also operate within the northwestern portion of Riverside County but do not currently offer rail transit options that would serve the populations traveling through Temescal Valley between Corona and Lake Elsinore. Overall, regional transit options are limited for travelers south of Corona's city limits.

The Express Lanes Network in both Riverside and San Bernardino Counties has been growing rapidly in response to the increased inter-county travel demand. Development of an extensive regional express lanes network is a key strategy in the 2020–2045 RTP/SCS that aims to improve travel time reliability, provide travel choices, and ensure existing freeway capacity is optimized within the SCAG region. In 2017, RCTC completed construction of the SR-91 Express Lanes in the City of Corona—the first Express Lanes constructed in Riverside County. RCTC's I-15 Express

Lanes Project (ELP), which extends the SR-91 Express Lanes Network north and south of SR-91 along I-15 through the Cities of Jurupa Valley, Eastvale, Norco, and Corona, opened to traffic in 2021. North of the I-15 ELP, in 2021 San Bernardino County Transportation Authority will break ground on the I-15 Corridor Project, which will construct Express Lanes in both directions along I-15 between Cantu-Galleano Ranch Road in the City of Jurupa Valley and Duncan Canyon Road in the City of Fontana. In addition to providing continuity of Express Lanes north of the I-15 ELP, the I-15 Corridor Project will connect to the I-10 Corridor Project (Phase 1), which is currently under construction and will add Express Lanes in each direction on I-10 between the Cities of Montclair and Upland. Once these projects are completed in 2021, the southern terminus of the Express Lanes Network in the Inland Empire will terminate at Cajalco Road on I-15.

As federal, state, and local funding becomes constrained and additional projects are developed to maintain the condition of existing roadways, it has become increasingly challenging for transportation agencies to develop, construct, operate, and maintain new projects that improve mobility in heavily congested corridors. Based on this situation, alternative funding streams like federal loans and revenue bonds can be utilized to fill the funding gaps. In some cases, if financial obligations are met on Express Lane projects, excess toll revenue can provide additional funding to invest in other improvements within the corridor.

Currently, north-south mobility options for motorists are limited through this portion of Riverside County. Besides local streets, the only parallel route for motorists is Interstate 215, which is over 10 miles east of I-15 and generally serves a different region within Riverside County. Under Existing Conditions (2019) during the AM peak hour, northbound I-15 experiences heavy congestion at the Cajalco Road interchange due to commuter traffic along the corridor. This heavy congestion during the AM peak hour results in a bottleneck at the Cajalco Road on-ramp that extends to the Indian Truck Trail off-ramp. Through the project limits, during the PM peak hour, the southbound direction experiences heavy congestion due to commuter traffic. The southbound I-15 bottleneck at the Cajalco Road on-ramp extends to the Magnolia Avenue on-ramp during the PM peak hour.

Study Area

The traffic study area is approximately 22 miles on I-15, generally between the Franklin Street Overcrossing (to the south) and Hidden Valley Interchange (to the north). The ELPSE construction limits are on I-15 between Main Street (Lake Elsinore, RIV-15 PM 21.2) and El Cerrito Road (PM 38.1); however, the study area captures several miles upstream and downstream of the ELPSE limits to include the effects of upstream and downstream bottlenecks, as well as interactions with the current State Route 91 (SR-91) interchange connectors and the SR-91 Express Lane direct connectors. **Figure 1** shows both the study area and construction limits of the ELPSE.

The study locations consist of roadway segments, I-15 mainline segments and ramp junctions in the study area. The study locations were approved by the PDT including RCTC and Caltrans in October 29, 2019 as part of the *Interstate 15 Express Lanes Project Southern Extension PA/ED: Traffic Analysis and Travel Demand Forecasting Assumptions, Methodology and Approach EA:0J0820/ID 08-18000063 (September 2019)*, which has been attached to this document in **Appendix A**.

Freeway Segments

Freeway general purpose lanes on I-15 between Franklin Street Overcrossing and Hidden Valley Parkway Interchange, including the freeway-to-freeway connectors at SR-91.

Freeway Ramps

The on- and off- ramps (including the freeway-to-freeway connectors) at 13 study interchanges.



- Study Area
- Interchange



Figure 1

I-15 Express Lanes Project Limits

Study Scenarios

The following analysis scenarios are included as part of this assessment:

- Existing (2019) Conditions
- Opening Year (2030) No-Build Alternative
- Opening Year (2030) Build Alternative
- Design Year (2050) No-Build Alternative
- Design Year (2050) Build Alternative

Although the ELPSE would have an anticipated opening year of 2027, an opening year of 2030 was used so that the study periods of the ELPSE are in 5-year increments to be consistent with travel demand model forecasting year increments and to respond to Caltrans requests. Additional discussion and detail on opening year study periods is provided in the Forecasting Procedure section in Chapter 3 of the *Interstate 15 Express Lanes Project Southern Extension PA/ED: Traffic Volumes Report EA:0J0820/ID 08-18000063 (March 2020) (Appendix B)*¹.

The PDT has considered several improvement options along the I-15 corridor and concurred to carry one Build Alternative forward for this PA/ED. This concurrence was approved on October 29, 2019 and documented in the *Interstate 15 Express Lanes Project Southern Extension PA/ED: Traffic Analysis and Travel Demand Forecasting Assumptions, Methodology, and Approach EA:0J0820/ID 08-18000063 (September 2019)*. The ELPSE description of the Build Alternative is presented in Chapter 4 and its performance is detailed in Chapter 5 and 6.

Report Outline

The remainder of this report contains the following chapters.

- Chapter 2 – Traffic Analysis Methodology
- Chapter 3 – Existing (2019) Conditions
- Chapter 4 – Project Alternatives
- Chapter 5 – Opening Year (2030) Conditions
- Chapter 6 – Design Year (2050) Conditions
- Chapter 7 – Conclusions

Following this introduction, Chapter 2 summarizes the traffic operations analysis and travel demand forecasting methodologies applied for this traffic report. Chapter 3 describes traffic operational characteristics of the current performance of the facility. Chapter 4 outlines each of the ELPSE alternatives and their proposed improvements.

¹ Traffic volumes in the TOAR supersede the traffic volumes presented in the Traffic Volumes Report and should be used for all technical analysis forward. TOAR traffic volumes include updated modes split assumptions on the I-15 mainline to more accurately reflect Existing mode splits. Express lane user projections in Opening Year and Design Year of the TOAR were further refined based on designed locations of express lane access points, and initial operation results of the freeway (ie if the general-purpose lanes were uncongested, express lane contribution was adjusted to shift more drivers to the general-purpose lanes to reflect realistic driver behavior). TOAR traffic volumes also consider the re-routing of traffic due to the inclusion of Community and Environmental Transportation Acceptability Process West (CETAP West) Corridor in the Design Year and additional RTP projects (such as a new interchange at Horsethief Canyon) that were not contemplated in the Volumes Report.

Chapters 5 and 6 present the Opening Year (2030) and Design Year (2050) traffic analysis results for each of the ELPSE alternatives. Chapter 7 concludes with the comparison results of the ELPSE alternatives.

2. Traffic Analysis Methodology

This chapter describes the methodologies used to develop traffic demand forecasts and analyze traffic operations as well as the evaluation criteria used to determine acceptable traffic operations conditions. The analysis methodologies were also presented in the *Interstate 15 Express Lanes Project Southern Extension PA/ED: Traffic Analysis and Travel Demand Forecasting Assumptions, Methodology, and Approach (EA:0J0820/ID 08-18000063)* and approved by the Project Development Team (PDT) in September 2019.

Traffic Forecasting Methodology

The Riverside County Transportation Analysis Model (RIVTAM) was used to develop traffic forecasts for this project. RIVTAM includes detailed roadway and land use information for local conditions of the study area and has been calibrated for use in Riverside County.

RIVTAM land-use and roadway information was updated with the Southern California Association of Government's 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy (2016 SCAG RTP/SCS)². Land-use estimates were provided in the 2016 SCAG RTP/SCS by the Western Riverside Council of Governments (WRCOG). Roadway information for the ELPSE was derived from SCAG's 2016 financially constrained RTP/SCS project list adopted in April 2016, Amendment 1 adopted in April 2017, Amendment 2 adopted in July 2017, and Amendment 3 adopted in September 2018.

Please note that, at the time of this assessment, SCAG has not yet completed adoption of the 2020 RTP/SCS. However, Fehr & Peers staff did review the draft project list in the draft 2020 RTP/SCS to verify that no significant changes are planned within the study corridor to ensure that the assumptions from the 2016 RTP/SCS were still appropriate for this assessment. This approach represents use of the best available information at the time of the assessment.

The anticipated project completion year was used to identify projects in the RTP/SCS (including Amendments 1-3) to determine if a project should be included as future roadway improvements when developing the Opening Year (2030) and Design Year (2050) traffic forecasts. The *RIVTAM Development Report (2009)* outlines that RIVTAM is based-off of the SCAG traffic demand model structure and parameters. Similar to the SCAG model, the RIVTAM travel demand model is typically run with a maximum of five feedback loops, which is the standard practice for RIVTAM/SCAG model as noted in the *SCAG User's Guide* (June 2008).

The 2016 SCAG RTP SCS capital improvement list was reviewed for interstate and state route improvements to consider in the future. Key transportation improvements listed below are assumed in the RIVTAM travel demand model based on their anticipated opening year:

- **RTP ID RIV071267:** I-15 Express Lanes from county line to Cajalco Road (Post Mile (PM) 51.40 to PM 36.80, opening in late 2020 – currently under construction)
- **RTP ID RIV011233:** Widen Limonite Avenue from four to six lanes. Between Eastvale Gateway and 475 feet east of Pats Ranch Road, reconstruct/widen NB and SB exit ramps from three to four lanes. Replace NB and SB entry ramps with entry loop ramps from two to three lanes. Entry ramps include HOV by-pass lane, ramps include extended acceleration/deceleration lanes and extended right turn lanes (opened late 2019 – landscaping remains under construction)

² The most recent SCAG RTP/SCS, Connect SoCal (2020 – 2045 Regional Transportation Plan/Sustainable Communities Strategy) was adopted on May 7, 2020. Analysis methodology for the I-15 Express Lanes Project Southern Extension PA/ED was finalized on August 23, 2019, prior to the adoption of Connect SoCal, and uses information from the 2016 SCAG RTP/SCS including Amendments #1-3; the latest, Amendment #3 was adopted on September 6, 2018.

- **RTP ID 3A01WT159:** Replace two-lane bridge on Hamner Avenue over Santa Ana River (five Miles North of Sixth Street) with a six-lane bridge (2030)
- **RTP ID 3M04WT005:** Reconstruct interchange ramps and channelization improvements at I-15 and Sixth Street between Hamner Avenue and Sierra Avenue (PM 45.10 to 46.10, 2030)
- **RTP ID 3M0733:** At I-15 on Second Street between Hamner Avenue and Valley View Avenue reconstruct/widen interchange from two to four lanes and widen ramps (PM 43.13 to 44.13, 202)
- **RTP ID 3M04WT007:** At I-15 on Hidden Valley Parkway between Hamner Avenue and beyond NB exit-ramp, reconstruct interchange/ramps/channelization improvements (PM 42.37 to 43.37, 2025)
- **RTP ID RIV010208:** At I-15/Cajalco Road interchange near Corona, design, reconstruct/realign and widen Cajalco Road from two to six through lanes from Temescal Canyon Road to Bedford Canyon Road. Reconstruct/widen SB entry from one to two lanes, NB exit from two to four lanes, and add auxiliary lanes (opened in late 2019, landscaping remains under construction)
- **RTP ID 3161L005:** Widen Magnolia Avenue from four to six lanes from El Camino Avenue to 1,000 feet east of All-American Way (2022)
- **RTP ID 3A04WT137A-3A04WT138:** Widen Cajalco Road from two to four through lanes in each direction from Temescal Canyon Road to Harvill Avenue and from four to six lanes from Harvill Avenue to I-215 including turn pockets and a bridge reconstruction over a water crossing (2025)
- **RTP ID 3C01MA01:** CETAP West- provide new east-west transportation corridor between I-15 to the west, I-215 to the East, South of Lake Mathews to the north, and SR74 to the South (2040)
- **I-15 ICOP FTIP ID RIV071267B³:** Add auxiliary lane on southbound I-15 from Cajalco Road southbound on-ramp (PM 35.9) to Weirick/Dos Lagos Road southbound off-ramp (PM 36.8), for a distance of 0.9 mile. (2022)
- **RTP ID 3200S010/FTIP ID RIV071267A⁴:** Restripe lane drop from PM 37.12 as lane extension (ie trap lane) in southbound direction to exit at Weirick/Dos Lagos Drive. Join existing I-15 striping at PM 35.7. for temporary striping and ancillary improvements (2025)
- **RTP ID 3M0728:** At I-15 on Temescal Canyon reconstruct/widen Temescal Canyon Interchange from two to four lanes and reconstruct ramps (PM 32.60 to PM 33.60; 2030)
- **RTP ID 3A04WT198B:** Widen Temescal Canyon from Indian Truck Trail to 0.22 miles west of Lake Street (2035)
- **RTP ID 3A04WT161, RTP ID 3M0729:** Widen Horsethief Canyon Rd from Temescal Canyon Road to I-15 from two to four lanes and reconstruct ramps (PM 28.36 to 29.36; 2035)
- **RTP ID 3M0737:** Reconstruct/widen I-15 interchange at Lake Street from two to six lanes between Walker Canyon Road and Temescal Canyon Road and reconstruct/widen ramps (2022)
- **RTP ID 3M0736:** Reconstruct/widen I-15 interchange at Nichols Road from two to six lanes between the ramps and reconstruct/widen ramps (PM 23.35 to PM 24.35; 2025)
- **RTP ID 3AL204:** Widen Riverside Drive (SR-74) from three to six lanes and Grand Avenue from two to four lanes (2021)

³ This project will be included in the next amendment of the FTIP which is scheduled to be approved in December 2022.

⁴ Based on discussions with RCTC, the project description is currently being revised. Current RTP descriptions are outdated. The project description has been updated to reflect future improvement

- **RTP ID 3A04WT191:** Widen SR-74 from I-15 to Ethanac Road (2035)
RTP ID 3A01WT151: Construct a four-lane arterial (Ethanac Road) from SR-74 to Keystone Drive (2030)
- **RTP ID 3A04A17, RTP ID RIV060109⁵:** Construct NB hook on- and off- ramps at Dexter Avenue. Close existing NB on ramp from SR-74 (Central Avenue). Widen Central Avenue. (2025)
- **RTP ID 3A04A16:** Construct new connecting four-lane arterial overcrossing at I-15 and Second Street between Chaney Avenue and Camino Del Norte (2028)
- **RTP ID 3160004, RIV180144:** Main Street/I-15 Interchange improvements. Widening of NB Main Street under the freeway from one to two lanes. Add an additional lane to the NB entrance and exit ramps, widen SB off-ramp to accommodate one right-turn lane, one left-turn lane, and one shared through-left-turn lane at the Main Street intersection. Install ramp meters and traffic signals at ramp terminal intersections and Camino Del Norte/Main Street Intersection (2023)
- **RTP ID 3160002:** Construct two HOV lanes on I-15 between Junction I-15/I-215 to SR-74 Central Avenue (PM 22.30 to PM 8.70, 2039)
- **RTP ID RIV010206A, RIV010206B:** At I-15/ Railroad Canyon Road Interchange, widen NB entrance ramp from two to three lanes, widen SB entrance ramp from one to three lanes, widen ramp acceleration and deceleration lanes at Railroad Canyon Road (Phase I). Construct new I-15 Franklin Street Interchange and add auxiliary lanes from Franklin Street Interchange to Main Street Interchange and from Franklin Street Interchange to Railroad Canyon Interchange. Realign/widen SB Main Street On-Ramp from one to two lanes and construct Frontage Road on west and east of I-15 (PM 18.52 to PM 20.96; 2027)
- **RTP ID 3M0734:** Construct new four-lane overcrossing over I-15 at Malaga Road between Casino Drive and Lakeview Terrace and Grape Street (2028)
- **RTP ID 3M0735:** Construct new four lane interchange and ramps for I-15 at Olive Street between Orchard Street and Grape Street (PM 17.01 to PM 18.01, 2018-not constructed)
- **RTP ID 3A01WT134:** Widen Bundy Canyon Road from Mission Trail to I-15 from two to four lanes (2025)
- **RTP ID 3M0727:** Reconstruct/Widen Bundy Canyon Road Interchange from two to four lanes and reconstruct ramps (PM 15.8 to PM 16.8; 2025)
- **RTP ID 3A01WT133:** Widen Bundy Canyon Road between I-15 to Murrieta Road from two to four lanes (2020)
- **RTP ID 3A04WT126:** Widen Baxter Road from I-15 to Central Street from two to four lanes (2025)
- **RTP ID 3M0730:** Construct new NB loop on-ramp and realign existing NB off-ramp at I-15 and Murrieta Hot Springs Road (2019)
- **RTP ID RIV031215:** French Valley Parkway Interchange Arterial Phases- (Phase 2) construct two-lane NB CD north of Winchester On-ramp to just north of Route I-15/I-215 Junction with connectors to I-15 and I-215. (Phase 3) construct six-lane overcrossing (Jefferson to Ynez) and ramps, NB/SB auxiliary lane, CD lanes (one NB and three SB). Modify Winchester Road interchange (PM 8.43 to PM 9.75; 2028)
- **RTP ID 3M0721:** At I-15 on Rancho California Road, reconfigure interchange from four to six lanes and modify ramps. Type of lanes for arterial widening will be with through lanes (PM 4.48 to PM 5.48; 2035)

⁵ Based on discussions with the City of Lake Elsinore and project team, the RTP description is outdated. The project description has been updated to reflect the future improvements to the existing interchange.

An additional key transportation improvement from the SCAG Federal Transportation Improvement Program (FTIP) was also included in the model's assumptions of future networks:

- **FTIP ID: RIV180102:** Widen Ontario Avenue from five to seven lanes (2021)

Fehr & Peers used data collected as part of this effort to complete a sub-area model calibration of the RIVTAM model for the study area. The sub-area model calibration followed the validation requirements set forth by the Federal Highways Administration (FHWA) and the model validation guidance produced by the California Transportation Commission (CTC). The model modification and validation statistics were summarized in the *Interstate 15 (I-15) Express Lanes Project Southern Extension Project Approval/Environmental Document (EA 0J0820) Final Traffic Volume Report* (March 2020).

Traffic forecasts for study locations were developed using the “difference methodology”. This approach is consistent with methodologies delineated in the *National Cooperative Highway Research Program Report (NCHRP) 765 Analytical Travel Forecasting Approaches for Project Level Planning and Design* (Transportation Research Board (TRB), 2014) and is considered state of the practice for adjusting raw model forecasts for use in traffic operations assessment. The difference methodology uses the Base Year and Future Year model outputs to calculate the annual growth at study facilities. This growth was added to the existing (2019) traffic counts and was used to develop the Opening Year (2030) and Design Year (2050) traffic forecasts for Build and No-Build Alternatives. Conservation of flow was applied to all forecasted volumes to ensure volumes are balanced along the study corridors.

The forecasting methodology for the proposed express lanes is detailed in the *Interstate 15 (I-15) Express Lane Project Southern Extension Project Approval/Environmental Document (EA 0J0820) Traffic Volumes Report (March 2020)* and summarized below:

- To represent the tolled express lanes, two additional freeway lanes were added along the study corridor in each direction as general-purpose lanes, but with a reduced capacity (20% less) to reflect the use of tolling with dynamic pricing to manage flow in the express lanes.
- Sub-area extraction Origin-Destination (OD) matrices for users of the corridor were compared to the Streetlight OD big data obtained as part of this effort.
- OD pairs that have a travel distance along the I-15 corridor of greater than six-miles (assumes that trips less than six miles will not use the express lanes) were isolated as potential express lane users.
- OD pairs were initially constrained at 20% (per OD pair) max participation in the express lanes as outlined in our methodology and assumptions memorandum and in the volumes report; however, this under-estimated the existing use of the I-15 to SR-91 Express Lane direct connectors by approximately 50%; indicating that the 20% cap was an under-estimate⁶. This was consequently increased to 30% in the Opening Year and 45% in the Design Year to reflect more reasonable estimates based on observed data at the existing express lane connectors, projected future congestion along the corridor, and available capacity in the express lane network.
- Constrained express lane use at 1,750 vehicles per lane per hour is based on FHWA “rule of thumb” throughput for various configurations of managed lanes, review of RCTC existing toll transactions, and RCTC’s toll policy to maintain speed in the express lanes. The cap of 1,750 vehicles per lane per hour is a

⁶ Existing express lane use on the I-15/SR-91 Direct Connector is upwards of 30 to 60% of the total traffic demand during the peak period. Express lane users comprise 41 to 60% of total travel demand from NB I-15 to WB SR-91 during the AM from 5:00 to 10:00 AM and 30 – 41 percent of total demand from eastbound (EB) SR-91 to SB I-15 during the PM from 2:00 to 7:00 PM based on traffic counts collected for the ELPSE.

reasonable throughput that is likely to be observed on the current and future express lane facilities. Additional discussion on capacity for the express lanes is documented in the methodologies and assumptions memorandum.

- Any OD demand that could not be accommodated in the express lanes was reallocated to the general-purpose lanes.

Traffic Operations Analysis Methodology

Freeway Analysis

Freeway mainline and ramp junctions were analyzed using the VISSIM 11 microscopic multi-modal traffic flow simulation software package developed by PTV Group. All components of freeway operations (i.e. mainline, on-ramp merge, off-ramp diverge, and weaving sections) function as a single integrated system with congestion and queues affecting both upstream and downstream traffic. VISSIM was used for this operations analysis to capture the effects between all the freeway components and the system-wide measures of effectiveness (MOE). The freeway segments were analyzed using the *Highway Capacity Manual* (HCM), 6th Edition and the methodologies contained in VISSIM are consistent with the procedures and methodologies of HCM.

The level of service (LOS) was calculated for each study facility to evaluate traffic operations. LOS is a quantitative measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. The freeway LOS was calculated for each study facility based on density in number of vehicles per hour per lane. **Table 1** below describes the LOS thresholds for freeway sections identified in the HCM.

The peak-hour density calculations are consistent with the definitions from the HCM, which defines four freeway section types: merge, diverge, weave, and basic. Merge and diverge sections, which refer to the freeway ramp junctions, are defined as the section of the freeway 1,500 feet downstream of an on-ramp and upstream of an off-ramp, respectively. The density is measured over the two adjacent freeway through lanes plus any auxiliary lanes. A weaving section occurs between a successive on-ramp and off-ramp pair connected by an auxiliary lane, and the maximum weaving distance between the ramps is determined by the weaving/total volumes and number of lanes. Basic freeway sections include all other freeway sections that are not included in a merge, diverge, or weaving section. The densities at weaving and basic sections are measured across all mixed-flow freeway lanes (including both through lanes and auxiliary lanes).

Roadway Analysis

The City of Corona, City of Lake Elsinore, and County of Riverside use volume-to-capacity (V/C) ratios to analyze the LOS for roadway segments. The capacity of a roadway is determined by its classification as defined (by the City or County) and number of lanes. The roadway segment capacities for each city and their influence area in Riverside County is summarized in **Table 2**. When a roadway is approaching capacity or over capacity, which is categorized as LOS E or worse, its' average daily traffic (ADT) is higher than the capacity of the roadway and V/C ratio is greater than 0.9.

Table 1 – Freeway Segment LOS Threshold

Level of Service	Description	Density (pc/mi/ln) ¹		
		Basic	Merge & Diverge	Weave
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 11	< 10	≤ 10
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	> 11 to 18	> 10 to 20	> 10 to 20
C	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	> 18 to 26	> 20 to 28	> 20 to 28
D	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	> 26 to 35	> 28 to 35	> 28 to 35
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	> 35 to 45	> 35	> 35 to 43
F	Represents a breakdown in flow.	Demand Exceeds Capacity OR Density >45	Demand Exceeds Capacity	Demand Exceeds Capacity OR Density >43

Notes:

1. Density is reported in number of passenger cars per mile per lane (pc/mi/ln).
2. Volume to Capacity is greater than or equal to 1 ($V/C \geq 1$) LOS is considered to be F.

Source: *Highway Capacity Manual 6th Edition* (Transportation Research Board, 2016)

Table 2 – Roadway Capacity

Roadway	Lanes	LOS E Capacity
City of Corona ¹		
Collector	2	13,000
Secondary	4	34,800
Mountain Arterial	2	16,100
Mountain Arterial	3	20,900
Arterial	2	18,000
Arterial	4	35,900
Major Arterial	4	37,900
Major Arterial	6	54,300
City of Lake Elsinore ²		
Secondary ⁴	2	12,950
Secondary	4	25,900
Major Arterial	4	34,100
Major Arterial	8	68,200
Urban Arterial ⁴	2	18,000
Urban Arterial	6	53,900
Urban Arterial	8	71,800
Riverside County ³		
Secondary	4	25,900
Arterial	2	18,000
Major Arterial	4	34,100
Urban Arterial	4	35,900
Urban Arterial	6	53,900
Urban Arterial	8	71,800

Source:

1. *City of Corona General Plan Update Traffic Impact Analysis (2019) or City of Corona TIS Guidelines (2006)*
2. *City of Lake Elsinore General Plan (2011)*
3. *Riverside County General Plan (2008)*
4. *Interpolated capacity by number of lanes*

Analysis Evaluation Criteria

Freeway Analysis

The analysis evaluation criteria described below were used to determine acceptable traffic operating conditions and are based on the LOS policies identified by Caltrans.

The Caltrans' *Guide for the Preparation of Traffic Impact Studies* (December 2002) states "Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" (see Appendix "C-3") on State highway facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS". For this study LOS D will be used as the acceptable operating level for freeway facilities analysis.

Roadway Analysis

City of Corona

According to the City of Corona General Plan, LOS "D" is the minimum acceptable standard on arterial roadways. At some key locations, such as at heavily traveled freeway interchanges, LOS E may be adopted as the acceptable threshold standard, on a case-by-case basis. Locations that may warrant the LOS E standard include: Lincoln Avenue at SR-91, Main Street at SR-91, McKinley Avenue at SR-91, Hidden Valley Parkway at I-15, Cajalco Road at I-15, Weirick Road at I-15

City of Lake Elsinore

According to the City of Lake Elsinore General Plan, a V/C ratio between 0.81 to 1.00 is approaching capacity (AC) and a V/C ratio below 0.8 is below capacity. Below capacity and AC are both are considered acceptable by the City. A V/C ratio between 1.01 to 1.24 is considered potentially exceeding capacity (PEC) and could be acceptable if adjacent intersections are operating acceptably during the peak hour. A V/C ratio greater than 1.24 is considered deficient.

Riverside County

According to the Riverside County General Plan Amendment No. 960, LOS "D" is the minimum acceptable standard on arterial roadways within any of the following Area Plans: Eastvale, Jurupa, Temescal Canyon, Lake Mathews/Woodcrest, Elsinore, Mead Valley, Highgrove, Reche Canyon/Badlands, Lakeview/Nuevo, Sun City/Menifee Valley, Harvest Valley/Winchester, Southwest Area, The Pass, San Jacinto Valley, and Western Coachella Valley.

3. Existing (2019) Conditions

This chapter describes the development of the traffic model and the operational characteristics of the I-15 mainline segments and ramp junctions under existing conditions.

Data Collection

Existing traffic volumes were collected in the fall of 2019 from various sources including traffic counts conducted by Fehr & Peers for ELPSE and Caltrans' Freeway Performance Measurement System (PeMS). Existing travel time data was collected with INRIX and verified with field travel time surveys.

Traffic Count Collection

Three-day, 72-hour traffic data collection for this project was completed between Tuesday, September 17th and Thursday, September 19th in 2019 using machine counts (tubes), video cameras, and Wavetronix detection. The data was reviewed to verify no major traffic collisions or general anomalies occurred that might have disrupted the traffic counts. Due to ongoing construction, traffic counts were not collected at the following locations:

- Liberty Avenue (access to the roadway was closed due to construction activities)
- I-15 NB Cajalco Road Slip On-Ramp for WB Cajalco Road (this ramp was still under construction; however, traffic was captured as it was routed to the loop on-ramp at the time of data collection)

Although these locations were not counted, the freeway volumes presented in this report are unaffected. Counts at Liberty Avenue were to support the noise assessment for the ELPSE and the new I-15 NB Cajalco Road Slip On-Ramp for WB Cajalco Road was not open to the traffic.

The classification counts for the mainline freeway were conducted consistent with Caltrans guidelines and were provided as a total, percentage of total in one-hour intervals, and peak hour volumes for the environmental assessment purposes. Data was collected while schools were in session and during favorable weather conditions during pre-COVID conditions.

Roadway Segment Traffic Volumes

Traffic volumes were collected on roadway segments parallel to I-15 to help demonstrate and quantify ELPSE benefits to the parallel roadway network and assist with the noise assessment. Three-day, 72-hour traffic counts were conducted at the following 62 roadway segments:

1. Hidden Valley Parkway west of I-15
2. Hidden Valley Parkway east of I-15
3. Parkridge Avenue west of Cresta Road
4. Parkridge Avenue east of Cresta Road
5. Cresta Road south of Parkridge Avenue
6. Sixth Street west of El Sobrante
7. Sixth Street west of Radio Road
8. Radio Road north of Sixth Street
9. El Sobrante between Sixth Street and Magnolia Avenue
10. Magnolia Avenue west of I-15
11. Magnolia Avenue east of I-15
12. Ontario Avenue west of I-15
13. Ontario Avenue east of I-15
14. Ontario Avenue north of El Cerrito Avenue

15. El Cerrito Avenue west of I-15
16. El Cerrito Avenue between I-15 and Temescal Canyon Road
17. Bedford Canyon Road south of El Cerrito Avenue
18. Bedford Canyon Road north of Cajalco Road
19. Evelyn Street
20. Frances Street
21. Katy Way
22. Liberty Avenue⁷
23. Temescal Canyon Road from El Cerrito Avenue to Cajalco Road
24. Temescal Canyon Road from Cajalco Road to Dos Lagos Drive
25. Temescal Canyon Road from Dos Lagos Drive to Dawson Canyon Road
26. Temescal Canyon Road from Dawson Canyon Road to I-15
27. Temescal Canyon Road from I-15 to Lawson Road
28. Temescal Canyon Road from Lawson Road to Trilogy Parkway
29. Temescal Canyon Road from Trilogy Parkway to Campbell Ranch Road
30. Temescal Canyon Road from Campbell Ranch Road to Indian Truck Trail Road
31. Temescal Canyon Road from Indian Truck Trail Road to Horsethief Road
32. Temescal Canyon Road from Horsethief Road to I-15 Frontage Road
33. Temescal Canyon Road from I-15 Frontage Road to Lake Street
34. Cajalco Road west of I-15
35. Cajalco Road between I-15 and Grand Oaks
36. Cajalco Road from Grand Oaks to Temescal Canyon Road
37. Retreat Parkway west of Knabe Road
38. Weirick Road from I-15 to Knabe Road
39. Weirick Road north of Knabe Road
40. Dos Lagos Drive east of I-15
41. Knabe Road from Weirick Road to White Sage Street
42. Knabe Road from White Sage Street to Hunt Road
43. Campbell Ranch Road from Temescal Canyon Road to Mayhew Canyon Road
44. Campbell Ranch Road from Mayhew Canyon Road to Indian Truck Trail
45. De Palma Road between Indian Truck Trail and Horsethief Canyon Road
46. Horsethief Canyon Road west of De Palma Road
47. Horsethief Canyon Road from De Palma Road to Temescal Canyon Road
48. Lake Street west of Temescal Canyon Road
49. Lake Street east of Temescal Canyon Road
50. Nichols Road west of Collier Road
51. Nichols Road from Collier Road to I-15
52. Nichols Road east of I-15
53. Collier Avenue from Nichols Road and Riverside Drive
54. Collier Avenue from Riverside Drive to Central Avenue
55. Collier Avenue south of SR-74 (Central Avenue)
56. Dexter Avenue north of SR-74 (Central Avenue)
57. Dexter Avenue south of SR-74 (Central Avenue)
58. SR-74 (Central Avenue) from Collier to I-15
59. SR-74 (Central Avenue) from I-15 to Dexter Avenue
60. SR-74 (Central Avenue) from Dexter Avenue to Cambern Avenue
61. SR-74 (Central Avenue) east of Cambern Avenue

⁷ Due to ongoing construction at Liberty Avenue, counts were not collected since this roadway was not open to traffic.

62. Main Street west of I-15

Freeway Mainline Traffic Volumes

In many cases traffic counts refer to the constrained traffic volumes that get through transportation facilities such as freeways and arterials. In over-saturated conditions, which is the case on I-15, traffic demand is not adequately accommodated by the freeway, and the traffic served is typically referred as constrained volumes or traffic counts. To determine the existing traffic *demand* along I-15, the traffic counts were taken at uncongested portions of I-15, confirming that the demand volume would be captured for both directions of I-15.

SB and NB freeway mainline traffic counts and classification counts were collected on I-15 at the southern and northern end of the study area at the following locations:

1. NB & SB I-15 at Franklin Street Overcrossing
2. NB & SB I-15 at Magnolia Drive Overcrossing

Interchange Ramp Traffic Volumes

Interchange ramp volumes were collected in the study area and conservation of flow/balancing was completed with the traffic counts on the on- and off-ramps. Three-day, 72-hour traffic counts were conducted at 13 interchanges on the following ramps:

I-15/Main Street Interchange

1. I-15 NB Off-Ramp to Main Street
2. I-15 NB On-Ramp from Main Street
3. I-15 SB On-Ramp from Main Street
4. I-15 SB Off-Ramp to Main Street

I-15/SR-74 (Central Avenue) Interchange

5. I-15 NB Off-Ramp to Central Avenue
6. I-15 NB On-Ramp from Central Avenue
7. I-15 SB On-Ramp from Central Avenue
8. I-15 SB Off-Ramp to Central Avenue

I-15/Nichols Road Interchange

9. I-15 NB Off-Ramp to Nichols Road
10. I-15 NB On-Ramp from Nichols Road
11. I-15 SB On-Ramp from Nichols Road
12. I-15 SB Off-Ramp to Nichols Road

I-15/Lake Street Interchange

13. I-15 NB Off-Ramp to Lake Street
14. I-15 NB On-Ramp from Lake Street
15. I-15 SB On-Ramp from Lake Street
16. I-15 SB Off-Ramp to Lake Street

I-15/Indian Truck Trail Interchange

17. I-15 NB Off-Ramp to Indian Truck Trail
18. I-15 NB On-Ramp from Indian Truck Trail
19. I-15 SB On-Ramp from Indian Truck Trail

20. I-15 SB Off-Ramp to Indian Truck Trail

I-15/Temescal Canyon Road Interchange

21. I-15 NB Off-Ramp to Temescal Canyon Road
22. I-15 NB On-Ramp from Temescal Canyon Road
23. I-15 SB On-Ramp from Temescal Canyon Road
24. I-15 SB Off-Ramp to Temescal Canyon Road

I-15/Weirick Road/Dos Lagos Drive Interchange

25. I-15 NB Off-Ramp to Weirick Road/Dos Lagos Drive
26. I-15 NB On-Ramp from Weirick Road/Dos Lagos Drive
27. I-15 SB On-Ramp from Weirick Road/Dos Lagos Drive
28. I-15 SB Off-Ramp to Weirick Road/Dos Lagos Drive

I-15/Cajalco Road Interchange

29. I-15 NB Off-Ramp to Cajalco Road
30. I-15 NB On-Ramp from WB Cajalco Road⁸
31. I-15 NB Loop On-Ramp from EB Cajalco Road
32. I-15 SB On-Ramp from Cajalco Road
33. I-15 SB Off-Ramp to Cajalco Road

I-15/El Cerrito Road Interchange

34. I-15 NB Off-Ramp to El Cerrito Road
35. I-15 NB On-Ramp from El Cerrito Road
36. I-15 SB On-Ramp from El Cerrito Road
37. I-15 SB Off-Ramp to El Cerrito Road

I-15/Ontario Avenue Interchange

38. I-15 NB Off-Ramp to Ontario Avenue
39. I-15 NB On-Ramp from Ontario Avenue
40. I-15 SB On-Ramp from Ontario Avenue
41. I-15 SB Off-Ramp to Ontario Avenue

I-15/Magnolia Avenue Interchange

42. I-15 NB Off-Ramp to Magnolia Avenue
43. I-15 NB On-Ramp from WB Magnolia Avenue
44. I-15 SB On-Ramp from Magnolia Avenue
45. I-15 SB Off-Ramp to Magnolia Avenue
46. I-15 NB Loop On-Ramp from EB Magnolia Avenue

I-15/SR-91 Interchange

47. I-15 NB Off-Ramp to WB SR-91
48. I-15 NB Off-Ramp to EB SR-91
49. I-15 NB On-Ramp from WB SR-91
50. I-15 SB Off-Ramp to WB SR-91
51. I-15 SB Loop Off-Ramp to EB SR-91
52. I-15 SB On-Ramp from WB SR-91

⁸ Due to ongoing construction at the Cajalco Road Interchange, counts at I-15 NB On-Ramp from Westbound Cajalco Road were not collected since this ramp was not yet constructed or open to traffic.

- 53. I-15 SB On-Ramp from EB SR-91
- 54. I-15 NB Express Lane Direct Connector Ramp to WB SR-91
- 55. I-15 SB Express Lane Direct Connector Ramp to EB SR-91

I-15/Hidden Valley Parkway Interchange

- 56. I-15 NB Off-Ramp to Hidden Valley Parkway
- 57. I-15 SB On-Ramp from Hidden Valley Parkway

Figure 2 shows the Existing (2019) peak hour traffic volumes for freeway mainline segments and ramps in the study area.

Classification Counts

Truck classification counts were collected on I-15 north of the Magnolia Avenue Interchange. At this count location, the highest combined northbound and southbound traffic demand is being served and would be representative of the vehicle flow mix on the corridor. Mainline counts were collected using Wavetronix detection which identifies motor vehicle classification by vehicle length. The following lengths were assumed for the following classes of vehicles:

- Passenger Cars: 0-30 feet
- Small Trucks: 30-50 feet
- Large Trucks: 50- 75 feet & longer

Table 3 summarizes the classification count percentages for the northbound and southbound traffic volumes during the AM and PM peak period. The VISSIM model will simulate truck percentage by hour. Collected counts reveal that at various times in the AM and PM peak periods, the percentage of trucks is higher than the 2018 Caltrans reported AADT total truck percentage of roughly 7% in the study corridor.

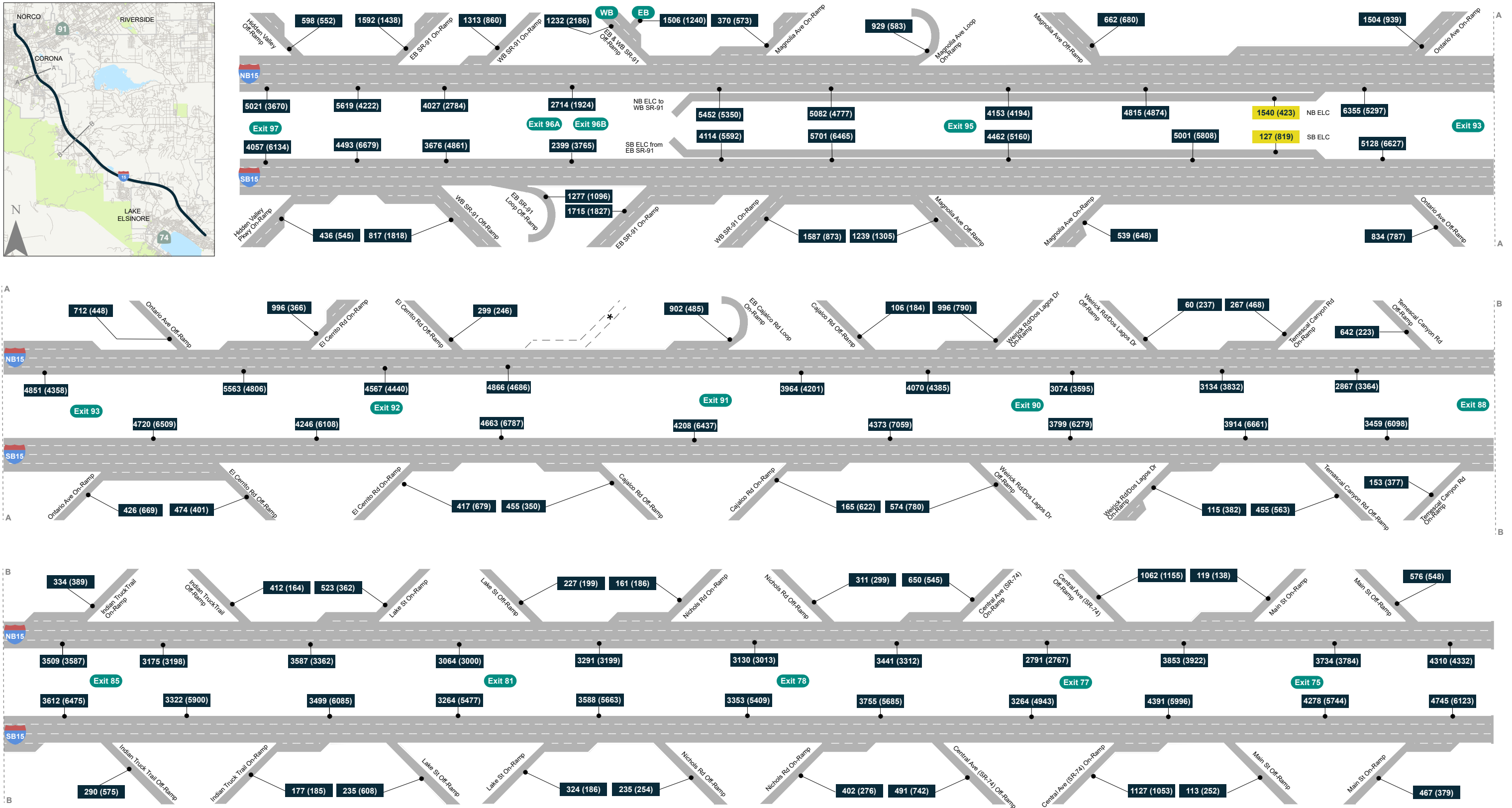
Table 3 – I-15 Mainline Classification Percent North of Magnolia

Time Of Day	Southbound				Northbound			
	Passenger Cars	Small Trucks	Large Trucks	All Trucks	Passenger Cars	Small Trucks	Large Trucks	All Trucks
04:00	72%	7%	21%	28%	91%	3%	6%	9%
05:00	81%	6%	13%	19%	90%	4%	6%	10%
06:00	85%	7%	8%	15%	92%	4%	4%	8%
07:00	87%	7%	6%	13%	93%	4%	3%	7%
08:00	87%	6%	7%	13%	92%	4%	4%	8%
09:00	86%	6%	8%	14%	89%	5%	6%	11%
10:00	85%	7%	8%	15%	84%	8%	8%	16%
11:00	86%	6%	8%	14%	82%	9%	9%	18%
12:00	88%	5%	7%	12%	83%	9%	8%	17%
13:00	90%	5%	5%	10%	85%	9%	6%	15%
14:00	92%	4%	4%	8%	86%	8%	6%	14%
15:00	92%	4%	4%	8%	87%	8%	5%	13%
16:00	93%	4%	3%	7%	91%	6%	3%	9%
17:00	93%	4%	3%	7%	89%	6%	5%	11%
18:00	96%	2%	2%	4%	93%	3%	4%	7%
19:00	96%	2%	2%	4%	93%	4%	3%	7%

Source: Fehr & Peers, 2019

Caltrans' Performance Measurement (PeMS) Data

Caltrans' PeMS data was used to verify reasonableness in collected traffic counts and to understand the existing throughput at the bottlenecks of the congested portions of I-15. PeMS data used in this study had detector health in good conditions with 100% observation rates to guarantee the data quality and when possible, were collected on the same day that the traffic counts were taken.



* Cajalco Road Northbound On-Ramp was under construction when counts were collected.
Traffic demand volumes represent true demand and considers vehicles in queue during oversaturated conditions.



xx (xx)	Mainline Volume	xx (xx)	AM Volume (PM Volume)
xx (xx)	Express Lane Volume	ELC	SR-91 Express Lane Connector
xx	Exit		

Figure 2
I-15 Freeway Lane Configurations & Peak Hour Traffic Demand Volumes
Existing Conditions 2019

INRIX Data

INRIX provides anonymous travel data from processed in-vehicle global positioning system (GPS) devices and some handheld GPS devices. This data can be used to understand speed, bottlenecks, and travel times. INRIX speed data for the period between Tuesday, September 17th and Thursday, September 19th in 2019 was compared to the three-month weekday average; it was used to determine which specific day would be used during model calibration. INRIX data presented in the report is representative of conditions on Thursday, September 19th, 2019.

GPS travel time runs obtained in field reconnaissance on the same dates were compared to the INRIX data to support the validity of INRIX data. GPS travel time runs fell within the 95th confidence interval of the INRIX data.

Streetlight Data

Streetlight data uses anonymous in-vehicle navigation system data and some cell phone location-based services data (referred to as records) that can be aggregated together (consistent with privacy protection requirements) to obtain origin/destination information. *Streetlight* O-D travel data along the corridor was purchased to validate the travel demand forecasting estimates and the O-D estimation.

VISSIM Traffic Model

The VISSIM traffic simulation models were developed to include all hours of congestion from 5:00 AM to 12:00 PM, representing the AM peak period; and from 1:00 to 8:00 PM, representing the PM peak period, as illustrated in **Exhibit A** and **Exhibit B** for Northbound I-15 and Southbound I-15, respectively. Study periods were selected to allow the model to begin and end under free-flow conditions.

The simulation models were developed to be consistent with HCM and *Protocol for VISSIM Simulation* (Washington State Department of Transportation (WSDOT), 2014) using the flow chart shown on **Exhibit C**. WSDOT *Protocol for VISSIM Simulation* is consistent with guidance established by FHWA (*Volume III - Guidelines for Applying Traffic Microsimulation Modeling Software*, FHWA, 2019) and applies more stringent validation criteria than Caltrans (*Guidelines for Applying Traffic Microsimulation Modeling Software*, Caltrans, 2002). Use of the WSDOT guidelines has been requested by Caltrans District 8 for VISSIM application given its more stringent validation criteria.

Exhibit A - Northbound I-15 Weekday Speed Contour Plot (INRIX)

Source: INRIX (Representative of September 19, 2019)



Exhibit A - Northbound I-15 Weekday Speed Contour Plot (INRIX)

Source: INRIX (Representative of September 19, 2019)

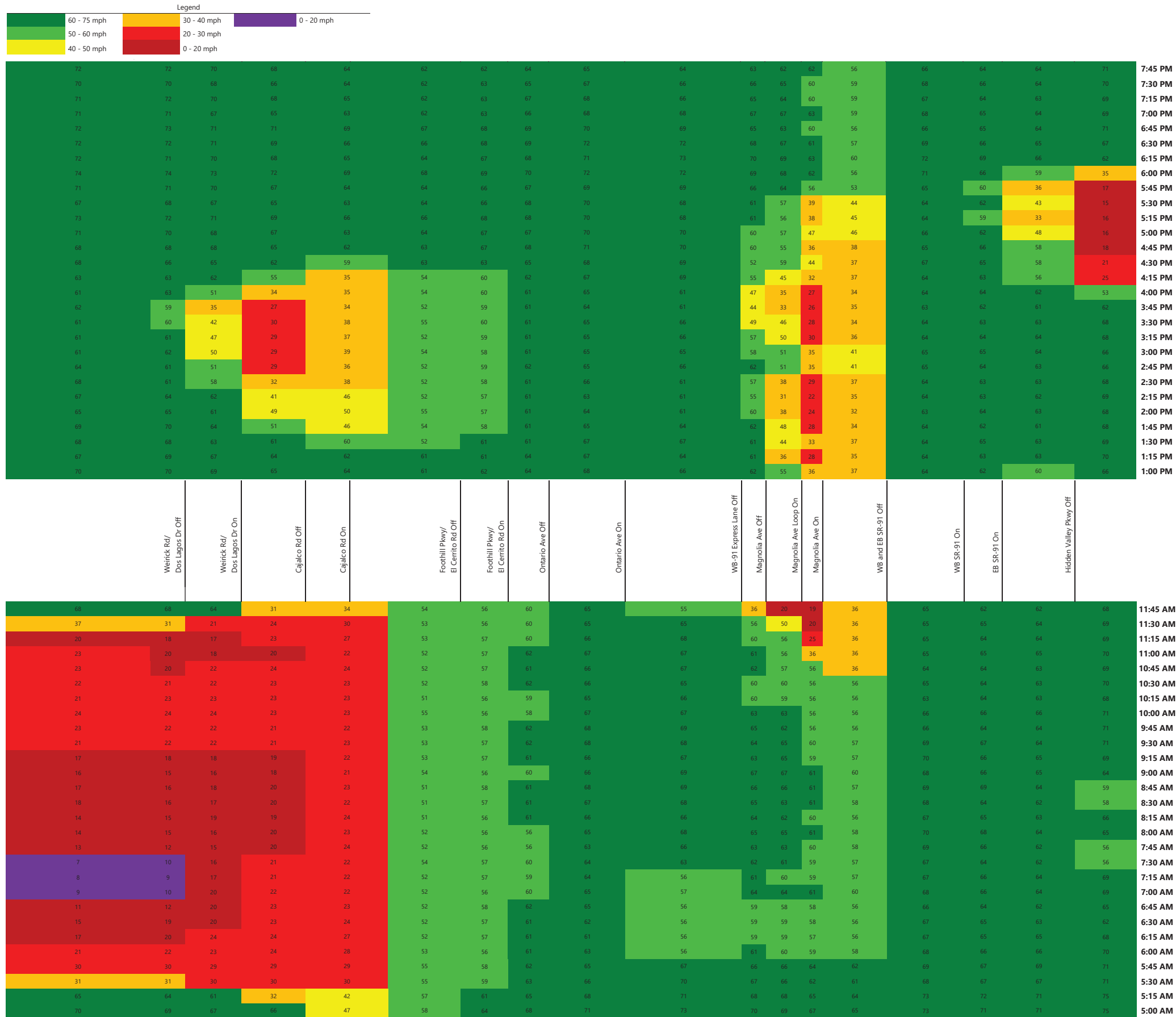


Exhibit B - Southbound I-15 Weekday Speed Contour Plot (INRIX)

Source: INRIX (Representative of September 19, 2019)

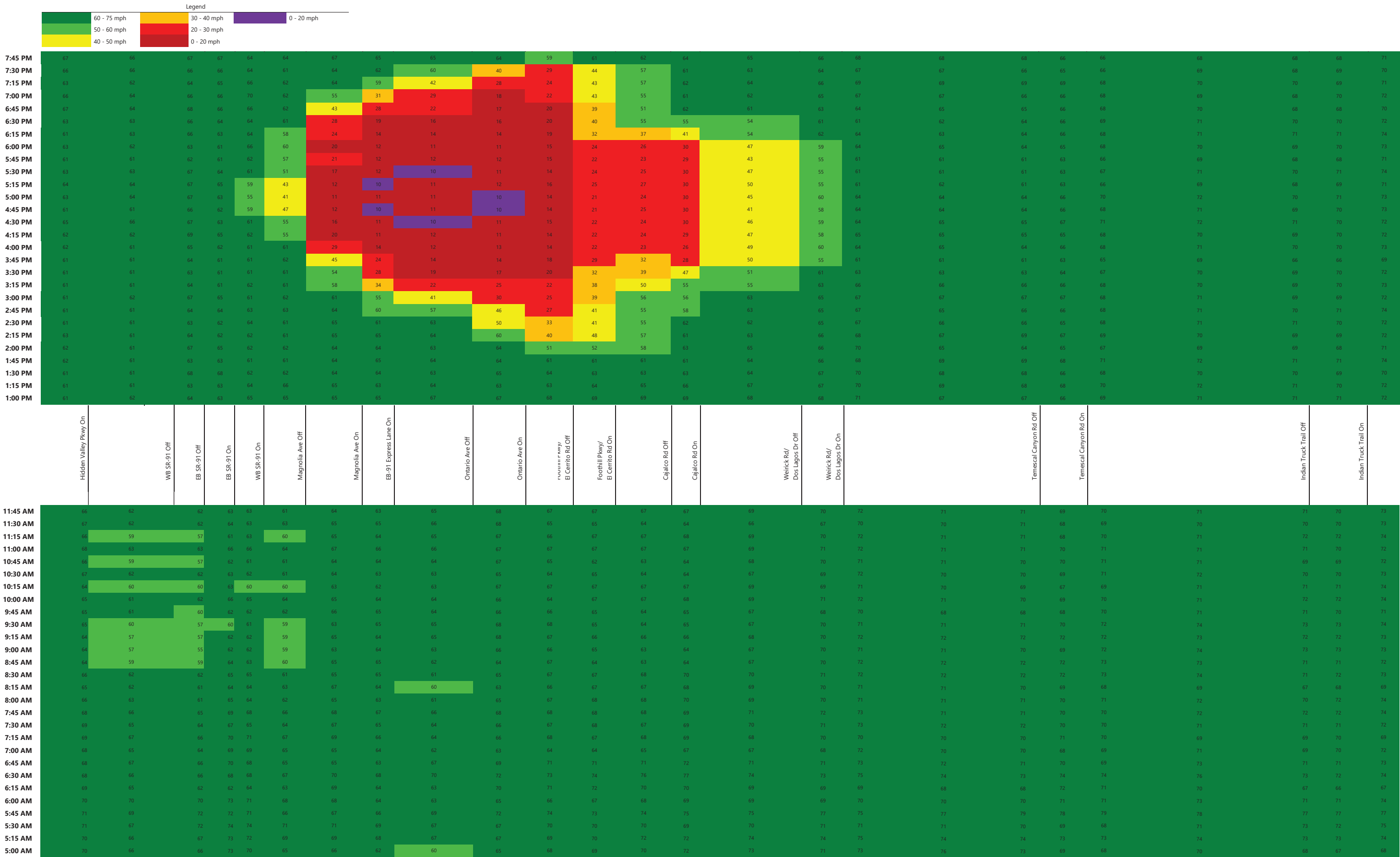


Exhibit B - Southbound I-15 Weekday Speed Contour Plot (INRIX)

Source: INRIX (Representative of September 19, 2019)

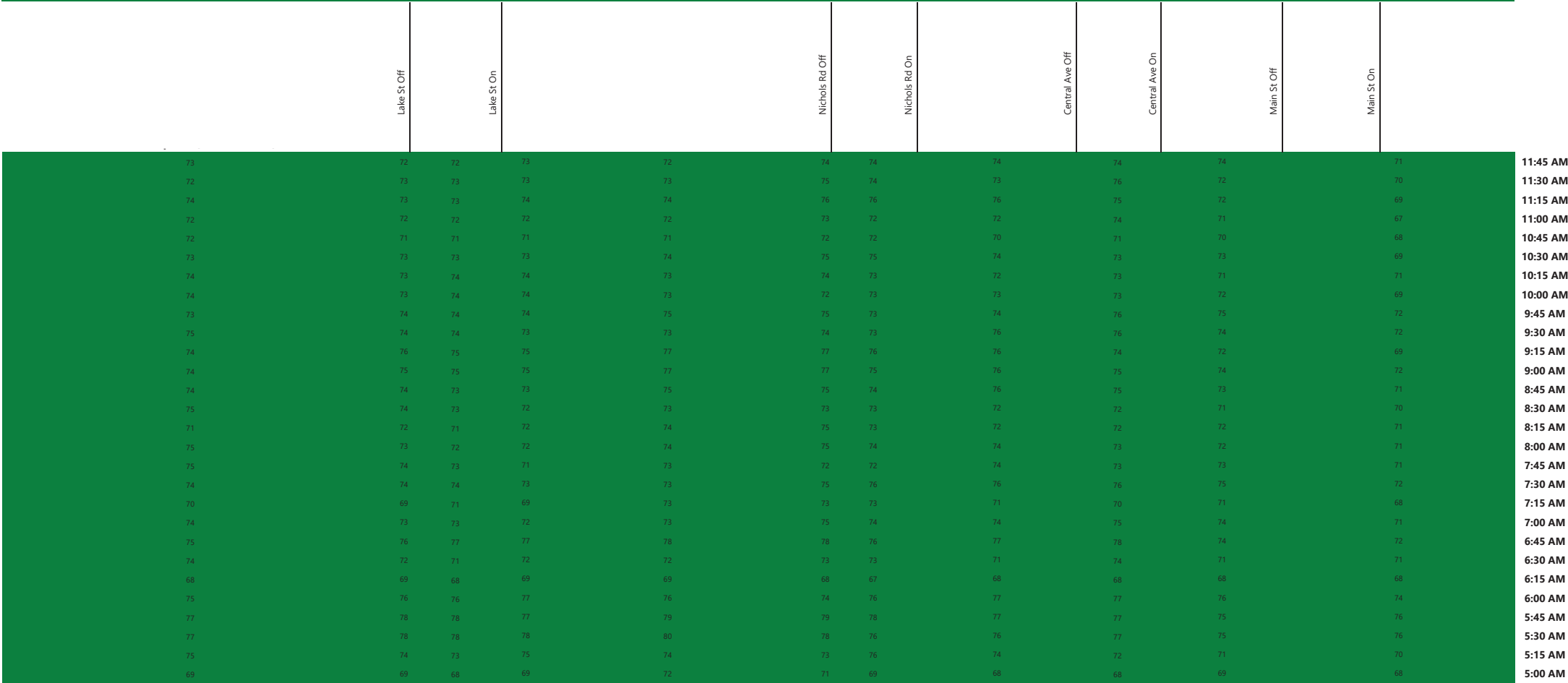
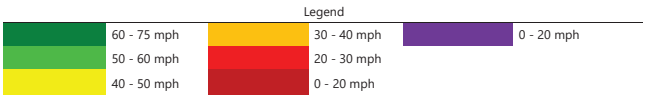
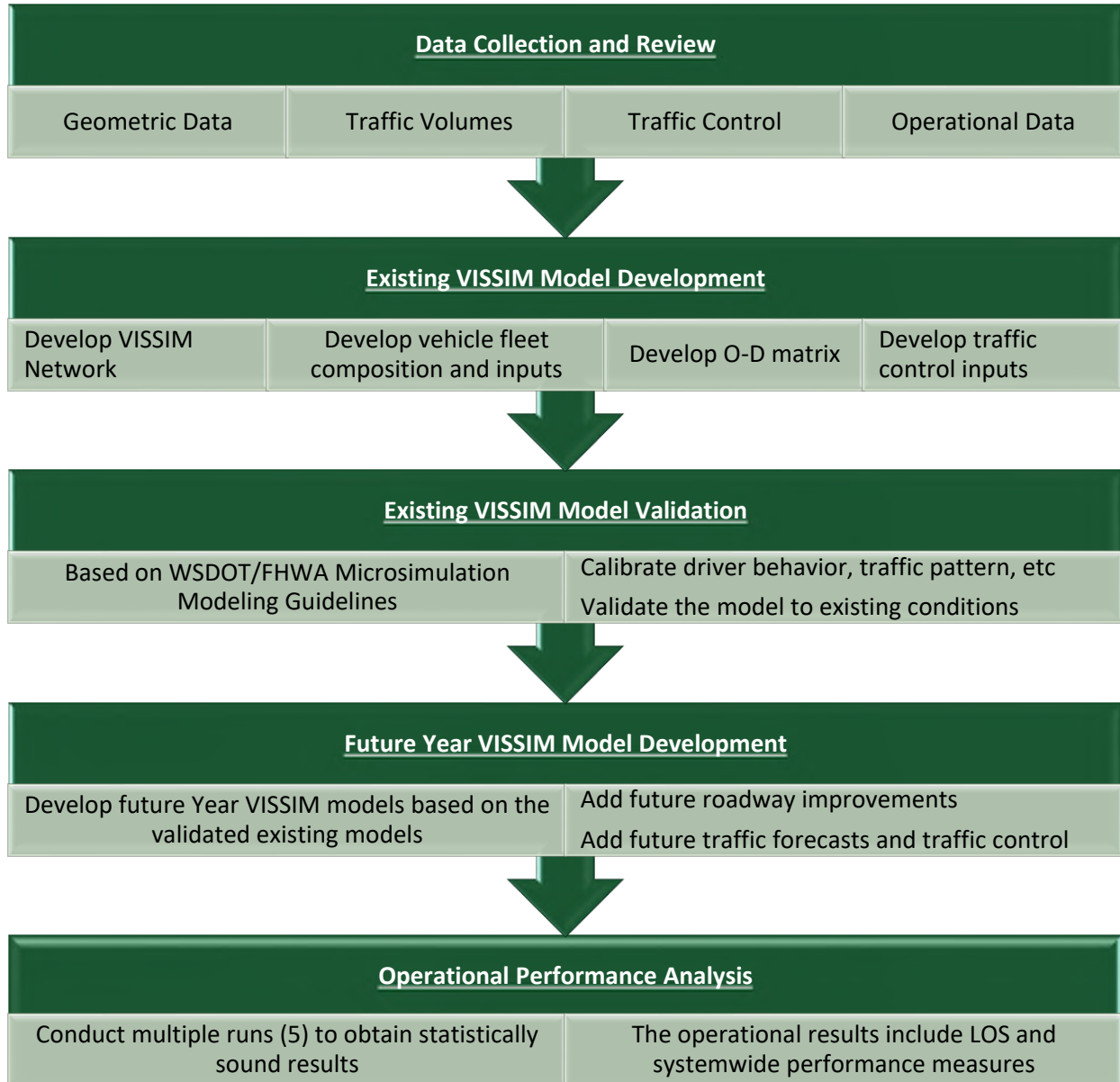


Exhibit C – VISSIM Model Development Flow Chart



Traffic Model Development

The VISSIM model covers the I-15 mainline segments and ramp junctions between the Hidden Valley Parkway and Main Street Interchanges. Separate VISSIM models were developed to represent the AM (5:00 AM to 12:00 PM) and PM (1:00 – 8:00 PM) peak periods under existing conditions. Existing VISSIM models were calibrated to match conditions observed in the field in when traffic counts were collected in September 2019. The key traffic data used for model development are described below.

Geometric Data

Freeway and ramp junction geometric data were gathered using aerial photographs and design plans. The geometric data, including lane geometrics, lane designations, and other data, were then verified by traffic engineers through the field work in the study area.

Geometric data is representative of when traffic volumes were collected in fall 2019, which coincided with construction activity for the I-15 ELP (between SR-60 and Cajalco Road) and the Cajalco Road/I-15 Interchange Project. Existing year models were developed and calibrated with construction geometries at the following locations.

- I-15 Express Lanes (between Hidden Valley Parkway and Cajalco Road):
 - **I-15 NB On-Ramp from EB SR-91** was reduced from two lanes to one lane.
 - **I-15 SB mainline from Hidden Valley Parkway On-Ramp to WB SR-91 Off-Ramp** had lane alignment shifts to the right (four-lane segment to five-lane segment).
 - Prior to construction, the I-15 SB mainline prior to the WB SR-91 off-ramp had a 2,700-foot deceleration lane. In the five-lane segment, Lanes four and five (outermost lanes) were receiving lanes for Lane four (outer lane) in the four-lane segment.
 - During construction, the deceleration lane was converted to a receiving lane for Lane four. In the five-lane segment, Lanes one and two (innermost lanes) are currently receiving lanes for Lane one (inner lane) in the four-lane segment.
- Cajalco Road/I-15 Interchange Project:
 - **I-15 NB On-Ramp from WB Cajalco Road** was not yet constructed. All traffic used the Cajalco Road Loop On-Ramp to access I-15 NB.
 - **I-15 NB mainline from WB Cajalco Road On-Ramp to El Cerrito Road Off-Ramp** will have an auxiliary lane. When the on-ramp and auxiliary lane are constructed the merge/diverge mainline segments will become a weave segment but, when counts were collected, the direct on-ramp was under construction and the auxiliary lane was not yet complete.
 - **I-15 SB mainline from El Cerrito Road On-Ramp to Cajalco Road Off-Ramp** will have an auxiliary lane. When the auxiliary lane is constructed the merge/diverge mainline segments will become a weave segment. However, at the time of traffic counts, the auxiliary lane was not yet constructed.
 - **I-15 SB Off-Ramp to Cajalco Road** currently has one lane. When the auxiliary lane is constructed, the off-ramp will be two lanes.

Traffic Volumes

As previously discussed, existing daily and peak period traffic volumes were collected in fall 2019. Existing peak hour factors (PHF) were also obtained as part of the data collection effort for this ELPSE.

Vehicle Composition

Vehicle fleet compositions were developed for each hour of the study period for NB and SB I-15. Vehicles were classified as either single-occupant vehicles (SOV), high-occupant vehicles with two people (HOV 2), high-occupant vehicles with three or more people (HOV 3+), express lane toll user vehicles, light trucks, or heavy trucks.

Mode split information was collected on the freeway mainline at the Magnolia Drive Overcrossing, located directly adjacent to the I-15/SR-91 direct connector. Tolling information provided by RCTC included the number of HOV 3+ and toll vehicles using the direct connector in each travel direction. The traffic volumes on the direct connector were then compared to the corresponding I-15/SR-91 general purpose ramps to determine the HOV 3+ and toll mode percentages. The HOV 2 mode split was determined using the RIVTAM model, which provides a relationship between HOV 2 and HOV 3+ mode splits.

Demand Volumes

When evaluating over-saturated conditions, traffic demand cannot be adequately accommodated by roadways, and the part of the traffic demand that can get through is the constrained volume or traffic count. Some of the existing count volumes are constrained volumes rather than traffic demand due to the over-saturated conditions along the I-15 study corridor. This occurs primarily at locations downstream of bottlenecks since some vehicles destined to these locations are stuck in queue.

Vehicle queue length at bottleneck locations were measured from INRIX speed plots, which were then verified and refined to be consistent with field observations. Vehicle headway was estimated using an empirical speed and density regression model. The traffic counts (served volume) and un-served traffic demand were summed to represent the existing demand volumes at each bottleneck location. The demand volume for the remaining freeway mainline segments were calculated using volume balancing based on the traffic demand at the bottleneck and the downstream on- and off-ramp volumes.

Origin-Destination Data

An O-D traffic flow matrix was developed for use in the existing VISSIM model. The O-D matrix was developed using Streetlight data. Streetlight data uses anonymous in-vehicle navigation system data and some cell phone location-based services data (referred to as records) that can be aggregated together (consistent with privacy protection requirements) to obtain origin/destination information. The O-D matrix is used to understand where traffic using the I-15 mainline originates in the study area and if the destination is within the study area; or if vehicles continue on the mainline throughout the study corridor (e.g. originate and are destined to locations outside of our study area). Volumes were specifically input using the O-D matrix to fully understand vehicle travel patterns and accurately reflect vehicle routing based on predicted origins and destinations.

Traffic Control Data

Ramp meter timings were provided by Caltrans at all ramps with ramp meter signals. Ramp meter signals are operational during the entire study period.

- SB I-15 On-Ramp from Hidden Valley Parkway
- SB I-15 On-Ramp from Magnolia Avenue

- SB I-15 On-Ramp from Ontario Avenue
- SB I-15 On-Ramp from El Cerrito Road
- SB I-15 On-Ramp from Weirick Road/Dos Lagos Drive
- SB I-15 On-Ramp from Temescal Canyon Road
- SB I-15 On-Ramp from Indian Truck Trail
- NB I-15 On-Ramp from Indian Truck Trail
- NB I-15 On-Ramp from Temescal Canyon Road
- NB I-15 On-Ramp from Weirick Road/Dos Lagos Drive
- NB I-15 On-Ramp from El Cerrito Road
- NB I-15 On-Ramp from Ontario Avenue
- NB I-15 On-Ramp from WB Magnolia Avenue
- NB I-15 Loop On-Ramp from EB Magnolia Avenue

Other Operational Data

Extensive field observations were conducted during the AM and PM peak periods along freeway mainline segments and on- and off-ramps. The observed operational characteristics such as lane change and gap acceptance driver behaviors, vehicle queues, lane utilizations, and others were used to calibrate and validate the existing VISSIM models.

Traffic Model Validation

According to the WSDOT *Protocol for VISSIM Simulation*, there are two separate criteria that must be met in order to justify the validity of a particular model and its usefulness in evaluating the transportation system:

- **Confidence** – ensuring that the reported model results are representative of the model
- **Calibration** – matching the model results to real world conditions

The two criteria and approach for ensuring that the VISSIM simulation model will meet both, are summarized below in detail.

Confidence

Given the varying results that inherently exist between microsimulation runs (due to the random seed number), every model is required to evaluate its reported results in a way that confides that they are representative of the model and not skewed towards a statistical outlier. Per the WSDOT *Protocol for VISSIM Simulation*, the VISSIM model runs will use a simulation resolution of 10-time steps per second, and the number of simulation runs must be large enough to reduce the impact that an atypical run will have on the sample average (determined to be five simulation runs); each using a different random seed value. For the existing conditions model, the statistical significance of five simulation runs was confirmed to verify that the variation in model vehicle throughput was within the 95% confidence level.

Calibration

Calibration is the process used to achieve adequate reliability or validity of the model by establishing suitable parameter values so that the model replicates local traffic conditions as closely as possible. The existing conditions VISSIM model will be calibrated to match throughput traffic volume and speed/travel time.

Traffic count calibration was assessed using the Geoffrey E. Havers (GEH) statistic for freeway mainline segments, on-ramps, and off-ramps. The GEH statistic summarizes the difference between the model output and observed

volumes – the closer the model output is to observed conditions, the lower the GEH statistic. **Table 4** below summarize the GEH and throughput traffic volume criteria. Throughput Traffic Volume was calibrated for each hour of the study period.

Table 4 – Throughput Traffic Volume Calibration Criteria

Criteria ¹	Acceptable Targets
GEH < 5.0	All state facility segments ² within the calibration area.
GEH < 3.0	All entry locations and entrance ramps within the calibration area.
GEH < 5.0	All exit locations and exit ramps within the calibration area.
Sum of all segment flows within the calibration area.	Within 5%

Notes:

1. GEH threshold was increased from 3.0 to 5.0 at locations where a higher variation in volume is expected.
2. State facility segments (i.e. freeway mainline segments) in queue were not calibrated to a traffic volume.

Source: *WSDOT Protocol for VISSIM Simulation* (September 2014)

Travel time calibration criteria are separated into two types of facilities: Uninterrupted Flow, representing free-flow corridors, and Interrupted Flow, representing freeway corridors with congestion. The allowable travel time variation was established using the free-flow speed and length of the corridor. Travel times were calibrated using the average 15-minute interval travel time for each study period. Speed contour plots used to calibrate vehicle queue lengths on the study corridor are presented in **Exhibit D 1 and 2** and **Exhibit E 1 and 2**.

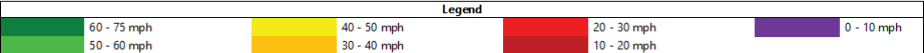
Table 5 shows the model validation results for the AM and PM VISSIM models. Technical documentation of calibration results is included in **Appendix C**.

Exhibit D1 - Southbound I-15 Weekday Speed Contour Plot (Existing Conditions - AM)

Source: INRIX (Representative of September 19, 2019)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

**I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Hour**



Southbound I-15: Measured Speed (Source - VISSIM Simulation Mode)

11:45 AM	65	63	65	68	66	63	61	65	65	67	68	68	67	67	68	68	68	67	68	61	66	65	66	67	68	67	68	68	66	68	67	68	68	68	68	67	68
11:30 AM	67	66	67	68	64	68	62	66	66	67	68	68	66	66	67	68	68	67	68	68	68	67	67	68	68	67	68	68	68	68	68	68	68	68	68	68	68
11:15 AM	67	67	68	68	66	68	62	66	67	68	69	69	67	67	68	69	68	68	67	68	68	67	68	68	68	67	68	68	68	68	68	68	68	68	68	68	68
11:00 AM	66	67	67	68	68	68	69	63	66	67	68	68	69	66	67	68	68	69	68	68	69	68	67	68	68	69	67	68	68	68	68	67	68	68	68	68	68
10:45 AM	66	68	68	68	68	67	69	61	65	66	68	69	69	67	67	68	69	69	68	67	68	68	68	67	68	68	68	68	68	69	68	69	68	68	69	69	69
10:30 AM	66	67	68	68	68	67	69	63	66	66	68	69	69	67	68	68	69	69	69	68	69	68	69	68	67	68	69	68	69	68	69	68	69	68	69	69	69
10:15 AM	66	68	68	68	69	68	69	61	66	66	67	68	69	67	68	68	68	69	68	67	68	68	66	67	67	68	67	68	68	68	69	68	68	68	68	68	68
10:00 AM	66	67	67	68	68	67	68	61	65	66	68	69	69	66	66	67	69	69	69	67	69	68	68	67	68	68	69	67	68	68	68	69	68	68	68	68	68
9:45 AM	68	68	68	68	67	69	62	66	66	67	68	69	67	67	68	69	69	69	67	69	68	66	66	67	68	67	68	68	68	69	68	68	68	68	68	68	68
9:30 AM	66	68	68	68	68	67	69	62	66	66	67	68	69	67	68	68	69	68	68	69	68	68	67	68	68	69	67	68	68	68	69	68	68	68	68	68	68
9:15 AM	66	68	68	68	68	65	68	61	65	65	67	69	69	67	67	68	68	68	68	67	69	68	68	67	68	68	67	68	68	68	69	68	68	68	68	68	68
9:00 AM	66	68	68	68	68	64	67	62	66	66	67	68	69	67	67	68	68	68	68	67	68	68	66	67	67	68	66	67	68	67	68	68	68	68	68	68	68
8:45 AM	66	68	67	67	68	65	68	63	67	67	68	69	69	67	67	68	69	68	68	68	69	68	67	68	68	69	67	68	68	68	69	68	68	68	68	68	68
8:30 AM	66	68	68	68	68	65	68	63	66	66	67	68	69	67	68	68	69	68	68	67	69	68	66	65	67	68	67	68	68	68	68	68	68	68	68	68	68
8:15 AM	66	68	68	68	68	66	68	62	66	66	67	69	69	67	67	68	68	68	69	67	68	68	66	67	68	69	67	68	68	68	68	69	68	68	68	68	68
8:00 AM	66	67	67	67	68	66	68	63	67	66	67	69	69	67	68	68	69	68	68	67	68	68	67	68	68	69	68	68	68	68	68	69	68	68	68	68	68
7:45 AM	66	68	68	68	68	63	68	63	68	67	68	69	69	67	67	68	68	68	68	67	68	68	66	66	67	68	67	68	68	68	67	68	68	68	68	68	68
7:30 AM	66	67	67	67	68	60	66	63	66	64	67	68	68	66	67	68	68	69	68	67	68	68	65	67	68	68	67	68	68	66	68	68	68	68	68	67	68
7:15 AM	66	67	68	68	68	66	69	63	67	65	67	69	69	68	68	68	69	68	68	68	68	66	66	67	68	67	68	68	68	68	68	68	68	68	68	68	68
7:00 AM	66	67	68	68	68	65	69	64	67	65	67	69	69	67	68	68	68	68	69	67	68	68	67	68	68	68	68	68	66	68	68	68	68	68	68	68	
6:45 AM	66	68	68	68	68	67	69	62	67	67	67	68	69	68	68	68	69	69	68	69	68	69	67	68	68	69	67	69	69	68	69	68	68	69	69	69	69
6:30 AM	66	68	69	69	69	68	69	64	68	67	68	69	69	67	68	68	69	69	69	68	69	69	68	68	69	69	68	69	69	69	68	69	68	69	69	69	69
6:15 AM	66	68	69	69	69	69	69	65	68	68	68	69	69	68	69	69	69	69	69	68	69	69	68	69	69	69	67	68	69	69	69	69	68	69	69	69	69
6:00 AM	66	69	69	69	69	68	69	63	67	68	68	69	69	68	69	69	69	69	69	68	69	69	69	69	69	69	69	69	69	69	69	69	69	68	69	69	69
5:45 AM	66	68	68	68	69	68	69	65	68	68	68	69	69	67	68	68	69	69	69	68	69	69	68	69	69	69	69	69	69	69	69	68	69	68	69	69	69
5:30 AM	66	69	69	69	69	69	69	64	67	67	68	69	69	68	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	68	69	69	69	69
5:15 AM	66	69	69	69	69	69	69	65	68	68	69	69	69	68	69	69	69	69	69	68	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69
5:00 AM	66	68	69	69	69	68	69	66	68	68	69	69	69	68	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69	69

Cumulative Distance (miles)	Length (miles)	Hidden Valley Play On																	
		WB SR-91 Off	EB SR-91 Off	EB SR-91 On	WB SR-91 On	Magnolia Ave Off	Magnolia Ave On	EB-91 Express Lane On	Ontario Ave Off	Ontario Ave On	Mountain Pkwy/ El Cerrito Rd Off	Foothill Pkwy/ El Cerrito Rd On	Cajalico Rd Off	Cajalico Rd On	Weirick Rd/ Dos Lagos Dr Off	Weirick Rd/ Dos Lagos Dr On	Temescal Canyon Rd Off	Temescal Canyon Rd On	Indian Truck Trail Off
		0.8	0.3	0.3	0.3	0.4	0.5	1	0.5	0.4	0.4	0.5	0.3	1	0.4	2	0.5	2.3	
	0.8	1.1	1.4	1.7	2.1	2.6	3.6	4.1	4.6	5	5.5	5.8	6.8	7.2	9.2	9.7	12		

Southbound I-15: Measured Speed: (Source - Inrix)

12:45 PM	66	61	60	64	65	62	62	61	65	64	64	64	65	68	69	71	71	71	69	71	73	71
12:30 PM	67	64	61	64	65	63	66	65	65	68	67	66	67	68	69	71	70	70	69	71	72	72
12:15 PM	66	62	60	63	64	63	66	65	63	66	63	62	63	66	67	68	66	66	67	69	70	70
12:00 PM	67	63	63	63	63	61	64	63	62	65	64	63	64	66	67	69	69	69	68	70	71	70
11:45 AM	66	62	62	63	63	61	64	63	65	68	67	67	67	69	70	72	71	71	69	70	71	71
11:30 AM	67	62	62	64	63	63	63	65	66	68	65	65	64	66	67	70	70	71	68	68	70	70
11:15 AM	66	59	57	61	63	60	65	64	65	67	66	67	68	69	70	72	71	71	68	70	71	72
11:00 AM	68	63	63	66	66	64	67	66	66	67	67	67	67	69	71	72	71	71	70	71	71	71
10:45 AM	66	59	57	62	61	61	64	64	64	67	65	62	63	64	68	70	71	71	70	71	71	69
10:30 AM	67	62	62	63	62	61	64	63	63	65	64	65	64	64	67	69	72	70	70	69	71	72
10:15 AM	64	60	60	63	60	60	63	62	63	67	67	67	67	67	69	69	71	70	69	67	69	71
10:00 AM	65	61	62	66	65	64	65	64	64	66	64	67	67	69	71	72	71	70	69	70	71	72
9:45 AM	65	61	60	62	62	62	66	65	64	66	66	65	64	65	67	68	70	68	68	68	70	71
9:30 AM	65	60	57	60	61	59	63	65	65	68	68	65	64	65	67	70	71	71	70	72	74	73
9:15 AM	64	57	57	62	62	59	63	64	65	68	67	66	66	66	68	70	72	72	72	72	72	72
9:00 AM	64	57	55	62	62	59	63	64	63	66	66	65	63	64	67	70	71	71	70	69	72	74
8:45 AM	64	59	59	64	63	60	65	65	62	64	67	64	63	64	67	70	72	72	72	73	73	71
8:30 AM	66	62	62	65	65	61	65	65	61	65	67	67	68	70	70	71	72	72	72	72	73	74
8:15 AM	65	62	61	64	64	63	67	64	60	63	66	67	67	68	69	70	71	71	70	69	68	69
8:00 AM	66	63	61	65	64	62	65	63	61	65	67	68	68	70	69	70	71	71	70	71	70	70
7:45 AM	68	66	65	69	68	66	68	67	66	68	68	68	68	69	71	72	73	71	71	70	70	72
7:30 AM	69	65	64	67	65	64	67	65	64	66	67	68	67	69	70	71	73	72	72	70	70	71
7:15 AM	69	67	66	70	71	67	69	66	64	66	68	67	68	69	68	70	70	70	70	71	70	69
7:00 AM	68	65	64	69	69	65	63	64	62	63	64	64	65	67	67	68	72	70	70	68	69	71
6:45 AM	68	67	66	70	68	65	65	63	67	69	71	71	71	72	71	71	73	72	71	70	69	73
6:30 AM	68	66	66	68	68	67	70	68	70	72	73	74	76	77	74	73	75	74	73	74	74	76
6:15 AM	69	65	62	62	64	63	69	64	63	70	71	72	70	70	69	69	69	68	68	72	71	70
6:00 AM	70	70	70	73	71	68	68	64	63	65	66	67	68	69	69	69	70	70	71	71	73	71
5:45 AM	71	69	72	72	71	66	67	66	69	72	74	73	74	75	75	77	75	77	79	78	79	78
5:30 AM	71	67	72	74	74	71	71	69	67	67	70	70	70	69	70	71	71	71	70	69	68	71
5:15 AM	70	66	67	71	72	69	69	68	67	67	69	70	72	72	74	74	73	74	74	73	73	74
5:00 AM	70	66	66	73	70	65	66	62	60	65	68	69	70	72	73	71	73	76	73	69	68	70

Exhibit D1 - Southbound I-15 Weekday Speed Contour Plot (Existing Conditions - AM)

Source: INRIX (Representative of September 19, 2019)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Hour

Southbound I-15: Measured Speed (Source - VISSIM Simulation Model)

68	68	68	68	68	68	68	68	68	68	67	67	68	67	68	65	66	66	67	68	67	67	67	68	11:45 AM		
68	68	68	67	68	68	68	68	68	68	68	68	68	67	69	66	68	67	68	68	67	68	68	68	11:30 AM		
68	68	68	68	69	69	69	69	69	69	69	67	68	69	68	69	64	67	68	68	68	67	67	67	68	11:15 AM	
68	68	68	68	68	68	68	68	68	68	68	68	67	68	68	69	65	67	67	68	68	68	68	68	11:00 AM		
69	68	69	69	68	68	69	68	68	68	68	68	69	67	68	68	69	66	68	67	68	69	68	68	68	10:45 AM	
69	68	68	68	68	68	69	68	68	68	69	68	68	68	69	68	69	66	67	67	66	68	67	68	68	10:30 AM	
69	68	68	68	68	68	68	68	68	68	68	69	67	68	68	68	69	66	68	68	68	69	68	68	68	10:15 AM	
69	68	68	69	69	68	68	69	69	68	68	67	68	67	68	68	69	65	67	67	68	68	67	68	68	10:00 AM	
68	68	69	68	68	69	68	68	68	69	69	69	68	68	68	69	66	67	67	68	68	68	68	68	68	9:45 AM	
69	68	68	68	68	68	68	68	68	68	68	68	69	68	68	68	68	69	66	67	67	68	68	68	68	9:30 AM	
69	68	68	68	68	67	68	68	68	69	68	68	68	67	68	68	69	66	67	67	68	68	68	68	68	9:15 AM	
68	68	68	68	68	68	69	68	68	68	68	68	68	67	68	68	68	68	65	67	67	68	68	68	68	9:00 AM	
69	68	68	68	68	67	68	68	68	68	68	68	68	67	68	68	68	68	66	67	67	68	68	67	68	8:45 AM	
68	68	68	68	68	67	68	68	68	68	68	68	68	67	68	68	68	68	65	67	67	68	68	67	68	8:30 AM	
69	68	68	69	69	67	69	68	68	68	68	68	68	67	68	68	68	69	66	67	67	68	68	67	68	8:15 AM	
68	68	68	68	68	68	68	68	68	68	68	68	68	66	67	68	67	68	65	66	67	67	68	67	67	8:00 AM	
68	68	68	68	68	68	68	68	68	68	68	68	68	67	67	68	68	68	65	66	66	67	67	66	66	7:45 AM	
68	68	68	68	68	68	68	68	68	68	68	68	68	66	67	68	63	68	63	65	66	67	68	66	66	67	7:30 AM
68	68	68	68	68	68	68	67	68	68	68	68	68	66	68	68	68	69	65	67	67	68	68	67	67	67	7:15 AM
69	68	68	68	68	68	68	68	67	68	68	68	68	67	68	68	68	69	65	68	68	68	69	67	68	68	7:00 AM
69	68	69	69	69	69	69	68	69	69	69	69	69	68	69	69	69	69	66	68	68	69	69	67	68	68	6:45 AM
69	68	69	69	68	69	68	69	69	69	69	69	69	67	68	69	69	69	67	68	69	69	69	67	68	68	6:30 AM
69	68	69	69	69	69	69	68	69	69	69	69	69	67	69	69	68	69	67	68	68	68	69	68	68	68	6:15 AM
69	68	69	69	69	69	69	69	69	69	69	69	69	68	69	69	69	69	68	69	69	69	69	68	69	69	6:00 AM
69	68	69	69	69	69	69	69	69	69	69	69	69	68	69	69	69	67	69	69	69	69	68	69	69	69	5:45 AM
69	68	69	69	69	69	69	69	68	69	69	69	69	68	69	69	69	66	68	69	69	69	68	69	69	69	5:30 AM
69	68	69	69	69	69	69	69	68	69	69	69	69	67	69	69	69	69	67	69	69	69	69	69	69	69	5:15 AM
69	69	69	69	69	69	69	69	69	69	70	70	70	68	69	69	69	70	66	69	69	69	69	68	69	69	5:00 AM

Indian Truck Trail On		Lake St Off	Lake St On	Nichols Rd Off	Nichols Rd On	Central Ave Off	Central Ave On	Main St Off	Main St On
0.6	3.1	0.6	2.2	0.6	1	0.6	0.7	0.7	
12.6	15.7	16.3	18.5	19.1	20.1	20.7	21.4	22.1	

Southbound I-15: Measured Speed: (Source - Inrix)

71	73	75	74	75	74	75	75	75	74	74	73	69	12:45 PM
71	73	72	71	72	72	72	73	72	71	72	72	69	12:30 PM
70	71	72	72	73	73	75	75	75	74	73	72	71	12:15 PM
70	72	73	72	72	74	74	75	74	74	74	74	72	12:00 PM
70	73	73	72	72	73	72	74	74	74	74	74	71	11:45 AM
70	73	72	73	73	73	73	75	74	73	76	72	70	11:30 AM
72	74	74	73	73	74	74	76	76	76	75	72	69	11:15 AM
70	72	72	72	72	72	72	73	72	72	74	71	67	11:00 AM
69	72	72	71	71	71	71	72	72	70	71	70	68	10:45 AM
70	73	73	73	73	73	74	75	75	74	73	73	69	10:30 AM
71	74	74	73	74	74	73	74	73	72	73	71	71	10:15 AM
72	74	74	73	74	74	73	72	73	73	73	72	69	10:00 AM
70	71	73	74	74	74	75	75	73	74	76	75	72	9:45 AM
73	74	75	74	74	73	73	74	73	76	76	74	72	9:30 AM
72	73	74	76	75	75	77	77	76	76	74	72	69	9:15 AM
73	73	74	75	75	75	77	77	75	76	75	74	72	9:00 AM
71	72	74	74	73	73	75	75	74	76	75	73	71	8:45 AM
72	73	75	74	73	72	73	73	73	72	72	71	70	8:30 AM
68	69	71	72	71	72	74	75	73	72	72	72	71	8:15 AM
72	74	75	73	72	72	74	75	74	74	73	72	71	8:00 AM
72	74	75	74	73	71	73	72	72	74	73	73	71	7:45 AM
71	72	74	74	74	73	73	75	76	76	76	75	72	7:30 AM
70	69	70	69	71	69	73	73	73	71	70	71	68	7:15 AM
70	72	74	73	73	72	73	75	74	74	75	74	71	7:00 AM
71	73	75	76	77	77	78	78	76	77	78	74	72	6:45 AM
72	74	74	72	71	72	72	73	73	71	74	71	71	6:30 AM
66	67	68	69	68	69	69	68	67	68	68	68	68	6:15 AM
71	74	75	76	76	77	76	74	77	77	76	76	74	6:00 AM
77	77	77	78	78	77	79	79	78	77	77	75	76	5:45 AM
72	75	77	78	78	78	80	78	76	76	77	75	76	5:30 AM
73	74	75	74	73	75	74	73	76	74	72	71	70	5:15 AM
67	68	69	69	68	69	72	71	69	68	68	69	69	5:00 AM

Exhibit D2 - Northbound I-15 Weekday Speed Contour Plot (Existing Conditions - AM)

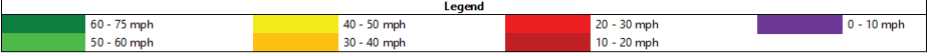
Source: INRIX (Representative of September 19, 2019)

VISSIM Post-Processor

Average Results from 5 Runs

Average Link Speed

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Hour



Northbound I-15: Measured Speed (Source - VISSIM Simulation Model)

[illegible]

Northbound I-15: Observed Speed (Source - Inri

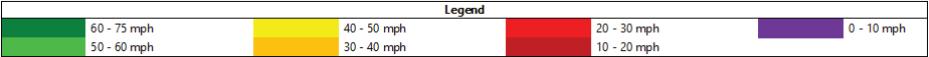


Exhibit D2 - Northbound I-15 Weekday Speed Contour Plot (Existing Conditions - AM)

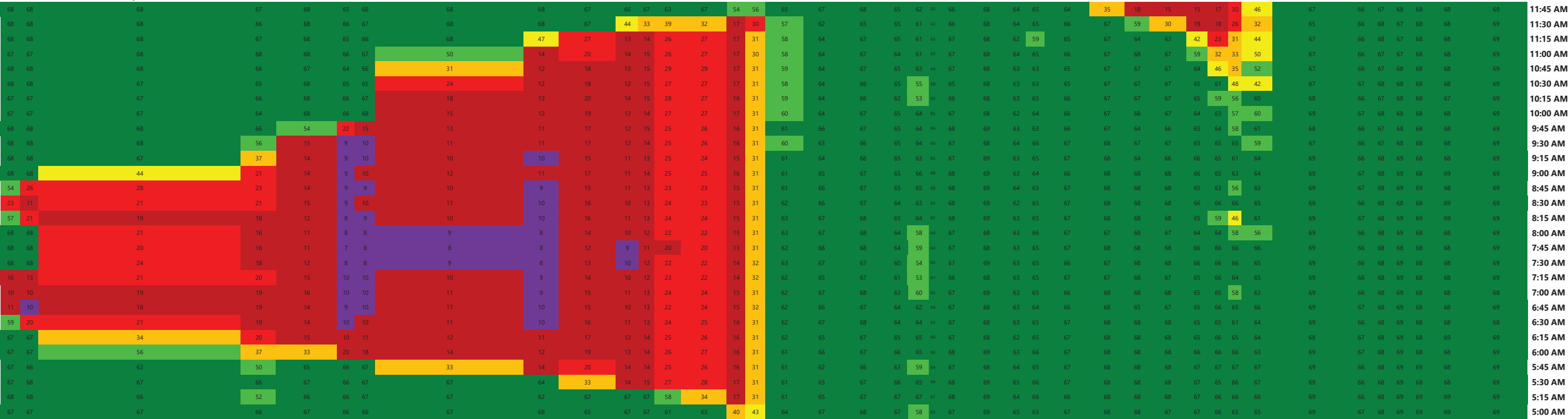
Source: INRIX (Representative of September 19, 2019)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Hour



Northbound I-15: Measured Speed (Source - VISSIM Simulation Model)



	Temescal Canyon Rd Off	Temescal Canyon Rd On		Weirick Rd/ Dos Lagos Dr Off	Weirick Rd/ Dos Lagos Dr On	Cajalco Rd Off	Cajalco Rd On		Foothill Pkwy/ El Cerrito Rd Off	Foothill Pkwy/ El Cerrito Rd On	Ontario Ave Off	Ontario Ave On		WB-91 Express Lane Off	Magnolia Ave Off	Magnolia Ave Loop On	Magnolia Ave On		WB and EB SR-91 Off		WB SR-91 On	EB SR-91 On		Hidden Valley Pkwy Off
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	0	0

Northbound I-15: Observed Speed (Source - Inrix)

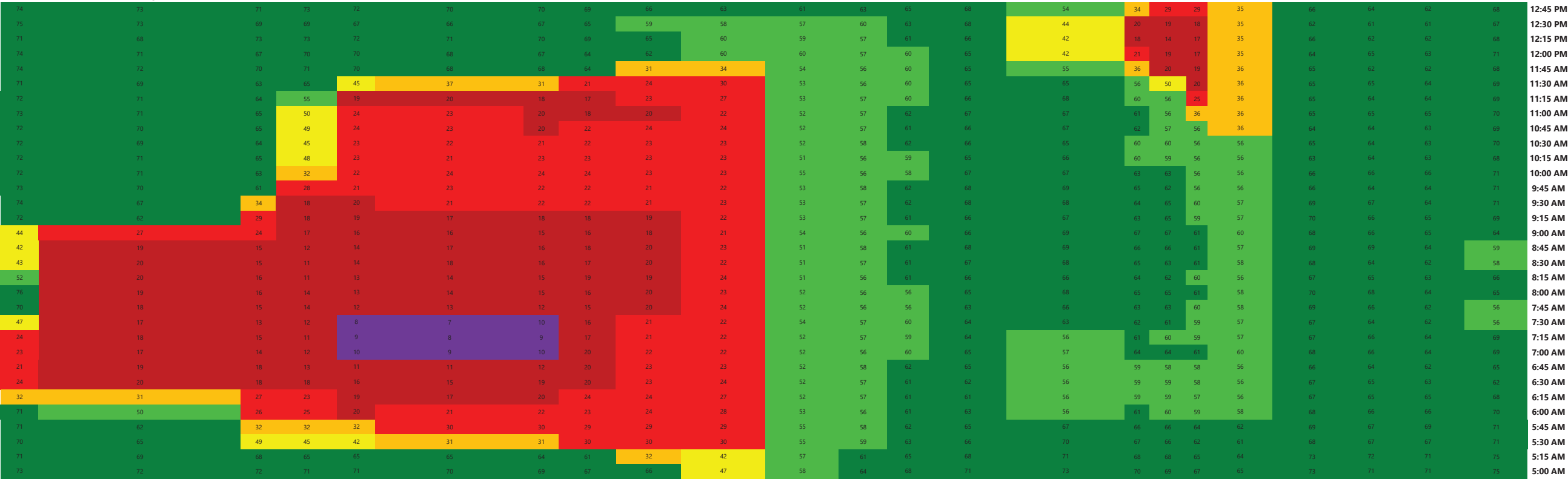


Exhibit E1 - Southbound I-15 Weekday Speed Contour Plot (Existing Conditions - PM)

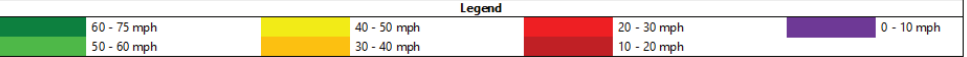
Source: INRIX (Representative of September 19, 2019)

VISSIM Post-Processor

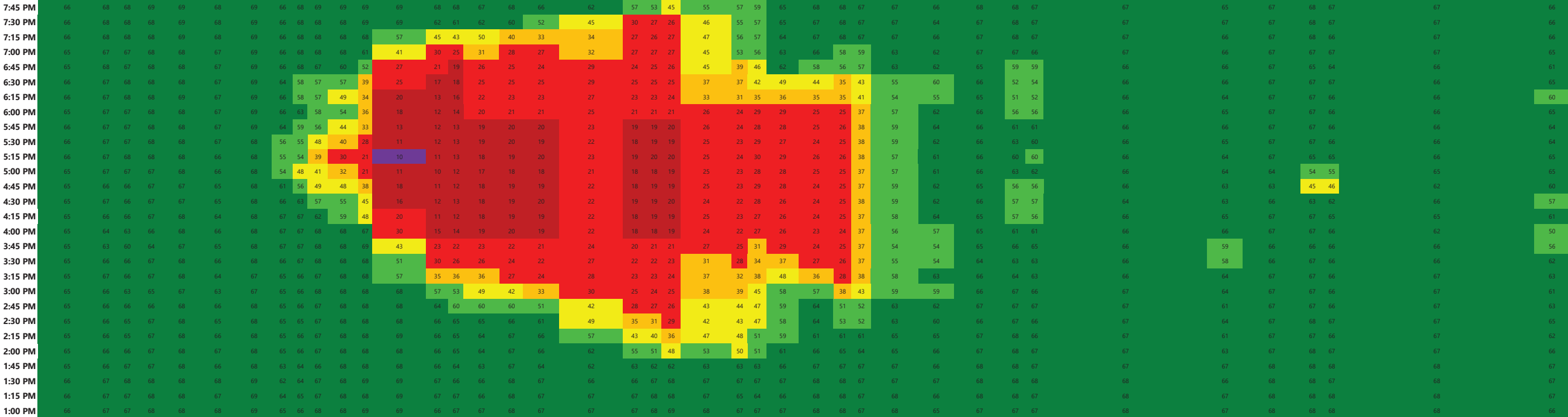
Average Results from 5 Runs

Average Link Speed

I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Hour



Southbound I-15: Measured Speed (Source - VISSIM Simulation Model)



Cumulative Distance (miles)	Length (miles)	Hidden Valley Pkwy On																								Indian Truck Trail Off	
		WB SR-91 Off	EB SR-91 Off	EB SR-91 On	WB SR-91 On	Magnolia Ave Off		Magnolia Ave On	EB-91 Express Lane On		Ontario Ave Off		Ontario Ave On	Foothill Pkwy/ El Cerrito Rd Off	Foothill Pkwy/ El Cerrito Rd On		Cajalco Rd Off	Cajalco Rd On		Weirick Rd/ Dos Lagos Dr Off	Weirick Rd/ Dos Lagos Dr On		Temescal Canyon Rd Off	Temescal Canyon Rd On			
		0.8	0.3	0.3	0.3	0.4		0.5		1		0.5		0.4	0.4		0.5	0.3		1		0.4		2			0.5
	0.8	1.1	1.4	1.7	2.1		2.6		3.6		4.1		4.6	5		5.5	5.8		6.8		7.2		9.2		9.7		12

Southbound I-15: Observed Speed (Source - Inrix)

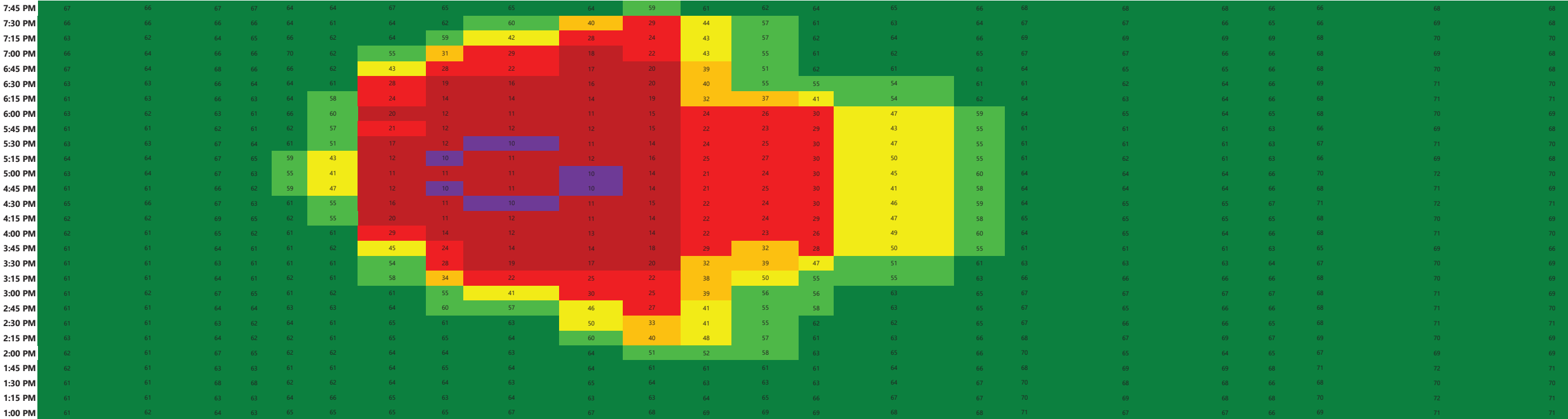
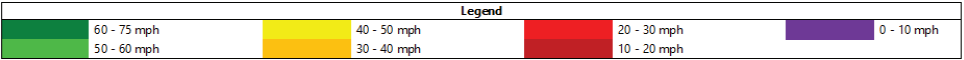


Exhibit E1 - Southbound I-15 Weekday Speed Contour Plot (Existing Conditions - PM)

Source: INRIX (Representative of September 19, 2019)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Hour

Southbound I-15: Measured Speed (Source - VISSIM Simulation Model)



	Indian Truck Trail On																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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Southbound I-15: Observed Speed (Source - Inrix)

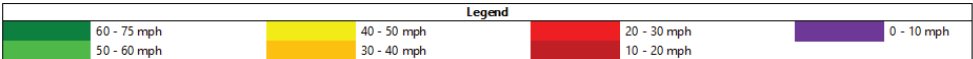


Exhibit E2 - Northbound I-15 Weekday Speed Contour Plot (Existing Conditions - PM)

Source: INRIX (Representative of September 19, 2019)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Hour



Northbound I-15: Measured Speed (Source - VISSIM Simulation Model)



Length (miles)	Main St Off																			
	Main St On																			
	Central Ave Off																			
	Central Ave On																			
	Nichols Rd Off																			
	Nichols Rd On																			
	Lake St Off																			
	Lake St On																			
																			Indian Truck Trail Off	
																				Indian Truck Trail On

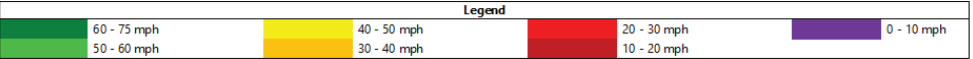
Northbound I-15: Observed Speed (Source - Inrix)



Exhibit E2 - Northbound I-15 Weekday Speed Contour Plot (Existing Conditions - PM)

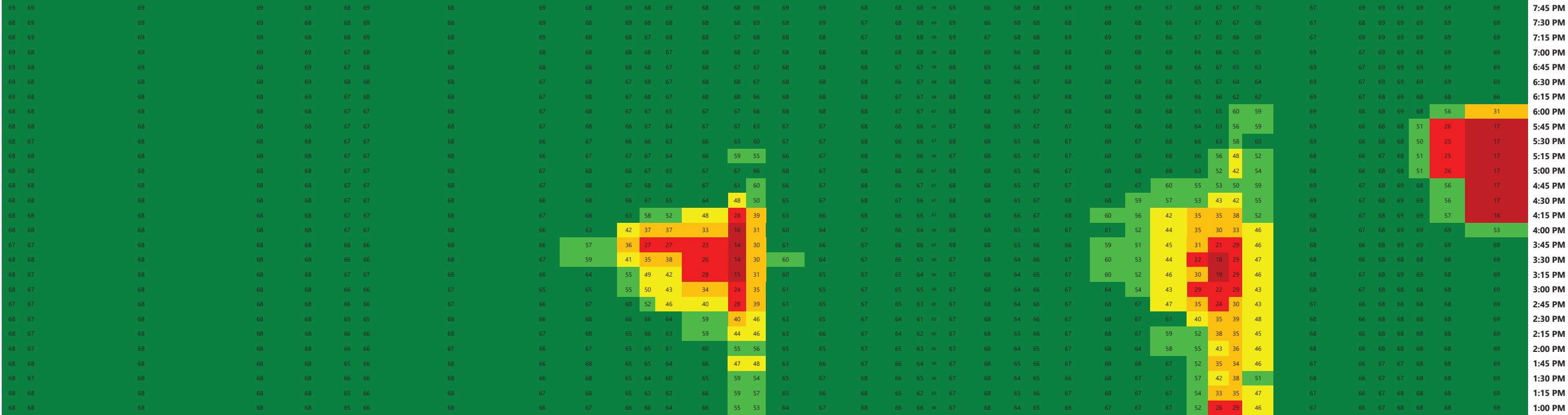
Source: INRIX (Representative of September 19, 2019)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Hour

Northbound I-15: Measured Speed (Source - VISSIM Simulation Model)



	Temescal Canyon Rd Off		Temescal Canyon Rd On		Weirick Rd/ Dos Lagos Dr Off	Weirick Rd/ Dos Lagos Dr On	Cajalco Rd Off	Cajalco Rd On		Foothill Pkwy/ El Cerrito Rd Off	Foothill Pkwy/ El Cerrito Rd On	Ontario Ave Off		Ontario Ave On		WB-91 Express Lane Off	Magnolia Ave Off	Magnolia Ave Loop On	Magnolia Ave On	WB and EB SR-91 Off		WB SR-91 On	EB SR-91 On		Hidden Valley Pkwy Off
2.3		0.5		1.9	0.5	0.5	0.4	0.9		0.4	0.3	0.6		1.1			0.3	0.2	0.5	0.7		0.3	0.6		
12.3		12.8		14.7	15.2	15.7	16.1	17		17.4	17.7	18.3		19.4			19.7	19.9	20.4	21.1		21.4	22		

Northbound I-15: Observed Speed (Source - Inrix)

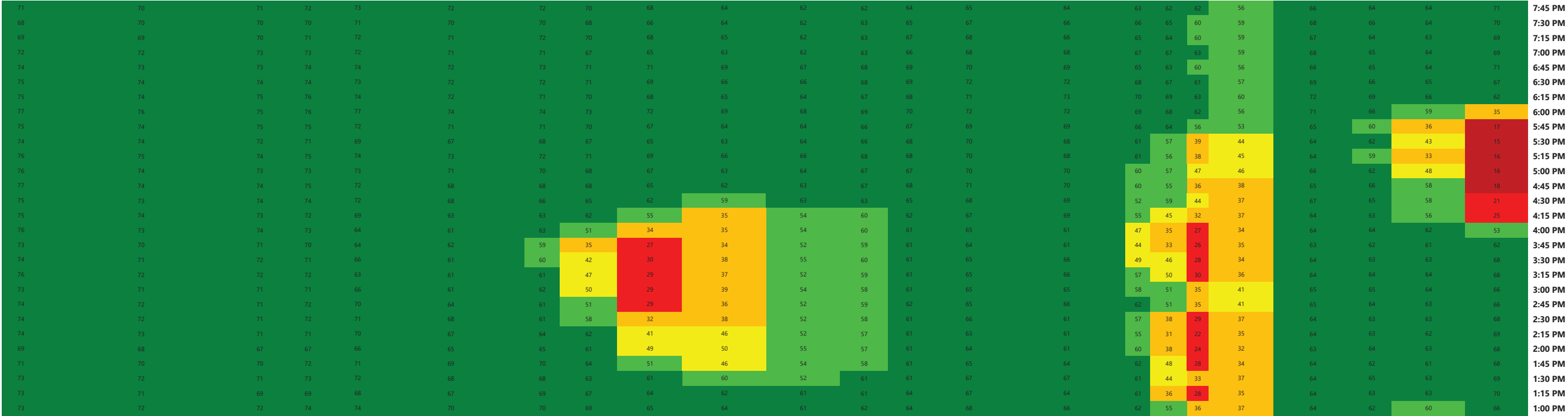


Table 5 – Model Validation Results

Criteria		Criteria Threshold	% Met Target	Peak Period	% Met / Value	Pass/Fail
State facility segments	GEH statistic	< 5.0	100%	AM PM	100% 100%	Pass Pass
Entry locations and entry ramps	GEH statistic	< 3.0	100%	AM PM	100% 100%	Pass Pass
Exit locations and exit ramps	GEH statistic	< 5.0	100%	AM PM	100% 100%	Pass Pass
Travel time	Within allowable tolerance	See Notes 1 and 2	100%	AM PM	100% 100%	Pass Pass
Queuing	Visual comparison to speed contour plot		-	AM PM	-	Pass Pass

Notes:

1. Free-flowing $\Delta = (1 / ((1/t) - (4.4/L))) - t$, where t is the real-world travel time (seconds) and L is the length of the facility (feet).
2. Interrupted Flow $\Delta = (1 / ((1/t) - ((0.1*5280*S) / (3600*L)))) - t$, where t is the real-world travel time (seconds), L is the length of the facility (feet), and S is the free-flow speed (mph).

Source: WSDOT Protocol for VISSIM Simulation (September 2014); Fehr & Peers, 2020

Freeway Operations Analysis

Freeway mainline segment and ramp junctions were analyzed using the methodology consistent with the HCM. Delay and LOS are presented for the AM peak hour (7:00 to 8:00 AM) and PM peak hour (3:00 to 4:00 PM) determined as hours with the highest demand volumes on both SB and NB I-15. Peak hour freeway mainline segment operations are presented in **Table 6** and **Table 7**. Identification numbers for each freeway segment corresponds to their segment numbers as listed in **Appendix C**.

During the Existing (2019) AM peak hour:

- Study segments on SB I-15 operate at LOS C or better.
- The NB I-15 bottleneck at the Cajalco Road On-Ramp merge segment creates a queue that extends to the Indian Truck Trail Off-Ramp; segments in queue due to the bottleneck operate at LOS F.
- The NB I-15 Ontario Avenue Off-Ramp also operates at LOS E during the PM peak hour.

During the Existing (2019) PM peak hour:

- The SB I-15 bottleneck at the Cajalco Road On-Ramp merge segment creates a queue that extends to the Magnolia Avenue On-Ramp; segments in queue due to the bottleneck operate at LOS E or F.
- Various SB I-15 diverge segments, including Weirick Road/Dos Lagos Drive Off-Ramp, Temescal Canyon Road Off-Ramp, and Indian Truck Trail Off-Ramp, operate at LOS E.
- The NB I-15 bottleneck at the Cajalco Road On-Ramp merge segment creates a queue that extends to the Weirick Road/Dos Lagos Drive On-Ramp; segments in queue due to the bottleneck operate at LOS F.
- The NB I-15 bottleneck at the WB Magnolia Avenue On-Ramp merge segment creates a queue that extends to the Magnolia Avenue Off-Ramp; segments in queue due to the bottleneck operate at LOS F.

Table 6 – Existing (2019) Peak Hour Freeway Mainline Operations - SB I-15

I-15 SB Segment		Facility Type	LOS / Density ¹	
			AM Peak Hour	PM Peak Hour
1	Hidden Valley Parkway Off-ramp to On-Ramp	Basic	B / 17	C / 25
2	Hidden Valley Parkway On-Ramp	Merge	B / 11	B / 18
3	Hidden Valley Parkway On-ramp to WB SR-91 Off-Ramp	Basic	B / 15	C / 21
4	WB SR-91 Off-Ramp	Basic	B / 15	C / 21
5	EB SR-91 Off-Ramp	Diverge	D / 26	D / 29
6	EB SR-91 Off-Ramp to On-Ramp	Basic	B / 13	C / 19
7	EB SR-91 On-Ramp	Merge	B / 15	C / 20
8	WB SR-91 On-Ramp to Magnolia Avenue Off-Ramp	Weave	B / 16	B / 18
9	Magnolia Avenue Off-Ramp to On-Ramp	Basic	B / 17	D / 34
10	Magnolia Avenue On-Ramp	Merge	B / 13	<u>F / DEC</u>
11	EB SR-91 Express Lane On-Ramp (Left)	Basic	B / 15	<u>F / DEC</u>
12	EB SR-91 Express Lane On-Ramp to Ontario Avenue Off-Ramp	Basic	B / 15	<u>F / DEC</u>
13	Ontario Avenue Off-Ramp	Basic	B / 15	<u>F / DEC</u>
14	Ontario Avenue Off-Ramp to On-Ramp	Basic	B / 16	<u>F / DEC</u>
15	Ontario Avenue On-Ramp	Merge	B / 13	<u>F / DEC</u>
16	El Cerrito Road Off-Ramp	Basic	C / 18	<u>F / DEC</u>
17	El Cerrito Road Off-Ramp to On-Ramp	Basic	C / 22	<u>F / DEC</u>
18	El Cerrito Road On-Ramp	Merge	C / 22	<u>F / DEC</u>
19	Cajalco Road Off-Ramp	Diverge	C / 25	<u>F / DEC</u>
20	Cajalco Road Off-Ramp to On-Ramp	Basic	C / 21	<u>F / DEC</u>
21	Cajalco Road On-Ramp	Merge	B / 18	<u>F / DEC</u>
22	Cajalco Road On-Ramp to Weirick Road/Dos Lagos Drive Off-Ramp	Basic	C / 22	<u>E / 42</u>
23	Weirick Road/Dos Lagos Drive Off-Ramp	Diverge	C / 23	<u>E / 42</u>
24	Weirick Road/Dos Lagos Drive Off-Ramp to On-Ramp	Basic	C / 19	D / 30
25	Weirick Road/Dos Lagos Drive On-Ramp	Merge	B / 15	D / 26
26	Weirick Road/Dos Lagos Drive On-Ramp to Temescal Canyon Road Off-Ramp	Basic	C / 20	D / 33
27	Temescal Canyon Road Off-Ramp	Diverge	C / 21	<u>E / 37</u>
28	Temescal Canyon Road Off-ramp to On-Ramp	Basic	B / 18	D / 30
29	Temescal Canyon Road On-Ramp	Merge	B / 14	C / 24
30	Temescal Canyon Road On-Ramp to Indian Truck Trail Off-Ramp	Basic	C / 18	D / 32
31	Indian Truck Trail Off-Ramp	Diverge	C / 19	<u>E / 37</u>
32	Indian Truck Trail Off-Ramp to On-Ramp	Basic	B / 17	D / 28
33	Indian Truck Trail On-Ramp	Merge	B / 14	C / 23
34	Indian Truck Trail On-Ramp to Lake Street Off-Ramp	Basic	B / 18	D / 29

Table 6 – Existing (2019) Peak Hour Freeway Mainline Operations - SB I-15

I-15 SB Segment		Facility Type	LOS / Density ¹	
			AM Peak Hour	PM Peak Hour
35	Lake Street Off-Ramp	Diverge	B / 18	D / 32
36	Lake Street Off-Ramp to On-Ramp	Basic	B / 17	C / 26
37	Lake Street On-Ramp	Merge	B / 14	C / 20
38	Lake Street On-Ramp to Nichols Road Off-Ramp	Basic	C / 18	D / 27
39	Nichols Road Off-Ramp	Diverge	C / 18	D / 28
40	Nichols Road Off-Ramp to On-Ramp	Basic	B / 17	C / 25
41	Nichols Road On-Ramp	Merge	B / 16	C / 22
42	Nichols Road On-Ramp to SR-74 (Central Avenue) Off-Ramp	Basic	C / 19	D / 27
43	SR-74 (Central Avenue) Off-Ramp	Diverge	C / 20	D / 29
44	SR-74 (Central Avenue) Off-Ramp to On-Ramp	Basic	B / 17	C / 23
45	SR-74 (Central Avenue) On-Ramp	Merge	C / 19	C / 24
46	SR-74 (Central Avenue) On-Ramp to Main Street Off-Ramp	Basic	C / 22	D / 30
47	Main Street Off-Ramp	Diverge	C / 22	D / 30
48	Main Street Off-Ramp to On-Ramp	Basic	C / 21	D / 27
49	Main Street On-Ramp	Merge	C / 20	C / 24
50	Main Street On-Ramp to Franklin Street Overcrossing	Basic	C / 24	D / 30

Notes:

1. Density reported in passenger cars per lane per mile.
2. **Bold and underline** font indicate LOS E or F conditions. DEC = Demand Exceeds Capacity.

Source: Fehr & Peers, 2020

Table 7 – Existing (2019) Peak Hour Freeway Mainline Operations - NB I-15

I-15 NB Segment		Facility Type	LOS / Density ¹	
			AM Peak Hour	PM Peak Hour
152	Hidden Valley Parkway Off-Ramp to On-Ramp	Basic	C / 19	B / 13
151	Hidden Valley Parkway Off-Ramp	Diverge	C / 24	B / 17
150	EB SR-91 On-Ramp	Basic	C / 21	B / 16
149	WB SR-91 On-Ramp	Merge	C / 19	B / 12
148	EB & WB SR-91 Off-Ramp to WB SR-91 On-Ramp	Basic	B / 14	A / 10
147	EB & WB SR-91 Off-Ramp	Diverge	C / 23	D / 33
146	Magnolia Avenue On-Ramp	Merge	C / 20	<u>F / DEC</u>
145	Magnolia Avenue Loop On-Ramp	Basic	C / 20	<u>F / DEC</u>
144	Magnolia Avenue Off-Ramp to Loop On-Ramp	Basic	C / 22	<u>F / DEC</u>
143	Magnolia Avenue Off-Ramp	Diverge	B / 17	C / 26
142	WB SR-91 Express Lane Off-Ramp (Left)	Basic	C / 20	C / 20
141	Ontario Avenue On-Ramp to WB SR-91 Express Lane Off-Ramp	Basic	C / 20	B / 16
140	Ontario Avenue On-Ramp	Merge	B / 12	A / 10
139	Ontario Avenue Off-Ramp to On-Ramp (5 Lanes)	Basic	B / 15	B / 13
138	Ontario Avenue Off-Ramp to On-Ramp (4 Lanes)	Basic	C / 20	B / 16
137	Ontario Avenue Off-Ramp to On-Ramp (3 Lanes)	Basic	D / 29	C / 22
136	Ontario Avenue Off-Ramp	Diverge	<u>E / 38</u>	C / 24
135	El Cerrito Road On-Ramp	Merge	C / 25	B / 17
134	El Cerrito Road Off-Ramp to On-Ramp	Basic	C / 24	C / 22
133	El Cerrito Road Off-Ramp	Diverge	C / 25	C / 23
132	Cajalco Road On-Ramp to El Cerrito Road Off-Ramp	Basic	D / 27	C / 26
131	Cajalco Road On-Ramp	Merge	<u>F / DEC</u>	<u>F / DEC</u>
130	Cajalco Road Off-Ramp to On-Ramp	Basic	<u>F / DEC</u>	<u>F / DEC</u>
129	Cajalco Road Off-Ramp	Diverge	<u>F / DEC</u>	<u>F / DEC</u>
128	Weirick Road/Dos Lagos Drive On-Ramp	Merge	<u>F / DEC</u>	<u>F / DEC</u>
127	Weirick Road/Dos Lagos Drive Off-Ramp to On-Ramp	Basic	<u>F / DEC</u>	C / 23
126	Weirick Road/Dos Lagos Drive Off-Ramp	Diverge	<u>F / DEC</u>	C / 20
125	Temescal Canyon Road On-Ramp to Weirick Road/Dos Lagos Drive Off-Ramp	Basic	<u>F / DEC</u>	C / 19
124	Temescal Canyon Road On-Ramp	Merge	<u>F / DEC</u>	B / 17
123	Temescal Canyon Road Off-Ramp to On-Ramp	Basic	<u>F / DEC</u>	B / 17
122	Temescal Canyon Road Off-Ramp	Diverge	<u>F / DEC</u>	C / 18
121	Indian Truck Trail On-Ramp to Temescal Canyon Road Off-Ramp	Basic	<u>F / DEC</u>	B / 18
120	Indian Truck Trail On-Ramp	Merge	<u>F / DEC</u>	B / 15
119	Indian Truck Trail Off-Ramp to On-Ramp	Basic	<u>F / DEC</u>	B / 16
118	Indian Truck Trail Off-Ramp	Diverge	<u>F / DEC</u>	B / 17
117	Lake Street On-Ramp to Indian Truck Trail Off-Ramp	Basic	C / 23	B / 17

Table 7 – Existing (2019) Peak Hour Freeway Mainline Operations - NB I-15

I-15 NB Segment		Facility Type	LOS / Density ¹	
			AM Peak Hour	PM Peak Hour
116	Lake Street On-Ramp	Merge	B / 16	B / 14
115	Lake Street Off-Ramp to On-Ramp	Basic	B / 16	B / 15
114	Lake Street Off-Ramp	Diverge	B / 18	B / 16
113	Nichols Road On-Ramp to Lake Street Off-Ramp	Basic	B / 17	B / 16
112	Nichols Road On-Ramp	Merge	B / 14	B / 12
111	Nichols Road Off-Ramp to On-Ramp	Basic	B / 16	B / 15
110	Nichols Road Off-Ramp	Diverge	C / 19	B / 17
109	SR-74 (Central Avenue) On-Ramp to Nichols Road Off-Ramp	Basic	B / 18	B / 16
108	SR-74 (Central Avenue) On-Ramp	Merge	B / 15	B / 13
107	SR-74 (Central Avenue) Off-Ramp to On-Ramp	Basic	B / 14	B / 14
106	SR-74 (Central Avenue) Off-Ramp	Diverge	C / 22	C / 22
105	Main Street On-Ramp to SR-74 (Central Avenue) Off-Ramp	Basic	C / 19	C / 20
104	Main Street On-Ramp	Merge	B / 15	B / 18
103	Main Street Off-Ramp to On-Ramp	Basic	C / 19	C / 19
102	Main Street Off-Ramp	Diverge	C / 24	C / 24
101	Franklin Street Overcrossing to Main Street Off-Ramp	Basic	C / 22	C / 22

Notes:

1. Density reported in passenger cars per lane per mile.
2. **Bold and underline** font indicate LOS E or F conditions. DEC = Demand Exceeds Capacity.

Source: Fehr & Peers, 2020

Travel Time

Reported travel time for the peak period was extracted from the VISSIM model and is presented for the AM peak period (5:00 AM to 12:00 PM) and PM peak period (1:00 to 8:00 PM). Existing peak period freeway mainline segment travel times are presented in **Exhibit F 1 and 2**.

Exhibit F1 – Existing (2019) AM Peak Period Travel Times

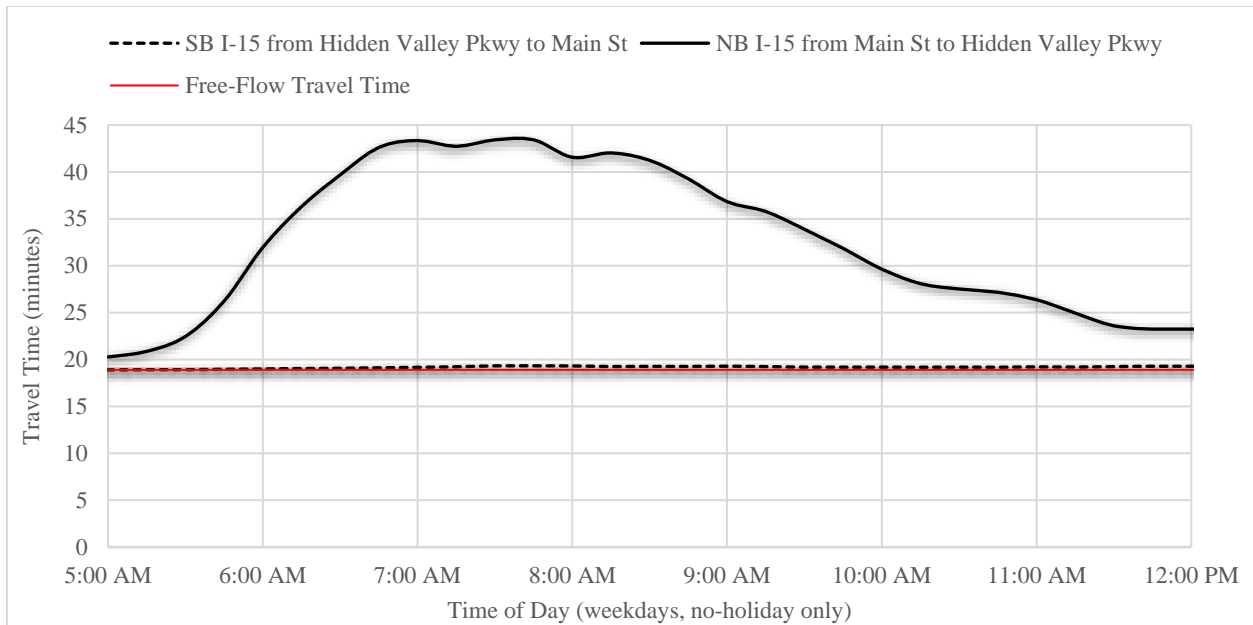
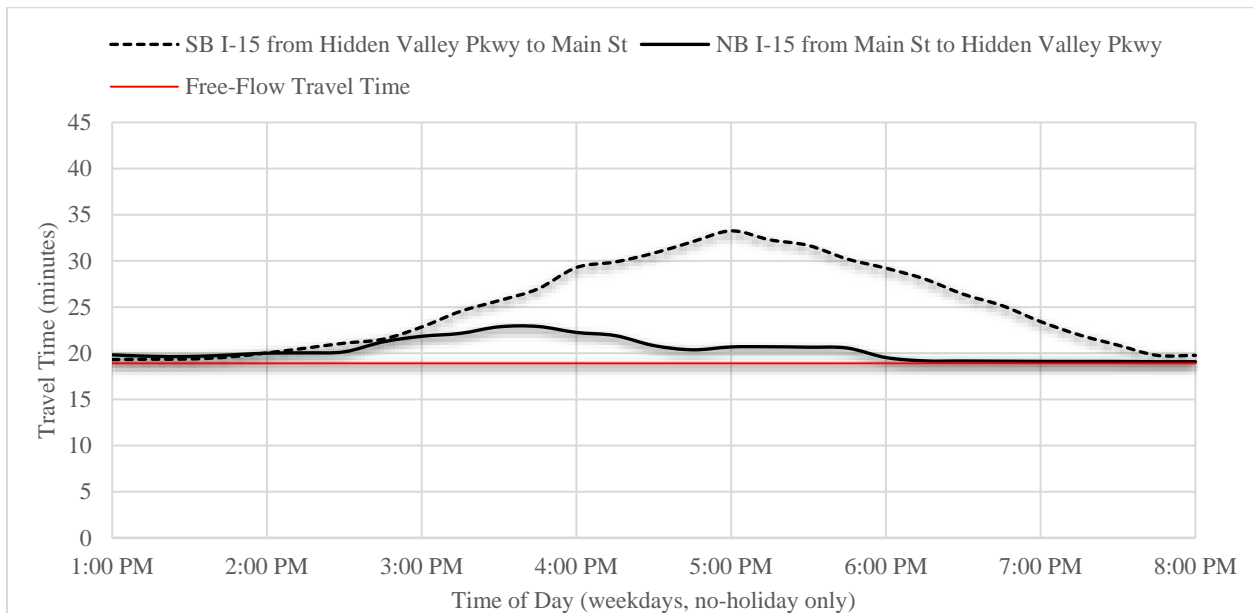


Exhibit F2 – Existing (2019) PM Peak Period Travel Times



Travel times peak on SB I-15 during the PM from 3:00 to 7:00 PM and on NB I-15 and during the AM from 6:00 to 10:00 AM, consistent with observations in the field.

System-wide Performance

While LOS is a typical indicator of transportation facility performance, the system-wide performance metrics have become effective measurements in evaluating transportation system. The system-wide performance measures used for ELPSE include number of vehicles served by the study network, total travel time/vehicle-hours-traveled (VHT), average delay per vehicle, and total delay/vehicle-hours-delay (VHD). System-wide performance metrics are presented for the AM seven-hour peak period (5:00 AM to 12:00 PM) and PM seven-hour peak period (1:00 to 8:00 PM). Peak Period system-wide performance metrics are presented in **Table 8**.

Table 8 – Existing (2019) Peak Period Network Statistics

Performance Measure	AM Peak Period	PM Peak Period
Volume Served (vehicles)	160,868	182,732
Total Distance Traveled (miles)	1,317,551	1,642,809
Total Travel Time (hours)	26,541	29,205
Average Delay Per Vehicle (seconds)	161	99
Total Delay(hours)	7,318	5,125

Source: Fehr & Peers, 2020

Roadway Segment Analysis

Table 9 summarizes average daily traffic (ADT) volumes and volume-to-capacity (V/C) LOS results. The traffic volumes were collected on parallel roadway networks to I-15 in order to quantify ELPSE benefits in future conditions and to assist with the noise assessment.

In Existing Conditions (2019), seven out of 62 roadway segments operate at LOS E, F, or deficiently:

- Hidden Valley Parkway East of I-15 (LOS F)
- Magnolia Avenue West of I-15 (LOS E)
- Temescal Canyon Road Between Lawson Road to Trilogy Parkway (LOS E)
- Dos Lagos Drive East of I-15 (LOS E)
- Lake Street West of Temescal Canyon Road (LOS F or PEC)
- Lake Street East of Temescal Canyon Road (LOS F or PEC)
- Main Street West of I-15 (LOS F or PEC)

All other study roadway segments are operating at LOS D or better.

Table 9 – Existing (2019) Average Daily Traffic & Roadway Segment LOS

	Roadway Segment	Classification	Capacity	Existing (2019)		
				Volume	V/C	LOS
1	Hidden Valley Parkway west of I-15	Arterial	35,900	29,967	0.83	D
2	Hidden Valley Parkway east of I-15	Arterial	35,900	40,038	1.12	F
3	Parkridge Avenue west of Cresta Road	Secondary	34,800	15,731	0.45	A
4	Parkridge Avenue east of Cresta Road	Secondary	34,800	8,244	0.24	A
5	Cresta Road south of Parkridge Avenue	Collector	13,000	9,680	0.74	C
6	Sixth Street west of El Sobrante Road	Major Arterial	37,900	25,840	0.68	B
7	Sixth Street west of Radio Road	Major Arterial	37,900	24,767	0.65	B
8	Radio Road north of Sixth	Collector	13,000	7,524	0.58	A
9	El Sobrante Road between Sixth and Magnolia	Collector	13,000	9,346	0.72	C
10	Magnolia Avenue west of I-15	Major Arterial	54,300	49,463	0.91	E
11	Magnolia Avenue east of I-15	Major Arterial	54,300	39,529	0.73	C
12	Ontario Avenue west of I-15	Major Arterial	54,300	46,021	0.85	D
13	Ontario Avenue east of I-15	Major Arterial	37,900	27,363	0.72	C
14	Ontario Avenue North of El Cerrito Road	Major Arterial	54,300	22,590	0.42	A
15	El Cerrito Road west of I-15	Secondary	34,800	22,236	0.64	B
16	El Cerrito Road between I-15 and Temescal Canyon Road	Secondary	34,800	8,917	0.26	A
17	Bedford Canyon Road south of El Cerrito Road	Collector	13,000	9,221	0.71	C

Table 9 – Existing (2019) Average Daily Traffic & Roadway Segment LOS

	Roadway Segment	Classification	Capacity	Existing (2019)		
				Volume	V/C	LOS
18	Bedford Canyon Road north of El Cerrito Road	Collector	13,000	7,420	0.57	A
19	Evelyn Street	Collector	13,000	425	0.03	A
20	Frances Street	Collector	13,000	162	0.01	A
21	Katy Street	Collector	13,000	515	0.04	A
22	Liberty Avenue	Collector	13,000	0	0.00	A
23	Temescal Canyon Road between El Cerrito Avenue to Cajalco Road	Major Arterial	34,100	19,895	0.58	A
24	Temescal Canyon Road between Cajalco Road to Dos Lagos Drive	Major Arterial	37,900	20,424	0.54	A
25	Temescal Canyon Road between Dos Lagos Drive to Dawson Canyon Road	Major Arterial	34,100	12,476	0.37	A
26	Temescal Canyon Road between Dawson Canyon Road to I-15	Major Arterial	34,100	13,523	0.40	A
27	Temescal Canyon Road between I-15 to Lawson Road	Major Arterial	34,100	17,710	0.52	A
28	Temescal Canyon Road between Lawson Road to Trilogy Parkway	Arterial	18,000	16,947	0.94	E
29	Temescal Canyon Road between Trilogy Parkway to Campbell Ranch Road	Arterial	18,000	10,190	0.57	A
30	Temescal Canyon Road between Campbell Ranch Road to Indian Truck Trail Road	Major Arterial	34,100	3,986	0.12	A
31	Temescal Canyon Road between Indian Truck Trail Road to Horsethief Road	Arterial	18,000	4,148	0.23	A
32	Temescal Canyon Road between Horsethief Road to I-15 Frontage Road	Arterial	18,000	4,624	0.26	A
33	Temescal Canyon Road between Concordia Ranch Road to Lake Street	Arterial	18,000	6,339	0.35	A
34	Cajalco Road west of I-15	Major Arterial	37,900	17,990	0.47	A

Table 9 – Existing (2019) Average Daily Traffic & Roadway Segment LOS

	Roadway Segment	Classification	Capacity	Existing (2019)		
				Volume	V/C	LOS
35	Cajalco Road between I-15 and Grand Oaks	Major Arterial	54,300	24,124	0.44	A
36	Cajalco Road between Grand Oaks to Temescal Canyon Road	Major Arterial	54,300	18,148	0.33	A
37	Retreat Parkway west of Knabe Road	Secondary	25,900	3,552	0.14	A
38	Weirick Road between I-15 to Knabe Road	Secondary	25,900	19,353	0.75	C
39	Weirick Road north of Knabe Road	Secondary	25,900	611	0.02	A
40	Dos Lagos Drive east of I-15	Secondary	25,900	23,988	0.93	E
41	Knabe Road between Weirick Road to White Sage Street	Secondary	25,900	14,663	0.57	A
42	Knabe Road between White Sage Street to Hunt Road	Secondary	25,900	5,719	0.22	A
43	Campbell Ranch Road between Temescal Canyon Road to Mayhew Canyon Road	Secondary	25,900	4,149	0.16	A
44	Campbell Ranch Road between Mayhew Canyon Road to Indian Truck Trail	Secondary	25,900	7,530	0.29	A
45	De Palma Road between Indian Truck Trail and Horsethief Canyon Road	Secondary	25,900	8,091	0.31	A
46	Horsethief Canyon Road west of De Palma Road	Arterial	18,000	10,009	0.56	A
47	Horsethief Canyon Road between De Palma Road to Temescal Canyon Road	Arterial	18,000	3,870	0.22	A
48	Lake Street west of Temescal Canyon Road	Urban Arterial	18,000	20,129	1.12	F ⁴
49	Lake Street east of Temescal Canyon Road	Urban Arterial	18,000	18,535	1.03	F ⁴
50	Nichols Road west of Collier Road	Urban Arterial	18,000	8,754	0.49	A
51	Nichols Road between Collier Road to I-15	Urban Arterial	18,000	12,410	0.69	B

Table 9 – Existing (2019) Average Daily Traffic & Roadway Segment LOS

	Roadway Segment	Classification	Capacity	Existing (2019)		
				Volume	V/C	LOS
52	Nichols Road east of I-15	Urban Arterial	18,000	4,305	0.24	A
53	Collier Avenue between Nichols Road and Riverside Drive	Major Arterial	34,100	5,619	0.16	A
54	Collier Avenue between Riverside Drive to Central Avenue	Urban Arterial	53,900	28,829	0.53	A
55	Collier Avenue south of SR-74 (Central Avenue)	Major Arterial	34,100	11,852	0.35	A
56	Dexter Avenue north of SR-74 (Central Avenue)	Collector	13,000	9,378	0.72	C
57	Dexter Avenue south of SR-74 (Central Avenue)	Collector	13,000	7,869	0.61	B
58	SR-74 (Central Avenue) between Collier Avenue to I-15	Major Arterial	68,200	41,817	0.61	B
59	SR-74 (Central Avenue) between I-15 to Dexter Avenue	Urban Arterial	71,800	54,589	0.76	C
60	SR-74 (Central Avenue) between Dexter Avenue to Cambern Avenue	Urban Arterial	71,800	43,152	0.60	B
61	SR-74 (Central Avenue) east of Cambern Avenue	Urban Arterial	71,800	44,027	0.61	B
62	Main Street west of I-15	Secondary	12,950	15,419	1.19	F⁴

Notes:

1. Capacity for each roadway segment was determined by the number of lanes and roadway capacities as defined by the City of Corona, City of Lake Elsinore, and County of Riverside General Plans and Traffic Impact Study Guidelines
2. V/C ratio = ADT/ Roadway Capacity
3. **Bold** font indicates deficient operations
4. The City of Lake Elsinore General Plan considers this V/C ratio as potentially exceeds capacity (PEC) if adjacent intersections are operating acceptably during the peak hour. Since intersection analysis is not part of this study, the roadway will be considered deficient.

Source: Fehr & Peers, 2020

Collision Data Review

A collision data review was conducted for the study area and is presented in the following section. Traffic Accident Surveillance and Analysis System (TASAS) data was provided by Caltrans for collisions occurring on I-15 mainline and freeway ramps through the study area between January 2017 and December 2019. These statistics include the most recent three years of complete data.

Vehicle Collision Data

A summary of Total, Fatal, and Fatal + Injury collisions occurring on the mainline and ramps is summarized in **Table 10**. On mainline segments in the study area from January 2017 and December 2019 0.72% of collisions reported were fatal, while 0% of the collisions reported on ramps between Main Street Interchange and Ontario Avenue Interchange were fatal. I-15 between PM 020.300 to PM 038.800, exhibits a collision rate lower than the statewide average for similar facilities. For ramps, 14 out of 48 reported collision rates (either Fatal, Fatal + Injury, or Total) exceeded the statewide average for similar facilities.

Table 11 summarizes the collision types for the mainline and interchange ramps in the study area. Rear-end and side-swipe type collisions accounted for 77.8% of all reported collisions on the I-15 mainline and ramps. Collisions that were a result of hitting an object accounted for 15.7% of all collisions. 6.5% of the reported collisions were due to other accident types that included head-on, broadside, overturned, and auto-pedestrian collisions.

Table 10 – I-15 Freeway Mainline Collision Summary

Facility	Collision Rate ¹							
	Fatal	Fatal + Injury	Actual			State Average		
			Fatality	Fatal + Injury	Total	Fatality	Fatal + Injury	Total
Interstate 15 Mainline (Directional)								
NB I-15 PM 020.300 to PM 038.800	0.24%	36.58%	0.002	0.23	0.63	0.007	0.28	0.85
SB I-15 PM 020.300 to PM 038.800	1.29%	32.23%	0.007	0.17	0.53	0.007	0.28	0.85
Interstate 15/Main Street Interchange Ramps								
SB I-15 On-Ramp from Main Street (PM 020.661)	0.00%	0.00%	0.000	0.00	0.23	0.002	0.21	0.60
NB I-15 Off-ramp to Main Street (PM 020.732)	0.00%	0.00%	0.000	0.19	0.37	0.004	0.32	0.92
NB I-15 On-Ramp from Main Street (PM 021.135)	0.00%	0.00%	0.000	0.00	0.51	0.002	0.21	0.60
SB I-15 Off-ramp to Main Street (PM 021.160)	0.00%	33.33%	0.000	0.39	1.17	0.004	0.32	0.92
Interstate 15/State Route 74/Central Avenue Interchange Ramps								
SB I-15 On-Ramp from State Route 74 (SR-74)	0.00%	0.00%	0.000	0.00	0.07	0.002	0.16	0.47

Table 10 – I-15 Freeway Mainline Collision Summary

Facility	Collision Rate ¹							
	Fatal	Fatal + Injury	Actual			State Average		
			Fatality	Fatal + Injury	Total	Fatality	Fatal + Injury	Total
(PM 022.080)								
NB I-15 Off-Ramp from SR-74 (Central Avenue) (PM 022.094)	0.00%	33.33%	0.000	0.19	0.58	0.003	0.24	0.68
NB I-15 On-Ramp from SR-74 (Central Avenue) (PM 022.428)	0.00%	28.57%	0.000	0.26	0.89	0.002	0.16	0.47
SB I-15 to SR-74 (Central Avenue) (PM 022.492)	0.00%	25.00%	0.000	0.31	1.25	0.003	0.24	0.68
Interstate 15/Nichols Road Interchange Ramps								
NB I-15 Off-Ramp to Nichols Road (PM 023.605)	0.00%	33.33%	0.000	0.25	0.75	0.004	0.32	0.92
SB I-15 On-Ramp from Nichols Road (PM 023.605)	0.00%	0.00%	0.000	0.00	0.00	0.002	0.21	0.60
NB I-15 On-Ramp from Nichols Road (PM 024.041)	0.00%	0.00%	0.000	0.00	0.00	0.002	0.21	0.60
SB I-15 Off-Ramp from Nichols Road (PM 024.075)	0.00%	0.00%	0.000	0.00	0.32	0.004	0.32	0.92
Interstate 15/Lake Street Interchange Ramps								
NB I-15 Off-Ramp to Lake Street (PM 026.463)	0.00%	50.00%	0.000	0.32	0.64	0.004	0.32	0.92
SB I-15 On-Ramp from Lake Street (PM 026.510)	0.00%	50.00%	0.000	0.37	0.75	0.002	0.21	0.60
NB I-15 On-Ramp from Lake Street (PM 026.912)	0.00%	100.00%	0.000	0.14	0.14	0.002	0.21	0.60
NB I-15 Off-Ramp to Lake Street (PM 026.949)	0.00%	14.29%	0.000	0.42	1.40	0.004	0.32	0.92
Interstate 15/Indian Truck Trail Interchange Ramps								
NB I-15 On-Ramp from Indian Trail (PM 030.196)	0.00%	0.00%	0.000	0.00	0.92	0.01	0.33	0.98
SB I-15 On-Ramp from Indian Trail (PM 030.250)	0.00%	0.00%	0.000	0.00	0.00	0.005	0.17	0.50
NB I-15 On-Ramp from Indian Trail (PM 030.600)	0.00%	33.33%	0.000	0.00	0.43	0.005	0.17	0.50

Table 10 – I-15 Freeway Mainline Collision Summary

Facility	Collision Rate ¹							
	Fatal	Fatal + Injury	Actual			State Average		
			Fatality	Fatal + Injury	Total	Fatality	Fatal + Injury	Total
SB I-15 Off-Ramp from Indian Trail (PM 030.646)	0.00%	0.00%	0.000	0.00	0.16	0.01	0.33	0.98
Interstate 15/Temescal Canyon Interchange Ramps								
SB I-15 On-Ramp from Temescal Canyon (PM 033.088)	0.00%	0.00%	0.000	0.00	0.00	0.005	0.17	0.50
NB I-15 Off-Ramp to Temescal Canyon (PM 033.104)	0.00%	30.77%	0.000	1.02	3.33	0.01	0.33	0.98
SB I-15 Off-Ramp to Temescal Canyon (PM 033.425)	0.00%	0.00%	0.000	0.00	0.22	0.01	0.33	0.98
NB I-15 On-Ramp from Temescal Canyon (PM 033.466)	0.00%	28.57%	0.000	0.24	0.83	0.005	0.17	0.50
Interstate 15/Weirick Road Interchange Ramps								
NB I-15 Off-Ramp to Weirick Road (PM 035.449)	0.00%	0.00%	0.000	0.00	0.43	0.004	0.32	0.92
SB I-15 On-Ramp from Weirick Road (PM 035.497)	0.00%	0.00%	0.000	0.00	0.00	0.002	0.21	0.60
SB I-15 Off-Ramp to Weirick Road (PM 035.854)	0.00%	0.00%	0.000	0.00	0.00	0.004	0.32	0.92
NB I-15 On-Ramp from Weirick Road (PM 035.871)	0.00%	14.29%	0.000	0.08	0.55	0.002	0.21	0.60
Interstate 15/Cajalco Road Interchange Ramps								
NB I-15 Off-Ramp to Cajalco Road (PM 036.639)	0.00%	42.86%	0.000	0.55	1.29	0.003	0.24	0.69
NB I-15 On-Ramp from Cajalco Road (PM 036.934)	0.00%	0.00%	0.000	0.00	0.21	0.003	0.19	0.56
SB I-15 On-Ramp from Cajalco Road (PM 036.960)	0.00%	66.67%	0.000	0.30	0.45	0.003	0.18	0.61
SB I-15 Off-Ramp to Cajalco Road (PM 037.187)	0.00%	40.00%	0.000	0.16	0.40	0.0003	0.15	0.45
Interstate 15/El Cerrito Road Interchange Ramps								

Table 10 – I-15 Freeway Mainline Collision Summary

Facility	Collision Rate ¹							
	Fatal	Fatal + Injury	Actual			State Average		
			Fatality	Fatal + Injury	Total	Fatality	Fatal + Injury	Total
NB I-15 Off-Ramp to El Cerrito Road (PM 037.657)	0.00%	75.00%	0.000	0.56	0.75	0.004	0.32	0.92
SB I-15 On-Ramp from El Cerrito Road (PM 037.682)	0.00%	0.00%	0.000	0.00	0.33	0.002	0.21	0.60
NB I-15 On-Ramp from El Cerrito Road (PM 038.016)	0.00%	100.00%	0.000	0.33	0.33	0.002	0.21	0.60
SB I-15 Off-Ramp to El Cerrito Road (PM 038.017)	0.00%	20.00%	0.000	0.17	0.17	0.004	0.32	0.92
<i>Interstate 15/Ontario Avenue Interchange Ramps</i>								
NB I-15 Off-Ramp to Ontario Avenue (PM 038.432)	0.00%	66.67%	0.000	0.70	1.05	0.004	0.32	0.92
SB I-15 On-Ramp from Ontario Avenue (PM 038.563)	0.00%	37.50%	0.000	0.31	0.84	0.002	0.21	0.60

Notes:

1. For mainline sections, the accident rate is the number of accidents per million vehicle-miles. For ramps, the accident rate is the number of accidents per million vehicles.
2. **Bold** indicates an actual accident rate that is higher than the average accident rate

Source: Caltrans District 8 TASAS Table B January 2017- December 2019; Fehr & Peers, 2020.

Table 11 – I-15 Freeway Mainline and Ramp Collision Type Summary

Facility	Rear Ends	Sideswipe	Hit Objects	Others'
<i>Interstate 15 Mainline (Directional)</i>				
NB I-15 (PM 020.300 to PM 038.800)	69%	16%	13%	2%
SB I-15 (PM 020.300 to PM 038.800)	47%	25%	20%	7%
<i>Interstate 15/Main Street Interchange Ramps</i>				
SB I-15 On-Ramp from Main Street (PM 020.661)	100%	0%	0%	0%
NB I-15 Off-Ramp to Main Street (PM 020.732)	50%	0%	50%	0%
NB I-15 On-Ramp from Main Street (PM 021.135)	0%	0%	100%	0%
SB I-15 Off-Ramp to Main Street (PM 021.160)	67%	0%	0%	33%
<i>Interstate 15/State Route 79/Central Avenue Interchange Ramps</i>				
SB I-15 On-Ramp from SR-74 (Central Avenue) (PM 022.080)	0%	100%	0%	0%
NB I-15 Off-Ramp from SR-74 (Central Avenue) (PM 022.094)	78%	11%	0%	11%
NB I-15 On-Ramp from SR-74 (Central Avenue) (PM 022.428)	57%	14%	0%	29%
SB I-15 Off-Ramp to Central Avenue (SR 74) (PM 022.492)	75%	8%	0%	17%
<i>Interstate 15/Nichols Road Interchange Ramps</i>				
NB I-680 Off-Ramp to Nichols Road (PM 023.605)	33%	0%	0%	67%
SB I-15 On-Ramp from Nichols Road (PM 023.605)	0%	0%	0%	0%
NB I-15 On-Ramp from Nichols Road (PM 024.041)	0%	0%	0%	0%
SB I-15 Off-Ramp from Nichols Road (PM 024.075)	100%	0%	0%	0%
<i>Interstate 15/Lake Street Interchange Ramps</i>				
NB I-15 Off-Ramp to Lake Street (PM 026.463)	100%	0%	0%	0%
SB I-15 On-Ramp from Lake Street (PM 026.510)	0%	50%	0%	50%
NB I-15 On-Ramp from Lake Street (PM 026.912)	0%	0%	100%	0%

Table 11 – I-15 Freeway Mainline and Ramp Collision Type Summary

Facility	Rear Ends	Sideswipe	Hit Objects	Others'
SB I-15 Off-Ramp to Lake Street (PM 026.949)	86%	0%	14%	0%
<i>Interstate 15/Indian Truck Trail Interchange Ramps</i>				
NB I-15 Off-Ramp from Indian Truck Trail (PM 030.196)	0%	33%	0%	67%
SB I-15 On-Ramp from Indian Truck Trail (PM 030.250)	0%	0%	0%	0%
NB I-15 On-Ramp from Indian Truck Trail (PM 030.600)	67%	33%	0%	0%
SB I-15 Off-Ramp from Indian Truck Trail (PM 030.646)	0%	0%	0%	100%
<i>Interstate 15/Temescal Canyon Interchange Ramps</i>				
SB I-15 On-Ramp from Temescal Canyon (PM 033.088)	0%	0%	0%	0%
NB I-15 Off-Ramp to Temescal Canyon (PM 033.104)	0%	0%	0%	0%
SB I-15 Off-Ramp to Temescal Canyon (PM 033.425)	50%	50%	0%	0%
NB I-15 On-Ramp from Temescal Canyon (PM 033.466)	57%	0%	29%	14%
<i>Interstate 15/Weirick Road Interchange Ramps</i>				
NB I-15 Off-Ramp to Weirick Road (PM 035.449)	100%	0%	0%	0%
SB I-15 On-Ramp from Weirick Road (PM 035.497)	0%	0%	0%	0%
SB I-15 Off-ramp to Weirick Road (PM 035.854)	0%	0%	0%	0%
NB I-15 On-Ramp from Weirick Road (PM 035.871)	29%	57%	14%	0%
<i>Interstate 15/Cajalco Road Interchange Ramps</i>				
NB I-15 Off-Ramp to Cajalco Road (PM 036.639)	0%	0%	0%	100%
NB I-15 On-Ramp from Cajalco Road (PM 036.934)	0%	0%	0%	0%
SB I-15 On-Ramp from Cajalco Road (PM 036.960)	33%	0%	0%	67%
SB I-15 Off-Ramp to Cajalco Road (PM 037.187)	20%	0%	40%	40%
<i>Interstate 15/El Cerrito Road Interchange Ramps</i>				
NB I-15 Off-Ramp to El Cerrito Road (PM 037.657)	75%	0%	0%	25%

Table 11 – I-15 Freeway Mainline and Ramp Collision Type Summary

Facility	Rear Ends	Sideswipe	Hit Objects	Others'
SB I-15 On-Ramp from El Cerrito Road (PM 037.682)	50%	0%	0%	50%
NB I-15 On-Ramp from El Cerrito Road (PM 038.016)	0%	0%	0%	100%
SB I-15 Off-Ramp to El Cerrito Road (PM 038.017)	20%	20%	0%	60%
<i>Interstate 15/Ontario Avenue Interchange Ramps</i>				
NB I-15 Off-Ramp to Ontario Avenue (PM 038.432)	44%	0%	11%	44%
SB I-15 On-Ramp from Ontario Avenue (PM 038.563)	75%	0%	25%	0%

Notes:

1. Other accident types include head-on, broadside, overturn, auto-pedestrian, and other collisions.

Source: Caltrans District 8 TASAS, 2017; Fehr & Peers, 2020

4. Project Alternatives

Two ELPSE alternatives are under evaluation in the PA/ED phase, including one No-Build Alternative (Alternative 1), and one Build Alternative.

Alternative 1: No-Build Alternative

The No-Build Alternative assumes no improvements to I-15 beyond those listed in the 2016 SCAG RTP/SCS.

Existing Conditions:	The existing lane configurations for the I-15 study corridor (generally three lanes in the NB and SB direction).
Opening Year (2030):	The study corridor assumes SCAG RTP/SCS improvements that have a 2030 Opening Year and include completion of the ELP and Cajalco Road interchange improvements.
Design Year (2050):	The study corridor assumes SCAG RTP/SCS improvements that have a 2050 Opening Year and includes the Ethanac Corridor connection, Cajalco Road widening project, and the CETAP-West project.

Alternative 2: Build Alternative (Dual Express Lanes)

Alternative 2 would extend the I-15 ELP that is currently under construction, an additional 14.5 miles to the South. The proposed new segment would extend roughly from SR-74 (Central Avenue) in Lake Elsinore, through the unincorporated Riverside County community of Temescal Valley to the El Cerrito Interchange in Corona. The proposed ELPSE includes additional attributes to the system, including: SB auxiliary lanes from Nichols Road (PM 23.9) to SR-74 (Central Avenue) and from SR-74 (Central Avenue) to Main Street (PM 21.2 in Lake Elsinore); and access locations, egress locations, and weave zones between the express lanes and general purpose lanes. The Project also proposes a dual lane southbound off-ramp at Weirick/Dos Lagos Drive (two total lanes) and would perpetuate an auxiliary lane between Cajalco Road (36.75) and Weirick Road/Dos Lagos Drive (PM 35.91) (approximately 0.91 mile). The ELPSE proposes to increase capacity by adding two tolled express lanes in both directions within the I-15 median to accommodate increasing traffic volumes in western Riverside County. Associated improvements, including advance signage and transition striping (extending two miles from each end of the express lane ELPSE limits) from PM 20.3 to the south and PM 40.1 to the north. The proposed lane improvements and supporting infrastructure would be constructed within the existing Caltrans right of way, with the express lanes located within the existing I-15 median.

Although the ELPSE would have an anticipated opening year of 2027, an opening year of 2030 was used so that the study periods of the ELPSE are in five-year increments to be consistent with travel demand model forecasting year increments as directed by Caltrans staff. Once built, the ELPSE would improve traffic operations and travel times, enhance mobility by expanding travel choices through carpooling and mass transit, increase travel time reliability, manage long-term traffic congestion, provide a cost-effective mobility solution, and expand and maintain compatibility with the regional express lanes network.

Other ELPSE features include widening of up to 15 bridges, creating multiple express lane entrance and exit points, as well as building noise barriers, retaining walls, drainage systems, and gantries with electronic toll collection and monitoring equipment and variable message signs.

Improvements proposed in the Build Alternative are illustrated in **Exhibit G1 and G2**.

Exhibit I1 – Proposed Build Alternative (Dual Express Lanes Cross-Section)

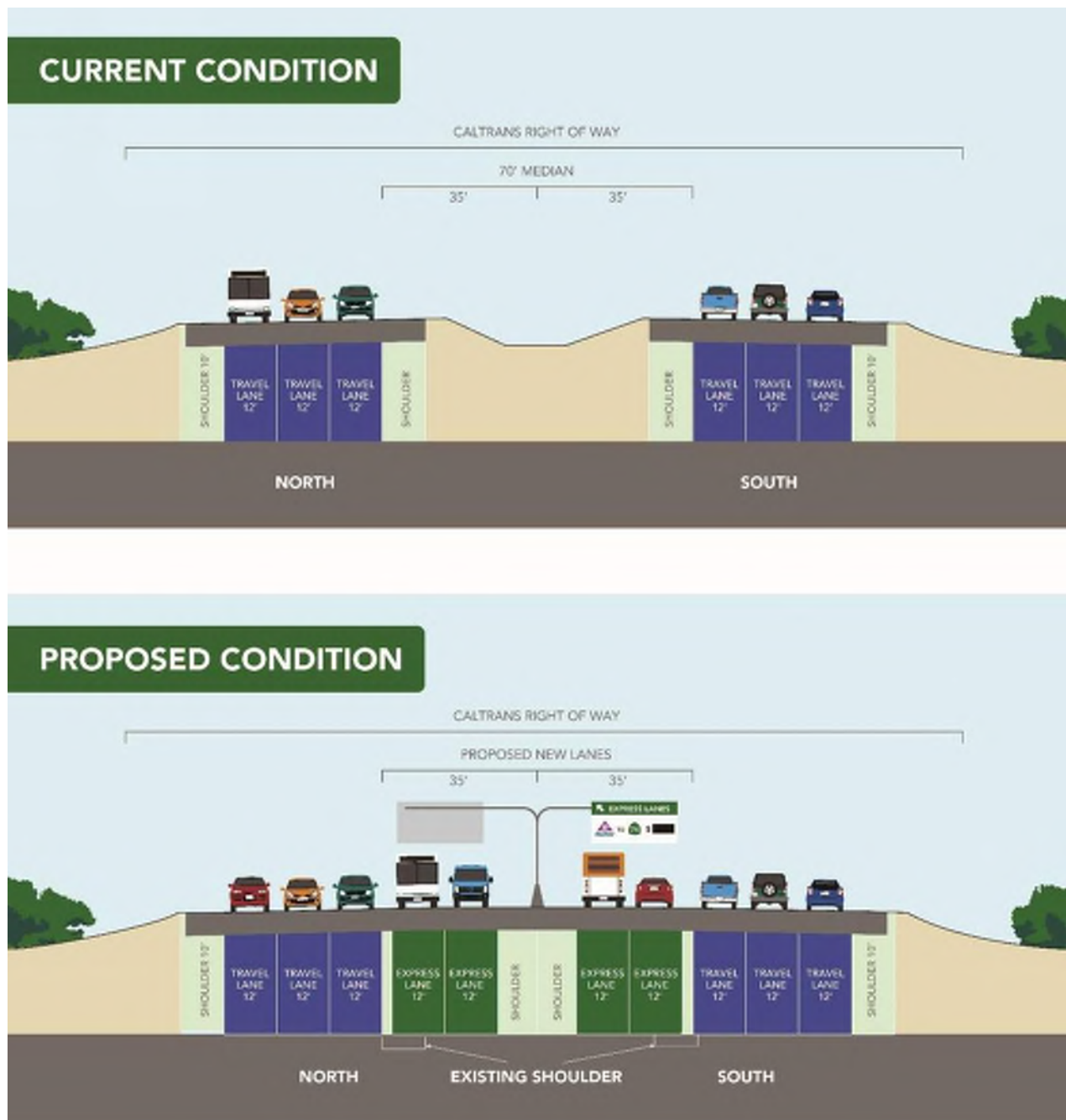


Exhibit J2 – Proposed Build Alternative (Express Lane Access and Auxiliary Lanes)



As shown on Exhibit G2, the following express lane access locations are proposed as part of the project. These locations were developed based on initial operational analysis results, which indicated modifications to the initial design was needed within the project limits to address some observed operational issues. These modifications included the addition of auxiliary lanes at the southbound terminus of the facility and minor shifts to access locations around the Weirick Road and Cajalco Road Interchange area to increase the weaving distance to access the express lane network.

Southbound Direction:

- Ingress and egress between El Cerrito Road and Cajalco Road
- Ingress and egress between Cajalco Road and Weirick Road
- Ingress and egress north of Indian Truck Trail
- Ingress and egress north of Lake Street
- Egress and #2 express lane termination north of Nichols Road
- Egress and #1 express lane termination between Nichols Road and Central Avenue

Northbound Direction:

- Ingress and formation of the #1 express lane north of Central Avenue
- Ingress and formation of the #2 express lane north of Nichols Road
- Ingress and egress north of Lake Street
- Ingress and egress north of Indian Truck Trail
- Ingress at Cajalco Road
- Ingress and egress between Cajalco Road and El Cerrito Road

Design Variations

Before the design of the Build-Alternative was submitted to Caltrans, design variations for project features were tested in VISSIM in order to inform and guide the design decision making process. Tests were conducted specifically at the following project access locations:

- Southbound I-15 Express Lane Egress at SR-74 (Central Avenue)
- Southbound I-15 Express Lane Ingress and Egress between Cajalco Road and Weirick Road
- Northbound I-15 Express Lane Ingress and Egress between Weirick Road and Cajalco Road
- Northbound I-15 Northern Express Lane Access

These design variations were evaluated to inform the design alternative and, as such, they were analyzed in VISSIM only during the peak demand direction using the Opening Year Plus Project volumes (unless otherwise stated). Additionally, only one run was utilized to expedite the process of testing multiple design variations during a shorter period of time to inform the project alternative (unless otherwise specified). Matrices comparing each design variation and speed contour plot exhibits is provided in Appendix E for informational purposes only.

Southbound I-15 Express Lane Egress at SR-74 (Central Avenue)

SR-74 (Central Avenue) has been the logical terminus for the Express Lane Southern Extension Project and was tested initially. Under this design variation, the single southbound express lane terminates at the SR-74 (Central Avenue)

Interchange. The resulting bottleneck extended from the southbound SR-74 (Central Avenue) On-Ramp to the Indian Truck Trail Off-Ramp with an active bottleneck from 2:30 PM to beyond 8:00 PM.

Because the congestion at the logical terminus was extensive, the limits of the project were tested to gain perspective on operational benefit of extending the terminus further south of the SR-74 (Central Avenue) Interchange.

Express Lane Extension South of SR-74 (Central Avenue)

Variation 1: Express Lanes Terminate South of Main Street

Under this design variation, the single southbound express lane would terminate approximately 1,500 feet south of the southbound Main Street On-Ramp. The bottleneck extended outside the southern end of the study area (south of Main Street interchange) to the Lake Street Interchange. The bottleneck is active from 3:30 PM to beyond 8:00 PM. Since this design variation created issues with logical termini and didn't provide substantial benefit related to operations, it was not considered for inclusion in the design alternative.

Variation 2: Express Lanes Terminate Between Main Street On- & Off-Ramps

Under this design variation, the single southbound express lane terminates between the Main Street On- and Off-Ramps. The bottleneck begins at the Main Street On-Ramp to the express lane egress north of the Lake Street Interchange. The bottleneck is active from 2:30 PM to 7:45 PM. Since this design variation created issues with logical termini and didn't provide substantial benefit related to operations, it was not considered for inclusion in the design alternative.

Shifting the terminus south indicated that it did not solve the bottleneck issue at the south end of the corridor; the bottleneck would just shift to wherever the express lanes were terminated and that distance affected how far back congestion extended during congestion.

The logical termini for I-15 ELPSE is the SR-74/Central Avenue interchange. Any extension of the facility will increase the project beyond the current scope of the project, and it will modify the termini for the project (perhaps terminating the facility without a logical location). Extending I-15 ELPSE has little benefit to traffic operations and reducing congestion at the southern terminus. Furthermore, the RTP/SCS has future projects programmed for I-15 south of SR-74 (Central Avenue) such as the following:

RTP ID 3160002: Construct two HOV lanes on I-15 between Junction I-15/I-215 to SR-74 Central Avenue (PM 22.30 to PM 8.70, 2039)

Variation 3: Auxiliary Lanes

Under this design variation, the single southbound express lane terminates at the SR-74 (Central Avenue) Interchange and auxiliary lanes would be constructed between Nichols Road On-Ramp and SR-74 (Central Avenue) Off-Ramp and SR-74 (Central Avenue) On-Ramp and Main Street Off-Ramp. Although the bottleneck still occurred and extended from the southbound SR-74 (Central Avenue) On-Ramp to the express lane egress north of Nichols Road, with an active bottleneck from 3:30 PM to 7:45 PM, the length of congestion was significantly reduced (in terms of both time and distance).

This testing verified that auxiliary lanes provided the highest level of operational benefit to the southern terminus of the express lanes and were added as design features to the project.

Variation 4: Trap Lane at SR-74 (Central Avenue)

A lane drop south of the express lane egress occurs between the southbound SR-74 (Central Avenue) Ramps and was suspected of causing operational weaving deficiencies in the Design Year PM peak period. The lane drop was tested in VISSIM to occur south of the SR-74 (Central Avenue) On-Ramp. Under this design variation, the single southbound express lane terminates at the SR-74 (Central Avenue) Interchange and auxiliary lanes are constructed between Nichols Road On-Ramp and SR-74 (Central Avenue) Off-Ramp and SR-74 (Central Avenue) On-Ramp and Main Street Off-Ramp.

The bottleneck extended from the southbound SR-74 (Central Avenue) On-Ramp to the Eastbound SR-91 On-Ramp, which is 8.2 miles longer than the queue that would have been present if the lane drop occurred between the ramps. The queue is worse if the lane drop occurs further south because of the interaction of merging from the SR-74 (Central Avenue) On-Ramp which serves high demand volume in the PM peak period. Additionally, when this queue spills back, it interacts with the bottleneck at the El Cerrito On-Ramp and creates additional congestion at the SR-91 interchange. The test for this design variation concluded that shifting the lane drop to occur south of the SR-74 (Central Avenue) On-Ramp would not benefit operations for the corridor and was not included as a feature for the build alternative for the project.

Variation 3 was incorporated into the Build Alternative because it had the most significant reduction of congestion by shortening both duration and length of the bottleneck.

Southbound I-15 Express Lane Ingress and Egress between Cajalco Road and Weirick Road

Two projects on southbound I-15 near Cajalco Road interchange were initiated:

- **I-15 Interim Corridor Operations Project (ICOP)** – This project was initiated in 2020 and has an opening year in 2022. I-15 ICOP would provide temporary operational improvement to alleviate the bottleneck and improve traffic flow along SB I-15 until the construction of permanent improvements in 2025. The proposed interim improvement includes the addition of an auxiliary lane along SB I-15 from the Cajalco Road On-Ramp (PM 36.75) to the Weirick Road Off-Ramp (PM 35.91), a distance of 0.84 miles.
- **I-15 Corridor Operations Project (COP)**- This project was initiated in 2021 and has an opening year in 2025. I-15 COP would remove the existing Southbound I-15 lane-drop within the I-15/Cajalco Road Interchange (PM 37.4) and extend the number four (or outside) general purpose lane to merge with the I-15 Interim Corridor Operations Project (ICOP) auxiliary lane between the SB Cajalco Road On-Ramp and the SB Weirick/Dos Lagos Drive Off-Ramp. Three general purpose lanes would continue south of the Weirick Road/Dos Lagos Drive Off-Ramp on Southbound I-15

I-15 COP and I-15 ICOP affect the weave requirements between the existing freeway ramps and the I-15 ELPSE access in this area. To confirm that the Traffic Operations Policy Directive (TOPD) design requirements related to spacing needed to negotiate weaving maneuvers on the freeway system are met, the Project team discussed five design variations for the southbound express lane access between Cajalco Road On-Ramp and Weirick Road/Dos Lagos Drive Off-Ramp and prepared a summary of benefits as it relates to each variation. The following analysis was conducted to inform the team on which design feature should be incorporated into the Build Alternative to best serve the future needs of the corridor while balancing traffic operation benefits with Caltrans' design requirements.

The following design variations were tested in VISSIM with the Design Year Plus Project volumes for the PM peak period, which is the peak period for the southbound direction.

Variation 5: No Auxiliary Lane with 2,000 foot Express Lane Access

Under this design variation, I-15 ELPSE would not remove the non-standard lane drop at the Cajalco Interchange and an auxiliary lane would not be constructed between the Cajalco Loop On-ramp and the Weirick Road/Dos Lagos Drive Off-Ramp. A 2,000 foot ingress/egress express lane access would be maintained per the I-15 ELPSE operations assessment approved with the February 2021 TOAR.

This test indicated that, without the auxiliary lane, there is observed congestion between the Cajalco Road and Weirick Road/Dos Lagos Drive Interchange primarily due to merging maneuvers from the Cajalco Road On-Ramp and high exiting volume to Weirick Road/Dos Lagos Drive Off-ramp. The congestion in South Corona lasted for 5.75 hours in the PM peak period. This design variation was not integrated into I-15 ELPSE as a project feature in order to improve general purpose lane speeds between the ramps.

Variation 6: Express Lane Access Shifted South of Weirick Road/Dos Lagos Drive Interchange

In this design variation, the express lane access between Cajalco Road Loop On-ramp and Weirick Road/Dos Lagos Drive Off-Ramp would not be provided and a 2,000 foot ingress/egress express lane access would be provided between the Weirick Road/Dos Lagos Drive and the Temescal Canyon Interchange. An auxiliary lane would be constructed between Cajalco Road and Weirick Road/Dos Lagos Drive. If no express lane access is provided between Cajalco Road and Weirick Road/Dos Lagos Drive, approximately 1,400 express lane users (with destinations to Dos Lagos/Weirick Road) would have to egress at the upstream express lane access at El Cerrito during the PM peak period.

This test resulted in the longest amount of congestion (over 6.75 hours) and longest queueing in South Corona than other design variations considered for this access due to the excessive exiting vehicles at the El Cerrito access point. Please note, that although this alternative created the highest level of congestion through the City of Corona, southbound I-15 users are being metered in this congestion which results in better operations in the Lake Elsinore area (e.g. Corona congestion limits the amount and how quickly traffic can get delivered to the Lake Elsinore area). This design feature was not incorporated into the Build Alternative since it subjected all southbound I-15 users to the largest duration of congestion.

Variation 7: Elongated Express Lane Access Opening – 4,215 feet

In this design variation, the express lane access between Cajalco Road Loop On-ramp and Weirick Road/Dos Lagos Drive Off-Ramp would be elongated to be 4,215' feet. Express lane users would be provided an additional 2,215 feet of express lane access opening and auxiliary lane to maneuver to and from the express lanes from the adjacent ramps.

The length of the bottleneck area in south Corona was similar to that of the design variation that did not provide an auxiliary lane, however, the congestion duration was reduced by 15 minutes. Since there is still a metering effect in place for 5.5 hours in the PM peak period, south Corona retains enough traffic to reduce the queue length in Lake Elsinore to 11.25 miles and provide some relief to Lake Elsinore due to the timing at which the vehicles would arrive farther south.

This design variation was not incorporated into the final design because it did not provide the best traffic operations for the corridor and the elongated access provides potential for toll violations in the corridor.

Variation 8: Dual Lane Exit at Weirick Road/Dos Lagos Drive Off-Ramp

Under this design variation, I-15 ELPSE would provide an auxiliary lane between the Cajalco Road Loop On-ramp and Weirick Road/Dos Lagos Drive Off-Ramp. A 2,000 foot ingress/egress express lane access would be maintained between the ramps and an additional lane on the Weirick Road/Dos Lagos Drive Off-ramp would be constructed (two exit lanes total).

This test resulted in reducing the duration of congestion by 45 minutes when compared to the design variation that provided no auxiliary lane. By improving the metering effect in south Corona, there is a collective benefit to southbound I-15 users with destinations in Corona, Temescal Valley, and south Corona business owners since they are able to pass the congestion point in Corona quicker. With a more efficient delivery to southbound I-15, the queue in Lake Elsinore increases as the bottleneck shifts to the south.

This design variation was incorporated into the Build Alternative because it minimizes the metering effect at the Corona congestion point while providing the best travel time and speed benefits to the corridor by efficiently delivering southbound I-15 users to their destinations sooner. This variation also better serves the second highest destination on southbound I-15, the Dos Lagos/Weirick Road Off-ramp, with an additional exiting lane.

Variation 9: Dual Lane Exit at Weirick Road/Dos Lagos Drive Off-Ramp & Elongated Access Opening – 4,215 feet

Under this design variation, I-15 ELPSE would provide an auxiliary lane between the Cajalco Road Loop On-ramp and Weirick Road/Dos Lagos Drive Off-Ramp, a 4,215 foot ingress/egress express lane access would be maintained between the ramps, and dual lanes to exit on the Weirick Road/Dos Lagos Drive Off-Ramp. This test was primarily run to see if a hybrid combination of the previous two design variations would have a significant effect on the provided traffic benefits.

This test indicated that the traffic operation benefit was similar to that of the dual lane exit only design variation with only slight benefit in reducing queue length in south Corona (reduced by 0.3 miles) and slightly better travel time savings (0.2 minutes of reduced average travel time in the general-purpose lanes). This design variation was not incorporated into the Build Alternative since it provided minimal additional traffic benefit and potential non-express lane users creating additional weaving maneuvers into and out of the express lanes with a 4,215 foot elongated express lane access opening.

Variation 8 with dual lane exit at Weirick Road/Dos Lagos Drive Off-Ramp was incorporated into the Build Alternative to serve the highest destination exit on southbound I-15. Variation 6 provided the best congestion relief for the south Corona congestion point than the other design variations (3, 4, 5, 7) considered for this access.

Northbound I-15 Express Lane Ingress and Egress between Weirick Road/Dos Lagos Drive and Cajalco Road

The Dos Lagos/Weirick Road express lane access was originally proposed to be 900 feet in length located between the Dos Lagos/Weirick Road and Cajalco Road Interchange. Under this design variation, a bottleneck occurred from 6:00 AM to 6:45 PM. This primarily occurred due to vehicles merging from the northbound Dos Lagos/Weirick Road On-Ramp attempting to access the express lanes. As such, we looked at a variety of design variations to assist with reducing congestion in this area. The tests concluded that constructing a weave zone between Dos Lagos/Weirick Road and Cajalco Road interchanges would operate sufficiently, however, due to concerns regarding speed

differentials between the general purpose lanes and the express lanes, the weave zone design at this access was not added as a project feature. Further design variations were considered for this access and are discussed in the Northbound I-15 Northern Express Lane Accesses section of this chapter.

Variation 10: Auxiliary Lanes

Since the Dos Lagos/Weirick Northbound On-Ramp serves a high demand volume on the corridor, an auxiliary lane was tested between the Dos Lagos/Weirick Road On-Ramp and Cajalco Road Off-Ramp and the 900 foot access was maintained. Under this design variation, a similar bottleneck occurred but for the time in congestion was reduced by only 15 minutes indicating limited operational benefit.

This test also indicated that the weave segment length was too short for vehicles merging from the northbound Dos Lagos/Weirick Road On-Ramp. As the major contributor to the congestion, additional design variations were considered to address that condition. An auxiliary lane between the two interchanges was not added as a project feature into the build alternative for the project.

Variation 11: Shift Weave Zone Express Lane Access between the Dos Lagos/Weirick Road Off- & On-Ramps

Under this design variation, the access was shifted south and constructed between the Dos/Lagos Weirick Off & On-Ramps. Although the bottleneck from the Dos Lagos/Weirick Road access was alleviated, a new bottleneck was formed downstream at the El Cerrito Road express lane access that extended from the access to the Cajalco Road Off-ramp from 5:15 AM to 8:45 AM.

This variation showed the most congested condition in the area as vehicles from the Dos Lagos/Weirick On-Ramp that would otherwise access the express lanes are forced to utilize the general purpose lanes for a longer period of time and too much demand occurs at the El Cerrito Road access downstream. The El Cerrito Road Access is not able to serve the express lane access demand and indicated that the Dos Lagos/Weirick Road access is needed to minimize congestion in the area. This design variation resulted in the worst operations (slower speeds and additional queueing in general purpose lanes and express lanes) and was not added as a design feature for the project.

Variation 12: Extend Weave Zone Express Lane Access between the Dos Lagos/Weirick Road Off- & On-Ramps

Under this design variation, the Dos Lagos/Weirick Road express lane access was extended to be 1,500 feet in length between the Dos Lagos/Weirick Road and Cajalco Road Interchange to assist in facilitating the weave that occurs in this area. The results indicate that no bottleneck occurred as a result of the access placement. Additionally, it indicated that the weave access needed to be a minimum of 1,500 feet for vehicles to successfully lane change into the express lanes.

General purpose lane congestion is projected in the opening and design year on northbound I-15 due to the Magnolia Avenue bottleneck. In the opening and design year, the general purpose lanes are projected to have a speed of 0-10 mph during the AM and PM peak periods while express lanes are projected to operate at speeds of 65 mph or higher. The speed differentials between the two facilities raised concerns for express lane users merging to and from the express lanes.

Ultimately, the weave zone design variation (10, 11, 12) for the Dos Lagos/Weirick Road access was not incorporated into the project and additional design variations of this express lane access were tested in VISSIM and discussed in the following section.

Northbound I-15 Northern Express Lane Accesses

The PM peak period Opening Year and Design Year Build Alternatives showed congestion on the northbound general-purpose lanes because of the bottleneck between the Magnolia Avenue ramps and the SR-91 ramps. As a result of this congestion, the northbound express lane access locations were tested between Dos Lagos/Weirick Road and Magnolia Avenue in order to determine if access design variations were operationally beneficial to the general-purpose lanes. Specifically, concerns related to vehicle merging to and from express lanes and general purpose lanes warranted an exploration and were tested in PM Opening Year Build Alternative scenarios with one simulation run.

Variation 13: El Cerrito Road Access – Closed

The El Cerrito Road express lane access is proposed to be an ingress and egress weaving zone located between the northbound El Cerrito Road Off-Ramp and On-Ramp. This access location will be constructed as part of I-15 ELP, and so the access location was preserved in the design for I-15 ELPSE. However, there were concerns related to congestion from the Magnolia weave section (described above) and the thought of decreasing access to the general-purpose lanes could improve operations in this area.

In this design variation, the El Cerrito Road access was tested to be closed to see if there was operational benefit to the general-purpose lane congestion. When the El Cerrito Road access is closed, the express lane users from the two northbound Cajalco Road Ramps must ingress at the downstream access between Ontario Avenue and Magnolia Avenue. Express lane users that would like to exit at Ontario Avenue Off-Ramp must use the upstream access at Dos Lagos/Weirick Road.

From this rerouting of express lane users, the general-purpose lanes are incurring 830 additional vehicles between the Cajalco Road and Ontario Avenue interchanges and 340 additional vehicles between Dos Lagos Road and Ontario Avenue during the seven-hour PM peak period. With additional vehicles in the general purpose lanes for a longer period of time, the queue length from the Magnolia Weave segment increases by approximately 0.8 miles from the original design. Slower speed ranges (0-10mph) have extended to the shoulder hours and there are also some speed decreases in the express lanes at the Ontario/Magnolia Access (due to increased ingress demand). Based on the operational results, this variation was not included as a feature of the build alternative for the project.

This test indicated that completely closing an access in the northern portion of the corridor created additional congestion for the general purpose lanes.

Variation 14: Dos Lagos/Weirick Road – Closed with Continuous Express Lane Access from Cajalco Loop On-Ramp to El Cerrito Road Access

Under this design variation, the Dos Lagos/Weirick Road full access was closed. Continuous express lane access was striped from the Cajalco Loop On-Ramp to the El Cerrito Road Access.

With the Dos Lagos access closed, 460 express lane users in the PM peak period that have a destination at Cajalco Road, must egress the express lanes at the Temescal Canyon Access. 1,500 express lane users with an origin at Temescal Canyon Road and Dos Lagos Drive, enter the express lanes at the El Cerrito Road/Cajalco Road access.

Compared to the weave zone design, this design variation resulted in a similar bottleneck in length and duration. Travel speed between Temescal Canyon Road and Dos Lagos Drive increased by 1-3 mph due to increased egress demand at the Temescal Canyon Road express lane access. It was determined

that this design variation showed no additional operational benefit to the corridor than the Dos Lagos Drive weave zone access design and this variation should no longer be considered for the project.

Variation 15: Dos Lagos/Weirick Road – Ingress Only with Merge Lane

Under this design variation, the Dos Lagos/Weirick Road full access was converted to an ingress only access and shifted north between the Cajalco Road Off & Loop On-Ramps. North the Cajalco Road Off-Ramp gore point, a new number one acceleration lane opens for approximately 1,000 feet to facilitate ingress for express lane vehicles between the general-purpose lanes (three lanes) and express lanes (two lanes).

When the Dos Lagos access is ingress only, the express lane users that have a destination at Cajalco Road or El Cerrito Road Off-Ramps must exit at the upstream access between Temescal Canyon/Indian Truck Trail. In the peak period, the general-purpose lanes between the Temescal Canyon and El Cerrito interchanges are incurring approximately 400 additional vehicles.

Comparing the weave zone design to the ingress only design, the queue length during the peak hour remained similar and the shoulder period between 7:45-8:00 PM show some signs of improved congestion relief. Speed increases slightly by 1-2 mph in the corridor between the Temescal Canyon and Dos Lagos interchanges. This test indicated that converting this access to ingress only showed slight speed increase and congestion benefits for the general purpose lanes.

Variation 15 was integrated as a project feature into the build alternative since it addressed concerns related to speed differentials and vehicles merging to and from the express lanes and general purpose lanes by limiting access at this location to ingress only.

5. Opening Year (2030) Conditions

This chapter presents the analysis results of the ELPSE alternatives under Opening Year (2030) conditions. The purpose of the Opening Year analysis is to evaluate initial traffic operations on I-15 within the study area, both with and without the improvements. For each alternative, traffic operations are evaluated using peak-hour density and LOS for freeway mainline and ramps, travel times, and other system-wide performance measures.

Analysis Scenarios

Traffic analysis was conducted for each of the following ELPSE alternatives under Opening Year (2030) conditions.

- Alternative 1 – No-Build Alternative
- Alternative 2 – Build Alternative (Dual Express Lanes)

Traffic Volume Forecasts & Key Projects

The *Interstate 15 (I-15) Express Lanes Project Southern Extension Project Approval/Environmental Document (EA 0J0820) Final Traffic Volume Report (Appendix B)* and its contained traffic volumes and future year traffic forecasts were reviewed and approved by Caltrans in March 2020.

The Opening Year (2030) traffic forecasts were developed consistent with methodologies in Chapter 2. The traffic models used for the Opening Year (2030) scenarios are described below:

- Opening Year 2030 No-Build – RIVTAM Future Year 2040 model with 2040 socioeconomic data (SED) and updates to the roadway network with regional transportation projects to be completed by 2030.
- Opening Year 2030 Build Alternative – RIVTAM Future Year 2040 model with 2040 SED and updates to the roadway network with regional transportation projects to be completed by 2030 and plus project conditions.

Key projects and their effect on the Opening Year (2030) forecasting are described below:

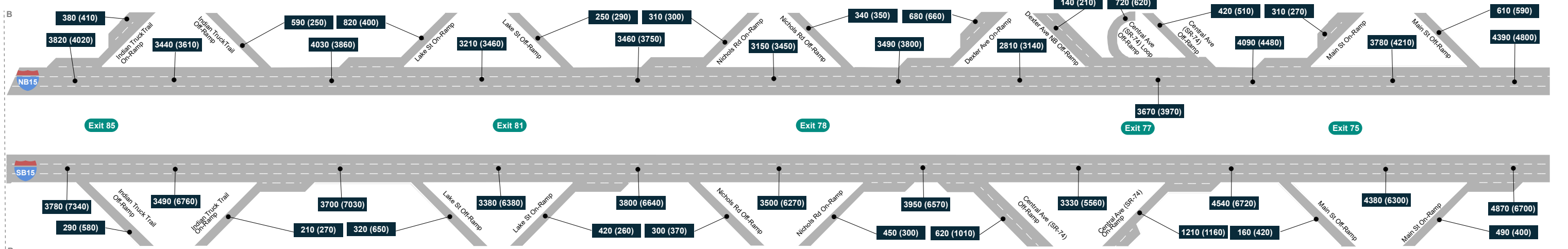
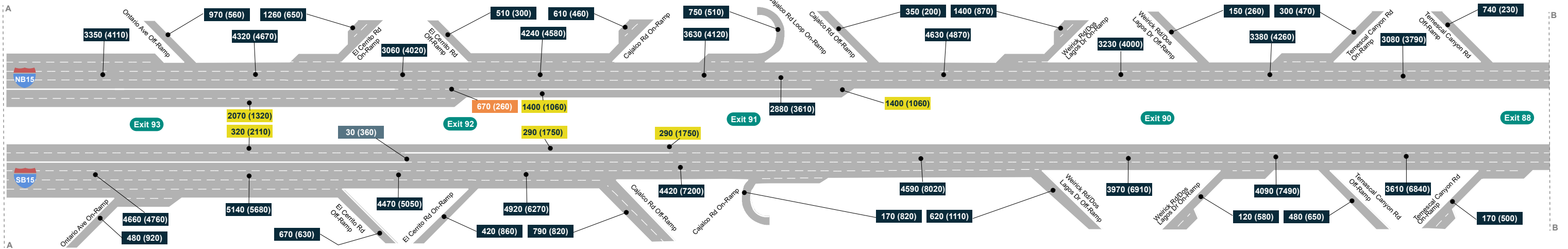
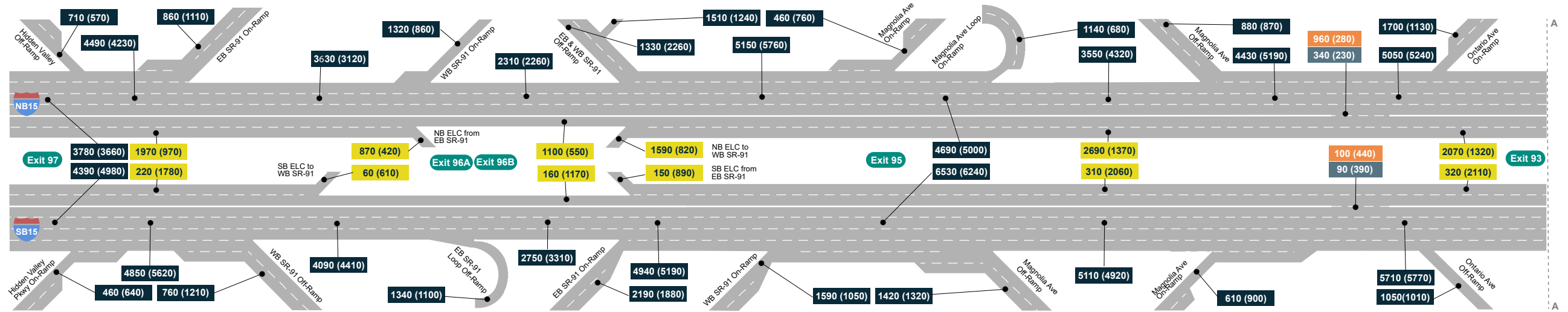
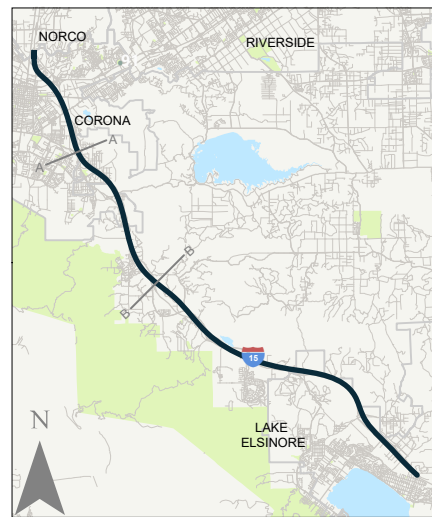
- The following RTP Projects enhance existing I-15 Interchanges at Hidden Valley Parkway, Cajalco Road, Temescal Canyon, SR-74 (Central Avenue), and Main Street. The improved interchanges along I-15 help serve local traffic and provide access to the I-15 freeway:
 - RTP ID 3M04WT007, RIV010208, 3M0728, 3A04A17 & RIV060109, 3160004
- The following RTP Projects enhance capacity at east-west roadway connections between I-215 and I-15 at Cajalco Road and Ethanac Road. With additional capacity at parallel facilities to SR-91, there is little to no growth forecasted at the SR-91 interchange ramps as more trips will take alternate east-west routes:
 - RTP ID 3A04WT137A-3A04WT138, 3A01WT15
- The construction of the RCTC I-15 Express Lanes (between SR-60 and Cajalco Road) Project and 15/91 Express lane Connector Project, increase express lane volumes that are forecasted at the north end of the corridor, where these projects expand the existing express lane facilities and connect to I-15:
 - RTP ID RIV071267
- The Build Alternative adds capacity to the freeway with two express and it alleviates traffic on the mainline such that trips that may have originally diverted from using I-15, now prefer to use I-15.

Express Lane Volume Forecasts

Express lane forecasts were developed through an iterative process as outlined below:

- Mode splits percentages in the existing conditions model were developed for each hour and each direction of travel on the corridor. The mode split was held consistent in the opening year, reflecting that growth in HOV 3+ and Toll Users are proportional to the overall growth in traffic demand on the corridor.
- Congestion on the study corridor observed from an initial VISSIM model run under Opening Year Conditions was used to determine potential mode shifts from general purpose lane users to express lane users.
- For directions of travel with hours of congestion on the study corridor, mode split was adjusted to reflect increased express lane use (i.e. SOVs were converted to Toll Users) until the 1,750-passenger car per hour per lane capacity was met. The total percentage express lane users (HOV 3+ and Toll Users) was capped at 30% for all OD pairs on the facility greater than six miles – trips less than six miles would not use the express lane.
- If express lane entrances at the southern end of the study corridor exceeded the 1,750-passenger car per hour per lane capacity, vehicles were rerouted to enter at a downstream ingress location or exit at an upstream egress location. This occurred at the express lane ingress/egress locations at the El Cerrito Road interchange and the Cajalco interchange under No-Build Conditions and at the express lane ingress/egress locations north of the Nichols Road interchange and at the SR-74/Central Avenue interchange under Build conditions.
- If congestion was concentrated within a particular segment of the corridor, Toll Users were routed out of the express lane upstream of the congestion as it is unlikely that Toll Users will use the express lane when the freeway mainline is uncongested.

The Opening Year (2030) No-Build Alternative AM and PM peak hour traffic forecasts for the I-15 mainline segments/ramps are shown in **Figure 3**. The Opening Year (2030) Build Alternative AM and PM peak hour forecasts for the I-15 mainline segments/ramps are shown in **Figure 5**. The express lane access segments are shown in **Figure 4** and **Figure 6** for No-Build and Build Alternative respectively.



Traffic demand volumes represent uncongested traffic conditions, and constraint volumes represent over saturated traffic conditions.



XX (XX) Mainline Volume
 XX (XX) Express Lane Volume
 xx (xx) AM Volume (PM Volume)
 XX (XX) Ingress Volume AM(PM)
 XX (XX) Egress Volume AM(PM)
 ELC SR-91 Express Lane Connector

XX Exit

I-15 Freeway Lane Configurations Peak Hour and Daily Traffic Demand Volumes
Opening Year 2030 No-Build Alternative

Figure 3

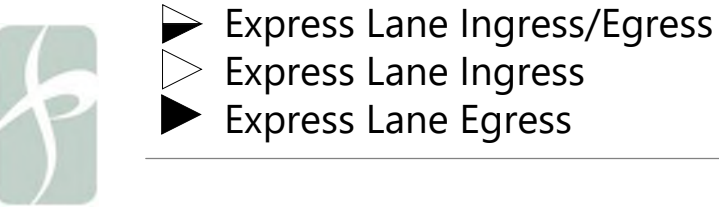
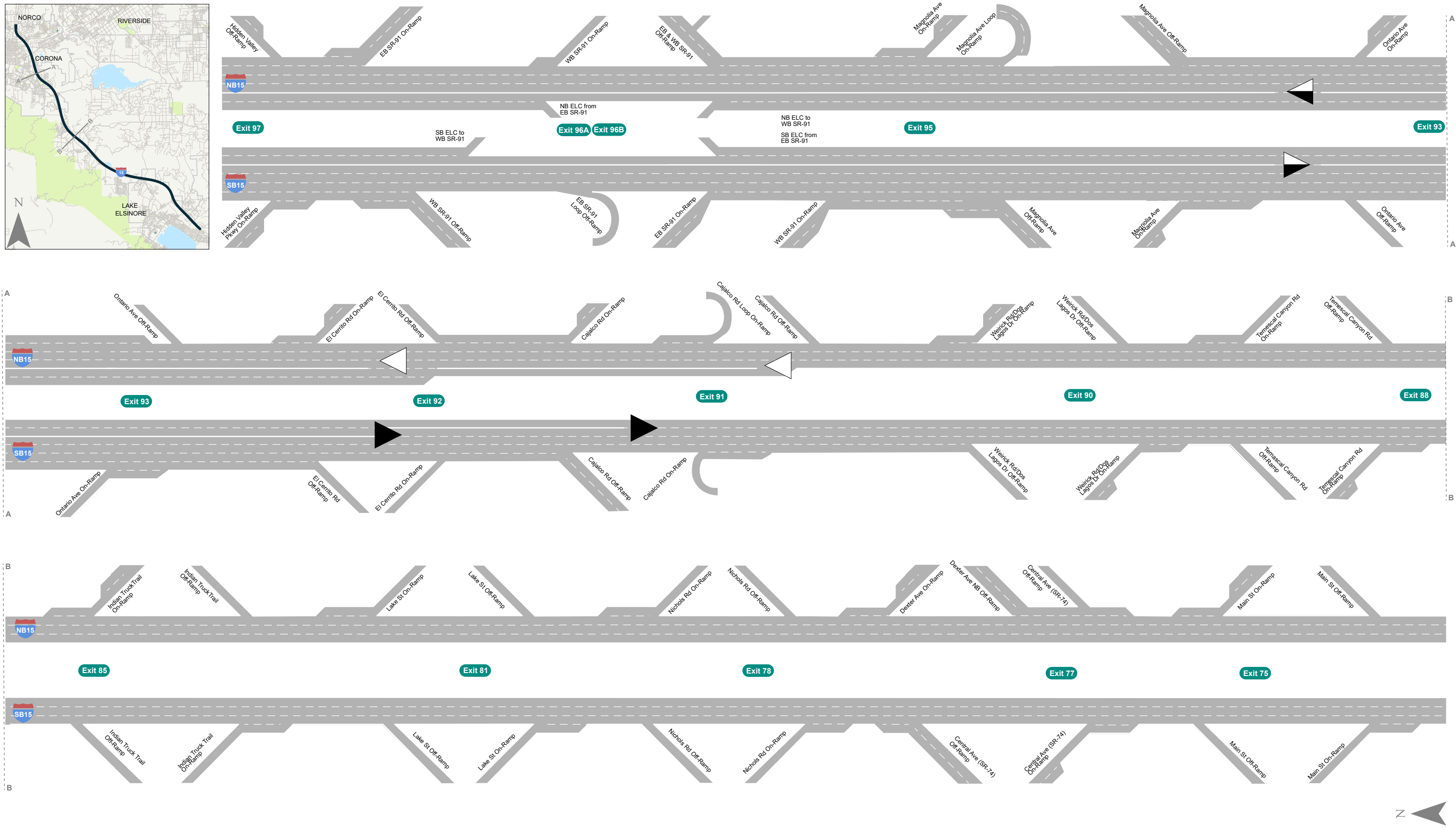
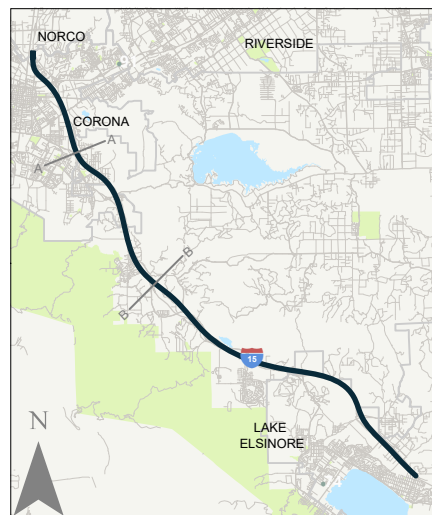
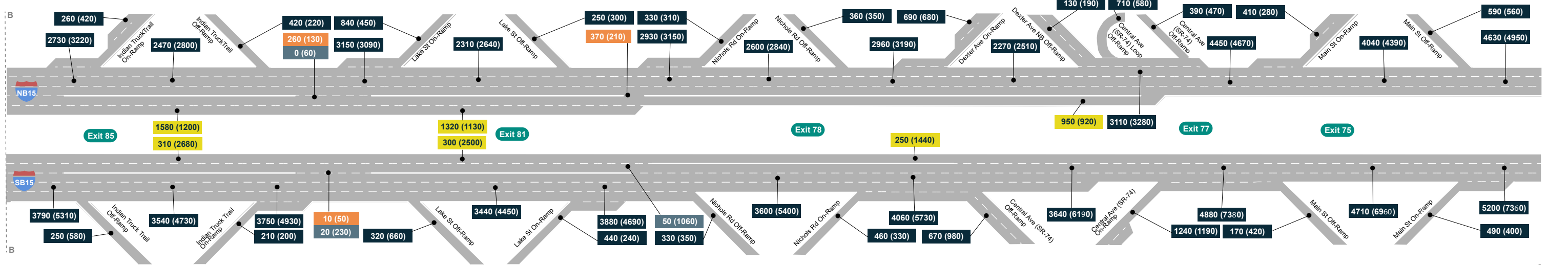
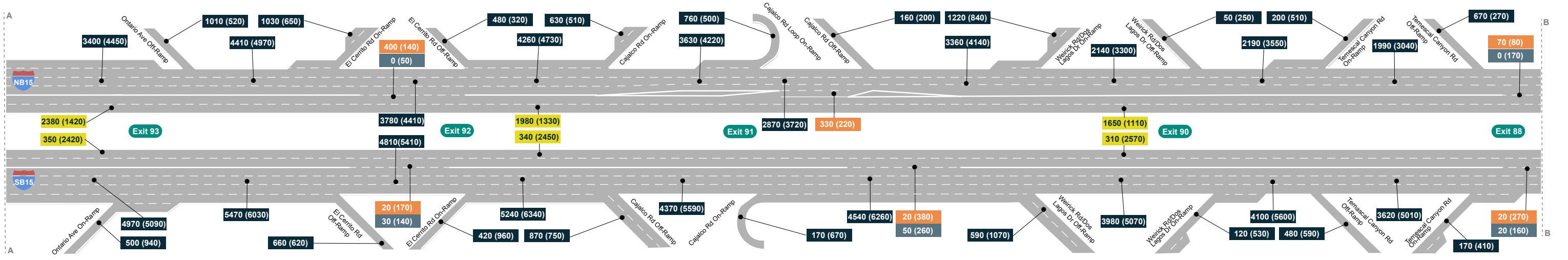
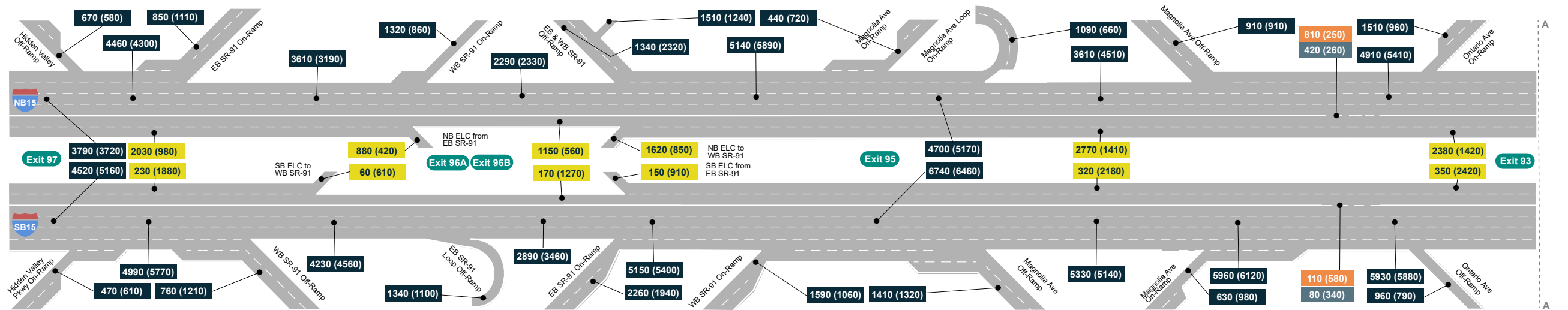
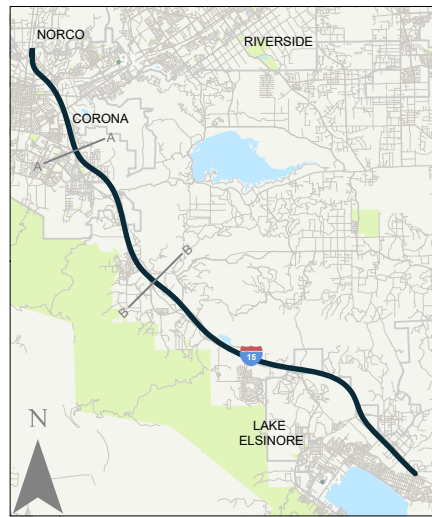


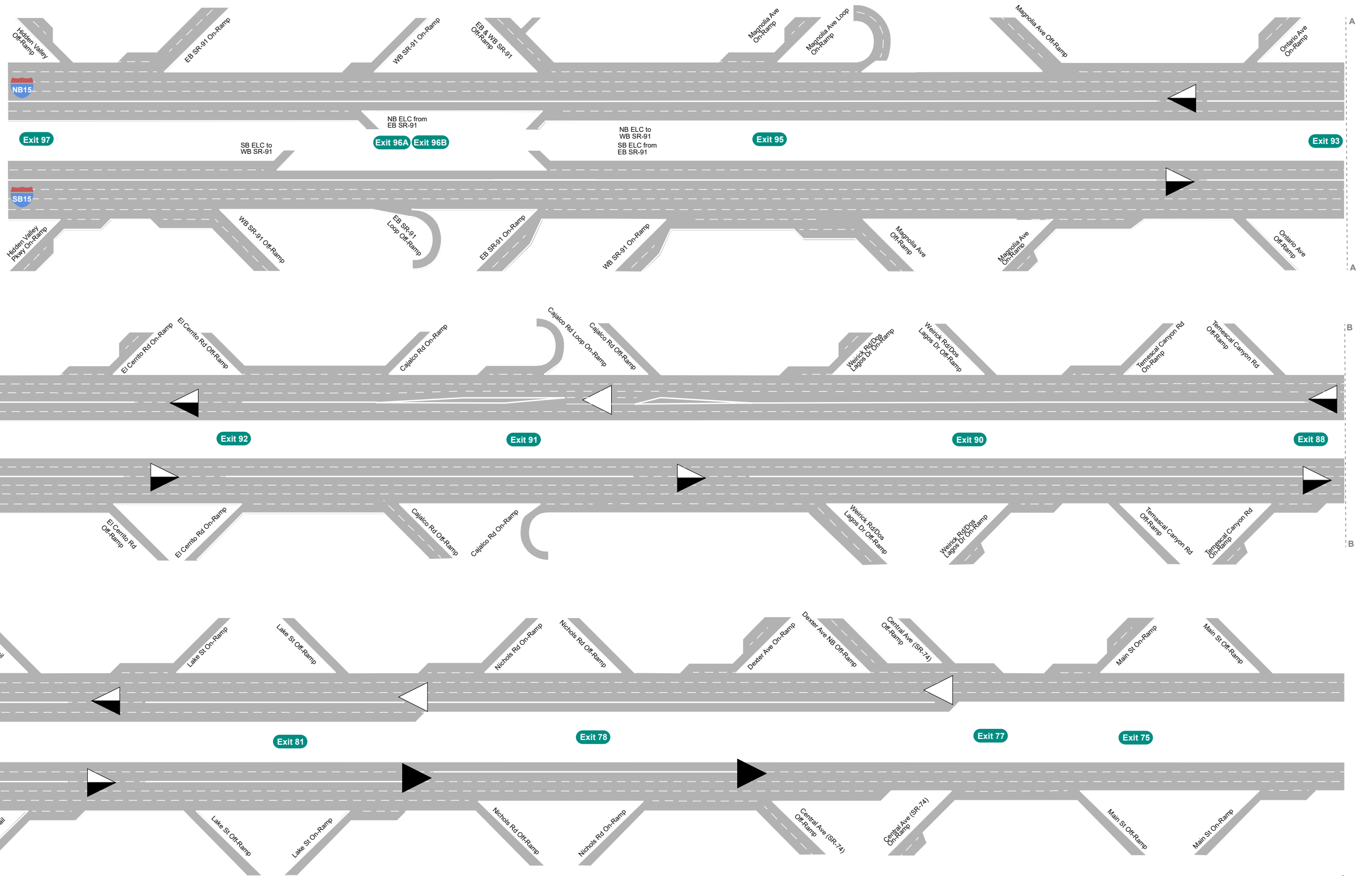
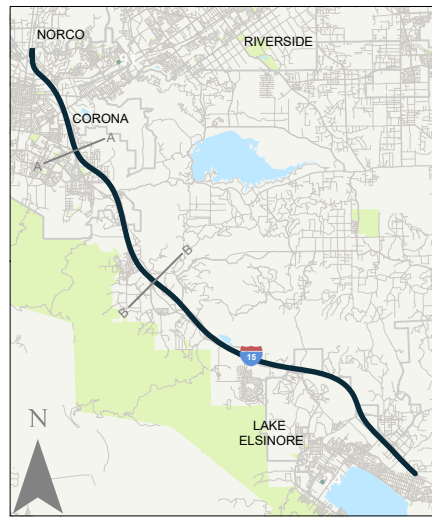
Figure 4
 I-15 Freeway Lane Configurations Peak Hour and Daily Traffic Demand Volumes
 Opening Year (2030) No-Build Alternative - Express Lane Merge, Diverge, and Weaving Access Segments



*Traffic demand volumes represent true demand and considers vehicles in queue during oversaturated conditions.



Figure 5
I-15 Freeway Lane Configurations Peak Hour & Daily Traffic Demand Volumes
Opening Year 2030 Build Alternative






-  Express Lane Ingress/Egress
-  Express Lane Ingress
-  Express Lane Egress



Figure 6
Opening Year (2030) Build Alternative
Managed Lane Access Segments

Freeway Operations Analysis

The Opening Year (2030) VISSIM models includes improvements associated with the completion of the I-15 ELP (between SR-60 and Cajalco Road), the 15/91 North-facing Express Lane Connector project, the Cajalco Road/I-15 Interchange project, I-15 ICOP, and I-15 COP. Additionally, driving parameters used to calibrate the SB I-15 bottleneck at the Cajalco Road On-Ramp and the NB I-15 bottleneck at the Cajalco Road On-Ramp were reset to default driving parameters to represent completion of those construction efforts. In the existing conditions model, the Standstill Distance (CC0) and Headway Time (CC1) parameters were increased to reflect the reduction in capacity due to lane narrowing and removal of shoulders due to construction. The completion of the Cajalco Road/I-15 Interchange project and ICOP will include auxiliary lanes between Cajalco Road and El Cerrito Road on I-15 in both directions. The completion of the I-15 COP will subsequently remove the nonstandard lane-drop on southbound I-15 prior to the Cajalco Road Overcrossing and extend the GP lane to join with the auxiliary lane constructed as a part of ICOP. The outside lane traps at the SB I-15 off-ramp to Weirick Road and three GP lanes continue southbound on I-15 just south of the Weirick Road Off-Ramp. When ELPSE is constructed, it would perpetuate the improvements near the Cajalco Road interchange. **Table 12** and **Table 13** show the Opening Year AM and PM peak hour density and LOS for the study freeway segments and ramp junctions under the No-Build and Build Alternatives on SB I-15 and NB I-15, respectively. The Express Lanes were analyzed as a separate facility and the operations results for the Express Lanes are shown in **Table 13** for SB and NB directions. Speed contour plots are provided in **Exhibit H 1 and 2** and **Exhibit I 1 and 2** for the No-Build Alternative and **Exhibit J 1 and 2** and **Exhibit K 1 and 2** for the Build Alternative. Identification numbers for each freeway segment corresponds to their segment numbers as listed in **Appendix C**, where detailed technical calculations are included.

AM Peak Hour – SB I-15

Under the Opening Year (2030) No-Build Alternative, all study locations including mainline segments, ramps, and express lanes on SB I-15 would operate at LOS D or better during the AM peak hour.

Under the Opening Year (2030) Build Alternative, all study locations including mainline segments, ramps, and express lanes on SB I-15 would continue to operate at LOS D or better during the AM peak hour.

AM Peak Hour – NB I-15

Under the Opening Year (2030) No-Build Alternative, all study locations including mainline segments, ramps, and express lanes on SB I-15 would operate at LOS D or better during the AM peak hour.

Under the Opening Year (2030) Build Alternative, all study locations including mainline segments, ramps, and express lanes on SB I-15 would continue to operate at LOS D or better during the AM peak hour.

PM Peak Hour – SB I-15

Under the Opening Year (2030) No-Build Alternative, the SB I-15 bottleneck at the Cajalco Road Interchange is exacerbated with the termination of the ELP. As such, it creates a queue that extends to the EB SR-91 On-Ramp. That queue length is approximately 4.8 miles from the Cajalco Road On-Ramp. In 2025, I-15 COP removes the nonstandard lane-drop and extends the general-purpose lane to join with the auxiliary lane at Cajalco Road On-Ramp and provides some congestion relief at the I-15 ELP bottleneck. Due to the bottlenecks, segments in queue would operate at LOS F. The demand from EB SR-91 cannot be fully served during the peak hour and will spillback onto EB SR-91. Additionally, five various SB I-15 freeway segments, between Temescal Canyon On-Ramp and Lake Street Off-Ramp

operate at LOS E. All other mainline segment, ramps, and express lanes will operate at LOS D or better during the PM peak hour.

Under the Opening Year (2030) Build Alternative, the SB I-15 bottleneck at the Cajalco Road On-Ramp merge segment is removed. Three off-ramp freeway segments at El Cerrito, Temescal Canyon Road, and Indian Truck Trail will operate at LOS E, but will operate better under the Build scenario when compared to the No-Build scenario,

The Build Alternative significantly improves operations for all southbound I-15 users in Corona and Temescal Valley because the congestion point at the I-15 ELP terminus is removed, which results in greater traffic throughput. However, these improvements allow additional vehicles to use the corridor and a new bottleneck forms downstream on SB I-15 at the Main Street On-Ramp merge segment. The SB I-15 bottleneck at the Main Street On-Ramp merge segment creates a queue that extends to the Nichols Road Off-Ramp (queue length is approximately 3.0 miles). Due to the bottleneck, segments in queue operate at LOS E or F. All other mainline segment, ramps, and express lanes would operate at LOS D or better during the PM peak hour. Please note that the auxiliary lanes added to the terminus segment of the facility improves operations and reduces queuing at this location. However, as noted above, there is still congestion occurring at the express lane terminus as the facility is generally reduced from a five-lane cross-section north of Nichols Road (three general purpose lanes and two express lanes) to a three-lane facility south of Main Street.

PM Peak Hour – NB I-15

Under the Opening Year (2030) No-Build Alternative, the NB I-15 bottleneck at the WB Magnolia Avenue On-Ramp merge segment creates a queue that extends to the Indian Truck Trail On-Ramp with a queue length of approximately 10 miles. Due to that bottleneck, segments in queue operate at LOS E or F. All other mainline segment, ramps, and express lanes would operate at LOS D or better during the PM peak hour.

Under the Opening Year (2030) Build Alternative, the NB I-15 bottleneck at the WB Magnolia Avenue On-Ramp merge segment continues to create a queue that extends to the Indian Truck Trail interchange with a queue length is approximately 9.8 miles. But this is somewhat shorter than the No-Build Alternative as additional capacity is provided by the ELPSE. Due to the bottleneck, segments in queue operate at LOS E or F. All other mainline segment, ramps, and express lanes would operate at LOS D or better during the PM peak hour. ELPSE does not alleviate traffic on the general purpose lanes from the No-Build Alternative, but rather helps manage congestion along the corridor. With the level of congestion projected in Opening Year, travel time management and reliability are expanded with the construction of the project.

The Build Alternative is unable to address the bottleneck at the WB Magnolia Avenue On-Ramp merge segment because it is outside the ELPSE limits; However, providing earlier access to the express lanes network, associated with the ELPSE, shortens the length of the queue caused by the bottleneck. Caltrans is currently evaluating the addition of NB auxiliary lanes at various locations throughout the I-15 corridor north of the ELPSE limits which should assist with this bottleneck location; however, as no project has been defined or included in the RTP/SCS constrained network, an improvement of this type has not been included in our assessment.

Table 12 – Opening Year (2030) Peak Hour General Purpose Lane Operations - SB I-15

I-15 SB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1	Hidden Valley Parkway Off-Ramp to On-Ramp	Basic	B / 17	B / 17	B / 18	C / 21
2	Hidden Valley Parkway On-Ramp	Merge	B / 18	C / 19	B / 18	C / 22
3	Hidden Valley Parkway On-Ramp to WB SR-91 Off-Ramp	Basic	B / 16	B / 15	B / 16	C / 19
4	WB SR-91 Off-Ramp	Basic	B / 16	B / 15	B / 16	C / 19
5	EB SR-91 Off-Ramp	Diverge	D / 28	C / 23	D / 28	D / 29
6	EB SR-91 Off-Ramp to On-Ramp	Basic	B / 15	C / 25	B / 15	C / 19
7	EB SR-91 On-Ramp	Merge	C / 18	F / DEC	C / 19	C / 20
8	WB SR-91 On-Ramp to Magnolia Avenue Off-Ramp	Weave	C / 19	F / DEC	C / 20	C / 19
9	Magnolia Avenue Off-Ramp to On-Ramp	Basic	C / 20	F / DEC	C / 21	C / 21
10	Magnolia Avenue On-Ramp	Merge	B / 18	F / DEC	C / 19	C / 19
11	Magnolia Avenue On-Ramp to Ontario Ave Off-Ramp ³	Weave	B / 17	F / DEC	B / 18	C / 22
12	Magnolia Avenue On-Ramp to Ontario Ave Off-Ramp	Basic	C / 23	F / DEC	C / 24	C / 24
13	Ontario Avenue Off-Ramp	Diverge	C / 26	F / DEC	D / 26	C / 25
14	Ontario Avenue Off-Ramp to On-Ramp	Basic	C / 19	F / DEC	C / 20	C / 21
15	Ontario Avenue On-Ramp	Merge	B / 13	F / DEC	B / 13	B / 17
16	El Cerrito Road Off-Ramp	Basic	C / 21	F / DEC	C / 22	E / 37
17	El Cerrito Road Off-Ramp to On-Ramp ³	Basic/Weave ⁴	C / 25	F / DEC	B / 18	D / 30

Table 12 – Opening Year (2030) Peak Hour General Purpose Lane Operations - SB I-15

I-15 SB Segment	Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
18 Express Lane (EL) On-Ramp at El Cerrito Road	Basic	C / 18	F / DEC	-	-
19 El Cerrito Road On-Ramp to Cajalco Road Off-Ramp	Weave	C / 20	F / DEC	C / 21	D / 28
20 EL On-Ramp Cajalco Road On-Ramp (4 Lane)	Basic	B / 17	F / DEC	C / 23	D / 31
21 Cajalco Road On-Ramp/Cajalco Road On-Ramp to Weirick Road/Dos Lagos Dr Off-Ramp	Merge/Weave ⁴	B / 13	F / DEC	C / 19	D / 29
22 Cajalco Road On-Ramp to Weirick Road/Dos Lagos Dr Off-Ramp ³	Basic/Weave ⁴	B / 18	F / DEC	B / 14	C / 26
23 Weirick Road/Dos Lagos Drive Off-Ramp	Diverge	B / 18	F / DEC	-	-
24 Weirick Road/Dos Lagos Drive Off-Ramp to On-Ramp	Basic	C / 21	F / DEC	C / 21	D / 30
25 Weirick Road/Dos Lagos Drive On-Ramp	Merge	B / 16	F / DEC	B / 16	D / 28
26 Weirick Road/Dos Lagos Drive On-Ramp to Temescal Canyon Road Off-Ramp	Basic	C / 22	F / DEC	C / 22	D / 34
27 Temescal Canyon Road Off-Ramp	Diverge	C / 21	F / DEC	C / 22	E / 38
28 Temescal Canyon Road Off-Ramp to On-Ramp	Basic	C / 19	F / DEC	C / 20	D / 29
29 Temescal Canyon Road On-Ramp	Merge	B / 14	F / DEC	B / 15	C / 26
30 Temescal Canyon Road On-Ramp to Indian Truck Trail Off-Ramp	Basic	C / 21	E / 42	C / 21	D / 33
52 Temescal Canyon Road On-Ramp to Indian Truck Trail Off-Ramp ³	Weave	-	-	B / 15	D / 27
53 Temescal Canyon Road On-Ramp to Indian Truck Trail Off-Ramp	Basic	-	-	C / 21	D / 33
31 Indian Truck Trail Off-Ramp	Diverge	C / 19	E / 44	C / 21	E / 35
32 Indian Truck Trail Off-Ramp to On-Ramp	Basic	C / 19	E / 35	C / 19	D / 28

Table 12 – Opening Year (2030) Peak Hour General Purpose Lane Operations - SB I-15

I-15 SB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
33	Indian Truck Trail On-Ramp	Merge	B / 15	D / 34	B / 15	C / 22
34	Indian Truck Trail On-Ramp to Lake St Off-Ramp	Basic	C / 20	E / 38	C / 21	D / 29
54	Indian Truck Trail On-Ramp to Lake St Off-Ramp ³	Weave	-	-	B / 15	D / 26
35	Lake Street Off-Ramp	Diverge	C / 19	E / 41	C / 20	D / 33
36	Lake St Off-Ramp to On-Ramp	Basic	C / 18	D / 31	C / 19	C / 25
37	Lake Street On-Ramp	Merge	B / 15	C / 25	B / 16	C / 19
38	Lake Street On-Ramp to Nichols Road Off-Ramp	Basic	C / 20	D / 33	C / 22	D / 27
55	Lake Street On-Ramp to Nichols Road Off-Ramp (EL Egress)	Basic	-	-	B / 16	C / 25
56	Lake Street On-Ramp to Nichols Road Off-Ramp	Basic	-	-	B / 16	E / 41
39	Nichols Road Off-Ramp	Diverge/Basic ⁴	C / 19	D / 34	B / 16	F / DEC
40	Nichols Road Off-Ramp to On-Ramp	Basic	C / 18	D / 31	C / 20	F / DEC
41	Nichols Road On-Ramp	Merge ⁵	B / 16	D / 27	B / 16	F / DEC
42	Nichols Road On-Ramp to SR-74 (Central Avenue) Off-Ramp	Basic ⁵	C / 21	D / 34		
43	SR-74 (Central Avenue) Off-Ramp	Diverge ⁵	B / 14	C / 22		
57	SR-74 (Central Avenue) (EL Egress)	Basic	-	-	B / 14	F / DEC
44	SR-74 (Central Avenue) Off-Ramp to On-Ramp	Basic	B / 17	D / 28	B / 15	F / DEC

Table 12 – Opening Year (2030) Peak Hour General Purpose Lane Operations - SB I-15

I-15 SB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
45	SR-74 (Central Avenue) On-Ramp	Merge ⁵	B / 17	D / 35	C / 20	F / DEC
46	SR-74 (Central Avenue) On-Ramp to Main Street Off-Ramp	Basic ⁵	C / 25	E / 39		
47	Main Street Off-Ramp	Diverge ⁵	C / 23	E / 36		
48	Main Street Off-Ramp to On-Ramp	Basic	C / 23	D / 31	C / 25	F / DEC
49	Main Street On-Ramp	Merge	C / 21	D / 28	C / 21	F / DEC
50	Main Street On-Ramp to Franklin Street Overcrossing	Basic	D / 26	D / 34	D / 28	E / 41

Notes:

- Density reported in passenger cars per lane per mile.
- Bold and underline** font indicate LOS E or F conditions. DEC = Demand Exceeds Capacity.
- Cells highlighted in orange indicate Express Lane Access Segments (analyzed as a left-sided weave).
- No-Build Alternative Facility Type/Build Alternative Facility Type.
- This segment is a weave segment in the Build Alternative due to the additional auxiliary lane.

Source: Fehr & Peers, 2020

Table 13 – Opening Year (2030) Peak Hour General Purpose Lane Operations - NB I-15

I-15 NB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
152	Hidden Valley Parkway Off-Ramp to On-Ramp	Basic	B / 12	B / 11	B / 12	B / 11
151	Hidden Valley Parkway Off-Ramp	Diverge	B / 16	B / 16	B / 15	B / 17
150	EB SR-91 On-Ramp	Merge	B / 16	B / 15	B / 15	B / 15
149	WB SR-91 On-Ramp	Merge	B / 17	B / 14	B / 17	B / 14
148	EB & WB SR-91 Off-Ramp to WB SR-91 On-Ramp	Basic	B / 12	B / 11	B / 12	B / 12
147	EB & WB SR-91 Off-Ramp	Diverge	C / 24	D / 29	C / 24	D / 30
146	Magnolia Avenue On-Ramp	Merge	C / 21	F / DEC	C / 23	F / DEC
145	Magnolia Avenue Loop On-Ramp	Basic	C / 19	F / DEC	C / 20	F / DEC
144	Magnolia Avenue Off-Ramp to Loop On-Ramp	Basic	C / 19	F / DEC	C / 20	F / DEC
143	Magnolia Avenue Off-Ramp	Diverge	B / 16	F / DEC	B / 17	F / DEC
141	Ontario Avenue to Magnolia Avenue ³	Weave	C / 19	F / DEC	C / 20	F / DEC
140	Ontario Avenue On-Ramp	Merge	B / 13	F / DEC	B / 14	F / DEC
138	Ontario Avenue Off-Ramp to On-Ramp (4 Lanes)	Basic	B / 13	F / DEC	B / 13	F / DEC
137	Ontario Avenue Off-Ramp to On-Ramp (3 Lanes)	Basic	B / 17	F / DEC	B / 19	F / DEC
136	Ontario Avenue Off-Ramp	Diverge	C / 24	F / DEC	C / 25	F / DEC
135	El Cerrito Road On-Ramp	Merge	C / 20	F / DEC	C / 20	F / DEC
134	Express Lane (EL) Access to El Cerrito Road On-Ramp	Basic	B / 15	F / DEC	-	-

Table 13 – Opening Year (2030) Peak Hour General Purpose Lane Operations - NB I-15

I-15 NB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
133	EL Access at El Cerrito Road ³	Basic/Weave ⁴	B / 15	F / DEC	C / 19	E / 42
132	Cajalco Road On-Ramp to El Cerrito Road Off-Ramp	Weave	B / 17	F / DEC	B / 17	F / DEC
131	Cajalco Road Loop On-Ramp	Merge	C / 18	F / DEC	B / 16	F / DEC
154	EL Ingress at Cajalco Road	Basic	C / 22	F / DEC	-	-
130/ 170 ⁵	Cajalco Road Off-Ramp to Loop On-Ramp	Basic	C / 24	F / DEC	B / 15	F / DEC
130	Cajalco Road Off-Ramp to EL Access	Basic	-	-	B / 12	F / DEC
129	Cajalco Road Off-Ramp	Diverge	D / 27	F / DEC	B / 12	F / DEC
128	Weirick Road/Dos Lagos Drive On-Ramp	Merge	C / 23	F / DEC	B / 15	F / DEC
127	Weirick Road/Dos Lagos Drive Off-Ramp to On-ramp	Basic	C / 18	F / DEC	B / 11	F / DEC
126	Weirick Road/Dos Lagos Drive Off-Ramp	Diverge	C / 19	F / DEC	A / 11	F / DEC
125	Temescal Canyon Road On-Ramp to Weirick Road/Dos Lagos Drive Off-Ramp	Basic	C / 19	F / DEC	B / 11	F / DEC
124	Temescal Canyon Road On-Ramp	Merge	B / 16	F / DEC	A / 9	F / DEC
123	Temescal Canyon Road Off-Ramp to On-Ramp	Basic	B / 17	F / DEC	A / 10	F / DEC
122	Temescal Canyon Road Off-Ramp	Diverge	C / 22	F / DEC	B / 14	F / DEC
121	Indian Truck Trail On-Ramp to Temescal Canyon Road Off-Ramp	Basic	C / 20	E / 36	B / 13	F / DEC
160	Indian Truck Trail On-Ramp to Temescal Canyon Road Off-Ramp ³	Weave	-	-	B / 14	F / DEC
159	Indian Truck Trail On-Ramp to Temescal Canyon Road Off-Ramp	Basic	-	-	B / 14	F / DEC

Table 13 – Opening Year (2030) Peak Hour General Purpose Lane Operations - NB I-15

I-15 NB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
120	Indian Truck Trail On-Ramp	Merge	B / 16	B / 14	A / 11	F / DEC
119	Indian Truck Trail Off-Ramp to On-ramp	Basic	C / 18	B / 16	B / 12	F / DEC
118	Indian Truck Trail Off-Ramp	Diverge	C / 21	B / 17	B / 15	B / 16
117	Lake Street On-Ramp to Indian Truck Trail Off-Ramp	Basic	C / 21	B / 16	B / 15	B / 17
158	Lake Street On-Ramp to Indian Truck Trail Off-Ramp ³	Weave	-	-	B / 14	B / 14
116	Lake Street On-Ramp	Merge	B / 18	B / 13	B / 13	B / 13
115	Lake Street Off-Ramp to On-Ramp	Basic	B / 16	B / 15	B / 11	B / 14
114	Lake Street Off-Ramp	Diverge	B / 18	B / 16	B / 13	B / 16
113	Nichols Road On-Ramp to Lake Street Off-Ramp	Basic	B / 17	B / 16	B / 13	B / 16
157	Nichols Road On-Ramp to Lake Street Off-Ramp (EL Ingress)	Basic	-	-	B / 12	B / 13
156	Nichols Road On-Ramp to Lake Street Off-Ramp	Basic	-	-	B / 15	B / 17
112	Nichols Road On-Ramp	Merge	B / 14	B / 12	A / 11	B / 12
111	Nichols Road Off-Ramp to On-Ramp	Basic	B / 16	B / 14	B / 13	B / 15
110	Nichols Road Off-Ramp	Diverge	C / 19	B / 17	B / 16	C / 18
109	Dexter Avenue/SR-74 (Central Avenue) On-Ramp to Nichols Road Off-Ramp	Merge	B / 15	B / 14	B / 13	B / 15
108	Dexter Avenue/ SR-74 (Central Avenue)) Off-Ramp to On-Ramp	Basic	B / 14	B / 13	B / 12	B / 13
155	Dexter Avenue/ SR-74 (Central Avenue) Off-Ramp to On-Ramp (EL Ingress)	Diverge	-	-	B / 13	B / 14

Table 13 – Opening Year (2030) Peak Hour General Purpose Lane Operations - NB I-15

I-15 NB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
153	Dexter Avenue Off-Ramp	Diverge	B / 14	B / 14	B / 13	B / 16
107	WB SR-74 (Central Avenue) Off-Ramp	Basic	B / 14	B / 13	B / 16	B / 17
106	EB SR-74 (Central Avenue)) Off-Ramp	Diverge	B / 16	B / 15	B / 17	C / 19
105	Main Street On-Ramp to Central Ave (SR-74) Off-Ramp	Basic	C / 21	C / 20	C / 24	D / 27
104	Main Street On-Ramp	Merge	B / 18	B / 17	C / 19	C / 21
103	Main Street Off-Ramp to On-Ramp	Basic	C / 19	C / 18	C / 21	C / 24
102	Main Street On-Ramp	Diverge	C / 25	C / 22	D / 27	D / 28
101	Franklin Street Overcrossing to Main Street Off-Ramp	Basic	C / 22	C / 20	C / 25	D / 27

Notes:

1. Density reported in passenger cars per lane per mile.
2. **Density** font indicate LOS E or F conditions. DEC = Demand Exceeds Capacity.
3. Cells highlighted in orange indicate Express Lane Access Segments (Analyzed as a left-sided weave).
4. No-Build Alternative Facility Type/Build Alternative Facility Type.
5. No-Build Alternative Post Processor ID number/Build Alternative Post Processor ID number.

Source: Fehr & Peers, 2020

Table 14 – Opening Year (2030) Peak Hour Express Lane Operations

Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
SB I-15 Express Lane						
200	WB SR-91 Off-Ramp	Basic	A / 2	A / 9	A / 2	B / 14
201	EB SR-91 On-Ramp	Basic	A / 2	B / 11	A / 2	B / 16
202	EB SR-91 On-Ramp to EL Access South of Magnolia Avenue	Basic	A / 2	B / 12	A / 2	B / 16
203	EL Access South of Magnolia Avenue to EL Access at El Cerrito Road	Basic	A / 4	C / 25	A / 3	B / 17
204	EL Egress at El Cerrito Road	Basic	A / 2	B / 14	-	-
204	EL Access at El Cerrito Road to EL Access South of Cajalco Road	Basic	-	-	A / 2	B / 18
205	EL Access South of Cajalco Road to EL Access South of Temescal Canyon Road	Basic	-	-	A / 2	B / 16
206	EL Access South of Temescal Canyon to EL Access South of Indian Truck Trail	Basic	-	-	A / 2	B / 18
207	EL Access South of Indian Truck Trail to EL Egress South of Lake Street	Basic	-	-	A / 2	B / 17
208	EL Egress South of Lake Street	Basic	-	-	A / 2	B / 18
NB I-15 Express Lane						
306	EL Ingress North of Nichols Road	Basic	-	-	B / 18	A / 7
304	EL Ingress North of Nichols Road to EL Access North of Lake Street	Basic	-	-	C / 25	B / 11
303	EL Access North of Lake Street to EL Access North of Indian Truck Trail	Basic	-	-	C / 24	B / 11
302	EL Access North of Indian Truck Trail to EL Access at Dos Lagos Drive	Basic	-	-	C / 21	A / 10
312	EL Ingress at Cajalco Road to EL Access at El Cerrito Road	Basic	-	-	C / 18	A / 10

Table 14 – Opening Year (2030) Peak Hour Express Lane Operations

Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
314	EL Ingress at Cajalco	Merge	-	-	B / 13	A / 7
301	EL Ingress at El Cerrito Road	Basic	C / 18	A / 10	-	-
302/311 ²	EL Access at El Cerrito Road to EL Access North of Ontario Avenue	Basic	C / 18	A / 10	B / 11	A / 7
303/310 ²	EL Access North of Ontario Avenue to WB SR-91 Off-ramp	Basic	C / 23	A / 10	B / 13	A / 9
304/309 ²	WB SR-91 Off-Ramp	Basic	C / 23	A / 10	A / 10	A / 9
306/308 ²	EB SR-91 On-Ramp	Basic	B / 17	A / 8	A / 10	A / 9

Notes:

1. Density reported in passenger cars per lane per mile.
2. No-Build Alternative Segment ID/Build Alternative Segment ID.

Source: Fehr & Peers, 2020

Exhibit H1 - Southbound I-15 Weekday Speed Contour Plot (Opening Year No-Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Opening Year No Build
AM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Mode)

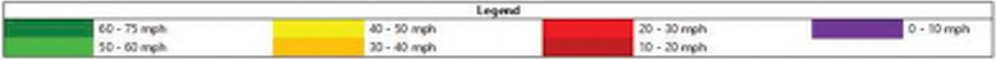
[illegible][illegible]

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

11:45 AM	70	70	70	69	69	70	70	69	69	69	69
11:30 AM	70	70	70	69	70	70	70	70	69	69	69
11:15 AM	70	70	70	69	70	70	70	70	69	69	69
11:00 AM	70	70	70	69	70	70	70	70	69	69	69
10:45 AM	70	70	70	70	70	70	70	70	70	70	69
10:30 AM	70	70	70	70	70	70	70	70	70	70	69
10:15 AM	70	70	70	69	70	70	70	70	70	69	69
10:00 AM	70	70	70	70	70	70	70	70	69	70	70
9:45 AM	70	70	70	69	70	70	70	70	70	70	69
9:30 AM	70	70	70	69	70	70	70	70	70	70	69
9:15 AM	70	70	70	70	70	70	70	70	70	70	70
9:00 AM	70	70	70	70	70	70	70	70	70	69	69
8:45 AM	70	70	70	70	70	70	70	70	69	69	69
8:30 AM	70	70	70	70	70	70	70	70	69	70	69
8:15 AM	70	70	70	70	70	70	70	70	69	70	70
8:00 AM	70	70	70	70	70	70	70	70	69	70	69
7:45 AM	70	70	70	70	70	70	70	70	69	70	70
7:30 AM	70	70	70	70	70	70	70	70	69	69	69
7:15 AM	70	70	70	70	70	70	70	70	69	70	69
7:00 AM	70	70	70	70	70	70	70	70	69	70	70
6:45 AM	70	70	70	69	70	70	70	70	70	70	70
6:30 AM	70	70	70	70	70	70	70	70	70	70	70
6:15 AM	70	70	70	70	70	70	70	70	70	70	70
6:00 AM	70	70	70	70	70	70	70	70	70	70	70
5:45 AM	69	70	69	69	69	69	70	70	70	70	70
5:30 AM	69	69	69	69	70	70	69	69	70	68	70
5:15 AM	70	70	70	70	70	70	70	70	70	67	70
5:00 AM	69	69	69	69	70	70	70	69	69	69	69

Exhibit H1 - Southbound I-15 Weekday Speed Contour Plot (Opening Year No-Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Opening Year No Build
AM Peak Hour

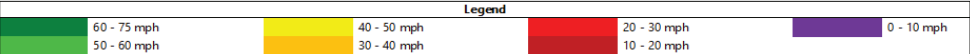
Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

64	65	64	64	63	64	65	64	64	63	64	63	63	64	64	64	61	60	62	62	63	62	63	63	11:45 AM	
65	65	64	64	61	64	65	64	64	64	65	64	63	64	64	65	62	62	62	63	63	62	63	63	11:30 AM	
65	65	64	64	63	65	65	65	64	64	64	64	64	64	65	65	62	62	62	63	64	62	63	63	11:15 AM	
64	65	64	64	63	65	65	65	65	64	65	64	64	64	64	64	65	62	63	63	63	64	62	63	63	11:00 AM
65	65	64	64	63	65	65	64	64	64	64	64	64	64	64	65	62	63	63	63	64	63	64	64	10:45 AM	
65	65	64	64	63	64	65	64	64	64	64	64	64	64	64	65	62	63	63	64	64	62	64	64	10:30 AM	
65	65	64	64	64	64	65	65	64	64	65	64	64	65	65	65	63	64	64	64	64	64	62	63	64	10:15 AM
65	65	64	64	64	65	65	65	65	65	64	65	64	64	65	65	65	62	63	64	64	64	63	64	64	10:00 AM
65	66	65	65	64	65	65	65	65	65	64	65	64	64	64	64	65	62	64	63	64	64	62	64	63	9:45 AM
65	66	65	65	64	65	65	65	64	64	64	64	64	64	64	65	63	63	63	63	64	63	63	63	9:30 AM	
64	65	64	64	62	64	64	65	64	63	63	64	63	63	64	63	65	63	63	63	64	64	62	63	63	9:15 AM
65	65	64	64	64	64	65	64	64	64	64	64	63	63	64	64	65	61	62	62	64	64	62	63	62	9:00 AM
65	65	65	65	64	65	65	65	64	64	64	64	64	64	64	64	65	62	62	63	64	64	63	63	63	8:45 AM
65	65	64	64	63	65	65	64	64	64	65	64	64	64	64	64	65	62	62	62	63	63	62	62	62	8:30 AM
65	65	64	64	64	65	65	65	65	65	64	65	65	64	64	64	65	63	64	63	64	64	62	61	63	8:15 AM
65	65	65	64	64	65	65	65	64	65	65	64	64	64	64	64	65	61	62	61	63	63	61	60	61	8:00 AM
65	65	65	64	63	65	65	65	64	64	64	64	63	63	64	64	65	62	62	62	63	63	62	61	62	7:45 AM
64	65	64	64	62	65	65	65	64	64	64	65	63	63	64	65	65	62	60	61	63	63	62	62	62	7:30 AM
65	65	64	64	64	65	65	63	64	64	65	63	63	64	65	65	65	62	62	62	63	63	62	62	62	7:15 AM
65	66	65	65	64	65	65	65	65	65	64	65	64	65	65	65	66	62	64	64	64	64	62	63	63	7:00 AM
66	66	66	66	66	66	66	66	66	66	66	66	65	66	66	66	66	62	64	64	65	65	63	64	65	6:45 AM
66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	63	65	65	65	65	64	65	65	6:30 AM
66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	67	63	65	66	66	66	64	65	65	6:15 AM
66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	64	66	66	66	66	64	66	66	6:00 AM
66	66	66	66	66	66	66	66	66	66	66	66	65	66	66	66	66	64	66	66	66	66	64	66	66	5:45 AM
66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	64	66	66	66	66	64	66	66	5:30 AM
66	66	66	66	66	66	66	66	67	66	66	66	66	66	66	66	67	64	66	66	66	66	65	66	66	5:15 AM
66	66	66	66	66	66	67	67	67	67	67	67	66	67	67	67	67	64	66	67	67	67	65	67	67	5:00 AM

Indian Truck Trail On		Lake St Off	Lake St On	Nichols Rd Off	Nichols Rd On	Central Ave Off	Central Ave On	Main St Off	Main St On
0.6	3.1	0.6	2.2	0.6	1	0.6	0.7	0.7	
12.6	15.7	16.3	18.5	19.1	20.1	20.7	21.4	22.1	

Exhibit H2 - Northbound I-15 Weekday Speed Contour Plot (Opening Year No-Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

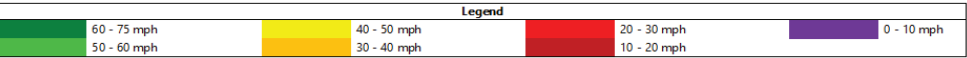


I-15 Express Lanes Southern Extension
Opening Year No Build
AM Peak Hour

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)																								
11:45 AM	69	66	68	68	67	67	67	68	68	68	69	66	67	67	68	69	68	68	68	68	68	68	68	68
11:30 AM	68	62	66	67	66	66	67	68	68	68	69	66	67	67	67	68	69	68	68	68	68	68	68	68
11:15 AM	69	67	68	67	67	67	68	68	69	69	69	67	68	68	68	69	69	68	68	68	68	68	68	68
11:00 AM	69	68	68	68	68	68	68	68	68	68	69	67	67	67	68	69	69	68	68	68	68	68	68	68
10:45 AM	69	67	68	67	67	67	68	68	68	69	69	67	68	68	68	69	69	68	68	68	68	67	68	68
10:30 AM	69	69	67	68	67	67	67	68	68	68	68	69	67	68	68	67	68	68	68	67	68	68	68	68
10:15 AM	69	67	68	68	68	68	68	69	69	69	69	67	68	68	68	69	69	68	68	68	67	67	68	68
10:00 AM	69	67	68	68	67	67	68	68	69	68	69	67	68	68	68	69	69	68	68	68	68	67	68	68
9:45 AM	69	67	68	68	68	68	68	69	69	68	69	67	68	68	68	69	69	68	68	68	68	68	67	68
9:30 AM	69	68	68	68	68	68	68	68	68	68	69	67	68	68	68	69	69	68	68	68	68	68	67	68
9:15 AM	69	68	68	68	68	68	68	69	69	68	69	67	68	68	68	69	69	68	68	68	67	68	68	68
9:00 AM	69	67	68	68	68	68	68	69	68	68	69	67	68	68	68	69	69	68	68	68	68	68	67	68
8:45 AM	69	68	68	68	68	68	68	69	69	69	69	68	68	68	68	69	69	68	68	68	68	68	67	68
8:30 AM	69	67	68	68	68	68	68	69	68	68	69	68	68	68	68	69	69	68	68	68	68	67	67	68
8:15 AM	69	68	68	68	68	68	68	69	69	68	69	67	68	68	68	69	69	68	68	68	67	67	68	68
8:00 AM	69	66	68	68	68	68	68	69	68	68	69	67	68	67	68	68	69	68	68	68	67	67	68	68
7:45 AM	68	65	68	68	68	68	68	69	69	68	69	67	68	68	67	69	69	68	68	68	67	67	68	68
7:30 AM	68	65	68	68	68	68	68	69	69	69	69	67	67	67	68	69	69	68	68	68	67	68	67	68
7:15 AM	68	65	68	68	68	67	67	69	69	69	69	67	68	68	68	69	69	68	68	68	67	67	68	68
7:00 AM	68	65	68	68	67	68	68	69	69	69	69	67	68	68	68	69	69	68	68	68	67	67	68	68
6:45 AM	68	66	68	68	68	68	68	69	69	68	68	67	68	67	67	68	69	68	68	68	67	67	68	68
6:30 AM	68	66	68	68	67	67	68	69	68	68	68	67	68	67	68	68	69	68	68	68	67	67	67	68
6:15 AM	68	65	67	67	67	67	68	68	68	68	68	68	68	67	67	67	68	68	68	67	66	67	65	67
6:00 AM	68	66	68	67	67	67	67	68	68	68	68	67	67	67	67	68	69	68	68	67	63	62	67	67
5:45 AM	68	66	67	67	66	66	67	68	68	68	68	67	67	67	67	68	68	67	67	67	61	62	66	67
5:30 AM	68	67	68	68	67	67	67	68	68	68	68	67	67	67	67	68	69	68	68	68	67	66	67	67
5:15 AM	69	69	69	68	68	68	68	69	69	68	69	68	68	68	68	68	68	68	68	68	66	66	67	67
5:00 AM	69	69	69	67	68	68	68	69	69	68	69	67	67	67	68	68	69	68	68	68	67	67	67	67
	Main St Off	Main St On	EB Central Ave Off	WB Central Ave Off	Dexter Ave Off	Dexter Ave/Central Ave On	Nichols Rd Off	Nichols Rd On	Lake St Off	Lake St On	Indian Truck Trail Off	Indian Truck Trail On												
													Length (miles)	0.5	0.8	0.3	0.2	0.5	0.6	0.7	2.2	0.6	3.1	0.6
													Cumulative Distance (miles)	0.5	1.3	1.6	1.8	2.3	2.9	3.6	5.8	6.4	9.5	10.1

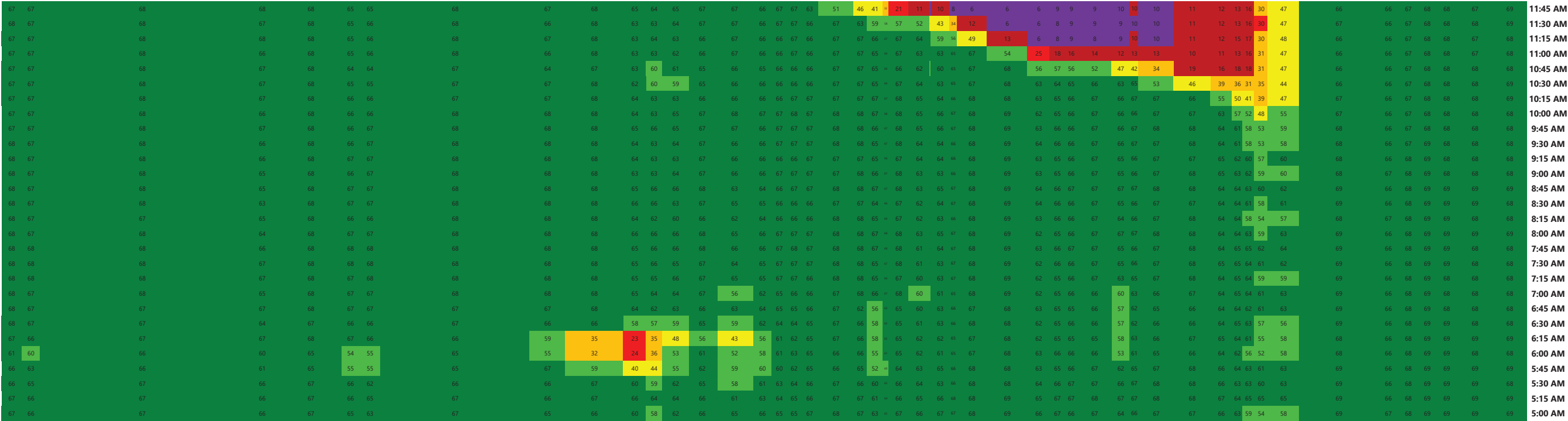
Exhibit H2 - Northbound I-15 Weekday Speed Contour Plot (Opening Year No-Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Opening Year No Build
AM Peak Hour

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



	Temescal Canyon Rd Off	Temescal Canyon Rd On		Weirick Rd/ Dos Lagos Dr Off	Weirick Rd/ Dos Lagos Dr On		Cajalco Rd Off	Express Lane Ingress	EB Cajalco Rd On	WB Cajalco Rd On		El Cerrito Rd Off	Express Lane Ingress	El Cerrito Rd On	Ontario Ave Off		Ontario Ave On		Express Lane Access (Ingress/Egress)		Magnolia Ave Off	EB Magnolia Ave On	WB Magnolia Ave On		WB and EB SR-91 Off		WB SR-91 On	EB SR-91 On		Hidden Valley Pkwy Off	Express Lane Ingress
2.3		0.5	1.9	0.5	0.5	0.5	0.3	0.4	0.4	0.3	0.6		1.1		0.3	0.2	0.5	0.7	0.3	0.6											
12.4		12.9	14.8	15.3	15.8	16.3	16.6	17	17.4	17.7	18.3		19.4		19.7	19.9	20.4	21.1	21.4	22											

Northbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

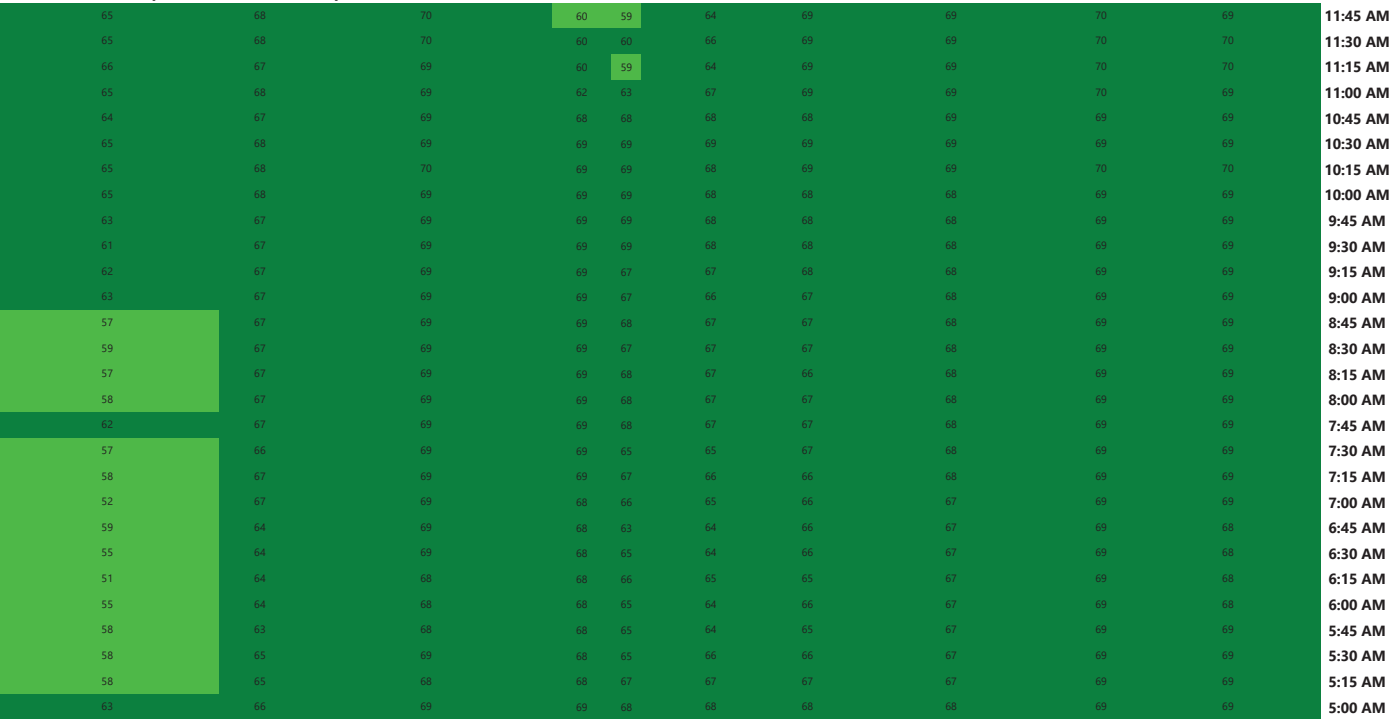
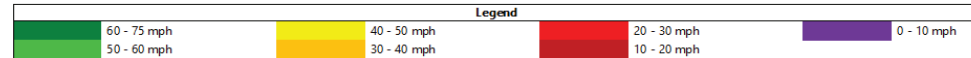


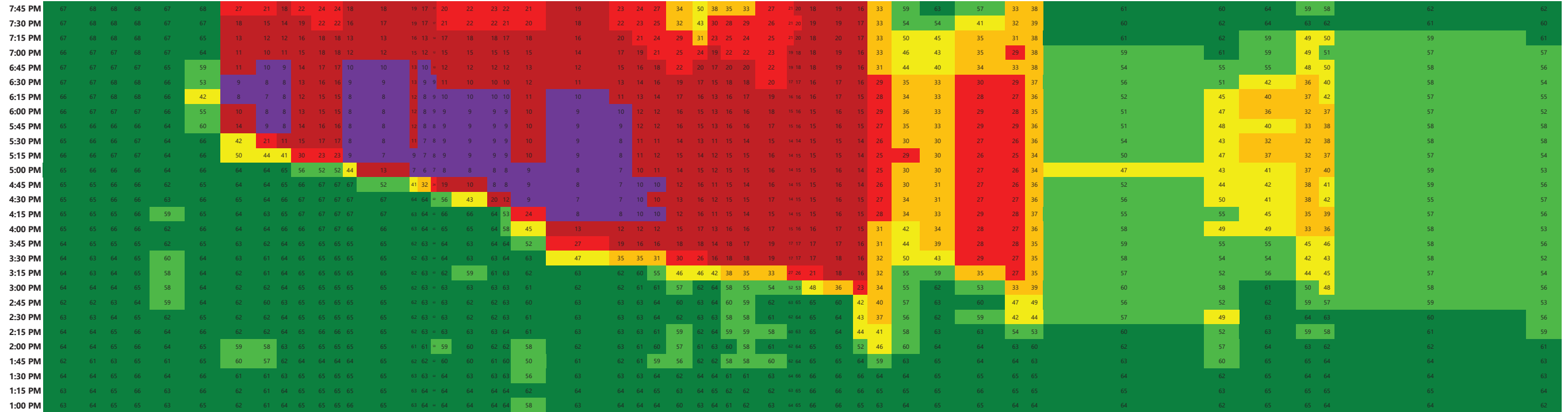
Exhibit I1 - Southbound I-15 Weekday Speed Contour Plot (Opening Year No-Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

I-15 Express Lanes Southern Extension
Opening Year No Build
PM Peak Hour



Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



Length (miles)																					
		WB SR-91 Off	EB SR-91 Off	EB SR-91 On	WB SR-91 On	Magnolia Ave Off	Magnolia Ave On	Express Lane Access (Ingress/Egress)	Ontario Ave Off	Ontario Ave On	El Cerrito Rd Off	Express Lane Egress	El Cerrito Rd On	Cajalco Rd Off	Express Lane Egress	Cajalco Rd On	Weirick Rd/ Dos Lagos Dr Off	Weirick Rd/ Dos Lagos Dr On	Temescal Canyon Rd Off	Temescal Canyon Rd On	Indian Truck Trail Off
	0.8	0.3	0.3	0.3	0.4	0.5	1	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.8	0.4	2	0.5	2.3	
Cumulative Distance (miles)	0.8	1.1	1.4	1.7	2.1	2.6	3.6	4.1	4.6	5	5.5	6	6.8	7.2	9.2	9.7	12				

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

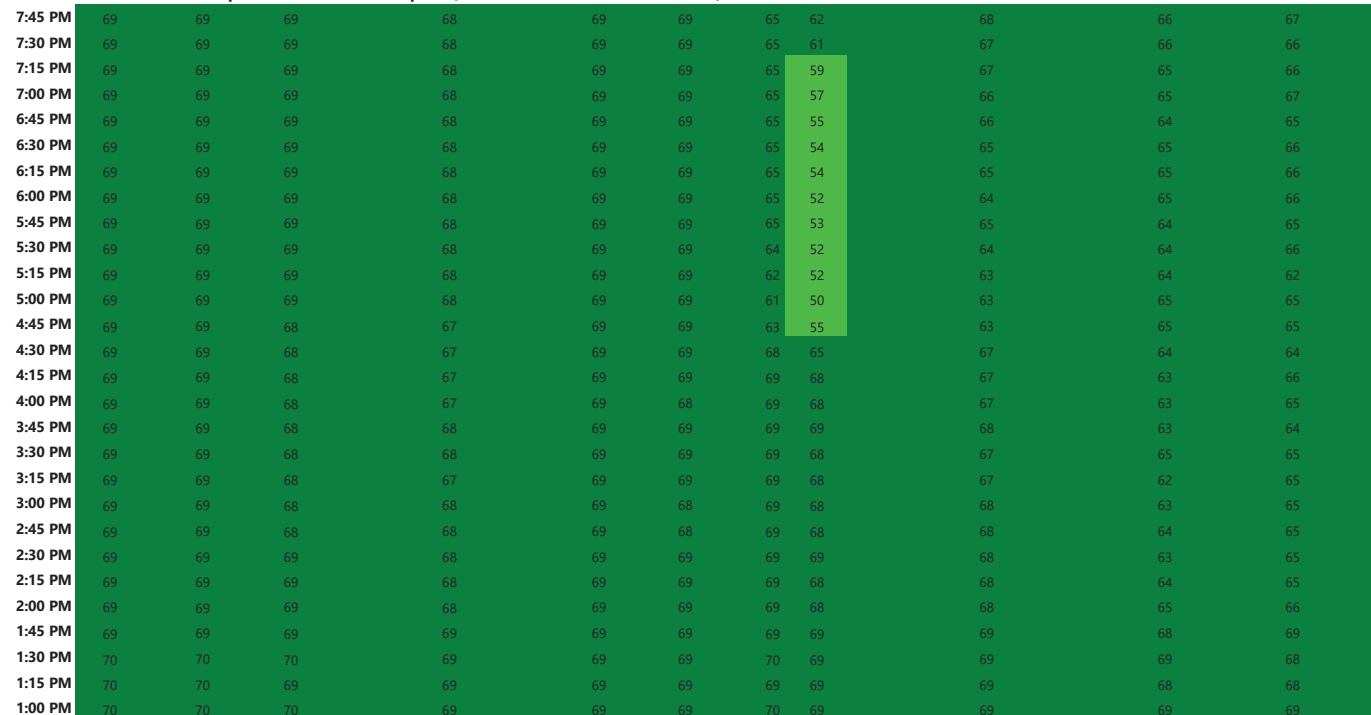
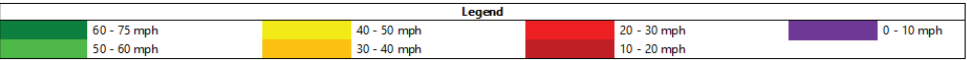


Exhibit I1 - Southbound I-15 Weekday Speed Contour Plot (Opening Year No-Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Opening Year No Build
PM Peak Hour

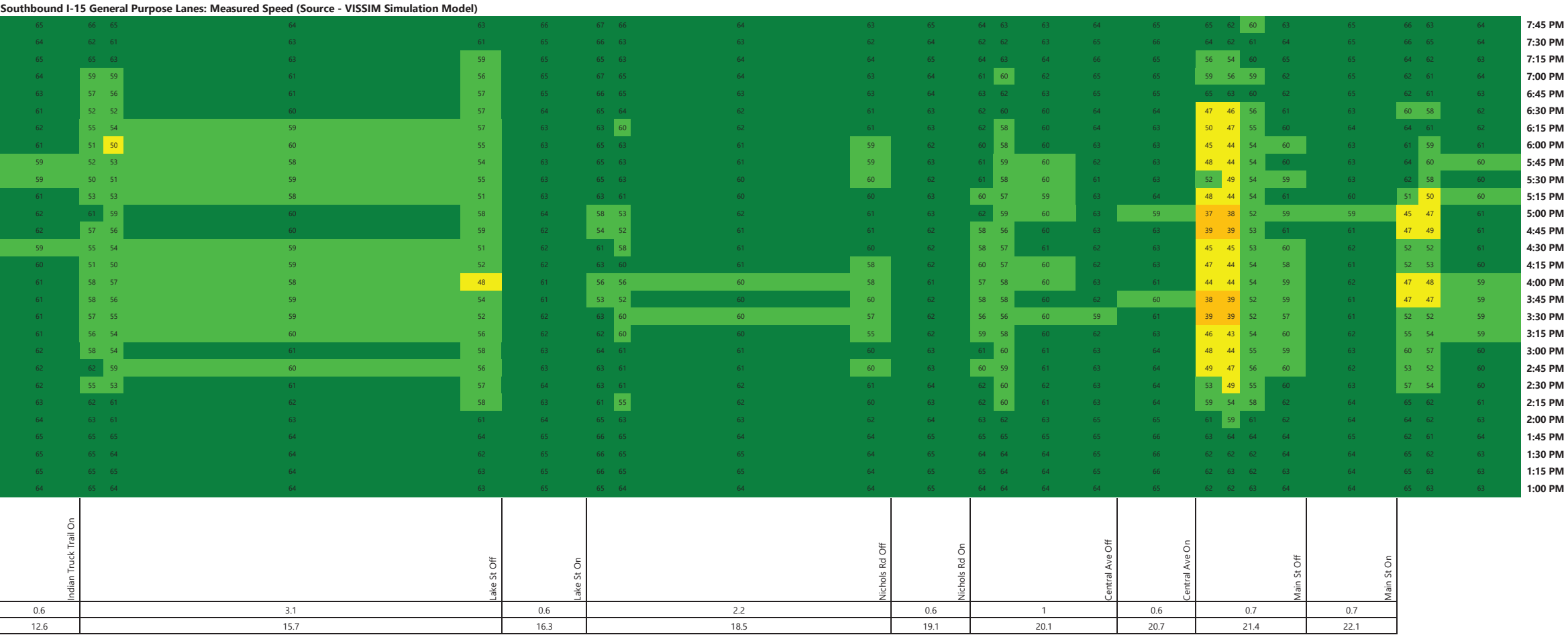
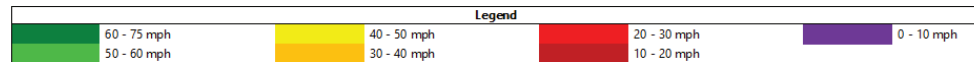
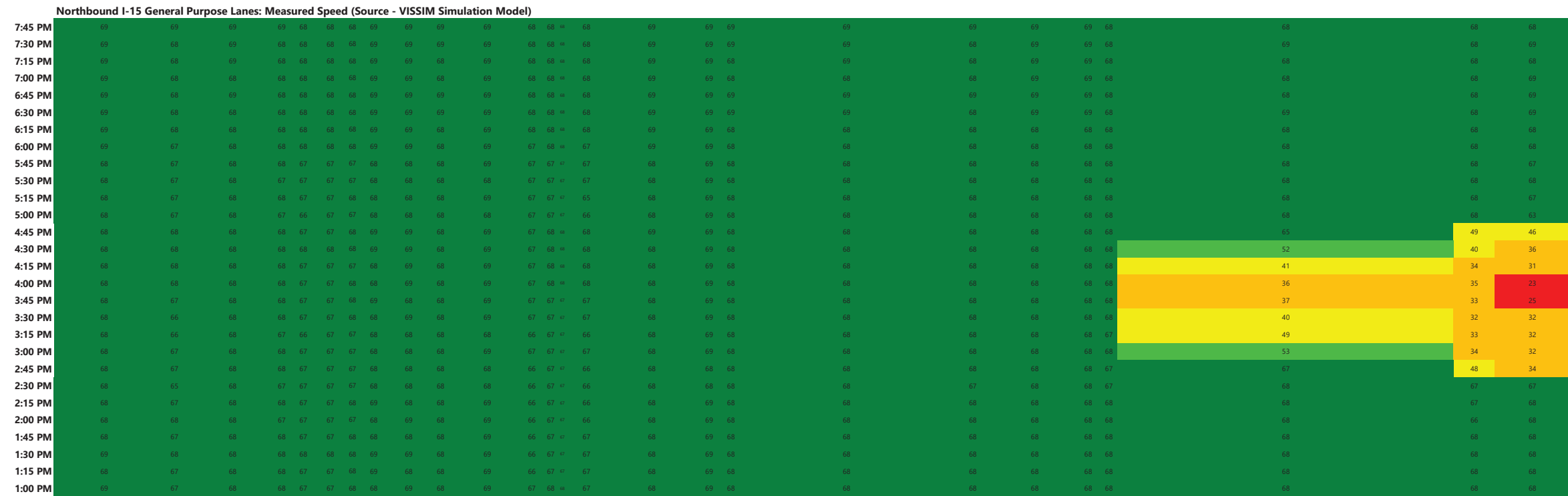


Exhibit I2 - Northbound I-15 Weekday Speed Contour Plot (Opening Year No-Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



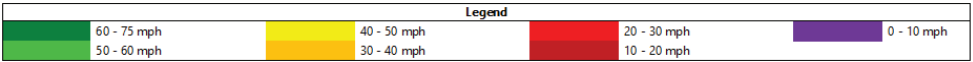
I-15 Express Lanes Southern Extension
Opening Year No Build
PM Peak Hour



	Main St Off		EB Central Ave Off	WB Central Ave Off	Dexter Ave Off	Dexter Ave On	Nichols Rd Off	Nichols Rd On	Lake St Off	Lake St On	Indian Truck Trail Off	Indian Truck Trail On
Length (miles)	0.5	0.8	0.3	0.2	0.5	0.6	0.7	2.2	0.6	3.1	0.6	
Cumulative Distance (miles)	0.5	1.3	1.6	1.8	2.3	2.9	3.6	5.8	6.4	9.5	10.1	

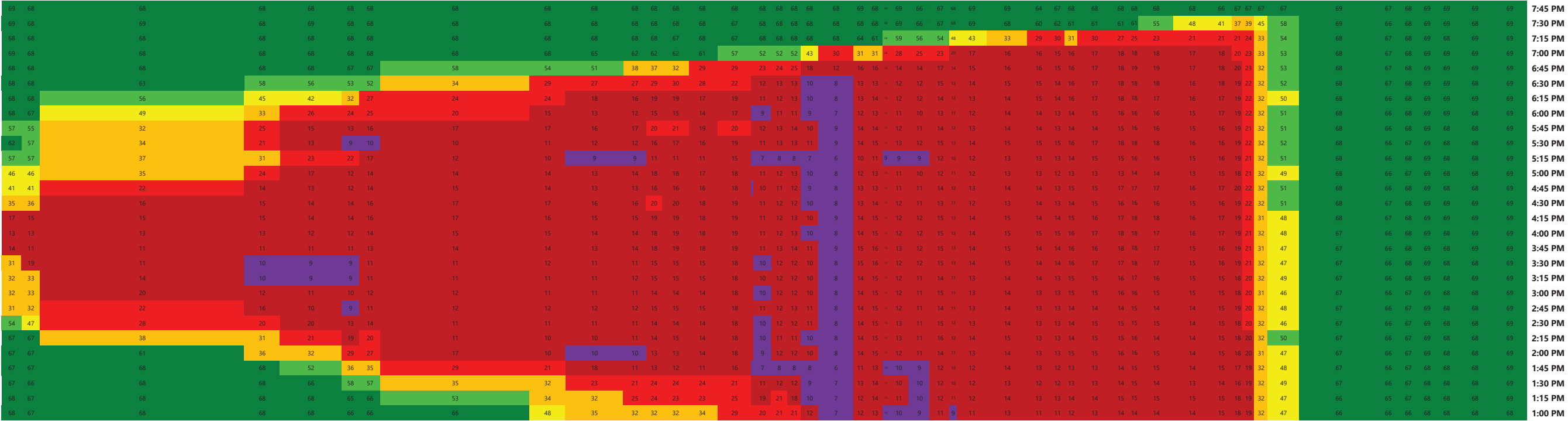
Exhibit I2 - Northbound I-15 Weekday Speed Contour Plot (Opening Year No-Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Opening Year No Build
PM Peak Hour

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



		Temescal Canyon Rd Off																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
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Northbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

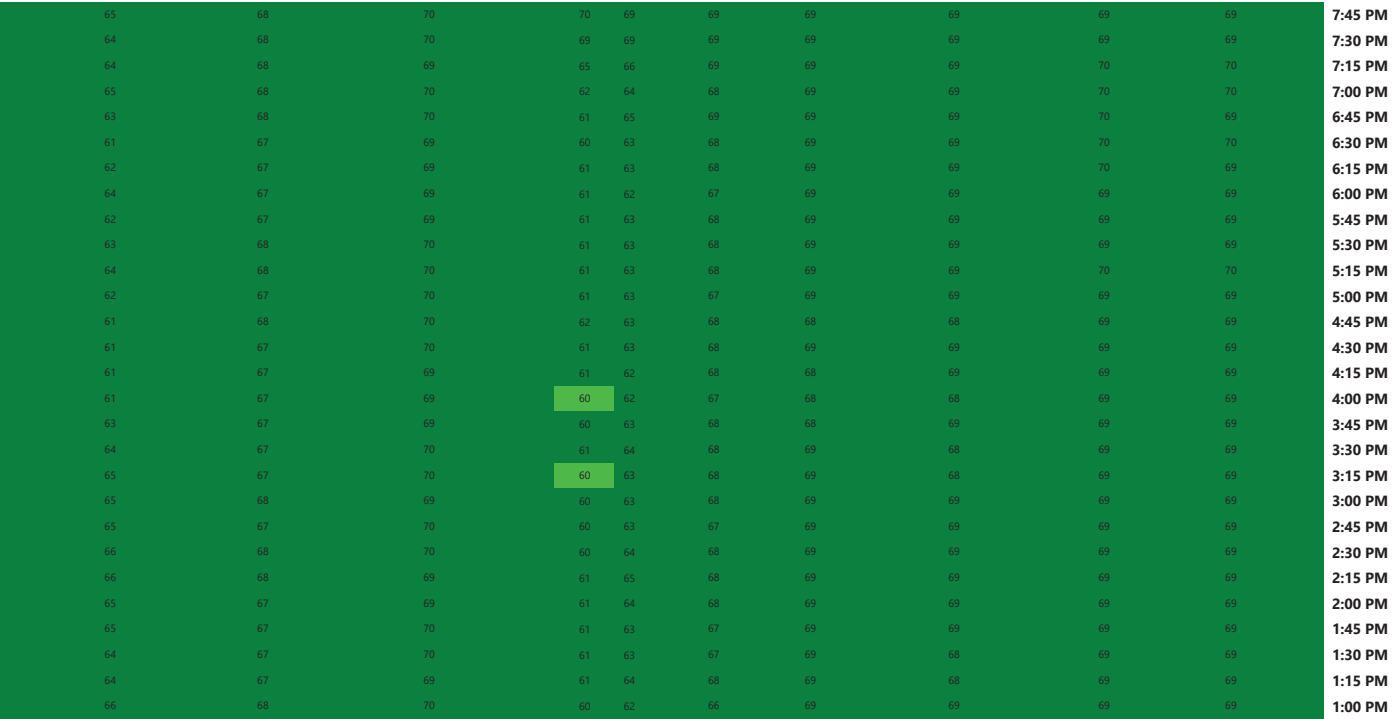
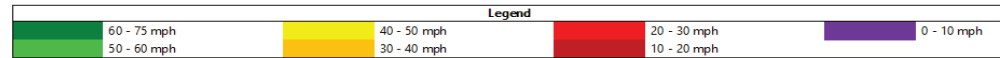


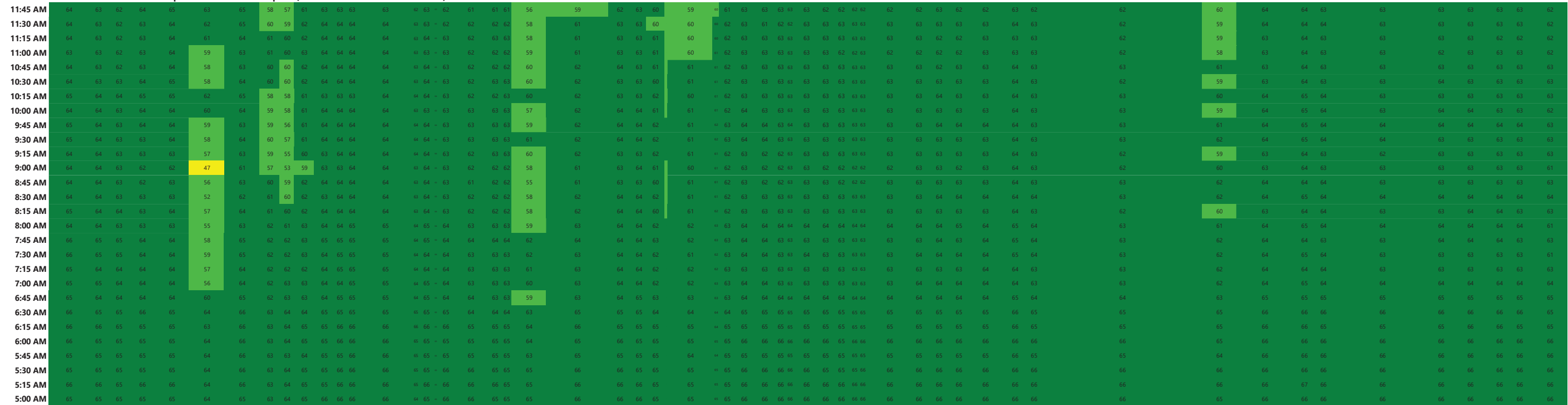
Exhibit J1 - Southbound I-15 Weekday Speed Contour Plot (Opening Year Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



**I-15 Express Lanes Southern Extension
Opening Year Plus Project
AM Peak Hour**

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

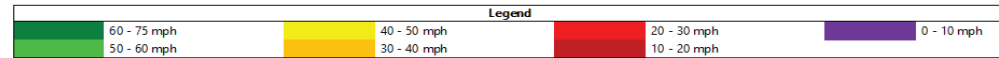
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Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



Exhibit J1 - Southbound I-15 Weekday Speed Contour Plot (Opening Year Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



**I-15 Express Lanes Southern Extension
Opening Year Plus Project
AM Peak Hour**

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

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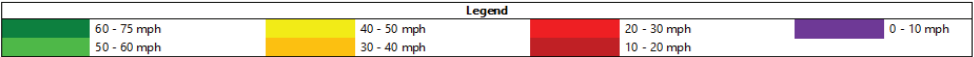
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Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

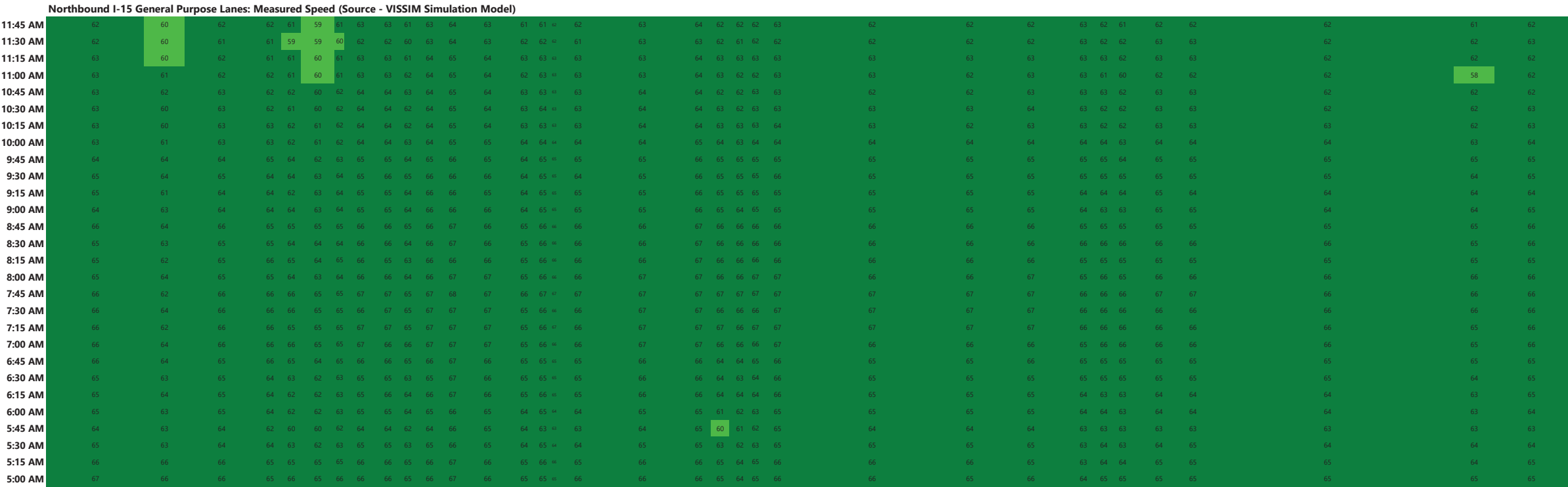
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70	70	70	70	69	70	11:30 AM
70	70	70	70	70	70	11:15 AM
70	70	70	70	69	70	11:00 AM
70	70	70	70	70	70	10:45 AM
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70	70	70	70	70	71	6:00 AM
70	70	70	70	69	70	5:45 AM
70	70	70	70	70	71	5:30 AM
70	70	70	70	67	70	5:15 AM
70	70	70	70	70	70	5:00 AM

Exhibit J2 - Northbound I-15 Weekday Speed Contour Plot (Opening Year Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Opening Year Plus Project
AM Peak Hour

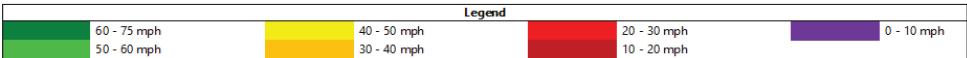


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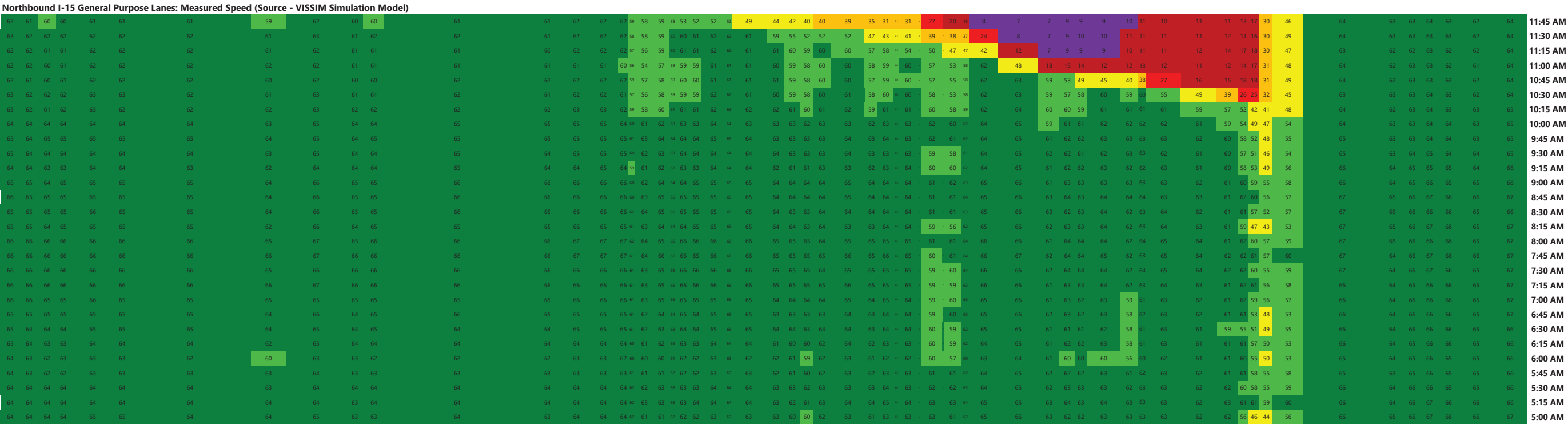


Exhibit J2 - Northbound I-15 Weekday Speed Contour Plot (Opening Year Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Opening Year Plus Project
AM Peak Hour



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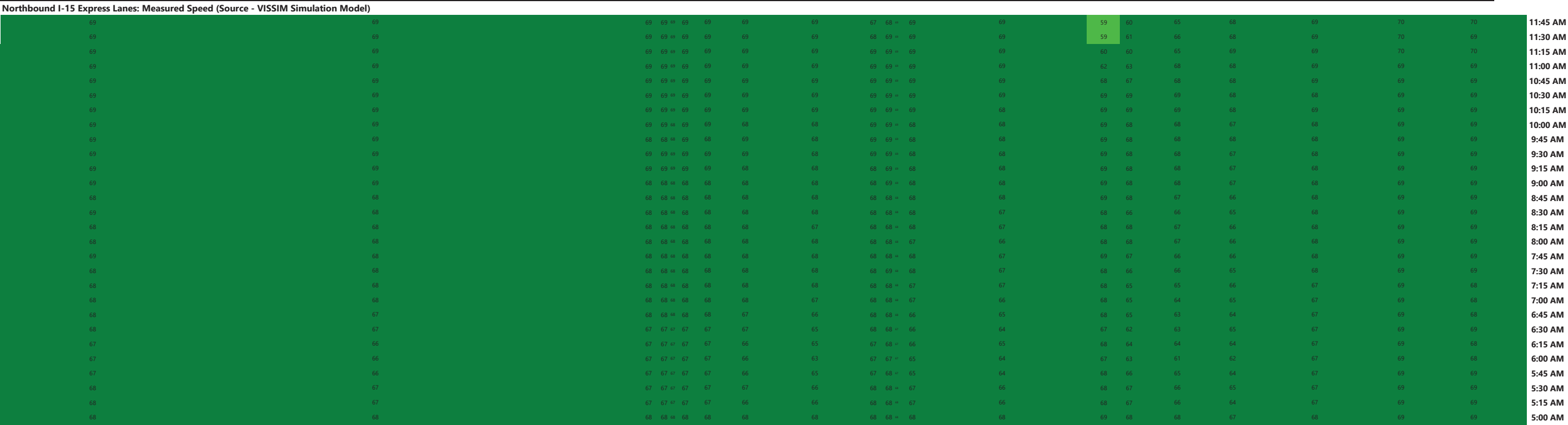
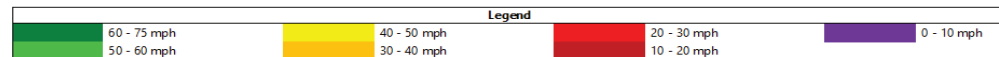


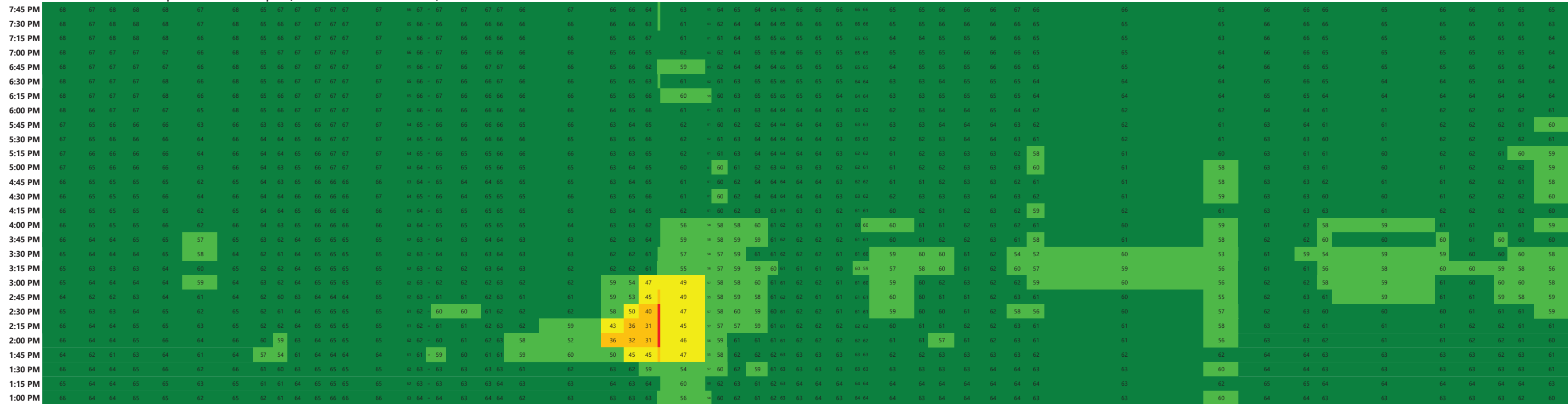
Exhibit K1 - Southbound I-15 Weekday Speed Contour Plot (Opening Year Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

**I-15 Express Lanes Southern Extension
Opening Year Plus Project
PM Peak Hour**



Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

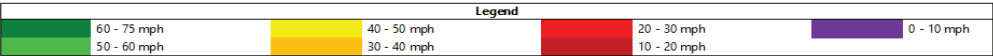
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Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



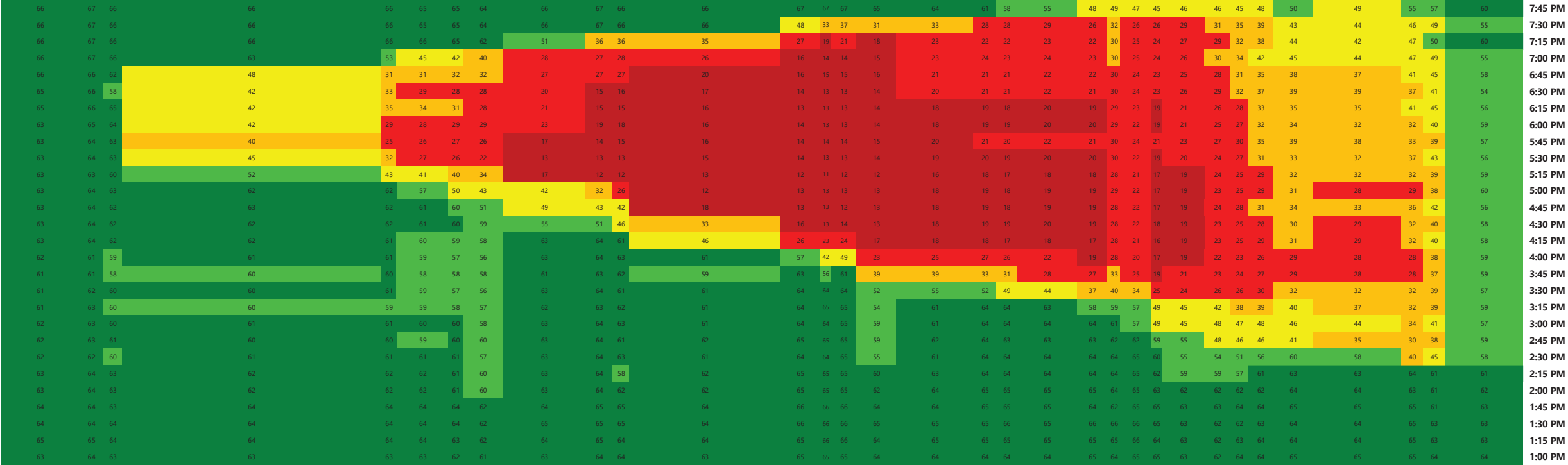
Exhibit K1 - Southbound I-15 Weekday Speed Contour Plot (Opening Year Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Opening Year Plus Project
PM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



Indian Truck Trail On		Express Lane Access (Ingress/Egress)	Lake St Off	Lake St On	Express Lane Egress	Nichols Rd Off	Nichols Rd On	Express Lane Egress Central Ave Off	Central Ave On	Main St Off	Main St On
0.6	3.1			0.6	2.2		0.6	1	0.6	0.7	0.7
12.6	15.7			16.3	18.5		19.1	20.1	20.7	21.4	22.1

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

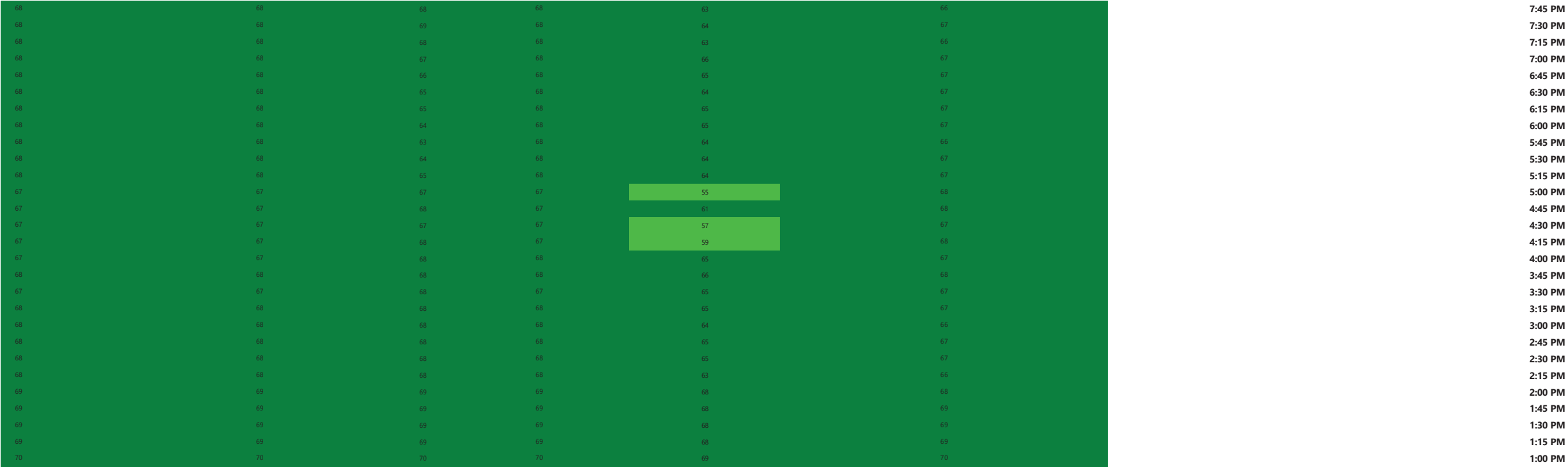
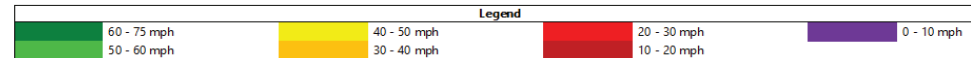


Exhibit K2 - Northbound I-15 Weekday Speed Contour Plot (Opening Year Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

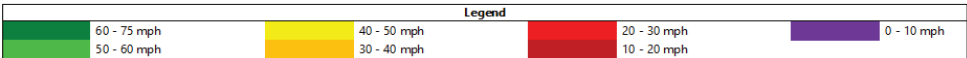
**I-15 Express Lanes Southern Extension
Opening Year Plus Project
PM Peak Hour**



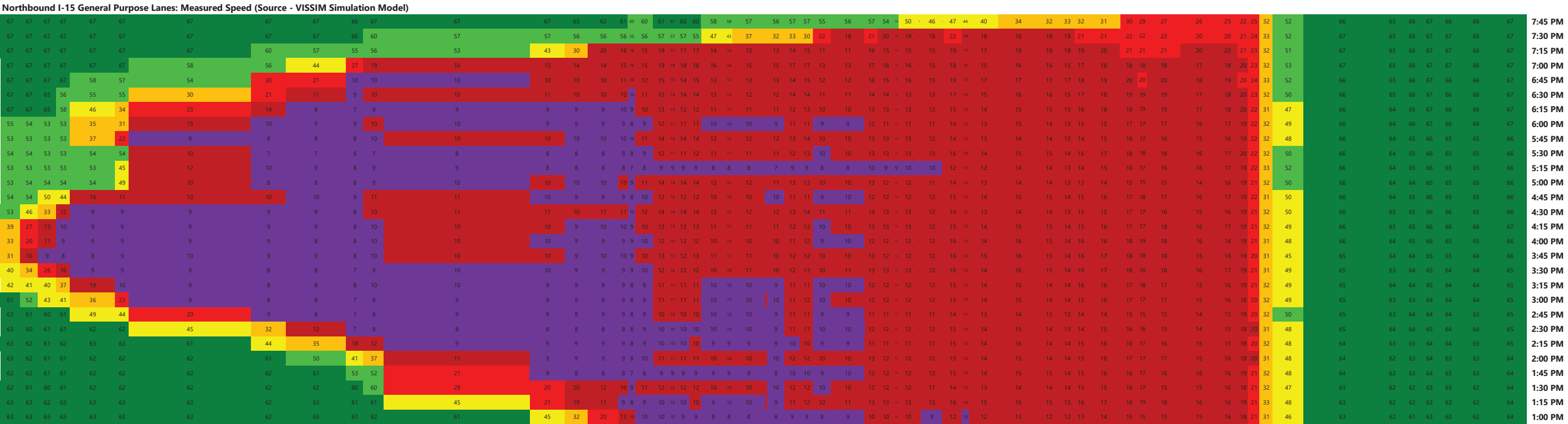
Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)																																			
7:45 PM	67	67	67	67	67	67	67	67	67	67	68	68	67	67	67	67	68	68	67	67	68	68	68	67	68	67	67	67	67	67	67	67	67		
7:30 PM	67	67	67	67	66	66	67	67	67	67	68	68	67	67	67	67	68	67	67	67	68	67	67	67	67	67	67	67	67	67	67	67	67	67	
7:15 PM	67	67	67	67	66	66	66	67	67	66	67	68	67	67	67	67	67	68	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	
7:00 PM	67	66	67	67	66	66	66	67	67	67	68	68	68	67	67	67	68	67	67	67	68	67	67	67	67	67	67	67	67	67	67	67	67	67	
6:45 PM	67	67	67	67	66	66	66	67	67	67	67	68	67	66	67	67	67	68	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	
6:30 PM	67	66	67	67	66	66	66	67	67	66	67	68	68	66	67	67	68	67	67	67	68	67	67	67	67	67	67	67	67	67	67	67	67	67	
6:15 PM	67	66	67	66	66	65	66	67	67	66	67	68	67	66	67	67	68	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	
6:00 PM	66	65	66	66	65	65	65	66	67	66	67	67	67	66	66	66	66	66	67	66	66	66	66	66	66	66	65	65	64	65	65	65	65	64	
5:45 PM	64	63	64	64	63	62	63	65	65	64	65	66	65	64	65	66	65	66	65	65	65	65	65	65	65	65	65	65	65	65	65	65	64	57	
5:30 PM	64	63	64	64	62	62	63	65	65	63	65	66	65	64	64	66	64	66	65	64	65	65	65	65	65	65	65	65	65	65	65	64	64	63	
5:15 PM	64	63	64	64	62	62	63	65	65	64	65	66	66	63	64	66	65	66	65	64	65	65	65	65	65	65	65	65	65	65	65	64	64	59	
5:00 PM	63	62	63	63	61	60	62	64	65	63	64	66	65	64	64	66	63	66	65	65	65	65	65	65	65	65	65	65	65	65	65	66	66	59	
4:45 PM	65	64	65	65	63	63	64	66	66	65	66	67	67	65	66	66	66	67	66	66	66	66	66	65	66	66	65	65	66	66	66	66	66	66	55
4:30 PM	65	64	65	65	64	64	64	66	66	65	66	67	66	65	66	66	66	67	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	55
4:15 PM	65	64	65	64	63	63	64	66	66	65	66	67	66	65	66	66	66	67	66	66	66	66	66	66	66	66	66	66	66	66	66	66	66	50	
4:00 PM	65	64	65	64	62	62	63	65	65	64	66	67	66	65	65	66	65	66	65	65	65	65	65	65	65	65	65	65	65	65	65	64	64	44	
3:45 PM	63																																		

Exhibit K2 - Northbound I-15 Weekday Speed Contour Plot (Opening Year Build Alternative - PM)

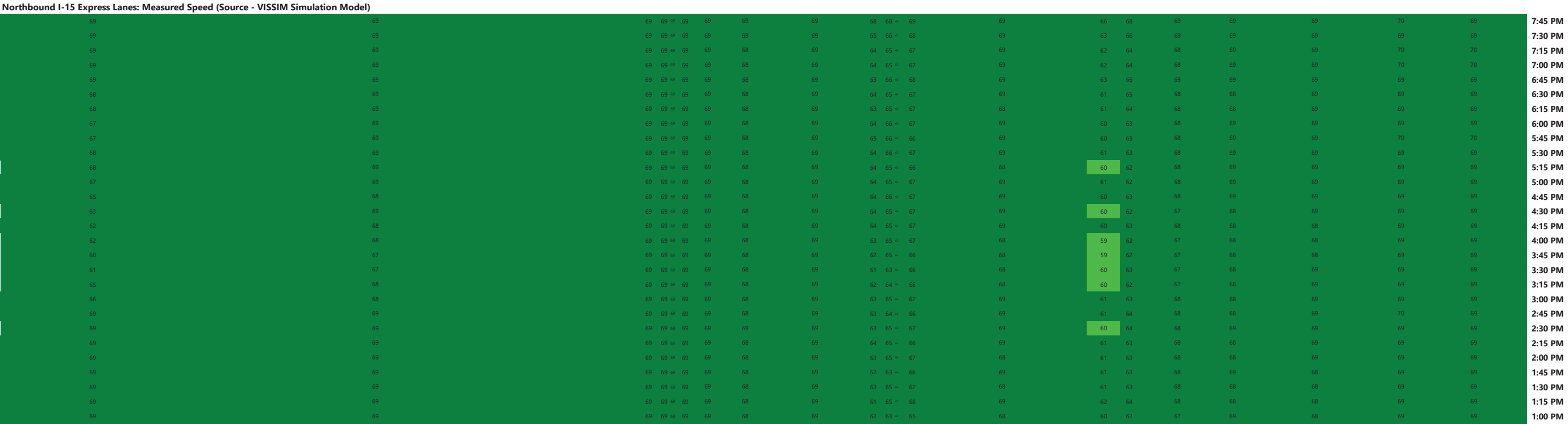
VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Opening Year Plus Project
PM Peak Hour



	Express Lane Access (Ingress/Egress)		Temescal Canyon Rd Off		Temescal Canyon Rd On		Weirick Rd/ Dos Lagos Dr Off		Weirick/Dos Lagos On		Cajalco Rd Off Express Lane Access (Ingress)		Cajalco Rd Loop On		EB Cajalco Rd On		WB Cajalco Rd On		El Cerrito Rd Off		Express Lane Access (Ingress/Egress) El Cerrito Rd On		Ontario Ave Off		Ontario Ave On		Express Lane Access (Ingress/Egress)		Magnolia Ave Off		EB Magnolia Ave On		WB Magnolia Ave On		WB and EB SR-91 Off		WB SR-91 On		EB SR-91 On		Hidden Valley Pkwy Off		Express Lane Ingress
		2.3		0.5		1.9		0.5		0.5		0.5		0.3		0.4		0.4		0.3		0.6				1.1				0.3		0.2		0.5		0.7		0.3		0.6			
		12.4		12.9		14.8		15.3		15.8		16.3		16.6		17		17.4		17.7		18.3				19.4				19.7		19.9		20.4		21.1		21.4		22			



Travel Time

VISSIM travel time estimates for the peak period is presented for the AM peak period (5:00 AM to 12:00 PM) and PM peak period (1:00 to 8:00 PM). Opening Year (2030) peak period freeway mainline segment travel times are presented in **Exhibit L1 through L4**.

Exhibit L1: Opening Year (2030) AM Peak Period Travel Times – SB I-15

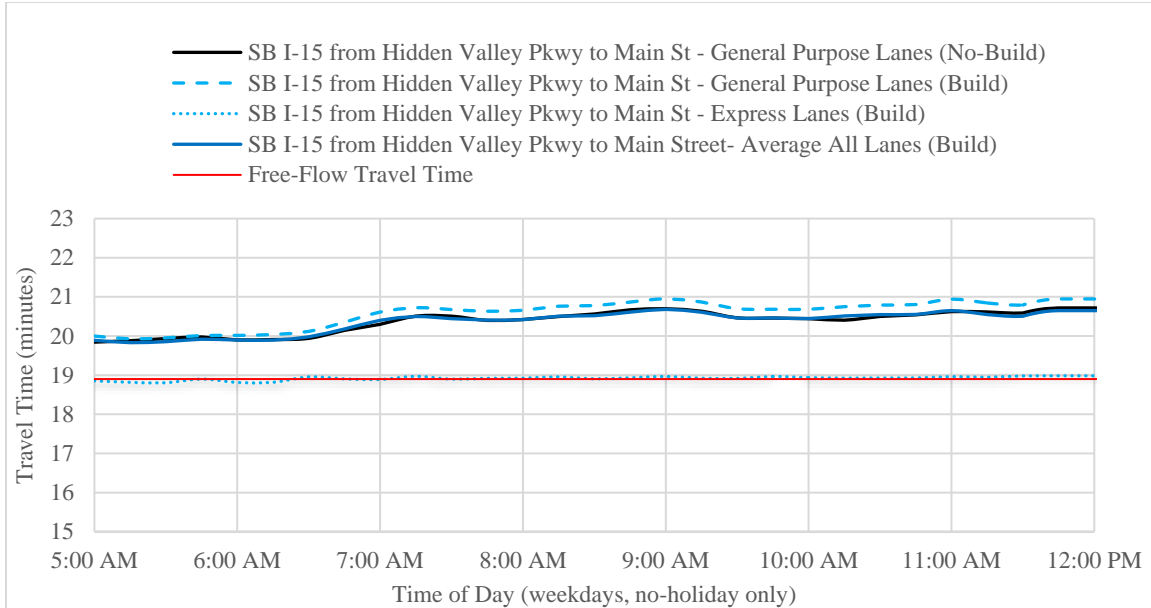


Exhibit L2: Opening Year (2030) AM Peak Period Travel Times – NB I-15

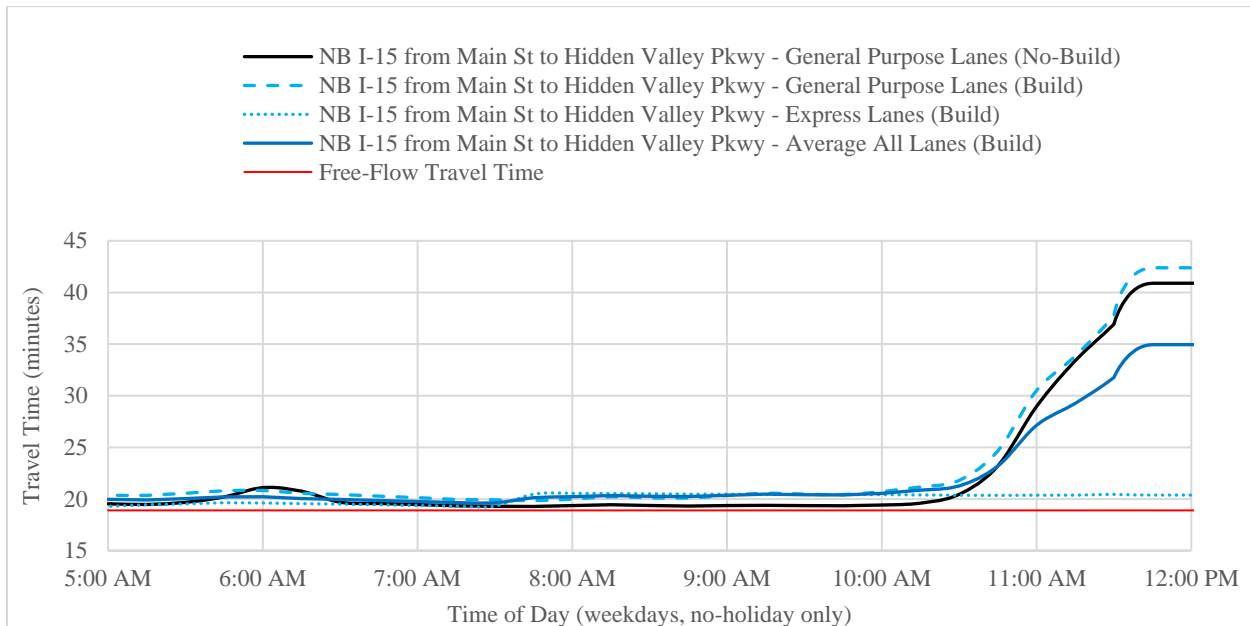


Exhibit L3: Opening Year (2030) PM Peak Period Travel Times – SB I-15

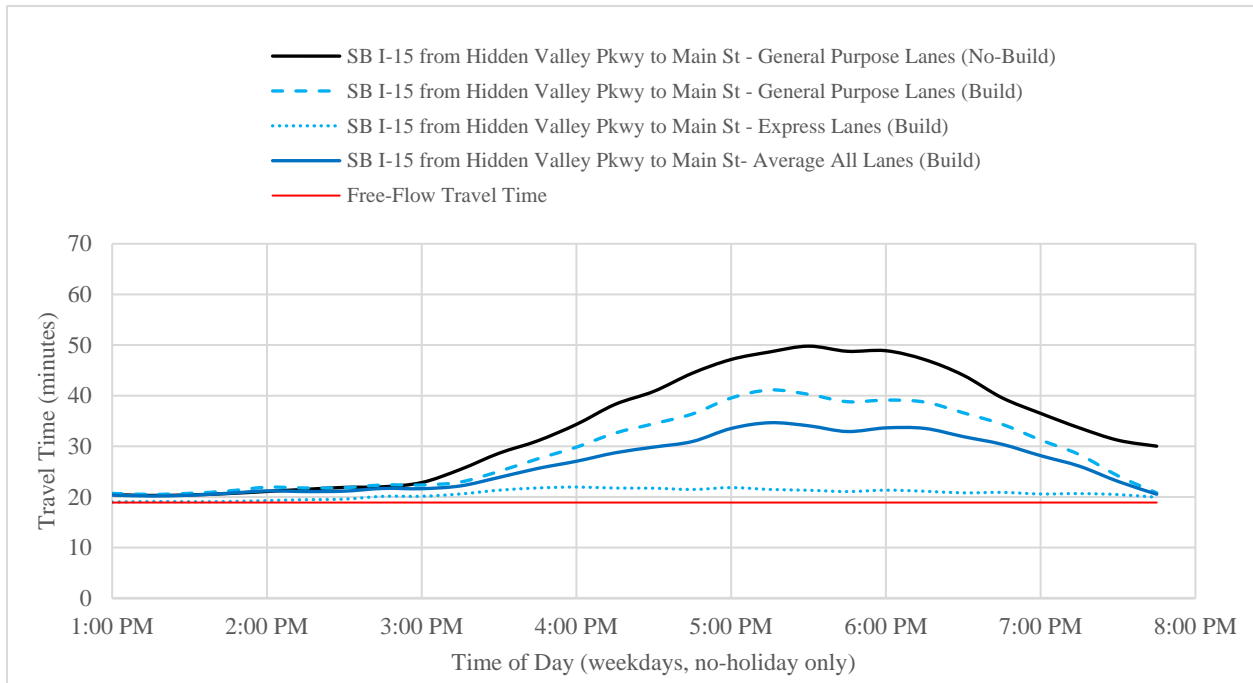
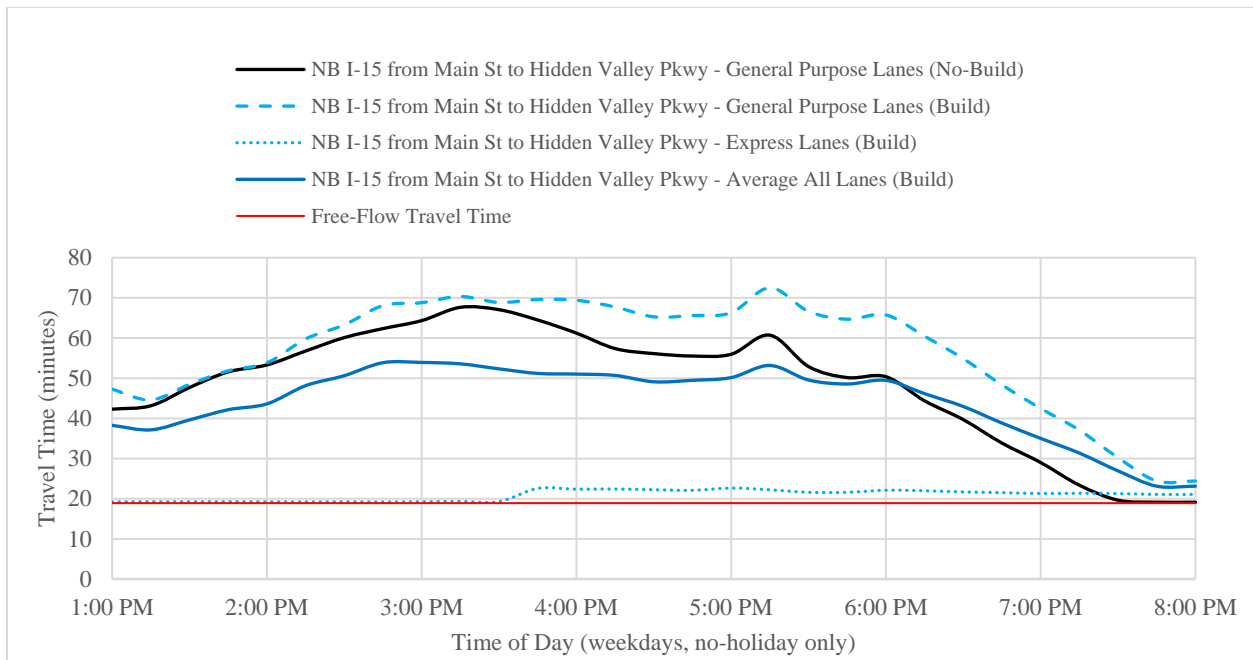


Exhibit L4: Opening Year (2030) PM Peak Period Travel Times – NB I-15



SB I-15

Travel time on SB I-15 is presented on Exhibit L1 for the AM peak period and Exhibit L3 for the PM peak period.

Under the No-Build Alternative, travel times peak on SB I-15 General Purpose Lanes during the PM from 3:30 to 8:00 PM (see Exhibit L3); peak travel time (50 minutes) would occur around 5:30 PM. Under the Build Alternative travel times peak on SB I-15 General Purpose Lanes during the PM from 4:00 to 7:00 PM; peak travel time (41 minutes) would occur around 5:00 PM. The Build Alternative would reduce the peak travel time on SB I-15 by roughly 18%.

Under the Build Alternative, the SB I-15 Express Lanes would operate at free-flow conditions.

NB I-15

Travel time on NB I-15 is presented on Exhibit L2 for the AM peak period and Exhibit L4 for the PM peak period.

Under the No-Build Alternative, travel times peak on NB I-15 General Purpose Lanes during the PM peak period from 2:00 PM AM to 6:00 PM (see Exhibit L4); peak travel time (68 minutes) would occur around 3:30 PM. Under the Build Alternative, travel times peak on NB I-15 General Purpose Lanes during the PM peak period from 2:00 PM AM to 6:30 PM; peak travel time (73 minutes) would occur at 5:15 PM. Under both alternatives, the travel time is primarily influenced by the NB I-15 bottleneck at the WB Magnolia Avenue On-Ramp merge segment. The Build Alternative would have slightly higher travel times than the No-Build Alternatives during some hours of the day due to higher traffic demand volume of approximately 2,600 vehicles north of the Cajalco On-Ramp. Total volume served is presented under the next subsection - system-wide performance statics.

Because the Build Alternative serves more vehicle demand in the PM peak period, the bottleneck at Magnolia On-Ramp requires more time than in the No-Build Alternative to dissipate and serve the vehicles still in queue. The average travel time for the Build Alternative is higher than the No-Build alternative during the PM shoulder hours of 6:00-8:00 PM because the vehicles are still in queue during this interval, consequently driving the overall average travel time higher during these hours.

Under the Build Alternative, the NB I-15 Express Lanes would operate at free-flow conditions.

System-wide Performance

The system-wide performance measures used for the Opening Year (2030) analysis include number of vehicles served by the study network, average delay per vehicle, and vehicle-hours-delay (VHD). System-wide performance metrics is presented for the AM peak period (5:00 AM to 12:00 PM) and PM peak period (1:00 to 8:00 PM).

Opening Year (2030) peak period system-wide performance metrics for the No-Build and Build Alternatives are presented in **Table 15**.

The system-wide performance metrics are unable to capture queuing outside of the network, therefore the relationship between some of the statistics (i.e. average delay per vehicle and total travel time) for the No-Build and Build Alternatives may be skewed. When comparing the volume served and total distance traveled, it can be concluded that Build Alternative serves trips with longer lengths than the No-Build Alternative in the AM peak period and PM peak period.

Under both peak periods, a typical vehicle on the I-15 corridor would experience less delay traveling under the Build Alternative than under the No-Build Alternative when comparing the average delay per vehicle.

The Build-Alternative in Opening Year has higher volume demand on the mainline freeway than No-Build Alternative. In the Build Alternative, the volumes on some ramps are lower as vehicles are preferring to stay on the mainline as opposed to diverting to parallel facilities to the freeway. Since the VISSIM model ends at the off- and on-ramps of the freeway, the model is double counting some vehicles that exit the freeway and re-enter at a different location through the use of local routes. Additionally, because the VISSIM model ends at the freeway ramps, when vehicles exit the system to take a local route, their travel time and distance traveled is no longer being recorded by the VISSIM model. For these reasons, some of the network wide statistics from the microsimulation model are showing decreased volume served or increased total distance traveled under the Build Alternative.

To correct for the limitations noted above, vehicle hours of delay (VHD) was extracted from the travel demand model (RIVTAM) in order to illustrate some project benefits that are not reflected in the VISSIM model results. VHD was extracted from a five-mile buffer around the study area in order to capture the volume demand shifts and travel time benefits for the system. Free flow travel time for all links within the five-mile buffer are compared to the congested travel time for all links in the same area for the No-Build and Build Alternative. The delta between free flow travel time and congested travel time is represented by VHD. The Build Alternative has a lower VHD within a system that incorporates local routes and likely is a better summary of project benefits as it corrects for the double counting of volumes and delay on the freeway only.

Table 15 – Opening Year (2030) Peak Period Network Statistics

Performance Measure	No-Build Alternative		Build Alternative	
	AM	PM	AM	PM
Volume Served (vehicles)	187,710	213,068	186,519	216,348
Total Distance Traveled (miles)	1,464,943	1,868,845	1,571,606	2,024,613
Total Travel Time (hours)	24,418	53,788	25,862	54,359
Average Delay Per Vehicle (seconds)	45	431	43	398
Total Delay (hours)	2,406	26,074	2,283	24,372
Total Delay Percent Difference	-	-	-5.1%	-6.5%
Vehicle Hours Delay ¹ (VHD)	5.1	8.5	4.9	8.1

Note: 1. Vehicle Hours Delay was extracted from the travel demand model, RIVTAM,
Source: Fehr & Peers, 2020

Roadway Segment Analysis

Table 16 summarizes ADT volumes and volume-to-capacity results for Opening Year (2030) No-Build Alternative and Opening Year (2030) Build Alternative. The ADT was forecasted based on the difference methodology, as outlined in Chapter 2.

Traffic in the study area is anticipated to grow in Opening Year 2030 No-Build and Build Alternatives. The SED in the future year RIVTAM model was updated based on SCAG's 2040 projections. Population, households, and employment in the subarea increase, therefore increasing the number of trips loaded on the roadway links of the model. Because the Build Alternative adds capacity to the freeway and alleviates traffic on the mainline, vehicles that had previously used parallel streets to avoid I-15 congestion in the No-Build Alternative are assumed to route back to I-

15 instead. This routing back onto I-15 causes many parallel routes to experience a decrease in traffic volumes associated with the ELPSE.

No-Build Alternative

In Opening Year (2030) No-Build, seven out of 62 roadway segments operate at LOS E, F, or deficiently. Five of these seven failing segments operated at LOS E, F, or deficiently in Existing Conditions and remain over capacity when the roadway volumes were forecasted to 2030 conditions. These seven segments are:

- Hidden Valley Parkway West of I-15 (LOS F)
- Hidden Valley Parkway East of I-15 (LOS F)
- Magnolia Avenue West of I-15 (LOS F)
- Temescal Canyon Road Between El Cerrito Avenue to Cajalco Road (LOS E)
- Weirick Road Between I-15 to Knabe Road (LOS E)
- Dos Lagos Drive East of I-15 (LOS F)
- Main Street West of I-15 (LOS F or PEC)

Otherwise, all other study roadway segments operate at LOS D or better.

Build Alternative

In the Opening Year (2030) Build Alternative, the six segments are operating at LOS E, F, or deficiently from the No-Build Alternative. Overall, the V/C ratio for each segment remains similar between scenarios. The following roadway segments were failing or deficient in No-Build, and V/C increased with the construction of the ELPSE. In these cases, the roadway segments were near I-15 ramps, where more vehicles are choosing to access the freeway:

- Hidden Valley Parkway west of I-15 (LOS F)
- Main Street west of I-15 (LOS F or PEC)

The following roadway segments have no change in V/C ratio or have improved between No-Build and Build Alternative.

- Hidden Valley Parkway east of I-15 (LOS F)
- Magnolia Avenue west of I-15 (LOS F)
- Temescal Canyon Road between El Cerrito Avenue to Cajalco Road (LOS E to LOS D)
- Weirick Road between I-15 to Knabe Road (LOS E)
- Dos Lagos Drive east of I-15 (LOS F)

Table 16 – Opening Year (2030) Average Daily Traffic & Roadway Segment LOS

	Roadway Segment	Classification	Capacity	Opening Year (2030) No-Build			Opening Year (2030) Build			Delta
				Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	
1	Hidden Valley Parkway west of I-15	Arterial	35,900	36,580	1.02	F	36,790	1.02	F	0.006
2	Hidden Valley Parkway east of I-15	Arterial	35,900	42,030	1.17	F	42,030	1.17	F	0.000
3	Parkridge Avenue west of Cresta Road	Secondary	34,800	18,860	0.54	A	18,850	0.54	A	0.000
4	Parkridge Avenue east of Cresta Road	Secondary	34,800	11,550	0.33	A	11,600	0.33	A	0.001
5	Cresta Road south of Parkridge Avenue	Collector	13,000	9,730	0.75	C	9,730	0.75	C	0.000
6	Sixth Street west of El Sobrante Road	Major Arterial	37,900	25,940	0.68	B	25,940	0.68	B	0.000
7	Sixth Street west of Radio Road	Major Arterial	37,900	30,080	0.79	C	30,000	0.79	C	-0.002
8	Radio Road north of Sixth	Collector	13,000	8,860	0.68	B	8,850	0.68	B	-0.001
9	El Sobrante Road between Sixth and Magnolia	Collector	13,000	10,450	0.80	D	10,490	0.81	D	0.003
10	Magnolia Avenue west of I-15	Major Arterial	54,300	54,700	1.01	F	54,560	1.00	F	-0.003
11	Magnolia Avenue east of I-15	Major Arterial	54,300	46,370	0.85	D	46,730	0.86	D	0.007
12	Ontario Avenue west of I-15	Major Arterial	54,300	46,200	0.85	D	48,640	0.90	D	0.045
13	Ontario Avenue east of I-15	Major Arterial	37,900	33,750	0.89	D	31,620	0.83	D	-0.056
14	Ontario Avenue north of El Cerrito Road	Major Arterial	54,300	30,640	0.56	A	26,050	0.48	A	-0.085
15	El Cerrito Road west of I-15	Secondary	34,800	25,040	0.72	C	25,850	0.74	C	0.023
16	El Cerrito Road between I-15 and Temescal Canyon Road	Secondary	34,800	9,920	0.29	A	9,610	0.28	A	-0.009
17	Bedford Canyon Road south of El Cerrito Road	Collector	13,000	11,270	0.87	D	10,000	0.77	C	-0.098
18	Bedford Canyon Road north of El Cerrito Road	Collector	13,000	9,190	0.71	C	7,930	0.61	B	-0.097

Table 16 – Opening Year (2030) Average Daily Traffic & Roadway Segment LOS

	Roadway Segment	Classification	Capacity	Opening Year (2030) No-Build			Opening Year (2030) Build			Delta
				Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	
19	Evelyn Street	Collector	13,000	460	0.04	A	470	0.04	A	0.001
20	Frances Street	Collector	13,000	180	0.01	A	190	0.01	A	0.001
21	Katy Street	Collector	13,000	580	0.04	A	590	0.05	A	0.001
22	Liberty Avenue	Collector	13,000	3,100	0.24	A	2,790	0.21	A	-0.024
23	Temescal Canyon Road between El Cerrito Avenue to Cajalco Road	Major Arterial	34,100	33,150	0.97	E	28,710	0.84	D	-0.130
24	Temescal Canyon Road between Cajalco Road to Dos Lagos Drive	Major Arterial	37,900	28,080	0.74	C	25,180	0.66	B	-0.077
25	Temescal Canyon Road between Dos Lagos Drive to Dawson Canyon Road	Major Arterial	34,100	20,270	0.59	A	16,480	0.48	A	-0.111
26	Temescal Canyon Road between Dawson Canyon Road to I-15	Major Arterial	34,100	13,290	0.39	A	13,590	0.40	A	0.009
27	Temescal Canyon Road between I-15 to Lawson Road	Major Arterial	34,100	16,460	0.48	A	16,110	0.47	A	-0.010
28	Temescal Canyon Road between Lawson Road to Trilogy Parkway	Arterial	18,000	15,530	0.86	D	14,960	0.83	D	-0.032
29	Temescal Canyon Road between Trilogy Parkway to Campbell Ranch Road	Arterial	18,000	9,170	0.51	A	8,640	0.48	A	-0.029
30	Temescal Canyon Road between Campbell Ranch Road to Indian Truck Trail Road	Major Arterial	34,100	7,020	0.21	A	6,070	0.18	A	-0.028
31	Temescal Canyon Road between Indian Truck Trail Road to Horsethief Road	Arterial	18,000	4,920	0.27	A	3,130	0.17	A	-0.099
32	Temescal Canyon Road between Horsethief Road to I-15 Frontage Road	Arterial	18,000	8,460	0.47	A	6,890	0.38	A	-0.087

Table 16 – Opening Year (2030) Average Daily Traffic & Roadway Segment LOS

Roadway Segment	Classification	Capacity	Opening Year (2030) No-Build			Opening Year (2030) Build			Delta
			Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	
33 Temescal Canyon Road between Concordia Ranch Road to Lake Street	Arterial	18,000	9,480	0.53	A	7,910	0.44	A	-0.087
34 Cajalco Road West of I-15	Major Arterial	54,300	36,090	0.66	B	36,520	0.67	B	0.008
35 Cajalco Road between I-15 and Grand Oaks	Major Arterial	54,300	39,320	0.72	C	39,070	0.72	C	-0.005
36 Cajalco Road between Grand Oaks to Temescal Canyon Road	Major Arterial	54,300	43,880	0.81	D	42,760	0.79	C	-0.021
37 Retreat Parkway west of Knabe Road	Secondary	25,900	4,350	0.17	A	4,250	0.16	A	-0.004
38 Weirick Road between I-15 to Knabe Road	Secondary	25,900	25,110	0.97	E	24,930	0.96	E	-0.007
39 Weirick Road north of Knabe Road	Secondary	25,900	750	0.03	A	740	0.03	A	0.000
40 Dos Lagos Drive east of I-15	Secondary	25,900	30,160	1.16	F	26,400	1.02	F	-0.145
41 Knabe Road between Weirick Road to White Sage Street	Secondary	25,900	17,600	0.68	B	17,620	0.68	B	0.001
42 Knabe Road between White Sage Street to Hunt Road	Secondary	25,900	8,460	0.33	A	8,530	0.33	A	0.003
43 Campbell Ranch Road between Temescal Canyon Road to Mayhew Canyon Road	Secondary	25,900	5,490	0.21	A	4,540	0.18	A	-0.037
44 Campbell Ranch Road between Mayhew Canyon Road to Indian Truck Trail	Secondary	25,900	13,570	0.52	A	11,240	0.43	A	-0.090
45 De Palma Road between Indian Truck Trail and Horsethief Canyon Road	Secondary	25,900	10,670	0.41	A	8,620	0.33	A	-0.079
46 Horsethief Canyon Road west of De Palma Road	Arterial	18,000	12,300	0.68	B	12,460	0.69	B	0.009

Table 16 – Opening Year (2030) Average Daily Traffic & Roadway Segment LOS

	Roadway Segment	Classification	Capacity	Opening Year (2030) No-Build			Opening Year (2030) Build			Delta
				Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	
47	Horsethief Canyon Road Between De Palma Road to Temescal Canyon Road	Arterial	18,000	6,780	0.38	A	6,440	0.36	A	-0.019
48	Lake Street west of Temescal Canyon Road	Urban Arterial	53,900	20,830	0.39	A	20,850	0.39	A	0.000
49	Lake Street east of Temescal Canyon Road	Urban Arterial	53,900	25,170	0.47	A	25,080	0.47	A	-0.002
50	Nichols Road west of Collier Road	Urban Arterial	53,900	11,440	0.21	A	10,650	0.20	A	-0.015
51	Nichols Road between Collier Road to I-15	Urban Arterial	53,900	3,100	0.06	A	2,470	0.05	A	-0.012
52	Nichols Road east of I-15	Urban Arterial	53,900	7,380	0.14	A	7,620	0.14	A	0.004
53	Collier Avenue between Nichols Road and Riverside Drive	Major Arterial	34,100	8,160	0.24	A	7,400	0.22	A	-0.022
54	Collier Avenue between Riverside Drive to SR-74 (Central Avenue)	Urban Arterial	53,900	30,860	0.57	A	30,160	0.56	A	-0.013
55	Collier Avenue south of SR-74 (Central Avenue)	Major Arterial	34,100	16,190	0.47	A	16,740	0.49	A	0.016
56	Dexter Avenue north of SR-74 (Central Avenue)	Secondary	25,900	13,170	0.51	A	13,410	0.52	A	0.009
57	Dexter Avenue south of SR-74 (Central Avenue)	Collector	13,000	9,010	0.69	B	9,080	0.70	B	0.005
58	SR-74 (Central Avenue) between Collier Avenue to I-15	Major Arterial	68,200	43,540	0.64	B	43,860	0.64	B	0.005
59	Central Avenue between I-15 to Dexter Avenue	Urban Arterial	71,800	55,790	0.78	C	55,890	0.78	C	0.001
60	Central Avenue between Dexter Avenue to Cambern Avenue	Urban Arterial	71,800	47,320	0.66	B	47,950	0.67	B	0.009

Table 16 – Opening Year (2030) Average Daily Traffic & Roadway Segment LOS

	Roadway Segment	Classification	Capacity	Opening Year (2030) No-Build			Opening Year (2030) Build			Delta
				Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	
61	Central Avenue east of Cambern Avenue	Urban Arterial	71,800	45,430	0.63	B	45,950	0.64	B	0.007
62	Main Street West of I-15	Secondary	12,950	15,920	1.23	F⁴	16,020	1.24	F⁴	0.008

Notes:

1. Capacity for each roadway segment was determined by the number of lanes and roadway capacities as defined by the City of Corona, City of Lake Elsinore, and County of Riverside General Plans and Traffic Impact Study Guidelines
2. V/C ratio = ADT/ Roadway Capacity
3. **Bold** font indicates deficient operations
4. The City of Lake Elsinore General Plan considers this V/C ratio as potentially exceeds capacity (PEC) if adjacent intersections are operating acceptably during the peak hour. Since intersection analysis is not part of this study, the roadway will be considered deficient.

Source: Fehr & Peers, 2020

6. Design Year (2050) Conditions

This chapter presents the analysis results of the ELPSE alternatives under Design Year (2050) conditions. The purpose of the Design Year analysis is to evaluate long term traffic operations on I-15 within the study area with and without the improvements. For each alternative, traffic operations were evaluated using peak-hour density and LOS for freeway mainline and ramps, travel times, and other system-wide performance measures.

Analysis Scenarios

Traffic analysis was conducted for each of the following ELPSE alternatives under Design Year (2050) conditions.

- Alternative 1 – No-Build Alternative
- Alternative 2 – Build Alternative (Dual Express Lanes)

Traffic Volume Forecasts & Key Projects

The *Interstate 15 (I-15) Express Lanes Project Southern Extension Project Approval/Environmental Document (EA 0J0820) Final Traffic Volume Report (Appendix B)* and its contained traffic volumes and future year traffic forecasts were reviewed and approved by Caltrans in March 2020.

The Design Year (2050) traffic forecasts were developed consistent with methodologies in Chapter 2. The traffic models used for the Design Year (2050) scenarios are described below:

- Design Year 2050 No-Build – RIVTAM Future Year 2040 model with 2040 SED and updates to the roadway network with regional transportation projects to be completed by 2040.
- Design Year 2050 Build – RIVTAM Future Year 2040 model with 2040 SED and updates to the roadway network with regional transportation projects to be completed by 2040 and plus project conditions.

Key projects and their effect on the Design Year (2050) forecasting are described below:

- The following RTP Projects constructs a new I-15 Interchange at Horsethief Canyon Road. The new access along I-15 serves local traffic between Indian Truck Trail and Lake Street. Vehicle trips that may have used the upstream or downstream interchange to access I-15 can now also have the option of using this new access:
 - RTP ID 3M0729
- The following RTP Projects enhance capacity at east-west roadway connections between I-215 and I-15 at SR-74 (Central Avenue) & CETAP West. With additional capacity at parallel facilities to SR-91, there is little to no growth forecasted at the SR-91 interchange ramps as more trips will take alternate east-west routes.
 - RTP ID 3A04WT191, 3C01MA01
- The following RTP Project enhances capacity at Temescal Canyon Road, generally a north-south roadway parallel to I-15. This corridor serves local traffic and also provides an alternate route to I-15.
 - RTP ID 3A04WT198B
- The following RTP project adds capacity to I-15 with the construction of one HOV lane in each direction from Central Avenue (SR-74) to I-215/I-15 Junction. The HOV project adds capacity to the freeway and alleviates traffic on the mainline such that trips that may have originally diverted from using I-15, now prefer to use I-15.
 - RTP ID 3160002
- CETAP West is major east-west corridor assumed to connect to the existing Cajalco Road Interchange. Vehicle trips that may have used WB SR-91 to SB I-15, now prefer to use WB CETAP West to NB I-15 in order to reach destinations north of SR-91, in the City of Corona, or WB SR-91. As a result of this shift, CETAP West increases trips on NB I-15 (after the Cajalco On-ramp) 2.5 times the growth rate of SB I-15 (after the WB SR-91 On-Ramp). In the No-Build PM peak period, SB I-15 vehicle trips divert from using

SB I-15 to take the Cajalco Road Off-Ramp for destinations west of I-15. Consequently, No-Build Design Year forecasts are lower than No-Build Opening Year Forecasts on the SB I-15 mainline after the Cajalco Road Off-Ramp in the PM peak period.

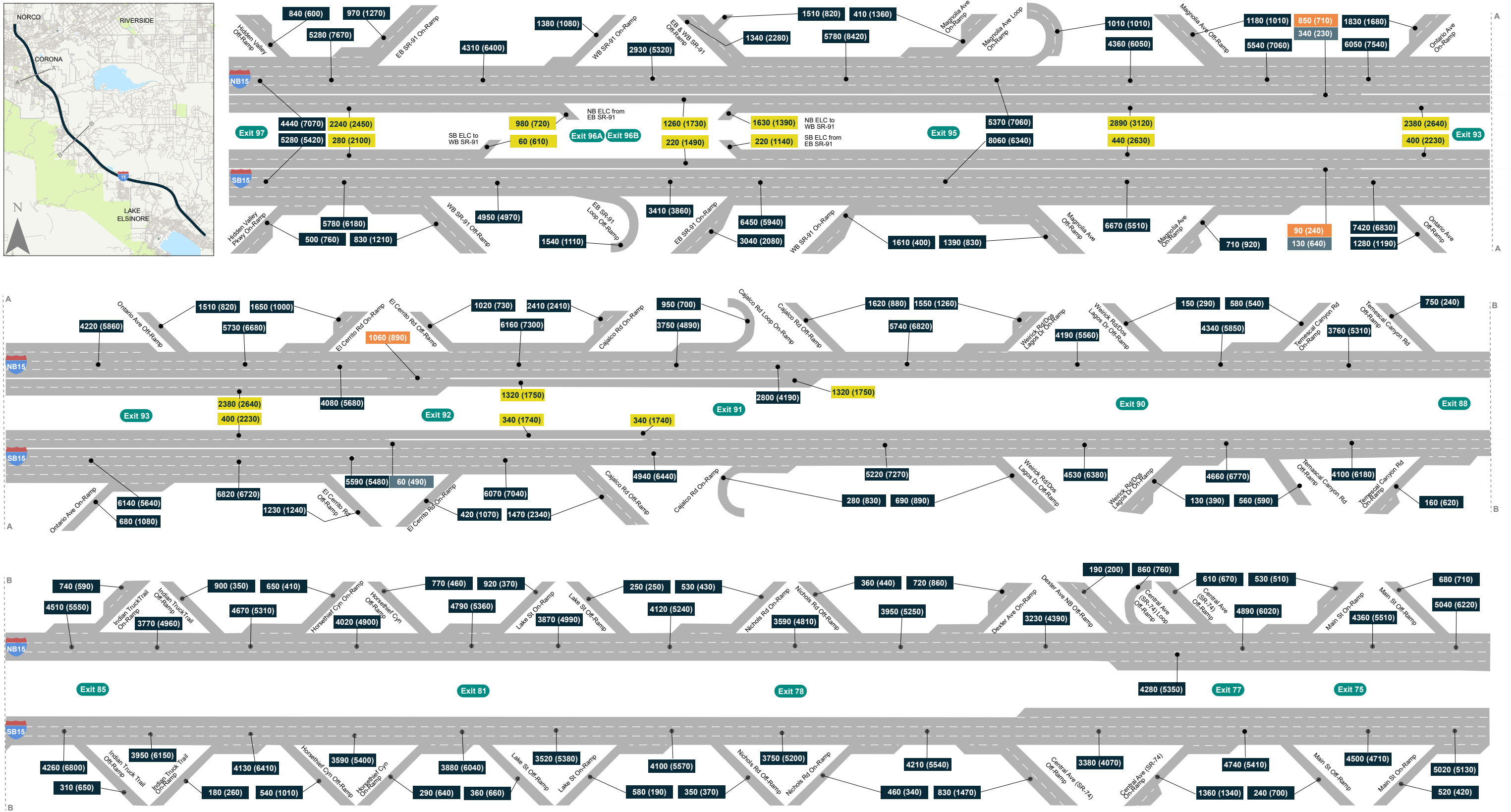
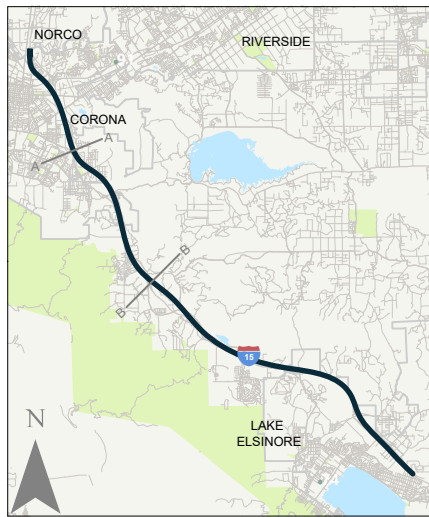
- The Build Alternative adds capacity to the freeway with two express and alleviates traffic on the mainline such that trips that may have originally diverted from using I-15, now prefer to use I-15.

Express Lane Volume Forecasts

Express lane forecasts developed through an iterative process are outlined below:

- Mode splits percentages in the Existing Conditions model were developed for each hour and each direction of travel on the corridor. The mode split was held consistent in the Design Year, reflecting that growth in HOV 3+ and Toll Users would be proportional to the overall growth in traffic demand on the corridor.
- Congestion on the study corridor observed from an initial VISSIM model run under Design Year Conditions was used to determine potential mode shifts from general purpose lane users to express lane users.
- For directions of travel with hours of congestion on the study corridor, mode split was adjusted to reflect increased express lane use (i.e. SOVs were converted to Toll Users) until the 1,750-passenger car per hour per lane capacity was met. The total percentage express lane users (HOV 3+ and Toll Users) was capped at 45% for all OD pairs on the facility greater than six miles – trips less than six miles would not use the express lane. This was determined after going through an iterative process looking at levels of congestion on the freeway mainline and available capacity in the express lane network.
- If express lane entrances at the southern end of the study corridor exceeded the 1,750-passenger car per hour per lane capacity, vehicles were rerouted to enter at a downstream ingress location or exit at an upstream egress location. This occurred at the express lane ingress/egress locations at the El Cerrito Road interchange and the Cajalco Road Interchange under No-Build Conditions and at the express lane ingress/egress locations north of the Nichols Road interchange and at the SR-74 (Central Avenue) Interchange under Build conditions.
- If congestion was concentrated within a particular segment of the corridor, Toll Users were routed out of the express lane upstream of the congestion since it is unlikely that Toll Users will use the express lane when the freeway mainline is uncongested.

The Design Year (2050) No-Build Alternative AM and PM peak hour traffic forecasts for the I-15 mainline segments/ramps are shown in **Figure 7**. The Design Year (2050) Build Alternative AM and PM peak hour traffic forecasts for the I-15 mainline segments/ramps are shown in **Figure 9**. The express lane access segments are shown in **Figure 8** and **Figure 10** for No-Build and Build Alternative respectively.

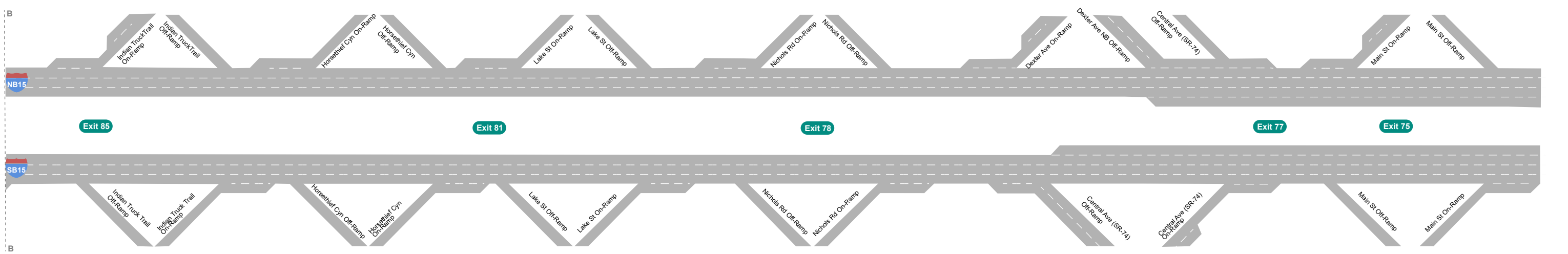
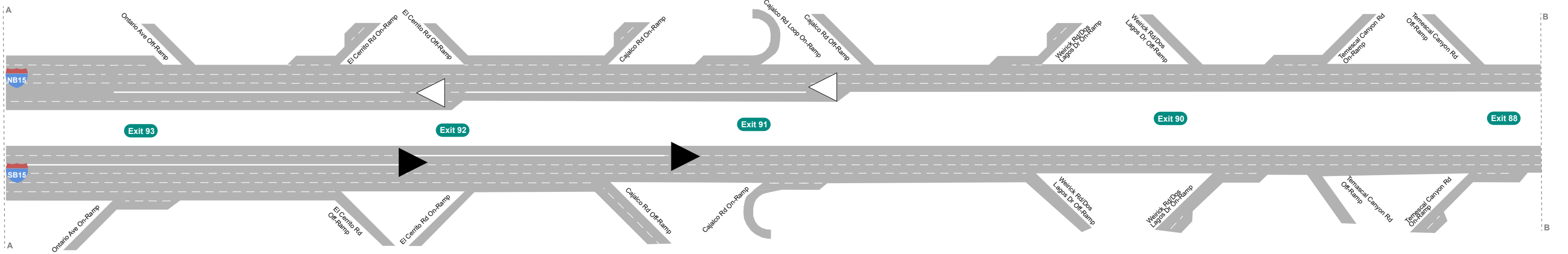
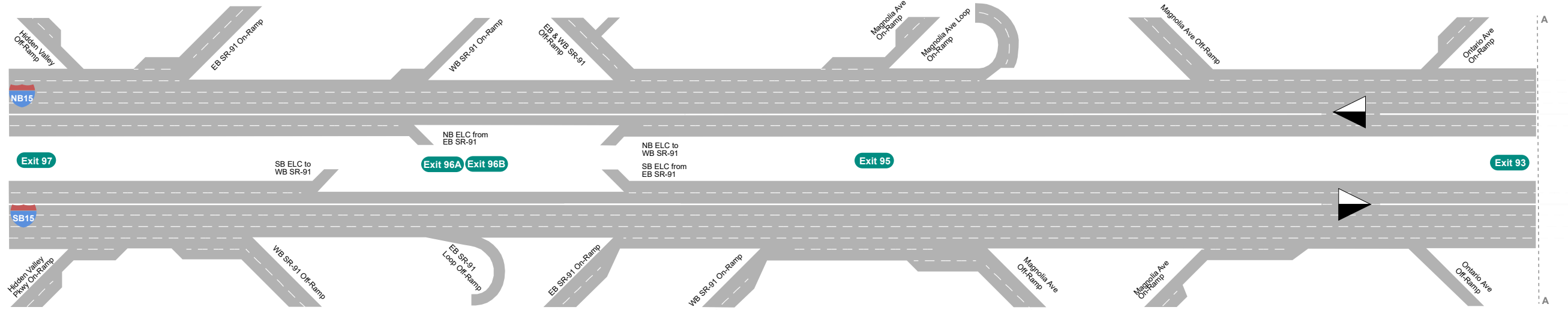
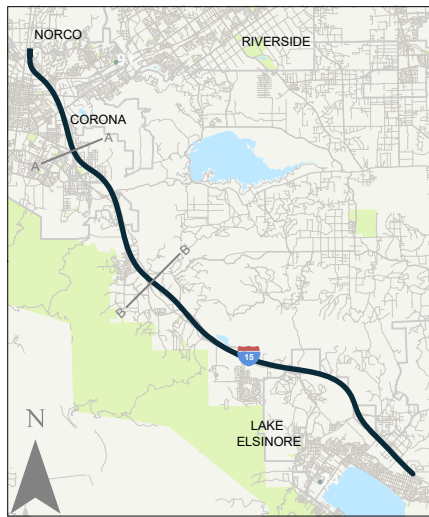


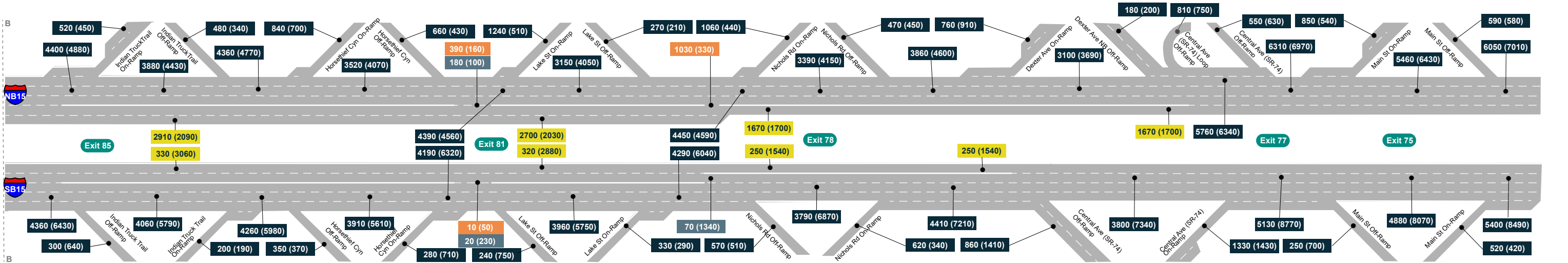
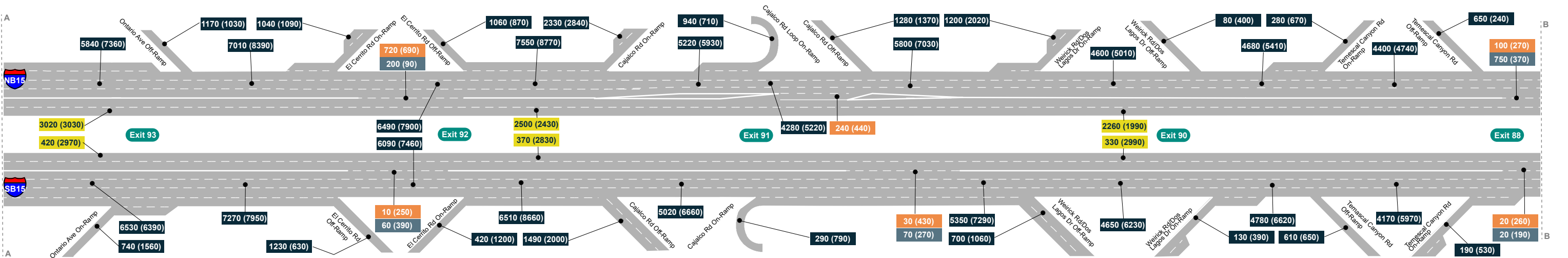
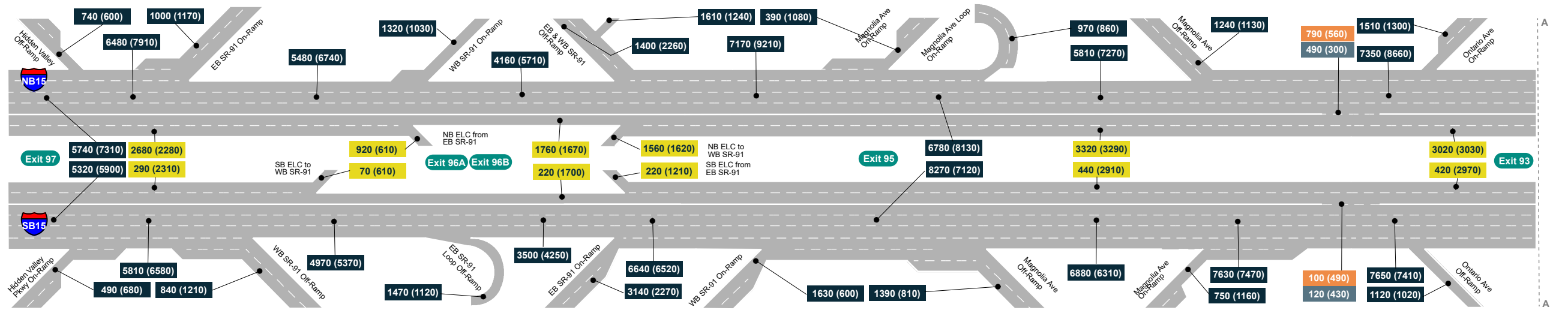
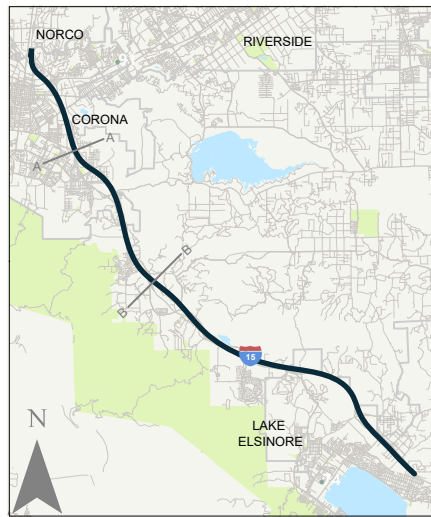
Traffic demand volumes represent uncongested traffic conditions, and constraint volume represent over saturated traffic conditions.



I-15 Freeway Lane Configurations Peak Hour and Daily Traffic Demand Volumes
Design Year 2050 No-Build Alternative

Figure 7





*Traffic demand volumes represent true demand and considers vehicles in queue during oversaturated conditions.

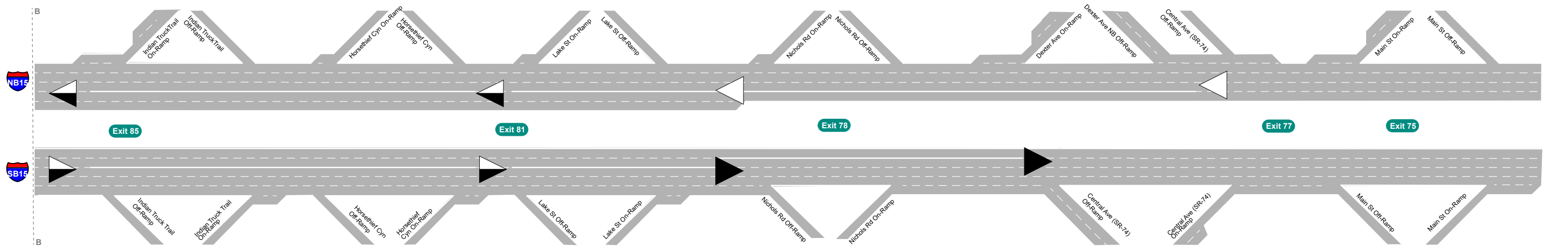
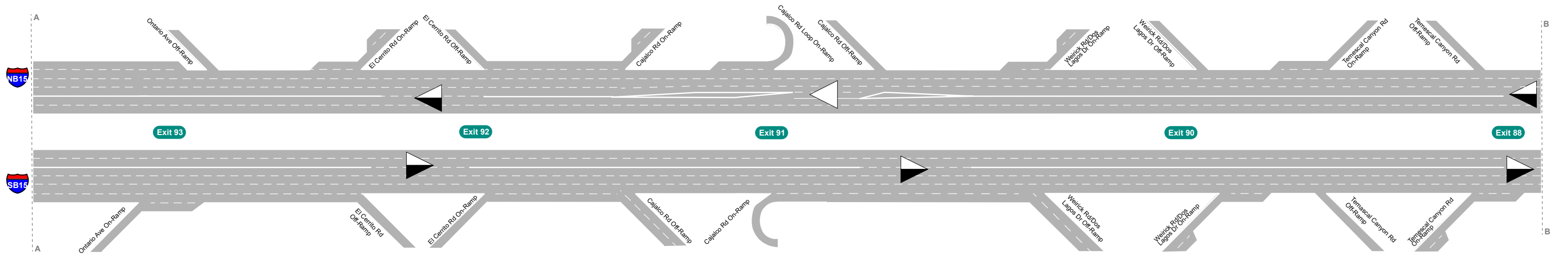
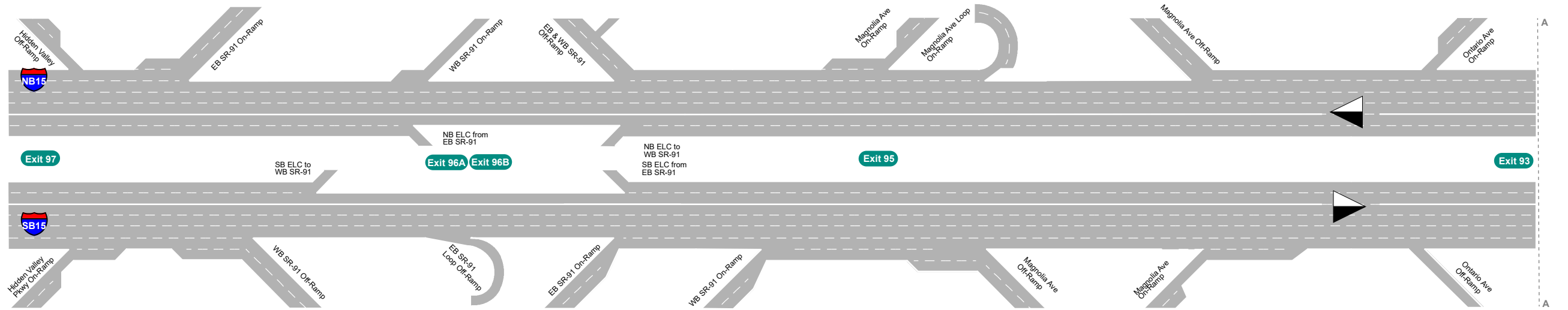
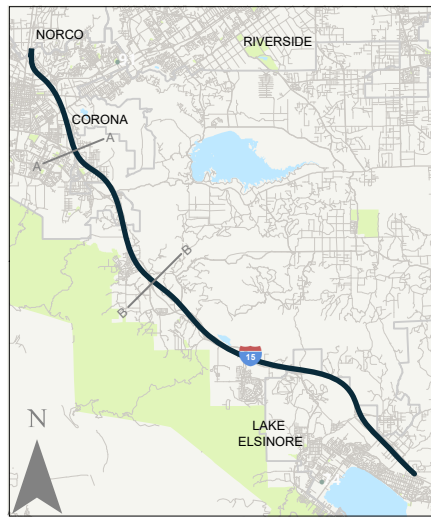


XX (XX) Mainline Volume
 XX (XX) Express Lane Volume
 xx (xx) AM Volume (PM Volume)
 XX (XX) Ingress Volume AM(PM)
 xx (xx) Egress Volume AM(PM)
 ELC SR-91 Express Lane Connector

XX Exit

I-15 Freeway Lane Configurations Peak Hour & Daily Traffic Demand Volumes
Design Year 2050 Build Alternative

Figure 9



- ▶ Express Lane Ingress/Egress
- ◀ Express Lane Ingress
- ▶ Express Lane Egress



Figure 10

Design Year (2050) Build Alternative
Managed Lane Access Segments

Freeway Operations Analysis

The Design Year (2050) VISSIM models includes improvements associated with the completion of the I-15 HOV Lanes (between SR-74 (Central Avenue) and the I-15/I-215 South Junction) project and the Horsethief Road/I-15 Interchange project.

Table 17 and **Table 18** show the Design Year (2050) AM and PM peak hour density and LOS for the study freeway segments and ramp junctions under the No-Build and Build Alternatives on SB I-15 and NB I-15, respectively. The Express Lanes were analyzed as a separate facility and the operations results for the express lanes are shown in **Table 19** for SB and NB directions. Speed contour plots are provided in **Exhibit M 1 and 2** and **Exhibit N 1 and 2** for the No-Build Alternative and **Exhibit O 1 and 2** and **Exhibit P 1 and 2** for the Build Alternative. Identification numbers for each freeway segment corresponds to their segment numbers as listed in **Appendix C**, where detailed technical calculations are included.

Exhibit Q 1 and 2 and **Exhibit R 1 and 2** illustrate a scenario where the No-Build Alternative network would serve the Build Alternative forecasts in Design Year. This sensitivity test was included for informational purposes only.

AM Peak Hour – SB I-15

Under both the Design Year (2050) No-Build Alternative and Build Alternative, the SB I-15 bottleneck at the Ontario Avenue Off-Ramp diverge segment would create a queue that extends to the Magnolia Avenue On-Ramp with a queue length of approximately 1.0 mile; Due to the bottleneck, segments in queue would operate at LOS E or F. Also, the I-15 EB SR-91 Off-Ramp would operate at LOS E or F due to vehicles diverging to access the off-ramp. The El Cerrito Off-Ramp segment degrades to LOS E with the Build Alternative because the Ontario Avenue Off-Ramp bottleneck is slightly relieved when the Project is constructed, and adjacent downstream links increase in density. All other mainline segment, ramps, and express lanes would operate at LOS D or better during the AM peak hour.

Design Year Failure

The bottleneck at Ontario Avenue Off-Ramp appears in the Design Year scenarios whereas in opening year, SB I-15 AM was uncongested. The maximum throughput of vehicles per hour on the freeway mainline was determined at the bottleneck in Design Year. Through interpolation between 2030 and 2050, the Ontario Avenue Off-Ramp bottleneck is anticipated to form in the year 2044.

AM Peak Hour – NB I-15

Under the Design Year (2050) No-Build Alternative, the NB I-15 bottleneck at the Weirick Road/Dos Lagos Drive On-Ramp merge segment would create a queue that extends past Main Street with a queue length extending past the model limits and cannot be measured. Due to the bottleneck, segments in queue operate at LOS F. Additionally, due to high serving volumes, the El Cerrito Road On-ramp and Ontario Avenue Off-Ramp operate at LOS E during the peak hour. All other mainline segment, ramps, and express lanes would operate at LOS D or better during the AM peak hour.

The Build Alternative would improve operations at the Weirick Road/Dos Lagos Road On-Ramp merge segment by providing additional throughput capacity. As the Build Alternative improves the bottleneck at the Weirick Road/Dos Lagos Road On-Ramp merge segment, a bottleneck forms downstream at the WB Magnolia Avenue On-Ramp merge segment. The NB I-15 bottleneck at the WB Magnolia Avenue On-Ramp merge segment would create a queue that extends to the Main Street On-Ramp with a queue length of 19.5 miles. Due to the bottleneck, segments in queue

operate at LOS E or F. Upstream of the queue there would be a slow down at the Main Street Off-Ramp (LOS E). All other mainline segment, ramps, and express lanes would operate at LOS D or better during the AM peak hour.

Although there would be more segments operating at LOS F under the Build Alternative, this is because the ELPSE provides additional throughput capacity at the Weirick Road/Dos Lagos Road On-Ramp merge. As a result, the bottleneck shifts downstream which allows for additional vehicles to enter the network and for queues to be measured within the study area (under the No-Build Alternative, the reduced capacity at Weirick Road/Dos Lagos Road limits the ability for vehicles to access the freeway and they are therefore not measured in the analysis results as they cannot be served).

Design Year Failure

The bottleneck at Dos Lagos/Weirick Road On-Ramp appears in the Design Year scenarios whereas, in Opening Year, NB I-15 AM was mostly uncongested. The max throughput of vehicles per hour on the freeway mainline was determined at the bottleneck in Design Year. Through interpolation between 2030 and 2050, the Dos Lagos/Wierick On-Ramp bottleneck is anticipated to form in the year 2039.

PM Peak Hour – SB I-15

Under the Design Year (2050) No-Build Alternative, the SB I-15 bottleneck at the Ontario Avenue Interchange would extend to the Magnolia Avenue Interchange with a queue length of approximately 1.5 miles. Due to the bottleneck, segments in queue would operate at LOS E or F. Downstream of Ontario Avenue there are slow downs at each interchange ramp between El Cerrito and Horsethief Canyon where vehicles are navigating to and from the on/off-ramps of the freeway; segments in queue due to the slow down would operate at LOS E or F. All other mainline segment, ramps, and express lanes would operate at LOS D or better during the PM peak hour.

Under the Design Year (2050) Build Alternative, the SB I-15 bottleneck at the El Cerrito Road Off-Ramp diverge segment (due to the lane drop) would create a queue that extends south of Hidden Valley Parkway (queue length approximately 4.5 miles); segments in queue due to the bottleneck would operate at LOS E or F. Indian Truck Trail and Lake Street Off-Ramp operate at LOS E.

The Build Alternative would attract drivers who, under the No-Build Alternative, would use local streets to bypass the freeway. As a result, overall congestion would worsen on SB I-15 during the PM peak hour. The Build Alternative incurs an additional demand of 2,600 vehicles on SB I-15 during the PM peak hour (approximately 17,600 additional vehicles over the PM 7-hour peak period).

Nevertheless, the Build Alternative would improve operations at Express Lane Egress segments at El Cerrito Road and Cajalco Road. As the Build Alternative significantly improves the bottleneck at the Ontario Avenue Interchange - resulting in greater traffic throughput - a bottleneck forms downstream on SB I-15 at the Main Street On-Ramp merge segment even with the addition of the future HOV lane. This is primarily due to the lane reduction that occurs on the corridor (five lanes north of Nichols (three general purpose lanes and two express lanes) and four lanes south of main street (three general purpose lanes and one HOV lane)). This lane reduction, with increased demands on I-15 due to the addition of the express lane project, creates congestion at this location. The SB I-15 bottleneck at the Main Street On-Ramp merge segment would create a queue that extends to the Nichols Road Off-Ramp with a queue length of approximately 3.2 miles. Due to the bottleneck, segments in queue operate at LOS E or F. The off-ramps at Indian Truck Trail and Lake Street operate at LOS E. All other mainline segment, ramps, and express lanes would operate at LOS D or better during the PM peak hour.

PM Peak Hour – NB I-15

Under both the Design Year (2050) No-Build Alternative and Build Alternative, the NB I-15 bottleneck at the WB Magnolia Avenue On-Ramp merge segment would create a queue that extends past Main Street and the model limits. The queue cannot be measured and/or is greater than 15 miles in length. Due to the bottleneck, segments in queue operate at LOS E or F. All other mainline segment, ramps, and express lanes would operate at LOS D or better during the PM peak hour. ELPSE does not alleviate traffic on the general purpose lanes from the No-Build Alternative, but rather helps manage congestion along the corridor. With the level of congestion projected in Design Year, travel time management and reliability are expanded with the construction of the project.

The Build Alternative is unable to address the bottleneck at the WB Magnolia Avenue On-Ramp merge segment because it is outside the ELPSE limits. Caltrans is currently evaluating the addition of NB auxiliary lanes at various locations throughout the I-15 corridor north of the ELPSE limits which should assist with this bottleneck location; however, as no project has been defined or included in the RTP/SCS constrained network, an improvement of this type has not been included in our assessment.

Design Year No-Build Network with Build Alternative Forecasts

This sensitivity test was included for informational purposes only. This scenario includes the following:

- Design Year No-Build – Network (without ELPSE)
- Design Year Build – Forecasts (with ELPSE)

This analysis demonstrates how the No-Build network would be strained with an increased traffic demand. During both peak periods, bottlenecks that were present in the No-Build Scenario were exacerbated or new bottlenecks had formed when higher traffic forecasts were applied to the No-Build Alternative network. Without the increase of capacity from ELPSE, the No-Build Alternative network would be strained at the following locations for each study scenario and are shown in **Exhibit Q 1 and 2** and **Exhibit R 1 and 2**.

AM Peak Hour – SB I-15

- Ontario Avenue On-Ramp (*Bottleneck Location in Design Year No-Build Alternative*)
- Magnolia Avenue On-Ramp (*Bottleneck Location in Design Year No-Build Alternative*)

PM Peak Hour – SB I-15

- El Cerrito Road Off-Ramp / I-15 ELP Egress at El Cerrito Road (*Bottleneck Location in Existing Conditions*)
- ELP Terminus near Cajalco Road On-Ramp (*Bottleneck Location in Opening Year No-Build Alternative*)
- Horsethief Canyon Road On-Ramp (*New Bottleneck*)
- Central Avenue (SR-74) On-Ramp (*New Bottleneck*)

AM Peak Hour – NB I-15

- Weirick/Dos Lagos Drive On-Ramp (*Bottleneck Location in Design Year No-Build Alternative*)
- WB Magnolia Avenue On-Ramp (*Bottleneck Location in Design Year No-Build Alternative*)

PM Peak Hour – NB I-15

- Weirick/Dos Lagos Drive On-Ramp (*Bottleneck Location in Design Year No-Build Alternative*)
- WB Magnolia Avenue On-Ramp (*Bottleneck Location in Design Year No-Build Alternative*)

Table 17 – Design Year (2050) Peak Hour General Purpose Lane Operations - SB I-15

I-15 SB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1	Hidden Valley Parkway Off-Ramp to On-Ramp	Basic	C / 21	C / 22	C / 21	F / DEC
2	Hidden Valley Parkway On-Ramp	Merge	C / 21	C / 24	C / 21	F / DEC
3	Hidden Valley Parkway On-Ramp to WB SR-91 Off-Ramp	Basic	C / 21	C / 21	C / 19	F / DEC
4	WB SR-91 Off-Ramp	Basic	C / 22	C / 21	C / 20	E / 43
5	EB SR-91 Off-Ramp	Diverge	F / DEC	D / 33	E / 38	F / DEC
6	EB SR-91 Off-Ramp to On-Ramp	Basic	C / 19	C / 21	C / 19	F / DEC
7	EB SR-91 On-Ramp	Merge	D / 26	D / 29	C / 26	F / DEC
8	WB SR-91 On-Ramp to Magnolia Avenue Off-Ramp	Weave	C / 24	D / 30	C / 25	F / DEC
9	Magnolia Avenue Off-ramp to On-Ramp	Basic	D / 27	F / DEC	D / 28	F / DEC
10	Magnolia Avenue On-Ramp	Merge	C / 25	F / DEC	D / 28	F / DEC
11	Magnolia Avenue On-Ramp to Ontario Ave Off-Ramp ³	Weave	C / 24	E / 41	C / 26	F / DEC
12	Magnolia Avenue On-Ramp to Ontario Ave Off-Ramp	Basic	E / 38	F / DEC	E / 37	F / DEC
13	Ontario Avenue Off-Ramp	Diverge	F / DEC	F / DEC	E / 45	F / DEC
14	Ontario Avenue Off-Ramp to On-Ramp	Basic	D / 27	F / DEC	D / 32	F / DEC
15	Ontario Avenue On-Ramp	Merge	C / 20	E / 37	C / 24	F / DEC
16	El Cerrito Road Off-Ramp	Basic	D / 33	F / DEC	E / 38	F / DEC
17	El Cerrito Road Off-Ramp to On-Ramp ³	Basic/Weave ⁴	D / 33	F / DEC	C / 24	E / 40

Table 17 – Design Year (2050) Peak Hour General Purpose Lane Operations - SB I-15

I-15 SB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
18	Express Lane (EL) On-Ramp at El Cerrito Road	Basic	C / 24	E / 36	-	-
19	El Cerrito Road On-Ramp to Cajalco Road Off-Ramp	Weave	C / 25	E / 38	D / 27	D / 31
20	EL On-Ramp Cajalco Road On-Ramp (4 Lane)	Basic	C / 19	D / 30	-	-
21	Cajalco Road On-Ramp / Cajalco Road On-Ramp to Weirick Road/Dos Lagos Dr Off-Ramp	Merge/Weave ⁴	B / 15	F / DEC	C / 23	D / 27
22	Cajalco Road On-Ramp to Weirick Road/Dos Lagos Drive Off-Ramp ³	Basic/Weave ⁴	C / 21	D / 35	B / 17	C / 25
23	Weirick Road/Dos Lagos Drive Off-Ramp	Diverge	C / 21	E / 35	-	-
24	Weirick Road/Dos Lagos Drive Off-Ramp to On-Ramp	Basic	C / 24	F / DEC	C / 25	D / 29
25	Weirick Road/Dos Lagos Drive On-Ramp	Merge	C / 18	F / DEC	C / 20	C / 24
26	Weirick Road/Dos Lagos Drive On-Ramp to Temescal Canyon Road Off-Ramp	Basic	C / 25	E / 41	D / 27	D / 32
27	Temescal Canyon Road Off-Ramp	Diverge	C / 25	F / DEC	D / 28	D / 34
28	Temescal Canyon Road Off-Ramp to On-Ramp	Basic	C / 22	F / DEC	C / 23	D / 28
29	Temescal Canyon Road On-Ramp	Merge	B / 16	F / DEC	B / 17	C / 24
30	Temescal Canyon Road On-Ramp to Indian Truck Trail Off-Ramp	Basic	C / 23	E / 42	C / 24	D / 32
52	Temescal Canyon Road On-Ramp to Indian Truck Trail Off-Ramp ³	Weave	-	-	B / 18	D / 28
53	Temescal Canyon Road On-Ramp to Indian Truck Trail Off-Ramp	Basic	-	-	C / 24	D / 34
31	Indian Truck Trail Off-Ramp	Diverge	C / 22	F / DEC	C / 25	E / 35
32	Indian Truck Trail Off-Ramp to On-Ramp	Basic	C / 21	D / 33	C / 22	D / 28

Table 17 – Design Year (2050) Peak Hour General Purpose Lane Operations - SB I-15

I-15 SB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
33	Indian Truck Trail On-Ramp	Merge	B / 16	D / 29	C / 18	C / 23
60	Indian Truck Trail On-Ramp to Horsethief Road Off-Ramp		C / 22	E / 38	C / 24	D / 30
61	Horsethief Road Off-Ramp		C / 22	E / 45	C / 24	D / 30
62	Horsethief Road Off-Ramp to On-Ramp		C / 19	D / 28	C / 22	D / 27
63	Horsethief Road On-Ramp		B / 15	D / 26	C / 18	D / 30
34	Horsethief Road On-Ramp to Lake St Off-Ramp	Basic	C / 21	D / 33	C / 23	D / 34
54	Horsethief Road On-Ramp to Lake St Off-Ramp ³	Weave	-	-	B / 16	D / 29
35	Lake Street Off-Ramp	Diverge	C / 20	D / 34	C / 23	E / 35
36	Lake Street Off-Ramp to On-Ramp	Basic	C / 19	D / 28	C / 21	D / 28
37	Lake Street On-Ramp	Merge	B / 17	C / 21	B / 17	C / 23
38	Lake Street On-Ramp to Nichols Road Off-Ramp	Basic	C / 22	D / 29	C / 23	D / 34
55	Lake Street On-Ramp to Nichols Road Off-Ramp (EL Egress)	Basic	-	-	B / 17	E / 40
56	Lake Street On-Ramp to Nichols Road Off-Ramp	Basic	-	-	B / 17	F / DEC
39	Nichols Road Off-Ramp	Diverge/Basic ⁴	C / 21	D / 29	C / 20	F / DEC
40	Nichols Road Off-Ramp to On-Ramp	Basic	C / 20	D / 27	C / 21	F / DEC
41	Nichols Road On-Ramp	Merge ⁵	B / 18	C / 23	B / 17	F / DEC
42	Nichols Road On-Ramp to SR-74 (Central Avenue) Off-Ramp	Basic ⁵	C / 22	D / 29		

Table 17 – Design Year (2050) Peak Hour General Purpose Lane Operations - SB I-15

I-15 SB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
43	SR-74 (Central Avenue) Off-Ramp	Diverge ⁵	B / 15	C / 20		
57	SR-74 (Central Avenue) (EL Egress)	Basic	-	-	B / 15	F / DEC
44	SR-74 (Central Avenue) Off-Ramp to On-Ramp	Basic	B / 17	C / 20	A / 6	E / 36
45	SR-74 (Central Avenue) On-Ramp	Merge ⁵	B / 18	C / 20	C / 21	F / DEC
46	SR-74 (Central Avenue) On-Ramp to Main Street Off-Ramp	Basic ⁵	C / 26	D / 28		
47	Main Street Off-Ramp	Diverge ⁵	C / 24	D / 30		
48	Main Street Off-Ramp to On-Ramp	Basic	C / 23	C / 23	C / 26	F / DEC
49	Main Street On-Ramp	Merge	C / 22	C / 20	C / 24	F / DEC
50	Main Street On-Ramp to Franklin Street Overcrossing	Basic	D / 27	C / 25	D / 30	E / 39

Notes:

- Density reported in passenger cars per lane per mile.
- Bold and underline** font indicate LOS E or F conditions. DEC = Demand Exceeds Capacity.
- Cells highlighted in orange indicate Express Lane Access Segments (Analyzed as a left-sided weave).
- No-Build Alternative Facility Type/Build Alternative Facility Type.
- This segment is a weave segment in the Build Alternative due to the additional auxiliary lane.

Source: Fehr & Peers, 2020

Table 18 – Design Year (2050) Peak Hour General Purpose Lane Operations - NB I-15

I-15 NB Segment	Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
152 Hidden Valley Parkway Off-Ramp to On-Ramp	Basic	B / 14	B / 18	B / 16	B / 17
151 Hidden Valley Parkway Off-Ramp	Diverge	C / 19	C / 22	C / 20	C / 22
150 EB SR-91 On-Ramp	Merge	C / 19	C / 21	C / 19	C / 20
149 WB SR-91 On-Ramp	Merge	C / 21	C / 21	C / 22	C / 21
148 EB & WB SR-91 Off-Ramp to WB SR-91 On-Ramp	Basic	B / 16	C / 20	B / 18	C / 20
147 EB & WB SR-91 Off-Ramp	Diverge	D / 27	D / 32	D / 31	D / 33
146 Magnolia Avenue On-Ramp	Merge	C / 26	F / DEC	F / DEC	F / DEC
145 Magnolia Avenue Loop On-Ramp	Basic	C / 22	F / DEC	F / DEC	F / DEC
144 Magnolia Avenue Off-Ramp to Loop On-Ramp	Basic	C / 24	F / DEC	F / DEC	F / DEC
143 Magnolia Avenue Off-Ramp	Diverge	C / 21	F / DEC	F / DEC	F / DEC
141 Ontario Avenue to Magnolia Avenue ³	Weave	C / 23	F / DEC	F / DEC	F / DEC
140 Ontario Avenue On-Ramp	Merge	B / 17	F / DEC	F / DEC	F / DEC
138 Ontario Avenue Off-Ramp to On-Ramp (4 Lanes)	Basic	B / 17	F / DEC	F / DEC	F / DEC
137 Ontario Avenue Off-Ramp to On-Ramp (3 Lanes)	Basic	C / 26	F / DEC	F / DEC	F / DEC
136 Ontario Avenue Off-Ramp	Diverge	E / 44	F / DEC	F / DEC	F / DEC
135 El Cerrito Road On-Ramp	Merge	E / 38	F / DEC	F / DEC	F / DEC
134 Express Lane (EL) Access to El Cerrito Road On-Ramp	Basic	C / 22	F / DEC	-	-

Table 18 – Design Year (2050) Peak Hour General Purpose Lane Operations - NB I-15

I-15 NB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
133	EL Access at El Cerrito Road ³	Basic/Weave ⁴	C / 23	F / DEC	F / DEC	E / 37
132	Cajalco Road On-Ramp to El Cerrito Road Off-Ramp	Weave	C / 24	F / DEC	F / DEC	F / DEC
131	Cajalco Road Loop On-Ramp	Merge	C / 20	F / DEC	F / DEC	F / DEC
154	EL Access at Cajalco Road	Basic	C / 19	F / DEC	-	-
130/ 170 ⁵	Cajalco Road Off-Ramp to Loop On-Ramp	Basic	C / 26	F / DEC	F / DEC	F / DEC
130	Cajalco Road Off-Ramp to EL Access	Basic	-	-	F / DEC	F / DEC
129	Cajalco Road Off-Ramp	Diverge	F / DEC	F / DEC	F / DEC	F / DEC
128	Weirick Road/Dos Lagos Drive On-Ramp	Merge	F / DEC	F / DEC	F / DEC	F / DEC
127	Weirick Road/Dos Lagos Drive Off-Ramp to On-Ramp	Basic	F / DEC	F / DEC	F / DEC	F / DEC
126	Weirick Road/Dos Lagos Drive Off-Ramp	Diverge	F / DEC	F / DEC	F / DEC	F / DEC
125	Temescal Canyon Road On-ramp to Weirick Road/Dos Lagos Drive Off-Ramp	Basic	F / DEC	F / DEC	F / DEC	F / DEC
124	Temescal Canyon Road On-Ramp	Merge	F / DEC	F / DEC	F / DEC	F / DEC
123	Temescal Canyon Road Off-Ramp to On-Ramp	Basic	F / DEC	F / DEC	F / DEC	F / DEC
122	Temescal Canyon Road Off-Ramp	Diverge	F / DEC	F / DEC	F / DEC	F / DEC
121	Indian Truck Trail On-ramp to Temescal Canyon Road Off-Ramp	Basic	F / DEC	F / DEC	F / DEC	F / DEC
160	Indian Truck Trail On-ramp to Temescal Canyon Road Off-Ramp ³	Weave	-	-	F / DEC	F / DEC
159	Indian Truck Trail On-Ramp to Temescal Canyon Road Off-Ramp	Basic	-	-	F / DEC	F / DEC

Table 18 – Design Year (2050) Peak Hour General Purpose Lane Operations - NB I-15

I-15 NB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
120	Indian Truck Trail On-Ramp	Merge	F / DEC	F / DEC	F / DEC	F / DEC
119	Indian Truck Trail Off-Ramp to On-Ramp	Basic	F / DEC	F / DEC	F / DEC	F / DEC
118	Indian Truck Trail Off-Ramp	Diverge	F / DEC	F / DEC	F / DEC	F / DEC
168	Horsethief Road On-Ramp to Indian Truck Trail Off-Ramp		F / DEC	F / DEC	F / DEC	F / DEC
167	Horsethief Road On-Ramp		F / DEC	F / DEC	F / DEC	F / DEC
166	Horsethief Road Off-Ramp to On-Ramp		F / DEC	F / DEC	F / DEC	F / DEC
165	Horsethief Road Off-Ramp		F / DEC	F / DEC	F / DEC	F / DEC
117	Lake Street On-ramp to Horsethief Road Off-Ramp	Basic	F / DEC	F / DEC	F / DEC	F / DEC
158	Lake Street On-ramp to Horsethief Road Off-Ramp ³	Weave	-	-	F / DEC	F / DEC
116	Lake Street On-Ramp	Merge	F / DEC	F / DEC	F / DEC	F / DEC
115	Lake Street Off-Ramp to On-Ramp	Basic	F / DEC	F / DEC	F / DEC	F / DEC
114	Lake Street Off-Ramp	Diverge	F / DEC	F / DEC	F / DEC	F / DEC
113	Nichols Road On-Ramp to Lake Street Off-Ramp	Basic	F / DEC	F / DEC	F / DEC	F / DEC
157	Nichols Road On-Ramp to Lake Street Off-Ramp (EL Ingress)	Basic	-	-	F / DEC	F / DEC
156	Nichols Road On-Ramp to Lake Street Off-Ramp	Basic	-	-	F / DEC	F / DEC
112	Nichols Road On-Ramp	Merge	F / DEC	F / DEC	F / DEC	F / DEC
111	Nichols Road Off-Ramp to On-Ramp	Basic	F / DEC	F / DEC	F / DEC	F / DEC

Table 18 – Design Year (2050) Peak Hour General Purpose Lane Operations - NB I-15

I-15 NB Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
110	Nichols Road Off-Ramp	Diverge	F / DEC	F / DEC	F / DEC	F / DEC
109	Dexter Ave/SR-74 (Central Avenue) On-Ramp to Nichols Road Off-Ramp	Merge	F / DEC	F / DEC	F / DEC	F / DEC
108	Dexter Ave/ SR-74 (Central Avenue) Off-Ramp to On-Ramp	Basic	F / DEC	F / DEC	F / DEC	F / DEC
155	Dexter Ave/ SR-74 (Central Avenue) Off-Ramp to On-ramp (EL Ingress)	Diverge	-	-	F / DEC	F / DEC
153	Dexter Ave Off-Ramp	Diverge	F / DEC	F / DEC	F / DEC	F / DEC
107	WB SR-74 (Central Avenue) Off-Ramp	Basic	F / DEC	F / DEC	F / DEC	F / DEC
106	EB SR-74 (Central Avenue) Off-Ramp	Diverge	F / DEC	F / DEC	F / DEC	F / DEC
105	Main Street On-ramp to Central Ave (SR-74) Off-Ramp	Basic	F / DEC	F / DEC	F / DEC	F / DEC
104	Main Street On-Ramp	Merge	F / DEC	F / DEC	F / 54	F / DEC
103	Main Street Off-Ramp to On-Ramp	Basic	F / DEC	F / DEC	E / 44	F / DEC
102	Main Street Off-Ramp	Diverge	F / DEC	F / DEC	E / 38	F / DEC
101	Franklin Street Overcrossing to Main Street Off-Ramp	Basic	F / DEC	F / DEC	D / 30	F / DEC

Notes:

1. Density reported in passenger cars per lane per mile.
2. **Bold and underline** font indicate LOS E or F conditions. DEC = Demand Exceeds Capacity.
3. Cells highlighted in orange indicate Express Lane Access Segments (Analyzed as a left-sided weave).
4. No-Build Alternative Facility Type/Build Alternative Facility Type.
5. No-Build Alternative Post Processor ID number/Build Alternative Post Processor ID number.

Source: Fehr & Peers, 2020

Table 19 – Design Year (2050) Peak Hour Express Lane Operations

Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
SB I-15 Express Lane						
200	WB SR-91 Off-Ramp	Basic	A / 2	B / 16	A / 2	C / 19
201	EB SR-91 On-Ramp	Basic	A / 3	C / 19	A / 3	C / 22
202	EB SR-91 On-Ramp to EL Access South of Magnolia Avenue	Basic	A / 3	C / 19	A / 3	C / 22
203	EL Access South of Magnolia to EL Access at El Cerrito Road	Basic	A / 5	D / 32	A / 3	C / 23
204	EL Egress at El Cerrito Road	Basic	A / 3	B / 18	-	-
204	EL Access at El Cerrito Road to EL Access South of Cajalco Road	Basic	-	-	A / 3	C / 23
205	EL Access South of Cajalco to EL Access South of Temescal Canyon Road	Basic	-	-	A / 2	C / 20
206	EL Access South of Temescal Canyon Road to EL Access South of Horsethief Canyon Road	Basic	-	-	A / 2	C / 22
207	EL Access South of Horsethief Canyon Road to EL Egress South of Lake Street	Basic	-	-	A / 2	C / 20
208	EL Egress South of Lake Street	Basic	-	-	A / 2	C / 21
NB I-15 Express Lane						
306	EL Ingress North of Nichols Road	Basic	-	-	C / 19	B / 14
304	EL Ingress North of Nichols Road to EL Access North of Lake Street	Basic	-	-	C / 23	B / 16
303	EL Access North of Lake Street to EL Access North of Indian Truck Trail	Basic	-	-	C / 23	B / 16
302	EL Access North of Indian Truck Trail to EL Access at Dos Lagos Drive	Basic	-	-	C / 20	B / 13
312	EL Ingress at Cajalco Road to EL Access at El Cerrito Road	Basic	-	-	B / 18	B / 12

Table 19 – Design Year (2050) Peak Hour Express Lane Operations

Segment		Facility Type	No-Build Alternative (LOS / Density ¹)		Build Alternative (LOS / Density ¹)	
			AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
314	EL Ingress at Cajalco	Merge	-	-	B / 13	A / 9
301	EL Ingress at El Cerrito Road	Basic	C / 20	B / 12	-	-
302/311 ²	EL Access at El Cerrito Road to EL Access North of Ontario Avenue	Basic	C / 19	B / 12	B / 14	A / 8
303/310 ²	EL Access North of Ontario to WB SR-91 Off-Ramp	Basic	C / 23	B / 15	C / 20	A / 11
304/309 ²	WB SR-91 Off-Ramp	Basic	C / 24	B / 15	C / 18	A / 10
306/308 ²	EB SR-91 On-ramp	Basic	C / 18	B / 13	B / 18	A / 10

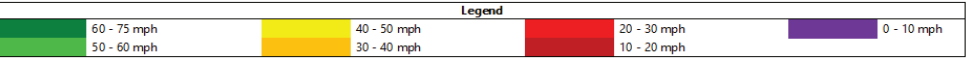
Notes:

1. Density reported in passenger cars per lane per mile.
2. No-Build Alternative Segment ID/Build Alternative Segment ID.

Source: Fehr & Peers, 2020

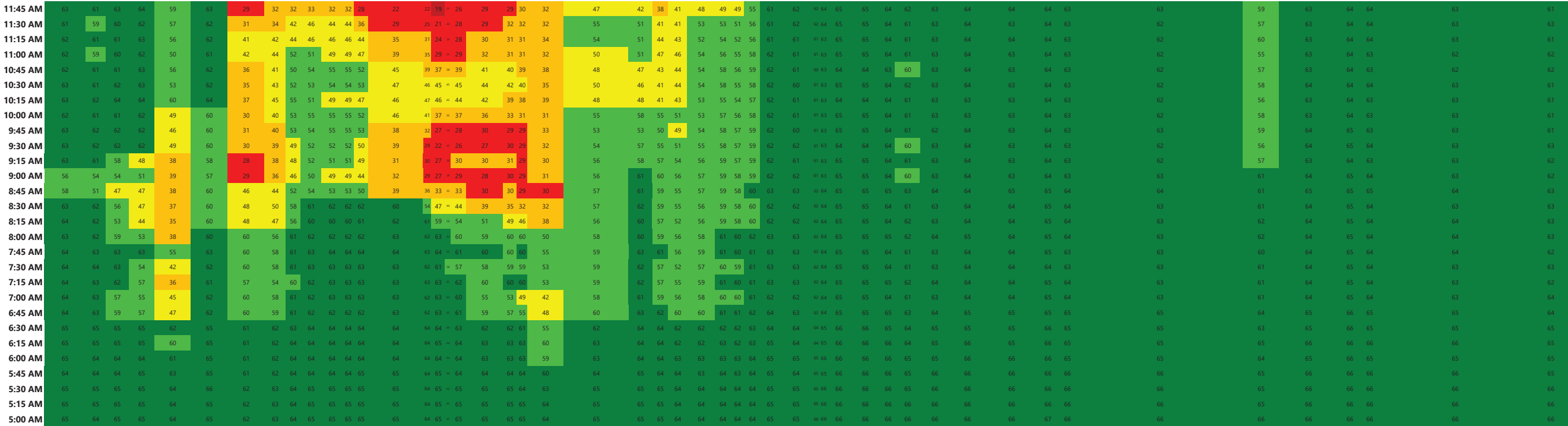
Exhibit M1 - Southbound I-15 Weekday Speed Contour Plot (Design Year No-Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build
AM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

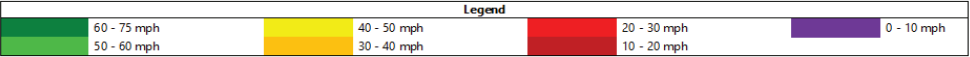


Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



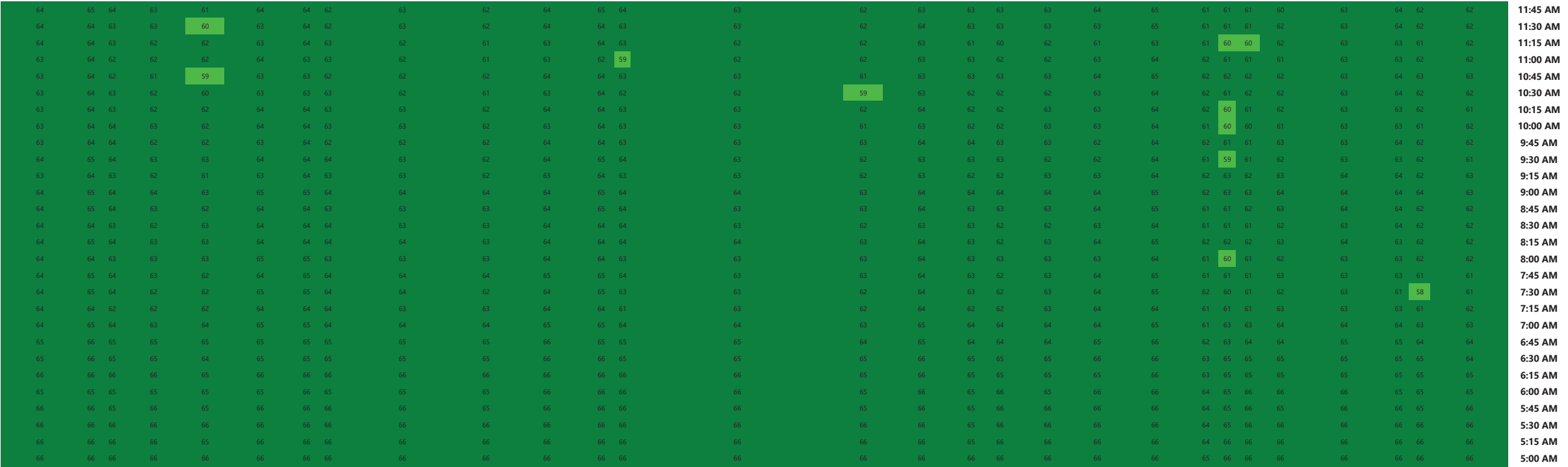
Exhibit M1 - Southbound I-15 Weekday Speed Contour Plot (Design Year No-Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build
AM Peak Hour

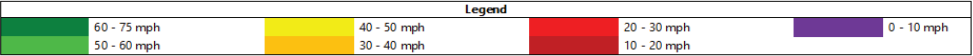
Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



	Indian Truck Trail On		Horsethelf Off		Horsethelf On		Lake St Off		Lake St On		Nichols Rd Off		Nichols Rd On		Central Ave Off		Central Ave On		Main St Off		Main St On
	0.6		1		0.5		1.6		0.6		2.2		0.6		1		0.6		0.7		0.7
	12.6		13.6		14.1		15.7		16.3		18.5		19.1		20.1		20.7		21.4		22.1

Exhibit M2 - Northbound I-15 Weekday Speed Contour Plot (Design Year No-Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build
AM Peak Hour

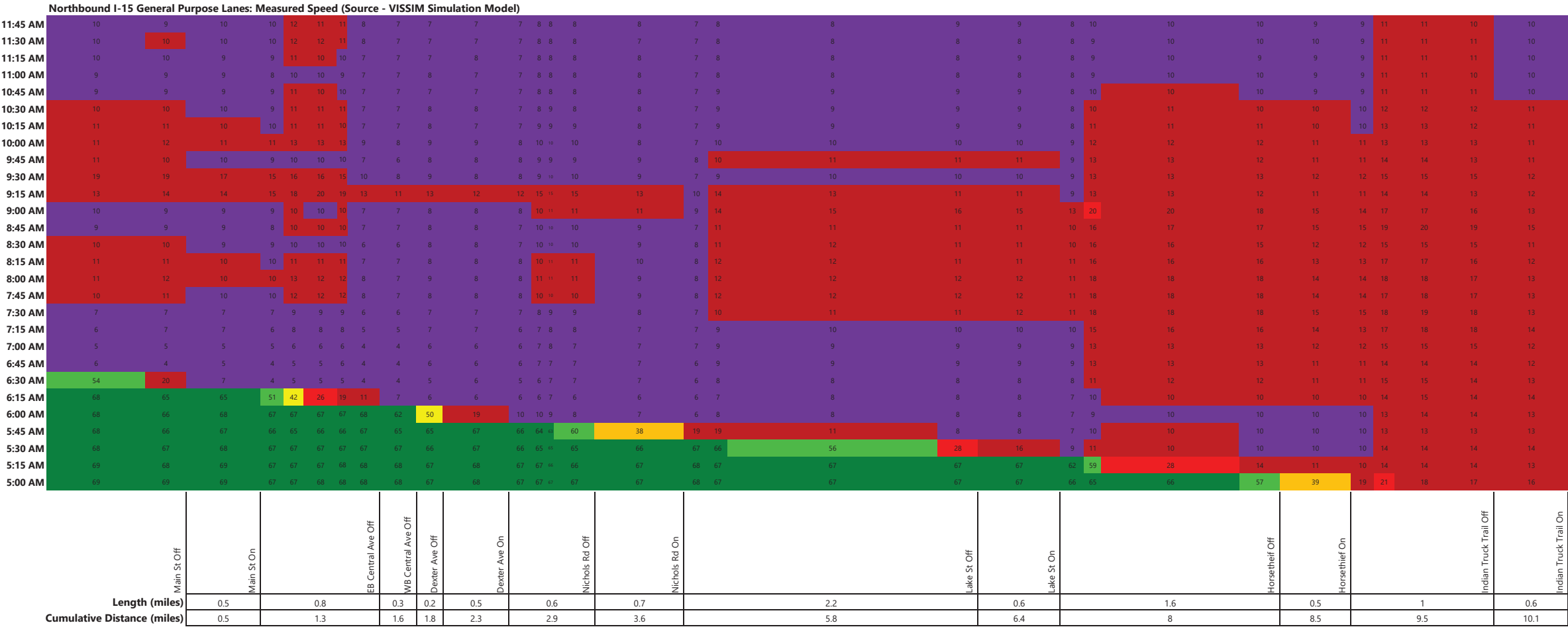
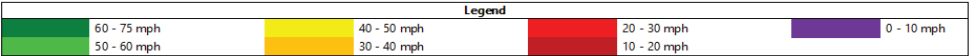


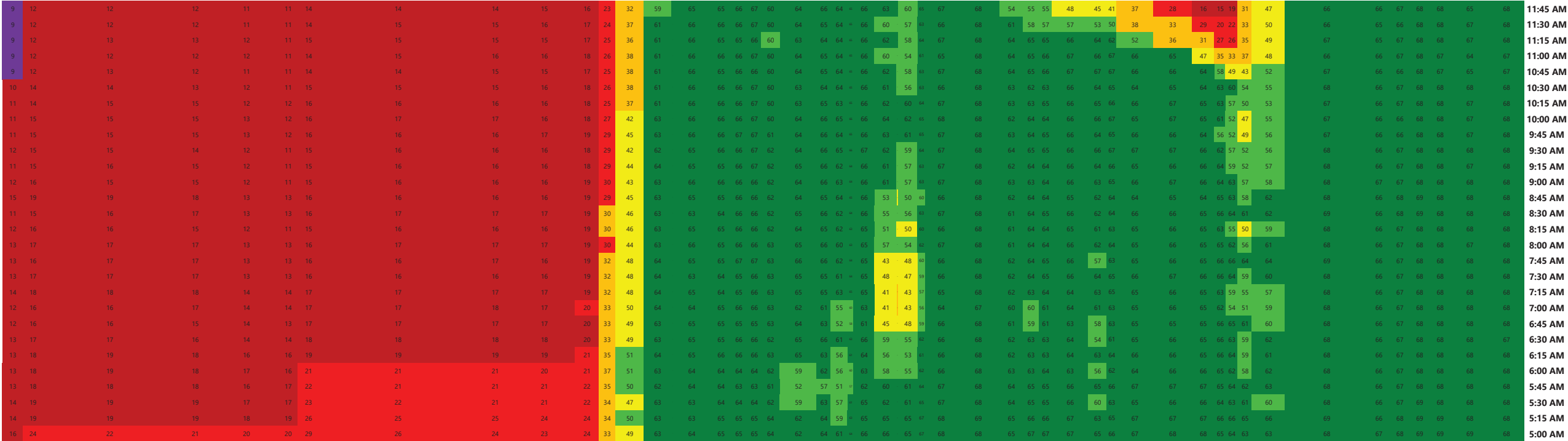
Exhibit M2 - Northbound I-15 Weekday Speed Contour Plot (Design Year No-Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build
AM Peak Hour

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



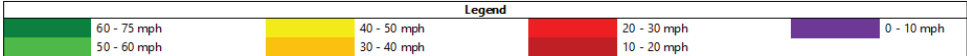
	Temescal Canyon Rd Off	Temescal Canyon Rd On		Weirick Rd/ Dos Lagos Dr Off	Weirick Rd/ Dos Lagos Dr On	Cajalco Rd Off	Express Lane Ingress EB Cajalco Rd On	WB Cajalco Rd On	El Ceritto Rd Off	Express Lane Ingress El Ceritto Rd On	Ontario Ave Off	Ontario Ave On		Express Lane Access (Ingress/Egress)	Magnolia Ave Off	EB Magnolia Ave On	WB Magnolia Ave On	WB and EB SR-91 Off		WB SR-91 On	EB SR-91 On	Hidden Valley Pkwy Off	Express Lane Ingress
	2.3	0.5	1.9	0.5	0.5	0.5	0.3	0.4	0.4	0.3	0.6		1.1		0.3	0.2	0.5	0.7		0.3		0.6	
	12.4	12.9	14.8	15.3	15.8	16.3	16.6	17	17.4	17.7	18.3		19.4		19.7	19.9	20.4	21.1		21.4		22	

Northbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



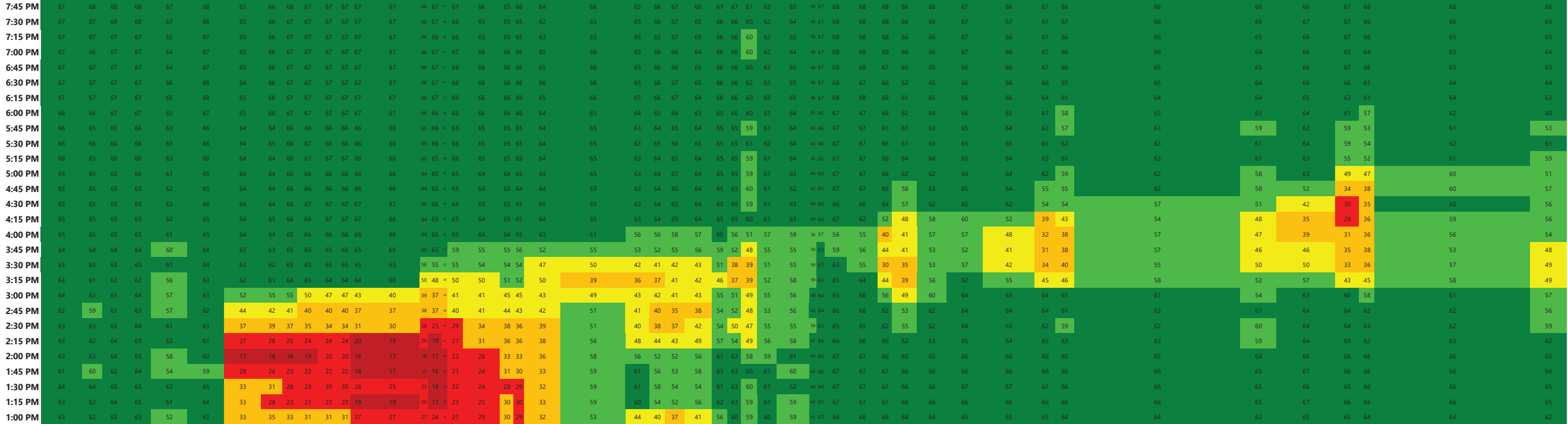
Exhibit N1 - Southbound I-15 Weekday Speed Contour Plot (Design Year No-Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build
PM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



Cumulative Distance (miles)	Length (miles)	Hidden Valley Play On																		Indian Truck Trail Off									
		WB SR-91 Off	EB SR-91 Off	EB SR-91 On	WB SR-91 On	Magnolia Ave Off		Magnolia Ave On		Express Lane Access (Ingress/Egress)	Ontario Ave Off		Ontario Ave On		El Cerrito Rd Off	Express Lane Egress	El Cerrito Rd On	Cajalco Rd Off	Express Lane Egress		Cajalco Rd On		Weirick Rd/ Dos Lagos Dr Off		Weirick Rd/ Dos Lagos Dr On		Temescal Canyon Rd Off		Temescal Canyon Rd On
	0.8	0.3	0.3	0.3	0.4		0.5		1		0.5		0.4		0.4		0.5		0.5		0.8		0.4		2		0.5		2.3
	0.8	1.1	1.4	1.7	2.1		2.6		3.6		4.1		4.6		5		5.5		6		6.8		7.2		9.2		9.7		12

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

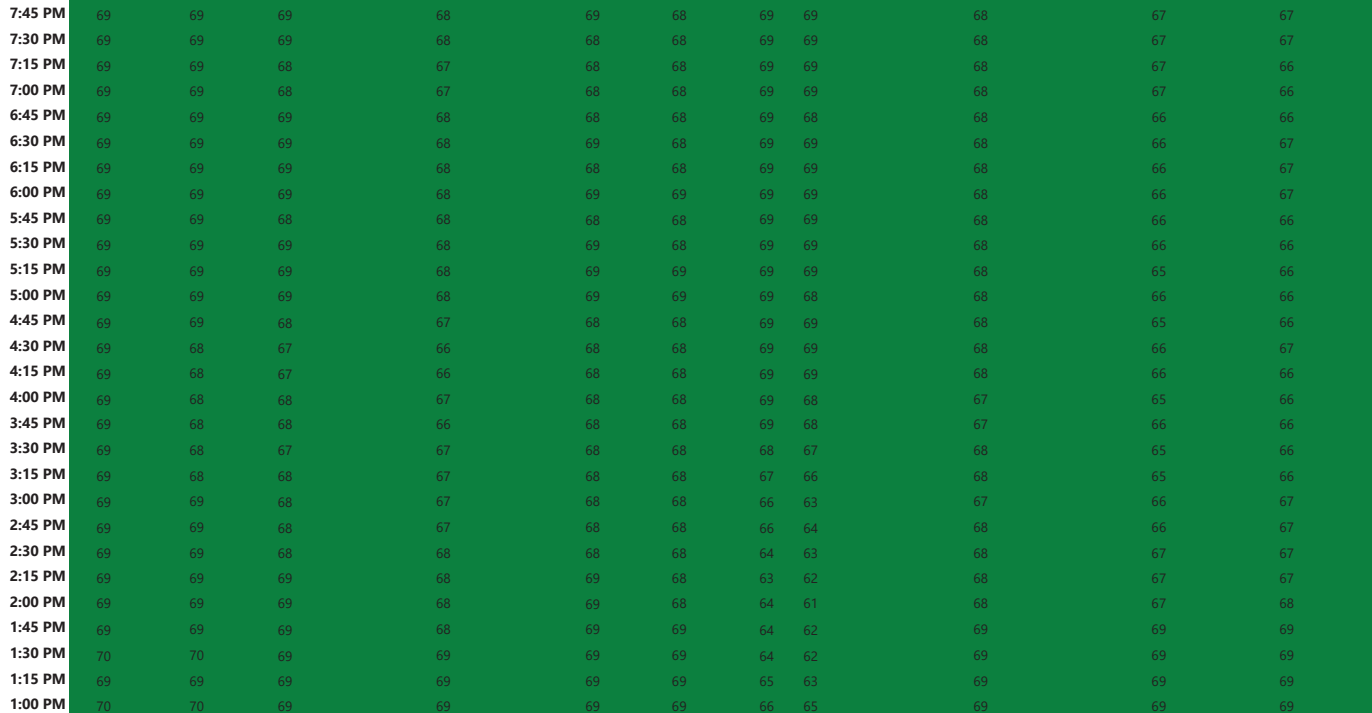
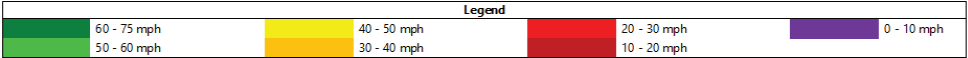


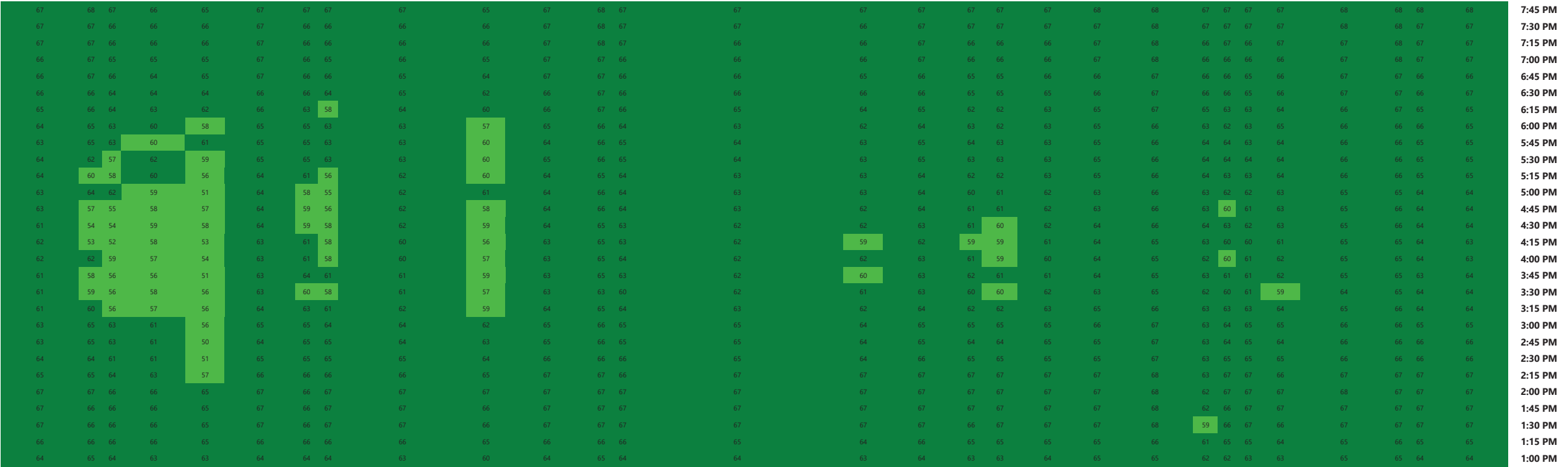
Exhibit N1 - Southbound I-15 Weekday Speed Contour Plot (Design Year No-Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build
PM Peak Hour

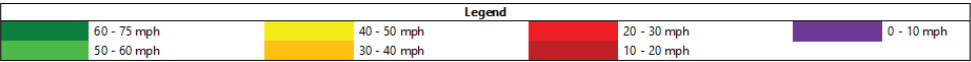
Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



	Indian Truck Trail On																			
		Horsethief Off		Horsethief On		Lake St Off		Lake St On		Nichols Rd Off		Nichols Rd On		Central Ave Off		Central Ave On		Main St Off		Main St On
0.6	1	0.5	1.6	0.6	2.2	0.6	1	0.6	19.1	20.1	20.7	21.4	22.1							
12.6	13.6	14.1	15.7	16.3	18.5	19.1	20.1	20.7	21.4	22.1										

Exhibit N2 - Northbound I-15 Weekday Speed Contour Plot (Design Year No-Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build
PM Peak Hour

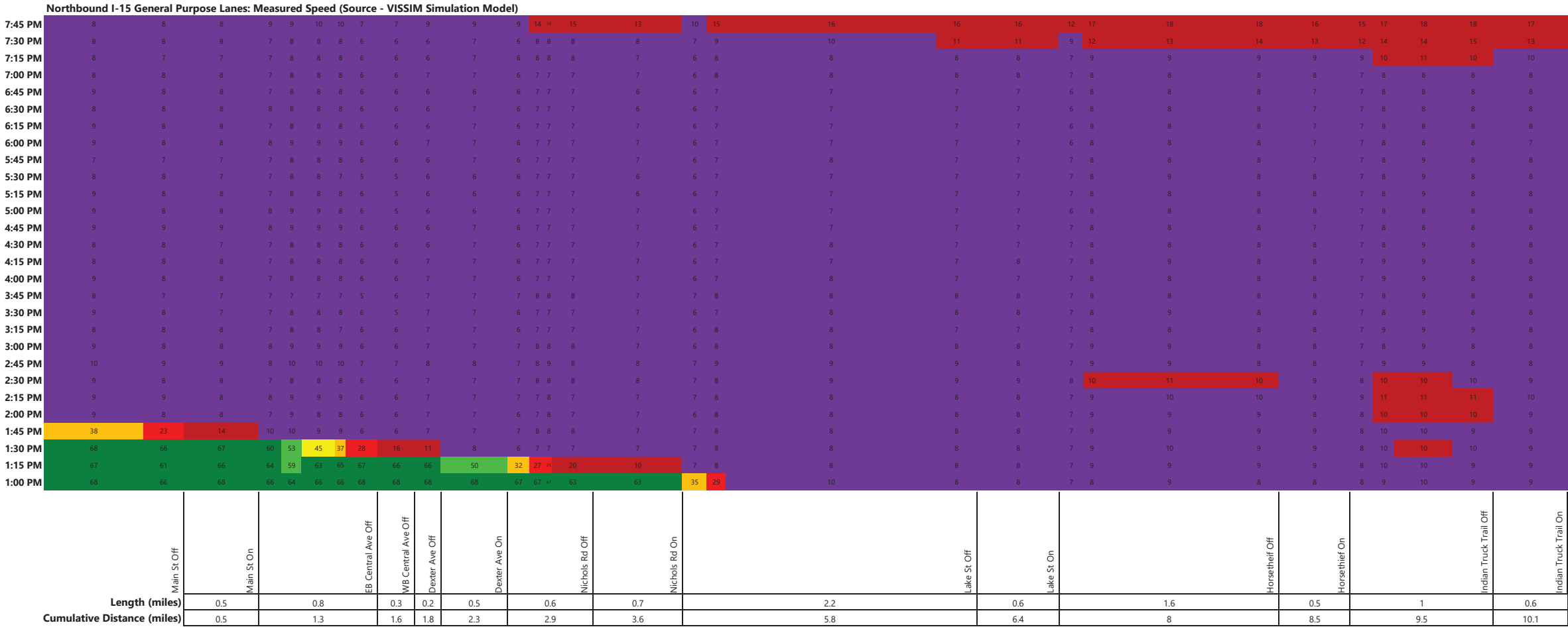
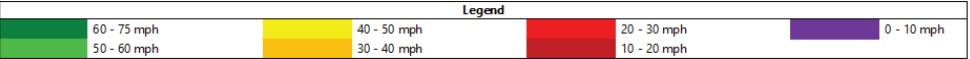


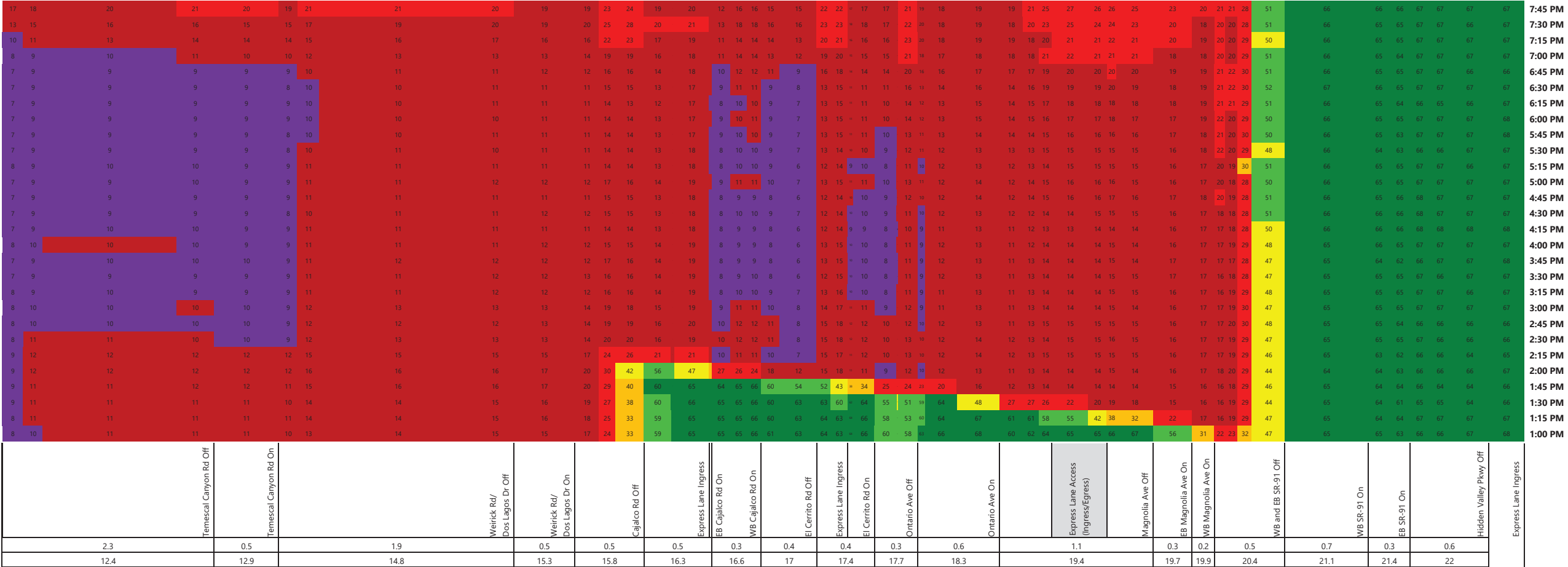
Exhibit N2 - Northbound I-15 Weekday Speed Contour Plot (Design Year No-Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build
PM Peak Hour

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



Northbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

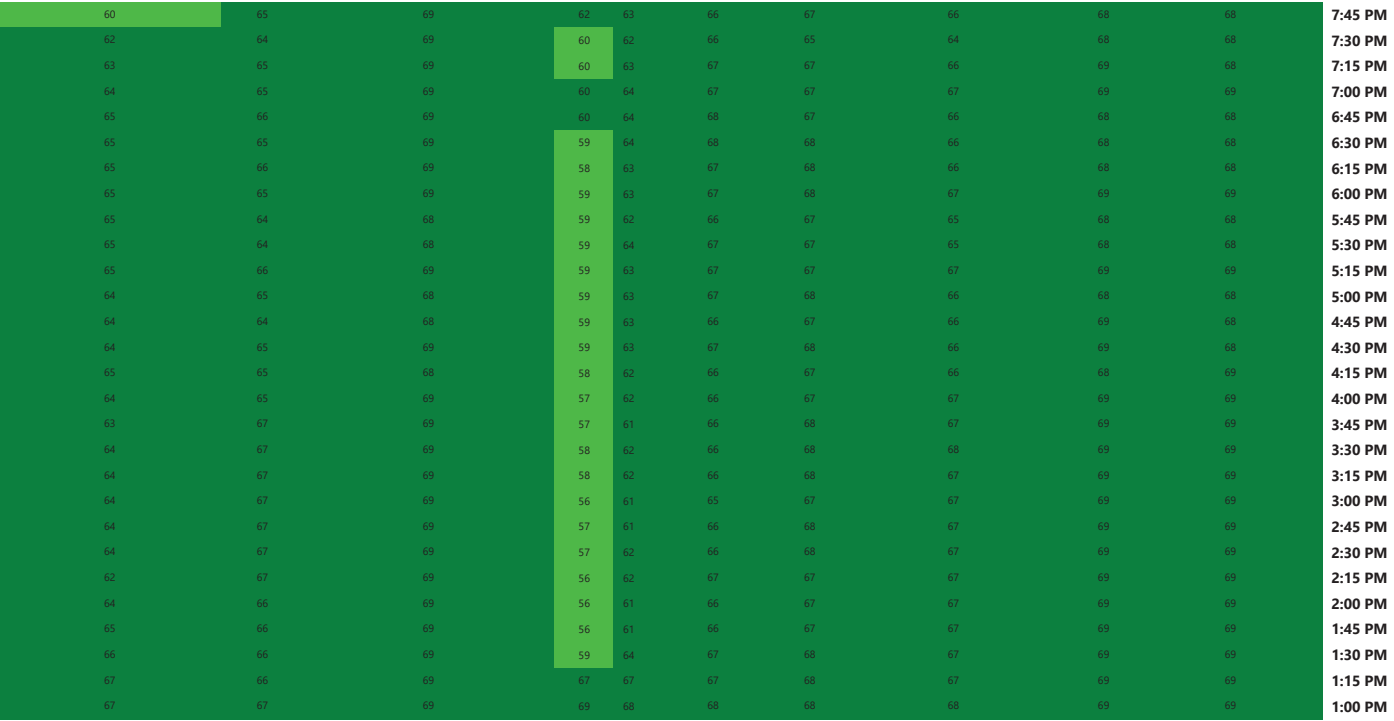
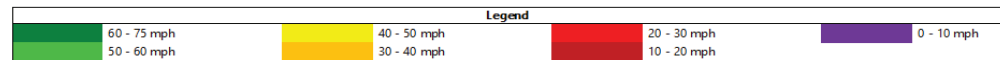


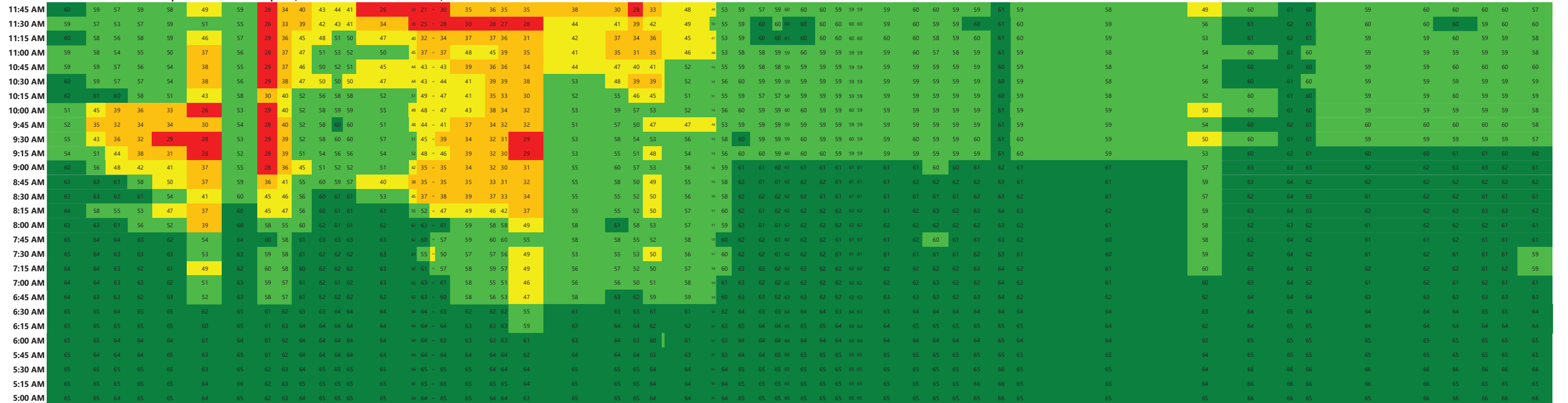
Exhibit O1 - Southbound I-15 Weekday Speed Contour Plot (Design Year Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

**I-15 Express Lanes Southern Extension
Design Year Plus Project
AM Peak Hour**



Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



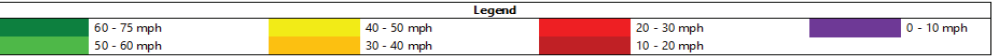
Cumulative Distance (miles)	Length (miles)	Hidden Valley Pkwy On																Temescal Canyon Rd Off																Indian Truck Trail Off																																																											
		WB SR-91 Off				EB SR-91 Off				EB SR-91 On				WB SR-91 On				Magnolia Ave Off				Magnolia Ave On				Express Lane Access (Ingress/Egress)				Ontario Ave Off				Ontario Ave On				El Cerrito Rd Off				Express Lane Access (Ingress/Egress)				El Cerrito Rd On ^				Cajalco Rd Off				Cajalco Rd On				Express Lane Access (Ingress/Egress)				Weirick Rd/ Dos Lagos Dr Off				Weirick Rd/ Dos Lagos Dr On				Temescal Canyon Rd Off				Temescal Canyon Rd On				Express Lane Access (Ingress/Egress)															
	0.8					0.3				0.3				0.3				0.4				0.5								1								0.5				0.4								0.4								0.9				0.4				2								0.5				2.3															
	0.8					1.1				1.4				1.7				2.1				2.6								3.6								4.1				4.6								5				5.5				5.9								6.8				7.2				9.2								9.7				12							

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



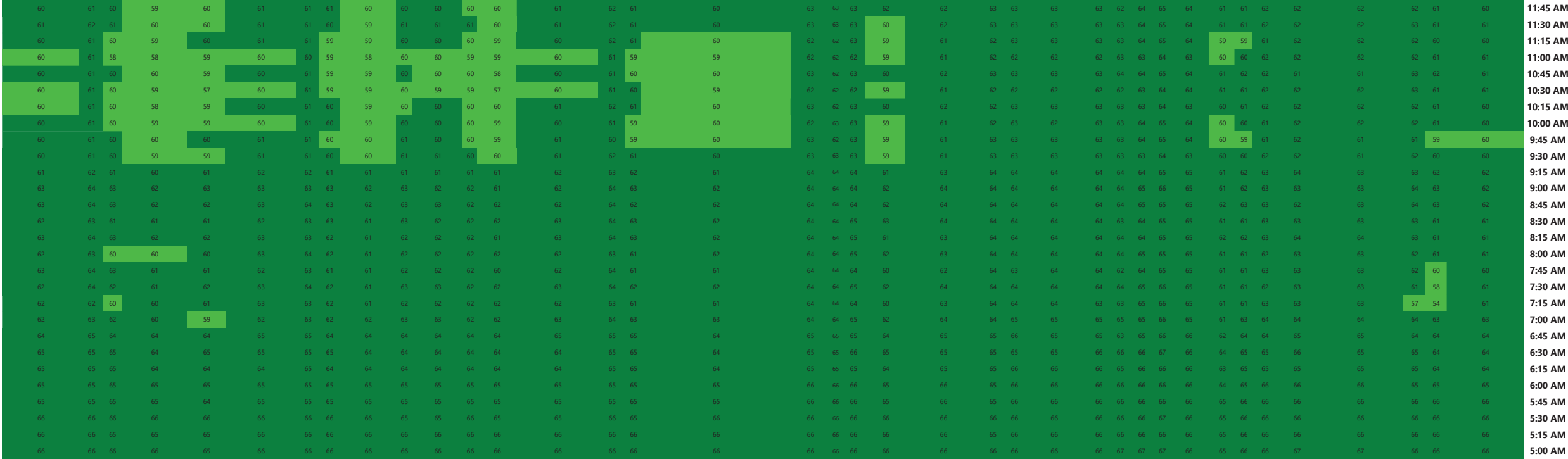
Exhibit O1 - Southbound I-15 Weekday Speed Contour Plot (Design Year Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year Plus Project
AM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



Indian Truck Trail On	Horseshoe Road Off	Horseshoe Road On	Express Lane Access (Ingress/Egress)	Lake St Off	Lake St On	Express Lane Egress	Nichols Rd Off	Nichols Rd On	Express Lane Egress Central Ave Off	Central Ave On	Main St Off	Main St On
0.6	1	0.5	1.5		0.6	2.2		0.6	1	0.6	0.7	0.7
12.6	13.6	14.1	15.6		16.2	18.4		19	20	20.6	21.3	22

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

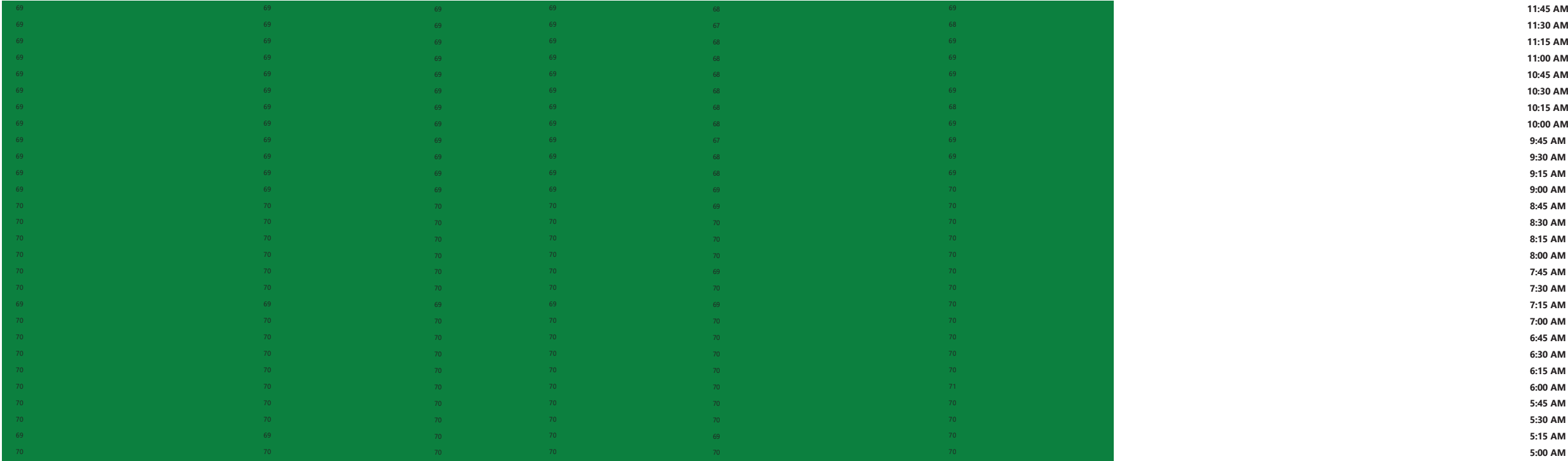
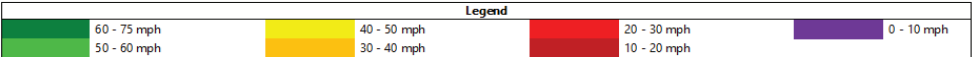


Exhibit O2 - Northbound I-15 Weekday Speed Contour Plot (Design Year Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year Plus Project
AM Peak Hour

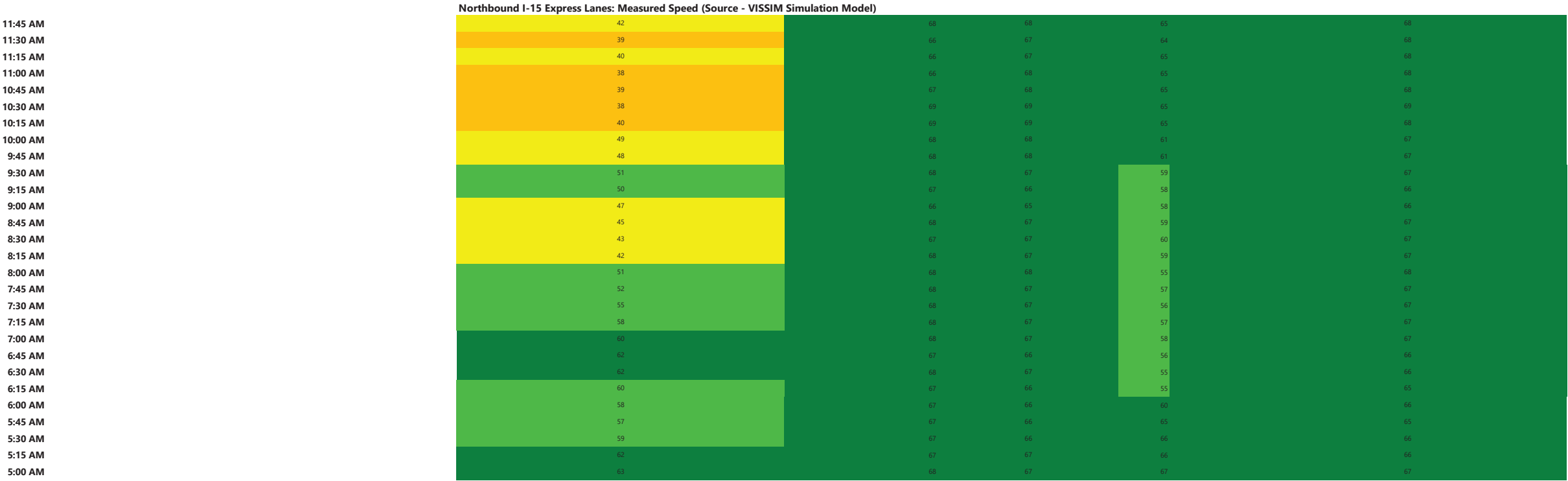
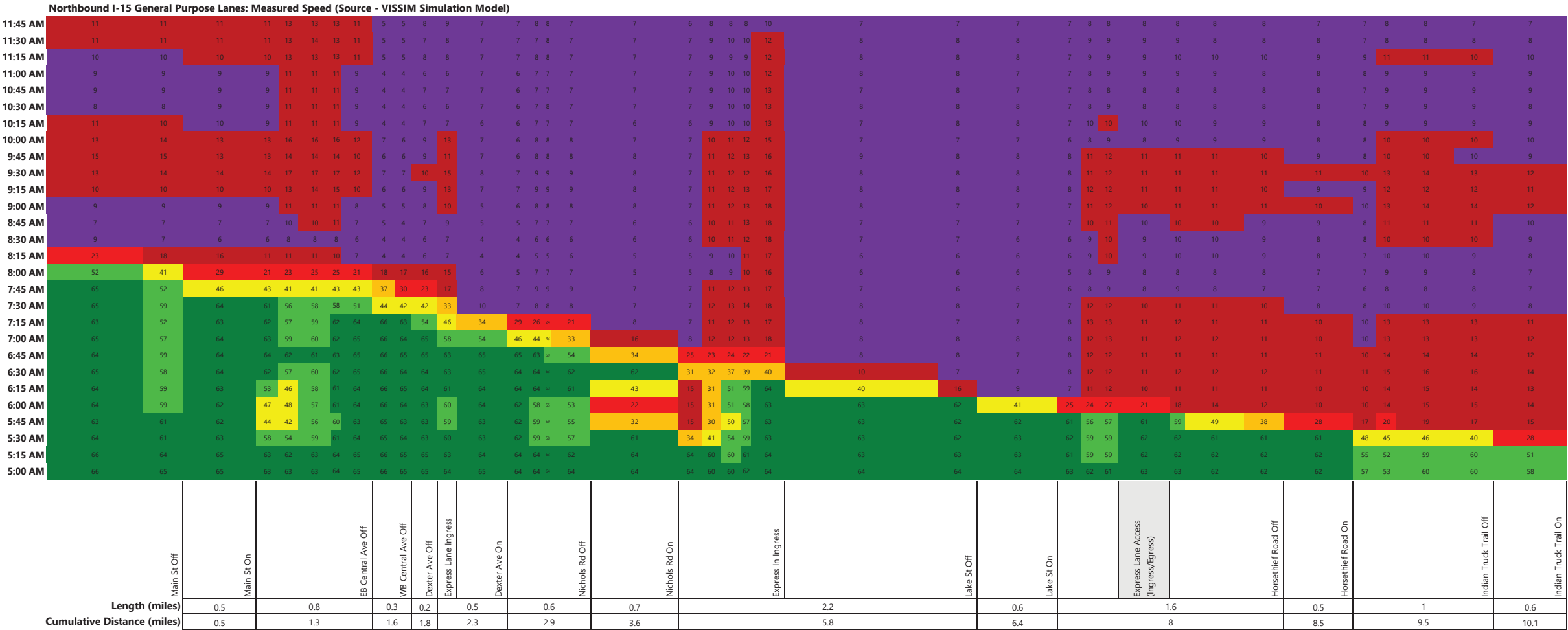
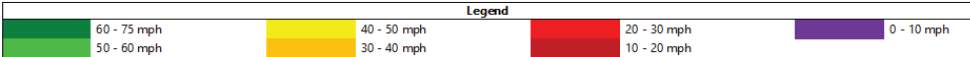


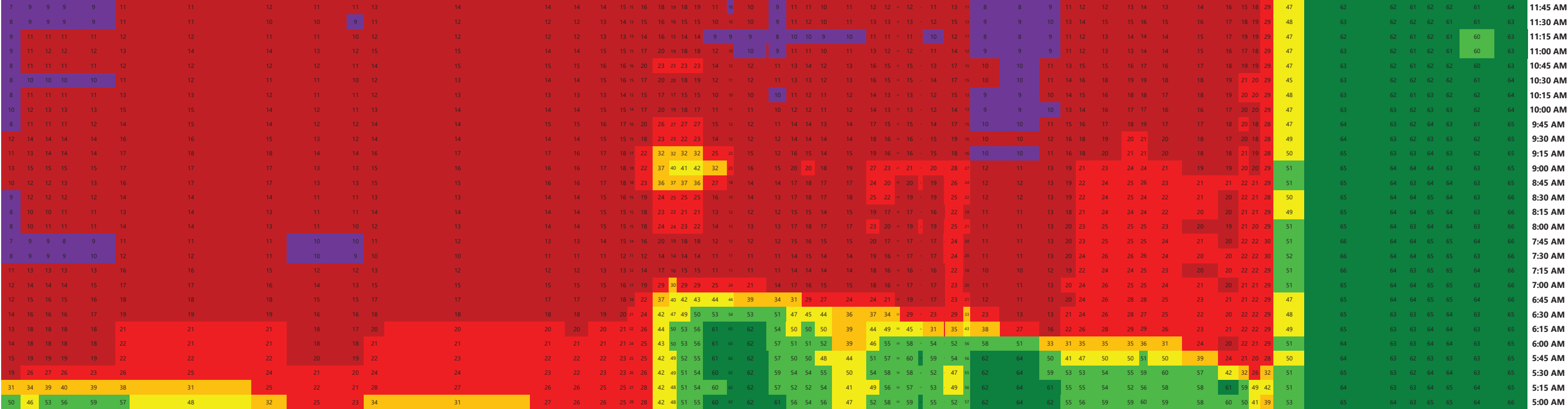
Exhibit O2 - Northbound I-15 Weekday Speed Contour Plot (Design Year Build Alternative - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year Plus Project
AM Peak Hour

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



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Northbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

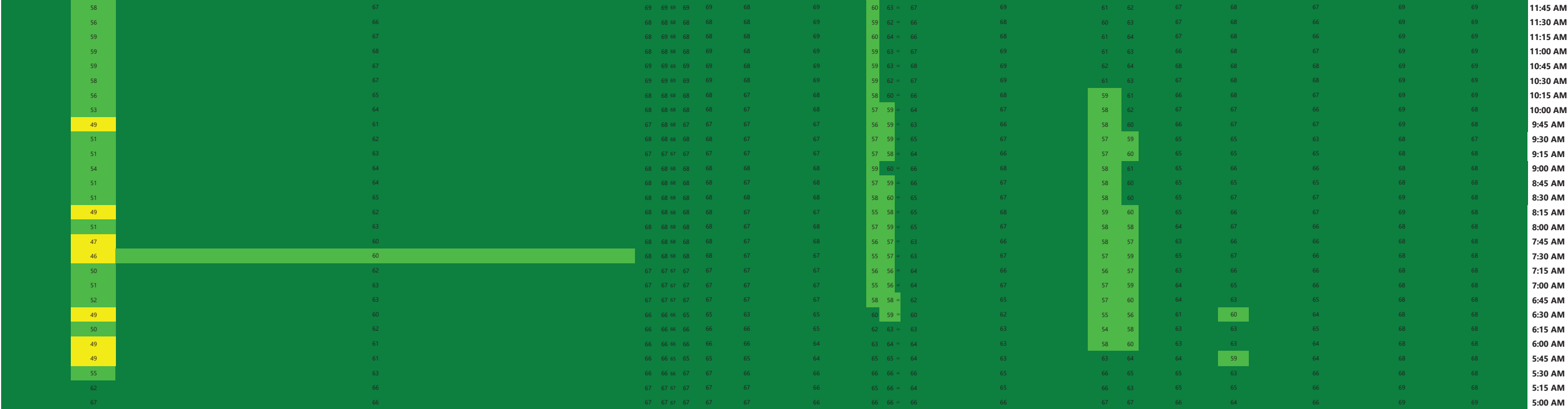


Exhibit P1 - Southbound I-15 Weekday Speed Contour Plot (Design Year Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

**I-15 Express Lanes Southern Extension
Design Year Plus Project
PM Peak Hour**

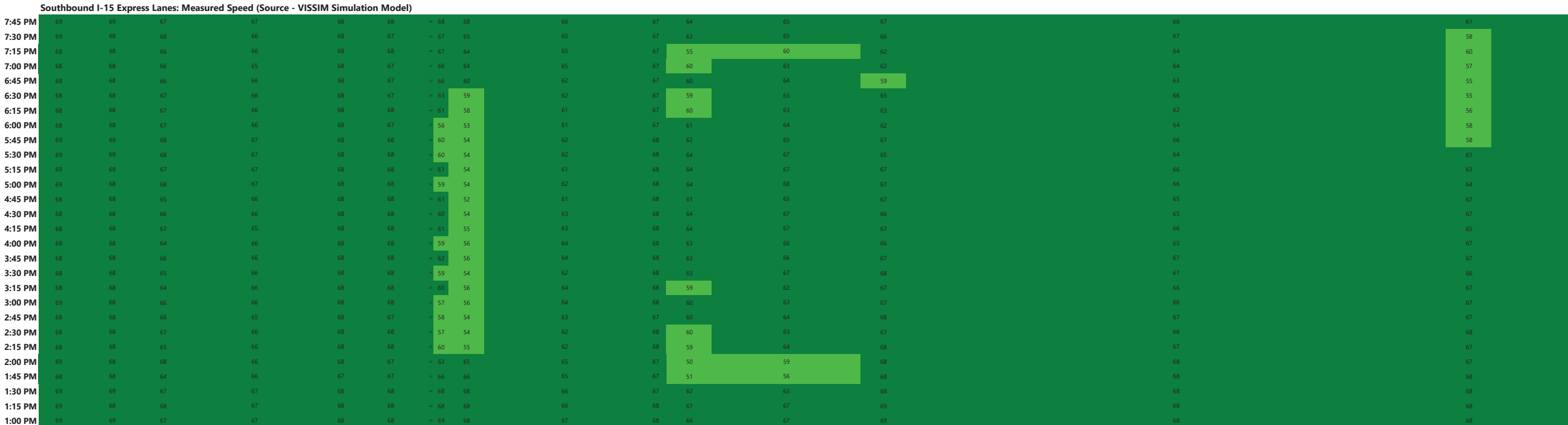
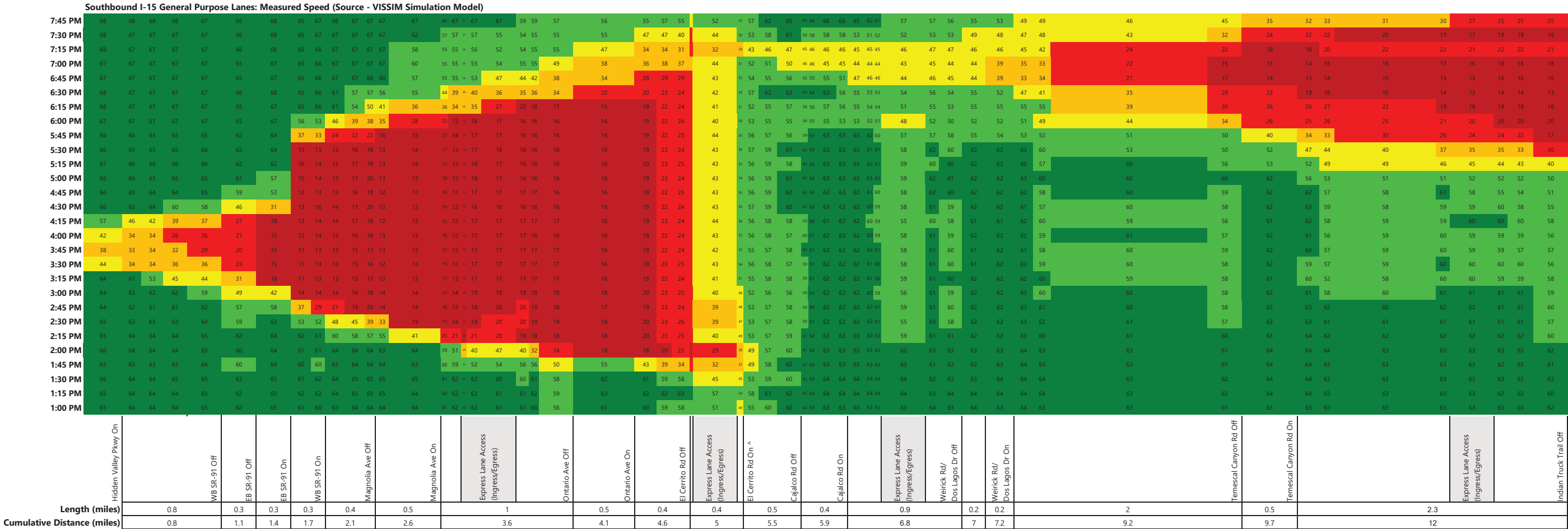
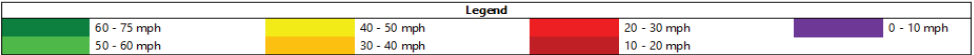


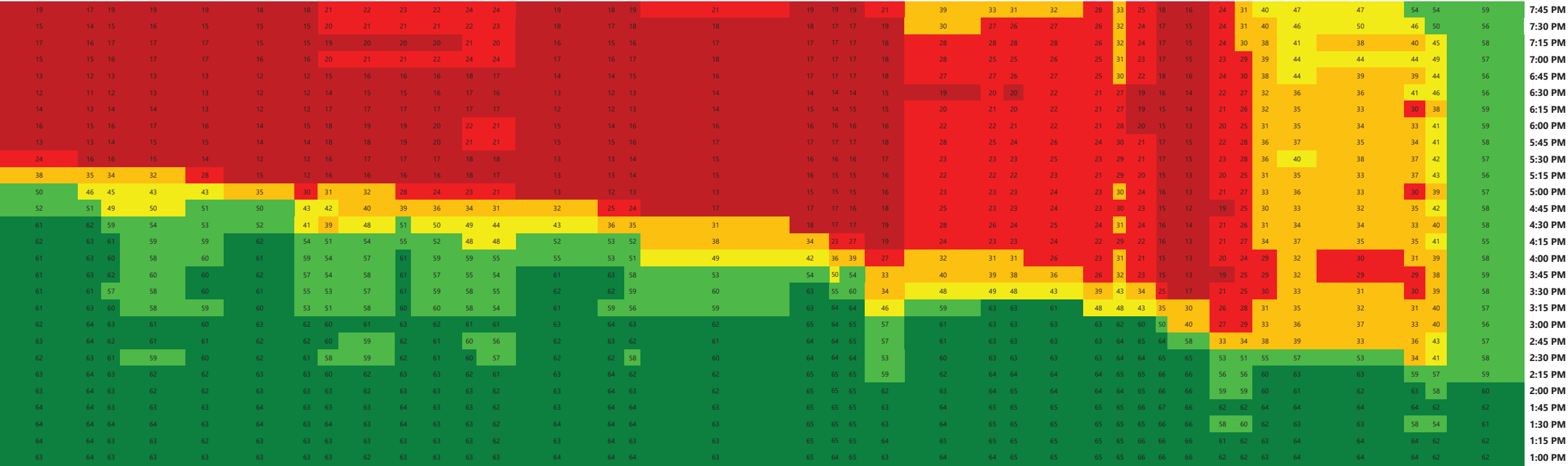
Exhibit P1 - Southbound I-15 Weekday Speed Contour Plot (Design Year Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year Plus Project
PM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



	Indian Truck Trail On		Horsethief Road Off		Horsethief Road On			Express Lane Access (Ingress/Egress)		Lake St. Off		Lake St. On		Express Lane Egress		Nichols Rd. Off		Nichols Rd. On		Express Lane Egress Central Ave. Off		Central Ave. On		Main St. Off		Main St. On
0.6	1	0.5	1.5			0.6	2.2		0.6		19	1	0.6	20	20.6	21.3	0.7									
12.6	13.6	14.1	15.6		16.2	18.4																				

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

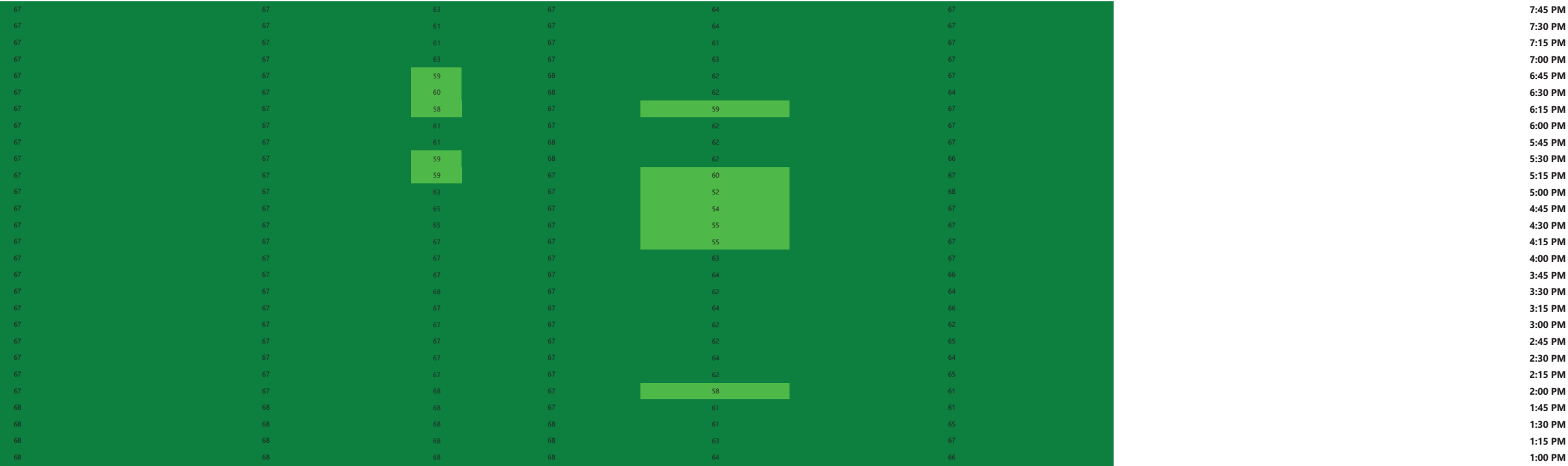
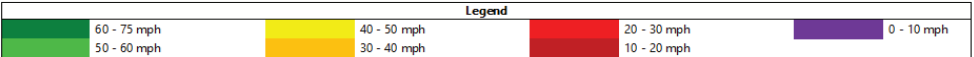


Exhibit P2 - Northbound I-15 Weekday Speed Contour Plot (Design Year Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year Plus Project
PM Peak Hour

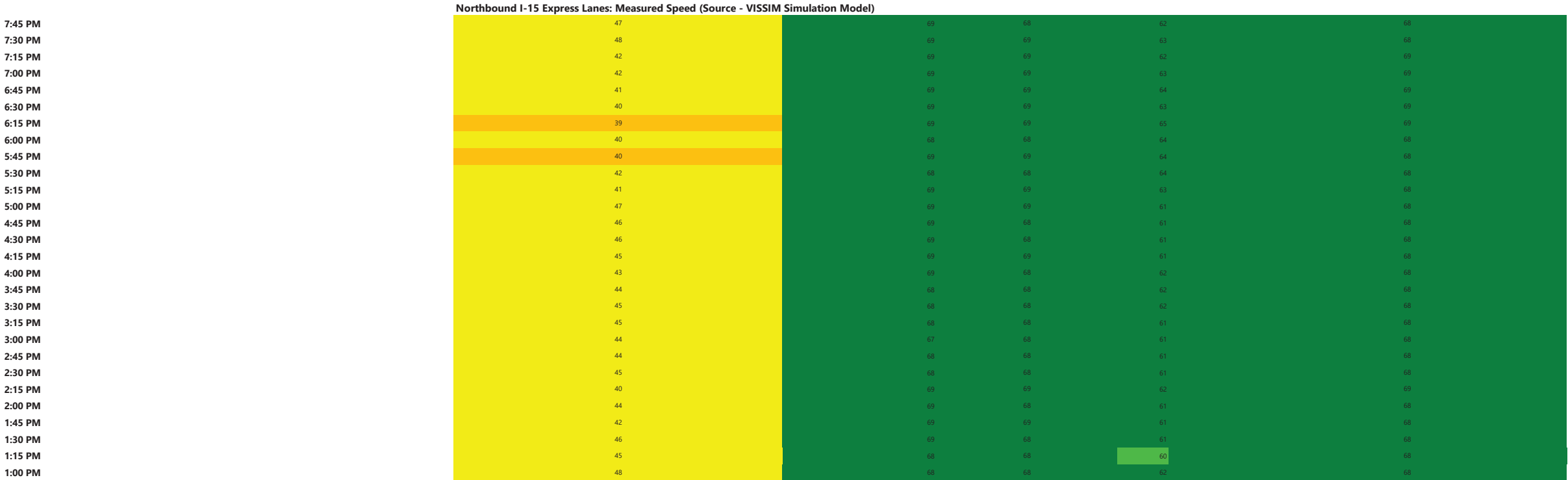
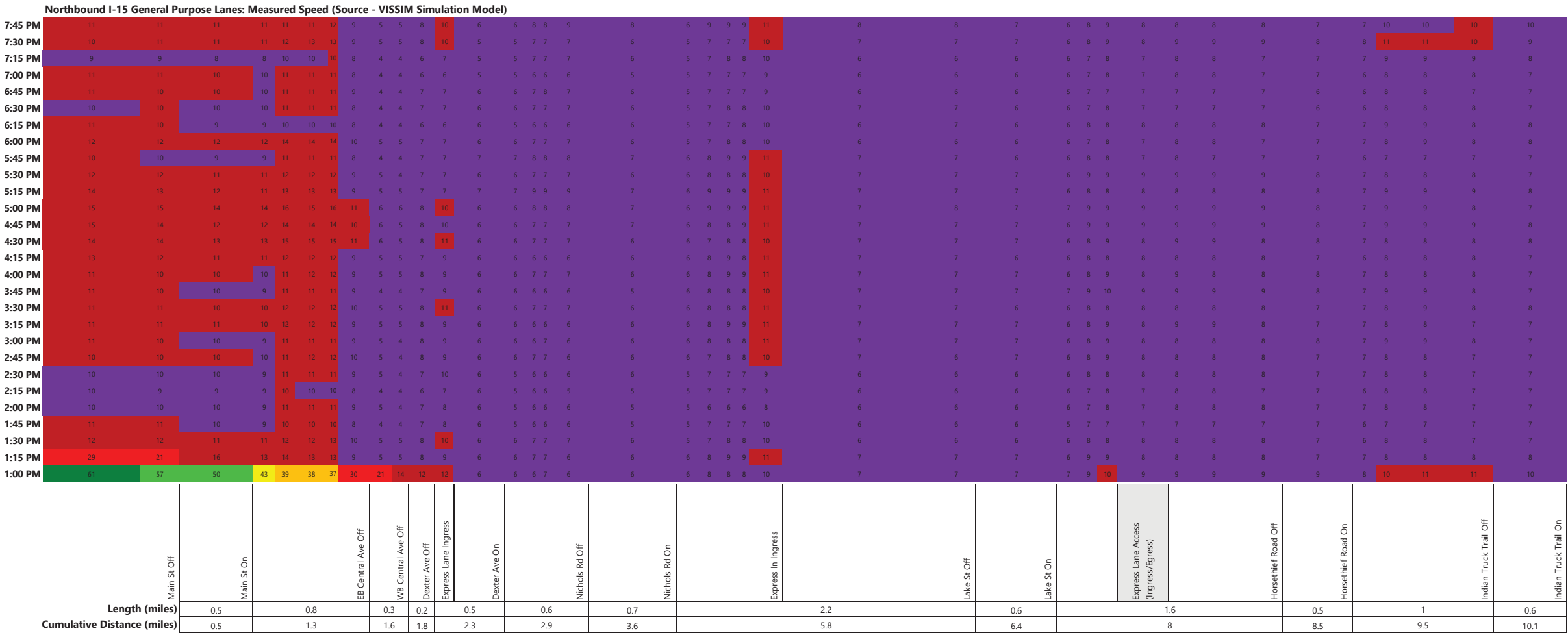
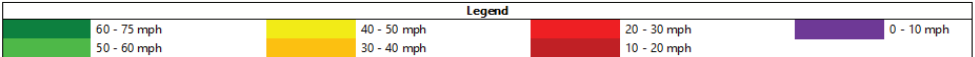


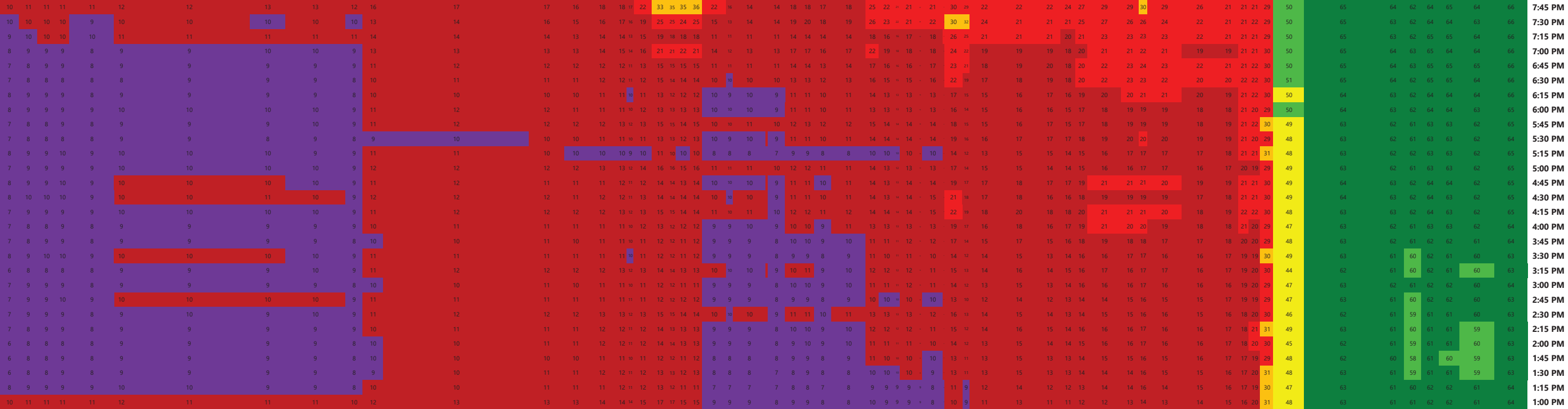
Exhibit P2 - Northbound I-15 Weekday Speed Contour Plot (Design Year Build Alternative - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year Plus Project
PM Peak Hour

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



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Northbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

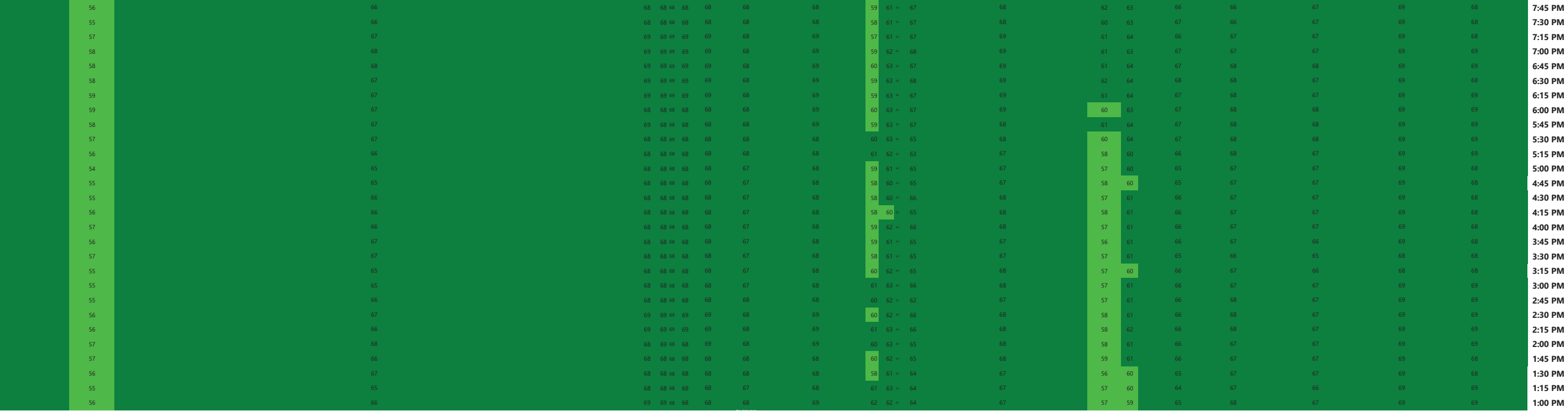
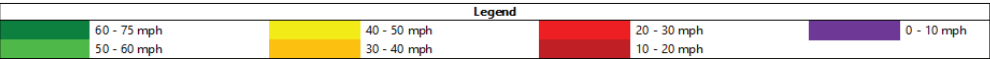


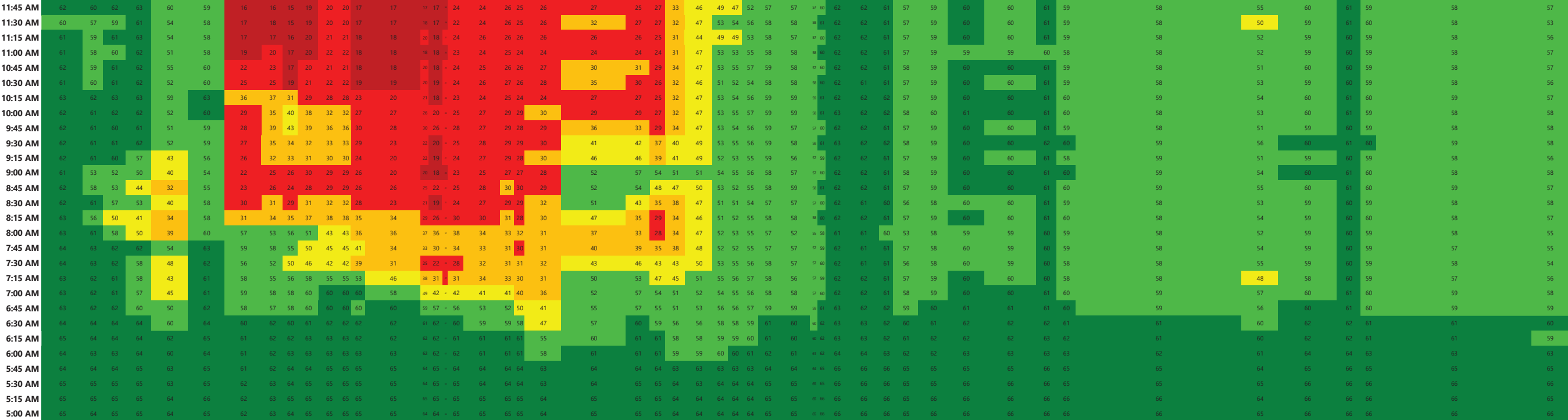
Exhibit Q1 - Southbound I-15 Weekday Speed Contour Plot (Design Year No-Build with Build Forecasts) - AM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build with Build Forecasts
AM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



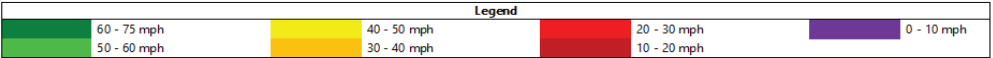
Cumulative Distance (miles)	Length (miles)	Hidden Valley Pkwy On																																											
		WB SR-91 Off		EB SR-91 Off		EB SR-91 On		WB SR-91 On		Magnolia Ave Off				Magnolia Ave On		Express Lane Access (Ingress/Egress)		Ontario Ave Off		Ontario Ave On		El Cerrito Rd Off		Express Lane Egress		El Cerrito Rd On		Cajalco Rd Off		Express Lane Egress		Cajalco Rd On		Weirick Rd/ Dos Lagos Dr Off		Weirick Rd/ Dos Lagos Dr On				Temescal Canyon Rd Off		Temescal Canyon Rd On			
	0.8			0.3		0.3		0.3		0.4				0.5				1		0.5		0.4		0.4		0.4		0.5		0.5		0.5		0.8		0.4		0.4		2		0.5		2.3	
	0.8			1.1		1.4		1.7		2.1		2.6		3.6		4.1		4.6		5		5.5		6		6.8		7.2		9.2		9.7		12											

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



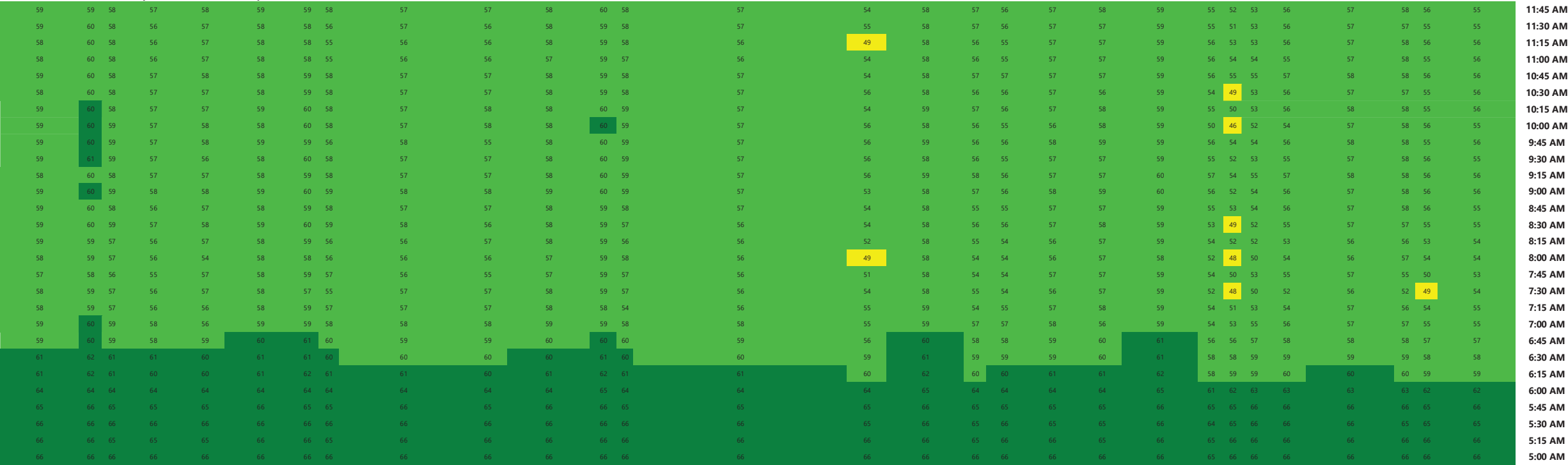
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I-15 Express Lanes Southern Extension
Design Year No Build with Build Forecasts
AM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



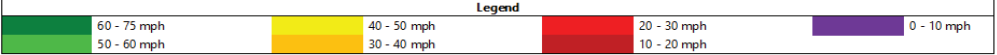
Indian Truck Trail On		Horseheif Off		Horseheif On		Lake St Off		Lake St On		Nichols Rd Off		Nichols Rd On		Central Ave Off		Central Ave On		Main St Off		Main St On
0.6	1	0.5	1.6	0.6	2.2	0.6	1	0.6	20.1	0.6	1	0.6	21.4	0.7	0.7					
12.6	13.6	14.1	15.7	16.3	18.5	19.1	20.1	20.7	22.1											

Exhibit Q2 - Northbound I-15 Weekday Speed Contour Plot (Design Year No-Build with Build Forecasts) - AM

VISSIM Post-Processor

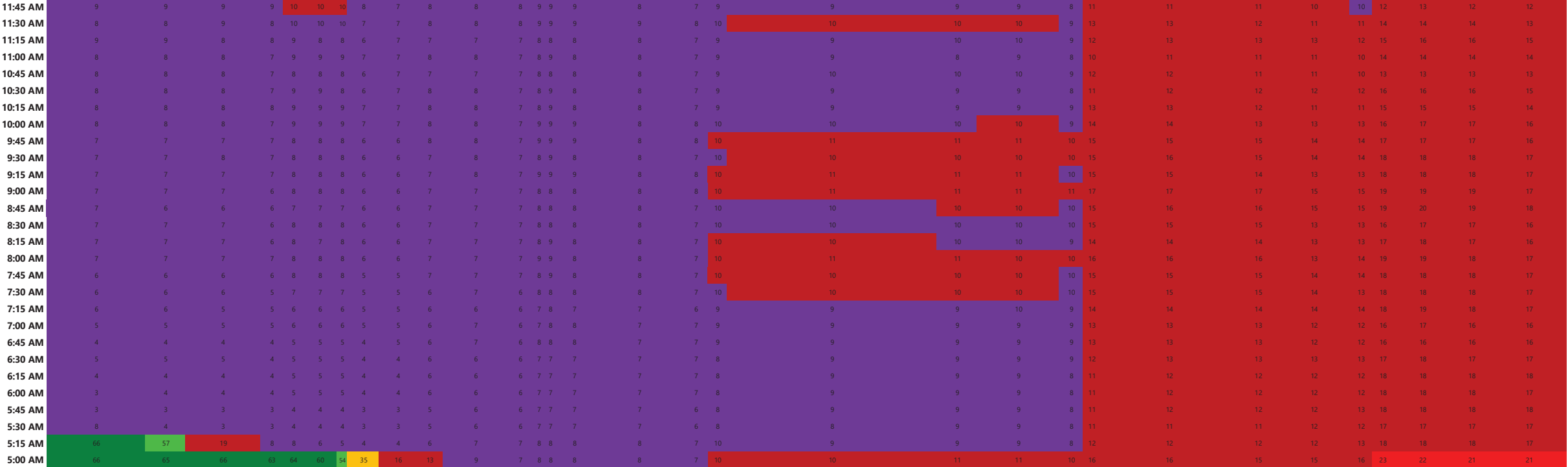
Average Results from 5 Runs

Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build with Build Forecasts
AM Peak Hour

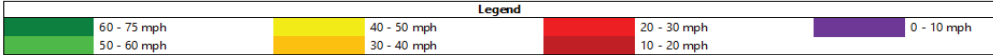
Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



Length (miles)	Main St Off	Main St On	EB Central Ave Off	WB Central Ave Off	Dexter Ave Off	Dexter Ave On	Nichols Rd Off	Nichols Rd On	Lake St Off	Lake St On	Horsethief Off	Horsethief On	Indian Truck Trail Off	Indian Truck Trail On
Cumulative Distance (miles)	0.5	0.8	0.3	0.2	0.5	0.6	0.7	2.2	0.6	1.6	0.5	1	0.6	
	0.5	1.3	1.6	1.8	2.3	2.9	3.6	5.8	6.4	8	8.5	9.5	10.1	

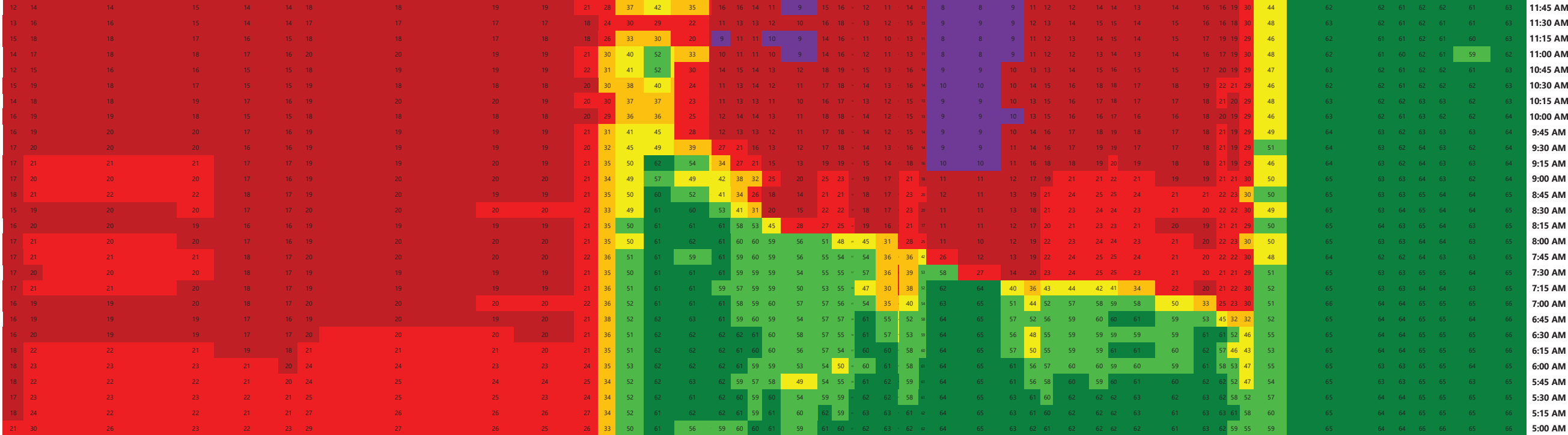
Exhibit Q2 - Northbound I-15 Weekday Speed Contour Plot (Design Year No-Build with Build Forecasts) - AM

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build with Build Forecasts
AM Peak Hour

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

[illegible]

Northbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

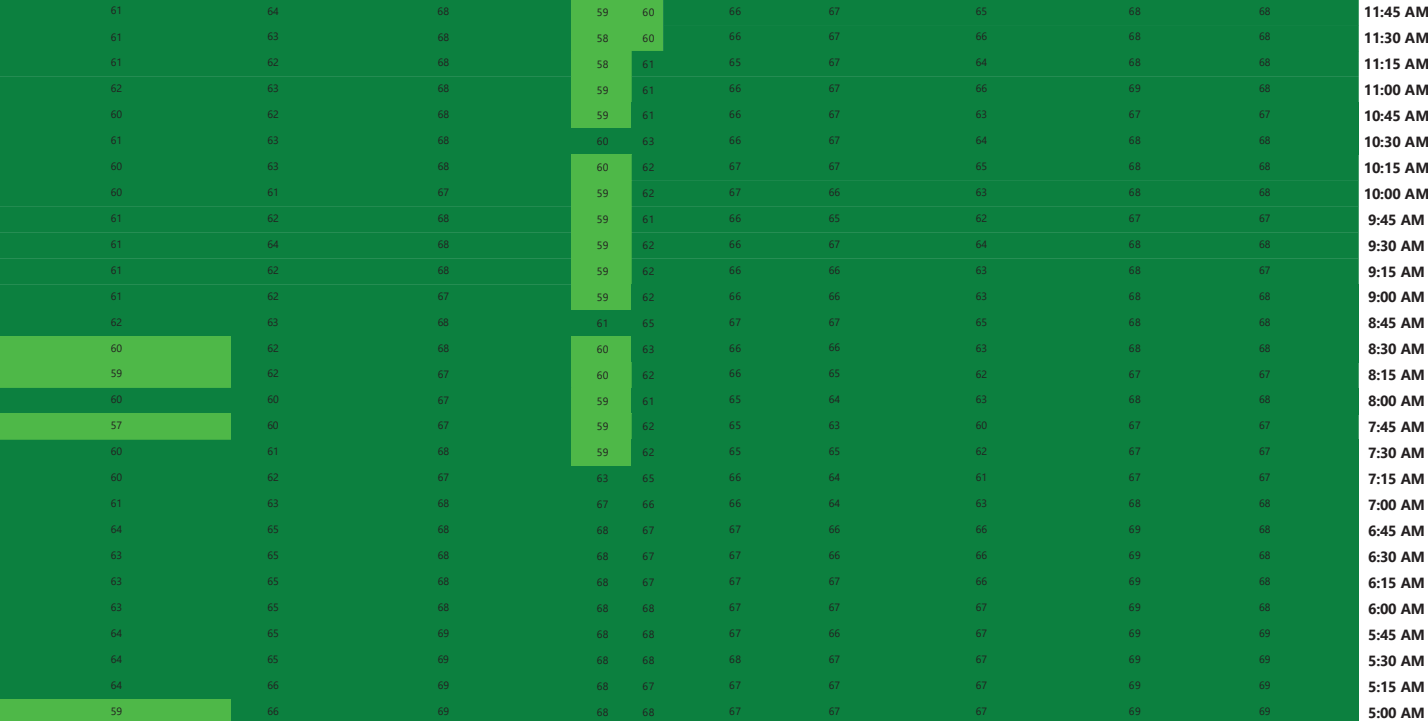


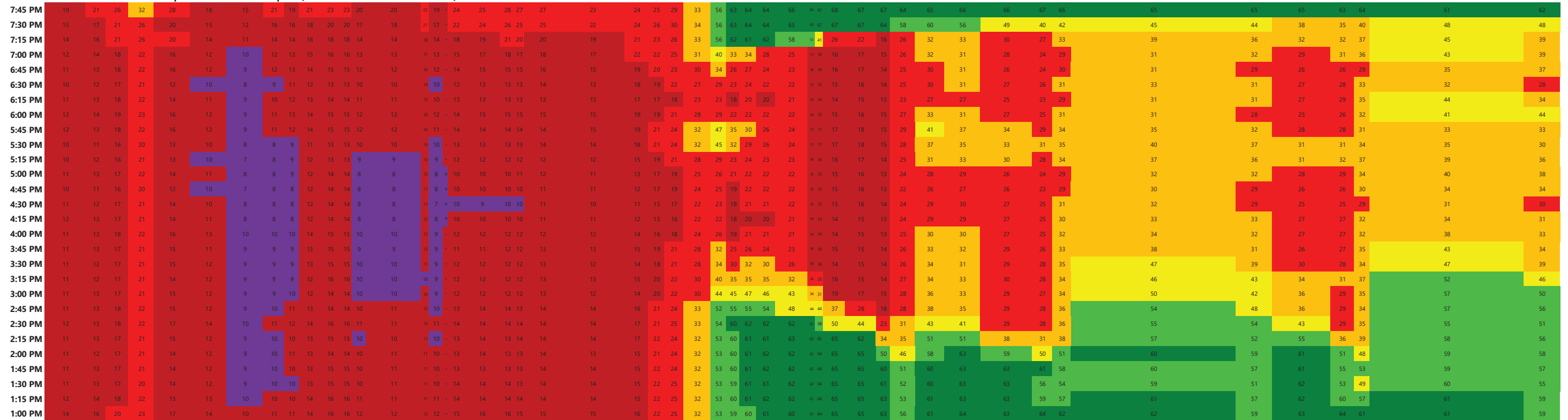
Exhibit R1 - Southbound I-15 Weekday Speed Contour Plot (Design Year No-Build with Build Forecasts) - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



**I-15 Express Lanes Southern Extension
Design Year No Build with Build Forecasts
PM Peak Hour**

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



Cumulative Distance (miles)	0.8	0.3	0.3	0.3	0.4	0.5	1	0.5	0.4	0.5	0.4	0.5	0.8	0.4	2	0.5	2.3
	0.8	1.1	1.4	1.7	2.1	2.6	3.6	4.1	4.6	5	5.5	6	6.8	7.2	9.2	9.7	12
	Indian Truck Trail Off																
Length (miles)	Hidden Valley Pkwy On																
	WB SR-91 Off																
	EB SR-91 Off																
	EB SR-91 On																
	WB SR-91 On																
	Magnolia Ave Off																
	Magnolia Ave On																
	Express Lane Access (Ingress/Egress)																
	Ontario Ave Off																
	Ontario Ave On																
	El Cerrito Rd Off																
	Express Lane Egress																
	El Cerrito Rd On																
	Cajalco Rd Off																
	Express Lane Egress																
	Cajalco Rd On																
	Weirick Rd/ Dos Lagos Dr Off																
	Weirick Rd/ Dos Lagos Dr On																
	Temescal Canyon Rd Off																
	Temescal Canyon Rd On																
	Indian Truck Trail Off																

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

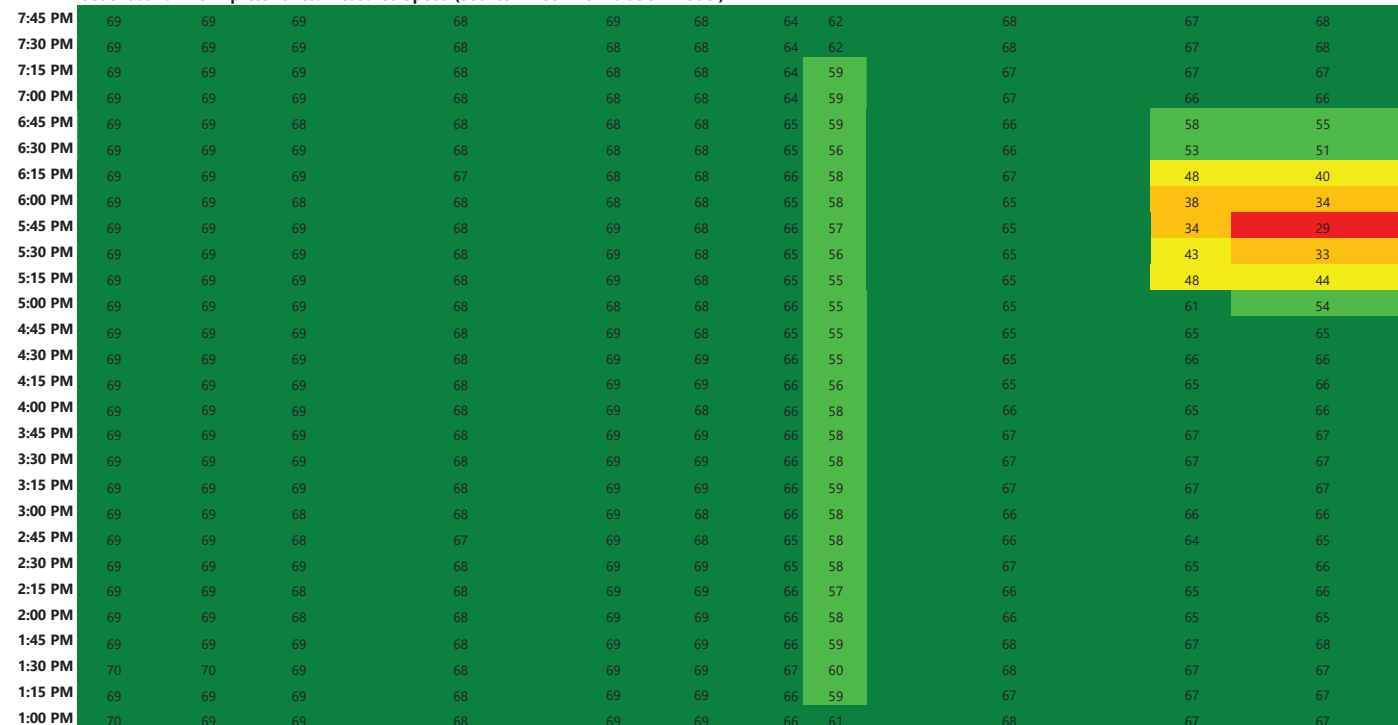
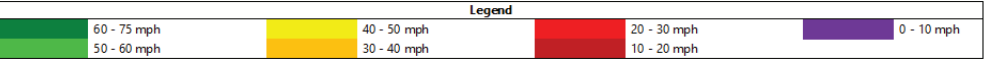


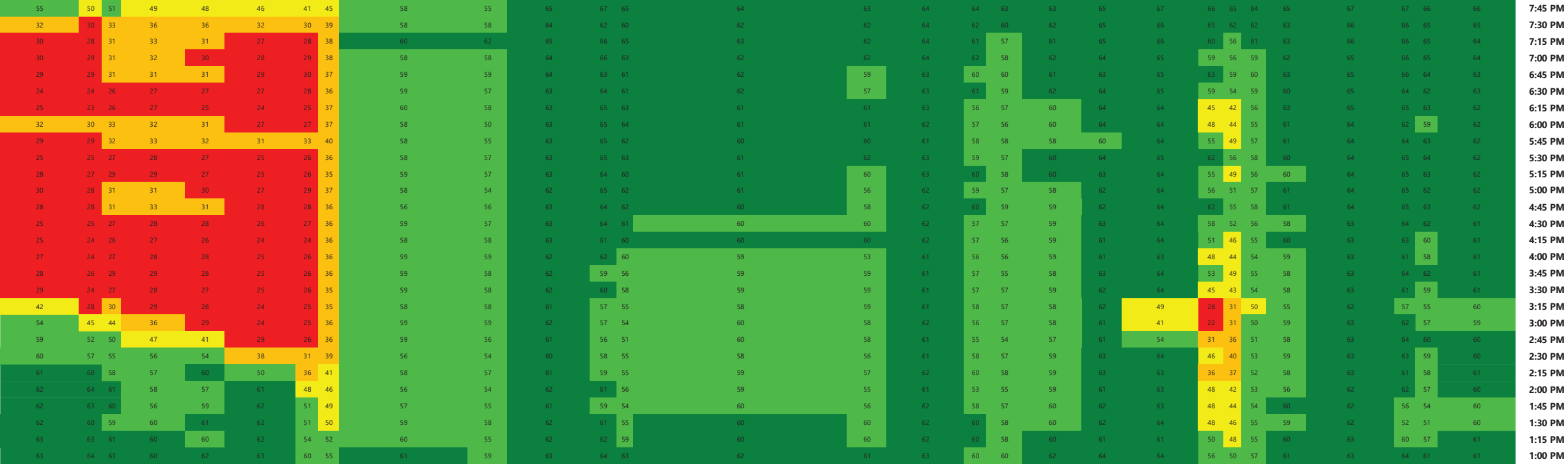
Exhibit R1 - Southbound I-15 Weekday Speed Contour Plot (Design Year No-Build with Build Forecasts) - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build with Build Forecasts
PM Peak Hour

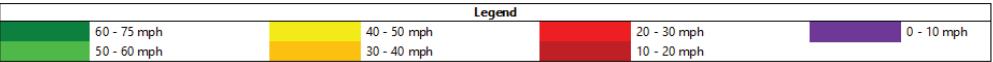
Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



Indian Truck Trail On		Horseheif Off		Horseheif On		Lake St Off		Lake St On		Nichols Rd Off		Nichols Rd On		Central Ave Off		Central Ave On		Main St Off		Main St On
0.6	1	0.5	1.6	0.6	2.2	0.6	1	0.6	0.7	0.7										
12.6	13.6	14.1	15.7	16.3	18.5	19.1	20.1	20.7	21.4	22.1										

Exhibit R2 - Northbound I-15 Weekday Speed Contour Plot (Design Year No-Build with Build Forecasts) - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Design Year No Build with Build Forecasts
PM Peak Hour

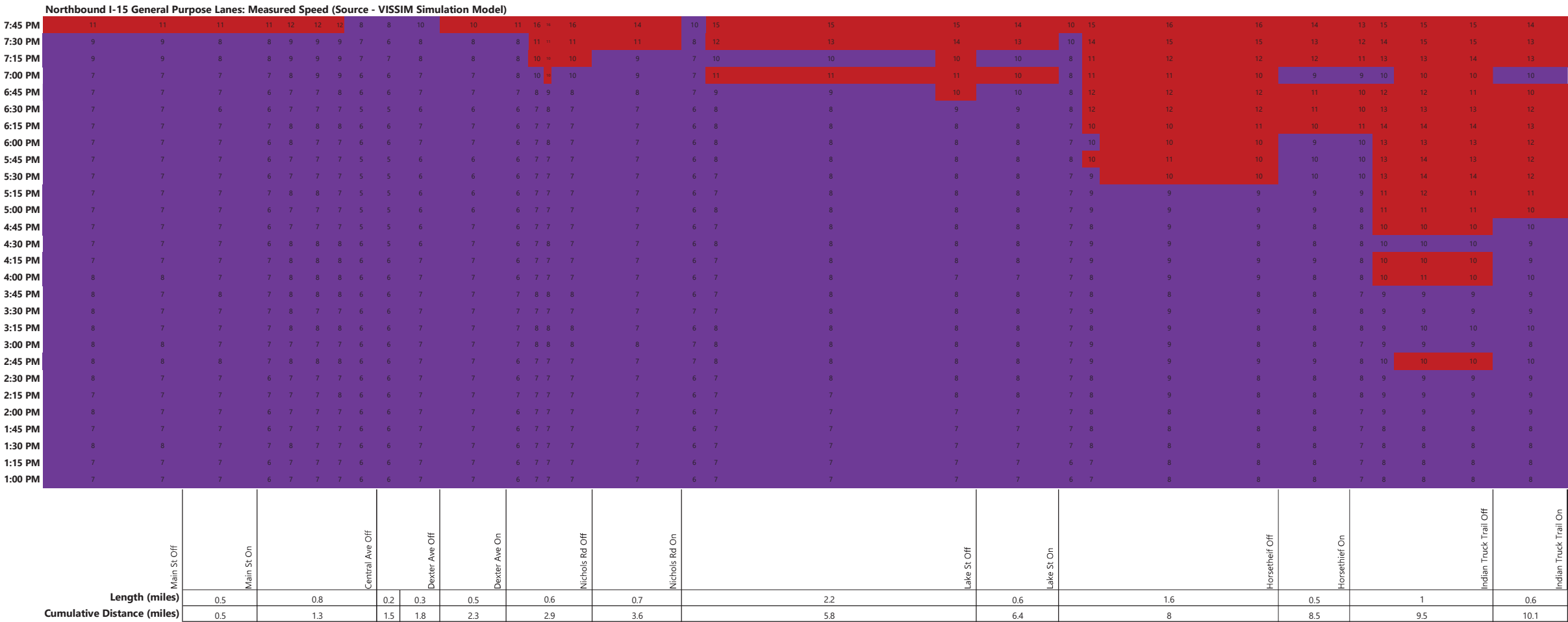
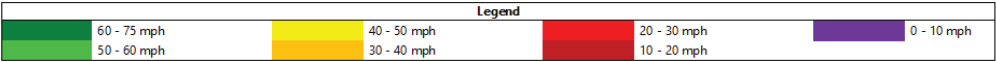


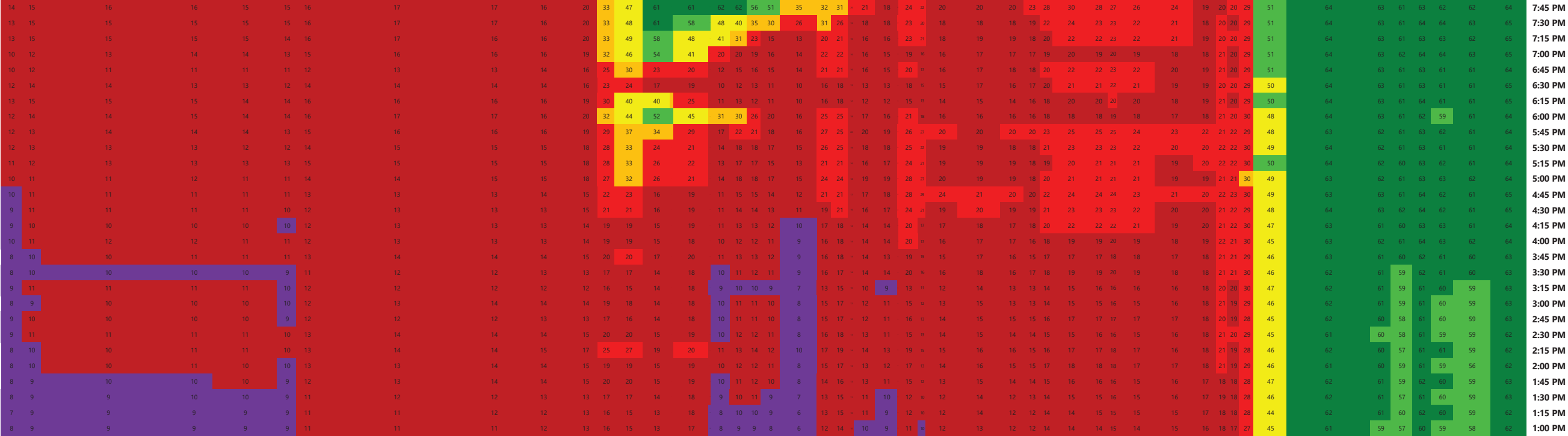
Exhibit R2 - Northbound I-15 Weekday Speed Contour Plot (Design Year No-Build with Build Forecasts) - PM)

VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



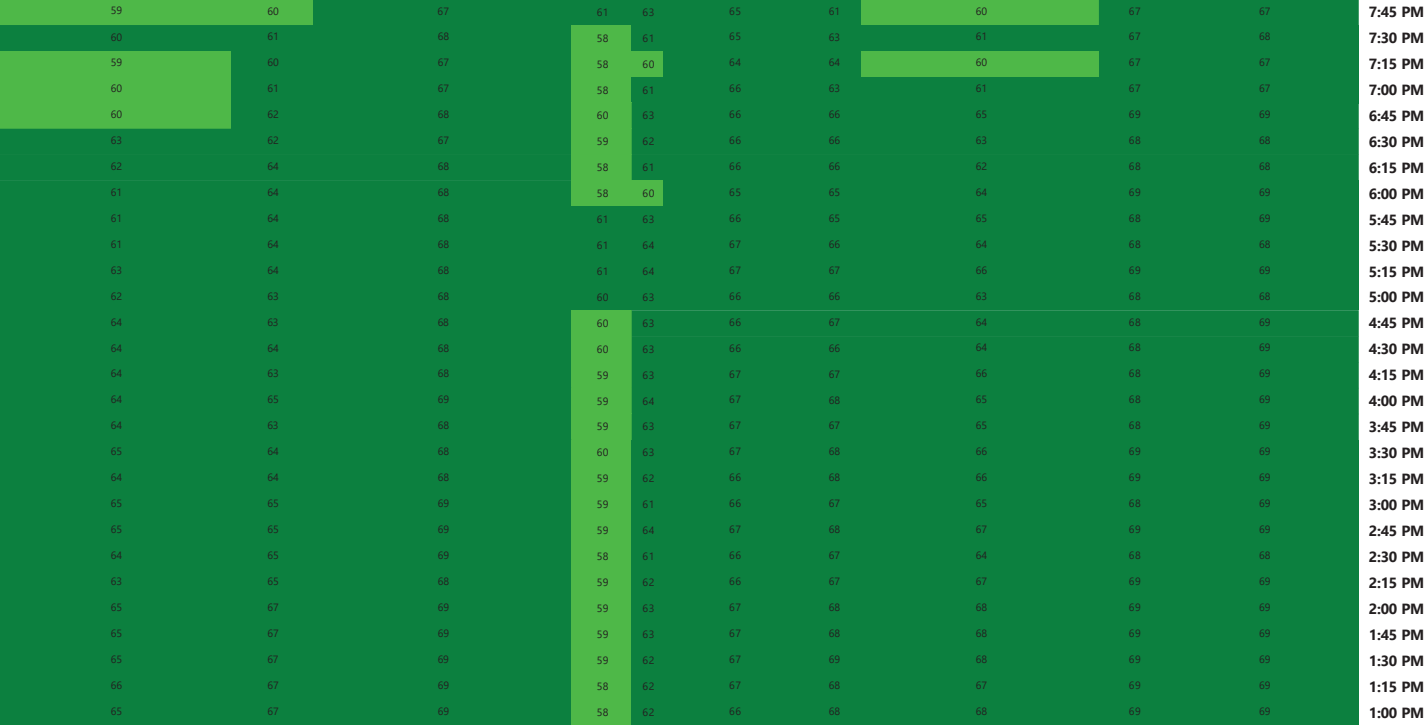
I-15 Express Lanes Southern Extension
Design Year No Build with Build Forecasts
PM Peak Hour

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



		Temescal Canyon Rd Off		Temescal Canyon Rd On		Weirick Rd/ Dos Lagos Dr Off		Weirick Rd/ Dos Lagos Dr On		Cajalco Rd Off		Express Lane Ingress		EB Cajalco Rd On		WB Cajalco Rd On		El Cerrito Rd Off		Express Lane Ingress		El Cerrito Rd On		Ontario Ave Off		Ontario Ave On			Express Lane Access (Ingress/Egress)		Magnolia Ave Off		EB Magnolia Ave On		WB Magnolia Ave On			WB and EB SR-91 Off			WB SR-91 On		EB SR-91 On			Hidden Valley Pkwy Off		Express Lane Ingress
	2.3		0.5		1.9		0.5		0.5		0.5		0.3		0.4		0.4		0.4		0.3		0.6		0.6		1.1			0.3		0.2		0.5			0.7		0.3			0.6						
	12.4		12.9		14.8		15.3		15.8		16.3		16.6		17		17.4		17.7		18.3					19.4			19.7		19.9		20.4			21.1		21.4			22							

Northbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



Travel Time

Travel time for the peak period is presented for the AM peak period (5:00 AM to 12:00 PM) and PM peak period (1:00 to 8:00 PM). Design Year (2050) peak period freeway mainline segment travel times are presented in **Exhibit S1 -S4**.

Exhibit S1: Design Year (2050) AM Peak Period Travel Times – SB I-15

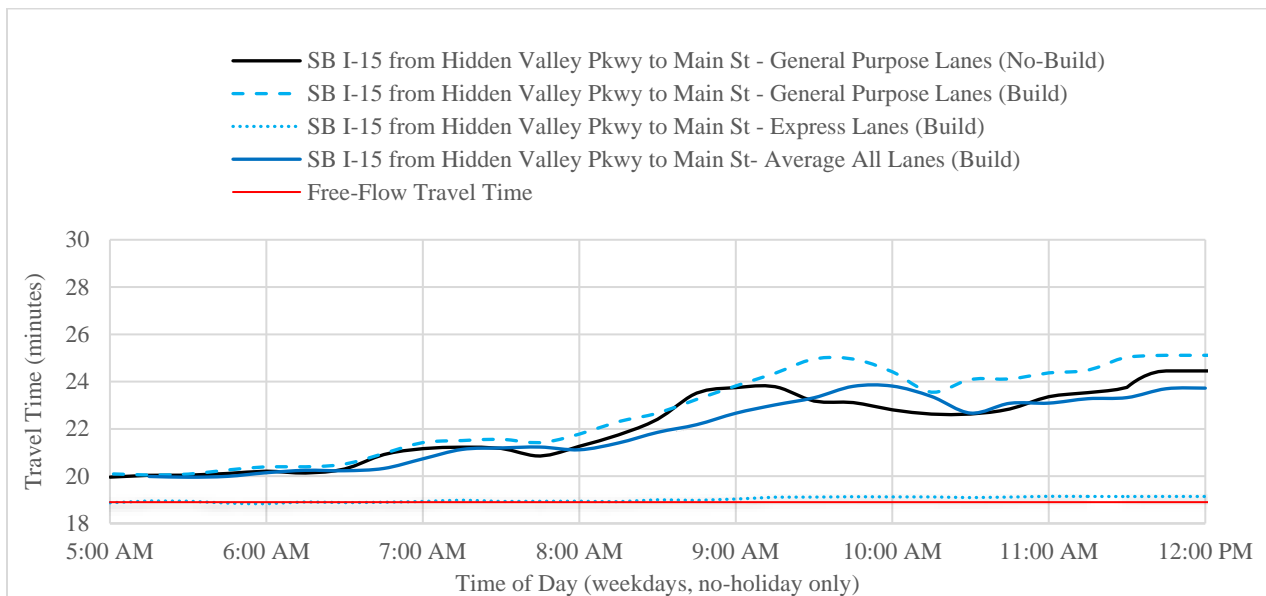


Exhibit S2: Design Year (2050) AM Peak Period Travel Times – NB I-15

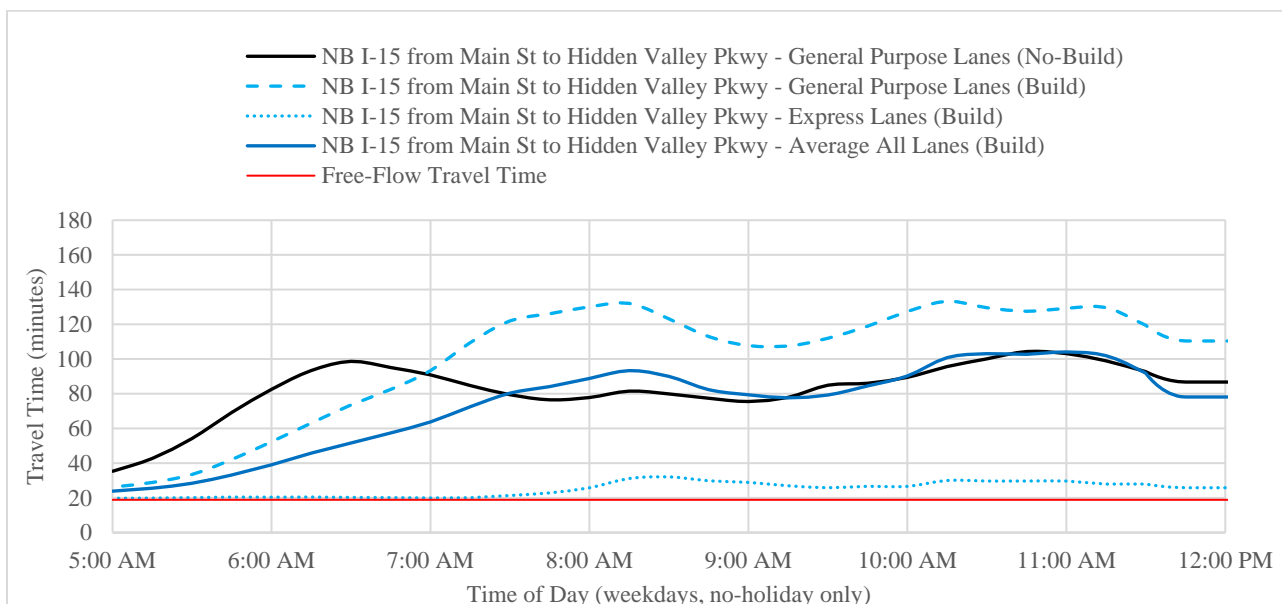


Exhibit S3: Design Year (2050) PM Peak Period Travel Times – SB I-15

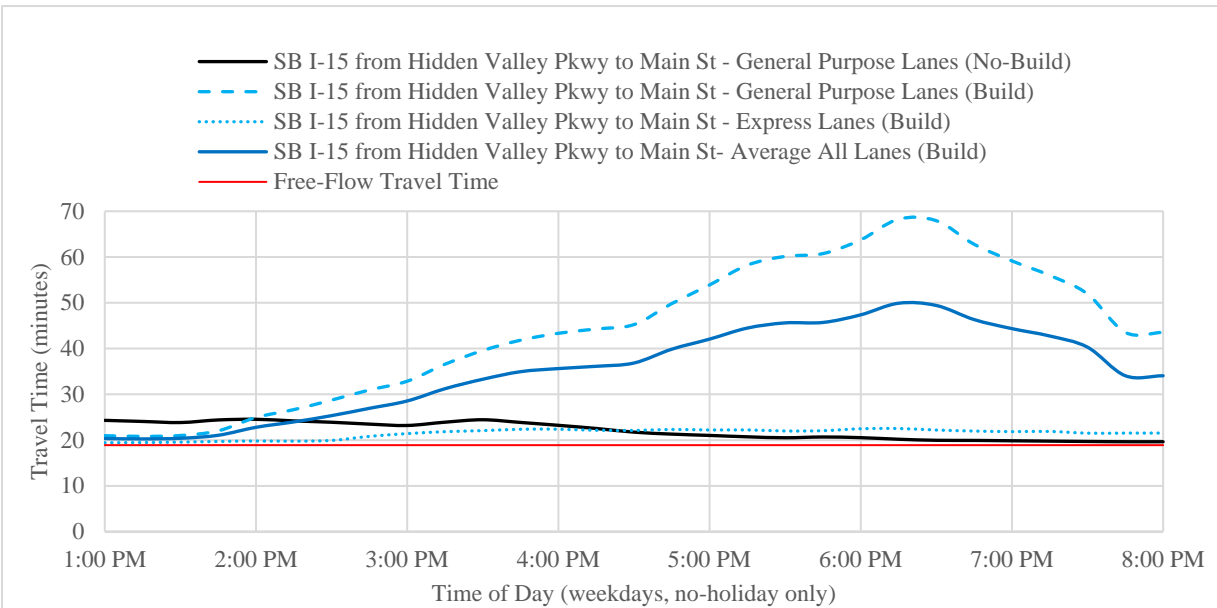
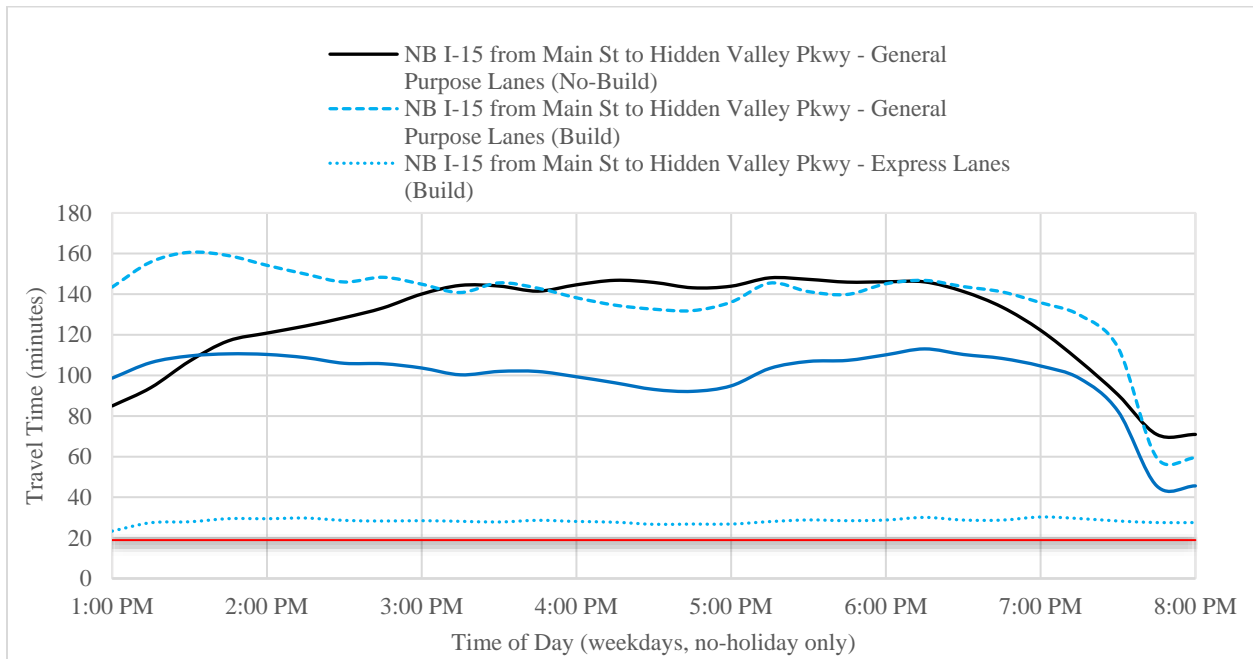


Exhibit S4: Design Year (2050) PM Peak Period Travel Times – NB I-15



SB I-15

Travel time on SB I-15 is presented on **Exhibit Q1** for the AM peak period and **Exhibit Q3** for the PM peak period.

Under the No-Build Alternative, travel times on SB I-15 General Purpose Lanes range between 19 to 25 minutes. Under the Build Alternative travel times peak on SB I-15 General Purpose Lanes during the PM from 4:00 to 8:00 PM; peak travel time (68 minutes) would occur around 6:15 PM. The increase in travel time is largely attributable to increased traffic demand along the corridor associated with travel shifts from parallel facilities back to I-15.

In Design Year (2050) No-Build, the travel times have improved when comparing to the Opening Year (2030) No-Build scenario. With the construction of CETAP West in Design Year (2050), approximately 7,500 vehicles traveling SB on I-15 during the seven-hour peak period prefer to exit at Cajalco Road Off-Ramp to CETAP West, rather than continuing south on I-15. As a result of this preference to take CETAP West over I-15, Opening Year (2030) forecasts are lower on the mainline freeway south of the Cajalco Road Interchange.

The Build Alternative would attract drivers who, under the No-Build Alternative, would use local streets to bypass the freeway in addition to increased demand along the I-15 corridor. As a result, overall congestion would worsen on SB I-15 during the PM peak hour. The Build Alternative incurs an additional demand of 17,600 vehicles on SB I-15 during the seven-hour PM peak period.

Under the Build Alternative, the SB I-15 Express Lanes would operate at free-flow conditions during all hours of the day.

NB I-15

Travel time on NB I-15 is presented on **Exhibit Q2** for the AM peak period and **Exhibit Q4** for the PM peak period. In the Design Year (2050), the NB I-15 corridor will be congested throughout the day.

Under the No-Build Alternative, travel times on NB I-15 General Purpose Lanes begin to exceed 40 minutes after 5:15 AM due to the bottleneck at the Weirick Road/Dos Lagos Road On-Ramp merge segment. Under the Build Alternative, travel times on NB I-15 General Purpose Lanes exceed 40 minutes after 5:30 AM due to the bottleneck at the WB Magnolia On-Ramp merge segment.

Between 7:00 AM to 12:00 PM, the travel time on NB I-15 General Purpose Lanes in the Build Alternative exceeds the travel time in the No-Build Alternative. This is because the ELPSE provides additional throughput capacity at the Weirick Road/Dos Lagos Road On-Ramp merge; and as a result, the bottleneck is shifted downstream. The VISSIM model is unable to capture travel time outside of the network.

During the PM peak period, the travel time is primarily influenced by the NB I-15 bottleneck at the WB Magnolia Avenue On-Ramp merge segment. The NB I-15 bottleneck at the WB Magnolia On-Ramp merge segment is active for both the No-Build and Build Alternatives between 1:00 to 8:00 PM.

Since the corridor is over-saturated, many of the on-ramps are unable to serve the demand going to the freeway. Travel times are generally higher for the Build Alternative because more vehicles making longer trips on I-15 are served overall. This means that more vehicles can enter the I-15 corridor at the on-ramps under the Build Alternative, causing additional merging and weaving. Total volume served is presented under the next subsection - system-wide performance statics.

Under the Build Alternative, the NB I-15 Express Lanes would operate at free-flow conditions during all hours of the day.

System-wide Performance

The system-wide performance measures used for the Design Year (2050) analysis include the number of vehicles served by the study network, average delay per vehicle, and vehicle-hours-delay (VHD). System-wide performance metrics are presented for the AM peak period (5:00 AM to 12:00 PM) and PM peak period (1:00 to 8:00 PM). Design Year (2050) peak period system-wide performance metrics for the No-Build and Build Alternatives are presented in **Table 20**.

Table 20 – Design Year (2050) Peak Period Network Statistics

Performance Measure	No-Build Alternative		Build Alternative	
	AM	PM	AM	PM
Volume Served (vehicles)	229,846	244,357	223,834	248,183
Total Distance Traveled (miles)	1,673,876	1,792,393	1,922,607	2,273,999
Total Travel Time (hours)	61,902	83,097	71,234	105,106
Average Delay Per Vehicle (seconds)	549	800	646	980
Total Delay (hours)	36,686	56,372	42,328	71,393
Vehicle Hours Delay ¹	3.6	6.9	3.4	6.5

Note: 1. Vehicle Hours Delay was extracted from the travel demand model, RIVTAM.
Source: Fehr & Peers, 2020

The system-wide performance metrics are unable to capture queuing outside of the network, therefore the relationship between some of the statistics (i.e. average delay per vehicle and total delay) for the No-Build and Build Alternatives may be skewed. When comparing the volume served and total distance traveled, it can be concluded that Build Alternative serves trips with longer lengths than the No-Build Alternative.

Similar to Opening Year, the Build-Alternative in Design Year has higher volume demand on the mainline freeway than No-Build Alternative. In the Build Alternative, the volumes on some ramps are lower as vehicles are preferring to stay on the mainline as opposed to diverting to parallel facilities to the freeway. Since the VISSIM model ends at the off- and on-ramps of the freeway, the model is double counting some vehicles that exit the freeway and re-enter at a different location through the use of local routes. Additionally, because the VISSIM model ends at the freeway ramps, when vehicles exit the system to take a local route, their travel time and distance traveled is no longer being recorded by the VISSIM model. For these reasons, some of the network wide statistics from the microsimulation model are misleadingly showing decreased volume served or increased total distance traveled under the Build Alternative.

To correct for the limitations noted above, vehicle hours of delay (VHD) was extracted from the travel demand model (RIVTAM) in order to illustrate some project benefits that are not reflected in the VISSIM model results. VHD was extracted from a five-mile buffer around the study area in order to capture the volume demand shifts and travel time benefits for the system. Free flow travel time for all links within the five-mile buffer are compared to the congested travel time for all links in the same area for the No-Build and Build Alternative. The delta between free flow travel time and congested travel time is represented by VHD. The Build Alternative has a lower VHD within a system that incorporates local routes and likely is a better summary of project benefits as it corrects for the double counting of volumes and delay on the freeway only.

Roadway Segment Analysis

Table 21 summarizes ADT volumes and volume-to-capacity results for Design Year (2050) No-Build Alternative and Design Year (2050) Build Alternative. The traffic volumes were forecasted based on the difference methodology, as outlined in Chapter 2.

Traffic in the subarea is anticipated to grow in Design Year No-Build and Build Alternatives. The SED in the future year RIVTAM model was updated based on SCAG's 2040 projections. Population, households, and employment in the subarea increase, therefore increasing the number of trips loaded on the roadway links of the model. Because the Build Alternative adds capacity to the freeway and alleviates traffic on the mainline, trips that had previously used parallel streets to I-15 congestion in the No-Build Alternative instead will route back to I-15 and many parallel routes experience a decrease in traffic volumes associated with the ELPSE.

No-Build Alternative

In Design Year (2050) No-Build, 19 out of 62 roadway segments are operating at LOS E, F, or deficiently. Seven of the 19 segments also operated deficiently in Opening Year (2030) conditions and remain over capacity when the roadway volumes were forecasted to 2050 conditions.

Build Alternative

In the Design Year (2050) Build Alternative, 16 out of 62 roadway segments are operating at LOS E, F, or deficiently. All 16 roadway segments that are deficient in the Build Alternative are also deficient in the No-Build Alternative.

The following roadway segments were failing in No-Build, and V/C increased with the construction of the ELPSE. In these cases, these roadway segments were near I-15 ramps, where more vehicles are choosing to access the freeway:

- Hidden Valley Road east of I-15
- El Sobrante Road between Sixth Street and Magnolia Avenue (LOS E)
- Magnolia Avenue west of I-15 (LOS F)
- Magnolia Avenue east of I-15 (LOS F)
- Ontario Avenue west of I-15 (LOS F)
- El Cerrito Road west of I-15 (LOS F)
- Weirick Road between I-15 to Knabe Road (LOS F)
- Main Street west of I-15 (LOS F)

The following roadway segments that are operating at LOS E or worse, have a V/C ratio that remains the same or improve with the construction of the ELPSE.:

- Hidden Valley Parkway west of I-15 (LOS F)
- Sixth Street west of Radio Road (LOS F)
- Ontario Avenue east of I-15 (LOS E)
- Bedford Canyon Road south of El Cerrito Road (LOS F)
- Bedford Canyon Road north of El Cerrito Road (LOS E)
- Temescal Canyon Road between El Cerrito Avenue to Cajalco Road (LOS F)
- Temescal Canyon Road between Cajalco Road to Dos Lagos Drive (LOS F)
- Dos Lagos Drive east of I-15 (LOS F)

The following roadway segment was operating at LOS E under No-Build conditions but improves to acceptable LOS with the construction of the ELPSE. All segments are along Temescal Canyon Road where the amount of cut through traffic decreases such that the V/C ratio decreases by as much as 0.35:

- Temescal Canyon Road between Dos Lagos Drive to Dawson Canyon Road (LOS F to LOS B)
- Temescal Canyon Road between Horsethief Road to I-15 Frontage Road (LOS E to LOS B)
- Temescal Canyon Road between Concordia Ranch Road to Lake Street (LOS E to LOS B)

All other study roadway segments are operating at acceptable conditions in Design Year (2050).

Table 21 – Design Year (2050) Average Daily Traffic & Roadway Segment LOS

	Roadway Segment	Classification	Capacity	Design Year (2050) No-Build			Design Year (2050) Build			Delta
				Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	
1	Hidden Valley Parkway west of I-15	Arterial	35,900	51,070	1.42	F	50,210	1.40	F	-0.024
2	Hidden Valley Parkway east of I-15	Arterial	35,900	45,720	1.27	F	45,770	1.27	F	0.001
3	Parkridge Avenue west of Cresta Road	Secondary	34,800	25,070	0.72	C	24,300	0.70	B	-0.022
4	Parkridge Avenue east of Cresta Road	Secondary	34,800	18,250	0.52	A	17,730	0.51	A	-0.015
5	Cresta Road south of Parkridge Avenue	Collector	13,000	9,730	0.75	C	10,190	0.78	C	0.035
6	Sixth Street west of El Sobrante Road	Major Arterial	37,900	25,940	0.68	B	25,940	0.68	B	0.000
7	Sixth Street west of Radio Road	Major Arterial	37,900	39,830	1.05	F	39,630	1.05	F	-0.005
8	Radio Road north of Sixth	Collector	13,000	11,310	0.87	D	11,270	0.87	D	-0.003
9	El Sobrante Road between Sixth and Magnolia	Collector	13,000	12,600	0.97	E	12,850	0.99	E	0.019
10	Magnolia Avenue west of I-15	Major Arterial	54,300	60,880	1.12	F	61,110	1.13	F	0.004
11	Magnolia Avenue east of I-15	Major Arterial	54,300	63,220	1.16	F	64,210	1.18	F	0.018
12	Ontario Avenue west of I-15	Major Arterial	54,300	55,820	1.03	F	63,570	1.17	F	0.143
13	Ontario Avenue east of I-15	Major Arterial	37,900	42,310	1.12	F	34,350	0.91	E	-0.210
14	Ontario Avenue north of El Cerrito Road	Major Arterial	54,300	42,610	0.78	C	27,630	0.51	A	-0.276
15	El Cerrito Road west of I-15	Secondary	34,800	39,270	1.13	F	40,550	1.17	F	0.037
16	El Cerrito Road between I-15 and Temescal Canyon Road	Secondary	34,800	11,750	0.34	A	10,880	0.31	A	-0.025
17	Bedford Canyon Road south of El Cerrito Road	Collector	13,000	19,790	1.52	F	14,460	1.11	F	-0.410
18	Bedford Canyon Road north of El Cerrito Road	Collector	13,000	16,920	1.30	F	11,780	0.91	E	-0.395
19	Evelyn Street	Collector	13,000	510	0.04	A	520	0.04	A	0.001

Table 21 – Design Year (2050) Average Daily Traffic & Roadway Segment LOS

	Roadway Segment	Classification	Capacity	Design Year (2050) No-Build			Design Year (2050) Build			Delta
				Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	
20	Frances Street	Collector	13,000	210	0.02	A	240	0.02	A	0.002
21	Katy Street	Collector	13,000	620	0.05	A	680	0.05	A	0.005
22	Liberty Avenue	Collector	13,000	7,560	0.58	A	5,610	0.43	A	-0.150
23	Temescal Canyon Road between El Cerrito Avenue to Cajalco Road	Major Arterial	34,100	48,290	1.42	F	36,930	1.08	F	-0.333
24	Temescal Canyon Road between Cajalco Road to Dos Lagos Drive	Major Arterial	37,900	52,760	1.39	F	41,010	1.08	F	-0.310
25	Temescal Canyon Road between Dos Lagos Drive to Dawson Canyon Road	Major Arterial	34,100	34,970	1.03	F	21,530	0.63	B	-0.394
26	Temescal Canyon Road between Dawson Canyon Road to I-15	Major Arterial	34,100	14,220	0.42	A	14,190	0.42	A	-0.001
27	Temescal Canyon Road between I-15 to Lawson Road	Major Arterial	34,100	15,890	0.47	A	14,400	0.42	A	-0.044
28	Temescal Canyon Road between Lawson Road to Trilogy Parkway	Arterial	18,000	14,380	0.80	C	12,330	0.69	B	-0.114
29	Temescal Canyon Road between Trilogy Parkway to Campbell Ranch Road	Arterial	18,000	9,070	0.50	A	6,810	0.38	A	-0.126
30	Temescal Canyon Road between Campbell Ranch Road to Indian Truck Trail Road	Major Arterial	34,100	8,900	0.26	A	7,640	0.22	A	-0.037
31	Temescal Canyon Road between Indian Truck Trail Road to Horsethief Road	Major Arterial	34,100	18,350	0.54	A	9,850	0.29	A	-0.249

Table 21 – Design Year (2050) Average Daily Traffic & Roadway Segment LOS

Roadway Segment	Classification	Capacity	Design Year (2050) No-Build			Design Year (2050) Build			Delta
			Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	
32 Temescal Canyon Road between Horsethief Road to I-15 Frontage Road	Major Arterial	34,100	30,980	0.91	E	22,930	0.67	B	-0.236
33 Temescal Canyon Road between Concordia Ranch Road to Lake Street	Major Arterial	34,100	30,740	0.90	E	22,680	0.67	B	-0.236
34 Cajalco Road West of I-15	Major Arterial	54,300	11,870	0.22	A	11,870	0.22	A	0.000
35 Cajalco Road Between I-15 and Grand Oaks	Major Arterial	54,300	26,990	0.50	A	23,580	0.43	A	-0.063
36 Cajalco Road Between Grand Oaks to Temescal Canyon Road	Major Arterial	54,300	18,510	0.34	A	17,560	0.32	A	-0.017
37 Retreat Parkway West of Knabe Road	Secondary	25,900	5,550	0.21	A	5,450	0.21	A	-0.004
38 Weirick Road Between I-15 to Knabe Road	Secondary	25,900	33,380	1.29	F	34,620	1.34	F	0.048
39 Weirick Road North of Knabe Road	Secondary	25,900	990	0.04	A	970	0.04	A	-0.001
40 Dos Lagos Drive East of I-15	Secondary	25,900	35,600	1.37	F	34,640	1.34	F	-0.037
41 Knabe Road Between Weirick Road to White Sage Street	Secondary	25,900	22,750	0.88	D	22,570	0.87	D	-0.007
42 Knabe Road Between White Sage Street to Hunt Road	Secondary	25,900	13,610	0.53	A	13,570	0.52	A	-0.002
43 Campbell Ranch Road Between Temescal Canyon Road to Mayhew Canyon Road	Secondary	25,900	4,310	0.17	A	3,040	0.12	A	-0.049

Table 21 – Design Year (2050) Average Daily Traffic & Roadway Segment LOS

Roadway Segment	Classification	Capacity	Design Year (2050) No-Build			Design Year (2050) Build			Delta
			Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	
44 Campbell Ranch Road Between Mayhew Canyon Road to Indian Truck Trail	Secondary	25,900	19,090	0.74	C	15,140	0.58	A	-0.153
45 De Palma Road between Indian Truck Trail and Horsethief Canyon Road	Secondary	25,900	11,990	0.46	A	9,590	0.37	A	-0.093
46 Horsethief Canyon Road west of De Palma Road	Major Arterial	34,100	16,480	0.48	A	16,710	0.49	A	0.013
47 Horsethief Canyon Road between De Palma Road to Temescal Canyon Road	Major Arterial	34,100	16,490	0.48	A	13,280	0.39	A	-0.094
48 Lake Street west of Temescal Canyon Road	Urban Arterial	53,900	22,630	0.42	A	23,130	0.43	A	0.009
49 Lake Street east of Temescal Canyon Road	Urban Arterial	53,900	40,250	0.75	C	38,570	0.72	C	-0.031
50 Nichols Road west of Collier Road	Urban Arterial	53,900	18,090	0.34	A	14,710	0.27	A	-0.063
51 Nichols Road between Collier Road to I-15	Urban Arterial	53,900	9,400	0.17	A	9,000	0.17	A	-0.007
52 Nichols Road east of I-15	Urban Arterial	53,900	11,720	0.22	A	12,390	0.23	A	0.012
53 Collier Avenue between Nichols Road and Riverside Drive	Major Arterial	34,100	12,580	0.37	A	10,010	0.29	A	-0.075
54 Collier Avenue between Riverside Drive to Central Avenue	Urban Arterial	53,900	36,120	0.67	B	34,700	0.64	B	-0.026
55 Collier Avenue south of Central Avenue	Major Arterial	34,100	23,590	0.69	B	23,290	0.68	B	-0.009
56 Dexter Avenue north of Central Avenue	Secondary	25,900	20,720	0.80	C	21,030	0.81	D	0.012

Table 21 – Design Year (2050) Average Daily Traffic & Roadway Segment LOS

Roadway Segment	Classification	Capacity	Design Year (2050) No-Build			Design Year (2050) Build			Delta
			Volume	V/C Ratio	LOS	Volume	V/C Ratio	LOS	
57 Dexter Avenue south of Central Avenue	Collector	13,000	11,270	0.87	D	11,370	0.87	D	0.008
58 Central Avenue between Collier Avenue to I-15	Major Arterial	68,200	49,540	0.73	C	52,150	0.76	C	0.038
59 Central Avenue between I-15 to Dexter Avenue	Urban Arterial	71,800	66,590	0.93	E ⁵	66,790	0.93	E ⁵	0.003
60 Central Avenue between Dexter Avenue to Cambern Avenue	Urban Arterial	71,800	56,260	0.78	C	55,500	0.77	C	-0.011
61 Central Avenue east of Cambern Avenue	Urban Arterial	71,800	49,520	0.69	B	49,590	0.69	B	0.001
62 Main Street west of I-15	Secondary	12,950	16,420	1.27	F⁴	17,120	1.32	F⁴	0.054

Notes:

1. Capacity for each roadway segment was determined by the number of lanes and roadway capacities as defined by the City of Corona, City of Lake Elsinore, and County of Riverside General Plans and Traffic Impact Study Guidelines
2. V/C ratio = ADT/ Roadway Capacity
3. **Bold** font indicates deficient operations
4. The City of Lake Elsinore General Plan considers this V/C ratio as potentially exceeds capacity (PEC) if adjacent intersections are operating acceptably during the peak hour. Since intersection analysis is not part of this study, the roadway will be considered deficient.
5. The City of Lake Elsinore General Plan considers this V/C ratio as approaching capacity (AC) and is considered acceptable by City standards.
6. The City of Corona General Plan considers LOS E acceptable for this roadway segment.

Source: Fehr & Peers, 2020

Vehicle Miles Traveled

In April 2020, Caltrans released draft guidance documents for evaluating projects on State Highway Systems (SHS), the Transportation Analysis Framework (TAF) and the Transportation Analysis under CEQA (TAC). Final guidance documents will be released in September of 2020.

On March 26, 2020 the *Interstate 15 Express Lanes Southern Extension Project (EA 0J0820) White Paper: Senate Bill (SB) 743 – Approach to Vehicle Miles Traveled Analysis in the Traffic Operation Analysis Report*, was submitted for Caltrans review. The document concluded that the I-15 ELPSE is a toll facility that should be screened from assessment within the TOAR based on the Caltrans and Office of Planning and Research (OPR) guidance.

Additionally, RCTC received a VMT Analysis Screening Form completed by Caltrans Staff which has been attached to this document as **Appendix D**. Finally, as agreed to by the PDT, any additional VMT documentation will be provided under separate cover.

7. Conclusions

This chapter summarizes the analysis results of the ELPSE alternatives under both Opening Year (2030) and Design Year (2050) conditions. The comparison was performed from the traffic operations point of view to identify traffic operational benefits anticipated from the Build Alternative.

Existing Conditions

Under Existing (2019) Conditions, the AM peak direction is NB, as it experiences significant congestion (LOS F) due to heavy commute traffic. The NB I-15 bottleneck at the Cajalco Road On-Ramp merge segment is active between 5:15 to 11:45 AM and extends to the Indian Truck Trail Off-Ramp during the peak hour.

The PM peak direction is SB, which also experiences significant congestion (LOS F) due to heavy commute traffic. The SB I-15 bottleneck at the Cajalco Road On-Ramp merge segment is active between 3:15 to 6:15 PM and extends to the Magnolia Avenue On-Ramp during the peak hour. The SB I-15 bottleneck at the El Cerrito Road Off-Ramp lane drop segment is active during the shoulder hours between 2:15 to 3:15 PM and from 6:15 to 7:45 PM.

Alternatives

There were two alternatives considered for I-15 ELPSE: No-Build Alternative and Build Alternative.

No-Build

The No-Build Alternative assumes no improvements to I-15 beyond those listed in the 2016 SCAG RTP/SCS.

Build

The proposed ELPSE would extend the I-15 Express Lanes currently under construction, an additional 14.5 miles to the south. The proposed new segment would extend from SR-74 (Central Avenue), through the unincorporated Riverside County community of Temescal Valley, to El Cerrito Road in Corona. ELPSE also proposes to add SB auxiliary lanes from Nichols Road to SR-74 (Central Avenue) and from SR-74 (Central Avenue) to Main Street. ELPSE also proposes to add a dual-lane exit (two total lanes) at the southbound Weirick/Dos Lagos Drive Off-Ramp and would perpetuate an auxiliary lane between Cajalco Road to Weirick/Dos Lagos Drive. The ELPSE proposes to increase capacity by adding two tolled express lanes in both directions within the I-15 median to accommodate increasing traffic volumes in western Riverside County and provide a reliable trip-time travel open. Associated improvements, including advance signage and transition striping, would extend two miles from each end of the express lane ELPSE limits. The proposed lane improvements and supporting infrastructure would be constructed within the existing Caltrans right-of-way, with the express lanes located within the existing I-15 median.

Performance

The proposed Build Alternative would improve traffic operations and travel time reliability for carpoolers and transit by expanding the region's express lanes network. In addition, the ELPSE would provide additional roadway capacity for anticipated developments in the region.

Opening Year (2030)

Traffic analysis results were compared between the No-Build and Build Alternatives under Opening Year (2030) Conditions, as presented in **Table 22**.

In the Opening Year (2030), the Build Alternative would improve traffic operation service levels at 8% of the freeway mainline and ramp locations during the AM and PM peak hour compared to the No-Build Alternative. The Build Alternative would serve more vehicles, particularly those making longer trips, and reduce overall vehicle delay within the study limits.

Table 22 – Opening Year (2030) Traffic Performance Metrics

Measure of Effectiveness		No-Build Alternative		Build Alternative	
Number of Freeway Mainline Locations ¹	Peak Hour LOS A, B, C, or D	149	73%	175	81%
	Peak Hour LOS E or F	55	27%	41	19%
Average Peak Period Travel Time (minutes) [AM / PM]	SB I-15 GP Lanes	20 / 34		21 / 29	
	SB I-15 Express Lanes	-		19 / 21	
	NB I-15 GP Lanes	23 / 51		23 / 57	
	NB I-15 Express Lanes	-		21 / 21	
Peak Period Volume Served Change (vehicles)		-		+ 2,089	
Peak Period Total Distance Traveled (miles)		-		+ 262,431	
Peak Period Total Vehicle Hours Delay Change (hours)		-		- 1,825	

Notes:

1. Mainline locations do not include Express Lane analysis locations.
2. Travel time was measured on SB I-15 from Hidden Valley Parkway overcrossing to Main Street undercrossing. Travel time was measured on NB I-15 from Main Street undercrossing to Hidden Valley Parkway overcrossing.

Source: Fehr & Peers, 2020

The No-Build Alternative would have congestion on SB I-15 due to a bottleneck at the Cajalco Road Interchange during the PM peak hour and on NB I-15 due to a bottleneck at the WB Magnolia Avenue On-Ramp during the AM peak hour.

The Build Alternative would significantly improve traffic operations and would remove the 4.8 mile long bottleneck at Cajalco Road. during the PM peak hour; the Build Alternative would also reduce the queue length on NB I-15 upstream of the WB Magnolia Avenue On-Ramp bottleneck by approximately 0.5 miles during the AM peak hour. When comparing the volume served and total distance traveled, it can be concluded that Build Alternative serves trips with longer lengths than the No-Build Alternative.

Design Year (2050)

Traffic analysis results were compared between the No-Build and Build Alternatives under Design Year (2050) Conditions, as presented in **Table 23**.

In the Design Year (2050), the Build Alternative would worsen traffic operation service levels at 14% of the freeway mainline and ramp locations during the AM and PM peak hour compared to the No-Build Alternative. However, the number of freeway mainline segments operating unacceptably increases primarily because the ELPSE shifts the bottlenecks downstream by providing additional throughput capacity. The Build Alternative would serve more vehicles on the mainline, particularly those making longer trips, and reduce overall vehicle delay in the region (delay results within the study limits are skewed because queues extend past the model limits).

Table 23 – Design Year (2050) Traffic Performance Metrics

Measure of Effectiveness		No-Build Alternative		Build Alternative	
Number of Freeway Mainline Locations ¹	Peak Hour LOS A, B, C, or D	112	51%	85	37%
	Peak Hour LOS E or F	108	49%	143	63%
Average Peak Period Travel Time ² (minutes) [AM / PM]	SB I-15 GP Lanes	22 / 22		23 / 44	
	SB I-15 Express Lanes	-		19 / 21	
	NB I-15 GP Lanes	82 / 130		101 / 141	
	NB I-15 Express Lanes	-		26 / 31	
Peak Period Volume Served Change (vehicles)		-		-2,186 ³	
Peak Period Total Distance Traveled (miles)		-		+ 730,337	
Peak Period Vehicle Hours Delay Change (hours)		-		+ 20,663 ⁴	

Notes:

1. Mainline locations do not include Express Lane analysis locations.
2. Travel time was measured on SB I-15 from Hidden Valley Parkway overcrossing to Main Street undercrossing. Travel time was measured on NB I-15 from Main Street undercrossing to Hidden Valley Parkway overcrossing.
3. Volume served is slightly skewed since vehicles in No-Build alternative may be double counted through exiting the I-15, taking a local route, and then entering I-15 at a downstream location.
4. Vehicle hours of delay do not include vehicles that are unable to enter the simulation model due to oversaturated conditions. As such, these increases with the Build Alternative are largely due to vehicles that enter the network and travel through the corridor instead of being stuck in queue along the corridor.

Source: Fehr & Peers, 2020

The No-Build Alternative would have congestion on SB I-15 due to a bottleneck at the Magnolia Avenue On-Ramp during the PM peak hour and it would have congestion on NB I-15 due to a bottleneck at the Weirick Road/Dos Lagos Road On-Ramp during the AM peak hour and at WB Magnolia Avenue On-Ramp during the PM peak hour.

The Build Alternative would improve traffic operations between Cajalco Road On-Ramp and Weirick Road Off-Ramp and remove the bottleneck at the Magnolia Avenue On-Ramp during the PM peak hour and remove the NB I-15 bottleneck at Weirick Road/Dos Lagos Road during the AM peak hour.

Design Year Build Alternative Failure Year Assessment

This section lists all freeway segments that operate at LOS E or worse in Design Year Build Alternative.

AM Peak Hour – SB I-15

The following segments are anticipated to operate at LOS E or worse due to a new bottleneck at Ontario Avenue Off-Ramp. This bottleneck exists in the No-Build and Build Alternative and improves slightly with the Project. This bottleneck is anticipated to form in the year 2044, causing the segments in queue to operate at LOS E or worse. Please note that both of these bottlenecks are outside of the project limits and are currently under study by Caltrans for future improvement identification.

- EB SR-91 Off-Ramp
- Magnolia Ave On-ramp to Ontario Ave Off-ramp
- Ontario Ave Off-ramp

AM Peak Hour – NB I-15

The following segments are anticipated to operate at LOS E or worse due to a new bottleneck at Dos Lagos/Weirick Road On-Ramp. This bottleneck also exists in the No-Build and Build Alternative. This bottleneck is anticipated to form in the year 2039, causing the segments in queue to operate at LOS E or worse.

- Cajalco Road Off-ramp
- Weirick Road/Dos Lagos Drive On-Ramp
- Weirick Road/Dos Lagos Drive On-Ramp
- Weirick Road/Dos Lagos Drive Off-Ramp to On-Ramp
- Weirick Road/Dos Lagos Drive Off-Ramp
- Temescal Canyon Road On-Ramp to Weirick Road/Dos Lagos Drive Off-Ramp
- Temescal Canyon Road On-Ramp
- Temescal Canyon Road Off-Ramp to On-Ramp
- Temescal Canyon Road Off-Ramp
- Indian Truck Trail On-Ramp to Temescal Canyon Road Off-Ramp
- Indian Truck Trail On-Ramp to Temescal Canyon Road Off-Ramp
- Indian Truck Trail On-Ramp to Temescal Canyon Road Off-Ramp
- Indian Truck Trail On-Ramp
- Indian Truck Trail Off-Ramp to On-Ramp
- Indian Truck Trail Off-Ramp
- Horsethief Road On-Ramp to Indian Truck Trail Off-Ramp
- Horsethief Road On-Ramp
- Horsethief Road Off-Ramp to On-Ramp
- Horsethief Road Off-Ramp
- Lake Street On-Ramp to Horsethief Road Off-Ramp
- Lake Street On-Ramp to Horsethief Road Off-Ramp
- Lake Street On-Ramp
- Lake Street Off-Ramp to On-Ramp
- Lake Street Off-Ramp
- Nichols Road On-Ramp to Lake Street Off-Ramp
- Nichols Road On-Ramp to Lake Street Off-Ramp
- Nichols Road On-Ramp to Lake Street Off-Ramp
- Nichols Road On-Ramp
- Nichols Road Off-Ramp to On-Ramp
- Nichols Road Off-Ramp
- Dexter Avenue/SR-74 (Central Avenue) On-Ramp to Nichols Road Off-Ramp
- Dexter Avenue/ SR-74 (Central Avenue Off-Ramp to On-Ramp
- Dexter Avenue/ SR-74 (Central Avenue Off-Ramp to On-Ramp (EL Ingress)
- Main Street Off-Ramp

The Build Alternative improves the bottleneck at Dos Lagos/Weirick Road On-Ramp and provides additional throughput capacity at the merge segment. As a result, the bottleneck shifts downstream to the Magnolia Avenue On-Ramp and is anticipated to form in year 2043. Please note that the bottleneck location shifts north to Magnolia Avenue with the project and queues back through these study facilities. This bottleneck location is outside of the project limits and are currently under study by Caltrans to address congestion in this specific area. This causes the following segments in queue to operate at LOS E or worse:

- Magnolia Avenue On-Ramp

- Magnolia Avenue Loop On-Ramp
- Magnolia Avenue Off-Ramp to Loop On-Ramp
- Magnolia Avenue Off-Ramp
- Ontario Avenue to Magnolia Avenue
- Ontario Avenue On-Ramp
- Ontario Avenue Off-Ramp to On-Ramp (four lanes)
- Ontario Avenue Off-Ramp to On-Ramp (three lanes)
- Ontario Avenue Off-Ramp
- El Cerrito Road On-Ramp
- Express Lane (EL) Access to El Cerrito Road On-Ramp
- EL Access at El Cerrito Road
- Cajalco Road On-Ramp to El Cerrito Road Off-Ramp
- Cajalco Road Loop On-Ramp
- EL Access at Cajalco Road
- Cajalco Road Off-Ramp to EL Access

PM Peak Hour – SB I-15

The ELPSE significantly improves the bottleneck at the Cajalco Road On-Ramp merge segment, resulting in greater traffic throughput and a new bottleneck forms downstream on SB I-15 at the Main Street On-Ramp merge segment (this does not occur in the No-Build condition as traffic is effectively metered at the ELP termination). Because the ELPSE shifts the bottleneck, the bottleneck is anticipated to form in 2027 (when ELPSE is implemented) and causes the following segments in queue to operate at LOS E or worse by the design year condition. Please note, in the opening year the queue is significantly less but extends over time as traffic along the corridor increases.

- Indian Truck Trail Off-Ramp
- Lake Street Off-Ramp
- Lake Street On-Ramp to Nichols Road Off-Ramp
- Nichols Road Off-Ramp
- Nichols Road Off-Ramp to On-Ramp
- Nichols Road On-Ramp
- Nichols Road On-Ramp to SR-74 (Central Avenue) Off-Ramp
- SR-74 (Central Avenue) Off-Ramp
- SR-74 (Central Avenue)) (EL Egress)
- SR-74 (Central Avenue) Off-Ramp to On-Ramp
- SR-74 (Central Avenue) On-Ramp
- SR-74 (Central Avenue) On-Ramp to Main Street Off-Ramp
- Main Street Off-Ramp
- Main Street Off-Ramp to On-Ramp
- Main Street On-Ramp
- Main Street On-Ramp to Diamond Drive/Railroad Canyon Road Off-Ramp

The Build Alternative would attract drivers who, under the No-Build Alternative, would use local streets to bypass the freeway and so the bottleneck is anticipated to form in 2040 and causes the following segments in queue to operate at LOS E or worse:

- Hidden Valley Parkway Off-Ramp to On-Ramp
- Hidden Valley Parkway On-Ramp
- Hidden Valley Parkway On-Ramp to WB SR-91 Off-Ramp

- WB SR-91 Off-Ramp
- EB SR-91 Off-Ramp
- EB SR-91 Off-Ramp to On-Ramp
- EB SR-91 On-Ramp
- WB SR-91 On-Ramp to Magnolia Ave Off-Ramp
- Magnolia Avenue Off-Ramp to On-Ramp
- Magnolia Avenue On-Ramp
- Magnolia Avenue On-Ramp to Ontario Ave Off-Ramp
- Magnolia Avenue On-Ramp to Ontario Ave Off-Ramp
- Ontario Avenue Off-Ramp
- Ontario Avenue Off-Ramp to On-Ramp
- Ontario Avenue On-Ramp
- El Cerrito Road Off-Ramp
- El Cerrito Road Off-Ramp to On-Ramp

PM Peak Hour – NB I-15

The Build Alternative is unable to relieve the bottleneck at the WB Magnolia Avenue On-Ramp weave segment to the SR-91 ramps as it is outside the ELPSE limits. The breakdown of the WB Magnolia Avenue On-Ramp merge segment occurs under existing conditions during the late morning/early afternoon time period and is identified in 2030 as extending into the peak hours. This weave breaks down and will only degrade operations as volumes are forecasted to 2050. Similar to discussion above, improvements to the identified bottleneck location is outside of the project limits but is currently being studied by Caltrans for potential improvements in the area.

- Magnolia Avenue On-Ramp
- Magnolia Avenue Loop On-Ramp
- Magnolia Avenue Off-Ramp to Loop On-Ramp
- Magnolia Avenue Off-Ramp
- Ontario Avenue to Magnolia Avenue
- Ontario Avenue On-Ramp
- Ontario Avenue Off-Ramp to On-Ramp (four lanes)
- Ontario Avenue Off-Ramp to On-Ramp (three lanes)
- Ontario Avenue Off-Ramp
- El Cerrito Road On-Ramp
- Express Lane (EL) Access to El Cerrito Road On-Ramp
- EL Access at El Cerrito Road
- Cajalco Road On-Ramp to El Cerrito Road Off-Ramp
- Cajalco Road Loop On-Ramp
- EL Access at Cajalco Road
- Cajalco Road Off-Ramp to EL Access
- Cajalco Road Off-Ramp
- Weirick Road/Dos Lagos Drive On-Ramp
- Weirick Road/Dos Lagos Drive On-Ramp
- Weirick Road/Dos Lagos Drive Off-Ramp to On-Ramp
- Weirick Road/Dos Lagos Drive Off-Ramp
- Temescal Canyon Road On-Ramp to Weirick Road/Dos Lagos Drive Off-Ramp
- Temescal Canyon Road On-Ramp
- Temescal Canyon Road Off-Ramp to On-Ramp

- Temescal Canyon Road Off-Ramp
- Indian Truck Trail On-Ramp to Temescal Canyon Road Off-Ramp
- Indian Truck Trail On-ramp to Temescal Canyon Road Off-Ramp
- Indian Truck Trail On-ramp to Temescal Canyon Road Off-Ramp
- Indian Truck Trail On-Ramp
- Indian Truck Trail Off-Ramp to On-Ramp
- Indian Truck Trail Off-Ramp
- Horsethief Road On-Ramp to Indian Truck Trail Off-Ramp
- Horsethief Road On-Ramp
- Horsethief Road Off-Ramp to On-Ramp
- Horsethief Road Off-Ramp
- Lake Street On-Ramp to Horsethief Road Off-Ramp
- Lake Street On-Ramp to Horsethief Road Off-Ramp
- Lake Street On-Ramp
- Lake Street Off-Ramp to On-Ramp
- Lake Street Off-Ramp
- Nichols Road On-Ramp to Lake Street Off-Ramp
- Nichols Road On-Ramp to Lake Street Off-Ramp
- Nichols Road On-Ramp to Lake Street Off-Ramp
- Nichols Road On-Ramp
- Nichols Road Off-Ramp to On-Ramp
- Nichols Road Off-Ramp
- Dexter Avenue/SR-74 (Central Avenue) On-Ramp to Nichols Road Off-Ramp
- Dexter Avenue/ SR-74 (Central Avenue) Off-Ramp to On-Ramp
- Dexter Avenue/ SR-74 (Central Avenue) Off-Ramp to On-Ramp (EL Ingress)
- Dexter Avenue/ SR-74 (Central Avenue) Off-Ramp
- SR-74 (Central Avenue)) Off-Ramp to Dexter Avenue/Central Ave (SR-74) Off-Ramp
- SR-74 (Central Avenue) Off-Ramp
- Main Street On-Ramp to Central Ave (SR-74) Off-Ramp
- Main Street On-Ramp
- Main Street Off-Ramp to On-Ramp
- Main Street Off-Ramp
- Diamond Drive/Railroad Canyon Road On-Ramp to Main Street Off-Ramp

List of Appendices

- **Appendix A:** Final Traffic Analysis and Travel Demand Forecasting Assumptions, Methodology, and Approach (September 2019)
- **Appendix B:** Final Traffic Volume Report (March 2020)
- **Appendix C:** Technical Calculations (Freeway Mainline Segments, Ramps and Express Lanes)
- **Appendix D:** Caltrans VMT Analysis Screening Form
- **Appendix E:** Design Variation Matrices & Speed Contour Plots
- **Appendix F:** I-15 Interim Corridor Operations Project (ICOP) & I-15 Corridor Operations Project (COP) Geometrics

Appendix A

Final Traffic Analysis and Travel Demand Forecasting Assumptions, Methodology, and Approach (September 2019)


Memorandum

*Making Conservation
A California Way of Life.*

To: DANIEL CIACCHELLA, P.E.
Project Manager
Program/Project Management, MS 1229

Date: October 29, 2019

File: Riv-15 PM 22.3/36.8
EA 0J082

From: MARIA 'SOLE' ARANGUIZ 
Branch Chief
Traffic Forecasting, MS 726

Subject: Interstate 15 Express Lane Project Southern Extension (I-15 ELPSE) (Dated September 25, 2019)

Per your request, the Branch of Traffic Forecasting has reviewed the revised Traffic Analysis and Forecasting Memorandum, and the response to request for additional information for the above referenced project. We concur with the proposed cap volume (vphpl) to HOT lane and have no further comments.

Should you have questions regarding the information above, you may reach me at (909) 383-4495 or Yu-Jen Chen at (909) 383-5789.



MEMORANDUM

Date: Updated August 23, 2019

To: Mark Hager, P.E. – HDR (for distribution to the Project Development Team)

Copies to: Stephanie Blanco, RCTC

From: Jason D. Pack, P.E.
Mae Tamayo

Subject: Interstate 15 Express Lanes Project Southern Extension PA/ED: Traffic Analysis and Travel Demand Forecasting Assumptions, Methodology, and Approach EA:0J0820/ID 08-18000063

OC19-0632

This memorandum presents the assumptions, methodologies, and approach for completing the Traffic Operations Analysis Report (TOAR) for the Interstate 15 Express Lanes Project Southern Extension ("Project") (ELPSE) PA/ED analysis (from Cajalco Road to SR-74).

The following topics are addressed in this memorandum:

- Preliminary Project Description
- Analysis Years and Study Periods
- Study Area for Analysis
- Data Collection
- Future Year Roadway Network Assumptions
- Travel Demand Forecasting
- Traffic Operations and Analysis Methods
- Documentation



PRELIMINARY PROJECT DESCRIPTION

The proposed Project will construct the following elements:

- Construct two express lanes in each direction on Interstate 15 (I-15), from the end of the previously approved under construction express lanes near the Cajalco Road/I-15 Interchange in the City of Corona, to the State Route 74 (Central Avenue)/I-15 Interchange in the City of Lake Elsinore.

The design and extents of these improvements are still in a preliminary stage. The existing configuration of I-15 within the study area is three general purpose lanes in each direction (six lanes total). The project proposes to improve the configuration to include three general purpose lanes and two express lanes in each direction (ten lanes total). The configuration/attributes and purpose of the express lanes will be consistent with RCTC 91 Express Lanes Toll Policy that is currently at RCTC's Toll Committee for modification on August 22, 2019. Updates to the RCTC 91 Express Lanes Toll Policy are expected as shown in the agenda which we have attached to this document. Although the improvement attributes will be refined as the project development process is completed. In order to fully evaluate the effects of the Project, Fehr & Peers will evaluate the following freeway locations using micro-simulation to account for geometrics at the entry and exit points and accurately reflect density, travel times, and speed along the corridor due to the proposed project.

- I-15 mainline, merge, diverge, and/or weave (for all local interchanges and to/from the express lanes access locations) from Hidden Valley Parkway in Corona to Main Street in Lake Elsinore
- SR-91 express lane connectors to I-15

ANALYSIS YEARS AND STUDY PERIODS

At this time, the Project is anticipated to be open in year 2029 with a design year of 2049. Since the regional travel demand forecasting models typically forecast in five year increments, the traffic study will consider an opening year of 2030 and a design year of 2050 consistent with the model forecasting capabilities. The traffic analysis will evaluate existing conditions in addition to conditions for the opening year, and design year. Traffic count data collection will begin once schools are back in session and will be supplemented with "big data" along the corridor.



Big data will include the purchase of the following data sets that will help inform the forecasting efforts and will assist in calibration and validation of the simulation model:

- INRIX travel data will be purchased and used to assist in defining peak periods along the corridor in addition to speed data along the corridor.
- Streetlight origin/destination (O-D) data will be purchased to assist in identifying travel patterns in the area. This will be especially helpful to inform the O-D estimation process for the operations model and will assist in identifying potential use of the express lanes along the corridor.

STUDY AREA FOR ANALYSIS

The study area will evaluate freeway operations on I-15, generally between the Hidden Valley Interchange and the Main Street Interchange. The Project will be constructed on I-15 between Cajalco Road and SR-74 (Central Avenue), however the study area captures several miles upstream and downstream of the project limits to include the effects of upstream and downstream bottlenecks, as well as interactions with the current SR-91 general purpose and express lane connectors.

DATA COLLECTION

In addition to the big data discussed above, Fehr & Peers will collect traffic counts on a variety of parallel roadway facilities, freeway mainline, and interchange ramps. Counts will be collected in September 2019 to ensure the counts are completed while local schools are in session. The sections below describe where data will be collected.

ROADWAY SEGMENT TRAFFIC VOLUMES

Counts will be taken on roadway segments parallel to I-15 to help demonstrate and quantify project benefits to the parallel roadway network and assist with the noise assessment. Three-day, 72-hour traffic counts will be conducted at the following 62 roadway segments. Please note that most of these segments will see little change with the proposed project; however, data is being collected in anticipation of being needed to inform the noise assessment.

1. Hidden Valley Parkway west of I-15
2. Hidden Valley Parkway east of I-15



3. Parkridge Avenue west of Cresta Road
4. Parkridge Avenue east of Cresta Road
5. Cresta Road south of Parkridge Avenue
6. 6th Street west of El Sobrante
7. 6th Street west of Radio Road
8. Radio Road north of 6th Street
9. El Sobrante between 6th Street and Magnolia Avenue
10. Magnolia Avenue west of I-15
11. Magnolia Avenue east of I-15
12. Ontario Avenue west of I-15
13. Ontario Avenue east of I-15
14. Ontario Avenue north of El Cerrito Avenue
15. El Cerrito Avenue west of I-15
16. El Cerrito Avenue between I-15 and Temescal Canyon Road
17. Bedford Canyon Road south of El Cerrito Avenue
18. Bedford Canyon Road north of Cajalco Road
19. Evelyn Street
20. Frances Street
21. Katy Way
22. Liberty Avenue
23. Temescal Canyon Road from El Cerrito Avenue to Cajalco Road
24. Temescal Canyon Road from Cajalco Road to Dos Lagos Drive
25. Temescal Canyon Road from Dos Lagos Drive to Dawson Canyon Road
26. Temescal Canyon Road from Dawson Canyon Road to I-15
27. Temescal Canyon Road from I-15 to Lawson Road
28. Temescal Canyon Road from Lawson Road to Trilogy Parkway
29. Temescal Canyon Road from Trilogy Parkway to Campbell Ranch Road
30. Temescal Canyon Road from Campbell Ranch Road to Indian Truck Trail Road
31. Temescal Canyon Road from Indian Truck Trail Road to Horsethief Road
32. Temescal Canyon Road from Horsethief Road to I-15 Frontage Road
33. Temescal Canyon Road from I-15 Frontage Road to Lake Street
34. Cajalco Road west of I-15
35. Cajalco Road between I-15 and Grand Oaks
36. Cajalco Road from Grand Oaks to Temescal Canyon Road
37. Retreat Parkway west of Knabe Road
38. Weirick Road from I-15 to Knabe Road
39. Weirick Road north of Knabe Road
40. Dos Lagos Drive east of I-15
41. Knabe Road from Weirick Road to White Sage Street
42. Knabe Road from White Sage Street to Hunt Road
43. Campbell Ranch Road from Temescal Canyon Road to Mayhew Canyon Road
44. Campbell Ranch Road from Mayhew Canyon Road to Indian Truck Trail
45. De Palma Road between Indian Truck Trail and Horsethief Canyon Road



46. Horsethief Canyon Road west of De Palma Road
47. Horsethief Canyon Road from De Palma Road to Temescal Canyon Road
48. Lake Street west of Temescal Canyon Road
49. Lake Street east of Temescal Canyon Road
50. Nichols Road west of Collier Road
51. Nichols Road from Collier Road to I-15
52. Nichols Road east of I-15
53. Collier Avenue from Nichols Road and Riverside Drive
54. Collier Avenue from Riverside Drive to Central Avenue
55. Collier Avenue south of Central Avenue
56. Dexter Avenue north of Central Avenue
57. Dexter Avenue south of Central Avenue
58. Central Avenue from Collier to I-15
59. Central Avenue from I-15 to Dexter Avenue
60. Central Avenue from Dexter Avenue to Cambern Avenue
61. Central Avenue east of Cambern Avenue
62. Main Street west of I-15

FREEWAY MAINLINE TRAFFIC VOLUMES

Northbound and southbound freeway mainline three day, 72-hour traffic counts will be collected on I-15 at the northern and southern end of the study area at the following locations:

1. Magnolia Drive Overcrossing
2. Franklin Street Overcrossing

INTERCHANGE RAMP TRAFFIC VOLUMES

Three-day, 72-hour traffic counts will be conducted at 13 interchanges on the following ramps:

I-15/Main Street Interchange

1. I-15 NB Off-Ramp to Main Street
2. I-15 NB On-Ramp from Main Street
3. I-15 SB On-Ramp from Main Street
4. I-15 SB Off-Ramp to Main Street

I-15/SR-74 (Central Avenue) Interchange

5. I-15 NB Off-Ramp to Central Avenue
6. I-15 NB On-Ramp from Central Avenue
7. I-15 SB On-ramp from Central Avenue
8. I-15 SB Off-ramp to Central Avenue



I-15/Nichols Road Interchange

- 9. I-15 NB Off-Ramp to Nichols Road
- 10. I-15 NB On-Ramp from Nichols Road
- 11. I-15 SB On-ramp from Nichols Road
- 12. I-15 SB Off-ramp to Nichols Road

I-15/Lake Street Interchange

- 13. I-15 NB Off-Ramp to Lake Street
- 14. I-15 NB On-Ramp from Lake Street
- 15. I-15 SB On-ramp from Lake Street
- 16. I-15 SB Off-ramp to Lake Street

I-15/Indian Truck Trail Interchange

- 17. I-15 NB Off-Ramp to Indian Truck Trail
- 18. I-15 NB On-Ramp from Indian Truck Trail
- 19. I-15 SB On-ramp from Indian Truck Trail
- 20. I-15 SB Off-ramp to Indian Truck Trail

I-15/Temescal Canyon Road Interchange

- 21. I-15 NB Off-Ramp to Temescal Canyon Road
- 22. I-15 NB On-Ramp from Temescal Canyon Road
- 23. I-15 SB On-ramp from Temescal Canyon Road
- 24. I-15 SB Off-ramp to Temescal Canyon Road

I-15/Dos Lagos Drive Interchange

- 25. I-15 NB Off-Ramp to Dos Lagos Drive
- 26. I-15 NB On-Ramp from Dos Lagos Drive
- 27. I-15 SB On-ramp from Dos Lagos Drive
- 28. I-15 SB Off-ramp to Dos Lagos Drive

I-15/Cajalco Road Interchange

- 29. I-15 NB Off-Ramp to Cajalco Road
- 30. I-15 NB On-Ramp from Westbound Cajalco Road
- 31. I-15 NB Loop On-Ramp from Eastbound Cajalco Road
- 32. I-15 SB On-Ramp from Cajalco Road
- 33. I-15 SB Off-Ramp to Cajalco Road

I-15/El Cerrito Road Interchange

- 34. I-15 NB Off-Ramp to El Cerrito Road
- 35. I-15 NB On-Ramp from El Cerrito Road
- 36. I-15 SB On-ramp from El Cerrito Road
- 37. I-15 SB Off-ramp to El Cerrito Road



I-15/Ontario Avenue Interchange

- 38. I-15 NB Off-Ramp to Ontario Avenue
- 39. I-15 NB On-Ramp from Ontario Avenue
- 40. I-15 SB On-Ramp from Ontario Avenue
- 41. I-15 SB Off-Ramp to Ontario Avenue

I-15/Magnolia Avenue Interchange

- 42. I-15 NB Off-Ramp to Magnolia Avenue
- 43. I-15 NB On-Ramp from Magnolia Avenue
- 44. I-15 SB On-Ramp from Magnolia Avenue
- 45. I-15 SB Off-Ramp to Magnolia Avenue
- 46. I-15 NB Loop On-Ramp from Magnolia Avenue

I-15/SR-91 Interchange

- 47. I-15 NB Off-Ramp to WB SR-91
- 48. I-15 NB Off-Ramp to EB SR-91
- 49. I-15 NB On-Ramp from WB SR-91
- 50. I-15 SB Off-Ramp to WB SR-91
- 51. I-15 SB Loop Off-Ramp to EB SR-91
- 52. I-15 SB On-Ramp from WB SR-91
- 53. I-15 SB On-Ramp from EB SR-91
- 54. I-15 NB Express Lane Connector Ramp
- 55. I-15 SB Express Lane Connector Ramp

I-15/Hidden Valley Parkway Interchange

- 56. I-15 NB Off-Ramp to Hidden Valley Parkway
- 57. I-15 SB On-Ramp from Hidden Valley Parkway

COLLISION DATA

Traffic Accident Surveillance and Analysis System (TASAS) data for I-15, within the study area, for the most recent three-year period of complete data will be obtained from Caltrans and used to prepare a collision summary.

FIELD RECONNAISSANCE

Fehr & Peers will conduct field reconnaissance including GPS data surveys for each lane of the corridor during the AM peak period (7:00 AM to 9:00AM) and PM peak period (4:00 PM to 6:00 PM). These surveys will assist in identifying current areas of congestion along the corridor that traditional analysis may not reflect. GPS travel time runs will be used to calibrate the traffic operations analysis model.



INRIX DATA

INRIX travel speed data will be purchased to supplement the GPS travel time runs obtained in field reconnaissance. This data will also be used to calibrate the traffic operations analysis model. Travel time/speed information will be used to identify bottleneck locations and extent of queues on I-15 and for VISSIM model calibration and validation.

On freeways, the speeds presented by INRIX are an aggregate of speeds across all travel lanes including express lane(s) where provided. At locations where there are no express lanes the INRIX speed data will be used to directly represent traffic conditions in the general purpose lanes. At locations where an express lane is provided, the INRIX speed data will be adjusted to determine speeds on the general purpose lanes. The following equation will be used to estimate speeds on the General Purpose (GP) Lanes at locations where an Express Lane is provided:

$$\text{INRIX Speed} = \% \text{ GP Lane Traffic} \times \text{GP Lane Speed} + \% \text{ Express Lane Traffic} \times \text{Express Lane Speed}; \text{ or}$$

$$\text{GP Lane Speed} = (\text{INRIX Speed} - \% \text{ Express Lane Traffic} \times \text{Express Lane Speed}) / \% \text{ GP Lane Traffic}$$

Where % GP lane traffic and % Express Lane traffic will be based on count data and the express lane speed data will be based on available PeMS data. Since the speeds on the express lanes are typically higher than on the GP lanes the outcome of the equation above is that the GP lanes speeds are typically 0 to 5 mph lower than the aggregate speeds presented by INRIX. Additionally, the per lane speed data collected using the GPS survey data will assist in validating the INRIX data.

STREETLIGHT DATA

Streetlight Origin-Destination travel data along the corridor will be purchased. This data will be disaggregated into less than 100 zones to develop the origin-destination travel data. Streetlight data uses in-vehicle navigation system data and some cell phone location-based services data (referred to as records) that can be aggregated together (consistent with privacy protection requirements) to obtain origin/destination information. This data will be used to validate the travel demand forecasting estimates and the origin-destination estimation for the microsimulation models. Fehr & Peers will document a description of Streetlight origin/destination data and will document key items such as record sample size, date, time period, and study area in the Traffic Operations Analysis Report (TOAR).



FUTURE YEAR ROADWAY NETWORK ASSUMPTIONS

INTERSTATE AND STATE ROUTE FACILITIES

The 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) improvement list was reviewed for interstate and state route improvements to assume in the future. Key transportation improvements are listed below:

1. **RTP ID RIV071267:** I-15 Express Lanes from county line to Cajalco Road (Post Mile (PM) 51.40 to PM 36.80, 2020 - under construction)
2. **RTP ID RIV011233:** Widen Limonite Ave from four to six lanes. Between Eastvale Gateway and 475' east of Pats Ranch Road, reconstruct/widen northbound and southbound exit ramps from three to four lanes. Replace northbound and southbound entry ramps with entry loop ramps from two to three lanes. Entry ramps include HOV by-pass lane, ramps include extended acceleration/deceleration lanes and extended right turn lanes (2019 - under construction)
3. **RTP ID RIV050532¹:** Construct Schleisman Road Interchange. Six through lanes will be constructed on Schleisman Road with new ramps (2 lanes). Construct a NB/SB auxiliary lane between Schleisman Road Interchange and Limonite Road Interchange (2035)
4. **RTP ID 3A01WT159:** Replace two-lane bridge on Hamner Avenue over Santa Ana River (5 Miles North of Sixth Street) with a six-lane Bridge (2030)
5. **RTP ID 3M04WT005:** Reconstruct interchange ramps and channelization improvements at I-15 and 6th Street between Hamner Avenue and Sierra Avenue (PM 45.10 to 46.10, 2030)
6. **RTP ID 3M0733:** At I-15 on 2nd Street between Hamner Avenue & Valley View Avenue reconstruct/widen interchange from two to four lanes and widen ramps (PM 43.13 to 44.13, 2025)
7. **RTP ID 3M04WT007:** At I-15 on Hidden Valley Parkway between Hamner Avenue & beyond northbound exit-ramp, reconstruct interchange/ramps/channelization improvements (PM 42.37 to 43.37, 2025)
8. **RTP ID RIV010208:** At I-15/Cajalco Road interchange near Corona, design, reconstruct/realign & widen Cajalco Road from two to six through lanes from Temescal Canyon Road to Bedford Canyon Road. Reconstruct/widen southbound entry from one

¹ The City of Eastvale just removed this interchange from their General Plan. As such, Fehr & Peers proposes to NOT include it in the forecasting efforts.



to two lanes, northbound exit from two to four lanes, and add aux lanes (under construction, opens late 2019)

9. **RTP ID 3A04WT137A-3A04WT138:** Widen Cajalco Road from two to four through lanes in each direction from Temescal Canyon Road to Harvill Avenue and from four to six lanes from Harvill Avenue to I-215 including turn pockets and a bridge reconstruction over a water crossing (2025)
10. **RTP ID 3C01MA01:** CETAP West- Provide new East-West transportation corridor between I-15 to the west, I-215 to the East, South of Lake Mathews to the north, and SR74 to the South (2035)
11. **RTP ID 3M0728:** At I-15 on Temescal Canyon reconstruct/widen Temescal Canyon Interchange from two to four lanes and reconstruct ramps (PM 32.60 to PM 33.60, 2030)
12. **RTP ID 3A04WT198B:** Widen Temescal Canyon from Indian Truck Trail to 0.22 miles west of Lake Street (2035)
13. **RTP ID 3A04WT161, RTP ID 3M0729:** Widen Horsethief Canyon Rd from Temescal Canyon Road to I-15 from 2 to 4 lanes and reconstruct ramps (PM 28.36 to 29.36, 2030)
14. **RTP ID 3M0737:** Reconstruct/widen I-15 interchange at Lake Street from two to six lanes between Walker Canyon Road and Temescal Canyon Road and reconstruct/widen ramps (2022)
15. **RTP ID 3M0736:** Reconstruct/widen I-15 interchange at Nichols Road from 2 to 6 lanes between the ramps and reconstruct/widen ramps (PM 23.35 to PM 24.35, 2025)
16. **RTP ID 3A04WT191:** Widen SR-74 from I-15 to Ethanac Road (2035)
RTP ID 3A01WT151: Construct a four-lane arterial (Ethanac Road) from SR-74 to Keystone Drive (2030)
17. **RTP ID 3A04A17:** Construct new four-lane overcrossing over I-15 at Riverside Drive between Collier Avenue and Dexter Avenue (2025)
18. **RTP ID RIV060109:** At I-15/Central Avenue Interchange junction modification between 1,000 feet west of Collier Avenue to Riverside Street: Add northbound loop entry ramp with acceleration lane, realign northbound entry and exit ramps. Add southbound acceleration/deceleration lanes, add northbound deceleration lane, Widen SR-74 from Riverside Drive to Central Avenue from two to four through lanes and from Collier Avenue to Cambern Avenue from six to eight through lanes. Construct new Riverside Avenue overcrossing (PM 15.50 to PM 18.50, 2025)
19. **RTP ID 3A04A16:** Construct new connecting four-lane arterial overcrossing at I-15 and Second Street between Chaney Avenue and Camino Del Norte (2028)



- 20. RTP ID 3160004:** Main St/I-15 Interchange improvements. Widening of NB Main St under the freeway from one to two lanes. Add an additional lane to the northbound entrance and exit ramps, widen southbound off-ramp to accommodate one right-turn lane, one left-turn lane, and one shared through-left-turn lane at the Main Street intersection. Install ramp meters & traffic signals at ramp terminal intersections and Camino Del Norte/Main St Intersection (2028)
- 21. RTP ID 3160002:** Construct 2 HOV lanes on I-15 between Junction I-15/I-215 to SR-74 (PM 22.30 to PM 8.70, 2039)
- 22. RTP ID RIV010206:** At I-15/ Railroad Canyon Road Interchange, widen northbound entrance ramp from two to three lanes, widen southbound entrance ramp from one to three lanes, widen ramp acceleration and deceleration lanes at Railroad Canyon Road (Phase I). Construct new I-15 Franklin Street Interchange, and add auxiliary lanes from Franklin Street Interchange to Main Street Interchange and from Franklin Street Interchange to Railroad Canyon Interchange. Realign/widen Main Street southbound on-ramp from one to two lanes and construct Frontage Road on west and east of I-15 (PM 18.52 to PM 20.96, 2022)
- 23. RTP ID 3M0734:** Construct new four-lane overcrossing over I-15 at Malaga Road between Casino Drive and Lakeview Terrace and Grape Street (2028)
- 24. RTP ID 3M0735:** Construct new four lane interchange and ramps for I-15 at Olive Street between Orchard Street and Grape Street (PM 17.01 to PM 18.01, 2018-not constructed)
- 25. RTP ID 3A01WT134:** Widen Bundy Canyon Road from Mission Trail to I-15 from two to four lanes (2025)
- 26. RTP ID 3M0727:** Reconstruct/Widen Bundy Canyon Road Interchange from two to four lanes and reconstruct ramps (PM 15.8 to PM 16.8, 2025)
- 27. RTP ID 3A01WT133:** Widen Bundy Canyon Road between I-15 to Murrieta Road from two to four lanes (2020)
- 28. RTP ID 3A04WT126:** Widen Baxter Road from I-15 to Central Street from two to four lanes (2025)
- 29. RTP ID 3M0730:** Construct new northbound loop on-ramp and realign existing northbound off-ramp at I-15 and Murrieta Hot Springs Road (2019)
- 30. RTP ID RIV031215:** French Valley Pkwy Interchange Arterial Phases- (Phase 2) Construct two-lane northbound CD north of Winchester On-ramp to just north of Route I-15/I-215 Junction with connectors to I-15 and I-215. (Phase 3) Construct six-lane overcrossing (Jefferson to Ynez) & ramps, northbound/southbound auxiliary lane,



CD lanes (1 northbound and 3 southbound). Modify Winchester Road interchange (PM 8.43 to PM 9.75, 2028)

- 31. RTP ID 3M0721:** At I-15 on Rancho California, reconfigure interchange from four to six lanes and modify ramps. Type of lanes for arterial widening will be with through lanes (PM 4.48 to PM 5.48, 2035)

Another key transportation improvement from the Southern California of Governments (SCAG) Federal Transportation Improvement Program (FTIP) assumed to be completed in the future network is listed below:

- **FTIP ID: RIV180102:** Widen Ontario Avenue from five to seven lanes.

TRAVEL DEMAND FORECASTING

The overall approach to developing traffic demand forecasts for this corridor is to make use of analytical tools that are appropriate to answer the questions being raised. This study will require an understanding of traffic patterns between both the regional and local travel characteristics of the study area, in order to fully characterize the potential impacts of the proposed Project and to assist the project team in refining the design of the facility and optimize its operations.

Travel Demand Model

The Riverside County Traffic Analysis Model (RIVTAM) will be used to develop volumes for the project. RIVTAM is considered the most appropriate model with detailed roadway and land use information to forecast for local conditions of the study area as it has been calibrated for use in Riverside County.

RIVTAM assumes a 2008 Base Year and a 2035 Future Year. While RIVTAM land use information was originally not consistent with the latest SCAG model, the Western Riverside Council of Governments (WRCOG) has updated land use, which includes the study area and is consistent with the 2016 SCAG RTP/SCS. The land use updated for WRCOG is considered the best available information for modeling procedures because the land use information and roadway information is consistent with 2016 SCAG RTP/SCS and is detailed for the study area. As such, the land use information assumed in RIVTAM was replaced with the WRCOG land use information for modeling efforts for this project. With the updated land use, RIVTAM assumes a 2012 Base Year and a 2040 Future Year.



SCAG's 2016 financially constrained RTP project list adopted in April 2016, Amendment 1 adopted in April 2017 and Amendment 2 adopted in July 2017, will be used as the baseline roadway network for the projects. The model will be updated to reflect the baseline roadway network using the project descriptions stated in the RTP/Amendment 1/Amendment 2 plus additional project details if available. The project completion year identified in the RTP/Amendment 1/Amendment 2 will be used to determine if the project should be included as future roadway improvements when developing the Opening Year (2030) and Design Year (2050) traffic forecasts. The RTP/ Amendment 1/Amendment 2 projects in the study area are listed in Appendix 1. The travel demand model will run using a maximum of five feedback loops which is the standard practice for RIVTAM/SCAG model as noted in the *SCAG User's Guide* (June 2008).

Fehr & Peers will use the data collected as part of this effort to complete a sub-area model calibration of the RIVTAM model for the study area. The sub-area model calibration will follow the validation requirements set forth by the Federal Highways Administration (FHWA) and the model validation guidance produced by the California Transportation Commission (CTC). The model modification and validation statistics will be summarized in the volumes development report prepared for the project.

Forecasting Procedure

Traffic forecasts for study locations will be developed using the difference methodology. This approach is consistent with methodologies delineated in the *National Cooperative Highway Research Program Report (NCHRP) 765* published by the Transportation Research Board (TRB): Analytical Travel Forecasting Approaches for Project Level Planning and Design (Transportation Research Board, 2014) and is considered state of the practice for adjusting raw model forecasts for use in traffic operations assessment. The difference methodology will use the Base Year and Future Year model outputs to calculate the annual growth at study facilities. This growth will be added to the existing (2019) traffic counts and develop the Opening Year (2030) and Design Year (2050) traffic forecasts for Build and No Build Alternatives. Conservation of flow will be applied to all forecasted volumes to ensure volumes are balanced along the study corridors.

Close attention will be paid to forecasting for the proposed express lanes. Fehr & Peers has completed a preliminary review of RIVTAM's sensitivity to pricing and determined that it is generally not sensitive to changes in pricing along this corridor (for example, a ten times (10x) increase in per mile pricing had minimal effect on express lane use). As such, we propose to utilize the methodology we developed to forecast express lanes use in other areas of California (including Caltrans District 4) that is described below:



- Add two additional freeway lanes in each direction as general purpose lanes but with a reduced capacity (20% less) to reflect dynamic pricing to manage flow in the express lanes
- Review OD matrices for users of the corridor and compare them to the Streetlight OD big data obtained as part of the effort
- Isolate OD pairs that have a travel distance along the I-15 corridor of greater than 6-miles (assumes that trips less than six miles will not use the express lanes)
- Cap OD pairs at 20% (per OD pair) max participation in the express lanes
- Any OD demand that cannot be accommodated in the express lanes (see express lane demand below) will be reallocated to the general purpose lanes

Express Lane Capacity Assumptions

The *Highway Capacity Manual* (Transportation Research Board, 6th Edition) identifies capacities for managed lane segments based on barrier/separation type in Exhibit 12-11 which is shown below. Please note that the proposed express lanes would classify as a Barrier 2 facility as there would be multiple lanes (two in each direction) and a lane-delineator barrier will be provided between the express lanes and the general purpose lanes.

Figure 1: Lane Capacities for Basic Managed Lane Segments

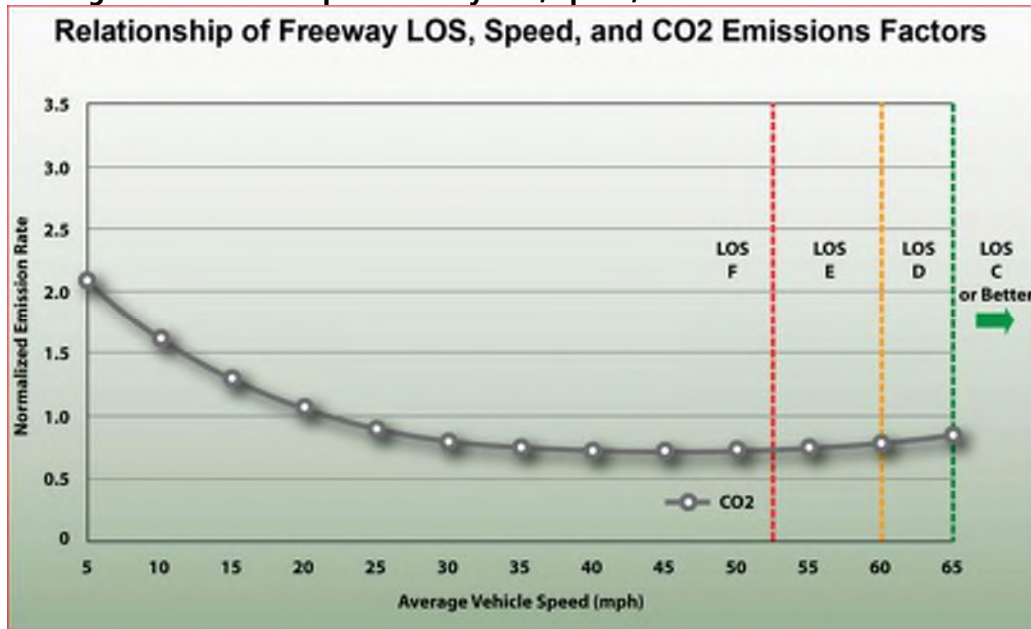
Exhibit 12-11 Estimated Lane Capacities for Basic Managed Lane Segments	FFS (mi/h)	Estimated Lane Capacities (pc/h/ln) by Basic Managed Lane Segment Type				
		Continuous Access	Buffer 1	Buffer 2	Barrier 1	Barrier 2
	75	1,800	1,700	1,850	1,750	2,100
	70	1,750	1,650	1,800	1,700	2,050
	65	1,700	1,600	1,750	1,650	2,000
	60	1,650	1,550	1,700	1,600	1,950
	55	1,600	1,500	1,650	1,550	1,900

As shown in Exhibit 12-11, depending on the free-flow speed (FFS) (which, on I-15 is in the 70-75 mi/h range), capacity of the express lanes would be above 2,000 vehicles per lane per hour. Additionally, as noted in the highway capacity manual, since managed lanes typically operate below capacity, these capacities do not necessarily represent a density of 45 passenger cars per mile per lane (as it is based on empirical observations) and is potentially underestimated for true segment capacity (which would occur at 45 passenger cars per mile per lane).

Operations of express lanes are governed by parameters outlined in the U.S. Government Code, Title 23 (Section 166) which identifies a degraded facility when it operates below 45 miles per hour (mph). 45 MPH would generally represent LOS F conditions for the freeway system as shown in the graphic below which summarizes the relationship between freeway LOS and speed:



Figure 2: Relationship of Freeway LOS, Speed, and CO2 Emissions Factors



Furthermore, it is RCTC's toll direction to maintain a goal of 60-65 mph within the express lane facility; which generally would operate at LOS D (volume-to-capacity ratio of 0.80 – 0.89). Assuming a volume-to-capacity ratio of 0.85 (middle of LOS D range or somewhere between 60 and 65 mph) and multiplying it by 2,050 (noted from the highway capacity manual above (assuming a free-flow speed of 70 MPH)) would yield a managed flow rate in the express lanes of 1,743 vehicles per lane per hour. Therefore, Fehr & Peers will utilize 1,750 vehicles per lane per hour for the capacity of the express lanes (please note that the I-15 ELP project currently under construction assumed 1,700 vehicles per lane per hour, the recently-completed I-15 EL project in San Bernardino County assumed 1,650 vehicles per lane per hour, and Fehr & Peers' other express lane work throughout the state have assumed up-to 1,850 vehicles per lane per hour).

Finally, Fehr & Peers reviewed data provided by RCTC related to toll transactions for the I-15 ramps accessing the SR-91 express lanes. That data showed that the single-lane access from I-15 (e.g. northbound I-15 connector to westbound SR-91) has existing peak usage of approximately 1,600 vehicles per lane per hour. This number is consistent with the capacities noted in Figure 1 above; where a Barrier 1 facility (there is only one access lane) at a free-flow speed of 70 MPH would generally provide a capacity of 1,700 vehicles per lane per hour and the peak usage being below that capacity is maintaining the desired speeds in the express lanes. This would support use of the recommended 1,750 vehicles per lane per hour noted above as the I-15 express lanes would have



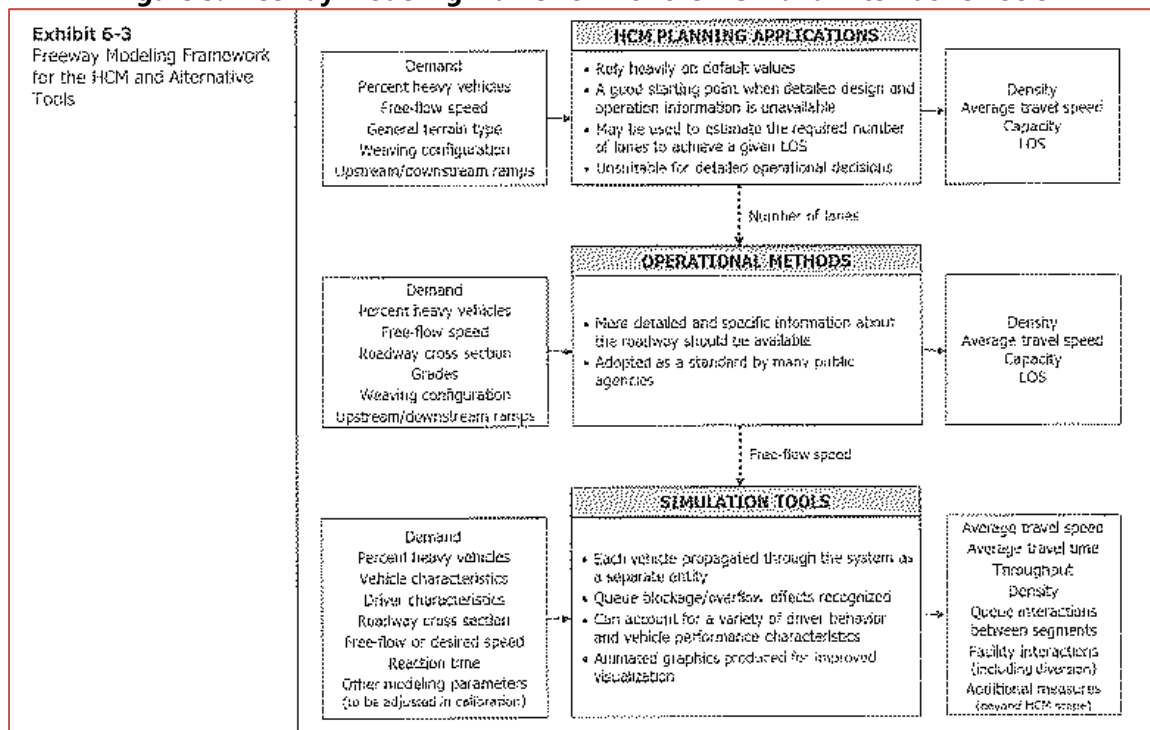
two barrier separated lanes and will provide higher capacity than the Barrier 1 facility providing that exists today.

TRAFFIC OPERATIONS ANALYSIS METHODS

Highway Capacity Manual, 6th Edition (HCM), Chapter 25 discusses limitations of HCM methodologies. HCM procedures become increasingly complex when downstream bottlenecks extend to upstream bottlenecks, causing a queue interaction. In these cases, the reliability of the methodology is questionable and a traffic simulation model is applicable. Due to the nature of the study area, oversaturated traffic conditions and interactions between SR-91 to I-15 express lane connectors will need to be considered.

Highway Capacity Manual, 6th Edition (HCM), Chapter 6 discusses appropriate use of microsimulation tools based on project needs. Exhibit 6-3 of Chapter 6 present the modeling framework for freeways. Microsimulation tools are stronger in evaluating queue interactions and facility interactions than HCM planning and operational methods. The analysis tool for the project will need to be capable of modeling a network of on-ramps, off-ramps, general purpose freeway lanes, and express lanes while representing oversaturated traffic conditions.

Figure 3: Freeway Modeling Framework for the HCM and Alternative Tools





VISSIM 11 is a microscopic multi-modal traffic flow simulation software package developed by PTV Group. As noted in the HCM, traffic simulation model may be more applicable for congested corridors, which is the case for our study area. Therefore, VISSIM is recommended to use in order to adequately evaluate the unique characteristics of this project. Compared to the HCS, VISSIM is capable to take into consideration of upstream or downstream bottleneck effect, queue spillback effect, interactions between General Purpose lanes and HOT lanes, interactions between ramp and mainline operations. All those above are not only required to be evaluated as part of this project but also provide a technically sound approach to refine project alternatives (such as ingress and egress points for HOT lanes). As a powerful tool for traffic operations analysis, VISSIM requires more in-depth analysis and consequently require more effort to develop. VISSIM has been used on numerous highway projects throughout California.

Freeway mainline and ramp junctions will be analyzed using the VISSIM 11. All components of freeway operations (i.e. mainline, on-ramp merge, off-ramp diverge, weaving sections, HOV2+/express lanes, ramp metering, etc.) operate as a single integrated system with congestion and queues affecting both upstream and downstream traffic operations. VISSIM will be used for this operations analysis to capture the effects between all the freeway components and the system-wide measures of effectiveness (MOE). The existing conditions models will use existing demand volumes (vehicle counts plus vehicles in queue) and existing truck volumes to assess their effects on operations. The model will be calibrated and validated to the existing operating conditions observed in the field measured through GPS travel time runs and big data obtained for this effort.

The VISSIM model will be calibrated using the Washington State Department of Transportation (WSDOT) protocol for VISSIM simulation. According to the *WSDOT VISSIM Protocol* (September 2014), there are two separate criteria that must be met in order to justify the validity of a particular model and its usefulness in evaluating the transportation system:

- **Confidence** – Ensuring that the reported model results are representative of the model
- **Calibration** – Matching the model results to real word conditions

The two criteria and approach for ensuring that the VISSIM simulation model will meet both, are summarized below.

- **Confidence:** Given the varying results that inherently exist between micro-simulation runs (due to the random seed number), every model is required to evaluate its reported results in a way that confides that they are representative of the model and not skewed towards a statistical outlier. Per the *WSDOT VISSIM Protocol*, the VISSIM model runs will use a simulation resolution of 10 time steps per second, and the initial results will be based on an average of at least 11 model runs, each using a different random seed value. For the



- existing conditions model, the statistical significance of 11 simulation runs will be confirmed to ensure that the variation in model vehicle throughput was within the 95 percent confidence level. Once an acceptable amount of deviation between runs is achieved, the average of the 11 runs will be used to produce statistically significant results.
- **Calibration:** Calibration is the process used to achieve adequate reliability or validity of the model by establishing suitable parameter values so that the model replicates local traffic conditions as closely as possible. The existing conditions VISSIM model will be calibrated to match traffic counts and observed queues. Traffic count calibration will be assessed using the GEH statistic for all segments in which there was accompanying field traffic count data. The GEH statistic summarizes the difference between the model output and observed volumes – the closer the model output is to observed conditions, the lower the GEH statistic. The throughput volume calibration is also considered in validation. **Table 1** and **Table 2** below summarize the GEH and Throughput Volume criteria.

TABLE 1
GEH STATISTIC GUIDELINES

GEH Statistic	Guidance
< 3.0	Acceptable Fit
3.0 to 5.0	Acceptable: For Local Roadway Facilities
>5.0	Unacceptable

Source: WSDOT VISSIM Protocol (September 2014)

TABLE 2
GEH STATISTIC GUIDELINES

Criteria	Acceptable Targets
GEH < 3.0	All state facility segments within the calibration area.
GEH < 3.0	All entry and exit locations within the calibration area.
GEH < 3.0	All entrance and exit ramps within the calibration area.
GEH < 5.0	At least 85% of applicable local roadway segments.
Sum of all segment flows within the calibration area. Within 5%	

Source: WSDOT VISSIM Protocol (September 2014)

The freeway segments will be analyzed using consistent methodologies from the Highway Capacity Manual, 6th Edition (HCM) contained in VISSIM. The level of service (LOS) will be calculated for each study facility to evaluate traffic operations using an HCM consistent post-processor developed for VISSIM outputs. LOS is a qualitative measure of traffic operating conditions whereby a letter grade,



from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving.

The freeway LOS will be calculated for each study facility based on density in number of vehicles per hour per lane. **Table 3** describes the LOS thresholds for freeway sections identified in the HCM.

The peak-hour density calculations are consistent with the definitions from the HCM, which defines four freeway section types: merge, diverge, weave, and basic. Merge and diverge sections, which refer to the freeway ramp junctions, are defined as the section of the freeway 1,500 feet downstream of an on-ramp and upstream of an off-ramp, respectively. The density is measured over the two outside freeway through lanes plus any auxiliary lanes. A weaving section occurs between a successive on-ramp and off-ramp pair connected by an auxiliary lane, and the maximum weaving distance between the ramps is no longer a fixed distance but determined by the weaving/total volumes and number of weaving lanes in the HCM. Basic freeway sections include all other freeway sections that are not included in a merge, diverge, or weaving section. The densities at weaving and basic sections are measured across all mixed-flow freeway lanes (including both through lanes and auxiliary lanes).

TABLE 3 FREEWAY MAINLINE AND RAMP JUNCTION/WEAVE SECTION LOS THRESHOLD				
Level of Service	Description	Density (vplpm) ¹		
		Mainline (Basic)	Mainline (Weave)	Ramp/ Merge/ Diverge
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 11	≤ 10	≤ 10
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	> 11 to 18	> 10 to 20	> 10 to 20
C	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	> 18 to 26	> 20 to 28	> 20 to 28



TABLE 3 FREEWAY MAINLINE AND RAMP JUNCTION/WEAVE SECTION LOS THRESHOLD				
Level of Service	Description	Density (vplpm) ¹		
		Mainline (Basic)	Mainline (Weave)	Ramp/ Merge/ Diverge
D	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	> 26 to 35	> 28 to 35	> 28 to 35
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	> 35 to 45	> 35 to 43	> 35 ²
F	Represents a breakdown in flow.	Demand Exceeds Capacity OR Density>45	Demand Exceeds Capacity OR Density>43	Demand Exceeds Capacity
Notes: 1. Density is reported in vehicles per lane per mile (vplpm). 2. The maximum density for ramp junctions and merge/diverge sections under LOS E is not defined in the HCM. The maximum density for basic segments of 45 vplpm was assumed to apply to ramp junctions and weaving sections. Source: <i>Highway Capacity Manual (Transportation Research Board, 2016)</i>				

In addition to LOS, the AM and PM peak period systemwide performance measures will be developed using the VISSIM models, including the following:

- Systemwide percent vehicles served
- Systemwide vehicle miles of travel (VMT)
- Systemwide vehicle hours of delay (VHD)
- Corridor Average travel time and speeds for I-15
- Bottleneck locations and queue lengths for I-15

Level of Service Criteria

The following level of service (LOS) criteria will be employed to determine if the project would result in any traffic operational deficiencies to the study area. The LOS criteria are in accordance with



Caltrans guidelines. Caltrans strives to have freeway facilities operate at a level of service between C and D; therefore, LOS D will be used as the threshold for freeway facilities analysis.

Simulation Sensitivity Testing

Fehr & Peers will also utilize a proprietary tool developed in-house to test the analysis results utilizing the microsimulation tool. Specifically, this tool is an automated process where different input parameters are modified to “proof” the analysis results. For example, we could modify traffic volumes by plus or minus 5%, 10%, or 20% to determine how that would affect operations. This will test the sensitivity of the traffic operation results to the forecast volumes to provide greater confidence in the analysis results. Additionally, we will test autonomous vehicle fleet penetration as part of this tool through adjustments to driver behavior parameters that will replicate AV characteristics. Although we do not anticipate including these results in the TOAR, we believe it will provide valuable information to the project team to ensure that the project is designed with a high level of confidence.

Senate Bill 743 (SB 743)

As a result of SB 743, the new recommended metric in the CEQA guidelines for transportation impacts is VMT and the legislation will require all jurisdictions to use VMT by July of 2020. In April, Caltrans released CEQA guidance related to VMT assessment as noted below:

While public agencies may immediately apply Section 15064.3 of the updated Guidelines, statewide application is not required until July 1, 2020. In addition, uniform statewide guidance for Caltrans projects is still under development. The project development team may determine the appropriate metric to use to analyze traffic impacts pursuant to section 15064.3(b). Projects for which a Notice of Preparation will be issued anytime after December 28, 2018 should consider including an analysis of VMT/induced demand if the project has the potential to increase VMT (see page 20 of Office of Planning and Research’s updated Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018)), particularly if the project will be approved after July 2020.

As such, VMT analysis will be included in the analysis and will generally be consistent with requirements of Senate Bill (SB-743), the Office of Planning and Research’s (OPR’s) technical advisory, and state of the practice methodologies. The legislative intent of SB 743 is to balance the needs of congestion management with statewide goals for infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions. Caltrans does not currently have guidelines completed to provide guidance for SB 743 assessment (they are in process). Vehicle miles traveled (VMT) will be estimated using both the VISSIM Model and the



regional travel demand model for the Project to evaluate the change in VMT associated with the project.

Operations Analysis Tools & Assumptions Summary

The tools and assumptions to be used for preparation of the traffic study are summarized below:

- Highway Capacity Manual, 6th Edition methodology and VISSIM simulation program will be used to analyze freeway mainline, ramp junctions, weaving, managed lanes, and ramp metering.
- Existing (2019) counts will be collected from various sources including Caltrans, PeMS (Freeway Performance Measurement System), RCTC, cities, and field data.
- Existing (2019) travel time data along the I-15 study corridor will be collected on the field.
- Existing lane configuration and roadway geometry will be collected from field observations.
- Existing ramp metering data will be provided by Caltrans.
- Most recent 3-year collision history will be provided by Caltrans.
- Existing peak hour factor (PHF) and heavy vehicle percentages will be determined based on the traffic counts.
- Opening Year and Design Year PHF is assumed to be 0.95 for urban freeways per HCM (2010), Chapter 10.
- Opening Year and Design Year heavy vehicle percentages will be determined based on the historical data from Caltrans' truck count database in addition to freeway truck classification and traffic counts.

DOCUMENTATION

The following deliverables will be provided to the project team for review and comment.

Traffic Volumes Development Report – The forecast volumes will be submitted as a separate report before the traffic operation analysis for the project is conducted.

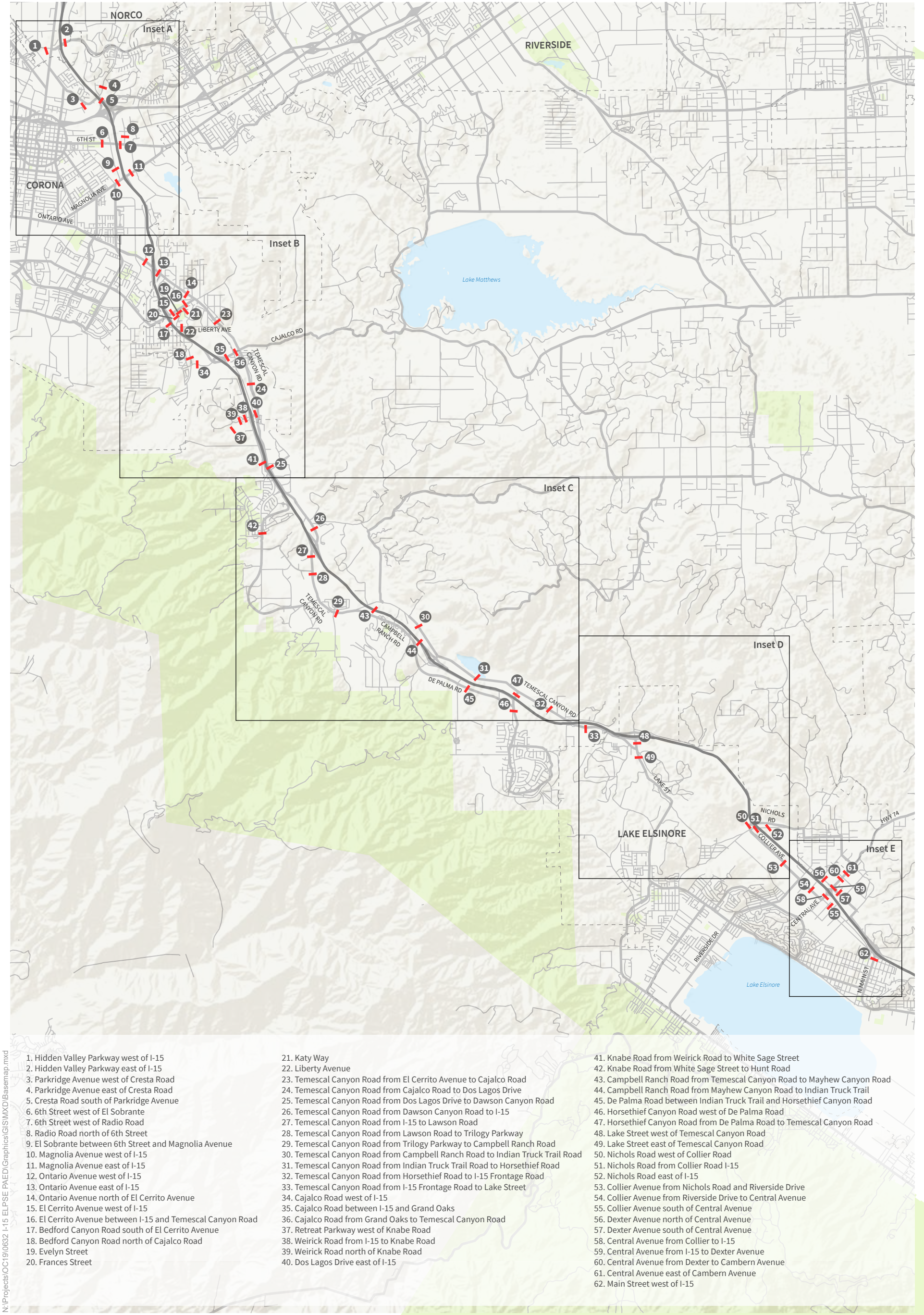
Traffic Operations Analysis Report (TOAR) – The results of the future year traffic operations analysis along with the information contained in the deliverable discussed above will be presented in a stand-alone Traffic Operations Analysis Report for review and comment.

If you have any questions, please contact Jason Pack at (949) 308-6312.

ATTACHMENTS

- Figure 1** Traffic Count Locations
- Figure 1.A** Traffic Count Locations Inset A
- Figure 1.B** Traffic Count Locations Inset B
- Figure 1.C** Traffic Count Locations Inset C
- Figure 1.D** Traffic Count Locations Inset D
- Figure 1.E** Traffic Count Locations Inset E
- Figure 2** Freeway Counts Locations
- Figure 3** Related RTP Projects
- Attachment 1** RCTC Meeting Agenda: Toll Policy and Operations Committee





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1. Hidden Valley Parkway west of I-15
2. Hidden Valley Parkway east of I-15
3. Parkridge Avenue west of Cresta Road
4. Parkridge Avenue east of Cresta Road
5. Cresta Road south of Parkridge Avenue
6. 6th Street west of El Sobrante
7. 6th Street west of Radio Road
8. Radio Road north of 6th Street
9. El Sobrante between 6th Street and Magnolia Avenue
10. Magnolia Avenue west of I-15
11. Magnolia Avenue east of I-15
12. Ontario Avenue west of I-15
13. Ontario Avenue east of I-15
14. Ontario Avenue north of El Cerrito Avenue
15. El Cerrito Avenue west of I-15
16. El Cerrito Avenue between I-15 and Temescal Canyon Road
17. Bedford Canyon Road south of El Cerrito Avenue
18. Bedford Canyon Road north of Cajalco Road
19. Evelyn Street
20. Frances Street

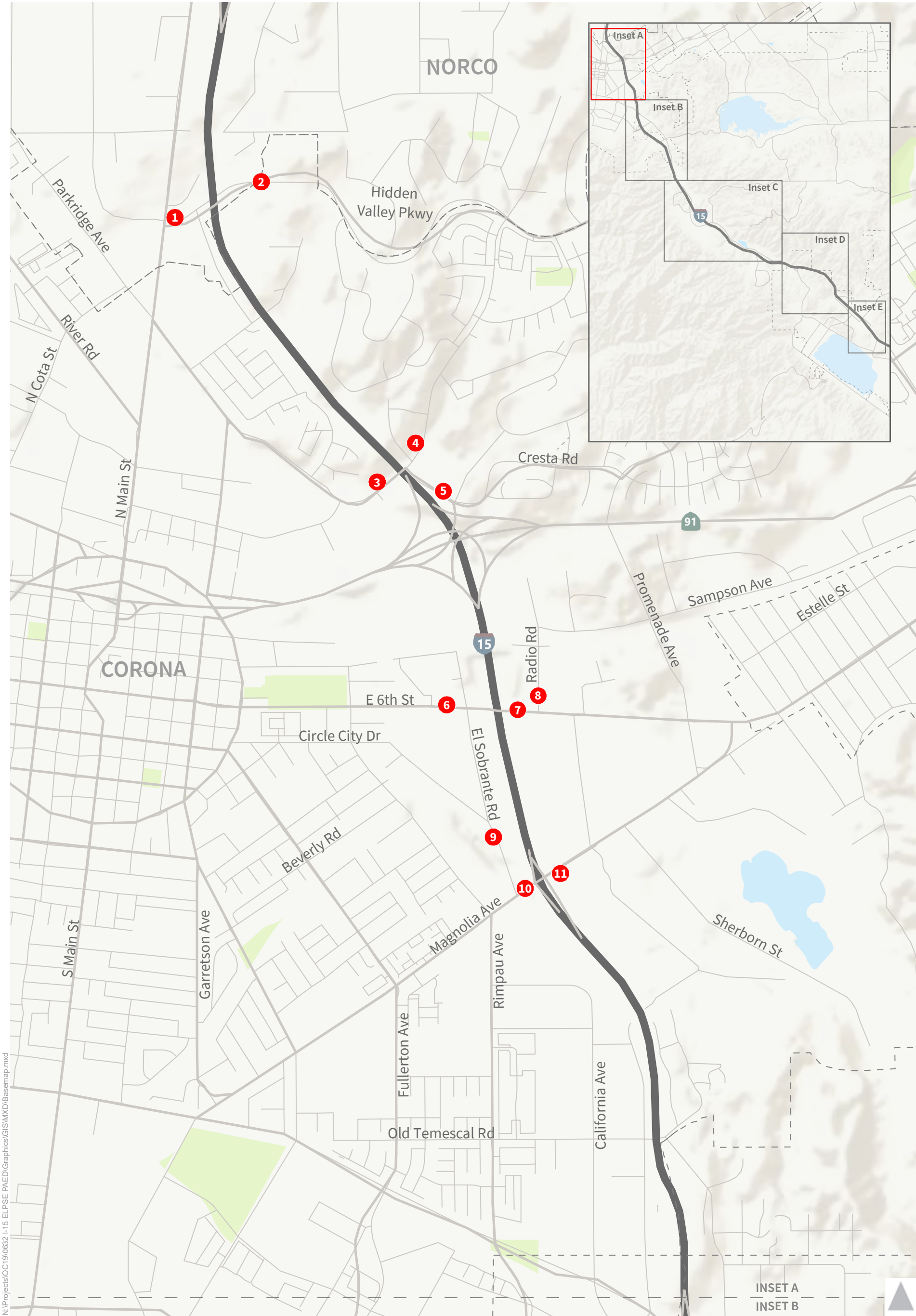
21. Katy Way
22. Liberty Avenue
23. Temescal Canyon Road from El Cerrito Avenue to Cajalco Road
24. Temescal Canyon Road from Cajalco Road to Dos Lagos Drive
25. Temescal Canyon Road from Dos Lagos Drive to Dawson Canyon Road
26. Temescal Canyon Road from Dawson Canyon Road to I-15
27. Temescal Canyon Road from I-15 to Lawson Road
28. Temescal Canyon Road from Lawson Road to Trilogy Parkway
29. Temescal Canyon Road from Trilogy Parkway to Campbell Ranch Road
30. Temescal Canyon Road from Campbell Ranch Road to Indian Truck Trail Road
31. Temescal Canyon Road from Indian Truck Trail Road to Horsethief Road
32. Temescal Canyon Road from Horsethief Road to I-15 Frontage Road
33. Temescal Canyon Road from I-15 Frontage Road to Lake Street
34. Cajalco Road west of I-15
35. Cajalco Road between I-15 and Grand Oaks
36. Cajalco Road from Grand Oaks to Temescal Canyon Road
37. Retreat Parkway west of Knabe Road
38. Weirick Road from I-15 to Knabe Road
39. Weirick Road north of Knabe Road
40. Dos Lagos Drive east of I-15

41. Knabe Road from Weirick Road to White Sage Street
42. Knabe Road from White Sage Street to Hunt Road
43. Campbell Ranch Road from Temescal Canyon Road to Mayhew Canyon Road
44. Campbell Ranch Road from Mayhew Canyon Road to Indian Truck Trail
45. De Palma Road between Indian Truck Trail and Horsethief Canyon Road
46. Horsethief Canyon Road west of De Palma Road
47. Horsethief Canyon Road from De Palma Road to Temescal Canyon Road
48. Lake Street west of Temescal Canyon Road
49. Lake Street east of Temescal Canyon Road
50. Nichols Road west of Collier Road
51. Nichols Road from Collier Road I-15
52. Nichols Road east of I-15
53. Collier Avenue from Nichols Road and Riverside Drive
54. Collier Avenue from Riverside Drive to Central Avenue
55. Collier Avenue south of Central Avenue
56. Dexter Avenue north of Central Avenue
57. Dexter Avenue south of Central Avenue
58. Central Avenue from Collier to I-15
59. Central Avenue from I-15 to Dexter Avenue
60. Central Avenue from Dexter to Cambern Avenue
61. Central Avenue east of Cambern Avenue
62. Main Street west of I-15


- Counts
- Cities
- Streets



Figure 1
Traffic Count Locations



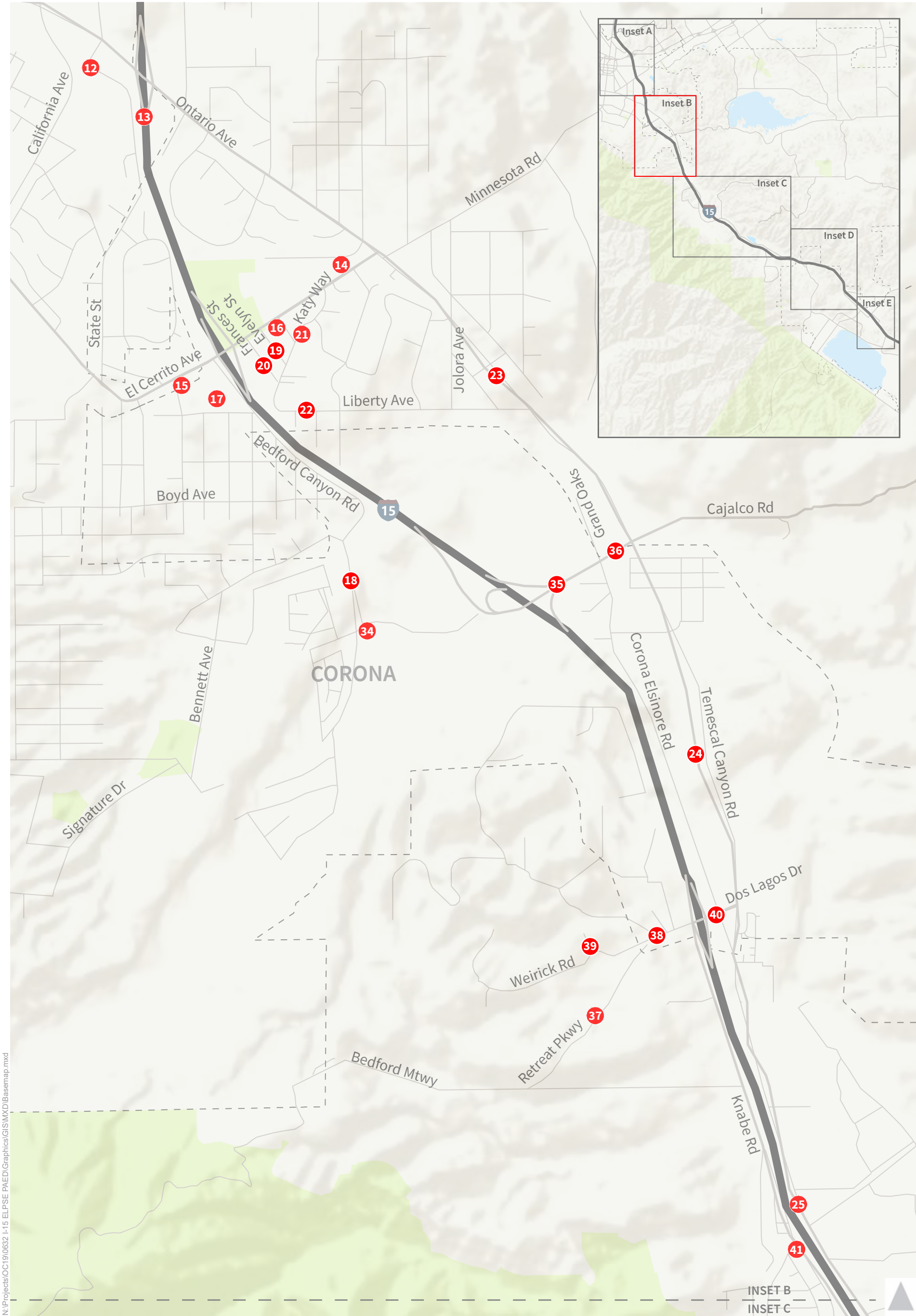
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-  Count Locations
-  Cities
-  Streets

1. Hidden Valley Parkway west of I-15
2. Hidden Valley Parkway east of I-15
3. Parkridge Avenue west of Cresta Road
4. Parkridge Avenue east of Cresta Road
5. Cresta Road south of Parkridge Avenue
6. 6th Street west of El Sobrante
7. 6th Street west of Radio Road
8. Radio Road north of 6th Street
9. El Sobrante between 6th Street and Magnolia Avenue
10. Magnolia Avenue west of I-15
11. Magnolia Avenue east of I-15



Figure 1.A
Traffic Count Locations



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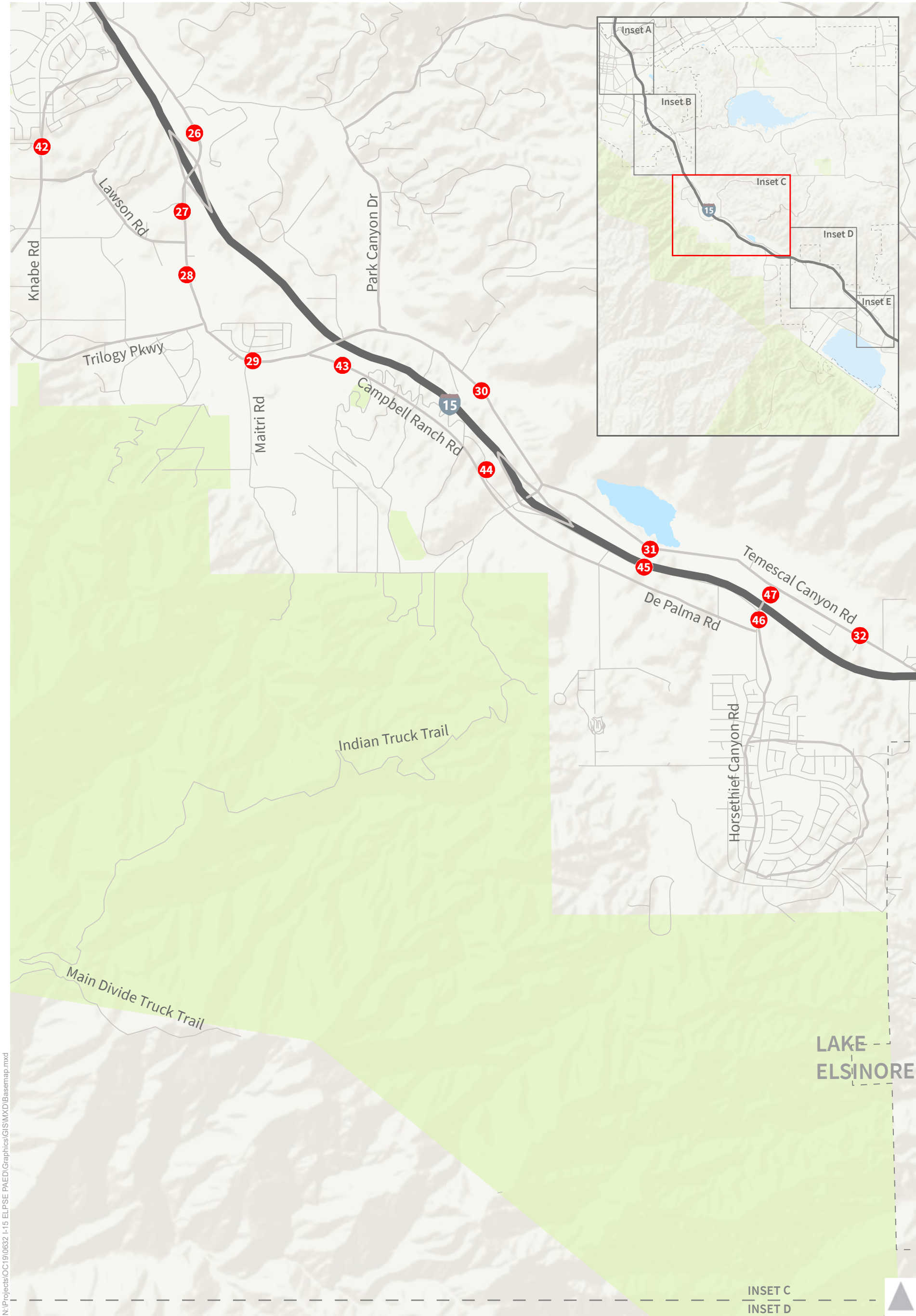
- # Count Locations**
- Cities**
- Streets**

- 12. Ontario Avenue west of I-15
- 13. Ontario Avenue east of I-15
- 14. Ontario Avenue north of El Cerrito Avenue
- 15. El Cerrito Avenue west of I-15
- 16. El Cerrito Avenue between I-15 and Temescal Canyon Road
- 17. Bedford Canyon Road south of El Cerrito Avenue
- 18. Bedford Canyon Road north of Cajalco Road
- 19. Evelyn Street
- 20. Frances Street
- 21. Katy Way
- 22. Liberty Avenue
- 23. Temescal Canyon Road from El Cerrito Avenue to Cajalco Road
- 24. Temescal Canyon Road from Cajalco Road to Dos Lagos Drive
- 25. Temescal Canyon Road from Dos Lagos Drive to Dawson Canyon Road

- 34. Cajalco Road west of I-15
- 35. Cajalco Road between I-15 and Grand Oaks
- 36. Cajalco Road from Grand Oaks to Temescal Canyon Road
- 37. Retreat Parkway west of Knabe Road
- 38. Weirick Road from I-15 to Knabe Road
- 39. Weirick Road north of Knabe Road
- 40. Dos Lagos Drive east of I-15
- 41. Knabe Road from Weirick Road to White Sage Street



Figure 1.B
Traffic Count Locations



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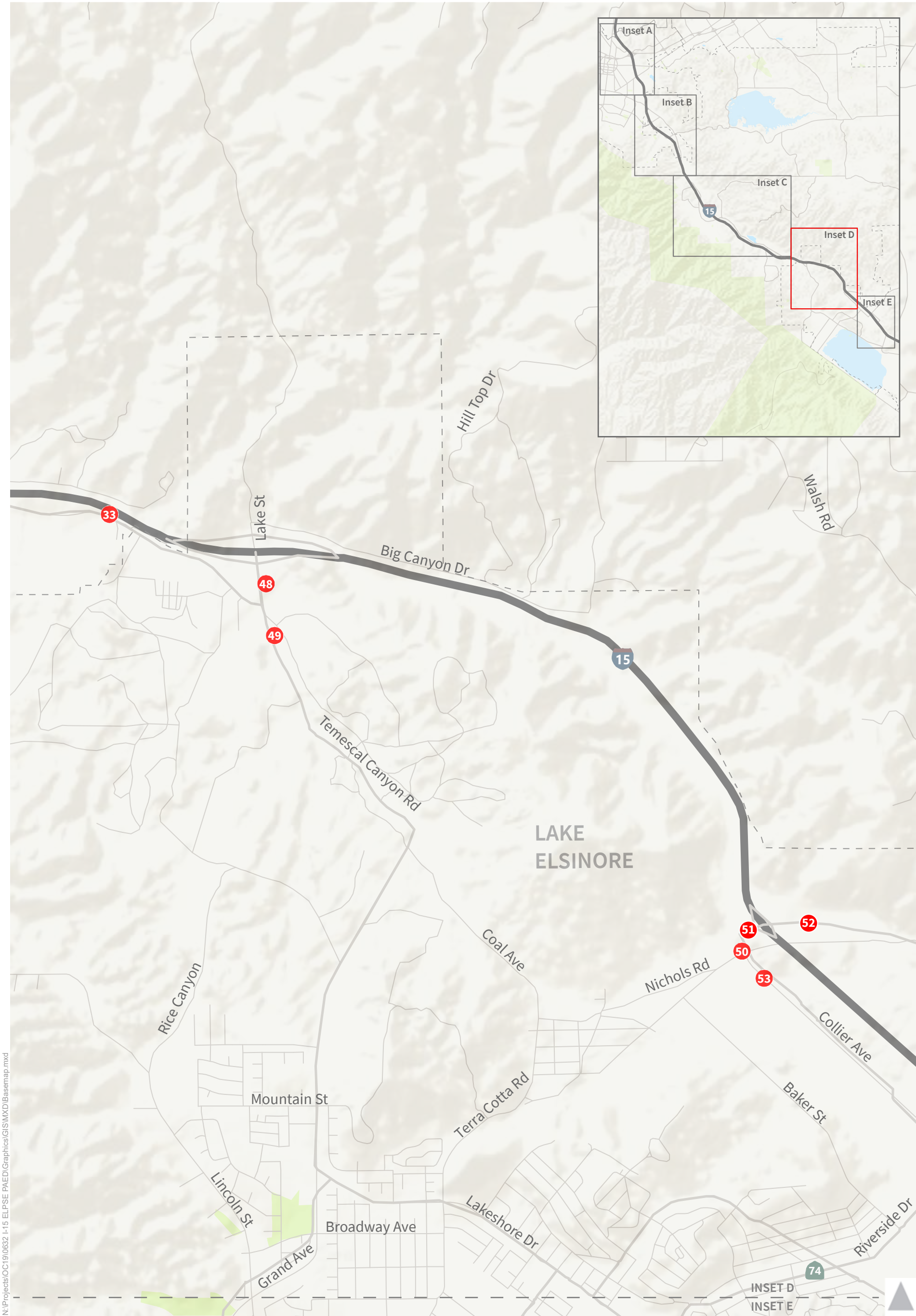
-  Count Locations
-  Cities
-  Streets

- 26. Temescal Canyon Road from Dawson Canyon Road to I-15
- 27. Temescal Canyon Road from I-15 to Lawson Road
- 28. Temescal Canyon Road from Lawson Road to Trilogy Parkway
- 29. Temescal Canyon Road from Trilogy Parkway to Campbell Ranch Road
- 30. Temescal Canyon Road from Campbell Ranch Road to Indian Truck Trail Road
- 31. Temescal Canyon Road from Indian Truck Trail Road to Horsethief Road
- 32. Temescal Canyon Road from Horsethief Road to I-15 Frontage Road

- 42. Knabe Road from White Sage Street to Hunt Road
- 43. Campbell Ranch Road from Temescal Canyon Road to Mayhew Canyon Road
- 44. Campbell Ranch Road from Mayhew Canyon Road to Indian Truck Trail
- 45. De Palma Road between Indian Truck Trail and Horsethief Canyon Road
- 46. Horsethief Canyon Road west of De Palma Road
- 47. Horsethief Canyon Road from De Palma Road to Temescal Canyon Road



Figure 1.C
Traffic Count Locations



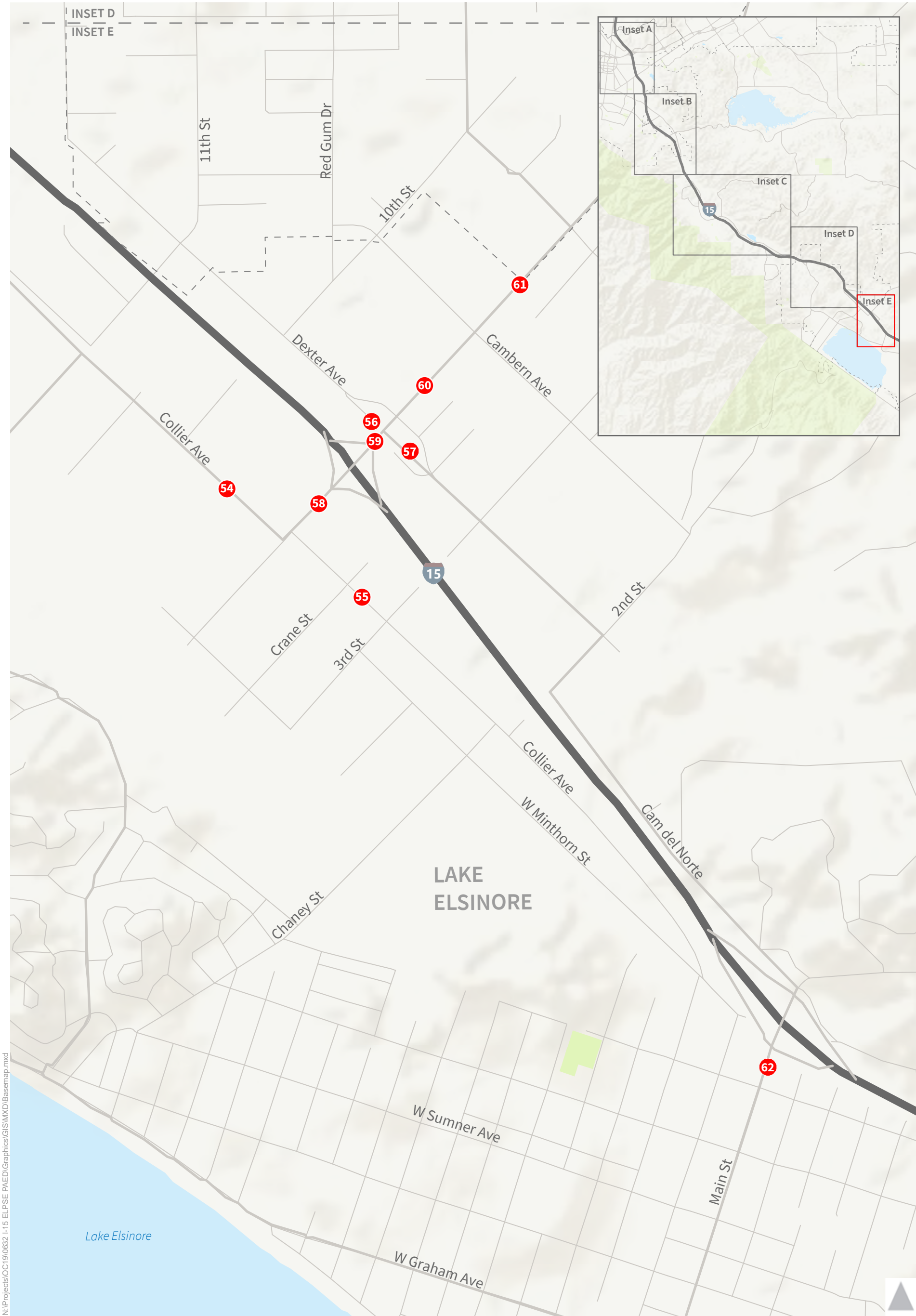
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- Count Locations
- Cities
- Streets

- 33. Temescal Canyon Road from I-15 Frontage Road to Lake Street
- 48. Lake Street west of Temescal Canyon Road
- 49. Lake Street east of Temescal Canyon Road
- 50. Nichols Road west of Collier Road
- 51. Nichols Road from Collier Road I-15
- 52. Nichols Road east of I-15
- 53. Collier Avenue from Nichols Road and Riverside Drive



Figure 1.D
Traffic Count Locations



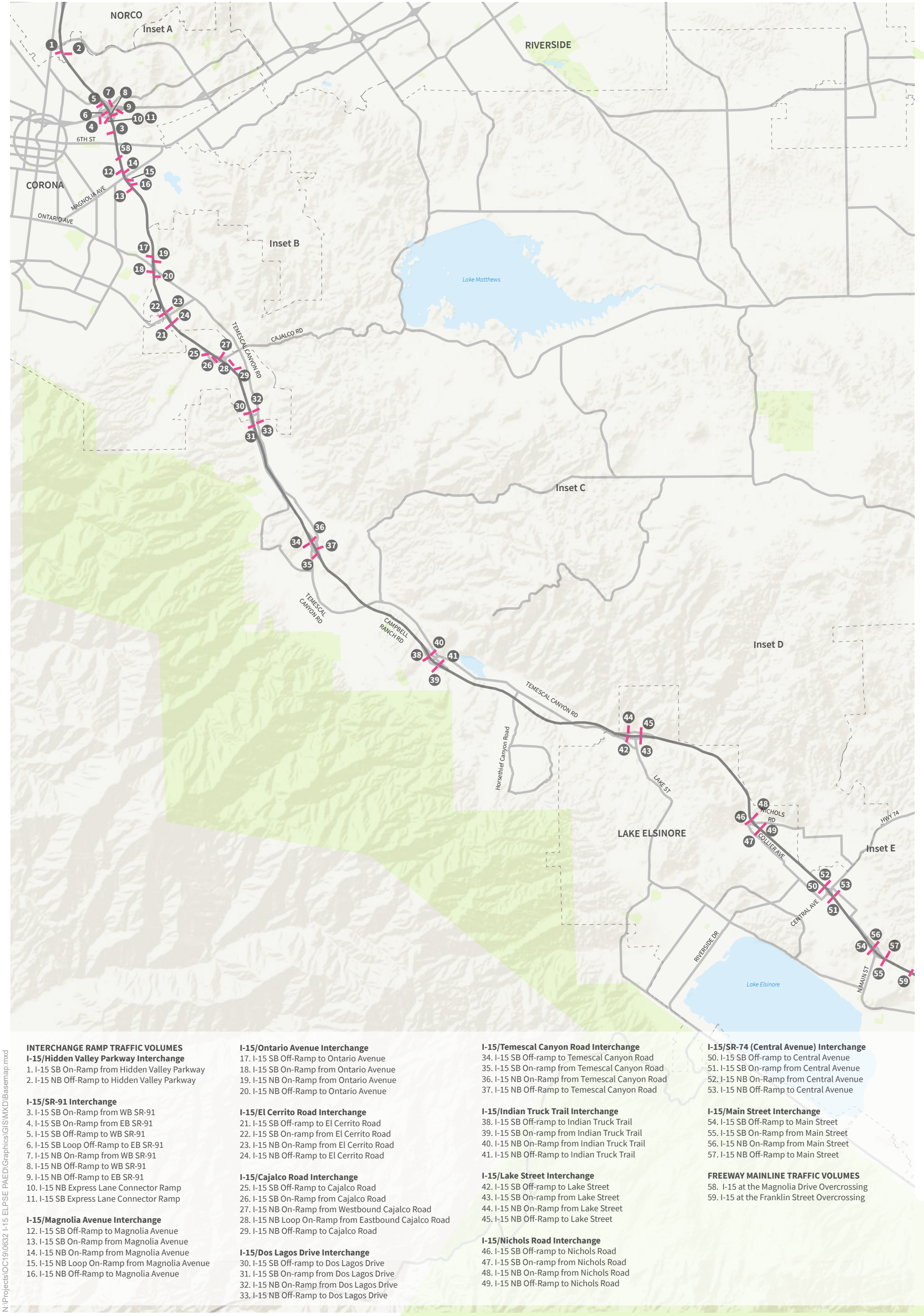
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- # Count Locations
- Cities
- Streets

- 54. Collier Avenue from Riverside Drive to Central Avenue
- 55. Collier Avenue south of Central Avenue
- 56. Dexter Avenue north of Central Avenue
- 57. Dexter Avenue south of Central Avenue
- 58. Central Avenue from Collier to I-15
- 59. Central Avenue from I-15 to Dexter Avenue
- 60. Central Avenue from Dexter to Cambern Avenue
- 61. Central Avenue east of Cambern Avenue
- 62. Main Street west of I-15



Figure 1.E
Traffic Count Locations

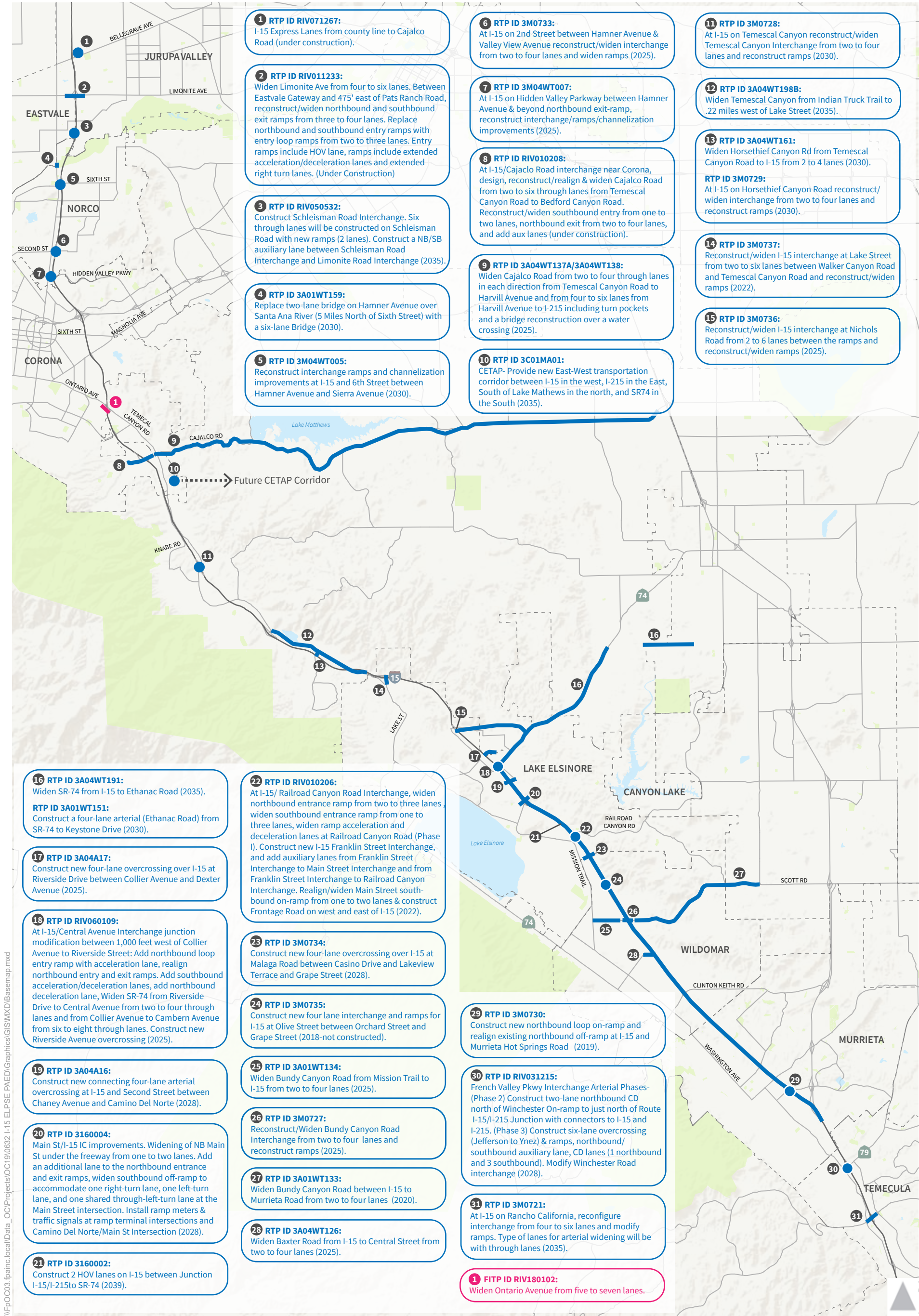


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- Counts
- Cities
- Streets



Figure 2
Freeway Count Segments



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Figure 3
RTP Projects



MEETING AGENDA

Toll Policy and Operations Committee

Time: 11:00 a.m.

Date: August 22, 2019

Location: Riverside County Transportation Commission
County of Riverside Administration Center
4080 Lemon St, Third Floor, Riverside CA 92501

COMMITTEE MEMBERS

Brian Berkson, **Chair** / Chris Barajas, City of Jurupa Valley
Lloyd White, **Vice Chair** / Julio Martinez, City of Beaumont
Larry Smith / Jim Hyatt, City of Calimesa
Clint Lorimore / Todd Rigby, City of Eastvale
Dana Reed / To Be Appointed, City of Indian Wells

Victoria Baca / Carla Thornton, City of Moreno Valley
Michael M. Vargas / Rita Rogers, City of Perris
Ben J. Benoit / Joseph Morabito, City of Wildomar

STAFF

Anne Mayer, Executive Director
Michael Blomquist, Toll Program Director

AREAS OF RESPONSIBILITY

Policies involving the Commission's Toll Facilities
Setting Tolls or Rates
Considering Contracts with Vendors Working on the Toll Program
Statewide and Federal Legislative Issues Regarding Tolling
Outreach and Marketing of the Toll Facilities
Interactions with Neighboring Jurisdictions Regarding Toll Matters
User-Based Funding Programs and Future Opportunities for Toll Facility Development in Riverside County

**RIVERSIDE COUNTY TRANSPORTATION COMMISSION
TOLL POLICY AND OPERATIONS COMMITTEE**

www.rctc.org

AGENDA*

*Actions may be taken on any item listed on the agenda

11:00 a.m.

Thursday, August 22, 2019

**March Field Conference Room
County of Riverside Administrative Center
4080 Lemon Street, Third Floor
Riverside, California**

In compliance with the Brown Act and Government Code Section 54957.5, agenda materials distributed 72 hours prior to the meeting, which are public records relating to open session agenda items, will be available for inspection by members of the public prior to the meeting at the Commission office, 4080 Lemon Street, Third Floor, Riverside, CA, and on the Commission's website, www.rctc.org.

In compliance with the Americans with Disabilities Act, Government Code Section 54954.2, and the Federal Transit Administration Title VI, please contact the Clerk of the Board at (951) 787-7141 if special assistance is needed to participate in a Commission meeting, including accessibility and translation services. Assistance is provided free of charge. Notification of at least 48 hours prior to the meeting time will assist staff in assuring reasonable arrangements can be made to provide assistance at the meeting.

- 1. CALL TO ORDER**
- 2. ROLL CALL**
- 3. PLEDGE OF ALLEGIANCE**
- 4. PUBLIC COMMENTS** – *Each individual speaker is limited to speak three (3) continuous minutes or less. The Committee may, either at the direction of the Chair or by majority vote of the Committee, waive this three minute time limitation. Depending on the number of items on the Agenda and the number of speakers, the Chair may, at his/her discretion, reduce the time of each speaker to two (2) continuous minutes. Also, the Committee may terminate public comments if such comments become repetitious. In addition, the maximum time for public comment for any individual item or topic is thirty (30) minutes. Speakers may not yield their time to others without the consent of the Chair. Any written documents to be distributed or presented to the Committee shall be submitted to the Clerk of the Board. This policy applies to Public Comments and comments on Agenda Items.*

Under the Brown Act, the Board should not take action on or discuss matters raised during public comment portion of the agenda which are not listed on the agenda. Board members may refer such matters to staff for factual information or to be placed on the subsequent agenda for consideration.

5. APPROVAL OF MINUTES – FEBRUARY 28, 2019 AND MAY 23, 2019

- 6. ADDITIONS/REVISIONS** *(The Committee may add an item to the Agenda after making a finding that there is a need to take immediate action on the item and that the item came to the attention of the Committee subsequent to the posting of the agenda. An action adding an item to the agenda requires 2/3 vote of the Committee. If there are less than 2/3 of the Committee members present, adding an item to the agenda requires a unanimous vote. Added items will be placed for discussion at the end of the agenda.)*

- 7. CONSENT CALENDAR** - *All matters on the Consent Calendar will be approved in a single motion unless a Commissioner(s) requests separate action on specific item(s). Items pulled from the Consent Calendar will be placed for discussion at the end of the agenda.*

7A. 91 EXPRESS LANES MONTHLY STATUS REPORTS

Page 1

Overview

This item is for the Committee to:

- 1) Receive and file the 91 Express Lanes Monthly Reports for the quarter ended June 30, 2019; and
- 2) Forward to the Commission for final action.

8. TOLL OPERATIONS YEAR-IN-REVIEW AND FISCAL YEAR 2018-2019 OPERATING RESULTS

Page 69

Overview

This item is for the Committee to receive and file a presentation providing a review of results from the latest fiscal year of toll operations.

9. AMENDMENT TO THE 91 EXPRESS LANES OPERATOR AGREEMENT

Page 84

Overview

This item is for the Committee to:

- 1) Approve Agreement No. 13-31-105-04, Amendment No. 4 to the 91 Express Lanes Operator Agreement No. 13-31-105-00 (commonly referred to as the ORCOA), among the Orange County Transportation Authority (OCTA), the Commission, and Cofiroute USA, LLC (Cofiroute), to extend the agreement for an additional six months in the amount of \$3,180,851 for a total amount not to exceed \$36,007,044;
- 2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to execute the amendment on behalf of the Commission; and
- 3) Forward to the Commission for final action.

10. RCTC 91 EXPRESS LANES TOLL POLICY

Page 95

Overview

This item is for the Committee to:

- 1) Approve Resolution 19-016, *"Amended and Restated Resolution of the Riverside County Transportation Commission Regarding the RCTC 91 Express Lane Toll Policy"* and
- 2) Forward to the Commission to conduct a public hearing at its September meeting.

11. COMMISSIONERS / STAFF REPORT

Overview

This item provides the opportunity for the Commissioners and staff to report on attended and upcoming meeting/conferences and issues related to Commission activities.

12. ADJOURNMENT

The next Toll Policy and Operations Committee meeting is scheduled to be held at **11:00 a.m., Thursday, February 27, 2020**, March Field, Third Floor, County Administrative Center, 4080 Lemon Street, Riverside.

AGENDA ITEM 5

MINUTES

RIVERSIDE COUNTY TRANSPORTATION COMMISSION

TOLL POLICY AND OPERATIONS COMMITTEE

Thursday, February 28, 2019

MINUTES

1. CALL TO ORDER

The meeting of the Toll Policy and Operations Committee was called to order by Chair Brian Berkson at 11:01 a.m., in the March Field Conference Room at the County of Riverside Administrative Center, 4080 Lemon Street, First Floor, Riverside, California, 92501.

2. ROLL CALL

Members/Alternates Present

Brian Berkson
Jim Hyatt
Dana Reed
Michael M. Vargas
Lloyd White

Members Absent

Victoria Baca
Ben J. Benoit
Clint Lorimore

3. PLEDGE OF ALLEGIANCE

Executive Director Anne Mayer led the Committee in a flag salute.

4. PUBLIC COMMENTS

There were no requests to speak from the public.

5. APPROVAL OF MINUTES – AUGUST 23, 2018

M/S/C (Hyatt/White) to approve the minutes of August 23, 2018 meeting as submitted.

Abstain: Vargas

6. ADDITIONS / REVISIONS

There were no additions or revisions to the agenda.

7. 91 EXPRESS LANES MONTHLY STATUS REPORTS

Michael Blomquist, Toll Programs Director, presented an overview of the status reports the Committee will be receiving at this meeting and future meetings.

Chair Berkson discussed using CHP as a deterrent at the beginning of the 3+ lanes rather than the end to see the difference in the amount of customers utilizing the 3+ lanes.

Commissioner Vargas asked who sets the fines for toll violations, as he feels they are not high enough. Staff stated the Commission sets the fines for toll violations.

Commissioner Reed stated at one point the legislation allowed the toll agency to receive 50% of the fee collected for citations given, however, that has since changed and the agency no longer receives a portion of the revenue.

Anne Mayer stated the Commission is obligated to use the CHP and there is no longer any revenue sharing with the agency from citation fees collected.

Michael Blomquist stated staff would bring options regarding 3+ lane enforcement to a future committee meeting.

Commissioner Smith asked if cameras can see into tinted windows to monitor occupancy. Jennifer Crosson stated there are two programs being tested to monitor occupancy: automated occupancy detection enforcement/cameras, and tint and nighttime are definitely an issue; as well as an infrared system, which has issues from windshields with metal oxide.

Commissioner Berkson asked questions about the call center, and Mr. Blomquist stated there is an automated system to attempt to screen phone calls prior to being sent to a live operator.

Commissioner Hyatt stated using The Toll Roads in south Orange County is incredibly easy to use in that you can handle everything online without the need to call in.

M/S/C to receive and file The 91 Express Lanes Monthly Reports.

8. 15 EXPRESS LANES CUSTOMER TRANSPONDER ACCOUNT FEE POLICIES AND TOLL POLICIES

Jennifer Crosson, Toll Program Manager, presented an overview of the proposed Resolution regarding toll policies, which includes a reduction in the discount for Clean Air Vehicles from 50% to 15%.

M/S/C (Reed/Vargas) to:

- 1) Adopt Resolution No. 19-003, “Resolution of the Riverside Transportation Commission Adopting the Amended and Restates Interstate 15 Express Lanes Toll Policy Goals and Toll Policies”;**

Jennifer Crosson presented an overview of the proposed Resolution regarding transponder and customer account fees for the 15 Express Lanes including fees for the sticker transponder, switchable transponder, mailed paper statements, monthly account fees, non-sufficient funds, account suspension, and pay-by-plate.

Chair Berkson asked about families with multiple vehicles who may have switchable transponders as well as a sticker in a particular car. Ms. Crosson stated all cars should have a sticker, even if there is a switchable transponder present. The technology is able to set the toll based on the lowest price available to that vehicle.

M/S/C (Hyatt/Vargas) to:

- 2) Adopt Resolution No. 19-004, “Resolution of the Riverside County Transportation Commission Regarding the 15 Express Lanes Transponder and Customer Account Fee Policies”; and**
- 3) Forward to the Commission for final action.**

9. ELECTION OF OFFICERS

Commissioner Hyatt made a motion to maintain the current Chair and Vice Chair for a second year, seconded by Commissioner Vargas. The motion carried unanimously.

10. COMMISSIONERS / STAFF REPORT

Commissioner Vargas announced a Tamale Festival in Perris on April 27.

Chair Berkson stated it would be beneficial to Committee members to take a tour of toll facilities.

Steve Debaun discussed adhering to the Brown Act in having a quorum of Commissioners traveling together, and Anne Mayer suggested holding tours with smaller groups of Committee members.

11. ADJOURNMENT

There being no further business for consideration by the Toll Policy and Operations Committee, the meeting was adjourned at 11:54 a.m.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Lisa", with a long horizontal flourish extending to the right.

Lisa Mobley
Clerk of the Board

RIVERSIDE COUNTY TRANSPORTATION COMMISSION

TOLL POLICY AND OPERATIONS COMMITTEE

Thursday, May 23, 2019

MINUTES

1. CALL TO ORDER

The meeting of the Toll Policy and Operations Committee was called to order by Chair Brian Berkson at 11:02 a.m., in the March Field Conference Room at the County of Riverside Administrative Center, 4080 Lemon Street, First Floor, Riverside, California, 92501.

2. ROLL CALL

Members/Alternates Present

Victoria Baca
Ben J. Benoit
Brian Berkson
Clint Lorimore
Dana Reed
Larry Smith
Michael M. Vargas
Lloyd White

Members Absent

3. PLEDGE OF ALLEGIANCE

Steve Debaun, Legal Counsel, led the Committee in a flag salute.

4. PUBLIC COMMENTS

There were no requests to speak from the public.

5. APPROVAL OF MINUTES – FEBRUARY 28, 2019

Approval of the February Minutes was continued to the next meeting.

6. ADDITIONS / REVISIONS

There were no additions or revisions to the agenda.

7. CONSENT CALENDAR

7A. 91 EXPRESS LANES MONTHLY STATUS REPORTS

M/S/C (Reed/White) to approve the Consent Calendar.

8. EXPRESS LANES ENFORCEMENT

At this time, Commissioner Lorimore joined the meeting.

Jennifer Crosson, Toll Program Manager, provided an overview of Express Lanes Toll Evasion Enforcement processes and advances in occupancy detection technology. Ms. Crosson presented on current enforcement practices.

At this time, Commissioner Benoit joined the meeting.

Commissioner Reed asked what other counties do for enforcement and Ms. Crosson stated the Commission is in line with other counties.

Commissioner Berkson stated when the CHP is present at the entrance to the 3+ lane people do not cheat, so having them there works as a deterrent. RCTC does not collect a portion of the ticket fines, so having CHP strictly as a deterrent will be more beneficial for the agency as it will lower the number of people utilizing the 3+ lane for free.

Commissioner Lorimore expressed concern that the Commission is paying the CHP for something they should already be doing and suggested a legislative fix wherein the ticket cost would offset the CHP contract.

At this time, Commissioner Smith joined the meeting.

Commissioner Reed asked about the possibility of introducing a rebate program for the 3+ lane, and Michael Blomquist stated an item will be presented at an upcoming meeting providing options for the 3+ lane.

Commissioner Berkson suggested additional signage regarding the fine for evasion.

At this time, Commissioner Vargas left the meeting.

Reinland Jones provided the second part of the presentation, an overview future HOV 3+ enforcement approaches including a camera-based approach, an app based approach, infrared sensors, and in car sensors.

Following Committee discussion, Michael Blomquist stated staff will work with the CHP to see if it is possible to locate a safe place to stage a CHP vehicle just prior to the 3+ HOV lanes as a deterrent.

M/S/C to receive and file the Express Lanes Enforcement Report.

9. AMENDED AND RESTATED ORDINANCE OF RIVERSIDE COUNTY TRANSPORTATION COMMISSION RELATING TO THE ADMINISTRATION OF TOLLS AND THE ENFORCEMENT OF TOLL VIOLATIONS FOR THE RIVERSIDE COUNTY TRANSPORTATION COMMISSION EXPRESS LANES

In preparation of the opening of the I-15 Express Lanes, Jennifer Crosson presented an overview of proposed Ordinance 19-001 which includes toll evasion penalties and fees.

Commissioner Reed requested additional information regarding assessments, and Ms. Crosson detailed the policy was inherited from OCTA and the assessments refer to collections fees.

M/S/C (Reed/White) to:

- 1) Adopt Ordinance No. 19-001 *“An Amended and Restated Ordinance of the Riverside County Transportation Commission Relating to the Administration of Tolls and the Enforcement of Toll Violations for the Riverside County Transportation Commission Express Lanes”*, including approval of the toll evasion penalties and fees for a violation set forth in Schedule A of the Ordinance; and**
- 2) Forward to the Commission to conduct a public hearing.**

Commissioner Lorimore asked for clarification regarding the timeline as to when violations are sent to collections. Ms. Crosson provided an overview of the violation letter process prior to being turned over to collections.

10. ITEMS(S) PULLED FROM CONSENT CALENDAR AGENDA

None

11. COMMISSIONERS / STAFF REPORT

Commissioners Reed and Baca both stated they would be unable to attend the August meeting. Staff stated a quorum check is conducted the week prior to the meeting and if a quorum is not reached, new dates will be proposed.

12. ADJOURNMENT

There being no further business for consideration by the Toll Policy and Operations Committee, the meeting was adjourned at 12:04 p.m.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Lisa", with a long horizontal stroke extending to the right.

Lisa Mobley
Clerk of the Board

AGENDA ITEM 7A

<i>RIVERSIDE COUNTY TRANSPORTATION COMMISSION</i>	
DATE:	August 22, 2019
TO:	Toll Policy and Operations Committee
FROM:	Jennifer Crosson, Toll Operations Manager
THROUGH:	Michael Blomquist, Toll Program Director
SUBJECT:	91 Express Lanes Monthly Status Reports

STAFF RECOMMENDATION:

This item is for the Committee to:

- 1) Receive and file the 91 Express Lanes Monthly Reports for the quarter ended June 30, 2019; and
- 2) Forward to the Commission for final action.

BACKGROUND INFORMATION:

The monthly 91 Express Lanes reports for the fourth quarter of 2019 are provided. The monthly reports provide information about 91 Express Lanes performance and activity. The monthly reports include information for both segments of the 91 Express Lanes in Orange and Riverside Counties.

Attachments:

- 1) 91 Express Lanes Status Report for April 2019
- 2) 91 Express Lanes Status Report for May 2019
- 3) 91 Express Lanes Status Report for June 2019



**Orange County Transportation Authority
Riverside County Transportation Commission**



Status Report
April 2019

As of April 30, 2019

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OPERATIONS OVERVIEW OCTA

TRAFFIC AND REVENUE STATISTICS FOR OCTA

Total traffic volume on the OCTA 91 Express Lanes for April 2019 was 1,529,138. This represents a daily average of 50,971. This is a 4.7% increase in total traffic volume from the same period last year when traffic levels totaled 1,461,076. Potential toll revenue for the month was \$4,487,650 which represents an increase of 4.6% from the prior year's total of \$4,289,009. Carpool percentage for the month was 26.59% as compared to the previous year's rate of 25.52%.

Month-to-date traffic and revenue data are summarized in the table below. The following trip and revenue statistics tables represent all trips taken on the OCTA 91 Express Lanes and associated potential revenue for the month of April 2019.

Current Month-to-Date (MTD) as of April 30, 2019

Trips	Apr-19 MTD Actual	Stantec MTD Projected	# Variance	% Variance	Apr-18 MTD Actual	Yr-to-Yr % Variance
Full Toll Lanes	1,122,505	1,153,473	(30,968)	(2.7%)	1,088,166	3.2%
3+ Lanes	406,633	353,325	53,308	15.1%	372,910	9.0%
Total Gross Trips	1,529,138	1,506,798	22,340	1.5%	1,461,076	4.7%
Revenue						
Full Toll Lanes	\$4,406,472	\$4,615,139	(\$208,667)	(4.5%)	\$4,212,016	4.6%
3+ Lanes	\$81,179	\$88,044	(\$6,865)	(7.8%)	\$76,993	5.4%
Total Gross Revenue	\$4,487,650	\$4,703,183	(\$215,533)	(4.6%)	\$4,289,009	4.6%
Average Revenue per Trip						
Average Full Toll Lanes	\$3.93	\$4.00	(\$0.07)	(1.8%)	\$3.87	1.6%
Average 3+ Lanes	\$0.20	\$0.25	(\$0.05)	(20.0%)	\$0.21	(4.8%)
Average Gross Revenue	\$2.93	\$3.12	(\$0.19)	(6.1%)	\$2.94	(0.3%)

The 2019 fiscal year-to-date traffic volume increased by 5.5% and potential toll revenue increased by 5.2%, when compared with the same period last year. Year-to-date average revenue per-trip is \$2.97.

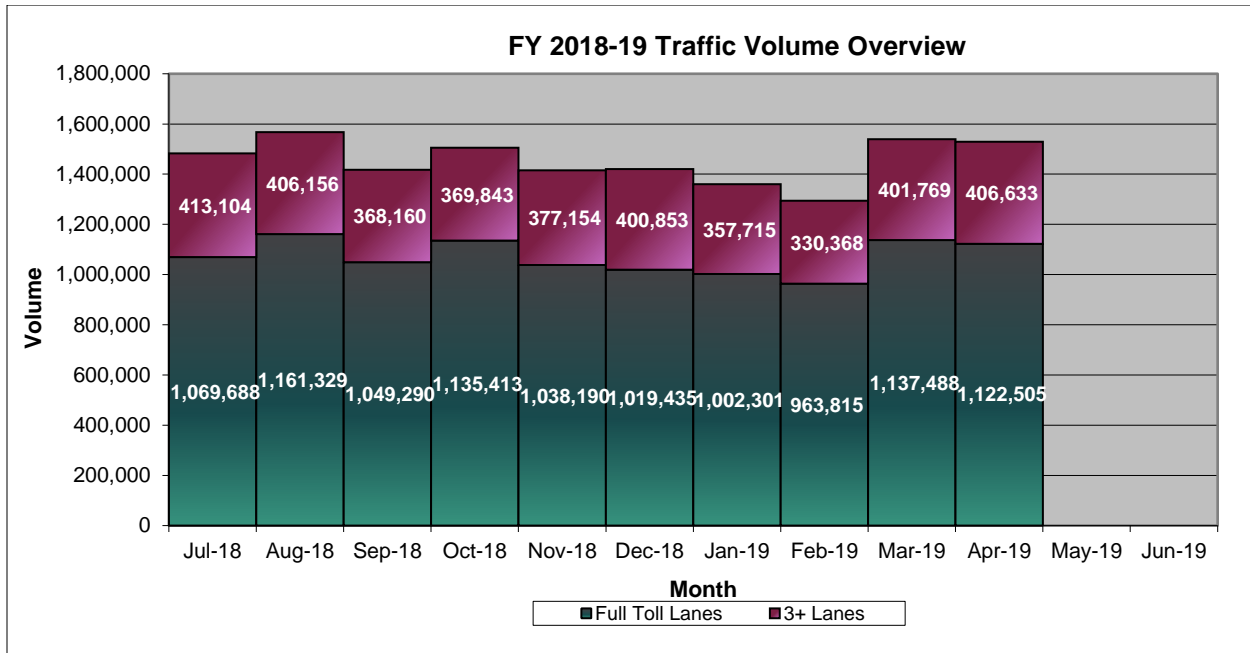
Fiscal year-to-date traffic and revenue data are summarized in the table below. The following trip and revenue statistics tables represent all trips taken on the OCTA 91 Express Lanes and associated potential revenue for the months of July 2018 through April 2019.

FY 2018-19 Year to Date as of April 30, 2019

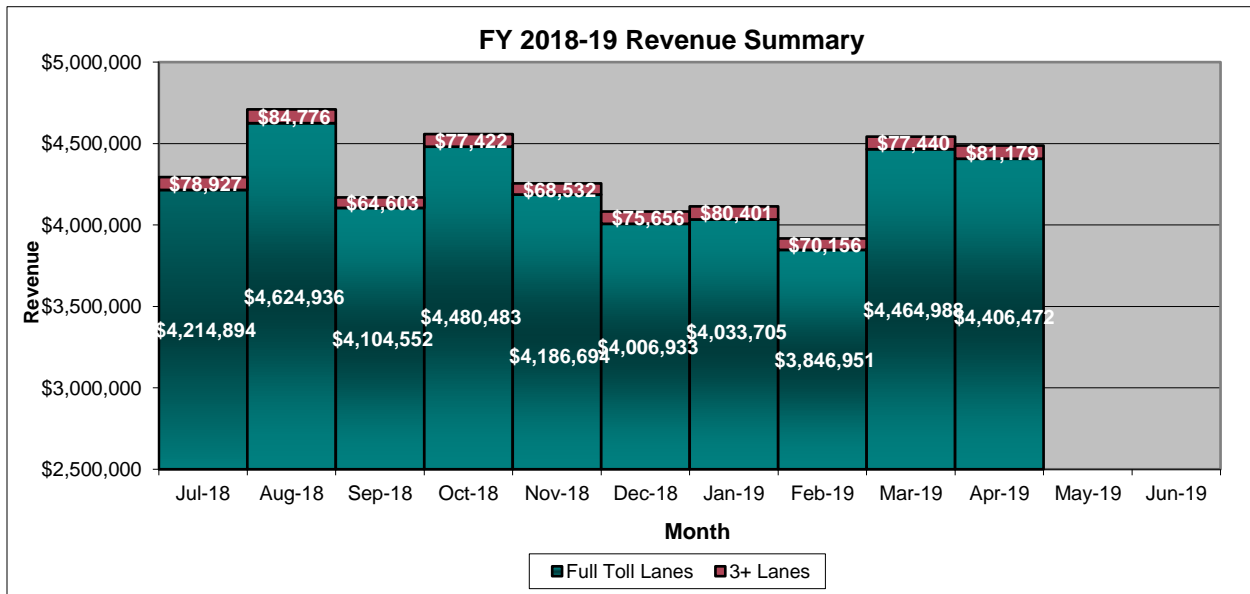
Trips	FY 2018-19 YTD Actual	Stantec YTD Projected	# Variance	% Variance	FY 2017-18 YTD Actual	Yr-to-Yr % Variance
Full Toll Lanes	10,699,454	10,960,279	(260,825)	(2.4%)	10,330,635	3.6%
3+ Lanes	3,831,755	3,298,070	533,685	16.2%	3,441,237	11.3%
Total Gross Trips	14,531,209	14,258,349	272,860	1.9%	13,771,872	5.5%
Revenue						
Full Toll Lanes	\$42,370,608	\$43,805,775	(\$1,435,167)	(3.3%)	\$40,267,281	5.2%
3+ Lanes	\$759,092	\$835,614	(\$76,522)	(9.2%)	\$728,322	4.2%
Total Gross Revenue	\$43,129,699	\$44,641,388	(\$1,511,689)	(3.4%)	\$40,995,603	5.2%
Average Revenue per Trip						
Average Full Toll Lanes	\$3.96	\$4.00	(\$0.04)	(1.0%)	\$3.90	1.5%
Average 3+ Lanes	\$0.20	\$0.25	(\$0.05)	(20.0%)	\$0.21	(4.8%)
Average Gross Revenue	\$2.97	\$3.13	(\$0.16)	(5.1%)	\$2.98	(0.3%)

OCTA Traffic and Revenue Summary

The chart below reflects the total trips breakdown between Full Toll trips and HOV3+ trips for FY 2018-19 on a monthly basis.



The chart below reflects the gross potential revenue breakdown between Full Toll trips and HOV3+ trips for FY 2018-19 on a monthly basis.



Peak traffic hour in the eastbound direction reached or exceeded 90% or more of defined capacity 27 times during the month of April 2019. As demonstrated on the next chart, westbound peak hour traffic volumes top out at 82% of defined capacity.

OCTA EASTBOUND PEAK-HOUR VOLUMES

PM Time	Monday 04/01/19				Tuesday 04/02/19				Wednesday 04/03/19				Thursday 04/04/19				Friday 04/05/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$5.05	507	2,603	77%	\$5.05	499	2,883	85%	\$5.05	524	2,883	85%	\$5.95	502	2,883	85%	\$6.35	624	3,229	95%
1500 - 1600	\$5.40	696	3,033	89%	\$5.65	724	2,977	88%	\$7.00	756	3,281	97%	\$6.00	764	3,188	94%	\$9.15	708	2,742	81%
1600 - 1700	\$5.25	556	2,874	85%	\$5.50	432	2,489	73%	\$7.50	536	2,508	74%	\$8.80	573	2,744	81%	\$8.95	560	2,810	83%
1700 - 1800	\$5.20	624	3,150	93%	\$5.40	484	2,634	77%	\$6.40	592	3,045	90%	\$8.70	587	3,046	90%	\$6.90	672	2,985	88%
1800 - 1900	\$5.40	633	2,395	70%	\$3.85	717	3,027	89%	\$3.85	634	2,910	86%	\$4.75	687	2,990	88%	\$6.40	617	2,446	72%
1900 - 2000	\$3.75	508	1,669	49%	\$3.75	661	2,355	69%	\$3.75	573	2,037	60%	\$5.50	577	1,973	58%	\$5.95	609	2,013	59%

PM Time	Monday 04/08/19				Tuesday 04/09/19				Wednesday 04/10/19				Thursday 04/11/19				Friday 04/12/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$5.05	462	2,661	78%	\$5.05	456	2,868	84%	\$5.05	461	2,927	86%	\$5.95	507	3,254	96%	\$6.35	619	3,367	99%
1500 - 1600	\$5.40	677	2,977	88%	\$5.65	737	2,918	86%	\$7.00	699	3,214	95%	\$6.00	742	3,096	91%	\$9.15	617	2,299	68%
1600 - 1700	\$5.25	544	2,857	84%	\$5.50	504	2,963	87%	\$7.50	493	2,556	75%	\$8.80	543	2,756	81%	\$8.95	592	2,909	86%
1700 - 1800	\$5.20	558	3,005	88%	\$5.40	584	3,000	88%	\$6.40	540	2,847	84%	\$8.70	589	2,850	84%	\$6.90	604	3,069	90%
1800 - 1900	\$5.40	722	2,867	84%	\$3.85	663	3,090	91%	\$3.85	624	2,885	85%	\$4.75	695	2,875	85%	\$6.40	658	3,201	94%
1900 - 2000	\$3.75	436	1,722	51%	\$3.75	487	1,938	57%	\$3.75	613	2,454	72%	\$5.50	712	2,764	81%	\$5.95	648	2,410	71%

PM Time	Monday 04/15/19				Tuesday 04/16/19				Wednesday 04/17/19				Thursday 04/18/19				Friday 04/19/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$5.05	455	2,631	77%	\$5.05	460	2,876	85%	\$5.05	552	3,059	90%	\$5.95	512	3,295	97%	\$6.35	623	3,080	91%
1500 - 1600	\$5.40	632	2,899	85%	\$5.65	722	2,845	84%	\$7.00	708	3,148	93%	\$6.00	710	2,398	71%	\$9.15	759	2,661	78%
1600 - 1700	\$5.25	504	2,878	85%	\$5.50	463	2,808	83%	\$7.50	513	2,637	78%	\$8.80	507	2,585	76%	\$8.95	510	2,688	79%
1700 - 1800	\$5.20	623	3,223	95%	\$5.40	574	2,968	87%	\$6.40	538	2,840	84%	\$8.70	565	2,846	84%	\$6.90	579	2,626	77%
1800 - 1900	\$5.40	661	2,598	76%	\$3.85	665	3,045	90%	\$3.85	680	3,101	91%	\$4.75	647	2,904	85%	\$6.40	565	2,072	61%
1900 - 2000	\$3.75	453	1,723	51%	\$3.75	551	2,071	61%	\$3.75	551	2,293	67%	\$5.50	719	2,852	84%	\$5.95	528	1,724	51%

PM Time	Monday 04/22/19				Tuesday 04/23/19				Wednesday 04/24/19				Thursday 04/25/19				Friday 04/26/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$5.05	482	2,602	77%	\$5.05	514	3,042	89%	\$5.05	525	2,994	88%	\$5.95	535	3,329	98%	\$6.35	568	3,276	96%
1500 - 1600	\$5.40	696	3,057	90%	\$5.65	667	2,756	81%	\$7.00	740	3,298	97%	\$6.00	735	3,030	89%	\$9.15	727	2,684	79%
1600 - 1700	\$5.25	559	3,063	90%	\$5.50	459	2,785	82%	\$7.50	493	2,482	73%	\$8.80	527	2,600	76%	\$8.95	502	2,728	80%
1700 - 1800	\$5.20	555	2,909	86%	\$5.40	575	2,915	86%	\$6.40	529	2,884	85%	\$8.70	612	2,991	88%	\$6.90	550	2,865	84%
1800 - 1900	\$5.40	674	2,604	77%	\$3.85	536	2,322	68%	\$3.85	700	3,050	90%	\$4.75	678	2,994	88%	\$6.40	672	2,541	75%
1900 - 2000	\$3.75	474	1,736	51%	\$3.75	679	2,702	79%	\$3.75	604	2,413	71%	\$5.50	649	2,453	72%	\$5.95	553	1,869	55%

PM Time	Monday 04/29/19				Tuesday 04/30/19				Wednesday 05/01/19				Thursday 05/02/19				Friday 05/03/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$5.05	467	2,596	76%	\$5.05	467	2,882	85%												
1500 - 1600	\$5.40	685	2,988	88%	\$5.65	740	2,855	84%												
1600 - 1700	\$5.25	545	2,960	87%	\$5.50	503	2,944	87%												
1700 - 1800	\$5.20	565	2,998	88%	\$5.40	600	3,077	91%												
1800 - 1900	\$5.40	626	2,441	72%	\$3.85	611	2,710	80%												
1900 - 2000	\$3.75	433	1,426	42%	\$3.75	508	1,866	55%												

OCTA WESTBOUND PEAK-HOUR VOLUMES

AM Time	Monday 04/01/19				Tuesday 04/02/19				Wednesday 04/03/19				Thursday 04/04/19				Friday 04/05/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$3.00	788	2,450	72%	\$3.00	827	2,399	71%	\$3.00	845	2,558	75%	\$3.00	790	2,401	71%	\$3.00	684	1,959	58%
0500 - 0600	\$4.85	921	2,504	74%	\$4.85	1002	2,728	80%	\$4.85	906	2,464	72%	\$4.85	929	2,522	74%	\$4.60	796	2,319	68%
0600 - 0700	\$5.05	612	2,044	60%	\$5.05	609	2,041	60%	\$5.05	665	2,151	63%	\$5.05	633	2,091	62%	\$4.85	623	2,095	62%
0700 - 0800	\$5.55	529	1,891	56%	\$5.55	532	2,087	61%	\$5.55	584	2,256	66%	\$5.55	515	2,042	60%	\$5.40	461	1,841	54%
0800 - 0900	\$5.05	348	1,900	56%	\$5.05	419	1,983	58%	\$5.05	429	2,242	66%	\$5.05	380	2,055	60%	\$4.85	402	1,872	55%
0900 - 1000	\$4.00	439	1,872	55%	\$4.00	393	2,003	59%	\$4.00	464	2,348	69%	\$4.00	442	2,134	63%	\$4.00	366	1,617	48%

AM Time	Monday 04/08/19				Tuesday 04/09/19				Wednesday 04/10/19				Thursday 04/11/19				Friday 04/12/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$3.00	856	2,556	75%	\$3.00	827	2,485	73%	\$3.00	856	2,529	74%	\$3.00	827	2,470	73%	\$3.00	725	2,146	63%
0500 - 0600	\$4.85	966	2,541	75%	\$4.85	996	2,690	79%	\$4.85	878	2,488	73%	\$4.85	918	2,514	74%	\$4.60	871	2,487	73%
0600 - 0700	\$5.05	660	2,225	65%	\$5.05	668	2,093	62%	\$5.05	683	2,147	63%	\$5.05	715	2,222	65%	\$4.85	646	2,243	66%
0700 - 0800	\$5.55	482	2,017	59%	\$5.55	573	2,190	64%	\$5.55	526	2,021	59%	\$5.55	576	2,336	69%	\$5.40	549	2,112	62%
0800 - 0900	\$5.05	347	2,069	61%	\$5.05	354	2,209	65%	\$5.05	371	2,217	65%	\$5.05	390	2,226	65%	\$4.85	371	2,019	59%
0900 - 1000	\$4.00	293	2,053	60%	\$4.00	350	2,289	67%	\$4.00	355	2,318	68%	\$4.00	338	2,237	66%	\$4.00	327	2,077	61%

AM Time	Monday 04/15/19				Tuesday 04/16/19				Wednesday 04/17/19				Thursday 04/18/19				Friday 04/19/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$3.00	845	2,633	77%	\$3.00	817	2,499	74%	\$3.00	844	2,514	74%	\$3.00	856	2,549	75%	\$3.00	627	1,837	54%
0500 - 0600	\$4.85	883	2,474	73%	\$4.85	981	2,671	79%	\$4.85	945	2,518	74%	\$4.85	947	2,474	73%	\$4.60	790	2,283	67%
0600 - 0700	\$5.05	692	2,166	64%	\$5.05	614	1,972	58%	\$5.05	656	2,204	65%	\$5.05	636	2,087	61%	\$4.85	582	1,870	55%
0700 - 0800	\$5.55	547	2,193	65%	\$5.55	572	2,193	65%	\$5.55	530	2,182	64%	\$5.55	546	2,062	61%	\$5.40	427	1,725	51%
0800 - 0900	\$5.05	389	2,250	66%	\$5.05	371	2,207	65%	\$5.05	326	2,059	61%	\$5.05	374	2,193	65%	\$4.85	326	1,598	47%
0900 - 1000	\$4.00	346	2,255	66%	\$4.00	330	2,107	62%	\$4.00	325	2,057	61%	\$4.00	305	2,005	59%	\$4.00	367	1,730	51%

AM Time	Monday 04/22/19				Tuesday 04/23/19				Wednesday 04/24/19				Thursday 04/25/19				Friday 04/26/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$3.00	859	2,551	75%	\$3.00	844	2,590	76%	\$3.00	911	2,672	79%	\$3.00	852	2,484	73%	\$3.00	713	1,973	58%
0500 - 0600	\$4.85	931	2,507	74%	\$4.85	972	2,683	79%	\$4.85	899	2,514	74%	\$4.85	951	2,507	74%	\$4.60	891	2,430	71%
0600 - 0700	\$5.05	622	2,153	63%	\$5.05	644	2,037	60%	\$5.05	718	2,281	67%	\$5.05	670	2,027	60%	\$4.85	664	2,177	64%
0700 - 0800	\$5.55	530	2,110	62%	\$5.55	578	2,335	69%	\$5.55	531	2,200	65%	\$5.55	646	2,380	70%	\$5.40	504	1,917	56%
0800 - 0900	\$5.05	411	2,164	64%	\$5.05	385	2,294	67%	\$5.05	380	2,297	68%	\$5.05	401	2,242	66%	\$4.85	324	1,726	51%
0900 - 1000	\$4.00	407	2,112	62%	\$4.00	392	2,242	66%	\$4.00	376	2,238	66%	\$4.00	358	2,133	63%	\$4.00	279	1,664	49%

AM Time	Monday 04/29/19				Tuesday 04/30/19				Wednesday 05/01/19				Thursday 05/02/19				Friday 05/03/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$3.00	837	2,517	74%	\$3.00	859	2,518	74%												
0500 - 0600	\$4.85	913	2,451	72%	\$4.85	1052	2,787	82%												
0600 - 0700	\$5.05	714	2,329	69%	\$5.05	637	2,022	59%												
0700 - 0800	\$5.55	579	2,300	68%	\$5.55	661	2,435	72%												
0800 - 0900	\$5.05	421	2,207	65%	\$5.05	354	2,176	64%												
0900 - 1000	\$4.00	377	2,284	67%	\$4.00	354	2,255	66%												

OCTA OPERATIONAL HIGHLIGHTS

On-road Operations

OCTA Customer Assistance Specialists (CAS) responded to 120 calls during the month of April. Of those calls, 104 were to assist disabled vehicles and 7 calls to remove debris. The CAS provided assistance to 9 accidents in the Express Lanes and 1 of those accidents originated from the SR91 general-purpose lanes.

Electronic Toll and Traffic Management System Project Update

An agreement with Kapsch TrafficCom USA, Inc., (Kapsch) was executed in June 2018 to provide toll lane system integrator services for the design, installation, operations, and maintenance of the electronic toll and traffic management system for the 91 Express Lanes. In April, Kapsch has developed several project plans and documentations and held weekly coordination meetings with OCTA and Cofiroute in preparation for the transition to the new lane system. This new lane system will be able to read the new 6C protocol as well as the current Title 21 protocol. Following RCTC's completion of their lane system installation on the 91 Express Lanes, OCTA will commence installation on the Orange County segment. It is anticipated the OCTA lane system equipment at the gantries will be replaced in summer 2019.

6C Transition Update

In addition to the lane system replacement, the back-office system will need to be modified in order to process the new transponders and changes to the customer account plans. Modification to the back-office system will commence when the lane system installations for both OCTA and RCTC have been completed. Distribution of the new 6C transponders to customers will begin after the back-office system changes have been made. OCTA and RCTC have prepared a series of customer communication to be provided to customers to facilitate the transition to the new protocol and changes to the account plans.

Amendment to the Three-Party Operating Agreement

As referenced above, due to the back-office system changes, an amendment to the OCTA, RCTC, Cofiroute USA (CUSA) Operating Agreement is required. Staff from both OCTA and RCTC have been in negotiations with CUSA for the amendment. It is



anticipated there will be no change to the maximum obligation of the contract. The amendment is expected to be finalized in the next few months.

California Highway Patrol Agreement

Staff is currently in discussion with the California Highway Patrol (CHP) for a new agreement to provide enforcement services on the OCTA 91 Express Lanes. As a requirement of the Franchise Agreement, OCTA is required to use CHP for enforcement services. Staff will be bringing forth the agreement for Board approval in May 2019.

FINANCIAL HIGHLIGHTS OCTA

91 Express Lanes Operating Statement

Description	YTD as of : 4/30/2019		YTD Variance	
	Actual ⁽¹⁾	Budget ⁽¹⁾	Dollar \$	Percent (%)
Operating revenues:				
Toll revenue	\$ 38,911,563	\$ 41,956,800	\$ (3,045,237)	(7.3)
Fee revenue	6,490,073	5,344,693	1,145,380	21.4
Total operating revenues	45,401,635	47,301,493	(1,899,858)	(4.0)
Operating expenses:				
Contracted services	5,463,361	6,265,900	802,540	12.8
Administrative fee	2,067,540	2,296,570	229,030	10.0
Other professional services	645,818	2,958,270	2,312,452	78.2
Credit card processing fees	1,096,729	1,046,269	(50,460)	(4.8)
Toll road account servicing	667,143	1,219,669	552,526	45.3
Other insurance expense	297,240	624,750	327,510	52.4
Toll road maintenance supply repairs	163,317	281,600	118,284	42.0
Patrol services	588,579	662,290	73,711	11.1
Building equipment repairs and maint	80,651	301,180	220,529	73.2
Other services	7,389	23,330	15,941	68.3
Utilities	37,535	54,980	17,445	31.7
Office expense	49,196	158,685	109,489	69.0
Bad debt expense	134,255	-	(134,255)	N/A
Miscellaneous ⁽²⁾	94,567	510,352	415,785	81.5
Leases	406,161	383,180	(22,981)	(6.0)
Total operating expenses	11,799,481	16,787,025	4,987,544	29.7
Depreciation and amortization ⁽³⁾	2,864,652	-	(2,864,652)	N/A
Operating income (loss)	30,737,502	30,514,468	223,034	0.7
Nonoperating revenues (expenses):				
Reimbursement from Other Agencies	417,547	931,990	(514,443)	(55.2)
Interest income	2,906,752	1,849,820	1,056,932	57.1
Interest expense	(4,091,896)	(4,174,960)	83,064	2.0
Other	33,409	-	33,409	N/A
Total nonoperating revenues (expenses)	(734,187)	(1,393,150)	658,963	47.3
Transfers in	-	-	-	N/A
Transfers out	(679,634)	(14,384,119)	13,704,485	95.3
Net income (loss)	\$ 29,323,681	\$ 14,737,199	\$ 14,586,482	99.0

¹Actual amounts are accounted for on the accrual basis of accounting in an enterprise fund. Budget amounts are accounted for on a modified accrual basis of accounting.

²Miscellaneous expenses include: Bond Insurance Costs, Bank Service Charge, Transponder Materials.

³Depreciation and amortization are not budgeted items.

Capital Asset Activity

During the ten months ending April 30, 2019, capital asset activities included \$349,599 for the Electronic Toll and Traffic Management system replacement project and \$226,014 for transponder purchases.

OPERATIONS OVERVIEW RCTC

TRAFFIC AND REVENUE STATISTICS FOR RCTC

Total traffic volume on the RCTC 91 Express Lanes for April 2019 was 1,345,641. This represents a daily average of 44,855. This is a 5.3% increase in total traffic volume from the same period last year when traffic levels totaled 1,277,507. Potential toll revenue for the month was \$5,365,382 which represents an increase of 20% from the prior year's total of \$4,471,413. Carpool percentage for the month was 25.05% as compared to the previous year's rate of 22.90%.

Month-to-date traffic and revenue data are summarized in the table below. The following trip and revenue statistics tables represent all trips taken on the RCTC 91 Express Lanes and associated potential revenue for the month of April 2019.

Current Month-to-Date (MTD) as of April 30, 2019

Trips	APR-19 MTD Actual	Stantec MTD Projected	# Variance	% Variance	APR-18 MTD Actual	Yr-to-Yr % Variance
Full Toll Lanes	1,008,624	708,543	300,081	42.4%	984,958	2.4%
3+ Lanes	337,017	231,771	105,246	45.4%	292,549	15.2%
Total Gross Trips	1,345,641	940,314	405,327	43.1%	1,277,507	5.3%
Revenue						
Full Toll Lanes	5,321,358	\$2,113,042	\$3,208,316	151.8%	4,436,585	19.9%
3+ Lanes	44,024	\$0	\$44,024		34,829	26.4%
Total Gross Revenue	\$5,365,382	\$2,113,042	\$3,252,340	153.9%	\$4,471,413	20.0%
Average Revenue per Trip						
Average Full Toll Lanes	\$5.28	\$2.98	\$2.30	77.2%	\$4.50	17.3%
Average 3+ Lanes	\$0.13	\$0.00	\$0.13		\$0.12	8.3%
Average Gross Revenue	\$3.99	\$2.25	\$1.74	77.3%	\$3.50	14.0%

The 2019 fiscal year-to-date (YTD) traffic volume is 5.2% higher when compared with the same period last year. The 2019 fiscal year-to-date revenue is 21.2% higher than for the same period last year. The traffic and revenue increases are attributed to higher demand and increase toll rates to manage the demand. Year-to-date average revenue per-trip is \$3.74.

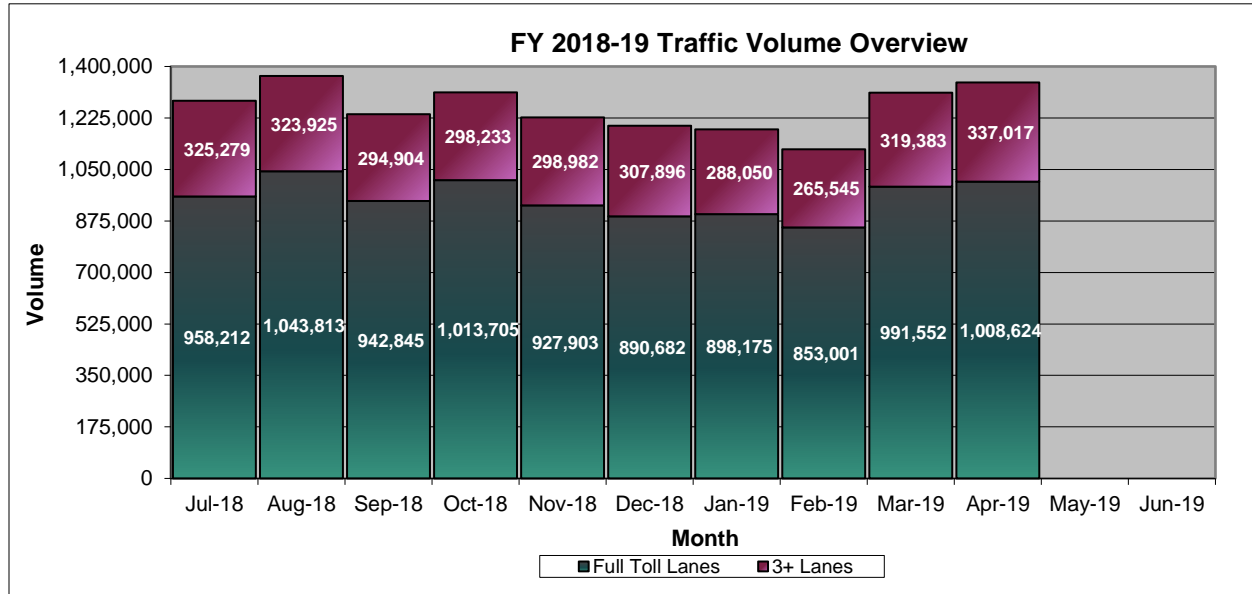
Fiscal year-to-date traffic and revenue data are summarized in the table below. The following trip and revenue statistics tables represent all trips taken on the RCTC 91 Express Lanes and associated potential revenue for the months of July 2018 through April 2019.

FY 2018-19 Year to Date as of April 30, 2019

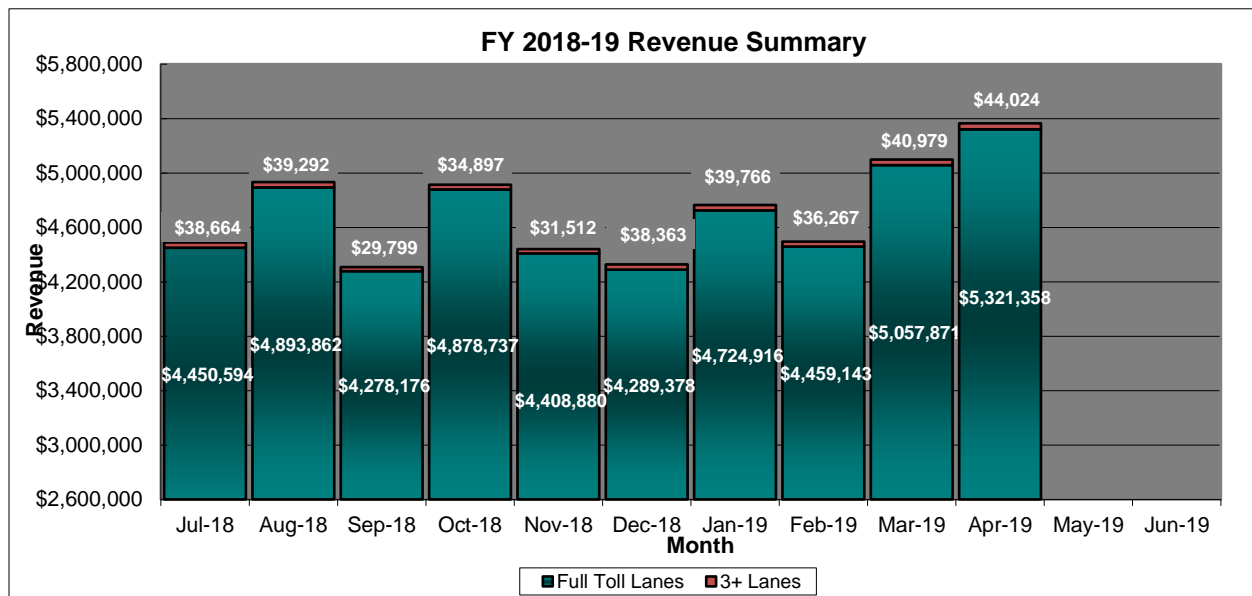
Trips	FY 2018-19 YTD Actual	Stantec YTD Projected	# Variance	% Variance	FY 2017-18 YTD Actual	Yr-to-Yr % Variance
Full Toll Lanes	9,528,512	6,412,886	3,115,626	48.6%	9,344,640	2.0%
3+ Lanes	3,059,212	2,236,857	822,355	36.8%	2,618,727	16.8%
Total Gross Trips	12,587,724	8,649,743	3,937,981	45.5%	11,963,367	5.2%
Revenue						
Full Toll Lanes	46,762,915	\$19,254,271	\$27,508,644	142.9%	38,583,085	21.2%
3+ Lanes	373,563	\$0	\$373,563		318,786	17.2%
Total Gross Revenue	\$47,136,479	\$19,254,271	\$27,882,208	144.8%	\$38,901,872	21.2%
Average Revenue per Trip						
Average Full Toll Lanes	\$4.91	\$3.00	\$1.91	63.7%	\$4.13	18.9%
Average 3+ Lanes	\$0.12	\$0.00	\$0.12		\$0.12	0.0%
Average Gross Revenue	\$3.74	\$2.23	\$1.51	67.7%	\$3.25	15.1%

RCTC Traffic and Revenue Summary

The chart below reflects the total trips broken down between Full Toll lanes and HOV3+ lanes for FY 2018-19 on a monthly basis.



The chart below reflects the gross potential revenue breakdown between Full Toll lanes and HOV3+ lanes for FY 2018-19 on a monthly basis.



RCTC PEAK-HOUR VOLUMES

RCTC regularly evaluates traffic volumes for peak period hours where Express Lanes performance is degraded and either increases or decreases tolls. Toll rates were adjusted once in April to improve the level of service in the peak hours where demand exceeded capacity. Hours highlighted in green were increased and hours highlighted in red were decreased. Hours that are highlighted in yellow were flagged for continued evaluation.

RCTC EASTBOUND PEAK-HOUR VOLUMES

Eastbound PM Peak - County Line to McKinley

PM Time	Monday 04/01/19					Tuesday 04/02/19					Wednesday 04/03/19					Thursday 04/04/19					Friday 04/05/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$6.70	239	886	1,125	D	\$6.70	294	994	1,288	E	\$6.70	280	1,048	1,328	F	\$8.85	283	1,080	1,363	F	\$19.00	354	1,058	1,412	F
1500 - 1600	\$6.70	365	1,015	1,380	F	\$6.70	366	941	1,307	F	\$7.55	408	1,012	1,420	F	\$10.60	368	1,014	1,382	F	\$18.70	371	806	1,177	D
1600 - 1700	\$5.15	260	880	1,140	D	\$6.70	211	752	963	C	\$5.15	241	808	1,049	D	\$7.90	289	891	1,180	D	\$10.75	295	995	1,290	E
1700 - 1800	\$5.15	284	932	1,216	E	\$5.15	205	790	995	C	\$5.15	266	891	1,157	D	\$5.15	279	945	1,224	E	\$6.70	325	1,014	1,339	F
1800 - 1900	\$5.15	279	688	967	C	\$5.15	364	899	1,263	E	\$5.15	341	832	1,173	D	\$5.15	334	867	1,201	E	\$6.70	290	841	1,131	D
1900 - 2000	\$2.20	226	490	716	B	\$4.05	267	653	920	C	\$3.95	235	600	835	C	\$4.05	237	625	862	C	\$5.15	270	704	974	C

PM Time	Monday 04/08/19					Tuesday 04/09/19					Wednesday 04/10/19					Thursday 04/11/19					Friday 04/12/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$6.70	251	914	1,165	D	\$6.70	263	1,027	1,290	E	\$6.70	271	1,108	1,379	F	\$8.85	280	1,238	1,518	F	\$19.00	346	1,019	1,365	F
1500 - 1600	\$6.70	367	984	1,351	F	\$6.70	387	915	1,302	F	\$7.55	377	1,045	1,422	F	\$10.60	405	990	1,395	F	\$18.70	343	698	1,041	D
1600 - 1700	\$5.15	244	912	1,156	D	\$6.70	237	902	1,139	D	\$5.15	226	863	1,089	D	\$7.90	274	932	1,206	E	\$10.75	286	967	1,253	E
1700 - 1800	\$5.15	245	891	1,136	D	\$5.15	254	913	1,167	D	\$5.15	266	912	1,178	D	\$5.15	272	934	1,206	E	\$6.70	284	860	1,144	D
1800 - 1900	\$5.15	332	751	1,083	D	\$5.15	319	908	1,227	E	\$5.15	294	853	1,147	D	\$5.15	308	861	1,169	D	\$6.70	309	777	1,086	D
1900 - 2000	\$2.20	191	499	690	B	\$4.05	220	560	780	B	\$3.95	279	740	1,019	D	\$4.05	309	930	1,239	E	\$5.15	301	817	1,118	D

PM Time	Monday 04/15/19					Tuesday 04/16/19					Wednesday 04/17/19					Thursday 04/18/19					Friday 04/19/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$6.70	241	837	1,078	D	\$6.70	247	996	1,243	E	\$6.70	304	1,154	1,458	F	\$8.85	283	1,179	1,462	F	\$19.00	358	1,031	1,389	F
1500 - 1600	\$6.70	366	928	1,294	E	\$6.70	373	915	1,288	E	\$7.55	387	944	1,331	F	\$10.60	339	835	1,174	D	\$18.70	407	843	1,250	E
1600 - 1700	\$5.15	224	906	1,130	D	\$6.70	211	861	1,072	D	\$5.15	231	858	1,089	D	\$7.90	283	895	1,178	D	\$10.75	277	926	1,203	E
1700 - 1800	\$5.15	282	899	1,181	D	\$5.15	246	870	1,116	D	\$5.15	260	911	1,171	D	\$5.15	326	1,058	1,384	F	\$6.70	256	813	1,069	D
1800 - 1900	\$5.15	293	778	1,071	D	\$5.15	353	817	1,170	D	\$5.15	348	902	1,250	E	\$5.15	348	991	1,339	F	\$6.70	315	677	992	C
1900 - 2000	\$2.20	191	477	668	B	\$4.05	234	550	784	B	\$3.95	255	736	991	C	\$4.05	340	923	1,263	E	\$5.15	233	510	743	B

PM Time	Monday 04/22/19					Tuesday 04/23/19					Wednesday 04/24/19					Thursday 04/25/19					Friday 04/26/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$6.70	252	958	1,210	E	\$6.70	271	1,041	1,312	F	\$6.70	284	1,110	1,394	F	\$8.85	331	1,273	1,604	F	\$19.00	359	1,184	1,543	F
1500 - 1600	\$6.70	386	978	1,364	F	\$6.70	347	889	1,236	E	\$7.55	381	955	1,336	F	\$10.60	387	1,001	1,388	F	\$18.70	469	1,107	1,576	F
1600 - 1700	\$5.15	259	922	1,181	D	\$6.70	221	934	1,155	D	\$5.15	244	806	1,050	D	\$7.90	268	889	1,157	D	\$10.75	234	910	1,144	D
1700 - 1800	\$5.15	240	836	1,076	D	\$5.15	256	871	1,127	D	\$5.15	276	896	1,172	D	\$5.15	290	970	1,260	E	\$6.70	272	927	1,199	D
1800 - 1900	\$5.15	337	726	1,063	D	\$5.15	225	562	787	B	\$5.15	330	929	1,259	E	\$5.15	344	940	1,284	E	\$6.70	331	839	1,170	D
1900 - 2000	\$2.20	189	496	685	B	\$4.05	308	796	1,104	D	\$3.95	277	742	1,019	D	\$4.05	341	865	1,206	E	\$5.15	267	665	932	C

PM Time	Monday 04/29/19					Tuesday 04/30/19					Wednesday 05/01/19					Thursday 05/02/19					Friday 05/03/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$6.70	248	860	1,108	D	\$6.70	241	961	1,202	E															
1500 - 1600	\$6.70	357	871	1,228	E	\$6.70	385	883	1,268	E															
1600 - 1700	\$5.15	235	767	1,002	D	\$6.70	227	869	1,096	D															
1700 - 1800	\$5.15	262	798	1,060	D	\$5.15	254	785	1,039	D															
1800 - 1900	\$5.15	276	619	895	C	\$5.15	309	776	1,085	D															
1900 - 2000	\$2.20	184	372	556	B	\$4.05	212	500	712	B															

Eastbound PM Peak - County Line to I-15 South

PM Time	Monday 04/01/19					Tuesday 04/02/19					Wednesday 04/03/19					Thursday 04/04/19					Friday 04/05/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.85	128	634	762	B	\$2.85	124	695	819	C	\$2.85	144	708	852	C	\$5.05	137	707	844	C	\$5.15	139	675	814	C
1500 - 1600	\$2.85	179	623	802	C	\$2.80	185	624	809	C	\$5.15	197	637	834	C	\$5.05	185	657	842	C	\$2.80	187	506	693	B
1600 - 1700	\$2.85	151	595	746	B	\$2.85	112	478	590	B	\$2.85	155	537	692	B	\$2.80	165	599	764	B	\$2.85	138	602	740	B
1700 - 1800	\$2.85	139	584	723	B	\$2.85	125	548	673	B	\$2.85	144	593	737	B	\$2.85	139	612	751	B	\$2.85	165	599	764	B
1800 - 1900	\$2.85	179	444	623	B	\$2.85	178	659	837	C	\$2.85	136	570	706	B	\$2.85	166	559	725	B	\$2.85	141	433	574	B
1900 - 2000	\$2.85	133	343	476	B	\$2.85	173	438	611	B	\$2.85	146	420	566	B	\$2.85	160	398	558	B	\$2.85	141	365	506	B

PM Time	Monday 04/08/19					Tuesday 04/09/19					Wednesday 04/10/19					Thursday 04/11/19					Friday 04/12/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.85	113	694	807	C	\$2.85	113	669	782	B	\$2.85	120	761	881	C	\$5.05	144	811	955	C	\$5.15	151	776	927	C
1500 - 1600	\$2.85	160	650	810	C	\$2.80	177	649	826	C	\$5.15	177	655	832	C	\$5.15	189	654	843	C	\$2.80	142	423	565	B
1600 - 1700	\$2.85	139	555	694	B	\$2.85	108	627	735	B	\$2.85	111	559	670	B	\$2.80	131	646	777	B	\$2.85	152	590	742	B
1700 - 1800	\$2.85	148	607	755	B	\$2.85	144	590	734	B	\$2.85	122	583	705	B	\$2.85	136	585	721	B	\$2.85	135	571	706	B
1800 - 1900	\$2.85	150	544	694	B	\$2.85	137	531	668	B	\$2.85	147	540	687	B	\$2.85	180	602	782	B	\$2.85	124	389	513	B
1900 - 2000	\$2.85	103	344	447	B	\$2.85	130	413	543	B	\$2.85	146	523	669	B	\$2.85	183	585	768	B	\$2.85	168	530	698	B

PM Time	Monday 04/15/19					Tuesday 04/16/19					Wednesday 04/17/19					Thursday 04/18/19					Friday 04/19/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.85	113	592	705	B	\$2.85	117	681	798	B	\$2.85	129	756	885	C	\$5.05	128	799	927	C	\$5.15	172	735	907	C
1500 - 1600	\$2.85	163	654	817	C	\$2.80	179	662	841	C	\$5.15	167	716	883	C	\$5.15	159	559	718	B	\$2.80	214	568	782	B
1600 - 1700	\$2.85	130	589	719	B	\$2.85	114	593	707	B	\$2.85	128	585	713	B	\$2.80	144	588	732	B	\$2.85	120	567	687	B
1700 - 1800	\$2.85	154	610	764	B	\$2.85	130	579	709	B	\$2.85	109	583	692	B	\$2.85	102	508	610	B	\$2.85	147	499	646	B
1800 - 1900	\$2.85	144	456	600	B	\$2.85	151	573	724	B	\$2.85	151	562	713	B	\$2.85	145	537	682	B	\$2.85	130	365	495	B
1900 - 2000	\$2.85	121	337	458	B	\$2.85	155	392	547	B	\$2.85	152	482	634	B	\$2.85	186	626	812	C	\$2.85	132	373	505	B

PM Time	Monday 04/22/19					Tuesday 04/23/19					Wednesday 04/24/19					Thursday 04/25/19					Friday 04/26/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.85	143	686	829	C	\$2.85	128	764	892	C	\$2.85	134	769	903	C	\$5.05	143	767	910	C	\$5.15	153	725	878	C
1500 - 1600	\$2.85	195	658	853	C	\$2.80	190	624	814	C	\$5.15	203	729	932	C	\$5.15	168	546	714	B	\$2.80	137	343	480	B
1600 - 1700	\$2.85	136	611	747	B	\$2.85	122	600	722	B	\$2.85	114	590	704	B	\$2.80	137	524	661	B	\$2.85	138	595	733	B
1700 - 1800	\$2.85	135	573	708	B	\$2.85	123	613	736	B	\$2.85	112	574	686	B	\$2.85	145	601	746	B	\$2.85	124	592	716	B
1800 - 1900	\$2.85	152	457	609	B	\$2.85	108	358	466	B	\$2.85	151	550	701	B	\$2.85	147	576	723	B	\$2.85	141	490	631	B
1900 - 2000	\$2.85	150	356	506	B	\$2.85	208	625	833	C	\$2.85	164	465	629	B	\$2.85	130	486	616	B	\$2.85	131	379	510	B

PM Time	Monday 04/29/19					Tuesday 04/30/19					Wednesday 05/01/19					Thursday 05/02/19					Friday 05/03/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.85	131	637	768	B	\$2.85	142	742	884	C															
1500 - 1600	\$2.85	159	592	751	B	\$2.80	174	612	786	B															
1600 - 1700	\$2.85	132	601	733	B	\$2.85	128	652	780	B															
1700 - 1800	\$2.85	152	586	738	B	\$2.85	123	621	744	B															
1800 - 1900	\$2.85	154	465	619	B	\$2.85	149	503	652	B															
1900 - 2000	\$2.85	103	271	374	A	\$2.85	131	359	490	B															

RCTC WESTBOUND PEAK-HOUR VOLUMES

Westbound AM Peak - McKinley to County Line

AM Time	Monday 04/01/19					Tuesday 04/02/19					Wednesday 04/03/19					Thursday 04/04/19					Friday 04/05/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$7.85	445	1,070	1,515	F	\$7.85	410	1,050	1,460	F	\$7.85	448	1,000	1,448	F	\$7.85	444	1,073	1,517	F	\$5.15	393	714	1,107	D
0500 - 0600	\$19.90	611	893	1,504	F	\$19.45	701	1,027	1,728	F	\$17.80	535	717	1,252	E	\$17.55	561	829	1,390	F	\$9.20	545	1,002	1,547	F
0600 - 0700	\$18.55	368	999	1,367	F	\$18.15	364	915	1,279	E	\$17.45	471	1,293	1,764	F	\$16.15	420	1,034	1,454	F	\$8.45	400	1,211	1,611	F
0700 - 0800	\$14.50	390	1,233	1,623	F	\$14.50	382	1,266	1,648	F	\$15.25	436	1,264	1,700	F	\$13.50	391	1,317	1,708	F	\$7.70	349	1,146	1,495	F
0800 - 0900	\$9.75	274	1,307	1,581	F	\$9.75	310	1,244	1,554	F	\$9.75	331	1,412	1,743	F	\$10.50	279	1,331	1,610	F	\$6.70	288	1,102	1,390	F
0900 - 1000	\$5.15	194	892	1,086	D	\$6.70	203	1,016	1,219	E	\$6.70	226	1,199	1,425	F	\$6.70	189	1,010	1,199	D	\$4.05	183	721	904	C

AM Time	Monday 04/08/19					Tuesday 04/09/19					Wednesday 04/10/19					Thursday 04/11/19					Friday 04/12/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$7.85	490	1,056	1,546	F	\$7.85	419	1,052	1,471	F	\$7.85	477	1,052	1,529	F	\$7.85	447	1,069	1,516	F	\$5.15	416	755	1,171	D
0500 - 0600	\$19.90	607	863	1,470	F	\$19.45	668	928	1,596	F	\$17.80	550	817	1,367	F	\$17.55	548	736	1,284	E	\$9.20	520	982	1,502	F
0600 - 0700	\$18.55	401	1,001	1,402	F	\$18.15	371	887	1,258	E	\$17.45	482	1,138	1,620	F	\$16.15	467	1,000	1,467	F	\$8.45	473	1,185	1,658	F
0700 - 0800	\$14.50	372	1,313	1,685	F	\$14.50	431	1,224	1,655	F	\$15.25	410	1,318	1,728	F	\$13.50	447	1,350	1,797	F	\$7.70	431	1,287	1,718	F
0800 - 0900	\$9.75	270	1,365	1,635	F	\$9.75	282	1,453	1,735	F	\$9.75	283	1,410	1,693	F	\$10.50	296	1,425	1,721	F	\$6.70	251	1,172	1,423	F
0900 - 1000	\$5.15	178	1,129	1,307	E	\$6.70	214	1,185	1,399	F	\$6.70	214	1,225	1,439	F	\$6.70	219	1,196	1,415	F	\$4.05	227	1,040	1,267	E

AM Time	Monday 04/15/19					Tuesday 04/16/19					Wednesday 04/17/19					Thursday 04/18/19					Friday 04/19/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$7.85	461	1,053	1,514	F	\$7.85	425	1,082	1,507	F	\$7.85	476	1,111	1,587	F	\$7.85	487	1,134	1,621	F	\$5.15	357	685	1,042	D
0500 - 0600	\$19.90	564	812	1,376	F	\$19.45	657	872	1,529	F	\$17.80	587	783	1,370	F	\$17.55	591	769	1,360	F	\$9.20	485	995	1,480	F
0600 - 0700	\$18.55	411	883	1,294	E	\$18.15	353	838	1,191	D	\$17.45	458	1,128	1,586	F	\$16.15	433	971	1,404	F	\$8.45	407	1,097	1,504	F
0700 - 0800	\$14.50	395	1,263	1,658	F	\$14.50	420	1,235	1,655	F	\$15.25	427	1,279	1,706	F	\$13.50	402	1,187	1,589	F	\$7.70	322	1,052	1,374	F
0800 - 0900	\$9.75	269	1,445	1,714	F	\$9.75	287	1,402	1,689	F	\$9.75	253	1,354	1,607	F	\$10.50	290	1,419	1,709	F	\$6.70	245	926	1,171	D
0900 - 1000	\$5.15	235	1,146	1,381	F	\$6.70	183	1,088	1,271	E	\$6.70	195	1,038	1,233	E	\$6.70	187	1,030	1,217	E	\$4.05	204	768	972	C

AM Time	Monday 04/22/19					Tuesday 04/23/19					Wednesday 04/24/19					Thursday 04/25/19					Friday 04/26/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$7.85	478	1,047	1,525	F	\$7.85	444	1,092	1,536	F	\$7.85	505	1,141	1,646	F	\$7.85	468	1,029	1,497	F	\$5.15	396	710	1,106	D
0500 - 0600	\$19.90	589	863	1,452	F	\$19.45	668	895	1,563	F	\$17.80	548	676	1,224	E	\$17.55	572	770	1,342	E	\$9.20	537	1,058	1,595	F
0600 - 0700	\$18.55	370	950	1,320	E	\$18.15	376	818	1,194	D	\$17.45	487	1,100	1,587	F	\$16.15	418	867	1,285	E	\$8.45	457	1,165	1,622	F
0700 - 0800	\$14.50	402	1,301	1,703	F	\$14.50	426	1,387	1,813	F	\$15.25	410	1,240	1,650	F	\$13.50	483	1,332	1,815	F	\$7.70	388	1,090	1,478	F
0800 - 0900	\$9.75	294	1,328	1,622	F	\$9.75	314	1,446	1,760	F	\$9.75	271	1,415	1,686	F	\$10.50	344	1,400	1,744	F	\$6.70	241	979	1,220	E
0900 - 1000	\$5.15	239	1,191	1,430	F	\$6.70	221	1,153	1,374	F	\$6.70	251	1,159	1,410	F	\$6.70	219	1,121	1,340	E	\$4.05	199	757	956	C

AM Time	Monday 04/29/19					Tuesday 04/30/19					Wednesday 05/01/19					Thursday 05/02/19					Friday 05/03/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$7.85	486	1,117	1,603	F	\$7.85	458	1,053	1,511	F															
0500 - 0600	\$19.90	569	832	1,401	F	\$19.45	708	951	1,659	F															
0600 - 0700	\$18.55	398	978	1,376	F	\$18.15	380	833	1,213	E															
0700 - 0800	\$14.50	419	1,350	1,769	F	\$14.50	450	1,297	1,747	F															
0800 - 0900	\$9.75	346	1,464	1,810	F	\$9.75	295	1,770	2,065	F															
0900 - 1000	\$5.15	268	1,304	1,572	F	\$6.70	231	1,153	1,384	F															

Westbound AM Peak - I-15 North to County Line

AM Time	Monday 04/01/19					Tuesday 04/02/19					Wednesday 04/03/19					Thursday 04/04/19					Friday 04/05/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$5.05	234	701	935	C	\$5.05	277	672	949	C	\$5.05	248	650	898	C	\$5.05	263	661	924	C	\$2.85	201	555	756	B
0500 - 0600	\$17.40	367	850	1,217	E	\$15.40	370	958	1,328	E	\$15.05	396	1,027	1,423	F	\$13.70	388	1,008	1,396	E	\$6.65	315	808	1,123	D
0600 - 0700	\$17.40	335	1,071	1,406	F	\$15.70	350	1,020	1,370	E	\$17.70	336	1,015	1,351	E	\$14.05	341	984	1,325	E	\$6.65	303	947	1,250	E
0700 - 0800	\$12.40	237	920	1,157	D	\$11.70	267	1,088	1,355	E	\$12.05	310	1,184	1,494	F	\$11.05	278	1,027	1,305	E	\$6.65	220	852	1,072	D
0800 - 0900	\$8.55	144	904	1,048	D	\$8.55	165	974	1,139	D	\$6.65	179	1,083	1,262	E	\$6.65	168	978	1,146	D	\$5.15	139	788	927	C
0900 - 1000	\$5.05	164	651	815	C	\$5.15	148	720	868	C	\$5.15	173	824	997	C	\$5.15	191	787	978	C	\$2.85	132	579	711	B

AM Time	Monday 04/08/19					Tuesday 04/09/19					Wednesday 04/10/19					Thursday 04/11/19					Friday 04/12/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$5.05	263	747	1,010	D	\$5.05	282	703	985	C	\$5.05	269	659	928	C	\$5.05	268	708	976	C	\$2.85	229	640	869	C
0500 - 0600	\$17.40	410	960	1,370	E	\$15.40	393	1,082	1,475	F	\$15.05	360	1,043	1,403	F	\$13.70	411	1,072	1,483	F	\$6.65	367	858	1,225	E
0600 - 0700	\$17.40	363	1,126	1,489	F	\$15.70	386	1,054	1,440	F	\$17.70	352	975	1,327	E	\$14.05	364	1,075	1,439	F	\$6.65	309	1,153	1,462	F
0700 - 0800	\$12.40	253	1,147	1,400	E	\$11.70	299	1,172	1,471	F	\$12.05	277	1,135	1,412	F	\$11.05	296	1,236	1,532	F	\$6.65	260	1,015	1,275	E
0800 - 0900	\$8.55	167	1,087	1,254	E	\$8.55	159	1,217	1,376	E	\$6.65	199	1,255	1,454	F	\$6.65	208	1,196	1,404	F	\$5.15	185	968	1,153	D
0900 - 1000	\$5.05	110	787	897	C	\$5.15	119	859	978	C	\$5.15	132	902	1,034	D	\$5.15	133	865	998	C	\$2.85	114	696	810	C

AM Time	Monday 04/15/19					Tuesday 04/16/19					Wednesday 04/17/19					Thursday 04/18/19					Friday 04/19/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$5.05	279	766	1,045	D	\$5.05	268	752	1,020	D	\$5.05	266	728	994	C	\$5.05	269	726	995	C	\$2.85	188	552	740	B
0500 - 0600	\$17.40	357	984	1,341	E	\$15.40	395	1,082	1,477	F	\$15.05	436	1,063	1,499	F	\$13.70	408	1,034	1,442	F	\$6.65	313	828	1,141	D
0600 - 0700	\$17.40	375	1,123	1,498	F	\$15.70	364	1,041	1,405	F	\$17.70	362	1,093	1,455	F	\$14.05	341	1,016	1,357	E	\$6.65	293	894	1,187	D
0700 - 0800	\$12.40	302	1,161	1,463	F	\$11.70	316	1,211	1,527	F	\$12.05	265	1,160	1,425	F	\$11.05	259	1,045	1,304	E	\$6.65	189	833	1,022	D
0800 - 0900	\$8.55	200	1,169	1,369	E	\$8.55	194	1,276	1,470	F	\$6.65	153	1,056	1,209	E	\$6.65	165	1,131	1,296	E	\$5.15	121	728	849	C
0900 - 1000	\$5.05	120	850	970	C	\$5.15	142	879	1,021	D	\$5.15	139	833	972	C	\$5.15	118	821	939	C	\$2.85	142	569	711	B

AM Time	Monday 04/22/19					Tuesday 04/23/19					Wednesday 04/24/19					Thursday 04/25/19					Friday 04/26/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$5.05	262	751	1,013	D	\$5.05	278	715	993	C	\$5.05	304	690	994	C	\$5.05	275	685	960	C	\$2.85	232	587	819	C
0500 - 0600	\$17.40	395	975	1,370	E	\$15.40	400	1,107	1,507	F	\$15.05	406	1,052	1,458	F	\$13.70	417	992	1,409	F	\$6.65	382	846	1,228	E
0600 - 0700	\$17.40	373	1,108	1,481	F	\$15.70	357	1,040	1,397	E	\$17.70	397	1,029	1,426	F	\$14.05	375	937	1,312	E	\$6.65	307	1,125	1,432	F
0700 - 0800	\$12.40	264	1,110	1,374	E	\$11.70	276	1,230	1,506	F	\$12.05	270	1,156	1,426	F	\$11.05	296	1,154	1,450	F	\$6.65	211	934	1,145	D
0800 - 0900	\$8.55	192	1,182	1,374	E	\$8.55	179	1,199	1,378	E	\$6.65	182	1,264	1,446	F	\$6.65	182	1,215	1,397	E	\$5.15	142	827	969	C
0900 - 1000	\$5.05	156	803	959	C	\$5.15	138	868	1,006	D	\$5.15	133	898	1,031	D	\$5.15	130	879	1,009	D	\$2.85	105	586	691	B

AM Time	Monday 04/29/19					Tuesday 04/30/19					Wednesday 05/01/19					Thursday 05/02/19					Friday 05/03/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$5.05	266	695	961	C	\$5.05	273	732	1,005	D															
0500 - 0600	\$17.40	402	918	1,320	E	\$15.40	431	1,100	1,531	F															
0600 - 0700	\$17.40	405	1,110	1,515	F	\$15.70	360	1,033	1,393	E															
0700 - 0800	\$12.40	282	1,226	1,508	F	\$11.70	290	1,115	1,405	F															
0800 - 0900	\$8.55	159	1,038	1,197	D	\$8.55	168	1,089	1,257	E															
0900 - 1000	\$5.05	109	784	893	C	\$5.15	139	917	1,056	D															

RCTC OPERATIONAL HIGHLIGHTS

On-road Operations

RCTC Freeway Service Patrol (FSP) responded to 76 calls during the month of April. Of those calls, 55 were to assist disabled vehicles, 7 were to remove debris, 7 were for traffic breaks, and 7 were in response to accidents.

6C Transponder Technology

Planning for the transition to the new transponder technology is underway. The lane system will be upgraded over a series of weekends with completion of that work expected by summer of 2019. The new sticker transponders have been received and are being prepared for distribution. Changes to the back-office system to process the new transponders and make changes to the customer account plan are being finalized and will be released to the customer once both the RCTC and OCTA lane system upgrades are performed. A series of customer communication has been prepared to facilitate the process for providing the new transponders to customers.

FINANCIAL HIGHLIGHTS RCTC

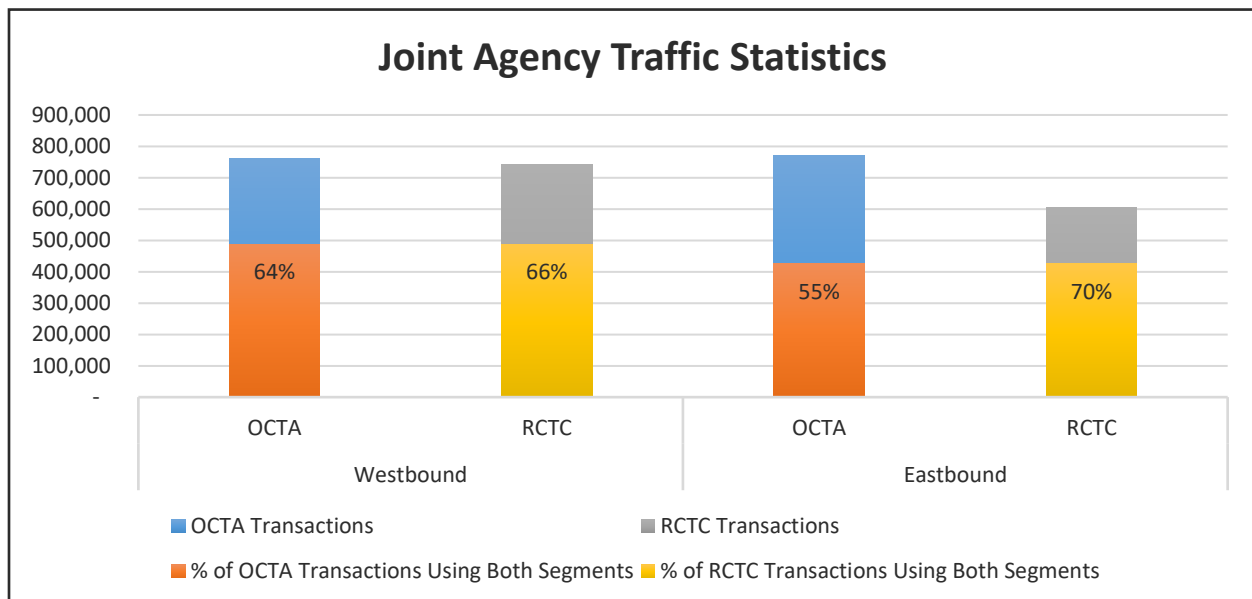
RCTC 91 Express Lanes Operating Statement				
Description	YTD as of:		YTD Variance	
	Actual ¹	4/30/2019 Budget	Dollar \$	Percent (%)
Operating revenues:				
Toll Revenue	\$ 41,238,090	\$ 26,748,417	\$ 14,489,674	54.2
Fee Revenue	\$ 7,168,287	\$ 4,035,250	\$ 3,133,037	77.6
Total operating revenues	\$ 48,406,378	\$ 30,783,667	\$ 17,622,711	57.2
Operating expenses:				
Salaries and Benefits	\$ 380,820	\$ 502,500	\$ 121,680	24.2
Legal Services	\$ 51,364	\$ 250,000	\$ 198,636	79.5
Advisory Services	\$ 40,966	\$ 62,500	\$ 21,534	34.5
Audit and Accounting Fees	\$ -	\$ 39,167	\$ 39,167	100.0
Service Fees	\$ 2,799	\$ 21,667	\$ 18,867	87.1
Other Professional Services	\$ 626,269	\$ 1,220,917	\$ 594,648	48.7
Lease Expense	\$ 190,725	\$ 217,167	\$ 26,441	12.2
Operations	\$ 2,065,252	\$ 2,767,833	\$ 702,581	25.4
Utilities	\$ 28,179	\$ 53,333	\$ 25,155	47.2
Supplies and Materials	\$ 514	\$ 4,250	\$ 3,736	87.9
Membership and Subscription Fees	\$ 12,297	\$ 10,250	\$ (2,047)	(20.0)
Office Equipment & Furniture (Non-Capital)	\$ 23	\$ 4,167	\$ 4,144	99.5
Maintenance/Repairs	\$ 95,772	\$ 722,583	\$ 626,811	86.7
Training Seminars and Conferences	\$ 675	\$ 6,667	\$ 5,992	89.9
Transportation Expenses	\$ 2,132	\$ 6,167	\$ 4,034	65.4
Lodging	\$ 2,053	\$ 5,833	\$ 3,780	64.8
Meals	\$ 1,128	\$ 1,500	\$ 372	24.8
Other Staff Expenses	\$ 2,359	\$ 2,333	\$ (26)	(1.1)
Advertising	\$ 6,335	\$ 116,667	\$ 110,332	94.6
Program Management	\$ 63,106	\$ 53,250	\$ (9,856)	(18.5)
Program Operations	\$ 5,520,852	\$ 7,268,500	\$ 1,747,648	24.0
Litigation Settlement	\$ 7,500	\$ 6,250	\$ (1,250)	(20.0)
Furniture & Equipment	\$ 303,860	\$ 679,333	\$ 375,473	55.3
Improvements	\$ 1,557,160	\$ 1,414,042	\$ (143,118)	(10.1)
Depreciation	\$ 7,973,379	\$ -	\$ (7,973,379)	N/A
Bad Debt Expense	\$ 39	\$ 83	\$ 44	53.0
Total operating expenses	\$ 18,935,558	\$ 15,436,958	\$ (3,498,600)	(22.7)
Operating income (loss)	\$ 29,470,819	\$ 15,346,708	\$ 14,124,111	92.0
Nonoperating revenues (expenses):				
Interest Revenue	\$ 1,467,244	\$ 117,750	\$ 1,349,494	(1,146.1)
Gain(Loss) on Sale of Capital Assets	\$ (2,224,670)	\$ -	\$ (2,224,670)	N/A
Other Miscellaneous Revenue	\$ 18,035	\$ 7,083,417	\$ (7,065,382)	99.7
Payment to Escrow Agent	\$ -	\$ (16,666,667)	\$ 16,666,667	(100.0)
Interest Expense	\$ (20,910,229)	\$ (5,933,250)	\$ (14,976,979)	252.4
Total nonoperating revenues (expenses)	\$ (21,649,620)	\$ (15,398,750)	\$ (6,250,870)	(40.6)
Transfers In	\$ -	\$ -	\$ -	N/A
Transfers Out	\$ (1,569,659)	\$ (5,256,000)	\$ 3,686,341	(70.1)
Net income (loss)	\$ 6,251,540.13	\$ (5,308,041.67)	\$ 11,559,581.80	(217.8)

¹ Unaudited
² Gain (loss) on sale of capital assets - Loss on sale of capital assets reflects the loss on sale of excess land purchased for the SR-91 Project. Loss on sale is not a cash-related item and not included in the FY'18/19 budget.
³ Depreciation is not a budgeted expense

JOINT AGENCY TRIP AND REVENUE STATISTICS

Apr-19 MTD	Transactions by Agency	Transactions Using Both Segments	% Using Both Segments	Revenue
Westbound				
OCTA	759,870	487,681	64%	\$ 1,887,838
RCTC	742,104	487,681	66%	\$ 3,542,483
I-15	315,790	213,405	68%	\$ 1,512,490
McKinley	426,314	274,276	64%	\$ 2,029,993
Eastbound				
OCTA	769,268	425,291	55%	\$ 2,599,813
RCTC	603,537	425,291	70%	\$ 1,822,900
I-15	217,904	167,667	77%	\$ 454,518
McKinley	385,633	257,624	67%	\$ 1,368,381

JOINT AGENCY TRAFFIC STATISTICS



JOINT AGENCY PERFORMANCE MEASURES

REPORTING REQUIREMENT	Reporting Period	PERFORMANCE STANDARD	Apr-19 Performance
CUSTOMER SERVICE			
Call Wait Time	Monthly	Not to exceed 2 minutes	1:06
Abandon Rate	Monthly	No more than 4.0%	1.5%
Customer Satisfaction	Monthly	At least 75 outbound calls	79
VIOLATION PROCESSING			
Response Time	Monthly	Within 2 business days of receipt	1.0
CUSA Violation Collection Rate	Quarterly	70% or more	
CUSA Violation Collection Rate	Annually	74% or more	
TRAFFIC OPERATIONS			
Initial & Secondary Review s	Monthly	Equal to or less than 15 days	1.2
* Plate Misread Errors	Monthly	Equal to or less than 0.4%	0.01%
CAS Response Time	Monthly	0:20 (minutes) per call	0:08
ACCOUNTING			
OCTA Exceptions	Monthly	No more than 3	0
RCTC Exceptions	Monthly	No more than 3	0
INFORMATION TECHNOLOGY			
Back-office System Uptime	Monthly	99% Availability	100%
Netw ork Uptime	Monthly	99% Availability	100%

CUSA = Cofiroute USA; CAS = OCTA Customer Assistance Specialists

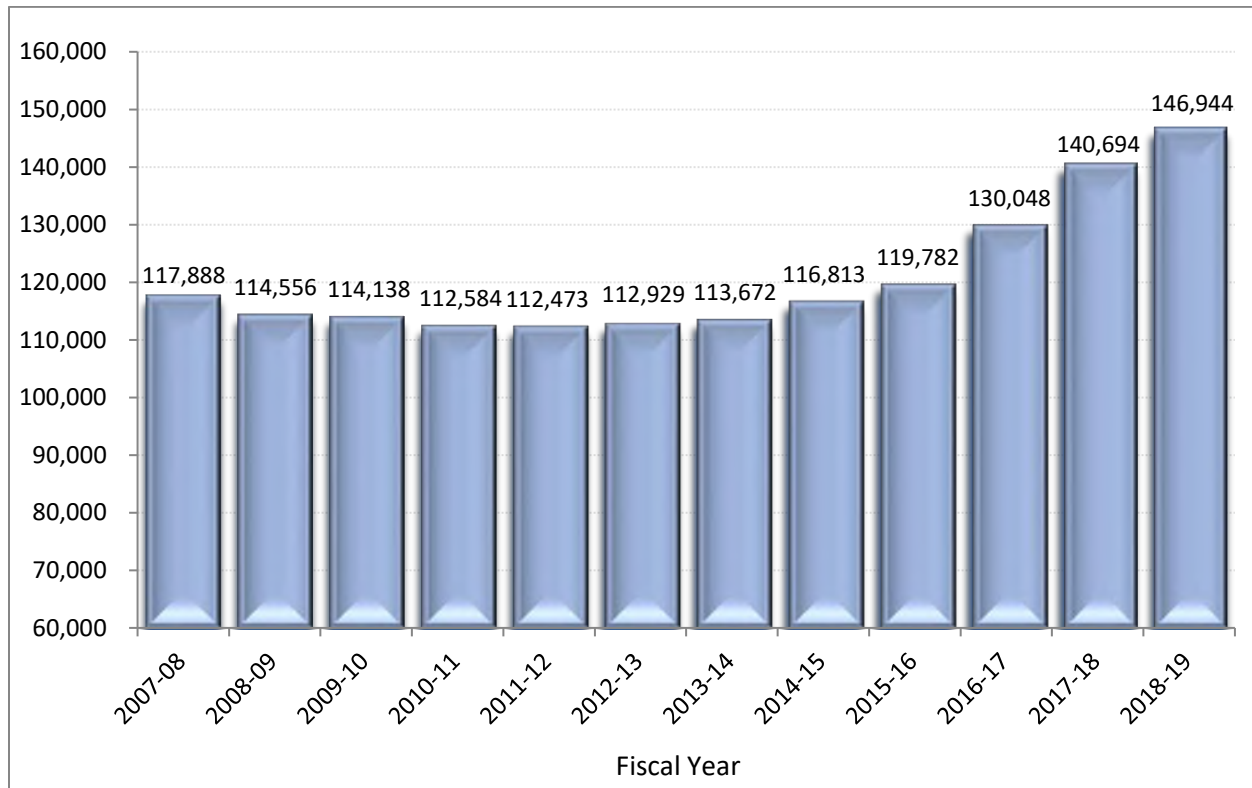
* Plate Misread Error performance is current after a 60-day hold-back period; therefore, percentage reported here is for 2 months prior to the month of this report.

JOINT AGENCY TRANSPONDER DISTRIBUTION

TRANSPONDER DISTRIBUTION	April-19		March-19		FY 2018-19	
	Tags	% of Total	Tags	% of Total	Average To-Date	
Issued						
To New Accounts	1,636	49.0%	1,383	48.7%	1,454	46.3%
Additional Tags to Existing Accounts	904	27.1%	798	28.1%	852	27.1%
Replacement Transponders	797	23.9%	661	23.3%	835	26.6%
Total Issued	3,337		2,842		3,140	
Returned						
Account Closures	371	32.9%	471	21.9%	423	28.3%
Accounts Downsizing	161	14.3%	223	10.4%	192	12.8%
Defective Transponders	595	52.8%	1,458	67.8%	879	58.8%
Total Returned	1,127		2,152		1,494	

At the end of April 2019, the 91 Express Lanes had 146,944 active customer accounts, and 223,716 transponders classified as Assigned.

Number of Accounts by Fiscal Year
As of April 30, 2019



Incoming Email Activity

During April, the Anaheim Processing Center received 3,512 emails.



**Orange County Transportation Authority
Riverside County Transportation Commission**



Status Report
May 2019

As of May 31, 2019

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OPERATIONS OVERVIEW OCTA

TRAFFIC AND REVENUE STATISTICS FOR OCTA

Total traffic volume on the OCTA 91 Express Lanes for May 2019 was 1,537,043. This represents a daily average of 49,582. This is a 4.7% increase in total traffic volume from the same period last year when traffic levels totaled 1,467,385. Potential toll revenue for the month was \$4,572,297 which represents an increase of 3.8% from the prior year's total of \$4,406,608. Carpool percentage for the month was 27.17% as compared to the previous year's rate of 25.19%.

Month-to-date traffic and revenue data are summarized in the table below. The following trip and revenue statistics tables represent all trips taken on the OCTA 91 Express Lanes and associated potential revenue for the month of May 2019.

Current Month-to-Date (MTD) as of May 31, 2019

Trips	May-19 MTD Actual	Stantec MTD Projected	# Variance	% Variance	May-18 MTD Actual	Yr-to-Yr % Variance
Full Toll Lanes	1,119,465	1,164,279	(44,814)	(3.8%)	1,097,729	2.0%
3+ Lanes	417,578	351,046	66,532	19.0%	369,656	13.0%
Total Gross Trips	1,537,043	1,515,325	21,718	1.4%	1,467,385	4.7%
Revenue						
Full Toll Lanes	\$4,485,490	\$4,639,899	(\$154,408)	(3.3%)	\$4,326,308	3.7%
3+ Lanes	\$86,806	\$88,516	(\$1,710)	(1.9%)	\$80,301	8.1%
Total Gross Revenue	\$4,572,297	\$4,728,414	(\$156,118)	(3.3%)	\$4,406,608	3.8%
Average Revenue per Trip						
Average Full Toll Lanes	\$4.01	\$3.99	\$0.02	0.5%	\$3.94	1.8%
Average 3+ Lanes	\$0.21	\$0.25	(\$0.04)	(16.0%)	\$0.22	(4.5%)
Average Gross Revenue	\$2.97	\$3.12	(\$0.15)	(4.8%)	\$3.00	(1.0%)

The 2019 fiscal year-to-date traffic volume increased by 5.4% and potential toll revenue increased by 5.1%, when compared with the same period last year. Year-to-date average revenue per-trip is \$2.97.

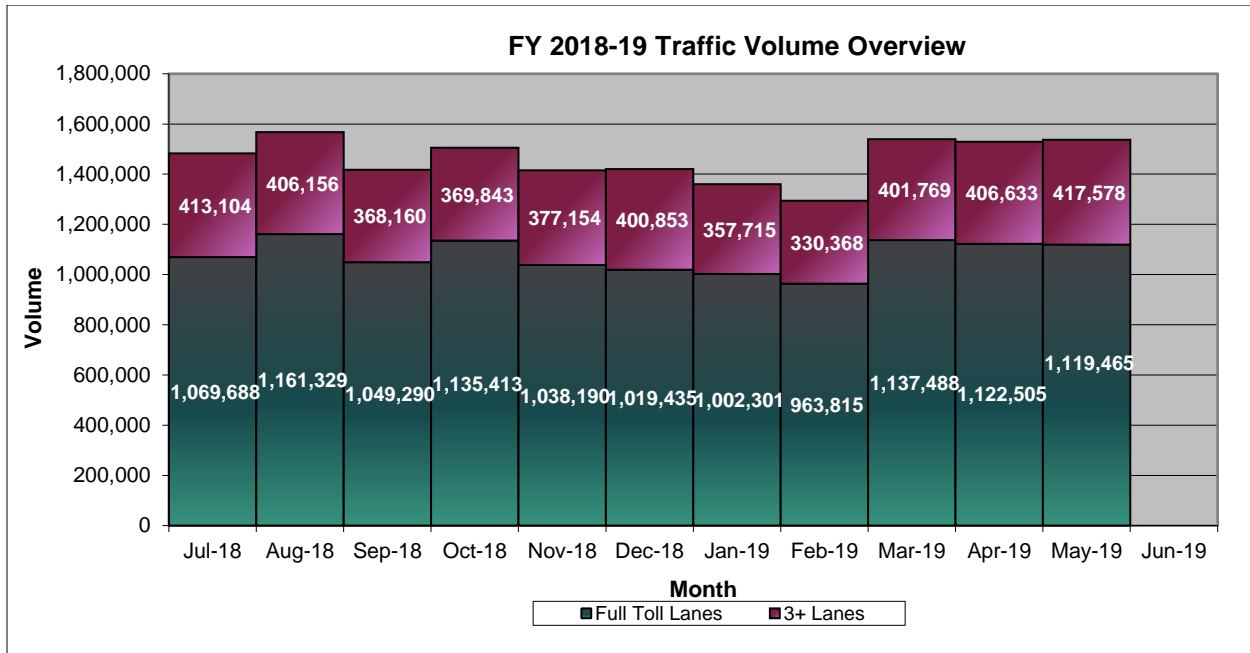
Fiscal year-to-date traffic and revenue data are summarized in the table below. The following trip and revenue statistics tables represent all trips taken on the OCTA 91 Express Lanes and associated potential revenue for the months of July 2018 through May 2019.

FY 2018-19 Year to Date as of May 31, 2019

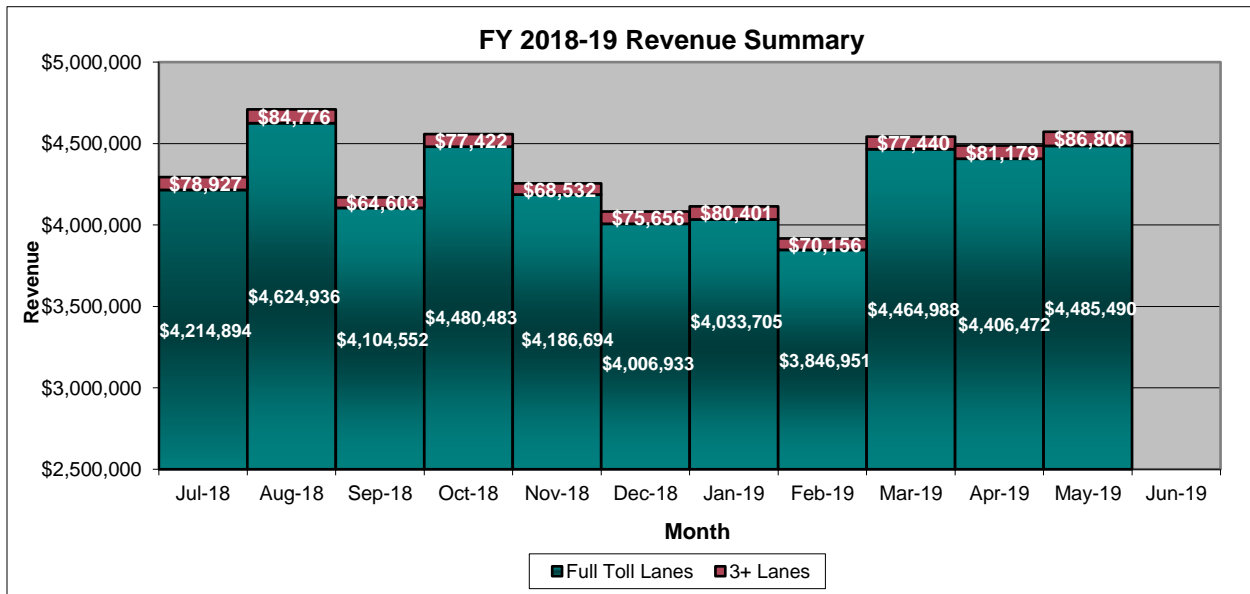
Trips	FY 2018-19 YTD Actual	Stantec YTD Projected	# Variance	% Variance	FY 2017-18 YTD Actual	Yr-to-Yr % Variance
Full Toll Lanes	11,818,919	12,124,558	(305,639)	(2.5%)	11,428,364	3.4%
3+ Lanes	4,249,333	3,649,116	600,217	16.4%	3,810,893	11.5%
Total Gross Trips	16,068,252	15,773,674	294,578	1.9%	15,239,257	5.4%
Revenue						
Full Toll Lanes	\$46,856,098	\$48,445,673	(\$1,589,575)	(3.3%)	\$44,593,589	5.1%
3+ Lanes	\$845,898	\$924,129	(\$78,231)	(8.5%)	\$808,622	4.6%
Total Gross Revenue	\$47,701,996	\$49,369,803	(\$1,667,807)	(3.4%)	\$45,402,211	5.1%
Average Revenue per Trip						
Average Full Toll Lanes	\$3.96	\$4.00	(\$0.04)	(1.0%)	\$3.90	1.5%
Average 3+ Lanes	\$0.20	\$0.25	(\$0.05)	(20.0%)	\$0.21	(4.8%)
Average Gross Revenue	\$2.97	\$3.13	(\$0.16)	(5.1%)	\$2.98	(0.3%)

OCTA Traffic and Revenue Summary

The chart below reflects the total trips breakdown between Full Toll trips and HOV3+ trips for FY 2018-19 on a monthly basis.



The chart below reflects the gross potential revenue breakdown between Full Toll trips and HOV3+ trips for FY 2018-19 on a monthly basis.



Peak traffic hour in the eastbound direction reached or exceeded 90% or more of defined capacity 28 times during the month of May 2019. As demonstrated on the next chart, westbound peak hour traffic volumes top out at 83% of defined capacity.

OCTA EASTBOUND PEAK-HOUR VOLUMES

PM Time	Monday 04/29/19				Tuesday 04/30/19				Wednesday 05/01/19				Thursday 05/02/19				Friday 05/03/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500									\$5.05	526	2,969	87%	\$5.95	541	3,258	96%	\$6.35	563	3,096	91%
1500 - 1600									\$7.00	709	3,091	91%	\$6.00	683	3,052	90%	\$9.15	761	2,676	79%
1600 - 1700									\$7.50	478	2,539	75%	\$8.80	515	2,594	76%	\$8.95	503	2,712	80%
1700 - 1800									\$6.40	563	2,899	85%	\$8.70	614	2,949	87%	\$6.90	609	2,930	86%
1800 - 1900									\$3.85	710	3,172	93%	\$4.75	655	2,907	86%	\$6.40	719	2,844	84%
1900 - 2000									\$3.75	535	2,029	60%	\$5.50	638	2,773	82%	\$5.95	571	1,913	56%

PM Time	Monday 05/06/19				Tuesday 05/07/19				Wednesday 05/08/19				Thursday 05/09/19				Friday 05/10/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$5.05	452	2,619	77%	\$5.05	488	2,958	87%	\$5.05	498	2,963	87%	\$5.95	517	3,204	94%	\$6.35	598	3,341	98%
1500 - 1600	\$5.40	734	2,997	88%	\$5.65	716	2,821	83%	\$7.00	725	3,284	97%	\$6.00	745	3,212	94%	\$9.15	779	2,757	81%
1600 - 1700	\$5.25	556	3,038	89%	\$5.50	483	2,996	88%	\$7.50	512	2,695	79%	\$8.80	519	2,611	77%	\$8.95	511	2,814	83%
1700 - 1800	\$5.20	583	2,939	86%	\$5.40	598	3,022	89%	\$6.40	612	3,052	90%	\$8.70	599	3,049	90%	\$6.90	623	2,931	86%
1800 - 1900	\$5.40	636	2,450	72%	\$3.85	660	2,929	86%	\$3.85	671	2,756	81%	\$4.75	691	2,933	86%	\$6.40	763	2,782	82%
1900 - 2000	\$3.75	420	1,505	44%	\$3.75	442	1,744	51%	\$3.75	515	1,917	56%	\$5.50	547	2,063	61%	\$5.95	632	1,897	56%

PM Time	Monday 05/13/19				Tuesday 05/14/19				Wednesday 05/15/19				Thursday 05/16/19				Friday 05/17/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$5.05	449	2,501	74%	\$5.05	471	2,989	88%	\$5.05	509	3,063	90%	\$5.95	480	2,931	86%	\$6.35	629	3,471	102%
1500 - 1600	\$5.40	699	2,998	88%	\$5.65	703	2,742	81%	\$7.00	730	3,177	93%	\$6.00	767	3,379	99%	\$9.15	847	2,774	82%
1600 - 1700	\$5.25	567	2,961	87%	\$5.50	505	2,880	85%	\$7.50	492	2,517	74%	\$8.80	450	2,509	74%	\$8.95	573	2,947	87%
1700 - 1800	\$5.20	583	2,960	87%	\$5.40	547	2,860	84%	\$6.40	594	3,085	91%	\$8.70	572	2,644	78%	\$6.90	666	3,030	89%
1800 - 1900	\$5.40	724	2,838	83%	\$3.85	698	2,944	87%	\$3.85	695	3,014	89%	\$4.75	569	2,347	69%	\$6.40	677	2,550	75%
1900 - 2000	\$3.75	459	1,720	51%	\$3.75	654	2,573	76%	\$3.75	632	2,507	74%	\$5.50	427	1,632	48%	\$5.95	587	1,931	57%

PM Time	Monday 05/20/19				Tuesday 05/21/19				Wednesday 05/22/19				Thursday 05/23/19				Friday 05/24/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$5.05	491	2,486	73%	\$5.05	468	2,893	85%	\$5.05	276	1,784	52%	\$5.95	587	3,314	97%	\$6.35	680	3,187	94%
1500 - 1600	\$5.40	728	3,125	92%	\$5.65	729	2,839	84%	\$7.00	636	2,678	79%	\$6.00	802	3,133	92%	\$9.15	835	2,711	80%
1600 - 1700	\$5.25	510	2,937	86%	\$5.50	505	2,840	84%	\$7.50	534	2,431	72%	\$8.80	522	2,590	76%	\$8.95	635	2,987	88%
1700 - 1800	\$5.20	608	3,027	89%	\$5.40	603	3,071	90%	\$6.40	638	2,975	88%	\$8.70	597	2,857	84%	\$6.90	671	2,814	83%
1800 - 1900	\$5.40	666	2,547	75%	\$3.85	732	2,918	86%	\$3.85	735	3,183	94%	\$4.75	793	2,999	88%	\$6.40	640	2,194	65%
1900 - 2000	\$3.75	396	1,493	44%	\$3.75	469	1,785	53%	\$3.75	679	2,701	79%	\$5.50	646	2,447	72%	\$5.95	593	1,827	54%

PM Time	Monday 05/27/19				Tuesday 05/28/19				Wednesday 05/29/19				Thursday 05/30/19				Friday 05/31/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$4.15	352	929	27%	\$5.05	431	2,357	69%	\$5.05	537	2,997	88%	\$5.95	523	3,162	93%	\$6.35	620	3,169	93%
1500 - 1600	\$4.15	407	983	29%	\$5.65	711	2,834	83%	\$7.00	712	3,180	94%	\$6.00	743	3,077	91%	\$9.15	717	2,662	78%
1600 - 1700	\$4.15	404	899	26%	\$5.50	488	2,983	88%	\$7.50	478	2,540	75%	\$8.80	501	2,482	73%	\$8.95	523	2,746	81%
1700 - 1800	\$4.15	432	934	27%	\$5.40	599	2,972	87%	\$6.40	587	2,911	86%	\$8.70	596	2,913	86%	\$6.90	590	2,856	84%
1800 - 1900	\$4.15	429	959	28%	\$3.85	691	2,949	87%	\$3.85	723	3,036	89%	\$4.75	729	3,173	93%	\$6.40	769	3,062	90%
1900 - 2000	\$4.15	456	906	27%	\$3.75	495	1,807	53%	\$3.75	452	1,779	52%	\$5.50	565	2,082	61%	\$5.95	555	2,011	59%

OCTA WESTBOUND PEAK-HOUR VOLUMES

AM Time	Monday 04/29/19				Tuesday 04/30/19				Wednesday 05/01/19				Thursday 05/02/19				Friday 05/03/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500									\$3.00	882	2,565	75%	\$3.00	859	2,542	75%	\$3.00	764	2,080	61%
0500 - 0600									\$4.85	949	2,585	76%	\$4.85	974	2,548	75%	\$4.60	862	2,504	74%
0600 - 0700									\$5.05	745	2,315	68%	\$5.05	770	2,355	69%	\$4.85	728	2,230	66%
0700 - 0800									\$5.55	530	2,166	64%	\$5.55	558	2,110	62%	\$5.40	537	1,917	56%
0800 - 0900									\$5.05	337	2,174	64%	\$5.05	360	2,113	62%	\$4.85	340	1,864	55%
0900 - 1000									\$4.00	329	2,158	63%	\$4.00	339	2,019	59%	\$4.00	326	1,636	48%

AM Time	Monday 05/06/19				Tuesday 05/07/19				Wednesday 05/08/19				Thursday 05/09/19				Friday 05/10/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$3.00	823	2,461	72%	\$3.00	899	2,709	80%	\$3.00	895	2,586	76%	\$3.00	834	2,418	71%	\$3.00	761	2,030	60%
0500 - 0600	\$4.85	998	2,606	77%	\$4.85	1020	2,819	83%	\$4.85	957	2,511	74%	\$4.85	957	2,485	73%	\$4.60	823	2,349	69%
0600 - 0700	\$5.05	681	2,290	67%	\$5.05	702	2,201	65%	\$5.05	728	2,313	68%	\$5.05	725	2,111	62%	\$4.85	667	2,062	61%
0700 - 0800	\$5.55	523	2,030	60%	\$5.55	577	2,153	63%	\$5.55	545	2,085	61%	\$5.55	590	2,215	65%	\$5.40	572	2,026	60%
0800 - 0900	\$5.05	425	2,028	60%	\$5.05	415	2,302	68%	\$5.05	365	2,134	63%	\$5.05	386	2,177	64%	\$4.85	339	1,773	52%
0900 - 1000	\$4.00	298	1,991	59%	\$4.00	342	2,302	68%	\$4.00	318	2,034	60%	\$4.00	332	1,955	58%	\$4.00	322	1,607	47%

AM Time	Monday 05/13/19				Tuesday 05/14/19				Wednesday 05/15/19				Thursday 05/16/19				Friday 05/17/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$3.00	860	2,554	75%	\$3.00	859	2,541	75%	\$3.00	852	2,509	74%	\$3.00	783	2,068	61%	\$3.00	773	2,133	63%
0500 - 0600	\$4.85	985	2,558	75%	\$4.85	968	2,684	79%	\$4.85	950	2,606	77%	\$4.85	507	1,443	42%	\$4.60	896	2,507	74%
0600 - 0700	\$5.05	738	2,256	66%	\$5.05	690	2,232	66%	\$5.05	759	2,325	68%	\$5.05	690	1,913	56%	\$4.85	712	2,240	66%
0700 - 0800	\$5.55	611	2,141	63%	\$5.55	590	2,289	67%	\$5.55	593	2,183	64%	\$5.55	575	1,908	56%	\$5.40	496	1,954	57%
0800 - 0900	\$5.05	372	2,122	62%	\$5.05	390	2,274	67%	\$5.05	364	2,032	60%	\$5.05	391	1,911	56%	\$4.85	331	1,952	57%
0900 - 1000	\$4.00	367	1,925	57%	\$4.00	358	2,246	66%	\$4.00	366	2,224	65%	\$4.00	363	2,100	62%	\$4.00	332	1,866	55%

AM Time	Monday 05/20/19				Tuesday 05/21/19				Wednesday 05/22/19				Thursday 05/23/19				Friday 05/24/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$3.00	876	2,602	77%	\$3.00	886	2,690	79%	\$3.00	855	2,539	75%	\$3.00	858	2,470	73%	\$3.00	732	2,010	59%
0500 - 0600	\$4.85	995	2,628	77%	\$4.85	995	2,704	80%	\$4.85	985	2,548	75%	\$4.85	989	2,592	76%	\$4.60	839	2,414	71%
0600 - 0700	\$5.05	719	2,324	68%	\$5.05	725	2,187	64%	\$5.05	755	2,327	68%	\$5.05	741	2,195	65%	\$4.85	682	2,072	61%
0700 - 0800	\$5.55	526	2,136	63%	\$5.55	587	2,371	70%	\$5.55	572	2,164	64%	\$5.55	567	2,129	63%	\$5.40	516	1,962	58%
0800 - 0900	\$5.05	361	2,005	59%	\$5.05	365	2,040	60%	\$5.05	330	2,057	61%	\$5.05	419	2,113	62%	\$4.85	321	1,780	52%
0900 - 1000	\$4.00	342	1,978	58%	\$4.00	327	2,232	66%	\$4.00	344	2,137	63%	\$4.00	346	2,088	61%	\$4.00	302	1,698	50%

AM Time	Monday 05/27/19				Tuesday 05/28/19				Wednesday 05/29/19				Thursday 05/30/19				Friday 05/31/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$1.65	53	111	3%	\$3.00	828	2,599	76%	\$3.00	887	2,584	76%	\$3.00	903	2,632	77%	\$3.00	772	2,134	63%
0500 - 0600	\$1.65	77	199	6%	\$4.85	973	2,679	79%	\$4.85	823	2,285	67%	\$4.85	923	2,608	77%	\$4.60	851	2,478	73%
0600 - 0700	\$1.65	91	243	7%	\$5.05	651	2,034	60%	\$5.05	708	2,267	67%	\$5.05	739	2,288	67%	\$4.85	667	2,147	63%
0700 - 0800	\$1.65	143	360	11%	\$5.55	558	2,101	62%	\$5.55	561	2,203	65%	\$5.55	547	2,119	62%	\$5.40	526	1,928	57%
0800 - 0900	\$2.45	214	620	18%	\$5.05	341	2,139	63%	\$5.05	316	1,935	57%	\$5.05	342	2,007	59%	\$4.85	397	1,862	55%
0900 - 1000	\$3.55	441	1,097	32%	\$4.00	403	2,513	74%	\$4.00	362	2,033	60%	\$4.00	376	2,079	61%	\$4.00	294	1,640	48%

OCTA OPERATIONAL HIGHLIGHTS

On-road Operations

OCTA Customer Assistance Specialists (CAS) responded to 120 calls during the month of May. Of those calls, 81 were to assist disabled vehicles and 23 calls to remove debris. The CAS provided assistance to 16 accidents in the Express Lanes and 5 of those accidents originated from the SR91 general-purpose lanes.

Electronic Toll and Traffic Management System Project Update

An agreement with Kapsch TrafficCom USA, Inc., (Kapsch) was executed in June 2018 to provide toll lane system integrator services for the design, installation, operations, and maintenance of the electronic toll and traffic management system for the 91 Express Lanes. This new lane system will be able to read the new 6C protocol as well as the current Title 21 protocol. Following RCTC's completion of their lane system installation on the 91 Express Lanes, OCTA will commence installation on the Orange County segment. It is anticipated the OCTA lane system equipment at the gantries will be replaced in summer 2019.

6C Transition Update

In addition to the lane system replacement, the back-office system will need to be modified in order to process the new transponders and changes to the customer account plans. Modification to the back-office system will commence when the lane system installations for both OCTA and RCTC have been completed. Distribution of the new 6C transponders to customers will begin after the back-office system changes have been made. OCTA and RCTC have prepared a series of customer communication to be provided to customers to facilitate the transition to the new protocol and changes to the account plans.

Amendment to the Three-Party Operating Agreement

As referenced above, due to the back-office system changes, an amendment to the OCTA, RCTC, Cofiroute USA (CUSA) Operating Agreement is required. Staff from both OCTA and RCTC have been in negotiations with CUSA for the amendment. It is anticipated there will be no change to the maximum obligation of the contract. The amendment is expected to be finalized in the next few months.

FINANCIAL HIGHLIGHTS OCTA

91 Express Lanes Operating Statement

Description	YTD as of : 5/31/2019		YTD Variance	
	Actual ⁽¹⁾	Budget ⁽¹⁾	Dollar \$	Percent (%)
Operating revenues:				
Toll revenue	\$ 43,047,286	\$ 46,535,991	\$ (3,488,705)	(7.5)
Fee revenue	7,096,465	5,655,046	1,441,419	25.5
Total operating revenues	50,143,751	52,191,037	(2,047,287)	(3.9)
Operating expenses:				
Contracted services	6,009,697	6,873,990	864,293	12.6
Administrative fee	2,274,294	2,526,227	251,933	10.0
Other professional services	787,012	3,103,400	2,316,388	74.6
Credit card processing fees	1,225,013	1,147,537	(77,476)	(6.8)
Toll road account servicing	738,210	1,254,063	515,853	41.1
Other insurance expense	328,331	687,225	358,894	52.2
Toll road maintenance supply repairs	191,368	298,510	107,142	35.9
Patrol services	647,437	728,519	81,082	11.1
Building equipment repairs and maint	95,137	323,406	228,269	70.6
Other services	8,135	24,163	16,028	66.3
Utilities	46,433	60,478	14,045	23.2
Office expense	51,805	164,516	112,711	68.5
Bad debt expense	145,168	-	(145,168)	N/A
Miscellaneous ⁽²⁾	360,199	519,646	159,447	30.7
Leases	436,813	421,498	(15,315)	(3.6)
Total operating expenses	13,345,051	18,133,178	4,788,127	26.4
Depreciation and amortization ⁽³⁾	3,149,897	-	(3,149,897)	N/A
Operating income (loss)	33,648,803	34,057,859	(409,056)	(1.2)
Nonoperating revenues (expenses):				
Reimbursement from Other Agencies	774,096	1,025,189	(251,093)	(24.5)
Interest income	3,366,075	2,034,802	1,331,273	65.4
Interest expense	(4,497,454)	(4,592,456)	95,002	2.1
Other	33,409	-	33,409	N/A
Total nonoperating revenues (expenses)	(323,873)	(1,532,465)	1,208,592	78.9
Transfers in	-	-	-	N/A
Transfers out	(996,636)	(14,403,531)	13,406,895	93.1
Net income (loss)	\$ 32,328,293	\$ 18,121,863	\$ 14,206,430	78.4

¹Actual amounts are accounted for on the accrual basis of accounting in an enterprise fund. Budget amounts are accounted for on a modified accrual basis of accounting.

²Miscellaneous expenses include: Bond Insurance Costs, Bank Service Charge, Transponder Materials.

³Depreciation and amortization are not budgeted items.

Capital Asset Activity

During the ten months ending May 31, 2019, capital asset activities included \$349,599 for the Electronic Toll and Traffic Management system replacement project and \$226,014 for transponder purchases.

OPERATIONS OVERVIEW RCTC

TRAFFIC AND REVENUE STATISTICS FOR RCTC

Total traffic volume on the RCTC 91 Express Lanes for May 2019 was 1,356,283. This represents a daily average of 43,751. This is a 6.1% increase in total traffic volume from the same period last year when traffic levels totaled 1,278,127. Potential toll revenue for the month was \$5,360,495 which represents an increase of 15.6% from the prior year's total of \$4,637,229. Carpool percentage for the month was 25.63% as compared to the previous year's rate of 22.84%.

Month-to-date traffic and revenue data are summarized in the table below. The following trip and revenue statistics tables represent all trips taken on the RCTC 91 Express Lanes and associated potential revenue for the month of May 2019.

Current Month-to-Date (MTD) as of May 31, 2019

Trips	MAY-19 MTD Actual	Stantec MTD Projected	# Variance	% Variance	MAY-18 MTD Actual	Yr-to-Yr % Variance
Full Toll Lanes	1,008,723	733,956	274,767	37.4%	986,259	2.3%
3+ Lanes	347,560	241,572	105,988	43.9%	291,868	19.1%
Total Gross Trips	1,356,283	975,528	380,755	39.0%	1,278,127	6.1%
Revenue						
Full Toll Lanes	5,313,798	\$2,195,443	\$3,118,355	142.0%	4,599,418	15.5%
3+ Lanes	46,697	\$0	\$46,697		37,811	23.5%
Total Gross Revenue	\$5,360,495	\$2,195,443	\$3,165,052	144.2%	\$4,637,229	15.6%
Average Revenue per Trip						
Average Full Toll Lanes	\$5.27	\$2.99	\$2.28	76.3%	\$4.66	13.1%
Average 3+ Lanes	\$0.13	\$0.00	\$0.13		\$0.13	0.0%
Average Gross Revenue	\$3.95	\$2.25	\$1.70	75.6%	\$3.63	8.8%

The 2019 fiscal year-to-date (YTD) traffic volume is 5.3% higher when compared with the same period last year. The 2019 fiscal year-to-date revenue is 20.6% higher than for the same period last year. The traffic and revenue increases are attributed to higher demand and increase toll rates to manage the demand. Year-to-date average revenue per-trip is \$3.76.

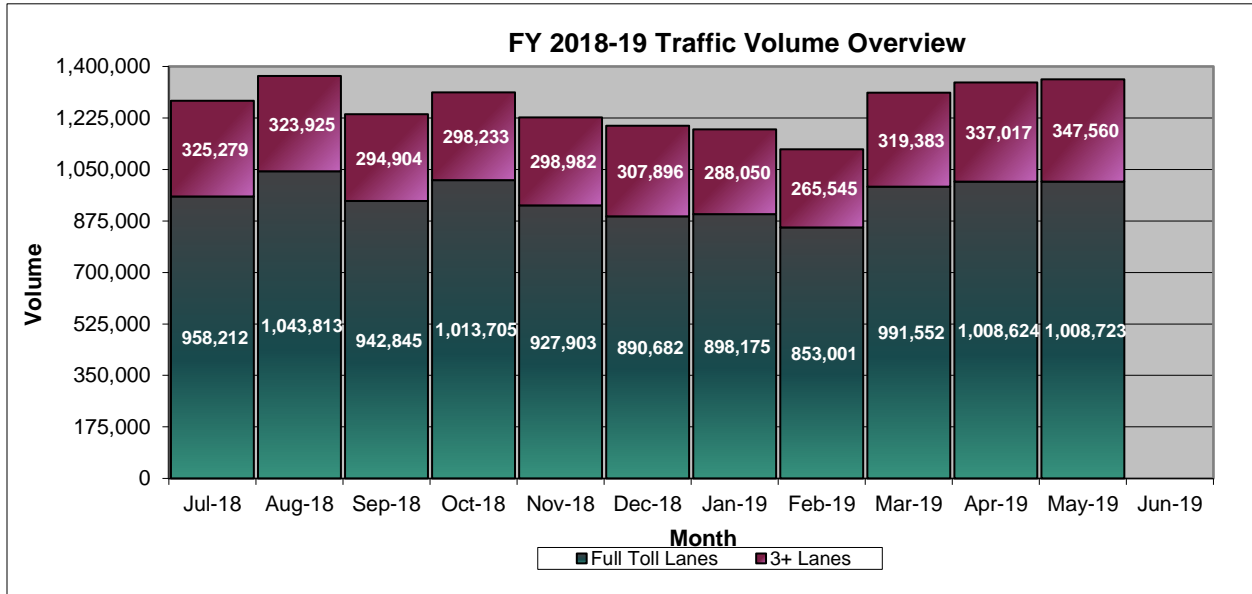
Fiscal year-to-date traffic and revenue data are summarized in the table below. The following trip and revenue statistics tables represent all trips taken on the RCTC 91 Express Lanes and associated potential revenue for the months of July 2018 through May 2019.

FY 2018-19 Year to Date as of May 31, 2019

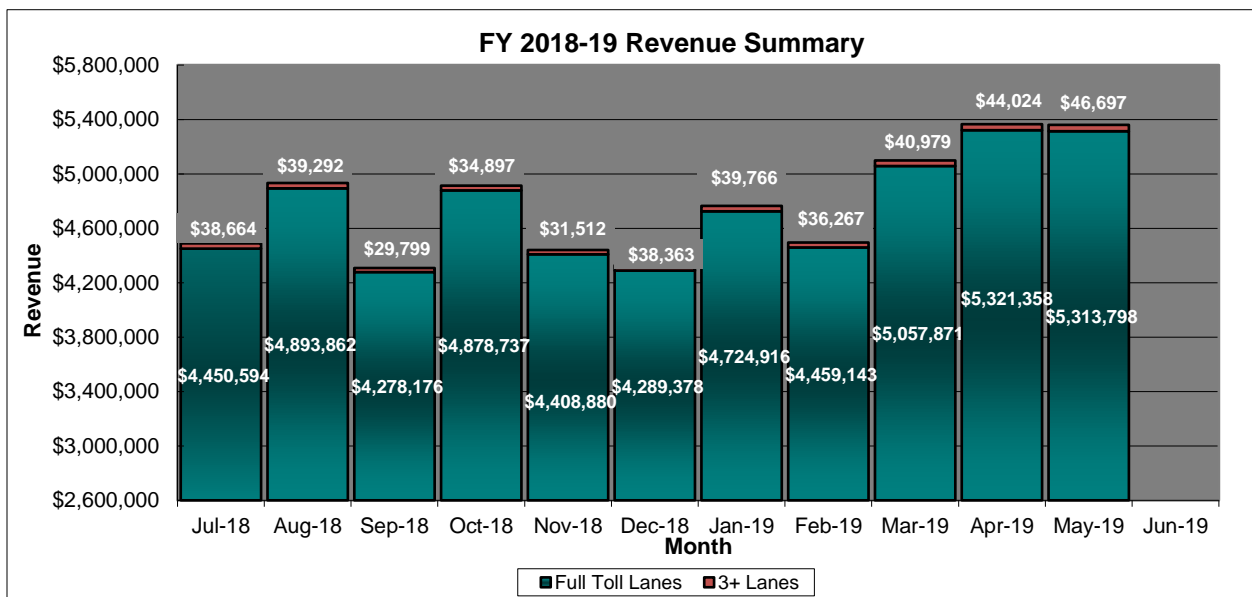
Trips	FY 2018-19 YTD Actual	Stantec YTD Projected	# Variance	% Variance	FY 2017-18 YTD Actual	Yr-to-Yr % Variance
Full Toll Lanes	10,537,235	7,146,842	3,390,393	47.4%	10,330,899	2.0%
3+ Lanes	3,406,772	2,478,429	(3,740,070)	(52.3%)	2,910,595	17.0%
Total Gross Trips	13,944,007	9,625,271	(349,677)	(2.4%)	13,241,494	5.3%
Revenue						
Full Toll Lanes	52,076,714	\$21,449,714	\$30,627,000	142.8%	43,182,503	20.6%
3+ Lanes	420,260	\$0	\$420,260		356,597	17.9%
Total Gross Revenue	\$52,496,974	\$21,449,714	\$31,047,260	144.7%	\$43,539,101	20.6%
Average Revenue per Trip						
Average Full Toll Lanes	\$4.94	\$3.00	\$1.94	64.7%	\$4.18	18.2%
Average 3+ Lanes	\$0.12	\$0.00	\$0.12		\$0.12	0.0%
Average Gross Revenue	\$3.76	\$1.50	\$2.26	150.7%	\$3.29	14.3%

RCTC Traffic and Revenue Summary

The chart below reflects the total trips broken down between Full Toll lanes and HOV3+ lanes for FY 2018-19 on a monthly basis.



The chart below reflects the gross potential revenue breakdown between Full Toll lanes and HOV3+ lanes for FY 2018-19 on a monthly basis.



RCTC PEAK-HOUR VOLUMES

RCTC regularly evaluates traffic volumes for peak period hours where Express Lanes performance is degraded and either increases or decreases tolls. There were no toll rates adjusted in May to improve the level of service in the peak hours where demand exceeded capacity. Hours that are highlighted in yellow were flagged for continued evaluation.

RCTC EASTBOUND PEAK-HOUR VOLUMES

Eastbound PM Peak - County Line to McKinley

PM Time	Monday 04/29/19					Tuesday 04/30/19					Wednesday 05/01/19					Thursday 05/02/19					Friday 05/03/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500											\$6.70	286	1,027	1,313	F	\$8.85	287	1,181	1,468	F	\$19.00	351	1,099	1,450	F
1500 - 1600											\$7.55	365	926	1,291	E	\$10.60	352	952	1,304	F	\$18.70	394	879	1,273	E
1600 - 1700											\$5.15	209	785	994	C	\$7.90	244	922	1,166	D	\$10.75	251	975	1,226	E
1700 - 1800											\$5.15	231	853	1,084	D	\$5.15	364	1,334	1,698	F	\$6.70	286	988	1,274	E
1800 - 1900											\$5.15	333	881	1,214	E	\$5.15	391	1,253	1,644	F	\$6.70	352	945	1,297	E
1900 - 2000											\$3.95	202	646	848	C	\$4.05	358	1,148	1,506	F	\$5.15	267	721	988	C

PM Time	Monday 05/06/19					Tuesday 05/07/19					Wednesday 05/08/19					Thursday 05/09/19					Friday 05/10/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$6.70	262	831	1,093	D	\$6.70	240	999	1,239	E	\$6.70	279	1,043	1,322	F	\$8.85	289	1,105	1,394	F	\$19.00	363	1,013	1,376	F
1500 - 1600	\$6.70	361	917	1,278	E	\$6.70	377	856	1,233	E	\$7.55	362	956	1,318	F	\$10.60	402	935	1,337	F	\$18.70	387	846	1,233	E
1600 - 1700	\$5.15	213	899	1,112	D	\$6.70	211	909	1,120	D	\$5.15	244	865	1,109	D	\$7.90	267	854	1,121	D	\$10.75	249	914	1,163	D
1700 - 1800	\$5.15	231	825	1,056	D	\$5.15	256	792	1,048	D	\$5.15	301	857	1,158	D	\$5.15	236	935	1,171	D	\$6.70	317	895	1,212	E
1800 - 1900	\$5.15	267	659	926	C	\$5.15	328	781	1,109	D	\$5.15	310	747	1,057	D	\$5.15	274	876	1,150	D	\$6.70	367	834	1,201	E
1900 - 2000	\$2.20	159	406	565	B	\$4.05	198	454	652	B	\$3.95	186	503	689	B	\$4.05	211	661	872	C	\$5.15	298	605	903	C

PM Time	Monday 05/13/19					Tuesday 05/14/19					Wednesday 05/15/19					Thursday 05/16/19					Friday 05/17/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$6.70	269	884	1,153	D	\$6.70	275	998	1,273	E	\$6.70	282	1,155	1,437	F	\$8.85	246	1,041	1,287	E	\$19.00	391	1,062	1,453	F
1500 - 1600	\$6.70	369	929	1,298	E	\$6.70	327	787	1,114	D	\$7.55	373	962	1,335	F	\$10.60	366	979	1,345	F	\$18.70	445	876	1,321	F
1600 - 1700	\$5.15	230	907	1,137	D	\$6.70	243	941	1,184	D	\$5.15	229	805	1,034	D	\$7.90	199	829	1,028	D	\$10.75	281	1,042	1,323	F
1700 - 1800	\$5.15	264	774	1,038	D	\$5.15	262	832	1,094	D	\$5.15	300	1,050	1,350	F	\$5.15	231	772	1,003	D	\$6.70	323	978	1,301	F
1800 - 1900	\$5.15	339	704	1,043	D	\$5.15	304	826	1,130	D	\$5.15	352	1,017	1,369	F	\$5.15	244	620	864	C	\$6.70	330	816	1,146	D
1900 - 2000	\$2.20	191	478	669	B	\$4.05	278	752	1,030	D	\$3.95	280	766	1,046	D	\$4.05	188	425	613	B	\$5.15	293	593	886	C

PM Time	Monday 05/20/19					Tuesday 05/21/19					Wednesday 05/22/19					Thursday 05/23/19					Friday 05/24/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$6.70	276	898	1,174	D	\$6.70	260	988	1,248	E	\$6.70	157	666	823	C	\$8.85	316	1,124	1,440	F	\$19.00	609	1,383	1,992	F
1500 - 1600	\$6.70	404	955	1,359	F	\$6.70	365	868	1,233	E	\$7.55	417	1,031	1,448	F	\$10.60	430	939	1,369	F	\$18.70	697	1,208	1,905	F
1600 - 1700	\$5.15	227	806	1,033	D	\$6.70	230	904	1,134	D	\$5.15	291	746	1,037	D	\$7.90	232	805	1,037	D	\$10.75	499	1,267	1,766	F
1700 - 1800	\$5.15	270	833	1,103	D	\$5.15	278	864	1,142	D	\$5.15	265	907	1,172	D	\$5.15	272	937	1,209	E	\$6.70	520	1,216	1,736	F
1800 - 1900	\$5.15	290	706	996	C	\$5.15	348	799	1,147	D	\$5.15	308	925	1,233	E	\$5.15	355	854	1,209	E	\$6.70	405	803	1,208	E
1900 - 2000	\$2.20	183	407	590	B	\$4.05	183	488	671	B	\$3.95	259	899	1,158	D	\$4.05	240	648	888	C	\$5.15	303	580	883	C

PM Time	Monday 05/27/19					Tuesday 05/28/19					Wednesday 05/29/19					Thursday 05/30/19					Friday 05/31/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.20	157	280	437	B	\$6.70	241	866	1,107	D	\$6.70	283	1,044	1,327	F	\$8.85	297	1,126	1,423	F	\$19.00	397	1,064	1,461	F
1500 - 1600	\$2.20	174	257	431	B	\$6.70	396	933	1,329	F	\$7.55	406	963	1,369	F	\$10.60	386	917	1,303	F	\$18.70	378	873	1,251	E
1600 - 1700	\$2.20	169	254	423	B	\$6.70	229	897	1,126	D	\$5.15	220	817	1,037	D	\$7.90	253	860	1,113	D	\$10.75	278	929	1,207	E
1700 - 1800	\$2.20	195	245	440	B	\$5.15	257	841	1,098	D	\$5.15	284	854	1,138	D	\$5.15	241	938	1,179	D	\$6.70	293	914	1,207	E
1800 - 1900	\$2.20	179	225	404	B	\$5.15	288	777	1,065	D	\$5.15	320	826	1,146	D	\$5.15	268	968	1,236	E	\$6.70	364	942	1,306	F
1900 - 2000	\$2.20	206	219	425	B	\$4.05	206	492	698	B	\$3.95	207	572	779	B	\$4.05	230	698	928	C	\$5.15	283	718	1,001	D

Eastbound PM Peak - County Line to I-15 South

PM Time	Monday 04/29/19					Tuesday 04/30/19					Wednesday 05/01/19					Thursday 05/02/19					Friday 05/03/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500											\$2.85	129	733	862	C	\$5.05	135	787	922	C	\$5.15	142	724	866	C
1500 - 1600											\$5.15	174	647	821	C	\$5.15	178	614	792	B	\$2.80	208	610	818	C
1600 - 1700											\$2.85	105	518	623	B	\$2.80	142	637	779	B	\$2.85	125	594	719	B
1700 - 1800											\$2.85	117	604	721	B	\$2.85	182	827	1,009	D	\$2.85	131	619	750	B
1800 - 1900											\$2.85	142	635	777	B	\$2.85	171	798	969	C	\$2.85	166	515	681	B
1900 - 2000											\$2.85	122	451	573	B	\$2.85	170	704	874	C	\$2.85	158	441	599	B

PM Time	Monday 05/06/19					Tuesday 05/07/19					Wednesday 05/08/19					Thursday 05/09/19					Friday 05/10/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.85	113	673	786	B	\$2.85	134	727	861	C	\$2.85	131	729	860	C	\$5.05	149	836	985	C	\$5.15	162	736	898	C
1500 - 1600	\$2.85	199	638	837	C	\$2.80	186	593	779	B	\$5.15	187	679	866	C	\$5.15	180	662	842	C	\$2.80	230	632	862	C
1600 - 1700	\$2.85	150	625	775	B	\$2.85	111	649	760	B	\$2.85	136	532	668	B	\$2.80	125	605	730	B	\$2.85	136	660	796	B
1700 - 1800	\$2.85	121	604	725	B	\$2.85	146	590	736	B	\$2.85	140	618	758	B	\$2.85	114	633	747	B	\$2.85	147	585	732	B
1800 - 1900	\$2.85	112	468	580	B	\$2.85	126	548	674	B	\$2.85	136	524	660	B	\$2.85	111	540	651	B	\$2.85	161	524	685	B
1900 - 2000	\$2.85	107	305	412	B	\$2.85	119	343	462	B	\$2.85	130	379	509	B	\$2.85	113	498	611	B	\$2.85	162	366	528	B

PM Time	Monday 05/13/19					Tuesday 05/14/19					Wednesday 05/15/19					Thursday 05/16/19					Friday 05/17/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.85	119	624	743	B	\$2.85	126	749	875	C	\$2.85	136	750	886	C	\$5.05	129	687	816	C	\$5.15	153	818	971	C
1500 - 1600	\$2.85	177	655	832	C	\$2.80	168	551	719	B	\$5.15	194	661	855	C	\$5.15	200	762	962	C	\$2.80	224	594	818	C
1600 - 1700	\$2.85	144	626	770	B	\$2.85	139	640	779	B	\$2.85	131	555	686	B	\$2.80	122	501	623	B	\$2.85	164	611	775	B
1700 - 1800	\$2.85	133	513	646	B	\$2.85	137	601	738	B	\$2.85	141	681	822	C	\$2.85	135	529	664	B	\$2.85	150	543	693	B
1800 - 1900	\$2.85	147	507	654	B	\$2.85	143	557	700	B	\$2.85	170	690	860	C	\$2.85	136	419	555	B	\$2.85	163	540	703	B
1900 - 2000	\$2.85	124	373	497	B	\$2.85	154	521	675	B	\$2.85	164	512	676	B	\$2.85	101	317	418	B	\$2.85	114	412	526	B

PM Time	Monday 05/20/19					Tuesday 05/21/19					Wednesday 05/22/19					Thursday 05/23/19					Friday 05/24/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.85	134	668	802	C	\$2.85	135	767	902	C	\$2.85	86	491	577	B	\$5.05	142	759	901	C	\$5.15	60	238	298	A
1500 - 1600	\$2.85	191	716	907	C	\$2.80	171	608	779	B	\$5.15	198	658	856	C	\$5.15	186	669	855	C	\$2.80	19	81	100	A
1600 - 1700	\$2.85	135	619	754	B	\$2.85	135	599	734	B	\$2.85	149	476	625	B	\$2.80	132	557	689	B	\$2.85	7	26	33	A
1700 - 1800	\$2.85	152	568	720	B	\$2.85	137	602	739	B	\$2.85	148	570	718	B	\$2.85	140	541	681	B	\$2.85	36	96	132	A
1800 - 1900	\$2.85	150	456	606	B	\$2.85	158	554	712	B	\$2.85	137	576	713	B	\$2.85	149	527	676	B	\$2.85	116	341	457	B
1900 - 2000	\$2.85	99	295	394	A	\$2.85	139	392	531	B	\$2.85	158	639	797	B	\$2.85	140	438	578	B	\$2.85	139	362	501	B

PM Time	Monday 05/27/19					Tuesday 05/28/19					Wednesday 05/29/19					Thursday 05/30/19					Friday 05/31/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$1.90	91	173	264	A	\$2.85	106	601	707	B	\$2.85	142	781	923	C	\$5.05	150	813	963	C	\$5.15	167	714	881	C
1500 - 1600	\$1.90	116	174	290	A	\$2.80	189	604	793	B	\$5.15	169	643	812	C	\$5.15	198	662	860	C	\$2.80	192	592	784	B
1600 - 1700	\$1.90	114	167	281	A	\$2.85	114	646	760	B	\$2.85	126	586	712	B	\$2.80	121	548	669	B	\$2.85	150	631	781	B
1700 - 1800	\$1.90	113	137	250	A	\$2.85	160	609	769	B	\$2.85	133	552	685	B	\$2.85	105	615	720	B	\$2.85	128	509	637	B
1800 - 1900	\$1.90	112	159	271	A	\$2.85	138	561	699	B	\$2.85	192	592	784	B	\$2.85	135	611	746	B	\$2.85	175	560	735	B
1900 - 2000	\$1.90	121	144	265	A	\$2.85	133	403	536	B	\$2.85	123	456	579	B	\$2.85	112	471	583	B	\$2.85	148	460	608	B

RCTC WESTBOUND PEAK-HOUR VOLUMES

Westbound AM Peak - McKinley to County Line

AM Time	Monday 04/29/19					Tuesday 04/30/19					Wednesday 05/01/19					Thursday 05/02/19					Friday 05/03/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500											\$7.85	501	1,038	1,539	F	\$7.85	486	1,095	1,581	F	\$5.15	435	722	1,157	D
0500 - 0600											\$17.80	554	761	1,315	E	\$17.55	588	795	1,383	F	\$9.20	546	1,069	1,615	F
0600 - 0700											\$17.45	493	1,136	1,629	F	\$16.15	459	1,088	1,547	F	\$8.45	485	1,155	1,640	F
0700 - 0800											\$15.25	414	1,237	1,651	F	\$13.50	440	1,220	1,660	F	\$7.70	425	1,086	1,511	F
0800 - 0900											\$9.75	281	1,442	1,723	F	\$10.50	302	1,396	1,698	F	\$6.70	210	1,029	1,239	E
0900 - 1000											\$6.70	186	1,093	1,279	E	\$6.70	219	1,105	1,324	E	\$4.05	190	751	941	C

AM Time	Monday 05/06/19					Tuesday 05/07/19					Wednesday 05/08/19					Thursday 05/09/19					Friday 05/10/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$7.85	439	976	1,415	F	\$7.85	478	1,008	1,486	F	\$7.85	490	1,138	1,628	F	\$7.85	487	1,074	1,561	F	\$5.15	442	679	1,121	D
0500 - 0600	\$19.90	649	879	1,528	F	\$19.45	691	919	1,610	F	\$17.80	608	758	1,366	F	\$17.55	611	704	1,315	E	\$9.20	463	903	1,366	F
0600 - 0700	\$18.55	397	1,026	1,423	F	\$18.15	387	915	1,302	E	\$17.45	460	1,162	1,622	F	\$16.15	448	885	1,333	E	\$8.45	440	997	1,437	F
0700 - 0800	\$14.50	380	1,248	1,628	F	\$14.50	420	1,192	1,612	F	\$15.25	359	1,306	1,665	F	\$13.50	442	1,203	1,645	F	\$7.70	409	1,096	1,505	F
0800 - 0900	\$9.75	283	1,283	1,566	F	\$9.75	290	1,423	1,713	F	\$9.75	269	1,343	1,612	F	\$10.50	302	1,426	1,728	F	\$6.70	262	998	1,260	E
0900 - 1000	\$5.15	203	1,054	1,257	E	\$6.70	224	1,261	1,485	F	\$6.70	186	1,016	1,202	E	\$6.70	199	1,069	1,268	E	\$4.05	201	764	965	C

AM Time	Monday 05/13/19					Tuesday 05/14/19					Wednesday 05/15/19					Thursday 05/16/19					Friday 05/17/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$7.85	461	949	1,410	F	\$7.85	463	1,005	1,468	F	\$7.85	494	1,107	1,601	F	\$7.85	478	880	1,358	F	\$5.15	427	705	1,132	D
0500 - 0600	\$19.90	627	929	1,556	F	\$19.45	653	899	1,552	F	\$17.80	559	777	1,336	E	\$17.55	621	1,111	1,732	F	\$9.20	540	1,018	1,558	F
0600 - 0700	\$18.55	444	982	1,426	F	\$18.15	403	926	1,329	E	\$17.45	475	1,107	1,582	F	\$16.15	750	1,791	2,541	F	\$8.45	495	1,155	1,650	F
0700 - 0800	\$14.50	429	1,243	1,672	F	\$14.50	478	1,269	1,747	F	\$15.25	451	1,232	1,683	F	\$13.50	568	2,001	2,569	F	\$7.70	411	1,174	1,585	F
0800 - 0900	\$9.75	291	1,398	1,689	F	\$9.75	326	1,404	1,730	F	\$9.75	290	1,343	1,633	F	\$10.50	276	1,732	2,008	F	\$6.70	255	1,066	1,321	E
0900 - 1000	\$5.15	191	972	1,163	D	\$6.70	205	1,177	1,382	F	\$6.70	227	1,180	1,407	F	\$6.70	249	1,876	2,125	F	\$4.05	173	803	976	C

AM Time	Monday 05/20/19					Tuesday 05/21/19					Wednesday 05/22/19					Thursday 05/23/19					Friday 05/24/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$7.85	502	1,071	1,573	F	\$7.85	482	1,039	1,521	F	\$7.85	527	1,142	1,669	F	\$7.85	479	1,107	1,586	F	\$5.15	427	634	1,061	D
0500 - 0600	\$19.90	613	862	1,475	F	\$19.45	643	903	1,546	F	\$17.80	584	710	1,294	E	\$17.55	612	782	1,394	F	\$9.20	517	992	1,509	F
0600 - 0700	\$18.55	424	1,003	1,427	F	\$18.15	384	853	1,237	E	\$17.45	450	1,142	1,592	F	\$16.15	443	1,037	1,480	F	\$8.45	466	1,099	1,565	F
0700 - 0800	\$14.50	407	1,294	1,701	F	\$14.50	454	1,343	1,797	F	\$15.25	529	1,862	2,391	F	\$13.50	414	1,281	1,695	F	\$7.70	405	1,084	1,489	F
0800 - 0900	\$9.75	260	1,240	1,500	F	\$9.75	267	1,186	1,453	F	\$9.75	251	1,350	1,601	F	\$10.50	321	1,298	1,619	F	\$6.70	219	928	1,147	D
0900 - 1000	\$5.15	201	944	1,145	D	\$6.70	193	1,107	1,300	E	\$6.70	227	1,101	1,328	E	\$6.70	224	946	1,170	D	\$4.05	178	694	872	C

AM Time	Monday 05/27/19					Tuesday 05/28/19					Wednesday 05/29/19					Thursday 05/30/19					Friday 05/31/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$1.50	24	24	48	A	\$7.85	467	1,060	1,527	F	\$7.85	506	1,133	1,639	F	\$7.85	506	1,076	1,582	F	\$5.15	450	733	1,183	D
0500 - 0600	\$1.50	36	62	98	A	\$19.45	639	865	1,504	F	\$17.80	560	787	1,347	E	\$17.55	586	830	1,416	F	\$9.20	540	1,058	1,598	F
0600 - 0700	\$1.50	41	80	121	A	\$18.15	374	869	1,243	E	\$17.45	468	1,107	1,575	F	\$16.15	471	1,047	1,518	F	\$8.45	467	1,182	1,649	F
0700 - 0800	\$1.50	66	114	180	A	\$14.50	416	1,197	1,613	F	\$15.25	447	1,289	1,736	F	\$13.50	443	1,219	1,662	F	\$7.70	416	1,121	1,537	F
0800 - 0900	\$1.50	126	257	383	A	\$9.75	288	1,237	1,525	F	\$9.75	230	1,262	1,492	F	\$10.50	283	1,228	1,511	F	\$6.70	253	1,014	1,267	E
0900 - 1000	\$2.20	293	566	859	C	\$6.70	264	1,267	1,531	F	\$6.70	225	985	1,210	E	\$6.70	246	1,015	1,261	E	\$4.05	191	711	902	C

Westbound AM Peak - I-15 North to County Line

AM Time	Monday 04/29/19					Tuesday 04/30/19					Wednesday 05/01/19					Thursday 05/02/19					Friday 05/03/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500											\$5.05	262	723	985	C	\$5.05	286	704	990	C	\$2.85	231	606	837	C
0500 - 0600											\$15.05	445	1,125	1,570	F	\$13.70	442	1,092	1,534	F	\$6.65	371	923	1,294	E
0600 - 0700											\$17.70	394	1,072	1,466	F	\$14.05	407	1,094	1,501	F	\$6.65	349	1,006	1,355	E
0700 - 0800											\$12.05	290	1,131	1,421	F	\$11.05	268	1,141	1,409	F	\$6.65	229	853	1,082	D
0800 - 0900											\$6.65	153	1,040	1,193	D	\$6.65	160	1,084	1,244	E	\$5.15	150	835	985	C
0900 - 1000											\$5.15	126	869	995	C	\$5.15	123	837	960	C	\$2.85	110	599	709	B

AM Time	Monday 05/06/19					Tuesday 05/07/19					Wednesday 05/08/19					Thursday 05/09/19					Friday 05/10/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$5.05	268	742	1,010	D	\$5.05	268	732	1,000	C	\$5.05	270	705	975	C	\$5.05	269	670	939	C	\$2.85	233	616	849	C
0500 - 0600	\$17.40	430	969	1,399	E	\$15.40	419	1,084	1,503	F	\$15.05	425	1,074	1,499	F	\$13.70	417	1,020	1,437	F	\$6.65	377	887	1,264	E
0600 - 0700	\$17.40	393	1,201	1,594	F	\$15.70	405	1,052	1,457	F	\$17.70	426	1,079	1,505	F	\$14.05	384	949	1,333	E	\$6.65	311	944	1,255	E
0700 - 0800	\$12.40	276	989	1,265	E	\$11.70	314	1,230	1,544	F	\$12.05	215	1,120	1,335	E	\$11.05	309	1,145	1,454	F	\$6.65	268	983	1,251	E
0800 - 0900	\$8.55	164	997	1,161	D	\$8.55	197	1,269	1,466	F	\$6.65	139	1,138	1,277	E	\$6.65	188	1,072	1,260	E	\$5.15	146	777	923	C
0900 - 1000	\$5.05	122	815	937	C	\$5.15	122	829	951	C	\$5.15	119	849	968	C	\$5.15	129	858	987	C	\$2.85	151	623	774	B

AM Time	Monday 05/13/19					Tuesday 05/14/19					Wednesday 05/15/19					Thursday 05/16/19					Friday 05/17/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$5.05	288	790	1,078	D	\$5.05	292	729	1,021	D	\$5.05	261	695	956	C	\$5.05	270	618	888	C	\$2.85	234	653	887	C
0500 - 0600	\$17.40	414	910	1,324	E	\$15.40	395	1,069	1,464	F	\$15.05	439	1,094	1,533	F	\$13.70	17	30	47	A	\$6.65	400	916	1,316	E
0600 - 0700	\$17.40	391	1,123	1,514	F	\$15.70	411	1,066	1,477	F	\$17.70	416	1,031	1,447	F	\$14.05	400	924	1,324	E	\$6.65	328	1,030	1,358	E
0700 - 0800	\$12.40	309	1,099	1,408	F	\$11.70	328	1,225	1,553	F	\$12.05	292	1,173	1,465	F	\$11.05	321	1,042	1,363	E	\$6.65	227	853	1,080	D
0800 - 0900	\$8.55	188	1,100	1,288	E	\$8.55	170	1,254	1,424	F	\$6.65	161	1,038	1,199	D	\$6.65	209	1,172	1,381	E	\$5.15	132	829	961	C
0900 - 1000	\$5.05	136	769	905	C	\$5.15	145	914	1,059	D	\$5.15	131	823	954	C	\$5.15	179	1,178	1,357	E	\$2.85	131	667	798	B

AM Time	Monday 05/20/19					Tuesday 05/21/19					Wednesday 05/22/19					Thursday 05/23/19					Friday 05/24/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$5.05	279	765	1,044	D	\$5.05	282	767	1,049	D	\$5.05	256	730	986	C	\$5.05	268	687	955	C	\$2.85	216	626	842	C
0500 - 0600	\$17.40	437	1,005	1,442	F	\$15.40	428	1,060	1,488	F	\$15.05	449	1,081	1,530	F	\$13.70	444	1,090	1,534	F	\$6.65	365	923	1,288	E
0600 - 0700	\$17.40	392	1,153	1,545	F	\$15.70	425	1,081	1,506	F	\$17.70	447	1,063	1,510	F	\$14.05	396	1,050	1,446	F	\$6.65	311	876	1,187	D
0700 - 0800	\$12.40	282	1,071	1,353	E	\$11.70	322	1,257	1,579	F	\$12.05	281	1,071	1,352	E	\$11.05	304	1,089	1,393	E	\$6.65	233	828	1,061	D
0800 - 0900	\$8.55	185	1,078	1,263	E	\$8.55	193	1,160	1,353	E	\$6.65	145	1,030	1,175	D	\$6.65	185	1,062	1,247	E	\$5.15	150	726	876	C
0900 - 1000	\$5.05	147	770	917	C	\$5.15	137	923	1,060	D	\$5.15	133	814	947	C	\$5.15	106	798	904	C	\$2.85	117	609	726	B

AM Time	Monday 05/27/19					Tuesday 05/28/19					Wednesday 05/29/19					Thursday 05/30/19					Friday 05/31/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$1.90	18	34	52	A	\$5.05	249	786	1,035	D	\$5.05	277	739	1,016	D	\$5.05	305	721	1,026	D	\$2.85	225	627	852	C
0500 - 0600	\$1.90	33	74	107	A	\$15.40	440	1,124	1,564	F	\$15.05	324	875	1,199	D	\$13.70	411	1,098	1,509	F	\$6.65	377	928	1,305	E
0600 - 0700	\$1.90	39	77	116	A	\$15.70	400	1,009	1,409	F	\$17.70	378	1,036	1,414	F	\$14.05	420	1,065	1,485	F	\$6.65	327	955	1,282	E
0700 - 0800	\$1.90	35	73	108	A	\$11.70	294	1,168	1,462	F	\$12.05	292	1,090	1,382	E	\$11.05	284	1,125	1,409	F	\$6.65	243	922	1,165	D
0800 - 0900	\$1.90	73	131	204	A	\$8.55	204	1,257	1,461	F	\$6.65	157	966	1,123	D	\$6.65	162	1,001	1,163	D	\$5.15	149	782	931	C
0900 - 1000	\$1.90	121	259	380	A	\$5.15	167	1,014	1,181	D	\$5.15	141	831	972	C	\$5.15	121	754	875	C	\$2.85	104	618	722	B

RCTC OPERATIONAL HIGHLIGHTS

On-road Operations

RCTC Freeway Service Patrol (FSP) responded to 70 calls during the month of May. Of those calls, 45 were to assist disabled vehicles, 11 were to remove debris, 6 were for traffic breaks, and 8 were in response to accidents.

6C Transponder Technology

Planning for the transition to the new transponder technology is underway. The lane system will be upgraded over a series of weekends with completion of that work expected by summer of 2019. The new sticker transponders have been received and are being prepared for distribution. Changes to the back-office system to process the new transponders and make changes to the customer account plan are being finalized and will be released to the customer once both the RCTC and OCTA lane system upgrades are performed. A series of customer communication has been prepared to facilitate the process for providing the new transponders to customers.

FINANCIAL HIGHLIGHTS RCTC

RCTC 91 Express Lanes Operating Statement				
Description	YTD as of:		YTD Variance	
	Actual ¹	5/31/2019 Budget	Dollar \$	Percent (%)
Operating revenues:				
Toll Revenue	\$ 46,124,748.37	\$ 29,423,258.33	\$ 16,701,490.04	56.8
Fee Revenue	7,868,076.52	4,438,775.00	3,429,301.52	77.3
Total operating revenues	53,992,824.89	33,862,033.33	20,130,791.56	59.4
Operating expenses:				
Salaries and Benefits	426,050.04	552,750.00	126,699.96	22.9
Legal Services	63,704.28	275,000.00	211,295.72	76.8
Advisory Services	46,758.05	68,750.00	21,991.95	32.0
Audit and Accounting Fees	-	43,083.33	43,083.33	100.0
Service Fees	1,613.97	23,833.33	22,219.36	93.2
Other Professional Services	692,056.08	1,343,008.33	650,952.25	48.5
Lease Expense	205,877.63	238,883.33	33,005.70	13.8
Operations	2,407,717.64	3,044,616.67	636,899.03	20.9
Utilities	37,400.84	58,666.67	21,265.83	36.2
Supplies and Materials	1,044.64	4,675.00	3,630.36	77.7
Membership and Subscription Fees	12,296.50	11,275.00	(1,021.50)	(9.1)
Office Equipment & Furniture (Non-Capital)	22.62	4,583.33	4,560.71	99.5
Maintenance/Repairs	99,398.44	794,841.67	695,443.23	87.5
Training Seminars and Conferences	1,315.00	7,333.33	6,018.33	82.1
Transportation Expenses	2,857.06	6,783.33	3,926.27	57.9
Lodging	3,128.59	6,416.67	3,288.08	51.2
Meals	2,074.27	1,650.00	(424.27)	(25.7)
Other Staff Expenses	2,453.14	2,566.67	113.53	4.4
Advertising	12,173.50	128,333.33	116,159.83	90.5
Program Management	65,547.07	58,575.00	(6,972.07)	(11.9)
Program Operations	6,080,660.80	7,995,350.00	1,914,689.20	23.9
Litigation Settlement	7,500.00	6,875.00	(625.00)	(9.1)
Furniture & Equipment	383,680.46	747,266.67	363,586.21	48.7
Improvements	1,557,159.78	1,555,445.83	(1,713.95)	(0.1)
Depreciation	7,973,379.38 ³	-	(7,973,379.38)	N/A
Bad Debt Expense	31.82	91.67	59.85	65.3
Total operating expenses	20,085,901.60	16,980,654.17	(3,105,247.43)	(18.3)
Operating income (loss)	33,906,923.29	16,881,379.17	17,025,544.12	100.9
Nonoperating revenues (expenses):				
Interest Revenue	1,780,885.97	129,525.00	1,651,360.97	(1,274.9)
Gain(Loss) on Sale of Capital Assets	(2,224,669.52) ²	-	(2,224,669.52)	N/A
Other Miscellaneous Revenue	21,439.70	7,791,758.33	(7,770,318.63)	99.7
Payment to Escrow Agent	-	(18,333,333.33)	18,333,333.33	(100.0)
Interest Expense	(20,910,229.17)	(6,526,575.00)	(14,383,654.17)	220.4
Total nonoperating revenues (expenses)	(21,332,573.02)	(16,938,625.00)	(4,393,948.02)	(25.9)
Transfers In	-	-	-	N/A
Transfers Out	(1,569,658.67)	(5,781,600.00)	4,211,941.33	(72.9)
Net income (loss)	\$ 11,004,691.60	\$ (5,838,845.83)	\$ 16,843,537.43	(288.5)

¹ Unaudited

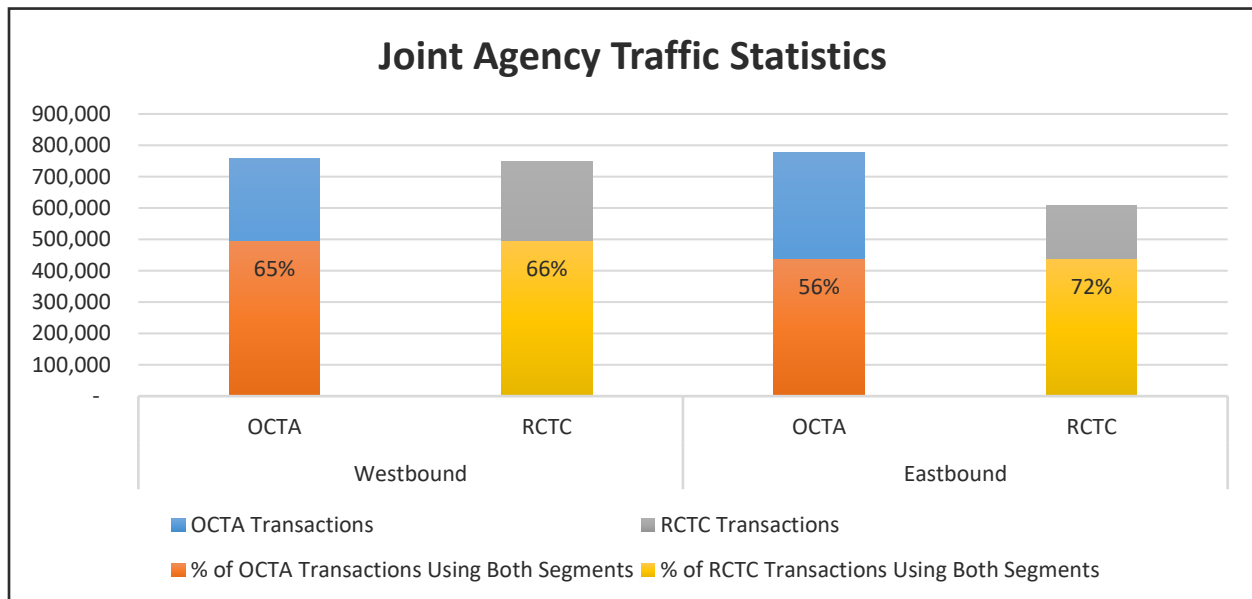
² Gain (loss) on sale of capital assets - Loss on sale of capital assets reflects the loss on sale of excess land purchased for the SR-91 Project. Loss on sale is not a cash-related item and not included in the FY'18/19 budget.

³ Depreciation is not a budgeted expense

JOINT AGENCY TRIP AND REVENUE STATISTICS

May-19 MTD	Transactions by Agency	Transactions Using Both Segments	% Using Both Segments	Revenue
Westbound				
OCTA	758,953	493,038	65%	\$ 1,886,148
RCTC	748,868	493,038	66%	\$ 3,471,012
I-15	319,071	216,180	68%	\$ 1,464,565
McKinley	429,797	276,858	64%	\$ 2,006,447
Eastbound				
OCTA	778,090	436,077	56%	\$ 2,686,149
RCTC	607,415	436,077	72%	\$ 1,889,483
I-15	224,096	174,669	78%	\$ 469,806
McKinley	383,319	261,408	68%	\$ 1,419,677

JOINT AGENCY TRAFFIC STATISTICS



JOINT AGENCY PERFORMANCE MEASURES

REPORTING REQUIREMENT	Reporting Period	PERFORMANCE STANDARD	May-19 Performance
CUSTOMER SERVICE			
Call Wait Time	Monthly	Not to exceed 2 minutes	0:39
Abandon Rate	Monthly	No more than 4.0%	0.8%
Customer Satisfaction	Monthly	At least 75 outbound calls	78
VIOLATION PROCESSING			
Response Time	Monthly	Within 2 business days of receipt	0.9
CUSA Violation Collection Rate	Quarterly	70% or more	
CUSA Violation Collection Rate	Annually	74% or more	
TRAFFIC OPERATIONS			
Initial & Secondary Reviews	Monthly	Equal to or less than 15 days	1.4
* Plate Misread Errors	Monthly	Equal to or less than 0.4%	0.01%
CAS Response Time	Monthly	0:20 (minutes) per call	0:08
ACCOUNTING			
OCTA Exceptions	Monthly	No more than 3	1
RCTC Exceptions	Monthly	No more than 3	1
INFORMATION TECHNOLOGY			
Back-office System Uptime	Monthly	99% Availability	100%
Network Uptime	Monthly	99% Availability	100%

CUSA = Cofiroute USA; CAS = OCTA Customer Assistance Specialists

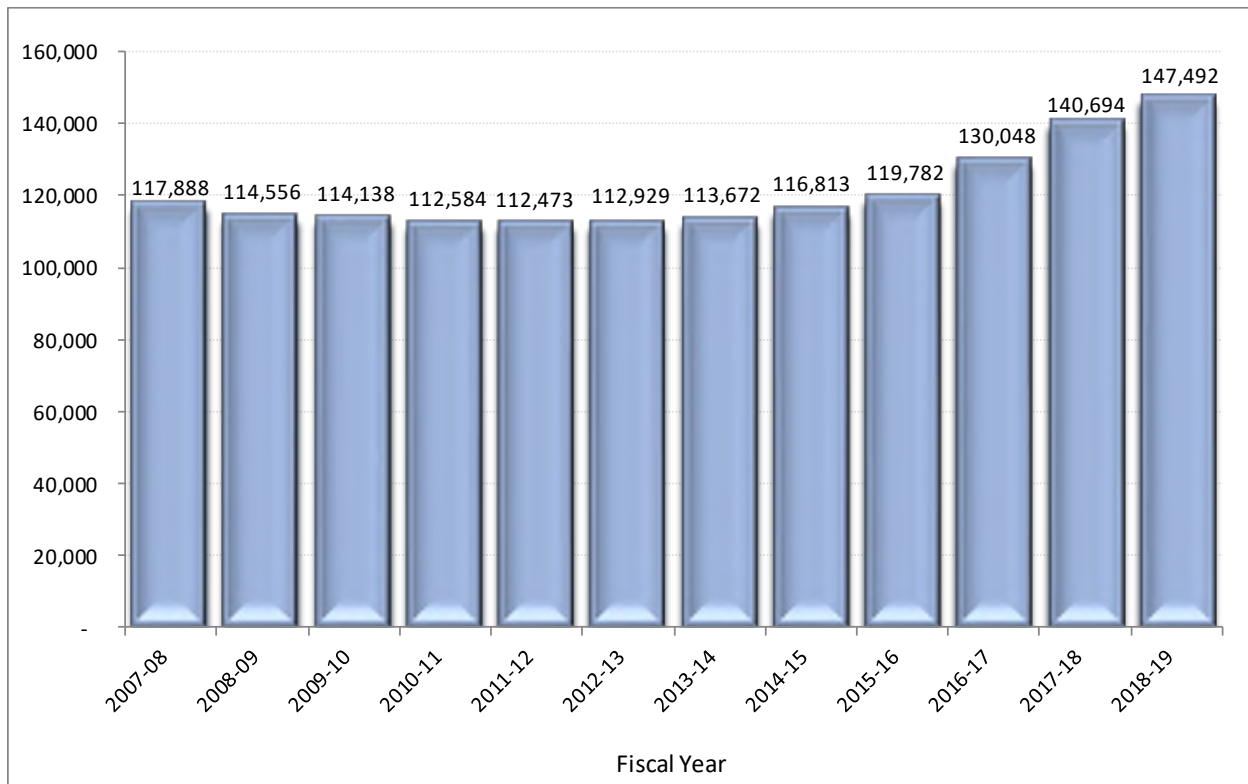
* Plate Misread Error performance is current after a 60-day hold-back period; therefore, percentage reported here is for 2 months prior to the month of this report.

JOINT AGENCY TRANSPONDER DISTRIBUTION

TRANSPONDER DISTRIBUTION	May-19		April-19		FY 2018-19	
	Tags	% of Total	Tags	% of Total	Average To-Date	
Issued						
To New Accounts	1,654	51.4%	1,636	49.0%	1,472	46.8%
Additional Tags to Existing Accounts	921	28.6%	904	27.1%	858	27.3%
Replacement Transponders	644	20.0%	797	23.9%	817	26.0%
Total Issued	3,219		3,337		3,148	
Returned						
Account Closures	450	35.5%	371	32.9%	426	28.9%
Accounts Dow nsizing	160	12.6%	161	14.3%	189	12.8%
Defective Transponders	658	51.9%	595	52.8%	859	58.3%
Total Returned	1,268		1,127		1,474	

At the end of May 2019, the 91 Express Lanes had 147,492 active customer accounts, and 224,786 transponders classified as Assigned.

Number of Accounts by Fiscal Year
As of May 31, 2019



Incoming Email Activity

During May, the Anaheim Processing Center received 3,370 emails.



**Orange County Transportation Authority
Riverside County Transportation Commission**



Status Report
June 2019

As of June 30, 2019

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OPERATIONS OVERVIEW OCTA

TRAFFIC AND REVENUE STATISTICS FOR OCTA

Total traffic volume on the OCTA 91 Express Lanes for June 2019 was 1,478,052. This represents a daily average of 49,268. This is a 0.1% decrease in total traffic volume from the same period last year, which totaled 1,480,114. In June 2019, there were four Fridays as compared to five Fridays in June 2018. In addition, in June of this year, there were two Caltrans maintenance closures as compared to one in the prior year. These factors could attribute to the decrease in traffic volume. Potential toll revenue for the month was \$4,152,162, which represents a decrease of 2.3% from the prior year's total of \$4,251,983. Carpool percentage for the month was 28.91% as compared to the previous year's rate of 26.85%.

Month-to-date traffic and revenue data are summarized in the table below. The following trip and revenue statistics tables represent all trips taken on the OCTA 91 Express Lanes and associated potential revenue for the month of June 2019.

Current Month-to-Date (MTD) as of June 30, 2019

Trips	Jun-19 MTD Actual	Stantec MTD Projected	# Variance	% Variance	Jun-18 MTD Actual	Yr-to-Yr % Variance
Full Toll Lanes	1,050,770	1,131,991	(81,221)	(7.2%)	1,082,670	(2.9%)
3+ Lanes	427,282	372,043	55,239	14.8%	397,444	7.5%
Total Gross Trips	1,478,052	1,504,034	(25,982)	(1.7%)	1,480,114	(0.1%)
Revenue						
Full Toll Lanes	\$4,074,814	\$4,484,822	(\$410,008)	(9.1%)	\$4,171,828	(2.3%)
3+ Lanes	\$77,348	\$85,558	(\$8,210)	(9.6%)	\$80,155	(3.5%)
Total Gross Revenue	\$4,152,162	\$4,570,380	(\$418,218)	(9.2%)	\$4,251,983	(2.3%)
Average Revenue per Trip						
Average Full Toll Lanes	\$3.88	\$3.96	(\$0.08)	(2.0%)	\$3.85	0.8%
Average 3+ Lanes	\$0.18	\$0.23	(\$0.05)	(21.7%)	\$0.20	(10.0%)
Average Gross Revenue	\$2.81	\$3.04	(\$0.23)	(7.6%)	\$2.87	(2.1%)

The 2019 fiscal year-to-date traffic volume increased by 4.9% and potential toll revenue increased by 4.4%, when compared with the same period last year. Year-to-date average revenue per-trip is \$2.96.

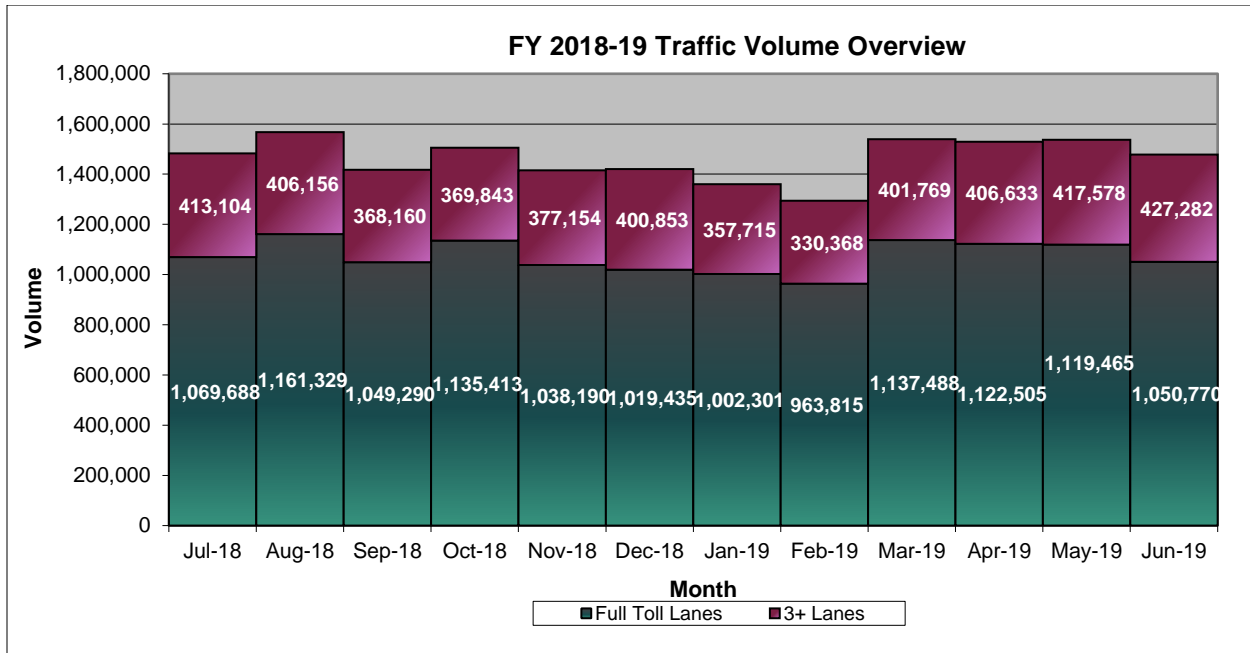
Fiscal year-to-date traffic and revenue data are summarized in the table below. The following trip and revenue statistics tables represent all trips taken on the OCTA 91 Express Lanes and associated potential revenue for the months of July 2018 through June 2019.

FY 2018-19 Year to Date as of June 30, 2019

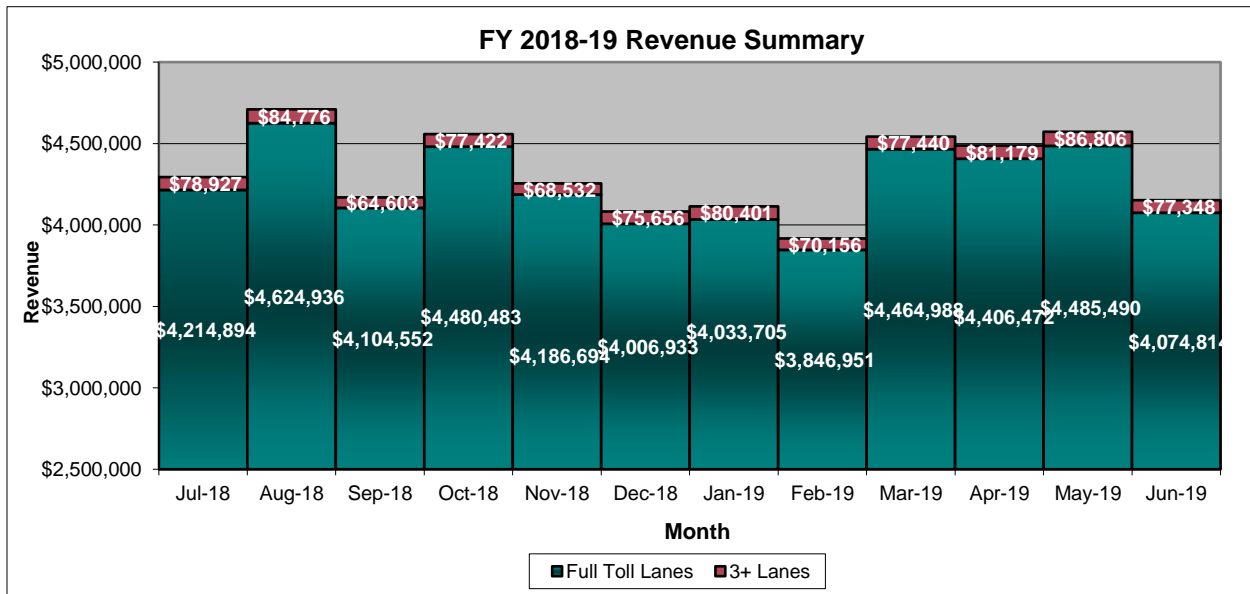
Trips	FY 2018-19 YTD Actual	Stantec YTD Projected	# Variance	% Variance	FY 2017-18 YTD Actual	Yr-to-Yr % Variance
Full Toll Lanes	12,869,689	13,256,549	(386,860)	(2.9%)	12,511,034	2.9%
3+ Lanes	4,676,615	4,021,158	655,457	16.3%	4,208,337	11.1%
Total Gross Trips	17,546,304	17,277,708	268,596	1.6%	16,719,371	4.9%
Revenue						
Full Toll Lanes	\$50,930,912	\$52,930,496	(\$1,999,584)	(3.8%)	\$48,765,417	4.4%
3+ Lanes	\$923,246	\$1,009,687	(\$86,441)	(8.6%)	\$888,777	3.9%
Total Gross Revenue	\$51,854,158	\$53,940,183	(\$2,086,025)	(3.9%)	\$49,654,194	4.4%
Average Revenue per Trip						
Average Full Toll Lanes	\$3.96	\$3.99	(\$0.03)	(0.8%)	\$3.90	1.5%
Average 3+ Lanes	\$0.20	\$0.25	(\$0.05)	(20.0%)	\$0.21	(4.8%)
Average Gross Revenue	\$2.96	\$3.12	(\$0.16)	(5.1%)	\$2.97	(0.3%)

OCTA Traffic and Revenue Summary

The chart below reflects the total trips breakdown between Full Toll trips and HOV3+ trips for FY 2018-19 on a monthly basis.



The chart below reflects the gross potential revenue breakdown between Full Toll trips and HOV3+ trips for FY 2018-19 on a monthly basis.



Peak traffic hour in the eastbound direction reached or exceeded 90% or more of defined capacity 23 times during the month of June 2019. As demonstrated on the next chart, westbound peak hour traffic volumes top out at 83% of defined capacity.

OCTA EASTBOUND PEAK-HOUR VOLUMES

PM Time	Monday 06/03/19				Tuesday 06/04/19				Wednesday 06/05/19				Thursday 06/06/19				Friday 06/07/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$5.05	496	2,665	78%	\$5.05	529	2,844	84%	\$5.05	573	2,966	87%	\$5.95	547	3,189	94%	\$6.35	618	3,229	95%
1500 - 1600	\$5.40	728	2,888	85%	\$5.65	734	2,751	81%	\$7.00	709	3,071	90%	\$6.00	748	3,009	89%	\$9.15	797	2,736	80%
1600 - 1700	\$5.25	533	2,918	86%	\$5.50	539	3,088	91%	\$7.50	575	2,608	77%	\$8.80	512	2,473	73%	\$8.95	560	2,733	80%
1700 - 1800	\$5.20	627	3,222	95%	\$5.40	601	3,184	94%	\$6.40	640	2,940	86%	\$8.70	588	2,784	82%	\$6.90	612	2,796	82%
1800 - 1900	\$5.40	651	2,566	75%	\$3.85	710	3,162	93%	\$3.85	711	2,963	87%	\$4.75	741	2,990	88%	\$6.40	750	2,855	84%
1900 - 2000	\$3.75	444	1,711	50%	\$3.75	518	1,971	58%	\$3.75	543	2,087	61%	\$5.50	738	2,534	75%	\$5.95	638	2,157	63%

PM Time	Monday 06/10/19				Tuesday 06/11/19				Wednesday 06/12/19				Thursday 06/13/19				Friday 06/14/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$5.05	541	2,618	77%	\$5.05	541	2,885	85%	\$5.05	608	2,976	88%	\$5.95	612	3,106	91%	\$6.35	662	3,154	93%
1500 - 1600	\$5.40	703	2,901	85%	\$5.65	750	2,786	82%	\$7.00	745	3,105	91%	\$6.00	737	3,021	89%	\$9.15	652	2,244	66%
1600 - 1700	\$5.25	593	2,927	86%	\$5.50	521	2,813	83%	\$7.50	481	2,428	71%	\$8.80	552	2,514	74%	\$8.95	568	2,799	82%
1700 - 1800	\$5.20	663	3,140	92%	\$5.40	599	2,905	85%	\$6.40	604	2,910	86%	\$8.70	605	2,822	83%	\$6.90	443	2,271	67%
1800 - 1900	\$5.40	629	2,366	70%	\$3.85	719	2,849	84%	\$3.85	661	2,664	78%	\$4.75	733	2,980	88%	\$6.40	779	3,105	91%
1900 - 2000	\$3.75	551	1,858	55%	\$3.75	524	1,939	57%	\$3.75	735	2,712	80%	\$5.50	744	2,579	76%	\$5.95	687	2,244	66%

PM Time	Monday 06/17/19				Tuesday 06/18/19				Wednesday 06/19/19				Thursday 06/20/19				Friday 06/21/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$5.05	627	2,694	79%	\$5.05	564	2,930	86%	\$5.05	546	2,874	85%	\$5.95	647	3,270	96%	\$6.35	652	3,216	95%
1500 - 1600	\$5.40	728	3,140	92%	\$5.65	697	2,710	80%	\$7.00	803	3,257	96%	\$6.00	755	3,181	94%	\$9.15	810	2,759	81%
1600 - 1700	\$5.25	554	2,856	84%	\$5.50	493	2,637	78%	\$7.50	533	2,679	79%	\$8.80	521	2,589	76%	\$8.95	540	2,879	85%
1700 - 1800	\$5.20	578	2,874	85%	\$5.40	575	2,801	82%	\$6.40	603	2,817	83%	\$8.70	611	2,811	83%	\$6.90	671	3,034	89%
1800 - 1900	\$5.40	667	2,486	73%	\$3.85	722	3,078	91%	\$3.85	702	3,009	89%	\$4.75	704	2,969	87%	\$6.40	659	2,417	71%
1900 - 2000	\$3.75	485	1,759	52%	\$3.75	584	2,199	65%	\$3.75	620	2,264	67%	\$5.50	646	2,366	70%	\$5.95	637	1,889	56%

PM Time	Monday 06/24/19				Tuesday 06/25/19				Wednesday 06/26/19				Thursday 06/27/19				Friday 06/28/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
1400 - 1500	\$5.05	570	2,615	77%	\$5.05	575	2,948	87%	\$5.05	576	2,919	86%	\$5.95	576	3,360	99%	\$6.35	678	3,138	92%
1500 - 1600	\$5.40	676	2,932	86%	\$5.65	755	2,921	86%	\$7.00	796	3,236	95%	\$6.00	728	2,971	87%	\$9.15	741	2,663	78%
1600 - 1700	\$5.25	542	2,841	84%	\$5.50	501	2,777	82%	\$7.50	531	2,618	77%	\$8.80	572	2,739	81%	\$8.95	461	2,254	66%
1700 - 1800	\$5.20	586	3,021	89%	\$5.40	575	2,946	87%	\$6.40	585	2,977	88%	\$8.70	593	2,897	85%	\$6.90	578	2,813	83%
1800 - 1900	\$5.40	703	2,609	77%	\$3.85	750	3,138	92%	\$3.85	683	2,886	85%	\$4.75	698	3,046	90%	\$6.40	714	2,699	79%
1900 - 2000	\$3.75	536	1,980	58%	\$3.75	629	2,157	63%	\$3.75	598	2,143	63%	\$5.50	580	2,111	62%	\$5.95	710	2,211	65%

OCTA WESTBOUND PEAK-HOUR VOLUMES

AM Time	Monday 06/03/19				Tuesday 06/04/19				Wednesday 06/05/19				Thursday 06/06/19				Friday 06/07/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$3.00	866	2,560	75%	\$3.00	860	2,542	75%	\$3.00	868	2,541	75%	\$3.00	881	2,586	76%	\$3.00	737	1,994	59%
0500 - 0600	\$4.85	899	2,335	69%	\$4.85	1044	2,789	82%	\$4.85	946	2,491	73%	\$4.85	867	2,310	68%	\$4.60	883	2,447	72%
0600 - 0700	\$5.05	652	2,159	64%	\$5.05	661	2,093	62%	\$5.05	695	2,165	64%	\$5.05	628	1,987	58%	\$4.85	646	2,155	63%
0700 - 0800	\$5.55	571	2,171	64%	\$5.55	577	2,013	59%	\$5.55	571	2,017	59%	\$5.55	651	2,428	71%	\$5.40	515	1,788	53%
0800 - 0900	\$5.05	345	1,933	57%	\$5.05	349	1,939	57%	\$5.05	382	1,931	57%	\$5.05	407	2,073	61%	\$4.85	370	1,786	53%
0900 - 1000	\$4.00	339	1,869	55%	\$4.00	310	1,918	56%	\$4.00	355	1,908	56%	\$4.00	449	2,044	60%	\$4.00	354	1,655	49%

AM Time	Monday 06/10/19				Tuesday 06/11/19				Wednesday 06/12/19				Thursday 06/13/19				Friday 06/14/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$3.00	870	2,623	77%	\$3.00	879	2,486	73%	\$3.00	765	2,071	61%	\$3.00	895	2,484	73%	\$3.00	769	2,035	60%
0500 - 0600	\$4.85	951	2,538	75%	\$4.85	1054	2,821	83%	\$4.85	701	1,987	58%	\$4.85	948	2,571	76%	\$4.60	868	2,375	70%
0600 - 0700	\$5.05	669	2,149	63%	\$5.05	635	2,047	60%	\$5.05	731	2,237	66%	\$5.05	702	2,156	63%	\$4.85	583	2,016	59%
0700 - 0800	\$5.55	566	2,104	62%	\$5.55	611	2,161	64%	\$5.55	642	2,328	68%	\$5.55	579	2,097	62%	\$5.40	505	1,893	56%
0800 - 0900	\$5.05	425	1,989	59%	\$5.05	376	1,971	58%	\$5.05	489	2,392	70%	\$5.05	449	2,047	60%	\$4.85	443	1,811	53%
0900 - 1000	\$4.00	409	2,020	59%	\$4.00	393	2,025	60%	\$4.00	524	2,515	74%	\$4.00	437	2,067	61%	\$4.00	461	1,930	57%

AM Time	Monday 06/17/19				Tuesday 06/18/19				Wednesday 06/19/19				Thursday 06/20/19				Friday 06/21/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$3.00	879	2,547	75%	\$3.00	891	2,538	75%	\$3.00	878	2,543	75%	\$3.00	892	2,539	75%	\$3.00	693	1,904	56%
0500 - 0600	\$4.85	899	2,374	70%	\$4.85	1021	2,810	83%	\$4.85	945	2,529	74%	\$4.85	950	2,581	76%	\$4.60	815	2,403	71%
0600 - 0700	\$5.05	581	2,039	60%	\$5.05	628	2,006	59%	\$5.05	686	2,186	64%	\$5.05	674	2,169	64%	\$4.85	618	2,106	62%
0700 - 0800	\$5.55	535	2,075	61%	\$5.55	543	2,062	61%	\$5.55	514	1,990	59%	\$5.55	560	2,099	62%	\$5.40	491	1,809	53%
0800 - 0900	\$5.05	410	2,006	59%	\$5.05	413	1,942	57%	\$5.05	423	1,963	58%	\$5.05	420	1,942	57%	\$4.85	391	1,747	51%
0900 - 1000	\$4.00	410	1,955	58%	\$4.00	406	2,022	59%	\$4.00	474	2,022	59%	\$4.00	424	2,182	64%	\$4.00	403	1,815	53%

AM Time	Monday 06/24/19				Tuesday 06/25/19				Wednesday 06/26/19				Thursday 06/27/19				Friday 06/28/19			
	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.	Price	HOV	Vol.	Cap.
0400 - 0500	\$3.00	854	2,559	75%	\$3.00	870	2,545	75%	\$3.00	926	2,562	75%	\$3.00	904	2,547	75%	\$3.00	775	2,011	59%
0500 - 0600	\$4.85	919	2,521	74%	\$4.85	976	2,628	77%	\$4.85	936	2,585	76%	\$4.85	947	2,585	76%	\$4.60	814	2,416	71%
0600 - 0700	\$5.05	624	2,052	60%	\$5.05	614	2,083	61%	\$5.05	638	2,146	63%	\$5.05	657	2,137	63%	\$4.85	620	2,040	60%
0700 - 0800	\$5.55	482	1,852	54%	\$5.55	539	2,104	62%	\$5.55	527	2,114	62%	\$5.55	527	2,008	59%	\$5.40	478	1,857	55%
0800 - 0900	\$5.05	358	1,782	52%	\$5.05	379	1,947	57%	\$5.05	396	1,980	58%	\$5.05	418	1,947	57%	\$4.85	416	1,771	52%
0900 - 1000	\$4.00	323	1,655	49%	\$4.00	376	1,981	58%	\$4.00	432	2,051	60%	\$4.00	423	1,989	59%	\$4.00	500	1,941	57%

OCTA OPERATIONAL HIGHLIGHTS

On-road Operations

OCTA Customer Assistance Specialists (CAS) responded to 113 calls during the month of June. Of those calls, 95 were to assist disabled vehicles and 13 calls to remove debris. The CAS provided assistance to 5 accidents in the Express Lanes with none of those accidents originating from the SR91 general-purpose lanes.

Electronic Toll and Traffic Management System Project Update

An agreement with Kapsch TrafficCom USA, Inc., (Kapsch) was executed in June 2018 to provide toll lane system integrator services for the design, installation, operations, and maintenance of the electronic toll and traffic management system for the 91 Express Lanes. This new lane system will be able to read the new 6C protocol as well as the current Title 21 protocol. Following RCTC's completion of their lane system installation on the 91 Express Lanes, OCTA will commence installation on the Orange County segment. It is anticipated the OCTA lane system equipment at the gantries will be replaced in summer 2019.

6C Transition Update

In addition to the lane system replacement, the back-office system will need to be modified in order to process the new transponders and changes to the customer account plans. Modification to the back-office system will commence when the lane system installations for both OCTA and RCTC have been completed. Distribution of the new 6C transponders to customers will begin after the back-office system changes have been made. OCTA and RCTC have prepared a series of customer communication to be provided to customers to facilitate the transition to the new protocol and changes to the account plans.

Amendment to the Three-Party Operating Agreement

As referenced above, due to the back-office system changes, an amendment to the OCTA, RCTC, Cofiroute USA (CUSA) Operating Agreement is required. Staff from both OCTA and RCTC have been in negotiations with CUSA for the amendment. It is anticipated there will be no change to the maximum obligation of the contract. The amendment is expected to be finalized in the next few months.

FINANCIAL HIGHLIGHTS OCTA

91 Express Lanes Operating Statement

Description	YTD as of : 6/30/2019		YTD Variance	
	Actual ⁽¹⁾ ⁽⁴⁾	Budget ⁽¹⁾	Dollar \$	Percent (%)
Operating revenues:				
Toll revenue	\$ 46,649,710	\$ 50,886,691	\$ (4,236,981)	(8.3)
Fee revenue	7,923,773	6,802,367	1,121,406	16.5
Total operating revenues	54,573,483	57,689,058	(3,115,575)	(5.4)
Operating expenses:				
Contracted services	6,556,033	7,485,000	928,967	12.4
Administrative fee	2,481,048	2,755,888	274,840	10.0
Other professional services	1,143,900	3,912,882	2,768,982	70.8
Credit card processing fees	1,366,537	1,234,973	(131,564)	(10.7)
Toll road account servicing	780,413	1,403,856	623,443	44.4
Other insurance expense	359,423	750,000	390,577	52.1
Toll road maintenance supply repairs	199,465	1,353,000	1,153,535	85.3
Patrol services	647,437	795,066	147,629	18.6
Building equipment repairs and maint	249,229	355,000	105,771	29.8
Other services	27,925	30,000	2,075	6.9
Utilities	76,566	66,000	(10,566)	(16.0)
Office expense	57,028	170,500	113,472	66.6
Bad debt expense	187,684	-	(187,684)	N/A
Miscellaneous ⁽²⁾	372,861	595,815	222,954	37.4
Leases	467,083	460,000	(7,083)	(1.5)
Total operating expenses	14,972,631	21,367,980	6,395,349	29.9
Depreciation and amortization ⁽³⁾	3,434,331	-	(3,434,331)	N/A
Operating income (loss)	36,166,521	36,321,078	(154,557)	(0.4)
Nonoperating revenues (expenses):				
Reimbursement from Other Agencies	1,144,400	1,118,837	25,563	2.3
Interest income	2,708,376	2,220,677	487,699	22.0
Interest expense	(4,903,012)	(5,011,950)	108,938	2.2
Other	50,961	-	50,961	N/A
Total nonoperating revenues (expenses)	(999,275)	(1,672,436)	673,161	40.3
Transfers in	-	-	-	N/A
Transfers out	(1,055,525)	(14,521,100)	13,465,575	92.7
Net income (loss)	\$ 34,111,721	\$ 20,127,542	\$ 13,984,179	69.5

¹Actual amounts are accounted for on the accrual basis of accounting in an enterprise fund. Budget amounts are accounted for on a modified accrual basis of accounting.

²Miscellaneous expenses include: Bond Insurance Costs, Bank Service Charge, Transponder Materials.

³Depreciation and amortization are not budgeted items.

⁴Actuals are preliminary pre-closing amounts as of FY 2018-19. Final numbers will be shown in the audited financial statements.

Capital Asset Activity

During the twelve months ending June 30 2019, capital asset activities included \$862,000 for the new customer service center leasehold improvements, \$349,599 for the Electronic Toll and Traffic Management system replacement project, \$6,680 for the closed circuit cameras and security alarm for the new customer service center, and \$226,014 for transponder purchases.



OPERATIONS OVERVIEW RCTC

TRAFFIC AND REVENUE STATISTICS FOR RCTC

Total traffic volume on the RCTC 91 Express Lanes for June 2019 was 1,199,215. This represents a daily average of 39,974. This is a 6.1% decrease in total traffic volume from the same period last year, which totaled 1,276,808. The decrease is due to the weekend closures for the toll system upgrade. Potential toll revenue for the month was \$4,675,291, which represents an increase of 6.2% from the prior year's total of \$4,402,632. Carpool percentage for the month was 26.76% as compared to the previous year's rate of 24.31%.

Month-to-date traffic and revenue data are summarized in the table below. The following trip and revenue statistics tables represent all trips taken on the RCTC 91 Express Lanes and associated potential revenue for the month of June 2019.

Current Month-to-Date (MTD) as of June 30, 2019

Trips	JUN-19 MTD Actual	Stantec MTD Projected	# Variance	% Variance	JUN-18 MTD Actual	Yr-to-Yr % Variance
Full Toll Lanes	878,365	712,958	165,407	23.2%	966,377	(9.1%)
3+ Lanes	320,850	235,271	85,579	36.4%	310,431	3.4%
Total Gross Trips	1,199,215	948,229	250,986	26.5%	1,276,808	(6.1%)
Revenue						
Full Toll Lanes	4,632,609	\$2,131,186	\$2,501,423	117.4%	4,364,339	6.1%
3+ Lanes	42,682	\$0	\$42,682		38,293	11.5%
Total Gross Revenue	\$4,675,291	\$2,131,186	\$2,544,105	119.4%	\$4,402,632	6.2%
Average Revenue per Trip						
Average Full Toll Lanes	\$5.27	\$2.99	\$2.28	76.3%	\$4.52	16.6%
Average 3+ Lanes	\$0.13	\$0.00	\$0.13		\$0.12	8.3%
Average Gross Revenue	\$3.90	\$2.25	\$1.65	73.3%	\$3.45	13.0%

The 2019 fiscal year-to-date (YTD) traffic volume is 4.3% higher when compared with the same period last year. The 2019 fiscal year-to-date revenue is 19.3% higher than for the same period last year. The traffic and revenue increases are attributed to higher demand and increase toll rates to manage the demand. Year-to-date average revenue per-trip is \$3.78.

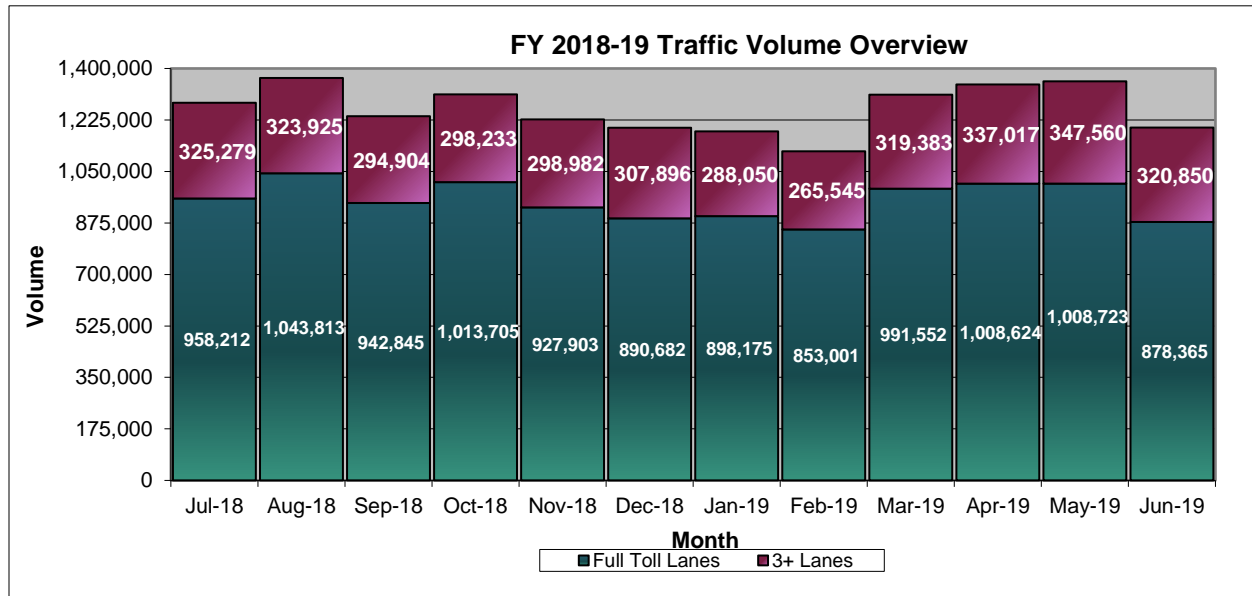
Fiscal year-to-date traffic and revenue data are summarized in the table below. The following trip and revenue statistics tables represent all trips taken on the RCTC 91 Express Lanes and associated potential revenue for the months of July 2018 through June 2019.

FY 2018-19 Year to Date as of June 30, 2019

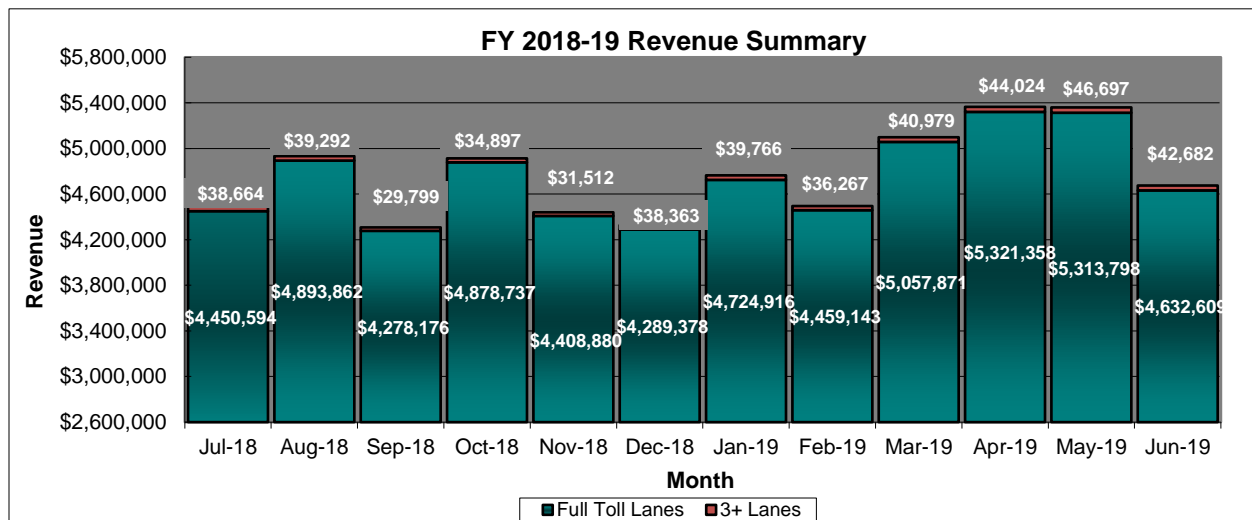
Trips	FY 2018-19 YTD Actual	Stantec YTD Projected	# Variance	% Variance	FY 2017-18 YTD Actual	Yr-to-Yr % Variance
Full Toll Lanes	11,415,600	7,859,800	3,555,800	45.2%	11,297,276	1.0%
3+ Lanes	3,727,622	2,713,700	1,013,922	37.4%	3,221,026	15.7%
Total Gross Trips	15,143,222	10,573,500	4,569,722	43.2%	14,518,302	4.3%
Revenue						
Full Toll Lanes	56,709,323	\$23,580,900	\$33,128,423	140.5%	47,546,842	19.3%
3+ Lanes	462,943	\$0	\$462,943		394,891	17.2%
Total Gross Revenue	\$57,172,265	\$23,580,900	\$33,591,365	142.5%	\$47,941,733	19.3%
Average Revenue per Trip						
Average Full Toll Lanes	\$4.97	\$3.00	\$1.97	65.7%	\$4.21	18.1%
Average 3+ Lanes	\$0.12	\$0.00	\$0.12		\$0.12	0.0%
Average Gross Revenue	\$3.78	\$2.23	\$1.55	69.5%	\$3.30	14.5%

RCTC Traffic and Revenue Summary

The chart below reflects the total trips broken down between Full Toll lanes and HOV3+ lanes for FY 2018-19 on a monthly basis.



The chart below reflects the gross potential revenue breakdown between Full Toll lanes and HOV3+ lanes for FY 2018-19 on a monthly basis.



RCTC PEAK-HOUR VOLUMES

RCTC regularly evaluates traffic volumes for peak period hours where Express Lanes performance is degraded and either increases or decreases tolls. There were no toll rates adjusted in June to improve the level of service in the peak hours where demand exceeded capacity. Hours that are highlighted in yellow were flagged for continued evaluation.

RCTC EASTBOUND PEAK-HOUR VOLUMES

Eastbound PM Peak - County Line to McKinley

PM Time	Monday 06/03/19					Tuesday 06/04/19					Wednesday 06/05/19					Thursday 06/06/19					Friday 06/07/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$6.70	279	883	1,162	D	\$6.70	287	975	1,262	E	\$6.70	292	1,036	1,328	F	\$8.85	318	1,132	1,450	F	\$19.00	358	1,070	1,428	F
1500 - 1600	\$6.70	382	880	1,262	E	\$6.70	376	918	1,294	E	\$7.55	372	948	1,320	F	\$10.60	376	961	1,337	F	\$18.70	434	941	1,375	F
1600 - 1700	\$5.15	253	911	1,164	D	\$6.70	271	926	1,197	D	\$5.15	279	803	1,082	D	\$7.90	250	850	1,100	D	\$10.75	308	1,015	1,323	F
1700 - 1800	\$5.15	276	862	1,138	D	\$5.15	261	842	1,103	D	\$5.15	279	839	1,118	D	\$5.15	309	894	1,203	E	\$6.70	329	921	1,250	E
1800 - 1900	\$5.15	311	736	1,047	D	\$5.15	351	868	1,219	E	\$5.15	323	793	1,116	D	\$5.15	334	896	1,230	E	\$6.70	361	803	1,164	D
1900 - 2000	\$2.20	186	526	712	B	\$4.05	260	620	880	C	\$3.95	245	636	881	C	\$4.05	325	784	1,109	D	\$5.15	323	824	1,147	D

PM Time	Monday 06/10/19					Tuesday 06/11/19					Wednesday 06/12/19					Thursday 06/13/19					Friday 06/14/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$6.70	301	931	1,232	E	\$6.70	282	973	1,255	E	\$6.70	300	1,049	1,349	F	\$8.85	310	1,135	1,445	F	\$19.00	380	989	1,369	F
1500 - 1600	\$6.70	371	918	1,289	E	\$6.70	396	870	1,266	E	\$7.55	404	911	1,315	F	\$10.60	402	934	1,336	F	\$18.70	386	776	1,162	D
1600 - 1700	\$5.15	268	861	1,129	D	\$6.70	243	879	1,122	D	\$5.15	240	820	1,060	D	\$7.90	254	829	1,083	D	\$10.75	274	880	1,154	D
1700 - 1800	\$5.15	309	910	1,219	E	\$5.15	282	838	1,120	D	\$5.15	287	887	1,174	D	\$5.15	284	915	1,199	D	\$6.70	214	618	832	C
1800 - 1900	\$5.15	304	684	988	C	\$5.15	329	839	1,168	D	\$5.15	312	798	1,110	D	\$5.15	380	853	1,233	E	\$6.70	435	1,014	1,449	F
1900 - 2000	\$2.20	236	521	757	B	\$4.05	253	575	828	C	\$3.95	351	841	1,192	D	\$4.05	347	810	1,157	D	\$5.15	357	774	1,131	D

PM Time	Monday 06/17/19					Tuesday 06/18/19					Wednesday 06/19/19					Thursday 06/20/19					Friday 06/21/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$6.70	329	844	1,173	D	\$6.70	301	952	1,253	E	\$6.70	289	1,002	1,291	E	\$8.85	346	1,004	1,350	F	\$19.00	348	1,046	1,394	F
1500 - 1600	\$6.70	382	949	1,331	F	\$6.70	397	849	1,246	E	\$7.55	424	965	1,389	F	\$10.60	400	897	1,297	E	\$18.70	434	904	1,338	F
1600 - 1700	\$5.15	272	832	1,104	D	\$6.70	237	756	993	C	\$5.15	266	856	1,122	D	\$7.90	259	854	1,113	D	\$10.75	274	951	1,225	E
1700 - 1800	\$5.15	268	815	1,083	D	\$5.15	258	881	1,139	D	\$5.15	322	843	1,165	D	\$5.15	321	836	1,157	D	\$6.70	348	893	1,241	E
1800 - 1900	\$5.15	313	664	977	C	\$5.15	330	891	1,221	E	\$5.15	328	820	1,148	D	\$5.15	348	827	1,175	D	\$6.70	338	774	1,112	D
1900 - 2000	\$2.20	216	544	760	B	\$4.05	266	679	945	C	\$3.95	260	692	952	C	\$4.05	286	727	1,013	D	\$5.15	301	601	902	C

PM Time	Monday 06/24/19					Tuesday 06/25/19					Wednesday 06/26/19					Thursday 06/27/19					Friday 06/28/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$6.70	298	833	1,131	D	\$6.70	312	917	1,229	E	\$6.70	308	1,021	1,329	F	\$8.85	331	1,197	1,528	F	\$19.00	372	963	1,335	F
1500 - 1600	\$6.70	373	943	1,316	F	\$6.70	408	878	1,286	E	\$7.55	402	976	1,378	F	\$10.60	385	956	1,341	F	\$18.70	428	892	1,320	F
1600 - 1700	\$5.15	257	891	1,148	D	\$6.70	248	811	1,059	D	\$5.15	248	874	1,122	D	\$7.90	272	856	1,128	D	\$10.75	249	839	1,088	D
1700 - 1800	\$5.15	294	879	1,173	D	\$5.15	287	826	1,113	D	\$5.15	274	850	1,124	D	\$5.15	295	945	1,240	E	\$6.70	307	927	1,234	E
1800 - 1900	\$5.15	355	719	1,074	D	\$5.15	353	826	1,179	D	\$5.15	328	821	1,149	D	\$5.15	351	868	1,219	E	\$6.70	339	851	1,190	D
1900 - 2000	\$2.20	259	635	894	C	\$4.05	289	590	879	C	\$3.95	253	693	946	C	\$4.05	271	683	954	C	\$5.15	346	719	1,065	D

Eastbound PM Peak - County Line to I-15 South

PM Time	Monday 06/03/19					Tuesday 06/04/19					Wednesday 06/05/19					Thursday 06/06/19					Friday 06/07/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.85	124	723	847	C	\$2.85	128	723	851	C	\$2.85	147	742	889	C	\$5.05	143	812	955	C	\$5.15	171	746	917	C
1500 - 1600	\$2.85	190	628	818	C	\$2.80	200	620	820	C	\$5.15	185	698	883	C	\$5.15	207	638	845	C	\$2.85	206	570	776	B
1600 - 1700	\$2.85	137	599	736	B	\$2.85	133	680	813	C	\$2.85	148	593	741	B	\$2.80	131	600	731	B	\$2.85	145	522	667	B
1700 - 1800	\$2.85	159	623	782	B	\$2.85	145	595	740	B	\$2.85	157	555	712	B	\$2.85	142	517	659	B	\$2.85	168	525	693	B
1800 - 1900	\$2.85	139	501	640	B	\$2.85	147	580	727	B	\$2.85	170	571	741	B	\$2.85	164	570	734	B	\$2.85	166	533	699	B
1900 - 2000	\$2.85	113	353	466	B	\$2.85	140	431	571	B	\$2.85	154	478	632	B	\$2.85	187	575	762	B	\$2.85	161	499	660	B

PM Time	Monday 06/10/19					Tuesday 06/11/19					Wednesday 06/12/19					Thursday 06/13/19					Friday 06/14/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.85	158	615	773	B	\$2.85	144	766	910	C	\$2.85	165	728	893	C	\$5.05	176	742	918	C	\$5.15	195	720	915	C
1500 - 1600	\$2.85	217	626	843	C	\$2.80	196	638	834	C	\$5.15	201	684	885	C	\$5.15	186	668	854	C	\$2.80	195	525	720	B
1600 - 1700	\$2.85	153	641	794	B	\$2.85	142	605	747	B	\$2.85	123	546	669	B	\$2.80	141	577	718	B	\$2.85	155	563	718	B
1700 - 1800	\$2.85	152	580	732	B	\$2.85	128	589	717	B	\$2.85	136	576	712	B	\$2.85	143	583	726	B	\$2.85	108	352	460	B
1800 - 1900	\$2.85	152	436	588	B	\$2.85	167	564	731	B	\$2.85	156	455	611	B	\$2.85	191	543	734	B	\$2.85	179	614	793	B
1900 - 2000	\$2.85	154	377	531	B	\$2.85	134	416	550	B	\$2.85	202	574	776	B	\$2.85	202	541	743	B	\$2.85	208	498	706	B

PM Time	Monday 06/17/19					Tuesday 06/18/19					Wednesday 06/19/19					Thursday 06/20/19					Friday 06/21/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.85	166	592	758	B	\$2.85	157	703	860	C	\$2.85	134	740	874	C	\$5.05	152	713	865	C	\$5.15	186	756	942	C
1500 - 1600	\$2.85	194	689	883	C	\$2.80	172	609	781	B	\$5.15	216	694	910	C	\$5.15	192	669	861	C	\$2.80	182	591	773	B
1600 - 1700	\$2.85	156	566	722	B	\$2.85	127	559	686	B	\$2.85	160	574	734	B	\$2.80	142	572	714	B	\$2.85	143	612	755	B
1700 - 1800	\$2.85	130	555	685	B	\$2.85	136	582	718	B	\$2.85	146	551	697	B	\$2.85	123	559	682	B	\$2.85	169	547	716	B
1800 - 1900	\$2.85	174	508	682	B	\$2.85	159	589	748	B	\$2.85	149	566	715	B	\$2.85	173	531	704	B	\$2.85	150	443	593	B
1900 - 2000	\$2.85	130	379	509	B	\$2.85	162	504	666	B	\$2.85	173	480	653	B	\$2.85	152	476	628	B	\$2.85	157	359	516	B

PM Time	Monday 06/24/19					Tuesday 06/25/19					Wednesday 06/26/19					Thursday 06/27/19					Friday 06/28/19				
	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
1400 - 1500	\$2.85	139	636	775	B	\$2.85	139	697	836	C	\$2.85	169	706	875	C	\$5.05	149	816	965	C	\$5.15	163	687	850	C
1500 - 1600	\$2.85	174	633	807	C	\$2.80	209	622	831	C	\$5.15	225	669	894	C	\$5.15	182	600	782	B	\$2.80	184	547	731	B
1600 - 1700	\$2.85	137	596	733	B	\$2.85	119	574	693	B	\$2.85	131	561	692	B	\$2.80	138	608	746	B	\$2.85	133	474	607	B
1700 - 1800	\$2.85	135	553	688	B	\$2.85	134	536	670	B	\$2.85	138	588	726	B	\$2.85	154	543	697	B	\$2.85	131	526	657	B
1800 - 1900	\$2.85	132	460	592	B	\$2.85	147	555	702	B	\$2.85	142	509	651	B	\$2.85	180	562	742	B	\$2.85	175	484	659	B
1900 - 2000	\$2.85	152	408	560	B	\$2.85	133	396	529	B	\$2.85	144	451	595	B	\$2.85	147	441	588	B	\$2.85	204	439	643	B

RCTC WESTBOUND PEAK-HOUR VOLUMES

Westbound AM Peak - McKinley to County Line

	Monday 06/03/19					Tuesday 06/04/19					Wednesday 06/05/19					Thursday 06/06/19					Friday 06/07/19				
AM Time	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$7.85	470	1,057	1,527	F	\$7.85	466	1,098	1,564	F	\$7.85	495	1,126	1,621	F	\$7.85	517	1,089	1,606	F	\$5.15	401	668	1,069	D
0500 - 0600	\$19.90	564	710	1,274	E	\$19.45	700	944	1,644	F	\$17.80	572	718	1,290	E	\$17.55	699	908	1,607	F	\$9.20	531	1,064	1,595	F
0600 - 0700	\$18.55	407	1,005	1,412	F	\$18.15	353	893	1,246	E	\$17.45	455	1,077	1,532	F	\$16.15	783	1,556	2,339	F	\$8.45	467	1,137	1,604	F
0700 - 0800	\$14.50	423	1,299	1,722	F	\$14.50	442	1,246	1,688	F	\$15.25	487	1,199	1,686	F	\$13.50	437	1,352	1,789	F	\$7.70	384	1,162	1,546	F
0800 - 0900	\$9.75	315	1,260	1,575	F	\$9.75	299	1,267	1,566	F	\$9.75	289	1,208	1,497	F	\$10.50	264	1,349	1,613	F	\$6.70	231	1,003	1,234	E
0900 - 1000	\$5.15	194	879	1,073	D	\$6.70	205	974	1,179	D	\$6.70	202	928	1,130	D	\$6.70	254	901	1,155	D	\$4.05	197	745	942	C

	Monday 06/10/19					Tuesday 06/11/19					Wednesday 06/12/19					Thursday 06/13/19					Friday 06/14/19				
AM Time	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$7.85	448	1,023	1,471	F	\$7.85	469	1,046	1,515	F	\$7.85	403	998	1,401	F	\$7.85	502	1,087	1,589	F	\$5.15	431	702	1,133	D
0500 - 0600	\$19.90	583	779	1,362	F	\$19.45	709	984	1,693	F	\$17.80	822	1,499	2,321	F	\$17.55	605	772	1,377	F	\$9.20	559	1,018	1,577	F
0600 - 0700	\$18.55	408	860	1,268	E	\$18.15	376	899	1,275	E	\$17.45	520	976	1,496	F	\$16.15	455	971	1,426	F	\$8.45	446	1,153	1,599	F
0700 - 0800	\$14.50	395	1,200	1,595	F	\$14.50	425	1,230	1,655	F	\$15.25	483	1,181	1,664	F	\$13.50	427	1,226	1,653	F	\$7.70	397	1,155	1,552	F
0800 - 0900	\$9.75	303	1,313	1,616	F	\$9.75	298	1,303	1,601	F	\$9.75	326	1,421	1,747	F	\$10.50	275	1,297	1,572	F	\$6.70	278	1,039	1,317	E
0900 - 1000	\$5.15	232	968	1,200	D	\$6.70	235	1,014	1,249	E	\$6.70	290	1,205	1,495	F	\$6.70	289	993	1,282	E	\$4.05	244	740	984	C

	Monday 06/17/19					Tuesday 06/18/19					Wednesday 06/19/19					Thursday 06/20/19					Friday 06/21/19				
AM Time	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$7.85	475	1,024	1,499	F	\$7.85	499	1,062	1,561	F	\$7.85	494	1,134	1,628	F	\$7.85	476	1,107	1,583	F	\$5.15	431	779	1,210	E
0500 - 0600	\$19.90	560	708	1,268	E	\$19.45	683	950	1,633	F	\$17.80	584	687	1,271	E	\$17.55	609	802	1,411	F	\$9.20	501	1,010	1,511	F
0600 - 0700	\$18.55	351	858	1,209	E	\$18.15	358	930	1,288	E	\$17.45	442	1,100	1,542	F	\$16.15	443	1,062	1,505	F	\$8.45	439	1,155	1,594	F
0700 - 0800	\$14.50	375	1,233	1,608	F	\$14.50	418	1,271	1,689	F	\$15.25	455	1,217	1,672	F	\$13.50	428	1,254	1,682	F	\$7.70	370	1,143	1,513	F
0800 - 0900	\$9.75	292	1,260	1,552	F	\$9.75	301	1,284	1,585	F	\$9.75	312	1,238	1,550	F	\$10.50	295	1,332	1,627	F	\$6.70	249	957	1,206	E
0900 - 1000	\$5.15	246	954	1,200	D	\$6.70	242	919	1,161	D	\$6.70	283	873	1,156	D	\$6.70	250	1,029	1,279	E	\$4.05	212	709	921	C

	Monday 06/24/19					Tuesday 06/25/19					Wednesday 06/26/19					Thursday 06/27/19					Friday 06/28/19				
AM Time	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$7.85	472	1,063	1,535	F	\$7.85	457	1,048	1,505	F	\$7.85	515	1,051	1,566	F	\$7.85	481	1,093	1,574	F	\$5.15	430	747	1,177	D
0500 - 0600	\$19.90	577	868	1,445	F	\$19.45	666	942	1,608	F	\$17.80	551	765	1,316	E	\$17.55	591	820	1,411	F	\$9.20	541	1,024	1,565	F
0600 - 0700	\$18.55	392	1,000	1,392	F	\$18.15	392	987	1,379	F	\$17.45	432	1,076	1,508	F	\$16.15	465	1,101	1,566	F	\$8.45	446	1,176	1,622	F
0700 - 0800	\$14.50	383	1,203	1,586	F	\$14.50	411	1,278	1,689	F	\$15.25	433	1,330	1,763	F	\$13.50	398	1,251	1,649	F	\$7.70	396	1,174	1,570	F
0800 - 0900	\$9.75	284	1,130	1,414	F	\$9.75	283	1,233	1,516	F	\$9.75	282	1,277	1,559	F	\$10.50	302	1,213	1,515	F	\$6.70	243	948	1,191	D
0900 - 1000	\$5.15	209	790	999	C	\$6.70	240	978	1,218	E	\$6.70	249	1,007	1,256	E	\$6.70	239	900	1,139	D	\$4.05	204	759	963	C

Westbound AM Peak - I-15 North to County Line

	Monday 06/03/19					Tuesday 06/04/19					Wednesday 06/05/19					Thursday 06/06/19					Friday 06/07/19				
AM Time	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$5.05	307	752	1,059	D	\$5.05	296	718	1,014	D	\$5.05	282	733	1,015	D	\$5.05	275	707	982	C	\$2.85	249	614	863	C
0500 - 0600	\$17.40	397	832	1,229	E	\$15.40	424	1,086	1,510	F	\$15.05	434	1,069	1,503	F	\$13.70	441	810	1,251	E	\$6.65	374	867	1,241	E
0600 - 0700	\$17.40	385	1,068	1,453	F	\$15.70	384	1,035	1,419	F	\$17.70	369	1,027	1,396	E	\$14.05	157	514	671	B	\$6.65	331	1,030	1,361	E
0700 - 0800	\$12.40	271	1,220	1,491	F	\$11.70	278	1,058	1,336	E	\$12.05	258	1,040	1,298	E	\$11.05	284	1,285	1,569	F	\$6.65	224	871	1,095	D
0800 - 0900	\$8.55	163	1,049	1,212	E	\$8.55	134	988	1,122	D	\$6.65	167	950	1,117	D	\$6.65	174	1,085	1,259	E	\$5.15	163	774	937	C
0900 - 1000	\$5.05	125	748	873	C	\$5.15	110	757	867	C	\$5.15	153	785	938	C	\$5.15	154	796	950	C	\$2.85	130	560	690	B

	Monday 06/10/19					Tuesday 06/11/19					Wednesday 06/12/19					Thursday 06/13/19					Friday 06/14/19				
AM Time	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$5.05	312	770	1,082	D	\$5.05	301	684	985	C	\$5.05	300	697	997	C	\$5.05	302	679	981	C	\$2.85	235	593	828	C
0500 - 0600	\$17.40	441	961	1,402	F	\$15.40	422	1,087	1,509	F	\$15.05	150	330	480	B	\$13.70	437	1,098	1,535	F	\$6.65	351	851	1,202	E
0600 - 0700	\$17.40	378	1,060	1,438	F	\$15.70	359	1,035	1,394	E	\$17.70	341	934	1,275	E	\$14.05	388	1,068	1,456	F	\$6.65	278	918	1,196	D
0700 - 0800	\$12.40	295	1,145	1,440	F	\$11.70	310	1,153	1,463	F	\$12.05	333	1,163	1,496	F	\$11.05	289	1,122	1,411	F	\$6.65	224	894	1,118	D
0800 - 0900	\$8.55	192	935	1,127	D	\$8.55	160	955	1,115	D	\$6.65	231	1,252	1,483	F	\$6.65	193	926	1,119	D	\$5.15	196	746	942	C
0900 - 1000	\$5.05	150	717	867	C	\$5.15	146	741	887	C	\$5.15	204	930	1,134	D	\$5.15	145	727	872	C	\$2.85	166	627	793	B

	Monday 06/17/19					Tuesday 06/18/19					Wednesday 06/19/19					Thursday 06/20/19					Friday 06/21/19				
AM Time	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$5.05	296	745	1,041	D	\$5.05	298	712	1,010	D	\$5.05	280	723	1,003	D	\$5.05	309	673	982	C	\$2.85	234	614	848	C
0500 - 0600	\$17.40	406	876	1,282	E	\$15.40	424	1,102	1,526	F	\$15.05	422	1,056	1,478	F	\$13.70	413	1,062	1,475	F	\$6.65	324	825	1,149	D
0600 - 0700	\$17.40	337	1,031	1,368	E	\$15.70	358	1,028	1,386	E	\$17.70	356	1,045	1,401	F	\$14.05	356	1,048	1,404	F	\$6.65	282	976	1,258	E
0700 - 0800	\$12.40	287	1,078	1,365	E	\$11.70	255	1,069	1,324	E	\$12.05	219	1,012	1,231	E	\$11.05	258	1,072	1,330	E	\$6.65	203	841	1,044	D
0800 - 0900	\$8.55	209	958	1,167	D	\$8.55	168	974	1,142	D	\$6.65	170	993	1,163	D	\$6.65	189	931	1,120	D	\$5.15	137	760	897	C
0900 - 1000	\$5.05	144	748	892	C	\$5.15	144	726	870	C	\$5.15	157	693	850	C	\$5.15	138	786	924	C	\$2.85	147	591	738	B

	Monday 06/24/19					Tuesday 06/25/19					Wednesday 06/26/19					Thursday 06/27/19					Friday 06/28/19				
AM Time	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS	Price	HOV	SOV	Vol.	LOS
0400 - 0500	\$5.05	283	751	1,034	D	\$5.05	292	703	995	C	\$5.05	325	672	997	C	\$5.05	282	671	953	C	\$2.85	244	595	839	C
0500 - 0600	\$17.40	396	951	1,347	E	\$15.40	405	1,028	1,433	F	\$15.05	443	1,046	1,489	F	\$13.70	416	1,036	1,452	F	\$6.65	330	792	1,122	D
0600 - 0700	\$17.40	363	1,095	1,458	F	\$15.70	363	1,055	1,418	F	\$17.70	362	1,058	1,420	F	\$14.05	363	1,072	1,435	F	\$6.65	292	895	1,187	D
0700 - 0800	\$12.40	215	926	1,141	D	\$11.70	260	1,093	1,353	E	\$12.05	222	1,078	1,300	E	\$11.05	249	1,002	1,251	E	\$6.65	201	886	1,087	D
0800 - 0900	\$8.55	135	818	953	C	\$8.55	167	981	1,148	D	\$6.65	178	895	1,073	D	\$6.65	164	903	1,067	D	\$5.15	172	711	883	C
0900 - 1000	\$5.05	112	672	784	B	\$5.15	126	713	839	C	\$5.15	160	708	868	C	\$5.15	170	706	876	C	\$2.85	169	565	734	B

RCTC OPERATIONAL HIGHLIGHTS

On-road Operations

RCTC Freeway Service Patrol (FSP) responded to 78 calls during the month of June. Of those calls, 54 were to assist disabled vehicles, 10 were to remove debris, 7 were for traffic breaks, and 7 were in response to accidents.

6C Transponder Technology

Planning for the transition to the new transponder technology is underway. The lane systems have been upgraded. The new sticker transponders have been received and will be distributed after OCTA completes the upgrade of their lane system. Changes to the back-office system to process the new transponders and make changes to the customer account plan are being finalized and will be released to the customer once both the RCTC and OCTA lane system upgrades are performed. A series of customer communication has been prepared to facilitate the process for providing the new transponders to customers.

FINANCIAL HIGHLIGHTS RCTC

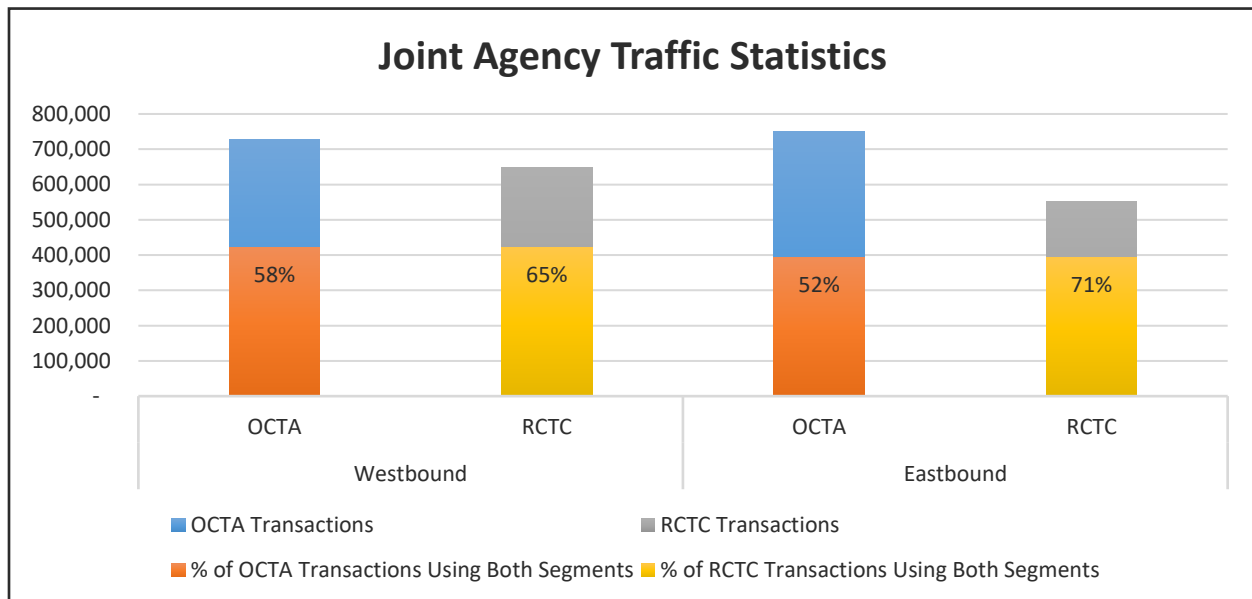
RCTC 91 Express Lanes Operating Statement				
Description	YTD as of :		YTD Variance	
	Actual ⁽¹⁾⁽²⁾	6/30/2019 Budget	Dollar \$	Percent (%)
Operating revenues:				
Toll Revenue	\$ 49,885,288.57	\$ 32,098,100.00	\$ 17,787,188.57	55.4
Fee Revenue	8,538,672.05	4,842,300.00	3,696,372.05	76.3
Total operating revenues	58,423,960.62	36,940,400.00	21,483,560.62	58.2
Operating expenses:				
Salaries and Benefits	479,339.62	603,000.00	123,660.38	20.5
Legal Services	65,732.68	300,000.00	234,267.32	78.1
Advisory Services	48,737.70	75,000.00	26,262.30	35.0
Audit and Accounting Fees	-	47,000.00	47,000.00	100.0
Service Fees	5,578.31	26,000.00	20,421.69	78.5
Other Professional Services	846,136.46	1,465,100.00	618,963.54	42.2
Lease Expense	221,203.63	260,600.00	39,396.37	15.1
Operations	2,979,185.46	3,321,400.00	342,214.54	10.3
Utilities	87,761.99	64,000.00	(23,761.99)	(37.1)
Supplies and Materials	1,144.64	5,100.00	3,955.36	77.6
Membership and Subscription Fees	12,296.50	12,300.00	3.50	0.0
Office Equipment & Furniture (Non-Capital)	22.62	5,000.00	4,977.38	99.5
Maintenance/Repairs	152,256.74	867,100.00	714,843.26	82.4
Training Seminars and Conferences	1,315.00	8,000.00	6,685.00	83.6
Transportation Expenses	3,223.31	7,400.00	4,176.69	56.4
Lodging	3,128.59	7,000.00	3,871.41	55.3
Meals	2,109.27	1,800.00	(309.27)	(17.2)
Other Staff Expenses	2,509.19	2,800.00	290.81	10.4
Advertising	21,101.00	140,000.00	118,899.00	84.9
Program Management	66,521.64	63,900.00	(2,621.64)	(4.1)
Program Operations	6,774,802.78	8,722,200.00	1,947,397.22	22.3
Litigation Settlement	7,500.00	7,500.00	-	-
Furniture & Equipment	495,444.30	815,200.00	319,755.70	39.2
Improvements	1,589,249.28	1,696,850.00	107,600.72	6.3
Depreciation	7,973,379.38 ⁴	-	(7,973,379.38)	N/A
Bad Debt Expense	33.43	100.00	66.57	66.6
Total operating expenses	21,839,713.52	18,524,350.00	(3,315,363.52)	(17.9)
Operating income (loss)	36,584,247.10	18,416,050.00	18,168,197.10	98.7
Nonoperating revenues (expenses):				
Interest Revenue	2,482,753.12	141,300.00	2,341,453.12	(1,657.1)
Gain(Loss) on Sale of Capital Assets	(2,224,669.52) ³	-	(2,224,669.52)	N/A
Other Miscellaneous Revenue	157,221.59	8,500,100.00	(8,342,878.41)	98.2
Payment to Escrow Agent	-	(20,000,000.00)	20,000,000.00	(100.0)
Interest Expense	(27,956,791.44)	(7,119,900.00)	(20,836,891.44)	292.7
Total nonoperating revenues (expenses)	(27,541,486.25)	(18,478,500.00)	(9,062,986.25)	(49.0)
Transfers In	-	-	-	N/A
Transfers Out	(2,069,658.67)	(6,307,200.00)	4,237,541.33	(67.2)
Net income (loss)	\$ 6,973,102.18	\$ (6,369,650.00)	\$ 13,342,752.18	(209.5)

¹ Unaudited
² Actuals are preliminary amounts for FY 2018-19. Final numbers will be shown in the audited financial statements.
³ Gain (loss) on sale of capital assets - Loss on sale of capital assets reflects the loss on sale of excess land purchased for the SR-91 Project. Loss on sale is not a cash-related item and not included in the FY18/19 budget.
⁴ Depreciation is not a budgeted expense

JOINT AGENCY TRIP AND REVENUE STATISTICS

May-19 MTD	Transactions by Agency	Transactions Using Both Segments	% Using Both Segments	Revenue
Westbound				
OCTA	727,821	422,610	58%	\$ 1,721,777
RCTC	648,565	422,610	65%	\$ 3,041,688
I-15	269,734	182,103	68%	\$ 1,272,514
McKinley	378,831	240,507	63%	\$ 1,769,174
Eastbound				
OCTA	750,231	392,943	52%	\$ 2,430,385
RCTC	550,650	392,943	71%	\$ 1,633,604
I-15	204,657	157,796	77%	\$ 418,512
McKinley	345,993	235,147	68%	\$ 1,215,092

JOINT AGENCY TRAFFIC STATISTICS



JOINT AGENCY PERFORMANCE MEASURES

REPORTING REQUIREMENT	Reporting Period	PERFORMANCE STANDARD	Jun-19 Performance
CUSTOMER SERVICE			
Call Wait Time	Monthly	Not to exceed 2 minutes	1:22
Abandon Rate	Monthly	No more than 4.0%	1.9%
Customer Satisfaction	Monthly	At least 75 outbound calls	75
VIOLATION PROCESSING			
Response Time	Monthly	Within 2 business days of receipt	1.4
CUSA Violation Collection Rate	Quarterly	70% or more	67%
CUSA Violation Collection Rate	Annually	74% or more	66%
TRAFFIC OPERATIONS			
Initial & Secondary Review s	Monthly	Equal to or less than 15 days	1.3
* Plate Misread Errors	Monthly	Equal to or less than 0.4%	0.01%
CAS Response Time	Monthly	0:20 (minutes) per call	0:08
ACCOUNTING			
OCTA Exceptions	Monthly	No more than 3	0
RCTC Exceptions	Monthly	No more than 3	0
INFORMATION TECHNOLOGY			
Back-office System Uptime	Monthly	99% Availability	100%
Network Uptime	Monthly	99% Availability	100%

CUSA = Cofiroute USA; CAS = OCTA Customer Assistance Specialists

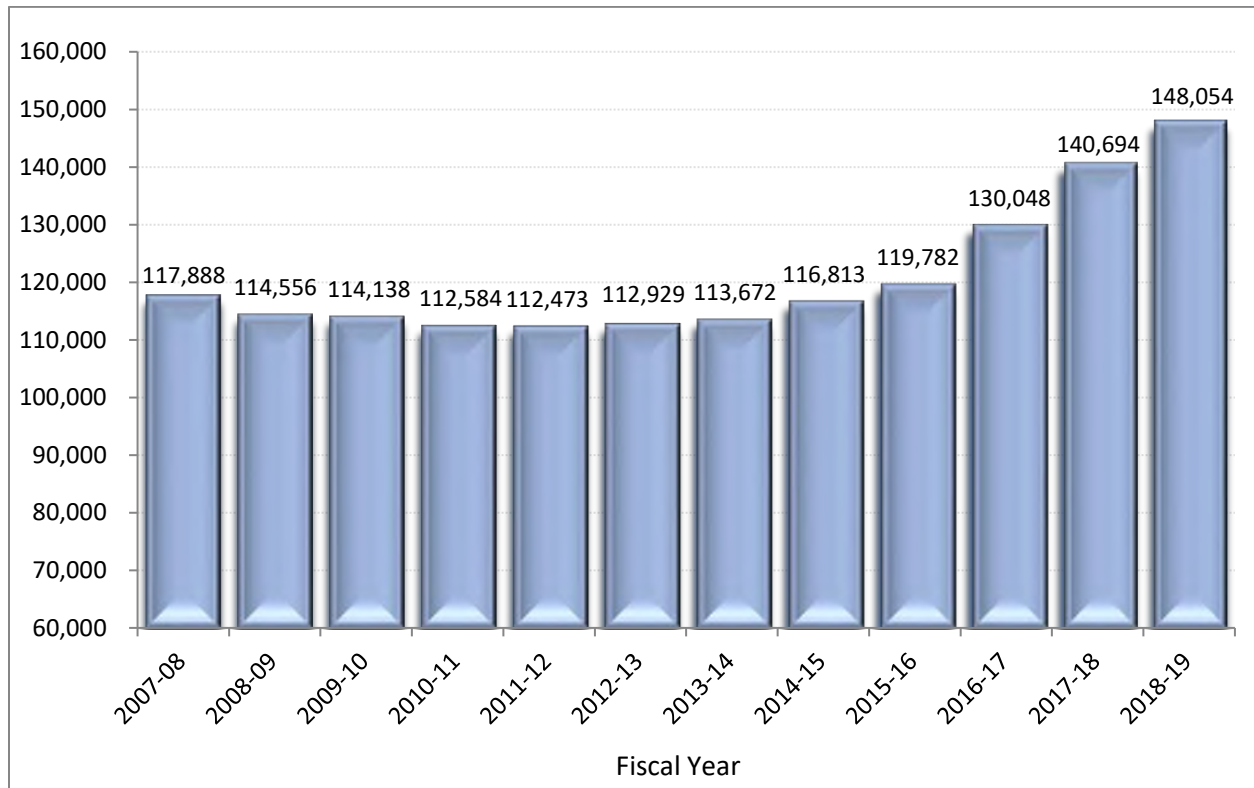
* Plate Misread Error performance is current after a 60-day hold-back period; therefore, percentage reported here is for 2 months prior to the month of this report.

JOINT AGENCY TRANSPONDER DISTRIBUTION

TRANSPONDER DISTRIBUTION	June-19		May-19		FY 2018-19	
	Tags	% of Total	Tags	% of Total	Average To-Date	
Issued						
To New Accounts	1,279	46.4%	1,654	51.4%	1,456	46.7%
Additional Tags to Existing Accounts	836	30.3%	921	28.6%	856	27.5%
Replacement Transponders	641	23.3%	644	20.0%	803	25.8%
Total Issued	2,756		3,219		3,115	
Returned						
Account Closures	432	26.3%	450	35.5%	426	28.7%
Accounts Dow nsizing	190	11.6%	160	12.6%	189	12.7%
Defective Transponders	1,020	62.1%	658	51.9%	872	58.6%
Total Returned	1,642		1,268		1,488	

At the end of June 2019, the 91 Express Lanes had 148,054 active customer accounts, and 225,621 transponders classified as Assigned.

Number of Accounts by Fiscal Year
As of June 30, 2019



Incoming Email Activity

During June, the Anaheim Processing Center received 3,342 emails.

AGENDA ITEM 8

<i>RIVERSIDE COUNTY TRANSPORTATION COMMISSION</i>	
DATE:	August 22, 2019
TO:	Toll Policy and Operations Committee
FROM:	Michael Blomquist, Toll Program Director
THROUGH:	Anne Mayer, Executive Director
SUBJECT:	Toll Operations Year-In-Review and Fiscal Year 2018-2019 Operating Results

STAFF RECOMMENDATION:

This item is for the Committee to receive and file a presentation providing a review of results from the latest fiscal year of toll operations.

BACKGROUND INFORMATION AND DISCUSSION:

In December of 2006, the Commission approved the establishment of a toll program including the development of express lane projects and their future operation. The Commission opened its first toll facility, the 91 Express Lanes, to customers in March 2017. The Commission's second toll facility, the 15 Express Lanes will open in 2020. Staff will review the results from the latest fiscal year of toll operations.

Attachment: Toll Operations Year-in-Review PowerPoint Presentation



TOLL OPERATIONS: YEAR IN REVIEW

Toll Policy and Operations Committee Meeting
August 22, 2019

Michael Blomquist, Toll Program Director



Bond Rating Upgrade



Fitch Upgrades Riverside County Transp. Commission, CA's SR-91 Sr. Bonds & TIFIA Loan to 'BBB'

Fitch Ratings-San Francisco-18 March 2019: Fitch Ratings has upgraded the following Riverside County Transportation Commission, CA (RCTC) SR-91 debt to 'BBB' from 'BBB-':

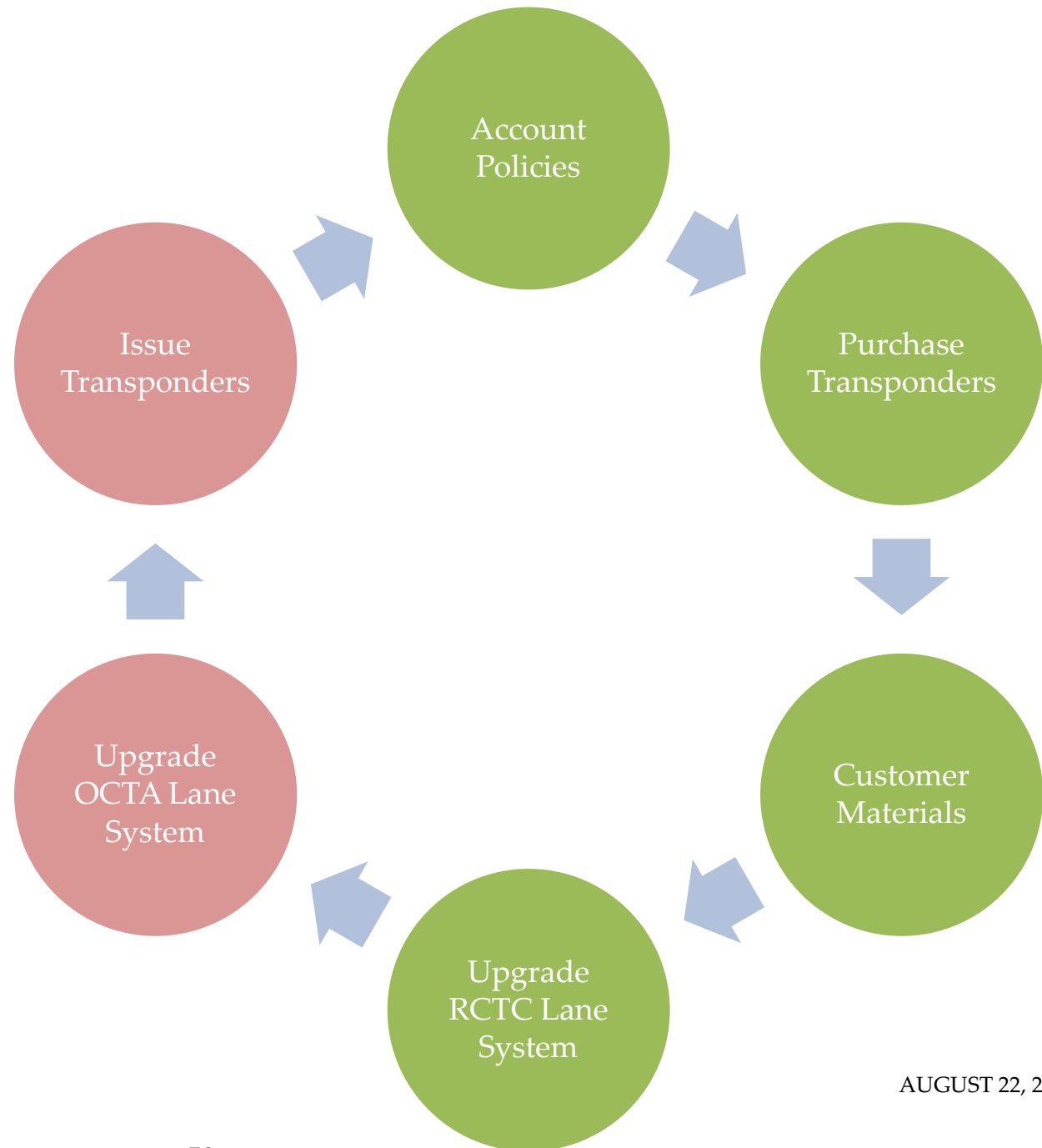
- \$199 million 2013 series A and Series B senior lien revenue bonds;
- \$461.9 million Transportation Infrastructure Finance and Innovation Act (TIFIA) loan.

New home for the Customer Service Center



AUGUST 22, 2019

Transition to a new transponder technology (6C)



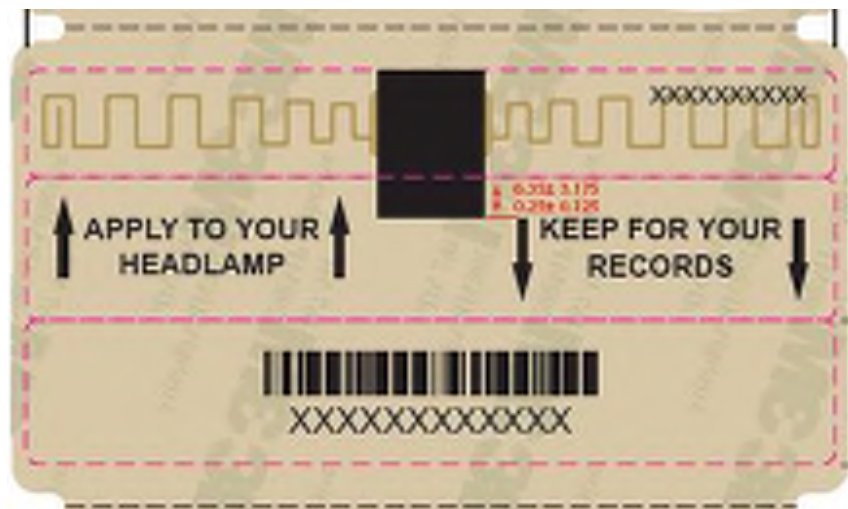
AUGUST 22, 2019

Transponder types

Interior Sticker Transponder

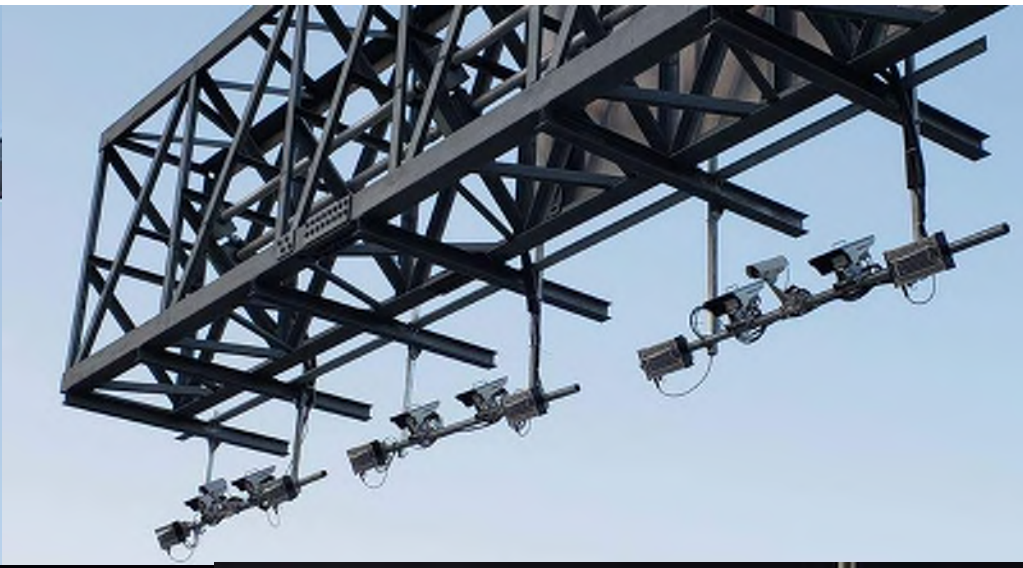


Exterior Sticker Transponder



Interior 3-position Transponder





New Operating Contract:

- Request for Proposal Issued
- Current contract expires June of 2021
- Joint Procurement with OCTA
- Proposals under review
- Contract award expected November 2019
- Expected implementation June 2021

Results: Fiscal Year 2018-19

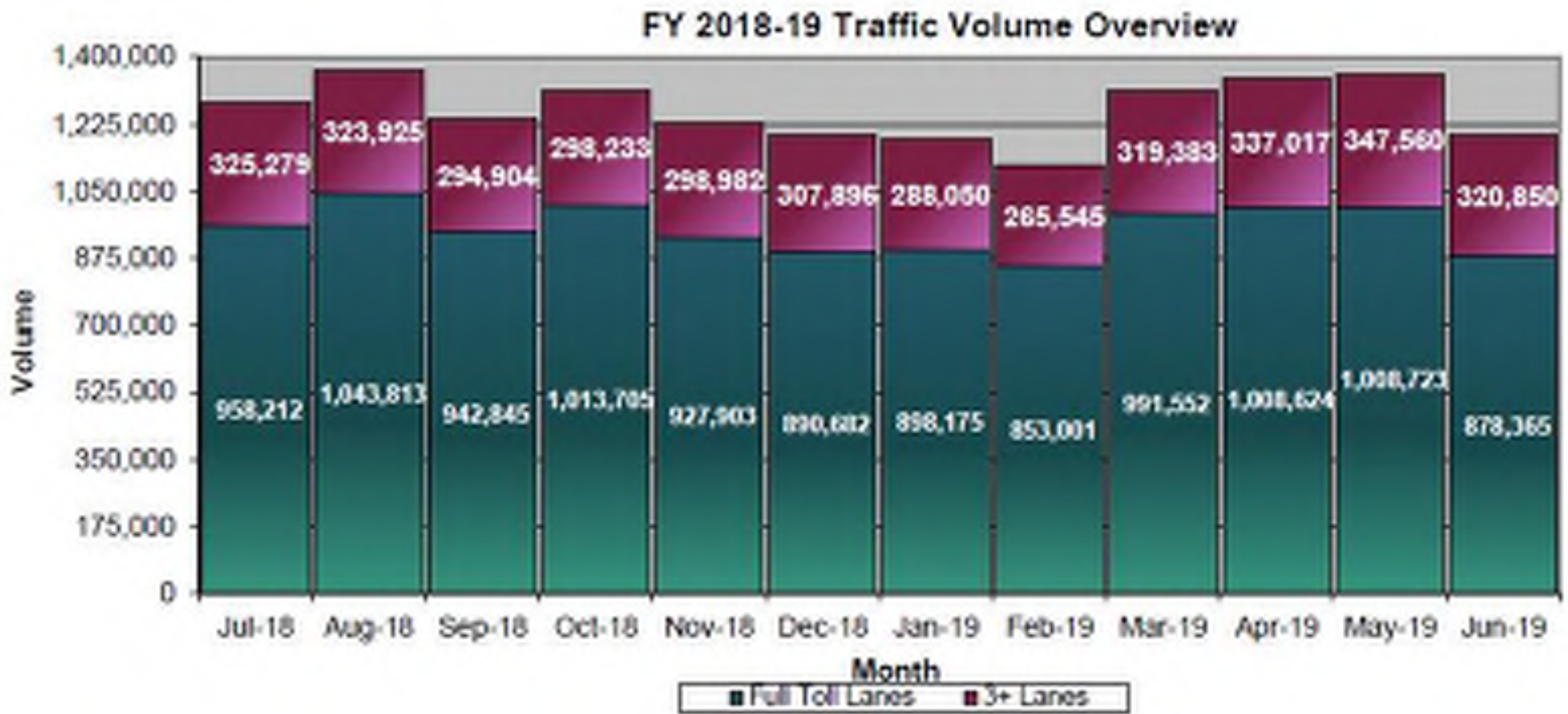
How many customers are using the 91 Express Lanes?

	Actual	Projected
Regular Users	11.4 million	7.9 million
Carpool (HOV3+) Users	3.7 million	2.7 million
Total Users	15.1 million	10.6 million

Which destination did they seek?

	McKinley Avenue	I-15 South
Total Users	9.2 million, 61%	5.9 million, 39%

Results: Fiscal Year 2018-19



Results: Fiscal Year 2018-19

How much gross revenue was generated from the lanes?

	Actual	Projected
Regular Users	\$56.7 million	\$23.6 million
Carpool (HOV3+) Users	\$0.5 million	\$0 million
Total Revenue	\$57.2 million	\$23.6 million

Results: Fiscal Year 2018-19

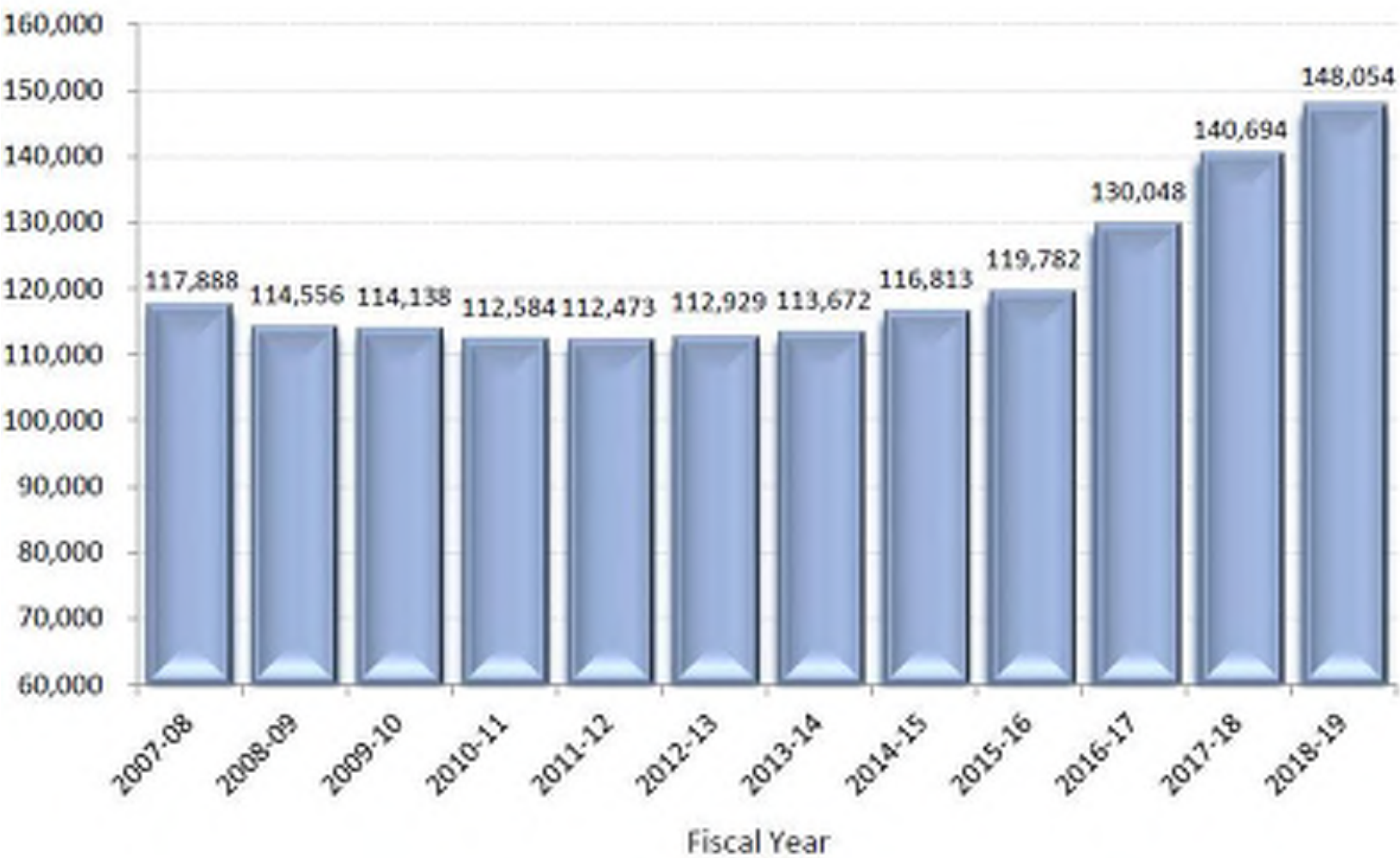
What about the peak periods of travel?

	Morning Peak: 4-10a.m. westbound	Afternoon Peak: 2-8p.m. eastbound
Carpool (HOV3+) Users	24%	25 %
Highest Toll	\$19.90	\$19.00
Highest Traffic Hour	7 am, westbound 3,932 customers	5 pm, eastbound 2,707 customers

AUGUST 22, 2019

Results: Fiscal Year 2018-19

How many accounts were opened?



Future 15 Express Lanes

- Board adopted toll policies
 - Zero Emission Vehicle Discount
 - Transponder and Customer Account Fee Policies
- Regional Operations Center status
- Design and construction of 15 Express Lanes



RIVERSIDE
COUNTY
TRANSPORTATION
COMMISSION

THANK YOU

QUESTIONS



AGENDA ITEM 9

<i>RIVERSIDE COUNTY TRANSPORTATION COMMISSION</i>	
DATE:	August 22, 2019
TO:	Toll Policy and Operations Committee
FROM:	Jennifer Crosson, Toll Operations Manager
THROUGH:	Michael Blomquist, Toll Program Director
SUBJECT:	Amendment to the 91 Express Lanes Operator Agreement

STAFF RECOMMENDATION:

This item is for the Committee to:

- 1) Approve Agreement No. 13-31-105-04, Amendment No. 4 to the 91 Express Lanes Operator Agreement No. 13-31-105-00 (commonly referred to as the ORCOA), among the Orange County Transportation Authority (OCTA), the Commission, and Cofiroute USA, LLC (Cofiroute), to extend the agreement for an additional six months in the amount of \$3,180,851 for a total amount not to exceed \$36,007,044;
- 2) Authorize the Chair or Executive Director, pursuant to legal counsel review, to execute the amendment on behalf of the Commission; and
- 3) Forward to the Commission for final action.

BACKGROUND INFORMATION:

In May 2013, the Commission approved the ORCOA to facilitate the joint operation of the 91 Express Lanes between the Commission and OCTA through the use of the existing contractor, Cofiroute. The agreement is set to expire on June 30, 2021. The agreement has no available extension options.

Under this agreement, Cofiroute provides all the systems, staffing and services required to operate the 91 Express Lanes with the exception of the in-lane systems. The work provided under this agreement is necessary to manage the customer accounts, provide transponders, process toll transactions, process toll evasion violations, manage the traffic operations center and answer customer calls and inquiries.

Given the June 30, 2021 agreement expiration, the Commission and OCTA are re-procuring the services performed under this agreement through a competitive procurement process. It is anticipated that the successful proposer will be under this new contract by the end of this year. If the successful proposer is not Cofiroute, it is estimated that it will take at least 18 months for the successful proposer to develop the required systems, hire and train the necessary staff, and migrate the data from the existing contractor. Depending on the timing of the new contract award and work progress made on the new contract, the new contractor may not be ready to

perform the work before the expiration of the current agreement on June 30, 2021. Therefore, Commission and OCTA staff sought to establish a contingency plan to extend Cofiroute's contract should it be needed.

Staff met with Cofiroute to negotiate an extension of the agreement for up to six months or through December 31, 2021. Prior to the expiration of the existing agreement and at the Commission's option, the Commission will notify Cofiroute if the agreement will be extended. After the first month of extension, the Commission will inform Cofiroute each month if the agreement shall continue or be terminated.

Cofiroute has agreed to continue performing the work described in the agreement for the same monthly rate in the base contract with an escalation increase tied to the Consumer Price Index (CPI). The maximum amount to be paid by the Commission is \$3,180,851 should the full, six-month extension be authorized. Table 1 below provides the calculation for the maximum amount. Staff believes the amount is fair and reasonable.

Table 1 – Maximum Amount

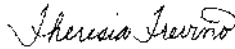
Month	Monthly Payment
June 2021 (Current contract monthly payment)	\$505,244
Amendment CPI maximum escalation (5%)	<u>\$24,898</u>
July 2021	\$530,142
August 2021	\$530,142
September 2021	\$530,142
October 2021	\$530,142
November 2021	\$530,142
December 2021	\$530,141
Amendment Maximum Amount	\$3,180,851 (1)

A summary of the ORCOA and related amendments is as follows:

Table 2 – ORCOA Amendments

Initial Agreement Amount	\$ 34,097,946
Amendment No. 1 – Approved Nov. 2016	(2,900,947)
Amendment No. 2 – Approved Jan. 2017	-
Amendment No. 3 - Approved Mar. 2017	1,629,194
Subtotal Revised Agreement Amount	32,826,193
<i>Amendment No. 4 - (proposed)</i>	<i>3,180,851 (1)</i>
Total Proposed Agreement Amount	\$ 36,007,044

To ensure there is no gap in services for the 91 Express Lanes, staff requests approval of Amendment No. 4 to extend the agreement for up to six additional months to allow for a successful transition to the successful proposer. The extended agreement cost will be included in the Fiscal Year 2021/22 budget process; therefore, a budget adjustment is not required.

Financial Information					
In Fiscal Year Budget:	N/A	Year:	FY 2021/22	Amount:	\$3,180,851
Source of Funds:	Toll Revenues			Budget Adjustment:	N/A
GL/Project Accounting No.:	009199 81041 00000 0000 591 31 81002				
Fiscal Procedures Approved:				Date:	08/05/2019

Attachments: ORCOA Agreement No. 13-31-105-04

1 **AMENDMENT NO. 4**

2 **OCTA AGREEMENT NO. C-3-1529**

3 **RCTC AGREEMENT NO. 13-31-105-04**

4 **AMONG**

5 **ORANGE COUNTY TRANSPORTATION AUTHORITY,**
6 **RIVERSIDE COUNTY TRANSPORTATION COMMISSION**

7 **AND**

8 **COFIROUTE USA, LLC**

9 THIS AMENDMENT NO. 4 TO AGREEMENT is entered into this ____ day
10 of _____, 2019, by and among the Orange County Transportation Authority,
11 a public corporation of the State of California (the "AUTHORITY"); the Riverside
12 County Transportation Commission, a public agency (the "COMMISSION"); and
13 Cofiroute USA, LLC, a Delaware limited liability company ("CONTRACTOR"). The
14 AUTHORITY, the COMMISSION and CONTRACTOR are sometimes individually
15 referred to herein as a "Party" and collectively as the "Parties." The AUTHORITY
16 and the COMMISSION are sometimes individually referred to herein as an "Agency"
17 and collectively as the "Agencies."

18 **RECITALS**

19 A. The Parties have entered into that certain three party operating
20 agreement, OCTA Agreement No. C-3-1529, RCTC Agreement No. 13-31-105-00,
21 dated as of May 24, 2013 (the "Original Agreement"), pursuant to which
22 AUTHORITY and COMMISSION engaged CONTRACTOR to provide management
23 and operational services for the 91 Express Lanes, with the mutual intent of the
24 Agencies of operating said lanes as a single, seamless toll facility from the customer's
25 perspective, which Original Agreement was amended on three (3) prior occasions.
26 The Original Agreement, as previously amended, is referred to herein as the
27 "Operating Agreement".

28 B. The term of the Operating Agreement expires on June 30, 2021

1 (“Expiration Date”).

2 C. The Parties now desire to amend the Operating Agreement and provide
3 Agencies with the option to extend the Expiration Date for a period of up to six (6)
4 months, based on the terms and conditions set forth herein.

5 NOW THEREFORE, it is mutually understood and agreed by the
6 AUTHORITY, COMMISSION and CONTRACTOR as follows:

7 1) The Agencies shall have the option to extend the expiration date of the
8 Operating Agreement for six (6) one (1) month periods (each such monthly extension
9 is referred to individually as the “Extension Period” and the six (6) one (1) month
10 options are collectively referred to as the “Extension Periods”).

11 2) The Agencies may exercise the first Extension Period by giving
12 CONTRACTOR sixty (60) days’ written notice prior to the Expiration Date. In the
13 event the first Extension Period is exercised, the Agencies may exercise the remaining
14 five (5) Extension Periods by providing CONTRACTOR ten (10) days written notice
15 prior to the end of each such Extension Period.

16 3) The monthly fee payable to CONTRACTOR during the Extension Periods
17 (“Monthly Fee”) shall be determined at the commencement of the first day of the first
18 Extension Period, and shall be applied to any subsequent Extension Periods. The
19 Monthly Fee shall be an amount equal to the monthly fee paid for the period June 1,
20 2021 to June 30, 2021 (the “Last Term Year”) plus an increase in an amount of no less
21 than three (3%) and no more than five (5%) of the annual fee prorated in effect during
22 the Last Term Year, with the exact amount determined based on the year-over year
23 change in the most recent Consumer Price Index (“CPI”) prior to June 30, 2021. Any
24 CPI increase shall be based on the information found in the current version of the table
25 found at the following reference Location:
26 https://www.bls.gov/regions/west/data/consumerpriceindex_losangeles_table.pdf, but
27 in no case shall such increase exceed five (5%) as set forth above.
28

1 4) CPI shall mean and refer to that table in the Consumer Price Index
2 published by the United States Department of Labor, Bureau of Labor Statistics, for
3 the Los Angeles, Long Beach, Anaheim Area (“Index”). If the Index is discontinued,
4 then any successor Consumer Price Index of the United States Bureau of Labor
5 Statistics, or successor agency thereto, shall be used.

6 5) The Parties agree that if the Index has not been determined when the first
7 Extension Period Monthly Fee is due, the Agencies will pay the CONTRACTOR the
8 Monthly Fee in effect at the Expiration Date until the Index has been determined for
9 the first Extension Period, and then Agencies shall pay over any difference to
10 CONTRACTOR upon demand and thereafter pay the newly determined Monthly Fee
11 for the balance of the Extension Period(s).

12 6) The Parties agree that after the completion of all Extension Periods the
13 services of critical staff may be requested by the Agencies to complete the transition
14 to the Successor Operator (as defined below). CONTRACTOR agrees to provide
15 requested critical staff to the extent, available as determined by the CONTRACTOR.
16 The Agencies will reimburse CONTRACTOR actual costs plus overhead and profit as
17 provided for in the Operating Agreement.

18 The Monthly Fee during the Extension Period(s) includes, without limitation,
19 full and complete payment for (i) performance of all services and obligations
20 set forth in the Operating Agreement and all exhibits attached thereto; (ii) all
21 extended software, license, maintenance and escrow agreements and
22 performance of all services thereunder including, without limitation, all
23 software updates and upgrades and the replacement of hardware based on the
24 historical replacement schedule for such hardware; and (iii) the work detailed in
25 the Operating Agreement Transition Plan, to be developed in accordance with
26 Section I-6 of Exhibit A to the Operating Agreement.

27 7) CONTRACTOR shall be solely responsible for, and shall pay in full
28 when due, all subcontractors, vendors, suppliers and all other costs incurred by or at

1 the direction of CONTRACTOR in the performance of CONTRACTOR's obligations
2 under this Amendment No. 4, unless expressly stated otherwise in the Operating
3 Agreement.

4 8) During the Extension Periods, for CONTRACTOR's full and complete
5 performance of its obligations under this Amendment No. 4, CONTRACTOR shall
6 invoice Agencies and Agencies shall make payment for approved invoices in
7 accordance with the following provisions. On July 1, 2021, and on July 15, 2021,
8 and on the first and 15th day of each succeeding Extension Period, CONTRACTOR
9 shall submit separate invoices to the AUTHORITY and the COMMISSION for the
10 services performed pursuant to this Amendment No. 4. Each invoice shall include the
11 amount due to CONTRACTOR pursuant to paragraph 3 hereof and shall be in the
12 form set forth in the Operating Agreement. AUTHORITY and COMMISSION shall
13 pay the amount set forth in their respective invoices pursuant to the terms of the
14 Operating Agreement.

15 9) Article 7, Payment, subsection J(6) shall be added to the Operating
16 Agreement to read as follows:

17 J(6)(a) AUTHORITY's maximum cumulative payment obligation,
18 hereunder, for the Extension Periods, for the period commencing on July
19 1, 2021 through December 31, 2021, shall not exceed the amount of
20 Three Million, Four Hundred Thirty-Seven Thousand, Four Hundred
21 Ninety-Eight dollars (\$3,437,498), which shall include all amounts
22 payable to CONTRACTOR for the services contained in Section 7 of this
23 amendment for the Extension Periods.

24 J(6)(b) COMMISSION's maximum cumulative payment obligation,
25 hereunder, for the Extension Periods, for the period commencing on July
26 1, 2021 through December 31, 2021, shall not exceed the amount of
27 Three Million, One Hundred Eight Thousand, Eight Hundred Fifty-One
28 dollars (\$3,180,851), which shall include all amounts payable to

CONTRACTOR for the services contained in Section 7 of this amendment for the Extension Periods.

10) All notices hereunder and communications regarding the interpretation of the terms of this Amendment, or changes thereto, shall be affected by delivery of said notices in person or by delivering said notices by recognized overnight mail or courier service, with delivery receipt requested or by depositing said notices in the U.S. mail, registered or certified mail, returned receipt requested, postage prepaid and addressed as follows:

To CONTRACTOR:	To AUTHORITY:
Cofiroute USA, LLC 200 Spectrum Center Dr., Suite 1650 Irvine, CA 92618 ATTN: Gary L. Hausdorfer, President and Chief Executive Officer	Orange County Transportation Authority 550 South Main St. P.O. Box 14184 Orange, CA 92863-1584 ATTN: Manager, Contracts and Procurement
	To COMMISSION: Riverside County Transportation Commission 4080 Lemon St., 3 rd Floor P.O. Box 12008 Riverside, CA 92502-2208 ATTN: Anne Mayer, Executive Director

Notices shall be deemed received when actually received in the office of the addressee (or by the addressee if personally delivered) or when delivery is refused, as shown on the receipt of the U.S. Postal Service, private carrier or other person making

1 the delivery.

2 11) Pursuant to Section I-6 of Exhibit A to the Operating Agreement:

- 3 a. The CONTRACTOR acknowledges that the service provided under
4 the terms of the Operating Agreement and the Statement of Work is
5 vital to the Agencies and must be continued without interruption.
6 Upon expiration of any Extension Period, a successor (the Agencies
7 or a new Operating Contractor (“Successor Operator”)) may be
8 responsible for providing these services. The CONTRACTOR agrees
9 to exercise its best efforts and cooperation to affect an orderly and
10 efficient transition to a Successor Operator.
- 11 b. Unless performed prior to the Expiration Date pursuant to the terms of
12 the Operating Agreement, upon the Agencies’ written notice, the
13 CONTRACTOR shall furnish transition services, during the
14 Extension Period(s), and the CONTRACTOR shall develop with the
15 Successor Operator or the Agencies staff, an Operating Agreement
16 Transition Plan describing the nature and extent of transition services
17 required for each facility. The Agreement Transition Plan and dates
18 for transferring responsibilities for each division of work shall be
19 submitted within fifteen (15) days of such notice. Upon completion of
20 Agencies’ review, all parties will meet and resolve any additional
21 requirements/differences. The CONTRACTOR shall provide 91
22 Express Lanes experienced personnel in each division of work during
23 the entire transition period to ensure that the services are maintained
24 at the level of proficiency required by the Operating Agreement.
- 25 c. The CONTRACTOR shall provide sufficient staff to help the
26 Successor Operator maintain the continuity and consistency of the
27 services required by the Statement of Work. The CONTRACTOR
28 shall allow the Successor Operator to conduct on-site interviews with

1 the employees.

2 12) This instrument may be executed in two or more counterparts, each of
3 which shall be deemed an original, but all of which together shall constitute one and
4 the same instrument.

5 13) Except as modified and amended herein, the Operating Agreement shall
6 remain unchanged and in full force and effect.

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11 [Signatures on following page]

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SIGNATURE PAGE TO AMENDMENT NO. 4 TO
OCTA AGREEMENT NO. C-3-1529
RCTC AGREEMENT NO. 13-31-105-04
AMONG
ORANGE COUNTY TRANSPORTATION AUTHORITY,
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
AND COFIROUTE USA, LLC.

RIVERSIDE COUNTY
TRANSPORTATION COMMISSION

By: _____

Its: _____

ORANGE COUNTY
TRANSPORTATION AUTHORITY

By: _____

Its: _____

APPROVED AS TO FORM:
BEST BEST & KRIEGER LLP

By: _____

Counsel to the Riverside County
Transportation Commission

APPROVED AS TO FORM:

By: _____

General Counsel to Orange County
Transportation Authority

COFIROUTE USA, LLC

By: _____

Gary L. Hausdorfer
President and Chief Executive Officer

AGENDA ITEM 10

RIVERSIDE COUNTY TRANSPORTATION COMMISSION	
DATE:	August 22, 2019
TO:	Toll Policy and Operations Committee
FROM:	Jennifer Crosson, Toll Operations Manager
THROUGH:	Michael Blomquist, Toll Program Director
SUBJECT:	RCTC 91 Express Lanes Toll Policy

STAFF RECOMMENDATION:

- 1) Adopt Resolution No. 19-016, "*Resolution of the Riverside County Transportation Commission Adopting the Amended and Restated RCTC 91 Express Lane Toll Policy*"; and
- 2) Forward to the Commission to conduct a public hearing at its September meeting.

BACKGROUND INFORMATION AND DISCUSSION:

In June 2012, the Commission adopted Resolution No. 12-019, "*Resolution of the Riverside County Transportation Commission Regarding the RCTC 91 Express Lanes Toll Policy*." The policy adopted in 2012 was modeled after the Orange County Transportation Authority's (OCTA) toll policy assuming that the OCTA and RCTC 91 Express Lanes would operate similarly and therefore demand could be stimulated or managed under identical policies. The existing 91 Express Lanes carpool discount policy, part of the overall toll policy, was also adopted by the Commission at that time.

The existing 91 Express Lanes carpool discount policy was last updated over sixteen years ago in 2003 when OCTA began operating the 91 Express Lanes. Therefore, given the passage of time and the changes in corridor traffic, OCTA and Commission staff and its consultant have reviewed the existing 91 Express Lanes carpool discount policy for potential changes with the following goals:

- Seek to further improve 91 Express Lanes traffic operations;
- Update the existing policy using current corridor traffic conditions and usage data;
- Determine whether new carpool discounts should be considered; and
- Re-examine the existing carpool discount in the eastbound, afternoon peak period.

In addition to these overall goals, Commission staff is also seeking to decrease the carpool violation rate in its express lanes. Despite various corridor improvements and toll rate changes in the RCTC 91 Express Lanes, there remains some ongoing queuing of westbound, morning traffic in the general purpose lanes seeking to access the express lanes. Possibly compounding this queuing problem are carpool violators (customers declaring themselves carpoolers but do

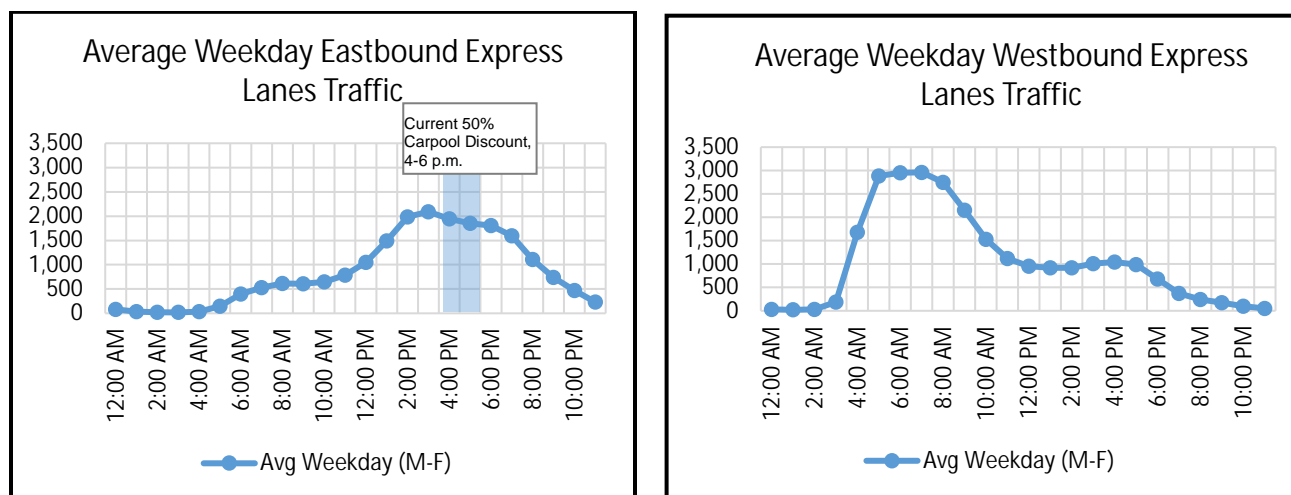
not have three or more people in the vehicle). It is possible that the introduction of a 50% carpool discount, versus toll-free travel, might reduce the carpool violator rate in this key peak period location.

The current carpool discount policy allows vehicles with three or more persons, High-Occupancy-Vehicles 3+ (HOV3+), to travel through the designated carpool lane for free during most hours. The exception is Monday through Friday from 4-6 PM in the eastbound direction when these customers pay a 50% discounted toll. Other vehicles also qualify for this discount including vehicles eligible for a 91 Express Lanes Special Access Account, including pure zero-emission vehicles as certified by the California Air Resources Board, motorcycles, and vehicles with a Department of Motor Vehicles-issued disabled license plate or disabled veteran license plate, herein all referred to as HOV3+ vehicles.

The Commission adopted the OCTA carpool discount policy to provide for consistency in the operation of the 91 Express Lanes. The eastbound, 4-6 PM, 50% carpool discount was originally included in the OCTA toll policy to manage the demand of the 91 Express Lanes in Orange County. The current carpool discount policy does not provide for a mechanism to adjust the hours or direction to which a 50% carpool discount is applied to help manage the demand in the express lanes in either Orange or Riverside County.

The current carpool discount policy hours of 4-6 PM in the eastbound direction do not coincide with the peak traffic hours in the RCTC 91 Express Lanes. The RCTC 91 Express Lanes have demand which exceeds capacity in both the eastbound and westbound directions during peak periods. The RCTC's westbound 91 Express Lanes' volume is regularly at or near 3,000 vehicles per hour during the morning peak period. The figure below reflects the hourly traffic volumes for the RCTC 91 Express Lanes in the eastbound and westbound directions (Figure 1).

Figure 1 – Average Hourly Weekday Express Lanes Traffic in RCTC's 91 Express Lanes

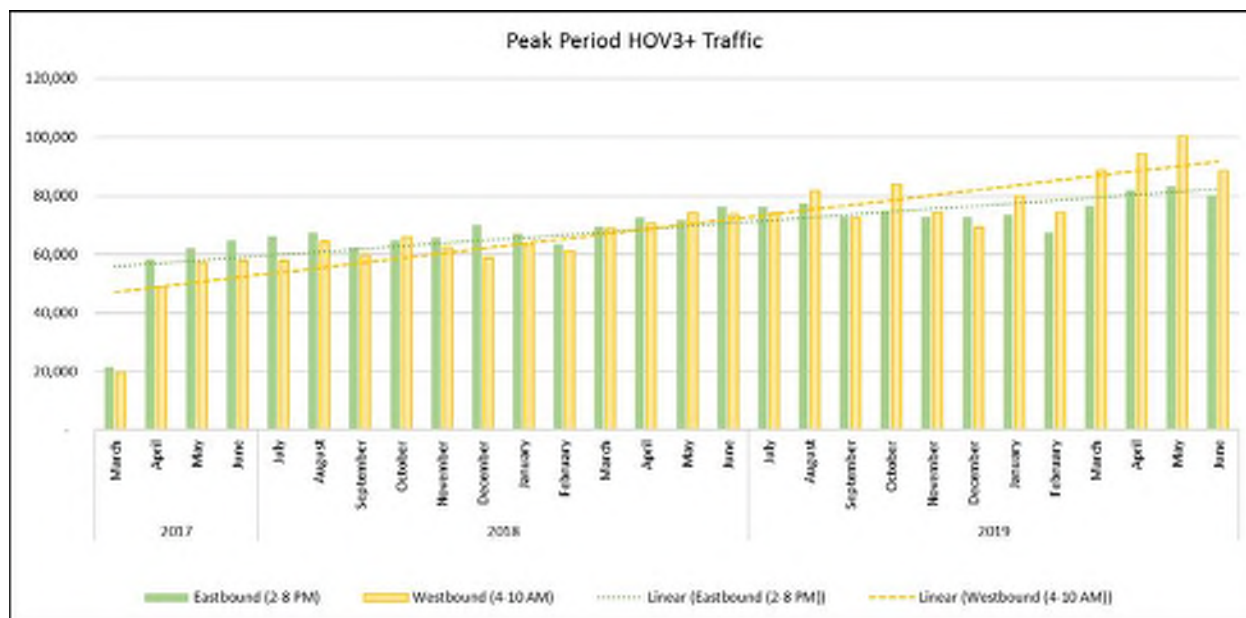


Note: Traffic Data from FY 2018/19

Since the opening of the RCTC 91 Express Lanes in 2017, several physical improvements have been made to the express lanes and the toll policy was amended in August 2018. The toll policy change provided for congestion pricing based on the specific demand for each movement (to/from I-15 or McKinley Street). While those physical improvements and toll policy changes helped to reduce backups at both the westbound entrance and eastbound exit, demand continues to exceed capacity during the peak hours.

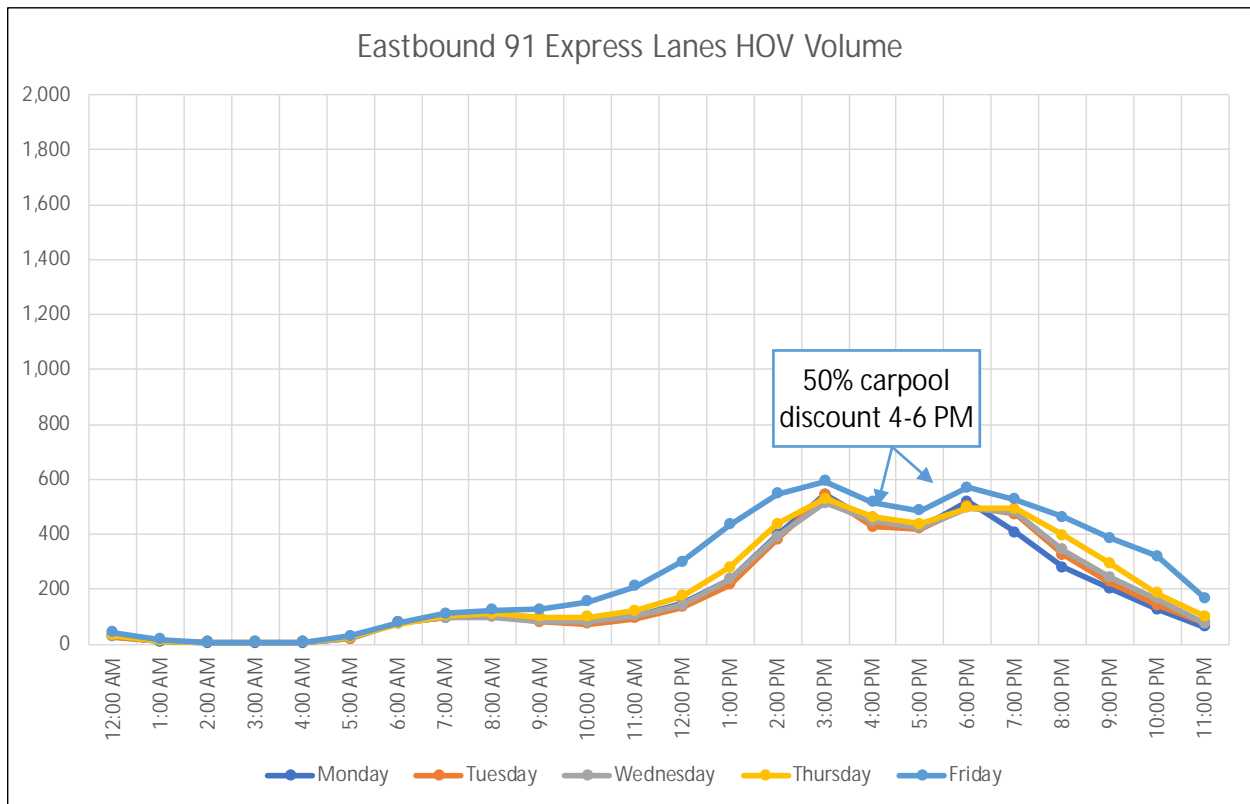
The number of HOV3+ vehicles utilizing the express lanes during the six-hour, morning (AM) and afternoon / evening (PM) peak periods has steadily grown since the RCTC 91 Express Lanes opened (Figure 2). Today, over 25% of the vehicles on the 91 Express Lanes during the AM westbound and PM eastbound peak periods are HOV3+ vehicles travelling for free. With tolls as high as \$20 during the AM peak period, the incentive for some users to use the HOV3+ lane without the proper number of occupants to avoid a toll exists. The number of vehicles without the proper number of occupants using the HOV3+ lane to receive a carpool discount is unknown at this time. However, quantifying the problem and implementing a solution are top priorities. OCTA and RCTC are in the process of engaging a consultant to perform visual counts at all Express Lanes toll plazas. The consultant will be asked to provide an estimated number of non-compliant vehicles both before and after a change in the HOV3+ carpool discount, if approved.

Figure 2 – Peak Period HOV3+ Express Lanes Traffic in RCTC's 91 Express Lanes



Historically, the number of HOV3+ trips decreases during the hours where the carpool discount is reduced from 100% to 50% (Figure 3).

Figure 3 – Eastbound HOV3+ Express Lanes Traffic in RCTC’s 91 Express Lanes



The large percentage of HOV3+ vehicles in the express lanes during peak periods (25%) not only consumes valuable capacity, but it reduces the effectiveness of congestion pricing. The principle of congestion pricing is to utilize price adjustments to either incentivize or dis-incentivize motorists from using the express lanes. As the price goes up, fewer motorists will elect to use the express lanes, and as the price goes down, more motorists will elect to use the express lanes. A 100% carpool discount reduces the effectiveness of congestion pricing in the express lanes because HOV3+ vehicles are not impacted by the price.

RCTC and OCTA staff enlisted the assistance of Stantec Consulting (Stantec), the traffic and revenue firm for the 91 Express Lanes, to study various HOV3+ carpool discount options. Stantec was asked to provide policy options that addressed both agencies' needs and met the following guidelines:

- No change to the vehicle or account types eligible for the carpool discount
- Retain 100% carpool discount for uncongested hours and 50% carpool discount for congested hours
- Use express lane traffic volume as the basis for applying a 50% carpool discount
- Provide for a single mechanism (same policy) to review and adjust for each county
- Provide a mechanism to revert to a 100% carpool discount if volumes no longer warrant a 50% carpool discount

- Evaluate OCTA and RCTC 91 Express Lanes separately based on actual traffic volumes
- Use the same carpool discount hours for all weekdays
- Apply to both RCTC 91 Express Lanes movements in the same direction of travel
- Expected review of carpool discount changes annually

Staff and Stantec conceived of and developed a number of options for carpool discounts. After analysis of each option, staff is recommending a 50% carpool discount for HOV3+ and special access vehicles when a specific threshold volume in the 91 Express Lanes is met. This recommended policy meets all of the criteria set forth in the guidelines above.

Use of a volume threshold for triggering a change from 100% to a 50% carpool discount is consistent with the existing toll policy's super-peak volume toll increase threshold. It is recommended that the Commission continue use of single-lane segment volumes to determine the carpool discount level (100% or 50%). The use of single-lane volumes continues to allow the management of the 91 Express Lanes based on congestion in single lane segments. The carpool discount will be applied to the entire hour for all weekdays in the direction of travel where at least one of the segments meets the volume threshold three or more times in a twelve month period. This will allow for consistency in communication to the customer across all the weekdays. Saturdays and Sundays have unique traffic patterns and will have the carpool discount applied individually to each of those days if the volume threshold is triggered three or more times in a twelve month period.

Consistent with both the existing 91 Express Lanes HOV3+ carpool discount and the Commission's planned carpool discount for its 15 Express Lanes opening next year, a 50% carpool discount is being recommended for hours where the volumes meet the thresholds. A 50% carpool discount provides both a meaningful incentive to carpool and balances the needs of all 91 Express Lanes users.

Stantec applied recent express lane traffic data to the recommended carpool discount policy to determine the potential impact to existing carpool discounts. The results reflected that the recommended option would retain the current 50% carpool discount on weekdays from 4-6 PM on the eastbound 91 Express Lanes in both counties, and provide for a 50% carpool discount on weekdays from 5-9 AM on the westbound 91 Express Lanes in Riverside County.

Staff from both OCTA and RCTC recommend this carpool discount policy as it best meets all the requested policy guidelines, is the most consistent with the current 91 Express Lanes toll policy, and would be simplest to implement and monitor.

Based on existing 91 Express Lanes traffic data, the recommended carpool discount policy would not change either OCTA or RCTC's current eastbound carpool discount and only provides for a carpool discount in the westbound direction for RCTC from 5 to 9 AM.

Stantec estimated the impact of the recommended carpool discount policy to the RCTC 91 Express Lanes traffic, toll rates, and revenue. This effort assessed how HOV3+ and non-HOV3+

traffic, toll rates, and revenue would change under the recommended carpool discount policy. Stantec determined that the implementation of a 50% carpool discount in the westbound AM hours will reduce demand in the express lanes with little impact to revenue. It is expected reduced demand will help ease the AM westbound queuing.

Consistent with the overarching agreement between OCTA and RCTC that includes joint operation and consistent toll policies, OCTA and RCTC are seeking concurrent approval from their respective Boards for this carpool discount change. Additionally, should Board approval occur, there are several steps which must be taken to put this change in place including a change to the toll system software, notification to customers, and updates to customer-facing materials. Staff believes this change would be in place between January 1 and June 30, 2020. Prior to changing the current carpool discount, notification will be given to 91 Express Lanes account holders by mail or email, posted on the 91 Express Lanes website, and posted on the changeable message signs where possible.

Staff Recommendation

The attached amended and restated toll policy provides a change to the carpool discounts given to eligible vehicles. In order to meet the existing toll policy goals established by the Commission of optimizing throughput at free flow speeds and balancing capacity and demand to serve customers who pay tolls as well as carpoolers who are offered discounted tolls, amendments to the toll policy are recommended.

Therefore, staff recommends approval of Resolution No. 19-016 and forwarding the resolution to the Commission to conduct a public hearing at its September meeting.

There is no direct fiscal impact related to the revised toll policy.

Attachment: Resolution No. 19-016

RESOLUTION NO. 19-016

**RESOLUTION OF THE
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
ADOPTING THE
AMENDED AND RESTATED
RCTC 91 EXPRESS LANES TOLL POLICY**

WHEREAS, the Riverside County Transportation Commission (the “Commission”) has been, in accordance with its legislative and regulatory authority, operating two tolled Express Lanes in Riverside County located between the Orange County Line and Interstate 15 (“RCTC 91 Express Lanes”);

WHEREAS, the Commission adopted its original RCTC 91 Express Lanes Toll Policy on June 7, 2012 (“Original RCTC 91 Express Lanes Toll Policy”);

WHEREAS, on October 10, 2018 the Commission adopted an amended and restated RCTC 91 Express Lanes Toll Policy (“First Amended and Restated RCTC 91 Express Lanes Toll Policy”) to address higher than expected traffic demand, traffic management in the single-lane portions of the facility, realized express lane capacity, and annual toll rate inflation adjustments.

WHEREAS, the Commission retains the authority to add, delete, or otherwise modify its policies and procedures;

WHEREAS, the Commission desires to amend and restate, in its entirety, the First Amended and Restated 91 Express Lanes Toll Policy to address changes to the discount policy for special access accounts including vehicles with three or more persons (HOV3+) to address high traffic volumes on the RCTC 91 Express Lanes during peak travel times.

WHEREAS, the Commission provided notice of a public hearing regarding adoption of this Resolution in a newspaper of general circulation in accordance with Government Code section 6062a.

NOW, THEREFORE, be it resolved by the Riverside County Transportation Commission as follows:

Section 1. The Riverside County Transportation Commission hereby adopts the Amended and Restated RCTC 91 Express Lanes Toll Policy

attached as Exhibit A. The details of the policy have been approved by the Commission, following the conduct of a public hearing, during its actions on September 11, 2019 and shall be communicated to the financial community, toll facility users, and the general public.

Section 2. Upon its adoption, the Amended and Restated RCTC 91 Express Lanes Toll Policy attached as Exhibit A shall supersede, in its entirety, the Original RCTC 91 Express Lanes Toll Policy, and the First Amended and Restated RCTC 91 Express Lanes Toll Policy.

APPROVED AND ADOPTED this September 11, 2019.

[Signatures on following page]

**SIGNATURE PAGE
TO
RESOLUTION NO. 19-016**

**RESOLUTION OF THE
RIVERSIDE COUNTY TRANSPORTATION COMMISSION
ADOPTING THE
AMENDED AND RESTATED
RCTC 91 EXPRESS LANES TOLL POLICY**

Chuck Washington, Chair
Riverside County Transportation Commission

ATTEST:

Lisa Mobley
Clerk of the Board

EXHIBIT A

AMENDED AND RESTATED

RCTC 91 EXPRESS LANES TOLL POLICY

[attached behind this page]

EXHIBIT A

RCTC 91 Express Lanes Toll Policy

Goals

The goals for the RCTC 91 Express Lanes toll policy are to:

- Provide a safe, reliable, and predictable commute for 91 Express Lanes customers;
- Optimize vehicle throughput at free flow speeds;
- Pay debt service and maintain debt service coverage;
- Increase average vehicle occupancy;
- Balance capacity and demand to serve customers who pay tolls as well as carpoolers with three or more persons who are offered discounted tolls;
- Generate sufficient revenue to sustain the financial viability of the RCTC 91 Express Lanes;
- Ensure all covenants in the Financing Documents are met; and
- Provide net revenues for Riverside Freeway/State Route 91 corridor improvements.¹

Definitions

Exhibit I, "Definitions", clarifies terms used in this RCTC 91 Express Lanes Toll Policy.

Super Peak Hours

The toll adjustment goals for Super Peak hours are to: a) reduce the likelihood of congestion by diverting traffic to other hours with available capacity; b) maintain free flow travel speed in the RCTC 91 Express Lanes; c) maintain travel time savings; d) accommodate projected growth in travel demand and; e) ensure that the toll road generates sufficient revenue to effectively operate the toll lanes and maintain a strong debt service position.

The toll for use of the RCTC 91 Express Lanes during a Super Peak hour shall be determined as follows:

1. Hourly and Daily Traffic Volumes will be monitored on a rolling 12-week period basis. The review period of 12 weeks may be reduced to a shorter period during times of Abnormal Traffic Volumes. In the case where traffic is stabilized for Super Peak hours, toll adjustments may be included in the Non-Super Peak for a quarterly adjustment.

¹ As allowable under Senate Bill 1316.

2. Hourly and Daily Traffic Volumes that exceed the Hourly and Daily Traffic Volume Increase Thresholds stated in the table below, will be flagged for further evaluation.

Segment	Hourly and Daily Traffic Volume Increase Thresholds
EB McKinley	1,200
EB I-15 South	1,200
WB McKinley	1,250
WB I-15 South	1,250

3. Hourly and Daily Traffic Volume Increase Thresholds that are met six times in a 12 week period excluding Abnormal Traffic Volumes, shall have the Average Hourly and Daily Traffic Volume calculated and a toll increase will be applied according to the tables below:

Eastbound			
McKinley Segment		15 South Segment	
Average Hourly and Daily Traffic Volume	Toll Increase Amount	Average Hourly and Daily Traffic Volume	Toll Increase Amount
>1,350	\$1.30	>1,450	\$1.30
1,300 to 1,350	\$1.00	1,400 to 1,450	\$1.00

See Exhibit II and III for the eastbound toll process flow.

Westbound			
McKinley Segment		15 South Segment	
Average Hourly and Daily Traffic Volume	Toll Increase Amount	Average Hourly and Daily Traffic Volume	Toll Increase Amount
>1,400	\$1.30	>1,450	\$1.30
1,350 to 1,400	\$1.00	1,400 to 1,450	\$1.00

See Exhibit IV and V for the westbound toll process flow.

4. Hourly and Daily Traffic Volume Decrease Thresholds that fall below the volumes stated in the table below, will be flagged for further evaluation.

Segment	Hourly and Daily Traffic Volume Decrease Thresholds
EB McKinley	1,200
EB I-15 South	1,200
WB McKinley	1,250
WB I-15 South	1,250

5. Hourly and Daily Traffic Volumes that fall below the Hourly and Daily Traffic Volume Decrease Thresholds six times in a 12-week period, excluding Abnormal Traffic Volumes, shall have the Average Hourly and Daily Traffic Volume calculated and a toll rate reduction applied according to the table below.

Toll rates shall be reduced until pricing and volumes reduce to the non-super peak level of service (LOS) toll schedule.

Segment	Hourly and Daily Traffic Volumes	Toll Rate Reduction
EB McKinley	<1,200	\$.65
EB I-15 South	<1,200	\$.65
WB McKinley	<1,250	\$.65
WB I-15 South	<1,250	\$.65

See Exhibit VI and VII for the toll reduction process flow.

Non-Super Peak Hours

Non-Super Peak hour toll rates will be set according to the vehicles per hour for single lane level of service (LOS) as set forth below. Toll rates were adopted on July 1, 2018 for each LOS reflecting the time-savings value to the driver as traffic moves into the next level of congestion. The adopted toll rates will increase annually by the Inflation Factor.

Level of Service Toll Schedule

LOS	Vehicles per Hour	McKinley Toll*	15 South Toll*
A	0 - 400	\$1.50	\$1.90
B	401 - 800	\$2.20	\$2.85
C	801 - 1,000	\$4.05	\$5.15
D	1,001 - 1,200	\$5.15	\$6.65
E (EB McKinley)	1,201 – 1,300	\$6.70	n/a
E (EB 15 South)	1,201 - 1,400	n/a	\$8.55
E (WB McKinley)	1,201 - 1,350	\$6.70	n/a
E (WB 15 South)	1,201 – 1,400	n/a	\$8.55

*Toll rates represent amounts as of July 1, 2018.

Non-Super Peak Hourly and Daily Traffic Volumes will be reviewed on a quarterly basis beginning January 1, 2018. Non-super peak Hourly and Daily Traffic Volumes will be averaged for the quarter, excluding Abnormal Traffic Volumes. If the Average Hourly and Daily Traffic Volume varies from the currently priced LOS, the toll rate will be increased or decreased according to the Level of Service Toll Schedule table above.

See Exhibit VIII (eastbound) and IX (westbound) for a non-super peak process flow.

Discount

Discount-Eligible Vehicles are permitted to a discounted toll in the RCTC 91 Express Lanes. The toll discount is (Super Peak or Non Super Peak) determined according to the process below. The toll discount will be initially evaluated and placed into effect after all necessary system updates have been completed on a date agreed to with OCTA, but no later than June 30, 2020. The toll discount will be reviewed at least annually.

1. Hourly and Daily Traffic Volumes will be monitored for up to a 12 month period. The review period may be reduced to a shorter period during times of Abnormal Traffic Volumes.
2. Average Hourly and Daily Traffic Volumes will be calculated for the review period removing Abnormal Traffic Volumes.
3. If the Average Hourly and Daily Traffic Volumes meet either of the thresholds established in the table below they will be flagged for a Super Peak Discount.
 - a) Weekdays: A Super Peak Discount shall be applied to a weekday hour if three or more weekday Average Hourly Traffic Volumes meet either of the thresholds established in the table below. If three or more weekdays meet the threshold, all weekdays for the hour will have the Super Peak Discount applied.
 - b) Weekends: A Super Peak Discount shall be applied to a Saturday or Sunday hour if Saturday or Sunday Average Hourly and Daily Traffic Volume meets either of the thresholds established in the table below.
4. If one segment in a direction has the Super Peak Discount applied, the discount shall apply to the remaining segment so that all Discount-Eligible Vehicles traveling in the corresponding direction are receiving the same discount.
5. If an hour that does not meet the thresholds in the table below falls between two hours that do meet the thresholds the adjacent hour shall qualify for a Super Peak Discount to prevent a discontinuity in the hours for which a Super Peak Discount is in effect.

Eastbound	
McKinley Segment	15 South Segment
Average Hourly and Daily Traffic Volume	Average Hourly and Daily Traffic Volume
>1,300	>1,400

See Exhibit X for the eastbound Super Peak Discount process flow.

Westbound	
McKinley Segment	15 South Segment
Average Hourly and Daily Traffic Volume	Average Hourly and Daily Traffic Volume
>1,350	>1,400

See Exhibit XI for the westbound Super Peak Discount process flow.

6. If an Average Hourly and Daily Traffic Volume falls below the thresholds established in the table below for both segments and is currently designated as a Super Peak Discount it shall be reviewed and reclassified as Non Super Peak Discount using the same process as outlined in 1 to 5 above.

Direction	Average Hourly and Daily Traffic Volume for highest volume segment
Eastbound	<800
Westbound	<800

See Exhibit XII for the Non-Super Peak Discount process flow.

The threshold volumes for Super Peak Discounts and Non-Super Peak Discounts will be reviewed regularly but no less than annually and following a change to the roadway that may impact capacity either favorably or unfavorably. Thresholds and the duration of the monitoring period for Super Peak Discounts and Non-Super Peak Discounts may be adjusted based on a review of traffic information.

Financing Requirements

RCTC shall charge and collect tolls that generate enough revenue to maintain the Debt Service Coverage Ratios as required in the Financing Documents and to operate and maintain the RCTC 91 Express Lanes in a safe condition in accordance with all applicable laws and regulations. RCTC recognizes that it must maintain a strong debt service position in order to satisfy the covenants in the Financing Documents. The requirement to maintain Debt Service Coverage Ratios and comply with Financing Document and other financing covenants will supersede the specific policies for setting and modifying tolls and discounts.

Holiday Toll Schedules

Holiday toll schedules will be established using actual traffic volumes for the prior year holiday and the Level of Service Toll Schedule.

Interpretation

These policies are intended as guidance and may be amended or superseded at any time.

Exhibit I Definitions

Abnormal Traffic Volumes – Any week, day, or hour where traffic volumes vary from those of prior weeks due to a holiday, incident, construction or other atypical occurrence.

Average Daily and Hourly Traffic Volume - The sum of a specific day, hour, segment and direction for the period of time analyzed divided by the number of days included in the sum. A calculated average may have a tolerance of the lesser amount of $\pm 5\%$ or 50 vehicles applied to it in the application of the toll rate adjustments.

Cash Available for Debt Service – for any Period, the excess, if any, computed on a cash basis, of:

- (1) the amount of RCTC 91 Express Lanes cash receipts during such Period from whatever source, including, without limitation, toll receipts, transponder revenues, and investment earnings, *excluding*:
 - proceeds of insurance,
 - proceeds of debt service letter of credit or other amounts held in or disbursed from the payment account, the debt service reserve account, the coverage account and the major maintenance reserve account, and
 - the proceeds of any bonds or loans issued or executed to provide capital improvements to the RCTC 91 Express Lanes, over
- (2) All Operating and Maintenance Costs incurred during such Period and not deducted in the computation of Cash Available for Debt Service in a prior Period. In computing Operating and Maintenance Costs for any Period, an appropriate prorating will be made for expenditures such as insurance premiums and taxes that would be prorated if the computation were to be made in accordance with Generally Accepted Accounting Principles.

Debt Service – for any Period, all payments of principal, interest, premiums (if any), fees and other amounts made (including by way of prepayment) or required to be made by RCTC during such Period under the Financing Documents (debt service payments related to RCTC's internal subordinated debt borrowings or application of revenues to pay RCTC's sales tax revenue bonds are to be excluded from these calculations). In computing Debt Service for any Period prior to the issuance of any additional financing, subject to the specific terms of the Financing Documents, RCTC will give pro forma effect to the transactions contemplated by the Financing Documents and the use of proceeds of the additional financing. In computing Debt Service for any prospective Period, RCTC will estimate in good faith such payments on the basis of reasonable assumptions. Such assumptions will include the absence of any waivers of or amendments to any agreements and the absence of any optional or extraordinary mandatory redemption of existing financings.

Debt Service Coverage Ratio – defined specifically in the Financing Documents, which specific provisions control the implementation and setting of tolls and discounts, but generally, for any

Period, the ratio of Cash Available for Debt Service for such Period to Debt Service for such Period.

Discount-Eligible Vehicles - Vehicles with three or more persons (HOV3+) that travel through the designated 3+ Carpool lanes at the Riverside County toll location and vehicles eligible for a 91 Express Lanes Special Access Account, including pure zero-emission vehicles (ZEVs) as certified by the California Air Resources Board, motorcycles, and vehicles with Department of Motor Vehicle issued disabled plates and disabled veteran plates.

Financing Documents – the documents under which RCTC has issued toll revenue bonds or other financings, including financings with TIFIA, payable primarily from toll revenues.

Fiscal Year – July 1 to June 30

Holiday – Any of the following holidays that occur or are recognized any day between Monday through Friday: New Year's Day, Memorial Day, 4th of July, Labor Day, Thanksgiving and Christmas. Other days where traffic volumes differ from the average hourly and daily traffic volumes, due to a recurring holiday, may be added to the holiday schedule.

Hourly and Daily Traffic Volume – the traffic volume for an hour, day, direction and segment of the Express Lane.

Hourly and Daily Traffic Volume Increase Threshold - The Hourly and Daily Traffic Volume Increase Thresholds are used to determine when a Super-peak hour shall receive a toll increase. The threshold amounts are equal to the optimal throughput for each single lane in the facility as determined by analysis of operational conditions at traffic volumes during the first 16 months of operation. The threshold amounts will be reviewed regularly but no less than annually and following a change to the roadway that may impact capacity either favorably or unfavorably. Thresholds for super-peak toll increases may be adjusted based on a review of traffic information.

Hourly and Daily Traffic Volume Decrease Threshold – The Hourly and Daily Traffic Volume Decrease Thresholds are used to determine when a Super-peak hour shall receive a toll decrease. The threshold amounts are equal to the actual traffic volume deemed to be less than the optimal capacity for maximizing volume while maintaining free-flow conditions for each single lane of the facility. The threshold amounts will be reviewed annually and following a change to the roadway that may impact the optimal capacity either favorably or unfavorably. Thresholds for super-peak toll decreases may be adjusted based on a review of traffic information.

Inflation Factor - The CPI Index Adjuster for the region from January to December of the previous calendar year. The Inflation Factor will be applied to all toll rates as of June 30th prior to the start of the new fiscal year, the Non-Super-peak level of service toll schedule, and the Super-peak toll increase and decrease amounts. All tolls will be rounded up or down to the nearest \$.05.

Non-Super Peak – Hourly period that is not Super-peak.

Non-Super Peak Discount – 100% toll discount for Discount-Eligible Vehicles.

Operating and Maintenance Costs – defined specifically in the Financing Documents, but generally, all reasonable and necessary expenses of administering, managing, maintaining and operating the RCTC 91 Express Lanes and in accordance with the operation and maintenance agreements.

Period – Length of time referring to an hour, day, week or month.

Super Peak – Hourly period, per day, and per direction with traffic volume use which meets or exceeds the following volume thresholds:

Segment	Hourly and Daily Traffic Volume Thresholds
EB McKinley	1,300
EB 15 South	1,400
WB McKinley	1,350
WB 15 South	1,400

Super Peak Discount – 50% toll discount for Discount-Eligible Vehicles.

Week – 12:00 a.m. Sunday to 11:59 p.m. the following Saturday.

Exhibit II
Toll Policy Decision Process
Super Peak
Eastbound – McKinley

Monitor Hourly and Daily Traffic Volume for last 12 weeks, excluding Abnormal Traffic Volumes

Flag individual hours when Hourly and Daily Traffic Volume is 1,200 or more per hour. Determine if this occurs six or more times in the 12 week period.

Calculate Average Daily and Hourly Traffic Volume for the 12 week period.

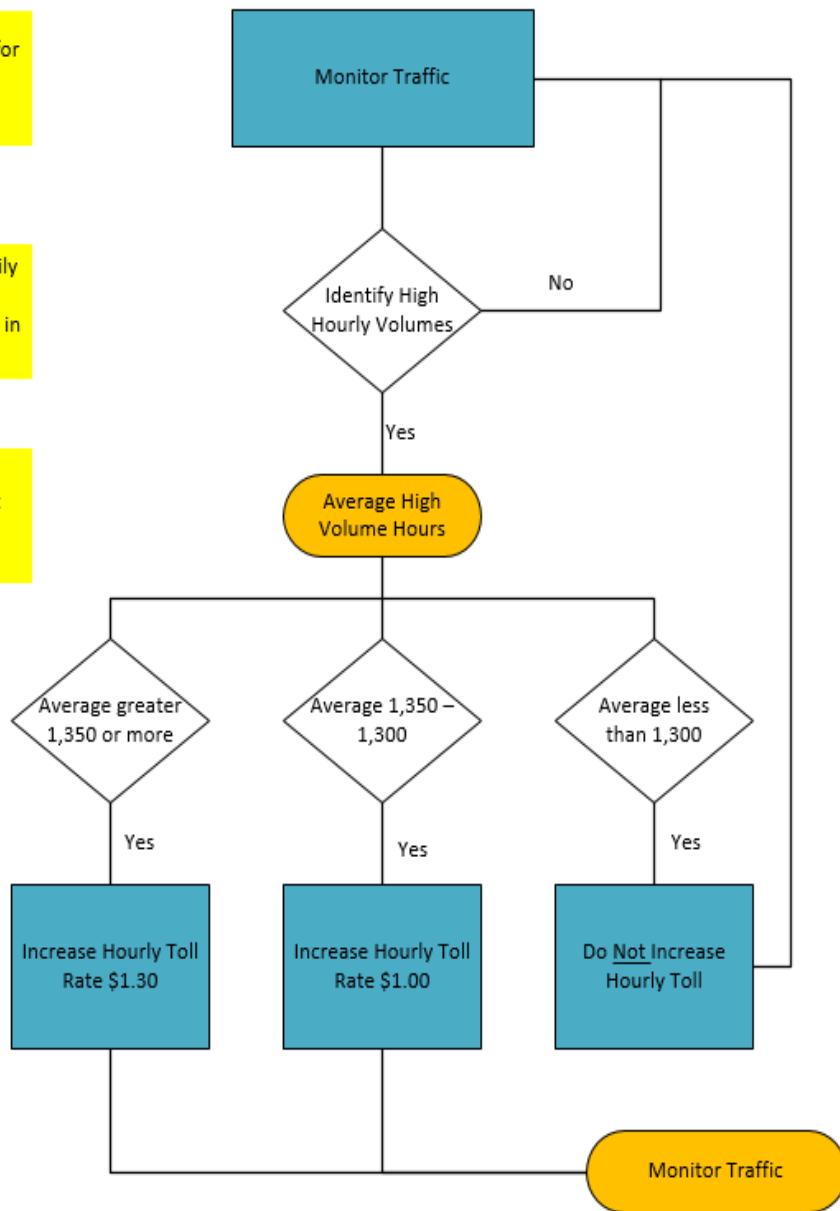


Exhibit III
Toll Policy Decision Process
Super Peak
Eastbound – 15 SB

Monitor Hourly and Daily Traffic Volume for last 12 weeks, excluding Abnormal Traffic Volumes

Flag individual hours when Hourly and Daily Traffic Volume is 1,200 or more per hour. Determine if this occurs six or more times in the 12 week period.

Calculate Average Daily and Hourly Traffic Volume for the 12 week period.

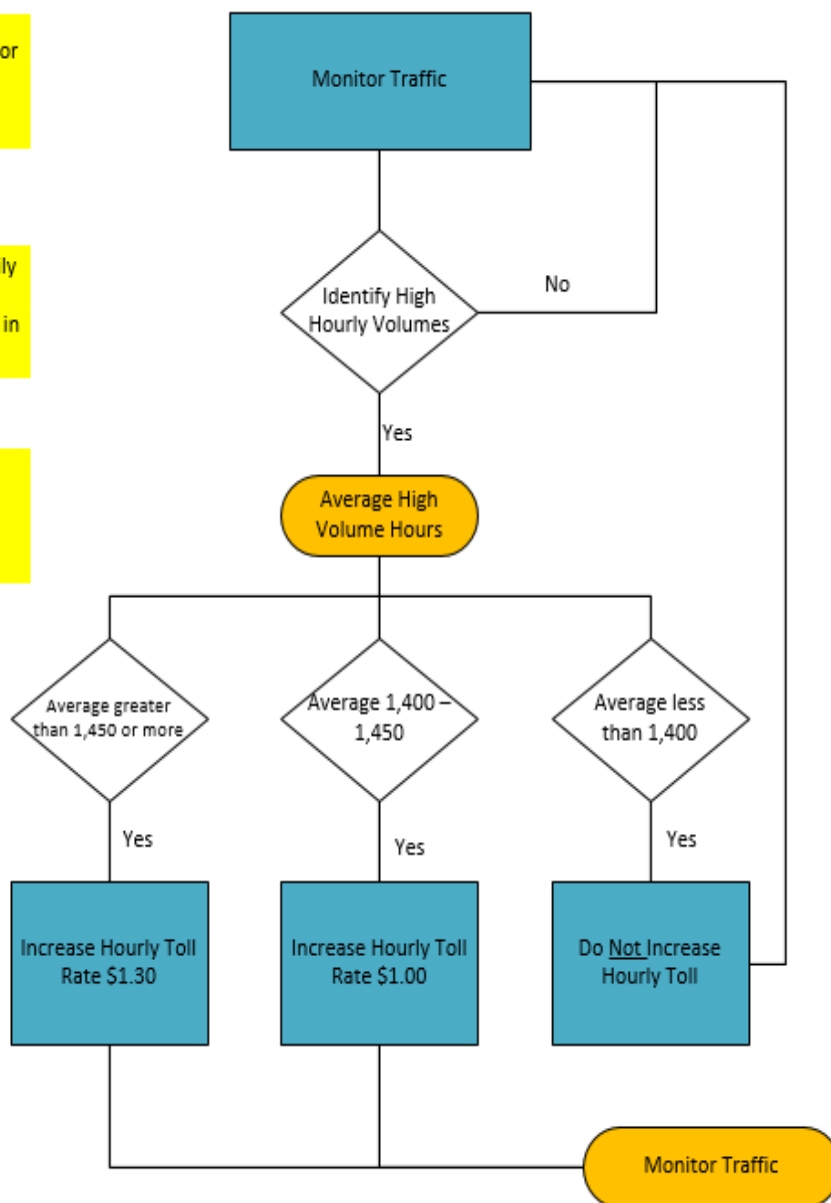


Exhibit IV
Toll Policy Decision Process
Super Peak
Westbound – McKinley

Monitor Hourly and Daily Traffic Volume for last 12 weeks, excluding Abnormal Traffic Volumes

Flag individual hours when Hourly and Daily Traffic Volume is 1,250 or more per hour. Determine if this occurs six or more times in the 12 week period.

Calculate Average Daily and Hourly Traffic Volume for the 12 week period.

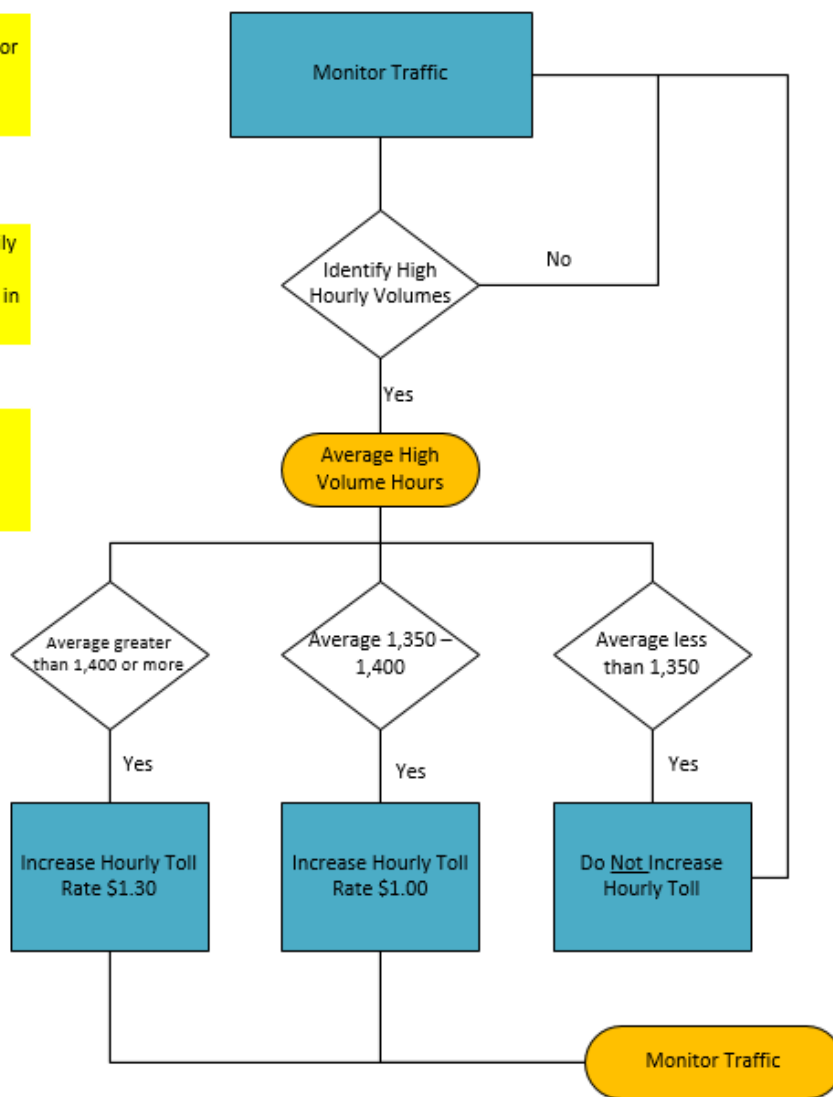


Exhibit V
Toll Policy Decision Process
Super Peak
Westbound – 15 SB

Monitor Hourly and Daily Traffic Volume for last 12 weeks, excluding Abnormal Traffic Volumes

Flag individual hours when Hourly and Daily Traffic Volume is 1,250 or more per hour. Determine if this occurs six or more times in the 12 week period.

Calculate Average Daily and Hourly Traffic Volume for the 12 week period.

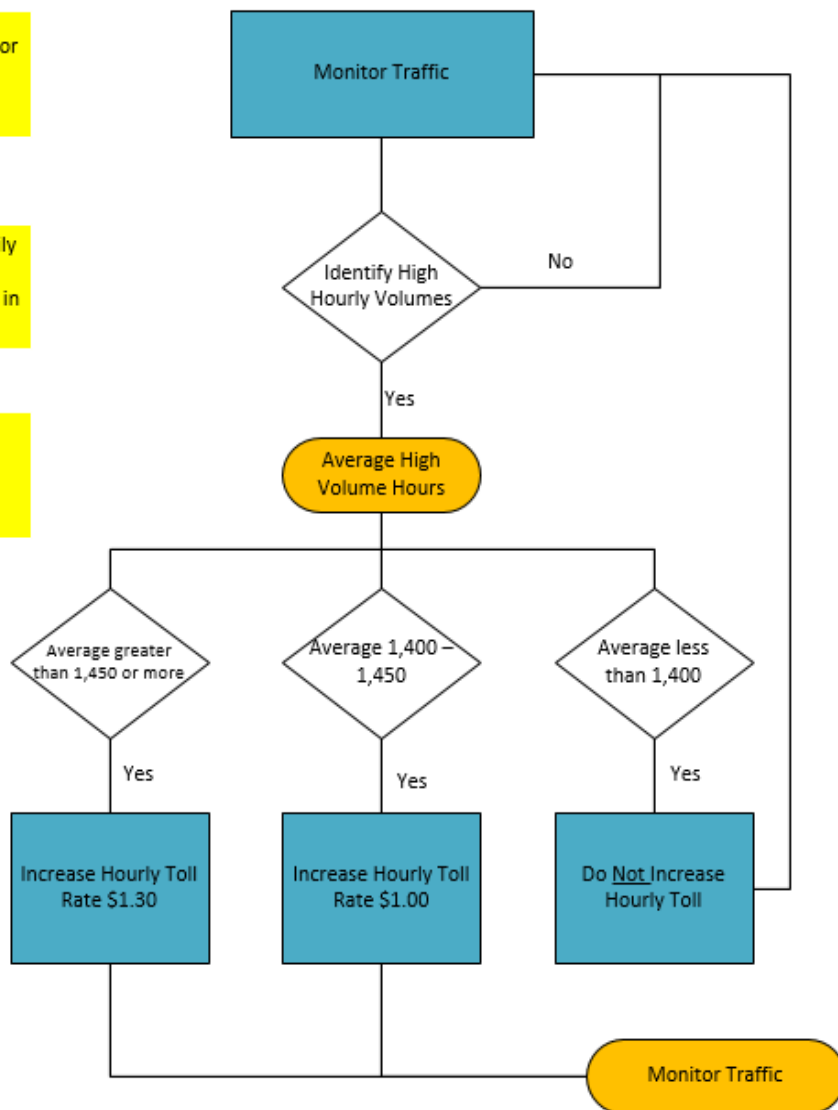


Exhibit VI
Toll Policy Decision Process
Toll Decrease – Eastbound

Monitor Hourly and Daily Traffic Volume for last 12 weeks, excluding Abnormal Traffic Volumes

Flag individual hours when Hourly and Daily Traffic Volume is 1,200 or less per hour. Determine if this occurs six or more times in the 12 week period.

Calculate Average Daily and Hourly Traffic Volume for the 12 week period.

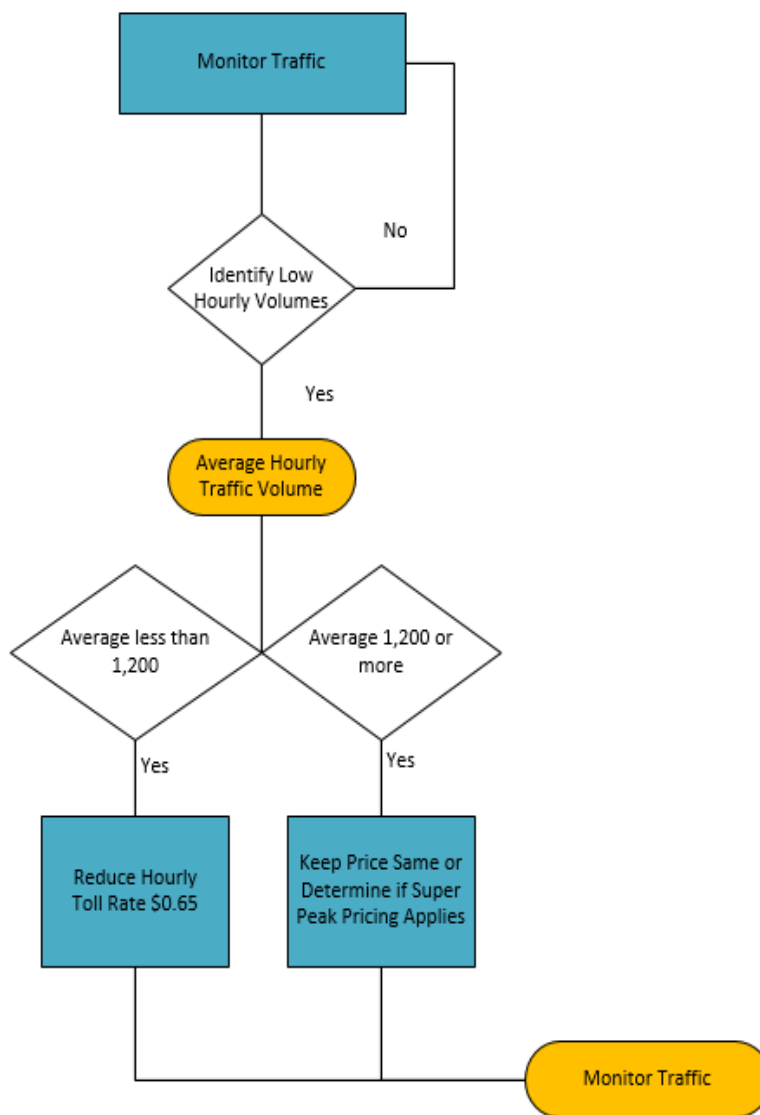


Exhibit VII
Toll Policy Decision Process
Toll Decrease – Westbound

Monitor Hourly and Daily Traffic Volume for last 12 weeks, excluding Abnormal Traffic Volumes

Flag individual hours when Hourly and Daily Traffic Volume is 1,200 or less per hour. Determine if this occurs six or more times in the 12 week period.

Calculate Average Daily and Hourly Traffic Volume for the 12 week period.

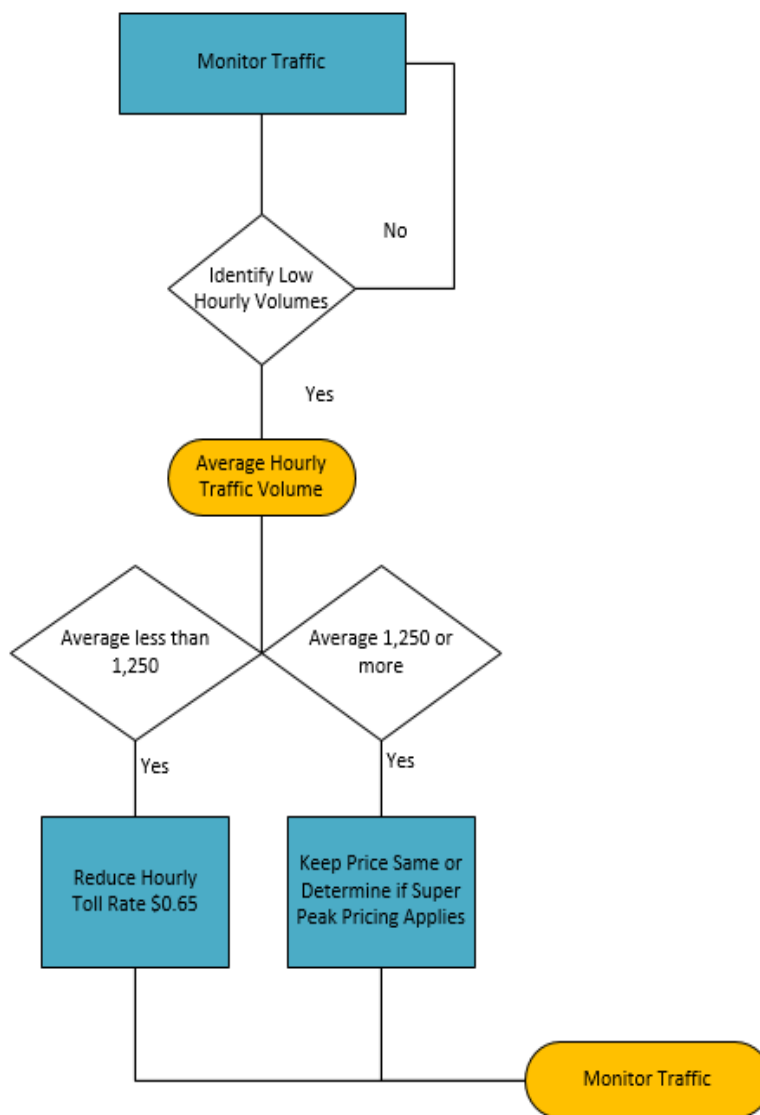


Exhibit VIII **Toll Policy Decision Process** **Non-Super Peak – Eastbound**

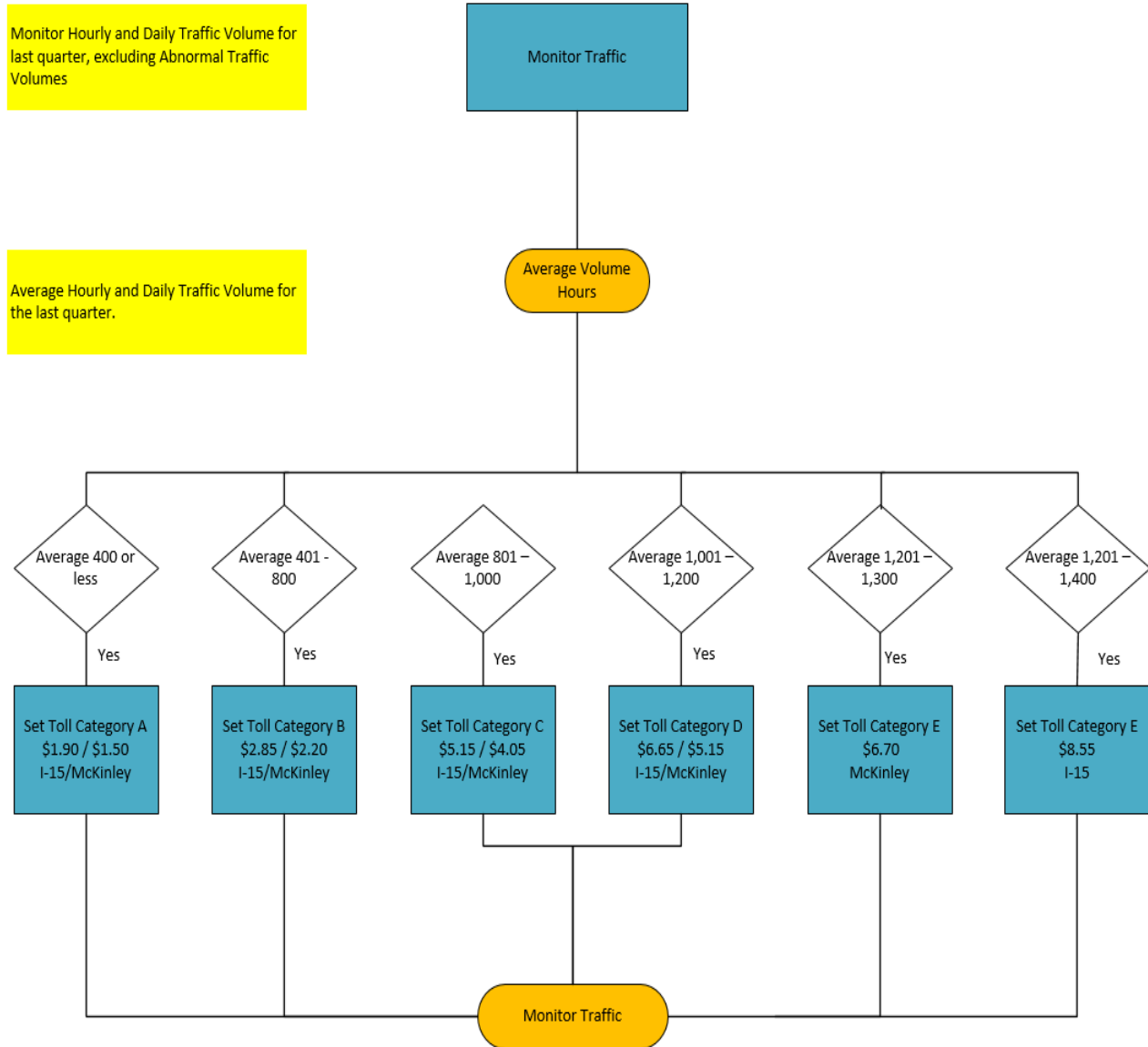


Exhibit IX Toll Policy Decision Process Non-Super Peak – Westbound

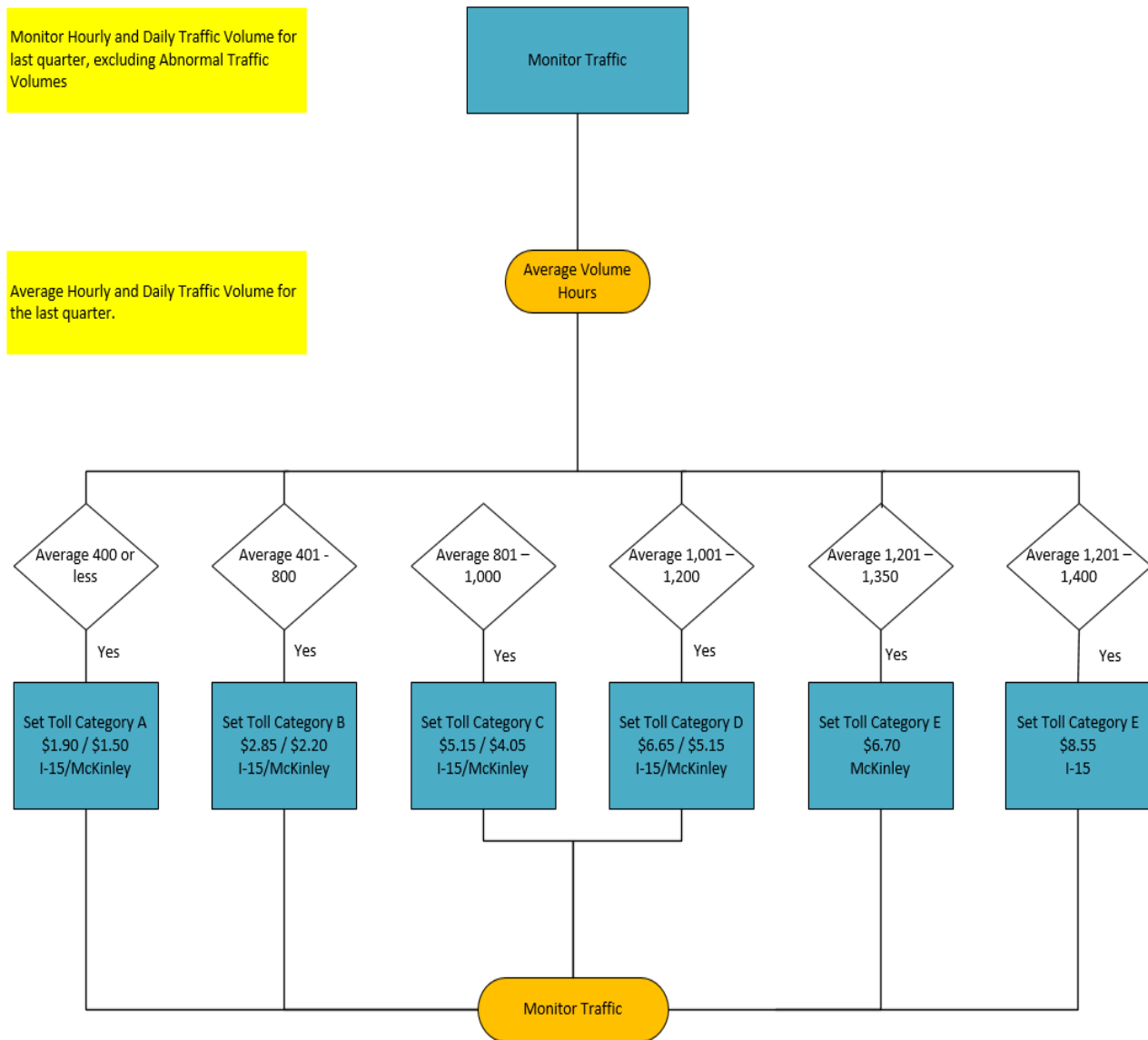


Exhibit X Super Peak Discount Process – Eastbound

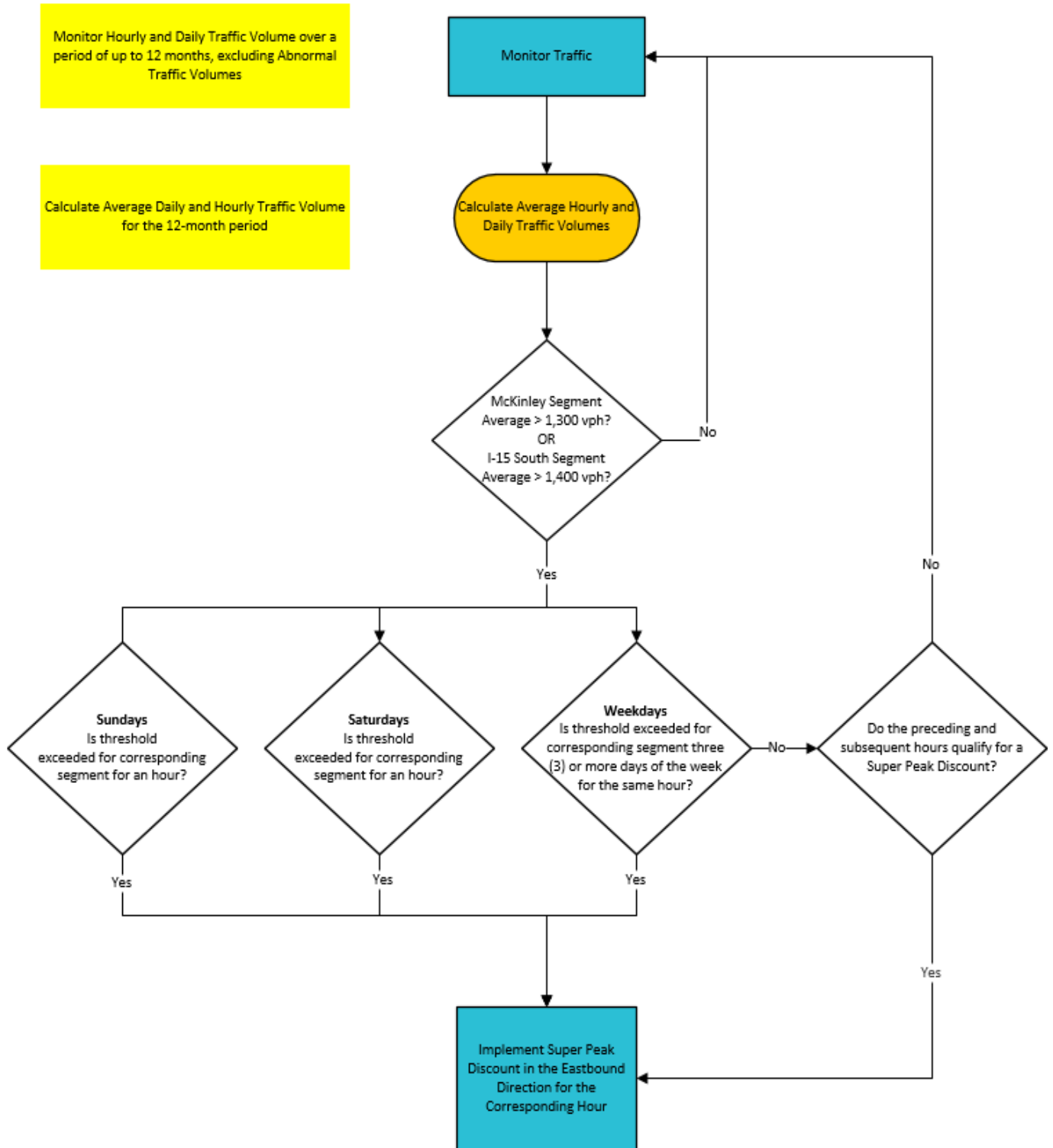


Exhibit XI Super Peak Discount Process – Westbound

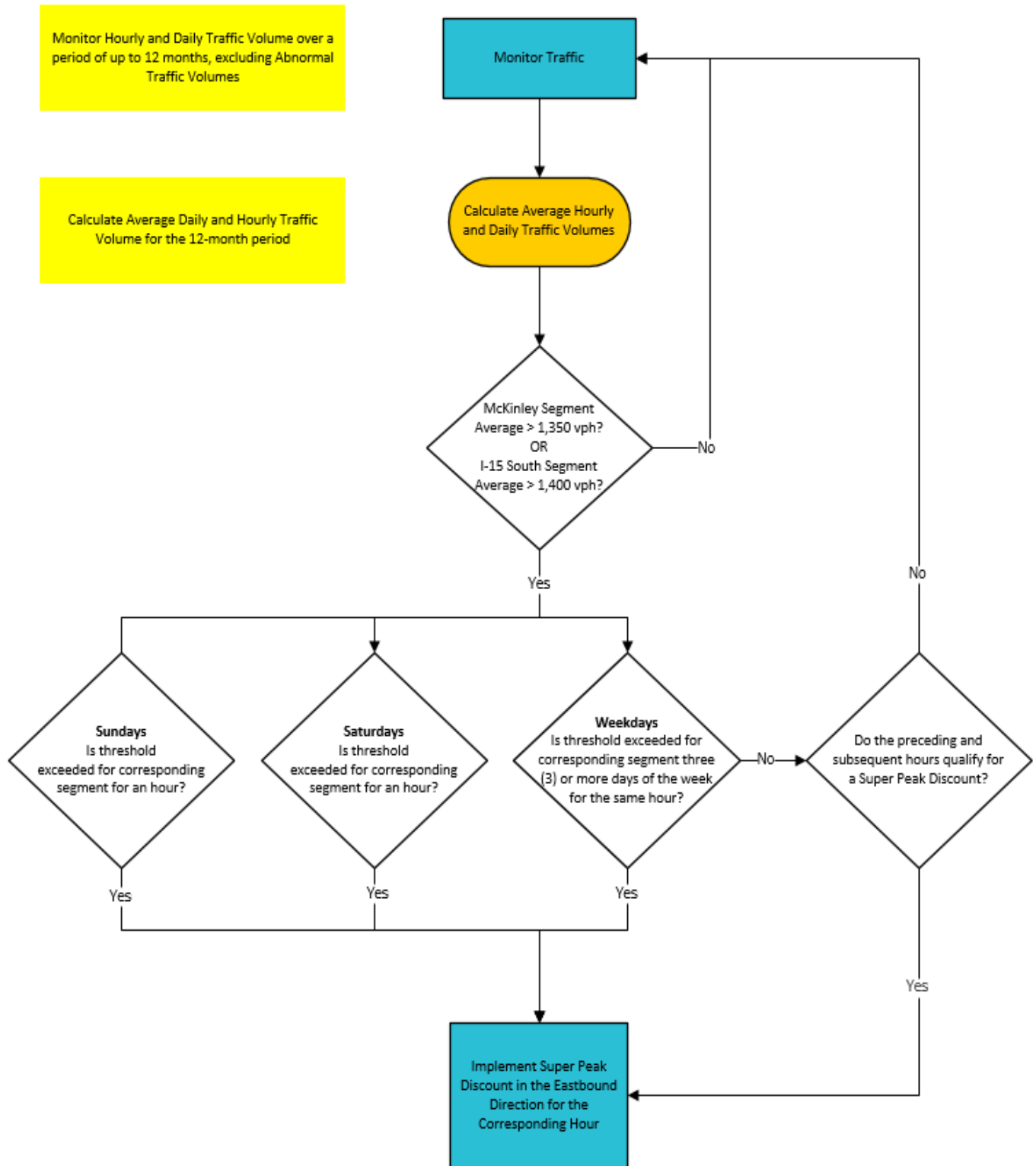
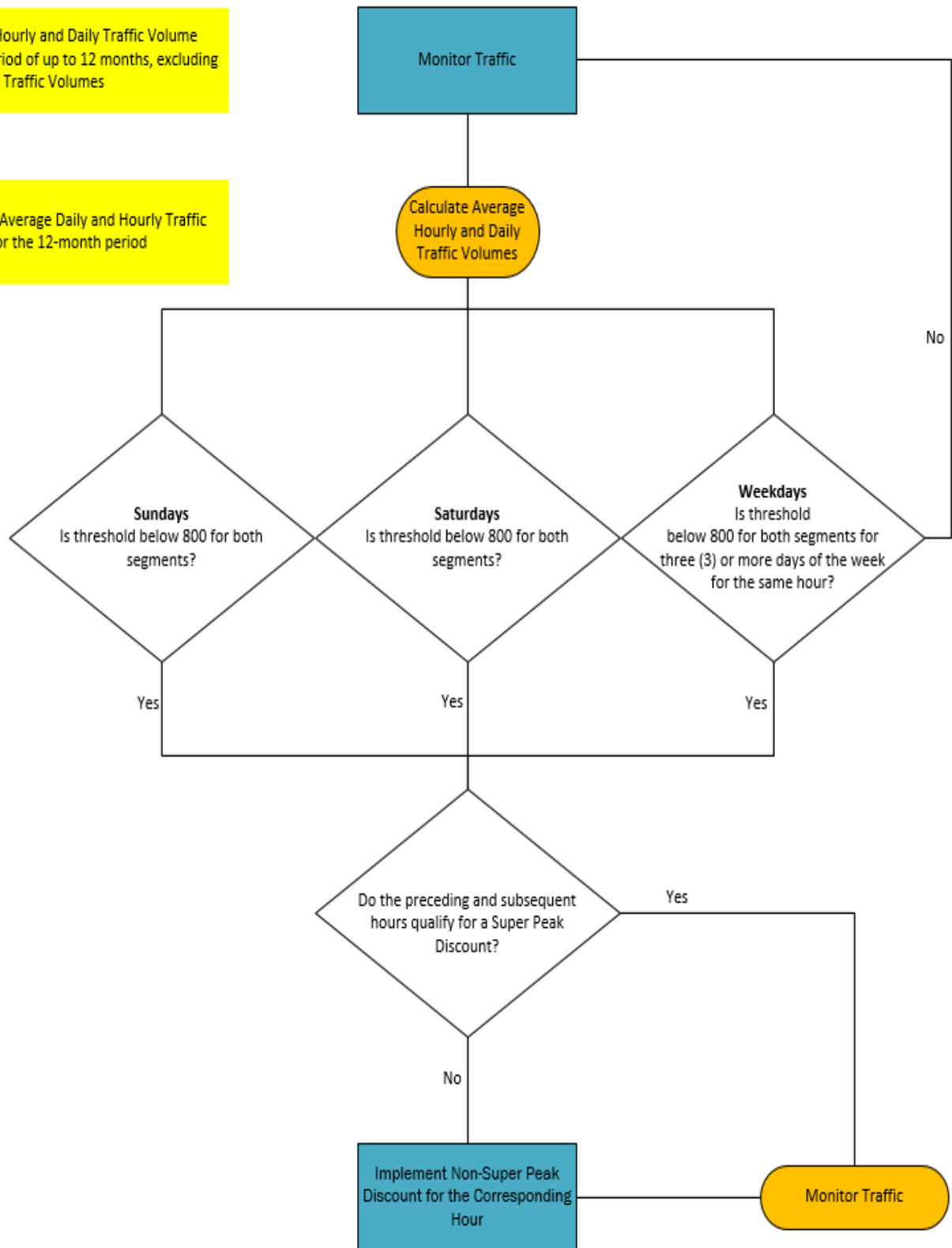


Exhibit XII

Non-Super Peak Discount Process – Eastbound and Westbound

Monitor Hourly and Daily Traffic Volume over a period of up to 12 months, excluding Abnormal Traffic Volumes

Calculate Average Daily and Hourly Traffic Volume for the 12-month period



Appendix B

Final Traffic Volume Report (March 2020)

Note: Traffic volumes in the TOAR supersede the traffic volumes presented in the Traffic Volumes Report. TOAR traffic volumes use updated modes split assumptions on the I-15 mainline to more accurately reflect Existing mode splits and consider the re-routing of traffic due to the inclusion of Community and Environmental Transportation Acceptability Process West (CETAP West) Corridor in the Design Year.

**Interstate 15 (I-15) Express Lanes Project
Southern Extension
Project Approval/Environmental Document
(EA 0J0820)**

Traffic Volumes Report



March 2020

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TOAR Volumes Supersede Traffic Volumes Report Volumes

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Appendix B: Traffic Analysis and Travel Demand Forecasting Assumptions, Methodology, and Approach Memorandum

Appendix C: Peak Period Traffic Volumes

Appendix D: Model Calibration & Model Plots

Appendix E: Response to Comments Matrix

TOAR Volumes Supersede Traffic Volumes Report Volumes

TOAR Volumes Supersede Traffic Volumes Report Volumes

1. Introduction

The California Department of Transportation (Caltrans), in cooperation with the Riverside County Transportation Commission (RCTC), proposes to extend the I-15 Express Lanes currently under construction, an additional 14.5 miles. The proposed new segment would extend from State Route 74 (Central Avenue) in Lake Elsinore, through the unincorporated Riverside County community of Temescal Valley, to Cajalco Road in Corona. The project proposes to increase capacity by adding two tolled express lanes in both directions within the I-15 median to accommodate increasing traffic volumes in western Riverside County. The project limits, which includes the advance signage and transition striping will be from PM 20.3 to PM 38.8, for a total of 18.5 miles.

The project is anticipated to be open by 2027. Once built, the project would improve traffic operations and travel times, enhance mobility by expanding travel choice through carpooling and mass transit, increase travel time reliability, manage long-term traffic congestion, provide a cost-effective mobility solution, and expand and maintain compatibility with the regional express lanes network.

Other project features include widening up to 15 bridges, creating multiple express lane entrance and exit points, as well as building noise barriers, retaining walls, drainage systems, and electronic toll collection equipment and signs.

Fehr & Peers is working with HDR Engineering Inc. to prepare the traffic study in support of the Project Approval and Environmental Document (PA/ED) for I-15 ELPSE. The purpose of the Traffic Volume Report is to summarize the existing traffic volumes and future year traffic forecasts of the study area, which will be used to support development/refinement of the project alternatives.

Study Area

The traffic study area covers approximately 22 miles on I-15, generally between the Main Street Interchange (to the south) and Hidden Valley Interchange (to the north). The Project construction limits are on I-15 between SR-74 (Central Avenue RIV-15 PM 22.3) and Cajalco Road (PM 36.8); however, the study area captures several miles upstream and downstream of the project limits to include the effects of upstream and downstream bottlenecks, as well as interactions with the current State Route 91 (SR-91) interchange connectors and the SR-91 Express Lane direct connectors. **Figure 1** shows both the study area and construction limits of the project.

The study locations consist of roadway segments, I-15 mainline segments and ramp junctions in the study area. The study locations were approved by the Project Development Team (PDT) including RCTC and Caltrans in October 29, 2019 as part of the *Interstate 15 Express Lanes Project Southern Extension PA/ED: Traffic Analysis and Travel Demand Forecasting Assumptions, Methodologies and Approach EA:0J0820/ID 08-18000063 (September 2019)* which has been attached to this document in **Appendix B**.

Freeway Segments Freeway general purpose lanes on I-15 between Franklin Street Overcrossing and Hidden Valley Parkway Interchange, including the freeway-to-freeway connectors at SR-91.

Freeway Ramps The on- and off- ramps (including the freeway-to-freeway connectors) at 13 study interchanges.

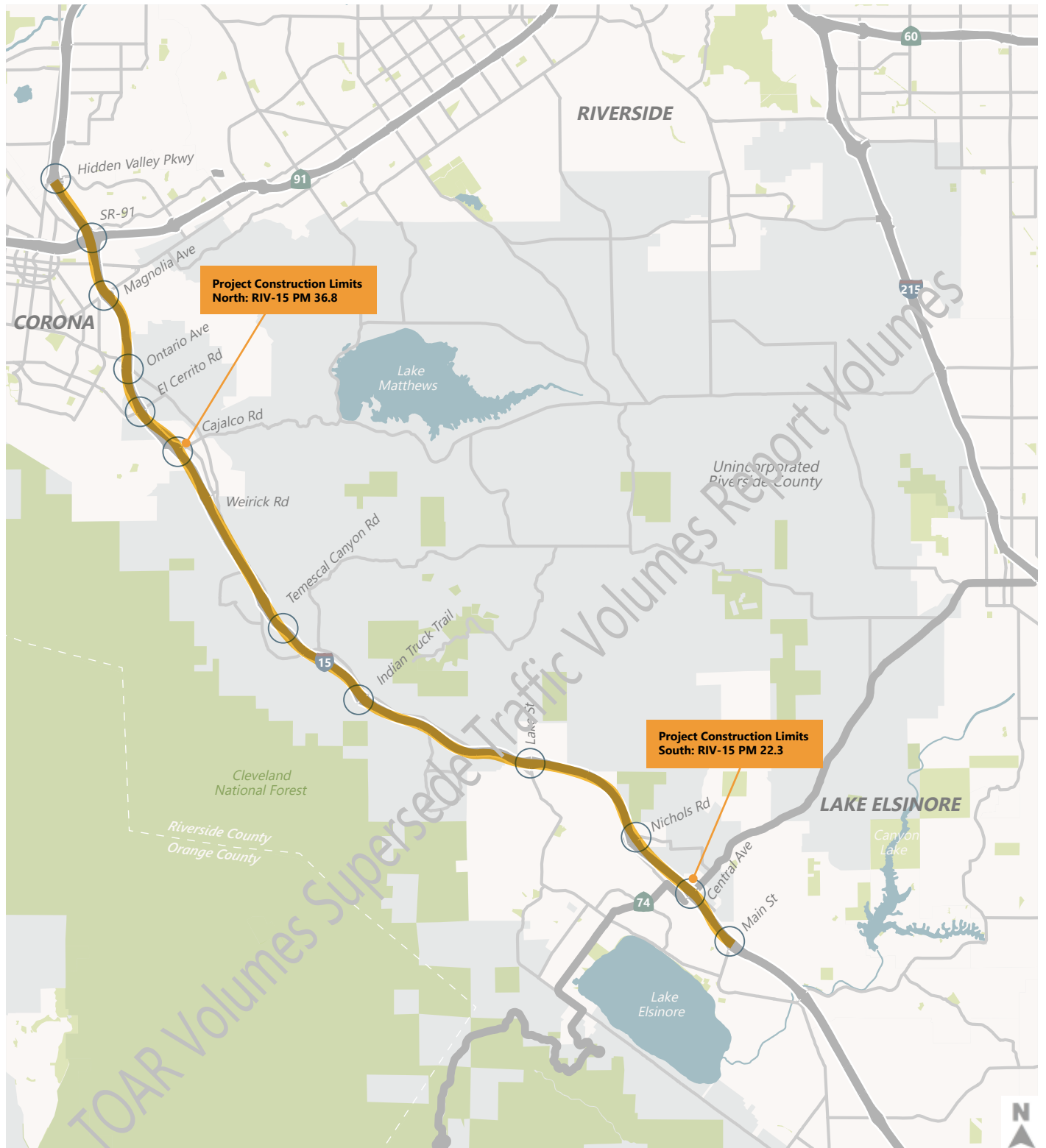


Figure 1

I-15 Express Lanes Construction Limits & Study Area

Analysis Scenarios

This traffic volume report contains the AM and PM peak hour traffic volumes for the above study locations and daily traffic volumes for study roadway segments under the following analysis scenarios:

- Existing (2019) Conditions
- Opening Year (2030) No-Build Alternative
- Opening Year (2030) Build Alternative
- Design Year (2050) No-Build Alternative
- Design Year (2050) Build Alternative

Although the project has an opening year of 2027, an opening year of 2030 was used so that the study periods of the project are in 5-year increments to be consistent with travel demand model forecasting year increments. Additional discussion and detail on opening year study periods is provided in the Forecasting Procedure section in Chapter 3.

The PDT has considered several improvement options along the I-15 corridor and concurred to carry one Build Alternative forward for this PA/ED. This concurrence was approved on October 29, 2019 and documented in the *Interstate 15 Express Lanes Project Southern Extension PA/ED: Traffic Analysis and Travel Demand Forecasting Assumptions, Methodology, and Approach EA:0J0820/ID 08-18000063 (September 2019)*. The project description of the Build Alternative is presented in the following chapter.

Report Outline

The remainder of this report contains the following chapters.

Chapter 2 – Existing (2019) Traffic Volumes

Chapter 3 – Forecasting Methodology

Chapter 4 – Project Alternatives

Chapter 5 – Opening Year (2030) Traffic Forecasts

Chapter 6 – Design Year (2050) Traffic Forecasts

Following this introduction, Chapter 2 presents the existing traffic data collection from different sources and existing traffic volumes at the study locations. Chapter 3 describes the methodology used to develop the traffic forecasts under Opening Year 2030 and Design Year 2050 conditions. Chapter 4 describes the project alternatives including the No-Build and one Build Alternative. Finally, Chapters 5 and 6 presents the Opening Year 2030 and Design Year 2050 traffic forecasts for each of the project alternatives, respectively.

2. Existing (2019) Traffic Volumes

This chapter describes the existing traffic data collection and development of existing traffic demand volumes at the study facilities.

Existing Data Collection

Existing traffic volumes were collected in the fall of 2019 from various sources including traffic counts conducted by Fehr & Peers and Caltrans' Freeway Performance Measurement System (PeMS). Existing travel time data was collected with INRIX, and verified with field travel time surveys.

Traffic Count Collection

Three-day, 72-hour traffic data collection for this project was completed between Tuesday, September 17th and Thursday, September 19th in 2019 using machine counts (tubes), video cameras, and Wavetronix detection. The data was reviewed to verify no major traffic collisions or general anomalies occurred that might have disrupted the traffic counts. Due to ongoing construction, traffic counts were not collected at the following locations:

- Liberty Avenue
- I-15 NB On-Ramp for westbound Cajalco Road

Although these locations were not counted, the volumes presented in this report are unaffected. Counts at Liberty Avenue were to support the noise assessment for the project and the new I-15 NB On-ramp for westbound Cajalco Road was not open to the public.

The classification counts for the mainline freeway were conducted consistent with Caltrans guidelines and were provided as a total, percentage of total in one-hour intervals, and peak hour volumes for the environmental assessment purposes. Per the guidelines, data was collected while schools were in session and during favorable weather conditions.

Roadway Segment Traffic Volumes

Traffic volumes were collected on roadway segments parallel to I-15 to help demonstrate and quantify project benefits to the parallel roadway network and assist with the noise assessment. Three-day, 72-hour traffic counts were conducted at the following 62 roadway segments:

1. Hidden Valley Parkway west of I-15
2. Hidden Valley Parkway east of I-15
3. Parkridge Avenue west of Cresta Road
4. Parkridge Avenue east of Cresta Road
5. Cresta Road south of Parkridge Avenue
6. 6th Street west of El Sobrante
7. 6th Street west of Radio Road
8. Radio Road north of 6th Street
9. El Sobrante between 6th Street and Magnolia Avenue
10. Magnolia Avenue west of I-15

11. Magnolia Avenue east of I-15
12. Ontario Avenue west of I-15
13. Ontario Avenue east of I-15
14. Ontario Avenue north of El Cerrito Avenue
15. El Cerrito Avenue west of I-15
16. El Cerrito Avenue between I-15 and Temescal Canyon Road
17. Bedford Canyon Road south of El Cerrito Avenue
18. Bedford Canyon Road north of Cajalco Road
19. Evelyn Street
20. Frances Street
21. Katy Way
22. Liberty Avenue¹
23. Temescal Canyon Road from El Cerrito Avenue to Cajalco Road
24. Temescal Canyon Road from Cajalco Road to Dos Lagos Drive
25. Temescal Canyon Road from Dos Lagos Drive to Dawson Canyon Road
26. Temescal Canyon Road from Dawson Canyon Road to I-15
27. Temescal Canyon Road from I-15 to Lawson Road
28. Temescal Canyon Road from Lawson Road to Trilogy Parkway
29. Temescal Canyon Road from Trilogy Parkway to Campbell Ranch Road
30. Temescal Canyon Road from Campbell Ranch Road to Indian Truck Trail Road
31. Temescal Canyon Road from Indian Truck Trail Road to Horsethief Road
32. Temescal Canyon Road from Horsethief Road to I-15 Frontage Road
33. Temescal Canyon Road from I-15 Frontage Road to Lake Street
34. Cajalco Road west of I-15
35. Cajalco Road between I-15 and Grand Oaks
36. Cajalco Road from Grand Oaks to Temescal Canyon Road
37. Retreat Parkway west of Knabe Road
38. Weirick Road from I-15 to Knabe Road
39. Weirick Road north of Knabe Road
40. Dos Lagos Drive east of I-15
41. Knabe Road from Weirick Road to White Sage Street
42. Knabe Road from White Sage Street to Hunt Road
43. Campbell Ranch Road from Temescal Canyon Road to Mayhew Canyon Road
44. Campbell Ranch Road from Mayhew Canyon Road to Indian Truck Trail
45. De Palma Road between Indian Truck Trail and Horsethief Canyon Road
46. Horsethief Canyon Road west of De Palma Road
47. Horsethief Canyon Road from De Palma Road to Temescal Canyon Road
48. Lake Street west of Temescal Canyon Road
49. Lake Street east of Temescal Canyon Road
50. Nichols Road west of Collier Road
51. Nichols Road from Collier Road to I-15
52. Nichols Road east of I-15

¹ Due to ongoing construction at Liberty Avenue, counts were not collected since this roadway was not open to traffic.

53. Collier Avenue from Nichols Road and Riverside Drive
54. Collier Avenue from Riverside Drive to Central Avenue
55. Collier Avenue south of Central Avenue
56. Dexter Avenue north of Central Avenue
57. Dexter Avenue south of Central Avenue
58. Central Avenue from Collier to I-15
59. Central Avenue from I-15 to Dexter Avenue
60. Central Avenue from Dexter Avenue to Cambern Avenue
61. Central Avenue east of Cambern Avenue
62. Main Street west of I-15

Freeway Mainline Traffic Volumes

In many cases traffic counts refer to the constrained traffic volumes that get through transportation facilities such as freeways and arterials. In over-saturated conditions, which is the case on I-15, traffic demand is not adequately accommodated by the freeway, and the traffic served is typically referred as constrained volumes or traffic counts. In order to determine the existing traffic *demand* along I-15, the traffic counts were taken at uncongested portions of I-15, confirming that the demand volume would be captured for both directions of I-15.

Southbound and northbound freeway mainline traffic counts and classification counts were collected on I-15 at the southern and northern end of the study area at the following locations:

1. NB & SB I-15 at Franklin Street Overcrossing
2. Northbound (NB) & Southbound (SB) I-15 at Magnolia Drive Overcrossing

Interchange Ramp Traffic Volumes

Interchange ramp volumes were collected in the study area and conservation of flow/balancing was completed with the traffic counts on the on- and off-ramps. Three-day, 72-hour traffic counts were conducted at 13 interchanges on the following ramps:

I-15/Main Street Interchange

1. I-15 NB Off-Ramp to Main Street
2. I-15 NB On-Ramp from Main Street
3. I-15 SB On-Ramp from Main Street
4. I-15 SB Off-Ramp to Main Street

I-15/SR-74 (Central Avenue) Interchange

5. I-15 NB Off-Ramp to Central Avenue
6. I-15 NB On-Ramp from Central Avenue
7. I-15 SB On-Ramp from Central Avenue
8. I-15 SB Off-Ramp to Central Avenue

I-15/Nichols Road Interchange

9. I-15 NB Off-Ramp to Nichols Road

- 10. I-15 NB On-Ramp from Nichols Road
- 11. I-15 SB On-ramp from Nichols Road
- 12. I-15 SB Off-ramp to Nichols Road

I-15/Lake Street Interchange

- 13. I-15 NB Off-Ramp to Lake Street
- 14. I-15 NB On-Ramp from Lake Street
- 15. I-15 SB On-Ramp from Lake Street
- 16. I-15 SB Off-Ramp to Lake Street

I-15/Indian Truck Trail Interchange

- 17. I-15 NB Off-Ramp to Indian Truck Trail
- 18. I-15 NB On-Ramp from Indian Truck Trail
- 19. I-15 SB On-Ramp from Indian Truck Trail
- 20. I-15 SB Off-Ramp to Indian Truck Trail

I-15/Temescal Canyon Road Interchange

- 21. I-15 NB Off-Ramp to Temescal Canyon Road
- 22. I-15 NB On-Ramp from Temescal Canyon Road
- 23. I-15 SB On-Ramp from Temescal Canyon Road
- 24. I-15 SB Off-Ramp to Temescal Canyon Road

I-15/Weirick Road/Dos Lagos Drive Interchange

- 25. I-15 NB Off-Ramp to Weirick Road/Dos Lagos Drive
- 26. I-15 NB On-Ramp from Weirick Road/Dos Lagos Drive
- 27. I-15 SB On-Ramp from Weirick Road/Dos Lagos Drive
- 28. I-15 SB Off-Ramp to Weirick Road/Dos Lagos Drive

I-15/Cajalco Road Interchange

- 29. I-15 NB Off-Ramp to Cajalco Road
- 30. I-15 NB On-Ramp from Westbound Cajalco Road²
- 31. I-15 NB Loop On-Ramp from Eastbound Cajalco Road
- 32. I-15 SB On-Ramp from Cajalco Road
- 33. I-15 SB Off-Ramp to Cajalco Road

I-15/El Cerrito Road Interchange

- 34. I-15 NB Off-Ramp to El Cerrito Road
- 35. I-15 NB On-Ramp from El Cerrito Road
- 36. I-15 SB On-Ramp from El Cerrito Road
- 37. I-15 SB Off-Ramp to El Cerrito Road

I-15/Ontario Avenue Interchange

- 38. I-15 NB Off-Ramp to Ontario Avenue

² Due to ongoing construction at the Cajalco Road Interchange, counts at I-15 NB On-Ramp from Westbound Cajalco Road were not collected since this ramp was not yet constructed or open to traffic.

- 39. I-15 NB On-Ramp from Ontario Avenue
- 40. I-15 SB On-Ramp from Ontario Avenue
- 41. I-15 SB Off-Ramp to Ontario Avenue

I-15/Magnolia Avenue Interchange

- 42. I-15 NB Off-Ramp to Magnolia Avenue
- 43. I-15 NB On-Ramp from Magnolia Avenue
- 44. I-15 SB On-Ramp from Magnolia Avenue
- 45. I-15 SB Off-Ramp to Magnolia Avenue
- 46. I-15 NB Loop On-Ramp from Eastbound Magnolia Avenue

I-15/SR-91 Interchange

- 47. I-15 NB Off-Ramp to WB SR-91
- 48. I-15 NB Off-Ramp to EB SR-91
- 49. I-15 NB On-Ramp from WB SR-91
- 50. I-15 SB Off-Ramp to WB SR-91
- 51. I-15 SB Loop Off-Ramp to EB SR-91
- 52. I-15 SB On-Ramp from WB SR-91
- 53. I-15 SB On-Ramp from EB SR-91
- 54. I-15 NB Express Lane Direct Connector Ramp to WB SR-91
- 55. I-15 SB Express Lane Direct Connector Ramp to EB SR-91

I-15/Hidden Valley Parkway Interchange

- 56. I-15 NB Off-Ramp to Hidden Valley Parkway
- 57. I-15 SB On-Ramp from Hidden Valley Parkway

Caltrans' PeMS Data

Caltrans' PeMS data was used to verify reasonableness in collected traffic counts and to understand the existing throughput at the bottlenecks of the congested portions of I-15. PeMS data used in this study had detector health in good conditions with 100% observation rates to guarantee the data quality and when possible, were collected on the same day that the traffic counts were taken.

INRIX Data

INRIX provides anonymous travel data from processed in-vehicle global positioning system (GPS) devices and some handheld GPS devices. This data can be used to understand speed, bottlenecks, and travel times. INRIX speed data was purchased to supplement the GPS travel time runs obtained in field reconnaissance and were ordered for the same dates the traffic counts were collected. Travel time/speed information was used to identify bottleneck locations and extent of queues on I-15.

Streetlight Data

Streetlight data uses anonymous in-vehicle navigation system data and some cell phone location-based services data (referred to as records) that can be aggregated together (consistent with privacy protection

requirements) to obtain origin/destination information. Streetlight Origin-Destination travel data along the corridor was purchased to validate the travel demand forecasting estimates and the origin-destination estimation.

Existing Traffic Demand Volumes

This section describes how the data collected for this study was used to develop existing traffic demand volumes. Counts were taken for three days but only one day was used to develop the existing demand traffic volumes for calibration purposes. It is best practice to calibrate the VISSIM model to a single day that best represents historical travel patterns. A single day is used to calibrate the model because it represents definite queue lengths where averaged traffic counts may include days with outliers that could skew the data. In order to find the best day to develop existing volumes, INRIX travel speed data was plotted by time and distance to create a speed profile for each of the three-day, 72-hour counts. Each counted day was compared to the historical average speed data³ of the corridor. It was determined that the counts taken on Tuesday and Wednesday, September 17th and 18th, deviated more from the historical average speed data patterns than the data collected on September 19th which was the most consistent with historical data. The September 19th count data was used to develop the existing traffic demand volumes.

The INRIX travel speed data revealed that morning (AM) congestion occurs in the northbound direction from 4:00 AM to 1:00 PM. Evening (PM) congestion occurs in the southbound direction from 1:00 PM to 8:00 PM. At these periods of congestion, bottlenecks exist on the corridor. In order to calibrate the VISSIM model to existing conditions, the simulation period should begin and end when there is no congestion on the corridor. This will provide sufficient time for the model to simulate the development and dissipation of queues during the peak hour. During peak periods of congestion, the ramp traffic counts do not represent true traffic demand volume and are constrained volumes or observed counts. Adjustments to the ramp volumes were made by analyzing the difference between the throughput volume and the demand volume at the controlling bottleneck on the freeway mainline and applying proportional adjustments to ramps affected by the mainline queues that restrict the true traffic demand from entering and exiting the freeway. The speed and length of the bottlenecks were used to calculate density, headway, and number of vehicles in queue to assist with this effort, as shown on **Exhibit 1** and **Exhibit 2**. The demand volume includes the vehicles that are in queue on the congested portions on the freeway.

³ INRIX historical average speed data is taken from the previous 6 months prior to the last map update. The data purchased for this project had a map update in October 2019, therefore the historical data range is from April 2019 to September 2019.

Exhibit 1: September 19th I-15 Northbound Congested Speed Profile

Cal-NExUS Exit Number	92	92	91	91	90	90	90	88	88	88	88	85	85	85	85	85	85	85
04:00:00	73	71	72	73	75	75	75	75	75	75	76	75	76	77	76	76	76	76
04:15:00	71	67	66	67	70	72	74	73	74	74	75	75	75	76	76	76	76	75
04:30:00	67	64	63	64	70	71	73	72	73	73	74	73	73	74	74	75	75	75
04:45:00	67	63	60	58	63	67	71	71	71	71	72	71	72	73	73	75	75	74
05:00:00	68	64	63	62	66	67	69	70	71	71	72	71	71	73	73	74	74	73
05:15:00	65	61	58	55	56	61	64	65	65	65	68	68	69	71	71	73	73	72
05:30:00	63	59	55	47	43	48	52	48	42	45	49	62	64	69	70	73	72	73
05:45:00	62	58	56	39	30	32	39	38	34	32	38	52	62	71	71	72	71	72
06:00:00	61	56	52	35	30	30	31	32	29	31	30	36	49	66	71	73	71	72
06:15:00	61	57	52	38	29	28	29	30	27	36	42	41	41	43	44	53	66	70
06:30:00	61	57	52	34	27	23	25	27	28	24	30	33	36	36	37	49	40	53
06:45:00	62	58	52	38	28	23	24	25	24	19	25	29	35	30	25	32	35	49
07:00:00	60	56	52	28	24	20	22	24	23	17	21	21	24	26	23	34	62	71
07:15:00	59	57	54	37	29	22	23	21	18	14	20	22	22	23	24	48	73	76
07:30:00	60	57	52	27	24	18	20	23	22	21	24	23	24	25	47	73	76	76
07:45:00	55	45	47	24	20	15	16	18	17	17	25	31	48	62	70	75	75	75
08:00:00	56	51	47	30	22	16	16	16	15	14	19	24	30	70	76	76	75	76
08:15:00	61	55	50	33	26	20	22	21	19	16	21	22	24	33	52	73	75	75
08:30:00	61	57	51	34	20	12	16	18	21	21	26	31	32	32	43	70	75	76
08:45:00	61	58	54	42	31	24	23	17	15	12	15	18	19	54	71	75	76	76
09:00:00	60	56	48	30	25	20	23	27	28	32	39	36	31	30	44	70	75	76
09:15:00	61	57	50	32	26	18	18	21	20	21	29	51	65	70	72	72	73	73
09:30:00	62	57	47	33	28	22	22	21	20	18	34	61	69	72	74	73	74	73
09:45:00	62	58	48	32	26	22	24	25	26	28	61	68	71	72	73	73	73	72
10:00:00	58	54	50	35	27	24	24	24	22	32	63	69	72	71	72	72	75	73
10:15:00	59	55	52	38	30	26	31	31	31	48	65	70	71	71	72	71	73	72
10:30:00	62	58	52	29	26	25	32	32	30	45	64	68	69	70	72	72	73	71
10:45:00	61	57	47	28	24	22	24	26	26	39	65	69	70	71	72	72	73	73
11:00:00	62	57	40	22	20	18	20	23	24	44	65	71	71	72	73	72	74	73
11:15:00	60	57	48	30	23	17	18	20	19	30	64	70	71	71	72	72	74	74
11:30:00	60	56	48	32	24	21	28	29	28	30	63	68	69	70	71	70	72	72
11:45:00	60	54	47	34	31	26	28	29	36	65	71	73	72	72	74	74	75	75
12:00:00	60	55	50	37	31	30	45	59	69	72	70	71	71	72	74	73	74	73
12:15:00	61	57	56	48	50	60	67	68	70	70	67	68	68	69	71	71	74	74
12:30:00	63	60	57	55	61	69	72	72	73	74	72	73	73	74	75	75	74	75
12:45:00	65	63	61	63	66	69	70	70	72	73	71	72	72	74	74	73	73	73

Notes:

1. California numbered Exit Uniform System (Cal-NExUS) exit number locations are provided on Figure 2. The locations on the speed profile exhibit are segments noted by the next available exit.

Fehr & Peers, 2019

Exhibit 2: September 19th I-15 Southbound Congested Speed Profile

Cal-NExUS Exit Number	97	97	96A	96B	96B	96B	95	95	95	93	93	92	92	91	91	90	90	90
11:00:00	67	63	63	63	63	61	64	63	62	65	64	63	64	63	66	67	69	69
13:00:00	67	61	60	64	64	64	66	65	64	60	48	49	54	58	63	64	67	67
13:15:00	66	59	59	65	64	62	65	64	65	64	58	57	57	57	64	67	69	69
13:30:00	63	52	56	62	63	62	63	64	61	38	29	41	50	55	63	65	68	68
13:45:00	59	39	56	61	62	62	65	62	46	22	23	38	54	59	63	65	68	69
14:00:00	62	42	55	61	63	62	65	60	31	18	24	44	58	61	65	66	68	65
14:15:00	64	51	55	61	64	62	65	59	34	18	25	42	57	60	63	66	68	67
14:30:00	63	56	55	63	63	61	60	49	19	16	23	41	54	56	62	65	67	66
14:45:00	65	61	60	63	59	53	23	20	17	17	22	39	53	58	63	65	67	65
15:00:00	67	62	62	64	58	53	22	20	18	17	20	41	56	62	63	65	67	67
15:15:00	65	59	58	62	59	57	21	16	16	16	21	38	50	57	59	63	66	66
15:30:00	66	61	60	63	58	51	18	15	14	15	20	32	39	47	58	61	63	63
15:45:00	66	62	63	63	55	49	16	15	14	14	18	29	32	41	50	54	58	60
16:00:00	66	61	59	64	60	57	20	13	12	13	14	22	23	26	49	60	64	65
16:15:00	66	62	59	64	57	55	15	11	12	11	14	22	24	34	54	63	65	65
16:30:00	66	62	64	66	60	55	16	11	10	11	15	22	24	30	46	59	64	65
16:45:00	66	60	58	60	56	47	12	10	11	10	14	21	25	30	41	58	64	64
17:00:00	66	63	64	64	56	41	11	11	11	10	14	21	24	30	45	60	64	64
17:15:00	66	61	62	62	53	43	12	10	11	12	16	25	27	30	50	54	54	58
17:30:00	66	62	61	62	58	51	17	12	10	11	14	24	25	32	47	54	57	60
17:45:00	67	61	55	61	60	57	21	12	12	12	15	22	23	29	43	52	55	60
18:00:00	67	62	62	66	62	60	20	12	11	11	15	24	26	30	47	59	64	65
18:15:00	67	61	60	64	61	58	24	14	14	14	19	32	37	41	54	62	64	63
18:30:00	67	62	60	64	62	61	45	19	16	16	21	40	56	57	54	59	61	62
18:45:00	67	64	62	67	64	62	64	53	22	17	20	39	51	47	55	60	64	65
19:00:00	68	64	61	65	65	62	64	59	33	18	22	43	55	60	62	65	67	67
19:15:00	67	64	63	65	65	62	64	62	57	28	24	43	57	62	64	66	69	69
19:30:00	64	63	61	65	64	60	64	62	60	40	29	44	57	61	63	64	67	67
19:45:00	69	66	64	68	67	64	67	65	65	64	60	61	62	64	65	66	68	68

Notes:

- California numbered Exit Uniform System (Cal-NExUS) exit number locations are provided on Figure 2. The locations on the speed profile exhibit are segments noted by the next available exit.

Fehr & Peers, 2019

Using conservation of flow, counts taken at uncongested segments of the freeway mainline were used to calculate the traffic demand volume and were balanced using the adjusted on- and off- ramp demand volumes. After finalizing the demand volumes, the AM Peak hour was determined to be from 7:00 AM to 8:00 AM and the PM peak hour from 3:00 PM to 4:00 PM. The traffic demand volume for the entirety of the peak periods (which will be used in the multi-hour micro-simulation assessment) are included in **Appendix C**, while this chapter will report the peak hour demand volumes.

Classification Counts

Truck classification counts were taken on I-15 north of the Magnolia Avenue Interchange. At this count location, the highest combined northbound and southbound traffic demand is being served and would be representative of the vehicle flow mix on the corridor. Additionally, this is consistent with our approved methodologies and assumptions memorandum identified count location. Mainline counts were collected using Wavetronix detection which identifies motor vehicle classification by length. The following lengths were assumed for the following classes of vehicles:

- Passenger Cars: 0-30 feet
- Small Trucks: 30-50 feet
- Large Trucks and Buses: 50-80 feet & up

Table 1 summarizes the classification count percentages for the combined northbound and southbound traffic volumes during the AM and PM peak period. The VISSIM model will simulate truck percentage by hour. Collected counts reveal that at various times in the AM and PM peak periods, the percentage of trucks is higher than the 2018 Caltrans reported AADT total truck percentage of roughly 7% in the study corridor.

TABLE 1: I-15 MAINLINE CLASSIFICATION PERCENT NORTH OF MAGNOLIA

Time of Day	Passenger Cars	Small Truck %	Large Truck %	All Trucks %
04:00	86%	4%	10%	14%
05:00	87%	5%	8%	13%
06:00	89%	5%	6%	11%
07:00	91%	5%	4%	9%
08:00	90%	5%	5%	10%
09:00	88%	5%	7%	12%
10:00	85%	7%	8%	15%
11:00	84%	8%	8%	16%
12:00	86%	7%	7%	14%
13:00	87%	7%	6%	13%
14:00	89%	6%	5%	11%
15:00	90%	6%	4%	10%
16:00	92%	5%	3%	8%
17:00	91%	5%	4%	9%
18:00	95%	2%	3%	5%
19:00	95%	2%	3%	5%

Fehr & Peers, 2019

Roadway Segment Average Daily Traffic (ADT)

Table 2 shows the existing (2019) ADT volumes for the 62 study roadway segments.

TABLE 2: EXISTING 2019 ROADWAY SEGMENT ADT

ID	Roadway	Segment	Existing (2019) ADT
1	Hidden Valley Road	West of I-15	29,970
2	Hidden Valley Road	East of I-15	40,040
3	Parkridge Avenue	West of Cresta Road	15,730
4	Parkridge Avenue	East of Cresta Road	8,240
5	Cresta Road	South of Parkridge Avenue	9,680
6	Sixth Street	West of El Sobrante Road	25,840
7	Sixth Street	West of Radio Road	24,770
8	Radio Road	North of Sixth	7,520
9	El Sobrante Road	Between Sixth and Magnolia	9,350
10	Magnolia Avenue	West of I-15	49,460
11	Magnolia Avenue	East of I-15	39,530
12	Ontario Avenue	West of I-15	46,020
13	Ontario Avenue	East of I-15	27,360
14	Ontario Avenue	North of El Cerrito Road	22,590
15	El Cerrito Road	West of I-15	22,240
16	El Cerrito Road	Between I-15 and Temescal Canyon Road	8,920
17	Bedford Canyon Road	South of El Cerrito Road	9,220
18	Bedford Canyon Road	North of El Cerrito Road	7,420
19	Evelyn Street	-	430
20	Frances Street	-	160
21	Katy Street	-	520
22	Liberty Avenue ¹	-	0
23	Temescal Canyon Road	Between El Cerrito Avenue to Cajalco Road	19,900
24	Temescal Canyon Road	Between Cajalco Road to Dos Lagos Drive	20,420
25	Temescal Canyon Road	Between Dos Lagos Drive to Dawson Canyon Road	12,480
26	Temescal Canyon Road	Between Dawson Canyon Road to I-15	13,520
27	Temescal Canyon Road	Between I-15 to Lawson Road	17,710
28	Temescal Canyon Road	Between Lawson Road to Trilogy Parkway	16,950
29	Temescal Canyon Road	Between Trilogy Parkway to Campbell Ranch Road	10,190
30	Temescal Canyon Road	Between Campbell Ranch Road to Indian Truck Trail Road	3,990
31	Temescal Canyon Road	Between Indian Truck Trail Road to Horsethief Road	4,150
32	Temescal Canyon Road	Between Horsethief Road to I-15 Frontage Road	4,620
33	Temescal Canyon Road	Between Concordia Ranch Road to Lake Street	6,340

34	Cajalco Road	West of I-15	17,990
35	Cajalco Road	Between I-15 and Grand Oaks	24,120
36	Cajalco Road	Between Grand Oaks to Temescal Canyon Road	18,150
37	Retreat Parkway	West of Knabe Road	3,550
38	Weirick Road	Between I-15 to Knabe Road	19,350
39	Weirick Road	North of Knabe Road	610
40	Dos Lagos Drive	East of I-15	23,990
41	Knabe Road	Between Weirick Road to White Sage Street	14,660
42	Knabe Road	Between White Sage Street to Hunt Road	5,720
43	Campbell Ranch Road	Between Temescal Canyon Road to Mayhew Canyon Road	4,150
44	Campbell Ranch Road	Between Mayhew Canyon Road to Indian Truck Trail	7,530
45	De Palma Road	Between Indian Truck Trail and Horsethief Canyon Road	8,090
46	Horsethief Canyon Road	West of De Palma Road	10,010
47	Horsethief Canyon Road	Between De Palma Road to Temescal Canyon Road	3,870
48	Lake Street	West of Temescal Canyon Road	20,130
49	Lake Street	East of Temescal Canyon Road	18,540
50	Nichols Road	West of Collier Road	8,750
51	Nichols Road	Between Collier Road to I-15	12,410
52	Nichols Road	East of I-15	4,310
53	Collier Avenue	Between Nichols Road and Riverside Drive	5,620
54	Collier Avenue	Between Riverside Drive to Central Avenue	28,830
55	Collier Avenue	South of Central Avenue	11,850
56	Dexter Avenue	North of Central Avenue	9,380
57	Dexter Avenue	South of Central Avenue	7,870
58	Central Avenue	Between Collier Avenue to I-15	41,820
59	Central Avenue	Between I-15 to Dexter Avenue	54,590
60	Central Avenue	Between Dexter Avenue to Cambern Avenue	43,150
61	Central Avenue	East of Cambern Avenue	44,030
62	Main Street	West of I-15	15,420

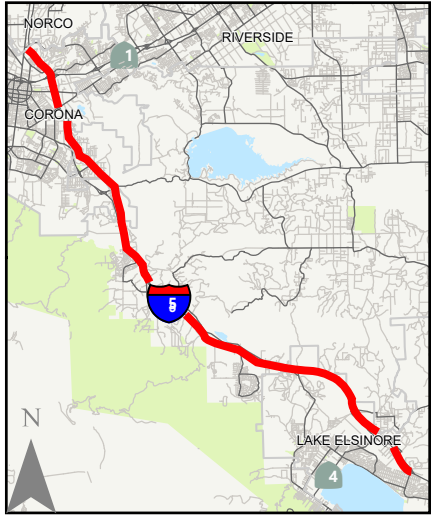
Notes:

1. Due to ongoing construction, traffic counts at Liberty Avenue were not collected.

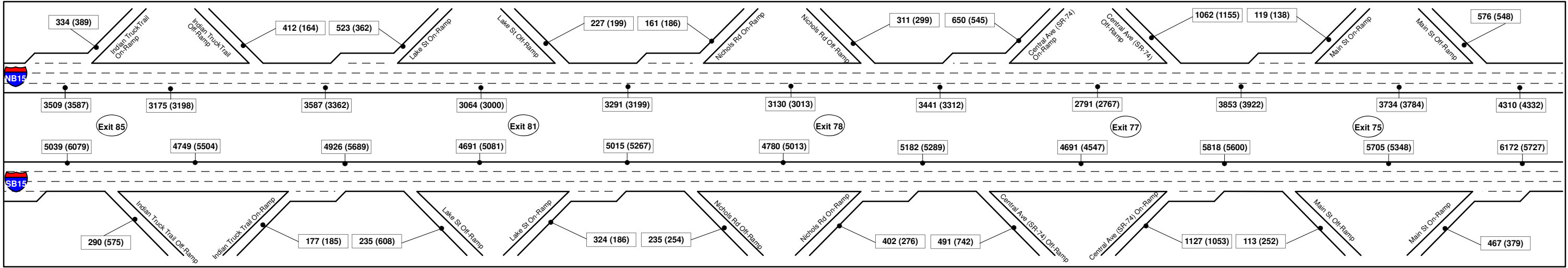
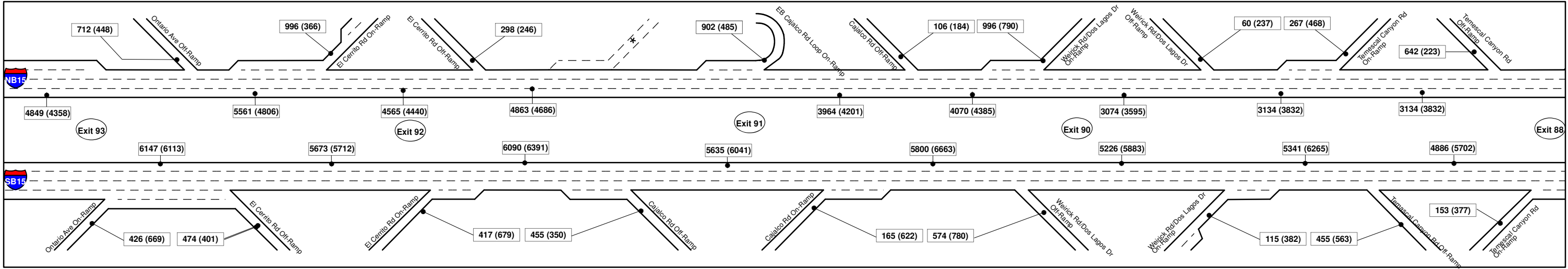
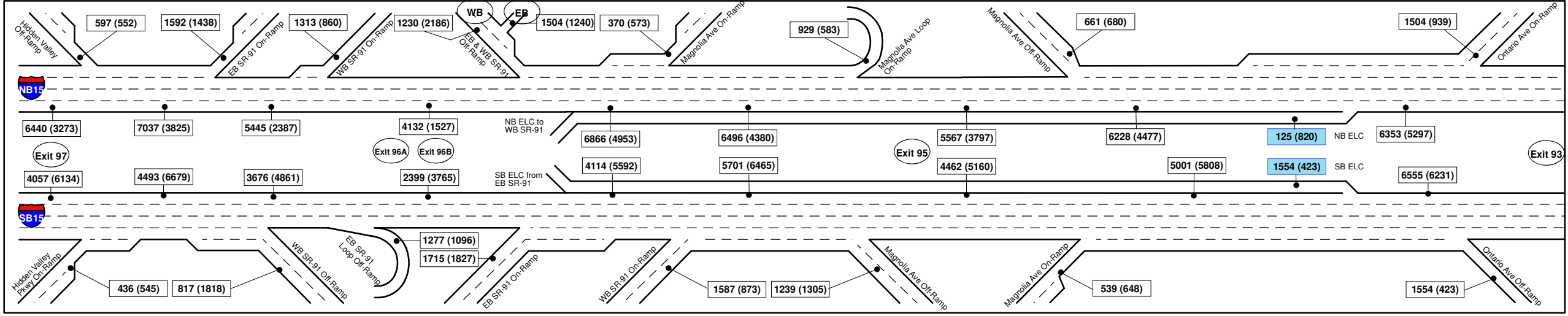
Source: Fehr & Peer, 2020

Freeway & Ramp Demand Volumes

Figure 2 shows the existing (2019) peak hour demand volumes for freeway mainline segments and ramps.



Vicinity Map



* Cajalco Road Northbound On-Ramp was under construction when counts were collected.
Traffic demand volumes represent true demand and considers vehicles in queue during oversaturated conditions.

Legend

AM Volume (PM Volume) - XX (XX)
SR-91 Express Lane Connector - ELC
Mainline Volume -
Express Lane Volume -



Figure 2

I-15 Freeway Lane Configurations Peak Hour and Daily Traffic Demand Volumes - Existing Conditions 2019

3. Forecasting Methodology

This chapter describes the methodologies used to develop travel demand forecasts for this project. The methodology was reviewed and approved by Caltrans and RCTC as part of the *Interstate 15 Express Lanes Project Southern Extension PA/ED: Traffic Analysis and Travel Demand Forecasting Assumptions, Methodology, and Approach EA:0J0820/ID 08-18000063* prepared by Fehr & Peers in September 2019. The approved memorandum is included in **Appendix B**.

RIVTAM Model

The Riverside County Transportation Analysis Model (RIVTAM) TransCAD model was used to develop the traffic forecasts for this project. RIVTAM was considered the most appropriate tool because it includes detailed roadway and land use information for local conditions of the study area and Riverside County.

Although RIVTAM had a 2008 base year, Western Riverside Council of Governments (WRCOG) updated it as part of the TUMF fee program update to reflect the SCAG 2016 financially constrained Regional Transportation Plan (RTP), adopted in April 2016 and Amendment 1 adopted in April 2017, for both the land use data and for the roadway network data. The project completion date identified in the RTP Amendment 1 was used to determine if the project will be included as future roadway improvements when developing the Opening Year (2030) and Design Year (2050) traffic forecasts.

Although the original RIVTAM model had a 2008 Base Year and a 2035 Future Year, since the network and land use data has been updated to reflect SCAG's 2016 data, for purposes of this study, the model generally represents an actual 2012 Base Year and 2040 Future Year.

The 2040 RIVTAM model was then used to develop model scenarios for both the No-Build and Build Alternative to forecast the Design Year (2050) traffic volumes. In addition, another set of models were developed to estimate traffic forecasts for the Opening Year (2030) conditions, under which the projects with completion dates beyond Year 2030 were removed from the models to reflect the 2030 opening year conditions.

Per the SCAG Model User Guide (2008), the relative gap (assignment convergence criteria) applied to the model is 0.01 and is the standard of practice when using RIVTAM (Appendix C: Page 156, SCAG Model User Guide). Because the convergence criteria of 0.01 is applied model wide, the study area should also represent a convergence criteria of 0.01 – this is especially true when using the RIVTAM model; as it is already a subarea model tiered from the SCAG model. Since RIVTAM provides greater detail in Riverside County (and aggregates areas outside of Riverside County), the assignment of traffic is heavily influenced by Riverside County assumptions (whereas the SCAG model is more heavily influenced by Los Angeles County).

Base Year Sub Area Model Calibration

Fehr & Peers used the collected traffic counts and Caltrans PeMS data to complete a sub-area model calibration for the study area. The sub-area model calibration followed the validation requirements set forth by the Federal Highways Administration (FHWA) and the model validation guidance produced by the California Transportation Commission (CTC) in the *2017 California Regional Transportation Plan Guidelines* (January 2017).

The RIVTAM model used for the analysis had a base year 2012. When initially compared to the 2019 counts, the model was producing an overall low traffic volume on I-15. In order to reflect existing condition counts, socioeconomic data (SED) in traffic analysis zones (TAZs) within a five-mile radius from the sub-area were evaluated for number of households, employment, and population. These categories were updated to reflect 2016 Southern California Association of Governments SED data obtained from the ongoing WRCOG Riverside Countywide Model update (RIVCOM). **Table 3** shows that the TAZ population and households within a five-mile radius from the sub area grew by 5%, while the employment grew by 17%. By updating the SED in the subarea, the base year model generated traffic volumes reflective of existing counts as discussed in the model calibration section.

TABLE 3: SED GROWTH BETWEEN RIVTAM SED & 2016 SCAG SED UPDATE

RIVTAM Base Year 2012			SCAG 2016 Data			Growth		
Pop	HH	Emp	Pop	HH	Emp	Pop	HH	Emp
391,199	112,262	113,853	411,192	117,500	133,245	19,993	5,238	19,392
Percent Growth						5%	5%	17%

Notes:

1. POP = Population
2. HH = House Holds
3. EMP = Employment

Fehr & Peers, 2020

The network in the sub-area was updated to reflect existing roadway network conditions. On major roadways and parallel facilities such as Ontario Avenue, Magnolia Avenue, Cajalco Road, Temescal Canyon Road, Central Avenue (SR-74), and I-215, the number of lanes, facility type, and posted speeds were evaluated and modified to produce travel patterns that were representative of existing daily volumes on I-15 mainline. The following major projects, were added to represent existing conditions:

- SR-91 Express Lanes Project – Although the model has limited sensitivity to pricing, the SR-91 Express Lanes ingress points, egress points, and direct connector ramps with I-15 were coded in the network. This project is an east-west travel enhancement between I-15 and the Orange County Line.
- Foothill Parkway Extension Project – Foothill Parkway is a major roadway connection that serves vehicles traveling between Green River Drive and I-15 at El Cerrito Road. This connection serves as an alternate north-south route to a portion of I-15.

Model Calibration

Before any model can be applied for use in a major corridor application like the I-15 ELPSE application, it must first satisfy specific validation criteria identified by Caltrans, the Federal Highways Administration (FHWA), and the California Transportation Commission (CTC). These criteria were developed to confirm that a model is developed such that it can accurately forecast existing conditions based on land use and roadway network information, which improves the model's ability to accurately forecast future conditions. Valid base-year models present state-of-the-practice for the starting point for developing defensible forecasts for changes in the roadway network and/or changes in proposed land use.

The first step of any model validation is to validate that the model generally produces similar results to existing counts.

Key metrics for model validation are described below:

- The volume-to-count ratio is computed by dividing the volume assigned by the model and the actual traffic count for individual roadways (or intersections) model-wide. The volume-to-count ratio should be less than 10%.
- The deviation is the difference between the model volume and the actual count divided by the actual count. Caltrans provides guidance on the maximum allowable deviation by facility type (e.g. lower-volume roadways can have a higher deviation than higher-volume roadways). 75% of the study facilities must be within the maximum allowable deviation.
- The correlation coefficient estimates the correlation between the actual traffic counts and the estimated traffic volumes from the model. The correlation coefficient should be greater than 0.88.
- The percent Root Mean Square Error (RMSE) is the square root of the model volume minus the actual count squared divided by the number of counts. It is a measure similar to standard deviation in that it assesses the accuracy of the entire model. The RMSE should be less than 40%.

The model validation statistics are summarized in **Table 4**. As shown in **Table 4**, the model meets or exceeds the identified model validation statistics in the study area. As such, the model is deemed appropriate for use in this assessment.

TABLE 4: I-15 ELPSE DAILY MODEL VALIDATION RESULTS

Metric	Model Validation	Maximum Allowable Deviation
Model/Count Ratio	0.95	between 0.90 and 1.10
Percent Within Caltrans Maximum Deviation	97%	> 75%
Percent Root Mean Square Error	10%	< 40%
Correlation Coefficient	0.95	> 0.88
% of Screenlines Within Caltrans Maximum Deviation	100%	100%

Fehr & Peers, 2019

The validation sheet, showing the model validation by facility type, is presented in **Appendix D**.

Future Year Traffic Forecasting

Forecasting Procedure

Traffic forecasts for study locations were developed using the difference methodology. This approach is consistent with methodologies delineated in the *National Cooperative Highway Research Program Report (NCHRP) 765* published by the Transportation Research Board (TRB): Analytical Travel Forecasting Approaches for Project Level Planning and Design (Transportation Research Board, 2014) and is considered state of the practice for adjusting raw model forecasts for use in traffic operations assessment. The difference methodology uses the Base Year and Future Year model outputs to calculate the annual growth at study facilities. This growth will be added to the existing (2019) traffic counts and develop the Opening Year (2030) and Design Year (2050) traffic forecasts for Build and No-Build Alternatives. Conservation of flow was applied to all forecasted volumes to ensure volumes are balanced along the study corridors.

Fehr & Peers completed a preliminary review of RIVTAM's sensitivity to pricing and determined that it is generally not sensitive to changes in pricing along this corridor (for example, a ten times (10x) increase in per mile pricing had minimal effect on express lane use). As such, the forecasting procedure for plus project conditions is described below:

- Added two additional freeway lanes in each direction as general-purpose lanes but with a reduced capacity (20% less) to reflect dynamic pricing to manage flow in the express lanes.
- Reviewed Origin-Destination (OD) matrices for users of the corridor and compare them to the Streetlight OD big data obtained as part of this effort.
- Isolated OD pairs that have a travel distance along the I-15 corridor of greater than 6-miles (assumes that trips less than six miles will not use the express lanes).
- Initially capped OD pairs at 20% (per OD pair) max participation in the express lanes; however, this under-estimated the existing use of the I-15 to SR-91 Express Lane direct connectors by

approximately 50%; indicating that the 20% cap is an under-estimate. This was consequently increased to 30% to reflect observed data at the express lane connectors.

- Capped express lane use at 1,750 vehicles per lane per hour based on FHWA “rule of thumb” throughput for various configurations of managed lanes, review of RCTC existing toll transactions, and RCTC’s toll policy to maintain speed in the express lanes. The cap of 1,750 vehicles per lane per hour is a reasonable throughput that is likely to be observed on the current and future express lane facilities. Additional discussion on capacity for the express lanes is documented in the methodologies and assumptions memorandum.
- Any OD demand that cannot be accommodated in the express lanes were reallocated to the general-purpose lanes.

Forecasting Procedure

The following models were developed to forecast future traffic:

- Base Year 2019 – RIVTAM Base Year 2012 model was calibrated to 2019 counts with updates to the roadway network and SED that reflect existing travel patterns.
- Opening Year 2030 No-Build – RIVTAM Future Year 2040 model with 2040 SED and updates to the roadway network with regional transportation projects to be completed by 2030.
- Opening Year 2030 Plus Project – RIVTAM Future Year 2040 model with 2040 SED and updates to the roadway network with regional transportation projects to be completed by 2030 and plus project conditions.
- Future Year 2050 No-Build – RIVTAM Future Year 2040 model with 2040 SED and updates to the roadway network with regional transportation projects to be completed by 2040.
- Future Year 2050 Plus Project – RIVTAM Future Year 2040 model with 2040 SED and updates to the roadway network with regional transportation projects to be completed by 2040 and plus project conditions.

The 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) improvement list was reviewed for interstate and state route improvements to consider in the future. Key transportation improvements are listed below:

1. **RTP ID RIV071267:** I-15 Express Lanes from county line to Cajalco Road (Post Mile (PM) 51.40 to PM 36.80, opening in late 2020 – currently under construction)
2. **RTP ID RIV011233:** Widen Limonite Avenue from four to six lanes. Between Eastvale Gateway and 475' east of Pats Ranch Road, reconstruct/widen northbound and southbound exit ramps from three to four lanes. Replace northbound and southbound entry ramps with entry loop ramps from two to three lanes. Entry ramps include HOV by-pass lane, ramps include extended acceleration/deceleration lanes and extended right turn lanes (opened late 2019 – landscaping remains under construction)
3. **RTP ID 3A01WT159:** Replace two-lane bridge on Hamner Avenue over Santa Ana River (5 Miles North of Sixth Street) with a six-lane Bridge (2030)

4. **RTP ID 3M04WT005:** Reconstruct interchange ramps and channelization improvements at I-15 and Sixth Street between Hamner Avenue and Sierra Avenue (PM 45.10 to 46.10, 2030)
5. **RTP ID 3M0733:** At I-15 on Second Street between Hamner Avenue & Valley View Avenue reconstruct/widen interchange from two to four lanes and widen ramps (PM 43.13 to 44.13, 2025)
6. **RTP ID 3M04WT007:** At I-15 on Hidden Valley Parkway between Hamner Avenue & beyond northbound exit-ramp, reconstruct interchange/ramps/channelization improvements (PM 42.37 to 43.37, 2025)
7. **RTP ID RIV010208:** At I-15/Cajalco Road interchange near Corona, design, reconstruct/realign & widen Cajalco Road from two to six through lanes from Temescal Canyon Road to Bedford Canyon Road. Reconstruct/widen southbound entry from one to two lanes, northbound exit from two to four lanes, and add aux lanes (opened in late 2019, landscaping remains under construction)
8. **RTP ID 3A04WT137A-3A04WT138:** Widen Cajalco Road from two to four through lanes in each direction from Temescal Canyon Road to Harvill Avenue and from four to six lanes from Harvill Avenue to I-215 including turn pockets and a bridge reconstruction over a water crossing (2025)
9. **RTP ID 3C01MA01:** CETAP West- Provide new East-West transportation corridor between I-15 to the west, I-215 to the East, South of Lake Mathews to the north, and SR74 to the South (2040)
10. **RTP ID 3M0728:** At I-15 on Temescal Canyon reconstruct/widen Temescal Canyon Interchange from two to four lanes and reconstruct ramps (PM 32.60 to PM 33.60, 2030)
11. **RTP ID 3A04WT198B:** Widen Temescal Canyon from Indian Truck Trail to 0.22 miles west of Lake Street (2035)
12. **RTP ID 3A04WT161, RTP ID 3M0729:** Widen Horsethief Canyon Rd from Temescal Canyon Road to I-15 from 2 to 4 lanes and reconstruct ramps (PM 28.36 to 29.36, 2030)
13. **RTP ID 3M0737:** Reconstruct/widen I-15 interchange at Lake Street from two to six lanes between Walker Canyon Road and Temescal Canyon Road and reconstruct/widen ramps (2022)
14. **RTP ID 3M0736:** Reconstruct/widen I-15 interchange at Nichols Road from 2 to 6 lanes between the ramps and reconstruct/widen ramps (PM 23.35 to PM 24.35, 2025)
15. **RTP ID 3A04WT191:** Widen SR-74 from I-15 to Ethanac Road (2035)
RTP ID 3A01WT151: Construct a four-lane arterial (Ethanac Road) from SR-74 to Keystone Drive (2030)

- 16. RTP ID 3A04A17, RTP ID RIV060109⁴:** Construct northbound hook on- and off- ramps at Dexter Avenue. Close existing northbound on ramp from SR-74 (Central Avenue) and construct a northbound loop off-ramp to westbound SR-74 (Central Avenue).
- 17. RTP ID 3A04A16:** Construct new connecting four-lane arterial overcrossing at I-15 and Second Street between Chaney Avenue and Camino Del Norte (2028)
- 18. RTP ID 3160004:** Main Street/I-15 Interchange improvements. Widening of NB Main Street under the freeway from one to two lanes. Add an additional lane to the northbound entrance and exit ramps, widen southbound off-ramp to accommodate one right-turn lane, one left-turn lane, and one shared through-left-turn lane at the Main Street intersection. Install ramp meters & traffic signals at ramp terminal intersections and Camino Del Norte/Main Street Intersection (2028)
- 19. RTP ID 3160002:** Construct 2 HOV lanes on I-15 between Junction I-15/I-215 to SR-74 Central Avenue (PM 22.30 to PM 8.70, 2039)
- 20. RTP ID RIV010206:** At I-15/ Railroad Canyon Road Interchange, widen northbound entrance ramp from two to three lanes, widen southbound entrance ramp from one to three lanes, widen ramp acceleration and deceleration lanes at Railroad Canyon Road (Phase I). Construct new I-15 Franklin Street Interchange, and add auxiliary lanes from Franklin Street Interchange to Main Street Interchange and from Franklin Street Interchange to Railroad Canyon Interchange. Realign/widen Main Street southbound on-ramp from one to two lanes and construct Frontage Road on west and east of I-15 (PM 18.52 to PM 20.96, 2027)
- 21. RTP ID 3M0734:** Construct new four-lane overcrossing over I-15 at Malaga Road between Casino Drive and Lakeview Terrace and Grape Street (2028)
- 22. RTP ID 3M0735:** Construct new four lane interchange and ramps for I-15 at Olive Street between Orchard Street and Grape Street (PM 17.01 to PM 18.01, 2018-not constructed)
- 23. RTP ID 3A01WT134:** Widen Bundy Canyon Road from Mission Trail to I-15 from two to four lanes (2025)
- 24. RTP ID 3M0727:** Reconstruct/Widen Bundy Canyon Road Interchange from two to four lanes and reconstruct ramps (PM 15.8 to PM 16.8, 2025)
- 25. RTP ID 3A01WT133:** Widen Bundy Canyon Road between I-15 to Murrieta Road from two to four lanes (2020)
- 26. RTP ID 3A04WT126:** Widen Baxter Road from I-15 to Central Street from two to four lanes (2025)
- 27. RTP ID 3M0730:** Construct new northbound loop on-ramp and realign existing northbound off-ramp at I-15 and Murrieta Hot Springs Road (2019)

⁴ Based on discussions with the City of Lake Elsinore and project team, the RTP description is outdated. The project description has been updated to reflect the future improvements to the existing interchange.

- 28. RTP ID RIV031215:** French Valley Pkwy Interchange Arterial Phases- (Phase 2) Construct two-lane northbound CD north of Winchester On-ramp to just north of Route I-15/I-215 Junction with connectors to I-15 and I-215. (Phase 3) Construct six-lane overcrossing (Jefferson to Ynez) & ramps, northbound/southbound auxiliary lane, CD lanes (1 northbound and 3 southbound). Modify Winchester Road interchange (PM 8.43 to PM 9.75, 2028)
- 29. RTP ID 3M0721:** At I-15 on Rancho California, reconfigure interchange from four to six lanes and modify ramps. Type of lanes for arterial widening will be with through lanes (PM 4.48 to PM 5.48, 2035)

Another key transportation improvement from the SCAG Federal Transportation Improvement Program (FTIP) assumed to be completed in the future network is listed below:

- **FTIP ID: RIV180102:** Widen Ontario Avenue from five to seven lanes **(2021)**.

Although the project has an opening year of 2027, an opening year of 2030 was used so that the study periods of the project are in 5-year increments to be consistent with travel demand model forecasting year increments. Projects opened between 2027 and 2030 would not result in significant differences in volumes as it relates to I-15 where 2027 volumes would be higher than the 2030 volumes. This conclusion is described in greater detail below:

Most projects with an opening year between 2027 and 2030 are outside of the study area and would have little effect on the future travel demand of I-15. These projects are listed below:

- **RTP ID 3A01WT159:** In Western Riverside County in the City of Norco - On Hamner Avenue over Santa Ana River 0.5 miles north of Sixth Street, replace 2 lane bridge with a 6 lane bridge (bridge no.56c0446).
- **RTP ID 3M04WT005:** I-15 improvements from 6th Street to between Hamner Avenue and Sierra Avenue – Reconstruct interchange ramps/channelization improvements.
- **RTP ID RIV031215:** French Valley Pkwy from Jefferson St to Ynez Rd – Construct 2 lane CD (north of Winchester interchange on-ramps to just north of route I-15/215 junction with connectors to I-15 and I-215 (I-215 pm: 8.43 to 9.75); and construct 6 lane overcrossing (Jefferson to Ynez) & ramps, northbound/southbound auxiliary lane, CD lanes (1 lane northbound & 3 lanes southbound) and modify Winchester Rd Interchange

The following projects were considered under the 2030 Opening Year and would also not be constructed by 2027.

- **RTP ID 3A01WT151:** Construct a four-lane arterial (Ethanac Road) from SR-74 to Keystone Drive (2030)

- **RTP ID 3A04WT161, RTP ID 3M0729:** Widen Horsethief Canyon Rd from Temescal Canyon Road to I-15 from 2 to 4 lanes and reconstruct ramps (PM 28.36 to 29.36, 2030)
- **RTP ID 3160004:** Main Street/I-15 Interchange improvements. Widening of NB Main Street under the freeway from one to two lanes. Add an additional lane to the northbound entrance and exit ramps, widen southbound off-ramp to accommodate one right-turn lane, one left-turn lane, and one shared through-left-turn lane at the Main Street intersection. Install ramp meters & traffic signals at ramp terminal intersections and Camino Del Norte/Main Street Intersection (2028)
- **RTP ID 3M0728:** At I-15 on Temescal Canyon reconstruct/widen Temescal Canyon Interchange from two to four lanes and reconstruct ramps (PM 32.60 to PM 33.60, 2030)

All projects considered in the 2030 Opening Year provide additional access to I-15. Although the listed projects would not exist in 2027 conditions, assuming their completion in the analysis year is a conservative approach because additional access to I-15 would increase travel demand to and from the freeway. As a result, the forecasted 2030 volumes would be higher than a forecasted 2027 volume set and would represent a worst-case-scenario.

4. Project Alternatives

The two project alternatives including the No-Build Alternative are described below.

Alternative 1: No-Build Alternative

Alternative 1, the No-Build Alternative, consists of the existing lane configurations for the I-15 study corridor. Under the No-Build Alternative, only projects listed in Chapter 3 will be assumed I-15 improvements. No other improvements would be made to I-15 within the project limits.

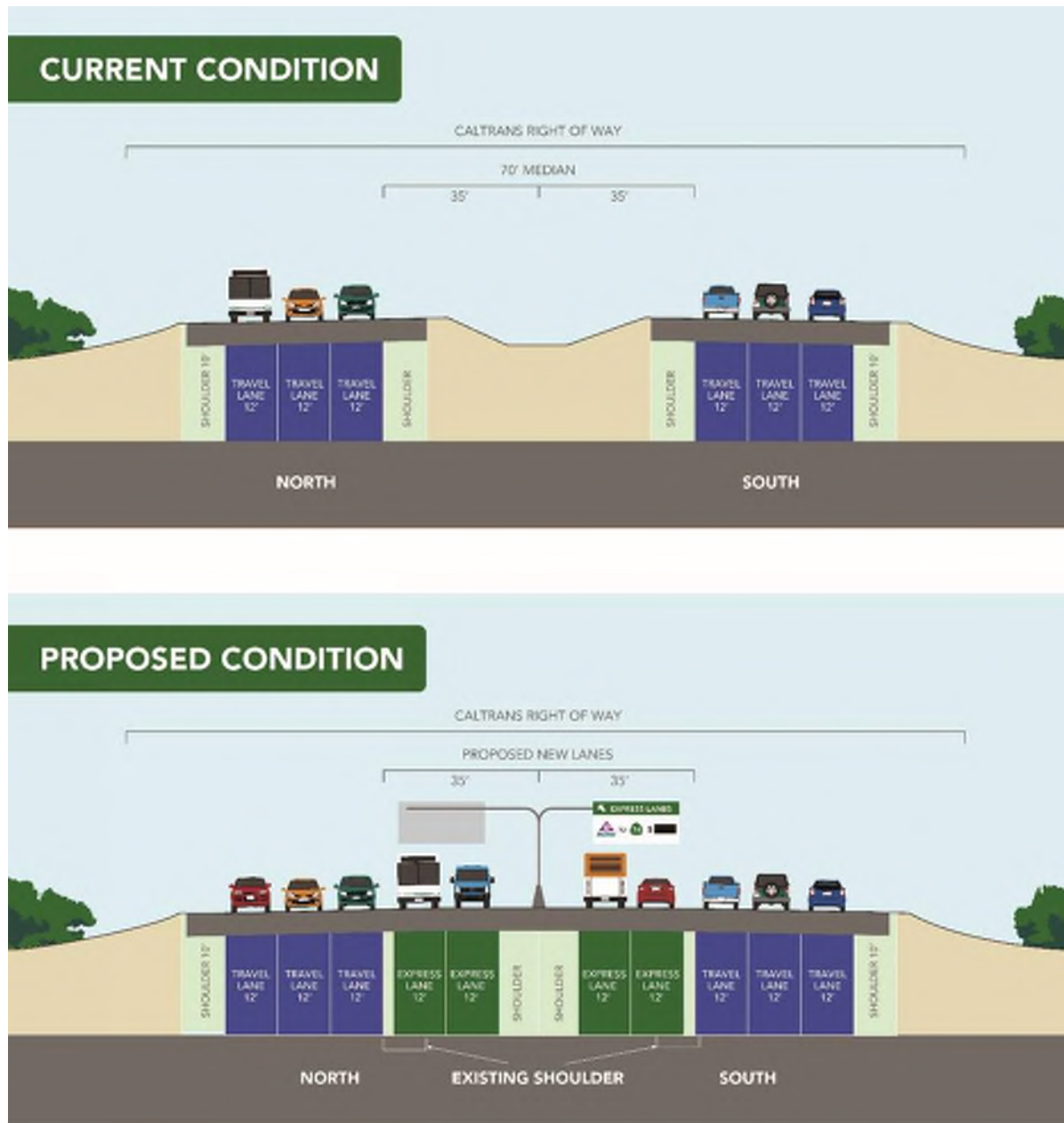
Alternative 2: Build Alternative

Alternative 2, the Build Alternative, would include the following improvements to the identified portion of the corridor:

- Construct two express lanes in each direction on I-15, from SR-74 (Central Avenue)/I-15 Interchange in the City of Lake Elsinore, to the end of the previously approved under construction express lanes near the Cajalco Road/I-15 Interchange in the City of Corona.

Improvements proposed in Alternative 2 are illustrated in **Exhibit 3**.

Exhibit 3: Existing Conditions & Proposed Improvements



5. Opening Year (2030) Traffic Volumes

TOAR Volumes Supersede Traffic Volumes Report Volumes

This chapter presents the peak hour and daily traffic volume forecasts for the study locations under Opening Year 2030 conditions.

Analysis Scenarios

Traffic forecasts were developed for each of the following project alternatives under opening year (2030) conditions.

- ❖ Alternative 1 – No Build Alternative
- ❖ Alternative 2 – Build Alternative

The detailed traffic forecasting methodology is contained in Chapter 3. The RIVTAM model was used to develop the future year (2040) model for each of the study alternatives; the growth was estimated from the travel demand model with the difference method and then applied to the existing counts to develop the Opening Year 2030 traffic forecasts.

Traffic Forecasts

The Opening Year 2030 ADT forecast for the roadway study segments are shown in **Table 4**.

For the No-Build Alternative, the Opening Year 2030 AM and PM peak hour traffic demand volume forecasts for the I-15 mainline segments, express lanes, and freeway ramps are shown on **Figure 3**.

The Opening Year 2030 AM and PM peak hour traffic demand forecasts for the freeway mainline segment, express lanes, and freeway ramps for the Build Alternative are shown on **Figure 4**.

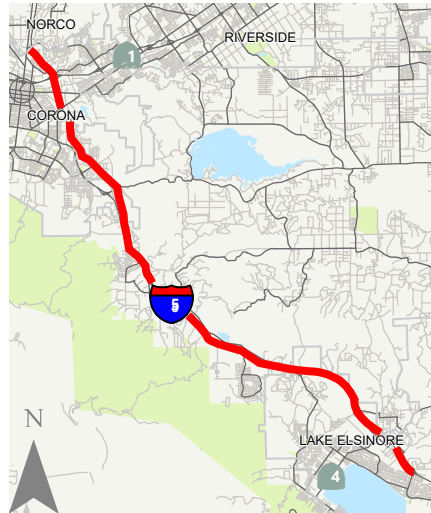
Traffic in the subarea is anticipated to grow in Opening Year 2030 No-Build and Build Alternatives. The SED in the future year RIVTAM model was updated based on SCAG's 2040 projections. Population, households, and employment in the subarea increase, therefore increasing number of trips loaded on the roadway links of the model. Because the Build Alternative adds capacity to the freeway and alleviates traffic on the mainline, generally, trips that had used parallel streets to I-15 as cut-through in the No-Build Alternative, prefer to stay on I-15.

TABLE 5: OPENING YEAR 2030 ROADWAY SEGMENT ADT

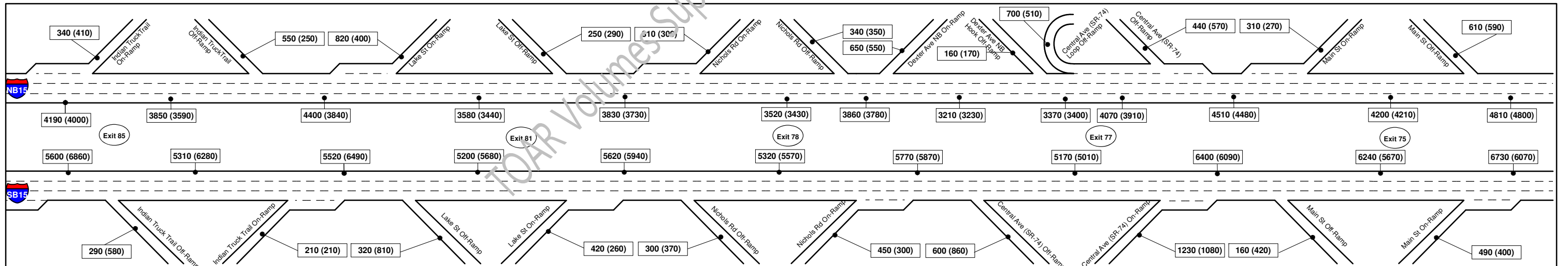
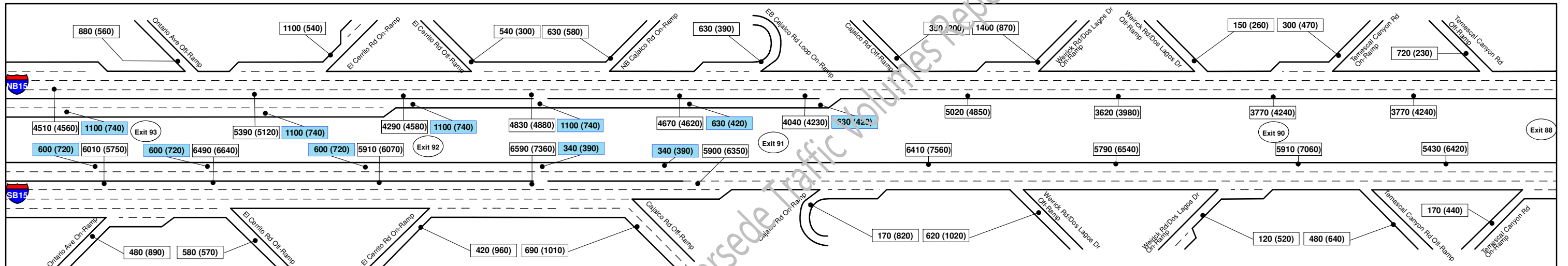
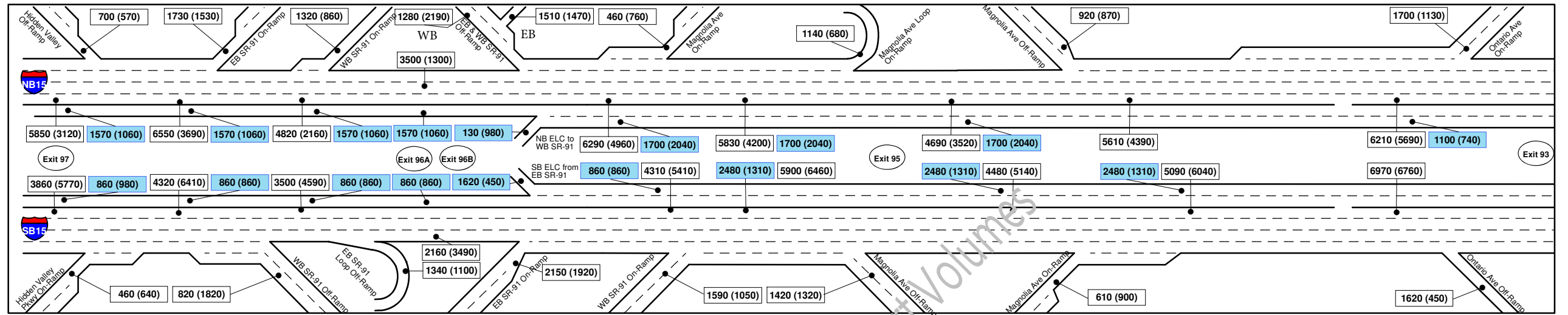
ID	Roadway	Segment	Opening Year 2030 No-Build Alternative ADT	Opening Year 2030 Build Alternative ADT
1	Hidden Valley Road	West of I-15	36,580	36,790
2	Hidden Valley Road	East of I-15	42,030	42,020
3	Parkridge Avenue	West of Cresta Road	18,860	18,850
4	Parkridge Avenue	East of Cresta Road	11,550	11,600
5	Cresta Road	South of Parkridge Avenue	9,730	9,730
6	Sixth Street	West of El Sobrante Road	25,940	25,940
7	Sixth Street	West of Radio Road	30,080	30,000
8	Radio Road	North of Sixth	8,820	9,020
9	El Sobrante Road	Between Sixth and Magnolia	11,850	12,150
10	Magnolia Avenue	West of I-15	54,700	54,560
11	Magnolia Avenue	East of I-15	46,370	46,730
12	Ontario Avenue	West of I-15	46,200	48,640
13	Ontario Avenue	East of I-15	33,750	31,620
14	Ontario Avenue	North of El Cerrito Road	30,640	26,050
15	El Cerrito Road	West of I-15	25,040	25,850
16	El Cerrito Road	Between I-15 and Temescal Canyon Road	9,920	9,610
17	Bedford Canyon Road	South of El Cerrito Road	11,270	10,000
18	Bedford Canyon Road	North of El Cerrito Road	9,190	7,930
19	Evelyn Street		460	470
20	Frances Street		180	190
21	Katy Street		580	590
22	Liberty Avenue		3,100	2,790
23	Temescal Canyon Road	Between El Cerrito Avenue to Cajalco Road	33,150	28,710
24	Temescal Canyon Road	Between Cajalco Road to Dos Lagos Drive	28,080	25,180
25	Temescal Canyon Road	Between Dos Lagos Drive to Dawson Canyon Road	20,270	16,480
26	Temescal Canyon Road	Between Dawson Canyon Road to I-15	13,290	13,590
27	Temescal Canyon Road	Between I-15 to Lawson Road	16,460	16,110
28	Temescal Canyon Road	Between Lawson Road to Trilogy Parkway	15,530	14,960
29	Temescal Canyon Road	Between Trilogy Parkway to Campbell Ranch Road	9,170	8,640
30	Temescal Canyon Road	Between Campbell Ranch Road to Indian Truck Trail Road	4,790	4,890
31	Temescal Canyon Road	Between Indian Truck Trail Road to Horsethief Road	4,920	5,050

32	Temescal Canyon Road	Between Horsethief Road to I-15 Frontage Road	5,620	5,620
33	Temescal Canyon Road	Between Concordia Ranch Road to Lake Street	7,540	7,640
34	Cajalco Road	West of I-15	21,990	25,990
35	Cajalco Road	Between I-15 and Grand Oaks	29,620	35,120
36	Cajalco Road	Between Grand Oaks to Temescal Canyon Road	22,250	26,350
37	Retreat Parkway	West of Knabe Road	4,250	4,350
38	Weirick Road	Between I-15 to Knabe Road	25,110	24,930
39	Weirick Road	North of Knabe Road	740	750
40	Dos Lagos Drive	East of I-15	30,160	26,400
41	Knabe Road	Between Weirick Road to White Sage Street	17,600	17,620
42	Knabe Road	Between White Sage Street to Hunt Road	8,460	8,530
43	Campbell Ranch Road	Between Temescal Canyon Road to Mayhew Canyon Road	5,490	4,540
44	Campbell Ranch Road	Between Mayhew Canyon Road to Indian Truck Trail	9,530	11,240
45	De Palma Road	Between Indian Truck Trail and Horsethief Canyon Road	10,670	8,620
46	Horsethief Canyon Road	West of De Palma Road	12,300	12,460
47	Horsethief Canyon Road	Between De Palma Road to Temescal Canyon Road	5,370	5,370
48	Lake Street	West of Temescal Canyon Road	20,830	20,850
49	Lake Street	East of Temescal Canyon Road	25,170	25,080
50	Nichols Road	West of Collier Road	11,440	10,650
51	Nichols Road	Between Collier Road to I-15	3,100	2,470
52	Nichols Road	East of I-15	6,510	6,710
53	Collier Avenue	Between Nichols Road and Riverside Drive	8,160	7,400
54	Collier Avenue	Between Riverside Drive to Central Avenue	30,860	30,160
55	Collier Avenue	South of Central Avenue	14,450	16,740
56	Dexter Avenue	North of Central Avenue	10,880	10,980
57	Dexter Avenue	South of Central Avenue	9,470	9,570
58	Central Avenue	Between Collier Avenue to I-15	43,540	43,520
59	Central Avenue	Between I-15 to Dexter Avenue	55,790	56,290
60	Central Avenue	Between Dexter Avenue to Cambren Avenue	47,320	47,950
61	Central Avenue	East of Cambren Avenue	45,430	45,950
62	Main Street	West of I-15	15,420	15,520

Source: Fehr & Peer, 2020



Vicinity Map



Traffic demand volumes represent true demand and considers vehicles in queue during oversaturated conditions.

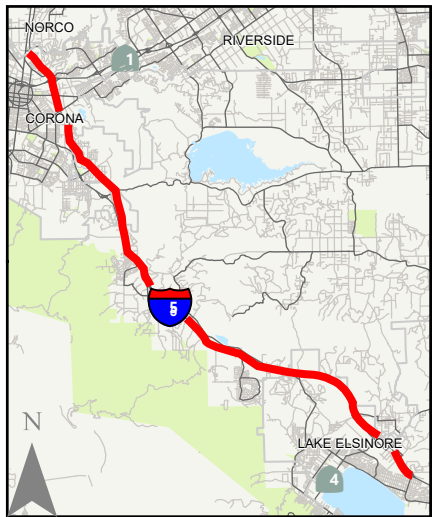
Legend

AM Volume (PM Volume) - XX (XX)
 SR-91 Express Lane Connector - ELC
 Mainline Volume -
 Express Lane Volume -

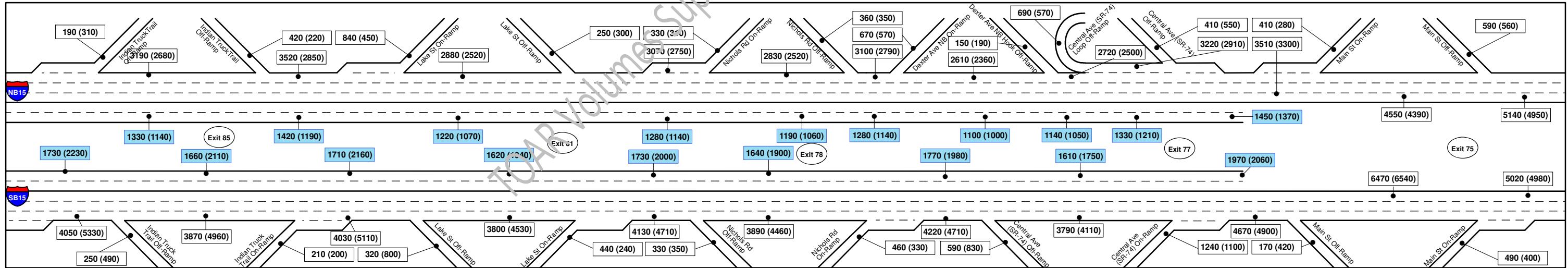
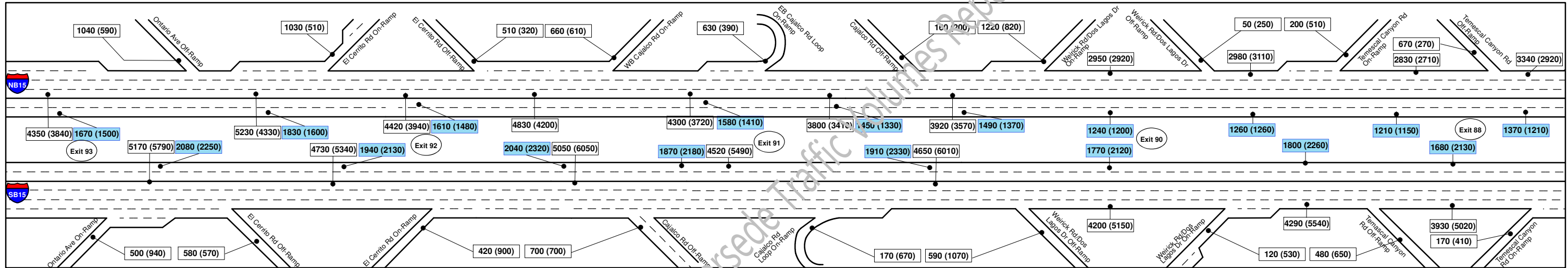
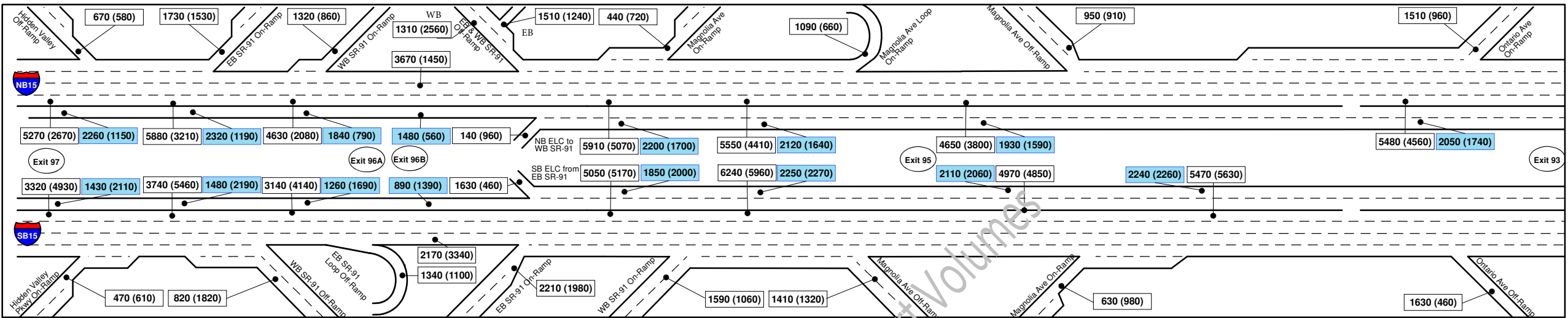


Figure 3

I-15 Freeway Lane Configurations Peak Hour and Daily Traffic Demand Volumes - Opening Year 2030 No-Build Alternative



Vicinity Map



Volumes presented in this figure show express lane demand volume between all ramps where complete access to general purpose lanes are assumed. Volumes provided in the TOAR will be balanced back to reflect egress and ingress points to the express lanes. Traffic demand volumes represent true demand and considers vehicles in queue during oversaturated conditions.

Legend

- AM Volume (PM Volume) - XX (XX)
- SR-91 Express Lane Connector - ELC
- Mainline Volume -
- Express Lane Volume -



Figure 4

I-15 Freeway Lane Configurations Peak Hour and Daily Traffic Demand Volumes - Opening Year 2030 Build Alternative

6. Design Year (2050) Traffic Volumes

This chapter presents the peak hour and daily traffic volume forecasts for the study locations under Design Year 2050 conditions.

Analysis Scenarios

Traffic forecasts were developed for each of the following project alternatives under Design Year (2050) conditions.

- ❖ Alternative 1 – No-Build Alternative
- ❖ Alternative 2 – Build Alternative

The detailed traffic forecasting methodology is contained in Chapter 3. The RIVTAM model was used to develop the future year (2050) model for each of the study alternatives. The per-year growth anticipated from the model was applied to the existing counts to develop the Design Year 2050 traffic forecasts. As described in previous chapter, the SCAG's 2016 financially constrained RTP projects are assumed to be in place for the design year forecasts.

Traffic Forecasts

Design year 2050 ADT forecast for the roadway study segments are shown in **Table 5**.

For the No-Build Alternative, the design year 2050 AM and PM peak hour traffic demand volumes for the I-15 mainline segments, express lanes, and freeway ramps are shown on **Figure 5**.

The design year 2050 freeway mainline segment, express lanes, and freeway ramp traffic demand volumes for the Build Alternative are shown on **Figure 6**.

Similar to opening year, traffic in the subarea is anticipated to grow in Design Year 2050 No-Build and Build Alternatives. The SED in the future year RIVTAM model was updated based on SCAG's 2040 projections. Population, households, and employment in the subarea increase, therefore increasing number of trips loaded on the roadway links of the model. Because the Build Alternative adds capacity to the freeway and alleviates traffic on the mainline, generally, trips that had used parallel streets to I-15 as cut-through in the No-Build Alternative, prefer to stay on I-15. With the addition of CETAP East-West corridor in 2050 conditions, vehicle trips that may have used SR-91, Central Avenue (SR-74), and Ethanac use Mid County Parkway to travel east and west between I-15 and I-215. A model plot for daily trip growth at a TAZ level between base year and future year model runs are attached in **Appendix D**.

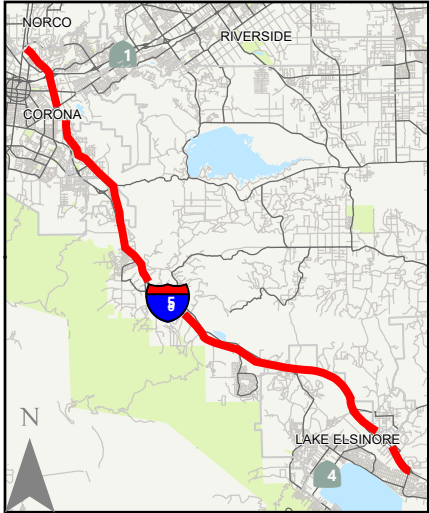
Future year traffic forecasts will be reviewed and approved by Caltrans and RCTC prior to use for the operational analysis.

TABLE 6: DESIGN YEAR 2050 ROADWAY SEGMENT ADT

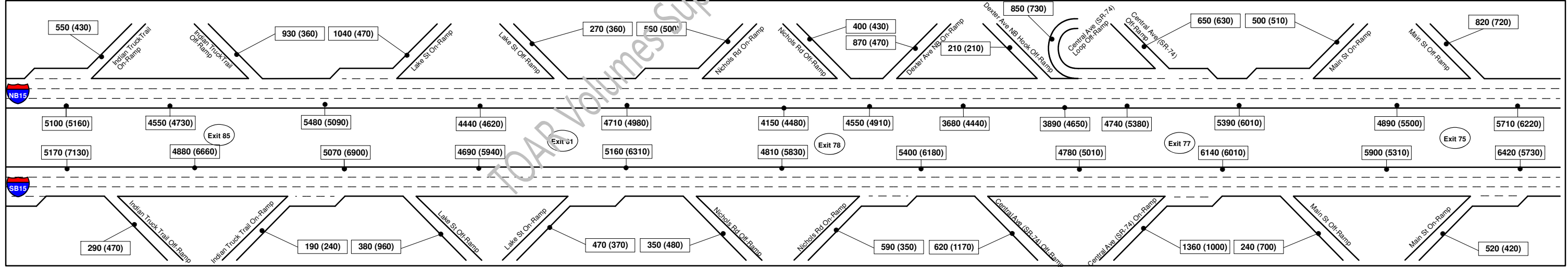
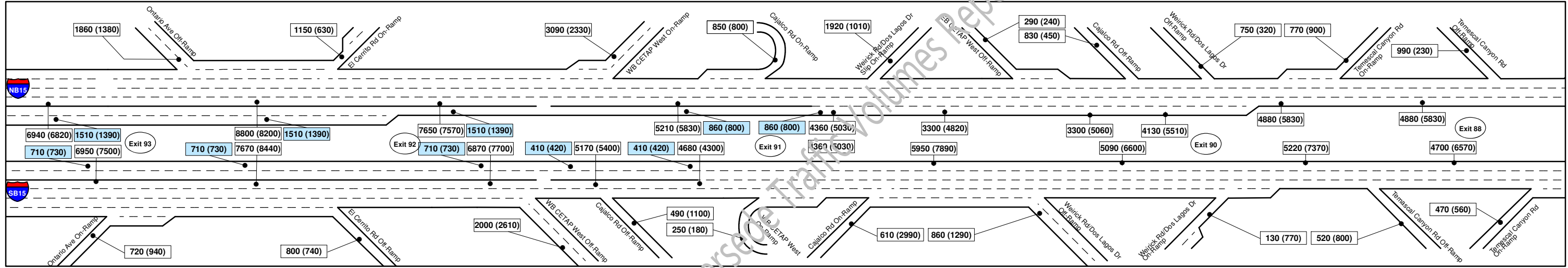
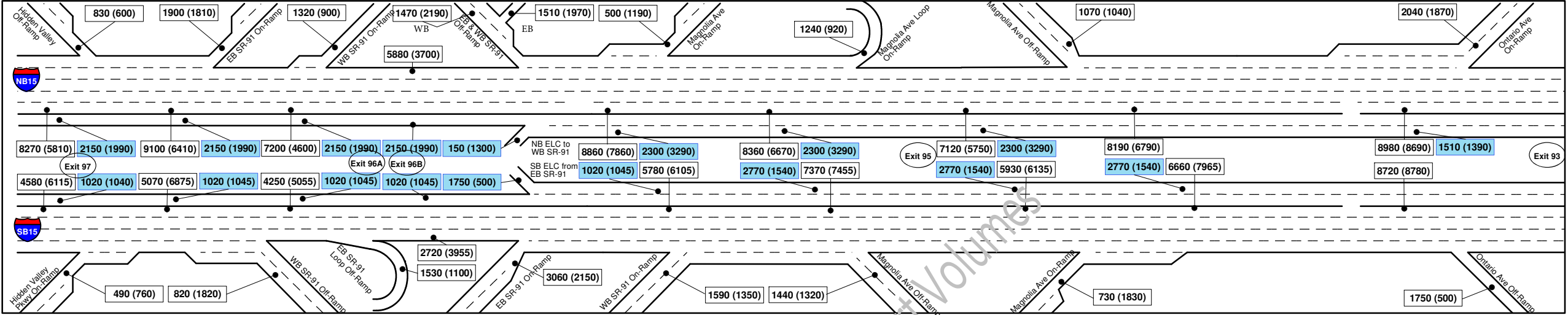
ID	Roadway	Segment	Design Year 2050 No Build Alternative ADT	Design Year 2050 Build Alternative ADT
1	Hidden Valley Road	West of I-15	49,990	49,190
2	Hidden Valley Road	East of I-15	45,660	45,650
3	Parkridge Avenue	West of Cresta Road	24,780	24,530
4	Parkridge Avenue	East of Cresta Road	17,940	17,690
5	Cresta Road	South of Parkridge Avenue	9,730	10,190
6	Sixth Street	West of El Sobrante Road	25,940	25,940
7	Sixth Street	West of Radio Road	39,850	39,510
8	Radio Road	North of Sixth	9,320	9,520
9	El Sobrante Road	Between Sixth and Magnolia	12,250	12,450
10	Magnolia Avenue	West of I-15	61,610	63,830
11	Magnolia Avenue	East of I-15	63,370	59,820
12	Ontario Avenue	West of I-15	57,770	60,780
13	Ontario Avenue	East of I-15	43,840	39,360
14	Ontario Avenue	North of El Cerrito Road	44,180	32,330
15	El Cerrito Road	West of I-15	36,460	32,430
16	El Cerrito Road	Between I-15 and Temescal Canyon Road	11,750	10,870
17	Bedford Canyon Road	South of El Cerrito Road	29,630	11,410
18	Bedford Canyon Road	North of El Cerrito Road	25,830	8,850
19	Evelyn Street		490	520
20	Frances Street		210	240
21	Katy Street		620	680
22	Liberty Avenue		8,740	7,870
23	Temescal Canyon Road	Between El Cerrito Avenue to Cajalco Road	49,580	44,750
24	Temescal Canyon Road	Between Cajalco Road to Dos Lagos Drive	53,190	33,810
25	Temescal Canyon Road	Between Dos Lagos Drive to Dawson Canyon Road	33,930	23,770
26	Temescal Canyon Road	Between Dawson Canyon Road to I-15	15,920	13,710
27	Temescal Canyon Road	Between I-15 to Lawson Road	15,430	13,210
28	Temescal Canyon Road	Between Lawson Road to Trilogy Parkway	14,110	11,350
29	Temescal Canyon Road	Between Trilogy Parkway to Campbell Ranch Road	8,530	5,830
30	Temescal Canyon Road	Between Campbell Ranch Road to Indian Truck Trail Road	5,490	5,690
31	Temescal Canyon Road	Between Indian Truck Trail Road to Horsethief Road	6,350	6,650
32	Temescal Canyon Road	Between Horsethief Road to I-15 Frontage Road	6,420	6,620

33	Temescal Canyon Road	Between Concordia Ranch Road to Lake Street	9,840	10,040
34	Cajalco Road	West of I-15	29,490	29,490
35	Cajalco Road	Between I-15 and Grand Oaks	39,120	39,120
36	Cajalco Road	Between Grand Oaks to Temescal Canyon Road	30,150	30,150
37	Retreat Parkway	West of Knabe Road	5,050	5,550
38	Weirick Road	Between I-15 to Knabe Road	34,560	35,060
39	Weirick Road	North of Knabe Road	990	990
40	Dos Lagos Drive	East of I-15	42,470	30,780
41	Knabe Road	Between Weirick Road to White Sage Street	22,920	22,990
42	Knabe Road	Between White Sage Street to Hunt Road	13,480	13,640
43	Campbell Ranch Road	Between Temescal Canyon Road to Mayhew Canyon Road	4,390	5,250
44	Campbell Ranch Road	Between Mayhew Canyon Road to Indian Truck Trail	11,530	12,030
45	De Palma Road	Between Indian Truck Trail and Horsethief Canyon Road	11,700	9,570
46	Horsethief Canyon Road	West of De Palma Road	16,430	16,920
47	Horsethief Canyon Road	Between De Palma Road to Temescal Canyon Road	5,570	5,670
48	Lake Street	West of Temescal Canyon Road	12,290	22,150
49	Lake Street	East of Temescal Canyon Road	40,040	36,980
50	Nichols Road	West of Collier Road	17,790	14,100
51	Nichols Road	Between Collier Road to I-15	9,320	6,970
52	Nichols Road	East of I-15	8,310	8,310
53	Collier Avenue	Between Nichols Road and Riverside Drive	12,930	10,650
54	Collier Avenue	Between Riverside Drive to Central Avenue	36,540	32,570
55	Collier Avenue	South of Central Avenue	16,050	16,050
56	Dexter Avenue	North of Central Avenue	12,380	12,580
57	Dexter Avenue	South of Central Avenue	11,370	11,370
58	Central Avenue	Between Collier Avenue to I-15	49,470	47,560
59	Central Avenue	Between I-15 to Dexter Avenue	56,590	57,090
60	Central Avenue	Between Dexter Avenue to Cambern Avenue	56,030	39,950
61	Central Avenue	East of Cambern Avenue	49,290	34,030
62	Main Street	West of I-15	15,620	15,720

Source: Fehr & Peer, 2020



Vicinity Map



Traffic demand volumes represent true demand and considers vehicles in queue during oversaturated conditions.

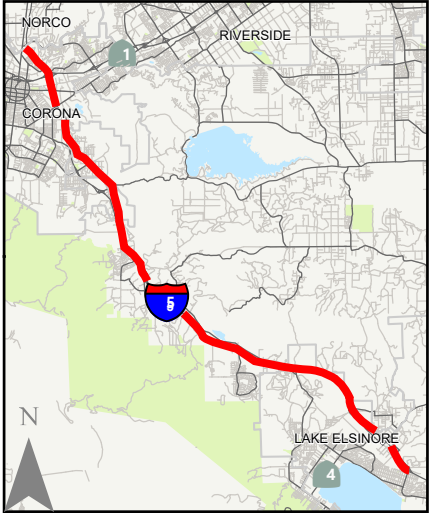
Legend

AM Volume (PM Volume) - XX (XX)
 SR-91 Express Lane Connector - ELC
 Mainline Volume -
 Express Lane Volume -

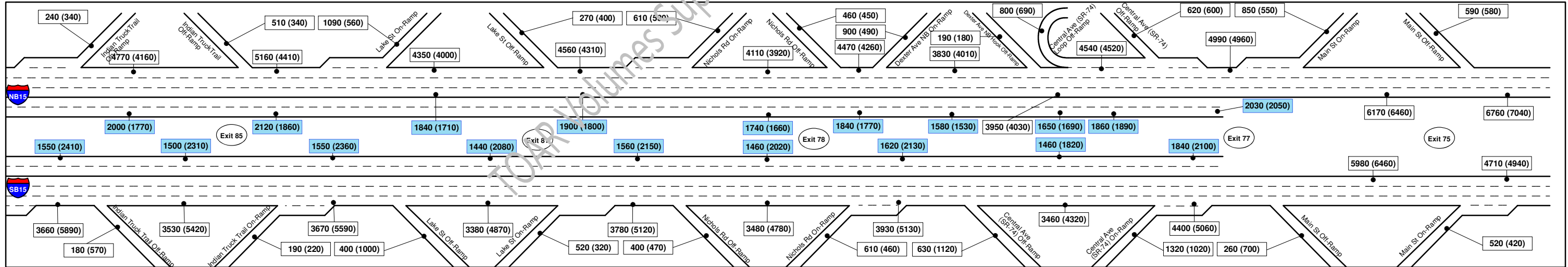
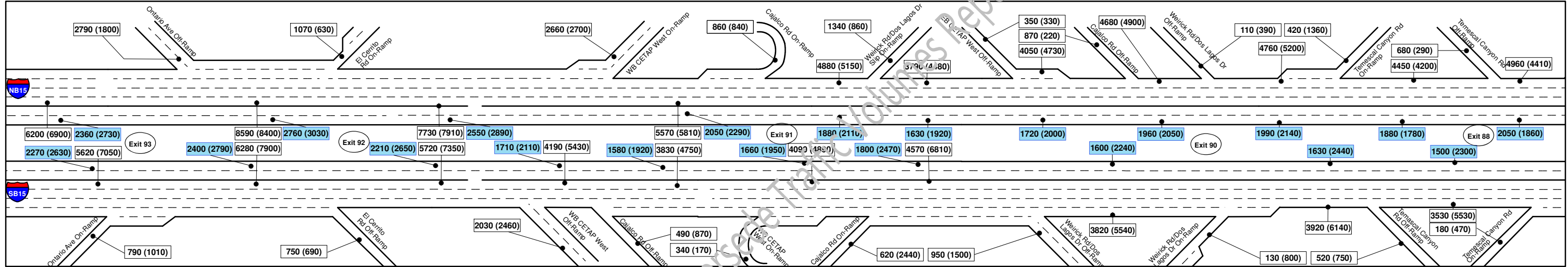
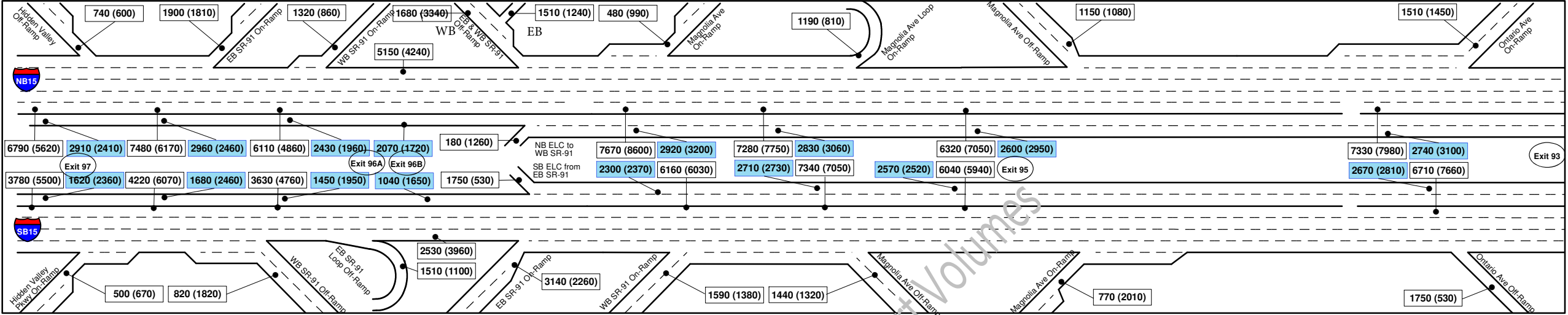


Figure 5

I-15 Freeway Lane Configurations Peak Hour and Daily Traffic Demand Volumes - Design Year 2050 No-Build Alternative



Vicinity Map



Volumes presented in this figure show express lane demand volume between all ramps where complete access to general purpose lanes are assumed. Volumes provided in the TOAR will be balanced back to reflect egress and ingress points to the express lanes. Traffic demand volumes represent true demand and considers vehicles in queue during oversaturated conditions.

Legend

- AM Volume (PM Volume) - XX (XX)
- SR-91 Express Lane Connector - ELC
- Mainline Volume - [white box]
- Express Lane Volume - [blue box]



Figure 6

I-15 Freeway Lane Configurations Peak Hour and Daily Traffic Demand Volumes - Design Year 2050 Build Alternative

List of Appendices

- ✚ Appendix A: Traffic Counts
- ✚ Appendix B: Final Interstate 15 Express Lanes Project Southern Extension PA/ED: Traffic Analysis and Travel Demand Forecasting Assumptions, Methodology, and Approach EA:0J0820/ID 08-18000063
 - ✚ Appendix C: Peak Period Traffic Volumes
 - ✚ Appendix D: Model Calibration & Model Plots
 - ✚ Appendix E: Response to Comments Matrix

TOAR Volumes Supersede Traffic Volumes Report Volumes

Appendix A



Traffic Counts

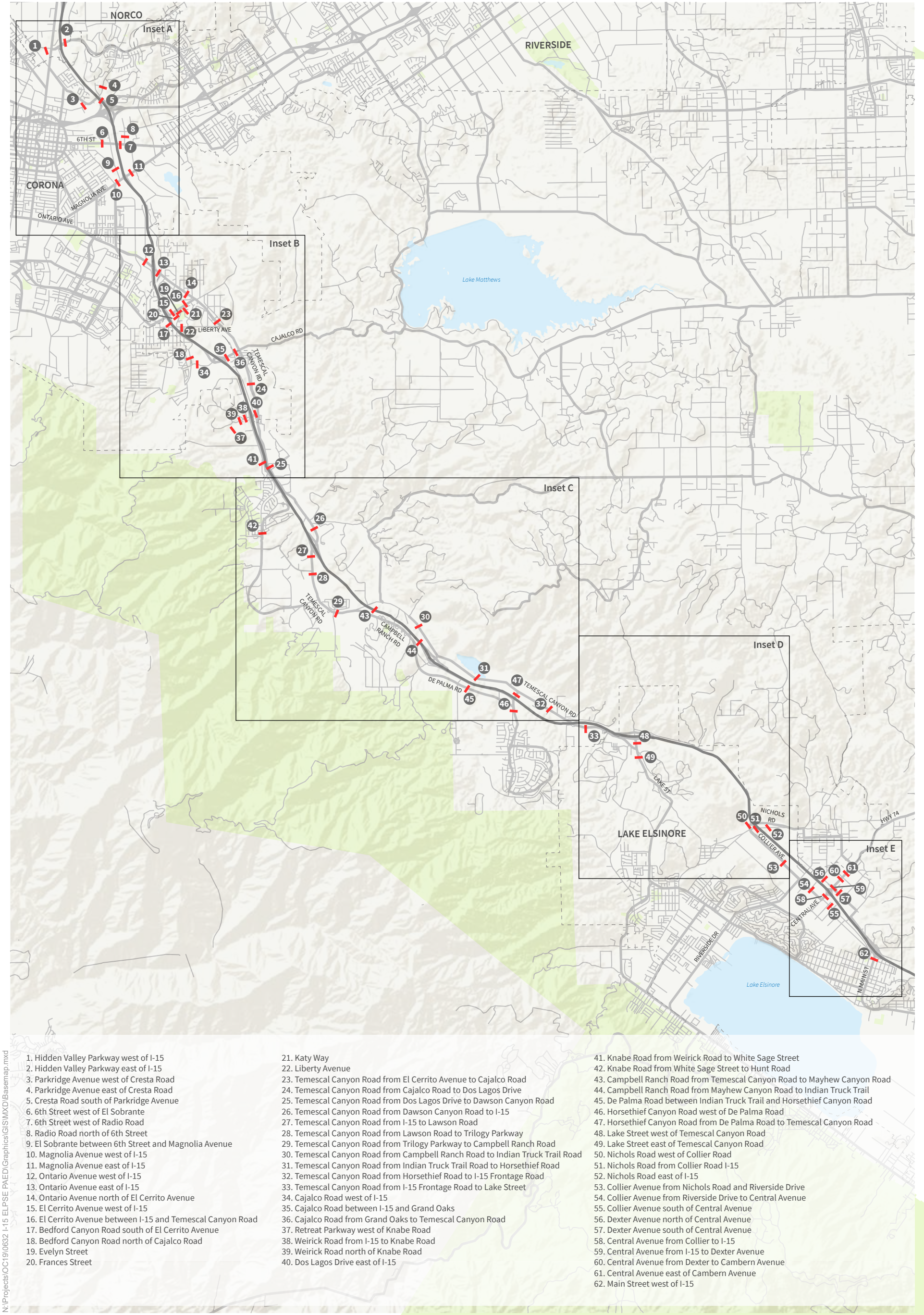
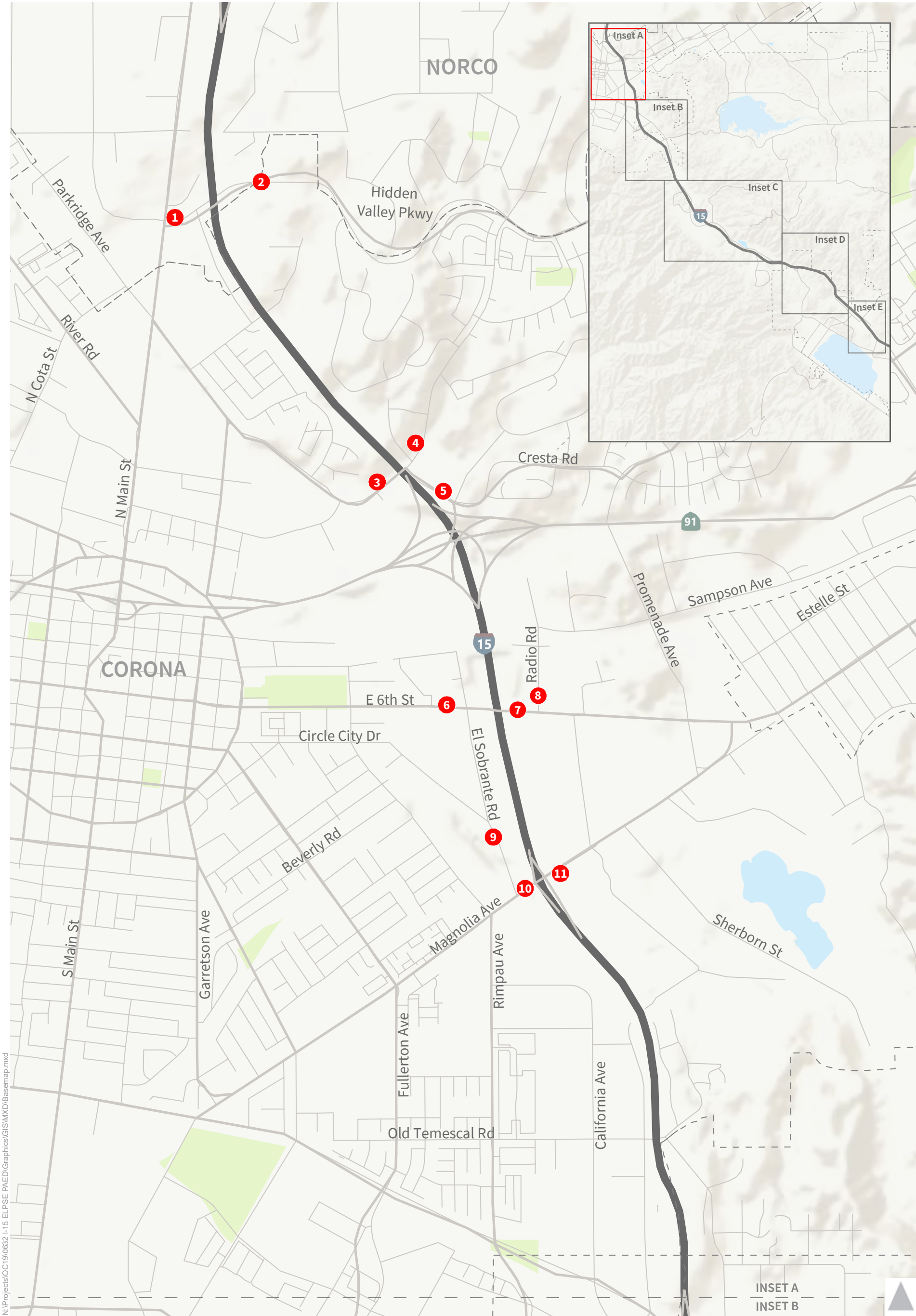


Figure 1
Traffic Count Locations



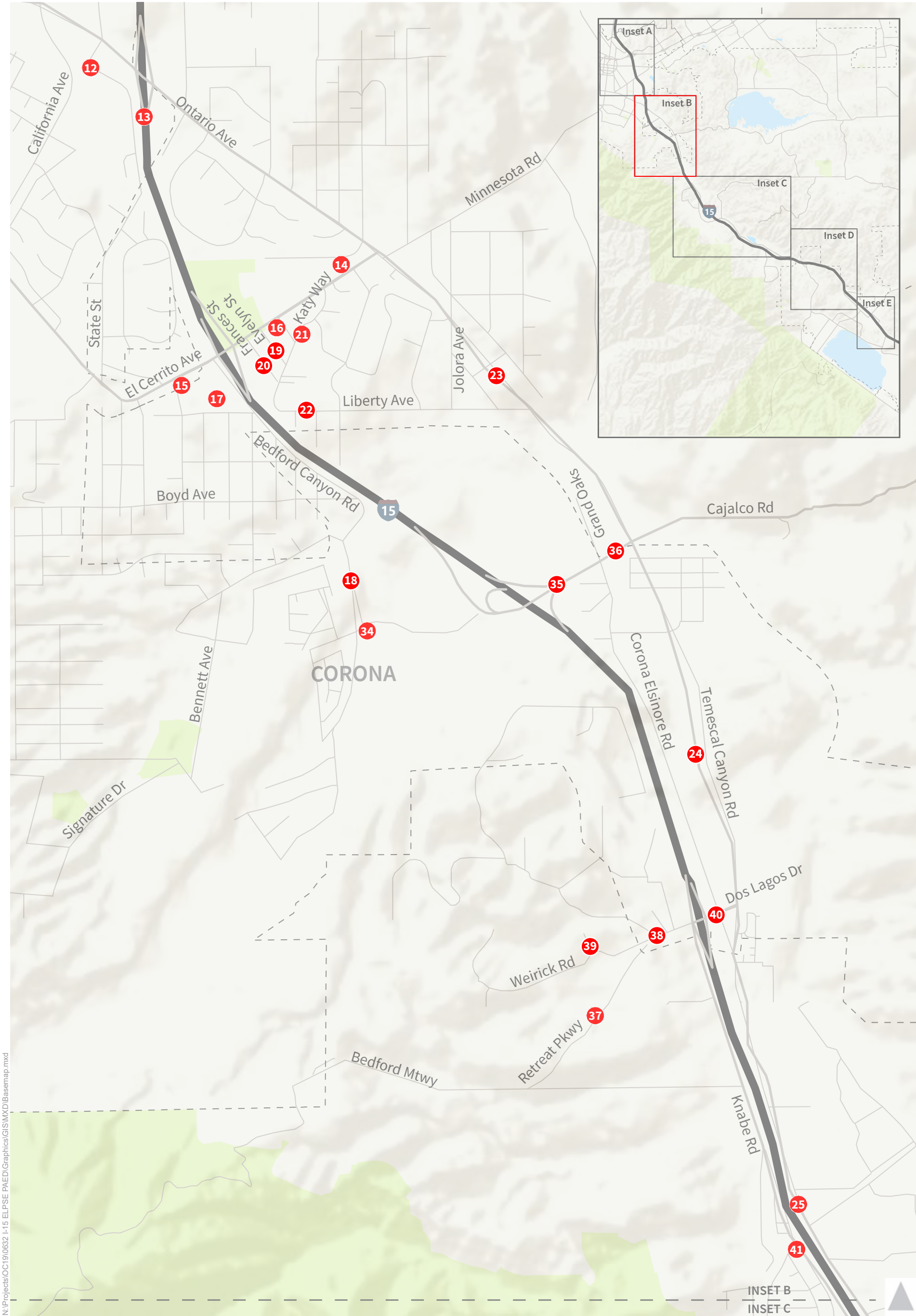
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- Count Locations
- Cities
- Streets

1. Hidden Valley Parkway west of I-15
2. Hidden Valley Parkway east of I-15
3. Parkridge Avenue west of Cresta Road
4. Parkridge Avenue east of Cresta Road
5. Cresta Road south of Parkridge Avenue
6. 6th Street west of El Sobrante
7. 6th Street west of Radio Road
8. Radio Road north of 6th Street
9. El Sobrante between 6th Street and Magnolia Avenue
10. Magnolia Avenue west of I-15
11. Magnolia Avenue east of I-15



Figure 1.A
Traffic Count Locations



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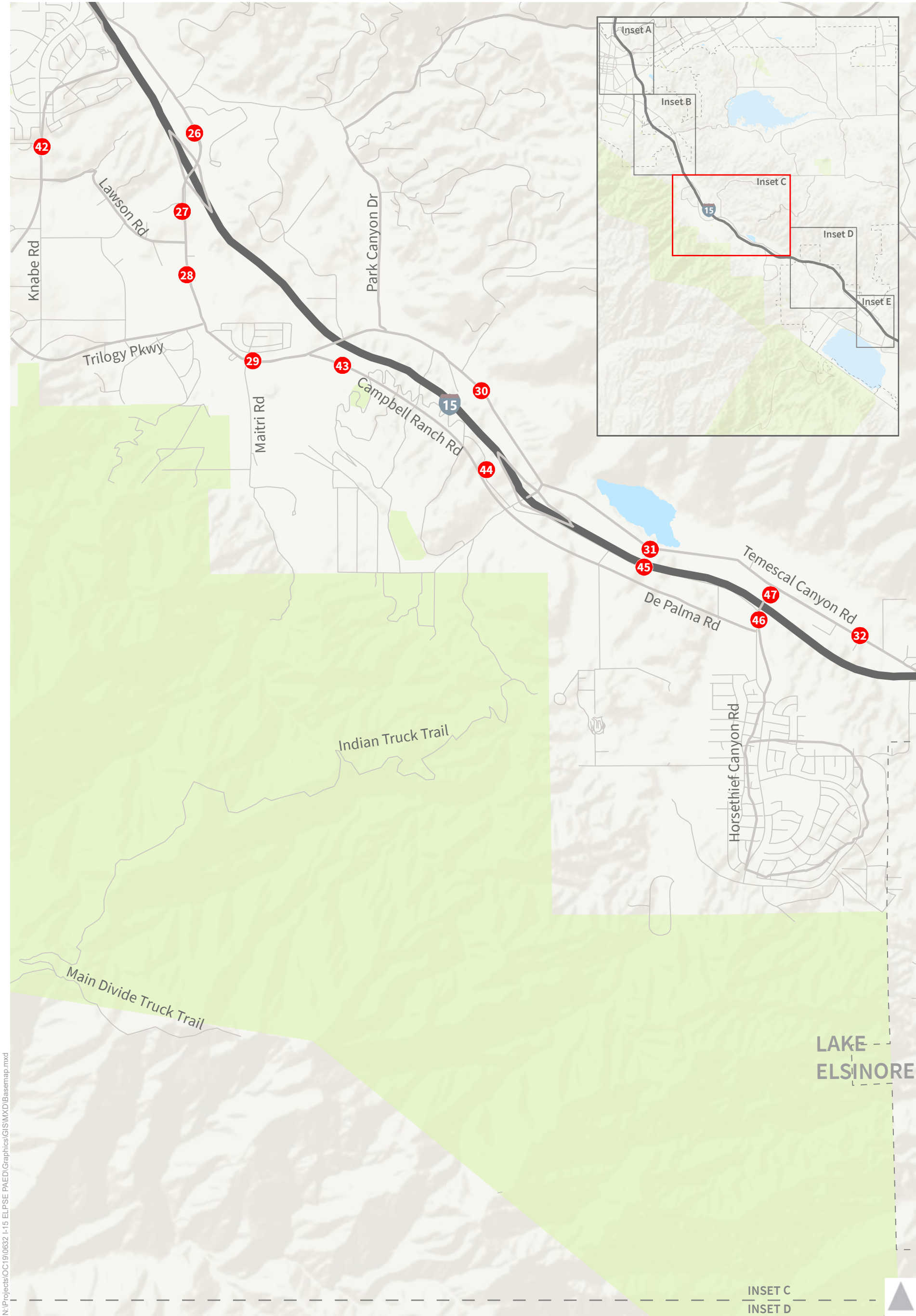
- Count Locations
- Cities
- Streets

- 12. Ontario Avenue west of I-15
- 13. Ontario Avenue east of I-15
- 14. Ontario Avenue north of El Cerrito Avenue
- 15. El Cerrito Avenue west of I-15
- 16. El Cerrito Avenue between I-15 and Temescal Canyon Road
- 17. Bedford Canyon Road south of El Cerrito Avenue
- 18. Bedford Canyon Road north of Cajalco Road
- 19. Evelyn Street
- 20. Frances Street
- 21. Katy Way
- 22. Liberty Avenue
- 23. Temescal Canyon Road from El Cerrito Avenue to Cajalco Road
- 24. Temescal Canyon Road from Cajalco Road to Dos Lagos Drive
- 25. Temescal Canyon Road from Dos Lagos Drive to Dawson Canyon Road

- 34. Cajalco Road west of I-15
- 35. Cajalco Road between I-15 and Grand Oaks
- 36. Cajalco Road from Grand Oaks to Temescal Canyon Road
- 37. Retreat Parkway west of Knabe Road
- 38. Weirick Road from I-15 to Knabe Road
- 39. Weirick Road north of Knabe Road
- 40. Dos Lagos Drive east of I-15
- 41. Knabe Road from Weirick Road to White Sage Street



Figure 1.B
Traffic Count Locations



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- Count Locations
- Cities
- Streets

26. Temescal Canyon Road from Dawson Canyon Road to I-15

27. Temescal Canyon Road from I-15 to Lawson Road

28. Temescal Canyon Road from Lawson Road to Trilogy Parkway

29. Temescal Canyon Road from Trilogy Parkway to Campbell Ranch Road

30. Temescal Canyon Road from Campbell Ranch Road to Indian Truck Trail Road

31. Temescal Canyon Road from Indian Truck Trail Road to Horsethief Road

32. Temescal Canyon Road from Horsethief Road to I-15 Frontage Road
42. Knabe Road from White Sage Street to Hunt Road

43. Campbell Ranch Road from Temescal Canyon Road to Mayhew Canyon Road

44. Campbell Ranch Road from Mayhew Canyon Road to Indian Truck Trail

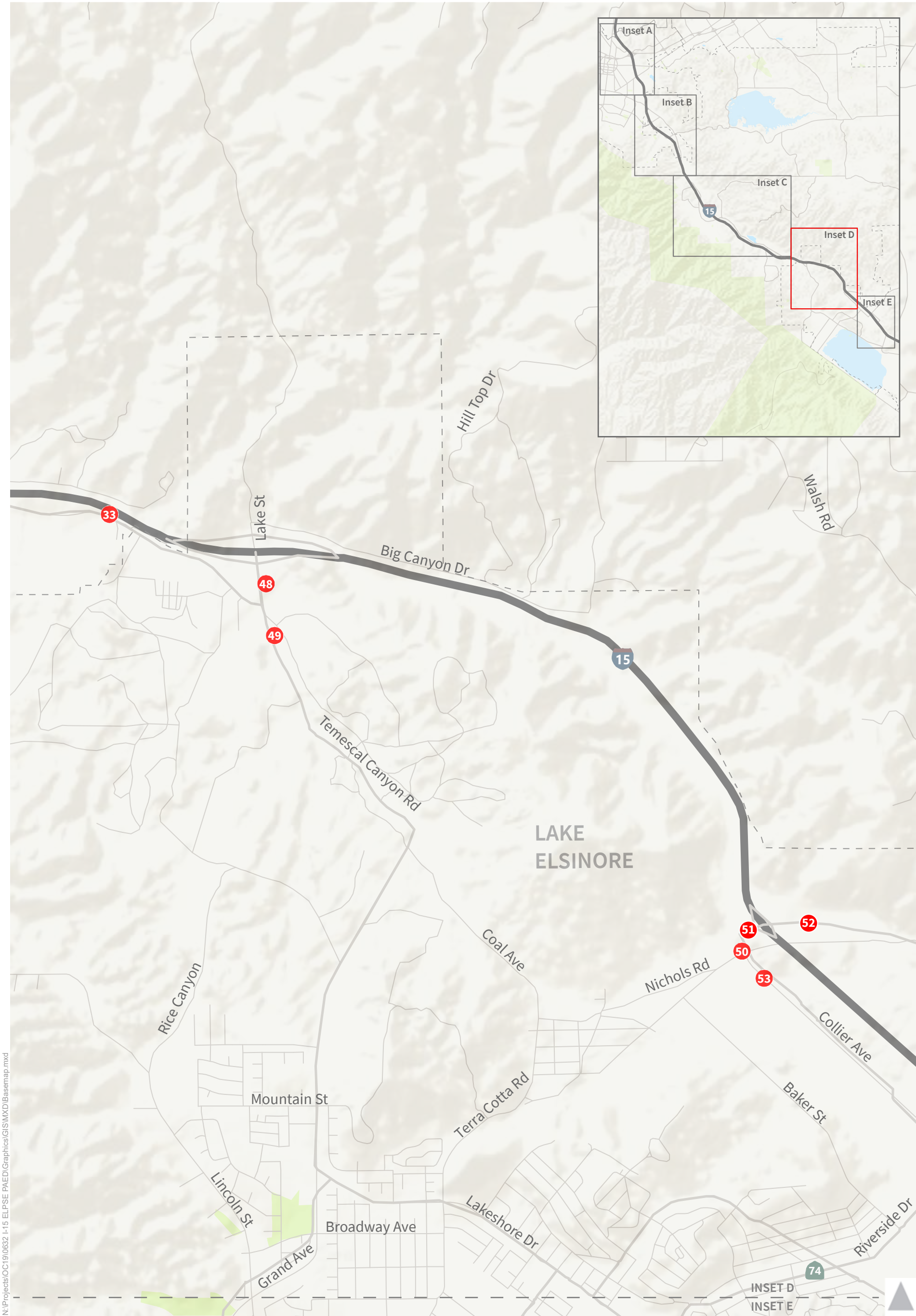
45. De Palma Road between Indian Truck Trail and Horsethief Canyon Road

46. Horsethief Canyon Road west of De Palma Road

47. Horsethief Canyon Road from De Palma Road to Temescal Canyon Road



Figure 1.C
Traffic Count Locations



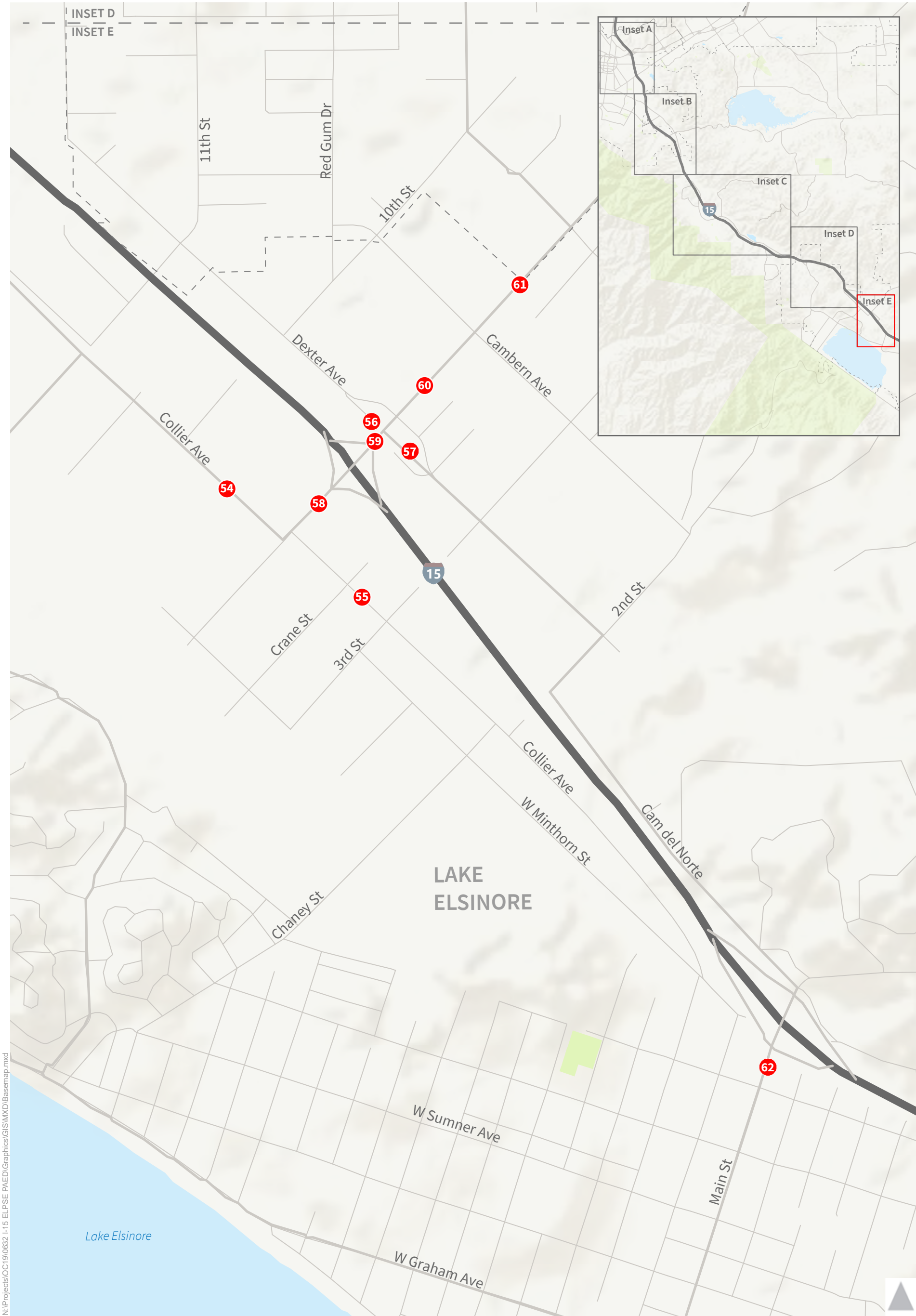
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- Count Locations
- Cities
- Streets

- 33. Temescal Canyon Road from I-15 Frontage Road to Lake Street
- 48. Lake Street west of Temescal Canyon Road
- 49. Lake Street east of Temescal Canyon Road
- 50. Nichols Road west of Collier Road
- 51. Nichols Road from Collier Road I-15
- 52. Nichols Road east of I-15
- 53. Collier Avenue from Nichols Road and Riverside Drive



Figure 1.D
Traffic Count Locations



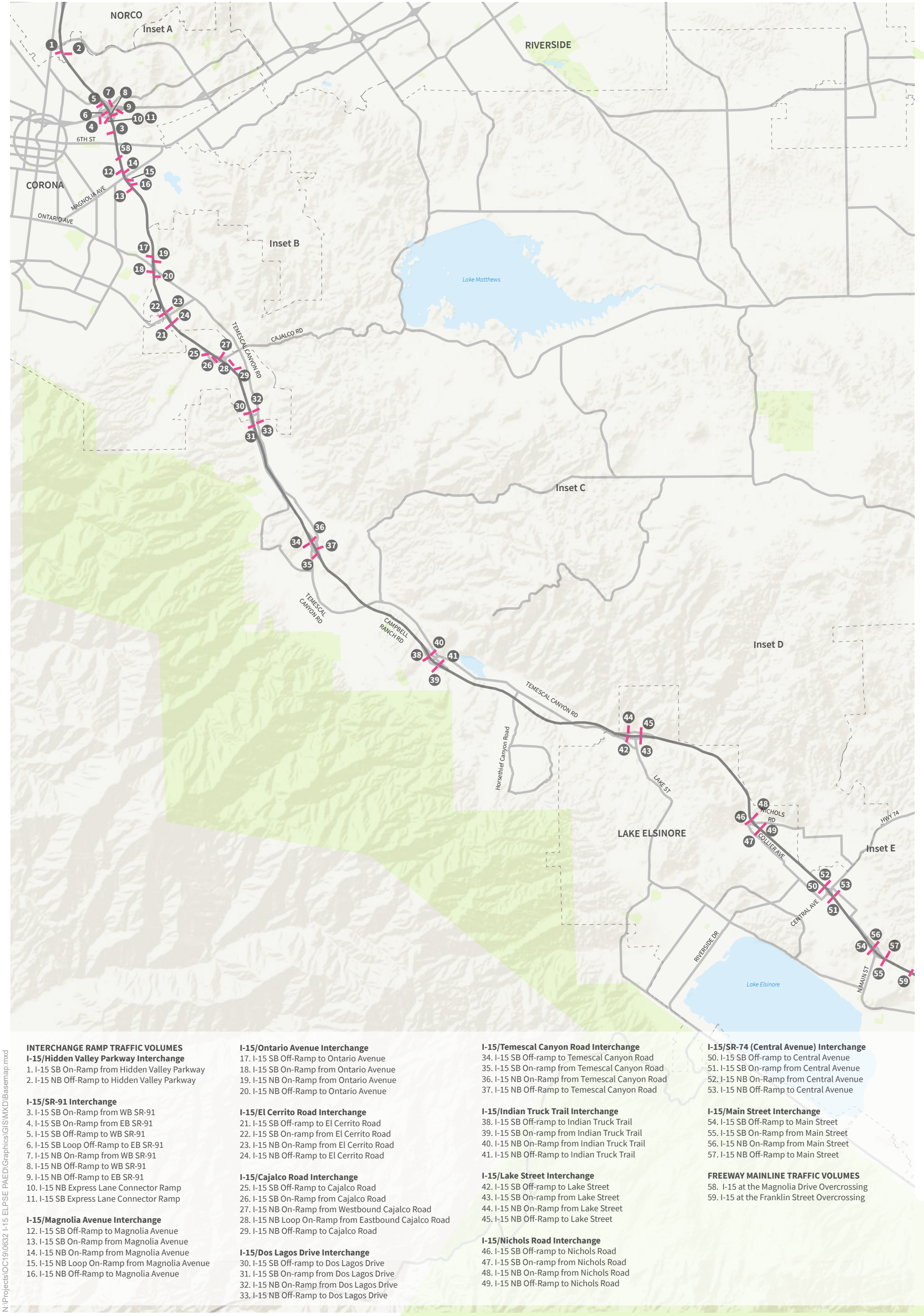
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- # Count Locations
- Cities
- Streets

- 54. Collier Avenue from Riverside Drive to Central Avenue
- 55. Collier Avenue south of Central Avenue
- 56. Dexter Avenue north of Central Avenue
- 57. Dexter Avenue south of Central Avenue
- 58. Central Avenue from Collier to I-15
- 59. Central Avenue from I-15 to Dexter Avenue
- 60. Central Avenue from Dexter to Cambern Avenue
- 61. Central Avenue east of Cambern Avenue
- 62. Main Street west of I-15



Figure 1.E
Traffic Count Locations



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- Counts
- Cities
- Streets



Figure 2
Freeway Count Segments

VOLUME

I-15 NB Off-Ramp To Main St

Day: Tuesday
Date: 10/1/2019City: Lake Elsinore
Project #: CA19_6124_001

DAILY TOTALS					NB	SB	EB					WB	Total
					6,487	0						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	8	0			8	12:00	104	0			104		
00:15	7	0			7	12:15	93	0			93		
00:30	4	0			4	12:30	96	0			96		
00:45	6	25	0		6 25	12:45	91	384	0		91 384		
01:00	9	0			9	13:00	85	0			85		
01:15	2	0			2	13:15	94	0			94		
01:30	1	0			1	13:30	130	0			130		
01:45	8	20	0		8 20	13:45	122	431	0		122 431		
02:00	1	0			1	14:00	125	0			125		
02:15	4	0			4	14:15	138	0			138		
02:30	3	0			3	14:30	136	0			136		
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03:30	3	0			3	15:30	143	0			143		
03:45	10	21	0		10 21	15:45	155	567	0		155 567		
04:00	8	0			8	16:00	145	0			145		
04:15	15	0			15	16:15	156	0			156		
04:30	14	0			14	16:30	129	0			129		
04:45	30	67	0		30 67	16:45	138	568	0		138 568		
05:00	22	0			22	17:00	118	0			118		
05:15	22	0			22	17:15	116	0			116		
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06:00	34	0			34	18:00	98	0			98		
06:15	66	0			66	18:15	101	0			101		
06:30	64	0			64	18:30	83	0			83		
06:45	132	296	0		132 296	18:45	71	353	0		71 353		
07:00	186	0			186	19:00	51	0			51		
07:15	146	0			146	19:15	43	0			43		
07:30	106	0			106	19:30	48	0			48		
07:45	140	578	0		140 578	19:45	46	188	0		46 188		
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08:45	98	428	0		98 428	20:45	28	140	0		28 140		
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10:15	72	0			72	22:15	15	0			15		
10:30	86	0			86	22:30	18	0			18		
10:45	93	330	0		93 330	22:45	16	74	0		16 74		
11:00	69	0			69	23:00	10	0			10		
11:15	93	0			93	23:15	12	0			12		
11:30	98	0			98	23:30	7	0			7		
11:45	92	352	0		92 352	23:45	16	45	0		16 45		
TOTALS	2618				2618	TOTALS	3869				3869		
SPLIT %	100.0%				40.4%	SPLIT %	100.0%				59.6%		

DAILY TOTALS					NB	SB						EB	WB	Total	
					6,487	0						0	0	6,487	

AM Peak Hour	07:00				07:00	PM Peak Hour	15:30				15:30
AM Pk Volume	578				578	PM Pk Volume	599				599
Pk Hr Factor	0.777				0.777	Pk Hr Factor	0.960				0.960
7 - 9 Volume	1006	0	0	0	1006	4 - 6 Volume	1044	0	0	0	1044
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	578	0	0	0	578	4 - 6 Pk Volume	568	0	0	0	568
Pk Hr Factor	0.777	0.000	0.000	0.000	0.777	Pk Hr Factor	0.910	0.000	0.000	0.000	0.910

VOLUME

I-15 NB Off-Ramp To Main St

Day: Wednesday

Date: 10/2/2019

City: Lake Elsinore

Project #: CA19_6124_001

DAILY TOTALS					NB	SB						EB	WB						Total
					6,629	0						0	0						6,629
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
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00:15	7	0			7		12:15	123	0			123							
00:30	2	0			2		12:30	121	0			121							
00:45	6	28	0		6	28	12:45	112	429	0		112	429						
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01:15	4	0			4		13:15	136	0			136							
01:30	5	0			5		13:30	127	0			127							
01:45	3	16	0		3	16	13:45	129	518	0		129	518						
02:00	3	0			3		14:00	141	0			141							
02:15	2	0			2		14:15	152	0			152							
02:30	3	0			3		14:30	183	0			183							
02:45	8	16	0		8	16	14:45	164	640	0		164	640						
03:00	6	0			6		15:00	136	0			136							
03:15	2	0			2		15:15	171	0			171							
03:30	5	0			5		15:30	145	0			145							
03:45	11	24	0		11	24	15:45	156	608	0		156	608						
04:00	6	0			6		16:00	126	0			126							
04:15	9	0			9		16:15	114	0			114							
04:30	17	0			17		16:30	108	0			108							
04:45	38	70	0		38	70	16:45	127	475	0		127	475						
05:00	23	0			23		17:00	118	0			118							
05:15	24	0			24		17:15	128	0			128							
05:30	24	0			24		17:30	127	0			127							
05:45	70	141	0		70	141	17:45	102	475	0		102	475						
06:00	33	0			33		18:00	81	0			81							
06:15	38	0			38		18:15	88	0			88							
06:30	59	0			59		18:30	98	0			98							
06:45	114	244	0		114	244	18:45	76	343	0		76	343						
07:00	129	0			129		19:00	56	0			56							
07:15	158	0			158		19:15	73	0			73							
07:30	128	0			128		19:30	41	0			41							
07:45	167	582	0		167	582	19:45	48	218	0		48	218						
08:00	125	0			125		20:00	37	0			37							
08:15	126	0			126		20:15	43	0			43							
08:30	97	0			97		20:30	35	0			35							
08:45	97	445	0		97	445	20:45	30	145	0		30	145						
09:00	73	0			73		21:00	37	0			37							
09:15	78	0			78		21:15	24	0			24							
09:30	79	0			79		21:30	28	0			28							
09:45	73	303	0		73	303	21:45	21	110	0		21	110						
10:00	82	0			82		22:00	23	0			23							
10:15	76	0			76		22:15	17	0			17							
10:30	62	0			62		22:30	21	0			21							
10:45	76	296	0		76	296	22:45	21	82	0		21	82						
11:00	99	0			99		23:00	10	0			10							
11:15	94	0			94		23:15	16	0			16							
11:30	86	0			86		23:30	8	0			8							
11:45	93	372	0		93	372	23:45	15	49	0		15	49						
TOTALS	2537				2537		TOTALS	4092				4092							
SPLIT %	100.0%				38.3%		SPLIT %	100.0%				61.7%							

DAILY TOTALS					NB	SB						EB	WB						Total
					6,629	0						0	0						6,629

AM Peak Hour	07:00				07:00		PM Peak Hour	14:30				14:30							
AM Pk Volume	582				582		PM Pk Volume	654				654							
Pk Hr Factor	0.871				0.871		Pk Hr Factor	0.893				0.893							
7 - 9 Volume	1027	0	0	0	1027		4 - 6 Volume	950	0	0	0	950							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:45				16:45							
7 - 9 Pk Volume	582	0	0	0	582		4 - 6 Pk Volume	500	0	0	0	500							
Pk Hr Factor	0.871	0.000	0.000	0.000	0.871		Pk Hr Factor	0.977	0.000	0.000	0.000	0.977							

VOLUME

I-15 NB Off-Ramp To Main St

Day: Thursday
Date: 10/3/2019City: Lake Elsinore
Project #: CA19_6124_001

DAILY TOTALS					NB	SB						EB	WB	Total
					6,351	0						0	0	6,351
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	14	0			14	12:00	91	0			91			
00:15	8	0			8	12:15	86	0			86			
00:30	7	0			7	12:30	95	0			95			
00:45	9	38	0		9 38	12:45	116	388	0		116 388			
01:00	7	0			7	13:00	100	0			100			
01:15	13	0			13	13:15	112	0			112			
01:30	5	0			5	13:30	117	0			117			
01:45	5	30	0		5 30	13:45	93	422	0		93 422			
02:00	2	0			2	14:00	118	0			118			
02:15	2	0			2	14:15	118	0			118			
02:30	4	0			4	14:30	126	0			126			
02:45	5	13	0		5 13	14:45	146	508	0		146 508			
03:00	2	0			2	15:00	122	0			122			
03:15	9	0			9	15:15	141	0			141			
03:30	5	0			5	15:30	147	0			147			
03:45	12	28	0		12 28	15:45	138	548	0		138 548			
04:00	9	0			9	16:00	127	0			127			
04:15	10	0			10	16:15	136	0			136			
04:30	16	0			16	16:30	138	0			138			
04:45	29	64	0		29 64	16:45	126	527	0		126 527			
05:00	21	0			21	17:00	113	0			113			
05:15	16	0			16	17:15	111	0			111			
05:30	41	0			41	17:30	95	0			95			
05:45	68	146	0		68 146	17:45	84	403	0		84 403			
06:00	35	0			35	18:00	85	0			85			
06:15	45	0			45	18:15	83	0			83			
06:30	74	0			74	18:30	86	0			86			
06:45	129	283	0		129 283	18:45	99	353	0		99 353			
07:00	171	0			171	19:00	58	0			58			
07:15	157	0			157	19:15	40	0			40			
07:30	117	0			117	19:30	63	0			63			
07:45	131	576	0		131 576	19:45	49	210	0		49 210			
08:00	119	0			119	20:00	34	0			34			
08:15	112	0			112	20:15	45	0			45			
08:30	88	0			88	20:30	36	0			36			
08:45	82	401	0		82 401	20:45	38	153	0		38 153			
09:00	75	0			75	21:00	39	0			39			
09:15	74	0			74	21:15	28	0			28			
09:30	71	0			71	21:30	17	0			17			
09:45	85	305	0		85 305	21:45	29	113	0		29 113			
10:00	75	0			75	22:00	16	0			16			
10:15	92	0			92	22:15	23	0			23			
10:30	96	0			96	22:30	26	0			26			
10:45	84	347	0		84 347	22:45	18	83	0		18 83			
11:00	101	0			101	23:00	24	0			24			
11:15	80	0			80	23:15	10	0			10			
11:30	78	0			78	23:30	11	0			11			
11:45	100	359	0		100 359	23:45	8	53	0		8 53			
TOTALS	2590				2590	TOTALS	3761				3761			
SPLIT %	100.0%				40.8%	SPLIT %	100.0%				59.2%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					6,351	0						0	0	6,351	

AM Peak Hour	07:00				07:00	PM Peak Hour	14:45				14:45
AM Pk Volume	576				576	PM Pk Volume	556				556
Pk Hr Factor	0.842				0.842	Pk Hr Factor	0.946				0.946
7 - 9 Volume	977	0	0	0	977	4 - 6 Volume	930	0	0	0	930
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	576	0	0	0	576	4 - 6 Pk Volume	527	0	0	0	527
Pk Hr Factor	0.842	0.000	0.000	0.000	0.842	Pk Hr Factor	0.955	0.000	0.000	0.000	0.955

CLASSIFICATION

I-15 NB 1/4 Mile N/O Magnolia NB On-Ramps

Day: Tuesday

Date: 9/17/2019

City: Corona

Project #: CA19_6126_001

Summary

Time	0-20ft	20-30ft	30-40ft	40-50ft	50-60ft	60-70ft	70-80ft	80ft & Up						Total
00:00 AM	645	47	26	16	12	60	31	10	0	0	0	0	0	847
01:00	467	32	25	15	9	47	29	4	0	0	0	0	0	628
02:00	599	58	30	17	20	51	29	5	0	0	0	0	0	809
03:00	984	107	32	29	16	86	28	8	0	0	0	0	0	1290
04:00	3132	544	127	55	55	180	52	36	0	0	0	0	0	4181
05:00	4056	724	153	74	56	224	59	32	0	0	0	0	0	5378
06:00	4850	1053	232	120	47	189	53	42	0	0	0	0	0	6586
07:00	5050	889	191	105	43	123	71	36	0	0	0	0	0	6508
08:00	4455	751	208	77	51	57	38	55	0	0	0	0	0	5692
09:00	3731	713	231	114	93	145	102	93	0	0	0	0	0	5222
10:00	4089	470	208	86	86	246	146	49	0	0	0	0	0	5380
11:00	3565	660	236	127	84	184	164	101	0	0	0	0	0	5121
12:00 PM	3376	747	262	151	68	121	70	74	0	0	0	0	0	4869
13:00	3495	831	279	148	94	127	107	113	0	0	0	0	0	5194
14:00	3682	844	334	150	98	107	64	74	0	0	0	0	0	5353
15:00	3388	808	300	142	98	98	107	86	0	0	0	0	0	5027
16:00	3894	779	240	135	76	66	61	68	0	0	0	0	0	5319
17:00	3909	694	196	107	44	68	46	41	0	0	0	0	0	5105
18:00	4105	371	117	42	23	74	53	19	0	0	0	0	0	4804
19:00	3357	275	80	41	18	74	49	21	0	0	0	0	0	3915
20:00	2613	234	64	23	12	68	44	16	0	0	0	0	0	3074
21:00	2365	149	38	25	13	67	43	13	0	0	0	0	0	2713
22:00	1773	115	37	20	8	50	43	9	0	0	0	0	0	2055
23:00	1197	64	19	18	13	58	38	9	0	0	0	0	0	1416
Totals	72777	11959	3665	1837	1137	2570	1527	1014						96486
% of Totals	75%	12%	4%	2%	1%	3%	2%	1%						100%

AM Volumes	35623	6048	1699	835	572	1592	802	471	0	0	0	0	0	47642
% AM	37%	6%	2%	1%	1%	2%	1%	0%						49%
AM Peak Hour	07:00	06:00	11:00	11:00	09:00	10:00	11:00	11:00						06:00
Volume	5050	1053	236	127	93	246	164	101						6586
PM Volumes	37154	5911	1966	1002	565	978	725	543	0	0	0	0	0	48844
% PM	39%	6%	2%	1%	1%	1%	1%	1%						51%
PM Peak Hour	18:00	14:00	14:00	12:00	14:00	13:00	13:00	13:00						14:00
Volume	4105	844	334	151	98	127	107	113						5353
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%
			12200	↔	13%	10063	↔	10%	10424	↔	11%	63799	↔	66%

DAILY TOTALS					NB	SB					EB	WB	To		
					96,486	0					0	0	96,486		
AM Period	NB		SB		EB	WB	TOTAL	PM Period	NB		SB		EB	WB	TOTAL
00:00	225		0		0	0	225	12:00	1236		0		0	0	1236
00:15	248		0		0	0	248	12:15	1194		0		0	0	1194
00:30	171		0		0	0	171	12:30	1229		0		0	0	1229
00:45	203	847	0		0	0	203 847	12:45	1210	4869	0		0	0	1210
01:00	204		0		0	0	204	13:00	1282		0		0	0	1282
01:15	151		0		0	0	151	13:15	1296		0		0	0	1296
01:30	122		0		0	0	122	13:30	1300		0		0	0	1300
01:45	151	628	0		0	0	151 628	13:45	1316	5194	0		0	0	1316
02:00	178		0		0	0	178	14:00	1288		0		0	0	1288
02:15	205		0		0	0	205	14:15	1354		0		0	0	1354
02:30	194		0		0	0	194	14:30	1354		0		0	0	1354
02:45	232	809	0		0	0	232 809	14:45	1357	5353	0		0	0	1357
03:00	205		0		0	0	205	15:00	1268		0		0	0	1268
03:15	271		0		0	0	271	15:15	1222		0		0	0	1222
03:30	434		0		0	0	434	15:30	1244		0		0	0	1244
03:45	380	1290	0		0	0	380 1290	15:45	1293	5027	0		0	0	1293
04:00	636		0		0	0	636	16:00	1366		0		0	0	1366
04:15	977		0		0	0	977	16:15	1383		0		0	0	1383
04:30	1233		0		0	0	1233	16:30	1285		0		0	0	1285
04:45	1335	4181	0		0	0	1335 4181	16:45	1285	5319	0		0	0	1285
05:00	1208		0		0	0	1208	17:00	1193		0		0	0	1193
05:15	1310		0		0	0	1310	17:15	1217		0		0	0	1217
05:30	1360		0		0	0	1360	17:30	1343		0		0	0	1343
05:45	1500	5378	0		0	0	1500 5378	17:45	1352	5105	0		0	0	1352
06:00	1576		0		0	0	1576	18:00	1299		0		0	0	1299
06:15	1592		0		0	0	1592	18:15	1237		0		0	0	1237
06:30	1735		0		0	0	1735	18:30	1169		0		0	0	1169
06:45	1683	6586	0		0	0	1683 6586	18:45	1099	4804	0		0	0	1099
07:00	1688		0		0	0	1688	19:00	1010		0		0	0	1010
07:15	1664		0		0	0	1664	19:15	1029		0		0	0	1029
07:30	1629		0		0	0	1629	19:30	985		0		0	0	985
07:45	1527	6508	0		0	0	1527 6508	19:45	891	3915	0		0	0	891
08:00	1402		0		0	0	1402	20:00	894		0		0	0	894
08:15	1404		0		0	0	1404	20:15	591		0		0	0	591
08:30	1448		0		0	0	1448	20:30	821		0		0	0	821
08:45	1438	5692	0		0	0	1438 5692	20:45	768	3074	0		0	0	768
09:00	1179		0		0	0	1179	21:00	671		0		0	0	671
09:15	1172		0		0	0	1172	21:15	634		0		0	0	634
09:30	1421		0		0	0	1421	21:30	723		0		0	0	723
09:45	1450	5222	0		0	0	1450 5222	21:45	685	2713	0		0	0	685
10:00	1405		0		0	0	1405	22:00	610		0		0	0	610
10:15	1346		0		0	0	1346	22:15	510		0		0	0	510
10:30	1297		0		0	0	1297	22:30	487		0		0	0	487
10:45	1332	5380	0		0	0	1332 5380	22:45	448	2055	0		0	0	448
11:00	1254		0		0	0	1254	23:00	436		0		0	0	436
11:15	1257		0		0	0	1257	23:15	373		0		0	0	373
11:30	1274		0		0	0	1274	23:30	326		0		0	0	326
11:45	1336	5121	0		0	0	1336 5121	23:45	281	1416	0		0	0	281
TOTALS	47642						47642	TOTALS	48844						
SPLIT %	100.0%						49.4%	SPLIT %	100.0%						

DAILY TOTALS					NB	SB					EB	WB	To	
					96,486	0					0	0	96,486	
AM Peak Hour	06:30				06:30	PM Peak Hour	14:00							
AM Pk Volume	6770				6770	PM Pk Volume	5353							
Pk Hr Factor	0.976				0.976	Pk Hr Factor	0.986							
7 - 9 Volume	12200	0	0	0	12200	4 - 6 Volume	10424	0	0	0				
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:00							
7 - 9 Pk Volume	6508	0	0	0	6508	4 - 6 Pk Volume	5319	0	0	0				
Pk Hr Factor	0.964	0.000	0.000	0.000	0.964	Pk Hr Factor	0.961	0.000	0.000	0.000				

CLASSIFICATION

I-15 NB 1/4 Mile N/O Magnolia NB On-Ramps

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6126_001

Summary

Time	0-20ft	20-30ft	30-40ft	40-50ft	50-60ft	60-70ft	70-80ft	80ft & Up						Total
00:00 AM	767	39	21	15	11	48	28	8	0	0	0	0	0	937
01:00	535	40	26	16	11	56	16	1	0	0	0	0	0	701
02:00	561	57	21	20	12	56	25	11	0	0	0	0	0	763
03:00	1178	104	46	27	18	94	38	14	0	0	0	0	0	1519
04:00	3345	481	87	48	35	182	71	25	0	0	0	0	0	4274
05:00	4260	764	153	79	61	230	56	32	0	0	0	0	0	5635
06:00	4971	904	231	99	44	184	79	51	0	0	0	0	0	6563
07:00	5256	881	210	110	46	119	76	52	0	0	0	0	0	6750
08:00	5148	814	225	94	50	170	80	46	0	0	0	0	0	6627
09:00	4795	652	253	92	68	218	112	43	0	0	0	0	0	6233
10:00	4072	601	254	118	85	250	143	76	0	0	0	0	0	5599
11:00	3620	771	283	145	88	143	90	98	0	0	0	0	0	5238
12:00 PM	3072	743	284	184	84	187	120	116	0	0	0	0	0	4790
13:00	3524	755	291	178	92	131	63	75	0	0	0	0	0	5109
14:00	3188	786	322	177	101	157	111	118	0	0	0	0	0	4960
15:00	3955	847	272	140	63	92	60	65	0	0	0	0	0	5494
16:00	3998	841	271	133	65	101	81	92	0	0	0	0	0	5582
17:00	3967	744	231	105	63	85	79	75	0	0	0	0	0	5349
18:00	4197	378	118	43	28	74	48	23	0	0	0	0	0	4909
19:00	3390	292	95	37	10	59	47	15	0	0	0	0	0	3945
20:00	2506	285	92	38	14	74	61	28	0	0	0	0	0	3098
21:00	2311	142	57	22	18	65	46	20	0	0	0	0	0	2681
22:00	1404	118	47	25	18	66	46	16	0	0	0	0	0	1740
23:00	942	60	29	12	12	43	38	10	0	0	0	0	0	1146
Totals	74962	12099	3919	1957	1097	2884	1614	1110						99642
% of Totals	75%	12%	4%	2%	1%	3%	2%	1%						100%

AM Volumes	38508	6108	1810	863	529	1750	814	457	0	0	0	0	0	50839
% AM	39%	6%	2%	1%	1%	2%	1%	0%						51%
AM Peak Hour	07:00	06:00	11:00	11:00	11:00	10:00	10:00	11:00						07:00
Volume	5256	904	283	145	88	250	143	98						6750
PM Volumes	36454	5991	2109	1094	568	1134	800	653	0	0	0	0	0	48803
% PM	37%	6%	2%	1%	1%	1%	1%	1%						49%
PM Peak Hour	18:00	15:00	14:00	12:00	14:00	12:00	12:00	14:00						16:00
Volume	4197	847	322	184	101	187	120	118						5582
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%
			13377	↔	13%	9899	↔	10%	10931	↔	11%	65435	↔	66%

DAILY TOTALS					NB	SB					EB	WB	To
					99,642	0					0	0	99,
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TO		
00:00	277	0	0	0	277	12:00	1287	0	0	0	1287		
00:15	242	0	0	0	242	12:15	1258	0	0	0	1258		
00:30	213	0	0	0	213	12:30	1108	0	0	0	1108		
00:45	205 937	0	0	0	205 937	12:45	1137 4790	0	0	0	1137		
01:00	200	0	0	0	200	13:00	1133	0	0	0	1133		
01:15	171	0	0	0	171	13:15	1338	0	0	0	1338		
01:30	166	0	0	0	166	13:30	1269	0	0	0	1269		
01:45	164 701	0	0	0	164 701	13:45	1369 5109	0	0	0	1369		
02:00	180	0	0	0	180	14:00	1295	0	0	0	1295		
02:15	174	0	0	0	174	14:15	1223	0	0	0	1223		
02:30	166	0	0	0	166	14:30	1224	0	0	0	1224		
02:45	243 763	0	0	0	243 763	14:45	1218 4960	0	0	0	1218		
03:00	228	0	0	0	228	15:00	1338	0	0	0	1338		
03:15	315	0	0	0	315	15:15	1364	0	0	0	1364		
03:30	438	0	0	0	438	15:30	1402	0	0	0	1402		
03:45	538 1519	0	0	0	538 1519	15:45	1390 5494	0	0	0	1390		
04:00	699	0	0	0	699	16:00	1361	0	0	0	1361		
04:15	1018	0	0	0	1018	16:15	1374	0	0	0	1374		
04:30	1203	0	0	0	1203	16:30	1410	0	0	0	1410		
04:45	1354 4274	0	0	0	1354 4274	16:45	1437 5582	0	0	0	1437		
05:00	1338	0	0	0	1338	17:00	1397	0	0	0	1397		
05:15	1339	0	0	0	1339	17:15	1388	0	0	0	1388		
05:30	1440	0	0	0	1440	17:30	1217	0	0	0	1217		
05:45	1518 5635	0	0	0	1518 5635	17:45	1347 5349	0	0	0	1347		
06:00	1513	0	0	0	1513	18:00	1305	0	0	0	1305		
06:15	1544	0	0	0	1544	18:15	1308	0	0	0	1308		
06:30	1741	0	0	0	1741	18:30	1159	0	0	0	1159		
06:45	1765 6563	0	0	0	1765 6563	18:45	1137 4909	0	0	0	1137		
07:00	1622	0	0	0	1622	19:00	976	0	0	0	976		
07:15	1744	0	0	0	1744	19:15	1008	0	0	0	1008		
07:30	1628	0	0	0	1628	19:30	982	0	0	0	982		
07:45	1756 6750	0	0	0	1756 6750	19:45	979 3945	0	0	0	979		
08:00	1679	0	0	0	1679	20:00	856	0	0	0	856		
08:15	1640	0	0	0	1640	20:15	491	0	0	0	491		
08:30	1694	0	0	0	1694	20:30	987	0	0	0	987		
08:45	1614 6627	0	0	0	1614 6627	20:45	764 3098	0	0	0	764		
09:00	1619	0	0	0	1619	21:00	759	0	0	0	759		
09:15	1598	0	0	0	1598	21:15	705	0	0	0	705		
09:30	1479	0	0	0	1479	21:30	632	0	0	0	632		
09:45	1537 6233	0	0	0	1537 6233	21:45	585 2681	0	0	0	585		
10:00	1404	0	0	0	1404	22:00	459	0	0	0	459		
10:15	1411	0	0	0	1411	22:15	451	0	0	0	451		
10:30	1396	0	0	0	1396	22:30	434	0	0	0	434		
10:45	1388 5599	0	0	0	1388 5599	22:45	396 1740	0	0	0	396		
11:00	1372	0	0	0	1372	23:00	297	0	0	0	297		
11:15	1300	0	0	0	1300	23:15	322	0	0	0	322		
11:30	1321	0	0	0	1321	23:30	278	0	0	0	278		
11:45	1245 5238	0	0	0	1245 5238	23:45	249 1146	0	0	0	249		
TOTALS	50839				50839	TOTALS	48803						
SPLIT %	100.0%				51.0%	SPLIT %	100.0%						

DAILY TOTALS					NB	SB					EB	WB	To
					99,642	0					0	0	99,
AM Peak Hour	06:30				06:30	PM Peak Hour	16:30						
AM Pk Volume	6872				6872	PM Pk Volume	5632						
Pk Hr Factor	0.973				0.973	Pk Hr Factor	0.980						
7 - 9 Volume	13377	0	0	0	13377	4 - 6 Volume	10931	0	0	0			
7 - 9 Peak Hour	07:15				07:15	4 - 6 Peak Hour	16:30						
7 - 9 Pk Volume	6807	0	0	0	6807	4 - 6 Pk Volume	5632	0	0	0			
Pk Hr Factor	0.969	0.000	0.000	0.000	0.969	Pk Hr Factor	0.980	0.000	0.000	0.000			

CLASSIFICATION

I-15 NB 1/4 Mile N/O Magnolia NB On-Ramps

Day: Thursday

Date: 9/19/2019

City: Corona

Project #: CA19_6126_001

Summary

Time	0-20ft	20-30ft	30-40ft	40-50ft	50-60ft	60-70ft	70-80ft	80ft & Up						Total
00:00 AM	593	30	21	11	5	67	26	5	0	0	0	0	0	758
01:00	463	35	15	15	13	51	22	2	0	0	0	0	0	616
02:00	531	55	25	18	16	53	28	8	0	0	0	0	0	734
03:00	946	129	50	42	19	83	36	21	0	0	0	0	0	1326
04:00	3214	438	98	59	50	183	41	16	0	0	0	0	0	4099
05:00	4107	732	174	89	65	246	62	41	0	0	0	0	0	5516
06:00	4928	985	230	97	55	200	73	34	0	0	0	0	0	6602
07:00	5486	879	250	120	50	116	71	31	0	0	0	0	0	7003
08:00	5259	708	241	95	37	149	83	46	0	0	0	0	0	6618
09:00	4639	614	232	98	54	229	105	59	0	0	0	0	0	6030
10:00	3857	685	289	177	79	209	149	69	0	0	0	0	0	5514
11:00	3510	774	339	165	98	156	111	142	0	0	0	0	0	5295
12:00 PM	3735	795	324	177	119	137	102	137	0	0	0	0	0	5526
13:00	3498	820	313	183	68	133	70	84	0	0	0	0	0	5169
14:00	3766	813	309	146	105	99	63	107	0	0	0	0	0	5408
15:00	3972	876	306	156	79	72	75	97	0	0	0	0	0	5633
16:00	4341	808	216	131	51	68	44	53	0	0	0	0	0	5712
17:00	3907	701	228	119	58	76	78	71	0	0	0	0	0	5238
18:00	4086	451	122	53	28	76	70	20	0	0	0	0	0	4906
19:00	3570	325	112	42	19	65	48	17	0	0	0	0	0	4198
20:00	2887	283	75	28	19	73	45	19	0	0	0	0	0	3429
21:00	2642	182	41	25	18	60	43	17	0	0	0	0	0	3028
22:00	1661	129	31	21	16	60	49	12	0	0	0	0	0	1979
23:00	1150	56	24	13	13	56	40	2	0	0	0	0	0	1354
Totals	76748	12303	4065	2080	1134	2717	1534	1110						101691
% of Totals	75%	12%	4%	2%	1%	3%	2%	1%						100%

AM Volumes	37533	6064	1964	986	541	1742	807	474	0	0	0	0	0	50111
% AM	37%	6%	2%	1%	1%	2%	1%	0%						49%
AM Peak Hour	07:00	06:00	11:00	10:00	11:00	05:00	10:00	11:00						07:00
Volume	5486	985	339	177	98	246	149	142						7003
PM Volumes	39215	6239	2101	1094	593	975	727	636	0	0	0	0	0	51580
% PM	39%	6%	2%	1%	1%	1%	1%	1%						51%
PM Peak Hour	16:00	15:00	12:00	13:00	12:00	12:00	12:00	12:00						16:00
Volume	4341	876	324	183	119	137	102	137						5712
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%
			13621	↔	13%	10695	↔	11%	10950	↔	11%	66425	↔	65%

DAILY TOTALS						NB	SB	EB				WB	To				
						101,691	0					0	0	101			
AM Period	NB		SB		EB	WB		TOTAL	PM Period	NB		SB		EB	WB		TO
00:00	214		0		0	0		214	12:00	1277	0		0	0	0		1277
00:15	205		0		0	0		205	12:15	1267	0		0	0	0		1267
00:30	177		0		0	0		177	12:30	1539	0		0	0	0		1539
00:45	162	758	0		0	0		162 758	12:45	1443	5526	0		0	0		1443
01:00	174		0		0	0		174	13:00	1212	0		0	0	0		1212
01:15	160		0		0	0		160	13:15	1261	0		0	0	0		1261
01:30	132		0		0	0		132	13:30	1410	0		0	0	0		1410
01:45	150	616	0		0	0		150 616	13:45	1286	5169	0		0	0		1286
02:00	132		0		0	0		132	14:00	1324	0		0	0	0		1324
02:15	193		0		0	0		193	14:15	1232	0		0	0	0		1232
02:30	191		0		0	0		191	14:30	1326	0		0	0	0		1326
02:45	218	734	0		0	0		218 734	14:45	1526	5408	0		0	0		1526
03:00	226		0		0	0		226	15:00	1430	0		0	0	0		1430
03:15	309		0		0	0		309	15:15	1459	0		0	0	0		1459
03:30	201		0		0	0		201	15:30	1409	0		0	0	0		1409
03:45	590	1326	0		0	0		590 1326	15:45	1335	5633	0		0	0		1335
04:00	644		0		0	0		644	16:00	1400	0		0	0	0		1400
04:15	929		0		0	0		929	16:15	1464	0		0	0	0		1464
04:30	1185		0		0	0		1185	16:30	1435	0		0	0	0		1435
04:45	1341	4099	0		0	0		1341 4099	16:45	1413	5712	0		0	0		1413
05:00	1292		0		0	0		1292	17:00	1365	0		0	0	0		1365
05:15	1360		0		0	0		1360	17:15	1454	0		0	0	0		1454
05:30	1384		0		0	0		1384	17:30	1134	0		0	0	0		1134
05:45	1480	5516	0		0	0		1480 5516	17:45	1285	5238	0		0	0		1285
06:00	1505		0		0	0		1505	18:00	1284	0		0	0	0		1284
06:15	1600		0		0	0		1600	18:15	1241	0		0	0	0		1241
06:30	1709		0		0	0		1709	18:30	1210	0		0	0	0		1210
06:45	1788	6602	0		0	0		1788 6602	18:45	1171	4906	0		0	0		1171
07:00	1689		0		0	0		1689	19:00	1106	0		0	0	0		1106
07:15	1759		0		0	0		1759	19:15	1117	0		0	0	0		1117
07:30	1796		0		0	0		1796	19:30	967	0		0	0	0		967
07:45	1759	7003	0		0	0		1759 7003	19:45	1008	4198	0		0	0		1008
08:00	1752		0		0	0		1752	20:00	943	0		0	0	0		943
08:15	1736		0		0	0		1736	20:15	617	0		0	0	0		617
08:30	1643		0		0	0		1643	20:30	959	0		0	0	0		959
08:45	1487	6618	0		0	0		1487 6618	20:45	910	3429	0		0	0		910
09:00	1558		0		0	0		1558	21:00	881	0		0	0	0		881
09:15	1450		0		0	0		1450	21:15	739	0		0	0	0		739
09:30	1572		0		0	0		1572	21:30	726	0		0	0	0		726
09:45	1450	6030	0		0	0		1450 6030	21:45	682	3028	0		0	0		682
10:00	1427		0		0	0		1427	22:00	592	0		0	0	0		592
10:15	1402		0		0	0		1402	22:15	436	0		0	0	0		436
10:30	1334		0		0	0		1334	22:30	496	0		0	0	0		496
10:45	1351	5514	0		0	0		1351 5514	22:45	455	1979	0		0	0		455
11:00	1349		0		0	0		1349	23:00	348	0		0	0	0		348
11:15	1317		0		0	0		1317	23:15	393	0		0	0	0		393
11:30	1345		0		0	0		1345	23:30	308	0		0	0	0		308
11:45	1284	5295	0		0	0		1284 5295	23:45	305	1354	0		0	0		305
TOTALS	50111							50111	TOTALS	51580							
SPLIT %	100.0%							49.3%	SPLIT %	100.0%							

DAILY TOTALS					NB	SB						EB	WB	To
					101,691	0						0	0	101
AM Peak Hour	07:15				07:15	PM Peak Hour	14:45							
AM Pk Volume	7066				7066	PM Pk Volume	5824							
Pk Hr Factor	0.984				0.984	Pk Hr Factor	0.954							
7 - 9 Volume	13621	0	0	0	13621	4 - 6 Volume	10950	0	0	0				
7 - 9 Peak Hour	07:15				07:15	4 - 6 Peak Hour	16:00							
7 - 9 Pk Volume	7066	0	0	0	7066	4 - 6 Pk Volume	5712	0	0	0				
Pk Hr Factor	0.984	0.000	0.000	0.000	0.984	Pk Hr Factor	0.975	0.000	0.000	0.000				

CLASSIFICATION

I-15 SB 800' SE/O 91 Fast Track Merge

Day: Tuesday

Date: 9/17/2019

City: Corona

Project #: CA19_6126_001

Summary

Time	0-20ft	20-30ft	30-40ft	40-50ft	50-60ft	60-70ft	70-80ft	80ft & Up						Total
00:00 AM	1118	64	22	12	6	24	27	9	0	0	0	0	0	1282
01:00	642	55	37	11	7	44	54	7	0	0	0	0	0	857
02:00	589	35	33	12	7	69	55	14	0	0	0	0	0	814
03:00	591	76	55	16	14	129	79	8	0	0	0	0	0	968
04:00	1064	176	102	31	28	189	85	30	0	0	0	0	0	1705
05:00	2003	383	126	50	37	233	106	36	0	0	0	0	0	2974
06:00	2963	582	232	70	46	184	120	34	0	0	0	0	0	4231
07:00	4400	728	231	89	56	168	99	30	0	0	0	0	0	5801
08:00	4359	683	253	106	78	176	99	58	0	0	0	0	0	5812
09:00	4301	622	252	124	67	235	136	57	0	0	0	0	0	5794
10:00	3851	624	257	83	62	202	128	51	0	0	0	0	0	5258
11:00	3928	539	234	86	61	235	126	42	0	0	0	0	0	5251
12:00 PM	4055	628	208	79	65	213	122	26	0	0	0	0	0	5396
13:00	4712	727	232	79	63	167	99	28	0	0	0	0	0	6107
14:00	5284	746	221	76	47	153	67	27	0	0	0	0	0	6621
15:00	5323	818	202	55	31	106	52	18	0	0	0	0	0	6605
16:00	4723	851	202	59	31	78	55	31	0	0	0	0	0	6030
17:00	4991	604	107	42	18	56	53	10	0	0	0	0	0	5881
18:00	5485	515	90	38	14	62	40	10	0	0	0	0	0	6254
19:00	4991	462	74	23	17	41	43	12	0	0	0	0	0	5663
20:00	4570	366	67	32	11	73	35	9	0	0	0	0	0	5163
21:00	3966	284	52	28	3	51	49	15	0	0	0	0	0	4448
22:00	3037	213	52	16	8	49	50	6	0	0	0	0	0	3431
23:00	1934	124	34	9	5	56	37	14	0	0	0	0	0	2213
Totals	82880	10905	3375	1226	782	2993	1816	582						104559
% of Totals	79%	10%	3%	1%	1%	3%	2%	1%						100%

AM Volumes	29809	4567	1834	690	469	1888	1114	376	0	0	0	0	0	40747
% AM	29%	4%	2%	1%	0%	2%	1%	0%						39%
AM Peak Hour	07:00	07:00	10:00	09:00	08:00	09:00	09:00	08:00						08:00
Volume	4400	728	257	124	78	235	136	58						5812
PM Volumes	53071	6338	1541	536	313	1105	702	206	0	0	0	0	0	63812
% PM	51%	6%	1%	1%	0%	1%	1%	0%						61%
PM Peak Hour	18:00	16:00	13:00	12:00	12:00	12:00	12:00	16:00						14:00
Volume	5485	851	232	79	65	213	122	31						6621
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%
			11613	↔	11%	11503	↔	11%	11911	↔	11%	69532	↔	67%

DAILY TOTALS				NB	SB	EB	WB	To
				0	104,559	0	0	104

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TO
00:00	0	392	0	0	392	12:00	0	1291	0	0	1291
00:15	0	346	0	0	346	12:15	0	1290	0	0	1290
00:30	0	274	0	0	274	12:30	0	1403	0	0	1403
00:45	0	270 1282	0	0	270 1282	12:45	0	1412 5396	0	0	1412
01:00	0	217	0	0	217	13:00	0	1488	0	0	1488
01:15	0	212	0	0	212	13:15	0	1496	0	0	1496
01:30	0	207	0	0	207	13:30	0	1504	0	0	1504
01:45	0	221 857	0	0	221 857	13:45	0	1619 6107	0	0	1619
02:00	0	208	0	0	208	14:00	0	1666	0	0	1666
02:15	0	205	0	0	205	14:15	0	1621	0	0	1621
02:30	0	187	0	0	187	14:30	0	1620	0	0	1620
02:45	0	214 814	0	0	214 814	14:45	0	1714 6621	0	0	1714
03:00	0	197	0	0	197	15:00	0	1629	0	0	1629
03:15	0	207	0	0	207	15:15	0	1687	0	0	1687
03:30	0	249	0	0	249	15:30	0	1678	0	0	1678
03:45	0	315 968	0	0	315 968	15:45	0	1611 6605	0	0	1611
04:00	0	334	0	0	334	16:00	0	1547	0	0	1547
04:15	0	354	0	0	354	16:15	0	1418	0	0	1418
04:30	0	472	0	0	472	16:30	0	1563	0	0	1563
04:45	0	545 1705	0	0	545 1705	16:45	0	1502 6030	0	0	1502
05:00	0	680	0	0	680	17:00	0	1546	0	0	1546
05:15	0	665	0	0	665	17:15	0	1494	0	0	1494
05:30	0	725	0	0	725	17:30	0	1411	0	0	1411
05:45	0	904 2974	0	0	904 2974	17:45	0	1430 5881	0	0	1430
06:00	0	1028	0	0	1028	18:00	0	1535	0	0	1535
06:15	0	974	0	0	974	18:15	0	1505	0	0	1505
06:30	0	1089	0	0	1089	18:30	0	1639	0	0	1639
06:45	0	1140 4231	0	0	1140 4231	18:45	0	1575 6254	0	0	1575
07:00	0	1378	0	0	1378	19:00	0	1449	0	0	1449
07:15	0	1448	0	0	1448	19:15	0	1397	0	0	1397
07:30	0	1531	0	0	1531	19:30	0	1421	0	0	1421
07:45	0	1444 5801	0	0	1444 5801	19:45	0	1396 5663	0	0	1396
08:00	0	1506	0	0	1506	20:00	0	1340	0	0	1340
08:15	0	1574	0	0	1574	20:15	0	1316	0	0	1316
08:30	0	1483	0	0	1483	20:30	0	1250	0	0	1250
08:45	0	1249 5812	0	0	1249 5812	20:45	0	1257 5163	0	0	1257
09:00	0	1483	0	0	1483	21:00	0	1076	0	0	1076
09:15	0	1461	0	0	1461	21:15	0	1054	0	0	1054
09:30	0	1457	0	0	1457	21:30	0	1273	0	0	1273
09:45	0	1393 5794	0	0	1393 5794	21:45	0	1045 4448	0	0	1045
10:00	0	1344	0	0	1344	22:00	0	1030	0	0	1030
10:15	0	1321	0	0	1321	22:15	0	874	0	0	874
10:30	0	1270	0	0	1270	22:30	0	800	0	0	800
10:45	0	1323 5258	0	0	1323 5258	22:45	0	727 3431	0	0	727
11:00	0	1307	0	0	1307	23:00	0	625	0	0	625
11:15	0	1310	0	0	1310	23:15	0	586	0	0	586
11:30	0	1360	0	0	1360	23:30	0	529	0	0	529
11:45	0	1274 5251	0	0	1274 5251	23:45	0	473 2213	0	0	473
TOTALS		40747			40747	TOTALS		63812			
SPLIT %		100.0%			39.0%	SPLIT %		100.0%			

DAILY TOTALS				NB	SB	EB	WB	To
				0	104,559	0	0	104

AM Peak Hour	07:30			07:30	PM Peak Hour	14:45		
AM Pk Volume	6055			6055	PM Pk Volume	6708		
Pk Hr Factor	0.962			0.962	Pk Hr Factor	0.978		
7 - 9 Volume	0	11613	0	0	4 - 6 Volume	0	11911	0
7 - 9 Peak Hour	07:30			07:30	4 - 6 Peak Hour	16:30		
7 - 9 Pk Volume	0	6055	0	0	4 - 6 Pk Volume	0	6105	0
Pk Hr Factor	0.000	0.962	0.000	0.000	Pk Hr Factor	0.000	0.976	0.000

CLASSIFICATION

I-15 SB 800' SE/O 91 Fast Track Merge

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6126_001

Summary

Time	0-20ft	20-30ft	30-40ft	40-50ft	50-60ft	60-70ft	70-80ft	80ft & Up						Total
00:00 AM	1297	64	34	9	10	34	33	6	0	0	0	0	0	1487
01:00	828	55	30	15	7	59	46	7	0	0	0	0	0	1047
02:00	632	49	29	11	6	71	64	8	0	0	0	0	0	870
03:00	643	94	59	14	11	131	46	10	0	0	0	0	0	1008
04:00	1231	215	88	34	24	211	99	28	0	0	0	0	0	1930
05:00	2045	417	145	44	42	198	100	41	0	0	0	0	0	3032
06:00	2975	581	202	73	34	180	112	34	0	0	0	0	0	4191
07:00	4214	671	216	87	49	155	107	29	0	0	0	0	0	5528
08:00	4183	693	252	112	58	201	97	68	0	0	0	0	0	5664
09:00	4177	579	269	105	52	225	139	43	0	0	0	0	0	5589
10:00	3851	621	260	98	68	207	132	29	0	0	0	0	0	5266
11:00	3965	563	280	70	47	219	123	41	0	0	0	0	0	5308
12:00 PM	4232	687	295	89	70	225	117	50	0	0	0	0	0	5765
13:00	4589	684	225	102	49	167	110	36	0	0	0	0	0	5962
14:00	5261	805	241	83	42	134	82	39	0	0	0	0	0	6687
15:00	5386	819	229	58	38	91	67	20	0	0	0	0	0	6708
16:00	4934	737	145	61	37	67	69	11	0	0	0	0	0	6061
17:00	5099	609	114	37	20	61	44	13	0	0	0	0	0	5997
18:00	5361	503	110	38	20	59	40	11	0	0	0	0	0	6142
19:00	5236	489	81	40	15	69	47	9	0	0	0	0	0	5986
20:00	4773	392	60	36	11	64	47	11	0	0	0	0	0	5394
21:00	2712	252	25	15	5	30	29	12	0	0	0	0	0	3080
22:00	2348	157	25	11	6	58	34	2	0	0	0	0	0	2641
23:00	1535	135	29	14	9	33	49	14	0	0	0	0	0	1818
Totals	81507	10871	3443	1256	730	2949	1833	572						103161
% of Totals	79%	11%	3%	1%	1%	3%	2%	1%						100%

AM Volumes	30041	4602	1864	672	408	1891	1098	344	0	0	0	0	0	40920
% AM	29%	4%	2%	1%	0%	2%	1%	0%						40%
AM Peak Hour	07:00	08:00	11:00	08:00	10:00	09:00	09:00	08:00						08:00
Volume	4214	693	280	112	68	225	139	68						5664
PM Volumes	51466	6269	1579	584	322	1058	735	228	0	0	0	0	0	62241
% PM	50%	6%	2%	1%	0%	1%	1%	0%						60%
PM Peak Hour	15:00	15:00	12:00	13:00	12:00	12:00	12:00	12:00						15:00
Volume	5386	819	295	102	70	225	117	50						6708
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%
			11192	↔	11%	11727	↔	11%	12058	↔	12%	68184	↔	66%

DAILY TOTALS					NB	SB	EB					WB	To
					0	103,161	0					0	103
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TO	
00:00	0	432	0	0	432		12:00	0	1502	0	0	1502	
00:15	0	386	0	0	386		12:15	0	1433	0	0	1433	
00:30	0	333	0	0	333		12:30	0	1365	0	0	1365	
00:45	0	336 1487	0	0	336 1487		12:45	0	1465 5765	0	0	1465	
01:00	0	318	0	0	318		13:00	0	1493	0	0	1493	
01:15	0	228	0	0	228		13:15	0	1455	0	0	1455	
01:30	0	242	0	0	242		13:30	0	1484	0	0	1484	
01:45	0	259 1047	0	0	259 1047		13:45	0	1530 5962	0	0	1530	
02:00	0	257	0	0	257		14:00	0	1653	0	0	1653	
02:15	0	169	0	0	169		14:15	0	1564	0	0	1564	
02:30	0	205	0	0	205		14:30	0	1684	0	0	1684	
02:45	0	239 870	0	0	239 870		14:45	0	1786 6687	0	0	1786	
03:00	0	202	0	0	202		15:00	0	1741	0	0	1741	
03:15	0	234	0	0	234		15:15	0	1639	0	0	1639	
03:30	0	258	0	0	258		15:30	0	1727	0	0	1727	
03:45	0	314 1008	0	0	314 1008		15:45	0	1601 6708	0	0	1601	
04:00	0	302	0	0	302		16:00	0	1588	0	0	1588	
04:15	0	423	0	0	423		16:15	0	1401	0	0	1401	
04:30	0	563	0	0	563		16:30	0	1589	0	0	1589	
04:45	0	642 1930	0	0	642 1930		16:45	0	1483 6061	0	0	1483	
05:00	0	695	0	0	695		17:00	0	1494	0	0	1494	
05:15	0	647	0	0	647		17:15	0	1445	0	0	1445	
05:30	0	794	0	0	794		17:30	0	1536	0	0	1536	
05:45	0	896 3032	0	0	896 3032		17:45	0	1522 5997	0	0	1522	
06:00	0	990	0	0	990		18:00	0	1520	0	0	1520	
06:15	0	1009	0	0	1009		18:15	0	1593	0	0	1593	
06:30	0	1028	0	0	1028		18:30	0	1506	0	0	1506	
06:45	0	1164 4191	0	0	1164 4191		18:45	0	1523 6142	0	0	1523	
07:00	0	1361	0	0	1361		19:00	0	1523	0	0	1523	
07:15	0	1298	0	0	1298		19:15	0	1472	0	0	1472	
07:30	0	1359	0	0	1359		19:30	0	1535	0	0	1535	
07:45	0	1510 5528	0	0	1510 5528		19:45	0	1456 5986	0	0	1456	
08:00	0	1496	0	0	1496		20:00	0	1458	0	0	1458	
08:15	0	1465	0	0	1465		20:15	0	1336	0	0	1336	
08:30	0	1313	0	0	1313		20:30	0	1342	0	0	1342	
08:45	0	1390 5664	0	0	1390 5664		20:45	0	1258 5394	0	0	1258	
09:00	0	1402	0	0	1402		21:00	0	1093	0	0	1093	
09:15	0	1419	0	0	1419		21:15	0	590	0	0	590	
09:30	0	1427	0	0	1427		21:30	0	692	0	0	692	
09:45	0	1341 5589	0	0	1341 5589		21:45	0	705 3080	0	0	705	
10:00	0	1404	0	0	1404		22:00	0	753	0	0	753	
10:15	0	1256	0	0	1256		22:15	0	675	0	0	675	
10:30	0	1367	0	0	1367		22:30	0	621	0	0	621	
10:45	0	1239 5266	0	0	1239 5266		22:45	0	592 2641	0	0	592	
11:00	0	1322	0	0	1322		23:00	0	529	0	0	529	
11:15	0	1323	0	0	1323		23:15	0	456	0	0	456	
11:30	0	1372	0	0	1372		23:30	0	429	0	0	429	
11:45	0	1291 5308	0	0	1291 5308		23:45	0	404 1818	0	0	404	
TOTALS	40920				40920		TOTALS	62241					
SPLIT %	100.0%				39.7%		SPLIT %	100.0%					

DAILY TOTALS					NB	SB						EB	WB	To
					0	103,161						0	0	103,161
AM Peak Hour		07:30			07:30	PM Peak Hour		14:45						
AM Pk Volume		5830			5830	PM Pk Volume		6893						
Pk Hr Factor		0.965			0.965	Pk Hr Factor		0.965						
7 - 9 Volume	0	11192	0	0	11192	4 - 6 Volume	0	12058	0	0				
7 - 9 Peak Hour		07:30			07:30	4 - 6 Peak Hour		16:00						
7 - 9 Pk Volume	0	5830	0	0	5830	4 - 6 Pk Volume	0	6061	0	0				
Pk Hr Factor	0.000	0.965	0.000	0.000	0.965	Pk Hr Factor	0.000	0.954	0.000	0.000				

CLASSIFICATION

I-15 SB 800' SE/O 91 Fast Track Merge

Day: Thursday

Date: 9/19/2019

City: Corona

Project #: CA19_6126_001

Summary

Time	0-20ft	20-30ft	30-40ft	40-50ft	50-60ft	60-70ft	70-80ft	80ft & Up						Total
00:00 AM	971	61	15	9	3	51	25	4	0	0	0	0	0	1139
01:00	542	38	11	8	9	43	29	8	0	0	0	0	0	688
02:00	424	49	30	8	7	67	40	5	0	0	0	0	0	630
03:00	494	63	40	19	13	116	50	5	0	0	0	0	0	800
04:00	1005	170	73	37	28	202	92	28	0	0	0	0	0	1635
05:00	1959	400	147	46	41	213	103	39	0	0	0	0	0	2948
06:00	2944	601	216	82	44	174	102	32	0	0	0	0	0	4195
07:00	4278	708	282	97	47	150	91	48	0	0	0	0	0	5701
08:00	4504	711	274	91	61	196	117	42	0	0	0	0	0	5996
09:00	4130	645	276	87	60	215	129	44	0	0	0	0	0	5586
10:00	3808	595	298	89	47	188	139	41	0	0	0	0	0	5205
11:00	4090	605	264	102	58	223	147	31	0	0	0	0	0	5520
12:00 PM	4245	590	217	70	66	183	96	46	0	0	0	0	0	5513
13:00	4728	730	250	95	61	167	101	36	0	0	0	0	0	6168
14:00	5259	782	248	88	54	145	87	22	0	0	0	0	0	6685
15:00	4916	997	231	66	41	109	70	35	0	0	0	0	0	6465
16:00	4655	855	197	73	29	61	60	26	0	0	0	0	0	5956
17:00	4230	837	166	84	51	61	45	38	0	0	0	0	0	5512
18:00	5150	540	84	38	21	66	37	10	0	0	0	0	0	5946
19:00	5287	487	75	32	23	65	49	18	0	0	0	0	0	6036
20:00	4795	393	61	39	13	62	46	11	0	0	0	0	0	5420
21:00	4292	328	44	25	10	51	49	12	0	0	0	0	0	4811
22:00	2770	168	26	18	5	47	62	9	0	0	0	0	0	3105
23:00	1889	112	28	10	3	49	46	9	0	0	0	0	0	2146
Totals	81365	11465	3553	1313	795	2904	1812	599						103806
% of Totals	78%	11%	3%	1%	1%	3%	2%	1%						100%

AM Volumes	29149	4646	1926	675	418	1838	1064	327	0	0	0	0	0	40043
% AM	28%	4%	2%	1%	0%	2%	1%	0%						39%
AM Peak Hour	08:00	08:00	10:00	11:00	08:00	11:00	11:00	07:00						08:00
Volume	4504	711	298	102	61	223	147	48						5996
PM Volumes	52216	6819	1627	638	377	1066	748	272	0	0	0	0	0	63763
% PM	50%	7%	2%	1%	0%	1%	1%	0%						61%
PM Peak Hour	19:00	15:00	13:00	13:00	12:00	12:00	13:00	12:00						14:00
Volume	5287	997	250	95	66	183	101	46						6685
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%
			11697	↔	11%	11681	↔	11%	11468	↔	11%	68960	↔	66%

DAILY TOTALS				NB	SB	EB	WB	To
				0	103,806	0	0	103

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TO
00:00	0	303	0	0	303	12:00	0	1376	0	0	1376
00:15	0	323	0	0	323	12:15	0	1341	0	0	1341
00:30	0	294	0	0	294	12:30	0	1304	0	0	1304
00:45	0	219 1139	0	0	219 1139	12:45	0	1492 5513	0	0	1492
01:00	0	201	0	0	201	13:00	0	1599	0	0	1599
01:15	0	152	0	0	152	13:15	0	1504	0	0	1504
01:30	0	185	0	0	185	13:30	0	1501	0	0	1501
01:45	0	150 688	0	0	150 688	13:45	0	1564 6168	0	0	1564
02:00	0	158	0	0	158	14:00	0	1664	0	0	1664
02:15	0	149	0	0	149	14:15	0	1629	0	0	1629
02:30	0	147	0	0	147	14:30	0	1623	0	0	1623
02:45	0	176 630	0	0	176 630	14:45	0	1769 6685	0	0	1769
03:00	0	173	0	0	173	15:00	0	1686	0	0	1686
03:15	0	173	0	0	173	15:15	0	1552	0	0	1552
03:30	0	207	0	0	207	15:30	0	1570	0	0	1570
03:45	0	247 800	0	0	247 800	15:45	0	1657 6465	0	0	1657
04:00	0	285	0	0	285	16:00	0	1510	0	0	1510
04:15	0	307	0	0	307	16:15	0	1467	0	0	1467
04:30	0	487	0	0	487	16:30	0	1491	0	0	1491
04:45	0	556 1635	0	0	556 1635	16:45	0	1488 5956	0	0	1488
05:00	0	622	0	0	622	17:00	0	1410	0	0	1410
05:15	0	660	0	0	660	17:15	0	1323	0	0	1323
05:30	0	784	0	0	784	17:30	0	1408	0	0	1408
05:45	0	882 2948	0	0	882 2948	17:45	0	1371 5512	0	0	1371
06:00	0	1015	0	0	1015	18:00	0	1530	0	0	1530
06:15	0	922	0	0	922	18:15	0	1442	0	0	1442
06:30	0	1015	0	0	1015	18:30	0	1476	0	0	1476
06:45	0	1243 4195	0	0	1243 4195	18:45	0	1498 5946	0	0	1498
07:00	0	1339	0	0	1339	19:00	0	1539	0	0	1539
07:15	0	1440	0	0	1440	19:15	0	1498	0	0	1498
07:30	0	1495	0	0	1495	19:30	0	1556	0	0	1556
07:45	0	1427 5701	0	0	1427 5701	19:45	0	1443 6036	0	0	1443
08:00	0	1497	0	0	1497	20:00	0	1457	0	0	1457
08:15	0	1504	0	0	1504	20:15	0	1411	0	0	1411
08:30	0	1531	0	0	1531	20:30	0	1328	0	0	1328
08:45	0	1464 5996	0	0	1464 5996	20:45	0	1224 5420	0	0	1224
09:00	0	1468	0	0	1468	21:00	0	1262	0	0	1262
09:15	0	1401	0	0	1401	21:15	0	1132	0	0	1132
09:30	0	1330	0	0	1330	21:30	0	1219	0	0	1219
09:45	0	1387 5586	0	0	1387 5586	21:45	0	1198 4811	0	0	1198
10:00	0	1375	0	0	1375	22:00	0	875	0	0	875
10:15	0	1216	0	0	1216	22:15	0	728	0	0	728
10:30	0	1324	0	0	1324	22:30	0	838	0	0	838
10:45	0	1290 5205	0	0	1290 5205	22:45	0	664 3105	0	0	664
11:00	0	1394	0	0	1394	23:00	0	632	0	0	632
11:15	0	1346	0	0	1346	23:15	0	548	0	0	548
11:30	0	1418	0	0	1418	23:30	0	510	0	0	510
11:45	0	1362 5520	0	0	1362 5520	23:45	0	456 2146	0	0	456
TOTALS		40043			40043	TOTALS		63763			
SPLIT %		100.0%			38.6%	SPLIT %		100.0%			

DAILY TOTALS				NB	SB	EB	WB	To
				0	103,806	0	0	103

AM Peak Hour	08:00			08:00	PM Peak Hour	14:15		
AM Pk Volume	5996			5996	PM Pk Volume	6707		
Pk Hr Factor	0.979			0.979	Pk Hr Factor	0.948		
7 - 9 Volume	0	11697	0	0	4 - 6 Volume	0	11468	0
7 - 9 Peak Hour	08:00			08:00	4 - 6 Peak Hour	16:00		
7 - 9 Pk Volume	0	5996	0	0	4 - 6 Pk Volume	0	5956	0
Pk Hr Factor	0.000	0.979	0.000	0.000	Pk Hr Factor	0.000	0.986	0.000

VOLUME

I-15 NB On-Ramp From Main St

Day: Tuesday
Date: 10/1/2019City: Lake Elsinore
Project #: CA19_6124_002

DAILY TOTALS					NB	SB						EB	WB						Total
					2,084	0						0	0						2,084
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	8	0			8		12:00	30	0			30							
00:15	2	0			2		12:15	24	0			24							
00:30	0	0			0		12:30	27	0			27							
00:45	0	10	0		0	10	12:45	33	114	0		33	114						
01:00	3	0			3		13:00	38	0			38							
01:15	1	0			1		13:15	29	0			29							
01:30	2	0			2		13:30	32	0			32							
01:45	1	7	0		1	7	13:45	36	135	0		36	135						
02:00	3	0			3		14:00	42	0			42							
02:15	2	0			2		14:15	35	0			35							
02:30	1	0			1		14:30	29	0			29							
02:45	4	10	0		4	10	14:45	35	141	0		35	141						
03:00	16	0			16		15:00	30	0			30							
03:15	8	0			8		15:15	42	0			42							
03:30	16	0			16		15:30	31	0			31							
03:45	18	58	0		18	58	15:45	37	140	0		37	140						
04:00	24	0			24		16:00	37	0			37							
04:15	23	0			23		16:15	25	0			25							
04:30	29	0			29		16:30	23	0			23							
04:45	27	103	0		27	103	16:45	28	113	0		28	113						
05:00	33	0			33		17:00	46	0			46							
05:15	30	0			30		17:15	28	0			28							
05:30	32	0			32		17:30	30	0			30							
05:45	29	124	0		29	124	17:45	34	138	0		34	138						
06:00	31	0			31		18:00	28	0			28							
06:15	31	0			31		18:15	27	0			27							
06:30	32	0			32		18:30	34	0			34							
06:45	22	116	0		22	116	18:45	30	119	0		30	119						
07:00	30	0			30		19:00	20	0			20							
07:15	24	0			24		19:15	18	0			18							
07:30	25	0			25		19:30	22	0			22							
07:45	34	113	0		34	113	19:45	12	72	0		12	72						
08:00	24	0			24		20:00	31	0			31							
08:15	25	0			25		20:15	24	0			24							
08:30	27	0			27		20:30	16	0			16							
08:45	21	97	0		21	97	20:45	12	83	0		12	83						
09:00	16	0			16		21:00	8	0			8							
09:15	22	0			22		21:15	8	0			8							
09:30	21	0			21		21:30	6	0			6							
09:45	28	87	0		28	87	21:45	11	33	0		11	33						
10:00	25	0			25		22:00	9	0			9							
10:15	27	0			27		22:15	5	0			5							
10:30	38	0			38		22:30	5	0			5							
10:45	32	122	0		32	122	22:45	7	26	0		7	26						
11:00	32	0			32		23:00	3	0			3							
11:15	29	0			29		23:15	3	0			3							
11:30	28	0			28		23:30	2	0			2							
11:45	25	114	0		25	114	23:45	1	9	0		1	9						
TOTALS	961				961		TOTALS	1123				1123							
SPLIT %	100.0%				46.1%		SPLIT %	100.0%				53.9%							

DAILY TOTALS					NB	SB						EB	WB						Total
					2,084	0						0	0						2,084

AM Peak Hour	10:30				10:30		PM Peak Hour	15:15				15:15							
AM Pk Volume	131				131		PM Pk Volume	147				147							
Pk Hr Factor	0.862				0.862		Pk Hr Factor	0.875				0.875							
7 - 9 Volume	210	0	0	0	210		4 - 6 Volume	251	0	0	0	251							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	17:00				17:00							
7 - 9 Pk Volume	113	0	0	0	113		4 - 6 Pk Volume	138	0	0	0	138							
Pk Hr Factor	0.831	0.000	0.000	0.000	0.831		Pk Hr Factor	0.750	0.000	0.000	0.000	0.750							

VOLUME

I-15 NB On-Ramp From Main St

Day: Wednesday

Date: 10/2/2019

City: Lake Elsinore

Project #: CA19_6124_002

DAILY TOTALS					NB	SB						EB	WB						Total
					2,113	0						0	0						2,113
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	2	0			2		12:00	37	0			37							
00:15	3	0			3		12:15	23	0			23							
00:30	1	0			1		12:30	33	0			33							
00:45	0	6	0		0	6	12:45	22	115	0		22	115						
01:00	4	0			4		13:00	39	0			39							
01:15	1	0			1		13:15	27	0			27							
01:30	6	0			6		13:30	29	0			29							
01:45	0	11	0		0	11	13:45	42	137	0		42	137						
02:00	1	0			1		14:00	38	0			38							
02:15	4	0			4		14:15	33	0			33							
02:30	2	0			2		14:30	24	0			24							
02:45	2	9	0		2	9	14:45	37	132	0		37	132						
03:00	10	0			10		15:00	32	0			32							
03:15	12	0			12		15:15	38	0			38							
03:30	8	0			8		15:30	41	0			41							
03:45	19	49	0		19	49	15:45	33	144	0		33	144						
04:00	18	0			18		16:00	40	0			40							
04:15	23	0			23		16:15	30	0			30							
04:30	39	0			39		16:30	27	0			27							
04:45	28	108	0		28	108	16:45	34	131	0		34	131						
05:00	26	0			26		17:00	42	0			42							
05:15	30	0			30		17:15	24	0			24							
05:30	33	0			33		17:30	32	0			32							
05:45	26	115	0		26	115	17:45	26	124	0		26	124						
06:00	43	0			43		18:00	35	0			35							
06:15	25	0			25		18:15	19	0			19							
06:30	31	0			31		18:30	20	0			20							
06:45	19	118	0		19	118	18:45	25	99	0		25	99						
07:00	21	0			21		19:00	19	0			19							
07:15	22	0			22		19:15	17	0			17							
07:30	38	0			38		19:30	23	0			23							
07:45	43	124	0		43	124	19:45	20	79	0		20	79						
08:00	37	0			37		20:00	30	0			30							
08:15	27	0			27		20:15	15	0			15							
08:30	34	0			34		20:30	12	0			12							
08:45	27	125	0		27	125	20:45	20	77	0		20	77						
09:00	21	0			21		21:00	12	0			12							
09:15	20	0			20		21:15	11	0			11							
09:30	27	0			27		21:30	7	0			7							
09:45	24	92	0		24	92	21:45	7	37	0		7	37						
10:00	27	0			27		22:00	8	0			8							
10:15	30	0			30		22:15	8	0			8							
10:30	25	0			25		22:30	4	0			4							
10:45	29	111	0		29	111	22:45	3	23	0		3	23						
11:00	30	0			30		23:00	6	0			6							
11:15	26	0			26		23:15	12	0			12							
11:30	37	0			37		23:30	4	0			4							
11:45	30	123	0		30	123	23:45	2	24	0		2	24						
TOTALS	991				991		TOTALS	1122				1122							
SPLIT %	100.0%				46.9%		SPLIT %	100.0%				53.1%							

DAILY TOTALS					NB	SB						EB	WB						Total
					2,113	0						0	0						2,113

AM Peak Hour	07:30				07:30		PM Peak Hour	15:15				15:15							
AM Pk Volume	145				145		PM Pk Volume	152				152							
Pk Hr Factor	0.843				0.843		Pk Hr Factor	0.927				0.927							
7 - 9 Volume	249	0	0	0	249		4 - 6 Volume	255	0	0	0	255							
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	16:15				16:15							
7 - 9 Pk Volume	145	0	0	0	145		4 - 6 Pk Volume	133	0	0	0	133							
Pk Hr Factor	0.843	0.000	0.000	0.000	0.843		Pk Hr Factor	0.792	0.000	0.000	0.000	0.792							

VOLUME

I-15 NB On-Ramp From Main St

Day: Thursday
Date: 10/3/2019City: Lake Elsinore
Project #: CA19_6124_002

DAILY TOTALS					NB	SB						EB	WB						Total
					2,002	0						0	0						2,002
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	4	0			4		12:00	31	0			31							
00:15	7	0			7		12:15	35	0			35							
00:30	7	0			7		12:30	23	0			23							
00:45	0	18	0		0	18	12:45	20	109	0		20	109						
01:00	2	0			2		13:00	32	0			32							
01:15	0	0			0		13:15	19	0			19							
01:30	6	0			6		13:30	17	0			17							
01:45	1	9	0		1	9	13:45	21	89	0		21	89						
02:00	1	0			1		14:00	37	0			37							
02:15	1	0			1		14:15	31	0			31							
02:30	3	0			3		14:30	36	0			36							
02:45	9	14	0		9	14	14:45	33	137	0		33	137						
03:00	8	0			8		15:00	43	0			43							
03:15	8	0			8		15:15	37	0			37							
03:30	17	0			17		15:30	25	0			25							
03:45	16	49	0		16	49	15:45	33	138	0		33	138						
04:00	31	0			31		16:00	31	0			31							
04:15	29	0			29		16:15	31	0			31							
04:30	41	0			41		16:30	27	0			27							
04:45	23	124	0		23	124	16:45	37	126	0		37	126						
05:00	35	0			35		17:00	32	0			32							
05:15	29	0			29		17:15	31	0			31							
05:30	28	0			28		17:30	41	0			41							
05:45	37	129	0		37	129	17:45	40	144	0		40	144						
06:00	33	0			33		18:00	23	0			23							
06:15	32	0			32		18:15	24	0			24							
06:30	28	0			28		18:30	19	0			19							
06:45	14	107	0		14	107	18:45	23	89	0		23	89						
07:00	20	0			20		19:00	19	0			19							
07:15	31	0			31		19:15	23	0			23							
07:30	37	0			37		19:30	19	0			19							
07:45	31	119	0		31	119	19:45	13	74	0		13	74						
08:00	30	0			30		20:00	15	0			15							
08:15	18	0			18		20:15	22	0			22							
08:30	18	0			18		20:30	11	0			11							
08:45	29	95	0		29	95	20:45	9	57	0		9	57						
09:00	19	0			19		21:00	18	0			18							
09:15	27	0			27		21:15	8	0			8							
09:30	16	0			16		21:30	10	0			10							
09:45	14	76	0		14	76	21:45	14	50	0		14	50						
10:00	22	0			22		22:00	9	0			9							
10:15	22	0			22		22:15	7	0			7							
10:30	38	0			38		22:30	3	0			3							
10:45	32	114	0		32	114	22:45	8	27	0		8	27						
11:00	20	0			20		23:00	2	0			2							
11:15	32	0			32		23:15	2	0			2							
11:30	29	0			29		23:30	2	0			2							
11:45	19	100	0		19	100	23:45	2	8	0		2	8						
TOTALS	954				954		TOTALS	1048				1048							
SPLIT %	100.0%				47.7%		SPLIT %	100.0%				52.3%							

DAILY TOTALS					NB	SB						EB	WB						Total
					2,002	0						0	0						2,002

AM Peak Hour	05:30				05:30		PM Peak Hour	14:30				14:30							
AM Pk Volume	130				130		PM Pk Volume	149				149							
Pk Hr Factor	0.878				0.878		Pk Hr Factor	0.866				0.866							
7 - 9 Volume	214	0	0	0	214		4 - 6 Volume	270	0	0	0	270							
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	17:00				17:00							
7 - 9 Pk Volume	129	0	0	0	129		4 - 6 Pk Volume	144	0	0	0	144							
Pk Hr Factor	0.872	0.000	0.000	0.000	0.872		Pk Hr Factor	0.878	0.000	0.000	0.000	0.878							

CLASSIFICATION

I-15 NB .80 Mile N/O Railroad Canyon Rd NB On-Ramp

Day: Tuesday
Date: 9/17/2019

City: Corona
Project #: CA19_6126_002

Summary

Time	0-20ft	20-30ft	30-40ft	40-50ft	50-60ft	60-70ft	70-80ft	80ft & Up						Total
00:00 AM	514	58	13	11	3	17	19	13	0	0	0	0	0	648
01:00	343	50	13	9	3	19	25	13	0	0	0	0	0	475
02:00	366	76	12	10	2	15	30	9	0	0	0	0	0	520
03:00	737	174	19	13	7	30	40	15	0	0	0	0	0	1035
04:00	2051	652	51	22	4	43	30	25	0	0	0	0	0	2878
05:00	2685	862	90	38	10	43	40	33	0	0	0	0	0	3801
06:00	3042	770	84	38	21	51	59	27	0	0	0	0	0	4092
07:00	3267	734	90	40	19	47	70	38	0	0	0	0	0	4305
08:00	2866	696	104	43	13	72	73	42	0	0	0	0	0	3909
09:00	2700	566	137	47	14	84	103	43	0	0	0	0	0	3694
10:00	2597	573	120	59	31	102	125	51	0	0	0	0	0	3658
11:00	2486	597	150	61	33	85	145	61	0	0	0	0	0	3618
12:00 PM	2625	595	172	70	32	116	121	73	0	0	0	0	0	3804
13:00	2682	612	167	86	39	87	120	64	0	0	0	0	0	3857
14:00	2832	642	209	87	33	103	116	78	0	0	0	0	0	4100
15:00	2821	759	178	85	33	63	101	44	0	0	0	0	0	4084
16:00	2997	706	149	59	22	50	58	36	0	0	0	0	0	4077
17:00	3051	598	94	46	27	37	43	39	0	0	0	0	0	3935
18:00	2672	515	81	48	22	34	50	47	0	0	0	0	0	3469
19:00	2241	444	60	29	6	22	59	39	0	0	0	0	0	2900
20:00	1800	299	34	12	7	19	41	22	0	0	0	0	0	2234
21:00	1410	246	26	10	7	22	31	27	0	0	0	0	0	1779
22:00	1016	177	33	15	1	23	42	27	0	0	0	0	0	1334
23:00	679	100	12	8	8	12	31	14	0	0	0	0	0	864
Totals	50480	11501	2098	946	397	1196	1572	880						69070
% of Totals	73%	17%	3%	1%	1%	2%	2%	1%						100%

AM Volumes	23654	5808	883	391	160	608	759	370	0	0	0	0	0	32633
% AM	34%	8%	1%	1%	0%	1%	1%	1%						47%
AM Peak Hour	07:00	05:00	11:00	11:00	11:00	10:00	11:00	11:00						07:00
Volume	3267	862	150	61	33	102	145	61						4305
PM Volumes	26826	5693	1215	555	237	588	813	510	0	0	0	0	0	36437
% PM	39%	8%	2%	1%	0%	1%	1%	1%						53%
PM Peak Hour	17:00	15:00	14:00	14:00	13:00	12:00	12:00	14:00						14:00
Volume	3051	759	209	87	39	116	121	78						4100
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%
			8214	↔	12%	7661	↔	11%	8012	↔	12%	45183	↔	65%

DAILY TOTALS					NB	SB					EB	WB	To	
					69,070	0					0	0	69,	
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		TO	
00:00	188	0	0	0	188	12:00	879	0	0	0	879			
00:15	141	0	0	0	141	12:15	967	0	0	0	967			
00:30	168	0	0	0	168	12:30	990	0	0	0	990			
00:45	151 648	0	0	0	151 648	12:45	968 3804	0	0	0	968			
01:00	136	0	0	0	136	13:00	986	0	0	0	986			
01:15	110	0	0	0	110	13:15	903	0	0	0	903			
01:30	109	0	0	0	109	13:30	1005	0	0	0	1005			
01:45	120 475	0	0	0	120 475	13:45	963 3857	0	0	0	963			
02:00	136	0	0	0	136	14:00	1016	0	0	0	1016			
02:15	104	0	0	0	104	14:15	1059	0	0	0	1059			
02:30	132	0	0	0	132	14:30	1074	0	0	0	1074			
02:45	148 520	0	0	0	148 520	14:45	951 4100	0	0	0	951			
03:00	134	0	0	0	134	15:00	981	0	0	0	981			
03:15	217	0	0	0	217	15:15	1043	0	0	0	1043			
03:30	274	0	0	0	274	15:30	1077	0	0	0	1077			
03:45	410 1035	0	0	0	410 1035	15:45	983 4084	0	0	0	983			
04:00	546	0	0	0	546	16:00	1064	0	0	0	1064			
04:15	721	0	0	0	721	16:15	982	0	0	0	982			
04:30	762	0	0	0	762	16:30	1061	0	0	0	1061			
04:45	849 2878	0	0	0	849 2878	16:45	970 4077	0	0	0	970			
05:00	935	0	0	0	935	17:00	936	0	0	0	936			
05:15	952	0	0	0	952	17:15	977	0	0	0	977			
05:30	993	0	0	0	993	17:30	1042	0	0	0	1042			
05:45	921 3801	0	0	0	921 3801	17:45	980 3935	0	0	0	980			
06:00	958	0	0	0	958	18:00	988	0	0	0	988			
06:15	1012	0	0	0	1012	18:15	897	0	0	0	897			
06:30	1055	0	0	0	1055	18:30	825	0	0	0	825			
06:45	1067 4092	0	0	0	1067 4092	18:45	759 3469	0	0	0	759			
07:00	1113	0	0	0	1113	19:00	753	0	0	0	753			
07:15	1113	0	0	0	1113	19:15	701	0	0	0	701			
07:30	1058	0	0	0	1058	19:30	736	0	0	0	736			
07:45	1021 4305	0	0	0	1021 4305	19:45	710 2900	0	0	0	710			
08:00	1031	0	0	0	1031	20:00	583	0	0	0	583			
08:15	1009	0	0	0	1009	20:15	590	0	0	0	590			
08:30	972	0	0	0	972	20:30	572	0	0	0	572			
08:45	897 3909	0	0	0	897 3909	20:45	489 2234	0	0	0	489			
09:00	891	0	0	0	891	21:00	443	0	0	0	443			
09:15	951	0	0	0	951	21:15	498	0	0	0	498			
09:30	919	0	0	0	919	21:30	458	0	0	0	458			
09:45	933 3694	0	0	0	933 3694	21:45	380 1779	0	0	0	380			
10:00	943	0	0	0	943	22:00	348	0	0	0	348			
10:15	866	0	0	0	866	22:15	359	0	0	0	359			
10:30	924	0	0	0	924	22:30	327	0	0	0	327			
10:45	925 3658	0	0	0	925 3658	22:45	300 1334	0	0	0	300			
11:00	834	0	0	0	834	23:00	263	0	0	0	263			
11:15	890	0	0	0	890	23:15	216	0	0	0	216			
11:30	952	0	0	0	952	23:30	204	0	0	0	204			
11:45	942 3618	0	0	0	942 3618	23:45	181 864	0	0	0	181			
TOTALS	32633				32633	TOTALS	36437							
SPLIT %	100.0%				47.2%	SPLIT %	100.0%							

DAILY TOTALS					NB	SB					EB	WB	To	
					69,070	0					0	0	69,	
AM Peak Hour	06:45				06:45	PM Peak Hour	15:15							
AM Pk Volume	4351				4351	PM Pk Volume	4167							
Pk Hr Factor	0.977				0.977	Pk Hr Factor	0.967							
7 - 9 Volume	8214	0	0	0	8214	4 - 6 Volume	8012	0	0	0				
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:00							
7 - 9 Pk Volume	4305	0	0	0	4305	4 - 6 Pk Volume	4077	0	0	0				
Pk Hr Factor	0.967	0.000	0.000	0.000	0.967	Pk Hr Factor	0.958	0.000	0.000	0.000				

CLASSIFICATION

I-15 NB .80 Mile N/O Railroad Canyon Rd NB On-Ramp

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6126_002

Summary

Time	0-20ft	20-30ft	30-40ft	40-50ft	50-60ft	60-70ft	70-80ft	80ft & Up						Total
00:00 AM	415	73	16	7	4	14	27	15	0	0	0	0	0	571
01:00	333	61	18	8	1	11	16	5	0	0	0	0	0	453
02:00	329	76	14	15	4	35	25	12	0	0	0	0	0	510
03:00	763	181	33	19	8	28	38	13	0	0	0	0	0	1083
04:00	2103	609	54	25	7	33	33	23	0	0	0	0	0	2887
05:00	2702	801	90	37	25	47	46	32	0	0	0	0	0	3780
06:00	2922	742	108	32	19	53	53	24	0	0	0	0	0	3953
07:00	3197	729	91	35	27	66	69	39	0	0	0	0	0	4253
08:00	3113	678	99	50	23	68	59	42	0	0	0	0	0	4132
09:00	2767	571	99	48	26	62	110	45	0	0	0	0	0	3728
10:00	2625	580	116	73	23	72	118	60	0	0	0	0	0	3667
11:00	2571	580	137	54	29	114	146	80	0	0	0	0	0	3711
12:00 PM	2794	625	166	77	30	108	133	71	0	0	0	0	0	4004
13:00	2837	650	152	89	49	111	121	62	0	0	0	0	0	4071
14:00	2970	699	168	94	31	95	125	64	0	0	0	0	0	4246
15:00	3052	761	164	77	21	70	87	39	0	0	0	0	0	4271
16:00	3159	684	158	78	24	42	73	44	0	0	0	0	0	4262
17:00	3267	708	139	72	26	54	60	41	0	0	0	0	0	4367
18:00	2569	466	77	30	12	27	39	28	0	0	0	0	0	3248
19:00	2375	467	73	35	11	22	47	26	0	0	0	0	0	3056
20:00	1823	354	44	16	15	18	42	28	0	0	0	0	0	2340
21:00	1426	224	30	17	4	25	39	50	0	0	0	0	0	1815
22:00	1033	164	20	2	9	26	42	22	0	0	0	0	0	1318
23:00	638	74	11	13	3	13	32	17	0	0	0	0	0	801
Totals	51783	11557	2077	1003	431	1214	1580	882						70527
% of Totals	73%	16%	3%	1%	1%	2%	2%	1%						100%

AM Volumes	23840	5681	875	403	196	603	740	390	0	0	0	0	0	32728
% AM	34%	8%	1%	1%	0%	1%	1%	1%						46%
AM Peak Hour	07:00	05:00	11:00	10:00	11:00	11:00	11:00	11:00						07:00
Volume	3197	801	137	73	29	114	146	80						4253
PM Volumes	27943	5876	1202	600	235	611	840	492	0	0	0	0	0	37799
% PM	40%	8%	2%	1%	0%	1%	1%	1%						54%
PM Peak Hour	17:00	15:00	14:00	14:00	13:00	13:00	12:00	12:00						17:00
Volume	3267	761	168	94	49	111	133	71						4367
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%
			8385	↔	12%	8075	↔	11%	8629	↔	12%	45438	↔	64%

DAILY TOTALS						NB	SB	EB				WB	To				
						70,527	0					0	0	70,527			
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	148	0	0	0	148	12:00	953	0	0	0	953	12:00	953	0	0	0	953
00:15	152	0	0	0	152	12:15	959	0	0	0	959	12:15	959	0	0	0	959
00:30	145	0	0	0	145	12:30	1082	0	0	0	1082	12:30	1082	0	0	0	1082
00:45	126 571	0	0	0	126 571	12:45	1010 4004	0	0	0	1010	12:45	1010	4004	0	0	1010
01:00	124	0	0	0	124	13:00	1046	0	0	0	1046	13:00	1046	0	0	0	1046
01:15	94	0	0	0	94	13:15	1011	0	0	0	1011	13:15	1011	0	0	0	1011
01:30	115	0	0	0	115	13:30	1005	0	0	0	1005	13:30	1005	0	0	0	1005
01:45	120 453	0	0	0	120 453	13:45	1009 4071	0	0	0	1009	13:45	1009	4071	0	0	1009
02:00	123	0	0	0	123	14:00	993	0	0	0	993	14:00	993	0	0	0	993
02:15	122	0	0	0	122	14:15	1055	0	0	0	1055	14:15	1055	0	0	0	1055
02:30	118	0	0	0	118	14:30	1079	0	0	0	1079	14:30	1079	0	0	0	1079
02:45	147 510	0	0	0	147 510	14:45	1119 4246	0	0	0	1119	14:45	1119	4246	0	0	1119
03:00	174	0	0	0	174	15:00	1075	0	0	0	1075	15:00	1075	0	0	0	1075
03:15	212	0	0	0	212	15:15	1084	0	0	0	1084	15:15	1084	0	0	0	1084
03:30	316	0	0	0	316	15:30	1094	0	0	0	1094	15:30	1094	0	0	0	1094
03:45	381 1083	0	0	0	381 1083	15:45	1018 4271	0	0	0	1018	15:45	1018	4271	0	0	1018
04:00	560	0	0	0	560	16:00	1021	0	0	0	1021	16:00	1021	0	0	0	1021
04:15	708	0	0	0	708	16:15	1068	0	0	0	1068	16:15	1068	0	0	0	1068
04:30	751	0	0	0	751	16:30	1106	0	0	0	1106	16:30	1106	0	0	0	1106
04:45	868 2887	0	0	0	868 2887	16:45	1067 4262	0	0	0	1067	16:45	1067	4262	0	0	1067
05:00	899	0	0	0	899	17:00	1173	0	0	0	1173	17:00	1173	0	0	0	1173
05:15	972	0	0	0	972	17:15	1034	0	0	0	1034	17:15	1034	0	0	0	1034
05:30	954	0	0	0	954	17:30	1132	0	0	0	1132	17:30	1132	0	0	0	1132
05:45	955 3780	0	0	0	955 3780	17:45	1028 4367	0	0	0	1028	17:45	1028	4367	0	0	1028
06:00	936	0	0	0	936	18:00	1007	0	0	0	1007	18:00	1007	0	0	0	1007
06:15	978	0	0	0	978	18:15	754	0	0	0	754	18:15	754	0	0	0	754
06:30	1045	0	0	0	1045	18:30	747	0	0	0	747	18:30	747	0	0	0	747
06:45	994 3953	0	0	0	994 3953	18:45	740 3248	0	0	0	740	18:45	740	3248	0	0	740
07:00	1082	0	0	0	1082	19:00	798	0	0	0	798	19:00	798	0	0	0	798
07:15	1093	0	0	0	1093	19:15	776	0	0	0	776	19:15	776	0	0	0	776
07:30	1067	0	0	0	1067	19:30	740	0	0	0	740	19:30	740	0	0	0	740
07:45	1011 4253	0	0	0	1011 4253	19:45	742 3056	0	0	0	742	19:45	742	3056	0	0	742
08:00	1039	0	0	0	1039	20:00	660	0	0	0	660	20:00	660	0	0	0	660
08:15	1063	0	0	0	1063	20:15	595	0	0	0	595	20:15	595	0	0	0	595
08:30	1032	0	0	0	1032	20:30	571	0	0	0	571	20:30	571	0	0	0	571
08:45	998 4132	0	0	0	998 4132	20:45	514 2340	0	0	0	514	20:45	514	2340	0	0	514
09:00	947	0	0	0	947	21:00	494	0	0	0	494	21:00	494	0	0	0	494
09:15	916	0	0	0	916	21:15	497	0	0	0	497	21:15	497	0	0	0	497
09:30	958	0	0	0	958	21:30	438	0	0	0	438	21:30	438	0	0	0	438
09:45	907 3728	0	0	0	907 3728	21:45	386 1815	0	0	0	386	21:45	386	1815	0	0	386
10:00	895	0	0	0	895	22:00	349	0	0	0	349	22:00	349	0	0	0	349
10:15	906	0	0	0	906	22:15	345	0	0	0	345	22:15	345	0	0	0	345
10:30	964	0	0	0	964	22:30	297	0	0	0	297	22:30	297	0	0	0	297
10:45	902 3667	0	0	0	902 3667	22:45	327 1318	0	0	0	327	22:45	327	1318	0	0	327
11:00	913	0	0	0	913	23:00	218	0	0	0	218	23:00	218	0	0	0	218
11:15	963	0	0	0	963	23:15	205	0	0	0	205	23:15	205	0	0	0	205
11:30	895	0	0	0	895	23:30	196	0	0	0	196	23:30	196	0	0	0	196
11:45	940 3711	0	0	0	940 3711	23:45	182 801	0	0	0	182	23:45	182	801	0	0	182
TOTALS	32728				32728	TOTALS	37799										
SPLIT %	100.0%				46.4%	SPLIT %	100.0%										

DAILY TOTALS					NB	SB					EB	WB	To	
					70,527	0					0	0	70,527	
AM Peak Hour	07:00				07:00	PM Peak Hour	16:15							
AM Pk Volume	4253				4253	PM Pk Volume	4414							
Pk Hr Factor	0.973				0.973	Pk Hr Factor	0.941							
7 - 9 Volume	8385	0	0	0	8385	4 - 6 Volume	8629	0	0	0				
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:15							
7 - 9 Pk Volume	4253	0	0	0	4253	4 - 6 Pk Volume	4414	0	0	0				
Pk Hr Factor	0.973	0.000	0.000	0.000	0.973	Pk Hr Factor	0.941	0.000	0.000	0.000				

CLASSIFICATION

I-15 NB .80 Mile N/O Railroad Canyon Rd NB On-Ramp

Day: Thursday

Date: 9/19/2019

City: Corona

Project #: CA19_6126_002

Summary

Time	0-20ft	20-30ft	30-40ft	40-50ft	50-60ft	60-70ft	70-80ft	80ft & Up						Total
00:00 AM	413	61	15	11	6	15	23	9	0	0	0	0	0	553
01:00	349	51	18	13	4	13	18	5	0	0	0	0	0	471
02:00	374	89	20	12	7	13	28	13	0	0	0	0	0	556
03:00	763	183	15	22	8	31	37	13	0	0	0	0	0	1072
04:00	1964	668	59	23	9	35	37	21	0	0	0	0	0	2816
05:00	2700	820	64	37	16	41	48	36	0	0	0	0	0	3762
06:00	3019	803	89	47	17	49	65	38	0	0	0	0	0	4127
07:00	3287	722	96	55	12	40	64	34	0	0	0	0	0	4310
08:00	2976	657	90	48	16	65	81	38	0	0	0	0	0	3971
09:00	2743	595	126	50	18	80	95	57	0	0	0	0	0	3764
10:00	2632	570	170	65	45	93	115	56	0	0	0	0	0	3746
11:00	2593	599	135	69	46	116	137	70	0	0	0	0	0	3765
12:00 PM	2592	615	161	82	32	84	133	71	0	0	0	0	0	3770
13:00	2705	644	172	69	38	94	115	67	0	0	0	0	0	3904
14:00	3011	702	179	85	36	88	83	53	0	0	0	0	0	4237
15:00	3111	720	178	72	29	67	103	52	0	0	0	0	0	4332
16:00	3131	675	121	63	24	60	61	49	0	0	0	0	0	4184
17:00	3206	666	109	52	19	28	47	31	0	0	0	0	0	4158
18:00	2730	564	83	33	18	33	61	25	0	0	0	0	0	3547
19:00	2414	482	64	36	14	25	39	23	0	0	0	0	0	3097
20:00	2042	391	51	21	3	26	35	19	0	0	0	0	0	2588
21:00	1600	282	31	18	8	10	41	24	0	0	0	0	0	2014
22:00	1084	177	28	11	5	31	39	20	0	0	0	0	0	1395
23:00	748	128	18	7	4	18	43	17	0	0	0	0	0	983
Totals	52187	11864	2092	1001	434	1155	1548	841						71122
% of Totals	73%	17%	3%	1%	1%	2%	2%	1%						100%

AM Volumes	23813	5818	897	452	204	591	748	390	0	0	0	0	0	32913
% AM	33%	8%	1%	1%	0%	1%	1%	1%						46%
AM Peak Hour	07:00	05:00	10:00	11:00	11:00	11:00	11:00	11:00						07:00
Volume	3287	820	170	69	46	116	137	70						4310
PM Volumes	28374	6046	1195	549	230	564	800	451	0	0	0	0	0	38209
% PM	40%	9%	2%	1%	0%	1%	1%	1%						54%
PM Peak Hour	17:00	15:00	14:00	14:00	13:00	13:00	12:00	12:00						15:00
Volume	3206	720	179	85	38	94	133	71						4332
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%
			8281	↔	12%	7674	↔	11%	8342	↔	12%	46825	↔	66%

DAILY TOTALS					NB	SB	EBWB				To
					71,122	0					0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TO
00:00	148	0	0	0	148	12:00	949	0	0	0	949
00:15	131	0	0	0	131	12:15	931	0	0	0	931
00:30	140	0	0	0	140	12:30	931	0	0	0	931
00:45	134 553	0	0	0	134 553	12:45	959 3770	0	0	0	959
01:00	118	0	0	0	118	13:00	902	0	0	0	902
01:15	124	0	0	0	124	13:15	1058	0	0	0	1058
01:30	111	0	0	0	111	13:30	933	0	0	0	933
01:45	118 471	0	0	0	118 471	13:45	1011 3904	0	0	0	1011
02:00	118	0	0	0	118	14:00	1048	0	0	0	1048
02:15	149	0	0	0	149	14:15	1012	0	0	0	1012
02:30	130	0	0	0	130	14:30	1124	0	0	0	1124
02:45	159 556	0	0	0	159 556	14:45	1053 4237	0	0	0	1053
03:00	171	0	0	0	171	15:00	1132	0	0	0	1132
03:15	224	0	0	0	224	15:15	1052	0	0	0	1052
03:30	291	0	0	0	291	15:30	1101	0	0	0	1101
03:45	386 1072	0	0	0	386 1072	15:45	1047 4332	0	0	0	1047
04:00	558	0	0	0	558	16:00	1039	0	0	0	1039
04:15	699	0	0	0	699	16:15	1105	0	0	0	1105
04:30	738	0	0	0	738	16:30	1028	0	0	0	1028
04:45	821 2816	0	0	0	821 2816	16:45	1012 4184	0	0	0	1012
05:00	919	0	0	0	919	17:00	1103	0	0	0	1103
05:15	890	0	0	0	890	17:15	1006	0	0	0	1006
05:30	1011	0	0	0	1011	17:30	1037	0	0	0	1037
05:45	942 3762	0	0	0	942 3762	17:45	1012 4158	0	0	0	1012
06:00	964	0	0	0	964	18:00	935	0	0	0	935
06:15	990	0	0	0	990	18:15	872	0	0	0	872
06:30	1085	0	0	0	1085	18:30	888	0	0	0	888
06:45	1088 4127	0	0	0	1088 4127	18:45	852 3547	0	0	0	852
07:00	1098	0	0	0	1098	19:00	840	0	0	0	840
07:15	1118	0	0	0	1118	19:15	771	0	0	0	771
07:30	1071	0	0	0	1071	19:30	753	0	0	0	753
07:45	1023 4310	0	0	0	1023 4310	19:45	733 3097	0	0	0	733
08:00	1049	0	0	0	1049	20:00	659	0	0	0	659
08:15	1026	0	0	0	1026	20:15	667	0	0	0	667
08:30	999	0	0	0	999	20:30	666	0	0	0	666
08:45	897 3971	0	0	0	897 3971	20:45	596 2588	0	0	0	596
09:00	937	0	0	0	937	21:00	505	0	0	0	505
09:15	913	0	0	0	913	21:15	551	0	0	0	551
09:30	914	0	0	0	914	21:30	535	0	0	0	535
09:45	1000 3764	0	0	0	1000 3764	21:45	423 2014	0	0	0	423
10:00	945	0	0	0	945	22:00	379	0	0	0	379
10:15	947	0	0	0	947	22:15	346	0	0	0	346
10:30	959	0	0	0	959	22:30	359	0	0	0	359
10:45	895 3746	0	0	0	895 3746	22:45	311 1395	0	0	0	311
11:00	937	0	0	0	937	23:00	317	0	0	0	317
11:15	976	0	0	0	976	23:15	231	0	0	0	231
11:30	953	0	0	0	953	23:30	231	0	0	0	231
11:45	899 3765	0	0	0	899 3765	23:45	204 983	0	0	0	204
TOTALS	32913				32913	TOTALS	38209				
SPLIT %	100.0%				46.3%	SPLIT %	100.0%				

DAILY TOTALS					NB	SB					EB	WB	To
					71,122	0					0	0	71,122
AM Peak Hour	06:30				06:30	PM Peak Hour	14:30						
AM Pk Volume	4389				4389	PM Pk Volume	4361						
Pk Hr Factor	0.981				0.981	Pk Hr Factor	0.963						
7 - 9 Volume	8281	0	0	0	8281	4 - 6 Volume	8342	0	0	0			
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:15						
7 - 9 Pk Volume	4310	0	0	0	4310	4 - 6 Pk Volume	4248	0	0	0			
Pk Hr Factor	0.964	0.000	0.000	0.000	0.964	Pk Hr Factor	0.961	0.000	0.000	0.000			

CLASSIFICATION

I-15 SB 270' S/O N Main St SB On-Ramp

Day: Tuesday

Date: 9/17/2019

City: Corona

Project #: CA19_6126_002

Summary

Time	0-20ft	20-30ft	30-40ft	40-50ft	50-60ft	60-70ft	70-80ft	80ft & Up						Total
00:00 AM	681	43	6	1	1	16	18	4	0	0	0	0	0	770
01:00	403	26	9	4	3	15	26	5	0	0	0	0	0	491
02:00	312	33	13	5	4	26	37	10	0	0	0	0	0	440
03:00	279	35	13	9	6	39	43	2	0	0	0	0	0	426
04:00	653	95	46	24	13	73	63	9	0	0	0	0	0	976
05:00	1264	206	93	45	29	118	76	12	0	0	0	0	0	1843
06:00	1923	324	135	56	25	114	82	26	0	0	0	0	0	2685
07:00	2854	447	163	71	20	98	66	8	0	0	0	0	0	3727
08:00	2863	412	145	74	24	68	63	19	0	0	0	0	0	3668
09:00	2862	338	134	90	15	100	95	16	0	0	0	0	0	3650
10:00	2570	305	116	62	33	91	102	14	0	0	0	0	0	3293
11:00	2715	337	149	64	34	93	75	14	0	0	0	0	0	3481
12:00 PM	2833	359	118	54	28	75	83	13	0	0	0	0	0	3563
13:00	3119	424	131	55	16	73	67	15	0	0	0	0	0	3900
14:00	3580	468	124	42	13	53	61	6	0	0	0	0	0	4347
15:00	3755	442	114	49	16	46	34	6	0	0	0	0	0	4462
16:00	3707	525	82	34	21	29	42	9	0	0	0	0	0	4449
17:00	4051	432	71	30	9	28	26	6	0	0	0	0	0	4653
18:00	3341	536	95	34	11	28	36	7	0	0	0	0	0	4088
19:00	3171	288	51	23	10	21	30	9	0	0	0	0	0	3603
20:00	2663	200	37	24	9	22	26	3	0	0	0	0	0	2984
21:00	2205	139	30	21	1	19	28	2	0	0	0	0	0	2445
22:00	1602	89	31	22	4	21	45	6	0	0	0	0	0	1820
23:00	1018	53	24	7	2	23	18	6	0	0	0	0	0	1151
Totals	54424	6556	1930	900	347	1289	1242	227						66915
% of Totals	81%	10%	3%	1%	1%	2%	2%	0%						100%

AM Volumes	19379	2601	1022	505	207	851	746	139	0	0	0	0	0	25450
% AM	29%	4%	2%	1%	0%	1%	1%	0%						38%
AM Peak Hour	08:00	07:00	07:00	09:00	11:00	05:00	10:00	06:00						07:00
Volume	2863	447	163	90	34	118	102	26						3727
PM Volumes	35045	3955	908	395	140	438	496	88	0	0	0	0	0	41465
% PM	52%	6%	1%	1%	0%	1%	1%	0%						62%
PM Peak Hour	17:00	18:00	13:00	13:00	12:00	12:00	12:00	13:00						17:00
Volume	4051	536	131	55	28	75	83	15						4653
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%
			7395	↔	11%	7463	↔	11%	9102	↔	14%	42955	↔	64%

DAILY TOTALS					NB	SB						EB	WB	To	
					0	66,915						0	0	66,915	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		To	
00:00	0	223	0	0	223		12:00	0	908	0	0	908		908	
00:15	0	190	0	0	190		12:15	0	856	0	0	856		856	
00:30	0	217	0	0	217		12:30	0	916	0	0	916		916	
00:45	0	140	770	0	140	770	12:45	0	883	3563	0	0	883	3563	
01:00	0	133	0	0	133		13:00	0	926	0	0	926		926	
01:15	0	144	0	0	144		13:15	0	955	0	0	955		955	
01:30	0	113	0	0	113		13:30	0	942	0	0	942		942	
01:45	0	101	491	0	101	491	13:45	0	1077	3900	0	0	1077	3900	
02:00	0	110	0	0	110		14:00	0	1119	0	0	1119		1119	
02:15	0	96	0	0	96		14:15	0	1048	0	0	1048		1048	
02:30	0	123	0	0	123		14:30	0	1082	0	0	1082		1082	
02:45	0	111	440	0	111	440	14:45	0	1098	4347	0	0	1098	4347	
03:00	0	95	0	0	95		15:00	0	1048	0	0	1048		1048	
03:15	0	102	0	0	102		15:15	0	1195	0	0	1195		1195	
03:30	0	102	0	0	102		15:30	0	1139	0	0	1139		1139	
03:45	0	127	426	0	127	426	15:45	0	1080	4462	0	0	1080	4462	
04:00	0	165	0	0	165		16:00	0	1047	0	0	1047		1047	
04:15	0	202	0	0	202		16:15	0	1137	0	0	1137		1137	
04:30	0	250	0	0	250		16:30	0	1143	0	0	1143		1143	
04:45	0	359	976	0	359	976	16:45	0	1122	4449	0	0	1122	4449	
05:00	0	424	0	0	424		17:00	0	1186	0	0	1186		1186	
05:15	0	434	0	0	434		17:15	0	1169	0	0	1169		1169	
05:30	0	462	0	0	462		17:30	0	1122	0	0	1122		1122	
05:45	0	523	1843	0	523	1843	17:45	0	1176	4653	0	0	1176	4653	
06:00	0	614	0	0	614		18:00	0	1041	0	0	1041		1041	
06:15	0	599	0	0	599		18:15	0	1011	0	0	1011		1011	
06:30	0	672	0	0	672		18:30	0	1082	0	0	1082		1082	
06:45	0	800	2685	0	800	2685	18:45	0	954	4088	0	0	954	4088	
07:00	0	783	0	0	783		19:00	0	895	0	0	895		895	
07:15	0	852	0	0	852		19:15	0	929	0	0	929		929	
07:30	0	965	0	0	965		19:30	0	915	0	0	915		915	
07:45	0	1127	3727	0	1127	3727	19:45	0	864	3603	0	0	864	3603	
08:00	0	987	0	0	987		20:00	0	793	0	0	793		793	
08:15	0	924	0	0	924		20:15	0	755	0	0	755		755	
08:30	0	869	0	0	869		20:30	0	729	0	0	729		729	
08:45	0	888	3668	0	888	3668	20:45	0	707	2984	0	0	707	2984	
09:00	0	932	0	0	932		21:00	0	663	0	0	663		663	
09:15	0	920	0	0	920		21:15	0	645	0	0	645		645	
09:30	0	881	0	0	881		21:30	0	569	0	0	569		569	
09:45	0	917	3650	0	917	3650	21:45	0	568	2445	0	0	568	2445	
10:00	0	834	0	0	834		22:00	0	474	0	0	474		474	
10:15	0	760	0	0	760		22:15	0	501	0	0	501		501	
10:30	0	852	0	0	852		22:30	0	437	0	0	437		437	
10:45	0	847	3293	0	847	3293	22:45	0	408	1820	0	0	408	1820	
11:00	0	850	0	0	850		23:00	0	357	0	0	357		357	
11:15	0	889	0	0	889		23:15	0	301	0	0	301		301	
11:30	0	894	0	0	894		23:30	0	259	0	0	259		259	
11:45	0	848	3481	0	848	3481	23:45	0	234	1151	0	0	234	1151	
TOTALS	25450				25450		TOTALS	41465							
SPLIT %	100.0%				38.0%		SPLIT %	100.0%							

DAILY TOTALS					NB	SB						EB	WB	To	
					0	66,915						0	0	66,915	
AM Peak Hour		07:30			07:30		PM Peak Hour		17:00						
AM Pk Volume		4003			4003		PM Pk Volume		4653						
Pk Hr Factor		0.888			0.888		Pk Hr Factor		0.981						
7 - 9 Volume		0	7395	0	0	7395	4 - 6 Volume		0	9102	0	0	0		
7 - 9 Peak Hour		07:30			07:30		4 - 6 Peak Hour		17:00						
7 - 9 Pk Volume		0	4003	0	0	4003	4 - 6 Pk Volume		0	4653	0	0	0		
Pk Hr Factor		0.000	0.888	0.000	0.000	0.888	Pk Hr Factor		0.000	0.981	0.000	0.000	0.000		

CLASSIFICATION

I-15 SB 270' S/O N Main St SB On-Ramp

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6126_002

Summary

Time	0-20ft	20-30ft	30-40ft	40-50ft	50-60ft	60-70ft	70-80ft	80ft & Up						Total
00:00 AM	730	42	19	8	2	28	26	4	0	0	0	0	0	859
01:00	404	24	21	7	2	25	33	2	0	0	0	0	0	518
02:00	277	23	17	9	3	30	34	4	0	0	0	0	0	397
03:00	280	30	10	11	7	43	32	2	0	0	0	0	0	415
04:00	679	100	42	18	7	82	51	10	0	0	0	0	0	989
05:00	1276	217	82	53	26	136	79	17	0	0	0	0	0	1886
06:00	1890	333	121	45	27	101	80	8	0	0	0	0	0	2605
07:00	2783	387	136	58	27	86	58	10	0	0	0	0	0	3545
08:00	3102	410	165	76	26	103	78	13	0	0	0	0	0	3973
09:00	2930	365	151	72	25	105	84	22	0	0	0	0	0	3754
10:00	2736	367	144	67	28	97	87	9	0	0	0	0	0	3535
11:00	2699	344	115	52	29	96	90	13	0	0	0	0	0	3438
12:00 PM	2942	355	112	51	20	71	78	20	0	0	0	0	0	3649
13:00	3223	397	115	44	29	72	71	12	0	0	0	0	0	3963
14:00	3604	453	101	60	20	35	52	12	0	0	0	0	0	4337
15:00	3772	478	136	51	21	41	50	6	0	0	0	0	0	4555
16:00	3838	492	89	34	10	20	48	7	0	0	0	0	0	4538
17:00	4062	431	89	38	12	18	29	7	0	0	0	0	0	4686
18:00	3603	356	59	35	7	22	28	3	0	0	0	0	0	4113
19:00	3346	278	57	28	10	28	28	3	0	0	0	0	0	3778
20:00	2844	224	32	12	6	23	24	6	0	0	0	0	0	3171
21:00	2090	140	39	30	3	19	24	4	0	0	0	0	0	2349
22:00	1775	88	34	12	1	23	34	2	0	0	0	0	0	1969
23:00	1180	57	25	9	7	19	32	5	0	0	0	0	0	1334
Totals	56065	6391	1911	880	355	1323	1230	201						68356
% of Totals	82%	9%	3%	1%	1%	2%	2%	0%						100%

AM Volumes	19786	2642	1023	476	209	932	732	114	0	0	0	0	0	25914
% AM	29%	4%	1%	1%	0%	1%	1%	0%						38%
AM Peak Hour	08:00	08:00	08:00	08:00	11:00	05:00	11:00	09:00						08:00
Volume	3102	410	165	76	29	136	90	22						3973
PM Volumes	36279	3749	888	404	146	391	498	87	0	0	0	0	0	42442
% PM	53%	5%	1%	1%	0%	1%	1%	0%						62%
PM Peak Hour	17:00	16:00	15:00	14:00	13:00	13:00	12:00	12:00						17:00
Volume	4062	492	136	60	29	72	78	20						4686
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%
			7518	↔	11%	7612	↔	11%	9224	↔	13%	44002	↔	64%

DAILY TOTALS					NB	SB						EB	WB	To	
					0	68,356						0	0	68,356	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		To	
00:00	0	266	0	0	266		12:00	0	872	0	0	872		872	
00:15	0	223	0	0	223		12:15	0	951	0	0	951		951	
00:30	0	191	0	0	191		12:30	0	941	0	0	941		941	
00:45	0	179 859	0	0	179 859		12:45	0	885 3649	0	0	885		885	
01:00	0	154	0	0	154		13:00	0	963	0	0	963		963	
01:15	0	138	0	0	138		13:15	0	980	0	0	980		980	
01:30	0	113	0	0	113		13:30	0	1025	0	0	1025		1025	
01:45	0	113 518	0	0	113 518		13:45	0	995 3963	0	0	995		995	
02:00	0	98	0	0	98		14:00	0	1056	0	0	1056		1056	
02:15	0	112	0	0	112		14:15	0	1080	0	0	1080		1080	
02:30	0	92	0	0	92		14:30	0	1140	0	0	1140		1140	
02:45	0	95 397	0	0	95 397		14:45	0	1061 4337	0	0	1061		1061	
03:00	0	108	0	0	108		15:00	0	1138	0	0	1138		1138	
03:15	0	100	0	0	100		15:15	0	1174	0	0	1174		1174	
03:30	0	106	0	0	106		15:30	0	1096	0	0	1096		1096	
03:45	0	101 415	0	0	101 415		15:45	0	1147 4555	0	0	1147		1147	
04:00	0	158	0	0	158		16:00	0	1087	0	0	1087		1087	
04:15	0	171	0	0	171		16:15	0	1140	0	0	1140		1140	
04:30	0	270	0	0	270		16:30	0	1083	0	0	1083		1083	
04:45	0	390 989	0	0	390 989		16:45	0	1228 4538	0	0	1228		1228	
05:00	0	424	0	0	424		17:00	0	1164	0	0	1164		1164	
05:15	0	422	0	0	422		17:15	0	1237	0	0	1237		1237	
05:30	0	455	0	0	455		17:30	0	1182	0	0	1182		1182	
05:45	0	585 1886	0	0	585 1886		17:45	0	1103 4686	0	0	1103		1103	
06:00	0	579	0	0	579		18:00	0	998	0	0	998		998	
06:15	0	554	0	0	554		18:15	0	1024	0	0	1024		1024	
06:30	0	707	0	0	707		18:30	0	1054	0	0	1054		1054	
06:45	0	765 2605	0	0	765 2605		18:45	0	1037 4113	0	0	1037		1037	
07:00	0	790	0	0	790		19:00	0	1001	0	0	1001		1001	
07:15	0	858	0	0	858		19:15	0	968	0	0	968		968	
07:30	0	904	0	0	904		19:30	0	950	0	0	950		950	
07:45	0	993 3545	0	0	993 3545		19:45	0	859 3778	0	0	859		859	
08:00	0	961	0	0	961		20:00	0	816	0	0	816		816	
08:15	0	967	0	0	967		20:15	0	832	0	0	832		832	
08:30	0	992	0	0	992		20:30	0	790	0	0	790		790	
08:45	0	1053 3973	0	0	1053 3973		20:45	0	733 3171	0	0	733		733	
09:00	0	872	0	0	872		21:00	0	781	0	0	781		781	
09:15	0	935	0	0	935		21:15	0	693	0	0	693		693	
09:30	0	960	0	0	960		21:30	0	441	0	0	441		441	
09:45	0	987 3754	0	0	987 3754		21:45	0	434 2349	0	0	434		434	
10:00	0	920	0	0	920		22:00	0	467	0	0	467		467	
10:15	0	863	0	0	863		22:15	0	569	0	0	569		569	
10:30	0	870	0	0	870		22:30	0	470	0	0	470		470	
10:45	0	882 3535	0	0	882 3535		22:45	0	463 1969	0	0	463		463	
11:00	0	870	0	0	870		23:00	0	399	0	0	399		399	
11:15	0	833	0	0	833		23:15	0	350	0	0	350		350	
11:30	0	834	0	0	834		23:30	0	308	0	0	308		308	
11:45	0	901 3438	0	0	901 3438		23:45	0	277 1334	0	0	277		277	
TOTALS	25914				25914		TOTALS	42442							
SPLIT %	100.0%				37.9%		SPLIT %	100.0%							

DAILY TOTALS					NB	SB						EB	WB	To	
					0	68,356						0	0	68,356	
AM Peak Hour		08:00			08:00		PM Peak Hour		16:45						
AM Pk Volume		3973			3973		PM Pk Volume		4811						
Pk Hr Factor		0.943			0.943		Pk Hr Factor		0.972						
7 - 9 Volume		0	7518	0	0	7518	4 - 6 Volume		0	9224	0	0	0		
7 - 9 Peak Hour		08:00			08:00		4 - 6 Peak Hour		16:45						
7 - 9 Pk Volume		0	3973	0	0	3973	4 - 6 Pk Volume		0	4811	0	0	0		
Pk Hr Factor		0.000	0.943	0.000	0.000	0.943	Pk Hr Factor		0.000	0.972	0.000	0.000	0.000		

CLASSIFICATION

I-15 SB 270' S/O N Main St SB On-Ramp

Day: Thursday

Date: 9/19/2019

City: Corona

Project #: CA19_6126_002

Summary

Time	0-20ft	20-30ft	30-40ft	40-50ft	50-60ft	60-70ft	70-80ft	80ft & Up						Total
00:00 AM	715	46	16	6	2	19	22	4	0	0	0	0	0	830
01:00	423	29	21	11	3	31	29	5	0	0	0	0	0	552
02:00	271	21	15	5	5	27	34	8	0	0	0	0	0	386
03:00	306	29	19	7	6	32	41	1	0	0	0	0	0	441
04:00	643	101	26	27	15	86	74	13	0	0	0	0	0	985
05:00	1274	226	79	40	21	113	87	23	0	0	0	0	0	1863
06:00	1910	336	154	58	32	104	88	8	0	0	0	0	0	2690
07:00	2962	415	192	72	20	91	57	8	0	0	0	0	0	3817
08:00	3089	413	144	61	14	80	71	16	0	0	0	0	0	3888
09:00	2858	358	147	68	28	83	68	19	0	0	0	0	0	3629
10:00	2662	366	156	50	18	78	102	21	0	0	0	0	0	3453
11:00	2841	385	128	64	24	96	82	18	0	0	0	0	0	3638
12:00 PM	3110	377	118	58	25	84	73	17	0	0	0	0	0	3862
13:00	3407	383	136	50	28	60	73	16	0	0	0	0	0	4153
14:00	3698	507	136	64	22	41	59	7	0	0	0	0	0	4534
15:00	3968	455	114	38	13	39	48	6	0	0	0	0	0	4681
16:00	3912	511	89	42	13	30	32	10	0	0	0	0	0	4639
17:00	4090	470	90	38	14	18	30	4	0	0	0	0	0	4754
18:00	3826	362	74	31	13	31	22	4	0	0	0	0	0	4363
19:00	3216	285	65	38	16	31	34	4	0	0	0	0	0	3689
20:00	2872	225	41	29	9	23	22	6	0	0	0	0	0	3227
21:00	2513	164	52	21	8	18	19	2	0	0	0	0	0	2797
22:00	1913	101	37	16	6	30	43	6	0	0	0	0	0	2152
23:00	1273	57	24	9	3	27	28	6	0	0	0	0	0	1427
Totals	57752	6622	2073	903	358	1272	1238	232						70450
% of Totals	82%	9%	3%	1%	1%	2%	2%	0%						100%

AM Volumes	19954	2725	1097	469	188	840	755	144	0	0	0	0	0	26172
% AM	28%	4%	2%	1%	0%	1%	1%	0%						37%
AM Peak Hour	08:00	07:00	07:00	07:00	06:00	05:00	10:00	05:00						08:00
Volume	3089	415	192	72	32	113	102	23						3888
PM Volumes	37798	3897	976	434	170	432	483	88	0	0	0	0	0	44278
% PM	54%	6%	1%	1%	0%	1%	1%	0%						63%
PM Peak Hour	17:00	16:00	13:00	14:00	13:00	12:00	12:00	12:00						17:00
Volume	4090	511	136	64	28	84	73	17						4754
Directional Peak Periods			AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes			Volume		%	Volume		%	Volume		%	Volume		%
			7705	↔	11%	8015	↔	11%	9393	↔	13%	45337	↔	64%

DAILY TOTALS					NB	SB						EB	WB	To	
					0	70,450						0	0	70,450	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		To	
00:00	0	237	0	0	237		12:00	0	955	0	0	955			
00:15	0	191	0	0	191		12:15	0	954	0	0	954			
00:30	0	195	0	0	195		12:30	0	950	0	0	950			
00:45	0	207 830	0	0	207 830		12:45	0	1003 3862	0	0	1003			
01:00	0	164	0	0	164		13:00	0	999	0	0	999			
01:15	0	139	0	0	139		13:15	0	1012	0	0	1012			
01:30	0	133	0	0	133		13:30	0	1048	0	0	1048			
01:45	0	116 552	0	0	116 552		13:45	0	1094 4153	0	0	1094			
02:00	0	102	0	0	102		14:00	0	1026	0	0	1026			
02:15	0	89	0	0	89		14:15	0	1168	0	0	1168			
02:30	0	93	0	0	93		14:30	0	1110	0	0	1110			
02:45	0	102 386	0	0	102 386		14:45	0	1230 4534	0	0	1230			
03:00	0	111	0	0	111		15:00	0	1179	0	0	1179			
03:15	0	94	0	0	94		15:15	0	1202	0	0	1202			
03:30	0	103	0	0	103		15:30	0	1147	0	0	1147			
03:45	0	133 441	0	0	133 441		15:45	0	1153 4681	0	0	1153			
04:00	0	174	0	0	174		16:00	0	1094	0	0	1094			
04:15	0	185	0	0	185		16:15	0	1214	0	0	1214			
04:30	0	234	0	0	234		16:30	0	1209	0	0	1209			
04:45	0	392 985	0	0	392 985		16:45	0	1122 4639	0	0	1122			
05:00	0	428	0	0	428		17:00	0	1220	0	0	1220			
05:15	0	433	0	0	433		17:15	0	1247	0	0	1247			
05:30	0	458	0	0	458		17:30	0	1146	0	0	1146			
05:45	0	544 1863	0	0	544 1863		17:45	0	1141 4754	0	0	1141			
06:00	0	571	0	0	571		18:00	0	1096	0	0	1096			
06:15	0	603	0	0	603		18:15	0	1098	0	0	1098			
06:30	0	712	0	0	712		18:30	0	1138	0	0	1138			
06:45	0	804 2690	0	0	804 2690		18:45	0	1031 4363	0	0	1031			
07:00	0	811	0	0	811		19:00	0	970	0	0	970			
07:15	0	869	0	0	869		19:15	0	944	0	0	944			
07:30	0	1049	0	0	1049		19:30	0	924	0	0	924			
07:45	0	1088 3817	0	0	1088 3817		19:45	0	851 3689	0	0	851			
08:00	0	984	0	0	984		20:00	0	887	0	0	887			
08:15	0	926	0	0	926		20:15	0	750	0	0	750			
08:30	0	1016	0	0	1016		20:30	0	853	0	0	853			
08:45	0	962 3888	0	0	962 3888		20:45	0	737 3227	0	0	737			
09:00	0	966	0	0	966		21:00	0	703	0	0	703			
09:15	0	873	0	0	873		21:15	0	712	0	0	712			
09:30	0	924	0	0	924		21:30	0	716	0	0	716			
09:45	0	866 3629	0	0	866 3629		21:45	0	666 2797	0	0	666			
10:00	0	872	0	0	872		22:00	0	671	0	0	671			
10:15	0	853	0	0	853		22:15	0	544	0	0	544			
10:30	0	819	0	0	819		22:30	0	476	0	0	476			
10:45	0	909 3453	0	0	909 3453		22:45	0	461 2152	0	0	461			
11:00	0	866	0	0	866		23:00	0	433	0	0	433			
11:15	0	881	0	0	881		23:15	0	386	0	0	386			
11:30	0	963	0	0	963		23:30	0	336	0	0	336			
11:45	0	928 3638	0	0	928 3638		23:45	0	272 1427	0	0	272			
TOTALS	26172				26172		TOTALS	44278							
SPLIT %	100.0%				37.1%		SPLIT %	100.0%							

DAILY TOTALS					NB	SB						EB	WB	To	
					0	70,450						0	0	70,450	
AM Peak Hour		07:30		07:30		PM Peak Hour		16:30							
AM Pk Volume		4047		4047		PM Pk Volume		4798							
Pk Hr Factor		0.930		0.930		Pk Hr Factor		0.962							
7 - 9 Volume	0	7705	0	0	7705	4 - 6 Volume	0	9393	0	0					
7 - 9 Peak Hour		07:30			07:30	4 - 6 Peak Hour		16:30							
7 - 9 Pk Volume	0	4047	0	0	4047	4 - 6 Pk Volume	0	4798	0	0					
Pk Hr Factor	0.000	0.930	0.000	0.000	0.930	Pk Hr Factor	0.000	0.962	0.000	0.000					

VOLUME

I-15 SB On-Ramp From Main St

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_003

DAILY TOTALS					NB	SB	EB					WB	Total
					0	5,279	0					0	5,279
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	4			4	12:00	0	91			91		
00:15	0	9			9	12:15	0	81			81		
00:30	0	4			4	12:30	0	76			76		
00:45	0	5	22		5 22	12:45	0	72	320		72 320		
01:00	0	3			3	13:00	0	88			88		
01:15	0	2			2	13:15	0	71			71		
01:30	0	2			2	13:30	0	134			134		
01:45	0	9	16		9 16	13:45	0	109	402		109 402		
02:00	0	2			2	14:00	0	113			113		
02:15	0	8			8	14:15	0	92			92		
02:30	0	2			2	14:30	0	102			102		
02:45	0	13	25		13 25	14:45	0	110	417		110 417		
03:00	0	2			2	15:00	0	113			113		
03:15	0	1			1	15:15	0	97			97		
03:30	0	8			8	15:30	0	90			90		
03:45	0	7	18		7 18	15:45	0	79	379		79 379		
04:00	0	12			12	16:00	0	89			89		
04:15	0	14			14	16:15	0	93			93		
04:30	0	32			32	16:30	0	89			89		
04:45	0	35	93		35 93	16:45	0	82	353		82 353		
05:00	0	31			31	17:00	0	92			92		
05:15	0	31			31	17:15	0	72			72		
05:30	0	45			45	17:30	0	80			80		
05:45	0	47	154		47 154	17:45	0	65	309		65 309		
06:00	0	63			63	18:00	0	73			73		
06:15	0	67			67	18:15	0	70			70		
06:30	0	67			67	18:30	0	62			62		
06:45	0	65	262		65 262	18:45	0	71	276		71 276		
07:00	0	116			116	19:00	0	70			70		
07:15	0	142			142	19:15	0	56			56		
07:30	0	119			119	19:30	0	49			49		
07:45	0	101	478		101 478	19:45	0	47	222		47 222		
08:00	0	82			82	20:00	0	51			51		
08:15	0	95			95	20:15	0	36			36		
08:30	0	83			83	20:30	0	40			40		
08:45	0	70	330		70 330	20:45	0	24	151		24 151		
09:00	0	68			68	21:00	0	35			35		
09:15	0	75			75	21:15	0	25			25		
09:30	0	85			85	21:30	0	27			27		
09:45	0	61	289		61 289	21:45	0	22	109		22 109		
10:00	0	49			49	22:00	0	23			23		
10:15	0	72			72	22:15	0	24			24		
10:30	0	64			64	22:30	0	13			13		
10:45	0	61	246		61 246	22:45	0	4	64		4 64		
11:00	0	80			80	23:00	0	6			6		
11:15	0	78			78	23:15	0	8			8		
11:30	0	75			75	23:30	0	12			12		
11:45	0	77	310		77 310	23:45	0	8	34		8 34		
TOTALS	2243				2243	TOTALS	3036				3036		
SPLIT %	100.0%				42.5%	SPLIT %	100.0%				57.5%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	5,279	0	0	5,279

AM Peak Hour	07:00	07:00	PM Peak Hour	13:30	13:30
AM Pk Volume	478	478	PM Pk Volume	448	448
Pk Hr Factor	0.842	0.842	Pk Hr Factor	0.836	0.836
7 - 9 Volume	0	808	4 - 6 Volume	0	662
7 - 9 Peak Hour	07:00	07:00	4 - 6 Peak Hour	16:15	16:15
7 - 9 Pk Volume	0	478	4 - 6 Pk Volume	0	356
Pk Hr Factor	0.000	0.842	Pk Hr Factor	0.000	0.957

VOLUME

I-15 SB On-Ramp From Main St

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_003

DAILY TOTALS					NB	SB	EB					WB	Total
					0	5,059	0					0	5,059
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	6			6		12:00	0	79			79	
00:15	0	5			5		12:15	0	69			69	
00:30	0	6			6		12:30	0	55			55	
00:45	0	4	21		4	21	12:45	0	93	296		93	296
01:00	0	2			2		13:00	0	93			93	
01:15	0	6			6		13:15	0	92			92	
01:30	0	2			2		13:30	0	92			92	
01:45	0	4	14		4	14	13:45	0	77	354		77	354
02:00	0	15			15		14:00	0	91			91	
02:15	0	2			2		14:15	0	101			101	
02:30	0	1			1		14:30	0	104			104	
02:45	0	4	22		4	22	14:45	0	94	390		94	390
03:00	0	2			2		15:00	0	69			69	
03:15	0	5			5		15:15	0	92			92	
03:30	0	10			10		15:30	0	74			74	
03:45	0	6	23		6	23	15:45	0	87	322		87	322
04:00	0	19			19		16:00	0	88			88	
04:15	0	12			12		16:15	0	102			102	
04:30	0	35			35		16:30	0	112			112	
04:45	0	32	98		32	98	16:45	0	95	397		95	397
05:00	0	24			24		17:00	0	87			87	
05:15	0	32			32		17:15	0	71			71	
05:30	0	39			39		17:30	0	87			87	
05:45	0	52	147		52	147	17:45	0	55	300		55	300
06:00	0	63			63		18:00	0	64			64	
06:15	0	66			66		18:15	0	66			66	
06:30	0	55			55		18:30	0	65			65	
06:45	0	67	251		67	251	18:45	0	63	258		63	258
07:00	0	85			85		19:00	0	51			51	
07:15	0	123			123		19:15	0	53			53	
07:30	0	102			102		19:30	0	37			37	
07:45	0	87	397		87	397	19:45	0	39	180		39	180
08:00	0	121			121		20:00	0	50			50	
08:15	0	122			122		20:15	0	36			36	
08:30	0	125			125		20:30	0	32			32	
08:45	0	59	427		59	427	20:45	0	34	152		34	152
09:00	0	85			85		21:00	0	28			28	
09:15	0	84			84		21:15	0	22			22	
09:30	0	76			76		21:30	0	16			16	
09:45	0	78	323		78	323	21:45	0	20	86		20	86
10:00	0	62			62		22:00	0	16			16	
10:15	0	69			69		22:15	0	11			11	
10:30	0	60			60		22:30	0	17			17	
10:45	0	58	249		58	249	22:45	0	12	56		12	56
11:00	0	76			76		23:00	0	7			7	
11:15	0	61			61		23:15	0	5			5	
11:30	0	63			63		23:30	0	12			12	
11:45	0	70	270		70	270	23:45	0	2	26		2	26
TOTALS	2242				2242		TOTALS	2817				2817	
SPLIT %	100.0%				44.3%		SPLIT %	100.0%				55.7%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	5,059	0	0	5,059

AM Peak Hour	07:45	07:45	PM Peak Hour	16:00	16:00	
AM Pk Volume	455	455	PM Pk Volume	397	397	
Pk Hr Factor	0.910	0.910	Pk Hr Factor	0.886	0.886	
7 - 9 Volume	0	824	0	697	0	697
7 - 9 Peak Hour	07:45	07:45	4 - 6 Peak Hour	16:00	16:00	
7 - 9 Pk Volume	0	455	0	397	0	397
Pk Hr Factor	0.000	0.910	0.000	0.886	0.000	0.886

VOLUME

I-15 SB On-Ramp From Main St

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_003

DAILY TOTALS					NB	SB	EB					WB	Total
					0	5,016	0					0	5,016
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	9			9		12:00	0	75			75	
00:15	0	5			5		12:15	0	70			70	
00:30	0	9			9		12:30	0	76			76	
00:45	0	4	27		4	27	12:45	0	74	295		74	295
01:00	0	6			6		13:00	0	70			70	
01:15	0	3			3		13:15	0	54			54	
01:30	0	2			2		13:30	0	95			95	
01:45	0	1	12		1	12	13:45	0	95	314		95	314
02:00	0	2			2		14:00	0	110			110	
02:15	0	5			5		14:15	0	81			81	
02:30	0	3			3		14:30	0	111			111	
02:45	0	1	11		1	11	14:45	0	94	396		94	396
03:00	0	3			3		15:00	0	107			107	
03:15	0	6			6		15:15	0	90			90	
03:30	0	8			8		15:30	0	94			94	
03:45	0	9	26		9	26	15:45	0	88	379		88	379
04:00	0	11			11		16:00	0	85			85	
04:15	0	9			9		16:15	0	89			89	
04:30	0	25			25		16:30	0	85			85	
04:45	0	31	76		31	76	16:45	0	84	343		84	343
05:00	0	37			37		17:00	0	120			120	
05:15	0	35			35		17:15	0	69			69	
05:30	0	44			44		17:30	0	56			56	
05:45	0	43	159		43	159	17:45	0	68	313		68	313
06:00	0	59			59		18:00	0	73			73	
06:15	0	72			72		18:15	0	64			64	
06:30	0	69			69		18:30	0	55			55	
06:45	0	63	263		63	263	18:45	0	46	238		46	238
07:00	0	114			114		19:00	0	38			38	
07:15	0	134			134		19:15	0	46			46	
07:30	0	131			131		19:30	0	59			59	
07:45	0	88	467		88	467	19:45	0	40	183		40	183
08:00	0	94			94		20:00	0	39			39	
08:15	0	117			117		20:15	0	28			28	
08:30	0	86			86		20:30	0	22			22	
08:45	0	65	362		65	362	20:45	0	38	127		38	127
09:00	0	67			67		21:00	0	26			26	
09:15	0	78			78		21:15	0	42			42	
09:30	0	52			52		21:30	0	19			19	
09:45	0	69	266		69	266	21:45	0	16	103		16	103
10:00	0	61			61		22:00	0	16			16	
10:15	0	63			63		22:15	0	25			25	
10:30	0	69			69		22:30	0	24			24	
10:45	0	63	256		63	256	22:45	0	8	73		8	73
11:00	0	69			69		23:00	0	15			15	
11:15	0	74			74		23:15	0	10			10	
11:30	0	77			77		23:30	0	6			6	
11:45	0	67	287		67	287	23:45	0	9	40		9	40
TOTALS	2212				2212		TOTALS	2804				2804	
SPLIT %	100.0%				44.1%		SPLIT %	100.0%				55.9%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	5,016	0	0	5,016

AM Peak Hour	07:00	07:00	PM Peak Hour	14:30	14:30	
AM Pk Volume	467	467	PM Pk Volume	402	402	
Pk Hr Factor	0.871	0.871	Pk Hr Factor	0.905	0.905	
7 - 9 Volume	0	829	0	656	0	656
7 - 9 Peak Hour	07:00	07:00	4 - 6 Peak Hour	16:15	16:15	
7 - 9 Pk Volume	0	467	0	378	0	378
Pk Hr Factor	0.000	0.871	0.000	0.788	0.000	0.788

VOLUME

I-15 SB Off-Ramp To Main St

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_004

DAILY TOTALS					NB	SB						Total
					0	2,811	0	0	2,811			
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	7			7	12:00	0	34			34	
00:15	0	5			5	12:15	0	38			38	
00:30	0	5			5	12:30	0	32			32	
00:45	0	6	23		6 23	12:45	0	46	150		46 150	
01:00	0	3			3	13:00	0	41			41	
01:15	0	1			1	13:15	0	40			40	
01:30	0	4			4	13:30	0	47			47	
01:45	0	8	16		8 16	13:45	0	50	178		50 178	
02:00	0	3			3	14:00	0	36			36	
02:15	0	14			14	14:15	0	57			57	
02:30	0	2			2	14:30	0	48			48	
02:45	0	7	26		7 26	14:45	0	61	202		61 202	
03:00	0	1			1	15:00	0	70			70	
03:15	0	1			1	15:15	0	51			51	
03:30	0	5			5	15:30	0	85			85	
03:45	0	6	13		6 13	15:45	0	76	282		76 282	
04:00	0	3			3	16:00	0	56			56	
04:15	0	9			9	16:15	0	83			83	
04:30	0	17			17	16:30	0	62			62	
04:45	0	14	43		14 43	16:45	0	84	285		84 285	
05:00	0	5			5	17:00	0	74			74	
05:15	0	9			9	17:15	0	87			87	
05:30	0	15			15	17:30	0	75			75	
05:45	0	21	50		21 50	17:45	0	92	328		92 328	
06:00	0	26			26	18:00	0	68			68	
06:15	0	17			17	18:15	0	59			59	
06:30	0	19			19	18:30	0	54			54	
06:45	0	17	79		17 79	18:45	0	44	225		44 225	
07:00	0	28			28	19:00	0	45			45	
07:15	0	32			32	19:15	0	32			32	
07:30	0	24			24	19:30	0	19			19	
07:45	0	32	116		32 116	19:45	0	29	125		29 125	
08:00	0	23			23	20:00	0	15			15	
08:15	0	17			17	20:15	0	29			29	
08:30	0	26			26	20:30	0	16			16	
08:45	0	31	97		31 97	20:45	0	23	83		23 83	
09:00	0	19			19	21:00	0	11			11	
09:15	0	44			44	21:15	0	14			14	
09:30	0	37			37	21:30	0	11			11	
09:45	0	27	127		27 127	21:45	0	16	52		16 52	
10:00	0	26			26	22:00	0	8			8	
10:15	0	19			19	22:15	0	12			12	
10:30	0	31			31	22:30	0	10			10	
10:45	0	36	112		36 112	22:45	0	6	36		6 36	
11:00	0	31			31	23:00	0	6			6	
11:15	0	29			29	23:15	0	11			11	
11:30	0	41			41	23:30	0	6			6	
11:45	0	30	131		30 131	23:45	0	9	32		9 32	
TOTALS	833				833	TOTALS	1978				1978	
SPLIT %	100.0%				29.6%	SPLIT %	100.0%				70.4%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	2,811	0	0	2,811

AM Peak Hour	11:30				11:30	PM Peak Hour	17:00				
AM Pk Volume	143				143	PM Pk Volume	328				328
Pk Hr Factor	0.872				0.872	Pk Hr Factor	0.891				0.891
7 - 9 Volume	0	213	0	0	213	4 - 6 Volume	0	613	0	0	613
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	0	116	0	0	116	4 - 6 Pk Volume	0	328	0	0	328
Pk Hr Factor	0.000	0.906	0.000	0.000	0.906	Pk Hr Factor	0.000	0.891	0.000	0.000	0.891

VOLUME

I-15 SB Off-Ramp To Main St

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_004

DAILY TOTALS					NB	SB						EB	WB						Total
					0	2,646						0	0						2,646
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	3			3		12:00	0	25			25							
00:15	0	4			4		12:15	0	44			44							
00:30	0	8			8		12:30	0	32			32							
00:45	0	3	18		3	18	12:45	0	34	135		34	135						
01:00	0	3			3		13:00	0	28			28							
01:15	0	3			3		13:15	0	30			30							
01:30	0	2			2		13:30	0	42			42							
01:45	0	7	15		7	15	13:45	0	41	141		41	141						
02:00	0	2			2		14:00	0	36			36							
02:15	0	4			4		14:15	0	53			53							
02:30	0	5			5		14:30	0	44			44							
02:45	0	5	16		5	16	14:45	0	59	192		59	192						
03:00	0	4			4		15:00	0	56			56							
03:15	0	4			4		15:15	0	51			51							
03:30	0	2			2		15:30	0	74			74							
03:45	0	5	15		5	15	15:45	0	70	251		70	251						
04:00	0	2			2		16:00	0	48			48							
04:15	0	8			8		16:15	0	60			60							
04:30	0	11			11		16:30	0	62			62							
04:45	0	14	35		14	35	16:45	0	78	248		78	248						
05:00	0	8			8		17:00	0	63			63							
05:15	0	6			6		17:15	0	80			80							
05:30	0	10			10		17:30	0	79			79							
05:45	0	20	44		20	44	17:45	0	84	306		84	306						
06:00	0	14			14		18:00	0	67			67							
06:15	0	12			12		18:15	0	66			66							
06:30	0	28			28		18:30	0	58			58							
06:45	0	18	72		18	72	18:45	0	56	247		56	247						
07:00	0	25			25		19:00	0	41			41							
07:15	0	25			25		19:15	0	46			46							
07:30	0	30			30		19:30	0	42			42							
07:45	0	41	121		41	121	19:45	0	24	153		24	153						
08:00	0	30			30		20:00	0	31			31							
08:15	0	19			19		20:15	0	20			20							
08:30	0	20			20		20:30	0	20			20							
08:45	0	21	90		21	90	20:45	0	18	89		18	89						
09:00	0	36			36		21:00	0	18			18							
09:15	0	18			18		21:15	0	10			10							
09:30	0	18			18		21:30	0	11			11							
09:45	0	29	101		29	101	21:45	0	18	57		18	57						
10:00	0	19			19		22:00	0	14			14							
10:15	0	16			16		22:15	0	13			13							
10:30	0	26			26		22:30	0	15			15							
10:45	0	21	82		21	82	22:45	0	19	61		19	61						
11:00	0	26			26		23:00	0	8			8							
11:15	0	41			41		23:15	0	8			8							
11:30	0	33			33		23:30	0	5			5							
11:45	0	31	131		31	131	23:45	0	5	26		5	26						
TOTALS	740				740		TOTALS	1906				1906							
SPLIT %	100.0%				28.0%		SPLIT %	100.0%				72.0%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	2,646						0	0						2,646

AM Peak Hour	11:30				11:30		PM Peak Hour	17:15				17:15							
AM Pk Volume	133				133		PM Pk Volume	310				310							
Pk Hr Factor	0.756				0.756		Pk Hr Factor	0.923				0.923							
7 - 9 Volume	0	211	0	0	211		4 - 6 Volume	0	554	0	0	554							
7 - 9 Peak Hour		07:15			07:15		4 - 6 Peak Hour		17:00			17:00							
7 - 9 Pk Volume	0	126	0	0	126		4 - 6 Pk Volume	0	306	0	0	306							
Pk Hr Factor	0.000	0.768	0.000	0.000	0.768		Pk Hr Factor	0.000	0.911	0.000	0.000	0.911							

VOLUME

I-15 SB Off-Ramp To Main St

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_004

DAILY TOTALS					NB	SB						Total
					0	2,686	EB	WB	0	0	2,686	
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	5			5	12:00	0	45			45	
00:15	0	9			9	12:15	0	22			22	
00:30	0	7			7	12:30	0	31			31	
00:45	0	6	27		6 27	12:45	0	37	135		37 135	
01:00	0	5			5	13:00	0	30			30	
01:15	0	2			2	13:15	0	43			43	
01:30	0	4			4	13:30	0	50			50	
01:45	0	4	15		4 15	13:45	0	41	164		41 164	
02:00	0	5			5	14:00	0	48			48	
02:15	0	2			2	14:15	0	48			48	
02:30	0	1			1	14:30	0	54			54	
02:45	0	6	14		6 14	14:45	0	62	212		62 212	
03:00	0	5			5	15:00	0	61			61	
03:15	0	2			2	15:15	0	63			63	
03:30	0	6			6	15:30	0	56			56	
03:45	0	7	20		7 20	15:45	0	61	241		61 241	
04:00	0	4			4	16:00	0	54			54	
04:15	0	6			6	16:15	0	77			77	
04:30	0	9			9	16:30	0	72			72	
04:45	0	11	30		11 30	16:45	0	80	283		80 283	
05:00	0	7			7	17:00	0	54			54	
05:15	0	13			13	17:15	0	68			68	
05:30	0	10			10	17:30	0	75			75	
05:45	0	26	56		26 56	17:45	0	77	274		77 274	
06:00	0	15			15	18:00	0	84			84	
06:15	0	12			12	18:15	0	45			45	
06:30	0	10			10	18:30	0	63			63	
06:45	0	17	54		17 54	18:45	0	52	244		52 244	
07:00	0	15			15	19:00	0	39			39	
07:15	0	30			30	19:15	0	36			36	
07:30	0	39			39	19:30	0	31			31	
07:45	0	29	113		29 113	19:45	0	35	141		35 141	
08:00	0	24			24	20:00	0	20			20	
08:15	0	19			19	20:15	0	27			27	
08:30	0	23			23	20:30	0	11			11	
08:45	0	28	94		28 94	20:45	0	22	80		22 80	
09:00	0	17			17	21:00	0	21			21	
09:15	0	26			26	21:15	0	19			19	
09:30	0	17			17	21:30	0	18			18	
09:45	0	28	88		28 88	21:45	0	17	75		17 75	
10:00	0	27			27	22:00	0	14			14	
10:15	0	29			29	22:15	0	13			13	
10:30	0	32			32	22:30	0	7			7	
10:45	0	37	125		37 125	22:45	0	9	43		9 43	
11:00	0	23			23	23:00	0	8			8	
11:15	0	34			34	23:15	0	10			10	
11:30	0	28			28	23:30	0	15			15	
11:45	0	34	119		34 119	23:45	0	6	39		6 39	
TOTALS	755				755	TOTALS	1931				1931	
SPLIT %	100.0%				28.1%	SPLIT %	100.0%				71.9%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	2,686	0	0	2,686

AM Peak Hour	11:15				11:15	PM Peak Hour	17:15				
AM Pk Volume	141				141	PM Pk Volume	304				304
Pk Hr Factor	0.783				0.783	Pk Hr Factor	0.905				0.905
7 - 9 Volume	0	207	0	0	207	4 - 6 Volume	0	557	0	0	557
7 - 9 Peak Hour		07:15			07:15	4 - 6 Peak Hour		16:00			16:00
7 - 9 Pk Volume	0	122	0	0	122	4 - 6 Pk Volume	0	283	0	0	283
Pk Hr Factor	0.000	0.782	0.000	0.000	0.782	Pk Hr Factor	0.000	0.884	0.000	0.000	0.884

VOLUME**I-15 NB Off-Ramp To Central Ave**

Day: Tuesday
Date: 9/17/2019

City: Lake Elsinore
Project #: CA19_6124_005

DAILY TOTALS					NB	SB	EBWB					Total
					16,513	0						0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	33	0			33	12:00	231	0			231	
00:15	30	0			30	12:15	246	0			246	
00:30	33	0			33	12:30	274	0			274	
00:45	24	120	0		24 120	12:45	238	989	0		238 989	
01:00	18	0			18	13:00	223	0			223	
01:15	14	0			14	13:15	244	0			244	
01:30	17	0			17	13:30	206	0			206	
01:45	17	66	0		17 66	13:45	241	914	0		241 914	
02:00	20	0			20	14:00	279	0			279	
02:15	15	0			15	14:15	302	0			302	
02:30	18	0			18	14:30	247	0			247	
02:45	14	67	0		14 67	14:45	269	1097	0		269 1097	
03:00	14	0			14	15:00	259	0			259	
03:15	24	0			24	15:15	369	0			369	
03:30	35	0			35	15:30	317	0			317	
03:45	56	129	0		56 129	15:45	323	1268	0		323 1268	
04:00	55	0			55	16:00	259	0			259	
04:15	47	0			47	16:15	322	0			322	
04:30	67	0			67	16:30	253	0			253	
04:45	108	277	0		108 277	16:45	282	1116	0		282 1116	
05:00	106	0			106	17:00	296	0			296	
05:15	142	0			142	17:15	308	0			308	
05:30	138	0			138	17:30	287	0			287	
05:45	138	524	0		138 524	17:45	312	1203	0		312 1203	
06:00	162	0			162	18:00	266	0			266	
06:15	203	0			203	18:15	271	0			271	
06:30	212	0			212	18:30	246	0			246	
06:45	267	844	0		267 844	18:45	228	1011	0		228 1011	
07:00	280	0			280	19:00	185	0			185	
07:15	284	0			284	19:15	222	0			222	
07:30	237	0			237	19:30	199	0			199	
07:45	305	1106	0		305 1106	19:45	181	787	0		181 787	
08:00	237	0			237	20:00	160	0			160	
08:15	248	0			248	20:15	162	0			162	
08:30	207	0			207	20:30	142	0			142	
08:45	181	873	0		181 873	20:45	116	580	0		116 580	
09:00	212	0			212	21:00	152	0			152	
09:15	176	0			176	21:15	122	0			122	
09:30	230	0			230	21:30	83	0			83	
09:45	258	876	0		258 876	21:45	77	434	0		77 434	
10:00	192	0			192	22:00	67	0			67	
10:15	245	0			245	22:15	85	0			85	
10:30	212	0			212	22:30	48	0			48	
10:45	223	872	0		223 872	22:45	44	244	0		44 244	
11:00	234	0			234	23:00	52	0			52	
11:15	241	0			241	23:15	50	0			50	
11:30	224	0			224	23:30	44	0			44	
11:45	233	932	0		233 932	23:45	38	184	0		38 184	
TOTALS	6686				6686	TOTALS	9827				9827	
SPLIT %	100.0%				40.5%	SPLIT %	100.0%				59.5%	

DAILY TOTALS					NB	SB						EB	WB	Total	
					16,513	0						0	0	16,513	

AM Peak Hour	07:00				07:00	PM Peak Hour	15:00				15:00				
AM Pk Volume	1106				1106	PM Pk Volume	1268				1268				
Pk Hr Factor	0.907				0.907	Pk Hr Factor	0.859				0.859				
7 - 9 Volume	1979	0	0	0	1979	4 - 6 Volume	2319	0	0	0	2319				
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	17:00				17:00				
7 - 9 Pk Volume	1106	0	0	0	1106	4 - 6 Pk Volume	1203	0	0	0	1203				
Pk Hr Factor	0.907	0.000	0.000	0.000	0.907	Pk Hr Factor	0.964	0.000	0.000	0.000	0.964				

VOLUME**I-15 NB Off-Ramp To Central Ave**

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_005

DAILY TOTALS					NB	SB						EB	WB	Total
					17,245	0						0	0	17,245
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	44	0			44	12:00	229	0			229			
00:15	40	0			40	12:15	253	0			253			
00:30	26	0			26	12:30	262	0			262			
00:45	21	131	0		21	12:45	235	979	0		235			
01:00	17	0			17	13:00	226	0			226			
01:15	19	0			19	13:15	233	0			233			
01:30	16	0			16	13:30	241	0			241			
01:45	12	64	0		12	13:45	293	993	0		293			
02:00	16	0			16	14:00	257	0			257			
02:15	19	0			19	14:15	300	0			300			
02:30	16	0			16	14:30	285	0			285			
02:45	20	71	0		20	14:45	297	1139	0		297			
03:00	15	0			15	15:00	335	0			335			
03:15	15	0			15	15:15	327	0			327			
03:30	35	0			35	15:30	387	0			387			
03:45	40	105	0		40	15:45	356	1405	0		356			
04:00	52	0			52	16:00	392	0			392			
04:15	45	0			45	16:15	359	0			359			
04:30	76	0			76	16:30	305	0			305			
04:45	131	304	0		131	16:45	394	1450	0		394			
05:00	121	0			121	17:00	311	0			311			
05:15	136	0			136	17:15	352	0			352			
05:30	141	0			141	17:30	291	0			291			
05:45	134	532	0		134	17:45	301	1255	0		301			
06:00	166	0			166	18:00	248	0			248			
06:15	177	0			177	18:15	221	0			221			
06:30	201	0			201	18:30	246	0			246			
06:45	239	783	0		239	18:45	279	994	0		279			
07:00	278	0			278	19:00	257	0			257			
07:15	269	0			269	19:15	201	0			201			
07:30	262	0			262	19:30	222	0			222			
07:45	280	1089	0		280	19:45	183	863	0		183			
08:00	263	0			263	20:00	163	0			163			
08:15	232	0			232	20:15	165	0			165			
08:30	217	0			217	20:30	143	0			143			
08:45	193	905	0		193	20:45	134	605	0		134			
09:00	200	0			200	21:00	120	0			120			
09:15	209	0			209	21:15	105	0			105			
09:30	207	0			207	21:30	104	0			104			
09:45	229	845	0		229	21:45	87	416	0		87			
10:00	213	0			213	22:00	80	0			80			
10:15	236	0			236	22:15	82	0			82			
10:30	221	0			221	22:30	68	0			68			
10:45	199	869	0		199	22:45	41	271	0		41			
11:00	261	0			261	23:00	51	0			51			
11:15	202	0			202	23:15	43	0			43			
11:30	269	0			269	23:30	46	0			46			
11:45	265	997	0		265	23:45	40	180	0		40			
TOTALS	6695				6695	TOTALS	10550				10550			
SPLIT %	100.0%				38.8%	SPLIT %	100.0%				61.2%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					17,245	0						0	0	17,245	

AM Peak Hour	07:00				07:00	PM Peak Hour	15:30				15:30
AM Pk Volume	1089				1089	PM Pk Volume	1494				1494
Pk Hr Factor	0.972				0.972	Pk Hr Factor	0.953				0.953
7 - 9 Volume	1994	0	0	0	1994	4 - 6 Volume	2705	0	0	0	2705
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	1089	0	0	0	1089	4 - 6 Pk Volume	1450	0	0	0	1450
Pk Hr Factor	0.972	0.000	0.000	0.000	0.972	Pk Hr Factor	0.920	0.000	0.000	0.000	0.920

VOLUME**I-15 NB Off-Ramp To Central Ave**

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6124_005

DAILY TOTALS					NB	SB						EB	WB	Total	
					16,927	0						0	0	16,927	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00	25	0			25		12:00	245	0			245			
00:15	35	0			35		12:15	238	0			238			
00:30	21	0			21		12:30	273	0			273			
00:45	26	107	0		26	107	12:45	236	992	0		236	992		
01:00	29	0			29		13:00	268	0			268			
01:15	17	0			17		13:15	259	0			259			
01:30	17	0			17		13:30	262	0			262			
01:45	15	78	0		15	78	13:45	261	1050	0		261	1050		
02:00	24	0			24		14:00	259	0			259			
02:15	11	0			11		14:15	287	0			287			
02:30	19	0			19		14:30	274	0			274			
02:45	25	79	0		25	79	14:45	296	1116	0		296	1116		
03:00	26	0			26		15:00	272	0			272			
03:15	22	0			22		15:15	300	0			300			
03:30	32	0			32		15:30	282	0			282			
03:45	48	128	0		48	128	15:45	301	1155	0		301	1155		
04:00	70	0			70		16:00	300	0			300			
04:15	41	0			41		16:15	273	0			273			
04:30	75	0			75		16:30	292	0			292			
04:45	119	305	0		119	305	16:45	312	1177	0		312	1177		
05:00	127	0			127		17:00	284	0			284			
05:15	136	0			136		17:15	302	0			302			
05:30	123	0			123		17:30	245	0			245			
05:45	152	538	0		152	538	17:45	290	1121	0		290	1121		
06:00	154	0			154		18:00	249	0			249			
06:15	211	0			211		18:15	246	0			246			
06:30	217	0			217		18:30	266	0			266			
06:45	279	861	0		279	861	18:45	255	1016	0		255	1016		
07:00	278	0			278		19:00	230	0			230			
07:15	263	0			263		19:15	219	0			219			
07:30	241	0			241		19:30	184	0			184			
07:45	280	1062	0		280	1062	19:45	193	826	0		193	826		
08:00	243	0			243		20:00	181	0			181			
08:15	239	0			239		20:15	190	0			190			
08:30	205	0			205		20:30	163	0			163			
08:45	219	906	0		219	906	20:45	114	648	0		114	648		
09:00	181	0			181		21:00	125	0			125			
09:15	191	0			191		21:15	126	0			126			
09:30	243	0			243		21:30	102	0			102			
09:45	245	860	0		245	860	21:45	79	432	0		79	432		
10:00	254	0			254		22:00	60	0			60			
10:15	227	0			227		22:15	79	0			79			
10:30	202	0			202		22:30	71	0			71			
10:45	255	938	0		255	938	22:45	64	274	0		64	274		
11:00	262	0			262		23:00	48	0			48			
11:15	267	0			267		23:15	46	0			46			
11:30	254	0			254		23:30	47	0			47			
11:45	288	1071	0		288	1071	23:45	46	187	0		46	187		
TOTALS	6933				6933		TOTALS	9994				9994			
SPLIT %	100.0%				41.0%		SPLIT %	100.0%				59.0%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					16,927	0						0	0	16,927	

AM Peak Hour	11:00				11:00		PM Peak Hour	16:30				16:30			
AM Pk Volume	1071				1071		PM Pk Volume	1190				1190			
Pk Hr Factor	0.930				0.930		Pk Hr Factor	0.954				0.954			
7 - 9 Volume	1968	0	0	0	1968		4 - 6 Volume	2298	0	0	0	2298			
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:30				16:30			
7 - 9 Pk Volume	1062	0	0	0	1062		4 - 6 Pk Volume	1190	0	0	0	1190			
Pk Hr Factor	0.948	0.000	0.000	0.000	0.948		Pk Hr Factor	0.954	0.000	0.000	0.000	0.954			

VOLUME

I-15 NB On-Ramp From Central Ave

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_006

DAILY TOTALS					NB	SB						EB	WB						Total
					9,317	0						0	0						9,317
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	11	0			11		12:00	144	0			144							
00:15	13	0			13		12:15	147	0			147							
00:30	14	0			14		12:30	156	0			156							
00:45	9	47	0		9	47	12:45	124	571	0		124	571						
01:00	8	0			8		13:00	131	0			131							
01:15	10	0			10		13:15	150	0			150							
01:30	6	0			6		13:30	136	0			136							
01:45	8	32	0		8	32	13:45	163	580	0		163	580						
02:00	20	0			20		14:00	141	0			141							
02:15	29	0			29		14:15	159	0			159							
02:30	18	0			18		14:30	152	0			152							
02:45	26	93	0		26	93	14:45	126	578	0		126	578						
03:00	46	0			46		15:00	124	0			124							
03:15	57	0			57		15:15	146	0			146							
03:30	79	0			79		15:30	136	0			136							
03:45	91	273	0		91	273	15:45	122	528	0		122	528						
04:00	169	0			169		16:00	131	0			131							
04:15	149	0			149		16:15	114	0			114							
04:30	150	0			150		16:30	137	0			137							
04:45	139	607	0		139	607	16:45	159	541	0		159	541						
05:00	145	0			145		17:00	167	0			167							
05:15	153	0			153		17:15	143	0			143							
05:30	143	0			143		17:30	123	0			123							
05:45	168	609	0		168	609	17:45	103	536	0		103	536						
06:00	153	0			153		18:00	109	0			109							
06:15	118	0			118		18:15	117	0			117							
06:30	131	0			131		18:30	100	0			100							
06:45	139	541	0		139	541	18:45	93	419	0		93	419						
07:00	119	0			119		19:00	69	0			69							
07:15	134	0			134		19:15	88	0			88							
07:30	165	0			165		19:30	67	0			67							
07:45	143	561	0		143	561	19:45	68	292	0		68	292						
08:00	119	0			119		20:00	65	0			65							
08:15	125	0			125		20:15	52	0			52							
08:30	101	0			101		20:30	56	0			56							
08:45	121	466	0		121	466	20:45	54	227	0		54	227						
09:00	121	0			121		21:00	49	0			49							
09:15	119	0			119		21:15	57	0			57							
09:30	138	0			138		21:30	32	0			32							
09:45	125	503	0		125	503	21:45	38	176	0		38	176						
10:00	120	0			120		22:00	31	0			31							
10:15	131	0			131		22:15	22	0			22							
10:30	104	0			104		22:30	24	0			24							
10:45	140	495	0		140	495	22:45	16	93	0		16	93						
11:00	127	0			127		23:00	12	0			12							
11:15	139	0			139		23:15	8	0			8							
11:30	101	0			101		23:30	15	0			15							
11:45	134	501	0		134	501	23:45	13	48	0		13	48						
TOTALS	4728				4728		TOTALS	4589				4589							
SPLIT %	100.0%				50.7%		SPLIT %	100.0%				49.3%							

DAILY TOTALS					NB	SB						EB	WB						Total
					9,317	0						0	0						9,317

AM Peak Hour	05:15				05:15		PM Peak Hour	13:45				13:45							
AM Pk Volume	617				617		PM Pk Volume	615				615							
Pk Hr Factor	0.918				0.918		Pk Hr Factor	0.943				0.943							
7 - 9 Volume	1027	0	0	0	1027		4 - 6 Volume	1077	0	0	0	1077							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	561	0	0	0	561		4 - 6 Pk Volume	606	0	0	0	606							
Pk Hr Factor	0.850	0.000	0.000	0.000	0.850		Pk Hr Factor	0.907	0.000	0.000	0.000	0.907							

VOLUME**I-15 NB On-Ramp From Central Ave**

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_006

DAILY TOTALS					NB	SB						EB	WB						Total
					9,382	0						0	0						9,382
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	10	0			10		12:00	139	0			139							
00:15	12	0			12		12:15	138	0			138							
00:30	22	0			22		12:30	145	0			145							
00:45	11	55	0		11	55	12:45	158	580	0		158	580						
01:00	8	0			8		13:00	157	0			157							
01:15	6	0			6		13:15	128	0			128							
01:30	17	0			17		13:30	132	0			132							
01:45	9	40	0		9	40	13:45	112	529	0		112	529						
02:00	17	0			17		14:00	147	0			147							
02:15	35	0			35		14:15	146	0			146							
02:30	15	0			15		14:30	132	0			132							
02:45	43	110	0		43	110	14:45	146	571	0		146	571						
03:00	35	0			35		15:00	115	0			115							
03:15	63	0			63		15:15	128	0			128							
03:30	68	0			68		15:30	123	0			123							
03:45	116	282	0		116	282	15:45	120	486	0		120	486						
04:00	143	0			143		16:00	131	0			131							
04:15	155	0			155		16:15	147	0			147							
04:30	163	0			163		16:30	131	0			131							
04:45	158	619	0		158	619	16:45	121	530	0		121	530						
05:00	162	0			162		17:00	147	0			147							
05:15	158	0			158		17:15	128	0			128							
05:30	127	0			127		17:30	129	0			129							
05:45	140	587	0		140	587	17:45	125	529	0		125	529						
06:00	156	0			156		18:00	95	0			95							
06:15	137	0			137		18:15	107	0			107							
06:30	137	0			137		18:30	91	0			91							
06:45	150	580	0		150	580	18:45	88	381	0		88	381						
07:00	114	0			114		19:00	63	0			63							
07:15	155	0			155		19:15	96	0			96							
07:30	119	0			119		19:30	71	0			71							
07:45	138	526	0		138	526	19:45	79	309	0		79	309						
08:00	142	0			142		20:00	57	0			57							
08:15	169	0			169		20:15	65	0			65							
08:30	167	0			167		20:30	35	0			35							
08:45	130	608	0		130	608	20:45	56	213	0		56	213						
09:00	128	0			128		21:00	47	0			47							
09:15	128	0			128		21:15	37	0			37							
09:30	133	0			133		21:30	37	0			37							
09:45	123	512	0		123	512	21:45	39	160	0		39	160						
10:00	108	0			108		22:00	28	0			28							
10:15	123	0			123		22:15	30	0			30							
10:30	107	0			107		22:30	30	0			30							
10:45	123	461	0		123	461	22:45	20	108	0		20	108						
11:00	130	0			130		23:00	22	0			22							
11:15	150	0			150		23:15	20	0			20							
11:30	144	0			144		23:30	9	0			9							
11:45	124	548	0		124	548	23:45	7	58	0		7	58						
TOTALS	4928				4928		TOTALS	4454				4454							
SPLIT %	100.0%				52.5%		SPLIT %	100.0%				47.5%							

DAILY TOTALS					NB	SB						EB	WB						Total
					9,382	0						0	0						9,382

AM Peak Hour	04:30				04:30		PM Peak Hour	12:15				12:15							
AM Pk Volume	641				641		PM Pk Volume	598				598							
Pk Hr Factor	0.983				0.983		Pk Hr Factor	0.946				0.946							
7 - 9 Volume	1134	0	0	0	1134		4 - 6 Volume	1059	0	0	0	1059							
7 - 9 Peak Hour	07:45				07:45		4 - 6 Peak Hour	16:15				16:15							
7 - 9 Pk Volume	616	0	0	0	616		4 - 6 Pk Volume	546	0	0	0	546							
Pk Hr Factor	0.911	0.000	0.000	0.000	0.911		Pk Hr Factor	0.929	0.000	0.000	0.000	0.929							

VOLUME

I-15 NB On-Ramp From Central Ave

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_006

DAILY TOTALS					NB	SB						EB	WB	Total	
					9,616	0						0	0	9,616	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00	14	0			14		12:00	136	0			136			
00:15	6	0			6		12:15	113	0			113			
00:30	14	0			14		12:30	145	0			145			
00:45	5	39	0		5	39	12:45	137	531	0		137	531		
01:00	10	0			10		13:00	116	0			116			
01:15	23	0			23		13:15	139	0			139			
01:30	21	0			21		13:30	137	0			137			
01:45	13	67	0		13	67	13:45	150	542	0		150	542		
02:00	10	0			10		14:00	149	0			149			
02:15	31	0			31		14:15	154	0			154			
02:30	24	0			24		14:30	154	0			154			
02:45	19	84	0		19	84	14:45	158	615	0		158	615		
03:00	37	0			37		15:00	140	0			140			
03:15	65	0			65		15:15	149	0			149			
03:30	85	0			85		15:30	124	0			124			
03:45	93	280	0		93	280	15:45	132	545	0		132	545		
04:00	138	0			138		16:00	122	0			122			
04:15	178	0			178		16:15	130	0			130			
04:30	154	0			154		16:30	160	0			160			
04:45	152	622	0		152	622	16:45	131	543	0		131	543		
05:00	150	0			150		17:00	149	0			149			
05:15	121	0			121		17:15	151	0			151			
05:30	180	0			180		17:30	136	0			136			
05:45	139	590	0		139	590	17:45	109	545	0		109	545		
06:00	149	0			149		18:00	107	0			107			
06:15	139	0			139		18:15	108	0			108			
06:30	142	0			142		18:30	92	0			92			
06:45	129	559	0		129	559	18:45	95	402	0		95	402		
07:00	125	0			125		19:00	85	0			85			
07:15	174	0			174		19:15	82	0			82			
07:30	200	0			200		19:30	83	0			83			
07:45	151	650	0		151	650	19:45	71	321	0		71	321		
08:00	156	0			156		20:00	66	0			66			
08:15	136	0			136		20:15	75	0			75			
08:30	119	0			119		20:30	69	0			69			
08:45	129	540	0		129	540	20:45	49	259	0		49	259		
09:00	142	0			142		21:00	54	0			54			
09:15	137	0			137		21:15	61	0			61			
09:30	117	0			117		21:30	29	0			29			
09:45	127	523	0		127	523	21:45	28	172	0		28	172		
10:00	111	0			111		22:00	41	0			41			
10:15	135	0			135		22:15	37	0			37			
10:30	122	0			122		22:30	28	0			28			
10:45	118	486	0		118	486	22:45	18	124	0		18	124		
11:00	126	0			126		23:00	20	0			20			
11:15	101	0			101		23:15	14	0			14			
11:30	130	0			130		23:30	15	0			15			
11:45	157	514	0		157	514	23:45	14	63	0		14	63		
TOTALS	4954				4954		TOTALS	4662				4662			
SPLIT %	100.0%				51.5%		SPLIT %	100.0%				48.5%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					9,616	0						0	0	9,616	

AM Peak Hour	07:15				07:15		PM Peak Hour	14:00				14:00			
AM Pk Volume	681				681		PM Pk Volume	615				615			
Pk Hr Factor	0.851				0.851		Pk Hr Factor	0.973				0.973			
7 - 9 Volume	1190	0	0	0	1190		4 - 6 Volume	1088	0	0	0	1088			
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	16:30				16:30			
7 - 9 Pk Volume	681	0	0	0	681		4 - 6 Pk Volume	591	0	0	0	591			
Pk Hr Factor	0.851	0.000	0.000	0.000	0.851		Pk Hr Factor	0.923	0.000	0.000	0.000	0.923			

VOLUME

I-15 SB On-Ramp From Central Ave

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_007

DAILY TOTALS					NB	SB						EB	WB	Total
					0	15,833						0	0	15,833
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	16			16		12:00	0	233			233		
00:15	0	25			25		12:15	0	235			235		
00:30	0	10			10		12:30	0	242			242		
00:45	0	16	67		16	67	12:45	0	252	962		252	962	
01:00	0	10			10		13:00	0	274			274		
01:15	0	9			9		13:15	0	250			250		
01:30	0	7			7		13:30	0	249			249		
01:45	0	14	40		14	40	13:45	0	292	1065		292	1065	
02:00	0	9			9		14:00	0	280			280		
02:15	0	10			10		14:15	0	273			273		
02:30	0	20			20		14:30	0	293			293		
02:45	0	13	52		13	52	14:45	0	279	1125		279	1125	
03:00	0	14			14		15:00	0	278			278		
03:15	0	12			12		15:15	0	276			276		
03:30	0	28			28		15:30	0	274			274		
03:45	0	33	87		33	87	15:45	0	281	1109		281	1109	
04:00	0	40			40		16:00	0	265			265		
04:15	0	67			67		16:15	0	270			270		
04:30	0	105			105		16:30	0	260			260		
04:45	0	112	324		112	324	16:45	0	249	1044		249	1044	
05:00	0	94			94		17:00	0	305			305		
05:15	0	106			106		17:15	0	246			246		
05:30	0	135			135		17:30	0	301			301		
05:45	0	139	474		139	474	17:45	0	212	1064		212	1064	
06:00	0	138			138		18:00	0	207			207		
06:15	0	167			167		18:15	0	223			223		
06:30	0	213			213		18:30	0	211			211		
06:45	0	226	744		226	744	18:45	0	193	834		193	834	
07:00	0	243			243		19:00	0	217			217		
07:15	0	314			314		19:15	0	228			228		
07:30	0	339			339		19:30	0	146			146		
07:45	0	279	1175		279	1175	19:45	0	183	774		183	774	
08:00	0	282			282		20:00	0	144			144		
08:15	0	243			243		20:15	0	146			146		
08:30	0	266			266		20:30	0	133			133		
08:45	0	240	1031		240	1031	20:45	0	116	539		116	539	
09:00	0	196			196		21:00	0	114			114		
09:15	0	198			198		21:15	0	104			104		
09:30	0	233			233		21:30	0	79			79		
09:45	0	203	830		203	830	21:45	0	64	361		64	361	
10:00	0	195			195		22:00	0	68			68		
10:15	0	201			201		22:15	0	60			60		
10:30	0	222			222		22:30	0	71			71		
10:45	0	235	853		235	853	22:45	0	38	237		38	237	
11:00	0	230			230		23:00	0	34			34		
11:15	0	234			234		23:15	0	25			25		
11:30	0	229			229		23:30	0	19			19		
11:45	0	251	944		251	944	23:45	0	20	98		20	98	
TOTALS	6621				6621		TOTALS	9212				9212		
SPLIT %	100.0%				41.8%		SPLIT %	100.0%				58.2%		

DAILY TOTALS					NB	SB						EB	WB	Total
					0	15,833						0	0	15,833

AM Peak Hour	07:15				07:15		PM Peak Hour	13:45				13:45		
AM Pk Volume	1214				1214		PM Pk Volume	1138				1138		
Pk Hr Factor	0.895				0.895		Pk Hr Factor	0.971				0.971		
7 - 9 Volume	0	2206	0	0	2206		4 - 6 Volume	0	2108	0	0	2108		
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	16:45				16:45		
7 - 9 Pk Volume	1214		0	0	1214		4 - 6 Pk Volume	1101		0	0	1101		
Pk Hr Factor	0.000	0.895	0.000	0.000	0.895		Pk Hr Factor	0.000	0.902	0.000	0.000	0.902		

VOLUME

I-15 SB On-Ramp From Central Ave

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_007

DAILY TOTALS					NB	SB	EB					WB	Total
					0	16,243						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	22			22	12:00	0	253			253		
00:15	0	24			24	12:15	0	256			256		
00:30	0	33			33	12:30	0	244			244		
00:45	0	15	94		15 94	12:45	0	248	1001		248 1001		
01:00	0	10			10	13:00	0	240			240		
01:15	0	14			14	13:15	0	253			253		
01:30	0	13			13	13:30	0	249			249		
01:45	0	7	44		7 44	13:45	0	274	1016		274 1016		
02:00	0	13			13	14:00	0	257			257		
02:15	0	10			10	14:15	0	281			281		
02:30	0	11			11	14:30	0	284			284		
02:45	0	16	50		16 50	14:45	0	307	1129		307 1129		
03:00	0	20			20	15:00	0	295			295		
03:15	0	14			14	15:15	0	260			260		
03:30	0	22			22	15:30	0	305			305		
03:45	0	26	82		26 82	15:45	0	250	1110		250 1110		
04:00	0	35			35	16:00	0	262			262		
04:15	0	59			59	16:15	0	256			256		
04:30	0	107			107	16:30	0	287			287		
04:45	0	111	312		111 312	16:45	0	240	1045		240 1045		
05:00	0	90			90	17:00	0	304			304		
05:15	0	107			107	17:15	0	249			249		
05:30	0	124			124	17:30	0	270			270		
05:45	0	152	473		152 473	17:45	0	232	1055		232 1055		
06:00	0	138			138	18:00	0	240			240		
06:15	0	163			163	18:15	0	212			212		
06:30	0	215			215	18:30	0	238			238		
06:45	0	208	724		208 724	18:45	0	233	923		233 923		
07:00	0	242			242	19:00	0	242			242		
07:15	0	265			265	19:15	0	236			236		
07:30	0	315			315	19:30	0	200			200		
07:45	0	241	1063		241 1063	19:45	0	165	843		165 843		
08:00	0	289			289	20:00	0	203			203		
08:15	0	294			294	20:15	0	148			148		
08:30	0	282			282	20:30	0	146			146		
08:45	0	253	1118		253 1118	20:45	0	108	605		108 605		
09:00	0	226			226	21:00	0	139			139		
09:15	0	224			224	21:15	0	102			102		
09:30	0	229			229	21:30	0	79			79		
09:45	0	224	903		224 903	21:45	0	78	398		78 398		
10:00	0	230			230	22:00	0	73			73		
10:15	0	246			246	22:15	0	77			77		
10:30	0	212			212	22:30	0	80			80		
10:45	0	236	924		236 924	22:45	0	51	281		51 281		
11:00	0	241			241	23:00	0	38			38		
11:15	0	239			239	23:15	0	30			30		
11:30	0	228			228	23:30	0	32			32		
11:45	0	219	927		219 927	23:45	0	23	123		23 123		
TOTALS	6714				6714	TOTALS	9529				9529		
SPLIT %	100.0%				41.3%	SPLIT %	100.0%				58.7%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	16,243	0	0	16,243

AM Peak Hour	07:30	07:30	PM Peak Hour	14:15	14:15
AM Pk Volume	1139	1139	PM Pk Volume	1167	1167
Pk Hr Factor	0.904	0.904	Pk Hr Factor	0.950	0.950
7 - 9 Volume	0	2181	0	0	2100
7 - 9 Peak Hour	07:30	07:30	4 - 6 Volume	0	2100
7 - 9 Pk Volume	0	1139	0	0	16:15
Pk Hr Factor	0.000	0.904	0.000	0.000	0.894

VOLUME

I-15 SB On-Ramp From Central Ave

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_007

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	16,262						0	0	16,262	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00	0	23			23		12:00	0	259			259			
00:15	0	26			26		12:15	0	214			214			
00:30	0	18			18		12:30	0	267			267			
00:45	0	15	82		15	82	12:45	0	256	996		256	996		
01:00	0	15			15		13:00	0	262			262			
01:15	0	15			15		13:15	0	282			282			
01:30	0	14			14		13:30	0	325			325			
01:45	0	12	56		12	56	13:45	0	235	1104		235	1104		
02:00	0	6			6		14:00	0	287			287			
02:15	0	9			9		14:15	0	275			275			
02:30	0	15			15		14:30	0	299			299			
02:45	0	18	48		18	48	14:45	0	281	1142		281	1142		
03:00	0	16			16		15:00	0	252			252			
03:15	0	10			10		15:15	0	248			248			
03:30	0	39			39		15:30	0	274			274			
03:45	0	25	90		25	90	15:45	0	279	1053		279	1053		
04:00	0	28			28		16:00	0	261			261			
04:15	0	57			57		16:15	0	282			282			
04:30	0	103			103		16:30	0	260			260			
04:45	0	112	300		112	300	16:45	0	321	1124		321	1124		
05:00	0	95			95		17:00	0	310			310			
05:15	0	107			107		17:15	0	254			254			
05:30	0	130			130		17:30	0	240			240			
05:45	0	132	464		132	464	17:45	0	247	1051		247	1051		
06:00	0	144			144		18:00	0	265			265			
06:15	0	187			187		18:15	0	239			239			
06:30	0	190			190		18:30	0	206			206			
06:45	0	224	745		224	745	18:45	0	198	908		198	908		
07:00	0	250			250		19:00	0	211			211			
07:15	0	299			299		19:15	0	196			196			
07:30	0	317			317		19:30	0	173			173			
07:45	0	261	1127		261	1127	19:45	0	177	757		177	757		
08:00	0	285			285		20:00	0	158			158			
08:15	0	237			237		20:15	0	152			152			
08:30	0	285			285		20:30	0	175			175			
08:45	0	225	1032		225	1032	20:45	0	135	620		135	620		
09:00	0	231			231		21:00	0	126			126			
09:15	0	203			203		21:15	0	88			88			
09:30	0	211			211		21:30	0	89			89			
09:45	0	224	869		224	869	21:45	0	76	379		76	379		
10:00	0	248			248		22:00	0	81			81			
10:15	0	213			213		22:15	0	72			72			
10:30	0	222			222		22:30	0	46			46			
10:45	0	229	912		229	912	22:45	0	53	252		53	252		
11:00	0	225			225		23:00	0	56			56			
11:15	0	243			243		23:15	0	39			39			
11:30	0	254			254		23:30	0	26			26			
11:45	0	285	1007		285	1007	23:45	0	23	144		23	144		
TOTALS	6732				6732		TOTALS	9530				9530		9530	
SPLIT %	100.0%				41.4%		SPLIT %	100.0%				58.6%		58.6%	

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	16,262						0	0	16,262	

AM Peak Hour	07:15				07:15		PM Peak Hour	16:15				16:15			
AM Pk Volume	1162				1162		PM Pk Volume	1173				1173			
Pk Hr Factor	0.916				0.916		Pk Hr Factor	0.914				0.914			
7 - 9 Volume	0	2159	0	0	2159		4 - 6 Volume	0	2175	0	0	2175			
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	16:15				16:15			
7 - 9 Pk Volume	1162		0	0	1162		4 - 6 Pk Volume	1173		0	0	1173			
Pk Hr Factor	0.000	0.916	0.000	0.000	0.916		Pk Hr Factor	0.000	0.914	0.000	0.000	0.914			

VOLUME

I-15 SB Off-Ramp To Central Ave

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_008

DAILY TOTALS					NB	SB						EB	WB						Total
					0	9,531						0	0						9,531
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	19			19		12:00	0	122			122							
00:15	0	30			30		12:15	0	126			126							
00:30	0	18			18		12:30	0	138			138							
00:45	0	14	81		14	81	12:45	0	113	499		113	499						
01:00	0	7			7		13:00	0	148			148							
01:15	0	11			11		13:15	0	185			185							
01:30	0	16			16		13:30	0	144			144							
01:45	0	13	47		13	47	13:45	0	143	620		143	620						
02:00	0	8			8		14:00	0	153			153							
02:15	0	18			18		14:15	0	202			202							
02:30	0	11			11		14:30	0	180			180							
02:45	0	15	52		15	52	14:45	0	174	709		174	709						
03:00	0	18			18		15:00	0	189			189							
03:15	0	9			9		15:15	0	179			179							
03:30	0	19			19		15:30	0	170			170							
03:45	0	20	66		20	66	15:45	0	197	735		197	735						
04:00	0	13			13		16:00	0	193			193							
04:15	0	30			30		16:15	0	179			179							
04:30	0	28			28		16:30	0	189			189							
04:45	0	42	113		42	113	16:45	0	193	754		193	754						
05:00	0	43			43		17:00	0	190			190							
05:15	0	50			50		17:15	0	202			202							
05:30	0	86			86		17:30	0	190			190							
05:45	0	65	244		65	244	17:45	0	207	789		207	789						
06:00	0	87			87		18:00	0	187			187							
06:15	0	90			90		18:15	0	170			170							
06:30	0	107			107		18:30	0	140			140							
06:45	0	127	411		127	411	18:45	0	156	653		156	653						
07:00	0	122			122		19:00	0	145			145							
07:15	0	134			134		19:15	0	143			143							
07:30	0	108			108		19:30	0	116			116							
07:45	0	131	495		131	495	19:45	0	118	522		118	522						
08:00	0	105			105		20:00	0	98			98							
08:15	0	118			118		20:15	0	102			102							
08:30	0	111			111		20:30	0	90			90							
08:45	0	113	447		113	447	20:45	0	91	381		91	381						
09:00	0	100			100		21:00	0	73			73							
09:15	0	97			97		21:15	0	66			66							
09:30	0	104			104		21:30	0	69			69							
09:45	0	106	407		106	407	21:45	0	59	267		59	267						
10:00	0	112			112		22:00	0	47			47							
10:15	0	123			123		22:15	0	58			58							
10:30	0	111			111		22:30	0	43			43							
10:45	0	105	451		105	451	22:45	0	46	194		46	194						
11:00	0	130			130		23:00	0	48			48							
11:15	0	108			108		23:15	0	27			27							
11:30	0	114			114		23:30	0	29			29							
11:45	0	117	469		117	469	23:45	0	21	125		21	125						
TOTALS	3283				3283		TOTALS	6248				6248							
SPLIT %	100.0%				34.4%		SPLIT %	100.0%				65.6%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	9,531						0	0						9,531

AM Peak Hour	11:45				11:45		PM Peak Hour	17:00						17:00					
AM Pk Volume	503				503		PM Pk Volume	789						789					
Pk Hr Factor	0.911				0.911		Pk Hr Factor	0.953						0.953					
7 - 9 Volume	0	942	0	0	942		4 - 6 Volume	0	1543	0	0	1543		0	0	0	0	0	1543
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	17:00				17:00		0	0	0	0	0	17:00
7 - 9 Pk Volume	495				495		4 - 6 Pk Volume	789				789		0	0	0	0	0	789
Pk Hr Factor	0.000	0.924	0.000	0.000	0.924		Pk Hr Factor	0.000	0.953	0.000	0.000	0.953		0.000	0.000	0.000	0.000	0.953	

VOLUME

I-15 SB Off-Ramp To Central Ave

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_008

DAILY TOTALS					NB	SB	EB					WB	Total
					0	9,373						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	30			30	12:00	0	101			101		
00:15	0	27			27	12:15	0	133			133		
00:30	0	22			22	12:30	0	121			121		
00:45	0	18	97		18 97	12:45	0	136	491		136 491		
01:00	0	16			16	13:00	0	124			124		
01:15	0	9			9	13:15	0	130			130		
01:30	0	10			10	13:30	0	148			148		
01:45	0	21	56		21 56	13:45	0	162	564		162 564		
02:00	0	13			13	14:00	0	181			181		
02:15	0	9			9	14:15	0	167			167		
02:30	0	13			13	14:30	0	164			164		
02:45	0	16	51		16 51	14:45	0	155	667		155 667		
03:00	0	9			9	15:00	0	174			174		
03:15	0	12			12	15:15	0	166			166		
03:30	0	24			24	15:30	0	200			200		
03:45	0	13	58		13 58	15:45	0	193	733		193 733		
04:00	0	19			19	16:00	0	192			192		
04:15	0	25			25	16:15	0	184			184		
04:30	0	29			29	16:30	0	200			200		
04:45	0	40	113		40 113	16:45	0	184	760		184 760		
05:00	0	31			31	17:00	0	164			164		
05:15	0	54			54	17:15	0	184			184		
05:30	0	80			80	17:30	0	201			201		
05:45	0	64	229		64 229	17:45	0	184	733		184 733		
06:00	0	54			54	18:00	0	172			172		
06:15	0	81			81	18:15	0	168			168		
06:30	0	119			119	18:30	0	165			165		
06:45	0	128	382		128 382	18:45	0	156	661		156 661		
07:00	0	116			116	19:00	0	162			162		
07:15	0	106			106	19:15	0	145			145		
07:30	0	109			109	19:30	0	157			157		
07:45	0	114	445		114 445	19:45	0	129	593		129 593		
08:00	0	109			109	20:00	0	99			99		
08:15	0	101			101	20:15	0	115			115		
08:30	0	88			88	20:30	0	77			77		
08:45	0	95	393		95 393	20:45	0	96	387		96 387		
09:00	0	120			120	21:00	0	99			99		
09:15	0	115			115	21:15	0	56			56		
09:30	0	107			107	21:30	0	60			60		
09:45	0	116	458		116 458	21:45	0	67	282		67 282		
10:00	0	109			109	22:00	0	41			41		
10:15	0	111			111	22:15	0	48			48		
10:30	0	91			91	22:30	0	54			54		
10:45	0	110	421		110 421	22:45	0	48	191		48 191		
11:00	0	90			90	23:00	0	33			33		
11:15	0	118			118	23:15	0	28			28		
11:30	0	142			142	23:30	0	31			31		
11:45	0	143	493		143 493	23:45	0	23	115		23 115		
TOTALS	3196				3196	TOTALS	6177				6177		
SPLIT %	100.0%				34.1%	SPLIT %	100.0%				65.9%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	9,373	0	0	9,373

AM Peak Hour	11:30				11:30	PM Peak Hour	15:30				15:30
AM Pk Volume	519				519	PM Pk Volume	769				769
Pk Hr Factor	0.907				0.907	Pk Hr Factor	0.961				0.961
7 - 9 Volume	0	838	0	0	838	4 - 6 Volume	0	1493	0	0	1493
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	0	445	0	0	445	4 - 6 Pk Volume	0	760	0	0	760
Pk Hr Factor	0.000	0.959	0.000	0.000	0.959	Pk Hr Factor	0.000	0.950	0.000	0.000	0.950

VOLUME

I-15 SB Off-Ramp To Central Ave

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_008

DAILY TOTALS					NB	SB	EB					WB	Total
					0	9,548	0					0	9,548
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	24			24		12:00	0	123			123	
00:15	0	25			25		12:15	0	154			154	
00:30	0	19			19		12:30	0	128			128	
00:45	0	21	89		21	89	12:45	0	119	524		119	524
01:00	0	15			15		13:00	0	123			123	
01:15	0	13			13		13:15	0	155			155	
01:30	0	14			14		13:30	0	156			156	
01:45	0	6	48		6	48	13:45	0	158	592		158	592
02:00	0	14			14		14:00	0	164			164	
02:15	0	11			11		14:15	0	165			165	
02:30	0	11			11		14:30	0	153			153	
02:45	0	14	50		14	50	14:45	0	140	622		140	622
03:00	0	20			20		15:00	0	182			182	
03:15	0	9			9		15:15	0	156			156	
03:30	0	14			14		15:30	0	186			186	
03:45	0	25	68		25	68	15:45	0	185	709		185	709
04:00	0	25			25		16:00	0	206			206	
04:15	0	25			25		16:15	0	194			194	
04:30	0	30			30		16:30	0	189			189	
04:45	0	39	119		39	119	16:45	0	191	780		191	780
05:00	0	55			55		17:00	0	194			194	
05:15	0	43			43		17:15	0	187			187	
05:30	0	84			84		17:30	0	180			180	
05:45	0	74	256		74	256	17:45	0	172	733		172	733
06:00	0	66			66		18:00	0	154			154	
06:15	0	67			67		18:15	0	157			157	
06:30	0	90			90		18:30	0	166			166	
06:45	0	143	366		143	366	18:45	0	152	629		152	629
07:00	0	104			104		19:00	0	144			144	
07:15	0	126			126		19:15	0	158			158	
07:30	0	121			121		19:30	0	152			152	
07:45	0	140	491		140	491	19:45	0	148	602		148	602
08:00	0	93			93		20:00	0	120			120	
08:15	0	131			131		20:15	0	115			115	
08:30	0	120			120		20:30	0	97			97	
08:45	0	120	464		120	464	20:45	0	87	419		87	419
09:00	0	89			89		21:00	0	77			77	
09:15	0	102			102		21:15	0	87			87	
09:30	0	108			108		21:30	0	75			75	
09:45	0	91	390		91	390	21:45	0	67	306		67	306
10:00	0	109			109		22:00	0	52			52	
10:15	0	94			94		22:15	0	54			54	
10:30	0	124			124		22:30	0	56			56	
10:45	0	124	451		124	451	22:45	0	65	227		65	227
11:00	0	124			124		23:00	0	32			32	
11:15	0	118			118		23:15	0	29			29	
11:30	0	126			126		23:30	0	32			32	
11:45	0	123	491		123	491	23:45	0	29	122		29	122
TOTALS	3283				3283		TOTALS	6265				6265	
SPLIT %	100.0%				34.4%		SPLIT %	100.0%				65.6%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	9,548	0	0	9,548

AM Peak Hour	11:45	PM Peak Hour	16:00
AM Pk Volume	528	PM Pk Volume	780
Pk Hr Factor	0.857	Pk Hr Factor	0.947
7 - 9 Volume	955	4 - 6 Volume	1513
7 - 9 Peak Hour	07:00	4 - 6 Peak Hour	16:00
7 - 9 Pk Volume	491	4 - 6 Pk Volume	780
Pk Hr Factor	0.877	Pk Hr Factor	0.947

VOLUME

I-15 NB Off-Ramp To Nichols Road

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_009

DAILY TOTALS					NB	SB	EB					WB	Total
					4,407	0						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	7	0			7	12:00	76	0			76		
00:15	10	0			10	12:15	56	0			56		
00:30	5	0			5	12:30	63	0			63		
00:45	6	28	0		6	12:45	53	248	0		53	248	
01:00	10	0			10	13:00	74	0			74		
01:15	4	0			4	13:15	70	0			70		
01:30	5	0			5	13:30	65	0			65		
01:45	5	24	0		5	13:45	85	294	0		85	294	
02:00	7	0			7	14:00	82	0			82		
02:15	4	0			4	14:15	116	0			116		
02:30	6	0			6	14:30	71	0			71		
02:45	7	24	0		7	14:45	84	353	0		84	353	
03:00	8	0			8	15:00	54	0			54		
03:15	24	0			24	15:15	81	0			81		
03:30	18	0			18	15:30	61	0			61		
03:45	28	78	0		28	15:45	88	284	0		88	284	
04:00	18	0			18	16:00	91	0			91		
04:15	26	0			26	16:15	76	0			76		
04:30	22	0			22	16:30	89	0			89		
04:45	25	91	0		25	16:45	83	339	0		83	339	
05:00	20	0			20	17:00	83	0			83		
05:15	33	0			33	17:15	93	0			93		
05:30	27	0			27	17:30	99	0			99		
05:45	27	107	0		27	17:45	90	365	0		90	365	
06:00	29	0			29	18:00	86	0			86		
06:15	32	0			32	18:15	79	0			79		
06:30	40	0			40	18:30	70	0			70		
06:45	82	183	0		82	18:45	69	304	0		69	304	
07:00	110	0			110	19:00	58	0			58		
07:15	104	0			104	19:15	57	0			57		
07:30	50	0			50	19:30	46	0			46		
07:45	45	309	0		45	19:45	59	220	0		59	220	
08:00	37	0			37	20:00	49	0			49		
08:15	30	0			30	20:15	55	0			55		
08:30	26	0			26	20:30	44	0			44		
08:45	33	126	0		33	20:45	37	185	0		37	185	
09:00	41	0			41	21:00	40	0			40		
09:15	27	0			27	21:15	27	0			27		
09:30	44	0			44	21:30	31	0			31		
09:45	54	166	0		54	21:45	23	121	0		23	121	
10:00	70	0			70	22:00	29	0			29		
10:15	43	0			43	22:15	21	0			21		
10:30	35	0			35	22:30	22	0			22		
10:45	64	212	0		64	22:45	19	91	0		19	91	
11:00	47	0			47	23:00	14	0			14		
11:15	55	0			55	23:15	6	0			6		
11:30	44	0			44	23:30	12	0			12		
11:45	69	215	0		69	23:45	8	40	0		8	40	
TOTALS	1563				1563	TOTALS	2844				2844		
SPLIT %	100.0%				35.5%	SPLIT %	100.0%				64.5%		

DAILY TOTALS					NB	SB						EB	WB						Total
					4,407	0						0	0						4,407

AM Peak Hour	06:45				06:45	PM Peak Hour	17:15				17:15
AM Pk Volume	346				346	PM Pk Volume	368				368
Pk Hr Factor	0.786				0.786	Pk Hr Factor	0.929				0.929
7 - 9 Volume	435	0	0	0	435	4 - 6 Volume	704	0	0	0	704
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	309	0	0	0	309	4 - 6 Pk Volume	365	0	0	0	365
Pk Hr Factor	0.702	0.000	0.000	0.000	0.702	Pk Hr Factor	0.922	0.000	0.000	0.000	0.922

VOLUME

I-15 NB Off-Ramp To Nichols Road

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_009

DAILY TOTALS					NB	SB						EB	WB						Total
					4,375	0						0	0						4,375
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	10	0			10		12:00	61	0			61							
00:15	6	0			6		12:15	71	0			71							
00:30	5	0			5		12:30	61	0			61							
00:45	8	29	0		8	29	12:45	92	285	0		92	285						
01:00	4	0			4		13:00	68	0			68							
01:15	7	0			7		13:15	60	0			60							
01:30	8	0			8		13:30	75	0			75							
01:45	4	23	0		4	23	13:45	61	264	0		61	264						
02:00	5	0			5		14:00	78	0			78							
02:15	7	0			7		14:15	81	0			81							
02:30	8	0			8		14:30	63	0			63							
02:45	10	30	0		10	30	14:45	81	303	0		81	303						
03:00	13	0			13		15:00	68	0			68							
03:15	19	0			19		15:15	86	0			86							
03:30	11	0			11		15:30	70	0			70							
03:45	26	69	0		26	69	15:45	85	309	0		85	309						
04:00	23	0			23		16:00	81	0			81							
04:15	24	0			24		16:15	94	0			94							
04:30	27	0			27		16:30	108	0			108							
04:45	28	102	0		28	102	16:45	91	374	0		91	374						
05:00	22	0			22		17:00	98	0			98							
05:15	35	0			35		17:15	110	0			110							
05:30	28	0			28		17:30	103	0			103							
05:45	27	112	0		27	112	17:45	101	412	0		101	412						
06:00	31	0			31		18:00	73	0			73							
06:15	31	0			31		18:15	79	0			79							
06:30	25	0			25		18:30	62	0			62							
06:45	33	120	0		33	120	18:45	63	277	0		63	277						
07:00	52	0			52		19:00	59	0			59							
07:15	67	0			67		19:15	51	0			51							
07:30	41	0			41		19:30	66	0			66							
07:45	58	218	0		58	218	19:45	53	229	0		53	229						
08:00	83	0			83		20:00	43	0			43							
08:15	83	0			83		20:15	47	0			47							
08:30	34	0			34		20:30	29	0			29							
08:45	46	246	0		46	246	20:45	37	156	0		37	156						
09:00	35	0			35		21:00	40	0			40							
09:15	27	0			27		21:15	28	0			28							
09:30	43	0			43		21:30	33	0			33							
09:45	47	152	0		47	152	21:45	25	126	0		25	126						
10:00	48	0			48		22:00	19	0			19							
10:15	51	0			51		22:15	17	0			17							
10:30	46	0			46		22:30	18	0			18							
10:45	42	187	0		42	187	22:45	15	69	0		15	69						
11:00	68	0			68		23:00	15	0			15							
11:15	49	0			49		23:15	12	0			12							
11:30	48	0			48		23:30	10	0			10							
11:45	73	238	0		73	238	23:45	8	45	0		8	45						
TOTALS	1526				1526		TOTALS	2849				2849							
SPLIT %	100.0%				34.9%		SPLIT %	100.0%				65.1%							

DAILY TOTALS					NB	SB						EB	WB						Total
					4,375	0						0	0						4,375

AM Peak Hour	11:45				11:45		PM Peak Hour	17:00				17:00							
AM Pk Volume	266				266		PM Pk Volume	412				412							
Pk Hr Factor	0.911				0.911		Pk Hr Factor	0.936				0.936							
7 - 9 Volume	464	0	0	0	464		4 - 6 Volume	786	0	0	0	786							
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	17:00				17:00							
7 - 9 Pk Volume	265	0	0	0	265		4 - 6 Pk Volume	412	0	0	0	412							
Pk Hr Factor	0.798	0.000	0.000	0.000	0.798		Pk Hr Factor	0.936	0.000	0.000	0.000	0.936							

VOLUME

I-15 NB Off-Ramp To Nichols Road

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_009

DAILY TOTALS					NB	SB						EB	WB						Total
					4,252	0						0	0						4,252
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	5	0			5		12:00	65	0			65							
00:15	7	0			7		12:15	50	0			50							
00:30	8	0			8		12:30	52	0			52							
00:45	7	27	0		7	27	12:45	56	223	0		56	223						
01:00	6	0			6		13:00	54	0			54							
01:15	6	0			6		13:15	61	0			61							
01:30	5	0			5		13:30	74	0			74							
01:45	5	22	0		5	22	13:45	82	271	0		82	271						
02:00	4	0			4		14:00	60	0			60							
02:15	8	0			8		14:15	79	0			79							
02:30	8	0			8		14:30	87	0			87							
02:45	6	26	0		6	26	14:45	95	321	0		95	321						
03:00	8	0			8		15:00	72	0			72							
03:15	24	0			24		15:15	77	0			77							
03:30	18	0			18		15:30	75	0			75							
03:45	22	72	0		22	72	15:45	75	299	0		75	299						
04:00	15	0			15		16:00	68	0			68							
04:15	27	0			27		16:15	75	0			75							
04:30	20	0			20		16:30	77	0			77							
04:45	41	103	0		41	103	16:45	70	290	0		70	290						
05:00	21	0			21		17:00	77	0			77							
05:15	30	0			30		17:15	80	0			80							
05:30	32	0			32		17:30	89	0			89							
05:45	48	131	0		48	131	17:45	93	339	0		93	339						
06:00	26	0			26		18:00	71	0			71							
06:15	30	0			30		18:15	75	0			75							
06:30	30	0			30		18:30	80	0			80							
06:45	52	138	0		52	138	18:45	67	293	0		67	293						
07:00	107	0			107		19:00	59	0			59							
07:15	104	0			104		19:15	58	0			58							
07:30	50	0			50		19:30	62	0			62							
07:45	50	311	0		50	311	19:45	48	227	0		48	227						
08:00	34	0			34		20:00	35	0			35							
08:15	22	0			22		20:15	60	0			60							
08:30	31	0			31		20:30	54	0			54							
08:45	32	119	0		32	119	20:45	36	185	0		36	185						
09:00	42	0			42		21:00	51	0			51							
09:15	50	0			50		21:15	42	0			42							
09:30	43	0			43		21:30	26	0			26							
09:45	61	196	0		61	196	21:45	36	155	0		36	155						
10:00	44	0			44		22:00	25	0			25							
10:15	45	0			45		22:15	28	0			28							
10:30	52	0			52		22:30	20	0			20							
10:45	57	198	0		57	198	22:45	16	89	0		16	89						
11:00	41	0			41		23:00	20	0			20							
11:15	37	0			37		23:15	5	0			5							
11:30	48	0			48		23:30	8	0			8							
11:45	49	175	0		49	175	23:45	9	42	0		9	42						
TOTALS	1518				1518		TOTALS	2734				2734							
SPLIT %	100.0%				35.7%		SPLIT %	100.0%				64.3%							

DAILY TOTALS					NB	SB						EB	WB						Total
					4,252	0						0	0						4,252

AM Peak Hour	06:45				06:45		PM Peak Hour	17:00				17:00							
AM Pk Volume	313				313		PM Pk Volume	339				339							
Pk Hr Factor	0.731				0.731		Pk Hr Factor	0.911				0.911							
7 - 9 Volume	430	0	0	0	430		4 - 6 Volume	629	0	0	0	629							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	17:00				17:00							
7 - 9 Pk Volume	311	0	0	0	311		4 - 6 Pk Volume	339	0	0	0	339							
Pk Hr Factor	0.727	0.000	0.000	0.000	0.727		Pk Hr Factor	0.911	0.000	0.000	0.000	0.911							

VOLUME

I-15 NB On-Ramp From Nichols Road

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_010

DAILY TOTALS					NB	SB	EBWB					Total
					2,338	0						0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	5	0			5	12:00	36	0			36	
00:15	3	0			3	12:15	33	0			33	
00:30	3	0			3	12:30	34	0			34	
00:45	4	15	0		4	12:45	31	134	0		31	134
01:00	2	0			2	13:00	31	0			31	
01:15	5	0			5	13:15	32	0			32	
01:30	1	0			1	13:30	29	0			29	
01:45	1	9	0		1	13:45	30	122	0		30	122
02:00	1	0			1	14:00	38	0			38	
02:15	4	0			4	14:15	27	0			27	
02:30	2	0			2	14:30	67	0			67	
02:45	6	13	0		6	14:45	66	198	0		66	198
03:00	6	0			6	15:00	39	0			39	
03:15	14	0			14	15:15	52	0			52	
03:30	11	0			11	15:30	45	0			45	
03:45	20	51	0		20	15:45	42	178	0		42	178
04:00	20	0			20	16:00	47	0			47	
04:15	38	0			38	16:15	28	0			28	
04:30	30	0			30	16:30	37	0			37	
04:45	37	125	0		37	16:45	34	146	0		34	146
05:00	30	0			30	17:00	47	0			47	
05:15	37	0			37	17:15	33	0			33	
05:30	28	0			28	17:30	36	0			36	
05:45	27	122	0		27	17:45	30	146	0		30	146
06:00	26	0			26	18:00	27	0			27	
06:15	36	0			36	18:15	23	0			23	
06:30	28	0			28	18:30	28	0			28	
06:45	27	117	0		27	18:45	23	101	0		23	101
07:00	51	0			51	19:00	29	0			29	
07:15	51	0			51	19:15	28	0			28	
07:30	47	0			47	19:30	16	0			16	
07:45	35	184	0		35	19:45	20	93	0		20	93
08:00	36	0			36	20:00	17	0			17	
08:15	24	0			24	20:15	17	0			17	
08:30	15	0			15	20:30	13	0			13	
08:45	24	99	0		24	20:45	22	69	0		22	69
09:00	19	0			19	21:00	15	0			15	
09:15	26	0			26	21:15	13	0			13	
09:30	21	0			21	21:30	15	0			15	
09:45	30	96	0		30	21:45	7	50	0		7	50
10:00	17	0			17	22:00	10	0			10	
10:15	28	0			28	22:15	9	0			9	
10:30	31	0			31	22:30	2	0			2	
10:45	30	106	0		30	22:45	4	25	0		4	25
11:00	27	0			27	23:00	6	0			6	
11:15	33	0			33	23:15	2	0			2	
11:30	26	0			26	23:30	1	0			1	
11:45	43	129	0		43	23:45	1	10	0		1	10
TOTALS	1066				1066	TOTALS	1272				1272	
SPLIT %	100.0%				45.6%	SPLIT %	100.0%				54.4%	

DAILY TOTALS					NB	SB						EB	WB						Total
					2,338	0						0	0						2,338

AM Peak Hour	07:00				07:00	PM Peak Hour	14:30				14:30
AM Pk Volume	184				184	PM Pk Volume	224				224
Pk Hr Factor	0.902				0.902	Pk Hr Factor	0.836				0.836
7 - 9 Volume	283	0	0	0	283	4 - 6 Volume	292	0	0	0	292
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:30				16:30
7 - 9 Pk Volume	184	0	0	0	184	4 - 6 Pk Volume	151	0	0	0	151
Pk Hr Factor	0.902	0.000	0.000	0.000	0.902	Pk Hr Factor	0.803	0.000	0.000	0.000	0.803

VOLUME

I-15 NB On-Ramp From Nichols Road

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_010

DAILY TOTALS					NB	SB						EB	WB						Total
					2,455	0						0	0						2,455
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	5	0			5		12:00	35	0			35							
00:15	2	0			2		12:15	30	0			30							
00:30	2	0			2		12:30	26	0			26							
00:45	1	10	0		1	10	12:45	28	119	0		28	119						
01:00	2	0			2		13:00	42	0			42							
01:15	2	0			2		13:15	38	0			38							
01:30	1	0			1		13:30	33	0			33							
01:45	4	9	0		4	9	13:45	35	148	0		35	148						
02:00	0	0			0		14:00	41	0			41							
02:15	1	0			1		14:15	57	0			57							
02:30	2	0			2		14:30	64	0			64							
02:45	8	11	0		8	11	14:45	57	219	0		57	219						
03:00	5	0			5		15:00	57	0			57							
03:15	6	0			6		15:15	44	0			44							
03:30	12	0			12		15:30	51	0			51							
03:45	11	34	0		11	34	15:45	31	183	0		31	183						
04:00	24	0			24		16:00	37	0			37							
04:15	38	0			38		16:15	45	0			45							
04:30	31	0			31		16:30	36	0			36							
04:45	38	131	0		38	131	16:45	50	168	0		50	168						
05:00	29	0			29		17:00	44	0			44							
05:15	37	0			37		17:15	30	0			30							
05:30	29	0			29		17:30	43	0			43							
05:45	24	119	0		24	119	17:45	26	143	0		26	143						
06:00	29	0			29		18:00	28	0			28							
06:15	44	0			44		18:15	30	0			30							
06:30	29	0			29		18:30	33	0			33							
06:45	21	123	0		21	123	18:45	28	119	0		28	119						
07:00	18	0			18		19:00	26	0			26							
07:15	33	0			33		19:15	21	0			21							
07:30	32	0			32		19:30	42	0			42							
07:45	22	105	0		22	105	19:45	18	107	0		18	107						
08:00	44	0			44		20:00	23	0			23							
08:15	67	0			67		20:15	26	0			26							
08:30	37	0			37		20:30	15	0			15							
08:45	39	187	0		39	187	20:45	7	71	0		7	71						
09:00	16	0			16		21:00	11	0			11							
09:15	21	0			21		21:15	13	0			13							
09:30	22	0			22		21:30	11	0			11							
09:45	33	92	0		33	92	21:45	9	44	0		9	44						
10:00	29	0			29		22:00	11	0			11							
10:15	22	0			22		22:15	7	0			7							
10:30	48	0			48		22:30	9	0			9							
10:45	34	133	0		34	133	22:45	5	32	0		5	32						
11:00	21	0			21		23:00	2	0			2							
11:15	28	0			28		23:15	3	0			3							
11:30	39	0			39		23:30	1	0			1							
11:45	37	125	0		37	125	23:45	17	23	0		17	23						
TOTALS	1079				1079		TOTALS	1376				1376							
SPLIT %	100.0%				44.0%		SPLIT %	100.0%				56.0%							

DAILY TOTALS					NB	SB						EB	WB						Total
					2,455	0						0	0						2,455

AM Peak Hour	08:00				08:00		PM Peak Hour	14:15				14:15							
AM Pk Volume	187				187		PM Pk Volume	235				235							
Pk Hr Factor	0.698				0.698		Pk Hr Factor	0.918				0.918							
7 - 9 Volume	292	0	0	0	292		4 - 6 Volume	311	0	0	0	311							
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	16:15				16:15							
7 - 9 Pk Volume	187	0	0	0	187		4 - 6 Pk Volume	175	0	0	0	175							
Pk Hr Factor	0.698	0.000	0.000	0.000	0.698		Pk Hr Factor	0.875	0.000	0.000	0.000	0.875							

VOLUME

I-15 NB On-Ramp From Nichols Road

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_010

DAILY TOTALS					NB	SB	EBWB					Total
					2,401	0						0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	2	0			2	12:00	51	0			51	
00:15	1	0			1	12:15	38	0			38	
00:30	6	0			6	12:30	26	0			26	
00:45	2	11	0		2	12:45	35	150	0		35	150
01:00	1	0			1	13:00	42	0			42	
01:15	1	0			1	13:15	35	0			35	
01:30	4	0			4	13:30	45	0			45	
01:45	3	9	0		3	13:45	34	156	0		34	156
02:00	1	0			1	14:00	41	0			41	
02:15	1	0			1	14:15	37	0			37	
02:30	5	0			5	14:30	76	0			76	
02:45	7	14	0		7	14:45	64	218	0		64	218
03:00	5	0			5	15:00	47	0			47	
03:15	4	0			4	15:15	36	0			36	
03:30	16	0			16	15:30	54	0			54	
03:45	16	41	0		16	15:45	49	186	0		49	186
04:00	29	0			29	16:00	38	0			38	
04:15	32	0			32	16:15	40	0			40	
04:30	32	0			32	16:30	29	0			29	
04:45	31	124	0		31	16:45	25	132	0		25	132
05:00	29	0			29	17:00	46	0			46	
05:15	24	0			24	17:15	29	0			29	
05:30	34	0			34	17:30	30	0			30	
05:45	36	123	0		36	17:45	22	127	0		22	127
06:00	36	0			36	18:00	37	0			37	
06:15	47	0			47	18:15	24	0			24	
06:30	36	0			36	18:30	23	0			23	
06:45	31	150	0		31	18:45	23	107	0		23	107
07:00	42	0			42	19:00	37	0			37	
07:15	48	0			48	19:15	23	0			23	
07:30	53	0			53	19:30	26	0			26	
07:45	18	161	0		18	19:45	15	101	0		15	101
08:00	27	0			27	20:00	21	0			21	
08:15	26	0			26	20:15	17	0			17	
08:30	26	0			26	20:30	25	0			25	
08:45	25	104	0		25	20:45	22	85	0		22	85
09:00	26	0			26	21:00	11	0			11	
09:15	15	0			15	21:15	10	0			10	
09:30	23	0			23	21:30	16	0			16	
09:45	21	85	0		21	21:45	7	44	0		7	44
10:00	34	0			34	22:00	6	0			6	
10:15	25	0			25	22:15	5	0			5	
10:30	35	0			35	22:30	9	0			9	
10:45	42	136	0		42	22:45	2	22	0		2	22
11:00	22	0			22	23:00	1	0			1	
11:15	29	0			29	23:15	1	0			1	
11:30	29	0			29	23:30	2	0			2	
11:45	30	110	0		30	23:45	1	5	0		1	5
TOTALS	1068				1068	TOTALS	1333				1333	
SPLIT %	100.0%				44.5%	SPLIT %	100.0%				55.5%	

DAILY TOTALS					NB	SB						EB	WB						Total
					2,401	0						0	0						2,401

AM Peak Hour	06:45				06:45	PM Peak Hour	14:15				14:15
AM Pk Volume	174				174	PM Pk Volume	224				224
Pk Hr Factor	0.821				0.821	Pk Hr Factor	0.737				0.737
7 - 9 Volume	265	0	0	0	265	4 - 6 Volume	259	0	0	0	259
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:15				16:15
7 - 9 Pk Volume	161	0	0	0	161	4 - 6 Pk Volume	140	0	0	0	140
Pk Hr Factor	0.759	0.000	0.000	0.000	0.759	Pk Hr Factor	0.761	0.000	0.000	0.000	0.761

VOLUME

I-15 SB On-Ramp From Nichols Road

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_011

DAILY TOTALS					NB	SB						Total
					0	4,500	0	0	4,500			
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	5			5	12:00	0	47			47	
00:15	0	3			3	12:15	0	74			74	
00:30	0	4			4	12:30	0	49			49	
00:45	0	5	17		5	12:45	0	60	230		60	
01:00	0	5			5	13:00	0	62			62	
01:15	0	3			3	13:15	0	68			68	
01:30	0	6			6	13:30	0	73			73	
01:45	0	4	18		4	13:45	0	73	276		73	
02:00	0	2			2	14:00	0	85			85	
02:15	0	6			6	14:15	0	87			87	
02:30	0	3			3	14:30	0	99			99	
02:45	0	5	16		5	14:45	0	84	355		84	
03:00	0	4			4	15:00	0	90			90	
03:15	0	6			6	15:15	0	61			61	
03:30	0	23			23	15:30	0	80			80	
03:45	0	25	58		25	15:45	0	65	296		65	
04:00	0	20			20	16:00	0	61			61	
04:15	0	32			32	16:15	0	75			75	
04:30	0	45			45	16:30	0	63			63	
04:45	0	32	129		32	16:45	0	87	286		87	
05:00	0	32			32	17:00	0	69			69	
05:15	0	41			41	17:15	0	61			61	
05:30	0	55			55	17:30	0	78			78	
05:45	0	52	180		52	17:45	0	55	263		55	
06:00	0	56			56	18:00	0	61			61	
06:15	0	61			61	18:15	0	62			62	
06:30	0	71			71	18:30	0	47			47	
06:45	0	63	251		63	18:45	0	55	225		55	
07:00	0	98			98	19:00	0	48			48	
07:15	0	89			89	19:15	0	49			49	
07:30	0	139			139	19:30	0	40			40	
07:45	0	84	410		84	19:45	0	48	185		48	
08:00	0	70			70	20:00	0	31			31	
08:15	0	73			73	20:15	0	31			31	
08:30	0	58			58	20:30	0	33			33	
08:45	0	61	262		61	20:45	0	24	119		24	
09:00	0	71			71	21:00	0	27			27	
09:15	0	67			67	21:15	0	31			31	
09:30	0	58			58	21:30	0	24			24	
09:45	0	61	257		61	21:45	0	20	102		20	
10:00	0	58			58	22:00	0	16			16	
10:15	0	49			49	22:15	0	10			10	
10:30	0	79			79	22:30	0	16			16	
10:45	0	39	225		39	22:45	0	13	55		13	
11:00	0	52			52	23:00	0	15			15	
11:15	0	56			56	23:15	0	13			13	
11:30	0	65			65	23:30	0	11			11	
11:45	0	66	239		66	23:45	0	7	46		7	
TOTALS	2062				2062	TOTALS	2438				2438	
SPLIT %	100.0%				45.8%	SPLIT %	100.0%				54.2%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	4,500	0	0	4,500

AM Peak Hour	07:00	07:00	PM Peak Hour	14:15	14:15
AM Pk Volume	410	410	PM Pk Volume	360	360
Pk Hr Factor	0.737	0.737	Pk Hr Factor	0.909	0.909
7 - 9 Volume	0	672	4 - 6 Volume	0	549
7 - 9 Peak Hour	07:00	07:00	4 - 6 Peak Hour	16:45	16:45
7 - 9 Pk Volume	0	410	4 - 6 Pk Volume	0	295
Pk Hr Factor	0.000	0.737	Pk Hr Factor	0.000	0.848

VOLUME**I-15 SB On-Ramp From Nichols Road**

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_011

DAILY TOTALS					NB	SB						EB	WB						Total
					0	4,482						0	0						4,482
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	6			6		12:00	0	41			41							
00:15	0	4			4		12:15	0	50			50							
00:30	0	6			6		12:30	0	66			66							
00:45	0	3	19		3	19	12:45	0	61	218		61	218						
01:00	0	4			4		13:00	0	77			77							
01:15	0	4			4		13:15	0	62			62							
01:30	0	2			2		13:30	0	71			71							
01:45	0	2	12		2	12	13:45	0	48	258		48	258						
02:00	0	4			4		14:00	0	79			79							
02:15	0	5			5		14:15	0	69			69							
02:30	0	4			4		14:30	0	101			101							
02:45	0	5	18		5	18	14:45	0	85	334		85	334						
03:00	0	9			9		15:00	0	74			74							
03:15	0	9			9		15:15	0	71			71							
03:30	0	29			29		15:30	0	74			74							
03:45	0	23	70		23	70	15:45	0	59	278		59	278						
04:00	0	14			14		16:00	0	73			73							
04:15	0	26			26		16:15	0	64			64							
04:30	0	40			40		16:30	0	89			89							
04:45	0	42	122		42	122	16:45	0	87	313		87	313						
05:00	0	30			30		17:00	0	76			76							
05:15	0	51			51		17:15	0	71			71							
05:30	0	52			52		17:30	0	66			66							
05:45	0	33	166		33	166	17:45	0	63	276		63	276						
06:00	0	45			45		18:00	0	58			58							
06:15	0	56			56		18:15	0	83			83							
06:30	0	75			75		18:30	0	57			57							
06:45	0	80	256		80	256	18:45	0	71	269		71	269						
07:00	0	70			70		19:00	0	66			66							
07:15	0	93			93		19:15	0	67			67							
07:30	0	113			113		19:30	0	76			76							
07:45	0	100	376		100	376	19:45	0	42	251		42	251						
08:00	0	76			76		20:00	0	50			50							
08:15	0	84			84		20:15	0	25			25							
08:30	0	75			75		20:30	0	20			20							
08:45	0	49	284		49	284	20:45	0	19	114		19	114						
09:00	0	65			65		21:00	0	26			26							
09:15	0	64			64		21:15	0	14			14							
09:30	0	50			50		21:30	0	15			15							
09:45	0	49	228		49	228	21:45	0	20	75		20	75						
10:00	0	50			50		22:00	0	15			15							
10:15	0	41			41		22:15	0	13			13							
10:30	0	54			54		22:30	0	9			9							
10:45	0	56	201		56	201	22:45	0	10	47		10	47						
11:00	0	58			58		23:00	0	14			14							
11:15	0	53			53		23:15	0	10			10							
11:30	0	76			76		23:30	0	8			8							
11:45	0	74	261		74	261	23:45	0	4	36		4	36						
TOTALS	2013				2013		TOTALS	2469				2469							
SPLIT %	100.0%				44.9%		SPLIT %	100.0%				55.1%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	4,482						0	0						4,482

AM Peak Hour	07:15				07:15		PM Peak Hour	14:00					14:00						
AM Pk Volume	382				382		PM Pk Volume	334					334						
Pk Hr Factor	0.845				0.845		Pk Hr Factor	0.827					0.827						
7 - 9 Volume	0	660	0	0	660		4 - 6 Volume	0	589	0	0	589							
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	382		0	0	382		4 - 6 Pk Volume	323		0	0	323							
Pk Hr Factor	0.000	0.845	0.000	0.000	0.845		Pk Hr Factor	0.000	0.907	0.000	0.000	0.907							

VOLUME

I-15 SB On-Ramp From Nichols Road

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_011

DAILY TOTALS					NB	SB	EB					WB	Total
					0	4,624						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	6			6	12:00	0	57			57		
00:15	0	5			5	12:15	0	65			65		
00:30	0	7			7	12:30	0	57			57		
00:45	0	5	23		5	12:45	0	60	239		60		
01:00	0	5			5	13:00	0	56			56		
01:15	0	4			4	13:15	0	60			60		
01:30	0	5			5	13:30	0	98			98		
01:45	0	6	20		6	13:45	0	68	282		68		
02:00	0	5			5	14:00	0	78			78		
02:15	0	4			4	14:15	0	68			68		
02:30	0	7			7	14:30	0	94			94		
02:45	0	2	18		2	14:45	0	86	326		86		
03:00	0	7			7	15:00	0	82			82		
03:15	0	8			8	15:15	0	69			69		
03:30	0	22			22	15:30	0	76			76		
03:45	0	24	61		24	15:45	0	49	276		49		
04:00	0	19			19	16:00	0	80			80		
04:15	0	32			32	16:15	0	52			52		
04:30	0	41			41	16:30	0	60			60		
04:45	0	32	124		32	16:45	0	84	276		84		
05:00	0	32			32	17:00	0	65			65		
05:15	0	42			42	17:15	0	68			68		
05:30	0	42			42	17:30	0	61			61		
05:45	0	47	163		47	17:45	0	70	264		70		
06:00	0	51			51	18:00	0	66			66		
06:15	0	75			75	18:15	0	74			74		
06:30	0	72			72	18:30	0	73			73		
06:45	0	74	272		74	18:45	0	55	268		55		
07:00	0	77			77	19:00	0	57			57		
07:15	0	99			99	19:15	0	45			45		
07:30	0	122			122	19:30	0	54			54		
07:45	0	104	402		104	19:45	0	41	197		41		
08:00	0	83			83	20:00	0	55			55		
08:15	0	80			80	20:15	0	38			38		
08:30	0	74			74	20:30	0	27			27		
08:45	0	69	306		69	20:45	0	38	158		38		
09:00	0	70			70	21:00	0	28			28		
09:15	0	61			61	21:15	0	20			20		
09:30	0	55			55	21:30	0	24			24		
09:45	0	58	244		58	21:45	0	22	94		22		
10:00	0	62			62	22:00	0	19			19		
10:15	0	61			61	22:15	0	18			18		
10:30	0	64			64	22:30	0	24			24		
10:45	0	54	241		54	22:45	0	14	75		14		
11:00	0	59			59	23:00	0	6			6		
11:15	0	62			62	23:15	0	10			10		
11:30	0	63			63	23:30	0	6			6		
11:45	0	79	263		79	23:45	0	10	32		10		
TOTALS	2137				2137	TOTALS	2487				2487		
SPLIT %	100.0%				46.2%	SPLIT %	100.0%				53.8%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	4,624	0	0	4,624

AM Peak Hour	07:15	07:15	PM Peak Hour	14:30	14:30
AM Pk Volume	408	408	PM Pk Volume	331	331
Pk Hr Factor	0.836	0.836	Pk Hr Factor	0.880	0.880
7 - 9 Volume	0	708	4 - 6 Volume	0	540
7 - 9 Peak Hour	07:15	07:15	4 - 6 Peak Hour	16:45	16:45
7 - 9 Pk Volume	0	408	4 - 6 Pk Volume	0	278
Pk Hr Factor	0.000	0.836	Pk Hr Factor	0.000	0.827

VOLUME

I-15 SB Off-Ramp To Nichols Road

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_012

DAILY TOTALS					NB	SB	EB					WB	Total
					0	2,769						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	8			8	12:00	0	49			49		
00:15	0	14			14	12:15	0	31			31		
00:30	0	3			3	12:30	0	30			30		
00:45	0	6	31		6 31	12:45	0	43	153		43 153		
01:00	0	2			2	13:00	0	39			39		
01:15	0	3			3	13:15	0	38			38		
01:30	0	2			2	13:30	0	47			47		
01:45	0	4	11		4 11	13:45	0	49	173		49 173		
02:00	0	5			5	14:00	0	58			58		
02:15	0	3			3	14:15	0	76			76		
02:30	0	4			4	14:30	0	70			70		
02:45	0	5	17		5 17	14:45	0	62	266		62 266		
03:00	0	6			6	15:00	0	59			59		
03:15	0	8			8	15:15	0	56			56		
03:30	0	5			5	15:30	0	57			57		
03:45	0	5	24		5 24	15:45	0	56	228		56 228		
04:00	0	4			4	16:00	0	45			45		
04:15	0	12			12	16:15	0	56			56		
04:30	0	7			7	16:30	0	51			51		
04:45	0	13	36		13 36	16:45	0	38	190		38 190		
05:00	0	13			13	17:00	0	59			59		
05:15	0	17			17	17:15	0	62			62		
05:30	0	24			24	17:30	0	55			55		
05:45	0	39	93		39 93	17:45	0	37	213		37 213		
06:00	0	28			28	18:00	0	47			47		
06:15	0	44			44	18:15	0	51			51		
06:30	0	22			22	18:30	0	38			38		
06:45	0	60	154		60 154	18:45	0	37	173		37 173		
07:00	0	107			107	19:00	0	31			31		
07:15	0	78			78	19:15	0	22			22		
07:30	0	28			28	19:30	0	27			27		
07:45	0	38	251		38 251	19:45	0	16	96		16 96		
08:00	0	27			27	20:00	0	18			18		
08:15	0	23			23	20:15	0	18			18		
08:30	0	20			20	20:30	0	17			17		
08:45	0	30	100		30 100	20:45	0	31	84		31 84		
09:00	0	30			30	21:00	0	16			16		
09:15	0	24			24	21:15	0	18			18		
09:30	0	31			31	21:30	0	13			13		
09:45	0	21	106		21 106	21:45	0	24	71		24 71		
10:00	0	29			29	22:00	0	10			10		
10:15	0	27			27	22:15	0	10			10		
10:30	0	24			24	22:30	0	8			8		
10:45	0	33	113		33 113	22:45	0	10	38		10 38		
11:00	0	41			41	23:00	0	3			3		
11:15	0	39			39	23:15	0	7			7		
11:30	0	25			25	23:30	0	2			2		
11:45	0	26	131		26 131	23:45	0	5	17		5 17		
TOTALS	1067				1067	TOTALS	1702				1702		
SPLIT %	100.0%				38.5%	SPLIT %	100.0%				61.5%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	2,769	0	0	2,769

AM Peak Hour	06:45	06:45	PM Peak Hour	14:15	14:15
AM Pk Volume	273	273	PM Pk Volume	267	267
Pk Hr Factor	0.638	0.638	Pk Hr Factor	0.878	0.878
7 - 9 Volume	0	351	4 - 6 Volume	0	403
7 - 9 Peak Hour	07:00	07:00	4 - 6 Peak Hour	16:45	16:45
7 - 9 Pk Volume	0	251	4 - 6 Pk Volume	0	214
Pk Hr Factor	0.000	0.586	Pk Hr Factor	0.000	0.863

VOLUME

I-15 SB Off-Ramp To Nichols Road

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_012

DAILY TOTALS					NB	SB						EB	WB	Total
					0	2,861						0	0	2,861
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	8			8		12:00	0	26			26		
00:15	0	4			4		12:15	0	40			40		
00:30	0	8			8		12:30	0	32			32		
00:45	0	7	27		7	27	12:45	0	41	139		41	139	
01:00	0	5			5		13:00	0	33			33		
01:15	0	3			3		13:15	0	48			48		
01:30	0	3			3		13:30	0	36			36		
01:45	0	2	13		2	13	13:45	0	47	164		47	164	
02:00	0	4			4		14:00	0	70			70		
02:15	0	4			4		14:15	0	82			82		
02:30	0	3			3		14:30	0	74			74		
02:45	0	1	12		1	12	14:45	0	56	282		56	282	
03:00	0	7			7		15:00	0	67			67		
03:15	0	2			2		15:15	0	55			55		
03:30	0	2			2		15:30	0	60			60		
03:45	0	7	18		7	18	15:45	0	55	237		55	237	
04:00	0	7			7		16:00	0	53			53		
04:15	0	6			6		16:15	0	52			52		
04:30	0	8			8		16:30	0	75			75		
04:45	0	10	31		10	31	16:45	0	55	235		55	235	
05:00	0	15			15		17:00	0	78			78		
05:15	0	13			13		17:15	0	40			40		
05:30	0	28			28		17:30	0	55			55		
05:45	0	22	78		22	78	17:45	0	51	224		51	224	
06:00	0	26			26		18:00	0	40			40		
06:15	0	27			27		18:15	0	43			43		
06:30	0	21			21		18:30	0	35			35		
06:45	0	58	132		58	132	18:45	0	41	159		41	159	
07:00	0	25			25		19:00	0	24			24		
07:15	0	41			41		19:15	0	28			28		
07:30	0	30			30		19:30	0	25			25		
07:45	0	64	160		64	160	19:45	0	32	109		32	109	
08:00	0	91			91		20:00	0	38			38		
08:15	0	63			63		20:15	0	16			16		
08:30	0	21			21		20:30	0	26			26		
08:45	0	38	213		38	213	20:45	0	17	97		17	97	
09:00	0	34			34		21:00	0	27			27		
09:15	0	36			36		21:15	0	8			8		
09:30	0	28			28		21:30	0	15			15		
09:45	0	30	128		30	128	21:45	0	9	59		9	59	
10:00	0	27			27		22:00	0	14			14		
10:15	0	36			36		22:15	0	9			9		
10:30	0	34			34		22:30	0	14			14		
10:45	0	42	139		42	139	22:45	0	12	49		12	49	
11:00	0	34			34		23:00	0	16			16		
11:15	0	30			30		23:15	0	7			7		
11:30	0	25			25		23:30	0	6			6		
11:45	0	31	120		31	120	23:45	0	7	36		7	36	
TOTALS	1071				1071		TOTALS	1790				1790		
SPLIT %	100.0%				37.4%		SPLIT %	100.0%				62.6%		

DAILY TOTALS					NB	SB						EB	WB	Total
					0	2,861						0	0	2,861

AM Peak Hour	07:30				07:30		PM Peak Hour	14:00						14:00
AM Pk Volume	248				248		PM Pk Volume	282						282
Pk Hr Factor	0.681				0.681		Pk Hr Factor	0.860						0.860
7 - 9 Volume	0	373	0	0	373		4 - 6 Volume	0	459	0	0	459		459
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	16:15				16:15		
7 - 9 Pk Volume	248		0	0	248		4 - 6 Pk Volume	260		0	0	260		
Pk Hr Factor	0.000	0.681	0.000	0.000	0.681		Pk Hr Factor	0.000	0.833	0.000	0.000	0.833		

VOLUME

I-15 SB Off-Ramp To Nichols Road

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_012

DAILY TOTALS					NB	SB						EB	WB						Total
					0	2,908						0	0						2,908
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	8			8		12:00	0	40			40							
00:15	0	11			11		12:15	0	43			43							
00:30	0	6			6		12:30	0	35			35							
00:45	0	6	31		6	31	12:45	0	37	155		37	155						
01:00	0	4			4		13:00	0	30			30							
01:15	0	6			6		13:15	0	50			50							
01:30	0	4			4		13:30	0	44			44							
01:45	0	5	19		5	19	13:45	0	41	165		41	165						
02:00	0	2			2		14:00	0	55			55							
02:15	0	6			6		14:15	0	61			61							
02:30	0	3			3		14:30	0	72			72							
02:45	0	1	12		1	12	14:45	0	62	250		62	250						
03:00	0	2			2		15:00	0	61			61							
03:15	0	2			2		15:15	0	58			58							
03:30	0	6			6		15:30	0	72			72							
03:45	0	5	15		5	15	15:45	0	53	244		53	244						
04:00	0	6			6		16:00	0	51			51							
04:15	0	6			6		16:15	0	36			36							
04:30	0	11			11		16:30	0	53			53							
04:45	0	14	37		14	37	16:45	0	55	195		55	195						
05:00	0	11			11		17:00	0	39			39							
05:15	0	13			13		17:15	0	63			63							
05:30	0	28			28		17:30	0	48			48							
05:45	0	31	83		31	83	17:45	0	70	220		70	220						
06:00	0	18			18		18:00	0	49			49							
06:15	0	39			39		18:15	0	48			48							
06:30	0	45			45		18:30	0	54			54							
06:45	0	55	157		55	157	18:45	0	44	195		44	195						
07:00	0	99			99		19:00	0	30			30							
07:15	0	56			56		19:15	0	35			35							
07:30	0	42			42		19:30	0	27			27							
07:45	0	38	235		38	235	19:45	0	31	123		31	123						
08:00	0	28			28		20:00	0	11			11							
08:15	0	37			37		20:15	0	18			18							
08:30	0	19			19		20:30	0	38			38							
08:45	0	18	102		18	102	20:45	0	16	83		16	83						
09:00	0	22			22		21:00	0	19			19							
09:15	0	29			29		21:15	0	25			25							
09:30	0	34			34		21:30	0	21			21							
09:45	0	41	126		41	126	21:45	0	20	85		20	85						
10:00	0	41			41		22:00	0	14			14							
10:15	0	36			36		22:15	0	11			11							
10:30	0	29			29		22:30	0	9			9							
10:45	0	46	152		46	152	22:45	0	6	40		6	40						
11:00	0	30			30		23:00	0	10			10							
11:15	0	44			44		23:15	0	9			9							
11:30	0	34			34		23:30	0	8			8							
11:45	0	41	149		41	149	23:45	0	8	35		8	35						
TOTALS	1118				1118		TOTALS	1790				1790							
SPLIT %	100.0%				38.4%		SPLIT %	100.0%				61.6%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	2,908						0	0						2,908

AM Peak Hour	06:30				06:30		PM Peak Hour	14:15				14:15							
AM Pk Volume	255				255		PM Pk Volume	256				256							
Pk Hr Factor	0.644				0.644		Pk Hr Factor	0.889				0.889							
7 - 9 Volume	0	337	0	0	337		4 - 6 Volume	0	415	0	0	415							
7 - 9 Peak Hour		07:00			07:00		4 - 6 Peak Hour		17:00			17:00							
7 - 9 Pk Volume	0	235	0	0	235		4 - 6 Pk Volume	0	220	0	0	220							
Pk Hr Factor	0.000	0.593	0.000	0.000	0.593		Pk Hr Factor	0.000	0.786	0.000	0.000	0.786							

VOLUME

I-15 NB Off-Ramp To Lake St

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_013

DAILY TOTALS					NB	SB						EB	WB	Total
					2,651	0						0	0	2,651
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	3	0			3	12:00	50	0			50			
00:15	2	0			2	12:15	35	0			35			
00:30	1	0			1	12:30	39	0			39			
00:45	3	9	0		3	12:45	36	160	0		36	160		
01:00	1	0			1	13:00	44	0			44			
01:15	4	0			4	13:15	40	0			40			
01:30	2	0			2	13:30	55	0			55			
01:45	1	8	0		1	13:45	53	192	0		53	192		
02:00	2	0			2	14:00	31	0			31			
02:15	1	0			1	14:15	36	0			36			
02:30	5	0			5	14:30	47	0			47			
02:45	5	13	0		5	14:45	74	188	0		74	188		
03:00	3	0			3	15:00	47	0			47			
03:15	5	0			5	15:15	43	0			43			
03:30	5	0			5	15:30	47	0			47			
03:45	8	21	0		8	15:45	53	190	0		53	190		
04:00	5	0			5	16:00	54	0			54			
04:15	13	0			13	16:15	35	0			35			
04:30	11	0			11	16:30	29	0			29			
04:45	11	40	0		11	16:45	42	160	0		42	160		
05:00	12	0			12	17:00	54	0			54			
05:15	21	0			21	17:15	59	0			59			
05:30	15	0			15	17:30	40	0			40			
05:45	30	78	0		30	17:45	39	192	0		39	192		
06:00	24	0			24	18:00	42	0			42			
06:15	23	0			23	18:15	44	0			44			
06:30	51	0			51	18:30	29	0			29			
06:45	41	139	0		41	18:45	35	150	0		35	150		
07:00	94	0			94	19:00	29	0			29			
07:15	95	0			95	19:15	30	0			30			
07:30	58	0			58	19:30	33	0			33			
07:45	35	282	0		35	19:45	22	114	0		22	114		
08:00	45	0			45	20:00	26	0			26			
08:15	32	0			32	20:15	36	0			36			
08:30	37	0			37	20:30	25	0			25			
08:45	31	145	0		31	20:45	19	106	0		19	106		
09:00	25	0			25	21:00	21	0			21			
09:15	28	0			28	21:15	21	0			21			
09:30	23	0			23	21:30	25	0			25			
09:45	31	107	0		31	21:45	11	78	0		11	78		
10:00	24	0			24	22:00	9	0			9			
10:15	26	0			26	22:15	10	0			10			
10:30	20	0			20	22:30	8	0			8			
10:45	28	98	0		28	22:45	15	42	0		15	42		
11:00	22	0			22	23:00	8	0			8			
11:15	39	0			39	23:15	6	0			6			
11:30	30	0			30	23:30	6	0			6			
11:45	23	114	0		23	23:45	5	25	0		5	25		
TOTALS	1054				1054	TOTALS	1597				1597			
SPLIT %	100.0%				39.8%	SPLIT %	100.0%				60.2%			

DAILY TOTALS					NB	SB						EB	WB	Total
					2,651	0						0	0	2,651

AM Peak Hour	06:45				06:45	PM Peak Hour	14:30				14:30
AM Pk Volume	288				288	PM Pk Volume	211				211
Pk Hr Factor	0.758				0.758	Pk Hr Factor	0.713				0.713
7 - 9 Volume	427	0	0	0	427	4 - 6 Volume	352	0	0	0	352
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:45				16:45
7 - 9 Pk Volume	282	0	0	0	282	4 - 6 Pk Volume	195	0	0	0	195
Pk Hr Factor	0.742	0.000	0.000	0.000	0.742	Pk Hr Factor	0.826	0.000	0.000	0.000	0.826

VOLUME

I-15 NB Off-Ramp To Lake St

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_013

DAILY TOTALS					NB	SB	EB					WB	Total
					2,613	0						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	4	0			4	12:00	28	0			28		
00:15	3	0			3	12:15	39	0			39		
00:30	2	0			2	12:30	34	0			34		
00:45	1	10	0		11	12:45	35	136	0		171		
01:00	2	0			2	13:00	37	0			37		
01:15	1	0			1	13:15	35	0			35		
01:30	5	0			5	13:30	40	0			40		
01:45	4	12	0		16	13:45	54	166	0		220		
02:00	3	0			3	14:00	46	0			46		
02:15	1	0			1	14:15	39	0			39		
02:30	6	0			6	14:30	69	0			69		
02:45	5	15	0		20	14:45	69	223	0		292		
03:00	4	0			4	15:00	48	0			48		
03:15	1	0			1	15:15	45	0			45		
03:30	6	0			6	15:30	41	0			41		
03:45	9	20	0		29	15:45	41	175	0		216		
04:00	5	0			5	16:00	41	0			41		
04:15	16	0			16	16:15	48	0			48		
04:30	9	0			9	16:30	39	0			39		
04:45	16	46	0		62	16:45	54	182	0		236		
05:00	14	0			14	17:00	41	0			41		
05:15	15	0			15	17:15	67	0			67		
05:30	20	0			20	17:30	65	0			65		
05:45	31	80	0		111	17:45	38	211	0		249		
06:00	11	0			11	18:00	28	0			28		
06:15	22	0			22	18:15	30	0			30		
06:30	39	0			39	18:30	36	0			36		
06:45	34	106	0		140	18:45	29	123	0		152		
07:00	51	0			51	19:00	34	0			34		
07:15	58	0			58	19:15	45	0			45		
07:30	35	0			35	19:30	35	0			35		
07:45	34	178	0		212	19:45	23	137	0		160		
08:00	46	0			46	20:00	30	0			30		
08:15	53	0			53	20:15	34	0			34		
08:30	63	0			63	20:30	30	0			30		
08:45	23	185	0		208	20:45	19	113	0		132		
09:00	20	0			20	21:00	25	0			25		
09:15	30	0			30	21:15	26	0			26		
09:30	25	0			25	21:30	26	0			26		
09:45	23	98	0		121	21:45	20	97	0		117		
10:00	33	0			33	22:00	8	0			8		
10:15	18	0			18	22:15	8	0			8		
10:30	21	0			21	22:30	10	0			10		
10:45	35	107	0		142	22:45	4	30	0		34		
11:00	33	0			33	23:00	5	0			5		
11:15	40	0			40	23:15	7	0			7		
11:30	39	0			39	23:30	5	0			5		
11:45	31	143	0		174	23:45	3	20	0		23		
TOTALS	1000				1000	TOTALS	1613				1613		
SPLIT %	100.0%				38.3%	SPLIT %	100.0%				61.7%		

DAILY TOTALS					NB	SB						EB	WB						Total
					2,613	0						0	0						2,613

AM Peak Hour	07:45				07:45	PM Peak Hour	14:30				14:30
AM Pk Volume	196				196	PM Pk Volume	231				231
Pk Hr Factor	0.778				0.778	Pk Hr Factor	0.837				0.837
7 - 9 Volume	363	0	0	0	363	4 - 6 Volume	393	0	0	0	393
7 - 9 Peak Hour	07:45				07:45	4 - 6 Peak Hour	16:45				16:45
7 - 9 Pk Volume	196	0	0	0	196	4 - 6 Pk Volume	227	0	0	0	227
Pk Hr Factor	0.778	0.000	0.000	0.000	0.778	Pk Hr Factor	0.847	0.000	0.000	0.000	0.847

VOLUME

I-15 NB Off-Ramp To Lake St

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_013

DAILY TOTALS					NB	SB						EB	WB						Total
					2,586	0						0	0						2,586
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	4	0			4		12:00	31	0			31							
00:15	3	0			3		12:15	35	0			35							
00:30	4	0			4		12:30	29	0			29							
00:45	1	12	0		1	12	12:45	58	153	0		58	153						
01:00	4	0			4		13:00	39	0			39							
01:15	2	0			2		13:15	37	0			37							
01:30	1	0			1		13:30	45	0			45							
01:45	2	9	0		2	9	13:45	52	173	0		52	173						
02:00	2	0			2		14:00	46	0			46							
02:15	2	0			2		14:15	35	0			35							
02:30	8	0			8		14:30	54	0			54							
02:45	13	25	0		13	25	14:45	75	210	0		75	210						
03:00	5	0			5		15:00	58	0			58							
03:15	3	0			3		15:15	51	0			51							
03:30	2	0			2		15:30	58	0			58							
03:45	15	25	0		15	25	15:45	32	199	0		32	199						
04:00	8	0			8		16:00	40	0			40							
04:15	12	0			12		16:15	56	0			56							
04:30	15	0			15		16:30	35	0			35							
04:45	13	48	0		13	48	16:45	40	171	0		40	171						
05:00	13	0			13		17:00	51	0			51							
05:15	17	0			17		17:15	39	0			39							
05:30	14	0			14		17:30	36	0			36							
05:45	27	71	0		27	71	17:45	46	172	0		46	172						
06:00	21	0			21		18:00	36	0			36							
06:15	31	0			31		18:15	34	0			34							
06:30	36	0			36		18:30	29	0			29							
06:45	45	133	0		45	133	18:45	29	128	0		29	128						
07:00	47	0			47		19:00	30	0			30							
07:15	73	0			73		19:15	36	0			36							
07:30	66	0			66		19:30	26	0			26							
07:45	41	227	0		41	227	19:45	27	119	0		27	119						
08:00	38	0			38		20:00	35	0			35							
08:15	30	0			30		20:15	38	0			38							
08:30	33	0			33		20:30	21	0			21							
08:45	31	132	0		31	132	20:45	23	117	0		23	117						
09:00	22	0			22		21:00	22	0			22							
09:15	13	0			13		21:15	36	0			36							
09:30	17	0			17		21:30	23	0			23							
09:45	21	73	0		21	73	21:45	15	96	0		15	96						
10:00	31	0			31		22:00	11	0			11							
10:15	24	0			24		22:15	5	0			5							
10:30	27	0			27		22:30	7	0			7							
10:45	32	114	0		32	114	22:45	8	31	0		8	31						
11:00	29	0			29		23:00	11	0			11							
11:15	25	0			25		23:15	15	0			15							
11:30	28	0			28		23:30	6	0			6							
11:45	27	109	0		27	109	23:45	7	39	0		7	39						
TOTALS	978				978		TOTALS	1608				1608							
SPLIT %	100.0%				37.8%		SPLIT %	100.0%				62.2%							

DAILY TOTALS					NB	SB						EB	WB						Total
					2,586	0						0	0						2,586

AM Peak Hour	06:45				06:45		PM Peak Hour	14:45				14:45							
AM Pk Volume	231				231		PM Pk Volume	242				242							
Pk Hr Factor	0.791				0.791		Pk Hr Factor	0.807				0.807							
7 - 9 Volume	359	0	0	0	359		4 - 6 Volume	343	0	0	0	343							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:15				16:15							
7 - 9 Pk Volume	227	0	0	0	227		4 - 6 Pk Volume	182	0	0	0	182							
Pk Hr Factor	0.777	0.000	0.000	0.000	0.777		Pk Hr Factor	0.813	0.000	0.000	0.000	0.813							

VOLUME

I-15 NB On-Ramp From Lake St

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_014

DAILY TOTALS					NB	SB						EB	WB						Total
					7,535	0						0	0						7,535
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	20	0			20		12:00	74	0			74							
00:15	4	0			4		12:15	67	0			67							
00:30	9	0			9		12:30	87	0			87							
00:45	15	48	0		15	48	12:45	74	302	0		74	302						
01:00	6	0			6		13:00	76	0			76							
01:15	7	0			7		13:15	68	0			68							
01:30	7	0			7		13:30	97	0			97							
01:45	11	31	0		11	31	13:45	70	311	0		70	311						
02:00	16	0			16		14:00	84	0			84							
02:15	16	0			16		14:15	119	0			119							
02:30	15	0			15		14:30	89	0			89							
02:45	31	78	0		31	78	14:45	89	381	0		89	381						
03:00	48	0			48		15:00	63	0			63							
03:15	63	0			63		15:15	83	0			83							
03:30	88	0			88		15:30	75	0			75							
03:45	135	334	0		135	334	15:45	75	296	0		75	296						
04:00	172	0			172		16:00	102	0			102							
04:15	181	0			181		16:15	106	0			106							
04:30	196	0			196		16:30	85	0			85							
04:45	181	730	0		181	730	16:45	72	365	0		72	365						
05:00	193	0			193		17:00	76	0			76							
05:15	226	0			226		17:15	73	0			73							
05:30	194	0			194		17:30	75	0			75							
05:45	182	795	0		182	795	17:45	84	308	0		84	308						
06:00	189	0			189		18:00	58	0			58							
06:15	206	0			206		18:15	60	0			60							
06:30	166	0			166		18:30	76	0			76							
06:45	135	696	0		135	696	18:45	65	259	0		65	259						
07:00	110	0			110		19:00	52	0			52							
07:15	118	0			118		19:15	45	0			45							
07:30	116	0			116		19:30	45	0			45							
07:45	124	468	0		124	468	19:45	34	176	0		34	176						
08:00	125	0			125		20:00	53	0			53							
08:15	100	0			100		20:15	39	0			39							
08:30	135	0			135		20:30	41	0			41							
08:45	102	462	0		102	462	20:45	30	163	0		30	163						
09:00	91	0			91		21:00	36	0			36							
09:15	118	0			118		21:15	41	0			41							
09:30	100	0			100		21:30	30	0			30							
09:45	96	405	0		96	405	21:45	17	124	0		17	124						
10:00	88	0			88		22:00	22	0			22							
10:15	109	0			109		22:15	26	0			26							
10:30	86	0			86		22:30	18	0			18							
10:45	80	363	0		80	363	22:45	23	89	0		23	89						
11:00	57	0			57		23:00	24	0			24							
11:15	75	0			75		23:15	7	0			7							
11:30	94	0			94		23:30	7	0			7							
11:45	80	306	0		80	306	23:45	7	45	0		7	45						
TOTALS	4716				4716		TOTALS	2819				2819							
SPLIT %	100.0%				62.6%		SPLIT %	100.0%				37.4%							

DAILY TOTALS					NB	SB						EB	WB						Total
					7,535	0						0	0						7,535

AM Peak Hour	04:30				04:30		PM Peak Hour	14:00				14:00							
AM Pk Volume	796				796		PM Pk Volume	381				381							
Pk Hr Factor	0.881				0.881		Pk Hr Factor	0.800				0.800							
7 - 9 Volume	930	0	0	0	930		4 - 6 Volume	673	0	0	0	673							
7 - 9 Peak Hour	07:45				07:45		4 - 6 Peak Hour	16:00				16:00							
7 - 9 Pk Volume	484	0	0	0	484		4 - 6 Pk Volume	365	0	0	0	365							
Pk Hr Factor	0.896	0.000	0.000	0.000	0.896		Pk Hr Factor	0.861	0.000	0.000	0.000	0.861							

VOLUME

I-15 NB On-Ramp From Lake St

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_014

DAILY TOTALS					NB	SB						EB	WB	Total
					7,995	0						0	0	7,995
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	8	0			8		12:00	69	0			69		
00:15	10	0			10		12:15	98	0			98		
00:30	8	0			8		12:30	90	0			90		
00:45	9	35	0		9	35	12:45	92	349	0		92	349	
01:00	7	0			7		13:00	82	0			82		
01:15	13	0			13		13:15	65	0			65		
01:30	12	0			12		13:30	83	0			83		
01:45	18	50	0		18	50	13:45	85	315	0		85	315	
02:00	10	0			10		14:00	100	0			100		
02:15	17	0			17		14:15	86	0			86		
02:30	18	0			18		14:30	101	0			101		
02:45	23	68	0		23	68	14:45	95	382	0		95	382	
03:00	48	0			48		15:00	88	0			88		
03:15	53	0			53		15:15	89	0			89		
03:30	82	0			82		15:30	79	0			79		
03:45	138	321	0		138	321	15:45	97	353	0		97	353	
04:00	185	0			185		16:00	84	0			84		
04:15	173	0			173		16:15	95	0			95		
04:30	217	0			217		16:30	91	0			91		
04:45	197	772	0		197	772	16:45	78	348	0		78	348	
05:00	219	0			219		17:00	83	0			83		
05:15	218	0			218		17:15	98	0			98		
05:30	154	0			154		17:30	99	0			99		
05:45	173	764	0		173	764	17:45	90	370	0		90	370	
06:00	210	0			210		18:00	61	0			61		
06:15	208	0			208		18:15	81	0			81		
06:30	192	0			192		18:30	79	0			79		
06:45	174	784	0		174	784	18:45	39	260	0		39	260	
07:00	153	0			153		19:00	60	0			60		
07:15	141	0			141		19:15	47	0			47		
07:30	146	0			146		19:30	50	0			50		
07:45	142	582	0		142	582	19:45	70	227	0		70	227	
08:00	157	0			157		20:00	39	0			39		
08:15	133	0			133		20:15	47	0			47		
08:30	116	0			116		20:30	30	0			30		
08:45	91	497	0		91	497	20:45	34	150	0		34	150	
09:00	99	0			99		21:00	37	0			37		
09:15	100	0			100		21:15	38	0			38		
09:30	92	0			92		21:30	34	0			34		
09:45	119	410	0		119	410	21:45	32	141	0		32	141	
10:00	102	0			102		22:00	13	0			13		
10:15	93	0			93		22:15	22	0			22		
10:30	89	0			89		22:30	19	0			19		
10:45	69	353	0		69	353	22:45	24	78	0		24	78	
11:00	75	0			75		23:00	17	0			17		
11:15	90	0			90		23:15	14	0			14		
11:30	83	0			83		23:30	14	0			14		
11:45	84	332	0		84	332	23:45	9	54	0		9	54	
TOTALS	4968				4968		TOTALS	3027				3027		
SPLIT %	100.0%				62.1%		SPLIT %	100.0%				37.9%		

DAILY TOTALS					NB	SB						EB	WB	Total
					7,995	0						0	0	7,995

AM Peak Hour	04:30				04:30		PM Peak Hour	14:00				14:00		
AM Pk Volume	851				851		PM Pk Volume	382				382		
Pk Hr Factor	0.971				0.971		Pk Hr Factor	0.946				0.946		
7 - 9 Volume	1079	0	0	0	1079		4 - 6 Volume	718	0	0	0	718		
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	17:00				17:00		
7 - 9 Pk Volume	586	0	0	0	586		4 - 6 Pk Volume	370	0	0	0	370		
Pk Hr Factor	0.933	0.000	0.000	0.000	0.933		Pk Hr Factor	0.934	0.000	0.000	0.000	0.934		

VOLUME

I-15 NB On-Ramp From Lake St

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_014

DAILY TOTALS					NB	SB						EB	WB						Total
					7,903	0						0	0						7,903
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	9	0			9		12:00	79	0			79							
00:15	18	0			18		12:15	96	0			96							
00:30	8	0			8		12:30	71	0			71							
00:45	13	48	0		13	48	12:45	100	346	0		100	346						
01:00	8	0			8		13:00	76	0			76							
01:15	10	0			10		13:15	104	0			104							
01:30	11	0			11		13:30	88	0			88							
01:45	12	41	0		12	41	13:45	101	369	0		101	369						
02:00	20	0			20		14:00	110	0			110							
02:15	14	0			14		14:15	74	0			74							
02:30	24	0			24		14:30	113	0			113							
02:45	29	87	0		29	87	14:45	86	383	0		86	383						
03:00	50	0			50		15:00	97	0			97							
03:15	70	0			70		15:15	86	0			86							
03:30	82	0			82		15:30	94	0			94							
03:45	131	333	0		131	333	15:45	85	362	0		85	362						
04:00	182	0			182		16:00	105	0			105							
04:15	170	0			170		16:15	80	0			80							
04:30	196	0			196		16:30	93	0			93							
04:45	186	734	0		186	734	16:45	79	357	0		79	357						
05:00	188	0			188		17:00	90	0			90							
05:15	222	0			222		17:15	78	0			78							
05:30	184	0			184		17:30	84	0			84							
05:45	184	778	0		184	778	17:45	67	319	0		67	319						
06:00	190	0			190		18:00	76	0			76							
06:15	186	0			186		18:15	89	0			89							
06:30	170	0			170		18:30	75	0			75							
06:45	150	696	0		150	696	18:45	55	295	0		55	295						
07:00	111	0			111		19:00	50	0			50							
07:15	112	0			112		19:15	67	0			67							
07:30	161	0			161		19:30	45	0			45							
07:45	139	523	0		139	523	19:45	48	210	0		48	210						
08:00	153	0			153		20:00	40	0			40							
08:15	138	0			138		20:15	36	0			36							
08:30	104	0			104		20:30	54	0			54							
08:45	109	504	0		109	504	20:45	43	173	0		43	173						
09:00	108	0			108		21:00	30	0			30							
09:15	120	0			120		21:15	41	0			41							
09:30	94	0			94		21:30	34	0			34							
09:45	88	410	0		88	410	21:45	28	133	0		28	133						
10:00	93	0			93		22:00	20	0			20							
10:15	107	0			107		22:15	29	0			29							
10:30	101	0			101		22:30	16	0			16							
10:45	87	388	0		87	388	22:45	20	85	0		20	85						
11:00	63	0			63		23:00	15	0			15							
11:15	61	0			61		23:15	14	0			14							
11:30	72	0			72		23:30	17	0			17							
11:45	73	269	0		73	269	23:45	14	60	0		14	60						
TOTALS	4811				4811		TOTALS	3092				3092							
SPLIT %	100.0%				60.9%		SPLIT %	100.0%				39.1%							

DAILY TOTALS					NB	SB						EB	WB						Total
					7,903	0						0	0						7,903

AM Peak Hour	04:30				04:30		PM Peak Hour	13:15				13:15							
AM Pk Volume	792				792		PM Pk Volume	403				403							
Pk Hr Factor	0.892				0.892		Pk Hr Factor	0.916				0.916							
7 - 9 Volume	1027	0	0	0	1027		4 - 6 Volume	676	0	0	0	676							
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	16:00				16:00							
7 - 9 Pk Volume	591	0	0	0	591		4 - 6 Pk Volume	357	0	0	0	357							
Pk Hr Factor	0.918	0.000	0.000	0.000	0.918		Pk Hr Factor	0.850	0.000	0.000	0.000	0.850							

VOLUME

I-15 SB On-Ramp From Lake St

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_015

DAILY TOTALS					NB	SB						Total
					0	2,703	EB	WB	0	0	2,703	
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	3			3	12:00	0	52			52	
00:15	0	1			1	12:15	0	23			23	
00:30	0	4			4	12:30	0	42			42	
00:45	0	2	10		2 10	12:45	0	32	149		32 149	
01:00	0	1			1	13:00	0	37			37	
01:15	0	0			0	13:15	0	44			44	
01:30	0	2			2	13:30	0	58			58	
01:45	0	0	3		0 3	13:45	0	39	178		39 178	
02:00	0	3			3	14:00	0	85			85	
02:15	0	0			0	14:15	0	95			95	
02:30	0	5			5	14:30	0	63			63	
02:45	0	5	13		5 13	14:45	0	31	274		31 274	
03:00	0	3			3	15:00	0	43			43	
03:15	0	2			2	15:15	0	44			44	
03:30	0	3			3	15:30	0	43			43	
03:45	0	8	16		8 16	15:45	0	46	176		46 176	
04:00	0	11			11	16:00	0	52			52	
04:15	0	4			4	16:15	0	45			45	
04:30	0	8			8	16:30	0	46			46	
04:45	0	20	43		20 43	16:45	0	37	180		37 180	
05:00	0	13			13	17:00	0	43			43	
05:15	0	16			16	17:15	0	52			52	
05:30	0	28			28	17:30	0	42			42	
05:45	0	27	84		27 84	17:45	0	40	177		40 177	
06:00	0	20			20	18:00	0	25			25	
06:15	0	35			35	18:15	0	31			31	
06:30	0	40			40	18:30	0	25			25	
06:45	0	73	168		73 168	18:45	0	28	109		28 109	
07:00	0	109			109	19:00	0	22			22	
07:15	0	95			95	19:15	0	28			28	
07:30	0	59			59	19:30	0	31			31	
07:45	0	48	311		48 311	19:45	0	9	90		9 90	
08:00	0	37			37	20:00	0	12			12	
08:15	0	58			58	20:15	0	6			6	
08:30	0	42			42	20:30	0	8			8	
08:45	0	45	182		45 182	20:45	0	12	38		12 38	
09:00	0	41			41	21:00	0	8			8	
09:15	0	26			26	21:15	0	8			8	
09:30	0	38			38	21:30	0	5			5	
09:45	0	33	138		33 138	21:45	0	14	35		14 35	
10:00	0	32			32	22:00	0	6			6	
10:15	0	40			40	22:15	0	5			5	
10:30	0	51			51	22:30	0	4			4	
10:45	0	32	155		32 155	22:45	0	4	19		4 19	
11:00	0	28			28	23:00	0	1			1	
11:15	0	37			37	23:15	0	2			2	
11:30	0	43			43	23:30	0	5			5	
11:45	0	37	145		37 145	23:45	0	2	10		2 10	
TOTALS	1268				1268	TOTALS	1435				1435	
SPLIT %	100.0%				46.9%	SPLIT %	100.0%				53.1%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	2,703	0	0	2,703

AM Peak Hour	06:45	06:45	PM Peak Hour	13:45	13:45						
AM Pk Volume	336	336	PM Pk Volume	282	282						
Pk Hr Factor	0.771	0.771	Pk Hr Factor	0.742	0.742						
7 - 9 Volume	0	493	0	4 - 6 Volume	0	357	0	0	357		
7 - 9 Peak Hour	07:00	07:00	4 - 6 Peak Hour	16:00	16:00						
7 - 9 Pk Volume	0	311	0	4 - 6 Pk Volume	0	180	0	0	180		
Pk Hr Factor	0.000	0.713	0.000	0.000	0.713	Pk Hr Factor	0.000	0.865	0.000	0.000	0.865

VOLUME

I-15 SB On-Ramp From Lake St

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_015

DAILY TOTALS					NB	SB						EB	WB						Total
					0	2,707						0	0						2,707
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	7			7		12:00	0	39			39							
00:15	0	8			8		12:15	0	39			39							
00:30	0	2			2		12:30	0	42			42							
00:45	0	4	21		4	21	12:45	0	29	149		29	149						
01:00	0	2			2		13:00	0	41			41							
01:15	0	0			0		13:15	0	41			41							
01:30	0	1			1		13:30	0	52			52							
01:45	0	6	9		6	9	13:45	0	35	169		35	169						
02:00	0	1			1		14:00	0	76			76							
02:15	0	1			1		14:15	0	81			81							
02:30	0	1			1		14:30	0	71			71							
02:45	0	2	5		2	5	14:45	0	55	283		55	283						
03:00	0	1			1		15:00	0	55			55							
03:15	0	1			1		15:15	0	31			31							
03:30	0	5			5		15:30	0	43			43							
03:45	0	7	14		7	14	15:45	0	39	168		39	168						
04:00	0	9			9		16:00	0	38			38							
04:15	0	6			6		16:15	0	38			38							
04:30	0	21			21		16:30	0	46			46							
04:45	0	15	51		15	51	16:45	0	54	176		54	176						
05:00	0	8			8		17:00	0	59			59							
05:15	0	9			9		17:15	0	53			53							
05:30	0	23			23		17:30	0	48			48							
05:45	0	12	52		12	52	17:45	0	28	188		28	188						
06:00	0	19			19		18:00	0	30			30							
06:15	0	36			36		18:15	0	24			24							
06:30	0	34			34		18:30	0	25			25							
06:45	0	48	137		48	137	18:45	0	40	119		40	119						
07:00	0	48			48		19:00	0	40			40							
07:15	0	54			54		19:15	0	47			47							
07:30	0	55			55		19:30	0	28			28							
07:45	0	107	264		107	264	19:45	0	8	123		8	123						
08:00	0	94			94		20:00	0	17			17							
08:15	0	57			57		20:15	0	19			19							
08:30	0	53			53		20:30	0	17			17							
08:45	0	38	242		38	242	20:45	0	15	68		15	68						
09:00	0	44			44		21:00	0	6			6							
09:15	0	44			44		21:15	0	8			8							
09:30	0	36			36		21:30	0	7			7							
09:45	0	25	149		25	149	21:45	0	5	26		5	26						
10:00	0	33			33		22:00	0	4			4							
10:15	0	30			30		22:15	0	1			1							
10:30	0	30			30		22:30	0	3			3							
10:45	0	23	116		23	116	22:45	0	4	12		4	12						
11:00	0	36			36		23:00	0	4			4							
11:15	0	41			41		23:15	0	1			1							
11:30	0	42			42		23:30	0	2			2							
11:45	0	36	155		36	155	23:45	0	4	11		4	11						
TOTALS	1215				1215		TOTALS	1492				1492							
SPLIT %	100.0%				44.9%		SPLIT %	100.0%				55.1%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	2,707						0	0						2,707

AM Peak Hour	07:30	07:30	PM Peak Hour	14:00	14:00		
AM Pk Volume	313	313	PM Pk Volume	283	283		
Pk Hr Factor	0.731	0.731	Pk Hr Factor	0.873	0.873		
7 - 9 Volume	0	506	0	364	0	0	364
7 - 9 Peak Hour	07:30	07:30	4 - 6 Peak Hour	16:45	16:45		
7 - 9 Pk Volume	0	313	0	214	0	0	214
Pk Hr Factor	0.000	0.731	0.000	0.907	0.000	0.000	0.907

VOLUME

I-15 SB On-Ramp From Lake St

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_015

DAILY TOTALS					NB	SB	EB					WB	Total
					0	2,651						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	3			3	12:00	0	19			19		
00:15	0	3			3	12:15	0	45			45		
00:30	0	1			1	12:30	0	39			39		
00:45	0	3	10		3	12:45	0	27	130		27		
01:00	0	4			4	13:00	0	29			29		
01:15	0	2			2	13:15	0	37			37		
01:30	0	3			3	13:30	0	53			53		
01:45	0	3	12		3	13:45	0	30	149		30		
02:00	0	1			1	14:00	0	80			80		
02:15	0	3			3	14:15	0	77			77		
02:30	0	3			3	14:30	0	74			74		
02:45	0	2	9		2	14:45	0	48	279		48		
03:00	0	3			3	15:00	0	56			56		
03:15	0	4			4	15:15	0	38			38		
03:30	0	7			7	15:30	0	46			46		
03:45	0	15	29		15	15:45	0	46	186		46		
04:00	0	5			5	16:00	0	44			44		
04:15	0	7			7	16:15	0	29			29		
04:30	0	9			9	16:30	0	36			36		
04:45	0	20	41		20	16:45	0	48	157		48		
05:00	0	12			12	17:00	0	35			35		
05:15	0	12			12	17:15	0	54			54		
05:30	0	18			18	17:30	0	39			39		
05:45	0	33	75		33	17:45	0	35	163		35		
06:00	0	25			25	18:00	0	34			34		
06:15	0	41			41	18:15	0	33			33		
06:30	0	35			35	18:30	0	25			25		
06:45	0	79	180		79	18:45	0	30	122		30		
07:00	0	108			108	19:00	0	30			30		
07:15	0	83			83	19:15	0	25			25		
07:30	0	60			60	19:30	0	26			26		
07:45	0	73	324		73	19:45	0	14	95		14		
08:00	0	34			34	20:00	0	18			18		
08:15	0	55			55	20:15	0	12			12		
08:30	0	49			49	20:30	0	7			7		
08:45	0	28	166		28	20:45	0	6	43		6		
09:00	0	35			35	21:00	0	4			4		
09:15	0	42			42	21:15	0	6			6		
09:30	0	31			31	21:30	0	9			9		
09:45	0	23	131		23	21:45	0	7	26		7		
10:00	0	24			24	22:00	0	10			10		
10:15	0	46			46	22:15	0	6			6		
10:30	0	33			33	22:30	0	3			3		
10:45	0	41	144		41	22:45	0	4	23		4		
11:00	0	43			43	23:00	0	8			8		
11:15	0	15			15	23:15	0	4			4		
11:30	0	49			49	23:30	0	2			2		
11:45	0	34	141		34	23:45	0	2	16		2		
TOTALS	1262				1262	TOTALS	1389				1389		
SPLIT %	100.0%				47.6%	SPLIT %	100.0%				52.4%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	2,651	0	0	2,651

AM Peak Hour	06:45	06:45	PM Peak Hour	14:00	14:00						
AM Pk Volume	330	330	PM Pk Volume	279	279						
Pk Hr Factor	0.764	0.764	Pk Hr Factor	0.872	0.872						
7 - 9 Volume	0	490	0	4 - 6 Volume	0	320	0	0	320		
7 - 9 Peak Hour	07:00	07:00	4 - 6 Peak Hour	16:45	16:45						
7 - 9 Pk Volume	0	324	0	4 - 6 Pk Volume	0	176	0	0	176		
Pk Hr Factor	0.000	0.750	0.000	0.000	0.750	Pk Hr Factor	0.000	0.815	0.000	0.000	0.815

VOLUME

I-15 SB Off-Ramp To Lake St

Day: Tuesday
Date: 9/17/2019City: Lake Elsinore
Project #: CA19_6124_016

DAILY TOTALS					NB	SB	EB					WB	Total
					0	7,817	0					0	7,817
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	34			34	12:00	0	55			55		
00:15	0	33			33	12:15	0	74			74		
00:30	0	29			29	12:30	0	64			64		
00:45	0	25	121		25 121	12:45	0	67	260		67 260		
01:00	0	19			19	13:00	0	62			62		
01:15	0	20			20	13:15	0	116			116		
01:30	0	15			15	13:30	0	114			114		
01:45	0	23	77		23 77	13:45	0	121	413		121 413		
02:00	0	29			29	14:00	0	112			112		
02:15	0	16			16	14:15	0	128			128		
02:30	0	29			29	14:30	0	110			110		
02:45	0	23	97		23 97	14:45	0	134	484		134 484		
03:00	0	12			12	15:00	0	143			143		
03:15	0	8			8	15:15	0	147			147		
03:30	0	15			15	15:30	0	177			177		
03:45	0	16	51		16 51	15:45	0	169	636		169 636		
04:00	0	31			31	16:00	0	159			159		
04:15	0	16			16	16:15	0	181			181		
04:30	0	20			20	16:30	0	179			179		
04:45	0	17	84		17 84	16:45	0	177	696		177 696		
05:00	0	29			29	17:00	0	189			189		
05:15	0	39			39	17:15	0	200			200		
05:30	0	41			41	17:30	0	180			180		
05:45	0	33	142		33 142	17:45	0	220	789		220 789		
06:00	0	43			43	18:00	0	196			196		
06:15	0	37			37	18:15	0	175			175		
06:30	0	73			73	18:30	0	183			183		
06:45	0	67	220		67 220	18:45	0	156	710		156 710		
07:00	0	56			56	19:00	0	159			159		
07:15	0	56			56	19:15	0	160			160		
07:30	0	66			66	19:30	0	139			139		
07:45	0	70	248		70 248	19:45	0	118	576		118 576		
08:00	0	43			43	20:00	0	127			127		
08:15	0	69			69	20:15	0	137			137		
08:30	0	42			42	20:30	0	108			108		
08:45	0	45	199		45 199	20:45	0	106	478		106 478		
09:00	0	54			54	21:00	0	98			98		
09:15	0	58			58	21:15	0	100			100		
09:30	0	49			49	21:30	0	92			92		
09:45	0	70	231		70 231	21:45	0	97	387		97 387		
10:00	0	55			55	22:00	0	81			81		
10:15	0	40			40	22:15	0	65			65		
10:30	0	57			57	22:30	0	61			61		
10:45	0	61	213		61 213	22:45	0	56	263		56 263		
11:00	0	68			68	23:00	0	44			44		
11:15	0	77			77	23:15	0	49			49		
11:30	0	62			62	23:30	0	34			34		
11:45	0	64	271		64 271	23:45	0	44	171		44 171		
TOTALS	1954				1954	TOTALS	5863				5863		
SPLIT %	100.0%				25.0%	SPLIT %	100.0%				75.0%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	7,817	0	0	7,817

AM Peak Hour	11:00			11:00	PM Peak Hour	17:15			17:15		
AM Pk Volume	271			271	PM Pk Volume	796			796		
Pk Hr Factor	0.880			0.880	Pk Hr Factor	0.905			0.905		
7 - 9 Volume	0	447	0	0	447	4 - 6 Volume	0	1485	0	0	1485
7 - 9 Peak Hour		07:00			07:00	4 - 6 Peak Hour		17:00			17:00
7 - 9 Pk Volume	0	248	0	0	248	4 - 6 Pk Volume	0	789	0	0	789
Pk Hr Factor	0.000	0.886	0.000	0.000	0.886	Pk Hr Factor	0.000	0.897	0.000	0.000	0.897

VOLUME

I-15 SB Off-Ramp To Lake St

Day: Wednesday

Date: 9/18/2019

City: Lake Elsinore

Project #: CA19_6124_016

DAILY TOTALS					NB	SB						Total
					0	8,107	EB	WB	0	0	8,107	
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	28			28	12:00	0	75			75	
00:15	0	33			33	12:15	0	78			78	
00:30	0	24			24	12:30	0	70			70	
00:45	0	40	125		40 125	12:45	0	81	304		81 304	
01:00	0	36			36	13:00	0	78			78	
01:15	0	19			19	13:15	0	93			93	
01:30	0	13			13	13:30	0	108			108	
01:45	0	23	91		23 91	13:45	0	108	387		108 387	
02:00	0	18			18	14:00	0	130			130	
02:15	0	13			13	14:15	0	120			120	
02:30	0	13			13	14:30	0	127			127	
02:45	0	25	69		25 69	14:45	0	125	502		125 502	
03:00	0	10			10	15:00	0	140			140	
03:15	0	13			13	15:15	0	155			155	
03:30	0	19			19	15:30	0	134			134	
03:45	0	21	63		21 63	15:45	0	165	594		165 594	
04:00	0	27			27	16:00	0	188			188	
04:15	0	27			27	16:15	0	127			127	
04:30	0	31			31	16:30	0	206			206	
04:45	0	20	105		20 105	16:45	0	170	691		170 691	
05:00	0	26			26	17:00	0	200			200	
05:15	0	42			42	17:15	0	223			223	
05:30	0	40			40	17:30	0	198			198	
05:45	0	34	142		34 142	17:45	0	215	836		215 836	
06:00	0	39			39	18:00	0	198			198	
06:15	0	44			44	18:15	0	183			183	
06:30	0	52			52	18:30	0	181			181	
06:45	0	56	191		56 191	18:45	0	172	734		172 734	
07:00	0	59			59	19:00	0	148			148	
07:15	0	50			50	19:15	0	164			164	
07:30	0	42			42	19:30	0	154			154	
07:45	0	67	218		67 218	19:45	0	132	598		132 598	
08:00	0	68			68	20:00	0	142			142	
08:15	0	63			63	20:15	0	161			161	
08:30	0	64			64	20:30	0	125			125	
08:45	0	64	259		64 259	20:45	0	134	562		134 562	
09:00	0	66			66	21:00	0	102			102	
09:15	0	61			61	21:15	0	96			96	
09:30	0	55			55	21:30	0	105			105	
09:45	0	57	239		57 239	21:45	0	101	404		101 404	
10:00	0	51			51	22:00	0	95			95	
10:15	0	52			52	22:15	0	86			86	
10:30	0	46			46	22:30	0	78			78	
10:45	0	54	203		54 203	22:45	0	79	338		79 338	
11:00	0	60			60	23:00	0	71			71	
11:15	0	45			45	23:15	0	59			59	
11:30	0	79			79	23:30	0	40			40	
11:45	0	55	239		55 239	23:45	0	43	213		43 213	
TOTALS	1944				1944	TOTALS	6163				6163	
SPLIT %	100.0%				24.0%	SPLIT %	100.0%				76.0%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	8,107	0	0	8,107

AM Peak Hour	11:30				11:30	PM Peak Hour	17:00				17:00
AM Pk Volume	287				287	PM Pk Volume	836				836
Pk Hr Factor	0.908				0.908	Pk Hr Factor	0.937				0.937
7 - 9 Volume	0	477	0	0	477	4 - 6 Volume	0	1527	0	0	1527
7 - 9 Peak Hour	07:45				07:45	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	262		0	0	262	4 - 6 Pk Volume	836		0	0	836
Pk Hr Factor	0.000	0.963	0.000	0.000	0.963	Pk Hr Factor	0.000	0.937	0.000	0.000	0.937

VOLUME

I-15 SB Off-Ramp To Lake St

Day: Thursday
Date: 9/19/2019City: Lake Elsinore
Project #: CA19_6124_016

DAILY TOTALS					NB	SB						Total
					0	7,822	EB	WB	0	0	7,822	
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	39			39	12:00	0	71			71	
00:15	0	39			39	12:15	0	55			55	
00:30	0	32			32	12:30	0	80			80	
00:45	0	43	153		43 153	12:45	0	69	275		69 275	
01:00	0	30			30	13:00	0	100			100	
01:15	0	23			23	13:15	0	99			99	
01:30	0	23			23	13:30	0	81			81	
01:45	0	21	97		21 97	13:45	0	115	395		115 395	
02:00	0	16			16	14:00	0	111			111	
02:15	0	18			18	14:15	0	97			97	
02:30	0	12			12	14:30	0	136			136	
02:45	0	20	66		20 66	14:45	0	123	467		123 467	
03:00	0	18			18	15:00	0	116			116	
03:15	0	21			21	15:15	0	140			140	
03:30	0	13			13	15:30	0	133			133	
03:45	0	24	76		24 76	15:45	0	190	579		190 579	
04:00	0	18			18	16:00	0	159			159	
04:15	0	24			24	16:15	0	172			172	
04:30	0	24			24	16:30	0	190			190	
04:45	0	17	83		17 83	16:45	0	176	697		176 697	
05:00	0	26			26	17:00	0	157			157	
05:15	0	39			39	17:15	0	185			185	
05:30	0	47			47	17:30	0	186			186	
05:45	0	42	154		42 154	17:45	0	186	714		186 714	
06:00	0	49			49	18:00	0	187			187	
06:15	0	35			35	18:15	0	169			169	
06:30	0	61			61	18:30	0	185			185	
06:45	0	58	203		58 203	18:45	0	173	714		173 714	
07:00	0	69			69	19:00	0	150			150	
07:15	0	64			64	19:15	0	132			132	
07:30	0	44			44	19:30	0	128			128	
07:45	0	58	235		58 235	19:45	0	134	544		134 544	
08:00	0	76			76	20:00	0	129			129	
08:15	0	49			49	20:15	0	117			117	
08:30	0	57			57	20:30	0	109			109	
08:45	0	58	240		58 240	20:45	0	110	465		110 465	
09:00	0	70			70	21:00	0	122			122	
09:15	0	46			46	21:15	0	105			105	
09:30	0	55			55	21:30	0	99			99	
09:45	0	67	238		67 238	21:45	0	111	437		111 437	
10:00	0	46			46	22:00	0	93			93	
10:15	0	65			65	22:15	0	76			76	
10:30	0	59			59	22:30	0	74			74	
10:45	0	46	216		46 216	22:45	0	68	311		68 311	
11:00	0	71			71	23:00	0	51			51	
11:15	0	63			63	23:15	0	59			59	
11:30	0	71			71	23:30	0	46			46	
11:45	0	56	261		56 261	23:45	0	46	202		46 202	
TOTALS	2022				2022	TOTALS	5800				5800	
SPLIT %	100.0%				25.9%	SPLIT %	100.0%				74.1%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	7,822	0	0	7,822

AM Peak Hour	11:45				11:45	PM Peak Hour	17:15				17:15
AM Pk Volume	262				262	PM Pk Volume	744				744
Pk Hr Factor	0.819				0.819	Pk Hr Factor	0.995				0.995
7 - 9 Volume	0	475	0	0	475	4 - 6 Volume	0	1411	0	0	1411
7 - 9 Peak Hour	07:15				07:15	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	242		0	0	242	4 - 6 Pk Volume	714		0	0	714
Pk Hr Factor	0.000	0.796	0.000	0.000	0.796	Pk Hr Factor	0.000	0.960	0.000	0.000	0.960

VOLUME**I-15 NB Off-Ramp To Indian Truck Trail**

Day: Tuesday
Date: 9/17/2019

City: Corona
Project #: CA19_6124_017

DAILY TOTALS					NB	SB						EB	WB						Total
					3,387	0						0	0						3,387
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	4	0			4		12:00	39	0			39							
00:15	5	0			5		12:15	41	0			41							
00:30	2	0			2		12:30	39	0			39							
00:45	8	19	0		8	19	12:45	42	161	0		42	161						
01:00	4	0			4		13:00	29	0			29							
01:15	2	0			2		13:15	29	0			29							
01:30	5	0			5		13:30	43	0			43							
01:45	5	16	0		5	16	13:45	48	149	0		48	149						
02:00	1	0			1		14:00	47	0			47							
02:15	5	0			5		14:15	38	0			38							
02:30	4	0			4		14:30	57	0			57							
02:45	8	18	0		8	18	14:45	37	179	0		37	179						
03:00	5	0			5		15:00	43	0			43							
03:15	12	0			12		15:15	36	0			36							
03:30	20	0			20		15:30	41	0			41							
03:45	13	50	0		13	50	15:45	47	167	0		47	167						
04:00	11	0			11		16:00	36	0			36							
04:15	21	0			21		16:15	37	0			37							
04:30	13	0			13		16:30	28	0			28							
04:45	16	61	0		16	61	16:45	33	134	0		33	134						
05:00	12	0			12		17:00	51	0			51							
05:15	26	0			26		17:15	48	0			48							
05:30	42	0			42		17:30	40	0			40							
05:45	70	150	0		70	150	17:45	33	172	0		33	172						
06:00	66	0			66		18:00	33	0			33							
06:15	76	0			76		18:15	25	0			25							
06:30	106	0			106		18:30	31	0			31							
06:45	117	365	0		117	365	18:45	23	112	0		23	112						
07:00	174	0			174		19:00	34	0			34							
07:15	113	0			113		19:15	29	0			29							
07:30	78	0			78		19:30	24	0			24							
07:45	102	467	0		102	467	19:45	22	109	0		22	109						
08:00	115	0			115		20:00	34	0			34							
08:15	78	0			78		20:15	17	0			17							
08:30	73	0			73		20:30	20	0			20							
08:45	61	327	0		61	327	20:45	22	93	0		22	93						
09:00	48	0			48		21:00	22	0			22							
09:15	47	0			47		21:15	19	0			19							
09:30	42	0			42		21:30	12	0			12							
09:45	40	177	0		40	177	21:45	22	75	0		22	75						
10:00	47	0			47		22:00	12	0			12							
10:15	26	0			26		22:15	13	0			13							
10:30	39	0			39		22:30	10	0			10							
10:45	27	139	0		27	139	22:45	4	39	0		4	39						
11:00	47	0			47		23:00	6	0			6							
11:15	40	0			40		23:15	7	0			7							
11:30	57	0			57		23:30	4	0			4							
11:45	42	186	0		42	186	23:45	5	22	0		5	22						
TOTALS	1975				1975		TOTALS	1412				1412							
SPLIT %	100.0%				58.3%		SPLIT %	100.0%				41.7%							

DAILY TOTALS					NB	SB						EB	WB						Total
					3,387	0						0	0						3,387

AM Peak Hour	06:30				06:30		PM Peak Hour	13:45				13:45							
AM Pk Volume	510				510		PM Pk Volume	190				190							
Pk Hr Factor	0.733				0.733		Pk Hr Factor	0.833				0.833							
7 - 9 Volume	794	0	0	0	794		4 - 6 Volume	306	0	0	0	306							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:45				16:45							
7 - 9 Pk Volume	467	0	0	0	467		4 - 6 Pk Volume	172	0	0	0	172							
Pk Hr Factor	0.671	0.000	0.000	0.000	0.671		Pk Hr Factor	0.843	0.000	0.000	0.000	0.843							

VOLUME**I-15 NB Off-Ramp To Indian Truck Trail**

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_017

DAILY TOTALS					NB	SB						EB	WB						Total
					3,100	0						0	0						3,100
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	6	0			6		12:00	44	0			44							
00:15	4	0			4		12:15	54	0			54							
00:30	2	0			2		12:30	37	0			37							
00:45	2	14	0		2	14	12:45	42	177	0		42	177						
01:00	7	0			7		13:00	53	0			53							
01:15	3	0			3		13:15	56	0			56							
01:30	1	0			1		13:30	43	0			43							
01:45	5	16	0		5	16	13:45	41	193	0		41	193						
02:00	4	0			4		14:00	44	0			44							
02:15	12	0			12		14:15	37	0			37							
02:30	3	0			3		14:30	45	0			45							
02:45	6	25	0		6	25	14:45	37	163	0		37	163						
03:00	4	0			4		15:00	36	0			36							
03:15	6	0			6		15:15	42	0			42							
03:30	23	0			23		15:30	33	0			33							
03:45	17	50	0		17	50	15:45	33	144	0		33	144						
04:00	9	0			9		16:00	29	0			29							
04:15	13	0			13		16:15	36	0			36							
04:30	11	0			11		16:30	28	0			28							
04:45	18	51	0		18	51	16:45	49	142	0		49	142						
05:00	30	0			30		17:00	43	0			43							
05:15	28	0			28		17:15	54	0			54							
05:30	28	0			28		17:30	48	0			48							
05:45	32	118	0		32	118	17:45	37	182	0		37	182						
06:00	39	0			39		18:00	27	0			27							
06:15	77	0			77		18:15	33	0			33							
06:30	84	0			84		18:30	22	0			22							
06:45	84	284	0		84	284	18:45	30	112	0		30	112						
07:00	121	0			121		19:00	32	0			32							
07:15	87	0			87		19:15	33	0			33							
07:30	79	0			79		19:30	24	0			24							
07:45	86	373	0		86	373	19:45	30	119	0		30	119						
08:00	64	0			64		20:00	24	0			24							
08:15	67	0			67		20:15	20	0			20							
08:30	63	0			63		20:30	25	0			25							
08:45	49	243	0		49	243	20:45	20	89	0		20	89						
09:00	44	0			44		21:00	13	0			13							
09:15	45	0			45		21:15	22	0			22							
09:30	40	0			40		21:30	15	0			15							
09:45	23	152	0		23	152	21:45	10	60	0		10	60						
10:00	37	0			37		22:00	12	0			12							
10:15	40	0			40		22:15	13	0			13							
10:30	38	0			38		22:30	14	0			14							
10:45	39	154	0		39	154	22:45	11	50	0		11	50						
11:00	45	0			45		23:00	12	0			12							
11:15	38	0			38		23:15	6	0			6							
11:30	38	0			38		23:30	4	0			4							
11:45	42	163	0		42	163	23:45	4	26	0		4	26						
TOTALS	1643				1643		TOTALS	1457				1457							
SPLIT %	100.0%				53.0%		SPLIT %	100.0%				47.0%							

DAILY TOTALS					NB	SB						EB	WB						Total
					3,100	0						0	0						3,100

AM Peak Hour	06:30				06:30		PM Peak Hour	12:45				12:45							
AM Pk Volume	376				376		PM Pk Volume	194				194							
Pk Hr Factor	0.777				0.777		Pk Hr Factor	0.866				0.866							
7 - 9 Volume	616	0	0	0	616		4 - 6 Volume	324	0	0	0	324							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:45				16:45							
7 - 9 Pk Volume	373	0	0	0	373		4 - 6 Pk Volume	194	0	0	0	194							
Pk Hr Factor	0.771	0.000	0.000	0.000	0.771		Pk Hr Factor	0.898	0.000	0.000	0.000	0.898							

VOLUME**I-15 NB Off-Ramp To Indian Truck Trail**

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6124_017

DAILY TOTALS					NB	SB						EB	WB	Total
					3,342	0						0	0	3,342
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	5	0			5	12:00	44	0			44			
00:15	4	0			4	12:15	37	0			37			
00:30	3	0			3	12:30	43	0			43			
00:45	4	16	0		4	12:45	36	160	0		36	160		
01:00	1	0			1	13:00	43	0			43			
01:15	6	0			6	13:15	45	0			45			
01:30	7	0			7	13:30	46	0			46			
01:45	9	23	0		9	13:45	48	182	0		48	182		
02:00	3	0			3	14:00	56	0			56			
02:15	7	0			7	14:15	41	0			41			
02:30	10	0			10	14:30	54	0			54			
02:45	7	27	0		7	14:45	55	206	0		55	206		
03:00	6	0			6	15:00	44	0			44			
03:15	8	0			8	15:15	43	0			43			
03:30	18	0			18	15:30	36	0			36			
03:45	21	53	0		21	15:45	41	164	0		41	164		
04:00	15	0			15	16:00	48	0			48			
04:15	15	0			15	16:15	45	0			45			
04:30	10	0			10	16:30	47	0			47			
04:45	29	69	0		29	16:45	35	175	0		35	175		
05:00	19	0			19	17:00	47	0			47			
05:15	20	0			20	17:15	47	0			47			
05:30	23	0			23	17:30	40	0			40			
05:45	38	100	0		38	17:45	26	160	0		26	160		
06:00	41	0			41	18:00	29	0			29			
06:15	70	0			70	18:15	22	0			22			
06:30	91	0			91	18:30	38	0			38			
06:45	112	314	0		112	18:45	32	121	0		32	121		
07:00	109	0			109	19:00	20	0			20			
07:15	96	0			96	19:15	38	0			38			
07:30	102	0			102	19:30	13	0			13			
07:45	105	412	0		105	19:45	29	100	0		29	100		
08:00	76	0			76	20:00	30	0			30			
08:15	61	0			61	20:15	29	0			29			
08:30	66	0			66	20:30	26	0			26			
08:45	54	257	0		54	20:45	22	107	0		22	107		
09:00	62	0			62	21:00	17	0			17			
09:15	62	0			62	21:15	24	0			24			
09:30	36	0			36	21:30	18	0			18			
09:45	42	202	0		42	21:45	10	69	0		10	69		
10:00	47	0			47	22:00	13	0			13			
10:15	31	0			31	22:15	10	0			10			
10:30	69	0			69	22:30	15	0			15			
10:45	38	185	0		38	22:45	15	53	0		15	53		
11:00	36	0			36	23:00	6	0			6			
11:15	40	0			40	23:15	5	0			5			
11:30	35	0			35	23:30	5	0			5			
11:45	53	164	0		53	23:45	7	23	0		7	23		
TOTALS	1822				1822	TOTALS	1520				1520			
SPLIT %	100.0%				54.5%	SPLIT %	100.0%				45.5%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					3,342	0						0	0	3,342	

AM Peak Hour	06:45				06:45	PM Peak Hour	14:00				14:00				
AM Pk Volume	419				419	PM Pk Volume	206				206				
Pk Hr Factor	0.935				0.935	Pk Hr Factor	0.920				0.920				
7 - 9 Volume	669	0	0	0	669	4 - 6 Volume	335	0	0	0	335				
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:30				16:30				
7 - 9 Pk Volume	412	0	0	0	412	4 - 6 Pk Volume	176	0	0	0	176				
Pk Hr Factor	0.945	0.000	0.000	0.000	0.945	Pk Hr Factor	0.936	0.000	0.000	0.000	0.936				

VOLUME**I-15 NB On-Ramp From Indian Truck Trail**

Day: Tuesday
Date: 9/17/2019

City: Corona
Project #: CA19_6124_018

DAILY TOTALS					NB	SB					EB	WB	Total
					6,637	0					0	0	6,637
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	7	0			7	12:00	100	0			100		
00:15	12	0			12	12:15	106	0			106		
00:30	3	0			3	12:30	80	0			80		
00:45	9	31	0		9	12:45	95	381	0		95	381	
01:00	3	0			3	13:00	76	0			76		
01:15	2	0			2	13:15	96	0			96		
01:30	9	0			9	13:30	73	0			73		
01:45	9	23	0		9	13:45	92	337	0		92	337	
02:00	9	0			9	14:00	91	0			91		
02:15	15	0			15	14:15	95	0			95		
02:30	8	0			8	14:30	138	0			138		
02:45	23	55	0		23	14:45	107	431	0		107	431	
03:00	18	0			18	15:00	91	0			91		
03:15	49	0			49	15:15	81	0			81		
03:30	40	0			40	15:30	97	0			97		
03:45	48	155	0		48	15:45	98	367	0		98	367	
04:00	88	0			88	16:00	86	0			86		
04:15	98	0			98	16:15	91	0			91		
04:30	111	0			111	16:30	82	0			82		
04:45	122	419	0		122	16:45	77	336	0		77	336	
05:00	117	0			117	17:00	121	0			121		
05:15	156	0			156	17:15	108	0			108		
05:30	105	0			105	17:30	87	0			87		
05:45	101	479	0		101	17:45	73	389	0		73	389	
06:00	119	0			119	18:00	81	0			81		
06:15	126	0			126	18:15	73	0			73		
06:30	105	0			105	18:30	75	0			75		
06:45	106	456	0		106	18:45	66	295	0		66	295	
07:00	97	0			97	19:00	53	0			53		
07:15	108	0			108	19:15	54	0			54		
07:30	69	0			69	19:30	37	0			37		
07:45	76	350	0		76	19:45	45	189	0		45	189	
08:00	91	0			91	20:00	38	0			38		
08:15	77	0			77	20:15	33	0			33		
08:30	91	0			91	20:30	33	0			33		
08:45	104	363	0		104	20:45	27	131	0		27	131	
09:00	95	0			95	21:00	29	0			29		
09:15	131	0			131	21:15	18	0			18		
09:30	130	0			130	21:30	25	0			25		
09:45	104	460	0		104	21:45	28	100	0		28	100	
10:00	115	0			115	22:00	16	0			16		
10:15	114	0			114	22:15	18	0			18		
10:30	112	0			112	22:30	8	0			8		
10:45	96	437	0		96	22:45	7	49	0		7	49	
11:00	86	0			86	23:00	8	0			8		
11:15	102	0			102	23:15	12	0			12		
11:30	99	0			99	23:30	7	0			7		
11:45	85	372	0		85	23:45	5	32	0		5	32	
TOTALS	3600				3600	TOTALS	3037				3037		
SPLIT %	100.0%				54.2%	SPLIT %	100.0%				45.8%		

DAILY TOTALS					NB	SB	EB	WB	Total
					6,637	0	0	0	6,637

AM Peak Hour	04:30				04:30	PM Peak Hour	14:00				14:00
AM Pk Volume	506				506	PM Pk Volume	431				431
Pk Hr Factor	0.811				0.811	Pk Hr Factor	0.781				0.781
7 - 9 Volume	713	0	0	0	713	4 - 6 Volume	725	0	0	0	725
7 - 9 Peak Hour	08:00				08:00	4 - 6 Peak Hour	16:45				16:45
7 - 9 Pk Volume	363	0	0	0	363	4 - 6 Pk Volume	393	0	0	0	393
Pk Hr Factor	0.873	0.000	0.000	0.000	0.873	Pk Hr Factor	0.812	0.000	0.000	0.000	0.812

VOLUME**I-15 NB On-Ramp From Indian Truck Trail**

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_018

DAILY TOTALS					NB	SB						EB	WB						Total
					6,810	0						0	0						6,810
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	9	0			9		12:00	85	0			85							
00:15	5	0			5		12:15	108	0			108							
00:30	7	0			7		12:30	93	0			93							
00:45	6	27	0		6	27	12:45	74	360	0		74	360						
01:00	9	0			9		13:00	97	0			97							
01:15	5	0			5		13:15	78	0			78							
01:30	5	0			5		13:30	101	0			101							
01:45	6	25	0		6	25	13:45	99	375	0		99	375						
02:00	9	0			9		14:00	119	0			119							
02:15	12	0			12		14:15	102	0			102							
02:30	8	0			8		14:30	110	0			110							
02:45	11	40	0		11	40	14:45	87	418	0		87	418						
03:00	15	0			15		15:00	103	0			103							
03:15	52	0			52		15:15	80	0			80							
03:30	32	0			32		15:30	95	0			95							
03:45	61	160	0		61	160	15:45	102	380	0		102	380						
04:00	84	0			84		16:00	88	0			88							
04:15	95	0			95		16:15	77	0			77							
04:30	116	0			116		16:30	109	0			109							
04:45	99	394	0		99	394	16:45	92	366	0		92	366						
05:00	137	0			137		17:00	99	0			99							
05:15	146	0			146		17:15	85	0			85							
05:30	130	0			130		17:30	105	0			105							
05:45	116	529	0		116	529	17:45	78	367	0		78	367						
06:00	109	0			109		18:00	87	0			87							
06:15	133	0			133		18:15	78	0			78							
06:30	102	0			102		18:30	78	0			78							
06:45	96	440	0		96	440	18:45	77	320	0		77	320						
07:00	77	0			77		19:00	69	0			69							
07:15	95	0			95		19:15	61	0			61							
07:30	89	0			89		19:30	53	0			53							
07:45	102	363	0		102	363	19:45	45	228	0		45	228						
08:00	138	0			138		20:00	44	0			44							
08:15	108	0			108		20:15	37	0			37							
08:30	111	0			111		20:30	40	0			40							
08:45	113	470	0		113	470	20:45	26	147	0		26	147						
09:00	91	0			91		21:00	26	0			26							
09:15	92	0			92		21:15	20	0			20							
09:30	110	0			110		21:30	27	0			27							
09:45	102	395	0		102	395	21:45	13	86	0		13	86						
10:00	109	0			109		22:00	25	0			25							
10:15	122	0			122		22:15	26	0			26							
10:30	106	0			106		22:30	15	0			15							
10:45	88	425	0		88	425	22:45	9	75	0		9	75						
11:00	103	0			103		23:00	21	0			21							
11:15	101	0			101		23:15	12	0			12							
11:30	95	0			95		23:30	7	0			7							
11:45	72	371	0		72	371	23:45	9	49	0		9	49						
TOTALS	3639				3639		TOTALS	3171				3171							
SPLIT %	100.0%				53.4%		SPLIT %	100.0%				46.6%							

DAILY TOTALS					NB	SB						EB	WB						Total
					6,810	0						0	0						6,810

AM Peak Hour	05:00				05:00		PM Peak Hour	13:45				13:45							
AM Pk Volume	529				529		PM Pk Volume	430				430							
Pk Hr Factor	0.906				0.906		Pk Hr Factor	0.903				0.903							
7 - 9 Volume	833	0	0	0	833		4 - 6 Volume	733	0	0	0	733							
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	470	0	0	0	470		4 - 6 Pk Volume	385	0	0	0	385							
Pk Hr Factor	0.851	0.000	0.000	0.000	0.851		Pk Hr Factor	0.883	0.000	0.000	0.000	0.883							

VOLUME**I-15 NB On-Ramp From Indian Truck Trail**

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6124_018

DAILY TOTALS					NB	SB						EB	WB	Total	
					6,717	0						0	0	6,717	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00	17	0			17		12:00	86	0			86			
00:15	4	0			4		12:15	76	0			76			
00:30	9	0			9		12:30	82	0			82			
00:45	11	41	0		11	41	12:45	88	332	0		88	332		
01:00	4	0			4		13:00	85	0			85			
01:15	7	0			7		13:15	97	0			97			
01:30	2	0			2		13:30	111	0			111			
01:45	2	15	0		2	15	13:45	84	377	0		84	377		
02:00	12	0			12		14:00	97	0			97			
02:15	12	0			12		14:15	97	0			97			
02:30	16	0			16		14:30	121	0			121			
02:45	10	50	0		10	50	14:45	126	441	0		126	441		
03:00	17	0			17		15:00	87	0			87			
03:15	32	0			32		15:15	92	0			92			
03:30	49	0			49		15:30	97	0			97			
03:45	39	137	0		39	137	15:45	113	389	0		113	389		
04:00	81	0			81		16:00	108	0			108			
04:15	89	0			89		16:15	98	0			98			
04:30	121	0			121		16:30	110	0			110			
04:45	108	399	0		108	399	16:45	70	386	0		70	386		
05:00	134	0			134		17:00	110	0			110			
05:15	136	0			136		17:15	80	0			80			
05:30	140	0			140		17:30	102	0			102			
05:45	118	528	0		118	528	17:45	81	373	0		81	373		
06:00	130	0			130		18:00	84	0			84			
06:15	127	0			127		18:15	71	0			71			
06:30	95	0			95		18:30	76	0			76			
06:45	108	460	0		108	460	18:45	74	305	0		74	305		
07:00	88	0			88		19:00	54	0			54			
07:15	75	0			75		19:15	63	0			63			
07:30	71	0			71		19:30	51	0			51			
07:45	100	334	0		100	334	19:45	43	211	0		43	211		
08:00	104	0			104		20:00	34	0			34			
08:15	105	0			105		20:15	41	0			41			
08:30	106	0			106		20:30	35	0			35			
08:45	80	395	0		80	395	20:45	27	137	0		27	137		
09:00	89	0			89		21:00	30	0			30			
09:15	102	0			102		21:15	13	0			13			
09:30	88	0			88		21:30	26	0			26			
09:45	105	384	0		105	384	21:45	18	87	0		18	87		
10:00	96	0			96		22:00	19	0			19			
10:15	129	0			129		22:15	23	0			23			
10:30	102	0			102		22:30	13	0			13			
10:45	112	439	0		112	439	22:45	13	68	0		13	68		
11:00	94	0			94		23:00	15	0			15			
11:15	80	0			80		23:15	17	0			17			
11:30	98	0			98		23:30	15	0			15			
11:45	99	371	0		99	371	23:45	11	58	0		11	58		
TOTALS	3553				3553		TOTALS	3164				3164			
SPLIT %	100.0%				52.9%		SPLIT %	100.0%				47.1%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					6,717	0						0	0	6,717	

AM Peak Hour	05:00				05:00		PM Peak Hour	14:00						14:00	
AM Pk Volume	528				528		PM Pk Volume	441						441	
Pk Hr Factor	0.943				0.943		Pk Hr Factor	0.875						0.875	
7 - 9 Volume	729	0	0	0	729		4 - 6 Volume	759	0	0	0	0	0	759	
7 - 9 Peak Hour	07:45				07:45		4 - 6 Peak Hour	16:15						16:15	
7 - 9 Pk Volume	415	0	0	0	415		4 - 6 Pk Volume	388	0	0	0	0	0	388	
Pk Hr Factor	0.979	0.000	0.000	0.000	0.979		Pk Hr Factor	0.882	0.000	0.000	0.000	0.000	0.000	0.882	

VOLUME

I-15 SB On-Ramp From Indian Truck Trail

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_019

DAILY TOTALS					NB	SB						EB	WB						Total
					0	2,798						0	0						2,798
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	5			5		12:00	0	39			39							
00:15	0	4			4		12:15	0	32			32							
00:30	0	2			2		12:30	0	22			22							
00:45	0	4	15		4	15	12:45	0	21	114		21	114						
01:00	0	4			4		13:00	0	56			56							
01:15	0	3			3		13:15	0	39			39							
01:30	0	3			3		13:30	0	45			45							
01:45	0	3	13		3	13	13:45	0	36	176		36	176						
02:00	0	5			5		14:00	0	36			36							
02:15	0	2			2		14:15	0	58			58							
02:30	0	5			5		14:30	0	72			72							
02:45	0	5	17		5	17	14:45	0	44	210		44	210						
03:00	0	5			5		15:00	0	60			60							
03:15	0	12			12		15:15	0	39			39							
03:30	0	2			2		15:30	0	52			52							
03:45	0	5	24		5	24	15:45	0	47	198		47	198						
04:00	0	7			7		16:00	0	59			59							
04:15	0	14			14		16:15	0	46			46							
04:30	0	12			12		16:30	0	47			47							
04:45	0	22	55		22	55	16:45	0	36	188		36	188						
05:00	0	15			15		17:00	0	45			45							
05:15	0	33			33		17:15	0	38			38							
05:30	0	22			22		17:30	0	53			53							
05:45	0	19	89		19	89	17:45	0	40	176		40	176						
06:00	0	22			22		18:00	0	47			47							
06:15	0	46			46		18:15	0	43			43							
06:30	0	47			47		18:30	0	33			33							
06:45	0	45	160		45	160	18:45	0	30	153		30	153						
07:00	0	51			51		19:00	0	30			30							
07:15	0	35			35		19:15	0	29			29							
07:30	0	56			56		19:30	0	24			24							
07:45	0	47	189		47	189	19:45	0	23	106		23	106						
08:00	0	50			50		20:00	0	17			17							
08:15	0	55			55		20:15	0	21			21							
08:30	0	56			56		20:30	0	21			21							
08:45	0	50	211		50	211	20:45	0	19	78		19	78						
09:00	0	34			34		21:00	0	11			11							
09:15	0	50			50		21:15	0	10			10							
09:30	0	35			35		21:30	0	11			11							
09:45	0	47	166		47	166	21:45	0	6	38		6	38						
10:00	0	43			43		22:00	0	11			11							
10:15	0	49			49		22:15	0	14			14							
10:30	0	51			51		22:30	0	8			8							
10:45	0	42	185		42	185	22:45	0	4	37		4	37						
11:00	0	56			56		23:00	0	5			5							
11:15	0	47			47		23:15	0	8			8							
11:30	0	37			37		23:30	0	7			7							
11:45	0	34	174		34	174	23:45	0	6	26		6	26						
TOTALS	1298				1298		TOTALS	1500				1500							
SPLIT %	100.0%				46.4%		SPLIT %	100.0%				53.6%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	2,798						0	0						2,798

AM Peak Hour	08:00				08:00		PM Peak Hour	14:15				14:15							
AM Pk Volume	211				211		PM Pk Volume	234				234							
Pk Hr Factor	0.942				0.942		Pk Hr Factor	0.813				0.813							
7 - 9 Volume	0	400	0	0	400		4 - 6 Volume	0	364	0	0	364							
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	16:00				16:00							
7 - 9 Pk Volume	0	211	0	0	211		4 - 6 Pk Volume	0	188	0	0	188							
Pk Hr Factor	0.000	0.942	0.000	0.000	0.942		Pk Hr Factor	0.000	0.797	0.000	0.000	0.797							

VOLUME**I-15 SB On-Ramp From Indian Truck Trail**

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_019

DAILY TOTALS					NB	SB						EB	WB						Total
					0	2,775						0	0						2,775
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	5			5		12:00	0	38			38							
00:15	0	6			6		12:15	0	31			31							
00:30	0	3			3		12:30	0	37			37							
00:45	0	3	17		3	17	12:45	0	36	142		36	142						
01:00	0	2			2		13:00	0	47			47							
01:15	0	4			4		13:15	0	43			43							
01:30	0	6			6		13:30	0	49			49							
01:45	0	1	13		1	13	13:45	0	57	196		57	196						
02:00	0	2			2		14:00	0	53			53							
02:15	0	5			5		14:15	0	41			41							
02:30	0	9			9		14:30	0	50			50							
02:45	0	3	19		3	19	14:45	0	42	186		42	186						
03:00	0	11			11		15:00	0	50			50							
03:15	0	4			4		15:15	0	47			47							
03:30	0	4			4		15:30	0	43			43							
03:45	0	6	25		6	25	15:45	0	47	187		47	187						
04:00	0	18			18		16:00	0	49			49							
04:15	0	17			17		16:15	0	50			50							
04:30	0	14			14		16:30	0	47			47							
04:45	0	19	68		19	68	16:45	0	34	180		34	180						
05:00	0	16			16		17:00	0	30			30							
05:15	0	21			21		17:15	0	44			44							
05:30	0	31			31		17:30	0	48			48							
05:45	0	26	94		26	94	17:45	0	34	156		34	156						
06:00	0	31			31		18:00	0	41			41							
06:15	0	24			24		18:15	0	33			33							
06:30	0	61			61		18:30	0	32			32							
06:45	0	34	150		34	150	18:45	0	33	139		33	139						
07:00	0	57			57		19:00	0	26			26							
07:15	0	47			47		19:15	0	23			23							
07:30	0	36			36		19:30	0	18			18							
07:45	0	66	206		66	206	19:45	0	22	89		22	89						
08:00	0	71			71		20:00	0	21			21							
08:15	0	65			65		20:15	0	23			23							
08:30	0	33			33		20:30	0	11			11							
08:45	0	55	224		55	224	20:45	0	15	70		15	70						
09:00	0	55			55		21:00	0	15			15							
09:15	0	33			33		21:15	0	13			13							
09:30	0	53			53		21:30	0	10			10							
09:45	0	28	169		28	169	21:45	0	19	57		19	57						
10:00	0	41			41		22:00	0	13			13							
10:15	0	25			25		22:15	0	10			10							
10:30	0	42			42		22:30	0	7			7							
10:45	0	43	151		43	151	22:45	0	6	36		6	36						
11:00	0	31			31		23:00	0	11			11							
11:15	0	61			61		23:15	0	10			10							
11:30	0	46			46		23:30	0	3			3							
11:45	0	33	171		33	171	23:45	0	6	30		6	30						
TOTALS	1307				1307		TOTALS	1468				1468							
SPLIT %	100.0%				47.1%		SPLIT %	100.0%				52.9%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	2,775						0	0						2,775

AM Peak Hour	07:30				07:30		PM Peak Hour	13:15				13:15							
AM Pk Volume	238				238		PM Pk Volume	202				202							
Pk Hr Factor	0.838				0.838		Pk Hr Factor	0.886				0.886							
7 - 9 Volume	0	430	0	0	430		4 - 6 Volume	0	336	0	0	336							
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	16:00				16:00							
7 - 9 Pk Volume	238		0	0	238		4 - 6 Pk Volume	180		0	0	180							
Pk Hr Factor	0.000	0.838	0.000	0.000	0.838		Pk Hr Factor	0.000	0.900	0.000	0.000	0.900							

VOLUME

I-15 SB On-Ramp From Indian Truck Trail

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_019

DAILY TOTALS					NB	SB						Total
					0	2,957	0	0	2,957			
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	8			8	12:00	0	58			58	
00:15	0	1			1	12:15	0	39			39	
00:30	0	7			7	12:30	0	50			50	
00:45	0	1	17		1	12:45	0	40	187		40	
01:00	0	3			3	13:00	0	35			35	
01:15	0	3			3	13:15	0	31			31	
01:30	0	2			2	13:30	0	51			51	
01:45	0	6	14		6	13:45	0	49	166		49	
02:00	0	2			2	14:00	0	55			55	
02:15	0	8			8	14:15	0	40			40	
02:30	0	3			3	14:30	0	70			70	
02:45	0	6	19		6	14:45	0	48	213		48	
03:00	0	13			13	15:00	0	52			52	
03:15	0	7			7	15:15	0	40			40	
03:30	0	8			8	15:30	0	54			54	
03:45	0	14	42		14	15:45	0	39	185		39	
04:00	0	19			19	16:00	0	48			48	
04:15	0	11			11	16:15	0	51			51	
04:30	0	15			15	16:30	0	54			54	
04:45	0	11	56		11	16:45	0	49	202		49	
05:00	0	21			21	17:00	0	54			54	
05:15	0	25			25	17:15	0	60			60	
05:30	0	26			26	17:30	0	46			46	
05:45	0	34	106		34	17:45	0	49	209		49	
06:00	0	32			32	18:00	0	34			34	
06:15	0	34			34	18:15	0	45			45	
06:30	0	52			52	18:30	0	30			30	
06:45	0	35	153		35	18:45	0	28	137		28	
07:00	0	50			50	19:00	0	25			25	
07:15	0	41			41	19:15	0	31			31	
07:30	0	46			46	19:30	0	29			29	
07:45	0	40	177		40	19:45	0	16	101		16	
08:00	0	67			67	20:00	0	19			19	
08:15	0	70			70	20:15	0	22			22	
08:30	0	56			56	20:30	0	19			19	
08:45	0	41	234		41	20:45	0	17	77		17	
09:00	0	43			43	21:00	0	17			17	
09:15	0	38			38	21:15	0	15			15	
09:30	0	31			31	21:30	0	13			13	
09:45	0	43	155		43	21:45	0	13	58		13	
10:00	0	37			37	22:00	0	16			16	
10:15	0	52			52	22:15	0	7			7	
10:30	0	51			51	22:30	0	5			5	
10:45	0	56	196		56	22:45	0	5	33		5	
11:00	0	60			60	23:00	0	11			11	
11:15	0	40			40	23:15	0	8			8	
11:30	0	53			53	23:30	0	3			3	
11:45	0	42	195		42	23:45	0	3	25		3	
TOTALS	1364				1364	TOTALS	1593				1593	
SPLIT %	100.0%				46.1%	SPLIT %	100.0%				53.9%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	2,957	0	0	2,957

AM Peak Hour	08:00	08:00	PM Peak Hour	16:30	16:30	
AM Pk Volume	234	234	PM Pk Volume	217	217	
Pk Hr Factor	0.836	0.836	Pk Hr Factor	0.904	0.904	
7 - 9 Volume	0	411	0	411	0	411
7 - 9 Peak Hour	08:00	08:00	4 - 6 Peak Hour	16:30	16:30	
7 - 9 Pk Volume	0	234	0	217	0	217
Pk Hr Factor	0.000	0.836	0.000	0.904	0.000	0.904

VOLUME**I-15 SB Off-Ramp To Indian Truck Trail**

Day: Tuesday
Date: 9/17/2019

City: Corona
Project #: CA19_6124_020

DAILY TOTALS					NB	SB						Total
					0	7,433	0	0	7,433			
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	19			19	12:00	0	89			89	
00:15	0	13			13	12:15	0	93			93	
00:30	0	15			15	12:30	0	122			122	
00:45	0	12	59		12 59	12:45	0	102	406		102 406	
01:00	0	7			7	13:00	0	108			108	
01:15	0	10			10	13:15	0	131			131	
01:30	0	7			7	13:30	0	141			141	
01:45	0	14	38		14 38	13:45	0	116	496		116 496	
02:00	0	15			15	14:00	0	114			114	
02:15	0	10			10	14:15	0	120			120	
02:30	0	10			10	14:30	0	104			104	
02:45	0	8	43		8 43	14:45	0	110	448		110 448	
03:00	0	8			8	15:00	0	146			146	
03:15	0	7			7	15:15	0	133			133	
03:30	0	10			10	15:30	0	161			161	
03:45	0	10	35		10 35	15:45	0	137	577		137 577	
04:00	0	13			13	16:00	0	129			129	
04:15	0	15			15	16:15	0	151			151	
04:30	0	18			18	16:30	0	146			146	
04:45	0	17	63		17 63	16:45	0	153	579		153 579	
05:00	0	24			24	17:00	0	142			142	
05:15	0	26			26	17:15	0	122			122	
05:30	0	31			31	17:30	0	166			166	
05:45	0	42	123		42 123	17:45	0	184	614		184 614	
06:00	0	31			31	18:00	0	181			181	
06:15	0	48			48	18:15	0	154			154	
06:30	0	50			50	18:30	0	160			160	
06:45	0	51	180		51 180	18:45	0	149	644		149 644	
07:00	0	60			60	19:00	0	136			136	
07:15	0	68			68	19:15	0	130			130	
07:30	0	73			73	19:30	0	118			118	
07:45	0	79	280		79 280	19:45	0	133	517		133 517	
08:00	0	80			80	20:00	0	126			126	
08:15	0	60			60	20:15	0	119			119	
08:30	0	63			63	20:30	0	102			102	
08:45	0	75	278		75 278	20:45	0	103	450		103 450	
09:00	0	75			75	21:00	0	109			109	
09:15	0	77			77	21:15	0	95			95	
09:30	0	72			72	21:30	0	77			77	
09:45	0	68	292		68 292	21:45	0	76	357		76 357	
10:00	0	59			59	22:00	0	64			64	
10:15	0	77			77	22:15	0	54			54	
10:30	0	75			75	22:30	0	41			41	
10:45	0	100	311		100 311	22:45	0	36	195		36 195	
11:00	0	78			78	23:00	0	36			36	
11:15	0	90			90	23:15	0	22			22	
11:30	0	86			86	23:30	0	28			28	
11:45	0	78	332		78 332	23:45	0	30	116		30 116	
TOTALS	2034				2034	TOTALS	5399				5399	
SPLIT %	100.0%				27.4%	SPLIT %	100.0%				72.6%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	7,433	0	0	7,433

AM Peak Hour	11:45				11:45	PM Peak Hour	17:30				17:30
AM Pk Volume	382				382	PM Pk Volume	685				685
Pk Hr Factor	0.783				0.783	Pk Hr Factor	0.931				0.931
7 - 9 Volume	0	558	0	0	558	4 - 6 Volume	0	1193	0	0	1193
7 - 9 Peak Hour	07:15				07:15	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	0	300	0	0	300	4 - 6 Pk Volume	0	614	0	0	614
Pk Hr Factor	0.000	0.938	0.000	0.000	0.938	Pk Hr Factor	0.000	0.834	0.000	0.000	0.834

VOLUME**I-15 SB Off-Ramp To Indian Truck Trail**

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_020

DAILY TOTALS					NB	SB						EB	WB	Total
					0	7,601						0	0	7,601
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	22			22		12:00	0	95			95		
00:15	0	22			22		12:15	0	91			91		
00:30	0	19			19		12:30	0	127			127		
00:45	0	17	80		17	80	12:45	0	122	435		122	435	
01:00	0	12			12		13:00	0	113			113		
01:15	0	11			11		13:15	0	128			128		
01:30	0	16			16		13:30	0	122			122		
01:45	0	11	50		11	50	13:45	0	98	461		98	461	
02:00	0	8			8		14:00	0	134			134		
02:15	0	6			6		14:15	0	131			131		
02:30	0	5			5		14:30	0	125			125		
02:45	0	5	24		5	24	14:45	0	119	509		119	509	
03:00	0	11			11		15:00	0	127			127		
03:15	0	7			7		15:15	0	143			143		
03:30	0	7			7		15:30	0	143			143		
03:45	0	13	38		13	38	15:45	0	158	571		158	571	
04:00	0	7			7		16:00	0	127			127		
04:15	0	14			14		16:15	0	115			115		
04:30	0	13			13		16:30	0	144			144		
04:45	0	17	51		17	51	16:45	0	136	522		136	522	
05:00	0	18			18		17:00	0	164			164		
05:15	0	18			18		17:15	0	163			163		
05:30	0	28			28		17:30	0	143			143		
05:45	0	34	98		34	98	17:45	0	172	642		172	642	
06:00	0	39			39		18:00	0	157			157		
06:15	0	36			36		18:15	0	162			162		
06:30	0	59			59		18:30	0	123			123		
06:45	0	67	201		67	201	18:45	0	177	619		177	619	
07:00	0	66			66		19:00	0	140			140		
07:15	0	62			62		19:15	0	140			140		
07:30	0	69			69		19:30	0	132			132		
07:45	0	77	274		77	274	19:45	0	139	551		139	551	
08:00	0	63			63		20:00	0	122			122		
08:15	0	70			70		20:15	0	141			141		
08:30	0	87			87		20:30	0	116			116		
08:45	0	86	306		86	306	20:45	0	141	520		141	520	
09:00	0	53			53		21:00	0	90			90		
09:15	0	85			85		21:15	0	76			76		
09:30	0	81			81		21:30	0	76			76		
09:45	0	82	301		82	301	21:45	0	89	331		89	331	
10:00	0	50			50		22:00	0	80			80		
10:15	0	71			71		22:15	0	53			53		
10:30	0	65			65		22:30	0	47			47		
10:45	0	63	249		63	249	22:45	0	65	245		65	245	
11:00	0	95			95		23:00	0	42			42		
11:15	0	95			95		23:15	0	39			39		
11:30	0	90			90		23:30	0	35			35		
11:45	0	103	383		103	383	23:45	0	24	140		24	140	
TOTALS	2055				2055		TOTALS	5546				5546		
SPLIT %	100.0%				27.0%		SPLIT %	100.0%				73.0%		

DAILY TOTALS					NB	SB						EB	WB	Total
					0	7,601						0	0	7,601

AM Peak Hour	11:45				11:45		PM Peak Hour	17:00						17:00
AM Pk Volume	416				416		PM Pk Volume	642						642
Pk Hr Factor	0.819				0.819		Pk Hr Factor	0.933						0.933
7 - 9 Volume	0	580	0	0	580		4 - 6 Volume	0	1164	0	0	1164		1164
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	17:00						17:00
7 - 9 Pk Volume	0	306	0	0	306		4 - 6 Pk Volume	642	0	0	0	642		642
Pk Hr Factor	0.000	0.879	0.000	0.000	0.879		Pk Hr Factor	0.000	0.933	0.000	0.000	0.933		0.933

VOLUME**I-15 SB Off-Ramp To Indian Truck Trail**

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6124_020

DAILY TOTALS					NB	SB	EB					WB	Total
					0	7,444						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	23			23	12:00	0	96			96		
00:15	0	28			28	12:15	0	89			89		
00:30	0	24			24	12:30	0	83			83		
00:45	0	14	89		14 89	12:45	0	124	392		124 392		
01:00	0	15			15	13:00	0	107			107		
01:15	0	8			8	13:15	0	127			127		
01:30	0	7			7	13:30	0	124			124		
01:45	0	14	44		14 44	13:45	0	85	443		85 443		
02:00	0	8			8	14:00	0	128			128		
02:15	0	7			7	14:15	0	108			108		
02:30	0	11			11	14:30	0	111			111		
02:45	0	14	40		14 40	14:45	0	134	481		134 481		
03:00	0	7			7	15:00	0	133			133		
03:15	0	10			10	15:15	0	142			142		
03:30	0	16			16	15:30	0	135			135		
03:45	0	10	43		10 43	15:45	0	139	549		139 549		
04:00	0	8			8	16:00	0	131			131		
04:15	0	13			13	16:15	0	140			140		
04:30	0	16			16	16:30	0	138			138		
04:45	0	17	54		17 54	16:45	0	140	549		140 549		
05:00	0	18			18	17:00	0	134			134		
05:15	0	15			15	17:15	0	150			150		
05:30	0	31			31	17:30	0	118			118		
05:45	0	33	97		33 97	17:45	0	146	548		146 548		
06:00	0	45			45	18:00	0	161			161		
06:15	0	47			47	18:15	0	160			160		
06:30	0	54			54	18:30	0	136			136		
06:45	0	72	218		72 218	18:45	0	139	596		139 596		
07:00	0	49			49	19:00	0	133			133		
07:15	0	80			80	19:15	0	143			143		
07:30	0	74			74	19:30	0	149			149		
07:45	0	87	290		87 290	19:45	0	152	577		152 577		
08:00	0	65			65	20:00	0	130			130		
08:15	0	73			73	20:15	0	123			123		
08:30	0	54			54	20:30	0	145			145		
08:45	0	53	245		53 245	20:45	0	122	520		122 520		
09:00	0	69			69	21:00	0	118			118		
09:15	0	64			64	21:15	0	90			90		
09:30	0	59			59	21:30	0	93			93		
09:45	0	68	260		68 260	21:45	0	91	392		91 392		
10:00	0	63			63	22:00	0	70			70		
10:15	0	74			74	22:15	0	62			62		
10:30	0	60			60	22:30	0	65			65		
10:45	0	71	268		71 268	22:45	0	48	245		48 245		
11:00	0	100			100	23:00	0	46			46		
11:15	0	80			80	23:15	0	41			41		
11:30	0	83			83	23:30	0	33			33		
11:45	0	98	361		98 361	23:45	0	23	143		23 143		
TOTALS	2009				2009	TOTALS	5435				5435		
SPLIT %	100.0%				27.0%	SPLIT %	100.0%				73.0%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	7,444	0	0	7,444

AM Peak Hour	11:30	11:30	PM Peak Hour	17:45	17:45
AM Pk Volume	366	366	PM Pk Volume	603	603
Pk Hr Factor	0.934	0.934	Pk Hr Factor	0.936	0.936
7 - 9 Volume	0	535	0	0	535
7 - 9 Peak Hour	07:15	07:15	4 - 6 Volume	0	1097
7 - 9 Pk Volume	0	306	0	0	1097
Pk Hr Factor	0.000	0.879	0.000	0.000	0.879
			4 - 6 Peak Hour	16:30	16:30
			4 - 6 Pk Volume	0	562
			Pk Hr Factor	0.000	0.937
				0.000	0.000
					0.937

VOLUME**I-15 NB Off-Ramp To Temescal Canyon Rd**

Day: Tuesday
Date: 9/17/2019

City: Corona
Project #: CA19_6124_021

DAILY TOTALS					NB	SB						EB	WB	Total
					4,765	0						0	0	4,765
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	10	0			10	12:00	70	0			70			
00:15	6	0			6	12:15	46	0			46			
00:30	8	0			8	12:30	44	0			44			
00:45	7	31	0		7	12:45	60	220	0		60	220		
01:00	5	0			5	13:00	51	0			51			
01:15	7	0			7	13:15	55	0			55			
01:30	5	0			5	13:30	43	0			43			
01:45	4	21	0		4	13:45	51	200	0		51	200		
02:00	4	0			4	14:00	51	0			51			
02:15	6	0			6	14:15	38	0			38			
02:30	11	0			11	14:30	46	0			46			
02:45	17	38	0		17	14:45	65	200	0		65	200		
03:00	6	0			6	15:00	56	0			56			
03:15	9	0			9	15:15	39	0			39			
03:30	19	0			19	15:30	41	0			41			
03:45	18	52	0		18	15:45	58	194	0		58	194		
04:00	23	0			23	16:00	36	0			36			
04:15	32	0			32	16:15	34	0			34			
04:30	28	0			28	16:30	46	0			46			
04:45	47	130	0		47	16:45	44	160	0		44	160		
05:00	37	0			37	17:00	33	0			33			
05:15	94	0			94	17:15	24	0			24			
05:30	127	0			127	17:30	37	0			37			
05:45	141	399	0		141	17:45	47	141	0		47	141		
06:00	140	0			140	18:00	28	0			28			
06:15	171	0			171	18:15	27	0			27			
06:30	129	0			129	18:30	21	0			21			
06:45	109	549	0		109	18:45	22	98	0		22	98		
07:00	96	0			96	19:00	17	0			17			
07:15	96	0			96	19:15	15	0			15			
07:30	155	0			155	19:30	12	0			12			
07:45	210	557	0		210	19:45	14	58	0		14	58		
08:00	198	0			198	20:00	18	0			18			
08:15	175	0			175	20:15	19	0			19			
08:30	172	0			172	20:30	16	0			16			
08:45	149	694	0		149	20:45	11	64	0		11	64		
09:00	151	0			151	21:00	8	0			8			
09:15	102	0			102	21:15	9	0			9			
09:30	83	0			83	21:30	11	0			11			
09:45	75	411	0		75	21:45	7	35	0		7	35		
10:00	57	0			57	22:00	9	0			9			
10:15	46	0			46	22:15	13	0			13			
10:30	63	0			63	22:30	22	0			22			
10:45	63	229	0		63	22:45	10	54	0		10	54		
11:00	50	0			50	23:00	16	0			16			
11:15	50	0			50	23:15	6	0			6			
11:30	52	0			52	23:30	6	0			6			
11:45	43	195	0		43	23:45	7	35	0		7	35		
TOTALS	3306				3306	TOTALS	1459				1459			
SPLIT %	100.0%				69.4%	SPLIT %	100.0%				30.6%			

DAILY TOTALS					NB	SB						EB	WB						Total
					4,765	0						0	0						4,765

AM Peak Hour	07:45				07:45	PM Peak Hour	12:00				12:00
AM Pk Volume	755				755	PM Pk Volume	220				220
Pk Hr Factor	0.899				0.899	Pk Hr Factor	0.786				0.786
7 - 9 Volume	1251	0	0	0	1251	4 - 6 Volume	301	0	0	0	301
7 - 9 Peak Hour	07:45				07:45	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	755	0	0	0	755	4 - 6 Pk Volume	160	0	0	0	160
Pk Hr Factor	0.899	0.000	0.000	0.000	0.899	Pk Hr Factor	0.870	0.000	0.000	0.000	0.870

VOLUME**I-15 NB Off-Ramp To Temescal Canyon Rd**

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_021

DAILY TOTALS					NB	SB						EB	WB						Total
					5,088	0						0	0						5,088
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	5	0			5		12:00	57	0			57							
00:15	1	0			1		12:15	56	0			56							
00:30	2	0			2		12:30	49	0			49							
00:45	5	13	0		5	13	12:45	55	217	0		55	217						
01:00	1	0			1		13:00	58	0			58							
01:15	6	0			6		13:15	47	0			47							
01:30	6	0			6		13:30	58	0			58							
01:45	5	18	0		5	18	13:45	48	211	0		48	211						
02:00	5	0			5		14:00	47	0			47							
02:15	12	0			12		14:15	69	0			69							
02:30	7	0			7		14:30	54	0			54							
02:45	10	34	0		10	34	14:45	45	215	0		45	215						
03:00	12	0			12		15:00	46	0			46							
03:15	19	0			19		15:15	38	0			38							
03:30	13	0			13		15:30	42	0			42							
03:45	14	58	0		14	58	15:45	50	176	0		50	176						
04:00	12	0			12		16:00	36	0			36							
04:15	20	0			20		16:15	60	0			60							
04:30	35	0			35		16:30	50	0			50							
04:45	44	111	0		44	111	16:45	33	179	0		33	179						
05:00	42	0			42		17:00	31	0			31							
05:15	73	0			73		17:15	36	0			36							
05:30	136	0			136		17:30	38	0			38							
05:45	148	399	0		148	399	17:45	40	145	0		40	145						
06:00	169	0			169		18:00	27	0			27							
06:15	192	0			192		18:15	31	0			31							
06:30	138	0			138		18:30	20	0			20							
06:45	140	639	0		140	639	18:45	17	95	0		17	95						
07:00	124	0			124		19:00	15	0			15							
07:15	221	0			221		19:15	19	0			19							
07:30	196	0			196		19:30	23	0			23							
07:45	210	751	0		210	751	19:45	16	73	0		16	73						
08:00	156	0			156		20:00	13	0			13							
08:15	155	0			155		20:15	14	0			14							
08:30	162	0			162		20:30	13	0			13							
08:45	144	617	0		144	617	20:45	11	51	0		11	51						
09:00	156	0			156		21:00	9	0			9							
09:15	151	0			151		21:15	23	0			23							
09:30	126	0			126		21:30	8	0			8							
09:45	97	530	0		97	530	21:45	5	45	0		5	45						
10:00	68	0			68		22:00	6	0			6							
10:15	49	0			49		22:15	16	0			16							
10:30	51	0			51		22:30	12	0			12							
10:45	56	224	0		56	224	22:45	15	49	0		15	49						
11:00	66	0			66		23:00	13	0			13							
11:15	50	0			50		23:15	7	0			7							
11:30	44	0			44		23:30	6	0			6							
11:45	47	207	0		47	207	23:45	5	31	0		5	31						
TOTALS	3601				3601		TOTALS	1487				1487							
SPLIT %	100.0%				70.8%		SPLIT %	100.0%				29.2%							

DAILY TOTALS					NB	SB						EB	WB						Total
					5,088	0						0	0						5,088

AM Peak Hour	07:15				07:15		PM Peak Hour	13:30				13:30							
AM Pk Volume	783				783		PM Pk Volume	222				222							
Pk Hr Factor	0.886				0.886		Pk Hr Factor	0.804				0.804							
7 - 9 Volume	1368	0	0	0	1368		4 - 6 Volume	324	0	0	0	324							
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	16:00				16:00							
7 - 9 Pk Volume	783	0	0	0	783		4 - 6 Pk Volume	179	0	0	0	179							
Pk Hr Factor	0.886	0.000	0.000	0.000	0.886		Pk Hr Factor	0.746	0.000	0.000	0.000	0.746							

VOLUME**I-15 NB Off-Ramp To Temescal Canyon Rd**

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6124_021

DAILY TOTALS					NB	SB						EB	WB						Total
					5,374	0						0	0						5,374
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	4	0			4		12:00	48	0			48							
00:15	2	0			2		12:15	45	0			45							
00:30	3	0			3		12:30	41	0			41							
00:45	4	13	0		4	13	12:45	55	189	0		55	189						
01:00	3	0			3		13:00	43	0			43							
01:15	7	0			7		13:15	47	0			47							
01:30	6	0			6		13:30	28	0			28							
01:45	6	22	0		6	22	13:45	61	179	0		61	179						
02:00	6	0			6		14:00	63	0			63							
02:15	14	0			14		14:15	46	0			46							
02:30	10	0			10		14:30	64	0			64							
02:45	9	39	0		9	39	14:45	48	221	0		48	221						
03:00	4	0			4		15:00	65	0			65							
03:15	12	0			12		15:15	56	0			56							
03:30	13	0			13		15:30	52	0			52							
03:45	8	37	0		8	37	15:45	50	223	0		50	223						
04:00	24	0			24		16:00	55	0			55							
04:15	29	0			29		16:15	39	0			39							
04:30	29	0			29		16:30	31	0			31							
04:45	29	111	0		29	111	16:45	38	163	0		38	163						
05:00	33	0			33		17:00	34	0			34							
05:15	55	0			55		17:15	44	0			44							
05:30	149	0			149		17:30	29	0			29							
05:45	130	367	0		130	367	17:45	47	154	0		47	154						
06:00	161	0			161		18:00	26	0			26							
06:15	166	0			166		18:15	41	0			41							
06:30	132	0			132		18:30	21	0			21							
06:45	120	579	0		120	579	18:45	19	107	0		19	107						
07:00	104	0			104		19:00	20	0			20							
07:15	151	0			151		19:15	26	0			26							
07:30	199	0			199		19:30	16	0			16							
07:45	188	642	0		188	642	19:45	19	81	0		19	81						
08:00	222	0			222		20:00	8	0			8							
08:15	188	0			188		20:15	15	0			15							
08:30	199	0			199		20:30	13	0			13							
08:45	202	811	0		202	811	20:45	9	45	0		9	45						
09:00	187	0			187		21:00	7	0			7							
09:15	148	0			148		21:15	12	0			12							
09:30	168	0			168		21:30	7	0			7							
09:45	121	624	0		121	624	21:45	9	35	0		9	35						
10:00	75	0			75		22:00	13	0			13							
10:15	74	0			74		22:15	14	0			14							
10:30	79	0			79		22:30	6	0			6							
10:45	68	296	0		68	296	22:45	9	42	0		9	42						
11:00	84	0			84		23:00	6	0			6							
11:15	117	0			117		23:15	8	0			8							
11:30	84	0			84		23:30	9	0			9							
11:45	70	355	0		70	355	23:45	16	39	0		16	39						
TOTALS	3896				3896		TOTALS	1478				1478							
SPLIT %	100.0%				72.5%		SPLIT %	100.0%				27.5%							

DAILY TOTALS					NB	SB						EB	WB						Total
					5,374	0						0	0						5,374

AM Peak Hour	08:00				08:00		PM Peak Hour	13:45				13:45							
AM Pk Volume	811				811		PM Pk Volume	234				234							
Pk Hr Factor	0.913				0.913		Pk Hr Factor	0.914				0.914							
7 - 9 Volume	1453	0	0	0	1453		4 - 6 Volume	317	0	0	0	317							
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	16:00				16:00							
7 - 9 Pk Volume	811	0	0	0	811		4 - 6 Pk Volume	163	0	0	0	163							
Pk Hr Factor	0.913	0.000	0.000	0.000	0.913		Pk Hr Factor	0.741	0.000	0.000	0.000	0.741							

VOLUME**I-15 NB On-Ramp From Temescal Canyon Rd**

Day: Tuesday
Date: 9/17/2019

City: Corona
Project #: CA19_6124_022

DAILY TOTALS					NB	SB						EB	WB	Total	
					7,727	0						0	0	7,727	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB		TOTAL		
00:00	18	0			18		12:00	109	0				109		
00:15	15	0			15		12:15	124	0				124		
00:30	7	0			7		12:30	124	0				124		
00:45	6	46	0		6	46	12:45	130	487	0			130	487	
01:00	26	0			26		13:00	158	0				158		
01:15	12	0			12		13:15	108	0				108		
01:30	14	0			14		13:30	160	0				160		
01:45	14	66	0		14	66	13:45	132	558	0			132	558	
02:00	23	0			23		14:00	147	0				147		
02:15	10	0			10		14:15	160	0				160		
02:30	12	0			12		14:30	146	0				146		
02:45	36	81	0		36	81	14:45	122	575	0			122	575	
03:00	29	0			29		15:00	104	0				104		
03:15	42	0			42		15:15	85	0				85		
03:30	53	0			53		15:30	129	0				129		
03:45	73	197	0		73	197	15:45	127	445	0			127	445	
04:00	76	0			76		16:00	98	0				98		
04:15	126	0			126		16:15	121	0				121		
04:30	114	0			114		16:30	113	0				113		
04:45	99	415	0		99	415	16:45	109	441	0			109	441	
05:00	99	0			99		17:00	107	0				107		
05:15	114	0			114		17:15	97	0				97		
05:30	88	0			88		17:30	91	0				91		
05:45	97	398	0		97	398	17:45	70	365	0			70	365	
06:00	133	0			133		18:00	88	0				88		
06:15	83	0			83		18:15	112	0				112		
06:30	99	0			99		18:30	83	0				83		
06:45	49	364	0		49	364	18:45	44	327	0			44	327	
07:00	43	0			43		19:00	79	0				79		
07:15	51	0			51		19:15	58	0				58		
07:30	100	0			100		19:30	56	0				56		
07:45	101	295	0		101	295	19:45	38	231	0			38	231	
08:00	112	0			112		20:00	44	0				44		
08:15	106	0			106		20:15	33	0				33		
08:30	116	0			116		20:30	56	0				56		
08:45	97	431	0		97	431	20:45	23	156	0			23	156	
09:00	113	0			113		21:00	33	0				33		
09:15	93	0			93		21:15	37	0				37		
09:30	95	0			95		21:30	16	0				16		
09:45	135	436	0		135	436	21:45	23	109	0			23	109	
10:00	142	0			142		22:00	23	0				23		
10:15	133	0			133		22:15	34	0				34		
10:30	146	0			146		22:30	30	0				30		
10:45	152	573	0		152	573	22:45	19	106	0			19	106	
11:00	151	0			151		23:00	31	0				31		
11:15	115	0			115		23:15	19	0				19		
11:30	167	0			167		23:30	14	0				14		
11:45	115	548	0		115	548	23:45	13	77	0			13	77	
TOTALS	3850				3850		TOTALS	3877					3877		
SPLIT %	100.0%				49.8%		SPLIT %	100.0%					50.2%		

DAILY TOTALS					NB	SB						EB	WB	Total	
					7,727	0						0	0	7,727	

AM Peak Hour	10:45				10:45		PM Peak Hour	13:30					13:30		
AM Pk Volume	585				585		PM Pk Volume	599					599		
Pk Hr Factor	0.876				0.876		Pk Hr Factor	0.936					0.936		
7 - 9 Volume	726	0	0	0	726		4 - 6 Volume	806	0	0	0		806		
7 - 9 Peak Hour	07:45				07:45		4 - 6 Peak Hour	16:15					16:15		
7 - 9 Pk Volume	435	0	0	0	435		4 - 6 Pk Volume	450	0	0	0		450		
Pk Hr Factor	0.938	0.000	0.000	0.000	0.938		Pk Hr Factor	0.930	0.000	0.000	0.000		0.930		

VOLUME

I-15 NB On-Ramp From Temescal Canyon Rd

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_022

DAILY TOTALS					NB	SB						EB	WB						Total
					7,899	0						0	0						7,899
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	15	0			15		12:00	120	0			120							
00:15	26	0			26		12:15	150	0			150							
00:30	12	0			12		12:30	132	0			132							
00:45	21	74	0		21	74	12:45	105	507	0		105	507						
01:00	7	0			7		13:00	138	0			138							
01:15	14	0			14		13:15	122	0			122							
01:30	7	0			7		13:30	151	0			151							
01:45	7	35	0		7	35	13:45	125	536	0		125	536						
02:00	16	0			16		14:00	144	0			144							
02:15	22	0			22		14:15	131	0			131							
02:30	17	0			17		14:30	139	0			139							
02:45	20	75	0		20	75	14:45	107	521	0		107	521						
03:00	38	0			38		15:00	109	0			109							
03:15	52	0			52		15:15	88	0			88							
03:30	55	0			55		15:30	137	0			137							
03:45	60	205	0		60	205	15:45	122	456	0		122	456						
04:00	84	0			84		16:00	99	0			99							
04:15	116	0			116		16:15	91	0			91							
04:30	111	0			111		16:30	133	0			133							
04:45	107	418	0		107	418	16:45	88	411	0		88	411						
05:00	119	0			119		17:00	126	0			126							
05:15	104	0			104		17:15	124	0			124							
05:30	100	0			100		17:30	93	0			93							
05:45	77	400	0		77	400	17:45	92	435	0		92	435						
06:00	90	0			90		18:00	82	0			82							
06:15	109	0			109		18:15	97	0			97							
06:30	100	0			100		18:30	91	0			91							
06:45	135	434	0		135	434	18:45	71	341	0		71	341						
07:00	122	0			122		19:00	70	0			70							
07:15	130	0			130		19:15	67	0			67							
07:30	129	0			129		19:30	57	0			57							
07:45	103	484	0		103	484	19:45	38	232	0		38	232						
08:00	125	0			125		20:00	43	0			43							
08:15	133	0			133		20:15	45	0			45							
08:30	89	0			89		20:30	37	0			37							
08:45	92	439	0		92	439	20:45	31	156	0		31	156						
09:00	100	0			100		21:00	31	0			31							
09:15	97	0			97		21:15	24	0			24							
09:30	116	0			116		21:30	21	0			21							
09:45	147	460	0		147	460	21:45	36	112	0		36	112						
10:00	121	0			121		22:00	23	0			23							
10:15	140	0			140		22:15	32	0			32							
10:30	150	0			150		22:30	24	0			24							
10:45	84	495	0		84	495	22:45	30	109	0		30	109						
11:00	111	0			111		23:00	30	0			30							
11:15	116	0			116		23:15	25	0			25							
11:30	108	0			108		23:30	8	0			8							
11:45	150	485	0		150	485	23:45	16	79	0		16	79						
TOTALS	4004				4004		TOTALS	3895				3895							
SPLIT %	100.0%				50.7%		SPLIT %	100.0%				49.3%							

DAILY TOTALS					NB	SB						EB	WB						Total
					7,899	0						0	0						7,899

AM Peak Hour	09:45				09:45		PM Peak Hour	13:30				13:30							
AM Pk Volume	558				558		PM Pk Volume	551				551							
Pk Hr Factor	0.930				0.930		Pk Hr Factor	0.912				0.912							
7 - 9 Volume	923	0	0	0	923		4 - 6 Volume	846	0	0	0	846							
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	490	0	0	0	490		4 - 6 Pk Volume	471	0	0	0	471							
Pk Hr Factor	0.921	0.000	0.000	0.000	0.921		Pk Hr Factor	0.885	0.000	0.000	0.000	0.885							

VOLUME

I-15 NB On-Ramp From Temescal Canyon Rd

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_022

DAILY TOTALS					NB	SB						EB	WB						Total
					7,887	0						0	0						7,887
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	11	0			11		12:00	108	0			108							
00:15	21	0			21		12:15	139	0			139							
00:30	15	0			15		12:30	127	0			127							
00:45	9	56	0		9	56	12:45	121	495	0		121	495						
01:00	15	0			15		13:00	138	0			138							
01:15	13	0			13		13:15	151	0			151							
01:30	14	0			14		13:30	123	0			123							
01:45	12	54	0		12	54	13:45	158	570	0		158	570						
02:00	24	0			24		14:00	127	0			127							
02:15	19	0			19		14:15	128	0			128							
02:30	25	0			25		14:30	151	0			151							
02:45	32	100	0		32	100	14:45	117	523	0		117	523						
03:00	54	0			54		15:00	129	0			129							
03:15	66	0			66		15:15	101	0			101							
03:30	52	0			52		15:30	124	0			124							
03:45	76	248	0		76	248	15:45	114	468	0		114	468						
04:00	79	0			79		16:00	107	0			107							
04:15	127	0			127		16:15	112	0			112							
04:30	120	0			120		16:30	108	0			108							
04:45	97	423	0		97	423	16:45	103	430	0		103	430						
05:00	141	0			141		17:00	100	0			100							
05:15	131	0			131		17:15	98	0			98							
05:30	100	0			100		17:30	95	0			95							
05:45	97	469	0		97	469	17:45	94	387	0		94	387						
06:00	110	0			110		18:00	73	0			73							
06:15	94	0			94		18:15	94	0			94							
06:30	118	0			118		18:30	70	0			70							
06:45	108	430	0		108	430	18:45	85	322	0		85	322						
07:00	29	0			29		19:00	77	0			77							
07:15	53	0			53		19:15	67	0			67							
07:30	109	0			109		19:30	60	0			60							
07:45	76	267	0		76	267	19:45	48	252	0		48	252						
08:00	103	0			103		20:00	56	0			56							
08:15	124	0			124		20:15	58	0			58							
08:30	97	0			97		20:30	37	0			37							
08:45	88	412	0		88	412	20:45	43	194	0		43	194						
09:00	115	0			115		21:00	48	0			48							
09:15	109	0			109		21:15	30	0			30							
09:30	120	0			120		21:30	60	0			60							
09:45	113	457	0		113	457	21:45	41	179	0		41	179						
10:00	114	0			114		22:00	22	0			22							
10:15	81	0			81		22:15	38	0			38							
10:30	149	0			149		22:30	27	0			27							
10:45	147	491	0		147	491	22:45	18	105	0		18	105						
11:00	117	0			117		23:00	13	0			13							
11:15	109	0			109		23:15	24	0			24							
11:30	124	0			124		23:30	18	0			18							
11:45	131	481	0		131	481	23:45	19	74	0		19	74						
TOTALS	3888				3888		TOTALS	3999				3999							
SPLIT %	100.0%				49.3%		SPLIT %	100.0%				50.7%							

DAILY TOTALS					NB	SB						EB	WB						Total
					7,887	0						0	0						7,887

AM Peak Hour	10:30				10:30		PM Peak Hour	13:00				13:00							
AM Pk Volume	522				522		PM Pk Volume	570				570							
Pk Hr Factor	0.876				0.876		Pk Hr Factor	0.902				0.902							
7 - 9 Volume	679	0	0	0	679		4 - 6 Volume	817	0	0	0	817							
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	16:00				16:00							
7 - 9 Pk Volume	412	0	0	0	412		4 - 6 Pk Volume	430	0	0	0	430							
Pk Hr Factor	0.831	0.000	0.000	0.000	0.831		Pk Hr Factor	0.960	0.000	0.000	0.000	0.960							

VOLUME

I-15 SB On-Ramp From Temescal Canyon Rd

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_023

DAILY TOTALS					NB	SB						Total
					0	3,649	0	0	3,649			
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	6			6	12:00	0	47			47	
00:15	0	4			4	12:15	0	46			46	
00:30	0	1			1	12:30	0	45			45	
00:45	0	3	14		3 14	12:45	0	55	193		55 193	
01:00	0	6			6	13:00	0	69			69	
01:15	0	4			4	13:15	0	52			52	
01:30	0	7			7	13:30	0	72			72	
01:45	0	7	24		7 24	13:45	0	67	260		67 260	
02:00	0	10			10	14:00	0	37			37	
02:15	0	3			3	14:15	0	68			68	
02:30	0	10			10	14:30	0	57			57	
02:45	0	4	27		4 27	14:45	0	68	230		68 230	
03:00	0	8			8	15:00	0	89			89	
03:15	0	3			3	15:15	0	80			80	
03:30	0	11			11	15:30	0	100			100	
03:45	0	2	24		2 24	15:45	0	82	351		82 351	
04:00	0	11			11	16:00	0	98			98	
04:15	0	8			8	16:15	0	92			92	
04:30	0	13			13	16:30	0	80			80	
04:45	0	18	50		18 50	16:45	0	99	369		99 369	
05:00	0	8			8	17:00	0	102			102	
05:15	0	7			7	17:15	0	87			87	
05:30	0	15			15	17:30	0	107			107	
05:45	0	16	46		16 46	17:45	0	88	384		88 384	
06:00	0	27			27	18:00	0	89			89	
06:15	0	26			26	18:15	0	68			68	
06:30	0	24			24	18:30	0	73			73	
06:45	0	35	112		35 112	18:45	0	59	289		59 289	
07:00	0	41			41	19:00	0	47			47	
07:15	0	36			36	19:15	0	51			51	
07:30	0	51			51	19:30	0	30			30	
07:45	0	29	157		29 157	19:45	0	23	151		23 151	
08:00	0	35			35	20:00	0	28			28	
08:15	0	44			44	20:15	0	29			29	
08:30	0	33			33	20:30	0	18			18	
08:45	0	49	161		49 161	20:45	0	17	92		17 92	
09:00	0	39			39	21:00	0	19			19	
09:15	0	41			41	21:15	0	25			25	
09:30	0	41			41	21:30	0	12			12	
09:45	0	39	160		39 160	21:45	0	11	67		11 67	
10:00	0	37			37	22:00	0	13			13	
10:15	0	53			53	22:15	0	13			13	
10:30	0	60			60	22:30	0	7			7	
10:45	0	35	185		35 185	22:45	0	13	46		13 46	
11:00	0	60			60	23:00	0	8			8	
11:15	0	61			61	23:15	0	6			6	
11:30	0	52			52	23:30	0	12			12	
11:45	0	47	220		47 220	23:45	0	11	37		11 37	
TOTALS	1180				1180	TOTALS	2469				2469	
SPLIT %	100.0%				32.3%	SPLIT %	100.0%				67.7%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	3,649	0	0	3,649

AM Peak Hour	11:00	11:00	PM Peak Hour	16:45	16:45
AM Pk Volume	220	220	PM Pk Volume	395	395
Pk Hr Factor	0.902	0.902	Pk Hr Factor	0.923	0.923
7 - 9 Volume	0	318	0	0	753
7 - 9 Peak Hour	08:00	08:00	4 - 6 Peak Hour	16:45	16:45
7 - 9 Pk Volume	0	161	0	0	395
Pk Hr Factor	0.000	0.821	0.000	0.923	0.000

VOLUME

I-15 SB On-Ramp From Temescal Canyon Rd

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_023

DAILY TOTALS					NB	SB						EB	WB						Total
					0	3,721						0	0						3,721
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	3			3		12:00	0	38			38							
00:15	0	7			7		12:15	0	54			54							
00:30	0	9			9		12:30	0	52			52							
00:45	0	4	23		4	23	12:45	0	68	212		68	212						
01:00	0	1			1		13:00	0	53			53							
01:15	0	8			8		13:15	0	39			39							
01:30	0	3			3		13:30	0	73			73							
01:45	0	1	13		1	13	13:45	0	62	227		62	227						
02:00	0	2			2		14:00	0	55			55							
02:15	0	10			10		14:15	0	77			77							
02:30	0	3			3		14:30	0	73			73							
02:45	0	2	17		2	17	14:45	0	74	279		74	279						
03:00	0	7			7		15:00	0	84			84							
03:15	0	3			3		15:15	0	91			91							
03:30	0	5			5		15:30	0	83			83							
03:45	0	7	22		7	22	15:45	0	111	369		111	369						
04:00	0	4			4		16:00	0	80			80							
04:15	0	12			12		16:15	0	76			76							
04:30	0	5			5		16:30	0	114			114							
04:45	0	6	27		6	27	16:45	0	94	364		94	364						
05:00	0	15			15		17:00	0	117			117							
05:15	0	17			17		17:15	0	99			99							
05:30	0	15			15		17:30	0	108			108							
05:45	0	17	64		17	64	17:45	0	80	404		80	404						
06:00	0	24			24		18:00	0	95			95							
06:15	0	24			24		18:15	0	84			84							
06:30	0	40			40		18:30	0	71			71							
06:45	0	32	120		32	120	18:45	0	72	322		72	322						
07:00	0	34			34		19:00	0	48			48							
07:15	0	25			25		19:15	0	39			39							
07:30	0	44			44		19:30	0	38			38							
07:45	0	48	151		48	151	19:45	0	26	151		26	151						
08:00	0	38			38		20:00	0	27			27							
08:15	0	32			32		20:15	0	25			25							
08:30	0	36			36		20:30	0	24			24							
08:45	0	49	155		49	155	20:45	0	30	106		30	106						
09:00	0	48			48		21:00	0	18			18							
09:15	0	50			50		21:15	0	17			17							
09:30	0	40			40		21:30	0	19			19							
09:45	0	43	181		43	181	21:45	0	15	69		15	69						
10:00	0	37			37		22:00	0	20			20							
10:15	0	42			42		22:15	0	11			11							
10:30	0	50			50		22:30	0	21			21							
10:45	0	38	167		38	167	22:45	0	16	68		16	68						
11:00	0	31			31		23:00	0	12			12							
11:15	0	37			37		23:15	0	6			6							
11:30	0	55			55		23:30	0	11			11							
11:45	0	51	174		51	174	23:45	0	7	36		7	36						
TOTALS	1114				1114		TOTALS	2607				2607							
SPLIT %	100.0%				29.9%		SPLIT %	100.0%				70.1%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	3,721						0	0						3,721

AM Peak Hour	11:30	11:30	PM Peak Hour	16:30	16:30
AM Pk Volume	198	198	PM Pk Volume	424	424
Pk Hr Factor	0.900	0.900	Pk Hr Factor	0.906	0.906
7 - 9 Volume	0	306	0	768	0
7 - 9 Peak Hour	07:30	07:30	4 - 6 Peak Hour	16:30	16:30
7 - 9 Pk Volume	0	162	0	424	0
Pk Hr Factor	0.000	0.844	0.000	0.906	0.000

VOLUME

I-15 SB On-Ramp From Temescal Canyon Rd

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_023

DAILY TOTALS					NB	SB	EBWB					Total
					0	3,860						0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	5			5	12:00	0	48			48	
00:15	0	7			7	12:15	0	68			68	
00:30	0	10			10	12:30	0	49			49	
00:45	0	2	24		2 24	12:45	0	56	221		56 221	
01:00	0	6			6	13:00	0	55			55	
01:15	0	3			3	13:15	0	67			67	
01:30	0	1			1	13:30	0	72			72	
01:45	0	12	22		12 22	13:45	0	52	246		52 246	
02:00	0	7			7	14:00	0	59			59	
02:15	0	10			10	14:15	0	62			62	
02:30	0	6			6	14:30	0	52			52	
02:45	0	2	25		2 25	14:45	0	70	243		70 243	
03:00	0	4			4	15:00	0	99			99	
03:15	0	2			2	15:15	0	73			73	
03:30	0	3			3	15:30	0	101			101	
03:45	0	10	19		10 19	15:45	0	104	377		104 377	
04:00	0	13			13	16:00	0	113			113	
04:15	0	5			5	16:15	0	94			94	
04:30	0	7			7	16:30	0	107			107	
04:45	0	15	40		15 40	16:45	0	101	415		101 415	
05:00	0	14			14	17:00	0	116			116	
05:15	0	8			8	17:15	0	101			101	
05:30	0	16			16	17:30	0	103			103	
05:45	0	18	56		18 56	17:45	0	101	421		101 421	
06:00	0	29			29	18:00	0	96			96	
06:15	0	23			23	18:15	0	77			77	
06:30	0	33			33	18:30	0	73			73	
06:45	0	30	115		30 115	18:45	0	53	299		53 299	
07:00	0	35			35	19:00	0	67			67	
07:15	0	44			44	19:15	0	46			46	
07:30	0	40			40	19:30	0	42			42	
07:45	0	34	153		34 153	19:45	0	41	196		41 196	
08:00	0	36			36	20:00	0	30			30	
08:15	0	30			30	20:15	0	30			30	
08:30	0	29			29	20:30	0	30			30	
08:45	0	30	125		30 125	20:45	0	31	121		31 121	
09:00	0	48			48	21:00	0	24			24	
09:15	0	60			60	21:15	0	30			30	
09:30	0	37			37	21:30	0	34			34	
09:45	0	35	180		35 180	21:45	0	29	117		29 117	
10:00	0	40			40	22:00	0	17			17	
10:15	0	38			38	22:15	0	12			12	
10:30	0	57			57	22:30	0	13			13	
10:45	0	52	187		52 187	22:45	0	13	55		13 55	
11:00	0	36			36	23:00	0	15			15	
11:15	0	46			46	23:15	0	7			7	
11:30	0	33			33	23:30	0	12			12	
11:45	0	48	163		48 163	23:45	0	6	40		6 40	
TOTALS	1109				1109	TOTALS	2751				2751	
SPLIT %	100.0%				28.7%	SPLIT %	100.0%				71.3%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	3,860	0	0	3,860

AM Peak Hour	11:45				11:45	PM Peak Hour	16:30				16:30
AM Pk Volume	213				213	PM Pk Volume	425				425
Pk Hr Factor	0.783				0.783	Pk Hr Factor	0.916				0.916
7 - 9 Volume	0	278	0	0	278	4 - 6 Volume	0	836	0	0	836
7 - 9 Peak Hour	07:15				07:15	4 - 6 Peak Hour	16:30				16:30
7 - 9 Pk Volume	0	154	0	0	154	4 - 6 Pk Volume	0	425	0	0	425
Pk Hr Factor	0.000	0.875	0.000	0.000	0.875	Pk Hr Factor	0.000	0.916	0.000	0.000	0.916

VOLUME

I-15 SB Off-Ramp To Temescal Canyon Rd

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_024

DAILY TOTALS					NB	SB						EB	WB						Total
					0	9,038						0	0						9,038
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	18			18		12:00	0	153			153							
00:15	0	25			25		12:15	0	169			169							
00:30	0	20			20		12:30	0	139			139							
00:45	0	19	82		19	82	12:45	0	144	605		144	605						
01:00	0	16			16		13:00	0	119			119							
01:15	0	26			26		13:15	0	146			146							
01:30	0	16			16		13:30	0	145			145							
01:45	0	18	76		18	76	13:45	0	140	550		140	550						
02:00	0	14			14		14:00	0	144			144							
02:15	0	27			27		14:15	0	139			139							
02:30	0	25			25		14:30	0	122			122							
02:45	0	29	95		29	95	14:45	0	124	529		124	529						
03:00	0	43			43		15:00	0	155			155							
03:15	0	52			52		15:15	0	142			142							
03:30	0	60			60		15:30	0	125			125							
03:45	0	80	235		80	235	15:45	0	114	536		114	536						
04:00	0	46			46		16:00	0	111			111							
04:15	0	64			64		16:15	0	112			112							
04:30	0	52			52		16:30	0	87			87							
04:45	0	75	237		75	237	16:45	0	104	414		104	414						
05:00	0	80			80		17:00	0	120			120							
05:15	0	66			66		17:15	0	107			107							
05:30	0	83			83		17:30	0	91			91							
05:45	0	98	327		98	327	17:45	0	115	433		115	433						
06:00	0	67			67		18:00	0	114			114							
06:15	0	90			90		18:15	0	88			88							
06:30	0	111			111		18:30	0	134			134							
06:45	0	106	374		106	374	18:45	0	127	463		127	463						
07:00	0	123			123		19:00	0	98			98							
07:15	0	118			118		19:15	0	98			98							
07:30	0	121			121		19:30	0	109			109							
07:45	0	123	485		123	485	19:45	0	87	392		87	392						
08:00	0	141			141		20:00	0	84			84							
08:15	0	135			135		20:15	0	70			70							
08:30	0	136			136		20:30	0	88			88							
08:45	0	146	558		146	558	20:45	0	88	330		88	330						
09:00	0	164			164		21:00	0	53			53							
09:15	0	151			151		21:15	0	68			68							
09:30	0	152			152		21:30	0	69			69							
09:45	0	172	639		172	639	21:45	0	59	249		59	249						
10:00	0	144			144		22:00	0	50			50							
10:15	0	151			151		22:15	0	52			52							
10:30	0	172			172		22:30	0	39			39							
10:45	0	138	605		138	605	22:45	0	28	169		28	169						
11:00	0	136			136		23:00	0	23			23							
11:15	0	139			139		23:15	0	23			23							
11:30	0	131			131		23:30	0	32			32							
11:45	0	142	548		142	548	23:45	0	29	107		29	107						
TOTALS	4261				4261		TOTALS	4777				4777							
SPLIT %	100.0%				47.1%		SPLIT %	100.0%				52.9%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	9,038						0	0						9,038

AM Peak Hour	09:00				09:00		PM Peak Hour	12:00						12:00					
AM Pk Volume	639				639		PM Pk Volume	605						605					
Pk Hr Factor	0.929				0.929		Pk Hr Factor	0.895						0.895					
7 - 9 Volume	0	1043	0	0	1043		4 - 6 Volume	0	847	0	0	847		847					
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	17:00				17:00		17:00					
7 - 9 Pk Volume	558		0	0	558		4 - 6 Pk Volume	433		0	0	433		433					
Pk Hr Factor	0.955	0.955	0.000	0.000	0.955		Pk Hr Factor	0.902	0.902	0.000	0.000	0.902		0.902					

VOLUME**I-15 SB Off-Ramp To Temescal Canyon Rd**

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_024

DAILY TOTALS					NB	SB						EB	WB						Total
					0	8,855						0	0						8,855
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	21			21		12:00	0	153			153							
00:15	0	28			28		12:15	0	142			142							
00:30	0	12			12		12:30	0	159			159							
00:45	0	22	83		22	83	12:45	0	142	596		142	596						
01:00	0	10			10		13:00	0	147			147							
01:15	0	12			12		13:15	0	121			121							
01:30	0	19			19		13:30	0	115			115							
01:45	0	23	64		23	64	13:45	0	144	527		144	527						
02:00	0	20			20		14:00	0	140			140							
02:15	0	18			18		14:15	0	144			144							
02:30	0	41			41		14:30	0	134			134							
02:45	0	30	109		30	109	14:45	0	143	561		143	561						
03:00	0	45			45		15:00	0	125			125							
03:15	0	42			42		15:15	0	113			113							
03:30	0	70			70		15:30	0	146			146							
03:45	0	77	234		77	234	15:45	0	129	513		129	513						
04:00	0	42			42		16:00	0	127			127							
04:15	0	54			54		16:15	0	121			121							
04:30	0	69			69		16:30	0	97			97							
04:45	0	64	229		64	229	16:45	0	103	448		103	448						
05:00	0	77			77		17:00	0	114			114							
05:15	0	68			68		17:15	0	103			103							
05:30	0	97			97		17:30	0	102			102							
05:45	0	72	314		72	314	17:45	0	109	428		109	428						
06:00	0	81			81		18:00	0	112			112							
06:15	0	76			76		18:15	0	116			116							
06:30	0	103			103		18:30	0	107			107							
06:45	0	113	373		113	373	18:45	0	100	435		100	435						
07:00	0	92			92		19:00	0	111			111							
07:15	0	122			122		19:15	0	102			102							
07:30	0	100			100		19:30	0	76			76							
07:45	0	103	417		103	417	19:45	0	93	382		93	382						
08:00	0	112			112		20:00	0	80			80							
08:15	0	145			145		20:15	0	84			84							
08:30	0	124			124		20:30	0	86			86							
08:45	0	177	558		177	558	20:45	0	84	334		84	334						
09:00	0	164			164		21:00	0	65			65							
09:15	0	159			159		21:15	0	66			66							
09:30	0	167			167		21:30	0	50			50							
09:45	0	151	641		151	641	21:45	0	55	236		55	236						
10:00	0	135			135		22:00	0	37			37							
10:15	0	113			113		22:15	0	49			49							
10:30	0	142			142		22:30	0	57			57							
10:45	0	135	525		135	525	22:45	0	41	184		41	184						
11:00	0	121			121		23:00	0	32			32							
11:15	0	143			143		23:15	0	27			27							
11:30	0	143			143		23:30	0	32			32							
11:45	0	137	544		137	544	23:45	0	29	120		29	120						
TOTALS	4091				4091		TOTALS	4764				4764							
SPLIT %	100.0%				46.2%		SPLIT %	100.0%				53.8%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	8,855						0	0						8,855

AM Peak Hour	08:45				08:45		PM Peak Hour	12:00						12:00					
AM Pk Volume	667				667		PM Pk Volume	596						596					
Pk Hr Factor	0.942				0.942		Pk Hr Factor	0.937						0.937					
7 - 9 Volume	0	975	0	0	975		4 - 6 Volume	0	876	0	0	876		876					
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	16:00				16:00		16:00					
7 - 9 Pk Volume	0	558	0	0	558		4 - 6 Pk Volume	0	448	0	0	448		448					
Pk Hr Factor	0.000	0.788	0.000	0.000	0.788		Pk Hr Factor	0.000	0.882	0.000	0.000	0.882		0.882					

VOLUME**I-15 SB Off-Ramp To Temescal Canyon Rd**

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6124_024

DAILY TOTALS					NB	SB	EB					WB	Total
					0	9,272						0	0
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	22			22		12:00	0	138			138	
00:15	0	29			29		12:15	0	139			139	
00:30	0	21			21		12:30	0	140			140	
00:45	0	20	92		20	92	12:45	0	113	530		113	530
01:00	0	21			21		13:00	0	144			144	
01:15	0	11			11		13:15	0	147			147	
01:30	0	24			24		13:30	0	136			136	
01:45	0	17	73		17	73	13:45	0	148	575		148	575
02:00	0	19			19		14:00	0	148			148	
02:15	0	48			48		14:15	0	129			129	
02:30	0	31			31		14:30	0	160			160	
02:45	0	55	153		55	153	14:45	0	133	570		133	570
03:00	0	42			42		15:00	0	136			136	
03:15	0	49			49		15:15	0	137			137	
03:30	0	72			72		15:30	0	140			140	
03:45	0	82	245		82	245	15:45	0	126	539		126	539
04:00	0	36			36		16:00	0	122			122	
04:15	0	103			103		16:15	0	102			102	
04:30	0	67			67		16:30	0	113			113	
04:45	0	86	292		86	292	16:45	0	107	444		107	444
05:00	0	74			74		17:00	0	120			120	
05:15	0	88			88		17:15	0	115			115	
05:30	0	100			100		17:30	0	112			112	
05:45	0	94	356		94	356	17:45	0	107	454		107	454
06:00	0	66			66		18:00	0	94			94	
06:15	0	84			84		18:15	0	119			119	
06:30	0	95			95		18:30	0	88			88	
06:45	0	117	362		117	362	18:45	0	110	411		110	411
07:00	0	95			95		19:00	0	114			114	
07:15	0	106			106		19:15	0	85			85	
07:30	0	131			131		19:30	0	109			109	
07:45	0	123	455		123	455	19:45	0	84	392		84	392
08:00	0	130			130		20:00	0	76			76	
08:15	0	123			123		20:15	0	89			89	
08:30	0	146			146		20:30	0	96			96	
08:45	0	176	575		176	575	20:45	0	87	348		87	348
09:00	0	143			143		21:00	0	93			93	
09:15	0	159			159		21:15	0	86			86	
09:30	0	148			148		21:30	0	68			68	
09:45	0	138	588		138	588	21:45	0	54	301		54	301
10:00	0	190			190		22:00	0	52			52	
10:15	0	155			155		22:15	0	46			46	
10:30	0	129			129		22:30	0	36			36	
10:45	0	147	621		147	621	22:45	0	36	170		36	170
11:00	0	163			163		23:00	0	32			32	
11:15	0	153			153		23:15	0	32			32	
11:30	0	127			127		23:30	0	33			33	
11:45	0	154	597		154	597	23:45	0	32	129		32	129
TOTALS	4409				4409		TOTALS	4863				4863	
SPLIT %	100.0%				47.6%		SPLIT %	100.0%				52.4%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	9,272	0	0	9,272

AM Peak Hour	09:15	09:15	PM Peak Hour	13:45	13:45
AM Pk Volume	635	635	PM Pk Volume	585	585
Pk Hr Factor	0.836	0.836	Pk Hr Factor	0.914	0.914
7 - 9 Volume	0	1030	4 - 6 Volume	0	898
7 - 9 Peak Hour	08:00	08:00	4 - 6 Peak Hour	16:30	16:30
7 - 9 Pk Volume	575	575	4 - 6 Pk Volume	455	455
Pk Hr Factor	0.000	0.817	Pk Hr Factor	0.000	0.948

VOLUME

I-15 NB Off-Ramp To Dos Lagos Dr

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_025

DAILY TOTALS					NB	SB	EBWB					Total
					2,211	0						0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	4	0			4	12:00	29	0			29	
00:15	6	0			6	12:15	37	0			37	
00:30	1	0			1	12:30	25	0			25	
00:45	7	18	0		7 18	12:45	39	130	0		39 130	
01:00	5	0			5	13:00	33	0			33	
01:15	4	0			4	13:15	28	0			28	
01:30	3	0			3	13:30	27	0			27	
01:45	5	17	0		5 17	13:45	28	116	0		28 116	
02:00	1	0			1	14:00	26	0			26	
02:15	4	0			4	14:15	42	0			42	
02:30	6	0			6	14:30	44	0			44	
02:45	6	17	0		6 17	14:45	49	161	0		49 161	
03:00	9	0			9	15:00	55	0			55	
03:15	7	0			7	15:15	30	0			30	
03:30	11	0			11	15:30	45	0			45	
03:45	16	43	0		16 43	15:45	41	171	0		41 171	
04:00	13	0			13	16:00	40	0			40	
04:15	17	0			17	16:15	41	0			41	
04:30	17	0			17	16:30	32	0			32	
04:45	18	65	0		18 65	16:45	41	154	0		41 154	
05:00	26	0			26	17:00	42	0			42	
05:15	21	0			21	17:15	34	0			34	
05:30	15	0			15	17:30	45	0			45	
05:45	16	78	0		16 78	17:45	30	151	0		30 151	
06:00	9	0			9	18:00	35	0			35	
06:15	13	0			13	18:15	44	0			44	
06:30	22	0			22	18:30	40	0			40	
06:45	12	56	0		12 56	18:45	31	150	0		31 150	
07:00	10	0			10	19:00	48	0			48	
07:15	16	0			16	19:15	30	0			30	
07:30	13	0			13	19:30	34	0			34	
07:45	20	59	0		20 59	19:45	24	136	0		24 136	
08:00	26	0			26	20:00	14	0			14	
08:15	13	0			13	20:15	13	0			13	
08:30	23	0			23	20:30	18	0			18	
08:45	28	90	0		28 90	20:45	12	57	0		12 57	
09:00	20	0			20	21:00	10	0			10	
09:15	31	0			31	21:15	13	0			13	
09:30	42	0			42	21:30	10	0			10	
09:45	45	138	0		45 138	21:45	15	48	0		15 48	
10:00	30	0			30	22:00	9	0			9	
10:15	43	0			43	22:15	10	0			10	
10:30	48	0			48	22:30	6	0			6	
10:45	46	167	0		46 167	22:45	7	32	0		7 32	
11:00	34	0			34	23:00	7	0			7	
11:15	26	0			26	23:15	3	0			3	
11:30	47	0			47	23:30	3	0			3	
11:45	33	140	0		33 140	23:45	4	17	0		4 17	
TOTALS	888				888	TOTALS	1323				1323	
SPLIT %	100.0%				40.2%	SPLIT %	100.0%				59.8%	

DAILY TOTALS					NB	SB						EB	WB	Total	
					2,211	0						0	0	2,211	

AM Peak Hour	10:15				10:15	PM Peak Hour	14:15					14:15			
AM Pk Volume	171				171	PM Pk Volume	190					190			
Pk Hr Factor	0.891				0.891	Pk Hr Factor	0.864					0.864			
7 - 9 Volume	149	0	0	0	149	4 - 6 Volume	305	0	0	0	0	305			
7 - 9 Peak Hour	08:00				08:00	4 - 6 Peak Hour	16:45					16:45			
7 - 9 Pk Volume	90	0	0	0	90	4 - 6 Pk Volume	162	0	0	0	0	162			
Pk Hr Factor	0.804	0.000	0.000	0.000	0.804	Pk Hr Factor	0.900	0.000	0.000	0.000	0.000	0.900			

VOLUME

I-15 NB Off-Ramp To Dos Lagos Dr

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_025

DAILY TOTALS					NB	SB	EB					WB	Total
					2,243	0						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	1	0			1	12:00	26	0			26		
00:15	1	0			1	12:15	41	0			41		
00:30	1	0			1	12:30	34	0			34		
00:45	4	7	0		4	12:45	25	126	0		25		
01:00	1	0			1	13:00	37	0			37		
01:15	1	0			1	13:15	46	0			46		
01:30	2	0			2	13:30	36	0			36		
01:45	7	11	0		7	13:45	31	150	0		31		
02:00	3	0			3	14:00	32	0			32		
02:15	5	0			5	14:15	42	0			42		
02:30	2	0			2	14:30	54	0			54		
02:45	5	15	0		5	14:45	56	184	0		56		
03:00	3	0			3	15:00	47	0			47		
03:15	6	0			6	15:15	56	0			56		
03:30	14	0			14	15:30	49	0			49		
03:45	12	35	0		12	15:45	50	202	0		50		
04:00	20	0			20	16:00	30	0			30		
04:15	26	0			26	16:15	41	0			41		
04:30	21	0			21	16:30	42	0			42		
04:45	20	87	0		20	16:45	44	157	0		44		
05:00	22	0			22	17:00	35	0			35		
05:15	15	0			15	17:15	33	0			33		
05:30	18	0			18	17:30	43	0			43		
05:45	17	72	0		17	17:45	45	156	0		45		
06:00	16	0			16	18:00	38	0			38		
06:15	12	0			12	18:15	33	0			33		
06:30	18	0			18	18:30	33	0			33		
06:45	20	66	0		20	18:45	21	125	0		21		
07:00	9	0			9	19:00	25	0			25		
07:15	12	0			12	19:15	36	0			36		
07:30	18	0			18	19:30	22	0			22		
07:45	13	52	0		13	19:45	31	114	0		31		
08:00	26	0			26	20:00	24	0			24		
08:15	16	0			16	20:15	18	0			18		
08:30	23	0			23	20:30	21	0			21		
08:45	14	79	0		14	20:45	15	78	0		15		
09:00	23	0			23	21:00	17	0			17		
09:15	20	0			20	21:15	17	0			17		
09:30	35	0			35	21:30	7	0			7		
09:45	31	109	0		31	21:45	11	52	0		11		
10:00	39	0			39	22:00	5	0			5		
10:15	58	0			58	22:15	7	0			7		
10:30	52	0			52	22:30	9	0			9		
10:45	29	178	0		29	22:45	9	30	0		9		
11:00	29	0			29	23:00	9	0			9		
11:15	40	0			40	23:15	11	0			11		
11:30	27	0			27	23:30	6	0			6		
11:45	34	130	0		34	23:45	2	28	0		2		
TOTALS	841				841	TOTALS	1402				1402		
SPLIT %	100.0%				37.5%	SPLIT %	100.0%				62.5%		

DAILY TOTALS					NB	SB						EB	WB						Total
					2,243	0						0	0						2,243

AM Peak Hour	09:45					09:45	PM Peak Hour	14:30					14:30
AM Pk Volume	180					180	PM Pk Volume	213					213
Pk Hr Factor	0.776					0.776	Pk Hr Factor	0.951					0.951
7 - 9 Volume	131	0	0	0	131	4 - 6 Volume	313	0	0	0	313		
7 - 9 Peak Hour	08:00					08:00	4 - 6 Peak Hour	16:15					16:15
7 - 9 Pk Volume	79	0	0	0	79	4 - 6 Pk Volume	162	0	0	0	162		
Pk Hr Factor	0.760	0.000	0.000	0.000	0.760	Pk Hr Factor	0.920	0.000	0.000	0.000	0.920		

VOLUME

I-15 NB Off-Ramp To Dos Lagos Dr

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_025

DAILY TOTALS					NB	SB						EB	WB	Total
					2,441	0						0	0	2,441
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	2	0			2	12:00	54	0			54			
00:15	6	0			6	12:15	46	0			46			
00:30	2	0			2	12:30	29	0			29			
00:45	3	13	0		3	12:45	30	159	0		30	159		
01:00	3	0			3	13:00	24	0			24			
01:15	5	0			5	13:15	29	0			29			
01:30	4	0			4	13:30	30	0			30			
01:45	4	16	0		4	13:45	37	120	0		37	120		
02:00	3	0			3	14:00	33	0			33			
02:15	3	0			3	14:15	62	0			62			
02:30	6	0			6	14:30	56	0			56			
02:45	2	14	0		2	14:45	60	211	0		60	211		
03:00	18	0			18	15:00	56	0			56			
03:15	9	0			9	15:15	63	0			63			
03:30	10	0			10	15:30	52	0			52			
03:45	14	51	0		14	15:45	66	237	0		66	237		
04:00	19	0			19	16:00	50	0			50			
04:15	17	0			17	16:15	53	0			53			
04:30	23	0			23	16:30	32	0			32			
04:45	21	80	0		21	16:45	39	174	0		39	174		
05:00	21	0			21	17:00	36	0			36			
05:15	28	0			28	17:15	27	0			27			
05:30	11	0			11	17:30	33	0			33			
05:45	12	72	0		12	17:45	48	144	0		48	144		
06:00	20	0			20	18:00	28	0			28			
06:15	20	0			20	18:15	42	0			42			
06:30	27	0			27	18:30	41	0			41			
06:45	11	78	0		11	18:45	21	132	0		21	132		
07:00	12	0			12	19:00	32	0			32			
07:15	19	0			19	19:15	22	0			22			
07:30	18	0			18	19:30	32	0			32			
07:45	12	61	0		12	19:45	27	113	0		27	113		
08:00	27	0			27	20:00	26	0			26			
08:15	15	0			15	20:15	23	0			23			
08:30	22	0			22	20:30	12	0			12			
08:45	27	91	0		27	20:45	17	78	0		17	78		
09:00	23	0			23	21:00	19	0			19			
09:15	30	0			30	21:15	18	0			18			
09:30	27	0			27	21:30	11	0			11			
09:45	27	107	0		27	21:45	14	62	0		14	62		
10:00	49	0			49	22:00	8	0			8			
10:15	52	0			52	22:15	5	0			5			
10:30	44	0			44	22:30	9	0			9			
10:45	36	181	0		36	22:45	5	27	0		5	27		
11:00	53	0			53	23:00	9	0			9			
11:15	42	0			42	23:15	9	0			9			
11:30	47	0			47	23:30	4	0			4			
11:45	50	192	0		50	23:45	6	28	0		6	28		
TOTALS	956				956	TOTALS	1485				1485			
SPLIT %	100.0%				39.2%	SPLIT %	100.0%				60.8%			

DAILY TOTALS					NB	SB						EB	WB	Total
					2,441	0						0	0	2,441

AM Peak Hour	11:30				11:30	PM Peak Hour	15:00				15:00
AM Pk Volume	197				197	PM Pk Volume	237				237
Pk Hr Factor	0.912				0.912	Pk Hr Factor	0.898				0.898
7 - 9 Volume	152	0	0	0	152	4 - 6 Volume	318	0	0	0	318
7 - 9 Peak Hour	08:00				08:00	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	91	0	0	0	91	4 - 6 Pk Volume	174	0	0	0	174
Pk Hr Factor	0.843	0.000	0.000	0.000	0.843	Pk Hr Factor	0.821	0.000	0.000	0.000	0.821

VOLUME

I-15 NB On-Ramp From Dos Lagos Dr

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_026

DAILY TOTALS					NB	SB						EB	WB						Total
					12,025	0						0	0						12,025
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	18	0			18		12:00	159	0			159							
00:15	12	0			12		12:15	181	0			181							
00:30	10	0			10		12:30	169	0			169							
00:45	8	48	0		8	48	12:45	187	696	0		187	696						
01:00	5	0			5		13:00	169	0			169							
01:15	9	0			9		13:15	164	0			164							
01:30	15	0			15		13:30	174	0			174							
01:45	7	36	0		7	36	13:45	174	681	0		174	681						
02:00	13	0			13		14:00	204	0			204							
02:15	13	0			13		14:15	178	0			178							
02:30	13	0			13		14:30	176	0			176							
02:45	12	51	0		12	51	14:45	168	726	0		168	726						
03:00	21	0			21		15:00	167	0			167							
03:15	32	0			32		15:15	198	0			198							
03:30	30	0			30		15:30	191	0			191							
03:45	52	135	0		52	135	15:45	159	715	0		159	715						
04:00	66	0			66		16:00	167	0			167							
04:15	85	0			85		16:15	156	0			156							
04:30	96	0			96		16:30	165	0			165							
04:45	93	340	0		93	340	16:45	178	666	0		178	666						
05:00	112	0			112		17:00	183	0			183							
05:15	108	0			108		17:15	185	0			185							
05:30	148	0			148		17:30	142	0			142							
05:45	152	520	0		152	520	17:45	178	688	0		178	688						
06:00	200	0			200		18:00	124	0			124							
06:15	231	0			231		18:15	134	0			134							
06:30	248	0			248		18:30	94	0			94							
06:45	256	935	0		256	935	18:45	125	477	0		125	477						
07:00	251	0			251		19:00	104	0			104							
07:15	247	0			247		19:15	104	0			104							
07:30	237	0			237		19:30	115	0			115							
07:45	260	995	0		260	995	19:45	91	414	0		91	414						
08:00	251	0			251		20:00	75	0			75							
08:15	256	0			256		20:15	62	0			62							
08:30	248	0			248		20:30	58	0			58							
08:45	244	999	0		244	999	20:45	58	253	0		58	253						
09:00	227	0			227		21:00	58	0			58							
09:15	188	0			188		21:15	63	0			63							
09:30	206	0			206		21:30	43	0			43							
09:45	193	814	0		193	814	21:45	51	215	0		51	215						
10:00	181	0			181		22:00	31	0			31							
10:15	164	0			164		22:15	31	0			31							
10:30	194	0			194		22:30	35	0			35							
10:45	168	707	0		168	707	22:45	28	125	0		28	125						
11:00	186	0			186		23:00	19	0			19							
11:15	181	0			181		23:15	18	0			18							
11:30	185	0			185		23:30	23	0			23							
11:45	155	707	0		155	707	23:45	22	82	0		22	82						
TOTALS	6287				6287		TOTALS	5738				5738							
SPLIT %	100.0%				52.3%		SPLIT %	100.0%				47.7%							

DAILY TOTALS					NB	SB						EB	WB						Total
					12,025	0						0	0						12,025

AM Peak Hour	07:45				07:45		PM Peak Hour	13:45				13:45							
AM Pk Volume	1015				1015		PM Pk Volume	732				732							
Pk Hr Factor	0.976				0.976		Pk Hr Factor	0.897				0.897							
7 - 9 Volume	1994	0	0	0	1994		4 - 6 Volume	1354	0	0	0	1354							
7 - 9 Peak Hour	07:45				07:45		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	1015	0	0	0	1015		4 - 6 Pk Volume	711	0	0	0	711							
Pk Hr Factor	0.976	0.000	0.000	0.000	0.976		Pk Hr Factor	0.961	0.000	0.000	0.000	0.961							

AM Peak Hour	06:45	06:45	PM Peak Hour	14:15	14:15
AM Pk Volume	1008	1008	PM Pk Volume	858	858
Pk Hr Factor	0.988	0.988	Pk Hr Factor	0.861	0.861
7 - 9 Volume	2007	0	0	0	2007
7 - 9 Peak Hour	08:00	08:00	4 - 6 Volume	1274	1274
7 - 9 Pk Volume	1004	0	0	0	1004
Pk Hr Factor	0.992	0.000	0.000	0.000	0.992
			4 - 6 Peak Hour	16:00	16:00
			4 - 6 Pk Volume	661	661
			Pk Hr Factor	0.928	0.000
				0.000	0.000
				0.000	0.928

VOLUME

I-15 NB On-Ramp From Dos Lagos Dr

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_026

DAILY TOTALS					NB	SB						EB	WB	Total
					12,162	0						0	0	12,162
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	18	0			18	12:00	161	0			161			
00:15	18	0			18	12:15	172	0			172			
00:30	11	0			11	12:30	171	0			171			
00:45	10	57	0		10 57	12:45	181	685	0		181 685			
01:00	9	0			9	13:00	172	0			172			
01:15	5	0			5	13:15	174	0			174			
01:30	18	0			18	13:30	176	0			176			
01:45	10	42	0		10 42	13:45	192	714	0		192 714			
02:00	16	0			16	14:00	199	0			199			
02:15	16	0			16	14:15	188	0			188			
02:30	18	0			18	14:30	171	0			171			
02:45	9	59	0		9 59	14:45	171	729	0		171 729			
03:00	19	0			19	15:00	191	0			191			
03:15	30	0			30	15:15	220	0			220			
03:30	30	0			30	15:30	200	0			200			
03:45	50	129	0		50 129	15:45	179	790	0		179 790			
04:00	58	0			58	16:00	160	0			160			
04:15	90	0			90	16:15	152	0			152			
04:30	96	0			96	16:30	180	0			180			
04:45	97	341	0		97 341	16:45	132	624	0		132 624			
05:00	104	0			104	17:00	172	0			172			
05:15	104	0			104	17:15	129	0			129			
05:30	151	0			151	17:30	163	0			163			
05:45	144	503	0		144 503	17:45	161	625	0		161 625			
06:00	171	0			171	18:00	143	0			143			
06:15	199	0			199	18:15	123	0			123			
06:30	245	0			245	18:30	115	0			115			
06:45	249	864	0		249 864	18:45	111	492	0		111 492			
07:00	247	0			247	19:00	102	0			102			
07:15	254	0			254	19:15	99	0			99			
07:30	253	0			253	19:30	95	0			95			
07:45	242	996	0		242 996	19:45	72	368	0		72 368			
08:00	235	0			235	20:00	98	0			98			
08:15	260	0			260	20:15	76	0			76			
08:30	210	0			210	20:30	81	0			81			
08:45	263	968	0		263 968	20:45	78	333	0		78 333			
09:00	239	0			239	21:00	79	0			79			
09:15	248	0			248	21:15	70	0			70			
09:30	213	0			213	21:30	50	0			50			
09:45	205	905	0		205 905	21:45	39	238	0		39 238			
10:00	187	0			187	22:00	41	0			41			
10:15	170	0			170	22:15	43	0			43			
10:30	206	0			206	22:30	32	0			32			
10:45	185	748	0		185 748	22:45	25	141	0		25 141			
11:00	182	0			182	23:00	24	0			24			
11:15	181	0			181	23:15	10	0			10			
11:30	191	0			191	23:30	29	0			29			
11:45	159	713	0		159 713	23:45	35	98	0		35 98			
TOTALS	6325				6325	TOTALS	5837				5837			
SPLIT %	100.0%				52.0%	SPLIT %	100.0%				48.0%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					12,162	0						0	0	12,162	

AM Peak Hour	06:45				06:45	PM Peak Hour	15:00				15:00
AM Pk Volume	1003				1003	PM Pk Volume	790				790
Pk Hr Factor	0.987				0.987	Pk Hr Factor	0.898				0.898
7 - 9 Volume	1964	0	0	0	1964	4 - 6 Volume	1249	0	0	0	1249
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:15				16:15
7 - 9 Pk Volume	996	0	0	0	996	4 - 6 Pk Volume	636	0	0	0	636
Pk Hr Factor	0.980	0.000	0.000	0.000	0.980	Pk Hr Factor	0.883	0.000	0.000	0.000	0.883

VOLUME

I-15 SB On-Ramp From Dos Lagos Dr

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_027

DAILY TOTALS					NB	SB						EB	WB						Total
					0	3,223						0	0						3,223
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	9			9		12:00	0	43			43							
00:15	0	8			8		12:15	0	44			44							
00:30	0	5			5		12:30	0	59			59							
00:45	0	7	29		7	29	12:45	0	24	170		24	170						
01:00	0	1			1		13:00	0	40			40							
01:15	0	4			4		13:15	0	44			44							
01:30	0	4			4		13:30	0	52			52							
01:45	0	3	12		3	12	13:45	0	50	186		50	186						
02:00	0	5			5		14:00	0	40			40							
02:15	0	3			3		14:15	0	65			65							
02:30	0	3			3		14:30	0	64			64							
02:45	0	4	15		4	15	14:45	0	48	217		48	217						
03:00	0	2			2		15:00	0	67			67							
03:15	0	3			3		15:15	0	71			71							
03:30	0	3			3		15:30	0	86			86							
03:45	0	9	17		9	17	15:45	0	84	308		84	308						
04:00	0	2			2		16:00	0	96			96							
04:15	0	5			5		16:15	0	105			105							
04:30	0	6			6		16:30	0	98			98							
04:45	0	8	21		8	21	16:45	0	87	386		87	386						
05:00	0	16			16		17:00	0	113			113							
05:15	0	5			5		17:15	0	80			80							
05:30	0	9			9		17:30	0	87			87							
05:45	0	6	36		6	36	17:45	0	94	374		94	374						
06:00	0	7			7		18:00	0	88			88							
06:15	0	12			12		18:15	0	83			83							
06:30	0	30			30		18:30	0	55			55							
06:45	0	23	72		23	72	18:45	0	63	289		63	289						
07:00	0	20			20		19:00	0	54			54							
07:15	0	23			23		19:15	0	46			46							
07:30	0	24			24		19:30	0	56			56							
07:45	0	27	94		27	94	19:45	0	39	195		39	195						
08:00	0	25			25		20:00	0	32			32							
08:15	0	30			30		20:15	0	31			31							
08:30	0	24			24		20:30	0	39			39							
08:45	0	22	101		22	101	20:45	0	26	128		26	128						
09:00	0	19			19		21:00	0	37			37							
09:15	0	17			17		21:15	0	27			27							
09:30	0	26			26		21:30	0	17			17							
09:45	0	28	90		28	90	21:45	0	18	99		18	99						
10:00	0	32			32		22:00	0	28			28							
10:15	0	21			21		22:15	0	23			23							
10:30	0	33			33		22:30	0	15			15							
10:45	0	35	121		35	121	22:45	0	14	80		14	80						
11:00	0	34			34		23:00	0	10			10							
11:15	0	34			34		23:15	0	13			13							
11:30	0	29			29		23:30	0	10			10							
11:45	0	38	135		38	135	23:45	0	15	48		15	48						
TOTALS	743				743		TOTALS	2480				2480							
SPLIT %	100.0%				23.1%		SPLIT %	100.0%				76.9%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	3,223						0	0						3,223

AM Peak Hour	11:45				11:45		PM Peak Hour	16:15				16:15							
AM Pk Volume	184				184		PM Pk Volume	403				403							
Pk Hr Factor	0.780				0.780		Pk Hr Factor	0.892				0.892							
7 - 9 Volume	0	195	0	0	195		4 - 6 Volume	0	760	0	0	760							
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	16:15				16:15							
7 - 9 Pk Volume	0	106	0	0	106		4 - 6 Pk Volume	0	403	0	0	403							
Pk Hr Factor	0.000	0.883	0.000	0.000	0.883		Pk Hr Factor	0.000	0.892	0.000	0.000	0.892							

VOLUME

I-15 SB On-Ramp From Dos Lagos Dr

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_027

DAILY TOTALS					NB	SB						EB	WB						Total
					0	3,168						0	0						3,168
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	10			10		12:00	0	43			43							
00:15	0	11			11		12:15	0	39			39							
00:30	0	3			3		12:30	0	42			42							
00:45	0	11	35		11	35	12:45	0	42	166		42	166						
01:00	0	2			2		13:00	0	38			38							
01:15	0	1			1		13:15	0	60			60							
01:30	0	0			0		13:30	0	57			57							
01:45	0	3	6		3	6	13:45	0	57	212		57	212						
02:00	0	2			2		14:00	0	64			64							
02:15	0	3			3		14:15	0	54			54							
02:30	0	5			5		14:30	0	48			48							
02:45	0	5	15		5	15	14:45	0	63	229		63	229						
03:00	0	1			1		15:00	0	62			62							
03:15	0	1			1		15:15	0	67			67							
03:30	0	3			3		15:30	0	78			78							
03:45	0	7	12		7	12	15:45	0	63	270		63	270						
04:00	0	3			3		16:00	0	102			102							
04:15	0	7			7		16:15	0	92			92							
04:30	0	6			6		16:30	0	67			67							
04:45	0	12	28		12	28	16:45	0	112	373		112	373						
05:00	0	7			7		17:00	0	101			101							
05:15	0	9			9		17:15	0	99			99							
05:30	0	4			4		17:30	0	95			95							
05:45	0	8	28		8	28	17:45	0	89	384		89	384						
06:00	0	16			16		18:00	0	69			69							
06:15	0	9			9		18:15	0	58			58							
06:30	0	21			21		18:30	0	54			54							
06:45	0	27	73		27	73	18:45	0	42	223		42	223						
07:00	0	24			24		19:00	0	46			46							
07:15	0	29			29		19:15	0	57			57							
07:30	0	28			28		19:30	0	21			21							
07:45	0	21	102		21	102	19:45	0	43	167		43	167						
08:00	0	23			23		20:00	0	51			51							
08:15	0	20			20		20:15	0	36			36							
08:30	0	32			32		20:30	0	30			30							
08:45	0	19	94		19	94	20:45	0	37	154		37	154						
09:00	0	21			21		21:00	0	34			34							
09:15	0	33			33		21:15	0	23			23							
09:30	0	45			45		21:30	0	25			25							
09:45	0	30	129		30	129	21:45	0	20	102		20	102						
10:00	0	30			30		22:00	0	15			15							
10:15	0	17			17		22:15	0	20			20							
10:30	0	32			32		22:30	0	18			18							
10:45	0	33	112		33	112	22:45	0	22	75		22	75						
11:00	0	29			29		23:00	0	13			13							
11:15	0	29			29		23:15	0	9			9							
11:30	0	38			38		23:30	0	10			10							
11:45	0	39	135		39	135	23:45	0	12	44		12	44						
TOTALS	769				769		TOTALS	2399				2399							
SPLIT %	100.0%				24.3%		SPLIT %	100.0%				75.7%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	3,168						0	0						3,168

AM Peak Hour	11:45				11:45		PM Peak Hour	16:45					16:45						
AM Pk Volume	163				163		PM Pk Volume	407					407						
Pk Hr Factor	0.948				0.948		Pk Hr Factor	0.908					0.908						
7 - 9 Volume	0	196	0	0	196		4 - 6 Volume	0	757	0	0	757							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:45				16:45							
7 - 9 Pk Volume	0	102	0	0	102		4 - 6 Pk Volume	0	407	0	0	407							
Pk Hr Factor	0.000	0.879	0.000	0.000	0.879		Pk Hr Factor	0.000	0.908	0.000	0.000	0.908							

VOLUME

I-15 SB On-Ramp From Dos Lagos Dr

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_027

DAILY TOTALS					NB	SB						EB	WB						Total
					0	3,533						0	0						3,533
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	12			12		12:00	0	39			39							
00:15	0	14			14		12:15	0	38			38							
00:30	0	5			5		12:30	0	40			40							
00:45	0	2	33		2	33	12:45	0	38	155		38	155						
01:00	0	8			8		13:00	0	68			68							
01:15	0	4			4		13:15	0	51			51							
01:30	0	2			2		13:30	0	31			31							
01:45	0	2	16		2	16	13:45	0	60	210		60	210						
02:00	0	6			6		14:00	0	71			71							
02:15	0	2			2		14:15	0	61			61							
02:30	0	3			3		14:30	0	74			74							
02:45	0	1	12		1	12	14:45	0	57	263		57	263						
03:00	0	3			3		15:00	0	71			71							
03:15	0	4			4		15:15	0	101			101							
03:30	0	2			2		15:30	0	103			103							
03:45	0	4	13		4	13	15:45	0	107	382		107	382						
04:00	0	11			11		16:00	0	113			113							
04:15	0	4			4		16:15	0	106			106							
04:30	0	7			7		16:30	0	117			117							
04:45	0	7	29		7	29	16:45	0	104	440		104	440						
05:00	0	4			4		17:00	0	105			105							
05:15	0	14			14		17:15	0	99			99							
05:30	0	8			8		17:30	0	92			92							
05:45	0	9	35		9	35	17:45	0	91	387		91	387						
06:00	0	10			10		18:00	0	91			91							
06:15	0	15			15		18:15	0	79			79							
06:30	0	20			20		18:30	0	80			80							
06:45	0	22	67		22	67	18:45	0	57	307		57	307						
07:00	0	23			23		19:00	0	58			58							
07:15	0	36			36		19:15	0	36			36							
07:30	0	30			30		19:30	0	45			45							
07:45	0	26	115		26	115	19:45	0	29	168		29	168						
08:00	0	22			22		20:00	0	52			52							
08:15	0	24			24		20:15	0	36			36							
08:30	0	23			23		20:30	0	36			36							
08:45	0	27	96		27	96	20:45	0	28	152		28	152						
09:00	0	33			33		21:00	0	38			38							
09:15	0	28			28		21:15	0	40			40							
09:30	0	38			38		21:30	0	16			16							
09:45	0	33	132		33	132	21:45	0	35	129		35	129						
10:00	0	34			34		22:00	0	15			15							
10:15	0	22			22		22:15	0	17			17							
10:30	0	36			36		22:30	0	17			17							
10:45	0	33	125		33	125	22:45	0	19	68		19	68						
11:00	0	43			43		23:00	0	12			12							
11:15	0	43			43		23:15	0	10			10							
11:30	0	33			33		23:30	0	7			7							
11:45	0	35	154		35	154	23:45	0	16	45		16	45						
TOTALS	827				827		TOTALS	2706				2706							
SPLIT %	100.0%				23.4%		SPLIT %	100.0%				76.6%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	3,533						0	0						3,533

AM Peak Hour	10:30				10:30		PM Peak Hour	15:45						15:45					
AM Pk Volume	155				155		PM Pk Volume	443						443					
Pk Hr Factor	0.901				0.901		Pk Hr Factor	0.947						0.947					
7 - 9 Volume	0	211	0	0	211		4 - 6 Volume	0	827	0	0	827		827					
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:00				16:00		16:00					
7 - 9 Pk Volume	0	115	0	0	115		4 - 6 Pk Volume	0	440	0	0	440		440					
Pk Hr Factor	0.000	0.799	0.000	0.000	0.799		Pk Hr Factor	0.000	0.940	0.000	0.000	0.940		0.940					

VOLUME

I-15 SB Off-Ramp To Dos Lagos Dr

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_028

DAILY TOTALS					NB	SB						Total
					0	10,600	0	0	10,600			
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	30			30	12:00	0	190			190	
00:15	0	25			25	12:15	0	196			196	
00:30	0	19			19	12:30	0	160			160	
00:45	0	15	89		15 89	12:45	0	194	740		194 740	
01:00	0	14			14	13:00	0	148			148	
01:15	0	13			13	13:15	0	185			185	
01:30	0	11			11	13:30	0	151			151	
01:45	0	14	52		14 52	13:45	0	164	648		164 648	
02:00	0	10			10	14:00	0	151			151	
02:15	0	7			7	14:15	0	186			186	
02:30	0	13			13	14:30	0	189			189	
02:45	0	9	39		9 39	14:45	0	167	693		167 693	
03:00	0	10			10	15:00	0	198			198	
03:15	0	8			8	15:15	0	202			202	
03:30	0	5			5	15:30	0	190			190	
03:45	0	14	37		14 37	15:45	0	155	745		155 745	
04:00	0	22			22	16:00	0	161			161	
04:15	0	19			19	16:15	0	156			156	
04:30	0	27			27	16:30	0	146			146	
04:45	0	43	111		43 111	16:45	0	152	615		152 615	
05:00	0	29			29	17:00	0	144			144	
05:15	0	35			35	17:15	0	163			163	
05:30	0	41			41	17:30	0	151			151	
05:45	0	82	187		82 187	17:45	0	180	638		180 638	
06:00	0	68			68	18:00	0	173			173	
06:15	0	91			91	18:15	0	195			195	
06:30	0	63			63	18:30	0	183			183	
06:45	0	130	352		130 352	18:45	0	189	740		189 740	
07:00	0	132			132	19:00	0	170			170	
07:15	0	127			127	19:15	0	195			195	
07:30	0	148			148	19:30	0	167			167	
07:45	0	167	574		167 574	19:45	0	188	720		188 720	
08:00	0	158			158	20:00	0	145			145	
08:15	0	154			154	20:15	0	152			152	
08:30	0	162			162	20:30	0	152			152	
08:45	0	147	621		147 621	20:45	0	154	603		154 603	
09:00	0	127			127	21:00	0	122			122	
09:15	0	114			114	21:15	0	123			123	
09:30	0	92			92	21:30	0	104			104	
09:45	0	137	470		137 470	21:45	0	84	433		84 433	
10:00	0	123			123	22:00	0	76			76	
10:15	0	126			126	22:15	0	71			71	
10:30	0	131			131	22:30	0	51			51	
10:45	0	147	527		147 527	22:45	0	57	255		57 255	
11:00	0	132			132	23:00	0	46			46	
11:15	0	128			128	23:15	0	32			32	
11:30	0	133			133	23:30	0	34			34	
11:45	0	161	554		161 554	23:45	0	45	157		45 157	
TOTALS	3613				3613	TOTALS	6987				6987	
SPLIT %	100.0%				34.1%	SPLIT %	100.0%				65.9%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	10,600	0	0	10,600

AM Peak Hour	11:45				11:45					14:45				
AM Pk Volume	707				707					757				
Pk Hr Factor	0.902				0.902					0.937				
7 - 9 Volume	0	1195	0	0	1195	4 - 6 Volume	0	1253	0	0	1253			
7 - 9 Peak Hour	07:45				07:45	4 - 6 Peak Hour		17:00			17:00			
7 - 9 Pk Volume	641		0	0	641	4 - 6 Pk Volume	0	638	0	0	638			
Pk Hr Factor	0.000	0.960	0.000	0.000	0.960	Pk Hr Factor	0.000	0.886	0.000	0.000	0.886			

VOLUME

I-15 SB Off-Ramp To Dos Lagos Dr

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_028

DAILY TOTALS					NB	SB	EB					WB	Total
					0	10,690						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	30			30	12:00	0	179			179		
00:15	0	21			21	12:15	0	172			172		
00:30	0	19			19	12:30	0	165			165		
00:45	0	26	96		26 96	12:45	0	172	688		172 688		
01:00	0	12			12	13:00	0	145			145		
01:15	0	12			12	13:15	0	189			189		
01:30	0	19			19	13:30	0	238			238		
01:45	0	11	54		11 54	13:45	0	233	805		233 805		
02:00	0	16			16	14:00	0	167			167		
02:15	0	10			10	14:15	0	196			196		
02:30	0	8			8	14:30	0	149			149		
02:45	0	9	43		9 43	14:45	0	146	658		146 658		
03:00	0	12			12	15:00	0	212			212		
03:15	0	7			7	15:15	0	205			205		
03:30	0	9			9	15:30	0	170			170		
03:45	0	10	38		10 38	15:45	0	116	703		116 703		
04:00	0	18			18	16:00	0	129			129		
04:15	0	15			15	16:15	0	136			136		
04:30	0	21			21	16:30	0	143			143		
04:45	0	41	95		41 95	16:45	0	137	545		137 545		
05:00	0	47			47	17:00	0	113			113		
05:15	0	37			37	17:15	0	150			150		
05:30	0	40			40	17:30	0	194			194		
05:45	0	94	218		94 218	17:45	0	150	607		150 607		
06:00	0	75			75	18:00	0	186			186		
06:15	0	94			94	18:15	0	201			201		
06:30	0	79			79	18:30	0	180			180		
06:45	0	133	381		133 381	18:45	0	180	747		180 747		
07:00	0	130			130	19:00	0	188			188		
07:15	0	116			116	19:15	0	216			216		
07:30	0	124			124	19:30	0	180			180		
07:45	0	135	505		135 505	19:45	0	192	776		192 776		
08:00	0	153			153	20:00	0	149			149		
08:15	0	165			165	20:15	0	145			145		
08:30	0	150			150	20:30	0	165			165		
08:45	0	163	631		163 631	20:45	0	147	606		147 606		
09:00	0	143			143	21:00	0	105			105		
09:15	0	113			113	21:15	0	90			90		
09:30	0	112			112	21:30	0	99			99		
09:45	0	136	504		136 504	21:45	0	87	381		87 381		
10:00	0	116			116	22:00	0	98			98		
10:15	0	140			140	22:15	0	71			71		
10:30	0	137			137	22:30	0	66			66		
10:45	0	137	530		137 530	22:45	0	64	299		64 299		
11:00	0	144			144	23:00	0	44			44		
11:15	0	147			147	23:15	0	61			61		
11:30	0	144			144	23:30	0	32			32		
11:45	0	176	611		176 611	23:45	0	32	169		32 169		
TOTALS	3706				3706	TOTALS	6984				6984		
SPLIT %	100.0%				34.7%	SPLIT %	100.0%				65.3%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	10,690	0	0	10,690

AM Peak Hour	11:45				11:45					PM Peak Hour	13:30
AM Pk Volume	692				692					PM Pk Volume	834
Pk Hr Factor	0.966				0.966					Pk Hr Factor	0.876
7 - 9 Volume	0	1136	0	0	1136	4 - 6 Volume	0	1152	0	0	1152
7 - 9 Peak Hour	08:00				08:00	4 - 6 Peak Hour		17:00			17:00
7 - 9 Pk Volume	631		0	0	631	4 - 6 Pk Volume	607		0	0	607
Pk Hr Factor	0.000	0.956	0.000	0.000	0.956	Pk Hr Factor	0.000	0.782	0.000	0.000	0.782

VOLUME

I-15 SB Off-Ramp To Dos Lagos Dr

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_028

DAILY TOTALS					NB	SB						EB	WB	Total
					0	10,647						0	0	10,647
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	29			29		12:00	0	172			172		
00:15	0	30			30		12:15	0	174			174		
00:30	0	18			18		12:30	0	155			155		
00:45	0	21	98		21	98	12:45	0	185	686		185	686	
01:00	0	15			15		13:00	0	180			180		
01:15	0	13			13		13:15	0	158			158		
01:30	0	17			17		13:30	0	153			153		
01:45	0	15	60		15	60	13:45	0	136	627		136	627	
02:00	0	15			15		14:00	0	167			167		
02:15	0	7			7		14:15	0	160			160		
02:30	0	5			5		14:30	0	190			190		
02:45	0	13	40		13	40	14:45	0	179	696		179	696	
03:00	0	13			13		15:00	0	223			223		
03:15	0	11			11		15:15	0	186			186		
03:30	0	12			12		15:30	0	179			179		
03:45	0	9	45		9	45	15:45	0	160	748		160	748	
04:00	0	14			14		16:00	0	137			137		
04:15	0	20			20		16:15	0	158			158		
04:30	0	32			32		16:30	0	148			148		
04:45	0	53	119		53	119	16:45	0	126	569		126	569	
05:00	0	30			30		17:00	0	126			126		
05:15	0	40			40		17:15	0	116			116		
05:30	0	62			62		17:30	0	170			170		
05:45	0	83	215		83	215	17:45	0	146	558		146	558	
06:00	0	67			67		18:00	0	177			177		
06:15	0	81			81		18:15	0	180			180		
06:30	0	74			74		18:30	0	172			172		
06:45	0	125	347		125	347	18:45	0	173	702		173	702	
07:00	0	111			111		19:00	0	195			195		
07:15	0	132			132		19:15	0	167			167		
07:30	0	152			152		19:30	0	181			181		
07:45	0	179	574		179	574	19:45	0	163	706		163	706	
08:00	0	155			155		20:00	0	183			183		
08:15	0	177			177		20:15	0	164			164		
08:30	0	160			160		20:30	0	157			157		
08:45	0	143	635		143	635	20:45	0	182	686		182	686	
09:00	0	113			113		21:00	0	131			131		
09:15	0	123			123		21:15	0	106			106		
09:30	0	132			132		21:30	0	107			107		
09:45	0	166	534		166	534	21:45	0	97	441		97	441	
10:00	0	116			116		22:00	0	85			85		
10:15	0	102			102		22:15	0	87			87		
10:30	0	145			145		22:30	0	69			69		
10:45	0	139	502		139	502	22:45	0	67	308		67	308	
11:00	0	148			148		23:00	0	49			49		
11:15	0	152			152		23:15	0	44			44		
11:30	0	140			140		23:30	0	38			38		
11:45	0	149	589		149	589	23:45	0	31	162		31	162	
TOTALS	3758				3758		TOTALS	6889				6889		
SPLIT %	100.0%				35.3%		SPLIT %	100.0%				64.7%		

DAILY TOTALS					NB	SB						EB	WB	Total
					0	10,647						0	0	10,647

AM Peak Hour	07:45				07:45		PM Peak Hour	14:30						14:30
AM Pk Volume	671				671		PM Pk Volume	778						778
Pk Hr Factor	0.937				0.937		Pk Hr Factor	0.872						0.872
7 - 9 Volume	0	1209	0	0	1209		4 - 6 Volume	0	1127	0	0	0	0	1127
7 - 9 Peak Hour	07:45				07:45		4 - 6 Peak Hour	16:00						16:00
7 - 9 Pk Volume	671		0	0	671		4 - 6 Pk Volume	569		0	0	0	0	569
Pk Hr Factor	0.000	0.937	0.000	0.000	0.937		Pk Hr Factor	0.000	0.900	0.000	0.000	0.000	0.000	0.900

VOLUME

I-15 NB Off-Ramp To Cajalco Rd

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_029

DAILY TOTALS					NB	SB						EB	WB						Total
					3,308	0						0	0						3,308
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	3	0			3		12:15	61	0			61							
00:30	4	0			4		12:30	46	0			46							
00:45	3	17	0		3	17	12:45	61	218	0		61	218						
01:00	7	0			7		13:00	49	0			49							
01:15	7	0			7		13:15	56	0			56							
01:30	6	0			6		13:30	50	0			50							
01:45	8	28	0		8	28	13:45	53	208	0		53	208						
02:00	6	0			6		14:00	52	0			52							
02:15	6	0			6		14:15	54	0			54							
02:30	2	0			2		14:30	69	0			69							
02:45	8	22	0		8	22	14:45	57	232	0		57	232						
03:00	3	0			3		15:00	35	0			35							
03:15	8	0			8		15:15	66	0			66							
03:30	15	0			15		15:30	55	0			55							
03:45	13	39	0		13	39	15:45	61	217	0		61	217						
04:00	9	0			9		16:00	45	0			45							
04:15	15	0			15		16:15	36	0			36							
04:30	15	0			15		16:30	57	0			57							
04:45	28	67	0		28	67	16:45	67	205	0		67	205						
05:00	30	0			30		17:00	68	0			68							
05:15	14	0			14		17:15	63	0			63							
05:30	16	0			16		17:30	50	0			50							
05:45	16	76	0		16	76	17:45	45	226	0		45	226						
06:00	12	0			12		18:00	52	0			52							
06:15	27	0			27		18:15	51	0			51							
06:30	18	0			18		18:30	52	0			52							
06:45	40	97	0		40	97	18:45	45	200	0		45	200						
07:00	42	0			42		19:00	40	0			40							
07:15	40	0			40		19:15	36	0			36							
07:30	29	0			29		19:30	45	0			45							
07:45	46	157	0		46	157	19:45	37	158	0		37	158						
08:00	34	0			34		20:00	34	0			34							
08:15	60	0			60		20:15	34	0			34							
08:30	28	0			28		20:30	18	0			18							
08:45	46	168	0		46	168	20:45	18	104	0		18	104						
09:00	52	0			52		21:00	27	0			27							
09:15	57	0			57		21:15	20	0			20							
09:30	49	0			49		21:30	13	0			13							
09:45	57	215	0		57	215	21:45	16	76	0		16	76						
10:00	57	0			57		22:00	6	0			6							
10:15	76	0			76		22:15	18	0			18							
10:30	59	0			59		22:30	6	0			6							
10:45	58	250	0		58	250	22:45	10	40	0		10	40						
11:00	60	0			60		23:00	3	0			3							
11:15	65	0			65		23:15	5	0			5							
11:30	84	0			84		23:30	2	0			2							
11:45	65	274	0		65	274	23:45	4	14	0		4	14						
TOTALS	1410				1410		TOTALS	1898				1898							
SPLIT %	100.0%				42.6%		SPLIT %	100.0%				57.4%							

DAILY TOTALS					NB	SB						EB	WB						Total
					3,308	0						0	0						3,308

AM Peak Hour	11:00				11:00		PM Peak Hour	16:30				16:30							
AM Pk Volume	274				274		PM Pk Volume	255				255							
Pk Hr Factor	0.815				0.815		Pk Hr Factor	0.938				0.938							
7 - 9 Volume	325	0	0	0	325		4 - 6 Volume	431	0	0	0	431							
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	169	0	0	0	169		4 - 6 Pk Volume	255	0	0	0	255							
Pk Hr Factor	0.704	0.000	0.000	0.000	0.704		Pk Hr Factor	0.938	0.000	0.000	0.000	0.938							

VOLUME

I-15 NB Off-Ramp To Cajalco Rd

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_029

DAILY TOTALS					NB	SB						EB	WB						Total
					2,955	0						0	0						2,955
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	5	0			5		12:00	56	0			56							
00:15	2	0			2		12:15	51	0			51							
00:30	3	0			3		12:30	40	0			40							
00:45	2	12	0		2	12	12:45	56	203	0		56	203						
01:00	5	0			5		13:00	53	0			53							
01:15	3	0			3		13:15	44	0			44							
01:30	8	0			8		13:30	56	0			56							
01:45	4	20	0		4	20	13:45	70	223	0		70	223						
02:00	4	0			4		14:00	46	0			46							
02:15	5	0			5		14:15	70	0			70							
02:30	7	0			7		14:30	55	0			55							
02:45	3	19	0		3	19	14:45	51	222	0		51	222						
03:00	13	0			13		15:00	51	0			51							
03:15	6	0			6		15:15	59	0			59							
03:30	3	0			3		15:30	51	0			51							
03:45	14	36	0		14	36	15:45	63	224	0		63	224						
04:00	19	0			19		16:00	51	0			51							
04:15	11	0			11		16:15	54	0			54							
04:30	26	0			26		16:30	45	0			45							
04:45	14	70	0		14	70	16:45	50	200	0		50	200						
05:00	18	0			18		17:00	41	0			41							
05:15	19	0			19		17:15	39	0			39							
05:30	13	0			13		17:30	50	0			50							
05:45	30	80	0		30	80	17:45	43	173	0		43	173						
06:00	14	0			14		18:00	45	0			45							
06:15	26	0			26		18:15	39	0			39							
06:30	30	0			30		18:30	37	0			37							
06:45	33	103	0		33	103	18:45	47	168	0		47	168						
07:00	26	0			26		19:00	35	0			35							
07:15	28	0			28		19:15	42	0			42							
07:30	22	0			22		19:30	29	0			29							
07:45	33	109	0		33	109	19:45	19	125	0		19	125						
08:00	33	0			33		20:00	20	0			20							
08:15	41	0			41		20:15	27	0			27							
08:30	28	0			28		20:30	19	0			19							
08:45	41	143	0		41	143	20:45	13	79	0		13	79						
09:00	39	0			39		21:00	15	0			15							
09:15	52	0			52		21:15	22	0			22							
09:30	40	0			40		21:30	14	0			14							
09:45	43	174	0		43	174	21:45	10	61	0		10	61						
10:00	49	0			49		22:00	10	0			10							
10:15	51	0			51		22:15	10	0			10							
10:30	60	0			60		22:30	8	0			8							
10:45	55	215	0		55	215	22:45	5	33	0		5	33						
11:00	39	0			39		23:00	7	0			7							
11:15	64	0			64		23:15	9	0			9							
11:30	70	0			70		23:30	2	0			2							
11:45	69	242	0		69	242	23:45	3	21	0		3	21						
TOTALS	1223				1223		TOTALS	1732				1732							
SPLIT %	100.0%				41.4%		SPLIT %	100.0%				58.6%							

DAILY TOTALS					NB	SB						EB	WB						Total
					2,955	0						0	0						2,955

AM Peak Hour	11:15				11:15		PM Peak Hour	13:30				13:30							
AM Pk Volume	259				259		PM Pk Volume	242				242							
Pk Hr Factor	0.925				0.925		Pk Hr Factor	0.864				0.864							
7 - 9 Volume	252	0	0	0	252		4 - 6 Volume	373	0	0	0	373							
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	16:00				16:00							
7 - 9 Pk Volume	143	0	0	0	143		4 - 6 Pk Volume	200	0	0	0	200							
Pk Hr Factor	0.872	0.000	0.000	0.000	0.872		Pk Hr Factor	0.926	0.000	0.000	0.000	0.926							

VOLUME

I-15 NB Off-Ramp To Cajalco Rd

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_029

DAILY TOTALS					NB	SB	EBWB					Total
					2,454	0						0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	3	0			3	12:00	43	0			43	
00:15	4	0			4	12:15	44	0			44	
00:30	4	0			4	12:30	39	0			39	
00:45	8	19	0		8 19	12:45	40	166	0		40 166	
01:00	5	0			5	13:00	37	0			37	
01:15	1	0			1	13:15	55	0			55	
01:30	7	0			7	13:30	40	0			40	
01:45	1	14	0		1 14	13:45	59	191	0		59 191	
02:00	7	0			7	14:00	56	0			56	
02:15	3	0			3	14:15	43	0			43	
02:30	3	0			3	14:30	43	0			43	
02:45	3	16	0		3 16	14:45	52	194	0		52 194	
03:00	2	0			2	15:00	35	0			35	
03:15	5	0			5	15:15	59	0			59	
03:30	13	0			13	15:30	39	0			39	
03:45	10	30	0		10 30	15:45	51	184	0		51 184	
04:00	17	0			17	16:00	48	0			48	
04:15	13	0			13	16:15	51	0			51	
04:30	13	0			13	16:30	49	0			49	
04:45	19	62	0		19 62	16:45	46	194	0		46 194	
05:00	16	0			16	17:00	44	0			44	
05:15	8	0			8	17:15	40	0			40	
05:30	17	0			17	17:30	52	0			52	
05:45	8	49	0		8 49	17:45	39	175	0		39 175	
06:00	13	0			13	18:00	28	0			28	
06:15	20	0			20	18:15	33	0			33	
06:30	13	0			13	18:30	40	0			40	
06:45	28	74	0		28 74	18:45	33	134	0		33 134	
07:00	30	0			30	19:00	35	0			35	
07:15	27	0			27	19:15	24	0			24	
07:30	27	0			27	19:30	23	0			23	
07:45	24	108	0		24 108	19:45	14	96	0		14 96	
08:00	31	0			31	20:00	22	0			22	
08:15	41	0			41	20:15	25	0			25	
08:30	25	0			25	20:30	12	0			12	
08:45	35	132	0		35 132	20:45	13	72	0		13 72	
09:00	24	0			24	21:00	15	0			15	
09:15	39	0			39	21:15	13	0			13	
09:30	32	0			32	21:30	13	0			13	
09:45	35	130	0		35 130	21:45	14	55	0		14 55	
10:00	39	0			39	22:00	7	0			7	
10:15	38	0			38	22:15	10	0			10	
10:30	42	0			42	22:30	9	0			9	
10:45	40	159	0		40 159	22:45	8	34	0		8 34	
11:00	29	0			29	23:00	3	0			3	
11:15	38	0			38	23:15	3	0			3	
11:30	41	0			41	23:30	3	0			3	
11:45	43	151	0		43 151	23:45	6	15	0		6 15	
TOTALS	944				944	TOTALS	1510				1510	
SPLIT %	100.0%				38.5%	SPLIT %	100.0%				61.5%	

DAILY TOTALS					NB	SB						EB	WB	Total	
					2,454	0						0	0	2,454	

AM Peak Hour	11:30				11:30	PM Peak Hour	13:15				13:15
AM Pk Volume	171				171	PM Pk Volume	210				210
Pk Hr Factor	0.972				0.972	Pk Hr Factor	0.890				0.890
7 - 9 Volume	240	0	0	0	240	4 - 6 Volume	369	0	0	0	369
7 - 9 Peak Hour	08:00				08:00	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	132	0	0	0	132	4 - 6 Pk Volume	194	0	0	0	194
Pk Hr Factor	0.805	0.000	0.000	0.000	0.805	Pk Hr Factor	0.951	0.000	0.000	0.000	0.951

VOLUME

I-15 NB Loop On-Ramp From EB Cajalco Rd

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_031

DAILY TOTALS					NB	SB						EB	WB						Total
					8,501	0						0	0						8,501
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	26	0			26		12:00	117	0			117							
00:15	16	0			16		12:15	113	0			113							
00:30	26	0			26		12:30	97	0			97							
00:45	13	81	0		13	81	12:45	105	432	0		105	432						
01:00	14	0			14		13:00	136	0			136							
01:15	4	0			4		13:15	114	0			114							
01:30	9	0			9		13:30	104	0			104							
01:45	14	41	0		14	41	13:45	136	490	0		136	490						
02:00	3	0			3		14:00	109	0			109							
02:15	12	0			12		14:15	118	0			118							
02:30	14	0			14		14:30	136	0			136							
02:45	11	40	0		11	40	14:45	120	483	0		120	483						
03:00	15	0			15		15:00	101	0			101							
03:15	29	0			29		15:15	98	0			98							
03:30	27	0			27		15:30	100	0			100							
03:45	31	102	0		31	102	15:45	100	399	0		100	399						
04:00	41	0			41		16:00	99	0			99							
04:15	53	0			53		16:15	93	0			93							
04:30	64	0			64		16:30	121	0			121							
04:45	63	221	0		63	221	16:45	99	412	0		99	412						
05:00	64	0			64		17:00	104	0			104							
05:15	67	0			67		17:15	90	0			90							
05:30	137	0			137		17:30	83	0			83							
05:45	114	382	0		114	382	17:45	111	388	0		111	388						
06:00	136	0			136		18:00	80	0			80							
06:15	146	0			146		18:15	94	0			94							
06:30	136	0			136		18:30	82	0			82							
06:45	183	601	0		183	601	18:45	106	362	0		106	362						
07:00	207	0			207		19:00	77	0			77							
07:15	234	0			234		19:15	84	0			84							
07:30	243	0			243		19:30	72	0			72							
07:45	209	893	0		209	893	19:45	70	303	0		70	303						
08:00	164	0			164		20:00	69	0			69							
08:15	191	0			191		20:15	58	0			58							
08:30	211	0			211		20:30	84	0			84							
08:45	157	723	0		157	723	20:45	77	288	0		77	288						
09:00	130	0			130		21:00	60	0			60							
09:15	149	0			149		21:15	48	0			48							
09:30	94	0			94		21:30	54	0			54							
09:45	126	499	0		126	499	21:45	72	234	0		72	234						
10:00	108	0			108		22:00	35	0			35							
10:15	100	0			100		22:15	42	0			42							
10:30	110	0			110		22:30	20	0			20							
10:45	115	433	0		115	433	22:45	26	123	0		26	123						
11:00	109	0			109		23:00	27	0			27							
11:15	114	0			114		23:15	26	0			26							
11:30	106	0			106		23:30	39	0			39							
11:45	116	445	0		116	445	23:45	34	126	0		34	126						
TOTALS	4461				4461		TOTALS	4040				4040							
SPLIT %	100.0%				52.5%		SPLIT %	100.0%				47.5%							

DAILY TOTALS					NB	SB						EB	WB						Total
					8,501	0						0	0						8,501

AM Peak Hour	07:00				07:00		PM Peak Hour	13:45				13:45							
AM Pk Volume	893				893		PM Pk Volume	499				499							
Pk Hr Factor	0.919				0.919		Pk Hr Factor	0.917				0.917							
7 - 9 Volume	1616	0	0	0	1616		4 - 6 Volume	800	0	0	0	800							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:15				16:15							
7 - 9 Pk Volume	893	0	0	0	893		4 - 6 Pk Volume	417	0	0	0	417							
Pk Hr Factor	0.919	0.000	0.000	0.000	0.919		Pk Hr Factor	0.862	0.000	0.000	0.000	0.862							

VOLUME

I-15 NB Loop On-Ramp From EB Cajalco Rd

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_031

DAILY TOTALS					NB	SB						EB	WB						Total
					8,641	0						0	0						8,641
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	11	0			11		12:00	122	0			122							
00:15	25	0			25		12:15	108	0			108							
00:30	18	0			18		12:30	109	0			109							
00:45	14	68	0		14	68	12:45	124	463	0		124	463						
01:00	11	0			11		13:00	103	0			103							
01:15	18	0			18		13:15	128	0			128							
01:30	13	0			13		13:30	98	0			98							
01:45	9	51	0		9	51	13:45	122	451	0		122	451						
02:00	8	0			8		14:00	100	0			100							
02:15	21	0			21		14:15	132	0			132							
02:30	8	0			8		14:30	108	0			108							
02:45	15	52	0		15	52	14:45	130	470	0		130	470						
03:00	17	0			17		15:00	114	0			114							
03:15	21	0			21		15:15	119	0			119							
03:30	21	0			21		15:30	121	0			121							
03:45	30	89	0		30	89	15:45	114	468	0		114	468						
04:00	31	0			31		16:00	95	0			95							
04:15	41	0			41		16:15	99	0			99							
04:30	60	0			60		16:30	99	0			99							
04:45	86	218	0		86	218	16:45	119	412	0		119	412						
05:00	84	0			84		17:00	89	0			89							
05:15	98	0			98		17:15	112	0			112							
05:30	83	0			83		17:30	110	0			110							
05:45	124	389	0		124	389	17:45	71	382	0		71	382						
06:00	114	0			114		18:00	94	0			94							
06:15	120	0			120		18:15	107	0			107							
06:30	132	0			132		18:30	100	0			100							
06:45	162	528	0		162	528	18:45	92	393	0		92	393						
07:00	204	0			204		19:00	74	0			74							
07:15	226	0			226		19:15	64	0			64							
07:30	236	0			236		19:30	86	0			86							
07:45	226	892	0		226	892	19:45	80	304	0		80	304						
08:00	157	0			157		20:00	97	0			97							
08:15	180	0			180		20:15	78	0			78							
08:30	184	0			184		20:30	74	0			74							
08:45	177	698	0		177	698	20:45	79	328	0		79	328						
09:00	146	0			146		21:00	72	0			72							
09:15	136	0			136		21:15	61	0			61							
09:30	140	0			140		21:30	76	0			76							
09:45	147	569	0		147	569	21:45	41	250	0		41	250						
10:00	107	0			107		22:00	41	0			41							
10:15	106	0			106		22:15	44	0			44							
10:30	120	0			120		22:30	33	0			33							
10:45	131	464	0		131	464	22:45	33	151	0		33	151						
11:00	115	0			115		23:00	24	0			24							
11:15	140	0			140		23:15	19	0			19							
11:30	111	0			111		23:30	17	0			17							
11:45	100	466	0		100	466	23:45	25	85	0		25	85						
TOTALS	4484				4484		TOTALS	4157				4157							
SPLIT %	100.0%				51.9%		SPLIT %	100.0%				48.1%							

DAILY TOTALS					NB	SB						EB	WB						Total
					8,641	0						0	0						8,641

AM Peak Hour	07:00				07:00		PM Peak Hour	14:15				14:15							
AM Pk Volume	892				892		PM Pk Volume	484				484							
Pk Hr Factor	0.945				0.945		Pk Hr Factor	0.917				0.917							
7 - 9 Volume	1590	0	0	0	1590		4 - 6 Volume	794	0	0	0	794							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:45				16:45							
7 - 9 Pk Volume	892	0	0	0	892		4 - 6 Pk Volume	430	0	0	0	430							
Pk Hr Factor	0.945	0.000	0.000	0.000	0.945		Pk Hr Factor	0.903	0.000	0.000	0.000	0.903							

VOLUME

I-15 NB Loop On-Ramp From EB Cajalco Rd

Day: Thursday

Date: 9/19/2019

City: Corona

Project #: CA19_6124_031

DAILY TOTALS					NB	SB						EB	WB						Total
					8,702	0						0	0						8,702
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	14	0			14		12:00	97	0			97							
00:15	14	0			14		12:15	127	0			127							
00:30	26	0			26		12:30	83	0			83							
00:45	11	65	0		11	65	12:45	110	417	0		110	417						
01:00	22	0			22		13:00	108	0			108							
01:15	16	0			16		13:15	125	0			125							
01:30	11	0			11		13:30	108	0			108							
01:45	11	60	0		11	60	13:45	137	478	0		137	478						
02:00	7	0			7		14:00	128	0			128							
02:15	12	0			12		14:15	119	0			119							
02:30	12	0			12		14:30	121	0			121							
02:45	15	46	0		15	46	14:45	102	470	0		102	470						
03:00	8	0			8		15:00	103	0			103							
03:15	25	0			25		15:15	124	0			124							
03:30	17	0			17		15:30	150	0			150							
03:45	31	81	0		31	81	15:45	108	485	0		108	485						
04:00	27	0			27		16:00	81	0			81							
04:15	55	0			55		16:15	99	0			99							
04:30	75	0			75		16:30	93	0			93							
04:45	61	218	0		61	218	16:45	98	371	0		98	371						
05:00	93	0			93		17:00	90	0			90							
05:15	88	0			88		17:15	109	0			109							
05:30	106	0			106		17:30	89	0			89							
05:45	135	422	0		135	422	17:45	84	372	0		84	372						
06:00	109	0			109		18:00	87	0			87							
06:15	130	0			130		18:15	89	0			89							
06:30	144	0			144		18:30	88	0			88							
06:45	173	556	0		173	556	18:45	99	363	0		99	363						
07:00	184	0			184		19:00	87	0			87							
07:15	233	0			233		19:15	83	0			83							
07:30	244	0			244		19:30	79	0			79							
07:45	241	902	0		241	902	19:45	81	330	0		81	330						
08:00	202	0			202		20:00	73	0			73							
08:15	191	0			191		20:15	98	0			98							
08:30	184	0			184		20:30	73	0			73							
08:45	178	755	0		178	755	20:45	78	322	0		78	322						
09:00	146	0			146		21:00	74	0			74							
09:15	146	0			146		21:15	74	0			74							
09:30	132	0			132		21:30	57	0			57							
09:45	146	570	0		146	570	21:45	48	253	0		48	253						
10:00	107	0			107		22:00	31	0			31							
10:15	113	0			113		22:15	38	0			38							
10:30	113	0			113		22:30	35	0			35							
10:45	122	455	0		122	455	22:45	35	139	0		35	139						
11:00	117	0			117		23:00	34	0			34							
11:15	132	0			132		23:15	20	0			20							
11:30	116	0			116		23:30	26	0			26							
11:45	101	466	0		101	466	23:45	26	106	0		26	106						
TOTALS	4596				4596		TOTALS	4106				4106							
SPLIT %	100.0%				52.8%		SPLIT %	100.0%				47.2%							

DAILY TOTALS					NB	SB						EB	WB						Total
					8,702	0						0	0						8,702

AM Peak Hour	07:15				07:15		PM Peak Hour	13:45				13:45							
AM Pk Volume	920				920		PM Pk Volume	505				505							
Pk Hr Factor	0.943				0.943		Pk Hr Factor	0.922				0.922							
7 - 9 Volume	1657	0	0	0	1657		4 - 6 Volume	743	0	0	0	743							
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	920	0	0	0	920		4 - 6 Pk Volume	390	0	0	0	390							
Pk Hr Factor	0.943	0.000	0.000	0.000	0.943		Pk Hr Factor	0.894	0.000	0.000	0.000	0.894							

VOLUME

I-15 SB On-Ramp From Cajalco Rd

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_032

DAILY TOTALS					NB	SB						EB	WB	Total
					0	5,206						0	0	5,206
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	7			7		12:00	0	74			74		
00:15	0	5			5		12:15	0	86			86		
00:30	0	5			5		12:30	0	69			69		
00:45	0	7	24		7	24	12:45	0	84	313		84	313	
01:00	0	8			8		13:00	0	74			74		
01:15	0	7			7		13:15	0	95			95		
01:30	0	1			1		13:30	0	73			73		
01:45	0	4	20		4	20	13:45	0	76	318		76	318	
02:00	0	3			3		14:00	0	73			73		
02:15	0	1			1		14:15	0	81			81		
02:30	0	4			4		14:30	0	90			90		
02:45	0	2	10		2	10	14:45	0	95	339		95	339	
03:00	0	2			2		15:00	0	115			115		
03:15	0	2			2		15:15	0	128			128		
03:30	0	9			9		15:30	0	140			140		
03:45	0	3	16		3	16	15:45	0	109	492		109	492	
04:00	0	5			5		16:00	0	147			147		
04:15	0	12			12		16:15	0	136			136		
04:30	0	7			7		16:30	0	181			181		
04:45	0	11	35		11	35	16:45	0	174	638		174	638	
05:00	0	21			21		17:00	0	159			159		
05:15	0	8			8		17:15	0	172			172		
05:30	0	17			17		17:30	0	165			165		
05:45	0	17	63		17	63	17:45	0	153	649		153	649	
06:00	0	23			23		18:00	0	140			140		
06:15	0	21			21		18:15	0	96			96		
06:30	0	27			27		18:30	0	89			89		
06:45	0	33	104		33	104	18:45	0	81	406		81	406	
07:00	0	48			48		19:00	0	68			68		
07:15	0	36			36		19:15	0	83			83		
07:30	0	45			45		19:30	0	58			58		
07:45	0	47	176		47	176	19:45	0	76	285		76	285	
08:00	0	36			36		20:00	0	46			46		
08:15	0	44			44		20:15	0	50			50		
08:30	0	44			44		20:30	0	56			56		
08:45	0	57	181		57	181	20:45	0	48	200		48	200	
09:00	0	42			42		21:00	0	61			61		
09:15	0	34			34		21:15	0	48			48		
09:30	0	45			45		21:30	0	42			42		
09:45	0	59	180		59	180	21:45	0	38	189		38	189	
10:00	0	46			46		22:00	0	30			30		
10:15	0	47			47		22:15	0	21			21		
10:30	0	73			73		22:30	0	13			13		
10:45	0	54	220		54	220	22:45	0	20	84		20	84	
11:00	0	47			47		23:00	0	24			24		
11:15	0	57			57		23:15	0	15			15		
11:30	0	53			53		23:30	0	10			10		
11:45	0	50	207		50	207	23:45	0	8	57		8	57	
TOTALS	1236				1236		TOTALS	3970				3970		
SPLIT %	100.0%				23.7%		SPLIT %	100.0%				76.3%		

DAILY TOTALS					NB	SB						EB	WB	Total
					0	5,206						0	0	5,206

AM Peak Hour	11:45				11:45		PM Peak Hour	16:30					16:30	
AM Pk Volume	279				279		PM Pk Volume	686					686	
Pk Hr Factor	0.811				0.811		Pk Hr Factor	0.948					0.948	
7 - 9 Volume	0	357	0	0	357		4 - 6 Volume	0	1287	0	0		1287	
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	16:30					16:30	
7 - 9 Pk Volume	181		0	0	181		4 - 6 Pk Volume	686		0	0		686	
Pk Hr Factor	0.000	0.794	0.000	0.000	0.794		Pk Hr Factor	0.000	0.948	0.000	0.000		0.948	

VOLUME

I-15 SB On-Ramp From Cajalco Rd

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_032

DAILY TOTALS					NB	SB						Total
					0	5,206	0	0	5,206			
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	11			11	12:00	0	69			69	
00:15	0	8			8	12:15	0	70			70	
00:30	0	6			6	12:30	0	63			63	
00:45	0	5	30		5	12:45	0	70	272		70	
01:00	0	5			5	13:00	0	55			55	
01:15	0	3			3	13:15	0	66			66	
01:30	0	3			3	13:30	0	99			99	
01:45	0	5	16		5	13:45	0	93	313		93	
02:00	0	2			2	14:00	0	81			81	
02:15	0	5			5	14:15	0	76			76	
02:30	0	4			4	14:30	0	109			109	
02:45	0	2	13		2	14:45	0	86	352		86	
03:00	0	4			4	15:00	0	90			90	
03:15	0	11			11	15:15	0	139			139	
03:30	0	5			5	15:30	0	143			143	
03:45	0	11	31		11	15:45	0	114	486		114	
04:00	0	8			8	16:00	0	142			142	
04:15	0	13			13	16:15	0	150			150	
04:30	0	18			18	16:30	0	155			155	
04:45	0	8	47		8	16:45	0	155	602		155	
05:00	0	20			20	17:00	0	147			147	
05:15	0	15			15	17:15	0	212			212	
05:30	0	11			11	17:30	0	166			166	
05:45	0	23	69		23	17:45	0	154	679		154	
06:00	0	33			33	18:00	0	111			111	
06:15	0	34			34	18:15	0	101			101	
06:30	0	44			44	18:30	0	84			84	
06:45	0	53	164		53	18:45	0	69	365		69	
07:00	0	39			39	19:00	0	74			74	
07:15	0	48			48	19:15	0	91			91	
07:30	0	35			35	19:30	0	68			68	
07:45	0	51	173		51	19:45	0	46	279		46	
08:00	0	46			46	20:00	0	51			51	
08:15	0	36			36	20:15	0	61			61	
08:30	0	36			36	20:30	0	55			55	
08:45	0	51	169		51	20:45	0	70	237		70	
09:00	0	30			30	21:00	0	41			41	
09:15	0	34			34	21:15	0	39			39	
09:30	0	54			54	21:30	0	31			31	
09:45	0	65	183		65	21:45	0	38	149		38	
10:00	0	45			45	22:00	0	21			21	
10:15	0	49			49	22:15	0	22			22	
10:30	0	53			53	22:30	0	22			22	
10:45	0	51	198		51	22:45	0	20	85		20	
11:00	0	53			53	23:00	0	12			12	
11:15	0	67			67	23:15	0	12			12	
11:30	0	60			60	23:30	0	12			12	
11:45	0	70	250		70	23:45	0	8	44		8	
TOTALS	1343				1343	TOTALS	3863				3863	
SPLIT %	100.0%				25.8%	SPLIT %	100.0%				74.2%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	5,206	0	0	5,206

AM Peak Hour	11:45				11:45	PM Peak Hour	16:45				16:45
AM Pk Volume	272				272	PM Pk Volume	680				680
Pk Hr Factor	0.971				0.971	Pk Hr Factor	0.802				0.802
7 - 9 Volume	0	342	0	0	342	4 - 6 Volume	0	1281	0	0	1281
7 - 9 Peak Hour	07:15				07:15	4 - 6 Peak Hour	16:45				16:45
7 - 9 Pk Volume	180		0	0	180	4 - 6 Pk Volume	680		0	0	680
Pk Hr Factor	0.000	0.882	0.000	0.000	0.882	Pk Hr Factor	0.000	0.802	0.000	0.000	0.802

VOLUME

I-15 SB On-Ramp From Cajalco Rd

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_032

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	5,772						0	0	5,772	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00	0	12			12		12:00	0	58			58			
00:15	0	13			13		12:15	0	64			64			
00:30	0	5			5		12:30	0	73			73			
00:45	0	8	38		8	38	12:45	0	89	284		89	284		
01:00	0	3			3		13:00	0	79			79			
01:15	0	2			2		13:15	0	75			75			
01:30	0	5			5		13:30	0	65			65			
01:45	0	3	13		3	13	13:45	0	89	308		89	308		
02:00	0	3			3		14:00	0	90			90			
02:15	0	2			2		14:15	0	89			89			
02:30	0	1			1		14:30	0	107			107			
02:45	0	4	10		4	10	14:45	0	98	384		98	384		
03:00	0	3			3		15:00	0	111			111			
03:15	0	20			20		15:15	0	163			163			
03:30	0	4			4		15:30	0	154			154			
03:45	0	3	30		3	30	15:45	0	194	622		194	622		
04:00	0	9			9		16:00	0	186			186			
04:15	0	11			11		16:15	0	186			186			
04:30	0	17			17		16:30	0	188			188			
04:45	0	13	50		13	50	16:45	0	180	740		180	740		
05:00	0	18			18		17:00	0	166			166			
05:15	0	14			14		17:15	0	180			180			
05:30	0	21			21		17:30	0	199			199			
05:45	0	14	67		14	67	17:45	0	178	723		178	723		
06:00	0	25			25		18:00	0	177			177			
06:15	0	43			43		18:15	0	130			130			
06:30	0	38			38		18:30	0	125			125			
06:45	0	37	143		37	143	18:45	0	70	502		70	502		
07:00	0	36			36		19:00	0	79			79			
07:15	0	29			29		19:15	0	55			55			
07:30	0	50			50		19:30	0	62			62			
07:45	0	50	165		50	165	19:45	0	75	271		75	271		
08:00	0	41			41		20:00	0	68			68			
08:15	0	50			50		20:15	0	50			50			
08:30	0	52			52		20:30	0	64			64			
08:45	0	51	194		51	194	20:45	0	70	252		70	252		
09:00	0	53			53		21:00	0	55			55			
09:15	0	53			53		21:15	0	35			35			
09:30	0	45			45		21:30	0	47			47			
09:45	0	53	204		53	204	21:45	0	41	178		41	178		
10:00	0	45			45		22:00	0	36			36			
10:15	0	39			39		22:15	0	27			27			
10:30	0	53			53		22:30	0	24			24			
10:45	0	53	190		53	190	22:45	0	25	112		25	112		
11:00	0	56			56		23:00	0	21			21			
11:15	0	62			62		23:15	0	14			14			
11:30	0	59			59		23:30	0	10			10			
11:45	0	62	239		62	239	23:45	0	8	53		8	53		
TOTALS	1343				1343		TOTALS	4429				4429			
SPLIT %	100.0%				23.3%		SPLIT %	100.0%				76.7%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	5,772						0	0	5,772	

AM Peak Hour	11:45				11:45		PM Peak Hour	15:45						15:45	
AM Pk Volume	257				257		PM Pk Volume	754						754	
Pk Hr Factor	0.880				0.880		Pk Hr Factor	0.972						0.972	
7 - 9 Volume	0	359	0	0	359		4 - 6 Volume	0	1463	0	0	1463		1463	
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	16:00				16:00		16:00	
7 - 9 Pk Volume	0	194	0	0	194		4 - 6 Pk Volume	0	740	0	0	740		740	
Pk Hr Factor	0.000	0.933	0.000	0.000	0.933		Pk Hr Factor	0.000	0.984	0.000	0.000	0.984		0.984	

VOLUME

I-15 SB Off-Ramp To Cajalco Rd

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_033

DAILY TOTALS					NB	SB						EB	WB						Total
					0	8,377						0	0						8,377
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	26			26		12:00	0	158			158							
00:15	0	26			26		12:15	0	161			161							
00:30	0	14			14		12:30	0	150			150							
00:45	0	16	82		16	82	12:45	0	139	608		139	608						
01:00	0	10			10		13:00	0	124			124							
01:15	0	10			10		13:15	0	157			157							
01:30	0	12			12		13:30	0	114			114							
01:45	0	16	48		16	48	13:45	0	113	508		113	508						
02:00	0	7			7		14:00	0	131			131							
02:15	0	15			15		14:15	0	100			100							
02:30	0	26			26		14:30	0	119			119							
02:45	0	19	67		19	67	14:45	0	85	435		85	435						
03:00	0	16			16		15:00	0	97			97							
03:15	0	30			30		15:15	0	79			79							
03:30	0	29			29		15:30	0	86			86							
03:45	0	44	119		44	119	15:45	0	93	355		93	355						
04:00	0	28			28		16:00	0	62			62							
04:15	0	56			56		16:15	0	61			61							
04:30	0	53			53		16:30	0	69			69							
04:45	0	57	194		57	194	16:45	0	69	261		69	261						
05:00	0	71			71		17:00	0	77			77							
05:15	0	42			42		17:15	0	69			69							
05:30	0	74			74		17:30	0	87			87							
05:45	0	91	278		91	278	17:45	0	82	315		82	315						
06:00	0	110			110		18:00	0	102			102							
06:15	0	93			93		18:15	0	105			105							
06:30	0	84			84		18:30	0	93			93							
06:45	0	92	379		92	379	18:45	0	111	411		111	411						
07:00	0	99			99		19:00	0	126			126							
07:15	0	87			87		19:15	0	135			135							
07:30	0	136			136		19:30	0	138			138							
07:45	0	141	463		141	463	19:45	0	116	515		116	515						
08:00	0	127			127		20:00	0	140			140							
08:15	0	137			137		20:15	0	126			126							
08:30	0	128			128		20:30	0	102			102							
08:45	0	140	532		140	532	20:45	0	104	472		104	472						
09:00	0	106			106		21:00	0	82			82							
09:15	0	99			99		21:15	0	79			79							
09:30	0	153			153		21:30	0	68			68							
09:45	0	151	509		151	509	21:45	0	93	322		93	322						
10:00	0	133			133		22:00	0	66			66							
10:15	0	143			143		22:15	0	61			61							
10:30	0	142			142		22:30	0	35			35							
10:45	0	160	578		160	578	22:45	0	31	193		31	193						
11:00	0	143			143		23:00	0	34			34							
11:15	0	158			158		23:15	0	26			26							
11:30	0	169			169		23:30	0	24			24							
11:45	0	155	625		155	625	23:45	0	24	108		24	108						
TOTALS	3874				3874		TOTALS	4503				4503							
SPLIT %	100.0%				46.2%		SPLIT %	100.0%				53.8%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	8,377						0	0						8,377

AM Peak Hour	11:30				11:30		PM Peak Hour	12:00					12:00						
AM Pk Volume	643				643		PM Pk Volume	608					608						
Pk Hr Factor	0.951				0.951		Pk Hr Factor	0.944					0.944						
7 - 9 Volume	0	995	0	0	995		4 - 6 Volume	0	576	0	0	576							
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	17:00				17:00							
7 - 9 Pk Volume	0	541	0	0	541		4 - 6 Pk Volume	315			0	315							
Pk Hr Factor	0.000	0.959	0.000	0.000	0.959		Pk Hr Factor	0.000	0.905	0.000	0.000	0.905							

VOLUME

I-15 SB Off-Ramp To Cajalco Rd

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_033

DAILY TOTALS					NB	SB						EB	WB						Total
					0	8,281						0	0						8,281
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	31			31		12:00	0	141			141							
00:15	0	20			20		12:15	0	120			120							
00:30	0	14			14		12:30	0	167			167							
00:45	0	8	73		8	73	12:45	0	124	552		124	552						
01:00	0	14			14		13:00	0	141			141							
01:15	0	14			14		13:15	0	161			161							
01:30	0	11			11		13:30	0	153			153							
01:45	0	15	54		15	54	13:45	0	149	604		149	604						
02:00	0	13			13		14:00	0	136			136							
02:15	0	10			10		14:15	0	135			135							
02:30	0	24			24		14:30	0	101			101							
02:45	0	23	70		23	70	14:45	0	78	450		78	450						
03:00	0	19			19		15:00	0	81			81							
03:15	0	21			21		15:15	0	74			74							
03:30	0	38			38		15:30	0	79			79							
03:45	0	31	109		31	109	15:45	0	87	321		87	321						
04:00	0	48			48		16:00	0	75			75							
04:15	0	51			51		16:15	0	66			66							
04:30	0	65			65		16:30	0	59			59							
04:45	0	57	221		57	221	16:45	0	72	272		72	272						
05:00	0	59			59		17:00	0	68			68							
05:15	0	45			45		17:15	0	79			79							
05:30	0	75			75		17:30	0	67			67							
05:45	0	112	291		112	291	17:45	0	79	293		79	293						
06:00	0	103			103		18:00	0	101			101							
06:15	0	105			105		18:15	0	94			94							
06:30	0	83			83		18:30	0	107			107							
06:45	0	98	389		98	389	18:45	0	114	416		114	416						
07:00	0	103			103		19:00	0	117			117							
07:15	0	83			83		19:15	0	168			168							
07:30	0	127			127		19:30	0	131			131							
07:45	0	113	426		113	426	19:45	0	147	563		147	563						
08:00	0	108			108		20:00	0	121			121							
08:15	0	115			115		20:15	0	98			98							
08:30	0	161			161		20:30	0	112			112							
08:45	0	115	499		115	499	20:45	0	103	434		103	434						
09:00	0	143			143		21:00	0	77			77							
09:15	0	136			136		21:15	0	63			63							
09:30	0	102			102		21:30	0	56			56							
09:45	0	137	518		137	518	21:45	0	58	254		58	254						
10:00	0	116			116		22:00	0	44			44							
10:15	0	155			155		22:15	0	51			51							
10:30	0	124			124		22:30	0	45			45							
10:45	0	140	535		140	535	22:45	0	29	169		29	169						
11:00	0	174			174		23:00	0	33			33							
11:15	0	161			161		23:15	0	20			20							
11:30	0	156			156		23:30	0	33			33							
11:45	0	163	654		163	654	23:45	0	28	114		28	114						
TOTALS	3839				3839		TOTALS	4442				4442							
SPLIT %	100.0%				46.4%		SPLIT %	100.0%				53.6%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	8,281						0	0						8,281

AM Peak Hour	11:00				11:00		PM Peak Hour	13:00					13:00						
AM Pk Volume	654				654		PM Pk Volume	604					604						
Pk Hr Factor	0.940				0.940		Pk Hr Factor	0.938					0.938						
7 - 9 Volume	0	925	0	0	925		4 - 6 Volume	0	565	0	0	565							
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	17:00				17:00							
7 - 9 Pk Volume	499		0	0	499		4 - 6 Pk Volume	293		0	0	293							
Pk Hr Factor	0.000	0.775	0.000	0.000	0.775		Pk Hr Factor	0.000	0.927	0.000	0.000	0.927							

VOLUME

I-15 SB Off-Ramp To Cajalco Rd

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_033

DAILY TOTALS					NB	SB						EB	WB						Total
					0	8,253						0	0						8,253
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	21			21		12:00	0	150			150							
00:15	0	22			22		12:15	0	179			179							
00:30	0	24			24		12:30	0	158			158							
00:45	0	25	92		25	92	12:45	0	122	609		122	609						
01:00	0	12			12		13:00	0	139			139							
01:15	0	9			9		13:15	0	139			139							
01:30	0	11			11		13:30	0	116			116							
01:45	0	11	43		11	43	13:45	0	114	508		114	508						
02:00	0	19			19		14:00	0	96			96							
02:15	0	19			19		14:15	0	122			122							
02:30	0	22			22		14:30	0	101			101							
02:45	0	19	79		19	79	14:45	0	98	417		98	417						
03:00	0	39			39		15:00	0	87			87							
03:15	0	15			15		15:15	0	74			74							
03:30	0	29			29		15:30	0	88			88							
03:45	0	35	118		35	118	15:45	0	83	332		83	332						
04:00	0	33			33		16:00	0	54			54							
04:15	0	45			45		16:15	0	57			57							
04:30	0	75			75		16:30	0	75			75							
04:45	0	89	242		89	242	16:45	0	62	248		62	248						
05:00	0	63			63		17:00	0	47			47							
05:15	0	51			51		17:15	0	69			69							
05:30	0	72			72		17:30	0	60			60							
05:45	0	93	279		93	279	17:45	0	70	246		70	246						
06:00	0	107			107		18:00	0	89			89							
06:15	0	73			73		18:15	0	80			80							
06:30	0	68			68		18:30	0	96			96							
06:45	0	110	358		110	358	18:45	0	125	390		125	390						
07:00	0	97			97		19:00	0	96			96							
07:15	0	96			96		19:15	0	122			122							
07:30	0	130			130		19:30	0	124			124							
07:45	0	132	455		132	455	19:45	0	129	471		129	471						
08:00	0	123			123		20:00	0	131			131							
08:15	0	133			133		20:15	0	145			145							
08:30	0	145			145		20:30	0	97			97							
08:45	0	125	526		125	526	20:45	0	113	486		113	486						
09:00	0	127			127		21:00	0	97			97							
09:15	0	117			117		21:15	0	108			108							
09:30	0	123			123		21:30	0	103			103							
09:45	0	123	490		123	490	21:45	0	77	385		77	385						
10:00	0	131			131		22:00	0	66			66							
10:15	0	119			119		22:15	0	69			69							
10:30	0	129			129		22:30	0	32			32							
10:45	0	162	541		162	541	22:45	0	40	207		40	207						
11:00	0	141			141		23:00	0	29			29							
11:15	0	165			165		23:15	0	28			28							
11:30	0	152			152		23:30	0	21			21							
11:45	0	169	627		169	627	23:45	0	26	104		26	104						
TOTALS	3850				3850		TOTALS	4403				4403							
SPLIT %	100.0%				46.6%		SPLIT %	100.0%				53.4%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	8,253						0	0						8,253

AM Peak Hour	11:45				11:45		PM Peak Hour	12:00				12:00							
AM Pk Volume	656				656		PM Pk Volume	609				609							
Pk Hr Factor	0.916				0.916		Pk Hr Factor	0.851				0.851							
7 - 9 Volume	0	981	0	0	981		4 - 6 Volume	0	494	0	0	494							
7 - 9 Peak Hour	07:45				07:45		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	533		0	0	533		4 - 6 Pk Volume	253		0	0	253							
Pk Hr Factor	0.000	0.919	0.000	0.000	0.919		Pk Hr Factor	0.000	0.843	0.000	0.000	0.843							

VOLUME

I-15 NB Off-Ramp To El Cerrito Rd

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_034

DAILY TOTALS					NB	SB						EB	WB	Total
					4,588	0						0	0	4,588
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	5	0			5		12:00	33	0			33		
00:15	5	0			5		12:15	61	0			61		
00:30	6	0			6		12:30	56	0			56		
00:45	8	24	0		8	24	12:45	39	189	0		39	189	
01:00	6	0			6		13:00	45	0			45		
01:15	8	0			8		13:15	58	0			58		
01:30	4	0			4		13:30	59	0			59		
01:45	2	20	0		2	20	13:45	66	228	0		66	228	
02:00	2	0			2		14:00	83	0			83		
02:15	1	0			1		14:15	85	0			85		
02:30	1	0			1		14:30	77	0			77		
02:45	3	7	0		3	7	14:45	89	334	0		89	334	
03:00	4	0			4		15:00	71	0			71		
03:15	5	0			5		15:15	52	0			52		
03:30	8	0			8		15:30	48	0			48		
03:45	12	29	0		12	29	15:45	62	233	0		62	233	
04:00	19	0			19		16:00	69	0			69		
04:15	41	0			41		16:15	61	0			61		
04:30	133	0			133		16:30	59	0			59		
04:45	184	377	0		184	377	16:45	62	251	0		62	251	
05:00	125	0			125		17:00	60	0			60		
05:15	92	0			92		17:15	75	0			75		
05:30	96	0			96		17:30	88	0			88		
05:45	76	389	0		76	389	17:45	78	301	0		78	301	
06:00	75	0			75		18:00	52	0			52		
06:15	47	0			47		18:15	72	0			72		
06:30	62	0			62		18:30	53	0			53		
06:45	91	275	0		91	275	18:45	56	233	0		56	233	
07:00	128	0			128		19:00	45	0			45		
07:15	100	0			100		19:15	46	0			46		
07:30	60	0			60		19:30	50	0			50		
07:45	49	337	0		49	337	19:45	22	163	0		22	163	
08:00	62	0			62		20:00	29	0			29		
08:15	85	0			85		20:15	22	0			22		
08:30	86	0			86		20:30	22	0			22		
08:45	74	307	0		74	307	20:45	18	91	0		18	91	
09:00	55	0			55		21:00	28	0			28		
09:15	63	0			63		21:15	21	0			21		
09:30	81	0			81		21:30	13	0			13		
09:45	71	270	0		71	270	21:45	27	89	0		27	89	
10:00	56	0			56		22:00	14	0			14		
10:15	54	0			54		22:15	17	0			17		
10:30	35	0			35		22:30	15	0			15		
10:45	35	180	0		35	180	22:45	11	57	0		11	57	
11:00	27	0			27		23:00	10	0			10		
11:15	47	0			47		23:15	10	0			10		
11:30	42	0			42		23:30	13	0			13		
11:45	44	160	0		44	160	23:45	11	44	0		11	44	
TOTALS	2375				2375		TOTALS	2213				2213		
SPLIT %	100.0%				51.8%		SPLIT %	100.0%				48.2%		

DAILY TOTALS					NB	SB						EB	WB	Total
					4,588	0						0	0	4,588

AM Peak Hour	04:30				04:30		PM Peak Hour	14:00				14:00		
AM Pk Volume	534				534		PM Pk Volume	334				334		
Pk Hr Factor	0.726				0.726		Pk Hr Factor	0.938				0.938		
7 - 9 Volume	644	0	0	0	644		4 - 6 Volume	552	0	0	0	552		
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	17:00				17:00		
7 - 9 Pk Volume	337	0	0	0	337		4 - 6 Pk Volume	301	0	0	0	301		
Pk Hr Factor	0.658	0.000	0.000	0.000	0.658		Pk Hr Factor	0.855	0.000	0.000	0.000	0.855		

VOLUME

I-15 NB Off-Ramp To El Cerrito Rd

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_034

DAILY TOTALS					NB	SB						EB	WB						Total
					4,530	0						0	0						4,530
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	8	0			8		12:00	64	0			64							
00:15	4	0			4		12:15	45	0			45							
00:30	7	0			7		12:30	58	0			58							
00:45	6	25	0		6	25	12:45	49	216	0		49	216						
01:00	4	0			4		13:00	67	0			67							
01:15	2	0			2		13:15	83	0			83							
01:30	3	0			3		13:30	58	0			58							
01:45	2	11	0		2	11	13:45	70	278	0		70	278						
02:00	2	0			2		14:00	48	0			48							
02:15	3	0			3		14:15	83	0			83							
02:30	1	0			1		14:30	85	0			85							
02:45	2	8	0		2	8	14:45	73	289	0		73	289						
03:00	3	0			3		15:00	75	0			75							
03:15	2	0			2		15:15	55	0			55							
03:30	8	0			8		15:30	43	0			43							
03:45	8	21	0		8	21	15:45	51	224	0		51	224						
04:00	12	0			12		16:00	49	0			49							
04:15	34	0			34		16:15	72	0			72							
04:30	119	0			119		16:30	67	0			67							
04:45	142	307	0		142	307	16:45	61	249	0		61	249						
05:00	105	0			105		17:00	69	0			69							
05:15	98	0			98		17:15	62	0			62							
05:30	110	0			110		17:30	67	0			67							
05:45	77	390	0		77	390	17:45	54	252	0		54	252						
06:00	60	0			60		18:00	82	0			82							
06:15	55	0			55		18:15	49	0			49							
06:30	83	0			83		18:30	72	0			72							
06:45	78	276	0		78	276	18:45	53	256	0		53	256						
07:00	91	0			91		19:00	26	0			26							
07:15	92	0			92		19:15	32	0			32							
07:30	79	0			79		19:30	34	0			34							
07:45	67	329	0		67	329	19:45	31	123	0		31	123						
08:00	94	0			94		20:00	43	0			43							
08:15	124	0			124		20:15	33	0			33							
08:30	62	0			62		20:30	42	0			42							
08:45	69	349	0		69	349	20:45	27	145	0		27	145						
09:00	56	0			56		21:00	27	0			27							
09:15	59	0			59		21:15	22	0			22							
09:30	63	0			63		21:30	16	0			16							
09:45	52	230	0		52	230	21:45	17	82	0		17	82						
10:00	59	0			59		22:00	17	0			17							
10:15	62	0			62		22:15	14	0			14							
10:30	42	0			42		22:30	18	0			18							
10:45	43	206	0		43	206	22:45	12	61	0		12	61						
11:00	35	0			35		23:00	7	0			7							
11:15	39	0			39		23:15	9	0			9							
11:30	37	0			37		23:30	7	0			7							
11:45	60	171	0		60	171	23:45	9	32	0		9	32						
TOTALS	2323				2323		TOTALS	2207				2207							
SPLIT %	100.0%				51.3%		SPLIT %	100.0%				48.7%							

DAILY TOTALS					NB	SB						EB	WB						Total
					4,530	0						0	0						4,530

AM Peak Hour	04:30				04:30		PM Peak Hour	14:15				14:15							
AM Pk Volume	464				464		PM Pk Volume	316				316							
Pk Hr Factor	0.817				0.817		Pk Hr Factor	0.929				0.929							
7 - 9 Volume	678	0	0	0	678		4 - 6 Volume	501	0	0	0	501							
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	16:15				16:15							
7 - 9 Pk Volume	364	0	0	0	364		4 - 6 Pk Volume	269	0	0	0	269							
Pk Hr Factor	0.734	0.000	0.000	0.000	0.734		Pk Hr Factor	0.934	0.000	0.000	0.000	0.934							

VOLUME

I-15 NB Off-Ramp To El Cerrito Rd

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_034

DAILY TOTALS					NB	SB						EB	WB	Total
					4,505	0						0	0	4,505
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	7	0			7	12:00	39	0			39			
00:15	8	0			8	12:15	42	0			42			
00:30	6	0			6	12:30	33	0			33			
00:45	10	31	0		10 31	12:45	47	161	0		47 161			
01:00	5	0			5	13:00	42	0			42			
01:15	2	0			2	13:15	45	0			45			
01:30	5	0			5	13:30	65	0			65			
01:45	3	15	0		3 15	13:45	69	221	0		69 221			
02:00	4	0			4	14:00	88	0			88			
02:15	4	0			4	14:15	87	0			87			
02:30	6	0			6	14:30	76	0			76			
02:45	2	16	0		2 16	14:45	94	345	0		94 345			
03:00	3	0			3	15:00	72	0			72			
03:15	9	0			9	15:15	69	0			69			
03:30	5	0			5	15:30	57	0			57			
03:45	2	19	0		2 19	15:45	48	246	0		48 246			
04:00	11	0			11	16:00	60	0			60			
04:15	36	0			36	16:15	63	0			63			
04:30	110	0			110	16:30	79	0			79			
04:45	164	321	0		164 321	16:45	59	261	0		59 261			
05:00	109	0			109	17:00	73	0			73			
05:15	108	0			108	17:15	61	0			61			
05:30	96	0			96	17:30	66	0			66			
05:45	82	395	0		82 395	17:45	75	275	0		75 275			
06:00	61	0			61	18:00	66	0			66			
06:15	69	0			69	18:15	67	0			67			
06:30	59	0			59	18:30	71	0			71			
06:45	113	302	0		113 302	18:45	43	247	0		43 247			
07:00	104	0			104	19:00	39	0			39			
07:15	109	0			109	19:15	61	0			61			
07:30	53	0			53	19:30	39	0			39			
07:45	36	302	0		36 302	19:45	43	182	0		43 182			
08:00	50	0			50	20:00	34	0			34			
08:15	61	0			61	20:15	41	0			41			
08:30	60	0			60	20:30	40	0			40			
08:45	65	236	0		65 236	20:45	26	141	0		26 141			
09:00	56	0			56	21:00	28	0			28			
09:15	65	0			65	21:15	48	0			48			
09:30	65	0			65	21:30	19	0			19			
09:45	67	253	0		67 253	21:45	18	113	0		18 113			
10:00	45	0			45	22:00	21	0			21			
10:15	37	0			37	22:15	14	0			14			
10:30	37	0			37	22:30	14	0			14			
10:45	33	152	0		33 152	22:45	15	64	0		15 64			
11:00	39	0			39	23:00	13	0			13			
11:15	42	0			42	23:15	13	0			13			
11:30	39	0			39	23:30	7	0			7			
11:45	43	163	0		43 163	23:45	11	44	0		11 44			
TOTALS	2205				2205	TOTALS	2300				2300			
SPLIT %	100.0%				48.9%	SPLIT %	100.0%				51.1%			

DAILY TOTALS					NB	SB						EB	WB						Total
					4,505	0						0	0						4,505

AM Peak Hour	04:30				04:30	PM Peak Hour	14:00				14:00
AM Pk Volume	491				491	PM Pk Volume	345				345
Pk Hr Factor	0.748				0.748	Pk Hr Factor	0.918				0.918
7 - 9 Volume	538	0	0	0	538	4 - 6 Volume	536	0	0	0	536
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	302	0	0	0	302	4 - 6 Pk Volume	275	0	0	0	275
Pk Hr Factor	0.693	0.000	0.000	0.000	0.693	Pk Hr Factor	0.917	0.000	0.000	0.000	0.917

VOLUME

I-15 NB On-Ramp From El Cerrito Rd

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_035

DAILY TOTALS					NB	SB						EB	WB	Total
					7,371	0						0	0	7,371
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	5	0			5	12:00	68	0			68			
00:15	6	0			6	12:15	86	0			86			
00:30	5	0			5	12:30	72	0			72			
00:45	8	24	0		8 24	12:45	109	335	0		109 335			
01:00	2	0			2	13:00	102	0			102			
01:15	4	0			4	13:15	77	0			77			
01:30	4	0			4	13:30	86	0			86			
01:45	7	17	0		7 17	13:45	85	350	0		85 350			
02:00	5	0			5	14:00	104	0			104			
02:15	5	0			5	14:15	176	0			176			
02:30	7	0			7	14:30	124	0			124			
02:45	5	22	0		5 22	14:45	88	492	0		88 492			
03:00	9	0			9	15:00	96	0			96			
03:15	21	0			21	15:15	97	0			97			
03:30	20	0			20	15:30	87	0			87			
03:45	33	83	0		33 83	15:45	88	368	0		88 368			
04:00	41	0			41	16:00	61	0			61			
04:15	42	0			42	16:15	95	0			95			
04:30	64	0			64	16:30	70	0			70			
04:45	49	196	0		49 196	16:45	73	299	0		73 299			
05:00	70	0			70	17:00	67	0			67			
05:15	76	0			76	17:15	92	0			92			
05:30	91	0			91	17:30	94	0			94			
05:45	126	363	0		126 363	17:45	83	336	0		83 336			
06:00	133	0			133	18:00	84	0			84			
06:15	154	0			154	18:15	82	0			82			
06:30	166	0			166	18:30	89	0			89			
06:45	207	660	0		207 660	18:45	96	351	0		96 351			
07:00	222	0			222	19:00	70	0			70			
07:15	266	0			266	19:15	86	0			86			
07:30	293	0			293	19:30	57	0			57			
07:45	215	996	0		215 996	19:45	41	254	0		41 254			
08:00	162	0			162	20:00	65	0			65			
08:15	165	0			165	20:15	36	0			36			
08:30	167	0			167	20:30	37	0			37			
08:45	159	653	0		159 653	20:45	32	170	0		32 170			
09:00	127	0			127	21:00	37	0			37			
09:15	115	0			115	21:15	34	0			34			
09:30	106	0			106	21:30	26	0			26			
09:45	100	448	0		100 448	21:45	28	125	0		28 125			
10:00	70	0			70	22:00	15	0			15			
10:15	87	0			87	22:15	12	0			12			
10:30	99	0			99	22:30	19	0			19			
10:45	85	341	0		85 341	22:45	23	69	0		23 69			
11:00	112	0			112	23:00	12	0			12			
11:15	80	0			80	23:15	13	0			13			
11:30	93	0			93	23:30	8	0			8			
11:45	89	374	0		89 374	23:45	12	45	0		12 45			
TOTALS	4177				4177	TOTALS	3194				3194			
SPLIT %	100.0%				56.7%	SPLIT %	100.0%				43.3%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					7,371	0						0	0	7,371	

AM Peak Hour	07:00				07:00	PM Peak Hour	14:00				14:00
AM Pk Volume	996				996	PM Pk Volume	492				492
Pk Hr Factor	0.850				0.850	Pk Hr Factor	0.699				0.699
7 - 9 Volume	1649	0	0	0	1649	4 - 6 Volume	635	0	0	0	635
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	996	0	0	0	996	4 - 6 Pk Volume	336	0	0	0	336
Pk Hr Factor	0.850	0.000	0.000	0.000	0.850	Pk Hr Factor	0.894	0.000	0.000	0.000	0.894

VOLUME

I-15 NB On-Ramp From El Cerrito Rd

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_035

DAILY TOTALS					NB	SB						EB	WB	Total
					7,246	0						0	0	7,246
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	6	0			6		12:00	88	0			88		
00:15	11	0			11		12:15	99	0			99		
00:30	4	0			4		12:30	89	0			89		
00:45	9	30	0		9	30	12:45	71	347	0		71	347	
01:00	3	0			3		13:00	81	0			81		
01:15	6	0			6		13:15	171	0			171		
01:30	8	0			8		13:30	150	0			150		
01:45	4	21	0		4	21	13:45	93	495	0		93	495	
02:00	6	0			6		14:00	97	0			97		
02:15	3	0			3		14:15	109	0			109		
02:30	7	0			7		14:30	101	0			101		
02:45	10	26	0		10	26	14:45	90	397	0		90	397	
03:00	7	0			7		15:00	94	0			94		
03:15	17	0			17		15:15	69	0			69		
03:30	19	0			19		15:30	88	0			88		
03:45	26	69	0		26	69	15:45	60	311	0		60	311	
04:00	42	0			42		16:00	88	0			88		
04:15	46	0			46		16:15	87	0			87		
04:30	65	0			65		16:30	80	0			80		
04:45	49	202	0		49	202	16:45	92	347	0		92	347	
05:00	70	0			70		17:00	66	0			66		
05:15	73	0			73		17:15	71	0			71		
05:30	98	0			98		17:30	81	0			81		
05:45	116	357	0		116	357	17:45	77	295	0		77	295	
06:00	119	0			119		18:00	80	0			80		
06:15	154	0			154		18:15	89	0			89		
06:30	153	0			153		18:30	88	0			88		
06:45	197	623	0		197	623	18:45	79	336	0		79	336	
07:00	223	0			223		19:00	59	0			59		
07:15	250	0			250		19:15	59	0			59		
07:30	254	0			254		19:30	59	0			59		
07:45	166	893	0		166	893	19:45	46	223	0		46	223	
08:00	156	0			156		20:00	42	0			42		
08:15	184	0			184		20:15	42	0			42		
08:30	152	0			152		20:30	32	0			32		
08:45	168	660	0		168	660	20:45	38	154	0		38	154	
09:00	158	0			158		21:00	36	0			36		
09:15	139	0			139		21:15	46	0			46		
09:30	103	0			103		21:30	28	0			28		
09:45	111	511	0		111	511	21:45	26	136	0		26	136	
10:00	88	0			88		22:00	24	0			24		
10:15	85	0			85		22:15	23	0			23		
10:30	71	0			71		22:30	16	0			16		
10:45	76	320	0		76	320	22:45	15	78	0		15	78	
11:00	88	0			88		23:00	19	0			19		
11:15	110	0			110		23:15	12	0			12		
11:30	101	0			101		23:30	3	0			3		
11:45	75	374	0		75	374	23:45	7	41	0		7	41	
TOTALS	4086				4086		TOTALS	3160				3160		
SPLIT %	100.0%				56.4%		SPLIT %	100.0%				43.6%		

DAILY TOTALS					NB	SB						EB	WB	Total
					7,246	0						0	0	7,246

AM Peak Hour	06:45				06:45		PM Peak Hour	13:15				13:15		
AM Pk Volume	924				924		PM Pk Volume	511				511		
Pk Hr Factor	0.909				0.909		Pk Hr Factor	0.747				0.747		
7 - 9 Volume	1553	0	0	0	1553		4 - 6 Volume	642	0	0	0	642		
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:00				16:00		
7 - 9 Pk Volume	893	0	0	0	893		4 - 6 Pk Volume	347	0	0	0	347		
Pk Hr Factor	0.879	0.000	0.000	0.000	0.879		Pk Hr Factor	0.943	0.000	0.000	0.000	0.943		

VOLUME

I-15 NB On-Ramp From El Cerrito Rd

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_035

DAILY TOTALS					NB	SB						EB	WB						Total
					7,518	0						0	0						7,518
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	6	0			6		12:00	96	0			96							
00:15	11	0			11		12:15	74	0			74							
00:30	8	0			8		12:30	98	0			98							
00:45	11	36	0		11	36	12:45	95	363	0		95	363						
01:00	12	0			12		13:00	82	0			82							
01:15	3	0			3		13:15	88	0			88							
01:30	3	0			3		13:30	96	0			96							
01:45	3	21	0		3	21	13:45	80	346	0		80	346						
02:00	4	0			4		14:00	103	0			103							
02:15	6	0			6		14:15	168	0			168							
02:30	5	0			5		14:30	124	0			124							
02:45	9	24	0		9	24	14:45	97	492	0		97	492						
03:00	12	0			12		15:00	92	0			92							
03:15	13	0			13		15:15	100	0			100							
03:30	23	0			23		15:30	92	0			92							
03:45	18	66	0		18	66	15:45	82	366	0		82	366						
04:00	37	0			37		16:00	104	0			104							
04:15	44	0			44		16:15	78	0			78							
04:30	61	0			61		16:30	52	0			52							
04:45	54	196	0		54	196	16:45	79	313	0		79	313						
05:00	57	0			57		17:00	87	0			87							
05:15	69	0			69		17:15	106	0			106							
05:30	104	0			104		17:30	85	0			85							
05:45	124	354	0		124	354	17:45	71	349	0		71	349						
06:00	126	0			126		18:00	89	0			89							
06:15	166	0			166		18:15	68	0			68							
06:30	159	0			159		18:30	107	0			107							
06:45	210	661	0		210	661	18:45	75	339	0		75	339						
07:00	217	0			217		19:00	53	0			53							
07:15	261	0			261		19:15	85	0			85							
07:30	302	0			302		19:30	66	0			66							
07:45	216	996	0		216	996	19:45	53	257	0		53	257						
08:00	163	0			163		20:00	59	0			59							
08:15	194	0			194		20:15	40	0			40							
08:30	161	0			161		20:30	54	0			54							
08:45	180	698	0		180	698	20:45	55	208	0		55	208						
09:00	127	0			127		21:00	33	0			33							
09:15	113	0			113		21:15	44	0			44							
09:30	122	0			122		21:30	38	0			38							
09:45	95	457	0		95	457	21:45	31	146	0		31	146						
10:00	73	0			73		22:00	19	0			19							
10:15	84	0			84		22:15	19	0			19							
10:30	97	0			97		22:30	16	0			16							
10:45	93	347	0		93	347	22:45	18	72	0		18	72						
11:00	107	0			107		23:00	15	0			15							
11:15	93	0			93		23:15	13	0			13							
11:30	87	0			87		23:30	7	0			7							
11:45	78	365	0		78	365	23:45	11	46	0		11	46						
TOTALS	4221				4221		TOTALS	3297				3297							
SPLIT %	100.0%				56.1%		SPLIT %	100.0%				43.9%							

DAILY TOTALS					NB	SB						EB	WB						Total
					7,518	0						0	0						7,518

AM Peak Hour	07:00				07:00		PM Peak Hour	14:00				14:00							
AM Pk Volume	996				996		PM Pk Volume	492				492							
Pk Hr Factor	0.825				0.825		Pk Hr Factor	0.732				0.732							
7 - 9 Volume	1694	0	0	0	1694		4 - 6 Volume	662	0	0	0	662							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:45				16:45							
7 - 9 Pk Volume	996	0	0	0	996		4 - 6 Pk Volume	357	0	0	0	357							
Pk Hr Factor	0.825	0.000	0.000	0.000	0.825		Pk Hr Factor	0.842	0.000	0.000	0.000	0.842							

VOLUME

I-15 SB On-Ramp From El Cerrito Rd

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_036

DAILY TOTALS					NB	SB	EB				WB	Total
					0	5,896	0				0	5,896
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	8			8	12:00	0	74			74	
00:15	0	6			6	12:15	0	71			71	
00:30	0	2			2	12:30	0	70			70	
00:45	0	2	18		2	12:45	0	77	292		77	292
01:00	0	7			7	13:00	0	56			56	
01:15	0	6			6	13:15	0	70			70	
01:30	0	1			1	13:30	0	60			60	
01:45	0	7	21		7	13:45	0	53	239		53	239
02:00	0	4			4	14:00	0	55			55	
02:15	0	5			5	14:15	0	111			111	
02:30	0	3			3	14:30	0	98			98	
02:45	0	1	13		1	14:45	0	117	381		117	381
03:00	0	3			3	15:00	0	132			132	
03:15	0	2			2	15:15	0	156			156	
03:30	0	6			6	15:30	0	153			153	
03:45	0	6	17		6	15:45	0	167	608		167	608
04:00	0	4			4	16:00	0	176			176	
04:15	0	10			10	16:15	0	192			192	
04:30	0	12			12	16:30	0	213			213	
04:45	0	10	36		10	16:45	0	205	786		205	786
05:00	0	11			11	17:00	0	203			203	
05:15	0	13			13	17:15	0	185			185	
05:30	0	18			18	17:30	0	211			211	
05:45	0	25	67		25	17:45	0	196	795		196	795
06:00	0	25			25	18:00	0	145			145	
06:15	0	38			38	18:15	0	149			149	
06:30	0	44			44	18:30	0	110			110	
06:45	0	62	169		62	18:45	0	110	514		110	514
07:00	0	73			73	19:00	0	80			80	
07:15	0	104			104	19:15	0	89			89	
07:30	0	124			124	19:30	0	63			63	
07:45	0	87	388		87	19:45	0	70	302		70	302
08:00	0	41			41	20:00	0	59			59	
08:15	0	57			57	20:15	0	53			53	
08:30	0	68			68	20:30	0	53			53	
08:45	0	60	226		60	20:45	0	60	225		60	225
09:00	0	49			49	21:00	0	36			36	
09:15	0	49			49	21:15	0	30			30	
09:30	0	64			64	21:30	0	23			23	
09:45	0	42	204		42	21:45	0	24	113		24	113
10:00	0	42			42	22:00	0	21			21	
10:15	0	45			45	22:15	0	19			19	
10:30	0	48			48	22:30	0	15			15	
10:45	0	58	193		58	22:45	0	11	66		11	66
11:00	0	47			47	23:00	0	6			6	
11:15	0	45			45	23:15	0	7			7	
11:30	0	51			51	23:30	0	8			8	
11:45	0	50	193		50	23:45	0	9	30		9	30
TOTALS	1545				1545	TOTALS	4351				4351	
SPLIT %	100.0%				26.2%	SPLIT %	100.0%				73.8%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	5,896	0	0	5,896

AM Peak Hour	07:00	07:00	PM Peak Hour	16:15	16:15
AM Pk Volume	388	388	PM Pk Volume	813	813
Pk Hr Factor	0.782	0.782	Pk Hr Factor	0.954	0.954
7 - 9 Volume	0	614	4 - 6 Volume	0	1581
7 - 9 Peak Hour	07:00	07:00	4 - 6 Peak Hour	16:15	16:15
7 - 9 Pk Volume	0	388	4 - 6 Pk Volume	0	813
Pk Hr Factor	0.000	0.782	Pk Hr Factor	0.000	0.954

VOLUME

I-15 SB On-Ramp From El Cerrito Rd

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_036

DAILY TOTALS					NB	SB	EB					WB	Total
					0	6,034	0					0	6,034
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	4			4	12:00	0	52			52		
00:15	0	6			6	12:15	0	49			49		
00:30	0	6			6	12:30	0	50			50		
00:45	0	5	21		5 21	12:45	0	53	204		53 204		
01:00	0	2			2	13:00	0	53			53		
01:15	0	4			4	13:15	0	104			104		
01:30	0	1			1	13:30	0	119			119		
01:45	0	6	13		6 13	13:45	0	86	362		86 362		
02:00	0	3			3	14:00	0	65			65		
02:15	0	3			3	14:15	0	76			76		
02:30	0	3			3	14:30	0	71			71		
02:45	0	5	14		5 14	14:45	0	105	317		105 317		
03:00	0	7			7	15:00	0	145			145		
03:15	0	7			7	15:15	0	140			140		
03:30	0	10			10	15:30	0	174			174		
03:45	0	5	29		5 29	15:45	0	149	608		149 608		
04:00	0	6			6	16:00	0	175			175		
04:15	0	11			11	16:15	0	182			182		
04:30	0	10			10	16:30	0	196			196		
04:45	0	10	37		10 37	16:45	0	194	747		194 747		
05:00	0	6			6	17:00	0	189			189		
05:15	0	12			12	17:15	0	200			200		
05:30	0	25			25	17:30	0	200			200		
05:45	0	32	75		32 75	17:45	0	184	773		184 773		
06:00	0	33			33	18:00	0	127			127		
06:15	0	34			34	18:15	0	147			147		
06:30	0	37			37	18:30	0	101			101		
06:45	0	63	167		63 167	18:45	0	104	479		104 479		
07:00	0	73			73	19:00	0	98			98		
07:15	0	86			86	19:15	0	88			88		
07:30	0	82			82	19:30	0	84			84		
07:45	0	58	299		58 299	19:45	0	80	350		80 350		
08:00	0	57			57	20:00	0	61			61		
08:15	0	77			77	20:15	0	59			59		
08:30	0	101			101	20:30	0	68			68		
08:45	0	89	324		89 324	20:45	0	81	269		81 269		
09:00	0	81			81	21:00	0	44			44		
09:15	0	45			45	21:15	0	42			42		
09:30	0	56			56	21:30	0	42			42		
09:45	0	46	228		46 228	21:45	0	45	173		45 173		
10:00	0	43			43	22:00	0	35			35		
10:15	0	46			46	22:15	0	30			30		
10:30	0	52			52	22:30	0	22			22		
10:45	0	39	180		39 180	22:45	0	30	117		30 117		
11:00	0	54			54	23:00	0	10			10		
11:15	0	47			47	23:15	0	17			17		
11:30	0	55			55	23:30	0	8			8		
11:45	0	50	206		50 206	23:45	0	7	42		7 42		
TOTALS	1593				1593	TOTALS	4441				4441		
SPLIT %	100.0%				26.4%	SPLIT %	100.0%				73.6%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	6,034	0	0	6,034

AM Peak Hour	08:15	08:15	PM Peak Hour	16:45	16:45
AM Pk Volume	348	348	PM Pk Volume	783	783
Pk Hr Factor	0.861	0.861	Pk Hr Factor	0.979	0.979
7 - 9 Volume	0	623	0	0	623
7 - 9 Peak Hour	08:00	08:00	4 - 6 Volume	0	1520
7 - 9 Pk Volume	0	324	0	0	324
Pk Hr Factor	0.000	0.802	0.000	0.000	0.802
			4 - 6 Peak Hour	16:45	16:45
			4 - 6 Pk Volume	0	783
			Pk Hr Factor	0.000	0.979
				0.000	0.000
				0.000	0.979

VOLUME

I-15 SB On-Ramp From El Cerrito Rd

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_036

DAILY TOTALS					NB	SB						EB	WB						Total
					0	6,207						0	0						6,207
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	14			14		12:00	0	57			57							
00:15	0	19			19		12:15	0	74			74							
00:30	0	12			12		12:30	0	54			54							
00:45	0	6	51		6	51	12:45	0	69	254		69	254						
01:00	0	3			3		13:00	0	70			70							
01:15	0	4			4		13:15	0	58			58							
01:30	0	4			4		13:30	0	64			64							
01:45	0	6	17		6	17	13:45	0	74	266		74	266						
02:00	0	7			7		14:00	0	71			71							
02:15	0	1			1		14:15	0	131			131							
02:30	0	2			2		14:30	0	127			127							
02:45	0	5	15		5	15	14:45	0	111	440		111	440						
03:00	0	3			3		15:00	0	165			165							
03:15	0	7			7		15:15	0	158			158							
03:30	0	4			4		15:30	0	188			188							
03:45	0	6	20		6	20	15:45	0	168	679		168	679						
04:00	0	6			6		16:00	0	210			210							
04:15	0	7			7		16:15	0	185			185							
04:30	0	15			15		16:30	0	191			191							
04:45	0	10	38		10	38	16:45	0	199	785		199	785						
05:00	0	15			15		17:00	0	191			191							
05:15	0	12			12		17:15	0	207			207							
05:30	0	19			19		17:30	0	197			197							
05:45	0	29	75		29	75	17:45	0	180	775		180	775						
06:00	0	23			23		18:00	0	164			164							
06:15	0	34			34		18:15	0	128			128							
06:30	0	34			34		18:30	0	131			131							
06:45	0	69	160		69	160	18:45	0	114	537		114	537						
07:00	0	76			76		19:00	0	110			110							
07:15	0	102			102		19:15	0	79			79							
07:30	0	129			129		19:30	0	76			76							
07:45	0	110	417		110	417	19:45	0	68	333		68	333						
08:00	0	54			54		20:00	0	70			70							
08:15	0	74			74		20:15	0	59			59							
08:30	0	67			67		20:30	0	69			69							
08:45	0	47	242		47	242	20:45	0	67	265		67	265						
09:00	0	58			58		21:00	0	45			45							
09:15	0	48			48		21:15	0	32			32							
09:30	0	43			43		21:30	0	29			29							
09:45	0	55	204		55	204	21:45	0	27	133		27	133						
10:00	0	44			44		22:00	0	21			21							
10:15	0	54			54		22:15	0	30			30							
10:30	0	47			47		22:30	0	24			24							
10:45	0	33	178		33	178	22:45	0	16	91		16	91						
11:00	0	56			56		23:00	0	11			11							
11:15	0	46			46		23:15	0	4			4							
11:30	0	38			38		23:30	0	7			7							
11:45	0	60	200		60	200	23:45	0	10	32		10	32						
TOTALS	1617				1617		TOTALS	4590				4590							
SPLIT %	100.0%				26.1%		SPLIT %	100.0%				73.9%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	6,207						0	0						6,207

AM Peak Hour	07:00				07:00		PM Peak Hour	16:45				16:45							
AM Pk Volume	417				417		PM Pk Volume	794				794							
Pk Hr Factor	0.808				0.808		Pk Hr Factor	0.959				0.959							
7 - 9 Volume	0	659	0	0	659		4 - 6 Volume	0	1560	0	0	1560							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:45				16:45							
7 - 9 Pk Volume	417		0	0	417		4 - 6 Pk Volume	794		0	0	794							
Pk Hr Factor	0.000	0.808	0.000	0.000	0.808		Pk Hr Factor	0.000	0.959	0.000	0.000	0.959							

VOLUME

I-15 SB Off-Ramp To El Cerrito Rd

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_037

DAILY TOTALS					NB	SB						EB	WB	Total
					0	7,570						0	0	7,570
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	0	19			19	12:00	0	138			138			
00:15	0	13			13	12:15	0	185			185			
00:30	0	17			17	12:30	0	158			158			
00:45	0	9	58		9 58	12:45	0	200	681		200 681			
01:00	0	9			9	13:00	0	163			163			
01:15	0	9			9	13:15	0	156			156			
01:30	0	5			5	13:30	0	179			179			
01:45	0	13	36		13 36	13:45	0	243	741		243 741			
02:00	0	7			7	14:00	0	196			196			
02:15	0	5			5	14:15	0	201			201			
02:30	0	5			5	14:30	0	176			176			
02:45	0	4	21		4 21	14:45	0	161	734		161 734			
03:00	0	5			5	15:00	0	140			140			
03:15	0	4			4	15:15	0	118			118			
03:30	0	7			7	15:30	0	95			95			
03:45	0	3	19		3 19	15:45	0	81	434		81 434			
04:00	0	14			14	16:00	0	93			93			
04:15	0	3			3	16:15	0	83			83			
04:30	0	4			4	16:30	0	104			104			
04:45	0	8	29		8 29	16:45	0	98	378		98 378			
05:00	0	7			7	17:00	0	69			69			
05:15	0	11			11	17:15	0	74			74			
05:30	0	10			10	17:30	0	111			111			
05:45	0	32	60		32 60	17:45	0	107	361		107 361			
06:00	0	25			25	18:00	0	116			116			
06:15	0	38			38	18:15	0	114			114			
06:30	0	59			59	18:30	0	104			104			
06:45	0	64	186		64 186	18:45	0	118	452		118 452			
07:00	0	125			125	19:00	0	150			150			
07:15	0	141			141	19:15	0	108			108			
07:30	0	124			124	19:30	0	111			111			
07:45	0	66	456		66 456	19:45	0	87	456		87 456			
08:00	0	59			59	20:00	0	97			97			
08:15	0	65			65	20:15	0	94			94			
08:30	0	95			95	20:30	0	94			94			
08:45	0	67	286		67 286	20:45	0	94	379		94 379			
09:00	0	70			70	21:00	0	61			61			
09:15	0	82			82	21:15	0	76			76			
09:30	0	90			90	21:30	0	65			65			
09:45	0	81	323		81 323	21:45	0	57	259		57 259			
10:00	0	82			82	22:00	0	44			44			
10:15	0	85			85	22:15	0	49			49			
10:30	0	101			101	22:30	0	46			46			
10:45	0	116	384		116 384	22:45	0	38	177		38 177			
11:00	0	119			119	23:00	0	24			24			
11:15	0	109			109	23:15	0	31			31			
11:30	0	157			157	23:30	0	32			32			
11:45	0	167	552		167 552	23:45	0	21	108		21 108			
TOTALS	2410				2410	TOTALS	5160				5160			
SPLIT %	100.0%				31.8%	SPLIT %	100.0%				68.2%			

DAILY TOTALS					NB	SB	EB	WB	Total
					0	7,570	0	0	7,570

AM Peak Hour	11:45				11:45	PM Peak Hour	13:30				13:30
AM Pk Volume	648				648	PM Pk Volume	819				819
Pk Hr Factor	0.876				0.876	Pk Hr Factor	0.843				0.843
7 - 9 Volume	0	742	0	0	742	4 - 6 Volume	0	739	0	0	739
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	0	456	0	0	456	4 - 6 Pk Volume	378	0	0	0	378
Pk Hr Factor	0.000	0.809	0.000	0.000	0.809	Pk Hr Factor	0.000	0.909	0.000	0.000	0.909

VOLUME

I-15 SB Off-Ramp To El Cerrito Rd

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_037

DAILY TOTALS					NB	SB						EB	WB	Total
					0	7,194						0	0	7,194
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	0	21			21	12:00	0	132			132			
00:15	0	17			17	12:15	0	148			148			
00:30	0	19			19	12:30	0	165			165			
00:45	0	18	75		18 75	12:45	0	193	638		193 638			
01:00	0	15			15	13:00	0	184			184			
01:15	0	10			10	13:15	0	177			177			
01:30	0	12			12	13:30	0	169			169			
01:45	0	6	43		6 43	13:45	0	165	695		165 695			
02:00	0	7			7	14:00	0	160			160			
02:15	0	7			7	14:15	0	185			185			
02:30	0	10			10	14:30	0	169			169			
02:45	0	9	33		9 33	14:45	0	171	685		171 685			
03:00	0	5			5	15:00	0	117			117			
03:15	0	3			3	15:15	0	113			113			
03:30	0	8			8	15:30	0	98			98			
03:45	0	4	20		4 20	15:45	0	100	428		100 428			
04:00	0	7			7	16:00	0	83			83			
04:15	0	9			9	16:15	0	105			105			
04:30	0	7			7	16:30	0	81			81			
04:45	0	8	31		8 31	16:45	0	80	349		80 349			
05:00	0	11			11	17:00	0	86			86			
05:15	0	15			15	17:15	0	102			102			
05:30	0	13			13	17:30	0	75			75			
05:45	0	34	73		34 73	17:45	0	110	373		110 373			
06:00	0	29			29	18:00	0	104			104			
06:15	0	30			30	18:15	0	108			108			
06:30	0	38			38	18:30	0	113			113			
06:45	0	75	172		75 172	18:45	0	113	438		113 438			
07:00	0	73			73	19:00	0	132			132			
07:15	0	120			120	19:15	0	115			115			
07:30	0	114			114	19:30	0	104			104			
07:45	0	68	375		68 375	19:45	0	104	455		104 455			
08:00	0	85			85	20:00	0	98			98			
08:15	0	80			80	20:15	0	85			85			
08:30	0	83			83	20:30	0	105			105			
08:45	0	79	327		79 327	20:45	0	80	368		80 368			
09:00	0	93			93	21:00	0	38			38			
09:15	0	74			74	21:15	0	49			49			
09:30	0	76			76	21:30	0	53			53			
09:45	0	71	314		71 314	21:45	0	39	179		39 179			
10:00	0	81			81	22:00	0	40			40			
10:15	0	91			91	22:15	0	34			34			
10:30	0	94			94	22:30	0	27			27			
10:45	0	134	400		134 400	22:45	0	35	136		35 136			
11:00	0	97			97	23:00	0	22			22			
11:15	0	113			113	23:15	0	23			23			
11:30	0	142			142	23:30	0	16			16			
11:45	0	158	510		158 510	23:45	0	16	77		16 77			
TOTALS	2373				2373	TOTALS	4821				4821			
SPLIT %	100.0%				33.0%	SPLIT %	100.0%				67.0%			

DAILY TOTALS					NB	SB	EB	WB	Total
					0	7,194	0	0	7,194

AM Peak Hour	11:45				11:45	PM Peak Hour	12:45				12:45
AM Pk Volume	603				603	PM Pk Volume	723				723
Pk Hr Factor	0.914				0.914	Pk Hr Factor	0.937				0.937
7 - 9 Volume	0	702	0	0	702	4 - 6 Volume	0	722	0	0	722
7 - 9 Peak Hour		07:15			07:15	4 - 6 Peak Hour		17:00			17:00
7 - 9 Pk Volume	0	387	0	0	387	4 - 6 Pk Volume	0	373	0	0	373
Pk Hr Factor	0.000	0.806	0.000	0.000	0.806	Pk Hr Factor	0.000	0.848	0.000	0.000	0.848

VOLUME

I-15 SB Off-Ramp To El Cerrito Rd

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_037

DAILY TOTALS					NB	SB						EB	WB	Total
					0	6,627						0	0	6,627
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	0	13			13	12:00	0	145			145			
00:15	0	12			12	12:15	0	126			126			
00:30	0	12			12	12:30	0	119			119			
00:45	0	15	52		15 52	12:45	0	164	554		164 554			
01:00	0	14			14	13:00	0	166			166			
01:15	0	4			4	13:15	0	134			134			
01:30	0	5			5	13:30	0	128			128			
01:45	0	8	31		8 31	13:45	0	138	566		138 566			
02:00	0	7			7	14:00	0	151			151			
02:15	0	5			5	14:15	0	183			183			
02:30	0	8			8	14:30	0	122			122			
02:45	0	5	25		5 25	14:45	0	109	565		109 565			
03:00	0	6			6	15:00	0	84			84			
03:15	0	5			5	15:15	0	98			98			
03:30	0	2			2	15:30	0	107			107			
03:45	0	3	16		3 16	15:45	0	91	380		91 380			
04:00	0	3			3	16:00	0	92			92			
04:15	0	7			7	16:15	0	85			85			
04:30	0	4			4	16:30	0	77			77			
04:45	0	8	22		8 22	16:45	0	79	333		79 333			
05:00	0	17			17	17:00	0	69			69			
05:15	0	17			17	17:15	0	70			70			
05:30	0	18			18	17:30	0	68			68			
05:45	0	21	73		21 73	17:45	0	104	311		104 311			
06:00	0	26			26	18:00	0	102			102			
06:15	0	37			37	18:15	0	94			94			
06:30	0	45			45	18:30	0	85			85			
06:45	0	73	181		73 181	18:45	0	95	376		95 376			
07:00	0	107			107	19:00	0	108			108			
07:15	0	141			141	19:15	0	130			130			
07:30	0	145			145	19:30	0	139			139			
07:45	0	81	474		81 474	19:45	0	102	479		102 479			
08:00	0	68			68	20:00	0	112			112			
08:15	0	85			85	20:15	0	111			111			
08:30	0	78			78	20:30	0	85			85			
08:45	0	68	299		68 299	20:45	0	66	374		66 374			
09:00	0	82			82	21:00	0	63			63			
09:15	0	67			67	21:15	0	77			77			
09:30	0	64			64	21:30	0	74			74			
09:45	0	77	290		77 290	21:45	0	54	268		54 268			
10:00	0	54			54	22:00	0	42			42			
10:15	0	57			57	22:15	0	29			29			
10:30	0	78			78	22:30	0	38			38			
10:45	0	108	297		108 297	22:45	0	42	151		42 151			
11:00	0	78			78	23:00	0	31			31			
11:15	0	111			111	23:15	0	34			34			
11:30	0	100			100	23:30	0	24			24			
11:45	0	112	401		112 401	23:45	0	20	109		20 109			
TOTALS	2161				2161	TOTALS	4466				4466			
SPLIT %	100.0%				32.6%	SPLIT %	100.0%				67.4%			

DAILY TOTALS					NB	SB	EB	WB	Total
					0	6,627	0	0	6,627

AM Peak Hour	11:45				11:45	PM Peak Hour	13:30				13:30
AM Pk Volume	502				502	PM Pk Volume	600				600
Pk Hr Factor	0.866				0.866	Pk Hr Factor	0.820				0.820
7 - 9 Volume	0	773	0	0	773	4 - 6 Volume	0	644	0	0	644
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	0	474	0	0	474	4 - 6 Pk Volume	0	333	0	0	333
Pk Hr Factor	0.000	0.817	0.000	0.000	0.817	Pk Hr Factor	0.000	0.905	0.000	0.000	0.905

VOLUME

I-15 NB Off-Ramp To Ontario Ave

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_038

DAILY TOTALS					NB	SB						EB	WB	Total
					7,470	0						0	0	7,470
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	5	0			5		12:00	104	0			104		
00:15	3	0			3		12:15	111	0			111		
00:30	3	0			3		12:30	90	0			90		
00:45	7	18	0		7	18	12:45	113	418	0		113	418	
01:00	4	0			4		13:00	103	0			103		
01:15	3	0			3		13:15	105	0			105		
01:30	6	0			6		13:30	121	0			121		
01:45	5	18	0		5	18	13:45	122	451	0		122	451	
02:00	3	0			3		14:00	130	0			130		
02:15	4	0			4		14:15	190	0			190		
02:30	4	0			4		14:30	181	0			181		
02:45	8	19	0		8	19	14:45	131	632	0		131	632	
03:00	9	0			9		15:00	93	0			93		
03:15	17	0			17		15:15	95	0			95		
03:30	19	0			19		15:30	110	0			110		
03:45	32	77	0		32	77	15:45	107	405	0		107	405	
04:00	42	0			42		16:00	97	0			97		
04:15	52	0			52		16:15	101	0			101		
04:30	72	0			72		16:30	92	0			92		
04:45	64	230	0		64	230	16:45	120	410	0		120	410	
05:00	66	0			66		17:00	108	0			108		
05:15	74	0			74		17:15	91	0			91		
05:30	57	0			57		17:30	106	0			106		
05:45	79	276	0		79	276	17:45	109	414	0		109	414	
06:00	72	0			72		18:00	92	0			92		
06:15	77	0			77		18:15	99	0			99		
06:30	123	0			123		18:30	78	0			78		
06:45	128	400	0		128	400	18:45	80	349	0		80	349	
07:00	181	0			181		19:00	72	0			72		
07:15	225	0			225		19:15	61	0			61		
07:30	177	0			177		19:30	69	0			69		
07:45	131	714	0		131	714	19:45	63	265	0		63	265	
08:00	117	0			117		20:00	51	0			51		
08:15	143	0			143		20:15	43	0			43		
08:30	129	0			129		20:30	52	0			52		
08:45	174	563	0		174	563	20:45	43	189	0		43	189	
09:00	116	0			116		21:00	30	0			30		
09:15	104	0			104		21:15	34	0			34		
09:30	120	0			120		21:30	35	0			35		
09:45	125	465	0		125	465	21:45	31	130	0		31	130	
10:00	107	0			107		22:00	20	0			20		
10:15	124	0			124		22:15	23	0			23		
10:30	122	0			122		22:30	25	0			25		
10:45	121	474	0		121	474	22:45	14	82	0		14	82	
11:00	103	0			103		23:00	14	0			14		
11:15	119	0			119		23:15	10	0			10		
11:30	101	0			101		23:30	11	0			11		
11:45	103	426	0		103	426	23:45	10	45	0		10	45	
TOTALS	3680				3680		TOTALS	3790				3790		
SPLIT %	100.0%				49.3%		SPLIT %	100.0%				50.7%		

DAILY TOTALS					NB	SB					EB	WB	Total	
					7,470	0					0	0	7,470	

AM Peak Hour	07:00				07:00	PM Peak Hour	14:00				14:00			
AM Pk Volume	714				714	PM Pk Volume	632				632			
Pk Hr Factor	0.793				0.793	Pk Hr Factor	0.832				0.832			
7 - 9 Volume	1277	0	0	0	1277	4 - 6 Volume	824	0	0	0	824			
7 - 9 Peak Hour	07:00				07:00	4 - 6 Peak Hour	16:45				16:45			
7 - 9 Pk Volume	714	0	0	0	714	4 - 6 Pk Volume	425	0	0	0	425			
Pk Hr Factor	0.793	0.000	0.000	0.000	0.793	Pk Hr Factor	0.885	0.000	0.000	0.000	0.885			

VOLUME

I-15 NB Off-Ramp To Ontario Ave

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_038

DAILY TOTALS					NB	SB						EB	WB						Total
					7,487	0						0	0						7,487
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	4	0			4		12:00	101	0			101							
00:15	8	0			8		12:15	104	0			104							
00:30	5	0			5		12:30	110	0			110							
00:45	8	25	0		8	25	12:45	86	401	0		86	401						
01:00	3	0			3		13:00	95	0			95							
01:15	7	0			7		13:15	148	0			148							
01:30	5	0			5		13:30	135	0			135							
01:45	6	21	0		6	21	13:45	146	524	0		146	524						
02:00	2	0			2		14:00	121	0			121							
02:15	3	0			3		14:15	148	0			148							
02:30	4	0			4		14:30	148	0			148							
02:45	10	19	0		10	19	14:45	133	550	0		133	550						
03:00	10	0			10		15:00	101	0			101							
03:15	14	0			14		15:15	94	0			94							
03:30	14	0			14		15:30	99	0			99							
03:45	32	70	0		32	70	15:45	113	407	0		113	407						
04:00	34	0			34		16:00	86	0			86							
04:15	47	0			47		16:15	87	0			87							
04:30	65	0			65		16:30	95	0			95							
04:45	73	219	0		73	219	16:45	101	369	0		101	369						
05:00	83	0			83		17:00	77	0			77							
05:15	73	0			73		17:15	94	0			94							
05:30	69	0			69		17:30	126	0			126							
05:45	59	284	0		59	284	17:45	102	399	0		102	399						
06:00	76	0			76		18:00	88	0			88							
06:15	74	0			74		18:15	98	0			98							
06:30	100	0			100		18:30	79	0			79							
06:45	106	356	0		106	356	18:45	93	358	0		93	358						
07:00	143	0			143		19:00	58	0			58							
07:15	188	0			188		19:15	87	0			87							
07:30	171	0			171		19:30	66	0			66							
07:45	164	666	0		164	666	19:45	61	272	0		61	272						
08:00	154	0			154		20:00	72	0			72							
08:15	168	0			168		20:15	63	0			63							
08:30	210	0			210		20:30	68	0			68							
08:45	159	691	0		159	691	20:45	40	243	0		40	243						
09:00	120	0			120		21:00	49	0			49							
09:15	104	0			104		21:15	39	0			39							
09:30	93	0			93		21:30	23	0			23							
09:45	128	445	0		128	445	21:45	26	137	0		26	137						
10:00	133	0			133		22:00	13	0			13							
10:15	115	0			115		22:15	22	0			22							
10:30	106	0			106		22:30	18	0			18							
10:45	109	463	0		109	463	22:45	20	73	0		20	73						
11:00	96	0			96		23:00	15	0			15							
11:15	122	0			122		23:15	11	0			11							
11:30	104	0			104		23:30	11	0			11							
11:45	121	443	0		121	443	23:45	15	52	0		15	52						
TOTALS	3702				3702		TOTALS	3785				3785							
SPLIT %	100.0%				49.4%		SPLIT %	100.0%				50.6%							

DAILY TOTALS					NB	SB						EB	WB						Total
					7,487	0						0	0						7,487

AM Peak Hour	07:45				07:45	PM Peak Hour	13:45				13:45
AM Pk Volume	696				696	PM Pk Volume	563				563
Pk Hr Factor	0.829				0.829	Pk Hr Factor	0.951				0.951
7 - 9 Volume	1357	0	0	0	1357	4 - 6 Volume	768	0	0	0	768
7 - 9 Peak Hour	07:45				07:45	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	696	0	0	0	696	4 - 6 Pk Volume	399	0	0	0	399
Pk Hr Factor	0.829	0.000	0.000	0.000	0.829	Pk Hr Factor	0.792	0.000	0.000	0.000	0.792

VOLUME

I-15 NB Off-Ramp To Ontario Ave

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_038

DAILY TOTALS					NB	SB						EB	WB						Total
					7,395	0						0	0						7,395
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	12	0			12		12:00	119	0			119							
00:15	6	0			6		12:15	101	0			101							
00:30	7	0			7		12:30	125	0			125							
00:45	5	30	0		5	30	12:45	105	450	0		105	450						
01:00	8	0			8		13:00	97	0			97							
01:15	4	0			4		13:15	95	0			95							
01:30	6	0			6		13:30	115	0			115							
01:45	7	25	0		7	25	13:45	121	428	0		121	428						
02:00	5	0			5		14:00	119	0			119							
02:15	4	0			4		14:15	169	0			169							
02:30	4	0			4		14:30	158	0			158							
02:45	12	25	0		12	25	14:45	162	608	0		162	608						
03:00	10	0			10		15:00	107	0			107							
03:15	20	0			20		15:15	113	0			113							
03:30	15	0			15		15:30	119	0			119							
03:45	25	70	0		25	70	15:45	108	447	0		108	447						
04:00	42	0			42		16:00	106	0			106							
04:15	45	0			45		16:15	113	0			113							
04:30	55	0			55		16:30	110	0			110							
04:45	91	233	0		91	233	16:45	98	427	0		98	427						
05:00	85	0			85		17:00	116	0			116							
05:15	72	0			72		17:15	101	0			101							
05:30	72	0			72		17:30	81	0			81							
05:45	61	290	0		61	290	17:45	86	384	0		86	384						
06:00	73	0			73		18:00	100	0			100							
06:15	74	0			74		18:15	97	0			97							
06:30	132	0			132		18:30	91	0			91							
06:45	127	406	0		127	406	18:45	81	369	0		81	369						
07:00	178	0			178		19:00	70	0			70							
07:15	222	0			222		19:15	72	0			72							
07:30	171	0			171		19:30	83	0			83							
07:45	147	718	0		147	718	19:45	57	282	0		57	282						
08:00	128	0			128		20:00	60	0			60							
08:15	128	0			128		20:15	63	0			63							
08:30	127	0			127		20:30	48	0			48							
08:45	112	495	0		112	495	20:45	45	216	0		45	216						
09:00	110	0			110		21:00	31	0			31							
09:15	92	0			92		21:15	44	0			44							
09:30	86	0			86		21:30	44	0			44							
09:45	113	401	0		113	401	21:45	24	143	0		24	143						
10:00	91	0			91		22:00	18	0			18							
10:15	100	0			100		22:15	25	0			25							
10:30	122	0			122		22:30	18	0			18							
10:45	83	396	0		83	396	22:45	20	81	0		20	81						
11:00	100	0			100		23:00	19	0			19							
11:15	109	0			109		23:15	16	0			16							
11:30	85	0			85		23:30	20	0			20							
11:45	109	403	0		109	403	23:45	13	68	0		13	68						
TOTALS	3492				3492		TOTALS	3903				3903							
SPLIT %	100.0%				47.2%		SPLIT %	100.0%				52.8%							

DAILY TOTALS					NB	SB						EB	WB						Total
					7,395	0						0	0						7,395

AM Peak Hour	07:00				07:00		PM Peak Hour	14:00						14:00					
AM Pk Volume	718				718		PM Pk Volume	608						608					
Pk Hr Factor	0.809				0.809		Pk Hr Factor	0.899						0.899					
7 - 9 Volume	1213	0	0	0	1213		4 - 6 Volume	811	0	0	0			811					
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:15						16:15					
7 - 9 Pk Volume	718	0	0	0	718		4 - 6 Pk Volume	437	0	0	0			437					
Pk Hr Factor	0.809	0.000	0.000	0.000	0.809		Pk Hr Factor	0.942	0.000	0.000	0.000			0.942					

VOLUME

I-15 NB On-Ramp From Ontario Ave

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_039

DAILY TOTALS					NB	SB						EB	WB						Total
					17,034	0						0	0						17,034
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	38	0			38		12:00	226	0			226							
00:15	18	0			18		12:15	206	0			206							
00:30	32	0			32		12:30	230	0			230							
00:45	22	110	0		22	110	12:45	202	864	0		202	864						
01:00	17	0			17		13:00	223	0			223							
01:15	11	0			11		13:15	230	0			230							
01:30	21	0			21		13:30	242	0			242							
01:45	12	61	0		12	61	13:45	192	887	0		192	887						
02:00	30	0			30		14:00	217	0			217							
02:15	30	0			30		14:15	209	0			209							
02:30	24	0			24		14:30	226	0			226							
02:45	16	100	0		16	100	14:45	239	891	0		239	891						
03:00	24	0			24		15:00	239	0			239							
03:15	42	0			42		15:15	267	0			267							
03:30	64	0			64		15:30	229	0			229							
03:45	64	194	0		64	194	15:45	206	941	0		206	941						
04:00	95	0			95		16:00	207	0			207							
04:15	139	0			139		16:15	200	0			200							
04:30	175	0			175		16:30	210	0			210							
04:45	169	578	0		169	578	16:45	188	805	0		188	805						
05:00	177	0			177		17:00	235	0			235							
05:15	215	0			215		17:15	219	0			219							
05:30	254	0			254		17:30	195	0			195							
05:45	299	945	0		299	945	17:45	209	858	0		209	858						
06:00	309	0			309		18:00	178	0			178							
06:15	331	0			331		18:15	186	0			186							
06:30	342	0			342		18:30	159	0			159							
06:45	343	1325	0		343	1325	18:45	177	700	0		177	700						
07:00	350	0			350		19:00	154	0			154							
07:15	311	0			311		19:15	155	0			155							
07:30	400	0			400		19:30	133	0			133							
07:45	414	1475	0		414	1475	19:45	155	597	0		155	597						
08:00	378	0			378		20:00	143	0			143							
08:15	311	0			311		20:15	102	0			102							
08:30	323	0			323		20:30	135	0			135							
08:45	309	1321	0		309	1321	20:45	140	520	0		140	520						
09:00	277	0			277		21:00	128	0			128							
09:15	335	0			335		21:15	99	0			99							
09:30	290	0			290		21:30	86	0			86							
09:45	291	1193	0		291	1193	21:45	72	385	0		72	385						
10:00	246	0			246		22:00	63	0			63							
10:15	194	0			194		22:15	92	0			92							
10:30	237	0			237		22:30	49	0			49							
10:45	233	910	0		233	910	22:45	58	262	0		58	262						
11:00	222	0			222		23:00	46	0			46							
11:15	231	0			231		23:15	49	0			49							
11:30	248	0			248		23:30	42	0			42							
11:45	235	936	0		235	936	23:45	39	176	0		39	176						
TOTALS	9148				9148		TOTALS	7886				7886							
SPLIT %	100.0%				53.7%		SPLIT %	100.0%				46.3%							

DAILY TOTALS					NB	SB						EB	WB						Total
					17,034	0						0	0						17,034

AM Peak Hour	07:15				07:15		PM Peak Hour	14:45				14:45							
AM Pk Volume	1503				1503		PM Pk Volume	974				974							
Pk Hr Factor	0.908				0.908		Pk Hr Factor	0.912				0.912							
7 - 9 Volume	2796	0	0	0	2796		4 - 6 Volume	1663	0	0	0	1663							
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	17:00				17:00							
7 - 9 Pk Volume	1503	0	0	0	1503		4 - 6 Pk Volume	858	0	0	0	858							
Pk Hr Factor	0.908	0.000	0.000	0.000	0.908		Pk Hr Factor	0.913	0.000	0.000	0.000	0.913							

VOLUME

I-15 NB On-Ramp From Ontario Ave

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_039

DAILY TOTALS					NB	SB						EB	WB						Total
					17,835	0						0	0						17,835
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	41	0			41		12:00	223	0			223							
00:15	31	0			31		12:15	238	0			238							
00:30	26	0			26		12:30	238	0			238							
00:45	18	116	0		18	116	12:45	243	942	0		243	942						
01:00	12	0			12		13:00	239	0			239							
01:15	17	0			17		13:15	194	0			194							
01:30	32	0			32		13:30	235	0			235							
01:45	26	87	0		26	87	13:45	210	878	0		210	878						
02:00	25	0			25		14:00	226	0			226							
02:15	15	0			15		14:15	250	0			250							
02:30	24	0			24		14:30	235	0			235							
02:45	19	83	0		19	83	14:45	264	975	0		264	975						
03:00	36	0			36		15:00	247	0			247							
03:15	47	0			47		15:15	256	0			256							
03:30	45	0			45		15:30	247	0			247							
03:45	68	196	0		68	196	15:45	196	946	0		196	946						
04:00	95	0			95		16:00	197	0			197							
04:15	131	0			131		16:15	187	0			187							
04:30	172	0			172		16:30	193	0			193							
04:45	155	553	0		155	553	16:45	217	794	0		217	794						
05:00	189	0			189		17:00	220	0			220							
05:15	219	0			219		17:15	216	0			216							
05:30	280	0			280		17:30	232	0			232							
05:45	295	983	0		295	983	17:45	175	843	0		175	843						
06:00	300	0			300		18:00	215	0			215							
06:15	344	0			344		18:15	190	0			190							
06:30	334	0			334		18:30	203	0			203							
06:45	388	1366	0		388	1366	18:45	162	770	0		162	770						
07:00	338	0			338		19:00	181	0			181							
07:15	352	0			352		19:15	182	0			182							
07:30	370	0			370		19:30	193	0			193							
07:45	383	1443	0		383	1443	19:45	178	734	0		178	734						
08:00	377	0			377		20:00	141	0			141							
08:15	318	0			318		20:15	148	0			148							
08:30	360	0			360		20:30	141	0			141							
08:45	360	1415	0		360	1415	20:45	146	576	0		146	576						
09:00	332	0			332		21:00	126	0			126							
09:15	296	0			296		21:15	127	0			127							
09:30	268	0			268		21:30	124	0			124							
09:45	261	1157	0		261	1157	21:45	78	455	0		78	455						
10:00	251	0			251		22:00	99	0			99							
10:15	262	0			262		22:15	96	0			96							
10:30	252	0			252		22:30	75	0			75							
10:45	237	1002	0		237	1002	22:45	67	337	0		67	337						
11:00	216	0			216		23:00	71	0			71							
11:15	248	0			248		23:15	57	0			57							
11:30	218	0			218		23:30	55	0			55							
11:45	274	956	0		274	956	23:45	45	228	0		45	228						
TOTALS	9357				9357		TOTALS	8478				8478							
SPLIT %	100.0%				52.5%		SPLIT %	100.0%				47.5%							

DAILY TOTALS					NB	SB						EB	WB						Total
					17,835	0						0	0						17,835

AM Peak Hour	07:15				07:15		PM Peak Hour	14:45				14:45							
AM Pk Volume	1482				1482		PM Pk Volume	1014				1014							
Pk Hr Factor	0.967				0.967		Pk Hr Factor	0.960				0.960							
7 - 9 Volume	2858	0	0	0	2858		4 - 6 Volume	1637	0	0	0	1637							
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	16:45				16:45							
7 - 9 Pk Volume	1482	0	0	0	1482		4 - 6 Pk Volume	885	0	0	0	885							
Pk Hr Factor	0.967	0.000	0.000	0.000	0.967		Pk Hr Factor	0.954	0.000	0.000	0.000	0.954							

VOLUME

I-15 NB On-Ramp From Ontario Ave

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_039

DAILY TOTALS					NB	SB						EB	WB	Total	
					17,693	0						0	0	17,693	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00	56	0			56		12:00	229	0			229			
00:15	44	0			44		12:15	247	0			247			
00:30	35	0			35		12:30	199	0			199			
00:45	36	171	0		36	171	12:45	230	905	0		230	905		
01:00	22	0			22		13:00	246	0			246			
01:15	24	0			24		13:15	205	0			205			
01:30	31	0			31		13:30	236	0			236			
01:45	46	123	0		46	123	13:45	186	873	0		186	873		
02:00	49	0			49		14:00	225	0			225			
02:15	37	0			37		14:15	189	0			189			
02:30	30	0			30		14:30	218	0			218			
02:45	45	161	0		45	161	14:45	245	877	0		245	877		
03:00	40	0			40		15:00	238	0			238			
03:15	76	0			76		15:15	243	0			243			
03:30	69	0			69		15:30	252	0			252			
03:45	118	303	0		118	303	15:45	206	939	0		206	939		
04:00	91	0			91		16:00	232	0			232			
04:15	117	0			117		16:15	187	0			187			
04:30	145	0			145		16:30	231	0			231			
04:45	148	501	0		148	501	16:45	216	866	0		216	866		
05:00	193	0			193		17:00	232	0			232			
05:15	225	0			225		17:15	208	0			208			
05:30	253	0			253		17:30	198	0			198			
05:45	283	954	0		283	954	17:45	179	817	0		179	817		
06:00	322	0			322		18:00	191	0			191			
06:15	324	0			324		18:15	215	0			215			
06:30	367	0			367		18:30	177	0			177			
06:45	334	1347	0		334	1347	18:45	156	739	0		156	739		
07:00	347	0			347		19:00	163	0			163			
07:15	357	0			357		19:15	111	0			111			
07:30	388	0			388		19:30	184	0			184			
07:45	412	1504	0		412	1504	19:45	172	630	0		172	630		
08:00	381	0			381		20:00	156	0			156			
08:15	305	0			305		20:15	155	0			155			
08:30	305	0			305		20:30	148	0			148			
08:45	295	1286	0		295	1286	20:45	165	624	0		165	624		
09:00	317	0			317		21:00	99	0			99			
09:15	325	0			325		21:15	156	0			156			
09:30	270	0			270		21:30	122	0			122			
09:45	301	1213	0		301	1213	21:45	79	456	0		79	456		
10:00	279	0			279		22:00	73	0			73			
10:15	243	0			243		22:15	64	0			64			
10:30	258	0			258		22:30	45	0			45			
10:45	234	1014	0		234	1014	22:45	53	235	0		53	235		
11:00	219	0			219		23:00	62	0			62			
11:15	241	0			241		23:15	61	0			61			
11:30	260	0			260		23:30	56	0			56			
11:45	219	939	0		219	939	23:45	37	216	0		37	216		
TOTALS	9516				9516		TOTALS	8177				8177			
SPLIT %	100.0%				53.8%		SPLIT %	100.0%				46.2%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					17,693	0						0	0	17,693	

AM Peak Hour	07:15				07:15		PM Peak Hour	14:45						14:45	
AM Pk Volume	1538				1538		PM Pk Volume	978						978	
Pk Hr Factor	0.933				0.933		Pk Hr Factor	0.970						0.970	
7 - 9 Volume	2790	0	0	0	2790		4 - 6 Volume	1683	0	0	0			1683	
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	16:30						16:30	
7 - 9 Pk Volume	1538	0	0	0	1538		4 - 6 Pk Volume	887	0	0	0			887	
Pk Hr Factor	0.933	0.000	0.000	0.000	0.933		Pk Hr Factor	0.956	0.000	0.000	0.000			0.956	

VOLUME

I-15 SB On-Ramp From Ontario Ave

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_040

DAILY TOTALS					NB	SB						EB	WB						Total
					0	8,459						0	0						8,459
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	18			18		12:00	0	139			139							
00:15	0	15			15		12:15	0	135			135							
00:30	0	10			10		12:30	0	140			140							
00:45	0	11	54		11	54	12:45	0	137	551		137	551						
01:00	0	8			8		13:00	0	140			140							
01:15	0	10			10		13:15	0	144			144							
01:30	0	6			6		13:30	0	126			126							
01:45	0	12	36		12	36	13:45	0	132	542		132	542						
02:00	0	11			11		14:00	0	158			158							
02:15	0	6			6		14:15	0	128			128							
02:30	0	9			9		14:30	0	124			124							
02:45	0	6	32		6	32	14:45	0	156	566		156	566						
03:00	0	5			5		15:00	0	171			171							
03:15	0	4			4		15:15	0	175			175							
03:30	0	7			7		15:30	0	175			175							
03:45	0	16	32		16	32	15:45	0	163	684		163	684						
04:00	0	17			17		16:00	0	180			180							
04:15	0	12			12		16:15	0	162			162							
04:30	0	21			21		16:30	0	145			145							
04:45	0	15	65		15	65	16:45	0	195	682		195	682						
05:00	0	19			19		17:00	0	175			175							
05:15	0	24			24		17:15	0	183			183							
05:30	0	29			29		17:30	0	162			162							
05:45	0	39	111		39	111	17:45	0	141	661		141	661						
06:00	0	52			52		18:00	0	134			134							
06:15	0	74			74		18:15	0	143			143							
06:30	0	52			52		18:30	0	137			137							
06:45	0	75	253		75	253	18:45	0	122	536		122	536						
07:00	0	79			79		19:00	0	124			124							
07:15	0	113			113		19:15	0	149			149							
07:30	0	125			125		19:30	0	122			122							
07:45	0	121	438		121	438	19:45	0	124	519		124	519						
08:00	0	106			106		20:00	0	131			131							
08:15	0	95			95		20:15	0	106			106							
08:30	0	92			92		20:30	0	122			122							
08:45	0	100	393		100	393	20:45	0	88	447		88	447						
09:00	0	91			91		21:00	0	77			77							
09:15	0	89			89		21:15	0	83			83							
09:30	0	71			71		21:30	0	78			78							
09:45	0	133	384		133	384	21:45	0	60	298		60	298						
10:00	0	94			94		22:00	0	50			50							
10:15	0	88			88		22:15	0	39			39							
10:30	0	124			124		22:30	0	29			29							
10:45	0	133	439		133	439	22:45	0	24	142		24	142						
11:00	0	113			113		23:00	0	25			25							
11:15	0	99			99		23:15	0	19			19							
11:30	0	130			130		23:30	0	33			33							
11:45	0	156	498		156	498	23:45	0	19	96		19	96						
TOTALS	2735				2735		TOTALS	5724				5724							
SPLIT %	100.0%				32.3%		SPLIT %	100.0%				67.7%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	8,459						0	0						8,459

AM Peak Hour	11:45				11:45	PM Peak Hour	16:45				16:45
AM Pk Volume	570				570	PM Pk Volume	715				715
Pk Hr Factor	0.913				0.913	Pk Hr Factor	0.917				0.917
7 - 9 Volume	0	831	0	0	831	4 - 6 Volume	0	1343	0	0	1343
7 - 9 Peak Hour	07:15				07:15	4 - 6 Peak Hour	16:45				16:45
7 - 9 Pk Volume	0	465	0	0	465	4 - 6 Pk Volume	0	715	0	0	715
Pk Hr Factor	0.000	0.930	0.000	0.000	0.930	Pk Hr Factor	0.000	0.917	0.000	0.000	0.917

VOLUME

I-15 SB On-Ramp From Ontario Ave

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_040

DAILY TOTALS					NB	SB						EB	WB						Total
					0	9,564						0	0						9,564
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	21			21		12:00	0	149			149							
00:15	0	14			14		12:15	0	131			131							
00:30	0	8			8		12:30	0	125			125							
00:45	0	17	60		17	60	12:45	0	165	570		165	570						
01:00	0	4			4		13:00	0	152			152							
01:15	0	3			3		13:15	0	158			158							
01:30	0	5			5		13:30	0	151			151							
01:45	0	5	17		5	17	13:45	0	146	607		146	607						
02:00	0	7			7		14:00	0	153			153							
02:15	0	3			3		14:15	0	137			137							
02:30	0	8			8		14:30	0	149			149							
02:45	0	5	23		5	23	14:45	0	136	575		136	575						
03:00	0	5			5		15:00	0	177			177							
03:15	0	11			11		15:15	0	164			164							
03:30	0	11			11		15:30	0	153			153							
03:45	0	11	38		11	38	15:45	0	182	676		182	676						
04:00	0	10			10		16:00	0	155			155							
04:15	0	13			13		16:15	0	162			162							
04:30	0	14			14		16:30	0	179			179							
04:45	0	27	64		27	64	16:45	0	180	676		180	676						
05:00	0	22			22		17:00	0	177			177							
05:15	0	33			33		17:15	0	157			157							
05:30	0	24			24		17:30	0	162			162							
05:45	0	44	123		44	123	17:45	0	138	634		138	634						
06:00	0	52			52		18:00	0	141			141							
06:15	0	52			52		18:15	0	144			144							
06:30	0	57			57		18:30	0	144			144							
06:45	0	60	221		60	221	18:45	0	135	564		135	564						
07:00	0	68			68		19:00	0	143			143							
07:15	0	84			84		19:15	0	126			126							
07:30	0	82			82		19:30	0	134			134							
07:45	0	88	322		88	322	19:45	0	123	526		123	526						
08:00	0	98			98		20:00	0	150			150							
08:15	0	96			96		20:15	0	122			122							
08:30	0	110			110		20:30	0	143			143							
08:45	0	130	434		130	434	20:45	0	103	518		103	518						
09:00	0	109			109		21:00	0	114			114							
09:15	0	123			123		21:15	0	165			165							
09:30	0	81			81		21:30	0	215			215							
09:45	0	106	419		106	419	21:45	0	182	676		182	676						
10:00	0	81			81		22:00	0	157			157							
10:15	0	117			117		22:15	0	135			135							
10:30	0	113			113		22:30	0	109			109							
10:45	0	109	420		109	420	22:45	0	117	518		117	518						
11:00	0	142			142		23:00	0	102			102							
11:15	0	125			125		23:15	0	93			93							
11:30	0	135			135		23:30	0	80			80							
11:45	0	126	528		126	528	23:45	0	80	355		80	355						
TOTALS	2669				2669		TOTALS	6895				6895							
SPLIT %	100.0%				27.9%		SPLIT %	100.0%				72.1%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	9,564						0	0						9,564

AM Peak Hour	11:30				11:30		PM Peak Hour	21:15				21:15							
AM Pk Volume	541				541		PM Pk Volume	719				719							
Pk Hr Factor	0.908				0.908		Pk Hr Factor	0.836				0.836							
7 - 9 Volume	0	756	0	0	756		4 - 6 Volume	0	1310	0	0	1310							
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	16:15				16:15							
7 - 9 Pk Volume	0	434	0	0	434		4 - 6 Pk Volume	698	0	0	0	698							
Pk Hr Factor	0.000	0.835	0.000	0.000	0.835		Pk Hr Factor	0.000	0.969	0.000	0.000	0.969							

VOLUME

I-15 SB On-Ramp From Ontario Ave

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_040

DAILY TOTALS					NB	SB	EB					WB	Total
					0	8,793						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	77			77	12:00	0	176			176		
00:15	0	63			63	12:15	0	150			150		
00:30	0	60			60	12:30	0	143			143		
00:45	0	43	243		43 243	12:45	0	170	639		170 639		
01:00	0	11			11	13:00	0	113			113		
01:15	0	9			9	13:15	0	158			158		
01:30	0	10			10	13:30	0	151			151		
01:45	0	15	45		15 45	13:45	0	129	551		129 551		
02:00	0	7			7	14:00	0	135			135		
02:15	0	9			9	14:15	0	147			147		
02:30	0	12			12	14:30	0	147			147		
02:45	0	16	44		16 44	14:45	0	148	577		148 577		
03:00	0	7			7	15:00	0	170			170		
03:15	0	4			4	15:15	0	170			170		
03:30	0	14			14	15:30	0	159			159		
03:45	0	11	36		11 36	15:45	0	170	669		170 669		
04:00	0	16			16	16:00	0	179			179		
04:15	0	19			19	16:15	0	153			153		
04:30	0	24			24	16:30	0	161			161		
04:45	0	18	77		18 77	16:45	0	169	662		169 662		
05:00	0	13			13	17:00	0	195			195		
05:15	0	28			28	17:15	0	149			149		
05:30	0	37			37	17:30	0	173			173		
05:45	0	38	116		38 116	17:45	0	130	647		130 647		
06:00	0	51			51	18:00	0	142			142		
06:15	0	60			60	18:15	0	128			128		
06:30	0	62			62	18:30	0	155			155		
06:45	0	69	242		69 242	18:45	0	149	574		149 574		
07:00	0	85			85	19:00	0	126			126		
07:15	0	102			102	19:15	0	140			140		
07:30	0	129			129	19:30	0	119			119		
07:45	0	110	426		110 426	19:45	0	115	500		115 500		
08:00	0	86			86	20:00	0	129			129		
08:15	0	102			102	20:15	0	116			116		
08:30	0	78			78	20:30	0	106			106		
08:45	0	83	349		83 349	20:45	0	116	467		116 467		
09:00	0	102			102	21:00	0	96			96		
09:15	0	109			109	21:15	0	102			102		
09:30	0	82			82	21:30	0	72			72		
09:45	0	108	401		108 401	21:45	0	73	343		73 343		
10:00	0	87			87	22:00	0	60			60		
10:15	0	95			95	22:15	0	58			58		
10:30	0	114			114	22:30	0	36			36		
10:45	0	101	397		101 397	22:45	0	42	196		42 196		
11:00	0	110			110	23:00	0	41			41		
11:15	0	106			106	23:15	0	27			27		
11:30	0	112			112	23:30	0	39			39		
11:45	0	135	463		135 463	23:45	0	22	129		22 129		
TOTALS	2839				2839	TOTALS	5954				5954		
SPLIT %	100.0%				32.3%	SPLIT %	100.0%				67.7%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	8,793	0	0	8,793

AM Peak Hour	11:45	11:45	PM Peak Hour	16:45	16:45
AM Pk Volume	604	604	PM Pk Volume	686	686
Pk Hr Factor	0.858	0.858	Pk Hr Factor	0.879	0.879
7 - 9 Volume	0	775	0	0	775
7 - 9 Peak Hour	07:15	07:15	4 - 6 Volume	0	1309
7 - 9 Pk Volume	0	427	0	0	427
Pk Hr Factor	0.000	0.828	0.000	0.000	0.828
			4 - 6 Peak Hour	16:45	16:45
			4 - 6 Pk Volume	0	686
			Pk Hr Factor	0.000	0.879
				0.000	0.000
				0.000	0.879

VOLUME

I-15 SB Off-Ramp To Ontario Ave

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_041

DAILY TOTALS					NB	SB						EB	WB	Total
					0	15,332						0	0	15,332
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	22			22		12:00	0	204			204		
00:15	0	24			24		12:15	0	254			254		
00:30	0	28			28		12:30	0	257			257		
00:45	0	20	94		20	94	12:45	0	278	993		278	993	
01:00	0	18			18		13:00	0	233			233		
01:15	0	27			27		13:15	0	216			216		
01:30	0	24			24		13:30	0	244			244		
01:45	0	33	102		33	102	13:45	0	256	949		256	949	
02:00	0	28			28		14:00	0	248			248		
02:15	0	13			13		14:15	0	271			271		
02:30	0	17			17		14:30	0	312			312		
02:45	0	17	75		17	75	14:45	0	314	1145		314	1145	
03:00	0	26			26		15:00	0	267			267		
03:15	0	25			25		15:15	0	192			192		
03:30	0	47			47		15:30	0	179			179		
03:45	0	31	129		31	129	15:45	0	169	807		169	807	
04:00	0	44			44		16:00	0	185			185		
04:15	0	65			65		16:15	0	147			147		
04:30	0	72			72		16:30	0	190			190		
04:45	0	88	269		88	269	16:45	0	184	706		184	706	
05:00	0	111			111		17:00	0	237			237		
05:15	0	107			107		17:15	0	140			140		
05:30	0	134			134		17:30	0	137			137		
05:45	0	158	510		158	510	17:45	0	134	648		134	648	
06:00	0	188			188		18:00	0	126			126		
06:15	0	165			165		18:15	0	207			207		
06:30	0	189			189		18:30	0	249			249		
06:45	0	270	812		270	812	18:45	0	202	784		202	784	
07:00	0	308			308		19:00	0	218			218		
07:15	0	229			229		19:15	0	229			229		
07:30	0	230			230		19:30	0	203			203		
07:45	0	271	1038		271	1038	19:45	0	196	846		196	846	
08:00	0	289			289		20:00	0	172			172		
08:15	0	289			289		20:15	0	153			153		
08:30	0	315			315		20:30	0	152			152		
08:45	0	285	1178		285	1178	20:45	0	140	617		140	617	
09:00	0	251			251		21:00	0	125			125		
09:15	0	267			267		21:15	0	137			137		
09:30	0	216			216		21:30	0	93			93		
09:45	0	201	935		201	935	21:45	0	86	441		86	441	
10:00	0	196			196		22:00	0	81			81		
10:15	0	186			186		22:15	0	63			63		
10:30	0	237			237		22:30	0	64			64		
10:45	0	206	825		206	825	22:45	0	63	271		63	271	
11:00	0	225			225		23:00	0	62			62		
11:15	0	253			253		23:15	0	63			63		
11:30	0	231			231		23:30	0	43			43		
11:45	0	250	959		250	959	23:45	0	31	199		31	199	
TOTALS	6926				6926		TOTALS	8406				8406		
SPLIT %	100.0%				45.2%		SPLIT %	100.0%				54.8%		

DAILY TOTALS					NB	SB						EB	WB	Total
					0	15,332						0	0	15,332

AM Peak Hour	08:00				08:00		PM Peak Hour	14:15						14:15
AM Pk Volume	1178				1178		PM Pk Volume	1164						1164
Pk Hr Factor	0.935				0.935		Pk Hr Factor	0.927						0.927
7 - 9 Volume	0	2216	0	0	2216		4 - 6 Volume	0	1354	0	0	1354		1354
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	16:15						16:15
7 - 9 Pk Volume	1178		0	0	1178		4 - 6 Pk Volume	758		0	0	758		758
Pk Hr Factor	0.000	0.935	0.000	0.000	0.935		Pk Hr Factor	0.000	0.800	0.000	0.000	0.800		0.800

VOLUME

I-15 SB Off-Ramp To Ontario Ave

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_041

DAILY TOTALS					NB	SB	EB					WB	Total
					0	15,978	0					0	15,978
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	39			39		12:00	0	231			231	
00:15	0	25			25		12:15	0	262			262	
00:30	0	32			32		12:30	0	265			265	
00:45	0	28	124		28	124	12:45	0	282	1040		282	1040
01:00	0	24			24		13:00	0	240			240	
01:15	0	29			29		13:15	0	264			264	
01:30	0	28			28		13:30	0	237			237	
01:45	0	44	125		44	125	13:45	0	278	1019		278	1019
02:00	0	16			16		14:00	0	259			259	
02:15	0	15			15		14:15	0	267			267	
02:30	0	23			23		14:30	0	287			287	
02:45	0	26	80		26	80	14:45	0	329	1142		329	1142
03:00	0	30			30		15:00	0	237			237	
03:15	0	35			35		15:15	0	239			239	
03:30	0	38			38		15:30	0	200			200	
03:45	0	33	136		33	136	15:45	0	205	881		205	881
04:00	0	39			39		16:00	0	205			205	
04:15	0	73			73		16:15	0	209			209	
04:30	0	77			77		16:30	0	130			130	
04:45	0	108	297		108	297	16:45	0	168	712		168	712
05:00	0	93			93		17:00	0	141			141	
05:15	0	118			118		17:15	0	160			160	
05:30	0	144			144		17:30	0	124			124	
05:45	0	190	545		190	545	17:45	0	116	541		116	541
06:00	0	210			210		18:00	0	137			137	
06:15	0	170			170		18:15	0	183			183	
06:30	0	201			201		18:30	0	204			204	
06:45	0	238	819		238	819	18:45	0	240	764		240	764
07:00	0	263			263		19:00	0	213			213	
07:15	0	147			147		19:15	0	220			220	
07:30	0	201			201		19:30	0	202			202	
07:45	0	327	938		327	938	19:45	0	214	849		214	849
08:00	0	259			259		20:00	0	167			167	
08:15	0	262			262		20:15	0	191			191	
08:30	0	312			312		20:30	0	164			164	
08:45	0	273	1106		273	1106	20:45	0	164	686		164	686
09:00	0	249			249		21:00	0	118			118	
09:15	0	211			211		21:15	0	156			156	
09:30	0	206			206		21:30	0	132			132	
09:45	0	228	894		228	894	21:45	0	146	552		146	552
10:00	0	217			217		22:00	0	123			123	
10:15	0	225			225		22:15	0	123			123	
10:30	0	225			225		22:30	0	121			121	
10:45	0	269	936		269	936	22:45	0	125	492		125	492
11:00	0	245			245		23:00	0	103			103	
11:15	0	238			238		23:15	0	74			74	
11:30	0	249			249		23:30	0	73			73	
11:45	0	243	975		243	975	23:45	0	75	325		75	325
TOTALS	6975				6975		TOTALS	9003				9003	
SPLIT %	100.0%				43.7%		SPLIT %	100.0%				56.3%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	15,978	0	0	15,978

AM Peak Hour	07:45				07:45	PM Peak Hour	14:00				14:00
AM Pk Volume	1160				1160	PM Pk Volume	1142				1142
Pk Hr Factor	0.887				0.887	Pk Hr Factor	0.868				0.868
7 - 9 Volume	0	2044	0	0	2044	4 - 6 Volume	0	1253	0	0	1253
7 - 9 Peak Hour	07:45				07:45	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	1160		0	0	1160	4 - 6 Pk Volume	712		0	0	712
Pk Hr Factor	0.000	0.887	0.000	0.000	0.887	Pk Hr Factor	0.000	0.852	0.000	0.000	0.852

VOLUME

I-15 SB Off-Ramp To Ontario Ave

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_041

DAILY TOTALS					NB	SB	EB					WB	Total
					0	15,325						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	88			88	12:00	0	249			249		
00:15	0	55			55	12:15	0	245			245		
00:30	0	46			46	12:30	0	236			236		
00:45	0	30	219		30 219	12:45	0	272	1002		272 1002		
01:00	0	35			35	13:00	0	262			262		
01:15	0	47			47	13:15	0	229			229		
01:30	0	47			47	13:30	0	257			257		
01:45	0	52	181		52 181	13:45	0	295	1043		295 1043		
02:00	0	44			44	14:00	0	175			175		
02:15	0	38			38	14:15	0	152			152		
02:30	0	31			31	14:30	0	251			251		
02:45	0	49	162		49 162	14:45	0	281	859		281 859		
03:00	0	60			60	15:00	0	223			223		
03:15	0	67			67	15:15	0	245			245		
03:30	0	78			78	15:30	0	138			138		
03:45	0	117	322		117 322	15:45	0	175	781		175 781		
04:00	0	50			50	16:00	0	160			160		
04:15	0	54			54	16:15	0	150			150		
04:30	0	66			66	16:30	0	157			157		
04:45	0	77	247		77 247	16:45	0	165	632		165 632		
05:00	0	94			94	17:00	0	151			151		
05:15	0	119			119	17:15	0	173			173		
05:30	0	150			150	17:30	0	134			134		
05:45	0	160	523		160 523	17:45	0	113	571		113 571		
06:00	0	176			176	18:00	0	119			119		
06:15	0	178			178	18:15	0	164			164		
06:30	0	214			214	18:30	0	206			206		
06:45	0	295	863		295 863	18:45	0	189	678		189 678		
07:00	0	274			274	19:00	0	281			281		
07:15	0	250			250	19:15	0	201			201		
07:30	0	134			134	19:30	0	226			226		
07:45	0	176	834		176 834	19:45	0	191	899		191 899		
08:00	0	278			278	20:00	0	196			196		
08:15	0	277			277	20:15	0	178			178		
08:30	0	292			292	20:30	0	186			186		
08:45	0	234	1081		234 1081	20:45	0	164	724		164 724		
09:00	0	269			269	21:00	0	141			141		
09:15	0	217			217	21:15	0	153			153		
09:30	0	208			208	21:30	0	112			112		
09:45	0	227	921		227 921	21:45	0	75	481		75 481		
10:00	0	214			214	22:00	0	82			82		
10:15	0	204			204	22:15	0	104			104		
10:30	0	204			204	22:30	0	73			73		
10:45	0	218	840		218 840	22:45	0	68	327		68 327		
11:00	0	235			235	23:00	0	61			61		
11:15	0	196			196	23:15	0	62			62		
11:30	0	229			229	23:30	0	60			60		
11:45	0	260	920		260 920	23:45	0	32	215		32 215		
TOTALS	7113				7113	TOTALS	8212				8212		
SPLIT %	100.0%				46.4%	SPLIT %	100.0%				53.6%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	15,325	0	0	15,325

AM Peak Hour	08:00	08:00	PM Peak Hour	13:00	13:00
AM Pk Volume	1081	1081	PM Pk Volume	1043	1043
Pk Hr Factor	0.926	0.926	Pk Hr Factor	0.884	0.884
7 - 9 Volume	0	1915	0	0	1203
7 - 9 Peak Hour	08:00	08:00	4 - 6 Peak Hour	16:30	16:30
7 - 9 Pk Volume	0	1081	0	0	646
Pk Hr Factor	0.000	0.926	0.000	0.934	0.934

Day: Tuesday
Date: 9/17/2019

City: Corona
Project #: CA19 6124 042

DAILY TOTALS	NB	SB	EB	WB	Total
	9,989	0	0	0	9,989

AM Peak Hour	07:30				07:30	PM Peak Hour	15:00				15:00
AM Pk Volume	782				782	PM Pk Volume	692				692
Pk Hr Factor	0.927				0.927	Pk Hr Factor	0.940				0.940
7 - 9 Volume	1434	0	0	0	1434	4 - 6 Volume	1126	0	0	0	1126
7 - 9 Peak Hour	07:30				07:30	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	782	0	0	0	782	4 - 6 Pk Volume	614	0	0	0	614
Pk Hr Factor	0.927	0.000	0.000	0.000	0.927	Pk Hr Factor	0.948	0.000	0.000	0.000	0.948

VOLUME

I-15 NB Off-Ramp To Magnolia Ave

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_042

DAILY TOTALS					NB	SB	EBWB					Total
					10,502	0						0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	26	0			26	12:00	137	0			137	
00:15	29	0			29	12:15	159	0			159	
00:30	34	0			34	12:30	163	0			163	
00:45	20	109	0		20 109	12:45	154	613	0		154 613	
01:00	12	0			12	13:00	208	0			208	
01:15	16	0			16	13:15	181	0			181	
01:30	24	0			24	13:30	208	0			208	
01:45	25	77	0		25 77	13:45	183	780	0		183 780	
02:00	13	0			13	14:00	153	0			153	
02:15	19	0			19	14:15	145	0			145	
02:30	16	0			16	14:30	146	0			146	
02:45	24	72	0		24 72	14:45	194	638	0		194 638	
03:00	25	0			25	15:00	154	0			154	
03:15	21	0			21	15:15	158	0			158	
03:30	46	0			46	15:30	187	0			187	
03:45	58	150	0		58 150	15:45	178	677	0		178 677	
04:00	38	0			38	16:00	150	0			150	
04:15	76	0			76	16:15	128	0			128	
04:30	79	0			79	16:30	134	0			134	
04:45	103	296	0		103 296	16:45	132	544	0		132 544	
05:00	88	0			88	17:00	106	0			106	
05:15	93	0			93	17:15	156	0			156	
05:30	111	0			111	17:30	150	0			150	
05:45	103	395	0		103 395	17:45	105	517	0		105 517	
06:00	107	0			107	18:00	117	0			117	
06:15	115	0			115	18:15	108	0			108	
06:30	126	0			126	18:30	94	0			94	
06:45	139	487	0		139 487	18:45	99	418	0		99 418	
07:00	136	0			136	19:00	95	0			95	
07:15	153	0			153	19:15	82	0			82	
07:30	184	0			184	19:30	88	0			88	
07:45	184	657	0		184 657	19:45	64	329	0		64 329	
08:00	148	0			148	20:00	188	0			188	
08:15	152	0			152	20:15	134	0			134	
08:30	182	0			182	20:30	81	0			81	
08:45	181	663	0		181 663	20:45	84	487	0		84 487	
09:00	163	0			163	21:00	55	0			55	
09:15	150	0			150	21:15	77	0			77	
09:30	136	0			136	21:30	95	0			95	
09:45	136	585	0		136 585	21:45	91	318	0		91 318	
10:00	145	0			145	22:00	132	0			132	
10:15	134	0			134	22:15	88	0			88	
10:30	136	0			136	22:30	82	0			82	
10:45	129	544	0		129 544	22:45	64	366	0		64 366	
11:00	134	0			134	23:00	61	0			61	
11:15	150	0			150	23:15	62	0			62	
11:30	131	0			131	23:30	45	0			45	
11:45	153	568	0		153 568	23:45	44	212	0		44 212	
TOTALS	4603				4603	TOTALS	5899				5899	
SPLIT %	100.0%				43.8%	SPLIT %	100.0%				56.2%	

DAILY TOTALS					NB	SB						EB	WB	Total
					10,502	0						0	0	10,502

AM Peak Hour	08:15				08:15	PM Peak Hour	13:00				13:00
AM Pk Volume	678				678	PM Pk Volume	780				780
Pk Hr Factor	0.931				0.931	Pk Hr Factor	0.938				0.938
7 - 9 Volume	1320	0	0	0	1320	4 - 6 Volume	1061	0	0	0	1061
7 - 9 Peak Hour	07:15				07:15	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	669	0	0	0	669	4 - 6 Pk Volume	544	0	0	0	544
Pk Hr Factor	0.909	0.000	0.000	0.000	0.909	Pk Hr Factor	0.907	0.000	0.000	0.000	0.907

VOLUME

I-15 NB Off-Ramp To Magnolia Ave

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_042

DAILY TOTALS					NB	SB						EB	WB						Total
					10,127	0						0	0						10,127
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	55	0			55		12:00	173	0			173							
00:15	53	0			53		12:15	129	0			129							
00:30	57	0			57		12:30	140	0			140							
00:45	44	209	0		44	209	12:45	156	598	0		156	598						
01:00	16	0			16		13:00	161	0			161							
01:15	35	0			35		13:15	145	0			145							
01:30	34	0			34		13:30	151	0			151							
01:45	44	129	0		44	129	13:45	145	602	0		145	602						
02:00	46	0			46		14:00	164	0			164							
02:15	28	0			28		14:15	190	0			190							
02:30	35	0			35		14:30	145	0			145							
02:45	51	160	0		51	160	14:45	131	630	0		131	630						
03:00	38	0			38		15:00	159	0			159							
03:15	20	0			20		15:15	156	0			156							
03:30	153	0			153		15:30	178	0			178							
03:45	117	328	0		117	328	15:45	186	679	0		186	679						
04:00	53	0			53		16:00	151	0			151							
04:15	64	0			64		16:15	129	0			129							
04:30	72	0			72		16:30	151	0			151							
04:45	88	277	0		88	277	16:45	135	566	0		135	566						
05:00	67	0			67		17:00	124	0			124							
05:15	102	0			102		17:15	145	0			145							
05:30	115	0			115		17:30	142	0			142							
05:45	107	391	0		107	391	17:45	125	536	0		125	536						
06:00	100	0			100		18:00	93	0			93							
06:15	107	0			107		18:15	110	0			110							
06:30	118	0			118		18:30	105	0			105							
06:45	130	455	0		130	455	18:45	88	396	0		88	396						
07:00	123	0			123		19:00	80	0			80							
07:15	148	0			148		19:15	103	0			103							
07:30	186	0			186		19:30	82	0			82							
07:45	212	669	0		212	669	19:45	71	336	0		71	336						
08:00	163	0			163		20:00	111	0			111							
08:15	156	0			156		20:15	145	0			145							
08:30	145	0			145		20:30	63	0			63							
08:45	154	618	0		154	618	20:45	74	393	0		74	393						
09:00	161	0			161		21:00	70	0			70							
09:15	141	0			141		21:15	58	0			58							
09:30	130	0			130		21:30	57	0			57							
09:45	122	554	0		122	554	21:45	35	220	0		35	220						
10:00	112	0			112		22:00	117	0			117							
10:15	120	0			120		22:15	64	0			64							
10:30	110	0			110		22:30	38	0			38							
10:45	115	457	0		115	457	22:45	42	261	0		42	261						
11:00	110	0			110		23:00	27	0			27							
11:15	116	0			116		23:15	28	0			28							
11:30	149	0			149		23:30	29	0			29							
11:45	170	545	0		170	545	23:45	34	118	0		34	118						
TOTALS	4792				4792		TOTALS	5335				5335							
SPLIT %	100.0%				47.3%		SPLIT %	100.0%				52.7%							

DAILY TOTALS					NB	SB						EB	WB						Total
					10,127	0						0	0						10,127

AM Peak Hour	07:30				07:30		PM Peak Hour	15:00				15:00							
AM Pk Volume	717				717		PM Pk Volume	679				679							
Pk Hr Factor	0.846				0.846		Pk Hr Factor	0.913				0.913							
7 - 9 Volume	1287	0	0	0	1287		4 - 6 Volume	1102	0	0	0	1102							
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	16:00				16:00							
7 - 9 Pk Volume	717	0	0	0	717		4 - 6 Pk Volume	566	0	0	0	566							
Pk Hr Factor	0.846	0.000	0.000	0.000	0.846		Pk Hr Factor	0.937	0.000	0.000	0.000	0.937							

VOLUME

I-15 NB On-Ramp From Magnolia Ave

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_043

DAILY TOTALS					NB	SB						EB	WB						Total
					9,369	0						0	0						9,369
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	39	0			39		12:00	223	0			223							
00:15	27	0			27		12:15	161	0			161							
00:30	25	0			25		12:30	161	0			161							
00:45	24	115	0		24	115	12:45	176	721	0		176	721						
01:00	21	0			21		13:00	192	0			192							
01:15	18	0			18		13:15	189	0			189							
01:30	42	0			42		13:30	245	0			245							
01:45	38	119	0		38	119	13:45	200	826	0		200	826						
02:00	37	0			37		14:00	189	0			189							
02:15	24	0			24		14:15	141	0			141							
02:30	37	0			37		14:30	179	0			179							
02:45	25	123	0		25	123	14:45	129	638	0		129	638						
03:00	34	0			34		15:00	152	0			152							
03:15	45	0			45		15:15	134	0			134							
03:30	33	0			33		15:30	183	0			183							
03:45	67	179	0		67	179	15:45	132	601	0		132	601						
04:00	63	0			63		16:00	177	0			177							
04:15	85	0			85		16:15	103	0			103							
04:30	108	0			108		16:30	155	0			155							
04:45	104	360	0		104	360	16:45	149	584	0		149	584						
05:00	111	0			111		17:00	196	0			196							
05:15	108	0			108		17:15	163	0			163							
05:30	122	0			122		17:30	123	0			123							
05:45	132	473	0		132	473	17:45	101	583	0		101	583						
06:00	113	0			113		18:00	110	0			110							
06:15	86	0			86		18:15	65	0			65							
06:30	98	0			98		18:30	75	0			75							
06:45	101	398	0		101	398	18:45	55	305	0		55	305						
07:00	103	0			103		19:00	86	0			86							
07:15	78	0			78		19:15	51	0			51							
07:30	92	0			92		19:30	53	0			53							
07:45	145	418	0		145	418	19:45	64	254	0		64	254						
08:00	100	0			100		20:00	60	0			60							
08:15	127	0			127		20:15	48	0			48							
08:30	124	0			124		20:30	37	0			37							
08:45	108	459	0		108	459	20:45	45	190	0		45	190						
09:00	113	0			113		21:00	44	0			44							
09:15	107	0			107		21:15	43	0			43							
09:30	132	0			132		21:30	52	0			52							
09:45	127	479	0		127	479	21:45	52	191	0		52	191						
10:00	111	0			111		22:00	70	0			70							
10:15	104	0			104		22:15	38	0			38							
10:30	133	0			133		22:30	43	0			43							
10:45	107	455	0		107	455	22:45	29	180	0		29	180						
11:00	119	0			119		23:00	36	0			36							
11:15	121	0			121		23:15	37	0			37							
11:30	166	0			166		23:30	16	0			16							
11:45	202	608	0		202	608	23:45	21	110	0		21	110						
TOTALS	4186				4186		TOTALS	5183				5183							
SPLIT %	100.0%				44.7%		SPLIT %	100.0%				55.3%							

DAILY TOTALS					NB	SB						EB	WB						Total
					9,369	0						0	0						9,369

AM Peak Hour	11:30				11:30		PM Peak Hour	13:00				13:00							
AM Pk Volume	752				752		PM Pk Volume	826				826							
Pk Hr Factor	0.843				0.843		Pk Hr Factor	0.843				0.843							
7 - 9 Volume	877	0	0	0	877		4 - 6 Volume	1167	0	0	0	1167							
7 - 9 Peak Hour	07:45				07:45		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	496	0	0	0	496		4 - 6 Pk Volume	663	0	0	0	663							
Pk Hr Factor	0.855	0.000	0.000	0.000	0.855		Pk Hr Factor	0.846	0.000	0.000	0.000	0.846							

VOLUME

I-15 NB On-Ramp From Magnolia Ave

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_043

DAILY TOTALS					NB	SB						EB	WB						Total
					9,685	0						0	0						9,685
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	21	0			21		12:00	226	0			226							
00:15	30	0			30		12:15	252	0			252							
00:30	21	0			21		12:30	209	0			209							
00:45	28	100	0		28	100	12:45	230	917	0		230	917						
01:00	26	0			26		13:00	215	0			215							
01:15	37	0			37		13:15	218	0			218							
01:30	33	0			33		13:30	189	0			189							
01:45	25	121	0		25	121	13:45	172	794	0		172	794						
02:00	33	0			33		14:00	182	0			182							
02:15	27	0			27		14:15	145	0			145							
02:30	30	0			30		14:30	185	0			185							
02:45	33	123	0		33	123	14:45	184	696	0		184	696						
03:00	29	0			29		15:00	146	0			146							
03:15	54	0			54		15:15	103	0			103							
03:30	41	0			41		15:30	164	0			164							
03:45	38	162	0		38	162	15:45	172	585	0		172	585						
04:00	64	0			64		16:00	156	0			156							
04:15	86	0			86		16:15	132	0			132							
04:30	101	0			101		16:30	169	0			169							
04:45	121	372	0		121	372	16:45	121	578	0		121	578						
05:00	121	0			121		17:00	182	0			182							
05:15	122	0			122		17:15	160	0			160							
05:30	130	0			130		17:30	130	0			130							
05:45	102	475	0		102	475	17:45	95	567	0		95	567						
06:00	111	0			111		18:00	121	0			121							
06:15	104	0			104		18:15	68	0			68							
06:30	98	0			98		18:30	81	0			81							
06:45	80	393	0		80	393	18:45	69	339	0		69	339						
07:00	97	0			97		19:00	83	0			83							
07:15	88	0			88		19:15	65	0			65							
07:30	59	0			59		19:30	63	0			63							
07:45	81	325	0		81	325	19:45	53	264	0		53	264						
08:00	92	0			92		20:00	80	0			80							
08:15	83	0			83		20:15	38	0			38							
08:30	95	0			95		20:30	52	0			52							
08:45	116	386	0		116	386	20:45	47	217	0		47	217						
09:00	110	0			110		21:00	61	0			61							
09:15	132	0			132		21:15	52	0			52							
09:30	125	0			125		21:30	45	0			45							
09:45	131	498	0		131	498	21:45	26	184	0		26	184						
10:00	139	0			139		22:00	87	0			87							
10:15	129	0			129		22:15	50	0			50							
10:30	143	0			143		22:30	41	0			41							
10:45	121	532	0		121	532	22:45	16	194	0		16	194						
11:00	155	0			155		23:00	41	0			41							
11:15	213	0			213		23:15	25	0			25							
11:30	178	0			178		23:30	30	0			30							
11:45	191	737	0		191	737	23:45	30	126	0		30	126						
TOTALS	4224				4224		TOTALS	5461				5461							
SPLIT %	100.0%				43.6%		SPLIT %	100.0%				56.4%							

DAILY TOTALS					NB	SB						EB	WB						Total
					9,685	0						0	0						9,685

AM Peak Hour	11:45				11:45		PM Peak Hour	12:00				12:00							
AM Pk Volume	878				878		PM Pk Volume	917				917							
Pk Hr Factor	0.871				0.871		Pk Hr Factor	0.910				0.910							
7 - 9 Volume	711	0	0	0	711		4 - 6 Volume	1145	0	0	0	1145							
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	386	0	0	0	386		4 - 6 Pk Volume	632	0	0	0	632							
Pk Hr Factor	0.832	0.000	0.000	0.000	0.832		Pk Hr Factor	0.868	0.000	0.000	0.000	0.868							

VOLUME

I-15 NB On-Ramp From Magnolia Ave

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_043

DAILY TOTALS					NB	SB						EB	WB						Total
					9,384	0						0	0						9,384
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	20	0			20		12:00	210	0			210							
00:15	22	0			22		12:15	204	0			204							
00:30	30	0			30		12:30	222	0			222							
00:45	28	100	0		28	100	12:45	217	853	0		217	853						
01:00	37	0			37		13:00	183	0			183							
01:15	16	0			16		13:15	212	0			212							
01:30	33	0			33		13:30	207	0			207							
01:45	12	98	0		12	98	13:45	170	772	0		170	772						
02:00	20	0			20		14:00	185	0			185							
02:15	34	0			34		14:15	177	0			177							
02:30	37	0			37		14:30	169	0			169							
02:45	29	120	0		29	120	14:45	151	682	0		151	682						
03:00	40	0			40		15:00	137	0			137							
03:15	33	0			33		15:15	126	0			126							
03:30	46	0			46		15:30	170	0			170							
03:45	57	176	0		57	176	15:45	140	573	0		140	573						
04:00	65	0			65		16:00	143	0			143							
04:15	84	0			84		16:15	123	0			123							
04:30	94	0			94		16:30	143	0			143							
04:45	95	338	0		95	338	16:45	127	536	0		127	536						
05:00	130	0			130		17:00	178	0			178							
05:15	87	0			87		17:15	167	0			167							
05:30	130	0			130		17:30	132	0			132							
05:45	84	431	0		84	431	17:45	115	592	0		115	592						
06:00	113	0			113		18:00	107	0			107							
06:15	89	0			89		18:15	86	0			86							
06:30	94	0			94		18:30	64	0			64							
06:45	84	380	0		84	380	18:45	64	321	0		64	321						
07:00	90	0			90		19:00	93	0			93							
07:15	116	0			116		19:15	68	0			68							
07:30	86	0			86		19:30	63	0			63							
07:45	78	370	0		78	370	19:45	35	259	0		35	259						
08:00	95	0			95		20:00	48	0			48							
08:15	96	0			96		20:15	49	0			49							
08:30	95	0			95		20:30	46	0			46							
08:45	77	363	0		77	363	20:45	39	182	0		39	182						
09:00	114	0			114		21:00	44	0			44							
09:15	122	0			122		21:15	36	0			36							
09:30	148	0			148		21:30	42	0			42							
09:45	151	535	0		151	535	21:45	52	174	0		52	174						
10:00	143	0			143		22:00	64	0			64							
10:15	111	0			111		22:15	51	0			51							
10:30	106	0			106		22:30	57	0			57							
10:45	153	513	0		153	513	22:45	20	192	0		20	192						
11:00	187	0			187		23:00	39	0			39							
11:15	122	0			122		23:15	13	0			13							
11:30	201	0			201		23:30	22	0			22							
11:45	226	736	0		226	736	23:45	14	88	0		14	88						
TOTALS	4160				4160		TOTALS	5224				5224							
SPLIT %	100.0%				44.3%		SPLIT %	100.0%				55.7%							

DAILY TOTALS					NB	SB						EB	WB						Total
					9,384	0						0	0						9,384

AM Peak Hour	11:45				11:45		PM Peak Hour	12:00				12:00							
AM Pk Volume	862				862		PM Pk Volume	853				853							
Pk Hr Factor	0.954				0.954		Pk Hr Factor	0.961				0.961							
7 - 9 Volume	733	0	0	0	733		4 - 6 Volume	1128	0	0	0	1128							
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	375	0	0	0	375		4 - 6 Pk Volume	615	0	0	0	615							
Pk Hr Factor	0.808	0.000	0.000	0.000	0.808		Pk Hr Factor	0.864	0.000	0.000	0.000	0.864							

VOLUME

I-15 SB On-Ramp From Magnolia Ave

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_044

DAILY TOTALS					NB	SB	EB					WB	Total
					0	10,270	0					0	10,270
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	17			17		12:00	0	188			188	
00:15	0	12			12		12:15	0	231			231	
00:30	0	11			11		12:30	0	184			184	
00:45	0	13	53		13	53	12:45	0	186	789		186	789
01:00	0	11			11		13:00	0	232			232	
01:15	0	12			12		13:15	0	195			195	
01:30	0	4			4		13:30	0	198			198	
01:45	0	8	35		8	35	13:45	0	182	807		182	807
02:00	0	11			11		14:00	0	191			191	
02:15	0	16			16		14:15	0	215			215	
02:30	0	30			30		14:30	0	224			224	
02:45	0	26	83		26	83	14:45	0	235	865		235	865
03:00	0	11			11		15:00	0	210			210	
03:15	0	14			14		15:15	0	176			176	
03:30	0	25			25		15:30	0	178			178	
03:45	0	43	93		43	93	15:45	0	184	748		184	748
04:00	0	36			36		16:00	0	151			151	
04:15	0	58			58		16:15	0	154			154	
04:30	0	52			52		16:30	0	159			159	
04:45	0	59	205		59	205	16:45	0	152	616		152	616
05:00	0	76			76		17:00	0	154			154	
05:15	0	80			80		17:15	0	194			194	
05:30	0	78			78		17:30	0	120			120	
05:45	0	57	291		57	291	17:45	0	134	602		134	602
06:00	0	79			79		18:00	0	133			133	
06:15	0	71			71		18:15	0	127			127	
06:30	0	108			108		18:30	0	106			106	
06:45	0	84	342		84	342	18:45	0	125	491		125	491
07:00	0	123			123		19:00	0	129			129	
07:15	0	161			161		19:15	0	98			98	
07:30	0	163			163		19:30	0	108			108	
07:45	0	128	575		128	575	19:45	0	77	412		77	412
08:00	0	119			119		20:00	0	79			79	
08:15	0	127			127		20:15	0	82			82	
08:30	0	144			144		20:30	0	72			72	
08:45	0	148	538		148	538	20:45	0	86	319		86	319
09:00	0	146			146		21:00	0	73			73	
09:15	0	138			138		21:15	0	72			72	
09:30	0	120			120		21:30	0	58			58	
09:45	0	133	537		133	537	21:45	0	69	272		69	272
10:00	0	130			130		22:00	0	43			43	
10:15	0	158			158		22:15	0	40			40	
10:30	0	140			140		22:30	0	40			40	
10:45	0	138	566		138	566	22:45	0	52	175		52	175
11:00	0	186			186		23:00	0	35			35	
11:15	0	174			174		23:15	0	29			29	
11:30	0	190			190		23:30	0	28			28	
11:45	0	184	734		184	734	23:45	0	30	122		30	122
TOTALS	4052				4052		TOTALS	6218				6218	
SPLIT %	100.0%				39.5%		SPLIT %	100.0%				60.5%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	10,270	0	0	10,270

AM Peak Hour	11:30			11:30	PM Peak Hour	14:15			14:15		
AM Pk Volume	793			793	PM Pk Volume	884			884		
Pk Hr Factor	0.858			0.858	Pk Hr Factor	0.940			0.940		
7 - 9 Volume	0	1113	0	0	1113	4 - 6 Volume	0	1218	0	0	1218
7 - 9 Peak Hour		07:00			07:00	4 - 6 Peak Hour		16:30			16:30
7 - 9 Pk Volume	0	575	0	0	575	4 - 6 Pk Volume	0	659	0	0	659
Pk Hr Factor	0.000	0.882	0.000	0.000	0.882	Pk Hr Factor	0.000	0.849	0.000	0.000	0.849

VOLUME

I-15 SB On-Ramp From Magnolia Ave

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_044

DAILY TOTALS					NB	SB	EB					WB	Total
					0	10,012	0					0	10,012
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	17			17		12:00	0	171			171	
00:15	0	23			23		12:15	0	184			184	
00:30	0	17			17		12:30	0	212			212	
00:45	0	21	78		21	78	12:45	0	190	757		190	757
01:00	0	23			23		13:00	0	207			207	
01:15	0	25			25		13:15	0	230			230	
01:30	0	18			18		13:30	0	197			197	
01:45	0	12	78		12	78	13:45	0	197	831		197	831
02:00	0	27			27		14:00	0	227			227	
02:15	0	12			12		14:15	0	172			172	
02:30	0	22			22		14:30	0	229			229	
02:45	0	12	73		12	73	14:45	0	209	837		209	837
03:00	0	16			16		15:00	0	188			188	
03:15	0	23			23		15:15	0	180			180	
03:30	0	11			11		15:30	0	150			150	
03:45	0	32	82		32	82	15:45	0	137	655		137	655
04:00	0	32			32		16:00	0	160			160	
04:15	0	33			33		16:15	0	121			121	
04:30	0	57			57		16:30	0	155			155	
04:45	0	74	196		74	196	16:45	0	128	564		128	564
05:00	0	73			73		17:00	0	156			156	
05:15	0	61			61		17:15	0	141			141	
05:30	0	82			82		17:30	0	109			109	
05:45	0	66	282		66	282	17:45	0	125	531		125	531
06:00	0	75			75		18:00	0	123			123	
06:15	0	81			81		18:15	0	125			125	
06:30	0	100			100		18:30	0	98			98	
06:45	0	92	348		92	348	18:45	0	100	446		100	446
07:00	0	101			101		19:00	0	111			111	
07:15	0	146			146		19:15	0	105			105	
07:30	0	140			140		19:30	0	106			106	
07:45	0	122	509		122	509	19:45	0	73	395		73	395
08:00	0	144			144		20:00	0	87			87	
08:15	0	127			127		20:15	0	85			85	
08:30	0	152			152		20:30	0	117			117	
08:45	0	159	582		159	582	20:45	0	88	377		88	377
09:00	0	164			164		21:00	0	88			88	
09:15	0	123			123		21:15	0	53			53	
09:30	0	129			129		21:30	0	37			37	
09:45	0	152	568		152	568	21:45	0	54	232		54	232
10:00	0	166			166		22:00	0	41			41	
10:15	0	172			172		22:15	0	51			51	
10:30	0	158			158		22:30	0	32			32	
10:45	0	153	649		153	649	22:45	0	35	159		35	159
11:00	0	147			147		23:00	0	40			40	
11:15	0	177			177		23:15	0	22			22	
11:30	0	168			168		23:30	0	17			17	
11:45	0	191	683		191	683	23:45	0	21	100		21	100
TOTALS	4128				4128		TOTALS	5884				5884	
SPLIT %	100.0%				41.2%		SPLIT %	100.0%				58.8%	

DAILY TOTALS					NB	SB	EB	WB	Total
					0	10,012	0	0	10,012

AM Peak Hour	11:45			11:45	PM Peak Hour	13:15			13:15		
AM Pk Volume	758			758	PM Pk Volume	851			851		
Pk Hr Factor	0.894			0.894	Pk Hr Factor	0.925			0.925		
7 - 9 Volume	0	1091	0	0	1091	4 - 6 Volume	0	1095	0	0	1095
7 - 9 Peak Hour		08:00			08:00	4 - 6 Peak Hour		16:30			16:30
7 - 9 Pk Volume	0	582	0	0	582	4 - 6 Pk Volume	0	580	0	0	580
Pk Hr Factor	0.000	0.915	0.000	0.000	0.915	Pk Hr Factor	0.000	0.929	0.000	0.000	0.929

VOLUME

I-15 SB On-Ramp From Magnolia Ave

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_044

DAILY TOTALS					NB	SB						EB	WB	Total
					0	10,184						0	0	10,184
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	24			24		12:00	0	168			168		
00:15	0	22			22		12:15	0	178			178		
00:30	0	18			18		12:30	0	174			174		
00:45	0	29	93		29	93	12:45	0	226	746		226	746	
01:00	0	50			50		13:00	0	191			191		
01:15	0	45			45		13:15	0	157			157		
01:30	0	39			39		13:30	0	163			163		
01:45	0	40	174		40	174	13:45	0	194	705		194	705	
02:00	0	37			37		14:00	0	195			195		
02:15	0	39			39		14:15	0	236			236		
02:30	0	45			45		14:30	0	195			195		
02:45	0	40	161		40	161	14:45	0	174	800		174	800	
03:00	0	48			48		15:00	0	201			201		
03:15	0	44			44		15:15	0	150			150		
03:30	0	50			50		15:30	0	157			157		
03:45	0	48	190		48	190	15:45	0	140	648		140	648	
04:00	0	68			68		16:00	0	154			154		
04:15	0	87			87		16:15	0	166			166		
04:30	0	79			79		16:30	0	121			121		
04:45	0	80	314		80	314	16:45	0	172	613		172	613	
05:00	0	86			86		17:00	0	162			162		
05:15	0	75			75		17:15	0	139			139		
05:30	0	78			78		17:30	0	122			122		
05:45	0	67	306		67	306	17:45	0	112	535		112	535	
06:00	0	83			83		18:00	0	114			114		
06:15	0	61			61		18:15	0	107			107		
06:30	0	95			95		18:30	0	107			107		
06:45	0	106	345		106	345	18:45	0	109	437		109	437	
07:00	0	120			120		19:00	0	94			94		
07:15	0	150			150		19:15	0	117			117		
07:30	0	162			162		19:30	0	110			110		
07:45	0	107	539		107	539	19:45	0	77	398		77	398	
08:00	0	121			121		20:00	0	94			94		
08:15	0	138			138		20:15	0	107			107		
08:30	0	128			128		20:30	0	102			102		
08:45	0	138	525		138	525	20:45	0	91	394		91	394	
09:00	0	124			124		21:00	0	84			84		
09:15	0	95			95		21:15	0	91			91		
09:30	0	117			117		21:30	0	58			58		
09:45	0	116	452		116	452	21:45	0	68	301		68	301	
10:00	0	140			140		22:00	0	57			57		
10:15	0	109			109		22:15	0	53			53		
10:30	0	114			114		22:30	0	69			69		
10:45	0	124	487		124	487	22:45	0	40	219		40	219	
11:00	0	166			166		23:00	0	41			41		
11:15	0	136			136		23:15	0	48			48		
11:30	0	178			178		23:30	0	32			32		
11:45	0	178	658		178	658	23:45	0	23	144		23	144	
TOTALS	4244				4244		TOTALS	5940				5940		
SPLIT %	100.0%				41.7%		SPLIT %	100.0%				58.3%		

DAILY TOTALS					NB	SB						EB	WB	Total
					0	10,184						0	0	10,184

AM Peak Hour	11:30				11:30		PM Peak Hour	13:45						13:45
AM Pk Volume	702				702		PM Pk Volume	820						820
Pk Hr Factor	0.986				0.986		Pk Hr Factor	0.869						0.869
7 - 9 Volume	0	1064	0	0	1064		4 - 6 Volume	0	1148	0	0	1148		1148
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	16:15				16:15		16:15
7 - 9 Pk Volume	540		0	0	540		4 - 6 Pk Volume	621		0	0	621		621
Pk Hr Factor	0.000	0.833	0.000	0.000	0.833		Pk Hr Factor	0.000	0.903	0.000	0.000	0.903		0.903

VOLUME

I-15 SB Off-Ramp to Magnolia Ave

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_045

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	23,052						0	0	23,052	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00	0	46			46		12:00	0	290			290			
00:15	0	61			61		12:15	0	312			312			
00:30	0	59			59		12:30	0	328			328			
00:45	0	42	208		42	208	12:45	0	386	1316		386	1316		
01:00	0	42			42		13:00	0	341			341			
01:15	0	50			50		13:15	0	327			327			
01:30	0	53			53		13:30	0	354			354			
01:45	0	54	199		54	199	13:45	0	366	1388		366	1388		
02:00	0	48			48		14:00	0	318			318			
02:15	0	42			42		14:15	0	341			341			
02:30	0	51			51		14:30	0	335			335			
02:45	0	64	205		64	205	14:45	0	353	1347		353	1347		
03:00	0	76			76		15:00	0	299			299			
03:15	0	80			80		15:15	0	325			325			
03:30	0	114			114		15:30	0	325			325			
03:45	0	109	379		109	379	15:45	0	406	1355		406	1355		
04:00	0	95			95		16:00	0	385			385			
04:15	0	118			118		16:15	0	391			391			
04:30	0	156			156		16:30	0	353			353			
04:45	0	214	583		214	583	16:45	0	379	1508		379	1508		
05:00	0	144			144		17:00	0	307			307			
05:15	0	170			170		17:15	0	362			362			
05:30	0	216			216		17:30	0	325			325			
05:45	0	259	789		259	789	17:45	0	321	1315		321	1315		
06:00	0	186			186		18:00	0	277			277			
06:15	0	211			211		18:15	0	260			260			
06:30	0	208			208		18:30	0	241			241			
06:45	0	278	883		278	883	18:45	0	202	980		202	980		
07:00	0	286			286		19:00	0	186			186			
07:15	0	276			276		19:15	0	211			211			
07:30	0	330			330		19:30	0	192			192			
07:45	0	360	1252		360	1252	19:45	0	213	802		213	802		
08:00	0	383			383		20:00	0	177			177			
08:15	0	338			338		20:15	0	216			216			
08:30	0	328			328		20:30	0	204			204			
08:45	0	351	1400		351	1400	20:45	0	162	759		162	759		
09:00	0	386			386		21:00	0	180			180			
09:15	0	386			386		21:15	0	342			342			
09:30	0	369			369		21:30	0	297			297			
09:45	0	380	1521		380	1521	21:45	0	282	1101		282	1101		
10:00	0	356			356		22:00	0	235			235			
10:15	0	274			274		22:15	0	209			209			
10:30	0	281			281		22:30	0	197			197			
10:45	0	289	1200		289	1200	22:45	0	172	813		172	813		
11:00	0	271			271		23:00	0	180			180			
11:15	0	348			348		23:15	0	152			152			
11:30	0	293			293		23:30	0	127			127			
11:45	0	270	1182		270	1182	23:45	0	108	567		108	567		
TOTALS	9801				9801		TOTALS	13251				13251			
SPLIT %	100.0%				42.5%		SPLIT %	100.0%				57.5%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					0	23,052						0	0	23,052	

AM Peak Hour	09:00				09:00		PM Peak Hour	15:45						15:45	
AM Pk Volume	1521				1521		PM Pk Volume	1535						1535	
Pk Hr Factor	0.985				0.985		Pk Hr Factor	0.945						0.945	
7 - 9 Volume	0	2652	0	0	2652		4 - 6 Volume	0	2823	0	0	2823		2823	
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	16:00				16:00		16:00	
7 - 9 Pk Volume	1411		0	0	1411		4 - 6 Pk Volume	1508		0	0	1508		1508	
Pk Hr Factor	0.000	0.921	0.000	0.000	0.921		Pk Hr Factor	0.000	0.964	0.000	0.000	0.964		0.964	

VOLUME

I-15 SB Off-Ramp to Magnolia Ave

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_045

DAILY TOTALS					NB	SB						EB	WB						Total
					0	21,953						0	0						21,953
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	96			96		12:00	0	337			337							
00:15	0	82			82		12:15	0	327			327							
00:30	0	83			83		12:30	0	322			322							
00:45	0	97	358		97	358	12:45	0	340	1326		340	1326						
01:00	0	73			73		13:00	0	330			330							
01:15	0	66			66		13:15	0	307			307							
01:30	0	64			64		13:30	0	315			315							
01:45	0	85	288		85	288	13:45	0	353	1305		353	1305						
02:00	0	62			62		14:00	0	314			314							
02:15	0	53			53		14:15	0	342			342							
02:30	0	58			58		14:30	0	295			295							
02:45	0	76	249		76	249	14:45	0	305	1256		305	1256						
03:00	0	95			95		15:00	0	301			301							
03:15	0	93			93		15:15	0	317			317							
03:30	0	107			107		15:30	0	301			301							
03:45	0	129	424		129	424	15:45	0	336	1255		336	1255						
04:00	0	130			130		16:00	0	316			316							
04:15	0	175			175		16:15	0	344			344							
04:30	0	206			206		16:30	0	325			325							
04:45	0	252	763		252	763	16:45	0	358	1343		358	1343						
05:00	0	156			156		17:00	0	346			346							
05:15	0	178			178		17:15	0	359			359							
05:30	0	222			222		17:30	0	310			310							
05:45	0	264	820		264	820	17:45	0	324	1339		324	1339						
06:00	0	203			203		18:00	0	284			284							
06:15	0	188			188		18:15	0	254			254							
06:30	0	244			244		18:30	0	214			214							
06:45	0	251	886		251	886	18:45	0	211	963		211	963						
07:00	0	262			262		19:00	0	213			213							
07:15	0	273			273		19:15	0	237			237							
07:30	0	348			348		19:30	0	202			202							
07:45	0	341	1224		341	1224	19:45	0	253	905		253	905						
08:00	0	363			363		20:00	0	199			199							
08:15	0	413			413		20:15	0	222			222							
08:30	0	365			365		20:30	0	156			156							
08:45	0	319	1460		319	1460	20:45	0	190	767		190	767						
09:00	0	301			301		21:00	0	140			140							
09:15	0	340			340		21:15	0	136			136							
09:30	0	322			322		21:30	0	145			145							
09:45	0	329	1292		329	1292	21:45	0	118	539		118	539						
10:00	0	281			281		22:00	0	108			108							
10:15	0	332			332		22:15	0	104			104							
10:30	0	252			252		22:30	0	96			96							
10:45	0	322	1187		322	1187	22:45	0	90	398		90	398						
11:00	0	342			342		23:00	0	119			119							
11:15	0	302			302		23:15	0	84			84							
11:30	0	275			275		23:30	0	85			85							
11:45	0	329	1248		329	1248	23:45	0	70	358		70	358						
TOTALS	10199				10199		TOTALS	11754				11754							
SPLIT %	100.0%				46.5%		SPLIT %	100.0%				53.5%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	21,953						0	0						21,953

AM Peak Hour	07:45				07:45		PM Peak Hour	16:30					16:30						
AM Pk Volume	1482				1482		PM Pk Volume	1388					1388						
Pk Hr Factor	0.897				0.897		Pk Hr Factor	0.967					0.967						
7 - 9 Volume	0	2684	0	0	2684		4 - 6 Volume	0	2682	0	0	2682							
7 - 9 Peak Hour	07:45				07:45		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	1482		0	0	1482		4 - 6 Pk Volume	1388		0	0	1388							
Pk Hr Factor	0.000	0.897	0.000	0.000	0.897		Pk Hr Factor	0.000	0.967	0.000	0.000	0.967							

VOLUME

I-15 SB Off-Ramp to Magnolia Ave

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_045

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	0					0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	0			0	12:00	0	0			0		
00:15	0	0			0	12:15	0	0			0		
00:30	0	0			0	12:30	0	0			0		
00:45	0	0			0	12:45	0	0			0		
01:00	0	0			0	13:00	0	0			0		
01:15	0	0			0	13:15	0	0			0		
01:30	0	0			0	13:30	0	0			0		
01:45	0	0			0	13:45	0	0			0		
02:00	0	0			0	14:00	0	0			0		
02:15	0	0			0	14:15	0	0			0		
02:30	0	0			0	14:30	0	0			0		
02:45	0	0			0	14:45	0	0			0		
03:00	0	0			0	15:00	0	0			0		
03:15	0	0			0	15:15	0	0			0		
03:30	0	0			0	15:30	0	0			0		
03:45	0	0			0	15:45	0	0			0		
04:00	0	0			0	16:00	0	0			0		
04:15	0	0			0	16:15	0	0			0		
04:30	0	0			0	16:30	0	0			0		
04:45	0	0			0	16:45	0	0			0		
05:00	0	0			0	17:00	0	0			0		
05:15	0	0			0	17:15	0	0			0		
05:30	0	0			0	17:30	0	0			0		
05:45	0	0			0	17:45	0	0			0		
06:00	0	0			0	18:00	0	0			0		
06:15	0	0			0	18:15	0	0			0		
06:30	0	0			0	18:30	0	0			0		
06:45	0	0			0	18:45	0	0			0		
07:00	0	0			0	19:00	0	0			0		
07:15	0	0			0	19:15	0	0			0		
07:30	0	0			0	19:30	0	0			0		
07:45	0	0			0	19:45	0	0			0		
08:00	0	0			0	20:00	0	0			0		
08:15	0	0			0	20:15	0	0			0		
08:30	0	0			0	20:30	0	0			0		
08:45	0	0			0	20:45	0	0			0		
09:00	0	0			0	21:00	0	0			0		
09:15	0	0			0	21:15	0	0			0		
09:30	0	0			0	21:30	0	0			0		
09:45	0	0			0	21:45	0	0			0		
10:00	0	0			0	22:00	0	0			0		
10:15	0	0			0	22:15	0	0			0		
10:30	0	0			0	22:30	0	0			0		
10:45	0	0			0	22:45	0	0			0		
11:00	0	0			0	23:00	0	0			0		
11:15	0	0			0	23:15	0	0			0		
11:30	0	0			0	23:30	0	0			0		
11:45	0	0			0	23:45	0	0			0		
TOTALS					0	TOTALS					0		
SPLIT %					#DIV/0!	SPLIT %					#DIV/0!		

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						0	0						0

AM Peak Hour						PM Peak Hour					
AM Pk Volume						PM Pk Volume					
Pk Hr Factor						Pk Hr Factor					
7 - 9 Volume	0	0	0	0	0	4 - 6 Volume	0	0	0	0	0
7 - 9 Peak Hour						4 - 6 Peak Hour					
7 - 9 Pk Volume	0	0	0	0	0	4 - 6 Pk Volume	0	0	0	0	0
Pk Hr Factor	0.000	0.000	0.000	0.000	0.000	Pk Hr Factor	0.000	0.000	0.000	0.000	0.000

VOLUME

I-15 NB Loop On-Ramp From Magnolia Ave

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_046

DAILY TOTALS					NB	SB						EB	WB						Total
					13,876	0						0	0						13,876
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	37	0			37		12:00	182	0			182							
00:15	27	0			27		12:15	215	0			215							
00:30	19	0			19		12:30	217	0			217							
00:45	25	108	0		25	108	12:45	172	786	0		172	786						
01:00	11	0			11		13:00	156	0			156							
01:15	14	0			14		13:15	185	0			185							
01:30	18	0			18		13:30	192	0			192							
01:45	24	67	0		24	67	13:45	152	685	0		152	685						
02:00	17	0			17		14:00	221	0			221							
02:15	12	0			12		14:15	205	0			205							
02:30	22	0			22		14:30	232	0			232							
02:45	22	73	0		22	73	14:45	215	873	0		215	873						
03:00	29	0			29		15:00	195	0			195							
03:15	31	0			31		15:15	226	0			226							
03:30	41	0			41		15:30	268	0			268							
03:45	47	148	0		47	148	15:45	207	896	0		207	896						
04:00	51	0			51		16:00	237	0			237							
04:15	64	0			64		16:15	234	0			234							
04:30	64	0			64		16:30	247	0			247							
04:45	59	238	0		59	238	16:45	235	953	0		235	953						
05:00	75	0			75		17:00	277	0			277							
05:15	77	0			77		17:15	302	0			302							
05:30	123	0			123		17:30	300	0			300							
05:45	113	388	0		113	388	17:45	238	1117	0		238	1117						
06:00	136	0			136		18:00	257	0			257							
06:15	172	0			172		18:15	201	0			201							
06:30	206	0			206		18:30	216	0			216							
06:45	199	713	0		199	713	18:45	188	862	0		188	862						
07:00	215	0			215		19:00	220	0			220							
07:15	224	0			224		19:15	189	0			189							
07:30	221	0			221		19:30	172	0			172							
07:45	160	820	0		160	820	19:45	124	705	0		124	705						
08:00	152	0			152		20:00	124	0			124							
08:15	137	0			137		20:15	117	0			117							
08:30	149	0			149		20:30	137	0			137							
08:45	140	578	0		140	578	20:45	119	497	0		119	497						
09:00	152	0			152		21:00	113	0			113							
09:15	156	0			156		21:15	184	0			184							
09:30	160	0			160		21:30	163	0			163							
09:45	156	624	0		156	624	21:45	147	607	0		147	607						
10:00	200	0			200		22:00	106	0			106							
10:15	159	0			159		22:15	99	0			99							
10:30	202	0			202		22:30	95	0			95							
10:45	171	732	0		171	732	22:45	94	394	0		94	394						
11:00	177	0			177		23:00	94	0			94							
11:15	185	0			185		23:15	55	0			55							
11:30	213	0			213		23:30	78	0			78							
11:45	159	734	0		159	734	23:45	51	278	0		51	278						
TOTALS	5223				5223		TOTALS	8653				8653							
SPLIT %	100.0%				37.6%		SPLIT %	100.0%				62.4%							

DAILY TOTALS					NB	SB						EB	WB						Total
					13,876	0						0	0						13,876

AM Peak Hour	06:45				06:45		PM Peak Hour	17:00				17:00							
AM Pk Volume	859				859		PM Pk Volume	1117				1117							
Pk Hr Factor	0.959				0.959		Pk Hr Factor	0.925				0.925							
7 - 9 Volume	1398	0	0	0	1398		4 - 6 Volume	2070	0	0	0	2070							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	17:00				17:00							
7 - 9 Pk Volume	820	0	0	0	820		4 - 6 Pk Volume	1117	0	0	0	1117							
Pk Hr Factor	0.915	0.000	0.000	0.000	0.915		Pk Hr Factor	0.925	0.000	0.000	0.000	0.925							

VOLUME

I-15 NB Loop On-Ramp From Magnolia Ave

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_046

DAILY TOTALS					NB	SB						EB	WB						Total
					13,439	0						0	0						13,439
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	63	0			63		12:00	162	0			162							
00:15	37	0			37		12:15	179	0			179							
00:30	43	0			43		12:30	159	0			159							
00:45	41	184	0		41	184	12:45	155	655	0		155	655						
01:00	30	0			30		13:00	151	0			151							
01:15	41	0			41		13:15	152	0			152							
01:30	22	0			22		13:30	177	0			177							
01:45	46	139	0		46	139	13:45	147	627	0		147	627						
02:00	25	0			25		14:00	152	0			152							
02:15	17	0			17		14:15	219	0			219							
02:30	34	0			34		14:30	178	0			178							
02:45	28	104	0		28	104	14:45	150	699	0		150	699						
03:00	56	0			56		15:00	174	0			174							
03:15	49	0			49		15:15	181	0			181							
03:30	48	0			48		15:30	155	0			155							
03:45	70	223	0		70	223	15:45	177	687	0		177	687						
04:00	85	0			85		16:00	231	0			231							
04:15	85	0			85		16:15	284	0			284							
04:30	106	0			106		16:30	293	0			293							
04:45	79	355	0		79	355	16:45	288	1096	0		288	1096						
05:00	64	0			64		17:00	262	0			262							
05:15	83	0			83		17:15	150	0			150							
05:30	109	0			109		17:30	229	0			229							
05:45	137	393	0		137	393	17:45	257	898	0		257	898						
06:00	138	0			138		18:00	243	0			243							
06:15	184	0			184		18:15	211	0			211							
06:30	185	0			185		18:30	209	0			209							
06:45	178	685	0		178	685	18:45	174	837	0		174	837						
07:00	208	0			208		19:00	193	0			193							
07:15	215	0			215		19:15	169	0			169							
07:30	214	0			214		19:30	164	0			164							
07:45	194	831	0		194	831	19:45	121	647	0		121	647						
08:00	221	0			221		20:00	152	0			152							
08:15	210	0			210		20:15	146	0			146							
08:30	232	0			232		20:30	113	0			113							
08:45	227	890	0		227	890	20:45	125	536	0		125	536						
09:00	243	0			243		21:00	118	0			118							
09:15	186	0			186		21:15	97	0			97							
09:30	175	0			175		21:30	71	0			71							
09:45	176	780	0		176	780	21:45	82	368	0		82	368						
10:00	170	0			170		22:00	72	0			72							
10:15	170	0			170		22:15	51	0			51							
10:30	193	0			193		22:30	50	0			50							
10:45	200	733	0		200	733	22:45	36	209	0		36	209						
11:00	197	0			197		23:00	40	0			40							
11:15	173	0			173		23:15	36	0			36							
11:30	170	0			170		23:30	34	0			34							
11:45	192	732	0		192	732	23:45	21	131	0		21	131						
TOTALS	6049				6049		TOTALS	7390				7390							
SPLIT %	100.0%				45.0%		SPLIT %	100.0%				55.0%							

DAILY TOTALS					NB	SB						EB	WB						Total
					13,439	0						0	0						13,439

AM Peak Hour	08:15				08:15		PM Peak Hour	16:15				16:15							
AM Pk Volume	912				912		PM Pk Volume	1127				1127							
Pk Hr Factor	0.938				0.938		Pk Hr Factor	0.962				0.962							
7 - 9 Volume	1721	0	0	0	1721		4 - 6 Volume	1994	0	0	0	1994							
7 - 9 Peak Hour	08:00				08:00		4 - 6 Peak Hour	16:15				16:15							
7 - 9 Pk Volume	890	0	0	0	890		4 - 6 Pk Volume	1127	0	0	0	1127							
Pk Hr Factor	0.959	0.000	0.000	0.000	0.959		Pk Hr Factor	0.962	0.000	0.000	0.000	0.962							

VOLUME**I-15 NB Loop On-Ramp From Magnolia Ave**

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6124_046

DAILY TOTALS					NB	SB						EB	WB						Total
					12,215	0						0	0						12,215
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	42	0			42		12:00	126	0			126							
00:15	22	0			22		12:15	118	0			118							
00:30	23	0			23		12:30	133	0			133							
00:45	16	103	0		16	103	12:45	136	513	0		136	513						
01:00	11	0			11		13:00	178	0			178							
01:15	10	0			10		13:15	112	0			112							
01:30	19	0			19		13:30	151	0			151							
01:45	14	54	0		14	54	13:45	134	575	0		134	575						
02:00	12	0			12		14:00	130	0			130							
02:15	16	0			16		14:15	127	0			127							
02:30	19	0			19		14:30	178	0			178							
02:45	15	62	0		15	62	14:45	194	629	0		194	629						
03:00	37	0			37		15:00	149	0			149							
03:15	24	0			24		15:15	183	0			183							
03:30	45	0			45		15:30	135	0			135							
03:45	39	145	0		39	145	15:45	116	583	0		116	583						
04:00	49	0			49		16:00	177	0			177							
04:15	75	0			75		16:15	240	0			240							
04:30	61	0			61		16:30	261	0			261							
04:45	45	230	0		45	230	16:45	210	888	0		210	888						
05:00	65	0			65		17:00	293	0			293							
05:15	74	0			74		17:15	129	0			129							
05:30	92	0			92		17:30	162	0			162							
05:45	117	348	0		117	348	17:45	243	827	0		243	827						
06:00	152	0			152		18:00	215	0			215							
06:15	159	0			159		18:15	194	0			194							
06:30	188	0			188		18:30	228	0			228							
06:45	198	697	0		198	697	18:45	193	830	0		193	830						
07:00	234	0			234		19:00	195	0			195							
07:15	237	0			237		19:15	159	0			159							
07:30	230	0			230		19:30	172	0			172							
07:45	228	929	0		228	929	19:45	132	658	0		132	658						
08:00	231	0			231		20:00	129	0			129							
08:15	206	0			206		20:15	134	0			134							
08:30	194	0			194		20:30	124	0			124							
08:45	210	841	0		210	841	20:45	131	518	0		131	518						
09:00	157	0			157		21:00	128	0			128							
09:15	171	0			171		21:15	98	0			98							
09:30	167	0			167		21:30	90	0			90							
09:45	185	680	0		185	680	21:45	73	389	0		73	389						
10:00	187	0			187		22:00	64	0			64							
10:15	195	0			195		22:15	65	0			65							
10:30	175	0			175		22:30	42	0			42							
10:45	187	744	0		187	744	22:45	35	206	0		35	206						
11:00	210	0			210		23:00	43	0			43							
11:15	183	0			183		23:15	40	0			40							
11:30	109	0			109		23:30	41	0			41							
11:45	112	614	0		112	614	23:45	28	152	0		28	152						
TOTALS	5447				5447		TOTALS	6768				6768							
SPLIT %	100.0%				44.6%		SPLIT %	100.0%				55.4%							

DAILY TOTALS					NB	SB						EB	WB						Total
					12,215	0						0	0						12,215

AM Peak Hour	07:00				07:00		PM Peak Hour	16:15				16:15							
AM Pk Volume	929				929		PM Pk Volume	1004				1004							
Pk Hr Factor	0.980				0.980		Pk Hr Factor	0.857				0.857							
7 - 9 Volume	1770	0	0	0	1770		4 - 6 Volume	1715	0	0	0	1715							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:15				16:15							
7 - 9 Pk Volume	929	0	0	0	929		4 - 6 Pk Volume	1004	0	0	0	1004							
Pk Hr Factor	0.980	0.000	0.000	0.000	0.980		Pk Hr Factor	0.857	0.000	0.000	0.000	0.857							

VOLUME

I-15 NB Off-Ramp WB SR-91

Day: Thursday
Date: 10/3/2019City: Corona
Project #: CA_19-6125-047

DAILY TOTALS						NB	SB					Total
						34,733	0					34,733
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
0:00	75	0	0	0	75	12:00	546	0	0	0	546	
0:15	100	0	0	0	100	12:15	498	0	0	0	498	
0:30	97	0	0	0	97	12:30	500	0	0	0	500	
0:45	92 364	0	0	0	92 364	12:45	507 2051	0	0	0	507 2051	
1:00	98	0	0	0	98	13:00	517	0	0	0	517	
1:15	90	0	0	0	90	13:15	529	0	0	0	529	
1:30	89	0	0	0	89	13:30	550	0	0	0	550	
1:45	92 369	0	0	0	92 369	13:45	565 2161	0	0	0	565 2161	
2:00	103	0	0	0	103	14:00	550	0	0	0	550	
2:15	102	0	0	0	102	14:15	521	0	0	0	521	
2:30	109	0	0	0	109	14:30	554	0	0	0	554	
2:45	125 439	0	0	0	125 439	14:45	494 2119	0	0	0	494 2119	
3:00	139	0	0	0	139	15:00	535	0	0	0	535	
3:15	220	0	0	0	220	15:15	524	0	0	0	524	
3:30	284	0	0	0	284	15:30	557	0	0	0	557	
3:45	396 1039	0	0	0	396 1039	15:45	522 2138	0	0	0	522 2138	
4:00	547	0	0	0	547	16:00	566	0	0	0	566	
4:15	644	0	0	0	644	16:15	595	0	0	0	595	
4:30	557	0	0	0	557	16:30	495	0	0	0	495	
4:45	496 2244	0	0	0	496 2244	16:45	537 2193	0	0	0	537 2193	
5:00	493	0	0	0	493	17:00	501	0	0	0	501	
5:15	357	0	0	0	357	17:15	480	0	0	0	480	
5:30	327	0	0	0	327	17:30	474	0	0	0	474	
5:45	345 1522	0	0	0	345 1522	17:45	419 1874	0	0	0	419 1874	
6:00	284	0	0	0	284	18:00	415	0	0	0	415	
6:15	263	0	0	0	263	18:15	455	0	0	0	455	
6:30	342	0	0	0	342	18:30	411	0	0	0	411	
6:45	330 1219	0	0	0	330 1219	18:45	426 1707	0	0	0	426 1707	
7:00	274	0	0	0	274	19:00	374	0	0	0	374	
7:15	293	0	0	0	293	19:15	330	0	0	0	330	
7:30	320	0	0	0	320	19:30	343	0	0	0	343	
7:45	366 1253	0	0	0	366 1253	19:45	352 1399	0	0	0	352 1399	
8:00	371	0	0	0	371	20:00	360	0	0	0	360	
8:15	372	0	0	0	372	20:15	350	0	0	0	350	
8:30	363	0	0	0	363	20:30	331	0	0	0	331	
8:45	344 1450	0	0	0	344 1450	20:45	301 1342	0	0	0	301 1342	
9:00	378	0	0	0	378	21:00	241	0	0	0	241	
9:15	361	0	0	0	361	21:15	280	0	0	0	280	
9:30	394	0	0	0	394	21:30	222	0	0	0	222	
9:45	458 1591	0	0	0	458 1591	21:45	231 974	0	0	0	231 974	
10:00	541	0	0	0	541	22:00	214	0	0	0	214	
10:15	469	0	0	0	469	22:15	201	0	0	0	201	
10:30	477	0	0	0	477	22:30	169	0	0	0	169	
10:45	493 1980	0	0	0	493 1980	22:45	160 744	0	0	0	160 744	
11:00	513	0	0	0	513	23:00	139	0	0	0	139	
11:15	531	0	0	0	531	23:15	114	0	0	0	114	
11:30	512	0	0	0	512	23:30	132	0	0	0	132	
11:45	527 2083	0	0	0	527 2083	23:45	93 478	0	0	0	93 478	
TOTALS	15553				15553	TOTALS	19180				19180	
SPLIT %	100.0%				44.8%	SPLIT %	100.0%				55.2%	

DAILY TOTALS						NB	SB					Total
						34,733	0					34,733

AM Peak Hour	4:00				4:00	PM Peak Hour	15:30				15:30
AM Pk Volume	2244				2244	PM Pk Volume	2240				2240
Pk Hr Factor	0.871				0.871	Pk Hr Factor	0.941				0.941
7 - 9 Volume	2703	0	0	0	2703	4 - 6 Volume	4067	0	0	0	4067
7 - 9 Peak Hour	7:45				7:45	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	1472	0	0	0	1472	4 - 6 Pk Volume	2193	0	0	0	2193
Pk Hr Factor	0.989	0.000	0.000	0.000	0.989	Pk Hr Factor	0.921	0.000	0.000	0.000	0.921

VOLUME

I-15 NB Off-Ramp WB SR-91

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA_19-6125-047

DAILY TOTALS						NB	SB					Total
						33,517	0					33,517
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
0:00	92	0	0	0	92	12:00	492	0	0	0	492	
0:15	73	0	0	0	73	12:15	504	0	0	0	504	
0:30	107	0	0	0	107	12:30	483	0	0	0	483	
0:45	94 366	0	0	0	94 366	12:45	489 1968	0	0	0	489 1968	
1:00	82	0	0	0	82	13:00	518	0	0	0	518	
1:15	62	0	0	0	62	13:15	483	0	0	0	483	
1:30	56	0	0	0	56	13:30	510	0	0	0	510	
1:45	94 294	0	0	0	94 294	13:45	512 2023	0	0	0	512 2023	
2:00	111	0	0	0	111	14:00	518	0	0	0	518	
2:15	101	0	0	0	101	14:15	511	0	0	0	511	
2:30	113	0	0	0	113	14:30	481	0	0	0	481	
2:45	127 452	0	0	0	127 452	14:45	489 1999	0	0	0	489 1999	
3:00	180	0	0	0	180	15:00	507	0	0	0	507	
3:15	278	0	0	0	278	15:15	516	0	0	0	516	
3:30	246	0	0	0	246	15:30	509	0	0	0	509	
3:45	351 1055	0	0	0	351 1055	15:45	529 2061	0	0	0	529 2061	
4:00	669	0	0	0	669	16:00	514	0	0	0	514	
4:15	766	0	0	0	766	16:15	518	0	0	0	518	
4:30	556	0	0	0	556	16:30	467	0	0	0	467	
4:45	515 2506	0	0	0	515 2506	16:45	515 2014	0	0	0	515 2014	
5:00	379	0	0	0	379	17:00	456	0	0	0	456	
5:15	354	0	0	0	354	17:15	476	0	0	0	476	
5:30	325	0	0	0	325	17:30	502	0	0	0	502	
5:45	304 1362	0	0	0	304 1362	17:45	495 1929	0	0	0	495 1929	
6:00	262	0	0	0	262	18:00	406	0	0	0	406	
6:15	328	0	0	0	328	18:15	380	0	0	0	380	
6:30	308	0	0	0	308	18:30	353	0	0	0	353	
6:45	308 1206	0	0	0	308 1206	18:45	361 1500	0	0	0	361 1500	
7:00	277	0	0	0	277	19:00	367	0	0	0	367	
7:15	256	0	0	0	256	19:15	330	0	0	0	330	
7:30	296	0	0	0	296	19:30	334	0	0	0	334	
7:45	322 1151	0	0	0	322 1151	19:45	323 1354	0	0	0	323 1354	
8:00	370	0	0	0	370	20:00	196	0	0	0	196	
8:15	326	0	0	0	326	20:15	423	0	0	0	423	
8:30	364	0	0	0	364	20:30	290	0	0	0	290	
8:45	347 1407	0	0	0	347 1407	20:45	309 1218	0	0	0	309 1218	
9:00	371	0	0	0	371	21:00	257	0	0	0	257	
9:15	401	0	0	0	401	21:15	265	0	0	0	265	
9:30	378	0	0	0	378	21:30	251	0	0	0	251	
9:45	421 1571	0	0	0	421 1571	21:45	259 1032	0	0	0	259 1032	
10:00	400	0	0	0	400	22:00	247	0	0	0	247	
10:15	417	0	0	0	417	22:15	196	0	0	0	196	
10:30	443	0	0	0	443	22:30	144	0	0	0	144	
10:45	486 1746	0	0	0	486 1746	22:45	175 762	0	0	0	175 762	
11:00	514	0	0	0	514	23:00	134	0	0	0	134	
11:15	524	0	0	0	524	23:15	149	0	0	0	149	
11:30	501	0	0	0	501	23:30	102	0	0	0	102	
11:45	517 2056	0	0	0	517 2056	23:45	100 485	0	0	0	100 485	
TOTALS	15172				15172	TOTALS	18345				18345	
SPLIT %	100.0%				45.3%	SPLIT %	100.0%				54.7%	

DAILY TOTALS						NB	SB					Total
						33,517	0					33,517

AM Peak Hour	4:00				4:00	PM Peak Hour	15:30				15:30
AM Pk Volume	2506				2506	PM Pk Volume	2070				2070
Pk Hr Factor	0.818				0.818	Pk Hr Factor	0.978				0.978
7 - 9 Volume	2558	0	0	0	2558	4 - 6 Volume	3943	0	0	0	3943
7 - 9 Peak Hour	8:00				8:00	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	1407	0	0	0	1407	4 - 6 Pk Volume	2014	0	0	0	2014
Pk Hr Factor	0.951	0.000	0.000	0.000	0.951	Pk Hr Factor	0.972	0.000	0.000	0.000	0.972

VOLUME

I-15 NB Off-Ramp WB SR-91

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-047

DAILY TOTALS						NB	SB					Total
						33,831	0					33,831
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
0:00	75	0	0	0	75	12:00	355	0	0	0	355	
0:15	88	0	0	0	88	12:15	472	0	0	0	472	
0:30	83	0	0	0	83	12:30	469	0	0	0	469	
0:45	85 331	0	0	0	85 331	12:45	487 1783	0	0	0	487 1783	
1:00	75	0	0	0	75	13:00	543	0	0	0	543	
1:15	65	0	0	0	65	13:15	544	0	0	0	544	
1:30	64	0	0	0	64	13:30	535	0	0	0	535	
1:45	57 261	0	0	0	57 261	13:45	522 2144	0	0	0	522 2144	
2:00	69	0	0	0	69	14:00	545	0	0	0	545	
2:15	89	0	0	0	89	14:15	500	0	0	0	500	
2:30	109	0	0	0	109	14:30	482	0	0	0	482	
2:45	115 382	0	0	0	115 382	14:45	495 2022	0	0	0	495 2022	
3:00	173	0	0	0	173	15:00	508	0	0	0	508	
3:15	264	0	0	0	264	15:15	535	0	0	0	535	
3:30	322	0	0	0	322	15:30	551	0	0	0	551	
3:45	429 1188	0	0	0	429 1188	15:45	557 2151	0	0	0	557 2151	
4:00	642	0	0	0	642	16:00	536	0	0	0	536	
4:15	746	0	0	0	746	16:15	512	0	0	0	512	
4:30	600	0	0	0	600	16:30	545	0	0	0	545	
4:45	503 2491	0	0	0	503 2491	16:45	511 2104	0	0	0	511 2104	
5:00	429	0	0	0	429	17:00	520	0	0	0	520	
5:15	356	0	0	0	356	17:15	530	0	0	0	530	
5:30	319	0	0	0	319	17:30	512	0	0	0	512	
5:45	297 1401	0	0	0	297 1401	17:45	478 2040	0	0	0	478 2040	
6:00	282	0	0	0	282	18:00	486	0	0	0	486	
6:15	308	0	0	0	308	18:15	398	0	0	0	398	
6:30	321	0	0	0	321	18:30	388	0	0	0	388	
6:45	289 1200	0	0	0	289 1200	18:45	325 1597	0	0	0	325 1597	
7:00	303	0	0	0	303	19:00	358	0	0	0	358	
7:15	265	0	0	0	265	19:15	381	0	0	0	381	
7:30	391	0	0	0	391	19:30	341	0	0	0	341	
7:45	401 1360	0	0	0	401 1360	19:45	327 1407	0	0	0	327 1407	
8:00	333	0	0	0	333	20:00	153	0	0	0	153	
8:15	322	0	0	0	322	20:15	462	0	0	0	462	
8:30	304	0	0	0	304	20:30	336	0	0	0	336	
8:45	378 1337	0	0	0	378 1337	20:45	288 1239	0	0	0	288 1239	
9:00	360	0	0	0	360	21:00	279	0	0	0	279	
9:15	392	0	0	0	392	21:15	262	0	0	0	262	
9:30	393	0	0	0	393	21:30	242	0	0	0	242	
9:45	413 1558	0	0	0	413 1558	21:45	223 1006	0	0	0	223 1006	
10:00	387	0	0	0	387	22:00	180	0	0	0	180	
10:15	432	0	0	0	432	22:15	184	0	0	0	184	
10:30	446	0	0	0	446	22:30	171	0	0	0	171	
10:45	447 1712	0	0	0	447 1712	22:45	143 678	0	0	0	143 678	
11:00	526	0	0	0	526	23:00	133	0	0	0	133	
11:15	491	0	0	0	491	23:15	118	0	0	0	118	
11:30	495	0	0	0	495	23:30	107	0	0	0	107	
11:45	480 1992	0	0	0	480 1992	23:45	89 447	0	0	0	89 447	
TOTALS	15213				15213	TOTALS	18618				18618	
SPLIT %	100.0%				45.0%	SPLIT %	100.0%				55.0%	

DAILY TOTALS						NB	SB					Total
						33,831	0					33,831

AM Peak Hour	4:00				4:00	PM Peak Hour	15:15				15:15
AM Pk Volume	2491				2491	PM Pk Volume	2179				2179
Pk Hr Factor	0.835				0.835	Pk Hr Factor	0.978				0.978
7 - 9 Volume	2697	0	0	0	2697	4 - 6 Volume	4144	0	0	0	4144
7 - 9 Peak Hour	7:30				7:30	4 - 6 Peak Hour	16:30				16:30
7 - 9 Pk Volume	1447	0	0	0	1447	4 - 6 Pk Volume	2106	0	0	0	2106
Pk Hr Factor	0.902	0.000	0.000	0.000	0.902	Pk Hr Factor	0.966	0.000	0.000	0.000	0.966

VOLUME

I-15 NB Off-Ramp WB SR-91

Day: Saturday
Date: 9/19/2019City: Corona
Project #: CA_19-6125-047

DAILY TOTALS						NB	SB					Total
						29,344	0					29,344
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
0:00	79	0	0	0	79	12:00	0	0	0	0	0	
0:15	79	0	0	0	79	12:15	0	0	0	0	0	
0:30	75	0	0	0	75	12:30	0	0	0	0	0	
0:45	71 304	0	0	0	71 304	12:45	0	0	0	0	0	
1:00	91	0	0	0	91	13:00	471	0	0	0	471	
1:15	66	0	0	0	66	13:15	528	0	0	0	528	
1:30	63	0	0	0	63	13:30	512	0	0	0	512	
1:45	61 281	0	0	0	61 281	13:45	510 2021	0	0	0	510 2021	
2:00	103	0	0	0	103	14:00	518	0	0	0	518	
2:15	94	0	0	0	94	14:15	529	0	0	0	529	
2:30	114	0	0	0	114	14:30	547	0	0	0	547	
2:45	132 443	0	0	0	132 443	14:45	537 2131	0	0	0	537 2131	
3:00	191	0	0	0	191	15:00	483	0	0	0	483	
3:15	149	0	0	0	149	15:15	548	0	0	0	548	
3:30	351	0	0	0	351	15:30	531	0	0	0	531	
3:45	398 1089	0	0	0	398 1089	15:45	561 2123	0	0	0	561 2123	
4:00	632	0	0	0	632	16:00	557	0	0	0	557	
4:15	731	0	0	0	731	16:15	547	0	0	0	547	
4:30	616	0	0	0	616	16:30	573	0	0	0	573	
4:45	510 2489	0	0	0	510 2489	16:45	562 2239	0	0	0	562 2239	
5:00	451	0	0	0	451	17:00	524	0	0	0	524	
5:15	341	0	0	0	341	17:15	486	0	0	0	486	
5:30	314	0	0	0	314	17:30	537	0	0	0	537	
5:45	307 1413	0	0	0	307 1413	17:45	514 2061	0	0	0	514 2061	
6:00	294	0	0	0	294	18:00	453	0	0	0	453	
6:15	294	0	0	0	294	18:15	402	0	0	0	402	
6:30	332	0	0	0	332	18:30	427	0	0	0	427	
6:45	294 1214	0	0	0	294 1214	18:45	380 1662	0	0	0	380 1662	
7:00	281	0	0	0	281	19:00	401	0	0	0	401	
7:15	319	0	0	0	319	19:15	354	0	0	0	354	
7:30	324	0	0	0	324	19:30	330	0	0	0	330	
7:45	396 1320	0	0	0	396 1320	19:45	375 1460	0	0	0	375 1460	
8:00	353	0	0	0	353	20:00	215	0	0	0	215	
8:15	334	0	0	0	334	20:15	408	0	0	0	408	
8:30	332	0	0	0	332	20:30	388	0	0	0	388	
8:45	388 1407	0	0	0	388 1407	20:45	361 1372	0	0	0	361 1372	
9:00	387	0	0	0	387	21:00	303	0	0	0	303	
9:15	409	0	0	0	409	21:15	283	0	0	0	283	
9:30	400	0	0	0	400	21:30	270	0	0	0	270	
9:45	405 1601	0	0	0	405 1601	21:45	251 1107	0	0	0	251 1107	
10:00	249	0	0	0	249	22:00	185	0	0	0	185	
10:15	0	0	0	0	0	22:15	210	0	0	0	210	
10:30	0	0	0	0	0	22:30	217	0	0	0	217	
10:45	0 249	0	0	0	0 249	22:45	178 790	0	0	0	178 790	
11:00	0	0	0	0	0	23:00	172	0	0	0	172	
11:15	0	0	0	0	0	23:15	144	0	0	0	144	
11:30	0	0	0	0	0	23:30	142	0	0	0	142	
11:45	0	0	0	0	0	23:45	110 568	0	0	0	110 568	
TOTALS	11810				11810	TOTALS	17534				17534	
SPLIT %	100.0%				40.2%	SPLIT %	100.0%				59.8%	

DAILY TOTALS						NB	SB					Total
						29,344	0					29,344

AM Peak Hour	4:00				4:00	PM Peak Hour	16:00					16:00
AM Pk Volume	2489				2489	PM Pk Volume	2239					2239
Pk Hr Factor	0.851				0.851	Pk Hr Factor	0.977					0.977
7 - 9 Volume	2727	0	0	0	2727	4 - 6 Volume	4300	0	0	0	0	4300
7 - 9 Peak Hour	7:45				7:45	4 - 6 Peak Hour	16:00					16:00
7 - 9 Pk Volume	1415	0	0	0	1415	4 - 6 Pk Volume	2239	0	0	0	0	2239
Pk Hr Factor	0.893	0.000	0.000	0.000	0.893	Pk Hr Factor	0.977	0.000	0.000	0.000	0.000	0.977

VOLUME

I-15 NB Off-Ramp EB SR-91

Day: Thursday
Date: 10/3/2019City: Corona
Project #: CA_19-6125-048

DAILY TOTALS						NB	SB	EB						WB	Total
						20,887	0							0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL				
0:00	52	0	0	0	52	12:00	251	0	0	0	251				
0:15	45	0	0	0	45	12:15	269	0	0	0	269				
0:30	44	0	0	0	44	12:30	286	0	0	0	286				
0:45	37	178	0	0	37	12:45	279	1085	0	0	279	1085			
1:00	28	0	0	0	28	13:00	267	0	0	0	267				
1:15	36	0	0	0	36	13:15	291	0	0	0	291				
1:30	38	0	0	0	38	13:30	275	0	0	0	275				
1:45	30	132	0	0	30	13:45	271	1104	0	0	271	1104			
2:00	34	0	0	0	34	14:00	287	0	0	0	287				
2:15	28	0	0	0	28	14:15	301	0	0	0	301				
2:30	38	0	0	0	38	14:30	275	0	0	0	275				
2:45	28	128	0	0	28	14:45	308	1171	0	0	308	1171			
3:00	22	0	0	0	22	15:00	296	0	0	0	296				
3:15	31	0	0	0	31	15:15	309	0	0	0	309				
3:30	51	0	0	0	51	15:30	311	0	0	0	311				
3:45	48	152	0	0	48	15:45	298	1214	0	0	298	1214			
4:00	50	0	0	0	50	16:00	301	0	0	0	301				
4:15	71	0	0	0	71	16:15	282	0	0	0	282				
4:30	92	0	0	0	92	16:30	325	0	0	0	325				
4:45	132	345	0	0	132	16:45	319	1227	0	0	319	1227			
5:00	138	0	0	0	138	17:00	359	0	0	0	359				
5:15	170	0	0	0	170	17:15	345	0	0	0	345				
5:30	191	0	0	0	191	17:30	337	0	0	0	337				
5:45	249	748	0	0	249	17:45	324	1365	0	0	324	1365			
6:00	241	0	0	0	241	18:00	336	0	0	0	336				
6:15	309	0	0	0	309	18:15	280	0	0	0	280				
6:30	398	0	0	0	398	18:30	298	0	0	0	298				
6:45	414	1362	0	0	414	18:45	290	1204	0	0	290	1204			
7:00	409	0	0	0	409	19:00	236	0	0	0	236				
7:15	397	0	0	0	397	19:15	243	0	0	0	243				
7:30	335	0	0	0	335	19:30	253	0	0	0	253				
7:45	380	1521	0	0	380	19:45	175	907	0	0	175	907			
8:00	352	0	0	0	352	20:00	234	0	0	0	234				
8:15	349	0	0	0	349	20:15	215	0	0	0	215				
8:30	366	0	0	0	366	20:30	212	0	0	0	212				
8:45	361	1428	0	0	361	20:45	210	871	0	0	210	871			
9:00	276	0	0	0	276	21:00	202	0	0	0	202				
9:15	281	0	0	0	281	21:15	185	0	0	0	185				
9:30	282	0	0	0	282	21:30	150	0	0	0	150				
9:45	304	1143	0	0	304	21:45	125	662	0	0	125	662			
10:00	276	0	0	0	276	22:00	137	0	0	0	137				
10:15	323	0	0	0	323	22:15	108	0	0	0	108				
10:30	296	0	0	0	296	22:30	114	0	0	0	114				
10:45	286	1181	0	0	286	22:45	95	454	0	0	95	454			
11:00	271	0	0	0	271	23:00	96	0	0	0	96				
11:15	268	0	0	0	268	23:15	53	0	0	0	53				
11:30	251	0	0	0	251	23:30	54	0	0	0	54				
11:45	271	1061	0	0	271	23:45	41	244	0	0	41	244			
TOTALS	9379				9379	TOTALS	11508				11508				
SPLIT %	100.0%				44.9%	SPLIT %	100.0%				55.1%				

DAILY TOTALS						NB	SB	EB				WB	Total
						20,887	0	0				0	20,887

AM Peak Hour	6:30				6:30	PM Peak Hour	17:00					17:00
AM Pk Volume	1618				1618	PM Pk Volume	1365					1365
Pk Hr Factor	0.977				0.977	Pk Hr Factor	0.951					0.951
7 - 9 Volume	2949	0	0	0	2949	4 - 6 Volume	2592	0	0	0	0	2592
7 - 9 Peak Hour	7:00				7:00	4 - 6 Peak Hour	17:00					17:00
7 - 9 Pk Volume	1521	0	0	0	1521	4 - 6 Pk Volume	1365	0	0	0	0	1365
Pk Hr Factor	0.930	0.000	0.000	0.000	0.930	Pk Hr Factor	0.951	0.000	0.000	0.000	0.000	0.951

VOLUME

I-15 NB Off-Ramp EB SR-91

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA_19-6125-048

DAILY TOTALS					NB	SB	EB					WB	Total
					19,846	0	0					0	19,846
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	44	0	0	0	44	12:00	296	0	0	0	296		
0:15	35	0	0	0	35	12:15	282	0	0	0	282		
0:30	37	0	0	0	37	12:30	280	0	0	0	280		
0:45	30	146	0	0	30	12:45	289	1147	0	0	289	1147	
1:00	22	0	0	0	22	13:00	284	0	0	0	284		
1:15	16	0	0	0	16	13:15	292	0	0	0	292		
1:30	27	0	0	0	27	13:30	264	0	0	0	264		
1:45	31	96	0	0	31	13:45	278	1118	0	0	278	1118	
2:00	25	0	0	0	25	14:00	282	0	0	0	282		
2:15	32	0	0	0	32	14:15	295	0	0	0	295		
2:30	35	0	0	0	35	14:30	333	0	0	0	333		
2:45	22	114	0	0	22	14:45	306	1216	0	0	306	1216	
3:00	23	0	0	0	23	15:00	289	0	0	0	289		
3:15	34	0	0	0	34	15:15	310	0	0	0	310		
3:30	47	0	0	0	47	15:30	321	0	0	0	321		
3:45	40	144	0	0	40	15:45	281	1201	0	0	281	1201	
4:00	80	0	0	0	80	16:00	293	0	0	0	293		
4:15	86	0	0	0	86	16:15	293	0	0	0	293		
4:30	80	0	0	0	80	16:30	351	0	0	0	351		
4:45	121	367	0	0	121	16:45	316	1253	0	0	316	1253	
5:00	142	0	0	0	142	17:00	358	0	0	0	358		
5:15	151	0	0	0	151	17:15	366	0	0	0	366		
5:30	212	0	0	0	212	17:30	321	0	0	0	321		
5:45	258	763	0	0	258	17:45	309	1354	0	0	309	1354	
6:00	243	0	0	0	243	18:00	298	0	0	0	298		
6:15	309	0	0	0	309	18:15	315	0	0	0	315		
6:30	352	0	0	0	352	18:30	310	0	0	0	310		
6:45	381	1285	0	0	381	18:45	273	1196	0	0	273	1196	
7:00	352	0	0	0	352	19:00	261	0	0	0	261		
7:15	296	0	0	0	296	19:15	277	0	0	0	277		
7:30	242	0	0	0	242	19:30	224	0	0	0	224		
7:45	244	1134	0	0	244	19:45	192	954	0	0	192	954	
8:00	220	0	0	0	220	20:00	152	0	0	0	152		
8:15	244	0	0	0	244	20:15	146	0	0	0	146		
8:30	276	0	0	0	276	20:30	191	0	0	0	191		
8:45	196	936	0	0	196	20:45	154	643	0	0	154	643	
9:00	233	0	0	0	233	21:00	142	0	0	0	142		
9:15	246	0	0	0	246	21:15	221	0	0	0	221		
9:30	256	0	0	0	256	21:30	206	0	0	0	206		
9:45	248	983	0	0	248	21:45	179	748	0	0	179	748	
10:00	249	0	0	0	249	22:00	143	0	0	0	143		
10:15	244	0	0	0	244	22:15	146	0	0	0	146		
10:30	263	0	0	0	263	22:30	143	0	0	0	143		
10:45	273	1029	0	0	273	22:45	134	566	0	0	134	566	
11:00	261	0	0	0	261	23:00	109	0	0	0	109		
11:15	280	0	0	0	280	23:15	88	0	0	0	88		
11:30	277	0	0	0	277	23:30	77	0	0	0	77		
11:45	284	1102	0	0	284	23:45	77	351	0	0	77	351	
TOTALS	8099				8099	TOTALS	11747				11747		
SPLIT %	100.0%				40.8%	SPLIT %	100.0%				59.2%		

DAILY TOTALS						NB	SB	EB				WB	Total
						19,846	0	0				0	19,846

AM Peak Hour	6:15				6:15	PM Peak Hour	16:30					16:30
AM Pk Volume	1394				1394	PM Pk Volume	1391					1391
Pk Hr Factor	0.915				0.915	Pk Hr Factor	0.950					0.950
7 - 9 Volume	2070	0	0	0	2070	4 - 6 Volume	2607	0	0	0	0	2607
7 - 9 Peak Hour	7:00				7:00	4 - 6 Peak Hour	16:30					16:30
7 - 9 Pk Volume	1134	0	0	0	1134	4 - 6 Pk Volume	1391	0	0	0	0	1391
Pk Hr Factor	0.805	0.000	0.000	0.000	0.805	Pk Hr Factor	0.950	0.000	0.000	0.000	0.000	0.950

VOLUME

I-15 NB Off-Ramp EB SR-91

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-048

DAILY TOTALS						NB	SB	EB				WB	Total
						21,105	0	0				0	21,105
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	63	0	0	0	63	12:00	227	0	0	0	227		
0:15	53	0	0	0	53	12:15	310	0	0	0	310		
0:30	61	0	0	0	61	12:30	290	0	0	0	290		
0:45	42	219	0	0	42	12:45	279	1106	0	0	279	1106	
1:00	36	0	0	0	36	13:00	238	0	0	0	238		
1:15	53	0	0	0	53	13:15	238	0	0	0	238		
1:30	39	0	0	0	39	13:30	255	0	0	0	255		
1:45	42	170	0	0	42	13:45	279	1010	0	0	279	1010	
2:00	60	0	0	0	60	14:00	281	0	0	0	281		
2:15	26	0	0	0	26	14:15	325	0	0	0	325		
2:30	39	0	0	0	39	14:30	309	0	0	0	309		
2:45	38	163	0	0	38	14:45	293	1208	0	0	293	1208	
3:00	50	0	0	0	50	15:00	277	0	0	0	277		
3:15	49	0	0	0	49	15:15	300	0	0	0	300		
3:30	63	0	0	0	63	15:30	309	0	0	0	309		
3:45	81	243	0	0	81	15:45	282	1168	0	0	282	1168	
4:00	97	0	0	0	97	16:00	326	0	0	0	326		
4:15	114	0	0	0	114	16:15	330	0	0	0	330		
4:30	138	0	0	0	138	16:30	313	0	0	0	313		
4:45	123	472	0	0	123	16:45	337	1306	0	0	337	1306	
5:00	131	0	0	0	131	17:00	342	0	0	0	342		
5:15	189	0	0	0	189	17:15	302	0	0	0	302		
5:30	206	0	0	0	206	17:30	346	0	0	0	346		
5:45	231	757	0	0	231	17:45	297	1287	0	0	297	1287	
6:00	237	0	0	0	237	18:00	277	0	0	0	277		
6:15	324	0	0	0	324	18:15	310	0	0	0	310		
6:30	393	0	0	0	393	18:30	319	0	0	0	319		
6:45	392	1346	0	0	392	18:45	255	1161	0	0	255	1161	
7:00	408	0	0	0	408	19:00	245	0	0	0	245		
7:15	384	0	0	0	384	19:15	265	0	0	0	265		
7:30	442	0	0	0	442	19:30	245	0	0	0	245		
7:45	380	1614	0	0	380	19:45	249	1004	0	0	249	1004	
8:00	327	0	0	0	327	20:00	112	0	0	0	112		
8:15	355	0	0	0	355	20:15	183	0	0	0	183		
8:30	354	0	0	0	354	20:30	187	0	0	0	187		
8:45	364	1400	0	0	364	20:45	185	667	0	0	185	667	
9:00	363	0	0	0	363	21:00	172	0	0	0	172		
9:15	303	0	0	0	303	21:15	155	0	0	0	155		
9:30	349	0	0	0	349	21:30	131	0	0	0	131		
9:45	284	1299	0	0	284	21:45	100	558	0	0	100	558	
10:00	303	0	0	0	303	22:00	80	0	0	0	80		
10:15	302	0	0	0	302	22:15	102	0	0	0	102		
10:30	290	0	0	0	290	22:30	92	0	0	0	92		
10:45	305	1200	0	0	305	22:45	64	338	0	0	64	338	
11:00	284	0	0	0	284	23:00	67	0	0	0	67		
11:15	303	0	0	0	303	23:15	56	0	0	0	56		
11:30	277	0	0	0	277	23:30	65	0	0	0	65		
11:45	317	1181	0	0	317	23:45	40	228	0	0	40	228	
TOTALS	10064				10064	TOTALS	11041				11041		
SPLIT %	100.0%				47.7%	SPLIT %	100.0%				52.3%		

DAILY TOTALS						NB	SB	EB				WB	Total
						21,105	0	0				0	21,105

AM Peak Hour	6:45				6:45	PM Peak Hour	16:45					16:45
AM Pk Volume	1626				1626	PM Pk Volume	1327					1327
Pk Hr Factor	0.920				0.920	Pk Hr Factor	0.959					0.959
7 - 9 Volume	3014	0	0	0	3014	4 - 6 Volume	2593	0	0	0	0	2593
7 - 9 Peak Hour	7:00				7:00	4 - 6 Peak Hour	16:45					16:45
7 - 9 Pk Volume	1614	0	0	0	1614	4 - 6 Pk Volume	1327	0	0	0	0	1327
Pk Hr Factor	0.913	0.000	0.000	0.000	0.913	Pk Hr Factor	0.959	0.000	0.000	0.000	0.000	0.959

VOLUME

I-15 NB Off-Ramp EB SR-91

Day: Saturday
Date: 9/19/2019City: Corona
Project #: CA_19-6125-048

DAILY TOTALS						NB	SB	EB						WB	Total
						17,585	0							0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL				
0:00	44	0	0	0	44	12:00	0	0	0	0	0				
0:15	38	0	0	0	38	12:15	0	0	0	0	0				
0:30	30	0	0	0	30	12:30	0	0	0	0	0				
0:45	29	141	0	0	29	12:45	0	0	0	0	0				
1:00	23	0	0	0	23	13:00	296	0	0	0	296				
1:15	18	0	0	0	18	13:15	292	0	0	0	292				
1:30	21	0	0	0	21	13:30	307	0	0	0	307				
1:45	22	84	0	0	22	13:45	285	1180	0	0	285				
2:00	28	0	0	0	28	14:00	304	0	0	0	304				
2:15	25	0	0	0	25	14:15	289	0	0	0	289				
2:30	25	0	0	0	25	14:30	304	0	0	0	304				
2:45	27	105	0	0	27	14:45	312	1209	0	0	312				
3:00	35	0	0	0	35	15:00	322	0	0	0	322				
3:15	17	0	0	0	17	15:15	288	0	0	0	288				
3:30	56	0	0	0	56	15:30	312	0	0	0	312				
3:45	62	170	0	0	62	15:45	294	1216	0	0	294				
4:00	66	0	0	0	66	16:00	288	0	0	0	288				
4:15	84	0	0	0	84	16:15	340	0	0	0	340				
4:30	97	0	0	0	97	16:30	296	0	0	0	296				
4:45	93	340	0	0	93	16:45	328	1252	0	0	328				
5:00	147	0	0	0	147	17:00	348	0	0	0	348				
5:15	166	0	0	0	166	17:15	312	0	0	0	312				
5:30	214	0	0	0	214	17:30	325	0	0	0	325				
5:45	234	761	0	0	234	17:45	324	1309	0	0	324				
6:00	237	0	0	0	237	18:00	282	0	0	0	282				
6:15	329	0	0	0	329	18:15	281	0	0	0	281				
6:30	383	0	0	0	383	18:30	313	0	0	0	313				
6:45	417	1366	0	0	417	18:45	290	1166	0	0	290				
7:00	373	0	0	0	373	19:00	291	0	0	0	291				
7:15	396	0	0	0	396	19:15	260	0	0	0	260				
7:30	364	0	0	0	364	19:30	275	0	0	0	275				
7:45	380	1513	0	0	380	19:45	234	1060	0	0	234				
8:00	328	0	0	0	328	20:00	122	0	0	0	122				
8:15	371	0	0	0	371	20:15	197	0	0	0	197				
8:30	331	0	0	0	331	20:30	200	0	0	0	200				
8:45	329	1359	0	0	329	20:45	215	734	0	0	215				
9:00	292	0	0	0	292	21:00	157	0	0	0	157				
9:15	299	0	0	0	299	21:15	180	0	0	0	180				
9:30	311	0	0	0	311	21:30	160	0	0	0	160				
9:45	316	1218	0	0	316	21:45	139	636	0	0	139				
10:00	179	0	0	0	179	22:00	71	0	0	0	71				
10:15	0	0	0	0	0	22:15	97	0	0	0	97				
10:30	0	0	0	0	0	22:30	95	0	0	0	95				
10:45	0	179	0	0	0	22:45	70	333	0	0	70				
11:00	0	0	0	0	0	23:00	87	0	0	0	87				
11:15	0	0	0	0	0	23:15	51	0	0	0	51				
11:30	0	0	0	0	0	23:30	63	0	0	0	63				
11:45	0	0	0	0	0	23:45	53	254	0	0	53				
TOTALS	7236				7236	TOTALS	10349				10349				
SPLIT %	100.0%				41.1%	SPLIT %	100.0%				58.9%				

DAILY TOTALS						NB	SB	EB				WB	Total
						17,585	0	0				0	17,585

AM Peak Hour	6:30				6:30	PM Peak Hour	16:45					16:45
AM Pk Volume	1569				1569	PM Pk Volume	1313					1313
Pk Hr Factor	0.941				0.941	Pk Hr Factor	0.943					0.943
7 - 9 Volume	2872	0	0	0	2872	4 - 6 Volume	2561	0	0	0	0	2561
7 - 9 Peak Hour	7:00				7:00	4 - 6 Peak Hour	16:45					16:45
7 - 9 Pk Volume	1513	0	0	0	1513	4 - 6 Pk Volume	1313	0	0	0	0	1313
Pk Hr Factor	0.955	0.000	0.000	0.000	0.955	Pk Hr Factor	0.943	0.000	0.000	0.000	0.000	0.943

VOLUME

From WB SR-91 I-15 NB On-Ramp

Day: Thursday
Date: 10/3/2019City: Corona
Project #: CA_19-6125-049

DAILY TOTALS					NB	SB	EBWB					Total	
					0	0						0	18,130
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
0:00	0	0	0	60	60	220	12:00	0	0	0	230	230	881
0:15	0	0	0	60	60		12:15	0	0	0	221	221	
0:30	0	0	0	54	54		12:30	0	0	0	219	219	
0:45	0	0	0	46	46		12:45	0	0	0	211	211	
1:00	0	0	0	57	57	166	13:00	0	0	0	223	223	931
1:15	0	0	0	37	37		13:15	0	0	0	232	232	
1:30	0	0	0	35	35		13:30	0	0	0	242	242	
1:45	0	0	0	37	37		13:45	0	0	0	234	234	
2:00	0	0	0	30	30	148	14:00	0	0	0	227	227	887
2:15	0	0	0	31	31		14:15	0	0	0	221	221	
2:30	0	0	0	48	48		14:30	0	0	0	213	213	
2:45	0	0	0	39	39		14:45	0	0	0	226	226	
3:00	0	0	0	46	46	286	15:00	0	0	0	189	189	860
3:15	0	0	0	73	73		15:15	0	0	0	225	225	
3:30	0	0	0	85	85		15:30	0	0	0	208	208	
3:45	0	0	0	82	82		15:45	0	0	0	238	238	
4:00	0	0	0	70	70	461	16:00	0	0	0	216	216	863
4:15	0	0	0	104	104		16:15	0	0	0	210	210	
4:30	0	0	0	149	149		16:30	0	0	0	206	206	
4:45	0	0	0	138	138		16:45	0	0	0	231	231	
5:00	0	0	0	166	166	893	17:00	0	0	0	266	266	1039
5:15	0	0	0	223	223		17:15	0	0	0	262	262	
5:30	0	0	0	250	250		17:30	0	0	0	262	262	
5:45	0	0	0	254	254		17:45	0	0	0	249	249	
6:00	0	0	0	288	288	1085	18:00	0	0	0	256	256	905
6:15	0	0	0	266	266		18:15	0	0	0	264	264	
6:30	0	0	0	268	268		18:30	0	0	0	189	189	
6:45	0	0	0	263	263		18:45	0	0	0	196	196	
7:00	0	0	0	322	322	1313	19:00	0	0	0	197	197	855
7:15	0	0	0	369	369		19:15	0	0	0	223	223	
7:30	0	0	0	324	324		19:30	0	0	0	248	248	
7:45	0	0	0	298	298		19:45	0	0	0	187	187	
8:00	0	0	0	272	272	1025	20:00	0	0	0	170	170	520
8:15	0	0	0	243	243		20:15	0	0	0	136	136	
8:30	0	0	0	253	253		20:30	0	0	0	111	111	
8:45	0	0	0	257	257		20:45	0	0	0	103	103	
9:00	0	0	0	218	218	961	21:00	0	0	0	273	273	1088
9:15	0	0	0	260	260		21:15	0	0	0	306	306	
9:30	0	0	0	240	240		21:30	0	0	0	269	269	
9:45	0	0	0	243	243		21:45	0	0	0	240	240	
10:00	0	0	0	209	209	895	22:00	0	0	0	227	227	660
10:15	0	0	0	229	229		22:15	0	0	0	155	155	
10:30	0	0	0	223	223		22:30	0	0	0	140	140	
10:45	0	0	0	234	234		22:45	0	0	0	138	138	
11:00	0	0	0	243	243	868	23:00	0	0	0	105	105	320
11:15	0	0	0	227	227		23:15	0	0	0	80	80	
11:30	0	0	0	200	200		23:30	0	0	0	67	67	
11:45	0	0	0	198	198		23:45	0	0	0	68	68	
TOTALS	8321				8321	TOTALS	9809				9809		
SPLIT %	100.0%				45.9%	SPLIT %	100.0%				54.1%		

DAILY TOTALS						NB	SB					EB	WB	Total	
						0	0					0	18,130	18,130	

AM Peak Hour	7:00			7:00	PM Peak Hour	21:00			21:00		
AM Pk Volume	1313			1313	PM Pk Volume	1088			1088		
Pk Hr Factor	0.890			0.890	Pk Hr Factor	0.889			0.889		
7 - 9 Volume	0	0	0	2338	2338	4 - 6 Volume	0	0	0	1902	1902
7 - 9 Peak Hour	7:00			7:00	4 - 6 Peak Hour	17:00			17:00		
7 - 9 Pk Volume	0	0	0	1313	1313	4 - 6 Pk Volume	0	0	0	1039	1039
Pk Hr Factor	0.000	0.000	0.000	0.890	0.890	Pk Hr Factor	0.000	0.000	0.000	0.977	0.977

VOLUME

From WB SR-91 I-15 NB On-Ramp

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA_19-6125-049

DAILY TOTALS						NB	SB					Total
						0	0					17,885
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
0:00	0	0	0	28	28	12:00	0	0	0	227	227	
0:15	0	0	0	24	24	12:15	0	0	0	232	232	
0:30	0	0	0	28	28	12:30	0	0	0	255	255	
0:45	0	0	0	26 106	26 106	12:45	0	0	0	288 1002	288 1002	
1:00	0	0	0	20	20	13:00	0	0	0	238	238	
1:15	0	0	0	17	17	13:15	0	0	0	273	273	
1:30	0	0	0	16	16	13:30	0	0	0	303	303	
1:45	0	0	0	19 72	19 72	13:45	0	0	0	267 1081	267 1081	
2:00	0	0	0	20	20	14:00	0	0	0	271	271	
2:15	0	0	0	12	12	14:15	0	0	0	254	254	
2:30	0	0	0	27	27	14:30	0	0	0	229	229	
2:45	0	0	0	31 90	31 90	14:45	0	0	0	236 990	236 990	
3:00	0	0	0	39	39	15:00	0	0	0	192	192	
3:15	0	0	0	54	54	15:15	0	0	0	226	226	
3:30	0	0	0	56	56	15:30	0	0	0	272	272	
3:45	0	0	0	65 214	65 214	15:45	0	0	0	267 957	267 957	
4:00	0	0	0	75	75	16:00	0	0	0	254	254	
4:15	0	0	0	87	87	16:15	0	0	0	246	246	
4:30	0	0	0	140	140	16:30	0	0	0	273	273	
4:45	0	0	0	140 442	140 442	16:45	0	0	0	301 1074	301 1074	
5:00	0	0	0	154	154	17:00	0	0	0	257	257	
5:15	0	0	0	197	197	17:15	0	0	0	316	316	
5:30	0	0	0	275	275	17:30	0	0	0	316	316	
5:45	0	0	0	275 901	275 901	17:45	0	0	0	239 1128	239 1128	
6:00	0	0	0	298	298	18:00	0	0	0	241	241	
6:15	0	0	0	315	315	18:15	0	0	0	261	261	
6:30	0	0	0	284	284	18:30	0	0	0	240	240	
6:45	0	0	0	270 1167	270 1167	18:45	0	0	0	236 978	236 978	
7:00	0	0	0	311	311	19:00	0	0	0	210	210	
7:15	0	0	0	327	327	19:15	0	0	0	221	221	
7:30	0	0	0	291	291	19:30	0	0	0	196	196	
7:45	0	0	0	289 1218	289 1218	19:45	0	0	0	202 829	202 829	
8:00	0	0	0	212	212	20:00	0	0	0	185	185	
8:15	0	0	0	232	232	20:15	0	0	0	177	177	
8:30	0	0	0	252	252	20:30	0	0	0	148	148	
8:45	0	0	0	224 920	224 920	20:45	0	0	0	171 681	171 681	
9:00	0	0	0	232	232	21:00	0	0	0	162	162	
9:15	0	0	0	269	269	21:15	0	0	0	154	154	
9:30	0	0	0	238	238	21:30	0	0	0	118	118	
9:45	0	0	0	246 985	246 985	21:45	0	0	0	94 528	94 528	
10:00	0	0	0	251	251	22:00	0	0	0	72	72	
10:15	0	0	0	234	234	22:15	0	0	0	87	87	
10:30	0	0	0	272	272	22:30	0	0	0	62	62	
10:45	0	0	0	299 1056	299 1056	22:45	0	0	0	52 273	52 273	
11:00	0	0	0	269	269	23:00	0	0	0	60	60	
11:15	0	0	0	294	294	23:15	0	0	0	52	52	
11:30	0	0	0	234	234	23:30	0	0	0	39	39	
11:45	0	0	0	218 1015	218 1015	23:45	0	0	0	27 178	27 178	
TOTALS	8186				8186	TOTALS	9699				9699	
SPLIT %	100.0%				45.8%	SPLIT %	100.0%				54.2%	

DAILY TOTALS						NB	SB					Total
						0	0					17,885

AM Peak Hour	7:00	7:00	PM Peak Hour	16:45	16:45
AM Pk Volume	1218	1218	PM Pk Volume	1190	1190
Pk Hr Factor	0.931	0.931	Pk Hr Factor	0.941	0.941
7 - 9 Volume	0	0	4 - 6 Volume	0	0
7 - 9 Peak Hour	7:00	7:00	4 - 6 Peak Hour	16:45	16:45
7 - 9 Pk Volume	1218	1218	4 - 6 Pk Volume	1190	1190
Pk Hr Factor	0.931	0.931	Pk Hr Factor	0.941	0.941

VOLUME

From WB SR-91 I-15 NB On-Ramp

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-049

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	0				19,108	19,108
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	0	38	38	12:00	0	0	0	254	254		
0:15	0	0	0	29	29	12:15	0	0	0	294	294		
0:30	0	0	0	34	34	12:30	0	0	0	312	312		
0:45	0	0	0	25 126	25 126	12:45	0	0	0	277 1137	277 1137		
1:00	0	0	0	15	15	13:00	0	0	0	289	289		
1:15	0	0	0	13	13	13:15	0	0	0	283	283		
1:30	0	0	0	23	23	13:30	0	0	0	246	246		
1:45	0	0	0	25 76	25 76	13:45	0	0	0	266 1084	266 1084		
2:00	0	0	0	13	13	14:00	0	0	0	286	286		
2:15	0	0	0	14	14	14:15	0	0	0	270	270		
2:30	0	0	0	17	17	14:30	0	0	0	287	287		
2:45	0	0	0	26 70	26 70	14:45	0	0	0	275 1118	275 1118		
3:00	0	0	0	37	37	15:00	0	0	0	236	236		
3:15	0	0	0	51	51	15:15	0	0	0	213	213		
3:30	0	0	0	64	64	15:30	0	0	0	241	241		
3:45	0	0	0	60 212	60 212	15:45	0	0	0	255 945	255 945		
4:00	0	0	0	98	98	16:00	0	0	0	230	230		
4:15	0	0	0	98	98	16:15	0	0	0	281	281		
4:30	0	0	0	131	131	16:30	0	0	0	239	239		
4:45	0	0	0	122 449	122 449	16:45	0	0	0	244 994	244 994		
5:00	0	0	0	141	141	17:00	0	0	0	269	269		
5:15	0	0	0	230	230	17:15	0	0	0	289	289		
5:30	0	0	0	244	244	17:30	0	0	0	279	279		
5:45	0	0	0	276 891	276 891	17:45	0	0	0	247 1084	247 1084		
6:00	0	0	0	292	292	18:00	0	0	0	247	247		
6:15	0	0	0	302	302	18:15	0	0	0	254	254		
6:30	0	0	0	274	274	18:30	0	0	0	235	235		
6:45	0	0	0	238 1106	238 1106	18:45	0	0	0	206 942	206 942		
7:00	0	0	0	255	255	19:00	0	0	0	225	225		
7:15	0	0	0	269	269	19:15	0	0	0	213	213		
7:30	0	0	0	285	285	19:30	0	0	0	207	207		
7:45	0	0	0	299 1108	299 1108	19:45	0	0	0	201 846	201 846		
8:00	0	0	0	266	266	20:00	0	0	0	195	195		
8:15	0	0	0	331	331	20:15	0	0	0	167	167		
8:30	0	0	0	264	264	20:30	0	0	0	174	174		
8:45	0	0	0	270 1131	270 1131	20:45	0	0	0	150 686	150 686		
9:00	0	0	0	258	258	21:00	0	0	0	204	204		
9:15	0	0	0	253	253	21:15	0	0	0	313	313		
9:30	0	0	0	253	253	21:30	0	0	0	270	270		
9:45	0	0	0	264 1028	264 1028	21:45	0	0	0	217 1004	217 1004		
10:00	0	0	0	254	254	22:00	0	0	0	214	214		
10:15	0	0	0	249	249	22:15	0	0	0	158	158		
10:30	0	0	0	271	271	22:30	0	0	0	164	164		
10:45	0	0	0	246 1020	246 1020	22:45	0	0	0	106 642	106 642		
11:00	0	0	0	254	254	23:00	0	0	0	114	114		
11:15	0	0	0	264	264	23:15	0	0	0	87	87		
11:30	0	0	0	247	247	23:30	0	0	0	97	97		
11:45	0	0	0	259 1024	259 1024	23:45	0	0	0	87 385	87 385		
TOTALS				8241	8241	TOTALS				10867	10867		
SPLIT %				100.0%	43.1%	SPLIT %				100.0%	56.9%		

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	0				19,108	19,108

AM Peak Hour				7:30	7:30	PM Peak Hour					12:15	12:15
AM Pk Volume				1181	1181	PM Pk Volume					1172	1172
Pk Hr Factor				0.892	0.892	Pk Hr Factor					0.939	0.939
7 - 9 Volume	0	0	0	2239	2239	4 - 6 Volume	0	0	0	0	2078	2078
7 - 9 Peak Hour				7:30	7:30	4 - 6 Peak Hour					17:00	17:00
7 - 9 Pk Volume	0	0	0	1181	1181	4 - 6 Pk Volume	0	0	0	0	1084	1084
Pk Hr Factor	0.000	0.000	0.000	0.892	0.892	Pk Hr Factor	0.000	0.000	0.000	0.000	0.938	0.938

VOLUME

From WB SR-91 I-15 NB On-Ramp

Day: Saturday
Date: 9/19/2019City: Corona
Project #: CA_19-6125-049

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	0					18,818	18,818
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
0:00	0	0	0	73	73		12:00	0	0	0	268	268	
0:15	0	0	0	73	73		12:15	0	0	0	313	313	
0:30	0	0	0	45	45		12:30	0	0	0	308	308	
0:45	0	0	0	34	225	34	12:45	0	0	0	273	1162	273
1:00	0	0	0	36	36		13:00	0	0	0	283	283	
1:15	0	0	0	36	36		13:15	0	0	0	283	283	
1:30	0	0	0	34	34		13:30	0	0	0	274	274	
1:45	0	0	0	39	145	39	13:45	0	0	0	335	1175	335
2:00	0	0	0	51	51		14:00	0	0	0	290	290	
2:15	0	0	0	46	46		14:15	0	0	0	239	239	
2:30	0	0	0	42	42		14:30	0	0	0	273	273	
2:45	0	0	0	48	187	48	14:45	0	0	0	246	1048	246
3:00	0	0	0	44	44		15:00	0	0	0	221	221	
3:15	0	0	0	74	74		15:15	0	0	0	240	240	
3:30	0	0	0	102	102		15:30	0	0	0	255	255	
3:45	0	0	0	87	307	87	15:45	0	0	0	254	970	254
4:00	0	0	0	101	101		16:00	0	0	0	255	255	
4:15	0	0	0	105	105		16:15	0	0	0	245	245	
4:30	0	0	0	126	126		16:30	0	0	0	254	254	
4:45	0	0	0	130	462	130	16:45	0	0	0	230	984	230
5:00	0	0	0	146	146		17:00	0	0	0	284	284	
5:15	0	0	0	224	224		17:15	0	0	0	278	278	
5:30	0	0	0	253	253		17:30	0	0	0	301	301	
5:45	0	0	0	284	907	284	17:45	0	0	0	255	1118	255
6:00	0	0	0	286	286		18:00	0	0	0	220	220	
6:15	0	0	0	285	285		18:15	0	0	0	245	245	
6:30	0	0	0	260	260		18:30	0	0	0	229	229	
6:45	0	0	0	232	1063	232	18:45	0	0	0	224	918	224
7:00	0	0	0	262	262		19:00	0	0	0	236	236	
7:15	0	0	0	299	299		19:15	0	0	0	190	190	
7:30	0	0	0	324	324		19:30	0	0	0	211	211	
7:45	0	0	0	305	1190	305	19:45	0	0	0	208	845	208
8:00	0	0	0	289	289		20:00	0	0	0	196	196	
8:15	0	0	0	340	340		20:15	0	0	0	167	167	
8:30	0	0	0	282	282		20:30	0	0	0	176	176	
8:45	0	0	0	237	1148	237	20:45	0	0	0	127	666	127
9:00	0	0	0	274	274		21:00	0	0	0	145	145	
9:15	0	0	0	302	302		21:15	0	0	0	182	182	
9:30	0	0	0	268	268		21:30	0	0	0	141	141	
9:45	0	0	0	270	1114	270	21:45	0	0	0	119	587	119
10:00	0	0	0	265	265		22:00	0	0	0	129	129	
10:15	0	0	0	251	251		22:15	0	0	0	87	87	
10:30	0	0	0	235	235		22:30	0	0	0	67	67	
10:45	0	0	0	237	988	237	22:45	0	0	0	68	351	68
11:00	0	0	0	304	304		23:00	0	0	0	57	57	
11:15	0	0	0	257	257		23:15	0	0	0	54	54	
11:30	0	0	0	247	247		23:30	0	0	0	54	54	
11:45	0	0	0	254	1062	254	23:45	0	0	0	31	196	31
TOTALS	8798				8798	TOTALS	10020				10020	10020	
SPLIT %	100.0%				46.8%	SPLIT %	100.0%				100.0%	53.2%	

DAILY TOTALS						NB	SB					EB	WB	Total	
						0	0					0	18,818	18,818	

AM Peak Hour	7:30			7:30	PM Peak Hour	13:15			13:15		
AM Pk Volume	1258			1258	PM Pk Volume	1182			1182		
Pk Hr Factor	0.925			0.925	Pk Hr Factor	0.882			0.882		
7 - 9 Volume	0	0	0	2338	2338	4 - 6 Volume	0	0	0	2102	2102
7 - 9 Peak Hour	7:30			7:30	4 - 6 Peak Hour	17:00			17:00		
7 - 9 Pk Volume	0	0	0	1258	1258	4 - 6 Pk Volume	0	0	0	1118	1118
Pk Hr Factor	0.000	0.000	0.000	0.925	0.925	Pk Hr Factor	0.000	0.000	0.000	0.929	0.929

VOLUME

I-15 SB Off-Ramp WB SR-91

Day: Tuesday
Date: 10/1/2019City: Corona
Project #: CA_19-6125-050

DAILY TOTALS					NB	SB						EB	WB	Total
					0	24,433						0	0	24,433
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	0	0	0		12:00	0	402	0	0	402		
0:15	0	0	0	0	0		12:15	0	363	0	0	363		
0:30	0	0	0	0	0		12:30	0	388	0	0	388		
0:45	0	0	0	0	0		12:45	0	408	1561	0	408	1561	
1:00	0	0	0	0	0		13:00	0	421	0	0	421		
1:15	0	0	0	0	0		13:15	0	405	0	0	405		
1:30	0	0	0	0	0		13:30	0	407	0	0	407		
1:45	0	0	0	0	0		13:45	0	411	1644	0	411	1644	
2:00	0	0	0	0	0		14:00	0	419	0	0	419		
2:15	0	0	0	0	0		14:15	0	449	0	0	449		
2:30	0	0	0	0	0		14:30	0	428	0	0	428		
2:45	0	0	0	0	0		14:45	0	466	1762	0	466	1762	
3:00	0	0	0	0	0		15:00	0	465	0	0	465		
3:15	0	0	0	0	0		15:15	0	451	0	0	451		
3:30	0	74	0	0	74		15:30	0	438	0	0	438		
3:45	0	172	246	0	172	246	15:45	0	440	1794	0	440	1794	
4:00	0	256	0	0	256		16:00	0	425	0	0	425		
4:15	0	305	0	0	305		16:15	0	492	0	0	492		
4:30	0	248	0	0	248		16:30	0	478	0	0	478		
4:45	0	199	1008	0	199	1008	16:45	0	456	1851	0	456	1851	
5:00	0	190	0	0	190		17:00	0	432	0	0	432		
5:15	0	163	0	0	163		17:15	0	463	0	0	463		
5:30	0	186	0	0	186		17:30	0	476	0	0	476		
5:45	0	180	719	0	180	719	17:45	0	440	1811	0	440	1811	
6:00	0	138	0	0	138		18:00	0	423	0	0	423		
6:15	0	232	0	0	232		18:15	0	450	0	0	450		
6:30	0	209	0	0	209		18:30	0	372	0	0	372		
6:45	0	198	777	0	198	777	18:45	0	334	1579	0	334	1579	
7:00	0	200	0	0	200		19:00	0	316	0	0	316		
7:15	0	218	0	0	218		19:15	0	298	0	0	298		
7:30	0	196	0	0	196		19:30	0	273	0	0	273		
7:45	0	214	828	0	214	828	19:45	0	262	1149	0	262	1149	
8:00	0	265	0	0	265		20:00	0	283	0	0	283		
8:15	0	262	0	0	262		20:15	0	259	0	0	259		
8:30	0	275	0	0	275		20:30	0	231	0	0	231		
8:45	0	259	1061	0	259	1061	20:45	0	256	1029	0	256	1029	
9:00	0	270	0	0	270		21:00	0	229	0	0	229		
9:15	0	246	0	0	246		21:15	0	216	0	0	216		
9:30	0	261	0	0	261		21:30	0	144	0	0	144		
9:45	0	250	1027	0	250	1027	21:45	0	166	755	0	166	755	
10:00	0	291	0	0	291		22:00	0	136	0	0	136		
10:15	0	346	0	0	346		22:15	0	132	0	0	132		
10:30	0	384	0	0	384		22:30	0	115	0	0	115		
10:45	0	353	1374	0	353	1374	22:45	0	133	516	0	133	516	
11:00	0	363	0	0	363		23:00	0	97	0	0	97		
11:15	0	397	0	0	397		23:15	0	98	0	0	98		
11:30	0	426	0	0	426		23:30	0	71	0	0	71		
11:45	0	417	1603	0	417	1603	23:45	0	73	339	0	73	339	
TOTALS	8643				8643		TOTALS	15790				15790		
SPLIT %	100.0%				35.4%		SPLIT %	100.0%				64.6%		

DAILY TOTALS						NB	SB					EB	WB	Total
						0	24,433					0	0	24,433

AM Peak Hour	11:15				11:15	PM Peak Hour	16:15					16:15		
AM Pk Volume	1642				1642	PM Pk Volume	1858					1858		
Pk Hr Factor	0.964				0.964	Pk Hr Factor	0.944					0.944		
7 - 9 Volume	0	1889	0	0	1889	4 - 6 Volume	0	3662	0	0	3662	0	0	3662
7 - 9 Peak Hour	8:00				8:00	4 - 6 Peak Hour	16:15				16:15			16:15
7 - 9 Pk Volume	0	1061	0	0	1061	4 - 6 Pk Volume	0	1858	0	0	1858	0	0	1858
Pk Hr Factor	0.000	0.965	0.000	0.000	0.965	Pk Hr Factor	0.000	0.944	0.000	0.000	0.944	0.000	0.000	0.944

VOLUME

I-15 SB Off-Ramp WB SR-91

Day: Thursday
Date: 10/3/2019City: Corona
Project #: CA_19-6125-050

DAILY TOTALS						NB	SB					EB	WB	Total
						0	26,714					0	0	26,714
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
0:00	0	73	0	0	73	12:00	0	446	0	0	446			
0:15	0	62	0	0	62	12:15	0	438	0	0	438			
0:30	0	65	0	0	65	12:30	0	430	0	0	430			
0:45	0	61	261	0	61 261	12:45	0	460	1774	0	460 1774			
1:00	0	61	0	0	61	13:00	0	461	0	0	461			
1:15	0	62	0	0	62	13:15	0	475	0	0	475			
1:30	0	51	0	0	51	13:30	0	482	0	0	482			
1:45	0	59	233	0	59 233	13:45	0	492	1910	0	492 1910			
2:00	0	57	0	0	57	14:00	0	495	0	0	495			
2:15	0	53	0	0	53	14:15	0	497	0	0	497			
2:30	0	75	0	0	75	14:30	0	507	0	0	507			
2:45	0	75	260	0	75 260	14:45	0	481	1980	0	481 1980			
3:00	0	74	0	0	74	15:00	0	457	0	0	457			
3:15	0	104	0	0	104	15:15	0	454	0	0	454			
3:30	0	114	0	0	114	15:30	0	471	0	0	471			
3:45	0	173	465	0	173 465	15:45	0	436	1818	0	436 1818			
4:00	0	269	0	0	269	16:00	0	455	0	0	455			
4:15	0	321	0	0	321	16:15	0	469	0	0	469			
4:30	0	258	0	0	258	16:30	0	453	0	0	453			
4:45	0	242	1090	0	242 1090	16:45	0	472	1849	0	472 1849			
5:00	0	212	0	0	212	17:00	0	438	0	0	438			
5:15	0	189	0	0	189	17:15	0	390	0	0	390			
5:30	0	185	0	0	185	17:30	0	386	0	0	386			
5:45	0	199	785	0	199 785	17:45	0	400	1614	0	400 1614			
6:00	0	189	0	0	189	18:00	0	416	0	0	416			
6:15	0	211	0	0	211	18:15	0	431	0	0	431			
6:30	0	204	0	0	204	18:30	0	415	0	0	415			
6:45	0	214	818	0	214 818	18:45	0	381	1643	0	381 1643			
7:00	0	185	0	0	185	19:00	0	373	0	0	373			
7:15	0	201	0	0	201	19:15	0	313	0	0	313			
7:30	0	224	0	0	224	19:30	0	314	0	0	314			
7:45	0	207	817	0	207 817	19:45	0	304	1304	0	304 1304			
8:00	0	240	0	0	240	20:00	0	261	0	0	261			
8:15	0	225	0	0	225	20:15	0	258	0	0	258			
8:30	0	253	0	0	253	20:30	0	218	0	0	218			
8:45	0	254	972	0	254 972	20:45	0	215	952	0	215 952			
9:00	0	221	0	0	221	21:00	0	230	0	0	230			
9:15	0	278	0	0	278	21:15	0	226	0	0	226			
9:30	0	302	0	0	302	21:30	0	203	0	0	203			
9:45	0	315	1116	0	315 1116	21:45	0	176	835	0	176 835			
10:00	0	333	0	0	333	22:00	0	165	0	0	165			
10:15	0	364	0	0	364	22:15	0	156	0	0	156			
10:30	0	367	0	0	367	22:30	0	129	0	0	129			
10:45	0	416	1480	0	416 1480	22:45	0	120	570	0	120 570			
11:00	0	408	0	0	408	23:00	0	95	0	0	95			
11:15	0	444	0	0	444	23:15	0	114	0	0	114			
11:30	0	477	0	0	477	23:30	0	89	0	0	89			
11:45	0	462	1791	0	462 1791	23:45	0	79	377	0	79 377			
TOTALS	10088				10088	TOTALS	16626				16626			
SPLIT %	100.0%				37.8%	SPLIT %	100.0%				62.2%			

DAILY TOTALS						NB	SB					EB	WB	Total
						0	26,714					0	0	26,714

AM Peak Hour	11:15	11:15	PM Peak Hour	13:45	13:45
AM Pk Volume	1829	1829	PM Pk Volume	1991	1991
Pk Hr Factor	0.959	0.959	Pk Hr Factor	0.982	0.982
7 - 9 Volume	0	1789	0	0	1789
7 - 9 Peak Hour	8:00	8:00	4 - 6 Volume	0	3463
7 - 9 Pk Volume	972	972	4 - 6 Peak Hour	16:00	16:00
Pk Hr Factor	0.000	0.957	0.000	0.000	0.979
			4 - 6 Pk Volume	1849	1849
			Pk Hr Factor	0.000	0.979
				0.000	0.000
				0.000	0.979

VOLUME

I-15 SB Off-Ramp WB SR-91

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-050

DAILY TOTALS						NB	SB	EB						WB	Total
						0	25,744							0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL				
0:00	0	54	0	0	54	12:00	0	427	0	0	427				
0:15	0	42	0	0	42	12:15	0	422	0	0	422				
0:30	0	48	0	0	48	12:30	0	418	0	0	418				
0:45	0	46	190	0	46 190	12:45	0	443	1710	0	443 1710				
1:00	0	48	0	0	48	13:00	0	390	0	0	390				
1:15	0	62	0	0	62	13:15	0	443	0	0	443				
1:30	0	31	0	0	31	13:30	0	429	0	0	429				
1:45	0	49	190	0	49 190	13:45	0	499	1761	0	499 1761				
2:00	0	54	0	0	54	14:00	0	427	0	0	427				
2:15	0	68	0	0	68	14:15	0	488	0	0	488				
2:30	0	56	0	0	56	14:30	0	478	0	0	478				
2:45	0	73	251	0	73 251	14:45	0	479	1872	0	479 1872				
3:00	0	81	0	0	81	15:00	0	465	0	0	465				
3:15	0	131	0	0	131	15:15	0	505	0	0	505				
3:30	0	116	0	0	116	15:30	0	483	0	0	483				
3:45	0	123	451	0	123 451	15:45	0	493	1946	0	493 1946				
4:00	0	276	0	0	276	16:00	0	478	0	0	478				
4:15	0	336	0	0	336	16:15	0	462	0	0	462				
4:30	0	219	0	0	219	16:30	0	419	0	0	419				
4:45	0	191	1022	0	191 1022	16:45	0	459	1818	0	459 1818				
5:00	0	200	0	0	200	17:00	0	441	0	0	441				
5:15	0	191	0	0	191	17:15	0	409	0	0	409				
5:30	0	177	0	0	177	17:30	0	439	0	0	439				
5:45	0	200	768	0	200 768	17:45	0	428	1717	0	428 1717				
6:00	0	197	0	0	197	18:00	0	445	0	0	445				
6:15	0	231	0	0	231	18:15	0	422	0	0	422				
6:30	0	194	0	0	194	18:30	0	403	0	0	403				
6:45	0	191	813	0	191 813	18:45	0	359	1629	0	359 1629				
7:00	0	229	0	0	229	19:00	0	272	0	0	272				
7:15	0	256	0	0	256	19:15	0	292	0	0	292				
7:30	0	248	0	0	248	19:30	0	303	0	0	303				
7:45	0	268	1001	0	268 1001	19:45	0	275	1142	0	275 1142				
8:00	0	237	0	0	237	20:00	0	227	0	0	227				
8:15	0	274	0	0	274	20:15	0	219	0	0	219				
8:30	0	273	0	0	273	20:30	0	202	0	0	202				
8:45	0	249	1033	0	249 1033	20:45	0	194	842	0	194 842				
9:00	0	320	0	0	320	21:00	0	155	0	0	155				
9:15	0	288	0	0	288	21:15	0	191	0	0	191				
9:30	0	278	0	0	278	21:30	0	189	0	0	189				
9:45	0	264	1150	0	264 1150	21:45	0	175	710	0	175 710				
10:00	0	268	0	0	268	22:00	0	158	0	0	158				
10:15	0	275	0	0	275	22:15	0	171	0	0	171				
10:30	0	284	0	0	284	22:30	0	140	0	0	140				
10:45	0	330	1157	0	330 1157	22:45	0	104	573	0	104 573				
11:00	0	381	0	0	381	23:00	0	80	0	0	80				
11:15	0	395	0	0	395	23:15	0	99	0	0	99				
11:30	0	422	0	0	422	23:30	0	88	0	0	88				
11:45	0	440	1638	0	440 1638	23:45	0	93	360	0	93 360				
TOTALS	9664				9664	TOTALS	16080				16080				
SPLIT %	100.0%				37.5%	SPLIT %	100.0%				62.5%				

DAILY TOTALS						NB	SB					EB	WB	Total
						0	25,744					0	0	25,744

AM Peak Hour	11:30				11:30	PM Peak Hour	15:15					15:15
AM Pk Volume	1711				1711	PM Pk Volume	1959					1959
Pk Hr Factor	0.972				0.972	Pk Hr Factor	0.970					0.970
7 - 9 Volume	0	2034	0	0	2034	4 - 6 Volume	0	3535	0	0	0	3535
7 - 9 Peak Hour		7:45			7:45	4 - 6 Peak Hour		16:00				16:00
7 - 9 Pk Volume	0	1052	0	0	1052	4 - 6 Pk Volume	0	1818	0	0	0	1818
Pk Hr Factor	0.000	0.960	0.000	0.000	0.960	Pk Hr Factor	0.000	0.951	0.000	0.000	0.000	0.951

VOLUME

I-15 SB Loop Off-Ramp EB SR-91

Day: Tuesday
Date: 10/1/2019City: Corona
Project #: CA_19-6125-051

DAILY TOTALS					NB	SB						EB	WB	Total
					0	17,143						0	0	17,143
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	0	0	0		12:00	0	203	0	0	203		
0:15	0	0	0	0	0		12:15	0	246	0	0	246		
0:30	0	0	0	0	0		12:30	0	230	0	0	230		
0:45	0	0	0	0	0		12:45	0	273	952	0	273	952	
1:00	0	0	0	0	0		13:00	0	230	0	0	230		
1:15	0	0	0	0	0		13:15	0	273	0	0	273		
1:30	0	0	0	0	0		13:30	0	231	0	0	231		
1:45	0	0	0	0	0		13:45	0	207	941	0	207	941	
2:00	0	0	0	0	0		14:00	0	237	0	0	237		
2:15	0	0	0	0	0		14:15	0	227	0	0	227		
2:30	0	0	0	0	0		14:30	0	254	0	0	254		
2:45	0	0	0	0	0		14:45	0	259	977	0	259	977	
3:00	0	0	0	0	0		15:00	0	283	0	0	283		
3:15	0	0	0	0	0		15:15	0	276	0	0	276		
3:30	0	0	0	0	0		15:30	0	296	0	0	296		
3:45	0	0	0	0	0		15:45	0	299	1154	0	299	1154	
4:00	0	0	0	0	0		16:00	0	337	0	0	337		
4:15	0	0	0	0	0		16:15	0	298	0	0	298		
4:30	0	0	0	0	0		16:30	0	335	0	0	335		
4:45	0	0	0	0	0		16:45	0	293	1263	0	293	1263	
5:00	0	52	0	0	52		17:00	0	274	0	0	274		
5:15	0	123	0	0	123		17:15	0	292	0	0	292		
5:30	0	144	0	0	144		17:30	0	313	0	0	313		
5:45	0	186	505	0	186	505	17:45	0	318	1197	0	318	1197	
6:00	0	188	0	0	188		18:00	0	302	0	0	302		
6:15	0	198	0	0	198		18:15	0	294	0	0	294		
6:30	0	230	0	0	230		18:30	0	258	0	0	258		
6:45	0	267	883	0	267	883	18:45	0	272	1126	0	272	1126	
7:00	0	320	0	0	320		19:00	0	273	0	0	273		
7:15	0	295	0	0	295		19:15	0	228	0	0	228		
7:30	0	265	0	0	265		19:30	0	257	0	0	257		
7:45	0	354	1234	0	354	1234	19:45	0	210	968	0	210	968	
8:00	0	343	0	0	343		20:00	0	179	0	0	179		
8:15	0	303	0	0	303		20:15	0	207	0	0	207		
8:30	0	310	0	0	310		20:30	0	169	0	0	169		
8:45	0	294	1250	0	294	1250	20:45	0	187	742	0	187	742	
9:00	0	264	0	0	264		21:00	0	148	0	0	148		
9:15	0	241	0	0	241		21:15	0	192	0	0	192		
9:30	0	258	0	0	258		21:30	0	144	0	0	144		
9:45	0	240	1003	0	240	1003	21:45	0	113	597	0	113	597	
10:00	0	209	0	0	209		22:00	0	129	0	0	129		
10:15	0	198	0	0	198		22:15	0	100	0	0	100		
10:30	0	189	0	0	189		22:30	0	88	0	0	88		
10:45	0	219	815	0	219	815	22:45	0	76	393	0	76	393	
11:00	0	201	0	0	201		23:00	0	45	0	0	45		
11:15	0	246	0	0	246		23:15	0	64	0	0	64		
11:30	0	228	0	0	228		23:30	0	45	0	0	45		
11:45	0	274	949	0	274	949	23:45	0	40	194	0	40	194	
TOTALS	6639				6639		TOTALS	10504				10504		
SPLIT %	100.0%				38.7%		SPLIT %	100.0%				61.3%		

DAILY TOTALS						NB	SB					EB	WB	Total
						0	17,143					0	0	17,143

AM Peak Hour	7:45	7:45	PM Peak Hour	15:45	15:45
AM Pk Volume	1310	1310	PM Pk Volume	1269	1269
Pk Hr Factor	0.925	0.925	Pk Hr Factor	0.941	0.941
7 - 9 Volume	0	2484	0	0	2460
7 - 9 Peak Hour	7:45	7:45	4 - 6 Peak Hour	16:00	16:00
7 - 9 Pk Volume	0	1310	0	0	1263
Pk Hr Factor	0.000	0.925	0.000	0.000	0.937

VOLUME

I-15 SB Loop Off-Ramp EB SR-91

Day: Thursday
Date: 10/3/2019City: Corona
Project #: CA_19-6125-051

DAILY TOTALS					NB	SB						EB	WB	Total
					0	17,729						0	0	17,729
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
0:00	0	44	0	0	44	12:00	0	243	0	0	243			
0:15	0	46	0	0	46	12:15	0	238	0	0	238			
0:30	0	42	0	0	42	12:30	0	271	0	0	271			
0:45	0	37	169	0	37	12:45	0	263	1015	0	263			
1:00	0	40	0	0	40	13:00	0	259	0	0	259			
1:15	0	31	0	0	31	13:15	0	239	0	0	239			
1:30	0	27	0	0	27	13:30	0	207	0	0	207			
1:45	0	33	131	0	33	13:45	0	226	931	0	226			
2:00	0	29	0	0	29	14:00	0	228	0	0	228			
2:15	0	28	0	0	28	14:15	0	234	0	0	234			
2:30	0	33	0	0	33	14:30	0	227	0	0	227			
2:45	0	21	111	0	21	14:45	0	236	925	0	236			
3:00	0	27	0	0	27	15:00	0	280	0	0	280			
3:15	0	26	0	0	26	15:15	0	249	0	0	249			
3:30	0	32	0	0	32	15:30	0	265	0	0	265			
3:45	0	34	119	0	34	15:45	0	302	1096	0	302			
4:00	0	33	0	0	33	16:00	0	267	0	0	267			
4:15	0	52	0	0	52	16:15	0	292	0	0	292			
4:30	0	65	0	0	65	16:30	0	271	0	0	271			
4:45	0	93	243	0	93	16:45	0	281	1111	0	281			
5:00	0	108	0	0	108	17:00	0	287	0	0	287			
5:15	0	114	0	0	114	17:15	0	274	0	0	274			
5:30	0	133	0	0	133	17:30	0	283	0	0	283			
5:45	0	205	560	0	205	17:45	0	284	1128	0	284			
6:00	0	170	0	0	170	18:00	0	274	0	0	274			
6:15	0	200	0	0	200	18:15	0	259	0	0	259			
6:30	0	245	0	0	245	18:30	0	287	0	0	287			
6:45	0	269	884	0	269	18:45	0	269	1089	0	269			
7:00	0	296	0	0	296	19:00	0	255	0	0	255			
7:15	0	306	0	0	306	19:15	0	237	0	0	237			
7:30	0	332	0	0	332	19:30	0	213	0	0	213			
7:45	0	343	1277	0	343	19:45	0	183	888	0	183			
8:00	0	338	0	0	338	20:00	0	194	0	0	194			
8:15	0	297	0	0	297	20:15	0	203	0	0	203			
8:30	0	279	0	0	279	20:30	0	191	0	0	191			
8:45	0	287	1201	0	287	20:45	0	182	770	0	182			
9:00	0	228	0	0	228	21:00	0	196	0	0	196			
9:15	0	252	0	0	252	21:15	0	169	0	0	169			
9:30	0	251	0	0	251	21:30	0	118	0	0	118			
9:45	0	275	1006	0	275	21:45	0	111	594	0	111			
10:00	0	241	0	0	241	22:00	0	132	0	0	132			
10:15	0	217	0	0	217	22:15	0	111	0	0	111			
10:30	0	229	0	0	229	22:30	0	100	0	0	100			
10:45	0	218	905	0	218	22:45	0	71	414	0	71			
11:00	0	240	0	0	240	23:00	0	80	0	0	80			
11:15	0	213	0	0	213	23:15	0	75	0	0	75			
11:30	0	211	0	0	211	23:30	0	48	0	0	48			
11:45	0	235	899	0	235	23:45	0	60	263	0	60			
TOTALS	7505				7505	TOTALS	10224				10224			
SPLIT %	100.0%				42.3%	SPLIT %	100.0%				57.7%			

DAILY TOTALS						NB	SB					EB	WB	Total
						0	17,729					0	0	17,729

AM Peak Hour	7:15	7:15	PM Peak Hour	15:45	15:45
AM Pk Volume	1319	1319	PM Pk Volume	1132	1132
Pk Hr Factor	0.961	0.961	Pk Hr Factor	0.937	0.937
7 - 9 Volume	0	2478	4 - 6 Volume	0	2239
7 - 9 Peak Hour	7:15	7:15	4 - 6 Peak Hour	16:15	16:15
7 - 9 Pk Volume	1319	1319	4 - 6 Pk Volume	1131	1131
Pk Hr Factor	0.000	0.961	Pk Hr Factor	0.000	0.968

VOLUME

I-15 SB Loop Off-Ramp EB SR-91

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-051

DAILY TOTALS						NB	SB					Total
						0	17,474					17,474
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
0:00	0	0	0	0	0	12:00	0	228	0	0	228	
0:15	0	0	0	0	0	12:15	0	216	0	0	216	
0:30	0	0	0	0	0	12:30	0	234	0	0	234	
0:45	0	0	0	0	0	12:45	0	255	933	0	255	933
1:00	0	0	0	0	0	13:00	0	233	0	0	233	
1:15	0	0	0	0	0	13:15	0	270	0	0	270	
1:30	0	0	0	0	0	13:30	0	257	0	0	257	
1:45	0	0	0	0	0	13:45	0	244	1004	0	244	1004
2:00	0	0	0	0	0	14:00	0	247	0	0	247	
2:15	0	0	0	0	0	14:15	0	284	0	0	284	
2:30	0	0	0	0	0	14:30	0	314	0	0	314	
2:45	0	0	0	0	0	14:45	0	289	1134	0	289	1134
3:00	0	0	0	0	0	15:00	0	270	0	0	270	
3:15	0	1	0	0	1	15:15	0	288	0	0	288	
3:30	0	0	0	0	0	15:30	0	309	0	0	309	
3:45	0	0	1	0	0	15:45	0	299	1166	0	299	1166
4:00	0	0	0	0	0	16:00	0	316	0	0	316	
4:15	0	0	0	0	0	16:15	0	286	0	0	286	
4:30	0	0	0	0	0	16:30	0	291	0	0	291	
4:45	0	91	91	0	91	16:45	0	281	1174	0	281	1174
5:00	0	98	0	0	98	17:00	0	315	0	0	315	
5:15	0	132	0	0	132	17:15	0	315	0	0	315	
5:30	0	141	0	0	141	17:30	0	295	0	0	295	
5:45	0	198	569	0	198	17:45	0	285	1210	0	285	1210
6:00	0	180	0	0	180	18:00	0	267	0	0	267	
6:15	0	207	0	0	207	18:15	0	285	0	0	285	
6:30	0	240	0	0	240	18:30	0	314	0	0	314	
6:45	0	295	922	0	295	18:45	0	243	1109	0	243	1109
7:00	0	298	0	0	298	19:00	0	220	0	0	220	
7:15	0	284	0	0	284	19:15	0	263	0	0	263	
7:30	0	313	0	0	313	19:30	0	226	0	0	226	
7:45	0	329	1224	0	329	19:45	0	187	896	0	187	896
8:00	0	316	0	0	316	20:00	0	192	0	0	192	
8:15	0	277	0	0	277	20:15	0	164	0	0	164	
8:30	0	282	0	0	282	20:30	0	194	0	0	194	
8:45	0	312	1187	0	312	20:45	0	186	736	0	186	736
9:00	0	272	0	0	272	21:00	0	194	0	0	194	
9:15	0	305	0	0	305	21:15	0	192	0	0	192	
9:30	0	237	0	0	237	21:30	0	111	0	0	111	
9:45	0	260	1074	0	260	21:45	0	133	630	0	133	630
10:00	0	219	0	0	219	22:00	0	125	0	0	125	
10:15	0	233	0	0	233	22:15	0	93	0	0	93	
10:30	0	236	0	0	236	22:30	0	92	0	0	92	
10:45	0	250	938	0	250	22:45	0	90	400	0	90	400
11:00	0	196	0	0	196	23:00	0	63	0	0	63	
11:15	0	221	0	0	221	23:15	0	73	0	0	73	
11:30	0	216	0	0	216	23:30	0	62	0	0	62	
11:45	0	210	843	0	210	23:45	0	35	233	0	35	233
TOTALS	6849				6849	TOTALS	10625				10625	
SPLIT %	100.0%				39.2%	SPLIT %	100.0%				60.8%	

DAILY TOTALS						NB	SB					Total
						0	17,474					17,474

AM Peak Hour	7:15	7:15	PM Peak Hour	15:15	15:15
AM Pk Volume	1242	1242	PM Pk Volume	1212	1212
Pk Hr Factor	0.944	0.944	Pk Hr Factor	0.959	0.959
7 - 9 Volume	0	2411	4 - 6 Volume	0	2384
7 - 9 Peak Hour	7:15	7:15	4 - 6 Peak Hour	17:00	17:00
7 - 9 Pk Volume	0	1242	4 - 6 Pk Volume	0	1210
Pk Hr Factor	0.000	0.944	Pk Hr Factor	0.000	0.960

VOLUME

From WB SR-91 I-15 SB On-Ramp

Day: Thursday
Date: 10/3/2019City: Corona
Project #: CA_19-6125-052

DAILY TOTALS						NB	SB					Total
						0	0					17,922
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
0:00	0	0	0	0	0	12:00	0	0	0	259	259	
0:15	0	0	0	0	0	12:15	0	0	0	256	256	
0:30	0	0	0	0	0	12:30	0	0	0	244	244	
0:45	0	0	0	0	0	12:45	0	0	0	266 1025	266 1025	
1:00	0	0	0	0	0	13:00	0	0	0	249	249	
1:15	0	0	0	0	0	13:15	0	0	0	266	266	
1:30	0	0	0	0	0	13:30	0	0	0	271	271	
1:45	0	0	0	0	0	13:45	0	0	0	281 1067	281 1067	
2:00	0	0	0	0	0	14:00	0	0	0	286	286	
2:15	0	0	0	0	0	14:15	0	0	0	250	250	
2:30	0	0	0	0	0	14:30	0	0	0	245	245	
2:45	0	0	0	0	0	14:45	0	0	0	237 1018	237 1018	
3:00	0	0	0	0	0	15:00	0	0	0	214	214	
3:15	0	0	0	0	0	15:15	0	0	0	217	217	
3:30	0	0	0	0	0	15:30	0	0	0	225	225	
3:45	0	0	0	0	0	15:45	0	0	0	217 873	217 873	
4:00	0	0	0	44	44	16:00	0	0	0	224	224	
4:15	0	0	0	70	70	16:15	0	0	0	214	214	
4:30	0	0	0	121	121	16:30	0	0	0	213	213	
4:45	0	0	0	147 382	147 382	16:45	0	0	0	244 895	244 895	
5:00	0	0	0	133	133	17:00	0	0	0	288	288	
5:15	0	0	0	145	145	17:15	0	0	0	309	309	
5:30	0	0	0	211	211	17:30	0	0	0	335	335	
5:45	0	0	0	232 721	232 721	17:45	0	0	0	292 1224	292 1224	
6:00	0	0	0	230	230	18:00	0	0	0	318	318	
6:15	0	0	0	296	296	18:15	0	0	0	324	324	
6:30	0	0	0	368	368	18:30	0	0	0	286	286	
6:45	0	0	0	368 1262	368 1262	18:45	0	0	0	240 1168	240 1168	
7:00	0	0	0	393	393	19:00	0	0	0	274	274	
7:15	0	0	0	412	412	19:15	0	0	0	302	302	
7:30	0	0	0	386	386	19:30	0	0	0	343	343	
7:45	0	0	0	396 1587	396 1587	19:45	0	0	0	270 1189	270 1189	
8:00	0	0	0	354	354	20:00	0	0	0	278	278	
8:15	0	0	0	379	379	20:15	0	0	0	254	254	
8:30	0	0	0	353	353	20:30	0	0	0	227	227	
8:45	0	0	0	303 1389	303 1389	20:45	0	0	0	185 944	185 944	
9:00	0	0	0	230	230	21:00	0	0	0	1	1	
9:15	0	0	0	296	296	21:15	0	0	0	0	0	
9:30	0	0	0	305	305	21:30	0	0	0	0	0	
9:45	0	0	0	272 1103	272 1103	21:45	0	0	0	0 1	0 1	
10:00	0	0	0	276	276	22:00	0	0	0	1	1	
10:15	0	0	0	304	304	22:15	0	0	0	1	1	
10:30	0	0	0	284	284	22:30	0	0	0	1	1	
10:45	0	0	0	241 1105	241 1105	22:45	0	0	0	0 3	0 3	
11:00	0	0	0	220	220	23:00	0	0	0	0	0	
11:15	0	0	0	255	255	23:15	0	0	0	0	0	
11:30	0	0	0	226	226	23:30	0	0	0	0	0	
11:45	0	0	0	265 966	265 966	23:45	0	0	0	0	0	
TOTALS	8515				8515	TOTALS	9407				9407	
SPLIT %	100.0%				47.5%	SPLIT %	100.0%				52.5%	

DAILY TOTALS						NB	SB					Total
						0	0					17,922

AM Peak Hour	7:00	7:00	PM Peak Hour	17:30	17:30
AM Pk Volume	1587	1587	PM Pk Volume	1269	1269
Pk Hr Factor	0.963	0.963	Pk Hr Factor	0.947	0.947
7 - 9 Volume	0	0	4 - 6 Volume	0	2119
7 - 9 Peak Hour	7:00	7:00	4 - 6 Peak Hour	17:00	17:00
7 - 9 Pk Volume	1587	1587	4 - 6 Pk Volume	1224	1224
Pk Hr Factor	0.000	0.000	Pk Hr Factor	0.000	0.913

VOLUME

From WB SR-91 I-15 SB On-Ramp

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA_19-6125-052

DAILY TOTALS						NB	SB					Total
						0	0					21,280
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
0:00	0	0	0	40	40	12:00	0	0	0	264	264	
0:15	0	0	0	39	39	12:15	0	0	0	297	297	
0:30	0	0	0	34	34	12:30	0	0	0	279	279	
0:45	0	0	0	34	147	12:45	0	0	0	337	1177	337 1177
1:00	0	0	0	29	29	13:00	0	0	0	319	319	
1:15	0	0	0	28	28	13:15	0	0	0	307	307	
1:30	0	0	0	25	25	13:30	0	0	0	342	342	
1:45	0	0	0	28	110	13:45	0	0	0	378	1346	378 1346
2:00	0	0	0	30	30	14:00	0	0	0	313	313	
2:15	0	0	0	30	30	14:15	0	0	0	327	327	
2:30	0	0	0	34	34	14:30	0	0	0	350	350	
2:45	0	0	0	25	119	14:45	0	0	0	344	1334	344 1334
3:00	0	0	0	35	35	15:00	0	0	0	310	310	
3:15	0	0	0	47	47	15:15	0	0	0	299	299	
3:30	0	0	0	72	72	15:30	0	0	0	290	290	
3:45	0	0	0	63	217	15:45	0	0	0	294	1193	294 1193
4:00	0	0	0	84	84	16:00	0	0	0	272	272	
4:15	0	0	0	100	100	16:15	0	0	0	303	303	
4:30	0	0	0	115	115	16:30	0	0	0	286	286	
4:45	0	0	0	136	435	16:45	0	0	0	296	1157	296 1157
5:00	0	0	0	121	121	17:00	0	0	0	291	291	
5:15	0	0	0	150	150	17:15	0	0	0	330	330	
5:30	0	0	0	196	196	17:30	0	0	0	319	319	
5:45	0	0	0	225	692	17:45	0	0	0	324	1264	324 1264
6:00	0	0	0	210	210	18:00	0	0	0	341	341	
6:15	0	0	0	250	250	18:15	0	0	0	338	338	
6:30	0	0	0	260	260	18:30	0	0	0	338	338	
6:45	0	0	0	358	1078	18:45	0	0	0	273	1290	273 1290
7:00	0	0	0	398	398	19:00	0	0	0	296	296	
7:15	0	0	0	380	380	19:15	0	0	0	302	302	
7:30	0	0	0	307	307	19:30	0	0	0	272	272	
7:45	0	0	0	376	1461	19:45	0	0	0	288	1158	288 1158
8:00	0	0	0	338	338	20:00	0	0	0	247	247	
8:15	0	0	0	357	357	20:15	0	0	0	238	238	
8:30	0	0	0	339	339	20:30	0	0	0	230	230	
8:45	0	0	0	301	1335	20:45	0	0	0	190	905	190 905
9:00	0	0	0	290	290	21:00	0	0	0	195	195	
9:15	0	0	0	282	282	21:15	0	0	0	189	189	
9:30	0	0	0	280	280	21:30	0	0	0	165	165	
9:45	0	0	0	302	1154	21:45	0	0	0	169	718	169 718
10:00	0	0	0	252	252	22:00	0	0	0	134	134	
10:15	0	0	0	310	310	22:15	0	0	0	119	119	
10:30	0	0	0	313	313	22:30	0	0	0	96	96	
10:45	0	0	0	280	1155	22:45	0	0	0	57	406	57 406
11:00	0	0	0	297	297	23:00	0	0	0	99	99	
11:15	0	0	0	317	317	23:15	0	0	0	63	63	
11:30	0	0	0	285	285	23:30	0	0	0	69	69	
11:45	0	0	0	243	1142	23:45	0	0	0	56	287	56 287
TOTALS					9045	TOTALS					12235	12235
SPLIT %					100.0%	SPLIT %					100.0%	57.5%

DAILY TOTALS						NB	SB					Total
						0	0					21,280

AM Peak Hour	7:00	7:00	PM Peak Hour	13:45	13:45
AM Pk Volume	1461	1461	PM Pk Volume	1368	1368
Pk Hr Factor	0.918	0.918	Pk Hr Factor	0.905	0.905
7 - 9 Volume	0	0	4 - 6 Volume	0	2421
7 - 9 Peak Hour	7:00	7:00	4 - 6 Peak Hour	17:00	17:00
7 - 9 Pk Volume	1461	1461	4 - 6 Pk Volume	1264	1264
Pk Hr Factor	0.000	0.000	Pk Hr Factor	0.000	0.958

VOLUME

From WB SR-91 I-15 SB On-Ramp

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-052

DAILY TOTALS						NB	SB							Total
						0	0							20,141
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
0:00	0	0	0	38	38	12:00	0	0	0	347	347			
0:15	0	0	0	46	46	12:15	0	0	0	314	314			
0:30	0	0	0	34	34	12:30	0	0	0	313	313			
0:45	0	0	0	51 169	51 169	12:45	0	0	0	329 1303	329 1303			
1:00	0	0	0	41	41	13:00	0	0	0	318	318			
1:15	0	0	0	27	27	13:15	0	0	0	315	315			
1:30	0	0	0	32	32	13:30	0	0	0	338	338			
1:45	0	0	0	26 126	26 126	13:45	0	0	0	346 1317	346 1317			
2:00	0	0	0	21	21	14:00	0	0	0	306	306			
2:15	0	0	0	22	22	14:15	0	0	0	316	316			
2:30	0	0	0	30	30	14:30	0	0	0	354	354			
2:45	0	0	0	30 103	30 103	14:45	0	0	0	339 1315	339 1315			
3:00	0	0	0	28	28	15:00	0	0	0	331	331			
3:15	0	0	0	49	49	15:15	0	0	0	296	296			
3:30	0	0	0	68	68	15:30	0	0	0	317	317			
3:45	0	0	0	53 198	53 198	15:45	0	0	0	283 1227	283 1227			
4:00	0	0	0	73	73	16:00	0	0	0	255	255			
4:15	0	0	0	106	106	16:15	0	0	0	309	309			
4:30	0	0	0	118	118	16:30	0	0	0	286	286			
4:45	0	0	0	138 435	138 435	16:45	0	0	0	292 1142	292 1142			
5:00	0	0	0	124	124	17:00	0	0	0	299	299			
5:15	0	0	0	144	144	17:15	0	0	0	319	319			
5:30	0	0	0	200	200	17:30	0	0	0	320	320			
5:45	0	0	0	217 685	217 685	17:45	0	0	0	326 1264	326 1264			
6:00	0	0	0	205	205	18:00	0	0	0	331	331			
6:15	0	0	0	228	228	18:15	0	0	0	309	309			
6:30	0	0	0	248	248	18:30	0	0	0	329	329			
6:45	0	0	0	315 996	315 996	18:45	0	0	0	326 1295	326 1295			
7:00	0	0	0	327	327	19:00	0	0	0	326	326			
7:15	0	0	0	346	346	19:15	0	0	0	308	308			
7:30	0	0	0	347	347	19:30	0	0	0	304	304			
7:45	0	0	0	366 1386	366 1386	19:45	0	0	0	291 1229	291 1229			
8:00	0	0	0	373	373	20:00	0	0	0	230	230			
8:15	0	0	0	347	347	20:15	0	0	0	259	259			
8:30	0	0	0	352	352	20:30	0	0	0	216	216			
8:45	0	0	0	300 1372	300 1372	20:45	0	0	0	231 936	231 936			
9:00	0	0	0	304	304	21:00	0	0	0	3	3			
9:15	0	0	0	308	308	21:15	0	0	0	0	0			
9:30	0	0	0	295	295	21:30	0	0	0	0	0			
9:45	0	0	0	343 1250	343 1250	21:45	0	0	0	1 4	1 4			
10:00	0	0	0	265	265	22:00	0	0	0	3	3			
10:15	0	0	0	298	298	22:15	0	0	0	0	0			
10:30	0	0	0	283	283	22:30	0	0	0	0	0			
10:45	0	0	0	310 1156	310 1156	22:45	0	0	0	0 3	0 3			
11:00	0	0	0	313	313	23:00	0	0	0	0	0			
11:15	0	0	0	295	295	23:15	0	0	0	0	0			
11:30	0	0	0	302	302	23:30	0	0	0	0	0			
11:45	0	0	0	320 1230	320 1230	23:45	0	0	0	0	0			
TOTALS					9106	TOTALS					11035			
SPLIT %					100.0%	SPLIT %					100.0%			

DAILY TOTALS						NB	SB							Total
						0	0							20,141

AM Peak Hour					7:45	7:45	PM Peak Hour					14:15	14:15
AM Pk Volume					1438	1438	PM Pk Volume					1340	1340
Pk Hr Factor					0.964	0.964	Pk Hr Factor					0.946	0.946
7 - 9 Volume	0	0	0	2758	2758	4 - 6 Volume	0	0	0	2406	2406		
7 - 9 Peak Hour					7:45	7:45	4 - 6 Peak Hour					17:00	17:00
7 - 9 Pk Volume	0	0	0	1438	1438	4 - 6 Pk Volume	0	0	0	1264	1264		
Pk Hr Factor	0.000	0.000	0.000	0.964	0.964	Pk Hr Factor	0.000	0.000	0.000	0.969	0.969		

VOLUME

From EB SR-91 I-15 SB On-Ramp

Day: Thursday
Date: 10/3/2019City: Corona
Project #: CA_19-6125-053

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	31,463				0	31,463
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	2	0	2	12:00	0	0	553	0	553		
0:15	0	0	0	0	0	12:15	0	0	572	0	572		
0:30	0	0	1	0	1	12:30	0	0	607	0	607		
0:45	0	0	0	3	0	12:45	0	0	563	2295	0	563	2295
1:00	0	0	0	0	0	13:00	0	0	612	0	612		
1:15	0	0	1	0	1	13:15	0	0	628	0	628		
1:30	0	0	0	0	0	13:30	0	0	681	0	681		
1:45	0	0	1	2	1	13:45	0	0	619	2540	0	619	2540
2:00	0	0	0	0	0	14:00	0	0	620	0	620		
2:15	0	0	0	0	0	14:15	0	0	570	0	570		
2:30	0	0	1	0	1	14:30	0	0	558	0	558		
2:45	0	0	0	1	0	14:45	0	0	478	2226	0	478	2226
3:00	0	0	87	0	87	15:00	0	0	529	0	529		
3:15	0	0	82	0	82	15:15	0	0	467	0	467		
3:30	0	0	101	0	101	15:30	0	0	430	0	430		
3:45	0	0	108	378	108	15:45	0	0	401	1827	0	401	1827
4:00	0	0	120	0	120	16:00	0	0	365	0	365		
4:15	0	0	153	0	153	16:15	0	0	327	0	327		
4:30	0	0	183	0	183	16:30	0	0	361	0	361		
4:45	0	0	217	673	217	16:45	0	0	355	1408	0	355	1408
5:00	0	0	191	0	191	17:00	0	0	414	0	414		
5:15	0	0	238	0	238	17:15	0	0	394	0	394		
5:30	0	0	277	0	277	17:30	0	0	414	0	414		
5:45	0	0	290	996	290	17:45	0	0	421	1643	0	421	1643
6:00	0	0	303	0	303	18:00	0	0	451	0	451		
6:15	0	0	337	0	337	18:15	0	0	468	0	468		
6:30	0	0	346	0	346	18:30	0	0	544	0	544		
6:45	0	0	386	1372	386	18:45	0	0	479	1942	0	479	1942
7:00	0	0	384	0	384	19:00	0	0	478	0	478		
7:15	0	0	426	0	426	19:15	0	0	563	0	563		
7:30	0	0	396	0	396	19:30	0	0	562	0	562		
7:45	0	0	509	1715	509	19:45	0	0	559	2162	0	559	2162
8:00	0	0	411	0	411	20:00	0	0	607	0	607		
8:15	0	0	478	0	478	20:15	0	0	551	0	551		
8:30	0	0	482	0	482	20:30	0	0	543	0	543		
8:45	0	0	447	1818	447	20:45	0	0	573	2274	0	573	2274
9:00	0	0	465	0	465	21:00	0	0	78	0	78		
9:15	0	0	444	0	444	21:15	0	0	1	0	1		
9:30	0	0	461	0	461	21:30	0	0	0	0	0		
9:45	0	0	486	1856	486	21:45	0	0	1	80	0	1	80
10:00	0	0	511	0	511	22:00	0	0	0	0	0		
10:15	0	0	574	0	574	22:15	0	0	0	0	0		
10:30	0	0	476	0	476	22:30	0	0	0	0	0		
10:45	0	0	510	2071	510	22:45	0	0	0	0	0		
11:00	0	0	492	0	492	23:00	0	0	1	0	1		
11:15	0	0	517	0	517	23:15	0	0	0	0	0		
11:30	0	0	548	0	548	23:30	0	0	0	0	0		
11:45	0	0	623	2180	623	23:45	0	0	0	1	0	0	1
TOTALS	13065				13065	TOTALS	18398				18398		
SPLIT %	100.0%				41.5%	SPLIT %	100.0%				58.5%		

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	31,463				0	31,463

AM Peak Hour			11:45	11:45	PM Peak Hour			13:15	13:15
AM Pk Volume			2355	2355	PM Pk Volume			2548	2548
Pk Hr Factor			0.945	0.945	Pk Hr Factor			0.935	0.935
7 - 9 Volume	0	0	3533	3533	4 - 6 Volume	0	0	3051	3051
7 - 9 Peak Hour			7:45	7:45	4 - 6 Peak Hour			17:00	17:00
7 - 9 Pk Volume	0	0	1880	1880	4 - 6 Pk Volume	0	0	1643	1643
Pk Hr Factor	0.000	0.000	0.923	0.923	Pk Hr Factor	0.000	0.000	0.976	0.976

VOLUME

From EB SR-91 I-15 SB On-Ramp

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA_19-6125-053

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	37,156				0	37,156
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	192	0	192	12:00	0	0	534	0	534		
0:15	0	0	137	0	137	12:15	0	0	556	0	556		
0:30	0	0	136	0	136	12:30	0	0	559	0	559		
0:45	0	0	114	579	114 579	12:45	0	0	507	2156	0	507	2156
1:00	0	0	104	0	104	13:00	0	0	533	0	533		
1:15	0	0	105	0	105	13:15	0	0	580	0	580		
1:30	0	0	109	0	109	13:30	0	0	617	0	617		
1:45	0	0	108	426	108 426	13:45	0	0	589	2319	0	589	2319
2:00	0	0	98	0	98	14:00	0	0	677	0	677		
2:15	0	0	78	0	78	14:15	0	0	616	0	616		
2:30	0	0	104	0	104	14:30	0	0	568	0	568		
2:45	0	0	87	367	87 367	14:45	0	0	576	2437	0	576	2437
3:00	0	0	90	0	90	15:00	0	0	538	0	538		
3:15	0	0	88	0	88	15:15	0	0	521	0	521		
3:30	0	0	113	0	113	15:30	0	0	499	0	499		
3:45	0	0	96	387	96 387	15:45	0	0	403	1961	0	403	1961
4:00	0	0	127	0	127	16:00	0	0	397	0	397		
4:15	0	0	136	0	136	16:15	0	0	388	0	388		
4:30	0	0	175	0	175	16:30	0	0	421	0	421		
4:45	0	0	208	646	208 646	16:45	0	0	435	1641	0	435	1641
5:00	0	0	221	0	221	17:00	0	0	438	0	438		
5:15	0	0	250	0	250	17:15	0	0	403	0	403		
5:30	0	0	294	0	294	17:30	0	0	391	0	391		
5:45	0	0	335	1100	335 1100	17:45	0	0	422	1654	0	422	1654
6:00	0	0	317	0	317	18:00	0	0	476	0	476		
6:15	0	0	315	0	315	18:15	0	0	537	0	537		
6:30	0	0	319	0	319	18:30	0	0	511	0	511		
6:45	0	0	393	1344	393 1344	18:45	0	0	518	2042	0	518	2042
7:00	0	0	407	0	407	19:00	0	0	529	0	529		
7:15	0	0	463	0	463	19:15	0	0	546	0	546		
7:30	0	0	468	0	468	19:30	0	0	573	0	573		
7:45	0	0	449	1787	449 1787	19:45	0	0	530	2178	0	530	2178
8:00	0	0	518	0	518	20:00	0	0	584	0	584		
8:15	0	0	516	0	516	20:15	0	0	591	0	591		
8:30	0	0	496	0	496	20:30	0	0	566	0	566		
8:45	0	0	478	2008	478 2008	20:45	0	0	544	2285	0	544	2285
9:00	0	0	469	0	469	21:00	0	0	481	0	481		
9:15	0	0	447	0	447	21:15	0	0	464	0	464		
9:30	0	0	516	0	516	21:30	0	0	403	0	403		
9:45	0	0	476	1908	476 1908	21:45	0	0	398	1746	0	398	1746
10:00	0	0	499	0	499	22:00	0	0	345	0	345		
10:15	0	0	453	0	453	22:15	0	0	308	0	308		
10:30	0	0	496	0	496	22:30	0	0	335	0	335		
10:45	0	0	512	1960	512 1960	22:45	0	0	282	1270	0	282	1270
11:00	0	0	517	0	517	23:00	0	0	230	0	230		
11:15	0	0	508	0	508	23:15	0	0	213	0	213		
11:30	0	0	548	0	548	23:30	0	0	217	0	217		
11:45	0	0	535	2108	535 2108	23:45	0	0	187	847	0	187	847
TOTALS	14620				14620	TOTALS	22536				22536		
SPLIT %	100.0%				39.3%	SPLIT %	100.0%				60.7%		

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	37,156				0	37,156

AM Peak Hour	11:45		11:45	PM Peak Hour	13:30		13:30
AM Pk Volume	2184		2184	PM Pk Volume	2499		2499
Pk Hr Factor	0.977		0.977	Pk Hr Factor	0.923		0.923
7 - 9 Volume	0	0	3795	4 - 6 Volume	0	0	3295
7 - 9 Peak Hour	8:00		8:00	4 - 6 Peak Hour	16:30		16:30
7 - 9 Pk Volume	0	0	2008	4 - 6 Pk Volume	0	0	1697
Pk Hr Factor	0.000	0.000	0.969	Pk Hr Factor	0.000	0.000	0.969

VOLUME

From EB SR-91 I-15 SB On-Ramp

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-053

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	32,330				0	32,330
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	179	0	179	12:00	0	0	565	0	565		
0:15	0	0	154	0	154	12:15	0	0	538	0	538		
0:30	0	0	162	0	162	12:30	0	0	534	0	534		
0:45	0	0	134	629	134 629	12:45	0	0	575	2212	575 2212		
1:00	0	0	81	0	81	13:00	0	0	524	0	524		
1:15	0	0	78	0	78	13:15	0	0	545	0	545		
1:30	0	0	122	0	122	13:30	0	0	555	0	555		
1:45	0	0	110	391	110 391	13:45	0	0	582	2206	582 2206		
2:00	0	0	89	0	89	14:00	0	0	569	0	569		
2:15	0	0	89	0	89	14:15	0	0	556	0	556		
2:30	0	0	81	0	81	14:30	0	0	631	0	631		
2:45	0	0	84	343	84 343	14:45	0	0	525	2281	525 2281		
3:00	0	0	33	0	33	15:00	0	0	453	0	453		
3:15	0	0	60	0	60	15:15	0	0	523	0	523		
3:30	0	0	96	0	96	15:30	0	0	483	0	483		
3:45	0	0	71	260	71 260	15:45	0	0	472	1931	472 1931		
4:00	0	0	120	0	120	16:00	0	0	408	0	408		
4:15	0	0	145	0	145	16:15	0	0	439	0	439		
4:30	0	0	179	0	179	16:30	0	0	431	0	431		
4:45	0	0	227	671	227 671	16:45	0	0	452	1730	452 1730		
5:00	0	0	222	0	222	17:00	0	0	406	0	406		
5:15	0	0	272	0	272	17:15	0	0	464	0	464		
5:30	0	0	275	0	275	17:30	0	0	474	0	474		
5:45	0	0	340	1109	340 1109	17:45	0	0	453	1797	453 1797		
6:00	0	0	310	0	310	18:00	0	0	504	0	504		
6:15	0	0	303	0	303	18:15	0	0	465	0	465		
6:30	0	0	344	0	344	18:30	0	0	463	0	463		
6:45	0	0	377	1334	377 1334	18:45	0	0	529	1961	529 1961		
7:00	0	0	331	0	331	19:00	0	0	545	0	545		
7:15	0	0	369	0	369	19:15	0	0	551	0	551		
7:30	0	0	454	0	454	19:30	0	0	580	0	580		
7:45	0	0	439	1593	439 1593	19:45	0	0	582	2258	582 2258		
8:00	0	0	465	0	465	20:00	0	0	573	0	573		
8:15	0	0	457	0	457	20:15	0	0	539	0	539		
8:30	0	0	455	0	455	20:30	0	0	529	0	529		
8:45	0	0	455	1832	455 1832	20:45	0	0	359	2000	359 2000		
9:00	0	0	437	0	437	21:00	0	0	4	0	4		
9:15	0	0	437	0	437	21:15	0	0	0	0	0		
9:30	0	0	433	0	433	21:30	0	0	0	0	0		
9:45	0	0	441	1748	441 1748	21:45	0	0	0	4	0 4		
10:00	0	0	469	0	469	22:00	0	0	1	0	1		
10:15	0	0	481	0	481	22:15	0	0	0	0	0		
10:30	0	0	421	0	421	22:30	0	0	1	0	1		
10:45	0	0	478	1849	478 1849	22:45	0	0	3	5	3 5		
11:00	0	0	544	0	544	23:00	0	0	0	0	0		
11:15	0	0	523	0	523	23:15	0	0	0	0	0		
11:30	0	0	499	0	499	23:30	0	0	0	0	0		
11:45	0	0	620	2186	620 2186	23:45	0	0	0	0	0		
TOTALS	13945				13945	TOTALS	18385				18385		
SPLIT %	100.0%				43.1%	SPLIT %	100.0%				56.9%		

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	32,330				0	32,330

AM Peak Hour	11:45		11:45	PM Peak Hour	13:45		13:45
AM Pk Volume	2257		2257	PM Pk Volume	2338		2338
Pk Hr Factor	0.910		0.910	Pk Hr Factor	0.926		0.926
7 - 9 Volume	0	0	3425	4 - 6 Volume	0	0	3527
7 - 9 Peak Hour	8:00		8:00	4 - 6 Peak Hour	17:00		17:00
7 - 9 Pk Volume	0	0	1832	4 - 6 Pk Volume	0	0	1797
Pk Hr Factor	0.000	0.000	0.985	Pk Hr Factor	0.000	0.000	0.948

VOLUME**I-15 NB Express Lane Connector Ramp EB SR-91**

Day: Thursday
Date: 10/3/2019

City: Corona
Project #: CA_19-6125-054

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	21,404				0	21,404
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	37	0	37	12:00	0	0	179	0	179		
0:15	0	0	84	0	84	12:15	0	0	226	0	226		
0:30	0	0	32	0	32	12:30	0	0	270	0	270		
0:45	0	0	28	181	208	12:45	0	0	320	995	1315		
1:00	0	0	28	0	28	13:00	0	0	347	0	347		
1:15	0	0	18	0	18	13:15	0	0	366	0	366		
1:30	0	0	11	0	11	13:30	0	0	380	0	380		
1:45	0	0	14	71	85	13:45	0	0	503	1596	2100		
2:00	0	0	12	0	12	14:00	0	0	529	0	529		
2:15	0	0	11	0	11	14:15	0	0	476	0	476		
2:30	0	0	4	0	4	14:30	0	0	548	0	548		
2:45	0	0	1	28	29	14:45	0	0	560	2113	2673		
3:00	0	0	0	0	0	15:00	0	0	523	0	523		
3:15	0	0	4	0	4	15:15	0	0	538	0	538		
3:30	0	0	8	0	8	15:30	0	0	486	0	486		
3:45	0	0	2	14	16	15:45	0	0	451	1998	2449		
4:00	0	0	3	0	3	16:00	0	0	500	0	500		
4:15	0	0	3	0	3	16:15	0	0	450	0	450		
4:30	0	0	9	0	9	16:30	0	0	481	0	481		
4:45	0	0	15	30	45	16:45	0	0	467	1898	2365		
5:00	0	0	10	0	10	17:00	0	0	497	0	497		
5:15	0	0	30	0	30	17:15	0	0	467	0	467		
5:30	0	0	47	0	47	17:30	0	0	495	0	495		
5:45	0	0	58	145	203	17:45	0	0	483	1942	2425		
6:00	0	0	51	0	51	18:00	0	0	510	0	510		
6:15	0	0	99	0	99	18:15	0	0	495	0	495		
6:30	0	0	114	0	114	18:30	0	0	512	0	512		
6:45	0	0	125	389	514	18:45	0	0	510	2027	2537		
7:00	0	0	116	0	116	19:00	0	0	507	0	507		
7:15	0	0	130	0	130	19:15	0	0	510	0	510		
7:30	0	0	116	0	116	19:30	0	0	453	0	453		
7:45	0	0	157	519	676	19:45	0	0	374	1844	2218		
8:00	0	0	129	0	129	20:00	0	0	354	0	354		
8:15	0	0	171	0	171	20:15	0	0	348	0	348		
8:30	0	0	140	0	140	20:30	0	0	286	0	286		
8:45	0	0	182	622	804	20:45	0	0	247	1235	1482		
9:00	0	0	155	0	155	21:00	0	0	216	0	216		
9:15	0	0	168	0	168	21:15	0	0	141	0	141		
9:30	0	0	152	0	152	21:30	0	0	239	0	239		
9:45	0	0	128	603	731	21:45	0	0	194	790	984		
10:00	0	0	151	0	151	22:00	0	0	191	0	191		
10:15	0	0	164	0	164	22:15	0	0	195	0	195		
10:30	0	0	174	0	174	22:30	0	0	223	0	223		
10:45	0	0	173	662	835	22:45	0	0	104	713	817		
11:00	0	0	146	0	146	23:00	0	0	112	0	112		
11:15	0	0	161	0	161	23:15	0	0	76	0	76		
11:30	0	0	198	0	198	23:30	0	0	63	0	63		
11:45	0	0	186	691	877	23:45	0	0	47	298	345		
TOTALS	3955				3955	TOTALS	17449				17449		
SPLIT %	100.0%				18.5%	SPLIT %	100.0%				81.5%		

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	21,404				0	21,404

AM Peak Hour	11:45		11:45	PM Peak Hour	14:30		14:30
AM Pk Volume	861		861	PM Pk Volume	2169		2169
Pk Hr Factor	0.797		0.797	Pk Hr Factor	0.968		0.968
7 - 9 Volume	0	0	1141	4 - 6 Volume	0	0	3840
7 - 9 Peak Hour	8:00		8:00	4 - 6 Peak Hour	17:00		17:00
7 - 9 Pk Volume	0	0	622	4 - 6 Pk Volume	0	0	1942
Pk Hr Factor	0.000	0.000	0.854	Pk Hr Factor	0.000	0.000	0.977

VOLUME**I-15 NB Express Lane Connector Ramp EB SR-91**

Day: Tuesday
Date: 9/17/2019

City: Corona
Project #: CA_19-6125-054

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	19,172				0	19,172
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	0	0	0	12:00	0	0	181	0	181		
0:15	0	0	0	0	0	12:15	0	0	191	0	191		
0:30	0	0	0	0	0	12:30	0	0	223	0	223		
0:45	0	0	0	0	0	12:45	0	0	215	810	215 810		
1:00	0	0	0	0	0	13:00	0	0	271	0	271		
1:15	0	0	0	0	0	13:15	0	0	308	0	308		
1:30	0	0	0	0	0	13:30	0	0	363	0	363		
1:45	0	0	0	0	0	13:45	0	0	350	1292	350 1292		
2:00	0	0	0	0	0	14:00	0	0	416	0	416		
2:15	0	0	0	0	0	14:15	0	0	428	0	428		
2:30	0	0	0	0	0	14:30	0	0	480	0	480		
2:45	0	0	0	0	0	14:45	0	0	539	1863	539 1863		
3:00	0	0	0	0	0	15:00	0	0	582	0	582		
3:15	0	0	3	0	3	15:15	0	0	518	0	518		
3:30	0	0	5	0	5	15:30	0	0	508	0	508		
3:45	0	0	1	9	1 9	15:45	0	0	538	2146	538 2146		
4:00	0	0	1	0	1	16:00	0	0	457	0	457		
4:15	0	0	3	0	3	16:15	0	0	506	0	506		
4:30	0	0	10	0	10	16:30	0	0	550	0	550		
4:45	0	0	12	26	12 26	16:45	0	0	559	2072	559 2072		
5:00	0	0	16	0	16	17:00	0	0	455	0	455		
5:15	0	0	23	0	23	17:15	0	0	470	0	470		
5:30	0	0	30	0	30	17:30	0	0	441	0	441		
5:45	0	0	60	129	60 129	17:45	0	0	454	1820	454 1820		
6:00	0	0	53	0	53	18:00	0	0	476	0	476		
6:15	0	0	73	0	73	18:15	0	0	439	0	439		
6:30	0	0	124	0	124	18:30	0	0	466	0	466		
6:45	0	0	117	367	117 367	18:45	0	0	486	1867	486 1867		
7:00	0	0	126	0	126	19:00	0	0	480	0	480		
7:15	0	0	119	0	119	19:15	0	0	417	0	417		
7:30	0	0	137	0	137	19:30	0	0	411	0	411		
7:45	0	0	151	533	151 533	19:45	0	0	377	1685	377 1685		
8:00	0	0	124	0	124	20:00	0	0	322	0	322		
8:15	0	0	149	0	149	20:15	0	0	347	0	347		
8:30	0	0	146	0	146	20:30	0	0	266	0	266		
8:45	0	0	148	567	148 567	20:45	0	0	221	1156	221 1156		
9:00	0	0	143	0	143	21:00	0	0	153	0	153		
9:15	0	0	136	0	136	21:15	0	0	165	0	165		
9:30	0	0	147	0	147	21:30	0	0	162	0	162		
9:45	0	0	127	553	127 553	21:45	0	0	130	610	130 610		
10:00	0	0	116	0	116	22:00	0	0	116	0	116		
10:15	0	0	128	0	128	22:15	0	0	100	0	100		
10:30	0	0	125	0	125	22:30	0	0	87	0	87		
10:45	0	0	142	511	142 511	22:45	0	0	75	378	75 378		
11:00	0	0	131	0	131	23:00	0	0	73	0	73		
11:15	0	0	151	0	151	23:15	0	0	60	0	60		
11:30	0	0	162	0	162	23:30	0	0	44	0	44		
11:45	0	0	134	578	134 578	23:45	0	0	23	200	23 200		
TOTALS	3273				3273	TOTALS	15899				15899		
SPLIT %	100.0%				17.1%	SPLIT %	100.0%				82.9%		

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	19,172				0	19,172

AM Peak Hour	11:45		11:45	PM Peak Hour	14:45		14:45
AM Pk Volume	729		729	PM Pk Volume	2147		2147
Pk Hr Factor	0.817		0.817	Pk Hr Factor	0.922		0.922
7 - 9 Volume	0	0	1100	4 - 6 Volume	0	0	3892
7 - 9 Peak Hour	7:45		7:45	4 - 6 Peak Hour	16:00		16:00
7 - 9 Pk Volume	0	0	570	4 - 6 Pk Volume	0	0	2072
Pk Hr Factor	0.000	0.000	0.944	Pk Hr Factor	0.000	0.000	0.927

VOLUME**I-15 NB Express Lane Connector Ramp EB SR-91**

Day: Tuesday
Date: 9/17/2019

City: Corona
Project #: CA_19-6125-054

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0	18,952					0	18,952	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
0:00			0	0	0		12:00			179	0	179		
0:15			0	0	0		12:15			190	0	190		
0:30			0	0	0		12:30			219	0	219		
0:45			0	0	0		12:45			214	802	0	214 802	
1:00			0	0	0		13:00			268	0	268		
1:15			0	0	0		13:15			302	0	302		
1:30			0	0	0		13:30			356	0	356		
1:45			0	0	0		13:45			343	1269	0	343 1269	
2:00			0	0	0		14:00			408	0	408		
2:15			0	0	0		14:15			425	0	425		
2:30			0	0	0		14:30			476	0	476		
2:45			0	0	0		14:45			530	1839	0	530 1839	
3:00			0	0	0		15:00			576	0	576		
3:15			3	0	3		15:15			515	0	515		
3:30			5	0	5		15:30			504	0	504		
3:45			1	9	1 9		15:45			530	2125	0	530 2125	
4:00			1	0	1		16:00			452	0	452		
4:15			3	0	3		16:15			502	0	502		
4:30			8	0	8		16:30			541	0	541		
4:45			12	24	12 24		16:45			553	2048	0	553 2048	
5:00			16	0	16		17:00			451	0	451		
5:15			23	0	23		17:15			466	0	466		
5:30			29	0	29		17:30			437	0	437		
5:45			56	124	56 124		17:45			450	1804	0	450 1804	
6:00			52	0	52		18:00			469	0	469		
6:15			72	0	72		18:15			433	0	433		
6:30			122	0	122		18:30			466	0	466		
6:45			117	363	117 363		18:45			484	1852	0	484 1852	
7:00			125	0	125		19:00			477	0	477		
7:15			118	0	118		19:15			413	0	413		
7:30			134	0	134		19:30			408	0	408		
7:45			149	526	149 526		19:45			376	1674	0	376 1674	
8:00			122	0	122		20:00			317	0	317		
8:15			148	0	148		20:15			345	0	345		
8:30			142	0	142		20:30			262	0	262		
8:45			146	558	146 558		20:45			219	1143	0	219 1143	
9:00			134	0	134		21:00			152	0	152		
9:15			132	0	132		21:15			164	0	164		
9:30			146	0	146		21:30			161	0	161		
9:45			126	538	126 538		21:45			129	606	0	129 606	
10:00			112	0	112		22:00			116	0	116		
10:15			127	0	127		22:15			100	0	100		
10:30			122	0	122		22:30			87	0	87		
10:45			140	501	140 501		22:45			75	378	0	75 378	
11:00			129	0	129		23:00			72	0	72		
11:15			149	0	149		23:15			60	0	60		
11:30			159	0	159		23:30			44	0	44		
11:45			133	570	133 570		23:45			23	199	0	23 199	
TOTALS	3213				3213		TOTALS	15739					15739	
SPLIT %	100.0%				17.0%		SPLIT %	100.0%					83.0%	

DAILY TOTALS					NB	SB	EB				WB	Total
					0	0	18,952				0	18,952

AM Peak Hour			11:45		11:45	PM Peak Hour			14:45		14:45
AM Pk Volume			721		721	PM Pk Volume			2125		2125
Pk Hr Factor			0.823		0.823	Pk Hr Factor			0.922		0.922
7 - 9 Volume	0	0	1084	0	1084	4 - 6 Volume	0	0	3852	0	3852
7 - 9 Peak Hour			7:45		7:45	4 - 6 Peak Hour			16:00		16:00
7 - 9 Pk Volume	0	0	561	0	561	4 - 6 Pk Volume	0	0	2048	0	2048
Pk Hr Factor	0.000	0.000	0.941	0.000	0.941	Pk Hr Factor	0.000	0.000	0.926	0.000	0.926

VOLUME**I-15 NB Express Lane Connector Ramp EB SR-91**

Day: Tuesday
Date: 9/17/2019

City: Corona
Project #: CA_19-6125-054

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	220				0	220
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	0	0	0	12:00	0	0	2	0	2		
0:15	0	0	0	0	0	12:15	0	0	1	0	1		
0:30	0	0	0	0	0	12:30	0	0	4	0	4		
0:45	0	0	0	0	0	12:45	0	0	1	8	0	1	8
1:00	0	0	0	0	0	13:00	0	0	3	0	3		
1:15	0	0	0	0	0	13:15	0	0	6	0	6		
1:30	0	0	0	0	0	13:30	0	0	7	0	7		
1:45	0	0	0	0	0	13:45	0	0	7	23	0	7	23
2:00	0	0	0	0	0	14:00	0	0	8	0	8		
2:15	0	0	0	0	0	14:15	0	0	3	0	3		
2:30	0	0	0	0	0	14:30	0	0	4	0	4		
2:45	0	0	0	0	0	14:45	0	0	9	24	0	9	24
3:00	0	0	0	0	0	15:00	0	0	6	0	6		
3:15	0	0	0	0	0	15:15	0	0	3	0	3		
3:30	0	0	0	0	0	15:30	0	0	4	0	4		
3:45	0	0	0	0	0	15:45	0	0	8	21	0	8	21
4:00	0	0	0	0	0	16:00	0	0	5	0	5		
4:15	0	0	0	0	0	16:15	0	0	4	0	4		
4:30	0	0	2	0	2	16:30	0	0	9	0	9		
4:45	0	0	0	2	0	16:45	0	0	6	24	0	6	24
5:00	0	0	0	0	0	17:00	0	0	4	0	4		
5:15	0	0	0	0	0	17:15	0	0	4	0	4		
5:30	0	0	1	0	1	17:30	0	0	4	0	4		
5:45	0	0	4	5	4	17:45	0	0	4	16	0	4	16
6:00	0	0	1	0	1	18:00	0	0	7	0	7		
6:15	0	0	1	0	1	18:15	0	0	6	0	6		
6:30	0	0	2	0	2	18:30	0	0	0	0	0		
6:45	0	0	0	4	0	18:45	0	0	2	15	0	2	15
7:00	0	0	1	0	1	19:00	0	0	3	0	3		
7:15	0	0	1	0	1	19:15	0	0	4	0	4		
7:30	0	0	3	0	3	19:30	0	0	3	0	3		
7:45	0	0	2	7	0	19:45	0	0	1	11	0	1	11
8:00	0	0	2	0	2	20:00	0	0	5	0	5		
8:15	0	0	1	0	1	20:15	0	0	2	0	2		
8:30	0	0	4	0	4	20:30	0	0	4	0	4		
8:45	0	0	2	9	0	20:45	0	0	2	13	0	2	13
9:00	0	0	9	0	9	21:00	0	0	1	0	1		
9:15	0	0	4	0	4	21:15	0	0	1	0	1		
9:30	0	0	1	0	1	21:30	0	0	1	0	1		
9:45	0	0	1	15	0	21:45	0	0	1	4	0	1	4
10:00	0	0	4	0	4	22:00	0	0	0	0	0		
10:15	0	0	1	0	1	22:15	0	0	0	0	0		
10:30	0	0	3	0	3	22:30	0	0	0	0	0		
10:45	0	0	2	10	0	22:45	0	0	0	0	0		
11:00	0	0	2	0	2	23:00	0	0	1	0	1		
11:15	0	0	2	0	2	23:15	0	0	0	0	0		
11:30	0	0	3	0	3	23:30	0	0	0	0	0		
11:45	0	0	1	8	0	23:45	0	0	0	1	0	0	1
TOTALS	60				60	TOTALS	160				160		
SPLIT %	100.0%				27.3%	SPLIT %	100.0%				72.7%		

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	220				0	220

AM Peak Hour	8:30		8:30		PM Peak Hour	13:15		13:15	
AM Pk Volume	19		19		PM Pk Volume	28		28	
Pk Hr Factor	0.528		0.528		Pk Hr Factor	0.875		0.875	
7 - 9 Volume	0	0	16	0	4 - 6 Volume	0	0	40	0
7 - 9 Peak Hour	7:45		7:45		4 - 6 Peak Hour	16:00		16:00	
7 - 9 Pk Volume	0	0	9	0	4 - 6 Pk Volume	0	0	24	0
Pk Hr Factor	0.000	0.000	0.563	0.000	Pk Hr Factor	0.000	0.000	0.667	0.000

VOLUME**I-15 NB Express Lane Connector Ramp EB SR-91**

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-054

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	19,805				0	19,805
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	8	0	8	12:00	0	0	170	0	170		
0:15	0	0	13	0	13	12:15	0	0	176	0	176		
0:30	0	0	8	0	8	12:30	0	0	225	0	225		
0:45	0	0	6	35	6 35	12:45	0	0	254	825	254 825		
1:00	0	0	5	0	5	13:00	0	0	328	0	328		
1:15	0	0	5	0	5	13:15	0	0	320	0	320		
1:30	0	0	6	0	6	13:30	0	0	368	0	368		
1:45	0	0	9	25	9 25	13:45	0	0	420	1436	420 1436		
2:00	0	0	1	0	1	14:00	0	0	456	0	456		
2:15	0	0	2	0	2	14:15	0	0	509	0	509		
2:30	0	0	2	0	2	14:30	0	0	539	0	539		
2:45	0	0	1	6	1 6	14:45	0	0	545	2049	545 2049		
3:00	0	0	0	0	0	15:00	0	0	549	0	549		
3:15	0	0	2	0	2	15:15	0	0	559	0	559		
3:30	0	0	1	0	1	15:30	0	0	500	0	500		
3:45	0	0	0	3	0 3	15:45	0	0	486	2094	486 2094		
4:00	0	0	3	0	3	16:00	0	0	466	0	466		
4:15	0	0	9	0	9	16:15	0	0	488	0	488		
4:30	0	0	8	0	8	16:30	0	0	535	0	535		
4:45	0	0	16	36	16 36	16:45	0	0	474	1963	474 1963		
5:00	0	0	13	0	13	17:00	0	0	509	0	509		
5:15	0	0	31	0	31	17:15	0	0	447	0	447		
5:30	0	0	34	0	34	17:30	0	0	458	0	458		
5:45	0	0	24	102	24 102	17:45	0	0	442	1856	442 1856		
6:00	0	0	12	0	12	18:00	0	0	447	0	447		
6:15	0	0	18	0	18	18:15	0	0	483	0	483		
6:30	0	0	21	0	21	18:30	0	0	473	0	473		
6:45	0	0	38	89	38 89	18:45	0	0	467	1870	467 1870		
7:00	0	0	84	0	84	19:00	0	0	416	0	416		
7:15	0	0	107	0	107	19:15	0	0	397	0	397		
7:30	0	0	159	0	159	19:30	0	0	452	0	452		
7:45	0	0	145	495	145 495	19:45	0	0	417	1682	417 1682		
8:00	0	0	175	0	175	20:00	0	0	457	0	457		
8:15	0	0	230	0	230	20:15	0	0	302	0	302		
8:30	0	0	208	0	208	20:30	0	0	322	0	322		
8:45	0	0	198	811	198 811	20:45	0	0	321	1402	321 1402		
9:00	0	0	146	0	146	21:00	0	0	235	0	235		
9:15	0	0	108	0	108	21:15	0	0	217	0	217		
9:30	0	0	139	0	139	21:30	0	0	130	0	130		
9:45	0	0	123	516	123 516	21:45	0	0	124	706	124 706		
10:00	0	0	129	0	129	22:00	0	0	152	0	152		
10:15	0	0	125	0	125	22:15	0	0	143	0	143		
10:30	0	0	155	0	155	22:30	0	0	108	0	108		
10:45	0	0	137	546	137 546	22:45	0	0	94	497	94 497		
11:00	0	0	156	0	156	23:00	0	0	54	0	54		
11:15	0	0	156	0	156	23:15	0	0	51	0	51		
11:30	0	0	146	0	146	23:30	0	0	19	0	19		
11:45	0	0	169	627	169 627	23:45	0	0	10	134	10 134		
TOTALS	3291				3291	TOTALS	16514				16514		
SPLIT %	100.0%				16.6%	SPLIT %	100.0%				83.4%		

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	19,805				0	19,805

AM Peak Hour	8:00				8:00	PM Peak Hour	14:30				14:30
AM Pk Volume	811				811	PM Pk Volume	2192				2192
Pk Hr Factor	0.882				0.882	Pk Hr Factor	0.980				0.980
7 - 9 Volume	0	0	1306	0	1306	4 - 6 Volume	0	0	3819	0	3819
7 - 9 Peak Hour	8:00				8:00	4 - 6 Peak Hour	16:15				16:15
7 - 9 Pk Volume	0	0	811	0	811	4 - 6 Pk Volume	0	0	2006	0	2006
Pk Hr Factor	0.000	0.000	0.882	0.000	0.882	Pk Hr Factor	0.000	0.000	0.937	0.000	0.937

VOLUME**I-15 NB Express Lane Connector Ramp EB SR-91**

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-054

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	19,567					0	19,567
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
0:00			8	0	8		12:00			169	0	169	
0:15			13	0	13		12:15			176	0	176	
0:30			8	0	8		12:30			224	0	224	
0:45			6	35	6	35	12:45			252	821	252	821
1:00			5	0	5		13:00			328	0	328	
1:15			5	0	5		13:15			316	0	316	
1:30			6	0	6		13:30			364	0	364	
1:45			9	25	9	25	13:45			415	1423	415	1423
2:00			1	0	1		14:00			447	0	447	
2:15			2	0	2		14:15			500	0	500	
2:30			2	0	2		14:30			533	0	533	
2:45			1	6	1	6	14:45			541	2021	541	2021
3:00			0	0	0		15:00			539	0	539	
3:15			2	0	2		15:15			553	0	553	
3:30			1	0	1		15:30			495	0	495	
3:45			0	3	0	3	15:45			482	2069	482	2069
4:00			3	0	3		16:00			460	0	460	
4:15			8	0	8		16:15			481	0	481	
4:30			7	0	7		16:30			531	0	531	
4:45			15	33	15	33	16:45			466	1938	466	1938
5:00			13	0	13		17:00			503	0	503	
5:15			30	0	30		17:15			443	0	443	
5:30			32	0	32		17:30			447	0	447	
5:45			24	99	24	99	17:45			439	1832	439	1832
6:00			12	0	12		18:00			445	0	445	
6:15			18	0	18		18:15			476	0	476	
6:30			20	0	20		18:30			470	0	470	
6:45			37	87	37	87	18:45			461	1852	461	1852
7:00			84	0	84		19:00			415	0	415	
7:15			104	0	104		19:15			395	0	395	
7:30			158	0	158		19:30			449	0	449	
7:45			144	490	144	490	19:45			413	1672	413	1672
8:00			174	0	174		20:00			452	0	452	
8:15			227	0	227		20:15			299	0	299	
8:30			201	0	201		20:30			317	0	317	
8:45			193	795	193	795	20:45			320	1388	320	1388
9:00			138	0	138		21:00			234	0	234	
9:15			104	0	104		21:15			217	0	217	
9:30			136	0	136		21:30			128	0	128	
9:45			123	501	123	501	21:45			122	701	122	701
10:00			124	0	124		22:00			148	0	148	
10:15			123	0	123		22:15			143	0	143	
10:30			155	0	155		22:30			108	0	108	
10:45			137	539	137	539	22:45			93	492	93	492
11:00			152	0	152		23:00			53	0	53	
11:15			155	0	155		23:15			50	0	50	
11:30			143	0	143		23:30			19	0	19	
11:45			165	615	165	615	23:45			8	130	8	130
TOTALS	3228				3228		TOTALS	16339				16339	
SPLIT %	100.0%				16.5%		SPLIT %	100.0%				83.5%	

DAILY TOTALS					NB	SB	EB				WB	Total
					0	0	19,567				0	19,567

AM Peak Hour			8:00		8:00	PM Peak Hour			14:30		14:30
AM Pk Volume			795		795	PM Pk Volume			2166		2166
Pk Hr Factor			0.876		0.876	Pk Hr Factor			0.979		0.979
7 - 9 Volume	0	0	1285	0	1285	4 - 6 Volume	0	0	3770	0	3770
7 - 9 Peak Hour			8:00		8:00	4 - 6 Peak Hour			16:15		16:15
7 - 9 Pk Volume	0	0	795	0	795	4 - 6 Pk Volume	0	0	1981	0	1981
Pk Hr Factor	0.000	0.000	0.876	0.000	0.876	Pk Hr Factor	0.000	0.000	0.933	0.000	0.933

VOLUME**I-15 NB Express Lane Connector Ramp EB SR-91**

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-054

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	238				0	238
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	0	0	0	12:00	0	0	1	0	1		
0:15	0	0	0	0	0	12:15	0	0	0	0	0		
0:30	0	0	0	0	0	12:30	0	0	1	0	1		
0:45	0	0	0	0	0	12:45	0	0	2	4	2	4	4
1:00	0	0	0	0	0	13:00	0	0	0	0	0		
1:15	0	0	0	0	0	13:15	0	0	4	0	4		
1:30	0	0	0	0	0	13:30	0	0	4	0	4		
1:45	0	0	0	0	0	13:45	0	0	5	13	5	13	13
2:00	0	0	0	0	0	14:00	0	0	9	0	9		
2:15	0	0	0	0	0	14:15	0	0	9	0	9		
2:30	0	0	0	0	0	14:30	0	0	6	0	6		
2:45	0	0	0	0	0	14:45	0	0	4	28	4	28	28
3:00	0	0	0	0	0	15:00	0	0	10	0	10		
3:15	0	0	0	0	0	15:15	0	0	6	0	6		
3:30	0	0	0	0	0	15:30	0	0	5	0	5		
3:45	0	0	0	0	0	15:45	0	0	4	25	4	25	25
4:00	0	0	0	0	0	16:00	0	0	6	0	6		
4:15	0	0	1	0	1	16:15	0	0	7	0	7		
4:30	0	0	1	0	1	16:30	0	0	4	0	4		
4:45	0	0	1	3	1	16:45	0	0	8	25	8	25	25
5:00	0	0	0	0	0	17:00	0	0	6	0	6		
5:15	0	0	1	0	1	17:15	0	0	4	0	4		
5:30	0	0	2	0	2	17:30	0	0	11	0	11		
5:45	0	0	0	3	0	17:45	0	0	3	24	3	24	24
6:00	0	0	0	0	0	18:00	0	0	2	0	2		
6:15	0	0	0	0	0	18:15	0	0	7	0	7		
6:30	0	0	1	0	1	18:30	0	0	3	0	3		
6:45	0	0	1	2	1	18:45	0	0	6	18	6	18	18
7:00	0	0	0	0	0	19:00	0	0	1	0	1		
7:15	0	0	3	0	3	19:15	0	0	2	0	2		
7:30	0	0	1	0	1	19:30	0	0	3	0	3		
7:45	0	0	1	5	1	19:45	0	0	4	10	4	10	10
8:00	0	0	1	0	1	20:00	0	0	5	0	5		
8:15	0	0	3	0	3	20:15	0	0	3	0	3		
8:30	0	0	7	0	7	20:30	0	0	5	0	5		
8:45	0	0	5	16	5	20:45	0	0	1	14	1	14	14
9:00	0	0	8	0	8	21:00	0	0	1	0	1		
9:15	0	0	4	0	4	21:15	0	0	0	0	0		
9:30	0	0	3	0	3	21:30	0	0	2	0	2		
9:45	0	0	0	15	0	21:45	0	0	2	5	2	5	5
10:00	0	0	5	0	5	22:00	0	0	4	0	4		
10:15	0	0	2	0	2	22:15	0	0	0	0	0		
10:30	0	0	0	0	0	22:30	0	0	0	0	0		
10:45	0	0	0	7	0	22:45	0	0	1	5	1	5	5
11:00	0	0	4	0	4	23:00	0	0	1	0	1		
11:15	0	0	1	0	1	23:15	0	0	1	0	1		
11:30	0	0	3	0	3	23:30	0	0	0	0	0		
11:45	0	0	4	12	4	23:45	0	0	2	4	2	4	4
TOTALS	63				63	TOTALS	175				175		
SPLIT %	100.0%				26.5%	SPLIT %	100.0%				73.5%		

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	238				0	238

AM Peak Hour	8:30		8:30	PM Peak Hour	13:45		13:45	
AM Pk Volume	24		24	PM Pk Volume	29		29	
Pk Hr Factor	0.750		0.750	Pk Hr Factor	0.806		0.806	
7 - 9 Volume	0	0	21	0	0	49	0	49
7 - 9 Peak Hour	8:00		8:00	4 - 6 Peak Hour	16:45		16:45	
7 - 9 Pk Volume	0	0	16	0	0	29	0	29
Pk Hr Factor	0.000	0.000	0.571	0.000	0.000	0.659	0.000	0.659

VOLUME**I-15 SB Express Lane Connector Ramp WB SR-91**

Day: Thursday
Date: 10/3/2019

City: Corona
Project #: CA_19-6125-055

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	0					27,534	27,534
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
0:00	0	0	0	10	10		12:00	0	0	0	255	255	
0:15	0	0	0	7	7		12:15	0	0	0	217	217	
0:30	0	0	0	7	7		12:30	0	0	0	273	273	
0:45	0	0	0	5 29	5 29		12:45	0	0	0	214 959	214 959	
1:00	0	0	0	8	8		13:00	0	0	0	236	236	
1:15	0	0	0	6	6		13:15	0	0	0	217	217	
1:30	0	0	0	6	6		13:30	0	0	0	214	214	
1:45	0	0	0	5 25	5 25		13:45	0	0	0	212 879	212 879	
2:00	0	0	0	9	9		14:00	0	0	0	206	206	
2:15	0	0	0	5	5		14:15	0	0	0	220	220	
2:30	0	0	0	9	9		14:30	0	0	0	229	229	
2:45	0	0	0	17 40	17 40		14:45	0	0	0	215 870	215 870	
3:00	0	0	0	22	22		15:00	0	0	0	240	240	
3:15	0	0	0	37	37		15:15	0	0	0	214	214	
3:30	0	0	0	61	61		15:30	0	0	0	293	293	
3:45	0	0	0	127 247	127 247		15:45	0	0	0	278 1025	278 1025	
4:00	0	0	0	232	232		16:00	0	0	0	294	294	
4:15	0	0	0	331	331		16:15	0	0	0	297	297	
4:30	0	0	0	591	591		16:30	0	0	0	293	293	
4:45	0	0	0	778 1932	778 1932		16:45	0	0	0	349 1233	349 1233	
5:00	0	0	0	775	775		17:00	0	0	0	325	325	
5:15	0	0	0	785	785		17:15	0	0	0	355	355	
5:30	0	0	0	826	826		17:30	0	0	0	298	298	
5:45	0	0	0	810 3196	810 3196		17:45	0	0	0	276 1254	276 1254	
6:00	0	0	0	751	751		18:00	0	0	0	233	233	
6:15	0	0	0	727	727		18:15	0	0	0	207	207	
6:30	0	0	0	739	739		18:30	0	0	0	175	175	
6:45	0	0	0	762 2979	762 2979		18:45	0	0	0	124 739	124 739	
7:00	0	0	0	772	772		19:00	0	0	0	139	139	
7:15	0	0	0	803	803		19:15	0	0	0	104	104	
7:30	0	0	0	750	750		19:30	0	0	0	120	120	
7:45	0	0	0	755 3080	755 3080		19:45	0	0	0	73 436	73 436	
8:00	0	0	0	775	775		20:00	0	0	0	77	77	
8:15	0	0	0	792	792		20:15	0	0	0	53	53	
8:30	0	0	0	808	808		20:30	0	0	0	80	80	
8:45	0	0	0	716 3091	716 3091		20:45	0	0	0	53 263	53 263	
9:00	0	0	0	613	613		21:00	0	0	0	59	59	
9:15	0	0	0	667	667		21:15	0	0	0	50	50	
9:30	0	0	0	588	588		21:30	0	0	0	48	48	
9:45	0	0	0	475 2343	475 2343		21:45	0	0	0	29 186	29 186	
10:00	0	0	0	454	454		22:00	0	0	0	31	31	
10:15	0	0	0	410	410		22:15	0	0	0	26	26	
10:30	0	0	0	348	348		22:30	0	0	0	20	20	
10:45	0	0	0	317 1529	317 1529		22:45	0	0	0	16 93	16 93	
11:00	0	0	0	285	285		23:00	0	0	0	15	15	
11:15	0	0	0	276	276		23:15	0	0	0	17	17	
11:30	0	0	0	244	244		23:30	0	0	0	8	8	
11:45	0	0	0	254 1059	254 1059		23:45	0	0	0	7 47	7 47	
TOTALS	19550				19550		TOTALS	7984				7984	
SPLIT %	100.0%				71.0%		SPLIT %	100.0%				29.0%	

DAILY TOTALS						NB	SB					EB	WB	Total	
						0	0					0	27,534	27,534	

AM Peak Hour	5:00	5:00	PM Peak Hour	16:45	16:45
AM Pk Volume	3196	3196	PM Pk Volume	1327	1327
Pk Hr Factor	0.967	0.967	Pk Hr Factor	0.935	0.935
7 - 9 Volume	0	0	4 - 6 Volume	0	0
7 - 9 Peak Hour	7:45	7:45	4 - 6 Peak Hour	16:45	16:45
7 - 9 Pk Volume	3130	3130	4 - 6 Pk Volume	1327	1327
Pk Hr Factor	0.000	0.000	Pk Hr Factor	0.000	0.000

VOLUME**I-15 SB Express Lane Connector Ramp WB SR-91**

Day: Tuesday
Date: 9/17/2019

City: Corona
Project #: CA_19-6125-055

DAILY TOTALS						NB	SB					Total
						0	0					20,373
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
0:00	0	0	0	0	0	12:00	0	0	0	234	234	
0:15	0	0	0	0	0	12:15	0	0	0	247	247	
0:30	0	0	0	0	0	12:30	0	0	0	214	214	
0:45	0	0	0	0	0	12:45	0	0	0	233 928	233 928	
1:00	0	0	0	0	0	13:00	0	0	0	226	226	
1:15	0	0	0	0	0	13:15	0	0	0	220	220	
1:30	0	0	0	0	0	13:30	0	0	0	233	233	
1:45	0	0	0	0	0	13:45	0	0	0	217 896	217 896	
2:00	0	0	0	0	0	14:00	0	0	0	223	223	
2:15	0	0	0	0	0	14:15	0	0	0	208	208	
2:30	0	0	0	0	0	14:30	0	0	0	208	208	
2:45	0	0	0	0	0	14:45	0	0	0	197 836	197 836	
3:00	0	0	0	0	0	15:00	0	0	0	206	206	
3:15	0	0	0	11	11	15:15	0	0	0	248	248	
3:30	0	0	0	28	28	15:30	0	0	0	270	270	
3:45	0	0	0	166 205	166 205	15:45	0	0	0	305 1029	305 1029	
4:00	0	0	0	216	216	16:00	0	0	0	265	265	
4:15	0	0	0	433	433	16:15	0	0	0	254	254	
4:30	0	0	0	612	612	16:30	0	0	0	215	215	
4:45	0	0	0	737 1998	737 1998	16:45	0	0	0	228 962	228 962	
5:00	0	0	0	757	757	17:00	0	0	0	212	212	
5:15	0	0	0	775	775	17:15	0	0	0	233	233	
5:30	0	0	0	752	752	17:30	0	0	0	222	222	
5:45	0	0	0	748 3032	748 3032	17:45	0	0	0	183 850	183 850	
6:00	0	0	0	377	377	18:00	0	0	0	159	159	
6:15	0	0	0	395	395	18:15	0	0	0	154	154	
6:30	0	0	0	369	369	18:30	0	0	0	131	131	
6:45	0	0	0	362 1503	362 1503	18:45	0	0	0	112 556	112 556	
7:00	0	0	0	379	379	19:00	0	0	0	91	91	
7:15	0	0	0	409	409	19:15	0	0	0	77	77	
7:30	0	0	0	404	404	19:30	0	0	0	76	76	
7:45	0	0	0	395 1587	395 1587	19:45	0	0	0	96 340	96 340	
8:00	0	0	0	399	399	20:00	0	0	0	60	60	
8:15	0	0	0	398	398	20:15	0	0	0	29	29	
8:30	0	0	0	421	421	20:30	0	0	0	32	32	
8:45	0	0	0	387 1605	387 1605	20:45	0	0	0	19 140	19 140	
9:00	0	0	0	364	364	21:00	0	0	0	25	25	
9:15	0	0	0	300	300	21:15	0	0	0	21	21	
9:30	0	0	0	260	260	21:30	0	0	0	18	18	
9:45	0	0	0	221 1145	221 1145	21:45	0	0	0	13 77	13 77	
10:00	0	0	0	469	469	22:00	0	0	0	11	11	
10:15	0	0	0	414	414	22:15	0	0	0	15	15	
10:30	0	0	0	394	394	22:30	0	0	0	15	15	
10:45	0	0	0	325 1602	325 1602	22:45	0	0	0	5 46	5 46	
11:00	0	0	0	326	326	23:00	0	0	0	11	11	
11:15	0	0	0	261	261	23:15	0	0	0	4	4	
11:30	0	0	0	210	210	23:30	0	0	0	2	2	
11:45	0	0	0	216 1013	216 1013	23:45	0	0	0	6 23	6 23	
TOTALS					13690	TOTALS					6683	6683
SPLIT %					100.0%	SPLIT %					100.0%	32.8%

DAILY TOTALS						NB	SB					Total
						0	0					20,373

AM Peak Hour				5:00	5:00	PM Peak Hour					15:30	15:30
AM Pk Volume				3032	3032	PM Pk Volume					1094	1094
Pk Hr Factor				0.978	0.978	Pk Hr Factor					0.897	0.897
7 - 9 Volume	0	0	0	3192	3192	4 - 6 Volume	0	0	0		1812	1812
7 - 9 Peak Hour				7:45	7:45	4 - 6 Peak Hour					16:00	16:00
7 - 9 Pk Volume	0	0	0	1613	1613	4 - 6 Pk Volume	0	0	0		962	962
Pk Hr Factor	0.000	0.000	0.000	0.958	0.958	Pk Hr Factor	0.000	0.000	0.000		0.908	0.908

VOLUME**I-15 SB Express Lane Connector Ramp WB SR-91**

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-055

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	0					26,082	26,082
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
0:00	0	0	0	1	1		12:00	0	0	0	237	237	
0:15	0	0	0	1	1		12:15	0	0	0	249	249	
0:30	0	0	0	0	0		12:30	0	0	0	235	235	
0:45	0	0	0	3	5	3	12:45	0	0	0	232	953	232
1:00	0	0	0	0	0		13:00	0	0	0	236	236	
1:15	0	0	0	1	1		13:15	0	0	0	252	252	
1:30	0	0	0	0	0		13:30	0	0	0	228	228	
1:45	0	0	0	1	2	1	13:45	0	0	0	260	976	260
2:00	0	0	0	0	0		14:00	0	0	0	240	240	
2:15	0	0	0	0	0		14:15	0	0	0	218	218	
2:30	0	0	0	5	5		14:30	0	0	0	236	236	
2:45	0	0	0	23	28	23	14:45	0	0	0	220	914	220
3:00	0	0	0	7	7		15:00	0	0	0	246	246	
3:15	0	0	0	33	33		15:15	0	0	0	260	260	
3:30	0	0	0	27	27		15:30	0	0	0	255	255	
3:45	0	0	0	64	131	64	15:45	0	0	0	242	1003	242
4:00	0	0	0	230	230		16:00	0	0	0	244	244	
4:15	0	0	0	376	376		16:15	0	0	0	226	226	
4:30	0	0	0	647	647		16:30	0	0	0	243	243	
4:45	0	0	0	796	2049	796	16:45	0	0	0	276	989	276
5:00	0	0	0	789	789		17:00	0	0	0	279	279	
5:15	0	0	0	775	775		17:15	0	0	0	251	251	
5:30	0	0	0	792	792		17:30	0	0	0	232	232	
5:45	0	0	0	743	3099	743	17:45	0	0	0	185	947	185
6:00	0	0	0	433	433		18:00	0	0	0	166	166	
6:15	0	0	0	360	360		18:15	0	0	0	177	177	
6:30	0	0	0	365	365		18:30	0	0	0	139	139	
6:45	0	0	0	613	1771	613	18:45	0	0	0	112	594	112
7:00	0	0	0	767	767		19:00	0	0	0	106	106	
7:15	0	0	0	813	813		19:15	0	0	0	92	92	
7:30	0	0	0	845	845		19:30	0	0	0	93	93	
7:45	0	0	0	857	3282	857	19:45	0	0	0	83	374	83
8:00	0	0	0	936	936		20:00	0	0	0	44	44	
8:15	0	0	0	845	845		20:15	0	0	0	31	31	
8:30	0	0	0	831	831		20:30	0	0	0	26	26	
8:45	0	0	0	743	3355	743	20:45	0	0	0	32	133	32
9:00	0	0	0	769	769		21:00	0	0	0	29	29	
9:15	0	0	0	748	748		21:15	0	0	0	27	27	
9:30	0	0	0	631	631		21:30	0	0	0	18	18	
9:45	0	0	0	532	2680	532	21:45	0	0	0	13	87	13
10:00	0	0	0	497	497		22:00	0	0	0	14	14	
10:15	0	0	0	413	413		22:15	0	0	0	16	16	
10:30	0	0	0	360	360		22:30	0	0	0	7	7	
10:45	0	0	0	331	1601	331	22:45	0	0	0	14	51	14
11:00	0	0	0	292	292		23:00	0	0	0	12	12	
11:15	0	0	0	248	248		23:15	0	0	0	3	3	
11:30	0	0	0	252	252		23:30	0	0	0	5	5	
11:45	0	0	0	239	1031	239	23:45	0	0	0	7	27	7
TOTALS	19034				19034	TOTALS	7048				7048		
SPLIT %	100.0%				73.0%	SPLIT %	100.0%				27.0%		

DAILY TOTALS						NB	SB					EB	WB	Total	
						0	0					0	26,082	26,082	

AM Peak Hour	7:30				7:30	PM Peak Hour	16:30				16:30
AM Pk Volume	3483				3483	PM Pk Volume	1049				1049
Pk Hr Factor	0.930				0.930	Pk Hr Factor	0.940				0.940
7 - 9 Volume	0	0	0	6637	6637	4 - 6 Volume	0	0	0	1936	1936
7 - 9 Peak Hour	7:30				7:30	4 - 6 Peak Hour	16:30				16:30
7 - 9 Pk Volume	0	0	0	3483	3483	4 - 6 Pk Volume	0	0	0	1049	1049
Pk Hr Factor	0.000	0.000	0.000	0.930	0.930	Pk Hr Factor	0.000	0.000	0.000	0.940	0.940

VOLUME

I-15 NB Off-Ramp To Hidden Valley Pkwy

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_056

DAILY TOTALS					NB	SB						EB	WB						Total
					8,953	0						0	0						8,953
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	24	0			24		12:00	166	0			166							
00:15	13	0			13		12:15	150	0			150							
00:30	12	0			12		12:30	133	0			133							
00:45	18	67	0		18	67	12:45	158	607	0		158	607						
01:00	14	0			14		13:00	126	0			126							
01:15	5	0			5		13:15	122	0			122							
01:30	10	0			10		13:30	123	0			123							
01:45	7	36	0		7	36	13:45	136	507	0		136	507						
02:00	9	0			9		14:00	124	0			124							
02:15	13	0			13		14:15	125	0			125							
02:30	9	0			9		14:30	123	0			123							
02:45	13	44	0		13	44	14:45	146	518	0		146	518						
03:00	13	0			13		15:00	124	0			124							
03:15	21	0			21		15:15	115	0			115							
03:30	22	0			22		15:30	159	0			159							
03:45	28	84	0		28	84	15:45	122	520	0		122	520						
04:00	18	0			18		16:00	145	0			145							
04:15	22	0			22		16:15	115	0			115							
04:30	38	0			38		16:30	149	0			149							
04:45	49	127	0		49	127	16:45	150	559	0		150	559						
05:00	43	0			43		17:00	139	0			139							
05:15	49	0			49		17:15	169	0			169							
05:30	63	0			63		17:30	177	0			177							
05:45	92	247	0		92	247	17:45	186	671	0		186	671						
06:00	79	0			79		18:00	134	0			134							
06:15	74	0			74		18:15	149	0			149							
06:30	105	0			105		18:30	133	0			133							
06:45	146	404	0		146	404	18:45	124	540	0		124	540						
07:00	128	0			128		19:00	117	0			117							
07:15	139	0			139		19:15	118	0			118							
07:30	164	0			164		19:30	112	0			112							
07:45	142	573	0		142	573	19:45	98	445	0		98	445						
08:00	145	0			145		20:00	85	0			85							
08:15	122	0			122		20:15	94	0			94							
08:30	129	0			129		20:30	65	0			65							
08:45	140	536	0		140	536	20:45	98	342	0		98	342						
09:00	119	0			119		21:00	87	0			87							
09:15	118	0			118		21:15	88	0			88							
09:30	129	0			129		21:30	68	0			68							
09:45	111	477	0		111	477	21:45	54	297	0		54	297						
10:00	119	0			119		22:00	46	0			46							
10:15	118	0			118		22:15	43	0			43							
10:30	161	0			161		22:30	36	0			36							
10:45	142	540	0		142	540	22:45	48	173	0		48	173						
11:00	130	0			130		23:00	32	0			32							
11:15	132	0			132		23:15	14	0			14							
11:30	130	0			130		23:30	26	0			26							
11:45	149	541	0		149	541	23:45	26	98	0		26	98						
TOTALS	3676				3676		TOTALS	5277				5277							
SPLIT %	100.0%				41.1%		SPLIT %	100.0%				58.9%							

DAILY TOTALS					NB	SB						EB	WB						Total
					8,953	0						0	0						8,953

AM Peak Hour	11:45				11:45		PM Peak Hour	17:00				17:00							
AM Pk Volume	598				598		PM Pk Volume	671				671							
Pk Hr Factor	0.901				0.901		Pk Hr Factor	0.902				0.902							
7 - 9 Volume	1109	0	0	0	1109		4 - 6 Volume	1230	0	0	0	1230							
7 - 9 Peak Hour	07:15				07:15		4 - 6 Peak Hour	17:00				17:00							
7 - 9 Pk Volume	590	0	0	0	590		4 - 6 Pk Volume	671	0	0	0	671							
Pk Hr Factor	0.899	0.000	0.000	0.000	0.899		Pk Hr Factor	0.902	0.000	0.000	0.000	0.902							

VOLUME

I-15 NB Off-Ramp To Hidden Valley Pkwy

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_056

DAILY TOTALS					NB	SB						EB	WB						Total
					10,250	0						0	0						10,250
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	28	0			28		12:00	146	0			146							
00:15	19	0			19		12:15	162	0			162							
00:30	19	0			19		12:30	139	0			139							
00:45	9	75	0		9	75	12:45	133	580	0		133	580						
01:00	14	0			14		13:00	140	0			140							
01:15	9	0			9		13:15	149	0			149							
01:30	19	0			19		13:30	116	0			116							
01:45	18	60	0		18	60	13:45	129	534	0		129	534						
02:00	35	0			35		14:00	116	0			116							
02:15	12	0			12		14:15	146	0			146							
02:30	16	0			16		14:30	124	0			124							
02:45	14	77	0		14	77	14:45	144	530	0		144	530						
03:00	12	0			12		15:00	143	0			143							
03:15	14	0			14		15:15	150	0			150							
03:30	14	0			14		15:30	150	0			150							
03:45	35	75	0		35	75	15:45	127	570	0		127	570						
04:00	30	0			30		16:00	127	0			127							
04:15	33	0			33		16:15	151	0			151							
04:30	31	0			31		16:30	155	0			155							
04:45	36	130	0		36	130	16:45	182	615	0		182	615						
05:00	47	0			47		17:00	170	0			170							
05:15	53	0			53		17:15	176	0			176							
05:30	58	0			58		17:30	198	0			198							
05:45	75	233	0		75	233	17:45	166	710	0		166	710						
06:00	61	0			61		18:00	156	0			156							
06:15	65	0			65		18:15	147	0			147							
06:30	108	0			108		18:30	144	0			144							
06:45	103	337	0		103	337	18:45	120	567	0		120	567						
07:00	143	0			143		19:00	126	0			126							
07:15	139	0			139		19:15	127	0			127							
07:30	166	0			166		19:30	119	0			119							
07:45	148	596	0		148	596	19:45	122	494	0		122	494						
08:00	135	0			135		20:00	115	0			115							
08:15	113	0			113		20:15	105	0			105							
08:30	127	0			127		20:30	98	0			98							
08:45	127	502	0		127	502	20:45	123	441	0		123	441						
09:00	138	0			138		21:00	214	0			214							
09:15	114	0			114		21:15	105	0			105							
09:30	137	0			137		21:30	55	0			55							
09:45	105	494	0		105	494	21:45	86	460	0		86	460						
10:00	127	0			127		22:00	75	0			75							
10:15	149	0			149		22:15	96	0			96							
10:30	123	0			123		22:30	121	0			121							
10:45	129	528	0		129	528	22:45	102	394	0		102	394						
11:00	134	0			134		23:00	137	0			137							
11:15	134	0			134		23:15	125	0			125							
11:30	141	0			141		23:30	204	0			204							
11:45	184	593	0		184	593	23:45	189	655	0		189	655						
TOTALS	3700				3700		TOTALS	6550				6550							
SPLIT %	100.0%				36.1%		SPLIT %	100.0%				63.9%							

DAILY TOTALS					NB	SB						EB	WB						Total
					10,250	0						0	0						10,250

AM Peak Hour	11:30				11:30		PM Peak Hour	16:45				16:45							
AM Pk Volume	633				633		PM Pk Volume	726				726							
Pk Hr Factor	0.860				0.860		Pk Hr Factor	0.917				0.917							
7 - 9 Volume	1098	0	0	0	1098		4 - 6 Volume	1325	0	0	0	1325							
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	16:45				16:45							
7 - 9 Pk Volume	596	0	0	0	596		4 - 6 Pk Volume	726	0	0	0	726							
Pk Hr Factor	0.898	0.000	0.000	0.000	0.898		Pk Hr Factor	0.917	0.000	0.000	0.000	0.917							

VOLUME

I-15 NB Off-Ramp To Hidden Valley Pkwy

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_056

DAILY TOTALS					NB	SB						EB	WB	Total
					11,178	0						0	0	11,178
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	185	0			185	12:00	169	0			169			
00:15	212	0			212	12:15	159	0			159			
00:30	154	0			154	12:30	153	0			153			
00:45	130	681	0		130 681	12:45	156	637	0		156 637			
01:00	96	0			96	13:00	146	0			146			
01:15	120	0			120	13:15	133	0			133			
01:30	93	0			93	13:30	137	0			137			
01:45	93	402	0		93 402	13:45	140	556	0		140 556			
02:00	106	0			106	14:00	113	0			113			
02:15	118	0			118	14:15	122	0			122			
02:30	111	0			111	14:30	120	0			120			
02:45	135	470	0		135 470	14:45	155	510	0		155 510			
03:00	126	0			126	15:00	128	0			128			
03:15	150	0			150	15:15	157	0			157			
03:30	159	0			159	15:30	133	0			133			
03:45	174	609	0		174 609	15:45	121	539	0		121 539			
04:00	162	0			162	16:00	118	0			118			
04:15	22	0			22	16:15	150	0			150			
04:30	30	0			30	16:30	130	0			130			
04:45	46	260	0		46 260	16:45	162	560	0		162 560			
05:00	40	0			40	17:00	185	0			185			
05:15	56	0			56	17:15	188	0			188			
05:30	70	0			70	17:30	172	0			172			
05:45	83	249	0		83 249	17:45	204	749	0		204 749			
06:00	77	0			77	18:00	128	0			128			
06:15	94	0			94	18:15	122	0			122			
06:30	101	0			101	18:30	115	0			115			
06:45	121	393	0		121 393	18:45	121	486	0		121 486			
07:00	124	0			124	19:00	108	0			108			
07:15	150	0			150	19:15	99	0			99			
07:30	160	0			160	19:30	116	0			116			
07:45	170	604	0		170 604	19:45	91	414	0		91 414			
08:00	146	0			146	20:00	100	0			100			
08:15	130	0			130	20:15	108	0			108			
08:30	120	0			120	20:30	121	0			121			
08:45	121	517	0		121 517	20:45	96	425	0		96 425			
09:00	115	0			115	21:00	90	0			90			
09:15	115	0			115	21:15	84	0			84			
09:30	122	0			122	21:30	67	0			67			
09:45	133	485	0		133 485	21:45	55	296	0		55 296			
10:00	115	0			115	22:00	35	0			35			
10:15	127	0			127	22:15	37	0			37			
10:30	126	0			126	22:30	27	0			27			
10:45	129	497	0		129 497	22:45	33	132	0		33 132			
11:00	154	0			154	23:00	30	0			30			
11:15	152	0			152	23:15	13	0			13			
11:30	155	0			155	23:30	21	0			21			
11:45	156	617	0		156 617	23:45	26	90	0		26 90			
TOTALS	5784				5784	TOTALS	5394				5394			
SPLIT %	100.0%				51.7%	SPLIT %	100.0%				48.3%			

DAILY TOTALS					NB	SB						EB	WB	Total
					11,178	0						0	0	11,178

AM Peak Hour						PM Peak Hour	17:00							17:00
AM Pk Volume	681				681	PM Pk Volume	749							749
Pk Hr Factor	0.803				0.803	Pk Hr Factor	0.918							0.918
7 - 9 Volume	1121	0	0	0	1121	4 - 6 Volume	1309	0	0	0				1309
7 - 9 Peak Hour	07:15				07:15	4 - 6 Peak Hour	17:00							17:00
7 - 9 Pk Volume	626	0	0	0	626	4 - 6 Pk Volume	749	0	0	0				749
Pk Hr Factor	0.921	0.000	0.000	0.000	0.921	Pk Hr Factor	0.918	0.000	0.000	0.000				0.918

VOLUME

I-15 SB On-Ramp From Hidden Valley Pkwy

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA19_6124_057

DAILY TOTALS					NB	SB						EB	WB						Total
					0	7,624						0	0						7,624
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	19			19		12:00	0	123			123							
00:15	0	13			13		12:15	0	160			160							
00:30	0	15			15		12:30	0	154			154							
00:45	0	13	60		13	60	12:45	0	161	598		161	598						
01:00	0	7			7		13:00	0	140			140							
01:15	0	4			4		13:15	0	124			124							
01:30	0	9			9		13:30	0	125			125							
01:45	0	6	26		6	26	13:45	0	138	527		138	527						
02:00	0	10			10		14:00	0	145			145							
02:15	0	11			11		14:15	0	147			147							
02:30	0	6			6		14:30	0	139			139							
02:45	0	13	40		13	40	14:45	0	144	575		144	575						
03:00	0	7			7		15:00	0	159			159							
03:15	0	11			11		15:15	0	116			116							
03:30	0	20			20		15:30	0	125			125							
03:45	0	25	63		25	63	15:45	0	114	514		114	514						
04:00	0	22			22		16:00	0	126			126							
04:15	0	26			26		16:15	0	114			114							
04:30	0	24			24		16:30	0	135			135							
04:45	0	27	99		27	99	16:45	0	121	496		121	496						
05:00	0	31			31		17:00	0	125			125							
05:15	0	37			37		17:15	0	123			123							
05:30	0	36			36		17:30	0	134			134							
05:45	0	25	129		25	129	17:45	0	133	515		133	515						
06:00	0	50			50		18:00	0	140			140							
06:15	0	56			56		18:15	0	119			119							
06:30	0	69			69		18:30	0	127			127							
06:45	0	75	250		75	250	18:45	0	115	501		115	501						
07:00	0	83			83		19:00	0	110			110							
07:15	0	130			130		19:15	0	105			105							
07:30	0	106			106		19:30	0	103			103							
07:45	0	89	408		89	408	19:45	0	113	431		113	431						
08:00	0	87			87		20:00	0	109			109							
08:15	0	95			95		20:15	0	82			82							
08:30	0	84			84		20:30	0	75			75							
08:45	0	75	341		75	341	20:45	0	79	345		79	345						
09:00	0	80			80		21:00	0	72			72							
09:15	0	82			82		21:15	0	75			75							
09:30	0	83			83		21:30	0	52			52							
09:45	0	73	318		73	318	21:45	0	43	242		43	242						
10:00	0	105			105		22:00	0	60			60							
10:15	0	78			78		22:15	0	30			30							
10:30	0	105			105		22:30	0	35			35							
10:45	0	111	399		111	399	22:45	0	25	150		25	150						
11:00	0	125			125		23:00	0	31			31							
11:15	0	114			114		23:15	0	21			21							
11:30	0	136			136		23:30	0	15			15							
11:45	0	133	508		133	508	23:45	0	22	89		22	89						
TOTALS	2641				2641		TOTALS	4983				4983							
SPLIT %	100.0%				34.6%		SPLIT %	100.0%				65.4%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	7,624						0	0						7,624

AM Peak Hour	11:45				11:45	PM Peak Hour	12:15				12:15
AM Pk Volume	570				570	PM Pk Volume	615				615
Pk Hr Factor	0.891				0.891	Pk Hr Factor	0.955				0.955
7 - 9 Volume	0	749	0	0	749	4 - 6 Volume	0	1011	0	0	1011
7 - 9 Peak Hour	07:15				07:15	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	0	412	0	0	412	4 - 6 Pk Volume	0	515	0	0	515
Pk Hr Factor	0.000	0.792	0.000	0.000	0.792	Pk Hr Factor	0.000	0.961	0.000	0.000	0.961

VOLUME**I-15 SB On-Ramp From Hidden Valley Pkwy**

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA19_6124_057

DAILY TOTALS					NB	SB						EB	WB						Total
					0	9,908						0	0						9,908
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	0	22			22		12:00	0	150			150							
00:15	0	13			13		12:15	0	150			150							
00:30	0	12			12		12:30	0	139			139							
00:45	0	10	57		10	57	12:45	0	159	598		159	598						
01:00	0	4			4		13:00	0	163			163							
01:15	0	19			19		13:15	0	146			146							
01:30	0	8			8		13:30	0	126			126							
01:45	0	17	48		17	48	13:45	0	148	583		148	583						
02:00	0	33			33		14:00	0	137			137							
02:15	0	8			8		14:15	0	162			162							
02:30	0	6			6		14:30	0	157			157							
02:45	0	12	59		12	59	14:45	0	140	596		140	596						
03:00	0	6			6		15:00	0	155			155							
03:15	0	11			11		15:15	0	155			155							
03:30	0	10			10		15:30	0	133			133							
03:45	0	25	52		25	52	15:45	0	113	556		113	556						
04:00	0	22			22		16:00	0	123			123							
04:15	0	27			27		16:15	0	133			133							
04:30	0	29			29		16:30	0	124			124							
04:45	0	29	107		29	107	16:45	0	124	504		124	504						
05:00	0	40			40		17:00	0	104			104							
05:15	0	36			36		17:15	0	112			112							
05:30	0	39			39		17:30	0	125			125							
05:45	0	40	155		40	155	17:45	0	108	449		108	449						
06:00	0	42			42		18:00	0	119			119							
06:15	0	62			62		18:15	0	107			107							
06:30	0	64			64		18:30	0	113			113							
06:45	0	84	252		84	252	18:45	0	102	441		102	441						
07:00	0	92			92		19:00	0	106			106							
07:15	0	104			104		19:15	0	117			117							
07:30	0	104			104		19:30	0	98			98							
07:45	0	108	408		108	408	19:45	0	100	421		100	421						
08:00	0	98			98		20:00	0	98			98							
08:15	0	109			109		20:15	0	84			84							
08:30	0	81			81		20:30	0	79			79							
08:45	0	102	390		102	390	20:45	0	94	355		94	355						
09:00	0	96			96		21:00	0	235			235							
09:15	0	111			111		21:15	0	204			204							
09:30	0	92			92		21:30	0	192			192							
09:45	0	86	385		86	385	21:45	0	197	828		197	828						
10:00	0	117			117		22:00	0	209			209							
10:15	0	123			123		22:15	0	197			197							
10:30	0	133			133		22:30	0	204			204							
10:45	0	119	492		119	492	22:45	0	197	807		197	807						
11:00	0	135			135		23:00	0	209			209							
11:15	0	110			110		23:15	0	212			212							
11:30	0	133			133		23:30	0	214			214							
11:45	0	128	506		128	506	23:45	0	224	859		224	859						
TOTALS	2911				2911		TOTALS	6997				6997							
SPLIT %	100.0%				29.4%		SPLIT %	100.0%				70.6%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	9,908						0	0						9,908

AM Peak Hour	11:45				11:45		PM Peak Hour	23:00				23:00							
AM Pk Volume	567				567		PM Pk Volume	859				859							
Pk Hr Factor	0.945				0.945		Pk Hr Factor	0.959				0.959							
7 - 9 Volume	0	798	0	0	798		4 - 6 Volume	0	953	0	0	953							
7 - 9 Peak Hour	07:30				07:30		4 - 6 Peak Hour	16:00				16:00							
7 - 9 Pk Volume	419		0	0	419		4 - 6 Pk Volume	504		0	0	504							
Pk Hr Factor	0.000	0.961	0.000	0.000	0.961		Pk Hr Factor	0.000	0.947	0.000	0.000	0.947							

VOLUME

I-15 SB On-Ramp From Hidden Valley Pkwy

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6124_057

DAILY TOTALS					NB	SB	EB					WB	Total
					0	10,163						0	0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
00:00	0	203			203	12:00	0	134			134		
00:15	0	207			207	12:15	0	143			143		
00:30	0	157			157	12:30	0	156			156		
00:45	0	126	693		126 693	12:45	0	168	601		168 601		
01:00	0	103			103	13:00	0	164			164		
01:15	0	120			120	13:15	0	144			144		
01:30	0	100			100	13:30	0	138			138		
01:45	0	94	417		94 417	13:45	0	140	586		140 586		
02:00	0	104			104	14:00	0	157			157		
02:15	0	103			103	14:15	0	164			164		
02:30	0	104			104	14:30	0	165			165		
02:45	0	144	455		144 455	14:45	0	154	640		154 640		
03:00	0	122			122	15:00	0	135			135		
03:15	0	149			149	15:15	0	141			141		
03:30	0	147			147	15:30	0	139			139		
03:45	0	170	588		170 588	15:45	0	130	545		130 545		
04:00	0	178			178	16:00	0	128			128		
04:15	0	26			26	16:15	0	135			135		
04:30	0	18			18	16:30	0	124			124		
04:45	0	35	257		35 257	16:45	0	146	533		146 533		
05:00	0	55			55	17:00	0	118			118		
05:15	0	38			38	17:15	0	105			105		
05:30	0	39			39	17:30	0	129			129		
05:45	0	42	174		42 174	17:45	0	107	459		107 459		
06:00	0	43			43	18:00	0	122			122		
06:15	0	57			57	18:15	0	115			115		
06:30	0	66			66	18:30	0	112			112		
06:45	0	86	252		86 252	18:45	0	85	434		85 434		
07:00	0	104			104	19:00	0	119			119		
07:15	0	117			117	19:15	0	109			109		
07:30	0	131			131	19:30	0	92			92		
07:45	0	84	436		84 436	19:45	0	84	404		84 404		
08:00	0	100			100	20:00	0	113			113		
08:15	0	110			110	20:15	0	86			86		
08:30	0	91			91	20:30	0	74			74		
08:45	0	81	382		81 382	20:45	0	84	357		84 357		
09:00	0	104			104	21:00	0	76			76		
09:15	0	101			101	21:15	0	58			58		
09:30	0	115			115	21:30	0	64			64		
09:45	0	121	441		121 441	21:45	0	47	245		47 245		
10:00	0	116			116	22:00	0	62			62		
10:15	0	122			122	22:15	0	35			35		
10:30	0	142			142	22:30	0	32			32		
10:45	0	102	482		102 482	22:45	0	26	155		26 155		
11:00	0	138			138	23:00	0	27			27		
11:15	0	140			140	23:15	0	32			32		
11:30	0	128			128	23:30	0	26			26		
11:45	0	120	526		120 526	23:45	0	16	101		16 101		
TOTALS	5103				5103	TOTALS	5060				5060		
SPLIT %	100.0%				50.2%	SPLIT %	100.0%				49.8%		

DAILY TOTALS					NB	SB	EB	WB	Total
					0	10,163	0	0	10,163

AM Peak Hour						PM Peak Hour	14:00		14:00
AM Pk Volume		693			693	PM Pk Volume	640		640
Pk Hr Factor		0.837			0.837	Pk Hr Factor	0.970		0.970
7 - 9 Volume	0	818	0	0	818	4 - 6 Volume	0	992	992
7 - 9 Peak Hour		07:00			07:00	4 - 6 Peak Hour		16:00	16:00
7 - 9 Pk Volume	0	436	0	0	436	4 - 6 Pk Volume	0	533	533
Pk Hr Factor	0.000	0.832	0.000	0.000	0.832	Pk Hr Factor	0.000	0.913	0.913

VOLUME

From EB SR-91 I-15 NB On-Ramp

Day: Thursday
Date: 10/3/2019City: Corona
Project #: CA_19-6125-058

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	28,796				0	28,796
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	165	0	165	12:00	0	0	379	0	379		
0:15	0	0	242	0	242	12:15	0	0	398	0	398		
0:30	0	0	207	0	207	12:30	0	0	390	0	390		
0:45	0	0	180	794	180 794	12:45	0	0	399	1566	399 1566		
1:00	0	0	160	0	160	13:00	0	0	356	0	356		
1:15	0	0	157	0	157	13:15	0	0	347	0	347		
1:30	0	0	148	0	148	13:30	0	0	416	0	416		
1:45	0	0	141	606	141 606	13:45	0	0	438	1557	438 1557		
2:00	0	0	121	0	121	14:00	0	0	395	0	395		
2:15	0	0	103	0	103	14:15	0	0	423	0	423		
2:30	0	0	96	0	96	14:30	0	0	404	0	404		
2:45	0	0	106	426	106 426	14:45	0	0	361	1583	361 1583		
3:00	0	0	49	0	49	15:00	0	0	379	0	379		
3:15	0	0	64	0	64	15:15	0	0	346	0	346		
3:30	0	0	77	0	77	15:30	0	0	371	0	371		
3:45	0	0	85	275	85 275	15:45	0	0	342	1438	342 1438		
4:00	0	0	83	0	83	16:00	0	0	364	0	364		
4:15	0	0	101	0	101	16:15	0	0	350	0	350		
4:30	0	0	145	0	145	16:30	0	0	372	0	372		
4:45	0	0	138	467	138 467	16:45	0	0	379	1465	379 1465		
5:00	0	0	156	0	156	17:00	0	0	365	0	365		
5:15	0	0	189	0	189	17:15	0	0	351	0	351		
5:30	0	0	268	0	268	17:30	0	0	387	0	387		
5:45	0	0	295	908	295 908	17:45	0	0	369	1472	369 1472		
6:00	0	0	336	0	336	18:00	0	0	387	0	387		
6:15	0	0	335	0	335	18:15	0	0	387	0	387		
6:30	0	0	338	0	338	18:30	0	0	434	0	434		
6:45	0	0	362	1371	362 1371	18:45	0	0	393	1601	393 1601		
7:00	0	0	393	0	393	19:00	0	0	347	0	347		
7:15	0	0	412	0	412	19:15	0	0	398	0	398		
7:30	0	0	387	0	387	19:30	0	0	372	0	372		
7:45	0	0	400	1592	400 1592	19:45	0	0	374	1491	374 1491		
8:00	0	0	398	0	398	20:00	0	0	338	0	338		
8:15	0	0	376	0	376	20:15	0	0	266	0	266		
8:30	0	0	374	0	374	20:30	0	0	212	0	212		
8:45	0	0	344	1492	344 1492	20:45	0	0	181	997	181 997		
9:00	0	0	373	0	373	21:00	0	0	389	0	389		
9:15	0	0	366	0	366	21:15	0	0	259	0	259		
9:30	0	0	342	0	342	21:30	0	0	299	0	299		
9:45	0	0	365	1446	365 1446	21:45	0	0	208	1155	208 1155		
10:00	0	0	345	0	345	22:00	0	0	249	0	249		
10:15	0	0	296	0	296	22:15	0	0	276	0	276		
10:30	0	0	361	0	361	22:30	0	0	288	0	288		
10:45	0	0	399	1401	399 1401	22:45	0	0	362	1175	362 1175		
11:00	0	0	393	0	393	23:00	0	0	350	0	350		
11:15	0	0	371	0	371	23:15	0	0	274	0	274		
11:30	0	0	363	0	363	23:30	0	0	223	0	223		
11:45	0	0	328	1455	328 1455	23:45	0	0	216	1063	216 1063		
TOTALS	12233				12233	TOTALS	16563				16563		
SPLIT %	100.0%				42.5%	SPLIT %	100.0%				57.5%		

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	28,796				0	28,796

AM Peak Hour	7:15		7:15	PM Peak Hour	13:30		13:30
AM Pk Volume	1597		1597	PM Pk Volume	1672		1672
Pk Hr Factor	0.969		0.969	Pk Hr Factor	0.954		0.954
7 - 9 Volume	0	0	3084	4 - 6 Volume	0	0	2937
7 - 9 Peak Hour	7:15		7:15	4 - 6 Peak Hour	16:45		16:45
7 - 9 Pk Volume	0	0	1597	4 - 6 Pk Volume	0	0	1482
Pk Hr Factor	0.000	0.000	0.969	Pk Hr Factor	0.000	0.000	0.957

VOLUME

From EB SR-91 I-15 NB On-Ramp

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA_19-6125-058

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	27,250				4	27,254
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	98	0	98	12:00	0	0	362	0	362		
0:15	0	0	71	0	71	12:15	0	0	394	0	394		
0:30	0	0	87	0	87	12:30	0	0	375	0	375		
0:45	0	0	60	316	60 316	12:45	0	0	350	1481	350 1481		
1:00	0	0	54	0	54	13:00	0	0	343	0	343		
1:15	0	0	57	0	57	13:15	0	0	352	0	352		
1:30	0	0	67	0	67	13:30	0	0	357	0	357		
1:45	0	0	41	219	41 219	13:45	0	0	359	1411	359 1411		
2:00	0	0	42	0	42	14:00	0	0	376	0	376		
2:15	0	0	48	2	50	14:15	0	0	386	2	388		
2:30	0	0	38	0	38	14:30	0	0	358	0	358		
2:45	0	0	48	176	48 178	14:45	0	0	405	1525	405 1527		
3:00	0	0	42	0	42	15:00	0	0	381	0	381		
3:15	0	0	50	0	50	15:15	0	0	408	0	408		
3:30	0	0	79	0	79	15:30	0	0	381	0	381		
3:45	0	0	72	243	72 243	15:45	0	0	395	1565	395 1565		
4:00	0	0	78	0	78	16:00	0	0	408	0	408		
4:15	0	0	114	0	114	16:15	0	0	403	0	403		
4:30	0	0	174	0	174	16:30	0	0	386	0	386		
4:45	0	0	130	496	130 496	16:45	0	0	406	1603	406 1603		
5:00	0	0	157	0	157	17:00	0	0	431	0	431		
5:15	0	0	213	0	213	17:15	0	0	425	0	425		
5:30	0	0	316	0	316	17:30	0	0	400	0	400		
5:45	0	0	288	974	288 974	17:45	0	0	417	1673	417 1673		
6:00	0	0	314	0	314	18:00	0	0	454	0	454		
6:15	0	0	373	0	373	18:15	0	0	396	0	396		
6:30	0	0	343	0	343	18:30	0	0	408	0	408		
6:45	0	0	322	1352	322 1352	18:45	0	0	427	1685	427 1685		
7:00	0	0	417	0	417	19:00	0	0	421	0	421		
7:15	0	0	462	0	462	19:15	0	0	395	0	395		
7:30	0	0	438	0	438	19:30	0	0	420	0	420		
7:45	0	0	421	1738	421 1738	19:45	0	0	331	1567	331 1567		
8:00	0	0	425	0	425	20:00	0	0	360	0	360		
8:15	0	0	413	0	413	20:15	0	0	371	0	371		
8:30	0	0	397	0	397	20:30	0	0	302	0	302		
8:45	0	0	383	1618	383 1618	20:45	0	0	304	1337	304 1337		
9:00	0	0	342	0	342	21:00	0	0	231	0	231		
9:15	0	0	373	0	373	21:15	0	0	226	0	226		
9:30	0	0	364	0	364	21:30	0	0	236	0	236		
9:45	0	0	340	1419	340 1419	21:45	0	0	183	876	183 876		
10:00	0	0	336	0	336	22:00	0	0	151	0	151		
10:15	0	0	399	0	399	22:15	0	0	133	0	133		
10:30	0	0	400	0	400	22:30	0	0	159	0	159		
10:45	0	0	397	1532	397 1532	22:45	0	0	139	582	139 582		
11:00	0	0	354	0	354	23:00	0	0	119	0	119		
11:15	0	0	370	0	370	23:15	0	0	88	0	88		
11:30	0	0	357	0	357	23:30	0	0	111	0	111		
11:45	0	0	374	1455	374 1455	23:45	0	0	89	407	89 407		
TOTALS	11538 2				11540	TOTALS	15712 2				15714		
SPLIT %	100.0% 0.0%				42.3%	SPLIT %	100.0% 0.0%				57.7%		

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	27,250				4	27,254

AM Peak Hour	7:15	1:30	7:15	PM Peak Hour	17:15	13:30	17:15
AM Pk Volume	1746	2	1746	PM Pk Volume	1696	2	1696
Pk Hr Factor	0.945	0.250	0.945	Pk Hr Factor	0.934	0.250	0.934
7 - 9 Volume	0	0	3356	4 - 6 Volume	0	0	3276
7 - 9 Peak Hour	7:15	7:15	7:15	4 - 6 Peak Hour	17:00	17:00	17:00
7 - 9 Pk Volume	0	0	1746	4 - 6 Pk Volume	0	0	1673
Pk Hr Factor	0.000	0.000	0.945	Pk Hr Factor	0.000	0.000	0.970

VOLUME

From EB SR-91 I-15 NB On-Ramp

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA_19-6125-058

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	25,214					0	25,214
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
0:00			89	0	89		12:00			320	0	320	
0:15			65	0	65		12:15			346	0	346	
0:30			75	0	75		12:30			321	0	321	
0:45			51	280	51	280	12:45			304	1291	304	1291
1:00			41	0	41		13:00			298	0	298	
1:15			48	0	48		13:15			316	0	316	
1:30			55	0	55		13:30			324	0	324	
1:45			25	169	25	169	13:45			317	1255	317	1255
2:00			33	0	33		14:00			333	0	333	
2:15			40	0	40		14:15			343	0	343	
2:30			34	0	34		14:30			325	0	325	
2:45			34	141	34	141	14:45			374	1375	374	1375
3:00			39	0	39		15:00			362	0	362	
3:15			44	0	44		15:15			375	0	375	
3:30			63	0	63		15:30			356	0	356	
3:45			67	213	67	213	15:45			369	1462	369	1462
4:00			62	0	62		16:00			385	0	385	
4:15			106	0	106		16:15			376	0	376	
4:30			158	0	158		16:30			369	0	369	
4:45			118	444	118	444	16:45			378	1508	378	1508
5:00			143	0	143		17:00			410	0	410	
5:15			200	0	200		17:15			409	0	409	
5:30			298	0	298		17:30			380	0	380	
5:45			268	909	268	909	17:45			388	1587	388	1587
6:00			295	0	295		18:00			437	0	437	
6:15			353	0	353		18:15			378	0	378	
6:30			325	0	325		18:30			389	0	389	
6:45			313	1286	313	1286	18:45			411	1615	411	1615
7:00			403	0	403		19:00			405	0	405	
7:15			451	0	451		19:15			383	0	383	
7:30			422	0	422		19:30			401	0	401	
7:45			410	1686	410	1686	19:45			313	1502	313	1502
8:00			411	0	411		20:00			344	0	344	
8:15			386	0	386		20:15			356	0	356	
8:30			369	0	369		20:30			287	0	287	
8:45			359	1525	359	1525	20:45			293	1280	293	1280
9:00			311	0	311		21:00			220	0	220	
9:15			346	0	346		21:15			209	0	209	
9:30			346	0	346		21:30			219	0	219	
9:45			290	1293	290	1293	21:45			171	819	171	819
10:00			300	0	300		22:00			138	0	138	
10:15			355	0	355		22:15			122	0	122	
10:30			350	0	350		22:30			150	0	150	
10:45			352	1357	352	1357	22:45			125	535	125	535
11:00			320	0	320		23:00			107	0	107	
11:15			334	0	334		23:15			78	0	78	
11:30			325	0	325		23:30			105	0	105	
11:45			334	1313	334	1313	23:45			79	369	79	369
TOTALS			10616		10616		TOTALS			14598		14598	
SPLIT %			100.0%		42.1%		SPLIT %			100.0%		57.9%	

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	25,214					0	25,214

AM Peak Hour			7:15		7:15		PM Peak Hour			18:00		18:00	
AM Pk Volume			1694		1694		PM Pk Volume			1615		1615	
Pk Hr Factor			0.939		0.939		Pk Hr Factor			0.924		0.924	
7 - 9 Volume	0	0	3211	0	3211		4 - 6 Volume	0	0	3095	0	3095	
7 - 9 Peak Hour			7:15		7:15		4 - 6 Peak Hour			17:00		17:00	
7 - 9 Pk Volume	0	0	1694	0	1694		4 - 6 Pk Volume	0	0	1587	0	1587	
Pk Hr Factor	0.000	0.000	0.939	0.000	0.939		Pk Hr Factor	0.000	0.000	0.968	0.000	0.968	

VOLUME

From EB SR-91 I-15 NB On-Ramp

Day: Tuesday
Date: 9/17/2019City: Corona
Project #: CA_19-6125-058

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	2,036					4	2,040
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	9	0	9	12:00	0	0	42	0	42		
0:15	0	0	6	0	6	12:15	0	0	48	0	48		
0:30	0	0	12	0	12	12:30	0	0	54	0	54		
0:45	0	0	9	36	9	12:45	0	0	46	190	0	46	190
1:00	0	0	13	0	13	13:00	0	0	45	0	45		
1:15	0	0	9	0	9	13:15	0	0	36	0	36		
1:30	0	0	12	0	12	13:30	0	0	33	0	33		
1:45	0	0	16	50	16	13:45	0	0	42	156	0	42	156
2:00	0	0	9	0	9	14:00	0	0	43	0	43		
2:15	0	0	8	2	10	14:15	0	0	43	2	45		
2:30	0	0	4	0	4	14:30	0	0	33	0	33		
2:45	0	0	14	35	14	14:45	0	0	31	150	0	31	152
3:00	0	0	3	0	3	15:00	0	0	19	0	19		
3:15	0	0	6	0	6	15:15	0	0	33	0	33		
3:30	0	0	16	0	16	15:30	0	0	25	0	25		
3:45	0	0	5	30	5	15:45	0	0	26	103	0	26	103
4:00	0	0	16	0	16	16:00	0	0	23	0	23		
4:15	0	0	8	0	8	16:15	0	0	27	0	27		
4:30	0	0	16	0	16	16:30	0	0	17	0	17		
4:45	0	0	12	52	12	16:45	0	0	28	95	0	28	95
5:00	0	0	14	0	14	17:00	0	0	21	0	21		
5:15	0	0	13	0	13	17:15	0	0	16	0	16		
5:30	0	0	18	0	18	17:30	0	0	20	0	20		
5:45	0	0	20	65	20	17:45	0	0	29	86	0	29	86
6:00	0	0	19	0	19	18:00	0	0	17	0	17		
6:15	0	0	20	0	20	18:15	0	0	18	0	18		
6:30	0	0	18	0	18	18:30	0	0	19	0	19		
6:45	0	0	9	66	9	18:45	0	0	16	70	0	16	70
7:00	0	0	14	0	14	19:00	0	0	16	0	16		
7:15	0	0	11	0	11	19:15	0	0	12	0	12		
7:30	0	0	16	0	16	19:30	0	0	19	0	19		
7:45	0	0	11	52	11	19:45	0	0	18	65	0	18	65
8:00	0	0	14	0	14	20:00	0	0	16	0	16		
8:15	0	0	27	0	27	20:15	0	0	15	0	15		
8:30	0	0	28	0	28	20:30	0	0	15	0	15		
8:45	0	0	24	93	24	20:45	0	0	11	57	0	11	57
9:00	0	0	31	0	31	21:00	0	0	11	0	11		
9:15	0	0	27	0	27	21:15	0	0	17	0	17		
9:30	0	0	18	0	18	21:30	0	0	17	0	17		
9:45	0	0	50	126	50	21:45	0	0	12	57	0	12	57
10:00	0	0	36	0	36	22:00	0	0	13	0	13		
10:15	0	0	44	0	44	22:15	0	0	11	0	11		
10:30	0	0	50	0	50	22:30	0	0	9	0	9		
10:45	0	0	45	175	45	22:45	0	0	14	47	0	14	47
11:00	0	0	34	0	34	23:00	0	0	12	0	12		
11:15	0	0	36	0	36	23:15	0	0	10	0	10		
11:30	0	0	32	0	32	23:30	0	0	6	0	6		
11:45	0	0	40	142	40	23:45	0	0	10	38	0	10	38
TOTALS	922 2				924	TOTALS	1114 2				1116		
SPLIT %	99.8% 0.2%				45.3%	SPLIT %	99.8% 0.2%				54.7%		

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	2,036					4	2,040

AM Peak Hour	11:45 1:30		11:45	PM Peak Hour	12:15 13:30		12:15
AM Pk Volume	184 2		184	PM Pk Volume	193 2		193
Pk Hr Factor	0.852 0.250		0.852	Pk Hr Factor	0.894 0.250		0.894
7 - 9 Volume	0	0	145	4 - 6 Volume	0	0	181
7 - 9 Peak Hour	8:00 8:00		8:00	4 - 6 Peak Hour	16:00 16:00		16:00
7 - 9 Pk Volume	0	0	93	4 - 6 Pk Volume	0	0	95
Pk Hr Factor	0.000	0.000	0.830	Pk Hr Factor	0.000	0.000	0.848

VOLUME

From EB SR-91 I-15 NB On-Ramp

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-058

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	28,326				0	28,326
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL		
0:00	0	0	94	0	94	12:00	0	0	355	0	355		
0:15	0	0	69	0	69	12:15	0	0	403	0	403		
0:30	0	0	71	0	71	12:30	0	0	431	0	431		
0:45	0	0	38	272	38 272	12:45	0	0	374	1563	374 1563		
1:00	0	0	53	0	53	13:00	0	0	331	0	331		
1:15	0	0	53	0	53	13:15	0	0	368	0	368		
1:30	0	0	64	0	64	13:30	0	0	369	0	369		
1:45	0	0	54	224	54 224	13:45	0	0	360	1428	360 1428		
2:00	0	0	48	0	48	14:00	0	0	376	0	376		
2:15	0	0	38	0	38	14:15	0	0	354	0	354		
2:30	0	0	33	0	33	14:30	0	0	401	0	401		
2:45	0	0	41	160	41 160	14:45	0	0	334	1465	334 1465		
3:00	0	0	34	0	34	15:00	0	0	349	0	349		
3:15	0	0	60	0	60	15:15	0	0	360	0	360		
3:30	0	0	93	0	93	15:30	0	0	362	0	362		
3:45	0	0	70	257	70 257	15:45	0	0	387	1458	387 1458		
4:00	0	0	90	0	90	16:00	0	0	365	0	365		
4:15	0	0	110	0	110	16:15	0	0	354	0	354		
4:30	0	0	181	0	181	16:30	0	0	356	0	356		
4:45	0	0	152	533	152 533	16:45	0	0	399	1474	399 1474		
5:00	0	0	149	0	149	17:00	0	0	406	0	406		
5:15	0	0	220	0	220	17:15	0	0	361	0	361		
5:30	0	0	273	0	273	17:30	0	0	396	0	396		
5:45	0	0	265	907	265 907	17:45	0	0	421	1584	421 1584		
6:00	0	0	316	0	316	18:00	0	0	380	0	380		
6:15	0	0	351	0	351	18:15	0	0	429	0	429		
6:30	0	0	398	0	398	18:30	0	0	424	0	424		
6:45	0	0	355	1420	355 1420	18:45	0	0	417	1650	417 1650		
7:00	0	0	364	0	364	19:00	0	0	370	0	370		
7:15	0	0	387	0	387	19:15	0	0	378	0	378		
7:30	0	0	442	0	442	19:30	0	0	426	0	426		
7:45	0	0	431	1624	431 1624	19:45	0	0	340	1514	340 1514		
8:00	0	0	398	0	398	20:00	0	0	311	0	311		
8:15	0	0	347	0	347	20:15	0	0	305	0	305		
8:30	0	0	413	0	413	20:30	0	0	330	0	330		
8:45	0	0	339	1497	339 1497	20:45	0	0	373	1319	373 1319		
9:00	0	0	358	0	358	21:00	0	0	377	0	377		
9:15	0	0	381	0	381	21:15	0	0	345	0	345		
9:30	0	0	326	0	326	21:30	0	0	316	0	316		
9:45	0	0	327	1392	327 1392	21:45	0	0	353	1391	353 1391		
10:00	0	0	313	0	313	22:00	0	0	343	0	343		
10:15	0	0	352	0	352	22:15	0	0	344	0	344		
10:30	0	0	366	0	366	22:30	0	0	362	0	362		
10:45	0	0	358	1389	358 1389	22:45	0	0	348	1397	348 1397		
11:00	0	0	353	0	353	23:00	0	0	281	0	281		
11:15	0	0	368	0	368	23:15	0	0	216	0	216		
11:30	0	0	375	0	375	23:30	0	0	239	0	239		
11:45	0	0	365	1461	365 1461	23:45	0	0	211	947	211 947		
TOTALS	11136				11136	TOTALS	17190				17190		
SPLIT %	100.0%				39.3%	SPLIT %	100.0%				60.7%		

DAILY TOTALS						NB	SB	EB				WB	Total
						0	0	28,326				0	28,326

AM Peak Hour	7:15				7:15	PM Peak Hour	17:45				17:45
AM Pk Volume	1658				1658	PM Pk Volume	1654				1654
Pk Hr Factor	0.938				0.938	Pk Hr Factor	0.964				0.964
7 - 9 Volume	0	0	3121	0	3121	4 - 6 Volume	0	0	3058	0	3058
7 - 9 Peak Hour	7:15				7:15	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	0	0	1658	0	1658	4 - 6 Pk Volume	0	0	1584	0	1584
Pk Hr Factor	0.000	0.000	0.938	0.000	0.938	Pk Hr Factor	0.000	0.000	0.941	0.000	0.941

VOLUME

From EB SR-91 I-15 NB On-Ramp

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-058

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	26,291					0	26,291
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
0:00			90	0	90		12:00			320	0	320	
0:15			62	0	62		12:15			359	0	359	
0:30			61	0	61		12:30			392	0	392	
0:45			33	246	33	246	12:45			336	1407	336	1407
1:00			38	0	38		13:00			280	0	280	
1:15			46	0	46		13:15			334	0	334	
1:30			54	0	54		13:30			326	0	326	
1:45			37	175	37	175	13:45			322	1262	322	1262
2:00			35	0	35		14:00			339	0	339	
2:15			28	0	28		14:15			309	0	309	
2:30			25	0	25		14:30			371	0	371	
2:45			29	117	29	117	14:45			303	1322	303	1322
3:00			23	0	23		15:00			318	0	318	
3:15			51	0	51		15:15			320	0	320	
3:30			83	0	83		15:30			318	0	318	
3:45			60	217	60	217	15:45			362	1318	362	1318
4:00			75	0	75		16:00			346	0	346	
4:15			93	0	93		16:15			345	0	345	
4:30			166	0	166		16:30			342	0	342	
4:45			137	471	137	471	16:45			382	1415	382	1415
5:00			138	0	138		17:00			380	0	380	
5:15			201	0	201		17:15			342	0	342	
5:30			251	0	251		17:30			379	0	379	
5:45			245	835	245	835	17:45			402	1503	402	1503
6:00			295	0	295		18:00			367	0	367	
6:15			332	0	332		18:15			416	0	416	
6:30			374	0	374		18:30			414	0	414	
6:45			341	1342	341	1342	18:45			399	1596	399	1596
7:00			349	0	349		19:00			358	0	358	
7:15			373	0	373		19:15			370	0	370	
7:30			427	0	427		19:30			406	0	406	
7:45			410	1559	410	1559	19:45			329	1463	329	1463
8:00			378	0	378		20:00			294	0	294	
8:15			322	0	322		20:15			293	0	293	
8:30			393	0	393		20:30			306	0	306	
8:45			307	1400	307	1400	20:45			354	1247	354	1247
9:00			332	0	332		21:00			359	0	359	
9:15			359	0	359		21:15			326	0	326	
9:30			294	0	294		21:30			304	0	304	
9:45			298	1283	298	1283	21:45			340	1329	340	1329
10:00			283	0	283		22:00			325	0	325	
10:15			309	0	309		22:15			329	0	329	
10:30			341	0	341		22:30			338	0	338	
10:45			325	1258	325	1258	22:45			324	1316	324	1316
11:00			320	0	320		23:00			272	0	272	
11:15			325	0	325		23:15			203	0	203	
11:30			350	0	350		23:30			221	0	221	
11:45			321	1316	321	1316	23:45			198	894	198	894
TOTALS	10219				10219		TOTALS	16072					16072
SPLIT %	100.0%				38.9%		SPLIT %	100.0%					61.1%

DAILY TOTALS					NB	SB	EB				WB	Total
					0	0	26,291				0	26,291

AM Peak Hour			7:15		7:15		PM Peak Hour			17:45		17:45
AM Pk Volume			1588		1588		PM Pk Volume			1599		1599
Pk Hr Factor			0.930		0.930		Pk Hr Factor			0.961		0.961
7 - 9 Volume	0	0	2959	0	2959		4 - 6 Volume	0	0	2918	0	2918
7 - 9 Peak Hour			7:15		7:15		4 - 6 Peak Hour			17:00		17:00
7 - 9 Pk Volume	0	0	1588	0	1588		4 - 6 Pk Volume	0	0	1503	0	1503
Pk Hr Factor	0.000	0.000	0.930	0.000	0.930		Pk Hr Factor	0.000	0.000	0.935	0.000	0.935

VOLUME

From EB SR-91 I-15 NB On-Ramp

Day: Wednesday

Date: 9/18/2019

City: Corona

Project #: CA_19-6125-058

DAILY TOTALS						NB	SB	EB						WB	Total
						0	0	2,035						0	2,035
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL				
0:00	0	0	4	0	4	12:00	0	0	35	0	35				
0:15	0	0	7	0	7	12:15	0	0	44	0	44				
0:30	0	0	10	0	10	12:30	0	0	39	0	39				
0:45	0	0	5	26	5	12:45	0	0	38	156	38				
1:00	0	0	15	0	15	13:00	0	0	51	0	51				
1:15	0	0	7	0	7	13:15	0	0	34	0	34				
1:30	0	0	10	0	10	13:30	0	0	43	0	43				
1:45	0	0	17	49	17	13:45	0	0	38	166	38				
2:00	0	0	13	0	13	14:00	0	0	37	0	37				
2:15	0	0	10	0	10	14:15	0	0	45	0	45				
2:30	0	0	8	0	8	14:30	0	0	30	0	30				
2:45	0	0	12	43	12	14:45	0	0	31	143	31				
3:00	0	0	11	0	11	15:00	0	0	31	0	31				
3:15	0	0	9	0	9	15:15	0	0	40	0	40				
3:30	0	0	10	0	10	15:30	0	0	44	0	44				
3:45	0	0	10	40	10	15:45	0	0	25	140	25				
4:00	0	0	15	0	15	16:00	0	0	19	0	19				
4:15	0	0	17	0	17	16:15	0	0	9	0	9				
4:30	0	0	15	0	15	16:30	0	0	14	0	14				
4:45	0	0	15	62	15	16:45	0	0	17	59	17				
5:00	0	0	11	0	11	17:00	0	0	26	0	26				
5:15	0	0	19	0	19	17:15	0	0	19	0	19				
5:30	0	0	22	0	22	17:30	0	0	17	0	17				
5:45	0	0	20	72	20	17:45	0	0	19	81	19				
6:00	0	0	21	0	21	18:00	0	0	13	0	13				
6:15	0	0	19	0	19	18:15	0	0	13	0	13				
6:30	0	0	24	0	24	18:30	0	0	10	0	10				
6:45	0	0	14	78	14	18:45	0	0	18	54	18				
7:00	0	0	15	0	15	19:00	0	0	12	0	12				
7:15	0	0	14	0	14	19:15	0	0	8	0	8				
7:30	0	0	15	0	15	19:30	0	0	20	0	20				
7:45	0	0	21	65	21	19:45	0	0	11	51	11				
8:00	0	0	20	0	20	20:00	0	0	17	0	17				
8:15	0	0	25	0	25	20:15	0	0	12	0	12				
8:30	0	0	20	0	20	20:30	0	0	24	0	24				
8:45	0	0	32	97	32	20:45	0	0	19	72	19				
9:00	0	0	26	0	26	21:00	0	0	18	0	18				
9:15	0	0	22	0	22	21:15	0	0	19	0	19				
9:30	0	0	32	0	32	21:30	0	0	12	0	12				
9:45	0	0	29	109	29	21:45	0	0	13	62	13				
10:00	0	0	30	0	30	22:00	0	0	18	0	18				
10:15	0	0	43	0	43	22:15	0	0	15	0	15				
10:30	0	0	25	0	25	22:30	0	0	24	0	24				
10:45	0	0	33	131	33	22:45	0	0	24	81	24				
11:00	0	0	33	0	33	23:00	0	0	9	0	9				
11:15	0	0	43	0	43	23:15	0	0	13	0	13				
11:30	0	0	25	0	25	23:30	0	0	18	0	18				
11:45	0	0	44	145	44	23:45	0	0	13	53	13				
TOTALS	917				917	TOTALS	1118				1118				
SPLIT %	100.0%				45.1%	SPLIT %	100.0%				54.9%				

DAILY TOTALS						NB	SB	EB						WB	Total
						0	0	2,035						0	2,035

AM Peak Hour	11:45				11:45	PM Peak Hour	12:15				12:15
AM Pk Volume	162				162	PM Pk Volume	172				172
Pk Hr Factor	0.920				0.920	Pk Hr Factor	0.843				0.843
7 - 9 Volume	0	0	162	0	162	4 - 6 Volume	0	0	140	0	140
7 - 9 Peak Hour	8:00				8:00	4 - 6 Peak Hour	17:00				17:00
7 - 9 Pk Volume	0	0	97	0	97	4 - 6 Pk Volume	0	0	81	0	81
Pk Hr Factor	0.000	0.000	0.758	0.000	0.758	Pk Hr Factor	0.000	0.000	0.779	0.000	0.779

VOLUME

Hidden Valley Pkwy W/O I-15

Day: Thursday
Date: 9/19/2019

City: Norco
Project #: CA19_6122_001

DAILY TOTALS					NB	SB	EBWB					Total	
					0	0						29,967	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			38	31	69		12:00			234	252	486	
00:15			27	23	50		12:15			266	205	471	
00:30			21	14	35		12:30			265	204	469	
00:45			19	105	21	89	12:45			264	1029	241	902
01:00			25		13		13:00			266		239	
01:15			14		21		13:15			245		209	
01:30			28		11		13:30			246		232	
01:45			18	85	12	57	13:45			266	1023	228	908
02:00			19		18		14:00			234		230	
02:15			12		19		14:15			284		240	
02:30			11		14		14:30			276		216	
02:45			13	55	15	66	14:45			283	1077	209	895
03:00			14		10		15:00			254		207	
03:15			15		24		15:15			274		220	
03:30			20		39		15:30			258		229	
03:45			28	77	41	114	15:45			297	1083	209	865
04:00			27		48		16:00			284		204	
04:15			24		63		16:15			261		233	
04:30			26		100		16:30			301		200	
04:45			32	109	140	351	16:45			265	1111	258	895
05:00			59		104		17:00			285		244	
05:15			44		151		17:15			298		274	
05:30			64		222		17:30			292		285	
05:45			64	231	237	714	17:45			252	1127	288	1091
06:00			66		192		18:00			299		225	
06:15			81		265		18:15			246		188	
06:30			82		300		18:30			233		190	
06:45			97	326	340	1097	18:45			214	992	183	786
07:00			114		313		19:00			215		183	
07:15			138		328		19:15			191		158	
07:30			136		365		19:30			176		153	
07:45			133	521	378	1384	19:45			149	731	148	642
08:00			159		325		20:00			192		123	
08:15			171		270		20:15			155		165	
08:30			170		240		20:30			131		153	
08:45			153	653	275	1110	20:45			146	624	128	569
09:00			161		257		21:00			132		107	
09:15			165		195		21:15			93		89	
09:30			213		228		21:30			103		87	
09:45			176	715	200	880	21:45			82	410	84	367
10:00			159		189		22:00			82		67	
10:15			203		210		22:15			61		65	
10:30			227		185		22:30			57		45	
10:45			232	821	179	763	22:45			53	253	50	227
11:00			223		213		23:00			57		40	
11:15			235		207		23:15			48		26	
11:30			213		220		23:30			34		33	
11:45			203	874	230	870	23:45			30	169	25	124
TOTALS	4572				7495	12067	TOTALS	9629				8271	17900
SPLIT %	37.9%				62.1%	40.3%	SPLIT %	53.8%				46.2%	59.7%

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0	14,201					15,766	29,967	
AM Peak Hour			11:45	07:15	07:15		PM Peak Hour			16:30	17:00	17:00		
AM Pk Volume			968	1396	1962		PM Pk Volume			1149	1091	2218		
Pk Hr Factor			0.910	0.923	0.960		Pk Hr Factor			0.954	0.947	0.961		
7 - 9 Volume	0	0	1174	2494	3668		4 - 6 Volume	0	0	2238	1986	4224		
7 - 9 Peak Hour			08:00	07:15	07:15		4 - 6 Peak Hour			16:30	17:00	17:00		
7 - 9 Pk Volume	0	0	653	1396	1962		4 - 6 Pk Volume	0	0	1149	1091	2218		
Pk Hr Factor	0.000	0.000	0.955	0.923	0.960		Pk Hr Factor	0.000	0.000	0.954	0.947	0.961		

VOLUME

Hidden Valley Pkwy E/O I-15

Day: Thursday
Date: 9/19/2019

City: Norco
Project #: CA19_6122_002

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						11,026		
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			24	225	249		12:00			180	484	664		
00:15			26	270	296		12:15			182	368	550		
00:30			11	232	243		12:30			191	467	658		
00:45			19	80 229	956 248	1036	12:45			179	732 494	1813 673	2545	
01:00			18	180	198		13:00			178	454	632		
01:15			13	266	279		13:15			212	412	624		
01:30			12	181	193		13:30			161	438	599		
01:45			11	54 196	823 207	877	13:45			171	722 434	1738 605	2460	
02:00			7	250	257		14:00			173	437	610		
02:15			6	277	283		14:15			205	467	672		
02:30			7	274	281		14:30			205	363	568		
02:45			2	22 313	1114 315	1136	14:45			212	795 374	1641 586	2436	
03:00			10	268	278		15:00			217	370	587		
03:15			6	305	311		15:15			251	415	666		
03:30			11	306	317		15:30			217	429	646		
03:45			13	40 372	1251 385	1291	15:45			272	957 346	1560 618	2517	
04:00			9	365	374		16:00			246	329	575		
04:15			19	93	112		16:15			257	378	635		
04:30			15	116	131		16:30			243	319	562		
04:45			10	53 122	696 132	749	16:45			228	974 424	1450 652	2424	
05:00			22	102	124		17:00			220	402	622		
05:15			34	167	201		17:15			288	366	654		
05:30			23	206	229		17:30			260	433	693		
05:45			38	117 194	669 232	786	17:45			250	1018 420	1621 670	2639	
06:00			30	192	222		18:00			243	372	615		
06:15			42	263	305		18:15			215	298	513		
06:30			61	307	368		18:30			235	302	537		
06:45			65	198 287	1049 352	1247	18:45			217	910 314	1286 531	2196	
07:00			67	365	432		19:00			177	316	493		
07:15			79	530	609		19:15			157	289	446		
07:30			112	528	640		19:30			165	295	460		
07:45			102	360 441	1864 543	2224	19:45			142	641 285	1185 427	1826	
08:00			110	406	516		20:00			162	258	420		
08:15			91	359	450		20:15			145	268	413		
08:30			109	373	482		20:30			126	284	410		
08:45			114	424 335	1473 449	1897	20:45			107	540 213	1023 320	1563	
09:00			118	353	471		21:00			107	218	325		
09:15			113	345	458		21:15			108	160	268		
09:30			145	307	452		21:30			86	170	256		
09:45			128	504 333	1338 461	1842	21:45			71	372 125	673 196	1045	
10:00			123	352	475		22:00			51	107	158		
10:15			113	357	470		22:15			52	88	140		
10:30			139	387	526		22:30			53	75	128		
10:45			159	534 417	1513 576	2047	22:45			37	193 88	358 125	551	
11:00			153	382	535		23:00			30	42	72		
11:15			185	463	648		23:15			38	45	83		
11:30			177	431	608		23:30			24	68	92		
11:45			139	654 443	1719 582	2373	23:45			40	132 44	199 84	331	
TOTALS	3040				14465	17505	TOTALS	7986				14547	22533	
SPLIT %	17.4%				82.6%	43.7%	SPLIT %	35.4%				64.6%	56.3%	

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0	11,026					29,012	40,038	
AM Peak Hour			11:45	07:15	11:15		PM Peak Hour			17:15	12:30	17:00		
AM Pk Volume			692	1905	2502		PM Pk Volume			1041	1827	2639		
Pk Hr Factor			0.906	0.899	0.942		Pk Hr Factor			0.904	0.925	0.952		
7 - 9 Volume	0	0	784	3337	4121		4 - 6 Volume	0	0	1992	3071	5063		
7 - 9 Peak Hour			08:00	07:15	07:15		4 - 6 Peak Hour			17:00	16:45	17:00		
7 - 9 Pk Volume	0	0	424	1905	2308		4 - 6 Pk Volume	0	0	1018	1625	2639		
Pk Hr Factor	0.000	0.000	0.930	0.899	0.902		Pk Hr Factor	0.000	0.000	0.884	0.938	0.952		

VOLUME

Parkridge Ave W/O Cresta Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_003

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	8,874					6,857	15,731
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			16	5	21		12:00			110	82	192	
00:15			9	4	13		12:15			97	93	190	
00:30			12	5	17		12:30			97	72	169	
00:45			6	43	6	20	12:45			99	403	88	335
					12	63						187	738
01:00			11	5	16		13:00			100	97	197	
01:15			7	2	9		13:15			97	77	174	
01:30			12	3	15		13:30			136	108	244	
01:45			7	37	5	15	13:45			145	478	90	372
					12	52						235	850
02:00			10	4	14		14:00			161	158	319	
02:15			6	6	12		14:15			170	111	281	
02:30			14	5	19		14:30			221	115	336	
02:45			10	40	3	18	14:45			216	768	132	516
					13	58						348	1284
03:00			7	7	14		15:00			239	120	359	
03:15			4	14	18		15:15			234	91	325	
03:30			10	22	32		15:30			270	106	376	
03:45			7	28	30	94	15:45			259	1002	115	432
					30	94						374	1434
04:00			9	28	37		16:00			254	86	340	
04:15			5	42	47		16:15			283	94	377	
04:30			24	83	107		16:30			287	87	374	
04:45			22	60	126	317	16:45			295	1119	84	351
					126	317						379	1470
05:00			19	67	86		17:00			288	103	391	
05:15			13	72	85		17:15			269	110	379	
05:30			30	140	170		17:30			265	84	349	
05:45			32	94	173	514	17:45			268	1090	92	389
					173	514						360	1479
06:00			27	79	106		18:00			239	105	344	
06:15			34	112	146		18:15			189	60	249	
06:30			37	130	167		18:30			169	77	246	
06:45			45	143	238	657	18:45			119	716	80	322
					238	657						199	1038
07:00			71	194	265		19:00			130	70	200	
07:15			106	262	368		19:15			111	50	161	
07:30			134	237	371		19:30			98	53	151	
07:45			100	411	314	1318	19:45			92	431	40	213
					314	1318						132	644
08:00			90	150	240		20:00			86	39	125	
08:15			81	138	219		20:15			93	30	123	
08:30			60	117	177		20:30			74	38	112	
08:45			54	285	162	798	20:45			63	316	32	139
					162	798						95	455
09:00			54	72	126		21:00			74	26	100	
09:15			60	81	141		21:15			70	29	99	
09:30			71	57	128		21:30			58	16	74	
09:45			65	250	124	519	21:45			52	254	30	101
					124	519						82	355
10:00			55	67	122		22:00			46	16	62	
10:15			67	72	139		22:15			47	17	64	
10:30			57	54	111		22:30			38	14	52	
10:45			64	243	141	513	22:45			42	173	10	57
					141	513						52	230
11:00			85	74	159		23:00			32	16	48	
11:15			93	73	166		23:15			31	14	45	
11:30			94	82	176		23:30			31	13	44	
11:45			94	366	176	677	23:45			30	124	7	50
					176	677						37	174
TOTALS			2000	3580	5580		TOTALS			6874	3277	10151	
SPLIT %			35.8%	64.2%	35.5%		SPLIT %			67.7%	32.3%	64.5%	

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	8,874					6,857	15,731
AM Peak Hour			07:15	07:00	07:00		PM Peak Hour			16:15	14:00	16:30	
AM Pk Volume			430	907	1318		PM Pk Volume			1153	516	1523	
Pk Hr Factor			0.802	0.865	0.888		Pk Hr Factor			0.977	0.816	0.974	
7 - 9 Volume	0	0	696	1420	2116		4 - 6 Volume	0	0	2209	740	2949	
7 - 9 Peak Hour			07:15	07:00	07:00		4 - 6 Peak Hour			16:15	17:00	16:30	
7 - 9 Pk Volume	0	0	430	907	1318		4 - 6 Pk Volume	0	0	1153	389	1523	
Pk Hr Factor	0.000	0.000	0.802	0.865	0.888		Pk Hr Factor	0.000	0.000	0.977	0.884	0.974	

VOLUME

Parkridge Ave E/O Cresta Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_004

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						4,478		
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			10	1	11		12:00			63	47	110		
00:15			8	1	9		12:15			51	49	100		
00:30			6	3	9		12:30			61	34	95		
00:45			3	27	4	9	12:45			38	213	49	179	
01:00			5		1	6	13:00			63		46	109	
01:15			3		0	3	13:15			48		40	88	
01:30			3		3	6	13:30			74		53	127	
01:45			5	16	4	8	13:45			92	277	41	180	
02:00			3		4	7	14:00			88		150	238	
02:15			1		2	3	14:15			86		63	149	
02:30			8		1	9	14:30			83		65	148	
02:45			5	17	2	9	14:45			119	376	74	352	
03:00			4		5	9	15:00			108		81	189	
03:15			2		7	9	15:15			106		55	161	
03:30			1		8	9	15:30			100		74	174	
03:45			3	10	12	32	15:45			106	420	69	279	
04:00			2		10	12	16:00			133		41	174	
04:15			4		28	32	16:15			98		50	148	
04:30			5		30	35	16:30			119		46	165	
04:45			3	14	51	119	16:45			124	474	52	189	
05:00			8		27	35	17:00			139		49	188	
05:15			4		39	43	17:15			165		59	224	
05:30			14		48	62	17:30			127		63	190	
05:45			10	36	50	164	17:45			108	539	53	224	
06:00			15		33	48	18:00			108		62	170	
06:15			11		55	66	18:15			79		38	117	
06:30			18		66	84	18:30			84		32	116	
06:45			37	81	87	241	18:45			72	343	47	179	
07:00			67		107	174	19:00			67		38	105	
07:15			98		142	240	19:15			48		31	79	
07:30			91		168	259	19:30			52		27	79	
07:45			74	330	118	535	19:45			44	211	18	114	
08:00			49		74	123	20:00			47		23	70	
08:15			37		76	113	20:15			44		18	62	
08:30			46		59	105	20:30			38		26	64	
08:45			28	160	64	273	20:45			39	168	15	82	
09:00			26		39	65	21:00			49		13	62	
09:15			30		61	91	21:15			42		15	57	
09:30			40		34	74	21:30			29		10	39	
09:45			45	141	36	170	21:45			23	143	13	51	
10:00			46		44	90	22:00			19		9	28	
10:15			37		41	78	22:15			30		11	41	
10:30			25		35	60	22:30			23		6	29	
10:45			37	145	39	159	22:45			18	90	4	30	
11:00			45		38	83	23:00			11		5	16	
11:15			70		49	119	23:15			11		6	17	
11:30			41		45	86	23:30			7		5	12	
11:45			54	210	38	170	23:45			8	37	2	18	
TOTALS	1187				1889	3076	TOTALS	3291				1877	5168	
SPLIT %	38.6%				61.4%	37.3%	SPLIT %	63.7%				36.3%	62.7%	

DAILY TOTALS					NB	SB	EB				WB	Total
					0	0	4,478				3,766	8,244

AM Peak Hour			07:00	07:00	07:00	PM Peak Hour			16:45	14:00	16:45
AM Pk Volume			330	535	865	PM Pk Volume			555	352	778
Pk Hr Factor			0.842	0.796	0.835	Pk Hr Factor			0.841	0.587	0.868
7 - 9 Volume	0	0	490	808	1298	4 - 6 Volume	0	0	1013	413	1426
7 - 9 Peak Hour			07:00	07:00	07:00	4 - 6 Peak Hour			16:45	17:00	16:45
7 - 9 Pk Volume	0	0	330	535	865	4 - 6 Pk Volume	0	0	555	224	778
Pk Hr Factor	0.000	0.000	0.842	0.796	0.835	Pk Hr Factor	0.000	0.000	0.841	0.889	0.868

VOLUME

Cresta Rd S/O Parkridge Ave

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_005

DAILY TOTALS					NB	SB	EBWB					Total	
					4,291	5,389						0	0
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	5	14			19		12:00	50	68			118	
00:15	4	9			13		12:15	63	55			118	
00:30	2	4			6		12:30	47	68			115	
00:45	6	17	7	34	13	51	12:45	56	216	65	256	121	472
01:00	4	10			14		13:00	66	54			120	
01:15	0	4			4		13:15	50	49			99	
01:30	2	6			8		13:30	73	74			147	
01:45	1	7	3	23	4	30	13:45	71	260	79	256	150	516
02:00	0	5			5		14:00	62	114			176	
02:15	5	2			7		14:15	71	100			171	
02:30	4	8			12		14:30	64	150			214	
02:45	2	11	7	22	9	33	14:45	82	279	129	493	211	772
03:00	3	3			6		15:00	68	124			192	
03:15	8	1			9		15:15	61	132			193	
03:30	14	3			17		15:30	68	176			244	
03:45	12	37	6	13	18	50	15:45	71	268	192	624	263	892
04:00	19	10			29		16:00	76	170			246	
04:15	16	3			19		16:15	58	140			198	
04:30	53	9			62		16:30	59	188			247	
04:45	59	147	25	47	84	194	16:45	56	249	188	686	244	935
05:00	38	10			48		17:00	77	181			258	
05:15	43	15			58		17:15	70	163			233	
05:30	101	23			124		17:30	53	173			226	
05:45	94	276	32	80	126	356	17:45	65	265	146	663	211	928
06:00	56	20			76		18:00	57	150			207	
06:15	61	22			83		18:15	47	95			142	
06:30	80	35			115		18:30	54	104			158	
06:45	119	316	28	105	147	421	18:45	50	208	86	435	136	643
07:00	122	38			160		19:00	45	71			116	
07:15	161	44			205		19:15	33	66			99	
07:30	125	83			208		19:30	32	72			104	
07:45	135	543	73	238	208	781	19:45	26	136	49	258	75	394
08:00	95	61			156		20:00	27	53			80	
08:15	72	38			110		20:15	20	41			61	
08:30	73	29			102		20:30	20	47			67	
08:45	51	291	54	182	105	473	20:45	24	91	25	166	49	257
09:00	44	35			79		21:00	18	46			64	
09:15	32	41			73		21:15	20	31			51	
09:30	42	44			86		21:30	10	24			34	
09:45	37	155	43	163	80	318	21:45	20	68	25	126	45	194
10:00	43	48			91		22:00	11	28			39	
10:15	40	48			88		22:15	10	22			32	
10:30	31	30			61		22:30	10	24			34	
10:45	49	163	35	161	84	324	22:45	7	38	14	88	21	126
11:00	46	43			89		23:00	10	22			32	
11:15	52	51			103		23:15	10	17			27	
11:30	57	54			111		23:30	10	14			24	
11:45	61	216	55	203	116	419	23:45	4	34	14	67	18	101
TOTALS	2179	1271			3450		TOTALS	2112	4118			6230	
SPLIT %	63.2%	36.8%			35.6%		SPLIT %	33.9%	66.1%			64.4%	

DAILY TOTALS					NB	SB					EB	WB	Total	
					4,291	5,389					0	0	9,680	

AM Peak Hour	07:00	07:15			07:00	PM Peak Hour	14:15	16:30			16:30
AM Pk Volume	543	261			781	PM Pk Volume	285	720			982
Pk Hr Factor	0.843	0.786			0.939	Pk Hr Factor	0.869	0.957			0.952
7 - 9 Volume	834	420	0	0	1254	4 - 6 Volume	514	1349	0	0	1863
7 - 9 Peak Hour	07:00	07:15			07:00	4 - 6 Peak Hour	17:00	16:30			16:30
7 - 9 Pk Volume	543	261	0	0	781	4 - 6 Pk Volume	265	720	0	0	982
Pk Hr Factor	0.843	0.786	0.000	0.000	0.939	Pk Hr Factor	0.860	0.957	0.000	0.000	0.952

VOLUME

6th St W/O El Sobrante Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_006

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						12,887	12,953	25,840
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			24	18	42		12:00			178	238	416		
00:15			12	14	26		12:15			168	178	346		
00:30			13	13	26		12:30			173	218	391		
00:45			18	67	11	56	12:45			176	695	199	833	
01:00			13	18	31		13:00			159	235	394		
01:15			11	7	18		13:15			173	213	386		
01:30			12	20	32		13:30			173	289	462		
01:45			15	51	19	64	13:45			177	682	254	991	
02:00			15	13	28		14:00			179	243	422		
02:15			7	6	13		14:15			178	224	402		
02:30			15	9	24		14:30			132	351	483		
02:45			19	56	4	32	14:45			129	618	288	1106	
03:00			18	14	32		15:00			109	287	396		
03:15			35	9	44		15:15			341	221	562		
03:30			36	18	54		15:30			358	265	623		
03:45			53	142	24	65	15:45			359	1167	233	1006	
04:00			32	26	58		16:00			364	252	616		
04:15			32	44	76		16:15			377	227	604		
04:30			60	120	180		16:30			395	278	673		
04:45			84	208	189	379	16:45			405	1541	258	1015	
05:00			41	126	167		17:00			401	274	675		
05:15			56	142	198		17:15			394	226	620		
05:30			88	151	239		17:30			367	200	567		
05:45			141	326	157	576	17:45			272	1434	231	931	
06:00			59	148	207		18:00			245	177	422		
06:15			78	148	226		18:15			226	134	360		
06:30			70	174	244		18:30			195	148	343		
06:45			108	315	187	657	18:45			157	823	125	584	
07:00			98	171	269		19:00			138	154	292		
07:15			112	192	304		19:15			144	131	275		
07:30			131	221	352		19:30			122	80	202		
07:45			182	523	204	788	19:45			88	492	75	440	
08:00			148	198	346		20:00			84	71	155		
08:15			124	163	287		20:15			80	66	146		
08:30			121	177	298		20:30			84	65	149		
08:45			128	521	165	703	20:45			105	353	53	255	
09:00			111	160	271		21:00			91	79	170		
09:15			119	138	257		21:15			141	56	197		
09:30			113	152	265		21:30			108	50	158		
09:45			126	469	167	617	21:45			138	478	43	228	
10:00			150	132	282		22:00			145	57	202		
10:15			138	140	278		22:15			109	28	137		
10:30			149	145	294		22:30			132	44	176		
10:45			124	561	182	599	22:45			95	481	27	156	
11:00			107	185	292		23:00			112	39	151		
11:15			140	176	316		23:15			69	34	103		
11:30			169	176	345		23:30			62	42	104		
11:45			165	581	199	736	23:45			60	303	21	136	
TOTALS			3820	5272	9092		TOTALS			9067	7681	16748		
SPLIT %			42.0%	58.0%	35.2%		SPLIT %			54.1%	45.9%	64.8%		

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0	12,887					12,953	25,840	
AM Peak Hour			11:45	11:45	11:45		PM Peak Hour			16:30	14:15	16:30		
AM Pk Volume			684	833	1517		PM Pk Volume			1595	1150	2631		
Pk Hr Factor			0.961	0.875	0.912		Pk Hr Factor			0.985	0.819	0.974		
7 - 9 Volume	0	0	1044	1491	2535		4 - 6 Volume	0	0	2975	1946	4921		
7 - 9 Peak Hour			07:30	07:15	07:15		4 - 6 Peak Hour			16:30	16:15	16:30		
7 - 9 Pk Volume	0	0	585	815	1388		4 - 6 Pk Volume	0	0	1595	1037	2631		
Pk Hr Factor	0.000	0.000	0.804	0.922	0.899		Pk Hr Factor	0.000	0.000	0.985	0.933	0.974		

VOLUME
6th St W/O Radio Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_007

DAILY TOTALS					NB	SB	EBWB					Total	
					0	0						24,767	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			22	25	47		12:00			132	185	317	
00:15			17	17	34		12:15			167	160	327	
00:30			12	14	26		12:30			147	171	318	
00:45			12	63	10	66	12:45			162	608	166	682
					22	129						328	1290
01:00			23	17	40		13:00			182	177	359	
01:15			19	15	34		13:15			165	160	325	
01:30			33	11	44		13:30			171	266	437	
01:45			26	101	10	53	13:45			187	705	201	804
					36	154						388	1509
02:00			16	9	25		14:00			194	211	405	
02:15			7	6	13		14:15			190	211	401	
02:30			17	17	34		14:30			279	308	587	
02:45			13	53	16	48	14:45			226	889	258	988
					29	101						484	1877
03:00			17	27	44		15:00			273	240	513	
03:15			24	16	40		15:15			288	204	492	
03:30			30	31	61		15:30			298	274	572	
03:45			41	112	45	119	15:45			327	1186	227	945
					86	231						554	2131
04:00			36	33	69		16:00			365	256	621	
04:15			40	57	97		16:15			328	218	546	
04:30			60	138	198		16:30			285	257	542	
04:45			112	248	161	389	16:45			325	1303	257	988
					273	637						582	2291
05:00			59	104	163		17:00			285	253	538	
05:15			76	116	192		17:15			332	224	556	
05:30			100	168	268		17:30			327	201	528	
05:45			140	375	188	576	17:45			282	1226	210	888
					328	951						492	2114
06:00			66	134	200		18:00			245	201	446	
06:15			90	157	247		18:15			222	176	398	
06:30			90	241	331		18:30			146	152	298	
06:45			125	371	247	779	18:45			172	785	112	641
					372	1150						284	1426
07:00			110	222	332		19:00			127	150	277	
07:15			117	252	369		19:15			124	96	220	
07:30			146	251	397		19:30			105	107	212	
07:45			199	572	231	956	19:45			76	432	100	453
					430	1528						176	885
08:00			160	201	361		20:00			95	83	178	
08:15			140	195	335		20:15			76	85	161	
08:30			123	177	300		20:30			77	57	134	
08:45			134	557	185	758	20:45			84	332	67	292
					319	1315						151	624
09:00			116	173	289		21:00			67	67	134	
09:15			127	128	255		21:15			82	65	147	
09:30			123	138	261		21:30			72	55	127	
09:45			123	489	128	567	21:45			58	279	57	244
					251	1056						115	523
10:00			140	131	271		22:00			40	74	114	
10:15			139	124	263		22:15			39	40	79	
10:30			108	143	251		22:30			36	50	86	
10:45			172	559	161	559	22:45			20	135	27	191
					333	1118						47	326
11:00			142	157	299		23:00			23	60	83	
11:15			154	122	276		23:15			29	32	61	
11:30			127	145	272		23:30			40	32	72	
11:45			160	583	150	574	23:45			12	104	16	140
					310	1157						28	244
TOTALS	4083				5444	9527	TOTALS	7984				7256	15240
SPLIT %	42.9%				57.1%	38.5%	SPLIT %	52.4%				47.6%	61.5%

DAILY TOTALS			NB	SB	EB			WB			Total	
			0	0							12,067	12,700
AM Peak Hour			07:30	06:45	07:15	PM Peak Hour			15:30	14:15	15:30	
AM Pk Volume			645	972	1557	PM Pk Volume			1318	1017	2293	
Pk Hr Factor			0.810	0.964	0.905	Pk Hr Factor			0.903	0.825	0.923	
7 - 9 Volume	0	0	1129	1714	2843	4 - 6 Volume		0	0	2529	1876	4405
7 - 9 Peak Hour			07:30	07:00	07:15	4 - 6 Peak Hour			16:00	16:30	16:00	
7 - 9 Pk Volume	0	0	645	956	1557	4 - 6 Pk Volume		0	0	1303	991	2291
Pk Hr Factor	0.000	0.000	0.810	0.948	0.905	Pk Hr Factor		0.000	0.000	0.892	0.964	0.922

VOLUME
Radio Rd N/O 6th St

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_008

DAILY TOTALS					NB	SB						EB	WB	Total	
					3,636	3,888						0	0	7,524	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00	3	7			10		12:00	49	79			128			
00:15	4	4			8		12:15	46	43			89			
00:30	3	2			5		12:30	40	85			125			
00:45	2	12	2	15	4	27	12:45	51	186	59	266	110	452		
01:00	7	11			18		13:00	42	54			96			
01:15	1	6			7		13:15	46	43			89			
01:30	7	10			17		13:30	54	106			160			
01:45	4	19	1	28	5	47	13:45	49	191	50	253	99	444		
02:00	3	6			9		14:00	65	51			116			
02:15	1	1			2		14:15	71	58			129			
02:30	3	5			8		14:30	77	118			195			
02:45	4	11	4	16	8	27	14:45	74	287	71	298	145	585		
03:00	9	4			13		15:00	75	60			135			
03:15	4	6			10		15:15	87	52			139			
03:30	12	3			15		15:30	88	113			201			
03:45	18	43	13	26	31	69	15:45	83	333	70	295	153	628		
04:00	20	12			32		16:00	79	73			152			
04:15	21	22			43		16:15	92	51			143			
04:30	33	15			48		16:30	89	109			198			
04:45	64	138	27	76	91	214	16:45	77	337	73	306	150	643		
05:00	34	29			63		17:00	70	116			186			
05:15	32	20			52		17:15	84	75			159			
05:30	65	30			95		17:30	92	74			166			
05:45	92	223	39	118	131	341	17:45	81	327	87	352	168	679		
06:00	43	30			73		18:00	60	66			126			
06:15	31	45			76		18:15	53	46			99			
06:30	37	51			88		18:30	36	40			76			
06:45	42	153	63	189	105	342	18:45	46	195	33	185	79	380		
07:00	48	58			106		19:00	34	86			120			
07:15	33	59			92		19:15	45	39			84			
07:30	47	74			121		19:30	15	34			49			
07:45	59	187	50	241	109	428	19:45	16	110	28	187	44	297		
08:00	40	53			93		20:00	17	33			50			
08:15	37	29			66		20:15	18	33			51			
08:30	39	38			77		20:30	15	23			38			
08:45	47	163	41	161	88	324	20:45	17	67	21	110	38	177		
09:00	43	47			90		21:00	18	31			49			
09:15	37	36			73		21:15	9	23			32			
09:30	34	37			71		21:30	11	10			21			
09:45	49	163	38	158	87	321	21:45	10	48	19	83	29	131		
10:00	60	38			98		22:00	12	29			41			
10:15	37	44			81		22:15	6	8			14			
10:30	44	46			90		22:30	13	25			38			
10:45	56	197	51	179	107	376	22:45	8	39	13	75	21	114		
11:00	44	68			112		23:00	5	31			36			
11:15	58	41			99		23:15	7	11			18			
11:30	35	49			84		23:30	4	10			14			
11:45	49	186	56	214	105	400	23:45	5	21	5	57	10	78		
TOTALS	1495	1421			2916		TOTALS	2141	2467			4608			
SPLIT %	51.3%	48.7%			38.8%		SPLIT %	46.5%	53.5%			61.2%			

DAILY TOTALS					NB	SB						EB	WB	Total	
					3,636	3,888						0	0	7,524	
AM Peak Hour	05:15	11:45			11:45		PM Peak Hour	15:45	16:30			16:30			
AM Pk Volume	232	263			447		PM Pk Volume	343	373			693			
Pk Hr Factor	0.630	0.774			0.873		Pk Hr Factor	0.932	0.804			0.875			
7 - 9 Volume	350	402	0	0	752		4 - 6 Volume	664	658	0	0	1322			
7 - 9 Peak Hour	07:00	07:00			07:00		4 - 6 Peak Hour	16:00	16:30			16:30			
7 - 9 Pk Volume	187	241	0	0	428		4 - 6 Pk Volume	337	373	0	0	693			
Pk Hr Factor	0.792	0.814	0.000	0.000	0.884		Pk Hr Factor	0.916	0.804	0.000	0.000	0.875			

VOLUME

El Sobrante Bet. 6th St & Magnolia Ave

Day: Thursday

Date: 9/19/2019

City: Corona

Project #: CA19_6122_009

DAILY TOTALS				NB	SB	EB				WB	Total
				4,257	5,089	0				0	9,346

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	3	37			40	12:00	63	102			165
00:15	5	31			36	12:15	52	109			161
00:30	5	31			36	12:30	77	81			158
00:45	5	18	23	122	28 140	12:45	64	256	56	348	120 604
01:00	5	31			36	13:00	74	74			148
01:15	11	35			46	13:15	45	82			127
01:30	11	27			38	13:30	83	113			196
01:45	9	36	24	117	33 153	13:45	65	267	73	342	138 609
02:00	6	25			31	14:00	67	70			137
02:15	6	32			38	14:15	72	92			164
02:30	7	20			27	14:30	67	123			190
02:45	3	22	30	107	33 129	14:45	64	270	97	382	161 652
03:00	9	32			41	15:00	77	97			174
03:15	7	21			28	15:15	68	94			162
03:30	34	44			78	15:30	60	94			154
03:45	13	63	28	125	41 188	15:45	66	271	72	357	138 628
04:00	14	41			55	16:00	59	100			159
04:15	24	26			50	16:15	46	82			128
04:30	28	20			48	16:30	72	106			178
04:45	45	111	22	109	67 220	16:45	42	219	99	387	141 606
05:00	27	19			46	17:00	54	108			162
05:15	47	24			71	17:15	50	109			159
05:30	68	21			89	17:30	60	95			155
05:45	100	242	26	90	126 332	17:45	48	212	92	404	140 616
06:00	41	29			70	18:00	58	78			136
06:15	48	27			75	18:15	45	64			109
06:30	57	34			91	18:30	51	64			115
06:45	70	216	17	107	87 323	18:45	57	211	68	274	125 485
07:00	62	62			124	19:00	51	51			102
07:15	57	76			133	19:15	46	39			85
07:30	67	73			140	19:30	47	59			106
07:45	72	258	49	260	121 518	19:45	28	172	48	197	76 369
08:00	74	72			146	20:00	30	57			87
08:15	63	47			110	20:15	43	48			91
08:30	74	31			105	20:30	33	28			61
08:45	74	285	36	186	110 471	20:45	34	140	47	180	81 320
09:00	71	44			115	21:00	29	51			80
09:15	64	33			97	21:15	31	38			69
09:30	69	35			104	21:30	23	43			66
09:45	42	246	41	153	83 399	21:45	23	106	32	164	55 270
10:00	51	46			97	22:00	30	28			58
10:15	74	50			124	22:15	16	23			39
10:30	52	53			105	22:30	18	20			38
10:45	70	247	93	242	163 489	22:45	15	79	15	86	30 165
11:00	63	88			151	23:00	12	22			34
11:15	65	68			133	23:15	16	23			39
11:30	67	72			139	23:30	12	13			25
11:45	67	262	54	282	121 544	23:45	8	48	10	68	18 116
TOTALS	2006	1900			3906	TOTALS	2251	3189			5440
SPLIT %	51.4%	48.6%			41.8%	SPLIT %	41.4%	58.6%			58.2%

DAILY TOTALS				NB	SB	EB				WB	Total
				4,257	5,089	0				0	9,346

AM Peak Hour	08:00	11:45			11:45	PM Peak Hour	13:30	16:30			14:15
AM Pk Volume	285	346			605	PM Pk Volume	287	422			689
Pk Hr Factor	0.963	0.794			0.917	Pk Hr Factor	0.864	0.968			0.907
7 - 9 Volume	543	446	0	0	989	4 - 6 Volume	431	791	0	0	1222
7 - 9 Peak Hour	08:00	07:15			07:15	4 - 6 Peak Hour	16:00	16:30			16:30
7 - 9 Pk Volume	285	270	0	0	540	4 - 6 Pk Volume	219	422	0	0	640
Pk Hr Factor	0.963	0.888	0.000	0.000	0.925	Pk Hr Factor	0.760	0.968	0.000	0.000	0.899

VOLUME
Magnolia Ave W/O I-15

Day: Thursday
Date: 10/3/2019

City: Corona
Project #: CA19_6123_010

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						25,004		
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			56	20	76		12:00			363	350	713		
00:15			34	15	49		12:15			363	322	685		
00:30			34	11	45		12:30			359	340	699		
00:45			23	147	17	63	12:45			353	1438	380	1392	
01:00			33		14	47	13:00			361		356	717	
01:15			23		5	28	13:15			360		369	729	
01:30			37		7	44	13:30			373		381	754	
01:45			29	122	14	40	13:45			386	1480	386	1492	
02:00			27		9	36	14:00			410		418	828	
02:15			20		15	35	14:15			358		443	801	
02:30			31		7	38	14:30			434		459	893	
02:45			20	98	17	48	14:45			471	1673	456	1776	
03:00			31		12	43	15:00			475		392	867	
03:15			50		10	60	15:15			521		364	885	
03:30			53		19	72	15:30			507		369	876	
03:45			65	199	26	67	15:45			449	1952	418	1543	
04:00			72		42	114	16:00			453		444	897	
04:15			72		60	132	16:15			444		437	881	
04:30			84		82	166	16:30			499		423	922	
04:45			97	325	143	327	16:45			455	1851	466	1770	
05:00			96		104	200	17:00			544		491	1035	
05:15			114		139	253	17:15			529		443	972	
05:30			147		168	315	17:30			470		486	956	
05:45			165	522	280	691	17:45			390	1933	501	1921	
06:00			175		196	371	18:00			413		490	903	
06:15			251		256	507	18:15			349		430	779	
06:30			283		339	622	18:30			310		371	681	
06:45			299	1008	433	1224	18:45			355	1427	374	1665	
07:00			335		400	735	19:00			312		333	645	
07:15			400		488	888	19:15			275		347	622	
07:30			461		492	953	19:30			278		301	579	
07:45			383	1579	503	1883	19:45			228	1093	265	1246	
08:00			358		412	770	20:00			289		237	526	
08:15			302		445	747	20:15			210		259	469	
08:30			350		440	790	20:30			242		202	444	
08:45			293	1303	425	1722	20:45			224	965	207	905	
09:00			315		329	644	21:00			264		91	355	
09:15			289		345	634	21:15			235		55	290	
09:30			326		337	663	21:30			211		40	251	
09:45			315	1245	353	1364	21:45			206	916	52	238	
10:00			320		325	645	22:00			228		41	269	
10:15			324		309	633	22:15			154		54	208	
10:30			367		355	722	22:30			184		36	220	
10:45			336	1347	346	1335	22:45			139	705	42	173	
11:00			320		348	668	23:00			121		29	150	
11:15			285		348	633	23:15			111		40	151	
11:30			327		368	695	23:30			86		29	115	
11:45			345	1277	389	1453	23:45			81	399	23	121	
TOTALS	9172				10217	19389	TOTALS	15832				14242	30074	
SPLIT %	47.3%				52.7%	39.2%	SPLIT %	52.6%				47.4%	60.8%	

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0	25,004					24,459	49,463	
AM Peak Hour			07:15	07:15	07:15		PM Peak Hour			16:30	17:00	16:45		
AM Pk Volume			1602	1895	3497		PM Pk Volume			2027	1921	3884		
Pk Hr Factor			0.869	0.942	0.917		Pk Hr Factor			0.932	0.959	0.938		
7 - 9 Volume	0	0	2882	3605	6487		4 - 6 Volume	0	0	3784	3691	7475		
7 - 9 Peak Hour			07:15	07:15	07:15		4 - 6 Peak Hour			16:30	17:00	16:45		
7 - 9 Pk Volume	0	0	1602	1895	3497		4 - 6 Pk Volume	0	0	2027	1921	3884		
Pk Hr Factor	0.000	0.000	0.869	0.942	0.917		Pk Hr Factor	0.000	0.000	0.932	0.959	0.938		

VOLUME

Magnolia Ave E/O I-15

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_011

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	20,550					18,979	39,529
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			79	63	142		12:00			377	293	670	
00:15			79	68	147		12:15			320	307	627	
00:30			71	65	136		12:30			318	296	614	
00:45			53	282	56	252	12:45			364	1379	334	1230
					109	534						698	2609
01:00			18	68	86		13:00			342	312	654	
01:15			39	34	73		13:15			322	297	619	
01:30			37	56	93		13:30			318	329	647	
01:45			46	140	29	187	13:45			308	1290	336	1274
					75	327						644	2564
02:00			42	46	88		14:00			365	314	679	
02:15			27	57	84		14:15			353	295	648	
02:30			43	54	97		14:30			344	341	685	
02:45			48	160	47	204	14:45			376	1438	337	1287
					95	364						713	2725
03:00			43	70	113		15:00			422	337	759	
03:15			34	58	92		15:15			422	272	694	
03:30			105	68	173		15:30			382	355	737	
03:45			124	306	93	289	15:45			405	1631	316	1280
					217	595						721	2911
04:00			96	100	196		16:00			341	331	672	
04:15			140	146	286		16:15			356	316	672	
04:30			163	170	333		16:30			350	337	687	
04:45			178	577	189	605	16:45			328	1375	296	1280
					367	1182						624	2655
05:00			136	215	351		17:00			296	390	686	
05:15			170	170	340		17:15			330	277	607	
05:30			214	202	416		17:30			269	255	524	
05:45			216	736	192	779	17:45			243	1138	232	1154
					408	1515						475	2292
06:00			181	203	384		18:00			245	248	493	
06:15			175	166	341		18:15			191	197	388	
06:30			228	224	452		18:30			210	181	391	
06:45			293	877	259	852	18:45			195	841	232	858
					552	1729						427	1699
07:00			239	342	581		19:00			163	189	352	
07:15			321	392	713		19:15			144	181	325	
07:30			369	273	642		19:30			174	182	356	
07:45			453	1382	260	1267	19:45			161	642	128	680
					713	2649						289	1322
08:00			389	257	646		20:00			182	111	293	
08:15			332	281	613		20:15			180	113	293	
08:30			287	263	550		20:30			105	113	218	
08:45			346	1354	220	1021	20:45			116	583	101	438
					566	2375						217	1021
09:00			330	248	578		21:00			95	98	193	
09:15			317	238	555		21:15			98	59	157	
09:30			288	277	565		21:30			78	67	145	
09:45			260	1195	288	1051	21:45			74	345	91	315
					548	2246						165	660
10:00			248	313	561		22:00			73	78	151	
10:15			287	219	506		22:15			75	78	153	
10:30			273	203	476		22:30			81	86	167	
10:45			276	1084	267	1002	22:45			48	277	77	319
					543	2086						125	596
11:00			293	311	604		23:00			66	81	147	
11:15			315	242	557		23:15			44	56	100	
11:30			346	287	633		23:30			61	52	113	
11:45			357	1311	290	1130	23:45			36	207	36	225
					647	2441						72	432
TOTALS			9404	8639	18043		TOTALS			11146	10340	21486	
SPLIT %			52.1%	47.9%	45.6%		SPLIT %			51.9%	48.1%	54.4%	

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	20,550					18,979	39,529
AM Peak Hour			07:30	07:00	07:15		PM Peak Hour			15:00	16:15	15:00	
AM Pk Volume			1543	1267	2714		PM Pk Volume			1631	1339	2911	
Pk Hr Factor			0.852	0.808	0.952		Pk Hr Factor			0.966	0.858	0.959	
7 - 9 Volume	0	0	2736	2288	5024		4 - 6 Volume	0	0	2513	2434	4947	
7 - 9 Peak Hour			07:30	07:00	07:15		4 - 6 Peak Hour			16:00	16:15	16:15	
7 - 9 Pk Volume	0	0	1543	1267	2714		4 - 6 Pk Volume	0	0	1375	1339	2669	
Pk Hr Factor	0.000	0.000	0.852	0.808	0.952		Pk Hr Factor	0.000	0.000	0.966	0.858	0.971	

VOLUME

Ontario Ave W/O I-15

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_012

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						22,251	23,770	46,021
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			110	44	154		12:00			365	364	729		
00:15			82	59	141		12:15			346	378	724		
00:30			73	34	107		12:30			338	363	701		
00:45			63	328	52	189	12:45			379	1428	394	1499	
					115	517						773	2927	
01:00			26	35	61		13:00			351	341	692		
01:15			23	25	48		13:15			343	383	726		
01:30			27	28	55		13:30			350	385	735		
01:45			28	104	21	109	13:45			344	1388	414	1523	
					49	213						758	2911	
02:00			19	24	43		14:00			366	366	732		
02:15			25	27	52		14:15			357	443	800		
02:30			20	23	43		14:30			383	448	831		
02:45			29	93	30	104	14:45			393	1499	466	1723	
					59	197						859	3222	
03:00			18	32	50		15:00			429	369	798		
03:15			27	33	60		15:15			420	375	795		
03:30			35	40	75		15:30			410	297	707		
03:45			43	123	77	182	15:45			410	1669	321	1362	
					120	305						731	3031	
04:00			55	77	132		16:00			452	322	774		
04:15			60	81	141		16:15			383	313	696		
04:30			61	115	176		16:30			405	310	715		
04:45			70	246	162	435	16:45			417	1657	328	1273	
					232	681						745	2930	
05:00			83	116	199		17:00			434	342	776		
05:15			99	133	232		17:15			394	305	699		
05:30			135	131	266		17:30			425	314	739		
05:45			135	452	206	586	17:45			396	1649	330	1291	
					341	1038						726	2940	
06:00			163	243	406		18:00			372	300	672		
06:15			162	212	374		18:15			364	304	668		
06:30			199	288	487		18:30			381	329	710		
06:45			204	728	437	1180	18:45			345	1462	294	1227	
					641	1908						639	2689	
07:00			276	424	700		19:00			304	309	613		
07:15			288	547	835		19:15			280	284	564		
07:30			371	535	906		19:30			292	241	533		
07:45			308	1243	491	1997	19:45			266	1142	214	1048	
					799	3240						480	2190	
08:00			290	417	707		20:00			269	214	483		
08:15			263	394	657		20:15			248	188	436		
08:30			250	398	648		20:30			241	187	428		
08:45			260	1063	392	1601	20:45			249	1007	172	761	
					652	2664						421	1768	
09:00			270	352	622		21:00			201	147	348		
09:15			298	335	633		21:15			218	175	393		
09:30			258	314	572		21:30			177	166	343		
09:45			276	1102	351	1352	21:45			157	753	160	648	
					627	2454						317	1401	
10:00			275	338	613		22:00			127	140	267		
10:15			295	353	648		22:15			110	114	224		
10:30			335	353	688		22:30			84	114	198		
10:45			299	1204	334	1378	22:45			73	394	117	485	
					633	2582						190	879	
11:00			281	380	661		23:00			82	107	189		
11:15			326	368	694		23:15			74	100	174		
11:30			287	362	649		23:30			77	76	153		
11:45			339	1233	357	1467	23:45			51	284	67	350	
					696	2700						118	634	
TOTALS			7919	10580	18499		TOTALS			14332	13190	27522		
SPLIT %			42.8%	57.2%	40.2%		SPLIT %			52.1%	47.9%	59.8%		

DAILY TOTALS			NB	SB	EB			WB			Total
			0	0							22,251
AM Peak Hour			11:45	07:00	07:15	PM Peak Hour			15:15	14:15	14:15
AM Pk Volume			1388	1997	3247	PM Pk Volume			1692	1726	3288
Pk Hr Factor			0.951	0.913	0.896	Pk Hr Factor			0.936	0.926	0.957
7 - 9 Volume	0	0	2306	3598	5904	4 - 6 Volume	0	0	3306	2564	5870
7 - 9 Peak Hour			07:15	07:00	07:15	4 - 6 Peak Hour			16:45	16:15	16:45
7 - 9 Pk Volume	0	0	1257	1997	3247	4 - 6 Pk Volume	0	0	1670	1293	2959
Pk Hr Factor	0.000	0.000	0.847	0.913	0.896	Pk Hr Factor	0.000	0.000	0.962	0.945	0.953

VOLUME
Ontario Ave E/O I-15

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_013

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						11,548	15,815	27,363
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			26	22	48		12:00			178	210	388		
00:15			16	18	34		12:15			133	257	390		
00:30			24	20	44		12:30			151	218	369		
00:45			15	81	14	74	12:45			184	646	229	914	
01:00			17	26	43		13:00			168	210	378		
01:15			25	12	37		13:15			172	253	425		
01:30			20	24	44		13:30			173	198	371		
01:45			25	87	29	91	13:45			218	731	242	903	
02:00			16	28	44		14:00			243	255	498		
02:15			15	17	32		14:15			228	254	482		
02:30			9	10	19		14:30			245	253	498		
02:45			12	52	9	64	14:45			213	929	249	1011	
03:00			21	24	45		15:00			233	226	459		
03:15			17	38	55		15:15			235	200	435		
03:30			23	53	76		15:30			250	205	455		
03:45			22	83	52	167	15:45			242	960	226	857	
04:00			27	56	83		16:00			264	224	488		
04:15			33	130	163		16:15			253	201	454		
04:30			20	143	163		16:30			254	202	456		
04:45			14	94	143	472	16:45			275	1046	210	837	
05:00			29	140	169		17:00			277	211	488		
05:15			36	159	195		17:15			274	176	450		
05:30			47	232	279		17:30			269	179	448		
05:45			51	163	240	771	17:45			289	1109	195	761	
06:00			41	196	237		18:00			246	194	440		
06:15			53	223	276		18:15			252	192	444		
06:30			51	283	334		18:30			251	200	451		
06:45			65	210	273	975	18:45			236	985	182	768	
07:00			91	265	356		19:00			196	182	378		
07:15			101	297	398		19:15			174	155	329		
07:30			153	299	452		19:30			158	166	324		
07:45			108	453	284	1145	19:45			113	641	133	636	
08:00			127	297	424		20:00			143	144	287		
08:15			119	274	393		20:15			117	133	250		
08:30			116	264	380		20:30			126	144	270		
08:45			154	516	251	1086	20:45			129	515	116	537	
09:00			114	264	378		21:00			92	135	227		
09:15			112	255	367		21:15			104	130	234		
09:30			107	229	336		21:30			63	89	152		
09:45			99	432	236	984	21:45			77	336	98	452	
10:00			121	241	362		22:00			47	93	140		
10:15			136	226	362		22:15			73	66	139		
10:30			134	239	373		22:30			48	58	106		
10:45			141	532	219	925	22:45			35	203	71	288	
11:00			146	241	387		23:00			34	52	86		
11:15			163	215	378		23:15			38	46	84		
11:30			151	224	375		23:30			37	35	72		
11:45			165	625	257	937	23:45			10	119	27	160	
TOTALS	3328				7691	11019	TOTALS	8220				8124	16344	
SPLIT %	30.2%				69.8%	40.3%	SPLIT %	50.3%				49.7%	59.7%	

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0	11,548					15,815	27,363	
AM Peak Hour			11:15	07:15	07:15		PM Peak Hour			17:00	14:00	14:00		
AM Pk Volume			657	1177	1666		PM Pk Volume			1109	1011	1940		
Pk Hr Factor			0.923	0.984	0.921		Pk Hr Factor			0.959	0.991	0.974		
7 - 9 Volume	0	0	969	2231	3200		4 - 6 Volume	0	0	2155	1598	3753		
7 - 9 Peak Hour			08:00	07:15	07:15		4 - 6 Peak Hour			17:00	16:00	16:00		
7 - 9 Pk Volume	0	0	516	1177	1666		4 - 6 Pk Volume	0	0	1109	837	1883		
Pk Hr Factor	0.000	0.000	0.838	0.984	0.921		Pk Hr Factor	0.000	0.000	0.959	0.934	0.965		

VOLUME

Ontario Ave N/O El Cerrito Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_014

DAILY TOTALS					NB	SB					EB	WB	Total
					12,910	9,680					0	0	22,590
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	24	12			36		12:00	199	128			327	
00:15	26	14			40		12:15	160	140			300	
00:30	28	16			44		12:30	153	115			268	
00:45	21	99	9	51	30	150	12:45	166	678	137	520	303	1198
01:00	11	10			21		13:00	165	127			292	
01:15	15	13			28		13:15	158	140			298	
01:30	14	14			28		13:30	197	150			347	
01:45	30	70	14	51	44	121	13:45	175	695	137	554	312	1249
02:00	29	4			33		14:00	170	140			310	
02:15	21	3			24		14:15	228	206			434	
02:30	17	10			27		14:30	194	187			381	
02:45	25	92	15	32	40	124	14:45	197	789	186	719	383	1508
03:00	14	5			19		15:00	190	231			421	
03:15	35	12			47		15:15	161	190			351	
03:30	38	9			47		15:30	172	210			382	
03:45	50	137	12	38	62	175	15:45	158	681	254	885	412	1566
04:00	31	19			50		16:00	183	233			416	
04:15	75	20			95		16:15	159	234			393	
04:30	106	22			128		16:30	177	242			419	
04:45	95	307	30	91	125	398	16:45	176	695	252	961	428	1656
05:00	126	31			157		17:00	174	258			432	
05:15	130	30			160		17:15	179	279			458	
05:30	141	45			186		17:30	147	246			393	
05:45	173	570	52	158	225	728	17:45	139	639	264	1047	403	1686
06:00	204	36			240		18:00	173	231			404	
06:15	226	47			273		18:15	156	222			378	
06:30	248	42			290		18:30	152	241			393	
06:45	256	934	54	179	310	1113	18:45	135	616	198	892	333	1508
07:00	220	87			307		19:00	114	214			328	
07:15	243	112			355		19:15	105	139			244	
07:30	250	111			361		19:30	128	101			229	
07:45	253	966	91	401	344	1367	19:45	130	477	93	547	223	1024
08:00	220	99			319		20:00	111	95			206	
08:15	231	131			362		20:15	111	90			201	
08:30	240	93			333		20:30	114	74			188	
08:45	225	916	92	415	317	1331	20:45	108	444	88	347	196	791
09:00	239	72			311		21:00	93	57			150	
09:15	218	89			307		21:15	120	59			179	
09:30	217	97			314		21:30	85	70			155	
09:45	226	900	97	355	323	1255	21:45	70	368	53	239	123	607
10:00	176	82			258		22:00	47	47			94	
10:15	181	125			306		22:15	44	49			93	
10:30	169	88			257		22:30	35	45			80	
10:45	167	693	130	425	297	1118	22:45	59	185	35	176	94	361
11:00	189	138			327		23:00	40	24			64	
11:15	208	120			328		23:15	42	16			58	
11:30	224	114			338		23:30	49	17			66	
11:45	172	793	149	521	321	1314	23:45	35	166	19	76	54	242
TOTALS	6477	2717			9194		TOTALS	6433	6963			13396	
SPLIT %	70.4%	29.6%			40.7%		SPLIT %	48.0%	52.0%			59.3%	

DAILY TOTALS					NB	SB					EB	WB	Total
					12,910	9,680					0	0	22,590
AM Peak Hour	06:45	11:45			07:30		PM Peak Hour	14:15	17:00			16:30	
AM Pk Volume	969	532			1386		PM Pk Volume	809	1047			1737	
Pk Hr Factor	0.946	0.893			0.957		Pk Hr Factor	0.887	0.938			0.948	
7 - 9 Volume	1882	816	0	0	2698		4 - 6 Volume	1334	2008	0	0	3342	
7 - 9 Peak Hour	07:00	07:30			07:30		4 - 6 Peak Hour	16:30	17:00			16:30	
7 - 9 Pk Volume	966	432	0	0	1386		4 - 6 Pk Volume	706	1047	0	0	1737	
Pk Hr Factor	0.955	0.824	0.000	0.000	0.957		Pk Hr Factor	0.986	0.938	0.000	0.000	0.948	

VOLUME

El Cerrito Rd W/O I-15

Day: Thursday

Date: 9/19/2019

City: Corona

Project #: CA19_6122_015

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	11,967					10,586	22,553
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			13	19	32		12:00			145	129	274	
00:15			16	20	36		12:15			153	127	280	
00:30			13	13	26		12:30			145	130	275	
00:45			6	48	20	72	12:45			193	636	157	543
					26	120						350	1179
01:00			7	15	22		13:00			138	142	280	
01:15			3	3	6		13:15			141	122	263	
01:30			8	10	18		13:30			162	135	297	
01:45			7	25	10	38	13:45			155	596	147	546
					17	63						302	1142
02:00			5	13	18		14:00			188	141	329	
02:15			5	7	12		14:15			191	217	408	
02:30			1	8	9		14:30			196	214	410	
02:45			6	17	6	34	14:45			200	775	177	749
					12	51						377	1524
03:00			3	7	10		15:00			245	155	400	
03:15			6	4	10		15:15			309	157	466	
03:30			8	6	14		15:30			292	156	448	
03:45			12	29	8	25	15:45			285	1131	135	603
					20	54						420	1734
04:00			18	21	39		16:00			318	103	421	
04:15			22	47	69		16:15			290	140	430	
04:30			28	110	138		16:30			274	126	400	
04:45			33	101	183	361	16:45			282	1164	118	487
					216	462						400	1651
05:00			45	168	213		17:00			274	133	407	
05:15			52	152	204		17:15			332	127	459	
05:30			71	156	227		17:30			276	126	402	
05:45			101	269	158	634	17:45			277	1159	160	546
					259	903						437	1705
06:00			113	133	246		18:00			229	148	377	
06:15			133	128	261		18:15			200	151	351	
06:30			140	140	280		18:30			245	155	400	
06:45			218	604	172	573	18:45			160	834	161	615
					390	1177						321	1449
07:00			216	232	448		19:00			161	159	320	
07:15			336	203	539		19:15			150	157	307	
07:30			281	205	486		19:30			101	168	269	
07:45			255	1088	133	773	19:45			105	517	161	645
					388	1861						266	1162
08:00			167	119	286		20:00			86	174	260	
08:15			229	154	383		20:15			63	170	233	
08:30			190	143	333		20:30			65	146	211	
08:45			223	809	133	549	20:45			82	296	108	598
					356	1358						190	894
09:00			152	146	298		21:00			46	93	139	
09:15			146	130	276		21:15			37	127	164	
09:30			122	129	251		21:30			49	87	136	
09:45			135	555	158	563	21:45			42	174	66	373
					293	1118						108	547
10:00			102	107	209		22:00			22	62	84	
10:15			123	100	223		22:15			32	43	75	
10:30			115	117	232		22:30			32	53	85	
10:45			123	463	101	425	22:45			16	102	57	215
					224	888						73	317
11:00			154	102	256		23:00			17	44	61	
11:15			116	120	236		23:15			10	46	56	
11:30			126	111	237		23:30			8	40	48	
11:45			133	529	120	453	23:45			11	46	36	166
					253	982						47	212
TOTALS			4537	4500	9037		TOTALS			7430	6086	13516	
SPLIT %			50.2%	49.8%	40.1%		SPLIT %			55.0%	45.0%	59.9%	

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	11,967					10,586	22,553
AM Peak Hour			07:00	06:45	06:45		PM Peak Hour			15:15	14:15	15:15	
AM Pk Volume			1088	812	1863		PM Pk Volume			1204	763	1755	
Pk Hr Factor			0.810	0.875	0.864		Pk Hr Factor			0.947	0.879	0.942	
7 - 9 Volume	0	0	1897	1322	3219		4 - 6 Volume	0	0	2323	1033	3356	
7 - 9 Peak Hour			07:00	07:00	07:00		4 - 6 Peak Hour			16:00	17:00	17:00	
7 - 9 Pk Volume	0	0	1088	773	1861		4 - 6 Pk Volume	0	0	1164	546	1705	
Pk Hr Factor	0.000	0.000	0.810	0.833	0.863		Pk Hr Factor	0.000	0.000	0.915	0.853	0.929	

VOLUME

El Cerrito Rd Bet. I-15 & Temescal Canyon Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_016

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						4,697	4,220	8,917
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			4	3	7		12:00			65	58	123		
00:15			4	5	9		12:15			65	41	106		
00:30			3	6	9		12:30			55	50	105		
00:45			5	16	4	18	12:45			106	291	47	196	
01:00			3	2	5		13:00			67	45	112		
01:15			2	5	7		13:15			68	47	115		
01:30			4	2	6		13:30			63	67	130		
01:45			3	12	1	10	13:45			69	267	60	219	
02:00			1	4	5		14:00			62	69	131		
02:15			3	1	4		14:15			173	108	281		
02:30			4	0	4		14:30			98	95	193		
02:45			0	8	5	10	14:45			83	416	75	347	
03:00			5	8	13		15:00			90	84	174		
03:15			5	2	7		15:15			127	66	193		
03:30			6	2	8		15:30			113	65	178		
03:45			1	17	4	16	15:45			131	461	68	283	
04:00			1	12	13		16:00			127	66	193		
04:15			3	13	16		16:15			101	66	167		
04:30			8	25	33		16:30			114	60	174		
04:45			5	17	21	71	16:45			109	451	41	233	
05:00			5	47	52		17:00			99	63	162		
05:15			13	57	70		17:15			104	68	172		
05:30			11	85	96		17:30			122	54	176		
05:45			12	41	81	270	17:45			120	445	52	237	
06:00			15	67	82		18:00			110	63	173		
06:15			13	60	73		18:15			87	55	142		
06:30			16	84	100		18:30			106	64	170		
06:45			33	77	87	298	18:45			78	381	69	251	
07:00			43	111	154		19:00			70	45	115		
07:15			102	113	215		19:15			68	39	107		
07:30			143	149	292		19:30			69	44	113		
07:45			62	350	53	426	19:45			43	250	49	177	
08:00			50	48	98		20:00			39	51	90		
08:15			77	96	173		20:15			21	30	51		
08:30			66	84	150		20:30			40	43	83		
08:45			75	268	54	282	20:45			27	127	29	153	
09:00			61	48	109		21:00			23	23	46		
09:15			46	42	88		21:15			27	20	47		
09:30			46	69	115		21:30			25	16	41		
09:45			46	199	45	204	21:45			24	99	12	71	
10:00			32	44	76		22:00			11	15	26		
10:15			37	32	69		22:15			15	10	25		
10:30			45	54	99		22:30			15	15	30		
10:45			64	178	44	174	22:45			12	53	10	50	
11:00			50	40	90		23:00			6	5	11		
11:15			64	55	119		23:15			8	11	19		
11:30			71	42	113		23:30			10	16	26		
11:45			61	246	44	181	23:45			3	27	11	43	
TOTALS	1429				1960	3389	TOTALS	3268				2260	5528	
SPLIT %	42.2%				57.8%	38.0%	SPLIT %	59.1%				40.9%	62.0%	

DAILY TOTALS				NB	SB	EB				WB	Total
				0	0	4,697				4,220	8,917
AM Peak Hour			07:15	06:45	06:45	PM Peak Hour			15:15	14:15	14:15
AM Pk Volume			357	460	781	PM Pk Volume			498	362	806
Pk Hr Factor			0.624	0.772	0.669	Pk Hr Factor			0.950	0.838	0.717
7 - 9 Volume	0	0	618	708	1326	4 - 6 Volume	0	0	896	470	1366
7 - 9 Peak Hour			07:15	07:00	07:00	4 - 6 Peak Hour			16:00	17:00	16:00
7 - 9 Pk Volume	0	0	357	426	776	4 - 6 Pk Volume	0	0	451	237	684
Pk Hr Factor	0.000	0.000	0.624	0.715	0.664	Pk Hr Factor	0.000	0.000	0.888	0.871	0.886

VOLUME

Bedford Canyon Rd S/O El Cerrito Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_017

DAILY TOTALS					NB	SB	EB					WB	Total
					4,909	4,312						0	0
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	6	5			11		12:00	70	47			117	
00:15	6	7			13		12:15	65	57			122	
00:30	13	4			17		12:30	77	36			113	
00:45	9	34	6	22	15	56	12:45	111	323	45	185	156	508
01:00	8	4			12		13:00	74	65			139	
01:15	1	1			2		13:15	78	45			123	
01:30	2	2			4		13:30	66	43			109	
01:45	3	14	3	10	6	24	13:45	85	303	56	209	141	512
02:00	3	3			6		14:00	90	90			180	
02:15	1	0			1		14:15	64	122			186	
02:30	3	3			6		14:30	74	110			184	
02:45	2	9	6	12	8	21	14:45	66	294	116	438	182	732
03:00	3	1			4		15:00	88	100			188	
03:15	4	1			5		15:15	45	124			169	
03:30	12	1			13		15:30	67	120			187	
03:45	12	31	2	5	14	36	15:45	83	283	115	459	198	742
04:00	28	2			30		16:00	74	119			193	
04:15	24	3			27		16:15	60	126			186	
04:30	26	2			28		16:30	48	108			156	
04:45	31	109	3	10	34	119	16:45	64	246	110	463	174	709
05:00	31	3			34		17:00	59	97			156	
05:15	33	5			38		17:15	62	109			171	
05:30	46	3			49		17:30	75	121			196	
05:45	58	168	5	16	63	184	17:45	60	256	132	459	192	715
06:00	64	8			72		18:00	69	115			184	
06:15	66	13			79		18:15	56	111			167	
06:30	82	9			91		18:30	65	107			172	
06:45	96	308	17	47	113	355	18:45	51	241	93	426	144	667
07:00	114	17			131		19:00	41	75			116	
07:15	137	46			183		19:15	45	80			125	
07:30	89	70			159		19:30	49	80			129	
07:45	91	431	54	187	145	618	19:45	43	178	63	298	106	476
08:00	104	33			137		20:00	47	58			105	
08:15	100	63			163		20:15	32	47			79	
08:30	116	47			163		20:30	37	43			80	
08:45	122	442	46	189	168	631	20:45	40	156	41	189	81	345
09:00	97	34			131		21:00	28	36			64	
09:15	71	25			96		21:15	25	34			59	
09:30	70	15			85		21:30	32	19			51	
09:45	82	320	37	111	119	431	21:45	24	109	34	123	58	232
10:00	51	35			86		22:00	27	18			45	
10:15	48	43			91		22:15	20	16			36	
10:30	50	51			101		22:30	9	14			23	
10:45	83	232	40	169	123	401	22:45	17	73	15	63	32	136
11:00	87	39			126		23:00	11	14			25	
11:15	75	39			114		23:15	17	18			35	
11:30	68	44			112		23:30	5	11			16	
11:45	79	309	44	166	123	475	23:45	7	40	13	56	20	96
TOTALS	2407	944			3351		TOTALS	2502	3368			5870	
SPLIT %	71.8%	28.2%			36.3%		SPLIT %	42.6%	57.4%			63.7%	

DAILY TOTALS					NB	SB	EB				WB	Total
					4,909	4,312	0				0	9,221
AM Peak Hour	08:00	07:30			08:00		PM Peak Hour	12:30	15:30			15:30
AM Pk Volume	442	220			631		PM Pk Volume	340	480			764
Pk Hr Factor	0.906	0.786			0.939		Pk Hr Factor	0.766	0.952			0.965
7 - 9 Volume	873	376	0	0	1249		4 - 6 Volume	502	922	0	0	1424
7 - 9 Peak Hour	08:00	07:30			08:00		4 - 6 Peak Hour	16:45	16:00			17:00
7 - 9 Pk Volume	442	220	0	0	631		4 - 6 Pk Volume	260	463	0	0	715
Pk Hr Factor	0.906	0.786	0.000	0.000	0.939		Pk Hr Factor	0.867	0.919	0.000	0.000	0.912

VOLUME

Bedford Canyon Rd N/O Cajalco Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_018

DAILY TOTALS					NB	SB	EB				WB	Total
					4,116	3,304	0				0	7,420
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL
00:00	6	4			10		12:00	71	27			98
00:15	5	4			9		12:15	52	37			89
00:30	13	4			17		12:30	69	27			96
00:45	9	33	3	15	12	48	12:45	103	295	37	128	140 423
01:00	9	0			9		13:00	69	42			111
01:15	1	0			1		13:15	67	35			102
01:30	0	0			0		13:30	53	34			87
01:45	2	12	0		2	12	13:45	60	249	34	145	94 394
02:00	0	0			0		14:00	74	54			128
02:15	1	0			1		14:15	56	80			136
02:30	3	1			4		14:30	77	91			168
02:45	0	4	2	3	2	7	14:45	55	262	88	313	143 575
03:00	1	0			1		15:00	84	80			164
03:15	1	1			2		15:15	74	114			188
03:30	4	1			5		15:30	79	111			190
03:45	4	10	0	2	4	12	15:45	78	315	101	406	179 721
04:00	7	2			9		16:00	67	99			166
04:15	7	4			11		16:15	65	111			176
04:30	8	3			11		16:30	45	97			142
04:45	12	34	6	15	18	49	16:45	64	241	85	392	149 633
05:00	16	2			18		17:00	67	86			153
05:15	14	6			20		17:15	65	95			160
05:30	20	5			25		17:30	65	112			177
05:45	19	69	9	22	28	91	17:45	57	254	118	411	175 665
06:00	34	10			44		18:00	68	86			154
06:15	36	12			48		18:15	49	98			147
06:30	44	12			56		18:30	54	85			139
06:45	64	178	12	46	76	224	18:45	47	218	69	338	116 556
07:00	108	15			123		19:00	44	52			96
07:15	125	26			151		19:15	40	53			93
07:30	75	54			129		19:30	48	45			93
07:45	81	389	46	141	127	530	19:45	55	187	43	193	98 380
08:00	61	33			94		20:00	45	33			78
08:15	65	41			106		20:15	44	22			66
08:30	83	31			114		20:30	34	18			52
08:45	75	284	39	144	114	428	20:45	34	157	14	87	48 244
09:00	85	30			115		21:00	36	16			52
09:15	51	23			74		21:15	29	15			44
09:30	57	20			77		21:30	31	13			44
09:45	58	251	31	104	89	355	21:45	18	114	16	60	34 174
10:00	39	36			75		22:00	32	12			44
10:15	49	31			80		22:15	20	9			29
10:30	41	33			74		22:30	11	8			19
10:45	65	194	38	138	103	332	22:45	17	80	8	37	25 117
11:00	60	34			94		23:00	8	3			11
11:15	65	39			104		23:15	11	6			17
11:30	56	36			92		23:30	9	2			11
11:45	72	253	39	148	111	401	23:45	5	33	5	16	10 49
TOTALS	1711	778			2489		TOTALS	2405	2526			4931
SPLIT %	68.7%	31.3%			33.5%		SPLIT %	48.8%	51.2%			66.5%

DAILY TOTALS					NB	SB	EB				WB	Total
					4,116	3,304	0				0	7,420
AM Peak Hour	07:00	07:30			07:00		PM Peak Hour	15:00	15:15			15:15
AM Pk Volume	389	174			530		PM Pk Volume	315	425			723
Pk Hr Factor	0.778	0.806			0.877		Pk Hr Factor	0.938	0.932			0.951
7 - 9 Volume	673	285	0	0	958		4 - 6 Volume	495	803	0	0	1298
7 - 9 Peak Hour	07:00	07:30			07:00		4 - 6 Peak Hour	16:45	17:00			17:00
7 - 9 Pk Volume	389	174	0	0	530		4 - 6 Pk Volume	261	411	0	0	665
Pk Hr Factor	0.778	0.806	0.000	0.000	0.877		Pk Hr Factor	0.974	0.871	0.000	0.000	0.939

VOLUME

Evelyn St S/O El Cerrito Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_019

DAILY TOTALS					NB	SB	EBWB					Total
					255	170						0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	0			0	12:00	3	0			3	
00:15	0	0			0	12:15	1	3			4	
00:30	0	0			0	12:30	6	1			7	
00:45	0	0			0	12:45	1	11	2	6	317	
01:00	0	0			0	13:00	2	0			2	
01:15	1	1			2	13:15	4	2			6	
01:30	0	0			0	13:30	0	2			2	
01:45	0	1	0	1	02	13:45	0	6	2	6	212	
02:00	0	0			0	14:00	4	8			12	
02:15	0	0			0	14:15	17	14			31	
02:30	0	1			1	14:30	4	4			8	
02:45	0	1	2		12	14:45	6	31	1	27	758	
03:00	1	0			1	15:00	1	5			6	
03:15	0	0			0	15:15	3	4			7	
03:30	0	0			0	15:30	1	7			8	
03:45	0	1	0		01	15:45	3	8	2	18	526	
04:00	0	0			0	16:00	5	1			6	
04:15	2	0			2	16:15	0	2			2	
04:30	3	0			3	16:30	1	1			2	
04:45	1	6	0		16	16:45	3	9	1	5	414	
05:00	2	0			2	17:00	2	1			3	
05:15	0	1			1	17:15	3	3			6	
05:30	2	0			2	17:30	5	1			6	
05:45	4	8	0	1	49	17:45	10	20	3	8	1328	
06:00	3	0			3	18:00	4	5			9	
06:15	3	0			3	18:15	7	1			8	
06:30	0	0			0	18:30	0	6			6	
06:45	5	11	2	2	713	18:45	5	16	1	13	629	
07:00	16	3			19	19:00	5	2			7	
07:15	14	13			27	19:15	0	0			0	
07:30	7	22			29	19:30	1	1			2	
07:45	9	46	2	40	1186	19:45	1	7	1	4	211	
08:00	5	3			8	20:00	6	2			8	
08:15	7	3			10	20:15	3	1			4	
08:30	10	2			12	20:30	3	2			5	
08:45	8	30	2	10	1040	20:45	1	13	3	8	421	
09:00	1	1			2	21:00	3	1			4	
09:15	2	0			2	21:15	0	3			3	
09:30	1	1			2	21:30	0	0			0	
09:45	2	6	1	3	39	21:45	1	4	2	6	310	
10:00	2	0			2	22:00	1	0			1	
10:15	2	1			3	22:15	1	0			1	
10:30	5	0			5	22:30	0	0			0	
10:45	2	11	1	2	313	22:45	0	2	0		02	
11:00	1	2			3	23:00	0	1			1	
11:15	1	0			1	23:15	0	1			1	
11:30	5	2			7	23:30	0	1			1	
11:45	1	8	1	5	213	23:45	0	0	3		03	
TOTALS	128	66			194	TOTALS	127	104			231	
SPLIT %	66.0%	34.0%			45.6%	SPLIT %	55.0%	45.0%			54.4%	

DAILY TOTALS					NB	SB						EB	WB	Total	
					255	170						0	0	425	
AM Peak Hour	07:00	06:45			07:00		PM Peak Hour	14:00	13:45					14:00	
AM Pk Volume	46	40			86		PM Pk Volume	31	28					58	
Pk Hr Factor	0.719	0.455			0.741		Pk Hr Factor	0.456	0.500					0.468	
7 - 9 Volume	76	50	0	0	126		4 - 6 Volume	29	13	0	0			42	
7 - 9 Peak Hour	07:00	07:00			07:00		4 - 6 Peak Hour	17:00	17:00					17:00	
7 - 9 Pk Volume	46	40	0	0	86		4 - 6 Pk Volume	20	8	0	0			28	
Pk Hr Factor	0.719	0.455	0.000	0.000	0.741		Pk Hr Factor	0.500	0.667	0.000	0.000			0.538	

VOLUME

Frances St S/O El Cerrito Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_020

DAILY TOTALS					NB	SB					EB	WB	Total
					45	117					0	0	162
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	1	1			2		12:00	0	3			3	
00:15	1	0			1		12:15	0	2			2	
00:30	0	0			0		12:30	0	3			3	
00:45	0	2	0	1	0	3	12:45	1	1	1	9	2	10
01:00	0	0			0		13:00	0	2			2	
01:15	0	0			0		13:15	1	2			3	
01:30	0	0			0		13:30	0	1			1	
01:45	0	0			0		13:45	0	1	3	8	3	9
02:00	0	0			0		14:00	2	3			5	
02:15	0	0			0		14:15	0	6			6	
02:30	0	0			0		14:30	2	0			2	
02:45	0	0			0		14:45	0	4	1	10	1	14
03:00	1	0			1		15:00	2	1			3	
03:15	0	0			0		15:15	0	2			2	
03:30	2	0			2		15:30	2	1			3	
03:45	1	4	0		1	4	15:45	0	4	6	10	6	14
04:00	0	0			0		16:00	1	3			4	
04:15	0	0			0		16:15	0	2			2	
04:30	0	0			0		16:30	0	4			4	
04:45	1	1	0		1	1	16:45	1	2	0	9	1	11
05:00	1	0			1		17:00	1	5			6	
05:15	0	0			0		17:15	0	2			2	
05:30	0	1			1		17:30	0	1			1	
05:45	0	1	0	1	0	2	17:45	0	1	3	11	3	12
06:00	1	1			2		18:00	0	1			1	
06:15	0	0			0		18:15	0	2			2	
06:30	0	0			0		18:30	0	2			2	
06:45	3	4	1	2	4	6	18:45	1	1	1	6	2	7
07:00	3	2			5		19:00	1	1			2	
07:15	0	2			2		19:15	1	2			3	
07:30	0	3			3		19:30	0	2			2	
07:45	1	4	1	8	2	12	19:45	0	2	3	8	3	10
08:00	0	1			1		20:00	1	2			3	
08:15	1	0			1		20:15	1	2			3	
08:30	1	2			3		20:30	0	0			0	
08:45	0	2	2	5	2	7	20:45	1	3	2	6	3	9
09:00	1	1			2		21:00	1	2			3	
09:15	0	1			1		21:15	0	0			0	
09:30	0	0			0		21:30	0	0			0	
09:45	0	1	1	3	1	4	21:45	0	1	2	4	2	5
10:00	0	4			4		22:00	1	1			2	
10:15	1	1			2		22:15	0	2			2	
10:30	0	1			1		22:30	0	1			1	
10:45	2	3	0	6	2	9	22:45	0	1	0	4	0	5
11:00	0	0			0		23:00	0	0			0	
11:15	0	1			1		23:15	0	1			1	
11:30	0	2			2		23:30	1	0			1	
11:45	1	1	2	5	3	6	23:45	0	1	0	1	0	2
TOTALS	23	31			54		TOTALS	22	86			108	
SPLIT %	42.6%	57.4%			33.3%		SPLIT %	20.4%	79.6%			66.7%	

DAILY TOTALS					NB	SB					EB	WB	Total
					45	117					0	0	162
AM Peak Hour	06:15	11:45			06:45		PM Peak Hour	13:45	15:45			13:45	
AM Pk Volume	6	10			14		PM Pk Volume	4	15			16	
Pk Hr Factor	0.500	0.833			0.700		Pk Hr Factor	0.500	0.625			0.667	
7 - 9 Volume	6	13	0	0	19		4 - 6 Volume	3	20	0	0	23	
7 - 9 Peak Hour	07:00	07:00			07:00		4 - 6 Peak Hour	16:00	16:15			16:15	
7 - 9 Pk Volume	4	8	0	0	12		4 - 6 Pk Volume	2	11	0	0	13	
Pk Hr Factor	0.333	0.667	0.000	0.000	0.600		Pk Hr Factor	0.500	0.550	0.000	0.000	0.542	

VOLUME

Katy Way S/O El Cerrito Rd & Grandview Dr

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_021

DAILY TOTALS					NB	SB	EBWB					Total
					281	234						0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	0			0	12:00	2	5			7	
00:15	1	0			1	12:15	4	2			6	
00:30	0	1			1	12:30	4	5			9	
00:45	0	1	0	1	02	12:45	3	13	4	16	729	
01:00	2	2			4	13:00	0	1			1	
01:15	0	2			2	13:15	5	1			6	
01:30	1	0			1	13:30	2	3			5	
01:45	0	3	0	4	07	13:45	2	9	4	9	618	
02:00	1	0			1	14:00	3	9			12	
02:15	0	0			0	14:15	14	13			27	
02:30	1	0			1	14:30	5	4			9	
02:45	1	3	0		13	14:45	6	28	1	27	755	
03:00	1	0			1	15:00	3	8			11	
03:15	1	0			1	15:15	3	9			12	
03:30	3	0			3	15:30	5	3			8	
03:45	1	6	1	1	27	15:45	3	14	2	22	536	
04:00	1	0			1	16:00	3	6			9	
04:15	1	0			1	16:15	0	6			6	
04:30	1	0			1	16:30	3	1			4	
04:45	1	4	0		14	16:45	2	8	1	14	322	
05:00	3	1			4	17:00	3	3			6	
05:15	2	0			2	17:15	5	3			8	
05:30	2	0			2	17:30	1	5			6	
05:45	3	10	0	1	311	17:45	1	10	1	12	222	
06:00	2	0			2	18:00	3	8			11	
06:15	7	1			8	18:15	1	5			6	
06:30	2	1			3	18:30	2	4			6	
06:45	3	14	1	3	417	18:45	0	6	1	18	124	
07:00	10	1			11	19:00	3	4			7	
07:15	26	8			34	19:15	3	4			7	
07:30	26	6			32	19:30	0	2			2	
07:45	4	66	2	17	683	19:45	2	8	4	14	622	
08:00	3	5			8	20:00	5	8			13	
08:15	9	2			11	20:15	2	4			6	
08:30	4	5			9	20:30	2	0			2	
08:45	6	22	5	17	1139	20:45	1	10	2	14	324	
09:00	2	1			3	21:00	3	2			5	
09:15	2	1			3	21:15	0	1			1	
09:30	3	4			7	21:30	1	4			5	
09:45	5	12	0	6	518	21:45	2	6	2	9	415	
10:00	2	0			2	22:00	0	3			3	
10:15	6	1			7	22:15	2	2			4	
10:30	2	3			5	22:30	0	0			0	
10:45	2	12	3	7	519	22:45	1	3	2	7	310	
11:00	1	3			4	23:00	0	0			0	
11:15	2	2			4	23:15	1	2			3	
11:30	4	2			6	23:30	2	2			4	
11:45	1	8	4	11	519	23:45	2	5	0	4	29	
TOTALS	161	68			229	TOTALS	120	166			286	
SPLIT %	70.3%	29.7%			44.5%	SPLIT %	42.0%	58.0%			55.5%	

DAILY TOTALS						NB	SB							EB	WB	Total	
						281	234							0	0	515	
AM Peak Hour	07:00	07:15				07:00	PM Peak Hour	14:00	13:45				14:00				
AM Pk Volume	66	21				83	PM Pk Volume	28	30				55				
Pk Hr Factor	0.635	0.656				0.610	Pk Hr Factor	0.500	0.577				0.509				
7 - 9 Volume	88	34	0	0	122	4 - 6 Volume	18	26	0	0	44						
7 - 9 Peak Hour	07:00	07:15				07:00	4 - 6 Peak Hour	16:30	16:00				16:45				
7 - 9 Pk Volume	66	21	0	0	83	4 - 6 Pk Volume	13	14	0	0	23						
Pk Hr Factor	0.635	0.656	0.000	0.000	0.610	Pk Hr Factor	0.650	0.583	0.000	0.000	0.719						

VOLUME

Temescal Canyon Rd Bet. El Cerrito Rd & Cajalco Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_023

DAILY TOTALS					NB	SB	EB					WB	Total	
					10,319	9,576						0		
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	11	8			19		12:00	127	153			280		
00:15	14	12			26		12:15	159	118			277		
00:30	14	7			21		12:30	133	129			262		
00:45	10	49	10	37	20	86	12:45	116	535	121	521	237	1056	
01:00	13	8			21		13:00	127	128			255		
01:15	12	9			21		13:15	152	136			288		
01:30	12	8			20		13:30	146	129			275		
01:45	17	54	7	32	24	86	13:45	159	584	130	523	289	1107	
02:00	16	2			18		14:00	161	114			275		
02:15	6	3			9		14:15	154	198			352		
02:30	8	9			17		14:30	112	214			326		
02:45	3	33	14	28	17	61	14:45	148	575	166	692	314	1267	
03:00	7	3			10		15:00	137	209			346		
03:15	20	8			28		15:15	148	214			362		
03:30	29	8			37		15:30	129	254			383		
03:45	29	85	8	27	37	112	15:45	135	549	257	934	392	1483	
04:00	30	13			43		16:00	115	291			406		
04:15	63	12			75		16:15	126	269			395		
04:30	78	14			92		16:30	133	275			408		
04:45	106	277	23	62	129	339	16:45	97	471	282	1117	379	1588	
05:00	103	14			117		17:00	122	304			426		
05:15	130	10			140		17:15	106	306			412		
05:30	200	22			222		17:30	116	317			433		
05:45	224	657	34	80	258	737	17:45	104	448	298	1225	402	1673	
06:00	194	35			229		18:00	111	264			375		
06:15	209	32			241		18:15	125	281			406		
06:30	256	30			286		18:30	125	235			360		
06:45	277	936	39	136	316	1072	18:45	124	485	251	1031	375	1516	
07:00	172	32			204		19:00	134	201			335		
07:15	111	54			165		19:15	107	170			277		
07:30	111	61			172		19:30	116	112			228		
07:45	121	515	77	224	198	739	19:45	95	452	99	582	194	1034	
08:00	218	73			291		20:00	98	95			193		
08:15	197	67			264		20:15	98	69			167		
08:30	178	81			259		20:30	116	69			185		
08:45	193	786	76	297	269	1083	20:45	82	394	79	312	161	706	
09:00	188	71			259		21:00	98	53			151		
09:15	171	83			254		21:15	101	53			154		
09:30	164	101			265		21:30	67	59			126		
09:45	133	656	86	341	219	997	21:45	77	343	54	219	131	562	
10:00	156	82			238		22:00	56	37			93		
10:15	124	115			239		22:15	42	37			79		
10:30	133	99			232		22:30	46	38			84		
10:45	137	550	112	408	249	958	22:45	59	203	36	148	95	351	
11:00	149	116			265		23:00	35	17			52		
11:15	130	146			276		23:15	48	11			59		
11:30	127	122			249		23:30	20	7			27		
11:45	154	560	164	548	318	1108	23:45	19	122	17	52	36	174	
TOTALS	5158	2220			7378		TOTALS	5161	7356			12517		
SPLIT %	69.9%	30.1%			37.1%		SPLIT %	41.2%	58.8%			62.9%		

DAILY TOTALS					NB	SB					EB	WB	Total	
					10,319	9,576					0	0	19,895	
AM Peak Hour	06:00	11:15			11:45		PM Peak Hour	13:30	17:00			17:00		
AM Pk Volume	936	585			1137		PM Pk Volume	620	1225			1673		
Pk Hr Factor	0.845	0.892			0.894		Pk Hr Factor	0.963	0.966			0.966		
7 - 9 Volume	1301	521	0	0	1822		4 - 6 Volume	919	2342	0	0	3261		
7 - 9 Peak Hour	08:00	07:45			08:00		4 - 6 Peak Hour	16:15	17:00			17:00		
7 - 9 Pk Volume	786	298	0	0	1083		4 - 6 Pk Volume	478	1225	0	0	1673		
Pk Hr Factor	0.901	0.920	0.000	0.000	0.930		Pk Hr Factor	0.898	0.966	0.000	0.000	0.966		

VOLUME

Temescal Canyon Rd Bet. Cajalco Rd & Dos Lagos Dr

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_024

DAILY TOTALS				NB	SB	EB				WB	Total
				10,912	9,512	0				0	20,424

AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL	
00:00	5		8						13		12:00	139		142						281	
00:15	15		8						23		12:15	113		135						248	
00:30	14		9						23		12:30	116		122						238	
00:45	13	47	7	32					20	79	12:45	116	484	148	547					264	1031
01:00	2		5						7		13:00	112		132						244	
01:15	7		4						11		13:15	113		123						236	
01:30	3		8						11		13:30	115		132						247	
01:45	4	16	6	23					10	39	13:45	148	488	164	551					312	1039
02:00	4		4						8		14:00	129		150						279	
02:15	4		4						8		14:15	133		177						310	
02:30	9		3						12		14:30	143		203						346	
02:45	5	22	3	14					8	36	14:45	162	567	205	735					367	1302
03:00	9		4						13		15:00	174		182						356	
03:15	5		2						7		15:15	153		259						412	
03:30	7		5						12		15:30	145		256						401	
03:45	13	34	4	15					17	49	15:45	150	622	267	964					417	1586
04:00	7		8						15		16:00	167		295						462	
04:15	8		7						15		16:15	135		285						420	
04:30	21		18						39		16:30	103		295						398	
04:45	18	54	20	53					38	107	16:45	128	533	280	1155					408	1688
05:00	36		11						47		17:00	160		280						440	
05:15	62		14						76		17:15	112		297						409	
05:30	135		20						155		17:30	96		316						412	
05:45	161	394	43	88					204	482	17:45	118	486	277	1170					395	1656
06:00	193		30						223		18:00	116		281						397	
06:15	259		28						287		18:15	98		250						348	
06:30	276		26						302		18:30	93		257						350	
06:45	392	1120	43	127					435	1247	18:45	97	404	225	1013					322	1417
07:00	418		60						478		19:00	95		163						258	
07:15	325		79						404		19:15	69		160						229	
07:30	320		59						379		19:30	83		132						215	
07:45	305	1368	73	271					378	1639	19:45	77	324	104	559					181	883
08:00	270		78						348		20:00	83		91						174	
08:15	248		88						336		20:15	86		61						147	
08:30	296		71						367		20:30	54		76						130	
08:45	274	1088	71	308					345	1396	20:45	44	267	56	284					100	551
09:00	218		75						293		21:00	75		57						132	
09:15	221		72						293		21:15	61		54						115	
09:30	213		78						291		21:30	45		69						114	
09:45	171	823	114	339					285	1162	21:45	44	225	39	219					83	444
10:00	179		94						273		22:00	30		34						64	
10:15	149		93						242		22:15	35		28						63	
10:30	148		128						276		22:30	25		41						66	
10:45	171	647	113	428					284	1075	22:45	27	117	22	125					49	242
11:00	162		97						259		23:00	22		17						39	
11:15	220		113						333		23:15	17		10						27	
11:30	176		106						282		23:30	16		12						28	
11:45	143	701	128	444					271	1145	23:45	26	81	9	48					35	129
TOTALS	6314		2142						8456		TOTALS	4598		7370						11968	
SPLIT %	74.7%		25.3%						41.4%		SPLIT %	38.4%		61.6%						58.6%	

DAILY TOTALS				NB	SB	EB				WB	Total
				10,912	9,512	0				0	20,424

AM Peak Hour	06:45	11:45			06:45	PM Peak Hour	14:45	16:45			15:30
AM Pk Volume	1455	527			1696	PM Pk Volume	634	1173			1700
Pk Hr Factor	0.870	0.928			0.887	Pk Hr Factor	0.911	0.928			0.920
7 - 9 Volume	2456	579	0	0	3035	4 - 6 Volume	1019	2325	0	0	3344
7 - 9 Peak Hour	07:00	07:45			07:00	4 - 6 Peak Hour	16:00	16:45			16:00
7 - 9 Pk Volume	1368	310	0	0	1639	4 - 6 Pk Volume	533	1173	0	0	1688
Pk Hr Factor	0.818	0.881	0.000	0.000	0.857	Pk Hr Factor	0.798	0.928	0.000	0.000	0.913

VOLUME

Temescal Canyon Rd Bet. Dos Lagos Dr & Dawson Canyon Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_025

DAILY TOTALS					NB	SB	EB					WB	Total	
					7,863	4,613						0	0	12,476
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	5	3			8		12:00	116	58			174		
00:15	1	6			7		12:15	77	65			142		
00:30	4	4			8		12:30	60	62			122		
00:45	1	11	5	18	6	29	12:45	62	315	83	268	145	583	
01:00	1	5			6		13:00	85	83			168		
01:15	2	3			5		13:15	75	75			150		
01:30	5	3			8		13:30	87	64			151		
01:45	6	14	2	13	8	27	13:45	71	318	78	300	149	618	
02:00	4	3			7		14:00	70	73			143		
02:15	6	3			9		14:15	70	61			131		
02:30	3	3			6		14:30	95	84			179		
02:45	3	16	3	12	6	28	14:45	89	324	75	293	164	617	
03:00	1	3			4		15:00	98	94			192		
03:15	2	2			4		15:15	65	90			155		
03:30	9	4			13		15:30	127	91			218		
03:45	3	15	3	12	6	27	15:45	107	397	121	396	228	793	
04:00	4	5			9		16:00	113	115			228		
04:15	7	10			17		16:15	95	112			207		
04:30	9	24			33		16:30	98	116			214		
04:45	17	37	36	75	53	112	16:45	81	387	101	444	182	831	
05:00	24	23			47		17:00	134	112			246		
05:15	44	17			61		17:15	50	101			151		
05:30	121	37			158		17:30	60	104			164		
05:45	137	326	55	132	192	458	17:45	62	306	109	426	171	732	
06:00	191	42			233		18:00	42	94			136		
06:15	257	27			284		18:15	28	80			108		
06:30	263	52			315		18:30	36	68			104		
06:45	292	1003	89	210	381	1213	18:45	30	136	70	312	100	448	
07:00	294	80			374		19:00	33	56			89		
07:15	312	70			382		19:15	32	39			71		
07:30	295	56			351		19:30	27	37			64		
07:45	259	1160	74	280	333	1440	19:45	15	107	31	163	46	270	
08:00	261	70			331		20:00	22	27			49		
08:15	277	71			348		20:15	25	19			44		
08:30	229	76			305		20:30	22	22			44		
08:45	260	1027	56	273	316	1300	20:45	4	73	31	99	35	172	
09:00	234	69			303		21:00	19	21			40		
09:15	208	41			249		21:15	20	21			41		
09:30	227	75			302		21:30	11	16			27		
09:45	159	828	65	250	224	1078	21:45	6	56	11	69	17	125	
10:00	149	69			218		22:00	3	13			16		
10:15	94	56			150		22:15	3	14			17		
10:30	129	63			192		22:30	3	15			18		
10:45	117	489	54	242	171	731	22:45	7	16	15	57	22	73	
11:00	104	60			164		23:00	1	8			9		
11:15	152	58			210		23:15	3	3			6		
11:30	125	66			191		23:30	8	8			16		
11:45	102	483	61	245	163	728	23:45	7	19	5	24	12	43	
TOTALS	5409	1762			7171		TOTALS	2454	2851			5305		
SPLIT %	75.4%	24.6%			57.5%		SPLIT %	46.3%	53.7%			42.5%		

DAILY TOTALS					NB	SB	EB					WB	Total
					7,863	4,613						0	0
AM Peak Hour	06:45	06:45			06:45	PM Peak Hour	15:30	15:45			15:30		
AM Pk Volume	1193	295			1488	PM Pk Volume	442	464			881		
Pk Hr Factor	0.956	0.829			0.974	Pk Hr Factor	0.870	0.959			0.966		
7 - 9 Volume	2187	553	0	0	2740	4 - 6 Volume	693	870	0	0	1563		
7 - 9 Peak Hour	07:00	07:45			07:00	4 - 6 Peak Hour	16:15	16:00			16:15		
7 - 9 Pk Volume	1160	291	0	0	1440	4 - 6 Pk Volume	408	444	0	0	849		
Pk Hr Factor	0.929	0.957	0.000	0.000	0.942	Pk Hr Factor	0.761	0.957	0.000	0.000	0.863		

VOLUME

Temescal Canyon Rd Bet. Dawson Canyon Rd & I-15

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_026

DAILY TOTALS					NB	SB	EB				WB	Total
					8,513	5,010	0				0	13,523
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL
00:00	3	4			7		12:00	102	71			173
00:15	1	12			13		12:15	73	86			159
00:30	6	13			19		12:30	81	67			148
00:45	11	21	8	37	19	58	12:45	76	332	69	293	145 625
01:00	8	7			15		13:00	90	84			174
01:15	9	8			17		13:15	58	88			146
01:30	15	10			25		13:30	66	90			156
01:45	11	43	12	37	23	80	13:45	79	293	82	344	161 637
02:00	18	17			35		14:00	87	75			162
02:15	41	16			57		14:15	67	69			136
02:30	28	18			46		14:30	75	97			172
02:45	46	133	19	70	65	203	14:45	90	319	80	321	170 640
03:00	14	38			52		15:00	59	108			167
03:15	36	25			61		15:15	73	95			168
03:30	33	26			59		15:30	73	104			177
03:45	30	113	34	123	64	236	15:45	78	283	150	457	228 740
04:00	27	15			42		16:00	79	148			227
04:15	59	40			99		16:15	56	130			186
04:30	48	20			68		16:30	60	151			211
04:45	65	199	43	118	108	317	16:45	53	248	131	560	184 808
05:00	55	41			96		17:00	56	140			196
05:15	117	33			150		17:15	53	135			188
05:30	185	33			218		17:30	53	86			139
05:45	215	572	34	141	249	713	17:45	49	211	93	454	142 665
06:00	243	45			288		18:00	18	91			109
06:15	292	36			328		18:15	35	101			136
06:30	331	39			370		18:30	24	86			110
06:45	341	1207	31	151	372	1358	18:45	22	99	64	342	86 441
07:00	301	37			338		19:00	15	84			99
07:15	326	62			388		19:15	16	46			62
07:30	298	45			343		19:30	26	44			70
07:45	292	1217	23	167	315	1384	19:45	10	67	34	208	44 275
08:00	315	45			360		20:00	13	39			52
08:15	279	47			326		20:15	20	35			55
08:30	289	51			340		20:30	13	19			32
08:45	288	1171	43	186	331	1357	20:45	1	47	21	114	22 161
09:00	234	57			291		21:00	13	25			38
09:15	223	51			274		21:15	18	25			43
09:30	234	44			278		21:30	11	17			28
09:45	191	882	61	213	252	1095	21:45	11	53	25	92	36 145
10:00	133	49			182		22:00	7	17			24
10:15	105	57			162		22:15	7	13			20
10:30	126	74			200		22:30	9	16			25
10:45	109	473	53	233	162	706	22:45	6	29	15	61	21 90
11:00	103	57			160		23:00	6	15			21
11:15	179	54			233		23:15	6	6			12
11:30	104	77			181		23:30	4	9			13
11:45	89	475	64	252	153	727	23:45	10	26	6	36	16 62
TOTALS	6506	1728			8234		TOTALS	2007	3282			5289
SPLIT %	79.0%	21.0%			60.9%		SPLIT %	37.9%	62.1%			39.1%

DAILY TOTALS					NB	SB	EB				WB	Total
					8,513	5,010	0				0	13,523
AM Peak Hour	06:30	11:30			06:30		PM Peak Hour	12:00	15:45			15:45
AM Pk Volume	1299	298			1468		PM Pk Volume	332	579			852
Pk Hr Factor	0.952	0.866			0.946		Pk Hr Factor	0.814	0.959			0.934
7 - 9 Volume	2388	353	0	0	2741		4 - 6 Volume	459	1014	0	0	1473
7 - 9 Peak Hour	07:15	08:00			07:15		4 - 6 Peak Hour	16:00	16:00			16:00
7 - 9 Pk Volume	1231	186	0	0	1406		4 - 6 Pk Volume	248	560	0	0	808
Pk Hr Factor	0.944	0.912	0.000	0.000	0.906		Pk Hr Factor	0.785	0.927	0.000	0.000	0.890

VOLUME

Temescal Canyon Rd Bet. I-15 & Lawson Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_027

DAILY TOTALS					NB	SB	EBWB					Total	
					8,977	8,733						0	0
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	11	17			28		12:00	105	103			208	
00:15	14	26			40		12:15	129	118			247	
00:30	3	19			22		12:30	105	121			226	
00:45	6	34	19	81	25	115	12:45	121	460	105	447	226	907
01:00	9	12			21		13:00	129	139			268	
01:15	8	9			17		13:15	104	126			230	
01:30	7	18			25		13:30	111	128			239	
01:45	8	32	7	46	15	78	13:45	135	479	139	532	274	1011
02:00	13	4			17		14:00	118	164			282	
02:15	4	16			20		14:15	124	118			242	
02:30	11	14			25		14:30	133	157			290	
02:45	9	37	25	59	34	96	14:45	127	502	130	569	257	1071
03:00	25	30			55		15:00	143	164			307	
03:15	37	24			61		15:15	98	154			252	
03:30	27	43			70		15:30	128	135			263	
03:45	49	138	54	151	103	289	15:45	112	481	141	594	253	1075
04:00	63	25			88		16:00	102	153			255	
04:15	80	69			149		16:15	121	136			257	
04:30	84	53			137		16:30	106	151			257	
04:45	78	305	54	201	132	506	16:45	97	426	126	566	223	992
05:00	104	45			149		17:00	117	144			261	
05:15	99	43			142		17:15	94	136			230	
05:30	117	68			185		17:30	112	130			242	
05:45	121	441	53	209	174	650	17:45	100	423	148	558	248	981
06:00	145	46			191		18:00	87	127			214	
06:15	199	55			254		18:15	98	158			256	
06:30	290	78			368		18:30	73	114			187	
06:45	358	992	82	261	440	1253	18:45	86	344	132	531	218	875
07:00	335	73			408		19:00	84	150			234	
07:15	235	89			324		19:15	80	107			187	
07:30	163	105			268		19:30	68	123			191	
07:45	173	906	105	372	278	1278	19:45	47	279	99	479	146	758
08:00	172	121			293		20:00	64	84			148	
08:15	166	108			274		20:15	62	109			171	
08:30	158	115			273		20:30	40	100			140	
08:45	127	623	154	498	281	1121	20:45	43	209	90	383	133	592
09:00	147	132			279		21:00	42	88			130	
09:15	159	142			301		21:15	45	91			136	
09:30	141	136			277		21:30	63	67			130	
09:45	134	581	110	520	244	1101	21:45	39	189	64	310	103	499
10:00	123	173			296		22:00	27	61			88	
10:15	104	142			246		22:15	21	42			63	
10:30	156	125			281		22:30	23	42			65	
10:45	130	513	131	571	261	1084	22:45	17	88	32	177	49	265
11:00	109	128			237		23:00	13	30			43	
11:15	131	118			249		23:15	14	29			43	
11:30	102	105			207		23:30	12	26			38	
11:45	103	445	152	503	255	948	23:45	11	50	30	115	41	165
TOTALS	5047	3472			8519		TOTALS	3930	5261			9191	
SPLIT %	59.2%	40.8%			48.1%		SPLIT %	42.8%	57.2%			51.9%	

DAILY TOTALS					NB	SB					EB	WB	Total	
					8,977	8,733					0	0	17,710	

AM Peak Hour	06:30	10:00			06:30	PM Peak Hour	14:15	14:30			14:30
AM Pk Volume	1218	571			1540	PM Pk Volume	527	605			1106
Pk Hr Factor	0.851	0.825			0.875	Pk Hr Factor	0.921	0.922			0.901
7 - 9 Volume	1529	870	0	0	2399	4 - 6 Volume	849	1124	0	0	1973
7 - 9 Peak Hour	07:00	08:00			07:00	4 - 6 Peak Hour	16:15	16:00			16:15
7 - 9 Pk Volume	906	498	0	0	1278	4 - 6 Pk Volume	441	566	0	0	998
Pk Hr Factor	0.676	0.808	0.000	0.000	0.783	Pk Hr Factor	0.911	0.925	0.000	0.000	0.956

VOLUME

Temescal Canyon Rd Bet. Lawson Rd & Trilogy Pkwy

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_028

DAILY TOTALS					NB	SB	EB				WB	Total
					9,012	7,935	0				0	16,947
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL
00:00	11	16			27		12:00	98	126			224
00:15	14	19			33		12:15	111	103			214
00:30	3	11			14		12:30	96	119			215
00:45	7	35	14	60	21	95	12:45	109	414	132	480	241 894
01:00	9	17			26		13:00	117	121			238
01:15	8	10			18		13:15	97	133			230
01:30	8	10			18		13:30	111	143			254
01:45	6	31	15	52	21	83	13:45	136	461	152	549	288 1010
02:00	9	11			20		14:00	109	148			257
02:15	4	15			19		14:15	110	147			257
02:30	11	11			22		14:30	146	117			263
02:45	7	31	15	52	22	83	14:45	130	495	138	550	268 1045
03:00	23	10			33		15:00	135	147			282
03:15	36	26			62		15:15	89	160			249
03:30	25	43			68		15:30	129	135			264
03:45	44	128	26	105	70	233	15:45	116	469	125	567	241 1036
04:00	59	32			91		16:00	102	131			233
04:15	77	38			115		16:15	116	135			251
04:30	73	35			108		16:30	101	120			221
04:45	76	285	41	146	117	431	16:45	95	414	135	521	230 935
05:00	97	53			150		17:00	110	120			230
05:15	97	46			143		17:15	87	125			212
05:30	112	45			157		17:30	99	131			230
05:45	118	424	52	196	170	620	17:45	99	395	141	517	240 912
06:00	154	39			193		18:00	87	138			225
06:15	217	52			269		18:15	93	119			212
06:30	304	79			383		18:30	69	110			179
06:45	401	1076	72	242	473	1318	18:45	90	339	126	493	216 832
07:00	351	79			430		19:00	78	104			182
07:15	262	59			321		19:15	75	128			203
07:30	189	85			274		19:30	74	108			182
07:45	220	1022	99	322	319	1344	19:45	50	277	83	423	133 700
08:00	201	104			305		20:00	65	87			152
08:15	212	124			336		20:15	61	97			158
08:30	159	110			269		20:30	41	84			125
08:45	130	702	132	470	262	1172	20:45	46	213	59	327	105 540
09:00	166	109			275		21:00	41	77			118
09:15	153	111			264		21:15	45	50			95
09:30	132	92			224		21:30	60	46			106
09:45	122	573	90	402	212	975	21:45	36	182	59	232	95 414
10:00	132	105			237		22:00	28	50			78
10:15	99	136			235		22:15	20	45			65
10:30	144	123			267		22:30	19	32			51
10:45	119	494	120	484	239	978	22:45	17	84	30	157	47 241
11:00	105	107			212		23:00	11	28			39
11:15	119	110			229		23:15	11	21			32
11:30	98	137			235		23:30	13	25			38
11:45	98	420	137	491	235	911	23:45	13	48	23	97	36 145
TOTALS	5221	3022			8243		TOTALS	3791	4913			8704
SPLIT %	63.3%	36.7%			48.6%		SPLIT %	43.6%	56.4%			51.4%

DAILY TOTALS					NB	SB	EB				WB	Total
					9,012	7,935	0				0	16,947
AM Peak Hour	06:30	11:15			06:30		PM Peak Hour	14:15	13:30			14:15
AM Pk Volume	1318	510			1607		PM Pk Volume	521	590			1070
Pk Hr Factor	0.822	0.931			0.849		Pk Hr Factor	0.892	0.970			0.949
7 - 9 Volume	1724	792	0	0	2516		4 - 6 Volume	809	1038	0	0	1847
7 - 9 Peak Hour	07:00	08:00			07:00		4 - 6 Peak Hour	16:15	16:00			16:00
7 - 9 Pk Volume	1022	470	0	0	1344		4 - 6 Pk Volume	422	521	0	0	935
Pk Hr Factor	0.728	0.890	0.000	0.000	0.781		Pk Hr Factor	0.909	0.965	0.000	0.000	0.931

VOLUME

Temescal Canyon Rd Bet. Trilogy Pkwy & Campbell Ranch Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_029

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						4,527	5,663	10,190
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			4	3	7		12:00			62	81	143		
00:15			4	7	11		12:15			42	51	93		
00:30			3	1	4		12:30			68	46	114		
00:45			6	17	3	14	12:45			50	222	57	235	
01:00			6	0	6		13:00			56	77	133		
01:15			7	4	11		13:15			58	68	126		
01:30			3	6	9		13:30			84	43	127		
01:45			9	25	5	15	13:45			69	267	74	262	
02:00			1	3	4		14:00			102	54	156		
02:15			1	1	2		14:15			91	49	140		
02:30			4	9	13		14:30			96	129	225		
02:45			1	7	10	23	14:45			75	364	93	325	
03:00			5	4	9		15:00			79	60	139		
03:15			1	6	7		15:15			107	67	174		
03:30			1	21	22		15:30			69	61	130		
03:45			9	16	22	53	15:45			99	354	76	264	
04:00			9	16	25		16:00			97	59	156		
04:15			11	32	43		16:15			102	64	166		
04:30			14	23	37		16:30			89	66	155		
04:45			11	45	43	114	16:45			94	382	58	247	
05:00			10	24	34		17:00			79	52	131		
05:15			15	50	65		17:15			99	52	151		
05:30			21	53	74		17:30			99	53	152		
05:45			23	69	80	207	17:45			112	389	58	215	
06:00			20	117	137		18:00			91	42	133		
06:15			36	179	215		18:15			95	34	129		
06:30			46	248	294		18:30			67	36	103		
06:45			43	145	336	880	18:45			75	328	36	148	
07:00			42	275	317		19:00			75	34	109		
07:15			56	221	277		19:15			80	38	118		
07:30			83	154	237		19:30			69	28	97		
07:45			91	272	240	890	19:45			57	281	13	113	
08:00			81	189	270		20:00			56	27	83		
08:15			63	162	225		20:15			47	24	71		
08:30			53	110	163		20:30			46	20	66		
08:45			60	257	99	560	20:45			32	181	28	99	
09:00			48	134	182		21:00			51	15	66		
09:15			45	86	131		21:15			26	19	45		
09:30			52	86	138		21:30			24	11	35		
09:45			51	196	71	377	21:45			34	135	10	55	
10:00			48	79	127		22:00			17	7	24		
10:15			38	53	91		22:15			26	7	33		
10:30			65	87	152		22:30			19	9	28		
10:45			51	202	75	294	22:45			17	79	8	31	
11:00			49	53	102		23:00			16	2	18		
11:15			69	64	133		23:15			15	3	18		
11:30			48	51	99		23:30			5	6	11		
11:45			81	247	61	229	23:45			11	47	2	13	
TOTALS	1498				3656	5154	TOTALS	3029				2007	5036	
SPLIT %	29.1%				70.9%	50.6%	SPLIT %	60.1%				39.9%	49.4%	

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0	4,527					5,663	10,190	
AM Peak Hour			07:30	06:30	06:30		PM Peak Hour			17:15	14:30	14:30		
AM Pk Volume			318	1080	1267		PM Pk Volume			401	349	706		
Pk Hr Factor			0.874	0.804	0.836		Pk Hr Factor			0.895	0.676	0.784		
7 - 9 Volume	0	0	529	1450	1979		4 - 6 Volume	0	0	771	462	1233		
7 - 9 Peak Hour			07:30	07:00	07:00		4 - 6 Peak Hour			17:00	16:00	16:00		
7 - 9 Pk Volume	0	0	318	890	1162		4 - 6 Pk Volume	0	0	389	247	629		
Pk Hr Factor	0.000	0.000	0.874	0.809	0.878		Pk Hr Factor	0.000	0.000	0.868	0.936	0.947		

VOLUME

Temescal Canyon Rd Bet. Campbell Ranch Rd & Indian Truck Trail Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_030

DAILY TOTALS					NB	SB	EBWB					Total
					1,601	2,385						0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	1	1			2	12:00	27	44			71	
00:15	0	10			10	12:15	18	27			45	
00:30	6	1			7	12:30	33	33			66	
00:45	0	7	4	16	423	12:45	22	100	36	140	58240	
01:00	0	0			0	13:00	28	35			63	
01:15	4	3			7	13:15	20	35			55	
01:30	2	6			8	13:30	29	26			55	
01:45	5	11	8	17	1328	13:45	27	104	23	119	50223	
02:00	1	0			1	14:00	42	33			75	
02:15	0	2			2	14:15	24	14			38	
02:30	0	11			11	14:30	22	37			59	
02:45	6	7	5	18	1125	14:45	33	121	27	111	60232	
03:00	12	1			13	15:00	24	33			57	
03:15	3	3			6	15:15	25	22			47	
03:30	5	14			19	15:30	38	27			65	
03:45	11	31	13	31	2462	15:45	26	113	17	99	43212	
04:00	12	7			19	16:00	29	23			52	
04:15	10	13			23	16:15	34	28			62	
04:30	12	10			22	16:30	39	20			59	
04:45	7	41	15	45	2286	16:45	23	125	20	91	43216	
05:00	15	14			29	17:00	13	18			31	
05:15	10	21			31	17:15	32	20			52	
05:30	21	13			34	17:30	25	12			37	
05:45	18	64	31	79	49143	17:45	18	88	16	66	34154	
06:00	11	28			39	18:00	29	12			41	
06:15	17	72			89	18:15	20	11			31	
06:30	23	109			132	18:30	16	9			25	
06:45	16	67	156	365	172432	18:45	15	80	7	39	22119	
07:00	18	127			145	19:00	17	13			30	
07:15	8	97			105	19:15	17	6			23	
07:30	14	83			97	19:30	10	10			20	
07:45	17	57	84	391	101448	19:45	4	48	8	37	1285	
08:00	23	61			84	20:00	7	12			19	
08:15	36	57			93	20:15	8	16			24	
08:30	21	49			70	20:30	7	8			15	
08:45	27	107	46	213	73320	20:45	6	28	14	50	2078	
09:00	16	42			58	21:00	7	13			20	
09:15	29	26			55	21:15	4	12			16	
09:30	15	29			44	21:30	6	7			13	
09:45	26	86	39	136	65222	21:45	6	23	4	36	1059	
10:00	26	36			62	22:00	7	6			13	
10:15	36	35			71	22:15	5	5			10	
10:30	36	41			77	22:30	2	5			7	
10:45	58	156	32	144	90300	22:45	6	20	8	24	1444	
11:00	25	27			52	23:00	4	0			4	
11:15	24	28			52	23:15	0	0			0	
11:30	33	24			57	23:30	4	2			6	
11:45	27	109	36	115	63224	23:45	0	8	1	3	111	
TOTALS	743	1570			2313	TOTALS	858	815			1673	
SPLIT %	32.1%	67.9%			58.0%	SPLIT %	51.3%	48.7%			42.0%	

DAILY TOTALS					NB	SB	EB					WB	Total
					1,601	2,385						0	0
AM Peak Hour	10:00	06:30			06:30	PM Peak Hour	15:45	12:00				12:30	
AM Pk Volume	156	489			554	PM Pk Volume	128	140				242	
Pk Hr Factor	0.672	0.784			0.805	Pk Hr Factor	0.821	0.795				0.917	
7 - 9 Volume	164	604	0	0	768	4 - 6 Volume	213	157	0	0		370	
7 - 9 Peak Hour	08:00	07:00			07:00	4 - 6 Peak Hour	16:00	16:00				16:00	
7 - 9 Pk Volume	107	391	0	0	448	4 - 6 Pk Volume	125	91	0	0		216	
Pk Hr Factor	0.743	0.770	0.000	0.000	0.772	Pk Hr Factor	0.801	0.813	0.000	0.000		0.871	

VOLUME

Temescal Canyon Rd Bet. Indian Truck Trail Rd & Horsethief Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_031

DAILY TOTALS					NB	SB					EB	WB	Total
					2,608	1,540					0	0	4,148
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	6	2			8		12:00	23	28			51	
00:15	6	3			9		12:15	31	22			53	
00:30	5	2			7		12:30	26	33			59	
00:45	3	20	2	9	5	29	12:45	40	120	26	109	66	229
01:00	3	2			5		13:00	32	14			46	
01:15	3	2			5		13:15	32	20			52	
01:30	0	1			1		13:30	36	27			63	
01:45	1	7	0	5	1	12	13:45	21	121	27	88	48	209
02:00	8	1			9		14:00	40	30			70	
02:15	3	1			4		14:15	37	18			55	
02:30	9	1			10		14:30	41	16			57	
02:45	2	22	6	9	8	31	14:45	38	156	32	96	70	252
03:00	10	7			17		15:00	35	31			66	
03:15	6	4			10		15:15	31	25			56	
03:30	23	4			27		15:30	41	31			72	
03:45	19	58	6	21	25	79	15:45	32	139	28	115	60	254
04:00	25	4			29		16:00	37	27			64	
04:15	36	4			40		16:15	29	30			59	
04:30	33	6			39		16:30	44	36			80	
04:45	40	134	12	26	52	160	16:45	26	136	33	126	59	262
05:00	35	3			38		17:00	46	19			65	
05:15	44	3			47		17:15	29	25			54	
05:30	43	9			52		17:30	34	33			67	
05:45	45	167	14	29	59	196	17:45	22	131	24	101	46	232
06:00	42	17			59		18:00	26	36			62	
06:15	70	18			88		18:15	23	27			50	
06:30	77	14			91		18:30	25	26			51	
06:45	117	306	28	77	145	383	18:45	11	85	17	106	28	191
07:00	88	12			100		19:00	19	27			46	
07:15	62	28			90		19:15	16	26			42	
07:30	45	14			59		19:30	14	21			35	
07:45	64	259	28	82	92	341	19:45	16	65	14	88	30	153
08:00	52	17			69		20:00	13	15			28	
08:15	44	18			62		20:15	16	14			30	
08:30	41	25			66		20:30	10	17			27	
08:45	33	170	13	73	46	243	20:45	11	50	11	57	22	107
09:00	29	15			44		21:00	7	10			17	
09:15	31	22			53		21:15	4	13			17	
09:30	37	15			52		21:30	9	14			23	
09:45	31	128	19	71	50	199	21:45	5	25	8	45	13	70
10:00	28	17			45		22:00	4	13			17	
10:15	49	18			67		22:15	6	9			15	
10:30	26	19			45		22:30	2	8			10	
10:45	32	135	13	67	45	202	22:45	4	16	7	37	11	53
11:00	30	25			55		23:00	4	5			9	
11:15	26	22			48		23:15	5	3			8	
11:30	39	21			60		23:30	7	4			11	
11:45	44	139	21	89	65	228	23:45	3	19	2	14	5	33
TOTALS	1545	558			2103		TOTALS	1063	982			2045	
SPLIT %	73.5%	26.5%			50.7%		SPLIT %	52.0%	48.0%			49.3%	

DAILY TOTALS					NB	SB					EB	WB	Total
					2,608	1,540					0	0	4,148
AM Peak Hour	06:15	11:45			06:30		PM Peak Hour	14:00	16:00			14:45	
AM Pk Volume	352	104			426		PM Pk Volume	156	126			264	
Pk Hr Factor	0.752	0.788			0.734		Pk Hr Factor	0.951	0.875			0.917	
7 - 9 Volume	429	155	0	0	584		4 - 6 Volume	267	227	0	0	494	
7 - 9 Peak Hour	07:00	07:45			07:00		4 - 6 Peak Hour	16:15	16:00			16:15	
7 - 9 Pk Volume	259	88	0	0	341		4 - 6 Pk Volume	145	126	0	0	263	
Pk Hr Factor	0.736	0.786	0.000	0.000	0.853		Pk Hr Factor	0.788	0.875	0.000	0.000	0.822	

VOLUME

Temescal Canyon Rd Bet. Horsethief Rd to I-15 Frontage Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_032

DAILY TOTALS					NB	SB	EBWB					Total	
					2,359	2,265						0	0
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	2	2			4		12:00	20	22			42	
00:15	2	6			8		12:15	26	31			57	
00:30	3	4			7		12:30	30	28			58	
00:45	2	9	1	13	3	22	12:45	33	109	36	117	69	226
01:00	0	3			3		13:00	36	28			64	
01:15	1	1			2		13:15	22	35			57	
01:30	1	1			2		13:30	32	38			70	
01:45	4	6	6	11	10	17	13:45	37	127	25	126	62	253
02:00	0	2			2		14:00	25	33			58	
02:15	2	3			5		14:15	28	40			68	
02:30	2	2			4		14:30	34	30			64	
02:45	5	9	9	16	14	25	14:45	39	126	42	145	81	271
03:00	4	9			13		15:00	49	44			93	
03:15	9	6			15		15:15	33	32			65	
03:30	12	8			20		15:30	30	49			79	
03:45	12	37	16	39	28	76	15:45	28	140	15	140	43	280
04:00	10	9			19		16:00	31	29			60	
04:15	17	15			32		16:15	40	36			76	
04:30	17	13			30		16:30	27	34			61	
04:45	26	70	22	59	48	129	16:45	22	120	28	127	50	247
05:00	11	22			33		17:00	25	35			60	
05:15	23	27			50		17:15	41	28			69	
05:30	28	26			54		17:30	27	36			63	
05:45	48	110	45	120	93	230	17:45	24	117	21	120	45	237
06:00	49	39			88		18:00	29	20			49	
06:15	53	46			99		18:15	22	25			47	
06:30	70	80			150		18:30	36	23			59	
06:45	117	289	83	248	200	537	18:45	25	112	14	82	39	194
07:00	75	88			163		19:00	26	19			45	
07:15	56	65			121		19:15	18	20			38	
07:30	66	53			119		19:30	22	14			36	
07:45	67	264	72	278	139	542	19:45	21	87	20	73	41	160
08:00	66	43			109		20:00	19	18			37	
08:15	32	27			59		20:15	21	22			43	
08:30	37	41			78		20:30	10	23			33	
08:45	41	176	18	129	59	305	20:45	13	63	7	70	20	133
09:00	21	16			37		21:00	7	13			20	
09:15	21	20			41		21:15	9	12			21	
09:30	30	25			55		21:30	14	7			21	
09:45	40	112	19	80	59	192	21:45	9	39	7	39	16	78
10:00	14	24			38		22:00	7	2			9	
10:15	24	28			52		22:15	8	2			10	
10:30	27	18			45		22:30	7	4			11	
10:45	19	84	22	92	41	176	22:45	2	24	5	13	7	37
11:00	22	21			43		23:00	5	6			11	
11:15	26	21			47		23:15	5	8			13	
11:30	28	23			51		23:30	3	10			13	
11:45	38	114	34	99	72	213	23:45	2	15	5	29	7	44
TOTALS	1280	1184			2464		TOTALS	1079	1081			2160	
SPLIT %	51.9%	48.1%			53.3%		SPLIT %	50.0%	50.0%			46.7%	

DAILY TOTALS					NB	SB	EB					WB	Total
					2,359	2,265						0	0
AM Peak Hour	06:30	06:30			06:30		PM Peak Hour	14:30	14:45			14:45	
AM Pk Volume	318	316			634		PM Pk Volume	155	167			318	
Pk Hr Factor	0.679	0.898			0.793		Pk Hr Factor	0.791	0.852			0.855	
7 - 9 Volume	440	407	0	0	847		4 - 6 Volume	237	247	0	0	484	
7 - 9 Peak Hour	07:00	07:00			07:00		4 - 6 Peak Hour	16:00	16:15			16:00	
7 - 9 Pk Volume	264	278	0	0	542		4 - 6 Pk Volume	120	133	0	0	247	
Pk Hr Factor	0.880	0.790	0.000	0.000	0.831		Pk Hr Factor	0.750	0.924	0.000	0.000	0.813	

VOLUME

Temescal Canyon Rd Bet. I-15 Frontage Rd & Lake St

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_033

DAILY TOTALS					NB	SB	EB				WB	Total
					3,303	3,036	0				0	6,339
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL
00:00	3	3			6		12:00	35	34			69
00:15	2	2			4		12:15	39	46			85
00:30	5	3			8		12:30	38	36			74
00:45	0	10	5	13	5	23	12:45	53	165	23	139	76 304
01:00	3	0			3		13:00	56	39			95
01:15	3	2			5		13:15	54	39			93
01:30	1	1			2		13:30	60	38			98
01:45	5	12	1	4	6	16	13:45	60	230	34	150	94 380
02:00	3	0			3		14:00	47	98			145
02:15	4	1			5		14:15	38	78			116
02:30	3	3			6		14:30	80	72			152
02:45	6	16	3	7	9	23	14:45	82	247	58	306	140 553
03:00	5	1			6		15:00	48	60			108
03:15	4	1			5		15:15	52	50			102
03:30	3	5			8		15:30	57	62			119
03:45	13	25	11	18	24	43	15:45	56	213	55	227	111 440
04:00	7	7			14		16:00	58	52			110
04:15	6	10			16		16:15	61	47			108
04:30	16	18			34		16:30	47	66			113
04:45	20	49	24	59	44	108	16:45	67	233	56	221	123 454
05:00	19	10			29		17:00	71	44			115
05:15	24	18			42		17:15	66	70			136
05:30	17	16			33		17:30	75	58			133
05:45	43	103	28	72	71	175	17:45	60	272	49	221	109 493
06:00	38	35			73		18:00	36	45			81
06:15	46	41			87		18:15	42	59			101
06:30	84	45			129		18:30	54	45			99
06:45	88	256	77	198	165	454	18:45	40	172	44	193	84 365
07:00	104	105			209		19:00	37	40			77
07:15	93	73			166		19:15	48	39			87
07:30	116	57			173		19:30	33	31			64
07:45	79	392	78	313	157	705	19:45	27	145	12	122	39 267
08:00	48	43			91		20:00	29	15			44
08:15	25	56			81		20:15	31	17			48
08:30	34	41			75		20:30	29	13			42
08:45	33	140	31	171	64	311	20:45	25	114	8	53	33 167
09:00	25	29			54		21:00	19	4			23
09:15	25	37			62		21:15	33	5			38
09:30	23	41			64		21:30	23	12			35
09:45	25	98	32	139	57	237	21:45	22	97	12	33	34 130
10:00	30	34			64		22:00	10	15			25
10:15	26	47			73		22:15	9	11			20
10:30	23	37			60		22:30	11	9			20
10:45	41	120	36	154	77	274	22:45	5	35	8	43	13 78
11:00	29	49			78		23:00	5	11			16
11:15	34	20			54		23:15	10	6			16
11:30	40	53			93		23:30	5	3			8
11:45	33	136	35	157	68	293	23:45	3	23	3	23	6 46
TOTALS	1357	1305			2662		TOTALS	1946	1731			3677
SPLIT %	51.0%	49.0%			42.0%		SPLIT %	52.9%	47.1%			58.0%

DAILY TOTALS					NB	SB	EB				WB	Total
					3,303	3,036	0				0	6,339
AM Peak Hour	06:45	07:00			06:45		PM Peak Hour	16:45	14:00			14:00
AM Pk Volume	401	313			713		PM Pk Volume	279	306			553
Pk Hr Factor	0.864	0.745			0.853		Pk Hr Factor	0.930	0.781			0.910
7 - 9 Volume	532	484	0	0	1016		4 - 6 Volume	505	442	0	0	947
7 - 9 Peak Hour	07:00	07:00			07:00		4 - 6 Peak Hour	16:45	16:30			16:45
7 - 9 Pk Volume	392	313	0	0	705		4 - 6 Pk Volume	279	236	0	0	507
Pk Hr Factor	0.845	0.745	0.000	0.000	0.843		Pk Hr Factor	0.930	0.843	0.000	0.000	0.932

VOLUME
Cajalco Rd W/O I-15

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_034

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						8,937		
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			11	18	29		12:00			105	136	241		
00:15			8	17	25		12:15			119	175	294		
00:30			5	13	18		12:30			119	162	281		
00:45			10	34	12	60	12:45			125	468	162	635	
01:00			9	6	15		13:00			103	142	245		
01:15			4	7	11		13:15			129	146	275		
01:30			9	10	19		13:30			117	186	303		
01:45			3	25	5	28	13:45			135	484	165	639	
02:00			5	6	11		14:00			132	150	282		
02:15			7	6	13		14:15			157	154	311		
02:30			6	10	16		14:30			166	192	358		
02:45			6	24	6	28	14:45			157	612	202	698	
03:00			6	11	17		15:00			251	138	389		
03:15			7	3	10		15:15			240	123	363		
03:30			11	3	14		15:30			233	149	382		
03:45			13	37	13	30	15:45			238	962	142	552	
04:00			15	9	24		16:00			209	150	359		
04:15			23	13	36		16:15			231	118	349		
04:30			23	18	41		16:30			259	131	390		
04:45			16	77	15	55	16:45			221	920	124	523	
05:00			14	22	36		17:00			254	158	412		
05:15			29	19	48		17:15			229	141	370		
05:30			29	33	62		17:30			259	147	406		
05:45			43	115	54	128	17:45			257	999	123	569	
06:00			50	63	113		18:00			225	133	358		
06:15			66	67	133		18:15			184	149	333		
06:30			53	106	159		18:30			167	155	322		
06:45			82	251	110	346	18:45			159	735	142	579	
07:00			108	146	254		19:00			146	139	285		
07:15			96	167	263		19:15			105	169	274		
07:30			89	150	239		19:30			110	122	232		
07:45			82	375	134	597	19:45			95	456	122	552	
08:00			85	145	230		20:00			93	132	225		
08:15			88	162	250		20:15			95	128	223		
08:30			108	135	243		20:30			84	102	186		
08:45			128	409	129	571	20:45			73	345	91	453	
09:00			103	113	216		21:00			61	106	167		
09:15			111	115	226		21:15			47	82	129		
09:30			104	77	181		21:30			28	70	98		
09:45			94	412	120	425	21:45			36	172	65	323	
10:00			87	85	172		22:00			33	46	79		
10:15			87	119	206		22:15			29	50	79		
10:30			103	112	215		22:30			36	49	85		
10:45			110	387	136	452	22:45			28	126	36	181	
11:00			109	131	240		23:00			14	32	46		
11:15			114	143	257		23:15			14	36	50		
11:30			126	119	245		23:30			16	27	43		
11:45			111	460	116	509	23:45			8	52	25	120	
TOTALS	2606				3229	5835	TOTALS	6331				5824	12155	
SPLIT %	44.7%				55.3%	32.4%	SPLIT %	52.1%				47.9%	67.6%	

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0	8,937					9,053	17,990	
AM Peak Hour			11:30	07:00	11:45		PM Peak Hour			17:00	14:00	17:00		
AM Pk Volume			461	597	1043		PM Pk Volume			999	698	1568		
Pk Hr Factor			0.915	0.894	0.887		Pk Hr Factor			0.964	0.864	0.951		
7 - 9 Volume	0	0	784	1168	1952		4 - 6 Volume	0	0	1919	1092	3011		
7 - 9 Peak Hour			08:00	07:00	08:00		4 - 6 Peak Hour			17:00	16:45	17:00		
7 - 9 Pk Volume	0	0	409	597	980		4 - 6 Pk Volume	0	0	999	570	1568		
Pk Hr Factor	0.000	0.000	0.799	0.894	0.953		Pk Hr Factor	0.000	0.000	0.964	0.902	0.951		

VOLUME

Cajalco Rd Bet. I-15 & Grand Oaks

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_035

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						12,259	11,865	24,124
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			17	13	30		12:00			228	195	423		
00:15			16	30	46		12:15			215	196	411		
00:30			25	34	59		12:30			229	183	412		
00:45			17	75	17	94	12:45			228	900	214	788	
01:00			19	16	35		13:00			210	166	376		
01:15			8	16	24		13:15			203	221	424		
01:30			15	10	25		13:30			204	193	397		
01:45			17	59	9	51	13:45			191	808	214	794	
02:00			15	4	19		14:00			206	141	347		
02:15			10	4	14		14:15			181	218	399		
02:30			18	7	25		14:30			202	136	338		
02:45			22	65	12	27	14:45			177	766	168	663	
03:00			27	7	34		15:00			186	144	330		
03:15			43	38	81		15:15			221	159	380		
03:30			23	11	34		15:30			214	179	393		
03:45			47	140	15	71	15:45			234	855	132	614	
04:00			42	10	52		16:00			193	177	370		
04:15			42	58	100		16:15			184	146	330		
04:30			87	52	139		16:30			200	192	392		
04:45			91	262	75	195	16:45			235	812	159	674	
05:00			78	100	178		17:00			213	165	378		
05:15			67	83	150		17:15			210	160	370		
05:30			70	86	156		17:30			223	219	442		
05:45			75	290	137	406	17:45			221	867	151	695	
06:00			65	119	184		18:00			196	116	312		
06:15			107	127	234		18:15			219	148	367		
06:30			99	168	267		18:30			217	137	354		
06:45			78	349	215	629	18:45			225	857	144	545	
07:00			85	260	345		19:00			214	116	330		
07:15			111	252	363		19:15			191	119	310		
07:30			130	249	379		19:30			167	149	316		
07:45			123	449	245	1006	19:45			191	763	152	536	
08:00			112	198	310		20:00			149	147	296		
08:15			116	222	338		20:15			139	134	273		
08:30			136	215	351		20:30			136	133	269		
08:45			160	524	278	913	20:45			112	536	126	540	
09:00			164	189	353		21:00			85	108	193		
09:15			137	186	323		21:15			65	85	150		
09:30			153	184	337		21:30			85	83	168		
09:45			173	627	190	749	21:45			72	307	52	328	
10:00			179	118	297		22:00			53	46	99		
10:15			174	132	306		22:15			63	53	116		
10:30			191	178	369		22:30			48	55	103		
10:45			209	753	168	596	22:45			41	205	36	190	
11:00			225	195	420		23:00			37	25	62		
11:15			224	188	412		23:15			17	21	38		
11:30			239	137	376		23:30			16	20	36		
11:45			219	907	151	671	23:45			13	83	24	90	
TOTALS	4500				5408	9908	TOTALS	7759				6457	14216	
SPLIT %	45.4%				54.6%	41.1%	SPLIT %	54.6%				45.4%	58.9%	

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0	12,259					11,865	24,124	
AM Peak Hour			11:15	07:00	11:45		PM Peak Hour			12:00	12:45	12:00		
AM Pk Volume			910	1006	1616		PM Pk Volume			900	794	1688		
Pk Hr Factor			0.952	0.967	0.955		Pk Hr Factor			0.983	0.898	0.955		
7 - 9 Volume	0	0	973	1919	2892		4 - 6 Volume	0	0	1679	1369	3048		
7 - 9 Peak Hour			08:00	07:00	07:00		4 - 6 Peak Hour			16:45	16:45	16:45		
7 - 9 Pk Volume	0	0	524	1006	1455		4 - 6 Pk Volume	0	0	881	703	1584		
Pk Hr Factor	0.000	0.000	0.819	0.967	0.960		Pk Hr Factor	0.000	0.000	0.937	0.803	0.896		

VOLUME

Cajalco Rd Bet. Grand Oaks & Temescal Canyon Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_036

DAILY TOTALS					NB	SB	EBWB					Total			
					0	0						18,148			
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00			19	10	29		12:00			130	135	265			
00:15			14	15	29		12:15			109	122	231			
00:30			20	22	42		12:30			140	122	262			
00:45			13	66	19	66	32	132	12:45	159	538	134	513	293	1051
01:00			12	12	24		13:00			148	116	264			
01:15			9	5	14		13:15			132	112	244			
01:30			16	7	23		13:30			152	104	256			
01:45			16	53	7	31	23	84	13:45	148	580	122	454	270	1034
02:00			15	3	18		14:00			149	114	263			
02:15			8	6	14		14:15			133	150	283			
02:30			18	6	24		14:30			141	132	273			
02:45			16	57	9	24	25	81	14:45	129	552	122	518	251	1070
03:00			26	12	38		15:00			131	118	249			
03:15			40	27	67		15:15			142	137	279			
03:30			17	13	30		15:30			155	167	322			
03:45			43	126	20	72	63	198	15:45	157	585	158	580	315	1165
04:00			36	25	61		16:00			155	152	307			
04:15			43	59	102		16:15			142	127	269			
04:30			76	78	154		16:30			159	180	339			
04:45			76	231	61	223	137	454	16:45	149	605	158	617	307	1222
05:00			76	94	170		17:00			143	158	301			
05:15			60	85	145		17:15			166	173	339			
05:30			49	120	169		17:30			159	163	322			
05:45			55	240	124	423	179	663	17:45	137	605	148	642	285	1247
06:00			41	119	160		18:00			140	162	302			
06:15			93	141	234		18:15			135	113	248			
06:30			70	166	236		18:30			134	103	237			
06:45			58	262	224	650	282	912	18:45	122	531	119	497	241	1028
07:00			68	284	352		19:00			115	100	215			
07:15			81	249	330		19:15			110	72	182			
07:30			118	159	277		19:30			105	78	183			
07:45			101	368	187	879	288	1247	19:45	126	456	60	310	186	766
08:00			99	208	307		20:00			91	77	168			
08:15			84	247	331		20:15			99	61	160			
08:30			101	201	302		20:30			93	66	159			
08:45			103	387	175	831	278	1218	20:45	85	368	49	253	134	621
09:00			120	180	300		21:00			61	52	113			
09:15			81	160	241		21:15			63	64	127			
09:30			99	178	277		21:30			76	42	118			
09:45			96	396	151	669	247	1065	21:45	65	265	36	194	101	459
10:00			116	115	231		22:00			49	28	77			
10:15			110	123	233		22:15			45	34	79			
10:30			111	109	220		22:30			38	31	69			
10:45			138	475	148	495	286	970	22:45	36	168	27	120	63	288
11:00			127	114	241		23:00			37	22	59			
11:15			114	150	264		23:15			19	9	28			
11:30			127	157	284		23:30			15	12	27			
11:45			121	489	121	542	242	1031	23:45	8	79	20	63	28	142
TOTALS	3150				4905	8055	TOTALS	5332				4761	10093		
SPLIT %	39.1%				60.9%	44.4%	SPLIT %	52.8%				47.2%	55.6%		

DAILY TOTALS			NB	SB	EB			WB	Total				
			0	0				8,482	9,666	18,148			
AM Peak Hour			10:45	06:30	07:00	PM Peak Hour			16:30	16:30	16:30		
AM Pk Volume			506	923	1247	PM Pk Volume			617	669	1286		
Pk Hr Factor			0.917	0.813	0.886	Pk Hr Factor			0.929	0.929	0.948		
7 - 9 Volume	0	0	755	1710	2465	4 - 6 Volume	0	0	1210	1259	2469		
7 - 9 Peak Hour			07:30	07:00	07:00	4 - 6 Peak Hour			16:30	16:30	16:30		
7 - 9 Pk Volume			0	0	402	879	1247	4 - 6 Pk Volume	0	0	617	669	1286
Pk Hr Factor			0.000	0.000	0.852	0.774	0.886	Pk Hr Factor	0.000	0.000	0.929	0.929	0.948

VOLUME

Retreat Pkwy W/O Knabe Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_037

DAILY TOTALS					NB	SB	EBWB					Total
					1,728	1,824						0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	5			5	12:00	27	33			60	
00:15	4	4			8	12:15	24	28			52	
00:30	1	3			4	12:30	26	23			49	
00:45	1	6	3	15	421	12:45	28	105	24	108	52213	
01:00	1	3			4	13:00	27	18			45	
01:15	0	1			1	13:15	25	33			58	
01:30	0	4			4	13:30	35	18			53	
01:45	2	3	5	13	716	13:45	25	112	22	91	47203	
02:00	1	0			1	14:00	33	27			60	
02:15	0	0			0	14:15	28	20			48	
02:30	1	0			1	14:30	24	33			57	
02:45	0	2	2	2	24	14:45	27	112	27	107	54219	
03:00	1	0			1	15:00	25	39			64	
03:15	2	1			3	15:15	24	55			79	
03:30	2	0			2	15:30	23	38			61	
03:45	1	6	0	1	17	15:45	29	101	25	157	54258	
04:00	4	0			4	16:00	32	31			63	
04:15	3	1			4	16:15	14	34			48	
04:30	3	0			3	16:30	16	14			30	
04:45	9	19	1	2	1021	16:45	23	85	31	110	54195	
05:00	8	3			11	17:00	22	30			52	
05:15	11	1			12	17:15	20	33			53	
05:30	14	3			17	17:30	24	37			61	
05:45	14	47	2	9	1656	17:45	20	86	38	138	58224	
06:00	20	5			25	18:00	15	38			53	
06:15	20	5			25	18:15	15	41			56	
06:30	19	4			23	18:30	19	38			57	
06:45	71	130	4	18	75148	18:45	15	64	61	178	76242	
07:00	50	10			60	19:00	18	37			55	
07:15	50	14			64	19:15	15	36			51	
07:30	31	18			49	19:30	14	33			47	
07:45	42	173	28	70	70243	19:45	16	63	23	129	39192	
08:00	28	26			54	20:00	14	37			51	
08:15	39	32			71	20:15	13	29			42	
08:30	40	20			60	20:30	8	32			40	
08:45	36	143	27	105	63248	20:45	10	45	32	130	42175	
09:00	47	32			79	21:00	13	23			36	
09:15	39	20			59	21:15	9	21			30	
09:30	21	15			36	21:30	10	20			30	
09:45	20	127	32	99	52226	21:45	7	39	21	85	28124	
10:00	33	24			57	22:00	6	12			18	
10:15	30	19			49	22:15	8	9			17	
10:30	32	15			47	22:30	4	14			18	
10:45	27	122	29	87	56209	22:45	3	21	11	46	1467	
11:00	28	17			45	23:00	4	12			16	
11:15	32	22			54	23:15	3	5			8	
11:30	21	18			39	23:30	3	8			11	
11:45	24	105	34	91	58196	23:45	2	12	8	33	1045	
TOTALS	883	512			1395	TOTALS	845	1312			2157	
SPLIT %	63.3%	36.7%			39.3%	SPLIT %	39.2%	60.8%			60.7%	

DAILY TOTALS					NB	SB	EBWB					Total
					1,728	1,824						0
AM Peak Hour	06:45	11:45			08:15		PM Peak Hour	13:30	18:00			14:45
AM Pk Volume	202	118			273		PM Pk Volume	121	178			258
Pk Hr Factor	0.711	0.868			0.864		Pk Hr Factor	0.864	0.730			0.816
7 - 9 Volume	316	175	0	0	491		4 - 6 Volume	171	248	0	0	419
7 - 9 Peak Hour	07:00	07:45			07:45		4 - 6 Peak Hour	16:45	17:00			17:00
7 - 9 Pk Volume	173	106	0	0	255		4 - 6 Pk Volume	89	138	0	0	224
Pk Hr Factor	0.865	0.828	0.000	0.000	0.898		Pk Hr Factor	0.927	0.908	0.000	0.000	0.918

VOLUME

Weirick Rd Bet. I-15 & Knabe Rd

Day: Thursday
Date: 9/19/2019City: Corona
Project #: CA19_6122_038

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	9,559					9,794	19,353
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			9	28	37		12:00			145	152	297	
00:15			14	29	43		12:15			152	158	310	
00:30			11	17	28		12:30			159	120	279	
00:45			7	41	18	92	12:45			153	609	133	563
					25	133						286	1172
01:00			5	15	20		13:00			135	148	283	
01:15			3	10	13		13:15			131	135	266	
01:30			6	19	25		13:30			143	136	279	
01:45			4	18	13	57	13:45			150	559	139	558
					17	75						289	1117
02:00			4	10	14		14:00			166	155	321	
02:15			7	9	16		14:15			149	175	324	
02:30			12	0	12		14:30			139	213	352	
02:45			4	27	11	30	14:45			144	598	199	742
					15	57						343	1340
03:00			7	11	18		15:00			201	240	441	
03:15			16	4	20		15:15			192	219	411	
03:30			14	6	20		15:30			138	190	328	
03:45			41	78	3	24	15:45			147	678	189	838
					44	102						336	1516
04:00			43	4	47		16:00			132	168	300	
04:15			42	7	49		16:15			104	188	292	
04:30			55	10	65		16:30			133	163	296	
04:45			61	201	18	39	16:45			129	498	168	687
					79	240						297	1185
05:00			71	10	81		17:00			131	178	309	
05:15			71	16	87		17:15			125	158	283	
05:30			103	18	121		17:30			140	208	348	
05:45			105	350	19	63	17:45			142	538	206	750
					124	413						348	1288
06:00			126	40	166		18:00			120	203	323	
06:15			162	37	199		18:15			91	180	271	
06:30			193	36	229		18:30			109	198	307	
06:45			190	671	43	156	18:45			96	416	209	790
					233	827						305	1206
07:00			157	78	235		19:00			76	209	285	
07:15			107	110	217		19:15			75	160	235	
07:30			135	125	260		19:30			86	176	262	
07:45			168	567	136	449	19:45			66	303	139	684
					304	1016						205	987
08:00			188	126	314		20:00			83	165	248	
08:15			187	182	369		20:15			60	156	216	
08:30			228	129	357		20:30			54	140	194	
08:45			221	824	103	540	20:45			44	241	169	630
					324	1364						213	871
09:00			193	87	280		21:00			47	112	159	
09:15			188	85	273		21:15			54	107	161	
09:30			177	85	262		21:30			40	100	140	
09:45			149	707	121	378	21:45			27	168	85	404
					270	1085						112	572
10:00			150	100	250		22:00			46	73	119	
10:15			149	105	254		22:15			32	71	103	
10:30			176	123	299		22:30			19	68	87	
10:45			165	640	118	446	22:45			18	115	55	267
					283	1086						73	382
11:00			186	118	304		23:00			19	54	73	
11:15			178	101	279		23:15			11	36	47	
11:30			157	116	273		23:30			16	35	51	
11:45			135	656	117	452	23:45			10	56	30	155
					252	1108						40	211
TOTALS			4780	2726	7506		TOTALS			4779	7068	11847	
SPLIT %			63.7%	36.3%	38.8%		SPLIT %			40.3%	59.7%	61.2%	

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	9,559					9,794	19,353
AM Peak Hour			08:30	07:45	08:00		PM Peak Hour			15:00	14:30	14:30	
AM Pk Volume			830	573	1364		PM Pk Volume			678	871	1547	
Pk Hr Factor			0.910	0.787	0.924		Pk Hr Factor			0.843	0.907	0.877	
7 - 9 Volume	0	0	1391	989	2380		4 - 6 Volume	0	0	1036	1437	2473	
7 - 9 Peak Hour			08:00	07:45	08:00		4 - 6 Peak Hour			17:00	17:00	17:00	
7 - 9 Pk Volume	0	0	824	573	1364		4 - 6 Pk Volume	0	0	538	750	1288	
Pk Hr Factor	0.000	0.000	0.904	0.787	0.924		Pk Hr Factor	0.000	0.000	0.947	0.901	0.925	

VOLUME

Weirick Rd N/O Knabe Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_039

DAILY TOTALS					NB	SB	EB					WB	Total		
					0	0						307	304	611	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00			0	0	0		12:00			4	5	9			
00:15			0	1	1		12:15			5	3	8			
00:30			0	1	1		12:30			3	1	4			
00:45			0	0	0	2	12:45			3	15	4	13	7	28
01:00			1	0	1		13:00			1	3	4			
01:15			0	0	0		13:15			3	2	5			
01:30			0	0	0		13:30			2	3	5			
01:45			0	1	0	1	13:45			1	7	5	13	6	20
02:00			0	0	0		14:00			6	3	9			
02:15			1	1	2		14:15			4	5	9			
02:30			0	0	0		14:30			2	3	5			
02:45			0	1	1	2	14:45			5	17	3	14	8	31
03:00			1	0	1		15:00			7	9	16			
03:15			0	1	1		15:15			6	2	8			
03:30			1	0	1		15:30			4	3	7			
03:45			0	2	0	1	15:45			5	22	9	23	14	45
04:00			3	0	3		16:00			4	4	8			
04:15			0	0	0		16:15			2	5	7			
04:30			2	1	3		16:30			3	6	9			
04:45			1	6	1	7	16:45			1	10	7	21	7	31
05:00			2	1	3		17:00			6	7	13			
05:15			1	1	2		17:15			1	5	6			
05:30			2	0	2		17:30			2	4	6			
05:45			2	7	3	10	17:45			1	10	8	23	8	33
06:00			7	1	8		18:00			3	10	13			
06:15			3	0	3		18:15			6	6	12			
06:30			6	2	8		18:30			3	7	10			
06:45			2	18	4	23	18:45			10	22	29	42	29	64
07:00			4	2	6		19:00			1	7	8			
07:15			3	3	6		19:15			2	3	5			
07:30			3	6	9		19:30			3	0	3			
07:45			5	15	10	31	19:45			2	8	4	12	4	20
08:00			4	7	11		20:00			16	4	20			
08:15			6	9	15		20:15			4	1	5			
08:30			5	7	12		20:30			0	1	1			
08:45			3	18	19	57	20:45			3	23	4	7	4	30
09:00			2	6	8		21:00			8	1	9			
09:15			5	3	8		21:15			10	4	14			
09:30			24	2	26		21:30			0	2	2			
09:45			7	38	12	54	21:45			1	19	1	7	1	26
10:00			4	9	13		22:00			1	1	2			
10:15			4	5	9		22:15			0	0	0			
10:30			11	6	17		22:30			0	4	4			
10:45			8	27	12	51	22:45			0	1	0	5	0	6
11:00			4	4	8		23:00			1	0	1			
11:15			1	2	3		23:15			0	2	2			
11:30			3	5	8		23:30			2	0	2			
11:45			8	16	8	27	23:45			1	4	3	4	3	8
TOTALS			149	120	269		TOTALS			158	184	342			
SPLIT %			55.4%	44.6%	44.0%		SPLIT %			46.2%	53.8%	56.0%			

DAILY TOTALS					NB	SB	EB					WB	Total				
					0	0	307					304	611				
AM Peak Hour			09:15	08:00	08:45		PM Peak Hour			19:30	18:00	18:00					
AM Pk Volume			40	39	61		PM Pk Volume			25	42	64					
Pk Hr Factor			0.417	0.609	0.587		Pk Hr Factor			0.391	0.553	0.552					
7 - 9 Volume	0	0	33	55	88		4 - 6 Volume	0	0	20	44	64					
7 - 9 Peak Hour			07:45	08:00	08:00		4 - 6 Peak Hour			16:15	16:15	16:15					
7 - 9 Pk Volume	0	0	20	39	57		4 - 6 Pk Volume	0	0	12	24	36					
Pk Hr Factor	0.000	0.000	0.833	0.609	0.750		Pk Hr Factor	0.000	0.000	0.500	0.857	0.692					

VOLUME

Dos Lagos Dr E/O I-15

Day: Thursday

Date: 9/19/2019

City: Corona

Project #: CA19_6122_040

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	12,331					11,657	23,988
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			17	19	36		12:00			202	154	356	
00:15			26	34	60		12:15			212	150	362	
00:30			13	14	27		12:30			217	149	366	
00:45			21	77	14	81	12:45			202	833	150	603
					35	158						352	1436
01:00			20	18	38		13:00			175	191	366	
01:15			11	5	16		13:15			160	170	330	
01:30			18	24	42		13:30			179	182	361	
01:45			14	63	15	62	13:45			180	694	181	724
					29	125						361	1418
02:00			14	22	36		14:00			162	223	385	
02:15			6	14	20		14:15			187	194	381	
02:30			20	19	39		14:30			197	252	449	
02:45			18	58	11	66	14:45			209	755	207	876
					29	124						416	1631
03:00			29	11	40		15:00			248	231	479	
03:15			29	24	53		15:15			221	228	449	
03:30			24	25	49		15:30			200	267	467	
03:45			42	124	31	91	15:45			229	898	262	988
					73	215						491	1886
04:00			49	42	91		16:00			165	250	415	
04:15			60	68	128		16:15			164	238	402	
04:30			57	53	110		16:30			127	252	379	
04:45			86	252	53	216	16:45			142	598	210	950
					139	468						352	1548
05:00			82	59	141		17:00			127	261	388	
05:15			83	63	146		17:15			134	225	359	
05:30			97	72	169		17:30			157	232	389	
05:45			126	388	53	247	17:45			135	553	215	933
					179	635						350	1486
06:00			84	79	163		18:00			114	218	332	
06:15			135	86	221		18:15			157	179	336	
06:30			158	114	272		18:30			164	176	340	
06:45			312	689	128	407	18:45			150	585	176	749
					440	1096						326	1334
07:00			275	164	439		19:00			134	164	298	
07:15			205	195	400		19:15			115	135	250	
07:30			176	159	335		19:30			148	129	277	
07:45			200	856	156	674	19:45			135	532	88	516
					356	1530						223	1048
08:00			168	130	298		20:00			124	118	242	
08:15			203	228	431		20:15			130	104	234	
08:30			253	137	390		20:30			108	113	221	
08:45			254	878	156	651	20:45			82	444	92	427
					410	1529						174	871
09:00			189	157	346		21:00			83	108	191	
09:15			182	140	322		21:15			103	112	215	
09:30			164	134	298		21:30			81	68	149	
09:45			205	740	159	590	21:45			73	340	63	351
					364	1330						136	691
10:00			180	132	312		22:00			60	40	100	
10:15			179	135	314		22:15			79	56	135	
10:30			188	142	330		22:30			45	63	108	
10:45			201	748	140	549	22:45			54	238	51	210
					341	1297						105	448
11:00			213	133	346		23:00			47	45	92	
11:15			217	121	338		23:15			31	19	50	
11:30			191	134	325		23:30			44	40	84	
11:45			218	839	153	541	23:45			27	149	51	155
					371	1380						78	304
TOTALS			5712	4175	9887		TOTALS			6619	7482	14101	
SPLIT %			57.8%	42.2%	41.2%		SPLIT %			46.9%	53.1%	58.8%	

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	12,331					11,657	23,988
AM Peak Hour			06:45	08:15	06:45		PM Peak Hour			15:00	15:30	15:00	
AM Pk Volume			968	678	1614		PM Pk Volume			898	1017	1886	
Pk Hr Factor			0.776	0.743	0.917		Pk Hr Factor			0.905	0.952	0.960	
7 - 9 Volume	0	0	1734	1325	3059		4 - 6 Volume	0	0	1151	1883	3034	
7 - 9 Peak Hour			08:00	07:00	07:00		4 - 6 Peak Hour			16:00	16:15	16:00	
7 - 9 Pk Volume	0	0	878	674	1530		4 - 6 Pk Volume	0	0	598	961	1548	
Pk Hr Factor	0.000	0.000	0.864	0.864	0.871		Pk Hr Factor	0.000	0.000	0.906	0.920	0.933	

VOLUME

Knabe Rd Bet. Weirick Rd & White Sage St

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_041

DAILY TOTALS					NB	SB	EB				WB	Total
					7,602	7,061	0				0	14,663
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL
00:00	8	22			30		12:00	86	100			186
00:15	9	18			27		12:15	104	114			218
00:30	6	13			19		12:30	103	89			192
00:45	7	30	15	68	22	98	12:45	110	403	90	393	200 796
01:00	1	12			13		13:00	90	108			198
01:15	2	7			9		13:15	82	86			168
01:30	7	15			22		13:30	99	92			191
01:45	1	11	7	41	8	52	13:45	107	378	106	392	213 770
02:00	2	9			11		14:00	115	100			215
02:15	8	8			16		14:15	95	137			232
02:30	8	0			8		14:30	101	162			263
02:45	3	21	8	25	11	46	14:45	108	419	162	561	270 980
03:00	6	7			13		15:00	192	187			379
03:15	12	3			15		15:15	146	178			324
03:30	13	7			20		15:30	97	134			231
03:45	37	68	2	19	39	87	15:45	95	530	138	637	233 1167
04:00	35	5			40		16:00	76	127			203
04:15	45	4			49		16:15	85	133			218
04:30	54	6			60		16:30	92	134			226
04:45	53	187	14	29	67	216	16:45	83	336	131	525	214 861
05:00	67	5			72		17:00	81	137			218
05:15	56	15			71		17:15	96	117			213
05:30	90	15			105		17:30	105	172			277
05:45	104	317	11	46	115	363	17:45	115	397	146	572	261 969
06:00	106	20			126		18:00	89	159			248
06:15	148	17			165		18:15	72	130			202
06:30	240	19			259		18:30	86	153			239
06:45	293	787	27	83	320	870	18:45	75	322	132	574	207 896
07:00	199	51			250		19:00	56	160			216
07:15	144	77			221		19:15	62	126			188
07:30	134	75			209		19:30	57	129			186
07:45	142	619	86	289	228	908	19:45	51	226	118	533	169 759
08:00	170	76			246		20:00	52	123			175
08:15	188	135			323		20:15	44	136			180
08:30	226	83			309		20:30	47	110			157
08:45	189	773	68	362	257	1135	20:45	29	172	133	502	162 674
09:00	166	43			209		21:00	25	87			112
09:15	122	44			166		21:15	27	83			110
09:30	126	60			186		21:30	32	75			107
09:45	113	527	61	208	174	735	21:45	21	105	58	303	79 408
10:00	104	57			161		22:00	34	55			89
10:15	106	72			178		22:15	26	58			84
10:30	100	74			174		22:30	11	52			63
10:45	106	416	71	274	177	690	22:45	12	83	41	206	53 289
11:00	126	79			205		23:00	12	38			50
11:15	116	67			183		23:15	7	30			37
11:30	120	85			205		23:30	9	26			35
11:45	79	441	72	303	151	744	23:45	6	34	22	116	28 150
TOTALS	4197	1747			5944		TOTALS	3405	5314			8719
SPLIT %	70.6%	29.4%			40.5%		SPLIT %	39.1%	60.9%			59.5%

DAILY TOTALS					NB	SB	EB				WB	Total
					7,602	7,061	0				0	14,663
AM Peak Hour	06:15	07:45			08:00		PM Peak Hour	14:30	14:30			14:30
AM Pk Volume	880	380			1135		PM Pk Volume	547	689			1236
Pk Hr Factor	0.751	0.704			0.878		Pk Hr Factor	0.712	0.921			0.815
7 - 9 Volume	1392	651	0	0	2043		4 - 6 Volume	733	1097	0	0	1830
7 - 9 Peak Hour	08:00	07:45			08:00		4 - 6 Peak Hour	17:00	17:00			17:00
7 - 9 Pk Volume	773	380	0	0	1135		4 - 6 Pk Volume	397	572	0	0	969
Pk Hr Factor	0.855	0.704	0.000	0.000	0.878		Pk Hr Factor	0.863	0.831	0.000	0.000	0.875

VOLUME

Knabe Rd Bet. Hunt Rd & White Sage St

Day: Thursday

Date: 9/19/2019

City: Corona

Project #: CA19_6122_042

DAILY TOTALS				NB	SB	EB				WB	Total
				3,188	2,531	0				0	5,719

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	1	9			10	12:00	53	49			102
00:15	3	1			4	12:15	45	47			92
00:30	1	2			3	12:30	36	52			88
00:45	0	5	1	13	1	12:45	50	184	39	187	89
01:00	0	2			2	13:00	43	36			79
01:15	1	2			3	13:15	41	45			86
01:30	2	0			2	13:30	52	38			90
01:45	0	3	0	4	0	13:45	53	189	49	168	102
02:00	0	4			4	14:00	38	40			78
02:15	4	2			6	14:15	50	38			88
02:30	2	0			2	14:30	54	40			94
02:45	0	6	2	8	2	14:45	71	213	49	167	120
03:00	2	1			3	15:00	39	95			134
03:15	1	0			1	15:15	36	82			118
03:30	4	7			11	15:30	42	51			93
03:45	7	14	2	10	9	15:45	47	164	55	283	102
04:00	5	3			8	16:00	31	56			87
04:15	5	1			6	16:15	34	49			83
04:30	8	3			11	16:30	32	62			94
04:45	18	36	0	7	18	16:45	37	134	40	207	77
05:00	12	2			14	17:00	39	48			87
05:15	11	7			18	17:15	41	55			96
05:30	26	6			32	17:30	41	48			89
05:45	39	88	11	26	50	17:45	46	167	45	196	91
06:00	50	7			57	18:00	32	43			75
06:15	57	10			67	18:15	29	42			71
06:30	91	16			107	18:30	34	50			84
06:45	88	286	13	46	101	18:45	24	119	41	176	65
07:00	77	16			93	19:00	21	48			69
07:15	56	36			92	19:15	30	32			62
07:30	78	25			103	19:30	21	34			55
07:45	85	296	18	95	103	19:45	22	94	36	150	58
08:00	103	22			125	20:00	19	35			54
08:15	112	42			154	20:15	19	33			52
08:30	90	49			139	20:30	25	22			47
08:45	59	364	42	155	101	20:45	16	79	21	111	37
09:00	76	25			101	21:00	11	24			35
09:15	58	18			76	21:15	15	23			38
09:30	67	29			96	21:30	13	14			27
09:45	52	253	35	107	87	21:45	11	50	12	73	23
10:00	53	19			72	22:00	9	16			25
10:15	48	37			85	22:15	4	10			14
10:30	44	33			77	22:30	3	6			9
10:45	73	218	27	116	100	22:45	1	17	9	41	10
11:00	59	37			96	23:00	5	7			12
11:15	47	39			86	23:15	4	9			13
11:30	55	41			96	23:30	1	8			9
11:45	35	196	38	155	73	23:45	3	13	6	30	9
TOTALS	1765	742			2507	TOTALS	1423	1789			3212
SPLIT %	70.4%	29.6%			43.8%	SPLIT %	44.3%	55.7%			56.2%

DAILY TOTALS				NB	SB	EB				WB	Total
				3,188	2,531	0				0	5,719

AM Peak Hour	07:45	11:45			07:45	PM Peak Hour	14:15	15:00			14:30
AM Pk Volume	390	186			521	PM Pk Volume	214	283			466
Pk Hr Factor	0.871	0.894			0.846	Pk Hr Factor	0.754	0.745			0.869
7 - 9 Volume	660	250	0	0	910	4 - 6 Volume	301	403	0	0	704
7 - 9 Peak Hour	07:45	08:00			07:45	4 - 6 Peak Hour	17:00	16:00			17:00
7 - 9 Pk Volume	390	155	0	0	521	4 - 6 Pk Volume	167	207	0	0	363
Pk Hr Factor	0.871	0.791	0.000	0.000	0.846	Pk Hr Factor	0.908	0.835	0.000	0.000	0.945

VOLUME

Campbell Ranch Rd Bet. Temescal Canyon Rd & Mayhew Canyon Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_043

DAILY TOTALS					NB	SB					EB	WB	Total
					2,272	1,877					0	0	4,149
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	1	0			1		12:00	30	34			64	
00:15	0	3			3		12:15	19	25			44	
00:30	0	1			1		12:30	23	31			54	
00:45	0	1	3	7	3	8	12:45	28	100	29	119	57	219
01:00	1	3			4		13:00	30	20			50	
01:15	1	1			2		13:15	24	24			48	
01:30	0	0			0		13:30	28	38			66	
01:45	1	3	0	4	1	7	13:45	34	116	24	106	58	222
02:00	1	0			1		14:00	32	22			54	
02:15	0	3			3		14:15	31	36			67	
02:30	1	0			1		14:30	39	88			127	
02:45	0	2	1	4	1	6	14:45	27	129	28	174	55	303
03:00	0	0			0		15:00	27	45			72	
03:15	3	1			4		15:15	31	40			71	
03:30	7	3			10		15:30	24	50			74	
03:45	6	16	2	6	8	22	15:45	32	114	30	165	62	279
04:00	4	4			8		16:00	16	42			58	
04:15	6	4			10		16:15	25	34			59	
04:30	5	2			7		16:30	31	31			62	
04:45	9	24	3	13	12	37	16:45	23	95	39	146	62	241
05:00	5	3			8		17:00	18	42			60	
05:15	7	6			13		17:15	25	39			64	
05:30	19	2			21		17:30	19	40			59	
05:45	24	55	5	16	29	71	17:45	24	86	45	166	69	252
06:00	45	9			54		18:00	23	39			62	
06:15	71	9			80		18:15	11	48			59	
06:30	108	8			116		18:30	18	31			49	
06:45	116	340	3	29	119	369	18:45	20	72	22	140	42	212
07:00	106	14			120		19:00	16	33			49	
07:15	87	15			102		19:15	21	20			41	
07:30	81	29			110		19:30	16	28			44	
07:45	113	387	34	92	147	479	19:45	12	65	13	94	25	159
08:00	84	61			145		20:00	15	24			39	
08:15	56	41			97		20:15	13	16			29	
08:30	44	39			83		20:30	14	13			27	
08:45	33	217	22	163	55	380	20:45	12	54	14	67	26	121
09:00	55	19			74		21:00	11	11			22	
09:15	36	25			61		21:15	11	7			18	
09:30	34	15			49		21:30	13	8			21	
09:45	19	144	22	81	41	225	21:45	4	39	5	31	9	70
10:00	26	21			47		22:00	4	11			15	
10:15	20	18			38		22:15	2	3			5	
10:30	26	27			53		22:30	3	6			9	
10:45	21	93	42	108	63	201	22:45	5	14	6	26	11	40
11:00	20	28			48		23:00	4	7			11	
11:15	20	28			48		23:15	3	0			3	
11:30	24	22			46		23:30	3	2			5	
11:45	31	95	31	109	62	204	23:45	1	11	2	11	3	22
TOTALS	1377	632			2009		TOTALS	895	1245			2140	
SPLIT %	68.5%	31.5%			48.4%		SPLIT %	41.8%	58.2%			51.6%	

DAILY TOTALS					NB	SB					EB	WB	Total
					2,272	1,877					0	0	4,149
AM Peak Hour	06:30	07:45			07:15		PM Peak Hour	13:45	14:30			14:30	
AM Pk Volume	417	175			504		PM Pk Volume	136	201			325	
Pk Hr Factor	0.899	0.717			0.857		Pk Hr Factor	0.872	0.571			0.640	
7 - 9 Volume	604	255	0	0	859		4 - 6 Volume	181	312	0	0	493	
7 - 9 Peak Hour	07:00	07:45			07:15		4 - 6 Peak Hour	16:15	17:00			17:00	
7 - 9 Pk Volume	387	175	0	0	504		4 - 6 Pk Volume	97	166	0	0	252	
Pk Hr Factor	0.856	0.717	0.000	0.000	0.857		Pk Hr Factor	0.782	0.922	0.000	0.000	0.913	

VOLUME

Campbell Ranch Rd Bet. Mayhew Canyon Rd & Indian Truck Trail

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_044

DAILY TOTALS					NB	SB	EB					WB	Total	
					3,882	3,648						0		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	3	3			6	12:00	46	68			114			
00:15	6	3			9	12:15	38	45			83			
00:30	4	2			6	12:30	47	52			99			
00:45	4	17	4	12	8	12:45	53	184	50	215	103	399		
01:00	6	3			9	13:00	50	39			89			
01:15	4	1			5	13:15	54	49			103			
01:30	3	1			4	13:30	52	64			116			
01:45	1	14	0	5	1	13:45	56	212	43	195	99	407		
02:00	2	1			3	14:00	71	56			127			
02:15	2	6			8	14:15	74	44			118			
02:30	1	4			5	14:30	63	128			191			
02:45	1	6	0	11	1	14:45	54	262	78	306	132	568		
03:00	1	5			6	15:00	66	64			130			
03:15	3	9			12	15:15	62	61			123			
03:30	10	7			17	15:30	69	82			151			
03:45	8	22	5	26	13	15:45	63	260	64	271	127	531		
04:00	6	23			29	16:00	57	65			122			
04:15	12	22			34	16:15	57	61			118			
04:30	5	23			28	16:30	65	72			137			
04:45	10	33	21	89	31	16:45	54	233	70	268	124	501		
05:00	5	35			40	17:00	52	71			123			
05:15	7	30			37	17:15	55	61			116			
05:30	12	23			35	17:30	63	74			137			
05:45	19	43	20	108	39	17:45	71	241	74	280	145	521		
06:00	32	37			69	18:00	60	66			126			
06:15	57	39			96	18:15	66	71			137			
06:30	85	40			125	18:30	59	50			109			
06:45	78	252	35	151	113	18:45	53	238	37	224	90	462		
07:00	89	34			123	19:00	56	48			104			
07:15	88	37			125	19:15	63	35			98			
07:30	107	59			166	19:30	58	44			102			
07:45	105	389	72	202	177	19:45	66	243	33	160	99	403		
08:00	81	83			164	20:00	60	30			90			
08:15	61	83			144	20:15	64	25			89			
08:30	50	67			117	20:30	49	21			70			
08:45	43	235	42	275	85	20:45	53	226	30	106	83	332		
09:00	64	44			108	21:00	41	22			63			
09:15	46	51			97	21:15	41	12			53			
09:30	43	41			84	21:30	34	18			52			
09:45	33	186	42	178	75	21:45	31	147	9	61	40	208		
10:00	30	56			86	22:00	22	12			34			
10:15	34	55			89	22:15	18	7			25			
10:30	42	60			102	22:30	23	8			31			
10:45	32	138	79	250	111	22:45	17	80	7	34	24	114		
11:00	31	44			75	23:00	13	8			21			
11:15	45	46			91	23:15	20	5			25			
11:30	43	53			96	23:30	13	6			19			
11:45	49	168	54	197	103	23:45	7	53	5	24	12	77		
TOTALS	1503		1504		3007	TOTALS	2379		2144		4523			
SPLIT %	50.0%		50.0%		39.9%	SPLIT %	52.6%		47.4%		60.1%			

VOLUME

De Palma Rd Bet. Indian Truck Trail & Horsethief Canyon Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_045

DAILY TOTALS					NB	SB	EB					WB	Total	
					3,570	4,521						0	0	8,091
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	1	13			14	12:00	41	69			110			
00:15	1	17			18	12:15	45	57			102			
00:30	0	16			16	12:30	46	74			120			
00:45	3	5	8	54	11	12:45	38	170	81	281	119	451		
01:00	2	10			12	13:00	53	77			130			
01:15	1	6			7	13:15	33	73			106			
01:30	3	10			13	13:30	50	87			137			
01:45	3	9	9	35	12	13:45	47	183	80	317	127	500		
02:00	1	1			2	14:00	70	70			140			
02:15	4	5			9	14:15	56	57			113			
02:30	7	3			10	14:30	49	83			132			
02:45	3	15	3	12	6	14:45	37	212	81	291	118	503		
03:00	7	7			14	15:00	48	64			112			
03:15	23	5			28	15:15	48	79			127			
03:30	18	3			21	15:30	50	95			145			
03:45	19	67	3	18	22	15:45	42	188	105	343	147	531		
04:00	34	2			36	16:00	48	115			163			
04:15	34	2			36	16:15	42	89			131			
04:30	43	4			47	16:30	40	89			129			
04:45	46	157	8	16	54	16:45	46	176	108	401	154	577		
05:00	56	7			63	17:00	35	86			121			
05:15	57	11			68	17:15	50	90			140			
05:30	63	5			68	17:30	49	95			144			
05:45	70	246	7	30	77	17:45	44	178	108	379	152	557		
06:00	94	11			105	18:00	58	94			152			
06:15	84	12			96	18:15	41	129			170			
06:30	87	18			105	18:30	45	110			155			
06:45	84	349	19	60	103	18:45	42	186	88	421	130	607		
07:00	86	14			100	19:00	35	114			149			
07:15	70	21			91	19:15	29	104			133			
07:30	78	26			104	19:30	34	94			128			
07:45	79	313	42	103	121	19:45	25	123	88	400	113	523		
08:00	84	38			122	20:00	22	63			85			
08:15	59	39			98	20:15	27	71			98			
08:30	56	39			95	20:30	15	77			92			
08:45	57	256	28	144	85	20:45	13	77	40	251	53	328		
09:00	52	24			76	21:00	19	64			83			
09:15	59	29			88	21:15	21	56			77			
09:30	54	32			86	21:30	8	42			50			
09:45	51	216	39	124	90	21:45	4	52	53	215	57	267		
10:00	43	38			81	22:00	11	32			43			
10:15	38	47			85	22:15	10	32			42			
10:30	54	35			89	22:30	9	43			52			
10:45	48	183	44	164	92	22:45	2	32	51	158	53	190		
11:00	42	40			82	23:00	7	34			41			
11:15	41	49			90	23:15	7	27			34			
11:30	35	40			75	23:30	6	27			33			
11:45	35	153	64	193	99	23:45	4	24	23	111	27	135		
TOTALS	1969		953		2922	TOTALS	1601		3568		5169			
SPLIT %	67.4%		32.6%		36.1%	SPLIT %	31.0%		69.0%		63.9%			

DAILY TOTALS					NB	SB					EB	WB	Total	
					3,570	4,521					0	0	8,091	
AM Peak Hour	06:00		11:45		07:30		PM Peak Hour		13:30		17:45		17:45	
AM Pk Volume	349		264		445		PM Pk Volume		223		441		629	
Pk Hr Factor	0.928		0.892		0.912		Pk Hr Factor		0.796		0.855		0.925	
7 - 9 Volume	569		247		816		4 - 6 Volume		354		780		1134	
7 - 9 Peak Hour	07:00		07:45		07:30		4 - 6 Peak Hour		16:45		16:00		16:00	
7 - 9 Pk Volume	313		158		445		4 - 6 Pk Volume		180		401		577	
Pk Hr Factor	0.910		0.940		0.912		Pk Hr Factor		0.900		0.872		0.885	

VOLUME

Horsethief Canyon Rd S/O De Palma Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_046

DAILY TOTALS					NB	SB	EB				WB	Total
					4,986	5,023	0				0	10,009
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL
00:00	7	17			24		12:00	45	55			100
00:15	3	13			16		12:15	49	56			105
00:30	7	14			21		12:30	59	52			111
00:45	6	23	15	59	21	82	12:45	58	211	69	232	127 443
01:00	4	5			9		13:00	53	71			124
01:15	3	7			10		13:15	60	74			134
01:30	1	9			10		13:30	50	80			130
01:45	3	11	9	30	12	41	13:45	58	221	78	303	136 524
02:00	5	11			16		14:00	98	60			158
02:15	5	5			10		14:15	62	66			128
02:30	5	6			11		14:30	66	82			148
02:45	5	20	9	31	14	51	14:45	68	294	111	319	179 613
03:00	10	6			16		15:00	55	89			144
03:15	23	3			26		15:15	65	94			159
03:30	30	1			31		15:30	63	105			168
03:45	23	86	3	13	26	99	15:45	59	242	89	377	148 619
04:00	55	5			60		16:00	68	88			156
04:15	57	4			61		16:15	59	111			170
04:30	65	5			70		16:30	70	98			168
04:45	75	252	9	23	84	275	16:45	67	264	126	423	193 687
05:00	71	13			84		17:00	73	105			178
05:15	86	13			99		17:15	76	117			193
05:30	106	11			117		17:30	73	124			197
05:45	81	344	13	50	94	394	17:45	60	282	123	469	183 751
06:00	111	14			125		18:00	62	122			184
06:15	110	17			127		18:15	59	119			178
06:30	123	22			145		18:30	68	121			189
06:45	133	477	22	75	155	552	18:45	62	251	110	472	172 723
07:00	128	24			152		19:00	57	122			179
07:15	112	33			145		19:15	49	120			169
07:30	97	53			150		19:30	44	108			152
07:45	116	453	38	148	154	601	19:45	27	177	105	455	132 632
08:00	117	34			151		20:00	31	97			128
08:15	79	48			127		20:15	40	88			128
08:30	66	46			112		20:30	26	97			123
08:45	80	342	29	157	109	499	20:45	28	125	79	361	107 486
09:00	72	39			111		21:00	20	79			99
09:15	71	22			93		21:15	12	81			93
09:30	60	42			102		21:30	21	61			82
09:45	51	254	25	128	76	382	21:45	13	66	66	287	79 353
10:00	68	32			100		22:00	15	46			61
10:15	81	37			118		22:15	18	30			48
10:30	71	36			107		22:30	7	44			51
10:45	51	271	34	139	85	410	22:45	9	49	48	168	57 217
11:00	68	55			123		23:00	10	32			42
11:15	50	46			96		23:15	11	16			27
11:30	76	51			127		23:30	7	29			36
11:45	46	240	53	205	99	445	23:45	3	31	22	99	25 130
TOTALS	2773	1058			3831		TOTALS	2213	3965			6178
SPLIT %	72.4%	27.6%			38.3%		SPLIT %	35.8%	64.2%			61.7%

DAILY TOTALS					NB	SB	EB				WB	Total
					4,986	5,023	0				0	10,009
AM Peak Hour	06:30	11:45			06:45		PM Peak Hour	14:00	17:30			16:45
AM Pk Volume	496	216			602		PM Pk Volume	294	488			761
Pk Hr Factor	0.932	0.964			0.971		Pk Hr Factor	0.750	0.984			0.966
7 - 9 Volume	795	305	0	0	1100		4 - 6 Volume	546	892	0	0	1438
7 - 9 Peak Hour	07:00	07:30			07:00		4 - 6 Peak Hour	16:45	16:45			16:45
7 - 9 Pk Volume	453	173	0	0	601		4 - 6 Pk Volume	289	472	0	0	761
Pk Hr Factor	0.885	0.816	0.000	0.000	0.976		Pk Hr Factor	0.951	0.937	0.000	0.000	0.966

VOLUME

Horsethief Canyon Rd Bet. De Palma Rd & Temescal Canyon Rd

Day: Thursday
Date: 9/19/2019

City: Corona
Project #: CA19_6122_047

DAILY TOTALS					NB	SB	EB					WB	Total		
					0	0						2,304			1,566
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00			4	0	4		12:00			14	20	34			
00:15			3	2	5		12:15			29	27	56			
00:30			4	3	7		12:30			32	20	52			
00:45			3	14	1	6	12:45			26	101	29	96	55	197
01:00			2	2	4		13:00			22	19	41			
01:15			3	4	7		13:15			33	24	57			
01:30			1	1	2		13:30			35	34	69			
01:45			2	8	0	7	13:45			31	121	20	97	51	218
02:00			2	1	3		14:00			47	24	71			
02:15			2	1	3		14:15			34	29	63			
02:30			2	1	3		14:30			40	29	69			
02:45			1	7	5	8	14:45			42	163	44	126	86	289
03:00			3	3	6		15:00			31	36	67			
03:15			6	1	7		15:15			39	26	65			
03:30			13	2	15		15:30			31	45	76			
03:45			11	33	3	9	15:45			29	130	17	124	46	254
04:00			24	4	28		16:00			45	26	71			
04:15			23	3	26		16:15			31	34	65			
04:30			27	4	31		16:30			36	37	73			
04:45			34	108	13	24	16:45			36	148	29	126	65	274
05:00			23	12	35		17:00			39	36	75			
05:15			31	12	43		17:15			42	28	70			
05:30			35	11	46		17:30			40	33	73			
05:45			31	120	15	50	17:45			28	149	31	128	59	277
06:00			44	9	53		18:00			31	29	60			
06:15			39	12	51		18:15			33	22	55			
06:30			49	18	67		18:30			35	28	63			
06:45			63	195	12	51	18:45			25	124	17	96	42	220
07:00			59	19	78		19:00			30	26	56			
07:15			41	20	61		19:15			19	30	49			
07:30			38	30	68		19:30			15	15	30			
07:45			37	175	31	100	19:45			13	77	18	89	31	166
08:00			49	19	68		20:00			13	25	38			
08:15			37	13	50		20:15			14	24	38			
08:30			29	21	50		20:30			10	28	38			
08:45			37	152	10	63	20:45			9	46	14	91	23	137
09:00			29	12	41		21:00			7	15	22			
09:15			32	10	42		21:15			6	18	24			
09:30			28	16	44		21:30			9	11	20			
09:45			28	117	14	52	21:45			5	27	11	55	16	82
10:00			29	11	40		22:00			8	5	13			
10:15			36	14	50		22:15			10	4	14			
10:30			26	14	40		22:30			4	5	9			
10:45			30	121	12	51	22:45			6	28	10	24	16	52
11:00			37	21	58		23:00			6	8	14			
11:15			22	11	33		23:15			7	6	13			
11:30			33	21	54		23:30			2	5	7			
11:45			31	123	18	71	23:45			2	17	3	22	5	39
TOTALS	1173				492	1665	TOTALS	1131				1074	2205		
SPLIT %	70.5%				29.5%	43.0%	SPLIT %	51.3%				48.7%	57.0%		

DAILY TOTALS					NB	SB	EB					WB	Total				
					0	0	2,304					1,566	3,870				
AM Peak Hour			06:30	07:00	06:45		PM Peak Hour			14:00	14:45	14:45					
AM Pk Volume			212	100	282		PM Pk Volume			163	151	294					
Pk Hr Factor			0.841	0.806	0.904		Pk Hr Factor			0.867	0.839	0.855					
7 - 9 Volume	0	0	327	163	490		4 - 6 Volume	0	0	297	254	551					
7 - 9 Peak Hour			07:00	07:00	07:00		4 - 6 Peak Hour			16:45	16:15	16:30					
7 - 9 Pk Volume	0	0	175	100	275		4 - 6 Pk Volume	0	0	157	136	283					
Pk Hr Factor	0.000	0.000	0.742	0.806	0.881		Pk Hr Factor	0.000	0.000	0.935	0.919	0.943					

VOLUME

Lake St W/O Temescal Canyon Rd

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6122_048

DAILY TOTALS					NB	SB	EB					WB	Total	
					10,306	9,823						0	0	20,129
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	13	40			53		12:00	116	100			216		
00:15	10	37			47		12:15	100	79			179		
00:30	12	37			49		12:30	109	104			213		
00:45	17	52	41	155	58	207	12:45	125	450	112	395	237	845	
01:00	8	35			43		13:00	161	129			290		
01:15	9	20			29		13:15	112	125			237		
01:30	7	23			30		13:30	115	118			233		
01:45	16	40	18	96	34	136	13:45	109	497	154	526	263	1023	
02:00	16	18			34		14:00	153	133			286		
02:15	18	21			39		14:15	170	131			301		
02:30	28	14			42		14:30	156	183			339		
02:45	32	94	33	86	65	180	14:45	120	599	179	626	299	1225	
03:00	42	15			57		15:00	168	166			334		
03:15	60	16			76		15:15	160	188			348		
03:30	93	13			106		15:30	168	179			347		
03:45	114	309	30	74	144	383	15:45	141	637	210	743	351	1380	
04:00	191	24			215		16:00	116	189			305		
04:15	176	32			208		16:15	121	210			331		
04:30	186	32			218		16:30	140	229			369		
04:45	180	733	28	116	208	849	16:45	133	510	204	832	337	1342	
05:00	229	35			264		17:00	99	208			307		
05:15	186	49			235		17:15	100	222			322		
05:30	194	49			243		17:30	131	219			350		
05:45	233	842	65	198	298	1040	17:45	112	442	210	859	322	1301	
06:00	201	67			268		18:00	85	224			309		
06:15	199	55			254		18:15	87	199			286		
06:30	215	88			303		18:30	108	201			309		
06:45	203	818	88	298	291	1116	18:45	65	345	201	825	266	1170	
07:00	179	112			291		19:00	67	174			241		
07:15	222	134			356		19:15	53	169			222		
07:30	198	98			296		19:30	61	144			205		
07:45	232	831	95	439	327	1270	19:45	57	238	156	643	213	881	
08:00	258	93			351		20:00	50	161			211		
08:15	212	80			292		20:15	47	157			204		
08:30	153	76			229		20:30	36	126			162		
08:45	138	761	88	337	226	1098	20:45	44	177	125	569	169	746	
09:00	147	86			233		21:00	46	146			192		
09:15	134	57			191		21:15	47	133			180		
09:30	158	65			223		21:30	31	113			144		
09:45	129	568	81	289	210	857	21:45	25	149	123	515	148	664	
10:00	130	61			191		22:00	30	103			133		
10:15	152	89			241		22:15	18	78			96		
10:30	140	70			210		22:30	22	83			105		
10:45	127	549	72	292	199	841	22:45	21	91	76	340	97	431	
11:00	133	82			215		23:00	25	61			86		
11:15	126	81			207		23:15	10	65			75		
11:30	169	96			265		23:30	13	52			65		
11:45	89	517	79	338	168	855	23:45	9	57	54	232	63	289	
TOTALS	6114	2718			8832		TOTALS	4192	7105			11297		
SPLIT %	69.2%	30.8%			43.9%		SPLIT %	37.1%	62.9%			56.1%		

DAILY TOTALS					NB	SB	EB					WB	Total	
					10,306	9,823						0	0	20,129
AM Peak Hour	07:15	07:00			07:15		PM Peak Hour	15:00	17:15			15:00		
AM Pk Volume	910	439			1330		PM Pk Volume	637	875			1380		
Pk Hr Factor	0.882	0.819			0.934		Pk Hr Factor	0.948	0.977			0.983		
7 - 9 Volume	1592	776	0	0	2368		4 - 6 Volume	952	1691	0	0	2643		
7 - 9 Peak Hour	07:15	07:00			07:15		4 - 6 Peak Hour	16:00	16:30			16:15		
7 - 9 Pk Volume	910	439	0	0	1330		4 - 6 Pk Volume	510	863	0	0	1344		
Pk Hr Factor	0.882	0.819	0.000	0.000	0.934		Pk Hr Factor	0.911	0.942	0.000	0.000	0.911		

VOLUME

Lake St E/O Temescal Canyon Rd

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6122_049

DAILY TOTALS					NB	SB	EB					WB	Total						
					9,794	8,741						0	0	18,535					
AM Period	NB		SB		EB		WB		TOTAL	PM Period	NB		SB		EB		WB		TOTAL
00:00	9		38						47	12:00	111		82						193
00:15	11		38						49	12:15	101		67						168
00:30	9		35						44	12:30	137		87						224
00:45	14	43	44	155					58 198	12:45	111	460	102	338					798
01:00	8		29						37	13:00	114		101						215
01:15	9		19						28	13:15	115		102						217
01:30	9		24						33	13:30	114		128						242
01:45	13	39	14	86					27 125	13:45	127	470	135	466					936
02:00	16		15						31	14:00	100		166						266
02:15	21		19						40	14:15	154		178						332
02:30	27		10						37	14:30	114		130						244
02:45	42	106	22	66					64 172	14:45	98	466	131	605					1071
03:00	45		11						56	15:00	131		156						287
03:15	55		11						66	15:15	139		202						341
03:30	94		12						106	15:30	135		146						281
03:45	130	324	17	51					147 375	15:45	115	520	187	691					1211
04:00	187		19						206	16:00	108		189						297
04:15	200		26						226	16:15	109		138						247
04:30	221		25						246	16:30	110		213						323
04:45	208	816	25	95					233 911	16:45	102	429	198	738					1167
05:00	235		23						258	17:00	102		181						283
05:15	238		35						273	17:15	83		207						290
05:30	194		44						238	17:30	91		236						327
05:45	199	866	41	143					240 1009	17:45	104	380	215	839					1219
06:00	212		53						265	18:00	68		221						289
06:15	255		41						296	18:15	84		182						266
06:30	249		64						313	18:30	98		163						261
06:45	260	976	62	220					322 1196	18:45	62	312	155	721					1033
07:00	194		83						277	19:00	76		141						217
07:15	220		77						297	19:15	48		169						217
07:30	215		60						275	19:30	46		146						192
07:45	238	867	84	304					322 1171	19:45	48	218	144	600					818
08:00	207		96						303	20:00	51		126						177
08:15	188		86						274	20:15	42		139						181
08:30	166		92						258	20:30	30		121						151
08:45	144	705	89	363					233 1068	20:45	33	156	114	500					656
09:00	132		80						212	21:00	49		117						166
09:15	133		58						191	21:15	40		95						135
09:30	123		70						193	21:30	29		93						122
09:45	113	501	75	283					188 784	21:45	19	137	88	393					530
10:00	115		55						170	22:00	23		101						124
10:15	126		83						209	22:15	30		68						98
10:30	120		66						186	22:30	12		65						77
10:45	109	470	59	263					168 733	22:45	19	84	80	314					398
11:00	106		78						184	23:00	15		61						76
11:15	121		70						191	23:15	10		57						67
11:30	101		93						194	23:30	8		44						52
11:45	78	406	67	308					145 714	23:45	10	43	37	199					242
TOTALS	6119		2337						8456	TOTALS	3675		6404						10079
SPLIT %	72.4%		27.6%						45.6%	SPLIT %	36.5%		63.5%						54.4%

DAILY TOTALS					NB	SB						EB	WB	Total	
					9,794	8,741						0	0	18,535	
AM Peak Hour	06:00	08:00	06:30			PM Peak Hour	15:00	17:15			17:15				
AM Pk Volume	976	363	1209			PM Pk Volume	520	879			1225				
Pk Hr Factor	0.938	0.945	0.939			Pk Hr Factor	0.935	0.931			0.937				
7 - 9 Volume	1572	667	0	0	2239	4 - 6 Volume	809	1577	0	0	2386				
7 - 9 Peak Hour	07:15	08:00	07:15			4 - 6 Peak Hour	16:00	17:00			17:00				
7 - 9 Pk Volume	880	363	0	0	1197	4 - 6 Pk Volume	429	839	0	0	1219				
Pk Hr Factor	0.924	0.945	0.000	0.000	0.929	Pk Hr Factor	0.975	0.889	0.000	0.000	0.932				

VOLUME

Nichols Rd W/O Collier Ave

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6122_050

DAILY TOTALS					NB	SB	EB					WB	Total		
					0	0						4,538			4,216
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00			5	13	18		12:00			52	48	100			
00:15			1	8	9		12:15			62	49	111			
00:30			2	9	11		12:30			43	72	115			
00:45			4	12	6	36	12:45			47	204	62	231	109	435
01:00			3	3	6		13:00			57	64	121			
01:15			3	7	10		13:15			67	67	134			
01:30			2	4	6		13:30			72	64	136			
01:45			2	10	5	19	13:45			54	250	86	281	140	531
02:00			2	1	3		14:00			78	48	126			
02:15			1	7	8		14:15			104	62	166			
02:30			2	5	7		14:30			92	74	166			
02:45			2	7	10	23	14:45			87	361	90	274	177	635
03:00			3	4	7		15:00			74	72	146			
03:15			5	11	16		15:15			56	64	120			
03:30			33	5	38		15:30			80	85	165			
03:45			21	62	22	42	15:45			63	273	89	310	152	583
04:00			21	6	27		16:00			70	78	148			
04:15			34	11	45		16:15			49	71	120			
04:30			40	8	48		16:30			64	104	168			
04:45			34	129	12	37	16:45			75	258	73	326	148	584
05:00			21	18	39		17:00			62	104	166			
05:15			39	14	53		17:15			61	117	178			
05:30			41	32	73		17:30			66	93	159			
05:45			45	146	35	99	17:45			89	278	103	417	192	695
06:00			42	22	64		18:00			81	76	157			
06:15			71	32	103		18:15			60	97	157			
06:30			69	35	104		18:30			62	97	159			
06:45			94	276	37	126	18:45			57	260	73	343	130	603
07:00			127	68	195		19:00			64	65	129			
07:15			119	74	193		19:15			49	56	105			
07:30			123	69	192		19:30			49	75	124			
07:45			95	464	26	237	19:45			41	203	76	272	117	475
08:00			86	35	121		20:00			49	52	101			
08:15			70	24	94		20:15			38	50	88			
08:30			75	30	105		20:30			32	63	95			
08:45			72	303	39	128	20:45			24	143	49	214	73	357
09:00			76	29	105		21:00			29	43	72			
09:15			53	42	95		21:15			14	47	61			
09:30			57	43	100		21:30			17	31	48			
09:45			68	254	40	154	21:45			13	73	27	148	40	221
10:00			58	45	103		22:00			9	23	32			
10:15			82	32	114		22:15			10	31	41			
10:30			64	36	100		22:30			11	15	26			
10:45			58	262	60	173	22:45			8	38	20	89	28	127
11:00			63	37	100		23:00			7	15	22			
11:15			59	51	110		23:15			4	7	11			
11:30			63	51	114		23:30			4	9	13			
11:45			68	253	56	195	23:45			4	19	11	42	15	61
TOTALS	2178				1269	3447	TOTALS	2360				2947	5307		
SPLIT %	63.2%				36.8%	39.4%	SPLIT %	44.5%				55.5%	60.6%		

DAILY TOTALS					NB	SB	EB					WB	Total				
					0	0	4,538					4,216	8,754				
AM Peak Hour			07:00	06:45	06:45		PM Peak Hour			14:00	17:00	17:00					
AM Pk Volume			464	248	711		PM Pk Volume			361	417	695					
Pk Hr Factor			0.913	0.838	0.912		Pk Hr Factor			0.868	0.891	0.905					
7 - 9 Volume	0	0	767	365	1132		4 - 6 Volume	0	0	536	743	1279					
7 - 9 Peak Hour			07:00	07:00	07:00		4 - 6 Peak Hour			17:00	17:00	17:00					
7 - 9 Pk Volume	0	0	464	237	701		4 - 6 Pk Volume	0	0	278	417	695					
Pk Hr Factor	0.000	0.000	0.913	0.801	0.899		Pk Hr Factor	0.000	0.000	0.781	0.891	0.905					

VOLUME

Nichols Rd E/O I-15

Day: Thursday
Date: 10/3/2019City: Lake Elsinore
Project #: CA19_6123_051

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						6,478	5,932						12,410
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00			8	17	25		12:00			67	86	153							
00:15			11	20	31		12:15			82	71	153							
00:30			4	12	16		12:30			78	94	172							
00:45			5	28	7	56	12:45			92	319	84	335	176	654				
01:00			4	6	10		13:00			83	98	181							
01:15			6	8	14		13:15			89	113	202							
01:30			4	7	11		13:30			93	95	188							
01:45			2	16	5	26	13:45			115	380	120	426	235	806				
02:00			4	4	8		14:00			131	82	213							
02:15			5	7	12		14:15			148	86	234							
02:30			9	7	16		14:30			121	131	252							
02:45			3	21	11	29	14:45			122	522	117	416	239	938				
03:00			14	8	22		15:00			117	103	220							
03:15			26	12	38		15:15			115	111	226							
03:30			23	11	34		15:30			124	127	251							
03:45			17	80	26	57	15:45			97	453	125	466	222	919				
04:00			29	21	50		16:00			144	109	253							
04:15			39	30	69		16:15			115	113	228							
04:30			59	25	84		16:30			116	113	229							
04:45			56	183	33	109	16:45			116	491	93	428	209	919				
05:00			71	46	117		17:00			99	149	248							
05:15			63	38	101		17:15			109	138	247							
05:30			64	45	109		17:30			132	135	267							
05:45			59	257	45	174	17:45			105	445	136	558	241	1003				
06:00			72	47	119		18:00			93	107	200							
06:15			100	50	150		18:15			103	123	226							
06:30			95	55	150		18:30			107	117	224							
06:45			114	381	68	220	18:45			74	377	95	442	169	819				
07:00			145	99	244		19:00			82	90	172							
07:15			118	100	218		19:15			69	77	146							
07:30			116	81	197		19:30			75	87	162							
07:45			128	507	62	342	19:45			58	284	75	329	133	613				
08:00			92	57	149		20:00			75	66	141							
08:15			94	39	133		20:15			43	60	103							
08:30			96	52	148		20:30			50	57	107							
08:45			89	371	67	215	20:45			32	200	55	238	87	438				
09:00			87	51	138		21:00			44	60	104							
09:15			77	55	132		21:15			15	54	69							
09:30			68	48	116		21:30			31	23	54							
09:45			59	291	58	212	21:45			22	112	18	155	40	267				
10:00			71	66	137		22:00			22	25	47							
10:15			87	45	132		22:15			17	34	51							
10:30			90	50	140		22:30			16	24	40							
10:45			71	319	67	228	22:45			19	74	30	113	49	187				
11:00			78	67	145		23:00			9	24	33							
11:15			66	72	138		23:15			19	14	33							
11:30			83	72	155		23:30			13	15	28							
11:45			88	315	74	285	23:45			11	52	20	73	31	125				
TOTALS			2769	1953	4722		TOTALS			3709	3979	7688							
SPLIT %			58.6%	41.4%	38.0%		SPLIT %			48.2%	51.8%	62.0%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						6,478	5,932						12,410
AM Peak Hour			07:00	06:45	07:00		PM Peak Hour			14:00	17:00	17:00							
AM Pk Volume			507	348	849		PM Pk Volume			522	558	1003							
Pk Hr Factor			0.874	0.870	0.870		Pk Hr Factor			0.882	0.936	0.939							
7 - 9 Volume	0	0	878	557	1435		4 - 6 Volume	0	0	936	986	1922							
7 - 9 Peak Hour			07:00	07:00	07:00		4 - 6 Peak Hour			16:00	17:00	17:00							
7 - 9 Pk Volume	0	0	507	342	849		4 - 6 Pk Volume	0	0	491	558	1003							
Pk Hr Factor	0.000	0.000	0.874	0.855	0.870		Pk Hr Factor	0.000	0.000	0.852	0.936	0.939							

VOLUME

Nichols Rd E/O I-15

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6122_052

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						2,408	1,897	4,305
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			1	2	3		12:00			24	39	63		
00:15			3	0	3		12:15			32	21	53		
00:30			1	3	4		12:30			19	27	46		
00:45			3	8 1 6	4 14		12:45			14 89 26 113	40 202			
01:00			1	0	1		13:00			26	22	48		
01:15			4	1	5		13:15			36	34	70		
01:30			1	1	2		13:30			30	45	75		
01:45			3	9 1 3	4 12		13:45			32 124 13 114	45 238			
02:00			0	0	0		14:00			68	24	92		
02:15			1	4	5		14:15			89	18	107		
02:30			1	2	3		14:30			87	99	186		
02:45			0	2 4 10	4 12		14:45			62 306 77 218	139 524			
03:00			2	2	4		15:00			58	57	115		
03:15			2	8	10		15:15			63	26	89		
03:30			4	2	6		15:30			61	52	113		
03:45			12	20 12 24	24 44		15:45			46 228 42 177	88 405			
04:00			4	13	17		16:00			42	22	64		
04:15			7	6	13		16:15			32	24	56		
04:30			3	13	16		16:30			44	24	68		
04:45			17	31 7 39	24 70		16:45			49 167 32 102	81 269			
05:00			3	9	12		17:00			35	35	70		
05:15			9	11	20		17:15			41	22	63		
05:30			15	17	32		17:30			41	26	67		
05:45			19	46 11 48	30 94		17:45			53 170 16 99	69 269			
06:00			13	27	40		18:00			45	31	76		
06:15			32	54	86		18:15			35	26	61		
06:30			36	35	71		18:30			26	27	53		
06:45			72	153 29 145	101 298		18:45			18 124 15 99	33 223			
07:00			185	65	250		19:00			24	16	40		
07:15			151	80	231		19:15			30	17	47		
07:30			36	73	109		19:30			12	17	29		
07:45			36	408 30 248	66 656		19:45			22 88 10 60	32 148			
08:00			13	19	32		20:00			14	11	25		
08:15			19	17	36		20:15			11	11	22		
08:30			15	12	27		20:30			14	16	30		
08:45			12	59 13 61	25 120		20:45			8 47 15 53	23 100			
09:00			13	14	27		21:00			15	6	21		
09:15			20	22	42		21:15			11	7	18		
09:30			16	13	29		21:30			10	5	15		
09:45			26	75 20 69	46 144		21:45			6 42 3 21	9 63			
10:00			19	20	39		22:00			5	5	10		
10:15			23	30	53		22:15			3	2	5		
10:30			37	22	59		22:30			2	2	4		
10:45			24	103 18 90	42 193		22:45			5 15 2 11	7 26			
11:00			22	25	47		23:00			5	1	6		
11:15			15	23	38		23:15			4	0	4		
11:30			22	16	38		23:30			3	1	4		
11:45			22	81 19 83	41 164		23:45			1 13 2 4	3 17			
TOTALS	995 826				1821	TOTALS	1413 1071				2484			
SPLIT %	54.6% 45.4%				42.3%	SPLIT %	56.9% 43.1%				57.7%			

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	2,408					1,897	4,305
AM Peak Hour			06:30	07:00	06:45		PM Peak Hour			14:00	14:30	14:15	
AM Pk Volume			444	248	691		PM Pk Volume			306	259	547	
Pk Hr Factor			0.600	0.775	0.691		Pk Hr Factor			0.860	0.654	0.735	
7 - 9 Volume	0	0	467	309	776		4 - 6 Volume	0	0	337	201	538	
7 - 9 Peak Hour			07:00	07:00	07:00		4 - 6 Peak Hour			17:00	16:15	16:30	
7 - 9 Pk Volume	0	0	408	248	656		4 - 6 Pk Volume	0	0	170	115	282	
Pk Hr Factor	0.000	0.000	0.551	0.775	0.656		Pk Hr Factor	0.000	0.000	0.802	0.821	0.870	

VOLUME

Collier Ave Bet. Nichols Rd & Riverside Dr

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6122_053

DAILY TOTALS					NB	SB	EB				WB	Total
					2,958	2,661	0				0	5,619
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL
00:00	2	3			5		12:00	52	38			90
00:15	4	7			11		12:15	58	67			125
00:30	4	3			7		12:30	56	46			102
00:45	1	11	4	17	5	28	12:45	68	234	47	198	115 432
01:00	1	0			1		13:00	69	37			106
01:15	2	3			5		13:15	51	59			110
01:30	2	1			3		13:30	55	49			104
01:45	4	9	2	6	6	15	13:45	71	246	42	187	113 433
02:00	1	0			1		14:00	54	34			88
02:15	1	2			3		14:15	67	41			108
02:30	4	2			6		14:30	50	52			102
02:45	4	10	1	5	5	15	14:45	57	228	70	197	127 425
03:00	5	0			5		15:00	62	59			121
03:15	12	0			12		15:15	59	43			102
03:30	24	4			28		15:30	61	58			119
03:45	29	70	3	7	32	77	15:45	59	241	53	213	112 454
04:00	24	4			28		16:00	51	52			103
04:15	27	2			29		16:15	51	43			94
04:30	23	7			30		16:30	57	45			102
04:45	28	102	14	27	42	129	16:45	47	206	47	187	94 393
05:00	29	5			34		17:00	58	31			89
05:15	32	4			36		17:15	51	59			110
05:30	25	23			48		17:30	50	66			116
05:45	25	111	24	56	49	167	17:45	42	201	61	217	103 418
06:00	16	12			28		18:00	45	53			98
06:15	24	27			51		18:15	41	48			89
06:30	28	18			46		18:30	60	52			112
06:45	28	96	22	79	50	175	18:45	44	190	54	207	98 397
07:00	22	22			44		19:00	32	38			70
07:15	22	35			57		19:15	37	33			70
07:30	33	31			64		19:30	23	37			60
07:45	38	115	46	134	84	249	19:45	32	124	27	135	59 259
08:00	31	29			60		20:00	21	22			43
08:15	30	24			54		20:15	37	30			67
08:30	18	29			47		20:30	22	33			55
08:45	31	110	34	116	65	226	20:45	14	94	20	105	34 199
09:00	23	22			45		21:00	13	24			37
09:15	34	35			69		21:15	12	14			26
09:30	27	25			52		21:30	12	15			27
09:45	42	126	45	127	87	253	21:45	8	45	13	66	21 111
10:00	45	38			83		22:00	5	11			16
10:15	27	45			72		22:15	3	9			12
10:30	46	35			81		22:30	3	4			7
10:45	35	153	41	159	76	312	22:45	4	15	5	29	9 44
11:00	41	36			77		23:00	1	10			11
11:15	43	44			87		23:15	1	7			8
11:30	66	35			101		23:30	7	3			10
11:45	58	208	47	162	105	370	23:45	4	13	5	25	9 38
TOTALS	1121	895			2016		TOTALS	1837	1766			3603
SPLIT %	55.6%	44.4%			35.9%		SPLIT %	51.0%	49.0%			64.1%

DAILY TOTALS					NB	SB	EB				WB	Total
					2,958	2,661	0				0	5,619
AM Peak Hour	11:30	11:45			11:45		PM Peak Hour	12:15	17:15			14:45
AM Pk Volume	234	198			422		PM Pk Volume	251	239			469
Pk Hr Factor	0.886	0.739			0.844		Pk Hr Factor	0.909	0.905			0.923
7 - 9 Volume	225	250	0	0	475		4 - 6 Volume	407	404	0	0	811
7 - 9 Peak Hour	07:30	07:15			07:15		4 - 6 Peak Hour	16:15	17:00			17:00
7 - 9 Pk Volume	132	141	0	0	265		4 - 6 Pk Volume	213	217	0	0	418
Pk Hr Factor	0.868	0.766	0.000	0.000	0.789		Pk Hr Factor	0.918	0.822	0.000	0.000	0.901

VOLUME

Collier Ave Bet. Riverside Dr & Central Ave

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6122_054

DAILY TOTALS	NB	SB	EB		WB	Total
	14,963	13,866	0	0		28,829

AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL
00:00	37	17			54	12:00	232	209			441
00:15	34	18			52	12:15	227	181			408
00:30	16	15			31	12:30	258	176			434
00:45	16	103	16	66	32	12:45	257	974	206	772	463
01:00	21	13			34	13:00	231	240			471
01:15	13	8			21	13:15	205	228			433
01:30	7	15			22	13:30	235	227			462
01:45	11	52	5	41	16	13:45	262	933	173	868	435
02:00	17	7			24	14:00	240	211			451
02:15	7	13			20	14:15	290	240			530
02:30	9	10			19	14:30	254	229			483
02:45	21	54	11	41	32	14:45	259	1043	251	931	510
03:00	11	11			22	15:00	236	256			492
03:15	19	16			35	15:15	269	245			514
03:30	25	25			50	15:30	280	268			548
03:45	30	85	21	73	51	15:45	286	1071	273	1042	559
04:00	61	48			109	16:00	292	260			552
04:15	44	43			87	16:15	241	221			462
04:30	71	73			144	16:30	252	277			529
04:45	147	323	96	260	243	16:45	262	1047	230	988	492
05:00	159	75			234	17:00	261	292			553
05:15	162	100			262	17:15	278	237			515
05:30	175	109			284	17:30	268	233			501
05:45	141	637	114	398	255	17:45	251	1058	274	1036	525
06:00	113	108			221	18:00	243	280			523
06:15	126	147			273	18:15	262	202			464
06:30	136	157			293	18:30	248	275			523
06:45	165	540	204	616	369	18:45	234	987	255	1012	489
07:00	177	209			386	19:00	222	204			426
07:15	170	206			376	19:15	214	213			427
07:30	174	247			421	19:30	217	169			386
07:45	201	722	192	854	393	19:45	188	841	156	742	344
08:00	188	195			383	20:00	160	137			297
08:15	178	163			341	20:15	173	117			290
08:30	148	190			338	20:30	167	101			268
08:45	183	697	174	722	357	20:45	153	653	109	464	262
09:00	158	161			319	21:00	128	129			257
09:15	153	172			325	21:15	144	88			232
09:30	176	193			369	21:30	113	55			168
09:45	184	671	190	716	374	21:45	74	459	66	338	140
10:00	198	186			384	22:00	92	50			142
10:15	168	184			352	22:15	70	51			121
10:30	170	204			374	22:30	56	45			101
10:45	177	713	214	788	391	22:45	47	265	36	182	83
11:00	207	195			402	23:00	63	36			99
11:15	205	211			416	23:15	43	29			72
11:30	224	181			405	23:30	39	21			60
11:45	208	844	218	805	426	23:45	46	191	25	111	71
TOTALS	5441	5380			10821	TOTALS	9522	8486			18008
SPLIT %	50.3%	49.7%			37.5%	SPLIT %	52.9%	47.1%			62.5%

DAILY TOTALS	NB	SB	EB		WB	Total
	14,963	13,866	0	0		28,829

AM Peak Hour	11:45	06:45			11:45	PM Peak Hour	15:15	15:15			15:15
AM Pk Volume	925	866			1709	PM Pk Volume	1127	1046			2173
Pk Hr Factor	0.896	0.877			0.969	Pk Hr Factor	0.965	0.958			0.972
7 - 9 Volume	1419	1576	0	0	2995	4 - 6 Volume	2105	2024	0	0	4129
7 - 9 Peak Hour	07:30	07:00			07:00	4 - 6 Peak Hour	16:45	16:30			17:00
7 - 9 Pk Volume	741	854	0	0	1576	4 - 6 Pk Volume	1069	1036	0	0	2094
Pk Hr Factor	0.922	0.864	0.000	0.000	0.936	Pk Hr Factor	0.961	0.887	0.000	0.000	0.947

VOLUME

Collier Ave S/O Central Ave

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6122_055

DAILY TOTALS					NB	SB	EB				WB	Total
					6,127	5,725	0				0	11,852
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL
00:00	2	10			12		12:00	142	107			249
00:15	4	4			8		12:15	128	121			249
00:30	0	7			7		12:30	119	127			246
00:45	7	13	2	23	9	36	12:45	101	490	111	466	212 956
01:00	3	8			11		13:00	104	94			198
01:15	3	2			5		13:15	86	143			229
01:30	3	2			5		13:30	130	144			274
01:45	0	9	1	13	1	22	13:45	146	466	118	499	264 965
02:00	0	6			6		14:00	162	134			296
02:15	0	2			2		14:15	113	102			215
02:30	2	4			6		14:30	110	106			216
02:45	0	2	3	15	3	17	14:45	105	490	124	466	229 956
03:00	2	3			5		15:00	108	109			217
03:15	8	1			9		15:15	123	98			221
03:30	7	8			15		15:30	111	94			205
03:45	14	31	2	14	16	45	15:45	97	439	118	419	215 858
04:00	21	6			27		16:00	142	95			237
04:15	19	17			36		16:15	105	101			206
04:30	22	6			28		16:30	131	98			229
04:45	28	90	14	43	42	133	16:45	123	501	123	417	246 918
05:00	36	18			54		17:00	141	104			245
05:15	16	10			26		17:15	95	101			196
05:30	25	34			59		17:30	126	72			198
05:45	36	113	34	96	70	209	17:45	78	440	79	356	157 796
06:00	41	27			68		18:00	85	86			171
06:15	41	34			75		18:15	88	67			155
06:30	61	50			111		18:30	74	52			126
06:45	67	210	91	202	158	412	18:45	76	323	80	285	156 608
07:00	111	129			240		19:00	92	63			155
07:15	175	178			353		19:15	43	46			89
07:30	107	149			256		19:30	58	51			109
07:45	85	478	118	574	203	1052	19:45	44	237	38	198	82 435
08:00	98	98			196		20:00	43	43			86
08:15	118	95			213		20:15	37	43			80
08:30	100	87			187		20:30	40	28			68
08:45	71	387	77	357	148	744	20:45	36	156	38	152	74 308
09:00	77	76			153		21:00	31	27			58
09:15	85	60			145		21:15	37	26			63
09:30	74	97			171		21:30	20	25			45
09:45	79	315	60	293	139	608	21:45	16	104	19	97	35 201
10:00	108	68			176		22:00	13	17			30
10:15	73	86			159		22:15	12	15			27
10:30	102	94			196		22:30	9	11			20
10:45	83	366	88	336	171	702	22:45	3	37	13	56	16 93
11:00	93	64			157		23:00	8	11			19
11:15	100	82			182		23:15	5	10			15
11:30	105	83			188		23:30	3	7			10
11:45	113	411	84	313	197	724	23:45	3	19	7	35	10 54
TOTALS	2425	2279			4704		TOTALS	3702	3446			7148
SPLIT %	51.6%	48.4%			39.7%		SPLIT %	51.8%	48.2%			60.3%

DAILY TOTALS					NB	SB	EB				WB	Total
					6,127	5,725	0				0	11,852
AM Peak Hour	11:45	07:00			07:00		PM Peak Hour	13:30	13:15			13:15
AM Pk Volume	502	574			1052		PM Pk Volume	551	539			1063
Pk Hr Factor	0.884	0.806			0.745		Pk Hr Factor	0.850	0.936			0.898
7 - 9 Volume	865	931	0	0	1796		4 - 6 Volume	941	773	0	0	1714
7 - 9 Peak Hour	07:00	07:00			07:00		4 - 6 Peak Hour	16:00	16:15			16:15
7 - 9 Pk Volume	478	574	0	0	1052		4 - 6 Pk Volume	501	426	0	0	926
Pk Hr Factor	0.683	0.806	0.000	0.000	0.745		Pk Hr Factor	0.882	0.866	0.000	0.000	0.941

VOLUME

Dexter Ave N/O Central Ave

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6122_056

DAILY TOTALS					NB	SB	EB					WB	Total	
					4,693	4,685						0		
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL			
00:00	3	0			3	12:00	70	114			184			
00:15	3	1			4	12:15	92	71			163			
00:30	0	3			3	12:30	54	88			142			
00:45	2	8	0	4	2 12	12:45	69	285	93	366	162 651			
01:00	1	1			2	13:00	63	75			138			
01:15	0	0			0	13:15	87	99			186			
01:30	1	0			1	13:30	79	108			187			
01:45	1	3	3	4	4 7	13:45	83	312	82	364	165 676			
02:00	2	0			2	14:00	128	84			212			
02:15	0	0			0	14:15	114	86			200			
02:30	4	2			6	14:30	115	190			305			
02:45	0	6	2	4	2 10	14:45	103	460	191	551	294 1011			
03:00	0	0			0	15:00	99	96			195			
03:15	0	1			1	15:15	94	97			191			
03:30	3	3			6	15:30	90	103			193			
03:45	16	19	4	8	20 27	15:45	73	356	90	386	163 742			
04:00	5	3			8	16:00	87	81			168			
04:15	5	1			6	16:15	81	60			141			
04:30	2	5			7	16:30	80	78			158			
04:45	7	19	7	16	14 35	16:45	86	334	98	317	184 651			
05:00	4	12			16	17:00	78	98			176			
05:15	12	7			19	17:15	75	81			156			
05:30	17	30			47	17:30	82	82			164			
05:45	29	62	19	68	48 130	17:45	82	317	73	334	155 651			
06:00	32	20			52	18:00	80	64			144			
06:15	97	55			152	18:15	70	90			160			
06:30	75	52			127	18:30	67	74			141			
06:45	125	329	75	202	200 531	18:45	75	292	65	293	140 585			
07:00	210	193			403	19:00	68	64			132			
07:15	132	211			343	19:15	60	62			122			
07:30	46	106			152	19:30	54	54			108			
07:45	47	435	33	543	80 978	19:45	47	229	44	224	91 453			
08:00	54	32			86	20:00	34	35			69			
08:15	55	25			80	20:15	42	38			80			
08:30	31	26			57	20:30	24	66			90			
08:45	41	181	26	109	67 290	20:45	19	119	43	182	62 301			
09:00	47	27			74	21:00	15	13			28			
09:15	50	24			74	21:15	17	8			25			
09:30	66	37			103	21:30	6	4			10			
09:45	66	229	51	139	117 368	21:45	7	45	6	31	13 76			
10:00	80	49			129	22:00	8	15			23			
10:15	75	47			122	22:15	6	7			13			
10:30	79	71			150	22:30	4	1			5			
10:45	81	315	64	231	145 546	22:45	6	24	1	24	7 48			
11:00	71	64			135	23:00	2	0			2			
11:15	74	63			137	23:15	7	4			11			
11:30	78	89			167	23:30	1	1			2			
11:45	78	301	61	277	139 578	23:45	3	13	3	8	6 21			
TOTALS	1907	1605			3512	TOTALS	2786	3080			5866			
SPLIT %	54.3%	45.7%			37.4%	SPLIT %	47.5%	52.5%			62.6%			

DAILY TOTALS					NB	SB					EB	WB	Total	
					4,693	4,685					0	0	9,378	
AM Peak Hour	06:30	06:45		06:45			PM Peak Hour	14:00	14:30			14:00		
AM Pk Volume	542	585		1098			PM Pk Volume	460	574			1011		
Pk Hr Factor	0.645	0.693		0.681			Pk Hr Factor	0.898	0.751			0.829		
7 - 9 Volume	616	652	0	0	1268		4 - 6 Volume	651	651	0	0	1302		
7 - 9 Peak Hour	07:00	07:00			07:00		4 - 6 Peak Hour	16:00	16:45			16:45		
7 - 9 Pk Volume	435	543	0	0	978		4 - 6 Pk Volume	334	359	0	0	680		
Pk Hr Factor	0.518	0.643	0.000	0.000	0.607		Pk Hr Factor	0.960	0.916	0.000	0.000	0.924		

VOLUME

Dexter Ave S/O Central Ave

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6122_057

DAILY TOTALS					NB	SB	EBWB					Total	
					4,950	2,919						0	0
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	17	3			20		12:00	75	42			117	
00:15	2	2			4		12:15	95	47			142	
00:30	5	2			7		12:30	85	35			120	
00:45	0	24	0	7	0	31	12:45	80	335	44	168	124	503
01:00	1	0			1		13:00	84	48			132	
01:15	2	2			4		13:15	79	39			118	
01:30	0	0			0		13:30	76	42			118	
01:45	0	3	0	2	0	5	13:45	71	310	35	164	106	474
02:00	0	1			1		14:00	123	39			162	
02:15	1	3			4		14:15	147	36			183	
02:30	2	1			3		14:30	86	70			156	
02:45	1	4	0	5	1	9	14:45	123	479	87	232	210	711
03:00	4	0			4		15:00	97	62			159	
03:15	2	1			3		15:15	111	65			176	
03:30	1	1			2		15:30	98	64			162	
03:45	4	11	1	3	5	14	15:45	110	416	66	257	176	673
04:00	2	3			5		16:00	89	70			159	
04:15	11	4			15		16:15	95	69			164	
04:30	2	4			6		16:30	101	61			162	
04:45	7	22	17	28	24	50	16:45	102	387	62	262	164	649
05:00	5	7			12		17:00	101	55			156	
05:15	6	14			20		17:15	102	68			170	
05:30	14	22			36		17:30	108	67			175	
05:45	22	47	21	64	43	111	17:45	93	404	75	265	168	669
06:00	26	14			40		18:00	92	60			152	
06:15	42	19			61		18:15	70	46			116	
06:30	42	37			79		18:30	95	58			153	
06:45	84	194	39	109	123	303	18:45	72	329	61	225	133	554
07:00	115	84			199		19:00	71	27			98	
07:15	79	94			173		19:15	76	35			111	
07:30	53	88			141		19:30	54	26			80	
07:45	43	290	38	304	81	594	19:45	59	260	28	116	87	376
08:00	60	30			90		20:00	50	25			75	
08:15	47	42			89		20:15	51	30			81	
08:30	46	37			83		20:30	42	15			57	
08:45	61	214	39	148	100	362	20:45	31	174	18	88	49	262
09:00	59	27			86		21:00	45	21			66	
09:15	53	14			67		21:15	30	14			44	
09:30	65	24			89		21:30	24	14			38	
09:45	53	230	25	90	78	320	21:45	26	125	11	60	37	185
10:00	66	26			92		22:00	22	12			34	
10:15	69	34			103		22:15	17	11			28	
10:30	82	30			112		22:30	17	11			28	
10:45	60	277	34	124	94	401	22:45	14	70	5	39	19	109
11:00	77	39			116		23:00	11	7			18	
11:15	77	35			112		23:15	6	5			11	
11:30	79	39			118		23:30	7	2			9	
11:45	77	310	31	144	108	454	23:45	11	35	1	15	12	50
TOTALS	1626	1028			2654		TOTALS	3324	1891			5215	
SPLIT %	61.3%	38.7%			33.7%		SPLIT %	63.7%	36.3%			66.3%	

DAILY TOTALS					NB	SB					EB	WB	Total	
					4,950	2,919					0	0	7,869	
AM Peak Hour	11:45	06:45			06:45		PM Peak Hour	14:00	14:30			14:00		
AM Pk Volume	332	305			636		PM Pk Volume	479	284			711		
Pk Hr Factor	0.874	0.811			0.799		Pk Hr Factor	0.815	0.816			0.846		
7 - 9 Volume	504	452	0	0	956		4 - 6 Volume	791	527	0	0	1318		
7 - 9 Peak Hour	07:00	07:00			07:00		4 - 6 Peak Hour	16:45	17:00			17:00		
7 - 9 Pk Volume	290	304	0	0	594		4 - 6 Pk Volume	413	265	0	0	669		
Pk Hr Factor	0.630	0.809	0.000	0.000	0.746		Pk Hr Factor	0.956	0.883	0.000	0.000	0.956		

VOLUME

Central Ave Bet. Collier Ave & I-15

Day: Thursday
Date: 10/3/2019

City: Lake Elsinore
Project #: CA19_6123_058

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	20,437					21,380	41,817
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			35	24	59		12:00			357	316	673	
00:15			32	11	43		12:15			322	391	713	
00:30			32	17	49		12:30			335	354	689	
00:45			19	118	23	75	12:45			337	1351	346	1407
					42	193						683	2758
01:00			24	25	49		13:00			321	342	663	
01:15			13	27	40		13:15			320	355	675	
01:30			21	19	40		13:30			351	387	738	
01:45			11	69	17	88	13:45			373	1365	346	1430
					28	157						719	2795
02:00			7	23	30		14:00			385	322	707	
02:15			17	17	34		14:15			373	361	734	
02:30			12	9	21		14:30			405	338	743	
02:45			14	50	12	61	14:45			364	1527	399	1420
					26	111						763	2947
03:00			12	20	32		15:00			414	361	775	
03:15			25	12	37		15:15			382	325	707	
03:30			27	28	55		15:30			404	388	792	
03:45			32	96	37	97	15:45			424	1624	405	1479
					69	193						829	3103
04:00			53	65	118		16:00			416	326	742	
04:15			68	65	133		16:15			413	339	752	
04:30			90	91	181		16:30			457	377	834	
04:45			89	300	196	417	16:45			403	1689	359	1401
					285	717						762	3090
05:00			95	184	279		17:00			503	323	826	
05:15			102	192	294		17:15			339	349	688	
05:30			128	221	349		17:30			404	316	720	
05:45			122	447	226	823	17:45			364	1610	367	1355
					348	1270						731	2965
06:00			133	187	320		18:00			335	297	632	
06:15			170	196	366		18:15			322	316	638	
06:30			192	240	432		18:30			318	314	632	
06:45			239	734	339	962	18:45			348	1323	324	1251
					578	1696						672	2574
07:00			287	386	673		19:00			295	293	588	
07:15			310	404	714		19:15			291	260	551	
07:30			319	400	719		19:30			226	261	487	
07:45			260	1176	408	1598	19:45			225	1037	244	1058
					668	2774						469	2095
08:00			249	311	560		20:00			207	215	422	
08:15			256	288	544		20:15			176	186	362	
08:30			260	248	508		20:30			179	170	349	
08:45			224	989	320	1167	20:45			140	702	172	743
					544	2156						312	1445
09:00			231	293	524		21:00			177	121	298	
09:15			243	275	518		21:15			146	115	261	
09:30			229	272	501		21:30			109	118	227	
09:45			271	974	316	1156	21:45			96	528	106	460
					587	2130						202	988
10:00			286	274	560		22:00			82	94	176	
10:15			258	279	537		22:15			63	78	141	
10:30			281	284	565		22:30			67	67	134	
10:45			272	1097	311	1148	22:45			34	246	62	301
					583	2245						96	547
11:00			325	302	627		23:00			44	65	109	
11:15			274	282	556		23:15			32	54	86	
11:30			321	335	656		23:30			28	42	70	
11:45			336	1256	365	1284	23:45			25	129	38	199
					701	2540						63	328
TOTALS			7306	8876	16182		TOTALS			13131	12504	25635	
SPLIT %			45.1%	54.9%	38.7%		SPLIT %			51.2%	48.8%	61.3%	

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	20,437					21,380	41,817
AM Peak Hour			11:45	07:00	11:45		PM Peak Hour			16:15	15:00	16:15	
AM Pk Volume			1350	1598	2776		PM Pk Volume			1776	1479	3174	
Pk Hr Factor			0.945	0.979	0.973		Pk Hr Factor			0.883	0.913	0.951	
7 - 9 Volume	0	0	2165	2765	4930		4 - 6 Volume	0	0	3299	2756	6055	
7 - 9 Peak Hour			07:00	07:00	07:00		4 - 6 Peak Hour			16:15	16:30	16:15	
7 - 9 Pk Volume	0	0	1176	1598	2774		4 - 6 Pk Volume	0	0	1776	1408	3174	
Pk Hr Factor	0.000	0.000	0.922	0.979	0.965		Pk Hr Factor	0.000	0.000	0.883	0.934	0.951	

VOLUME

Central Ave Bet. I-15 & Dexter Ave

Day: Thursday
Date: 10/3/2019City: Lake Elsinore
Project #: CA19_6123_059

DAILY TOTALS						NB	SB	EBWB						Total	
						0	0							54,589	
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL			
00:00			45	42	87		12:00			463	415	878			
00:15			43	29	72		12:15			437	436	873			
00:30			45	36	81		12:30			413	451	864			
00:45			31	164	21	128	12:45			375	1688	410	1712	785	3400
01:00			29	27	56		13:00			385	436	821			
01:15			20	21	41		13:15			424	471	895			
01:30			27	16	43		13:30			436	458	894			
01:45			29	105	24	88	13:45			443	1688	447	1812	890	3500
02:00			23	28	51		14:00			483	402	885			
02:15			21	28	49		14:15			498	436	934			
02:30			26	36	62		14:30			443	447	890			
02:45			31	101	44	136	14:45			454	1878	486	1771	940	3649
03:00			20	46	66		15:00			572	429	1001			
03:15			34	60	94		15:15			514	418	932			
03:30			53	89	142		15:30			530	470	1000			
03:45			53	160	155	350	15:45			542	2158	412	1729	954	3887
04:00			63	159	222		16:00			575	412	987			
04:15			81	200	281		16:15			542	420	962			
04:30			83	231	314		16:30			557	467	1024			
04:45			108	335	288	878	16:45			565	2239	409	1708	974	3947
05:00			103	292	395		17:00			563	443	1006			
05:15			139	321	460		17:15			573	401	974			
05:30			147	335	482		17:30			498	419	917			
05:45			182	571	330	1278	17:45			534	2168	452	1715	986	3883
06:00			180	310	490		18:00			511	380	891			
06:15			271	338	609		18:15			486	427	913			
06:30			268	376	644		18:30			500	370	870			
06:45			313	1032	407	1431	18:45			472	1969	376	1553	848	3522
07:00			355	485	840		19:00			401	389	790			
07:15			374	537	911		19:15			413	318	731			
07:30			346	536	882		19:30			351	332	683			
07:45			326	1401	455	2013	19:45			353	1518	315	1354	668	2872
08:00			292	390	682		20:00			312	272	584			
08:15			287	387	674		20:15			281	260	541			
08:30			277	382	659		20:30			285	195	480			
08:45			238	1094	402	1561	20:45			215	1093	183	910	398	2003
09:00			278	349	627		21:00			259	170	429			
09:15			284	336	620		21:15			197	159	356			
09:30			271	326	597		21:30			141	139	280			
09:45			326	1159	304	1315	21:45			125	722	100	568	225	1290
10:00			347	366	713		22:00			139	101	240			
10:15			374	320	694		22:15			116	85	201			
10:30			341	364	705		22:30			90	97	187			
10:45			319	1381	397	1447	22:45			84	429	67	350	151	779
11:00			386	354	740		23:00			107	81	188			
11:15			355	388	743		23:15			94	51	145			
11:30			412	428	840		23:30			69	42	111			
11:45			416	1569	436	1606	23:45			70	340	40	214	110	554
TOTALS			9072	12231	21303		TOTALS			17890	15396	33286			
SPLIT %			42.6%	57.4%	39.0%		SPLIT %			53.7%	46.3%	61.0%			

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0	26,962					27,627	54,589	
AM Peak Hour			11:45	07:00	11:45		PM Peak Hour			16:30	13:00	16:30		
AM Pk Volume			1729	2013	3467		PM Pk Volume			2258	1812	3978		
Pk Hr Factor			0.934	0.937	0.987		Pk Hr Factor			0.985	0.962	0.971		
7 - 9 Volume	0	0	2495	3574	6069		4 - 6 Volume	0	0	4407	3423	7830		
7 - 9 Peak Hour			07:00	07:00	07:00		4 - 6 Peak Hour			16:30	16:15	16:30		
7 - 9 Pk Volume	0	0	1401	2013	3414		4 - 6 Pk Volume	0	0	2258	1739	3978		
Pk Hr Factor	0.000	0.000	0.936	0.937	0.937		Pk Hr Factor	0.000	0.000	0.985	0.931	0.971		

VOLUME

Central Ave Bet. Dexter Ave & Cambern Ave

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6122_060

DAILY TOTALS					NB	SB	EBWB					Total
					21,733	21,419						0
AM Period	NB	SB	EB	WB	TOTAL	PM Period	NB	SB	EB	WB	TOTAL	
00:00	53	38			91	12:00	287	305			592	
00:15	44	26			70	12:15	265	295			560	
00:30	44	38			82	12:30	281	317			598	
00:45	35	176	20	122	55 298	12:45	268	1101	312	1229	580 2330	
01:00	31	27			58	13:00	277	316			593	
01:15	27	19			46	13:15	317	352			669	
01:30	30	13			43	13:30	362	316			678	
01:45	20	108	19	78	39 186	13:45	352	1308	319	1303	671 2611	
02:00	18	28			46	14:00	341	332			673	
02:15	15	30			45	14:15	398	338			736	
02:30	27	38			65	14:30	379	325			704	
02:45	18	78	50	146	68 224	14:45	405	1523	311	1306	716 2829	
03:00	38	46			84	15:00	409	331			740	
03:15	32	63			95	15:15	423	349			772	
03:30	41	100			141	15:30	469	348			817	
03:45	38	149	164	373	202 522	15:45	447	1748	335	1363	782 3111	
04:00	68	162			230	16:00	482	293			775	
04:15	60	201			261	16:15	490	301			791	
04:30	78	242			320	16:30	440	370			810	
04:45	82	288	269	874	351 1162	16:45	483	1895	335	1299	818 3194	
05:00	102	296			398	17:00	488	356			844	
05:15	124	310			434	17:15	460	273			733	
05:30	131	274			405	17:30	445	340			785	
05:45	130	487	322	1202	452 1689	17:45	403	1796	358	1327	761 3123	
06:00	145	271			416	18:00	424	263			687	
06:15	202	296			498	18:15	400	272			672	
06:30	217	315			532	18:30	370	247			617	
06:45	271	835	360	1242	631 2077	18:45	380	1574	292	1074	672 2648	
07:00	286	385			671	19:00	383	232			615	
07:15	313	405			718	19:15	339	210			549	
07:30	325	397			722	19:30	294	176			470	
07:45	261	1185	395	1582	656 2767	19:45	327	1343	214	832	541 2175	
08:00	211	364			575	20:00	277	171			448	
08:15	249	317			566	20:15	246	167			413	
08:30	213	326			539	20:30	231	105			336	
08:45	193	866	352	1359	545 2225	20:45	217	971	121	564	338 1535	
09:00	205	290			495	21:00	235	121			356	
09:15	184	255			439	21:15	201	127			328	
09:30	205	285			490	21:30	168	102			270	
09:45	215	809	231	1061	446 1870	21:45	141	745	71	421	212 1166	
10:00	229	293			522	22:00	130	75			205	
10:15	207	257			464	22:15	127	69			196	
10:30	238	271			509	22:30	115	69			184	
10:45	253	927	241	1062	494 1989	22:45	111	483	51	264	162 747	
11:00	265	270			535	23:00	70	67			137	
11:15	257	285			542	23:15	69	34			103	
11:30	263	330			593	23:30	65	41			106	
11:45	277	1062	275	1160	552 2222	23:45	72	276	34	176	106 452	
TOTALS	6970	10261			17231	TOTALS	14763	11158			25921	
SPLIT %	40.5%	59.5%			39.9%	SPLIT %	57.0%	43.0%			60.1%	

DAILY TOTALS					NB	SB	EB					WB	Total	
					21,733	21,419						0	0	43,152
AM Peak Hour	06:45	07:00			07:00	PM Peak Hour	16:15	15:00					16:15	
AM Pk Volume	1195	1582			2767	PM Pk Volume	1901	1363					3263	
Pk Hr Factor	0.919	0.977			0.958	Pk Hr Factor	0.970	0.976					0.967	
7 - 9 Volume	2051	2941	0	0	4992	4 - 6 Volume	3691	2626	0	0			6317	
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:15	16:15					16:15	
7 - 9 Pk Volume	1185	1582	0	0	2767	4 - 6 Pk Volume	1901	1362	0	0			3263	
Pk Hr Factor	0.912	0.977	0.000	0.000	0.958	Pk Hr Factor	0.970	0.920	0.000	0.000			0.967	

VOLUME

Central Ave E/O Cambern Ave

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6122_061

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						21,563	22,464	44,027
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			44	39	83		12:00			267	277	544		
00:15			46	28	74		12:15			248	290	538		
00:30			40	28	68		12:30			270	345	615		
00:45			33	163	15	110	12:45			257	1042	280	1192	
01:00			31	18	49		13:00			242	320	562		
01:15			27	25	52		13:15			298	325	623		
01:30			30	26	56		13:30			336	284	620		
01:45			18	106	23	92	13:45			339	1215	422	1351	
02:00			19	19	38		14:00			336	415	751		
02:15			13	25	38		14:15			368	364	732		
02:30			28	41	69		14:30			377	343	720		
02:45			18	78	38	123	14:45			434	1515	385	1507	
03:00			35	58	93		15:00			434	370	804		
03:15			34	71	105		15:15			430	371	801		
03:30			39	115	154		15:30			461	348	809		
03:45			37	145	126	370	15:45			467	1792	314	1403	
04:00			67	168	235		16:00			496	393	889		
04:15			62	215	277		16:15			490	318	808		
04:30			78	243	321		16:30			465	338	803		
04:45			82	289	292	918	16:45			469	1920	365	1414	
05:00			101	273	374		17:00			490	383	873		
05:15			118	263	381		17:15			484	349	833		
05:30			138	331	469		17:30			464	324	788		
05:45			127	484	285	1152	17:45			399	1837	354	1410	
06:00			145	284	429		18:00			441	280	721		
06:15			195	313	508		18:15			400	289	689		
06:30			213	315	528		18:30			385	268	653		
06:45			268	821	395	1307	18:45			364	1590	259	1096	
07:00			286	482	768		19:00			403	206	609		
07:15			332	480	812		19:15			336	205	541		
07:30			342	463	805		19:30			296	195	491		
07:45			273	1233	461	1886	19:45			343	1378	151	757	
08:00			198	371	569		20:00			309	141	450		
08:15			244	380	624		20:15			247	159	406		
08:30			196	323	519		20:30			250	150	400		
08:45			188	826	330	1404	20:45			224	1030	127	577	
09:00			188	299	487		21:00			249	147	396		
09:15			181	294	475		21:15			203	111	314		
09:30			188	310	498		21:30			169	93	262		
09:45			186	743	284	1187	21:45			144	765	82	433	
10:00			202	302	504		22:00			134	79	213		
10:15			192	298	490		22:15			134	75	209		
10:30			210	266	476		22:30			118	47	165		
10:45			238	842	261	1127	22:45			108	494	67	268	
11:00			265	304	569		23:00			77	52	129		
11:15			239	271	510		23:15			70	49	119		
11:30			235	302	537		23:30			60	48	108		
11:45			245	984	313	1190	23:45			64	271	41	190	
TOTALS	6714				10866	17580	TOTALS	14849				11598	26447	
SPLIT %	38.2%				61.8%	39.9%	SPLIT %	56.1%				43.9%	60.1%	

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0	21,563					22,464	44,027	
AM Peak Hour			07:00	07:00	07:00		PM Peak Hour			16:00	13:45	16:30		
AM Pk Volume			1233	1886	3119		PM Pk Volume			1920	1544	3343		
Pk Hr Factor			0.901	0.978	0.960		Pk Hr Factor			0.968	0.915	0.957		
7 - 9 Volume	0	0	2059	3290	5349		4 - 6 Volume	0	0	3757	2824	6581		
7 - 9 Peak Hour			07:00	07:00	07:00		4 - 6 Peak Hour			16:00	16:30	16:30		
7 - 9 Pk Volume	0	0	1233	1886	3119		4 - 6 Pk Volume	0	0	1920	1435	3343		
Pk Hr Factor	0.000	0.000	0.901	0.978	0.960		Pk Hr Factor	0.000	0.000	0.968	0.937	0.957		

VOLUME
Main St N/O Flint St

Day: Thursday
Date: 9/19/2019

City: Lake Elsinore
Project #: CA19_6122_062

DAILY TOTALS					NB	SB	EB					WB	Total	
					7,428	7,991						0	0	15,419
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00	13	16			29		12:00	89	121			210		
00:15	7	15			22		12:15	119	93			212		
00:30	11	20			31		12:30	111	135			246		
00:45	9	40	7	58	16	98	12:45	110	429	122	471	232	900	
01:00	9	15			24		13:00	117	95			212		
01:15	7	9			16		13:15	81	124			205		
01:30	5	7			12		13:30	123	118			241		
01:45	2	23	4	35	6	58	13:45	146	467	132	469	278	936	
02:00	4	11			15		14:00	191	127			318		
02:15	4	9			13		14:15	129	116			245		
02:30	8	5			13		14:30	140	168			308		
02:45	12	28	6	31	18	59	14:45	131	591	200	611	331	1202	
03:00	10	7			17		15:00	128	171			299		
03:15	17	4			21		15:15	146	189			335		
03:30	16	11			27		15:30	158	150			308		
03:45	20	63	8	30	28	93	15:45	129	561	162	672	291	1233	
04:00	27	14			41		16:00	124	166			290		
04:15	31	12			43		16:15	124	154			278		
04:30	60	13			73		16:30	142	182			324		
04:45	53	171	28	67	81	238	16:45	133	523	174	676	307	1199	
05:00	78	27			105		17:00	158	151			309		
05:15	70	24			94		17:15	121	181			302		
05:30	67	35			102		17:30	112	180			292		
05:45	70	285	76	162	146	447	17:45	105	496	175	687	280	1183	
06:00	94	39			133		18:00	113	130			243		
06:15	115	56			171		18:15	103	107			210		
06:30	95	65			160		18:30	85	129			214		
06:45	100	404	128	288	228	692	18:45	72	373	126	492	198	865	
07:00	158	146			304		19:00	73	100			173		
07:15	149	209			358		19:15	82	86			168		
07:30	141	173			314		19:30	66	79			145		
07:45	130	578	141	669	271	1247	19:45	65	286	83	348	148	634	
08:00	122	121			243		20:00	61	57			118		
08:15	138	121			259		20:15	51	69			120		
08:30	119	92			211		20:30	41	40			81		
08:45	80	459	130	464	210	923	20:45	51	204	52	218	103	422	
09:00	92	85			177		21:00	48	61			109		
09:15	96	97			193		21:15	54	52			106		
09:30	97	74			171		21:30	34	44			78		
09:45	80	365	91	347	171	712	21:45	34	170	41	198	75	368	
10:00	93	75			168		22:00	18	40			58		
10:15	99	95			194		22:15	22	32			54		
10:30	93	106			199		22:30	25	26			51		
10:45	88	373	88	364	176	737	22:45	12	77	23	121	35	198	
11:00	101	87			188		23:00	16	23			39		
11:15	117	104			221		23:15	10	21			31		
11:30	102	115			217		23:30	12	23			35		
11:45	98	418	119	425	217	843	23:45	6	44	21	88	27	132	
TOTALS	3207	2940			6147		TOTALS	4221	5051			9272		
SPLIT %	52.2%	47.8%			39.9%		SPLIT %	45.5%	54.5%			60.1%		

DAILY TOTALS					NB	SB	EBWB					Total
					7,428	7,991						0
AM Peak Hour	07:00	07:00			07:00	PM Peak Hour	13:45	14:30			14:30	
AM Pk Volume	578	669			1247	PM Pk Volume	606	728			1273	
Pk Hr Factor	0.915	0.800			0.871	Pk Hr Factor	0.793	0.910			0.950	
7 - 9 Volume	1037	1133	0	0	2170	4 - 6 Volume	1019	1363	0	0	2382	
7 - 9 Peak Hour	07:00	07:00			07:00	4 - 6 Peak Hour	16:15	16:30			16:30	
7 - 9 Pk Volume	578	669	0	0	1247	4 - 6 Pk Volume	557	688	0	0	1242	
Pk Hr Factor	0.915	0.800	0.000	0.000	0.871	Pk Hr Factor	0.881	0.945	0.000	0.000	0.958	

Appendix B



Final Interstate 15 Express Lanes
Project Southern Extension PA/ED:
Traffic Analysis and Travel Demand
Forecasting Assumptions, Methodology,
and Approach EA:0J0820/ID 08-
18000063



MEMORANDUM

Date: Updated September 25, 2019

To: Mark Hager, P.E. – HDR (for distribution to the Project Development Team)

Copies to: Stephanie Blanco, RCTC

From: Jason D. Pack, P.E.
Mae Tamayo

Subject: Interstate 15 Express Lanes Project Southern Extension PA/ED: Traffic Analysis and Travel Demand Forecasting Assumptions, Methodology, and Approach EA:0J0820/ID 08-18000063

OC19-0632

This memorandum presents the assumptions, methodologies, and approach for completing the Traffic Operations Analysis Report (TOAR) for the Interstate 15 Express Lanes Project Southern Extension ("Project") (ELPSE) PA/ED analysis (from Cajalco Road to SR-74).

The following topics are addressed in this memorandum:

- Preliminary Project Description
- Analysis Years and Study Periods
- Study Area for Analysis
- Data Collection
- Future Year Roadway Network Assumptions
- Travel Demand Forecasting
- Traffic Operations and Analysis Methods
- Documentation



PRELIMINARY PROJECT DESCRIPTION

The proposed Project will construct the following elements:

- Construct two express lanes in each direction on Interstate 15 (I-15), from the end of the previously approved under construction express lanes near the Cajalco Road/I-15 Interchange in the City of Corona, to the State Route 74 (Central Avenue)/I-15 Interchange in the City of Lake Elsinore.

The design and extents of these improvements are still in a preliminary stage. The existing configuration of I-15 within the study area is three general purpose lanes in each direction (six lanes total). The project proposes to improve the configuration to include three general purpose lanes and two express lanes in each direction (ten lanes total). The configuration/attributes and purpose of the express lanes will be consistent with RCTC Toll Policy. Although the improvement attributes will be refined as the project development process is completed. In order to fully evaluate the effects of the Project, Fehr & Peers will evaluate the following freeway locations using micro-simulation to account for geometrics at the entry and exit points and accurately reflect density, travel times, and speed along the corridor due to the proposed project.

- I-15 mainline, merge, diverge, and/or weave (for all local interchanges and to/from the express lanes access locations) from Hidden Valley Parkway in Corona to Main Street in Lake Elsinore
- SR-91 express lane connectors to I-15

ANALYSIS YEARS AND STUDY PERIODS

At this time, the Project is anticipated to be open in year 2029 with a design year of 2049. Since the regional travel demand forecasting models typically forecast in five year increments, the traffic study will consider an opening year of 2030 and a design year of 2050 consistent with the model forecasting capabilities. The traffic analysis will evaluate existing conditions in addition to conditions for the opening year, and design year. Traffic count data collection will begin once schools are back in session and will be supplemented with "big data" along the corridor.

Big data will include the purchase of the following data sets that will help inform the forecasting efforts and will assist in calibration and validation of the simulation model:



- INRIX travel data will be purchased and used to assist in defining peak periods along the corridor in addition to speed data along the corridor.
- Streetlight origin/destination (O-D) data will be purchased to assist in identifying travel patterns in the area. This will be especially helpful to inform the O-D estimation process for the operations model and will assist in identifying potential use of the express lanes along the corridor.

STUDY AREA FOR ANALYSIS

The study area will evaluate freeway operations on I-15, generally between the Hidden Valley Interchange and the Main Street Interchange. The Project will be constructed on I-15 between Cajalco Road and SR-74 (Central Avenue), however the study area captures several miles upstream and downstream of the project limits to include the effects of upstream and downstream bottlenecks, as well as interactions with the current SR-91 general purpose and express lane connectors.

DATA COLLECTION

In addition to the big data discussed above, Fehr & Peers will collect traffic counts on a variety of parallel roadway facilities, freeway mainline, and interchange ramps. Counts will be collected in September 2019 to ensure the counts are completed while local schools are in session. The sections below describe where data will be collected.

ROADWAY SEGMENT TRAFFIC VOLUMES

Counts will be taken on roadway segments parallel to I-15 to help demonstrate and quantify project benefits to the parallel roadway network and assist with the noise assessment. Three-day, 72-hour traffic counts will be conducted at the following 62 roadway segments. Please note that most of these segments will see little change with the proposed project; however, data is being collected in anticipation of being needed to inform the noise assessment.

1. Hidden Valley Parkway west of I-15
2. Hidden Valley Parkway east of I-15
3. Parkridge Avenue west of Cresta Road
4. Parkridge Avenue east of Cresta Road
5. Cresta Road south of Parkridge Avenue



6. 6th Street west of El Sobrante
7. 6th Street west of Radio Road
8. Radio Road north of 6th Street
9. El Sobrante between 6th Street and Magnolia Avenue
10. Magnolia Avenue west of I-15
11. Magnolia Avenue east of I-15
12. Ontario Avenue west of I-15
13. Ontario Avenue east of I-15
14. Ontario Avenue north of El Cerrito Avenue
15. El Cerrito Avenue west of I-15
16. El Cerrito Avenue between I-15 and Temescal Canyon Road
17. Bedford Canyon Road south of El Cerrito Avenue
18. Bedford Canyon Road north of Cajalco Road
19. Evelyn Street
20. Frances Street
21. Katy Way
22. Liberty Avenue
23. Temescal Canyon Road from El Cerrito Avenue to Cajalco Road
24. Temescal Canyon Road from Cajalco Road to Dos Lagos Drive
25. Temescal Canyon Road from Dos Lagos Drive to Dawson Canyon Road
26. Temescal Canyon Road from Dawson Canyon Road to I-15
27. Temescal Canyon Road from I-15 to Lawson Road
28. Temescal Canyon Road from Lawson Road to Trilogy Parkway
29. Temescal Canyon Road from Trilogy Parkway to Campbell Ranch Road
30. Temescal Canyon Road from Campbell Ranch Road to Indian Truck Trail Road
31. Temescal Canyon Road from Indian Truck Trail Road to Horsethief Road
32. Temescal Canyon Road from Horsethief Road to I-15 Frontage Road
33. Temescal Canyon Road from I-15 Frontage Road to Lake Street
34. Cajalco Road west of I-15
35. Cajalco Road between I-15 and Grand Oaks
36. Cajalco Road from Grand Oaks to Temescal Canyon Road
37. Retreat Parkway west of Knabe Road
38. Weirick Road from I-15 to Knabe Road
39. Weirick Road north of Knabe Road
40. Dos Lagos Drive east of I-15
41. Knabe Road from Weirick Road to White Sage Street
42. Knabe Road from White Sage Street to Hunt Road
43. Campbell Ranch Road from Temescal Canyon Road to Mayhew Canyon Road
44. Campbell Ranch Road from Mayhew Canyon Road to Indian Truck Trail
45. De Palma Road between Indian Truck Trail and Horsethief Canyon Road
46. Horsethief Canyon Road west of De Palma Road
47. Horsethief Canyon Road from De Palma Road to Temescal Canyon Road
48. Lake Street west of Temescal Canyon Road



49. Lake Street east of Temescal Canyon Road
50. Nichols Road west of Collier Road
51. Nichols Road from Collier Road to I-15
52. Nichols Road east of I-15
53. Collier Avenue from Nichols Road and Riverside Drive
54. Collier Avenue from Riverside Drive to Central Avenue
55. Collier Avenue south of Central Avenue
56. Dexter Avenue north of Central Avenue
57. Dexter Avenue south of Central Avenue
58. Central Avenue from Collier to I-15
59. Central Avenue from I-15 to Dexter Avenue
60. Central Avenue from Dexter Avenue to Cambern Avenue
61. Central Avenue east of Cambern Avenue
62. Main Street west of I-15

FREEWAY MAINLINE TRAFFIC VOLUMES

Northbound and southbound freeway mainline three day, 72-hour traffic counts will be collected on I-15 at the northern and southern end of the study area at the following locations:

1. Magnolia Drive Overcrossing
2. Franklin Street Overcrossing

INTERCHANGE RAMP TRAFFIC VOLUMES

Three-day, 72-hour traffic counts will be conducted at 13 interchanges on the following ramps:

I-15/Main Street Interchange

1. I-15 NB Off-Ramp to Main Street
2. I-15 NB On-Ramp from Main Street
3. I-15 SB On-Ramp from Main Street
4. I-15 SB Off-Ramp to Main Street

I-15/SR-74 (Central Avenue) Interchange

5. I-15 NB Off-Ramp to Central Avenue
6. I-15 NB On-Ramp from Central Avenue
7. I-15 SB On-ramp from Central Avenue
8. I-15 SB Off-ramp to Central Avenue

I-15/Nichols Road Interchange

9. I-15 NB Off-Ramp to Nichols Road
10. I-15 NB On-Ramp from Nichols Road
11. I-15 SB On-ramp from Nichols Road



12. I-15 SB Off-ramp to Nichols Road

I-15/Lake Street Interchange

13. I-15 NB Off-Ramp to Lake Street
14. I-15 NB On-Ramp from Lake Street
15. I-15 SB On-ramp from Lake Street
16. I-15 SB Off-ramp to Lake Street

I-15/Indian Truck Trail Interchange

17. I-15 NB Off-Ramp to Indian Truck Trail
18. I-15 NB On-Ramp from Indian Truck Trail
19. I-15 SB On-ramp from Indian Truck Trail
20. I-15 SB Off-ramp to Indian Truck Trail

I-15/Temescal Canyon Road Interchange

21. I-15 NB Off-Ramp to Temescal Canyon Road
22. I-15 NB On-Ramp from Temescal Canyon Road
23. I-15 SB On-ramp from Temescal Canyon Road
24. I-15 SB Off-ramp to Temescal Canyon Road

I-15/Dos Lagos Drive Interchange

25. I-15 NB Off-Ramp to Dos Lagos Drive
26. I-15 NB On-Ramp from Dos Lagos Drive
27. I-15 SB On-ramp from Dos Lagos Drive
28. I-15 SB Off-ramp to Dos Lagos Drive

I-15/Cajalco Road Interchange

29. I-15 NB Off-Ramp to Cajalco Road
30. I-15 NB On-Ramp from Westbound Cajalco Road
31. I-15 NB Loop On-Ramp from Eastbound Cajalco Road
32. I-15 SB On-Ramp from Cajalco Road
33. I-15 SB Off-Ramp to Cajalco Road

I-15/El Cerrito Road Interchange

34. I-15 NB Off-Ramp to El Cerrito Road
35. I-15 NB On-Ramp from El Cerrito Road
36. I-15 SB On-ramp from El Cerrito Road
37. I-15 SB Off-ramp to El Cerrito Road

I-15/Ontario Avenue Interchange

38. I-15 NB Off-Ramp to Ontario Avenue
39. I-15 NB On-Ramp from Ontario Avenue
40. I-15 SB On-Ramp from Ontario Avenue



- 41. I-15 SB Off-Ramp to Ontario Avenue

I-15/Magnolia Avenue Interchange

- 42. I-15 NB Off-Ramp to Magnolia Avenue
- 43. I-15 NB On-Ramp from Magnolia Avenue
- 44. I-15 SB On-Ramp from Magnolia Avenue
- 45. I-15 SB Off-Ramp to Magnolia Avenue
- 46. I-15 NB Loop On-Ramp from Magnolia Avenue

I-15/SR-91 Interchange

- 47. I-15 NB Off-Ramp to WB SR-91
- 48. I-15 NB Off-Ramp to EB SR-91
- 49. I-15 NB On-Ramp from WB SR-91
- 50. I-15 SB Off-Ramp to WB SR-91
- 51. I-15 SB Loop Off-Ramp to EB SR-91
- 52. I-15 SB On-Ramp from WB SR-91
- 53. I-15 SB On-Ramp from EB SR-91
- 54. I-15 NB Express Lane Connector Ramp
- 55. I-15 SB Express Lane Connector Ramp

I-15/Hidden Valley Parkway Interchange

- 56. I-15 NB Off-Ramp to Hidden Valley Parkway
- 57. I-15 SB On-Ramp from Hidden Valley Parkway

COLLISION DATA

Traffic Accident Surveillance and Analysis System (TASAS) data for I-15, within the study area, for the most recent three-year period of complete data will be obtained from Caltrans and used to prepare a collision summary.

FIELD RECONNAISSANCE

Fehr & Peers will conduct field reconnaissance including GPS data surveys for each lane of the corridor during the AM peak period (7:00 AM to 9:00AM) and PM peak period (4:00 PM to 6:00 PM). These surveys will assist in identifying current areas of congestion along the corridor that traditional analysis may not reflect. GPS travel time runs will be used to calibrate the traffic operations analysis model.



INRIX DATA

INRIX travel speed data will be purchased to supplement the GPS travel time runs obtained in field reconnaissance. This data will also be used to calibrate the traffic operations analysis model. Travel time/speed information will be used to identify bottleneck locations and extent of queues on I-15 and for VISSIM model calibration and validation.

On freeways, the speeds presented by INRIX are an aggregate of speeds across all travel lanes including express lane(s) where provided. At locations where there are no express lanes the INRIX speed data will be used to directly represent traffic conditions in the general purpose lanes. At locations where an express lane is provided, the INRIX speed data will be adjusted to determine speeds on the general purpose lanes. The following equation will be used to estimate speeds on the General Purpose (GP) Lanes at locations where an Express Lane is provided:

$$\text{INRIX Speed} = \% \text{ GP Lane Traffic} \times \text{GP Lane Speed} + \% \text{ Express Lane Traffic} \times \text{Express Lane Speed; or}$$

$$\text{GP Lane Speed} = (\text{INRIX Speed} - \% \text{ Express Lane Traffic} \times \text{Express Lane Speed}) / \% \text{ GP Lane Traffic}$$

Where % GP lane traffic and % Express Lane traffic will be based on count data and the express lane speed data will be based on available PeMS data. Since the speeds on the express lanes are typically higher than on the GP lanes the outcome of the equation above is that the GP lanes speeds are typically 0 to 5 mph lower than the aggregate speeds presented by INRIX. Additionally, the per lane speed data collected using the GPS survey data will assist in validating the INRIX data.

STREETLIGHT DATA

Streetlight Origin-Destination travel data along the corridor will be purchased. This data will be disaggregated into less than 100 zones to develop the origin-destination travel data. Streetlight data uses in-vehicle navigation system data and some cell phone location-based services data (referred to as records) that can be aggregated together (consistent with privacy protection requirements) to obtain origin/destination information. This data will be used to validate the travel demand forecasting estimates and the origin-destination estimation for the microsimulation models. Fehr & Peers will document a description of Streetlight origin/destination data and will document key items such as record sample size, date, time period, and study area in the Traffic Operations Analysis Report (TOAR).



FUTURE YEAR ROADWAY NETWORK ASSUMPTIONS

INTERSTATE AND STATE ROUTE FACILITIES

The 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) improvement list was reviewed for interstate and state route improvements to assume in the future. Key transportation improvements are listed below:

1. **RTP ID RIV071267:** I-15 Express Lanes from county line to Cajalco Road (Post Mile (PM) 51.40 to PM 36.80, 2020 - under construction)
2. **RTP ID RIV011233:** Widen Limonite Ave from four to six lanes. Between Eastvale Gateway and 475' east of Pats Ranch Road, reconstruct/widen northbound and southbound exit ramps from three to four lanes. Replace northbound and southbound entry ramps with entry loop ramps from two to three lanes. Entry ramps include HOV by-pass lane, ramps include extended acceleration/deceleration lanes and extended right turn lanes (2019 - under construction)
3. **RTP ID RIV050532¹:** Construct Schleisman Road Interchange. Six through lanes will be constructed on Schleisman Road with new ramps (2 lanes). Construct a NB/SB auxiliary lane between Schleisman Road Interchange and Limonite Road Interchange (2035)
4. **RTP ID 3A01WT159:** Replace two-lane bridge on Hamner Avenue over Santa Ana River (5 Miles North of Sixth Street) with a six-lane Bridge (2030)
5. **RTP ID 3M04WT005:** Reconstruct interchange ramps and channelization improvements at I-15 and 6th Street between Hamner Avenue and Sierra Avenue (PM 45.10 to 46.10, 2030)
6. **RTP ID 3M0733:** At I-15 on 2nd Street between Hamner Avenue & Valley View Avenue reconstruct/widen interchange from two to four lanes and widen ramps (PM 43.13 to 44.13, 2025)
7. **RTP ID 3M04WT007:** At I-15 on Hidden Valley Parkway between Hamner Avenue & beyond northbound exit-ramp, reconstruct interchange/ramps/channelization improvements (PM 42.37 to 43.37, 2025)
8. **RTP ID RIV010208:** At I-15/Cajalco Road interchange near Corona, design, reconstruct/realign & widen Cajalco Road from two to six through lanes from Temescal Canyon Road to Bedford Canyon Road. Reconstruct/widen southbound entry from one

¹ The City of Eastvale just removed this interchange from their General Plan. As such, Fehr & Peers proposes to NOT include it in the forecasting efforts.



to two lanes, northbound exit from two to four lanes, and add aux lanes (under construction, opens late 2019)

9. **RTP ID 3A04WT137A-3A04WT138:** Widen Cajalco Road from two to four through lanes in each direction from Temescal Canyon Road to Harvill Avenue and from four to six lanes from Harvill Avenue to I-215 including turn pockets and a bridge reconstruction over a water crossing (2025)
10. **RTP ID 3C01MA01:** CETAP West- Provide new East-West transportation corridor between I-15 to the west, I-215 to the East, South of Lake Mathews to the north, and SR74 to the South (2035)
11. **RTP ID 3M0728:** At I-15 on Temescal Canyon reconstruct/widen Temescal Canyon Interchange from two to four lanes and reconstruct ramps (PM 32.60 to PM 33.60, 2030)
12. **RTP ID 3A04WT198B:** Widen Temescal Canyon from Indian Truck Trail to 0.22 miles west of Lake Street (2035)
13. **RTP ID 3A04WT161, RTP ID 3M0729:** Widen Horsethief Canyon Rd from Temescal Canyon Road to I-15 from 2 to 4 lanes and reconstruct ramps (PM 28.36 to 29.36, 2030)
14. **RTP ID 3M0737:** Reconstruct/widen I-15 interchange at Lake Street from two to six lanes between Walker Canyon Road and Temescal Canyon Road and reconstruct/widen ramps (2022)
15. **RTP ID 3M0736:** Reconstruct/widen I-15 interchange at Nichols Road from 2 to 6 lanes between the ramps and reconstruct/widen ramps (PM 23.35 to PM 24.35, 2025)
16. **RTP ID 3A04WT191:** Widen SR-74 from I-15 to Ethanac Road (2035)
RTP ID 3A01WT151: Construct a four-lane arterial (Ethanac Road) from SR-74 to Keystone Drive (2030)
17. **RTP ID 3A04A17:** Construct new four-lane overcrossing over I-15 at Riverside Drive between Collier Avenue and Dexter Avenue (2025)
18. **RTP ID RIV060109:** At I-15/Central Avenue Interchange junction modification between 1,000 feet west of Collier Avenue to Riverside Street: Add northbound loop entry ramp with acceleration lane, realign northbound entry and exit ramps. Add southbound acceleration/deceleration lanes, add northbound deceleration lane, Widen SR-74 from Riverside Drive to Central Avenue from two to four through lanes and from Collier Avenue to Cambern Avenue from six to eight through lanes. Construct new Riverside Avenue overcrossing (PM 15.50 to PM 18.50, 2025)
19. **RTP ID 3A04A16:** Construct new connecting four-lane arterial overcrossing at I-15 and Second Street between Chaney Avenue and Camino Del Norte (2028)



- 20. RTP ID 3160004:** Main St/I-15 Interchange improvements. Widening of NB Main St under the freeway from one to two lanes. Add an additional lane to the northbound entrance and exit ramps, widen southbound off-ramp to accommodate one right-turn lane, one left-turn lane, and one shared through-left-turn lane at the Main Street intersection. Install ramp meters & traffic signals at ramp terminal intersections and Camino Del Norte/Main St Intersection (2028)
- 21. RTP ID 3160002:** Construct 2 HOV lanes on I-15 between Junction I-15/I-215 to SR-74 (PM 22.30 to PM 8.70, 2039)
- 22. RTP ID RIV010206:** At I-15/ Railroad Canyon Road Interchange, widen northbound entrance ramp from two to three lanes, widen southbound entrance ramp from one to three lanes, widen ramp acceleration and deceleration lanes at Railroad Canyon Road (Phase I). Construct new I-15 Franklin Street Interchange, and add auxiliary lanes from Franklin Street Interchange to Main Street Interchange and from Franklin Street Interchange to Railroad Canyon Interchange. Realign/widen Main Street southbound on-ramp from one to two lanes and construct Frontage Road on west and east of I-15 (PM 18.52 to PM 20.96, 2022)
- 23. RTP ID 3M0734:** Construct new four-lane overcrossing over I-15 at Malaga Road between Casino Drive and Lakeview Terrace and Grape Street (2028)
- 24. RTP ID 3M0735:** Construct new four lane interchange and ramps for I-15 at Olive Street between Orchard Street and Grape Street (PM 17.01 to PM 18.01, 2018-not constructed)
- 25. RTP ID 3A01WT134:** Widen Bundy Canyon Road from Mission Trail to I-15 from two to four lanes (2025)
- 26. RTP ID 3M0727:** Reconstruct/Widen Bundy Canyon Road Interchange from two to four lanes and reconstruct ramps (PM 15.8 to PM 16.8, 2025)
- 27. RTP ID 3A01WT133:** Widen Bundy Canyon Road between I-15 to Murrieta Road from two to four lanes (2020)
- 28. RTP ID 3A04WT126:** Widen Baxter Road from I-15 to Central Street from two to four lanes (2025)
- 29. RTP ID 3M0730:** Construct new northbound loop on-ramp and realign existing northbound off-ramp at I-15 and Murrieta Hot Springs Road (2019)
- 30. RTP ID RIV031215:** French Valley Pkwy Interchange Arterial Phases- (Phase 2) Construct two-lane northbound CD north of Winchester On-ramp to just north of Route I-15/I-215 Junction with connectors to I-15 and I-215. (Phase 3) Construct six-lane overcrossing (Jefferson to Ynez) & ramps, northbound/southbound auxiliary lane,



CD lanes (1 northbound and 3 southbound). Modify Winchester Road interchange (PM 8.43 to PM 9.75, 2028)

- 31. RTP ID 3M0721:** At I-15 on Rancho California, reconfigure interchange from four to six lanes and modify ramps. Type of lanes for arterial widening will be with through lanes (PM 4.48 to PM 5.48, 2035)

Another key transportation improvement from the Southern California of Governments (SCAG) Federal Transportation Improvement Program (FTIP) assumed to be completed in the future network is listed below:

- **FTIP ID: RIV180102:** Widen Ontario Avenue from five to seven lanes.

TRAVEL DEMAND FORECASTING

The overall approach to developing traffic demand forecasts for this corridor is to make use of analytical tools that are appropriate to answer the questions being raised. This study will require an understanding of traffic patterns between both the regional and local travel characteristics of the study area, in order to fully characterize the potential impacts of the proposed Project and to assist the project team in refining the design of the facility and optimize its operations.

Travel Demand Model

The Riverside County Traffic Analysis Model (RIVTAM) will be used to develop volumes for the project. RIVTAM is considered the most appropriate model with detailed roadway and land use information to forecast for local conditions of the study area as it has been calibrated for use in Riverside County.

RIVTAM assumes a 2008 Base Year and a 2035 Future Year. While RIVTAM land use information was originally not consistent with the latest SCAG model, the Western Riverside Council of Governments (WRCOG) has updated land use, which includes the study area and is consistent with the 2016 SCAG RTP/SCS. The land use updated for WRCOG is considered the best available information for modeling procedures because the land use information and roadway information is consistent with 2016 SCAG RTP/SCS and is detailed for the study area. As such, the land use information assumed in RIVTAM was replaced with the WRCOG land use information for modeling efforts for this project. With the updated land use, RIVTAM assumes a 2012 Base Year and a 2040 Future Year.



SCAG's 2016 financially constrained RTP project list adopted in April 2016, Amendment 1 adopted in April 2017 and Amendment 2 adopted in July 2017, will be used as the baseline roadway network for the projects. The model will be updated to reflect the baseline roadway network using the project descriptions stated in the RTP/Amendment 1/Amendment 2 plus additional project details if available. The project completion year identified in the RTP/Amendment 1/Amendment 2 will be used to determine if the project should be included as future roadway improvements when developing the Opening Year (2030) and Design Year (2050) traffic forecasts. The RTP/ Amendment 1/Amendment 2 projects in the study area are listed in Appendix 1. The travel demand model will run using a maximum of five feedback loops which is the standard practice for RIVTAM/SCAG model as noted in the *SCAG User's Guide* (June 2008).

Fehr & Peers will use the data collected as part of this effort to complete a sub-area model calibration of the RIVTAM model for the study area. The sub-area model calibration will follow the validation requirements set forth by the Federal Highways Administration (FHWA) and the model validation guidance produced by the California Transportation Commission (CTC). The model modification and validation statistics will be summarized in the volumes development report prepared for the project.

Forecasting Procedure

Traffic forecasts for study locations will be developed using the difference methodology. This approach is consistent with methodologies delineated in the *National Cooperative Highway Research Program Report (NCHRP) 765* published by the Transportation Research Board (TRB): Analytical Travel Forecasting Approaches for Project Level Planning and Design (Transportation Research Board, 2014) and is considered state of the practice for adjusting raw model forecasts for use in traffic operations assessment. The difference methodology will use the Base Year and Future Year model outputs to calculate the annual growth at study facilities. This growth will be added to the existing (2019) traffic counts and develop the Opening Year (2030) and Design Year (2050) traffic forecasts for Build and No Build Alternatives. Conservation of flow will be applied to all forecasted volumes to ensure volumes are balanced along the study corridors.

Close attention will be paid to forecasting for the proposed express lanes. Fehr & Peers has completed a preliminary review of RIVTAM's sensitivity to pricing and determined that it is generally not sensitive to changes in pricing along this corridor (for example, a ten times (10x) increase in per mile pricing had minimal effect on express lane use). As such, we propose to utilize the methodology we developed to forecast express lanes use in other areas of California (including Caltrans District 4) that is described below:



- Add two additional freeway lanes in each direction as general purpose lanes but with a reduced capacity (20% less) to reflect dynamic pricing to manage flow in the express lanes
- Review OD matrices for users of the corridor and compare them to the Streetlight OD big data obtained as part of the effort
- Isolate OD pairs that have a travel distance along the I-15 corridor of greater than 6-miles (assumes that trips less than six miles will not use the express lanes)
- Cap OD pairs at 20% (per OD pair) max participation in the express lanes
- Any OD demand that cannot be accommodated in the express lanes (see express lane demand below) will be reallocated to the general purpose lanes

Express Lane Capacity Assumptions

The *Highway Capacity Manual* (Transportation Research Board, 6th Edition) identifies capacities for managed lane segments based on barrier/separation type in Exhibit 12-11 which is shown below. Please note that the proposed express lanes would classify as a Barrier 2 facility as there would be multiple lanes (two in each direction) and a lane-delineator barrier will be provided between the express lanes and the general purpose lanes.

Figure 1: Lane Capacities for Basic Managed Lane Segments

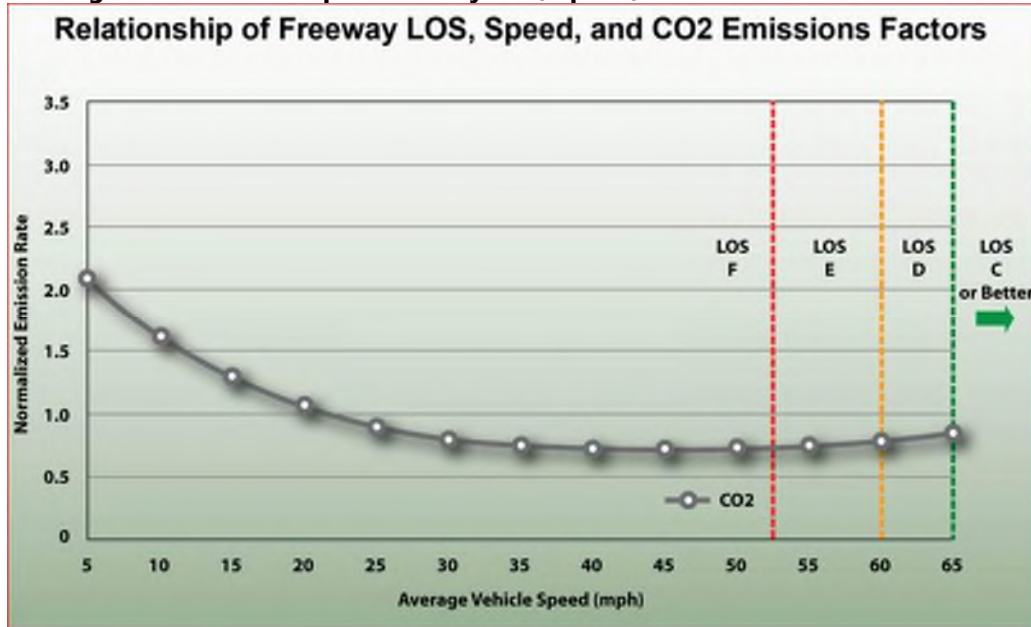
Exhibit 12-11 Estimated Lane Capacities for Basic Managed Lane Segments	FFS (mi/h)	Estimated Lane Capacities (pc/h/ln) by Basic Managed Lane Segment Type				
		Continuous Access	Buffer 1	Buffer 2	Barrier 1	Barrier 2
	75	1,800	1,700	1,850	1,750	2,100
	70	1,750	1,650	1,800	1,700	2,050
	65	1,700	1,600	1,750	1,650	2,000
	60	1,650	1,550	1,700	1,600	1,950
	55	1,600	1,500	1,650	1,550	1,900

As shown in Exhibit 12-11, depending on the free-flow speed (FFS) (which, on I-15 is in the 70-75 mi/h range), capacity of the express lanes would be above 2,000 vehicles per lane per hour. Additionally, as noted in the highway capacity manual, since managed lanes typically operate below capacity, these capacities do not necessarily represent a density of 45 passenger cars per mile per lane (as it is based on empirical observations) and is potentially underestimated for true segment capacity (which would occur at 45 passenger cars per mile per lane).

Operations of express lanes are governed by parameters outlined in the U.S. Government Code, Title 23 (Section 166) which identifies a degraded facility when it operates below 45 miles per hour (mph). 45 MPH would generally represent LOS F conditions for the freeway system as shown in the graphic below which summarizes the relationship between freeway LOS and speed:



Figure 2: Relationship of Freeway LOS, Speed, and CO2 Emissions Factors



Furthermore, it is RCTC's toll direction to maintain a goal of 60-65 mph within the express lane facility; which generally would operate at LOS D (volume-to-capacity ratio of 0.80 – 0.89). RCTC's Toll Policy regarding maintenance of speed is included as an attachment. Assuming a volume-to-capacity ratio of 0.85 (middle of LOS D range or somewhere between 60 and 65 mph) and multiplying it by 2,050 (noted from the highway capacity manual above (assuming a free-flow speed of 70 MPH)) would yield a managed flow rate in the express lanes of 1,743 vehicles per lane per hour (vplph). Therefore, Fehr & Peers will utilize 1,750 vehicles per lane per hour for the capacity of the express lanes (please note that the I-15 ELP project currently under construction assumed 1,700 vehicles per lane per hour, the recently-completed I-15 EL project in San Bernardino County assumed 1,650 vehicles per lane per hour, and Fehr & Peers' other express lane work throughout the state have assumed up-to 1,850 vehicles per lane per hour).

Additionally, Chapter 8.2.2 of The Freeway Management and Operations Handbook Federal Highway Administration on Managed Lanes describes "rule of thumb" throughput for various configurations of managed lanes (*Federal Highway Administration, 2011*). The guidance notes that for multi-lane managed lane applications, a throughput range of 1,700 to 1,900 vplph may be appropriate because there is less friction in flow and no constraints caused by the slowest moving vehicle. The proposed express lanes will be two lanes in each direction and, as such, 1,750 vplph is consistent with that range. The Chapter 8 guidance is provided on page 7 of **Attachment 2**.



Finally, Fehr & Peers reviewed data provided by RCTC related to toll transactions for the I-15 ramps accessing the SR-91 express lanes. That data showed that the single-lane access from I-15 (e.g. northbound I-15 connector to westbound SR-91) has existing peak usage of approximately 1,600 vehicles per lane per hour. This number is consistent with the capacities noted in Figure 1 above; where a Barrier 1 facility (there is only one access lane) at a free-flow speed of 70 MPH would generally provide a capacity of 1,700 vehicles per lane per hour and the peak usage being below that capacity is maintaining the desired speeds in the express lanes. This would support use of the recommended 1,750 vehicles per lane per hour noted above as the I-15 express lanes would have two barrier separated lanes and will provide higher capacity than the Barrier 1 facility providing that exists today.

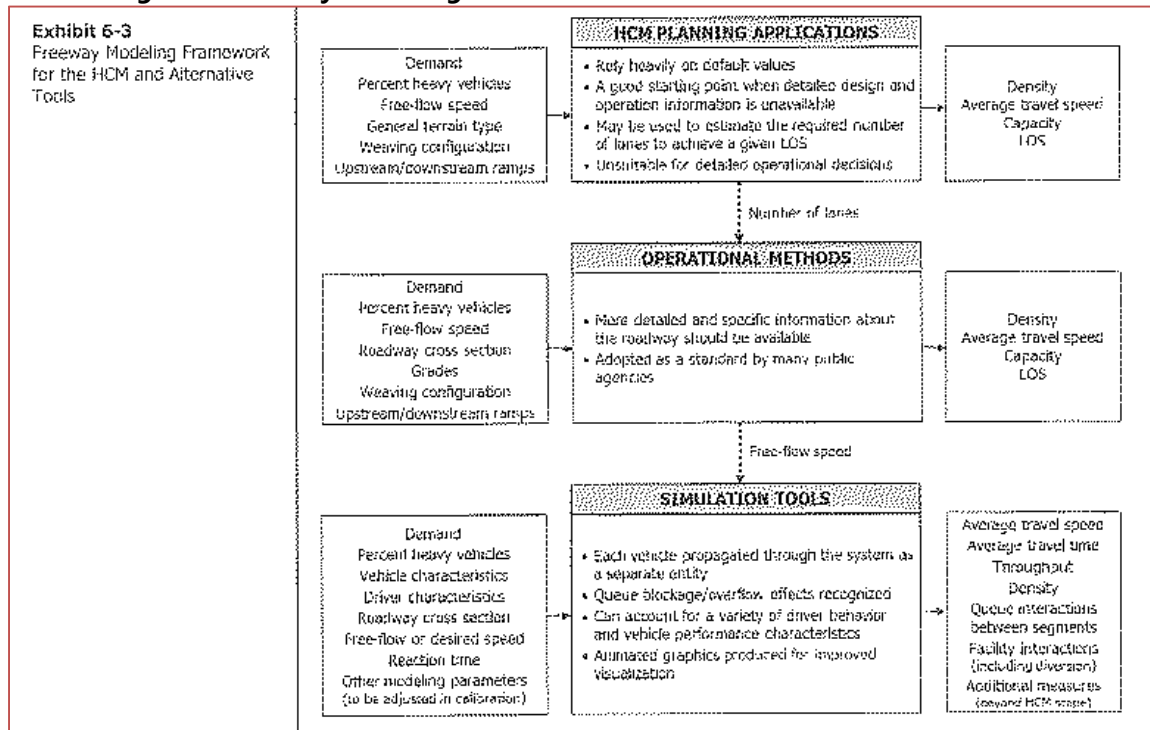
TRAFFIC OPERATIONS ANALYSIS METHODS

Highway Capacity Manual, 6th Edition (HCM), Chapter 25 discusses limitations of HCM methodologies. HCM procedures become increasingly complex when downstream bottlenecks extend to upstream bottlenecks, causing a queue interaction. In these cases, the reliability of the methodology is questionable and a traffic simulation model is applicable. Due to the nature of the study area, oversaturated traffic conditions and interactions between SR-91 to I-15 express lane connectors will need to be considered.

Highway Capacity Manual, 6th Edition (HCM), Chapter 6 discusses appropriate use of microsimulation tools based on project needs. Exhibit 6-3 of Chapter 6 present the modeling framework for freeways. Microsimulation tools are stronger in evaluating queue interactions and facility interactions than HCM planning and operational methods. The analysis tool for the project will need to be capable of modeling a network of on-ramps, off-ramps, general purpose freeway lanes, and express lanes while representing oversaturated traffic conditions.



Figure 3: Freeway Modeling Framework for the HCM and Alternative Tools



VISSIM 11 is a microscopic multi-modal traffic flow simulation software package developed by PTV Group. As noted in the HCM, traffic simulation model may be more applicable for congested corridors, which is the case for our study area. Therefore, VISSIM is recommended to use in order to adequately evaluate the unique characteristics of this project. Compared to the HCM, VISSIM is capable to take into consideration of upstream or downstream bottleneck effect, queue spillback effect, interactions between General Purpose lanes and HOT lanes, interactions between ramp and mainline operations. All those above are not only required to be evaluated as part of this project but also provide a technically sound approach to refine project alternatives (such as ingress and egress points for HOT lanes). As a powerful tool for traffic operations analysis, VISSIM requires more in-depth analysis and consequently require more effort to develop. VISSIM has been used on numerous highway projects throughout California.

All components of freeway operations (i.e. mainline, on-ramp merge, off-ramp diverge, weaving sections, HOV2+/express lanes, ramp metering, etc.) operate as a single integrated system with congestion and queues affecting both upstream and downstream traffic operations. VISSIM will be used for this operations analysis to capture the effects between all the freeway components and the system-wide measures of effectiveness (MOE). The existing conditions models will use existing demand volumes (vehicle counts plus vehicles in queue) and existing truck volumes to assess their effects on operations. The model will be calibrated and validated to the existing operating



conditions observed in the field measured through GPS travel time runs and big data obtained for this effort.

The VISSIM model will be calibrated using the Washington State Department of Transportation (WSDOT) protocol for VISSIM simulation. According to the *WSDOT VISSIM Protocol* (September 2014), there are two separate criteria that must be met in order to justify the validity of a particular model and its usefulness in evaluating the transportation system:

- **Confidence** – Ensuring that the reported model results are representative of the model
- **Calibration** – Matching the model results to real word conditions

The two criteria and approach for ensuring that the VISSIM simulation model will meet both, are summarized below.

- **Confidence:** Given the varying results that inherently exist between micro-simulation runs (due to the random seed number), every model is required to evaluate its reported results in a way that confides that they are representative of the model and not skewed towards a statistical outlier. Per the WSDOT VISSIM Protocol, the VISSIM model runs will use a simulation resolution of 10 time steps per second, and the initial results will be based on an average of at least 11 model runs, each using a different random seed value. For the existing conditions model, the statistical significance of 11 simulation runs will be confirmed to ensure that the variation in model vehicle throughput was within the 95 percent confidence level. Once an acceptable amount of deviation between runs is achieved, the average of the 11 runs will be used to produce statistically significant results.
- **Calibration:** Calibration is the process used to achieve adequate reliability or validity of the model by establishing suitable parameter values so that the model replicates local traffic conditions as closely as possible. The existing conditions VISSIM model will be calibrated to match traffic counts and observed queues. Traffic count calibration will be assessed using the GEH statistic for all segments in which there was accompanying field traffic count data. The GEH statistic summarizes the difference between the model output and observed volumes – the closer the model output is to observed conditions, the lower the GEH statistic. The throughput volume calibration is also considered in validation. **Table 1** and **Table 2** below summarize the GEH and Throughput Volume criteria.



TABLE 1
GEH STATISTIC GUIDELINES

GEH Statistic	Guidance
< 3.0	Acceptable Fit
3.0 to 5.0	Acceptable: For Local Roadway Facilities
>5.0	Unacceptable

Source: WSDOT VISSIM *Protocol* (September 2014)

TABLE 2
GEH STATISTIC GUIDELINES

Criteria	Acceptable Targets
GEH < 3.0	All state facility segments within the calibration area.
GEH < 3.0	All entry and exit locations within the calibration area.
GEH < 3.0	All entrance and exit ramps within the calibration area.
GEH < 5.0	At least 85% of applicable local roadway segments.
Sum of all segment flows within the calibration area. Within 5%	

Source: WSDOT VISSIM *Protocol* (September 2014)

The freeway segments will be analyzed using consistent methodologies from the Highway Capacity Manual, 6th Edition (HCM). The level of service (LOS) will be calculated for each study facility to evaluate traffic operations using an HCM consistent post-processor developed for VISSIM outputs. LOS is a qualitative measure of traffic operating conditions whereby a letter grade, from A (the best) to F (the worst), is assigned. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving.

The freeway LOS will be calculated for each study facility based on density in number of vehicles per hour per lane. **Table 3** describes the LOS thresholds for freeway sections identified in the HCM.

The peak-hour density calculations are consistent with the definitions from the HCM, which defines four freeway section types: merge, diverge, weave, and basic. Merge and diverge sections, which refer to the freeway ramp junctions, are defined as the section of the freeway 1,500 feet downstream of an on-ramp and upstream of an off-ramp, respectively. The density is measured over the two outside freeway through lanes plus any auxiliary lanes. A weaving section occurs between a successive on-ramp and off-ramp pair connected by an auxiliary lane, and the maximum weaving distance between the ramps is no longer a fixed distance but determined by the weaving/total



volumes and number of weaving lanes in the HCM. Basic freeway sections include all other freeway sections that are not included in a merge, diverge, or weaving section. The densities at weaving and basic sections are measured across all mixed-flow freeway lanes (including both through lanes and auxiliary lanes).

As discussed with Caltrans, in addition to VISSIM, an HCS equivalent tool will also be used to analyze the freeway segments consistent with HCM 6th Edition. Fehr & Peers will complete the assessment using both methodologies and, where results differ, will work with the project development team for concurrence to utilize the most accurate result in the TOAR.

TABLE 3 FREEWAY MAINLINE AND RAMP JUNCTION/WEAVE SECTION LOS THRESHOLD				
Level of Service	Description	Density (vplpm) ¹		
		Mainline (Basic)	Mainline (Weave)	Ramp/ Merge/ Diverge
A	Free-flow speeds prevail. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.	≤ 11	≤ 10	≤ 10
B	Free-flow speeds are maintained. The ability to maneuver with the traffic stream is only slightly restricted.	> 11 to 18	> 10 to 20	> 10 to 20
C	Flow with speeds at or near free-flow speeds. Freedom to maneuver within the traffic stream is noticeably restricted, and lane changes require more care and vigilance on the part of the driver.	> 18 to 26	> 20 to 28	> 20 to 28
D	Speeds decline slightly with increasing flows. Freedom to maneuver with the traffic stream is more noticeably limited, and the driver experiences reduced physical and psychological comfort.	> 26 to 35	> 28 to 35	> 28 to 35
E	Operation at capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver. Any disruption can be expected to produce a breakdown with queuing.	> 35 to 45	> 35 to 43	> 35 ²



TABLE 3 FREEWAY MAINLINE AND RAMP JUNCTION/WEAVE SECTION LOS THRESHOLD				
Level of Service	Description	Density (vplpm) ¹		
		Mainline (Basic)	Mainline (Weave)	Ramp/ Merge/ Diverge
F	Represents a breakdown in flow.	Demand Exceeds Capacity OR Density > 45	Demand Exceeds Capacity OR Density > 43	Demand Exceeds Capacity
Notes: 1. Density is reported in vehicles per lane per mile (vplpm). 2. The maximum density for ramp junctions and merge/diverge sections under LOS E is not defined in the HCM. The maximum density for basic segments of 45 vplpm was assumed to apply to ramp junctions and weaving sections. Source: Highway Capacity Manual (Transportation Research Board, 2016)				

In addition to LOS, the AM and PM peak period systemwide performance measures will be developed using the VISSIM models, including the following:

- Systemwide percent vehicles served
- Systemwide vehicle miles of travel (VMT)
- Systemwide vehicle hours of delay (VHD)
- Corridor Average travel time and speeds for I-15
- Bottleneck locations and queue lengths for I-15

Level of Service Criteria

The following level of service (LOS) criteria will be employed to determine if the project would result in any traffic operational deficiencies to the study area. The LOS criteria are in accordance with Caltrans guidelines. Caltrans strives to have freeway facilities operate at a level of service between C and D; therefore, LOS D will be used as the threshold for freeway facilities analysis.

Simulation Sensitivity Testing

Fehr & Peers will also utilize a proprietary tool developed in-house to test the analysis results utilizing the microsimulation tool. Specifically, this tool is an automated process where different input parameters are modified to “proof” the analysis results. For example, we could modify traffic volumes by plus or minus 5%, 10%, or 20% to determine how that would affect operations. This will



test the sensitivity of the traffic operation results to the forecast volumes to provide greater confidence in the analysis results. Additionally, we will test autonomous vehicle fleet penetration as part of this tool through adjustments to driver behavior parameters that will replicate AV characteristics. Although we do not anticipate including these results in the TOAR, we believe it will provide valuable information to the project team to ensure that the project is designed with a high level of confidence.

Senate Bill 743 (SB 743)

As a result of SB 743, the new recommended metric in the CEQA guidelines for transportation impacts is VMT and the legislation will require all jurisdictions to use VMT by July of 2020. In April, Caltrans released CEQA guidance related to VMT assessment as noted below:

While public agencies may immediately apply Section 15064.3 of the updated Guidelines, statewide application is not required until July 1, 2020. In addition, uniform statewide guidance for Caltrans projects is still under development. The project development team may determine the appropriate metric to use to analyze traffic impacts pursuant to section 15064.3(b). Projects for which a Notice of Preparation will be issued anytime after December 28, 2018 should consider including an analysis of VMT/induced demand if the project has the potential to increase VMT (see page 20 of Office of Planning and Research's updated Technical Advisory on Evaluating Transportation Impacts in CEQA (December 2018)), particularly if the project will be approved after July 2020.

As such, VMT analysis will be included in the analysis and will generally be consistent with requirements of Senate Bill (SB-743), the Office of Planning and Research's (OPR's) technical advisory, and state of the practice methodologies. The legislative intent of SB 743 is to balance the needs of congestion management with statewide goals for infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions. Caltrans does not currently have guidelines completed to provide guidance for SB 743 assessment (they are in process). Vehicle miles traveled (VMT) will be estimated using both the VISSIM Model and the regional travel demand model for the Project to evaluate the change in VMT associated with the project.

Operations Analysis Tools & Assumptions Summary

The tools and assumptions to be used for preparation of the traffic study are summarized below:

- Highway Capacity Manual, 6th Edition methodology and VISSIM simulation program and an HCS equivalent tool will be used to analyze freeway mainline, ramp junctions, weaving, managed lanes, and ramp metering.



- Existing (2019) counts will be collected from various sources including Caltrans, PeMS (Freeway Performance Measurement System), RCTC, cities, and field data.
- Existing (2019) travel time data along the I-15 study corridor will be collected on the field.
- Existing lane configuration and roadway geometry will be collected from field observations.
- Existing ramp metering data will be provided by Caltrans.
- Most recent 3-year collision history will be provided by Caltrans.
- Existing peak hour factor (PHF) and heavy vehicle percentages will be determined based on the traffic counts.
- Opening Year and Design Year PHF is assumed to be 0.95 for urban freeways per HCM (2010), Chapter 10.
- Opening Year and Design Year heavy vehicle percentages will be determined based on the historical data from Caltrans' truck count database in addition to freeway truck classification and traffic counts.

DOCUMENTATION

The following deliverables will be provided to the project team for review and comment.

Traffic Volumes Development Report – The forecast volumes will be submitted as a separate report before the traffic operation analysis for the project is conducted.

Traffic Operations Analysis Report (TOAR) – The results of the future year traffic operations analysis along with the information contained in the deliverable discussed above will be presented in a stand-alone Traffic Operations Analysis Report for review and comment.

If you have any questions, please contact Jason Pack at (949) 308-6312.

ATTACHMENTS

Figure 1	Traffic Count Locations
Figure 1.A	Traffic Count Locations Inset A
Figure 1.B	Traffic Count Locations Inset B
Figure 1.C	Traffic Count Locations Inset C
Figure 1.D	Traffic Count Locations Inset D
Figure 1.E	Traffic Count Locations Inset E
Figure 2	Freeway Counts Locations
Figure 3	Related RTP Projects
Attachment 1	RCTC Toll Policy Report 1-2. Toll Pricing Objectives
Attachment 2	FHWA Chapter 8 of The Freeway Management and Operations Handbook



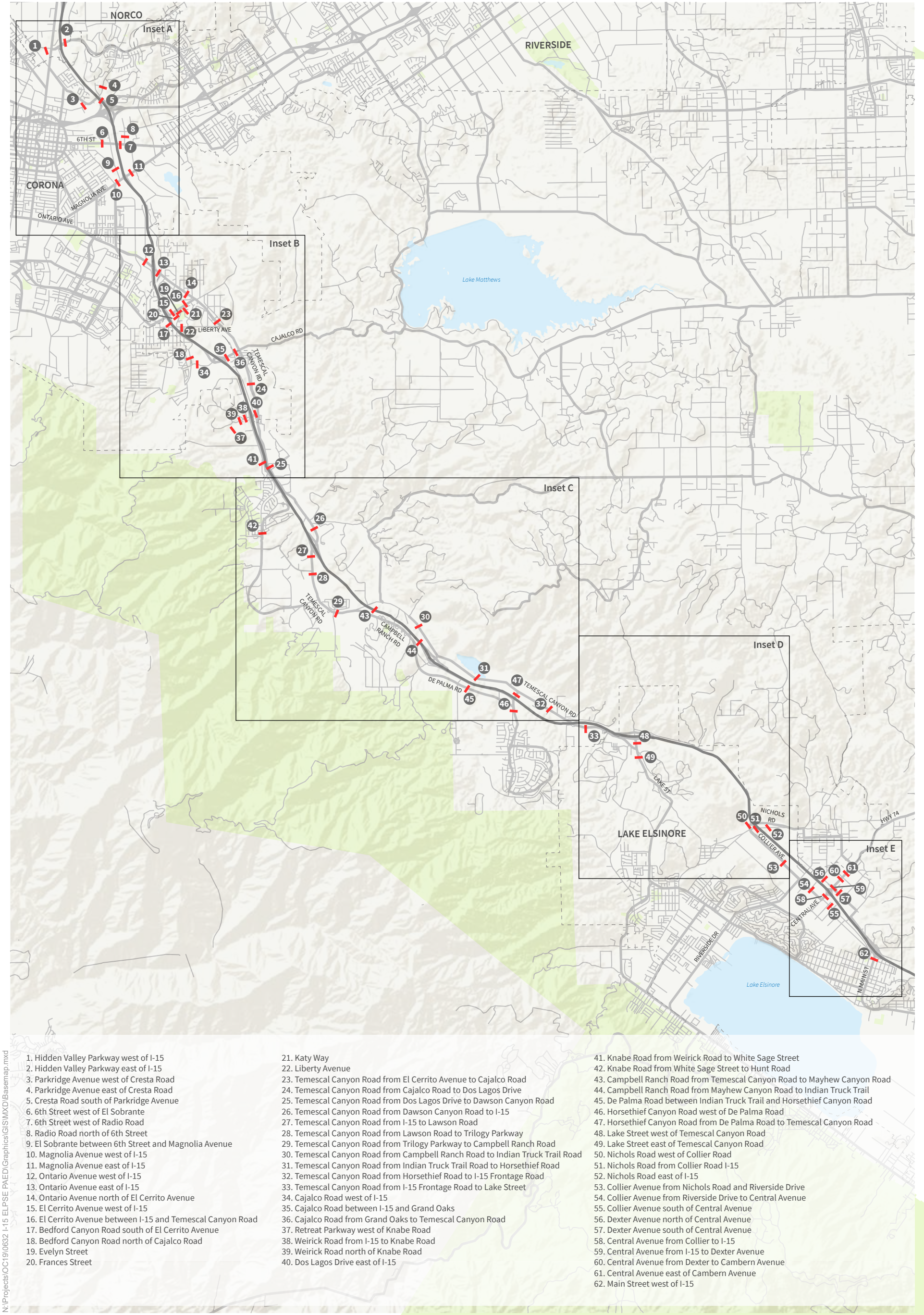


Figure 1
Traffic Count Locations

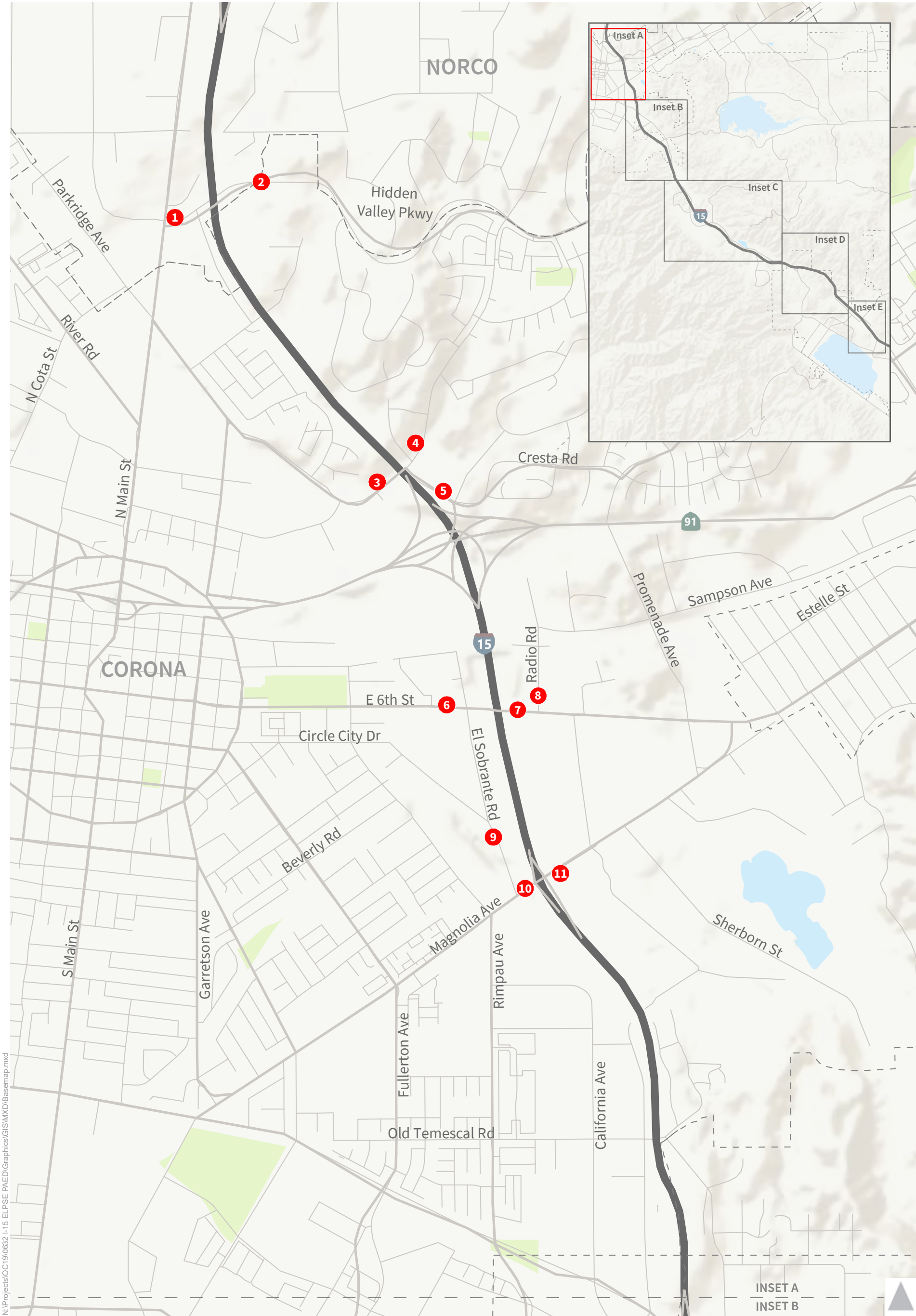
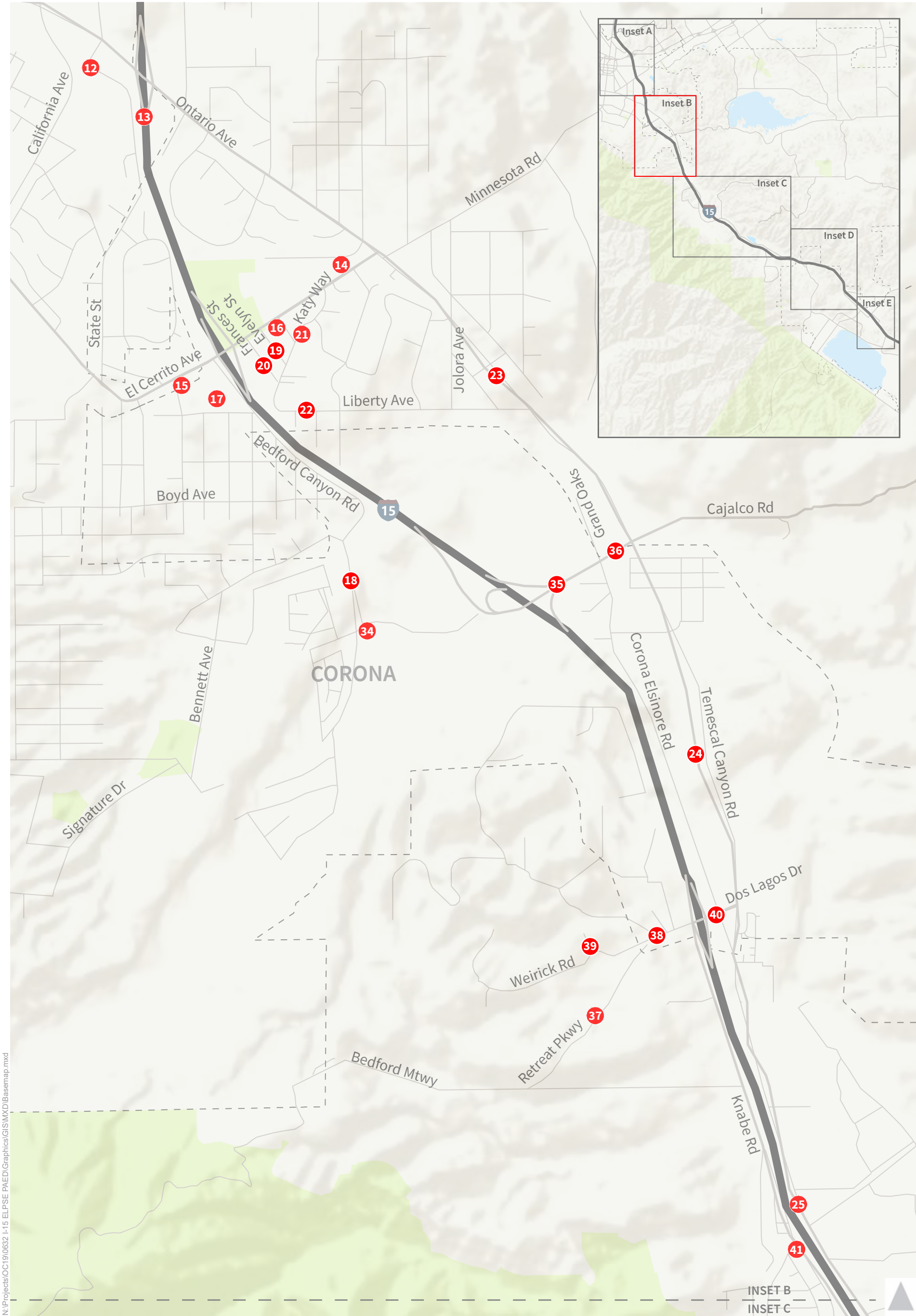


Figure 1.A
Traffic Count Locations



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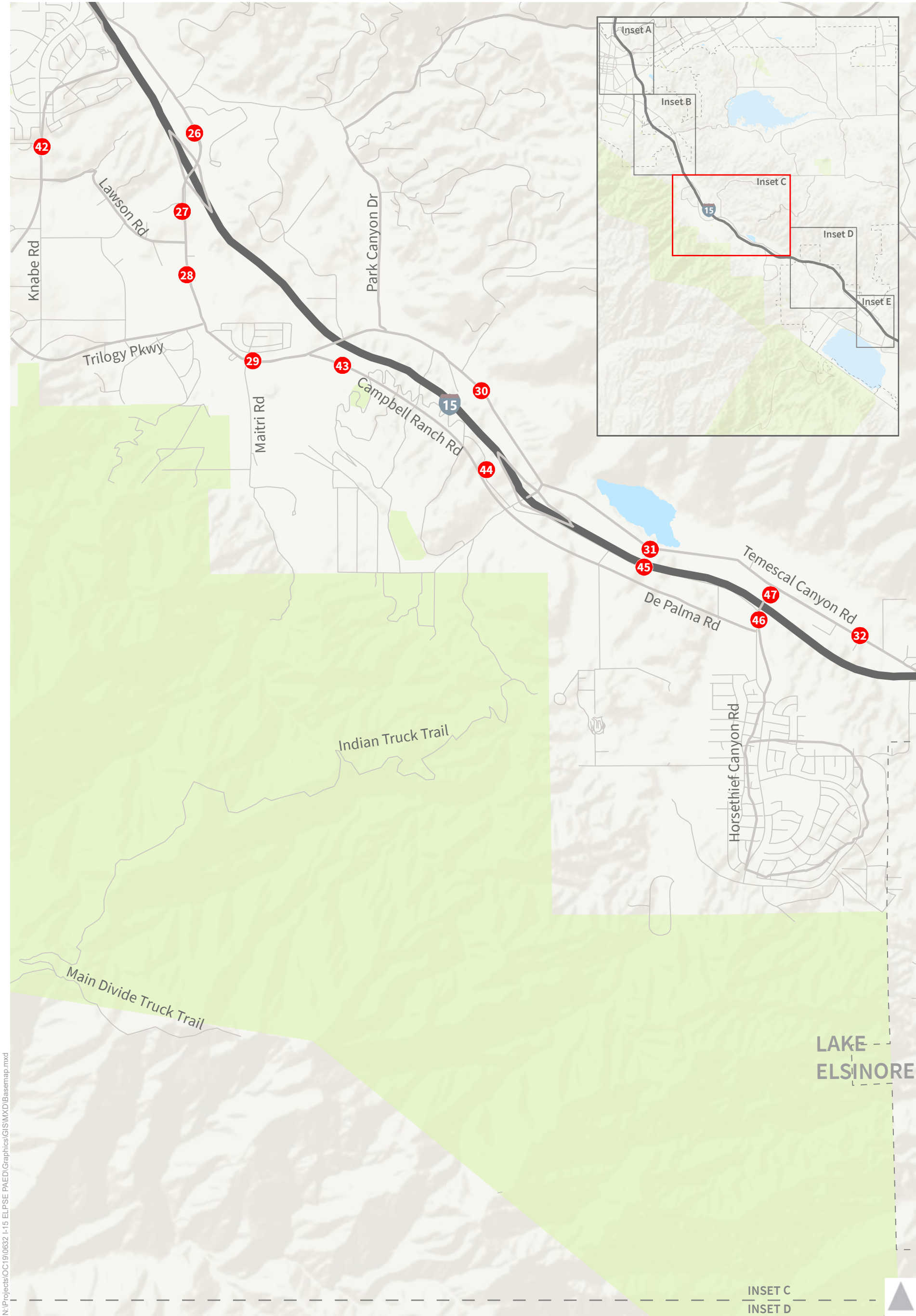
- Count Locations
- Cities
- Streets

- 12. Ontario Avenue west of I-15
- 13. Ontario Avenue east of I-15
- 14. Ontario Avenue north of El Cerrito Avenue
- 15. El Cerrito Avenue west of I-15
- 16. El Cerrito Avenue between I-15 and Temescal Canyon Road
- 17. Bedford Canyon Road south of El Cerrito Avenue
- 18. Bedford Canyon Road north of Cajalco Road
- 19. Evelyn Street
- 20. Frances Street
- 21. Katy Way
- 22. Liberty Avenue
- 23. Temescal Canyon Road from El Cerrito Avenue to Cajalco Road
- 24. Temescal Canyon Road from Cajalco Road to Dos Lagos Drive
- 25. Temescal Canyon Road from Dos Lagos Drive to Dawson Canyon Road

- 34. Cajalco Road west of I-15
- 35. Cajalco Road between I-15 and Grand Oaks
- 36. Cajalco Road from Grand Oaks to Temescal Canyon Road
- 37. Retreat Parkway west of Knabe Road
- 38. Weirick Road from I-15 to Knabe Road
- 39. Weirick Road north of Knabe Road
- 40. Dos Lagos Drive east of I-15
- 41. Knabe Road from Weirick Road to White Sage Street



Figure 1.B
Traffic Count Locations



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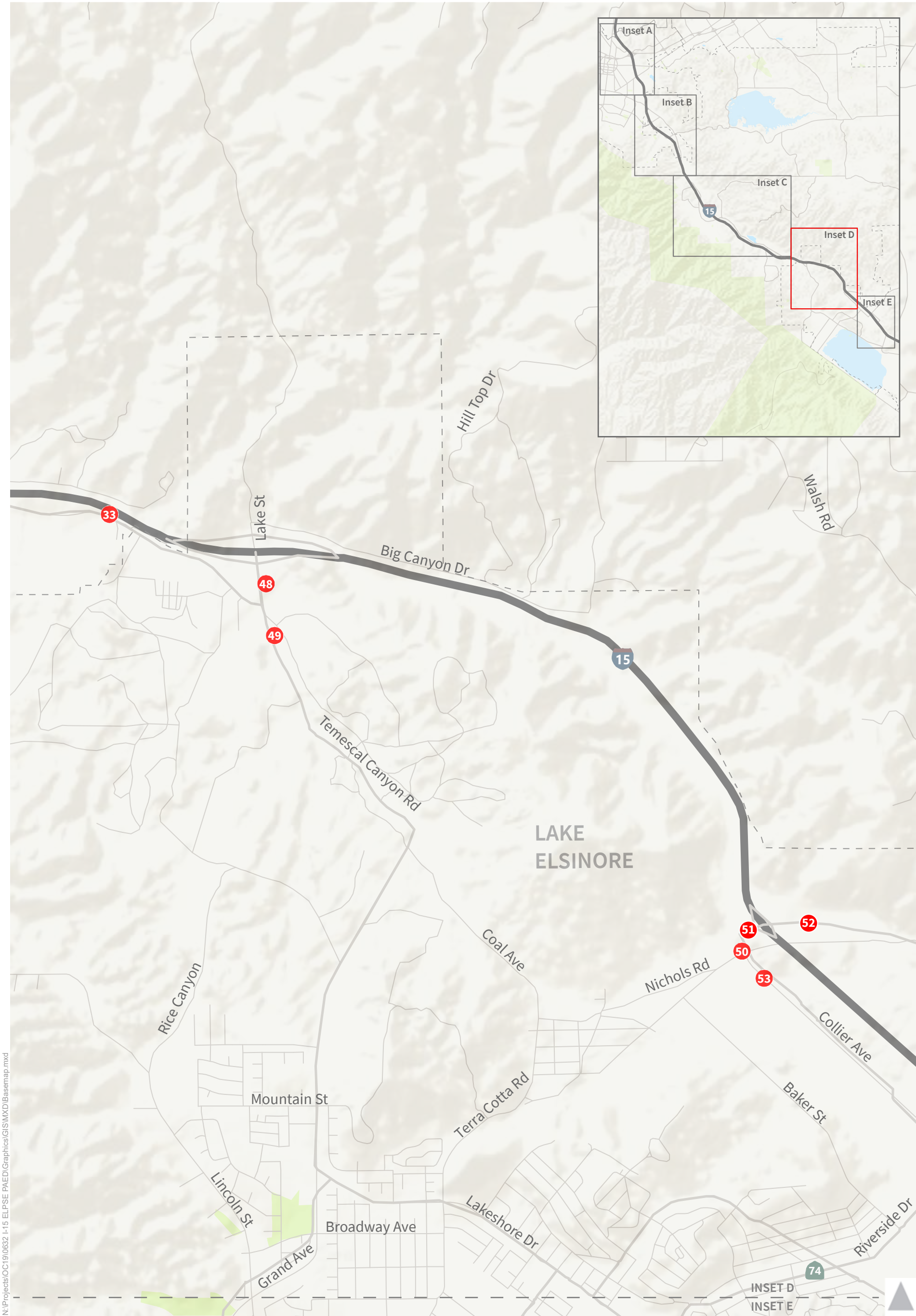
-  Count Locations
-  Cities
-  Streets

- 26. Temescal Canyon Road from Dawson Canyon Road to I-15
- 27. Temescal Canyon Road from I-15 to Lawson Road
- 28. Temescal Canyon Road from Lawson Road to Trilogy Parkway
- 29. Temescal Canyon Road from Trilogy Parkway to Campbell Ranch Road
- 30. Temescal Canyon Road from Campbell Ranch Road to Indian Truck Trail Road
- 31. Temescal Canyon Road from Indian Truck Trail Road to Horsethief Road
- 32. Temescal Canyon Road from Horsethief Road to I-15 Frontage Road

- 42. Knabe Road from White Sage Street to Hunt Road
- 43. Campbell Ranch Road from Temescal Canyon Road to Mayhew Canyon Road
- 44. Campbell Ranch Road from Mayhew Canyon Road to Indian Truck Trail
- 45. De Palma Road between Indian Truck Trail and Horsethief Canyon Road
- 46. Horsethief Canyon Road west of De Palma Road
- 47. Horsethief Canyon Road from De Palma Road to Temescal Canyon Road



Figure 1.C
Traffic Count Locations



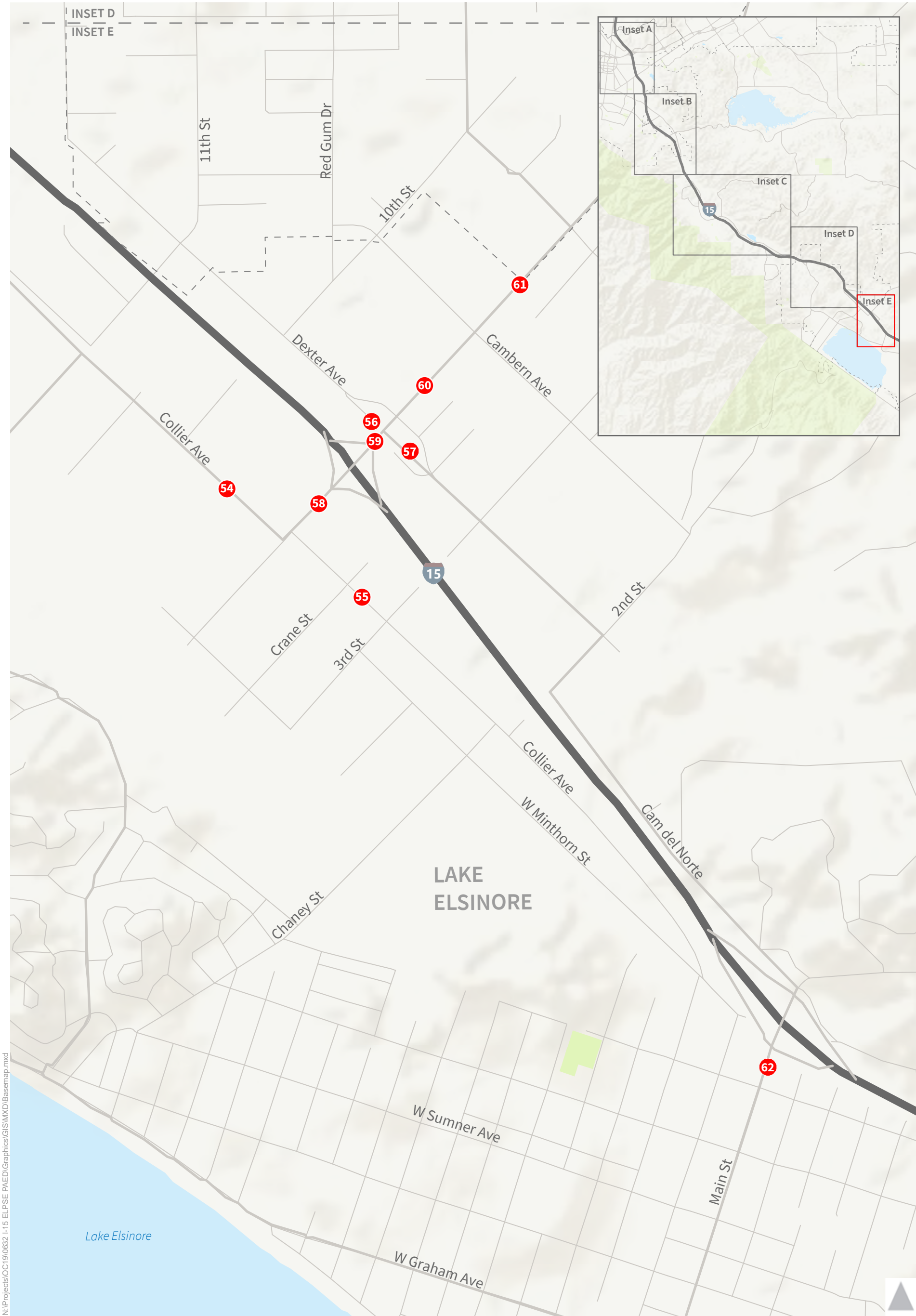
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- Count Locations
- Cities
- Streets

- 33. Temescal Canyon Road from I-15 Frontage Road to Lake Street
- 48. Lake Street west of Temescal Canyon Road
- 49. Lake Street east of Temescal Canyon Road
- 50. Nichols Road west of Collier Road
- 51. Nichols Road from Collier Road I-15
- 52. Nichols Road east of I-15
- 53. Collier Avenue from Nichols Road and Riverside Drive



Figure 1.D
Traffic Count Locations



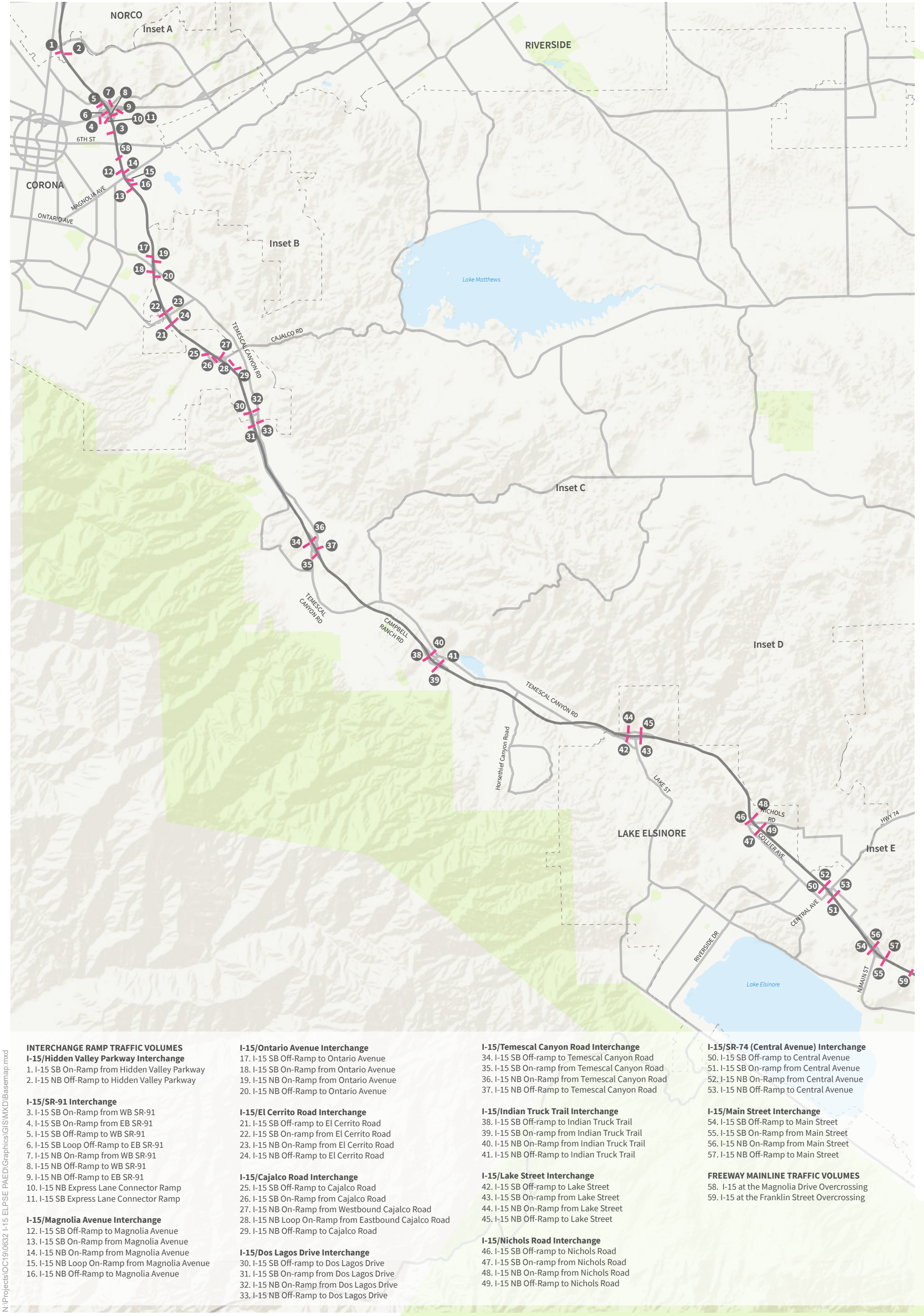
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- # Count Locations
- Cities
- Streets

- 54. Collier Avenue from Riverside Drive to Central Avenue
- 55. Collier Avenue south of Central Avenue
- 56. Dexter Avenue north of Central Avenue
- 57. Dexter Avenue south of Central Avenue
- 58. Central Avenue from Collier to I-15
- 59. Central Avenue from I-15 to Dexter Avenue
- 60. Central Avenue from Dexter to Cambern Avenue
- 61. Central Avenue east of Cambern Avenue
- 62. Main Street west of I-15



Figure 1.E
Traffic Count Locations

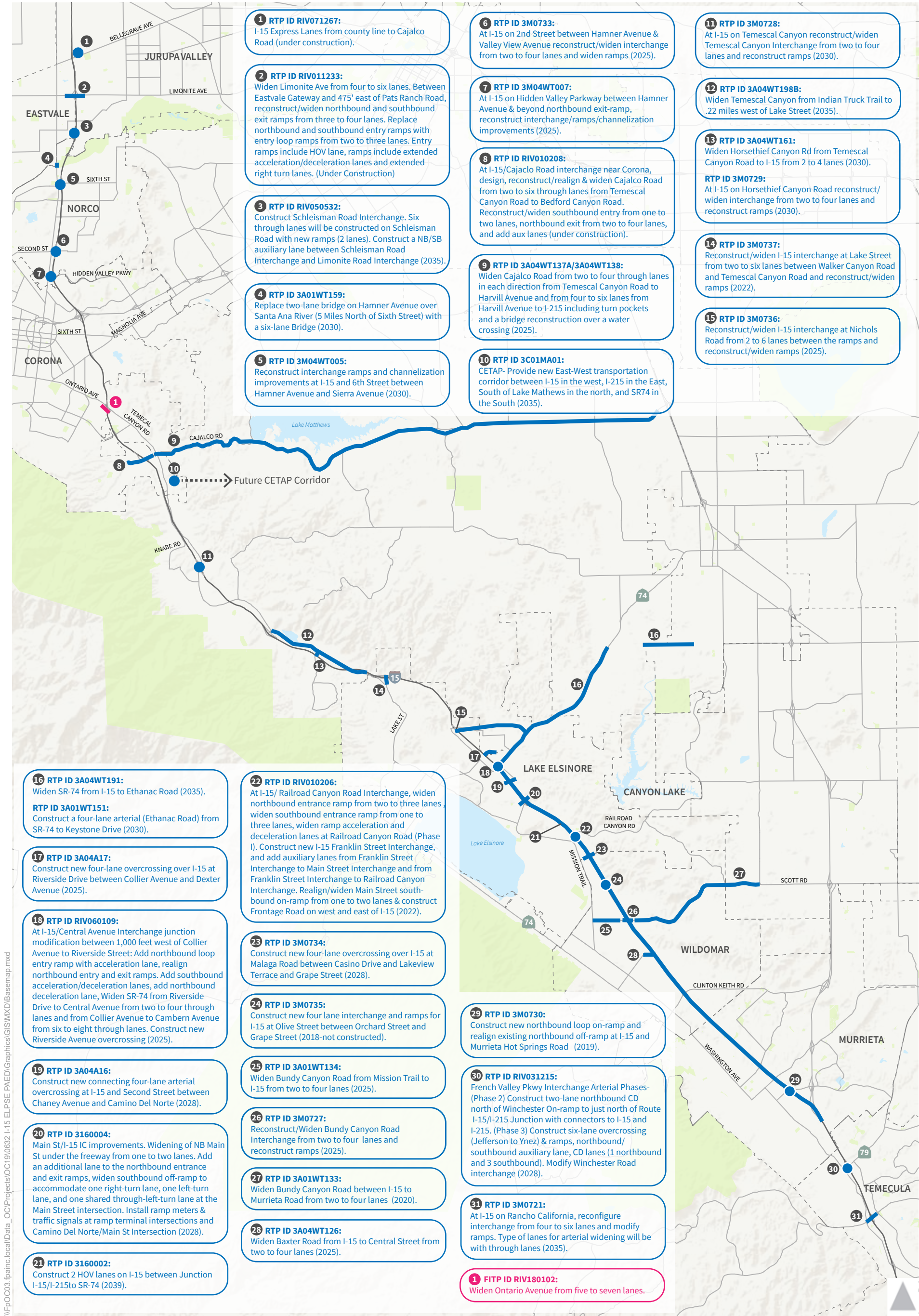


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- Counts
- Cities
- Streets



Figure 2
Freeway Count Segments



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Figure 3
RTP Projects

1 – 2. Toll Pricing Objectives

Description:

Express lane pricing serves as a tool to regulate demand and preserve optimal operating conditions. A primary goal of express lanes is to maintain priority access for high occupancy vehicles (HOVs), buses and vanpools to achieve high person throughput. In addition, federal requirements specify minimum operating conditions for HOV and express lanes and prescribe the use of pricing as a means of meeting those requirements. Express lane pricing also generates revenue that can be used to support project development, operating and maintenance costs, and other improvements.

Recommendation:

- 1. Optimize person throughput in the corridor while meeting debt obligations.***
- 2. Establish toll pricing to routinely achieve free-flow speeds of 60-65 mph, always exceeding the 45 mph federal minimum requirement***

Background:

A common goal of express lane projects around the country is to optimize the performance of the lanes using pricing. The performance of express lanes can be measured in a number of ways, including person throughput. And although not often stated as a primary goal of express lanes, revenue generation is another measure of performance. Optimizing person throughput in express lanes is achieved by maintaining priority service for HOVs, buses and vanpools by offering toll discounts and ensuring that the express lanes maintain free-flow conditions for these vehicles.

Federal requirements define a degraded HOV or express lane facility as one that does not meet a minimum average operating speed of 45 mph for 90 percent of the time over a 180-day monitoring period during weekday peak hours. The requirements specify varying the toll charged to vehicles to bring a degraded facility into compliance. As described in Section 19, dynamic pricing will be used to manage demand in the Express Lanes. The pricing algorithm used to calculate the toll rates can be calibrated to ensure that free-flow speeds of 60-65 mph are routinely achieved in the Express Lanes. Additionally, tolls can be set to ensure that the project generates revenue that will be used to service debt obligations.

Assessment:

Optimizing person throughput is a common goal of express lane projects and is achieved by using pricing as a mechanism to maintain priority access for vehicles carrying multiple occupants. Pricing will also be used to ensure that the federal minimum operating requirements are met and that the Express Lanes generate revenue necessary to service debt obligations.

Updated Chapter January 2011 Managed Lane Chapter for the Freeway Management and Operations Handbook

8.0 Managed Lanes

8.1 Introduction

Managed lanes have been in existence for nearly 40 years and represent a family of operational strategies designed to address a wide array of transportation objectives. The term itself varies from state to state, and managed lanes can mean different things to different stakeholders in the transportation industry. One key aspect that all managed lane facilities share in common is active demand and system management. Oftentimes, the development of managed lanes has come from the realization that high demand on existing facilities necessitates the efficient management of those facilities. This holds especially true in situations where options for constructing new capacity are limited.

The purpose of this chapter is to provide an introduction to the topic of managed lanes and to serve as a resource which incorporates the latest practices, strategies and technologies. The reader will have an understanding of the appropriate conditions for which to consider managed lanes, the range of benefits that may be accrued to both the system and to users, and the many complementary strategies and design tradeoffs that can impact the performance of the managed lanes facility.

Following this introductory section, background information is provided regarding the context for considering managed lanes and their relationship to other management and operational treatments for freeways. As managed lanes have different implications at the system, corridor, and project levels, this section concerning the context for managed lanes helps the reader address these implications at the appropriate scale and time of development.

The remainder of the chapter identifies the primary elements of managed lanes, including their ability to meet freeway management needs. Two conditions are presented for managed lane strategies: dedicated lanes to be managed, and, corridor management of all lanes. Operational and design considerations encourage the reader to consider all facets of implementation concerns. The planning and implementation section suggests a strategic evaluation of managed lanes' role in overall freeway system planning. Finally, case studies of different types of managed lanes as implemented in the U.S. and the U.K. illustrate the challenges and benefits from managed lane implementation.

In summary this chapter provides:

- A systematic approach to the development of a managed lane subsystem within a freeway management program, including the identification of operational needs and the application of appropriate strategies.
- A summary and description of various managed lane strategies and technologies, special issues in design and implementation, and complementary actions for improving effectiveness.
- Insight into developing and operating managed lane subsystems through example case studies.

8.1.1 Managed Lanes Defined

Various federal and state agencies have customized managed lane definitions to meet their particular needs. Examples are offered in references 1, 2 and 3. All definitions, though, contain these key elements:

- Highway facilities where operational strategies are proactively implemented
- Active management to optimize traffic flow and vehicular throughput
- Combination of operational and design actions that meet local and regional mobility objectives

Although the definition of managed lanes varies from one locale and agency to the next, managed lanes in this manual can generally be defined as freeway lanes that are set aside and operated using a variety of fixed and/or real-time strategies responding to local goals and objectives that move traffic more efficiently in those lanes. As a result, travelers have *options* to traveling on a congested freeway. Managed lanes are typically differentiated and distinct from traditional freeway lanes because their operations can be actively managed and allowed to change over time in

response to changing needs. A common element in the definitions is inclusion of a broad range of potential strategies and user groups. There is also an emphasis on achieving an enhanced operational condition within the managed lanes, as either explicitly stated in the definitions (such as freeway efficiency, reduction in congestion, optimized throughput) or through implicit qualities (such as travel time savings, trip reliability, free-flow speeds, or higher comparable speeds than for adjacent general purpose lanes).

From the 1960s to the 1990s, the most prevalent form of managed facilities were High-occupancy Vehicle (HOV) lanes (see Figure 1), although the HOV application is only one of many managed lane approaches that currently exist. Priority treatments for HOVs have proven to be one of the most flexible, cost effective alternatives for sustaining and in many cases increasing the person-moving capacity of congested metropolitan transportation systems. However, the concept of HOV-only lanes has evolved into other facilities that offer *more choices* and *more flexibility* for a wider range of freeway users. This is evident by the emergence of facilities that combine HOV and pricing strategies by allowing vehicles that do not meet minimum passenger occupancy requirements to gain access to HOV lanes by paying a toll when capacity allows.

Managed lanes involve the *regulation, warning, guidance* and *redistribution* of traffic to meet such overall goals as:

- Improve traffic operations
- Facilitate movement of people and goods
- Enhance performance and efficiency
- Promote air quality goals
- Improve safety
- Address return on investment

Figure 1: HOV lane on I-405, Orange County, California



The spectrum of projects that fall within the definition of managed lanes continues to widen as new combinations of management strategies are employed. The following are several examples of facility types that can be considered managed lanes if they are designed and operated to preserve enhanced travel conditions:

- HOV lanes
- High-occupancy/Toll (HOT) lanes
- Dynamic shoulder lanes
- Express lanes
- Truck lanes
- Interchange bypass lanes (usually transit, HOV or truck only)
- Dual roadways in which at least one of the roadways is managed
- Separate express lane tollways constructed within freeways

Many different definitions associated with many of these applications are found in Section 8.3.

Strategies for managing lanes typically fall into one of three categories. These include vehicle eligibility restrictions, access control, and pricing. The following list shows some of the common strategies that fall within this classification:

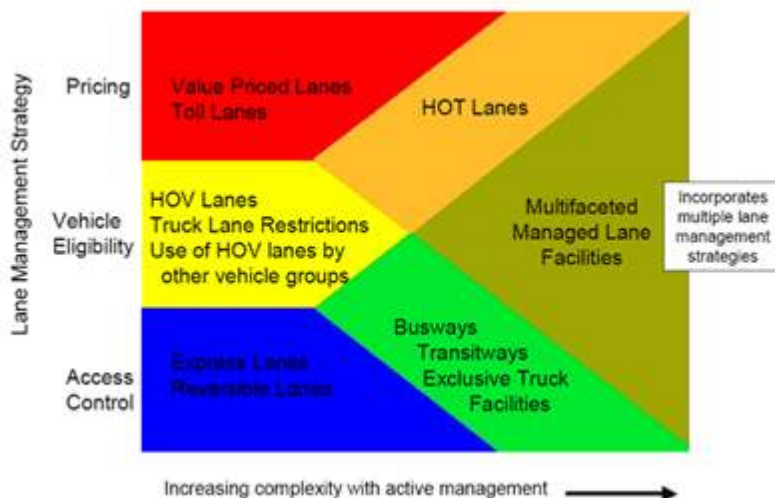
- Eligibility
 - Occupancy restrictions
 - Vehicle type restrictions (e.g., buses, vanpools, taxis, carpools)
- Access
 - Express lanes with limited access
 - Contraflow lanes
 - Reversible lanes
 - Ramp and mainline metering
- Pricing
 - Decal or sticker registration for use
 - Congestion pricing on managed lanes
 - Fixed or variable electronic tolling

Active traffic management (ATM), generally represented as traffic control applications that promote safer and more efficient operations, can be used to support the above strategies. Examples include:

- Speed advisories and controls
- Dynamic lane assignment
- Dynamic hard shoulder running
- Dynamic route diversion

Most managed lane implementation incorporate the application of multiple management strategies. Figure 2 shows the many manifestations of facilities that fall under the broad definition of managed lanes and how lane management strategies are utilized in their implementation. In almost cases, managed lanes are located within the freeway right-of-way, often on the left or "high speed" side of the mainlanes, but sometimes on the right lane or shoulder lane for short distances.

Figure 2: Managed Lane Implementation Strategies ([Texas Transportation Institute Website on Managed Lanes](#))



Agencies often combine lane management strategies and applications of various intelligent transportation systems (ITS) and traffic control devices to address both safety and operation needs. Examples include:

- Employing static signing to notify drivers of eligibility to use a dedicated lane and times indicating when restrictions are in place.
- Utilizing overhead lane control signals and/or changeable message signs to accommodate highly directional demand on reversible or contraflow lanes.
- Employing access treatment and lane separation strategies to manage the speed differential often associated with managed lanes.
- Increasing the level of automated and on-site monitoring, enforcement and incident response capability to help assure travel time reliability and safe operations.

- Implementing variable pricing through electronic tags that vary tolls by time of day or by demand to more efficiently utilize lane capacity.

8.1.2 Context for Application

The presence of traffic congestion is a fundamental prerequisite for considering many different congestion management strategies in this Handbook, and for contemplating managed lanes as a subsystem in particular. While other chapters address specific applications for addressing recurring and non-recurring congestion, the policy framework supporting the consideration and implementation of managed lanes relies on a need to aggressively manage designated lanes to an operational threshold that guarantees a certain level of travel performance and reliability. The supporting context for this rationale usually includes one or more of the following:

- A mobility policy that encourages commute choices, either by changing modes to ridesharing or transit, or willingness to pay a toll or abide by an increasing level of automated traffic management.
- A need to allocate limited spatial resources to a higher and better level of performance, at least during hours of greatest demand when congestion is most prevalent.
- An inability to manage the lane(s) or roadway through more conventional strategies common to freeway operation and adopted traffic management principles.
- A willingness to segregate and prioritize some lanes to meet a variety of regional goals, including improvements in air quality, person and freight movement, and performance.
- A lack of other options for more conventionally expanding capacity among one or more transportation modes (i.e., managed lanes provide greater efficiency, and therefore usually are included when there is insufficient space to meet demand conventionally or their implementation postpones the need for adding capacity).
- A desire to flexibly address demand over time due to changing traffic and corridor conditions, often beyond the respective project design year.
- A need for the respective project to cover some of its operation and implementation cost due largely to limited funding.

Although managed lanes have traditionally been added as new capacity, the concept does not explicitly require capacity expansion. Instead, the focus of managed lanes is to preserve a reliable trip that is viewed as a preferable alternative over congestion that exists in the general purpose lanes. Therefore, the correct objective for managed lanes is not necessarily congestion relief, but rather, improved management of congestion that provides relief to users and non-users.

The rationale of implementation does not suggest that incorporation of managed lanes should be a stand-alone strategy. Indeed, the best applications are ones in which managed lanes are an integral component of a comprehensive congestion management program incorporating an array of other treatments and strategies. These treatments may include ramp metering, incident management, traffic demand management (TDM) such as rideshare promotion, and associated programs that are both complementary and synergistic to overall regional mobility goals. For example, restricted lanes for buses and carpools only make sense and draw sufficient patronage when parallel programs including transit services, park-and-ride lots and rideshare matching are implemented. Ramp and connector metering offers the opportunity to provide bypass lanes for transit and other rideshare modes to attract demand.

The rationale for application is predicated on an understanding of the specific operational problem evidenced and forecasted to exist. The design should not define the operational need, but rather respond to the intended operation and attempt to fit within the specific corridor constraints that are often present. For example, highly directional congestion (i.e., inbound in the morning and outbound in the evening) may be addressed by a variety of different treatments such as concurrent, reversible or contraflow operations, and each will require a different design that may or may not fit within the corridor. The presence of congestion in both directions during the same daily commute may suggest only a bi-directional, concurrent flow operation (e.g., one dedicated lane operating in each direction) is appropriate. Similarly, the specific operational attributes of how many hours the managed lane is active, where access is applied and who can use it are determined in successive levels of evaluating the observed and forecast operational problems.

In order to build a case for managed lanes, this approach suggests the following questions are answered in the order presented:

First: Are prerequisite operational needs for managed lanes evidenced?

- Is regular and recurring congestion present or forecast for which an alternative lane or roadway can provide a meaningful benefit if provided?
- Is there enough demand for any type of managed lane?
- Are there potential ways of implementing a managed lane without adversely affecting the design or operation of other freeway lanes?

Second: What types of managed lane operations and designs are most appropriate?

- When is demand evidenced and in what directions?
- What are unique user origin-destination needs both within the corridor and regionally, as reflected from other programs and policies related to transit, ridesharing and potentially mixed traffic or trucking interests?
- What are the operational and design attributes that need to be accounted for?
- What other freeway management strategies are in place or planned that managed lanes could benefit from or be complementary with?

Third: How will managed lanes be implemented and what will be the impacts, now and in the future?

- What is the specific design and its impact on the existing or planned roadway?
- What are the operational attributes (e.g., hours of operation, directionality, user requirements and business rules)?
- How will the lanes be enforced?
- What role should each of the management strategies (i.e., eligibility, access and pricing) play?
- What are costs and benefits associated with the specific operation strategy and design?
- What are environmental impacts and benefits?
- What partners should sponsor, fund, implement, operate, maintain and enforce?
- What consistency, connectivity and phasing issues arise at a corridor or system level?
- What are corridor and regional benefits and impacts on traffic, other modes, mobility, safety, etc.?
- What are the complementary components that comprise the managed lane and congestion management program?
- What locally-specific issues need to be accounted for?
- Does the identified concept have public and political support?

These questions typically are addressed in a study of conceptual feasibility, and refined in the course of the project development process if feasibility is found favorable. If the core principles supporting any type of managed lane are not in evidence, then the planning and development process may stop at each of the successive stages outlined. Various checklists have been developed based on HOV and HOT lane guidance documents that offer further clarity in the performance of managed lane feasibility, and these may be tailored to a specific geographic context (Nevada Department of Transportation, *HOV/Managed lanes and Ramp Metering Implementation Plan*, 2006 [Link no longer active]).

8.1.3 Anticipated Benefits

Managed lanes address problems similar to those specified for other freeway management subsystems. These include excessive peak period demand that results in congestion, lack of trip reliability associated with recurring congestion and crashes, and excessive vehicle emissions emanating from stopped traffic that degrade the air quality of a region. There are other specific benefits that managed lanes can provide including:

- Provide more mobility options: Implementing a lane or roadway and managing its use to maintain free-flow operation for some users.
- Promote and sustain transit service: Dedicating lanes to transit and supporting facilities along the corridor that give transit patrons a travel advantage over other modes.
- Reduce dependence on single occupant travel by promoting ridesharing: Allowing high-occupancy vehicles (HOVs) to be eligible users on the managed lane, and providing ridematching services and park-and-ride lots that encourage ridesharing.
- Enhanced travel reliability: Operating the managed lane to a higher level of service by greater investment in ITS, enforcement, maintenance, and incident management services.
- Address air quality: Giving preference to low emitting vehicles, rideshare and transit modes that encourage greater fuel efficiency and vehicle occupancies with commensurate reduction in single occupant vehicle travel.
- Improve safety: Separating the managed lane from adjacent traffic and providing separate dedicated access treatments.
- Enhance trucking and commerce: Dedicating lanes for trucking operations and offering a preferential level of service to these users.
- Augment transportation funding: Pricing managed lanes to both manage flow and generate revenue.
- Improve user information: Through dynamic signing and web-based information, allowing users to make informed choices about which alternate lane or roadway to take, and what benefits (i.e., travel times) are gained from those choices.

- Expand throughput: Maximizing vehicle and/or person throughput by establishing policies that effectively address corridor needs
- Reduce travel delay: Managed lanes have the ability to reduce delay without adding capacity.
- Generate revenue: to cover implementation and higher relative costs of operating, enforcing and maintaining managed lanes.

8.1.4 Local and Stakeholder Considerations

A key consideration in the initial examination of managed lane opportunities is the requisite understanding of the local institutional environment and the identification of key stakeholders.

The institutional environment includes acknowledgment of what can realistically be performed in the realm of managed lanes, the receptivity to innovation and new ways of doing business, the willingness to sponsor and invest in managed lane solutions, and how local laws and regulations may impact the way managed lanes can be operated and enforced. To properly perform a needs analysis and complete a concept of operations determination, the stakeholders or potential partners in implementing, operating, and maintaining the managed lanes must be identified. Ultimately, a consensus is reached as to what the project or system will address and how it should operate. Some lane management strategies require legislation and enforcement to implement.

Stakeholders involved in managed lanes will vary depending on the identified problems and treatments but will likely include:

- Federal, state, regional and local departments of transportation (DOTs).
- State and local law enforcement agencies with current roles on the affected roadways.
- Metropolitan Planning Organizations (MPOs).
- Police agencies.
- Transit and rideshare agencies.
- Public: elected officials, advocacies, affected communities and neighborhoods.
- Private partners as part of Public Private Partnerships (PPP).

After identifying the affected stakeholders, a consensus about the problems and need for solutions is developed. Early on, it is equally critical to establish support from elected officials and the general public for managed lane concepts. This is particularly important for managed lane concepts that may not affect all motorists equally by the actions that may be implemented, such as eligibility restrictions, tolls and changes in access. Alternatives that adversely impact some motorists to the advantage of other motorists have typically needed a greater level of specificity and investigation of how impacts are mitigated and otherwise addressed. Alternatives that involve tolling have commonly met resistance and need to be fully and transparently vetted with affected agencies and stakeholders. These alternatives typically require more public outreach and political interaction among the stakeholders to ensure that they will be accepted and prove successful if implemented.

8.2 Determining Operational Needs

8.2.1 Demand

The most important prerequisite condition necessary for managed lane demand to materialize is the presence of recurring traffic congestion. Managed lanes are by definition a congestion management strategy and have benefits that are only fully realized in the context of frequent traffic congestion that causes significant travel time delays and uncertainty over trip time reliability. Although there is no broadly accepted definition of what constitutes traffic congestion, congestion is generally identified as a breakdown in the flow of traffic and a reduction in vehicle speeds caused by traffic demand approaching or exceeding available roadway capacity. These situations generally correspond to a level of service (LOS) of D or worse and average travel speeds of 30 mph or less, although this does not mean that other scenarios are not suitable for managed lane strategies. A common expectation for managed lanes applied along a corridor is that they will generate about a half minute of travel time savings per mile (i.e., they can be managed to operate at about 60 mph if adjacent lanes are operating at 30 mph or less).

Demand for a single dedicated lane needs to meet two thresholds:

1. Enough near-term "opening year" minimum demand needs to exist to support public acceptance, and
2. Demand for the longer-term should be present to justify implementation.

The thresholds for demand can vary by concept and by the two timelines indicated. Initial demand needs to be sufficient to make the lane adequately utilized, or general traffic will attempt to enter and violate lane restrictions. Public

support from the appearance of a near-empty lane can adversely affect support. Longer term, demand needs to be present at a rate that meets project goals. For example, if a goal is moving more people in the lane than a general purpose lane at capacity, then the longer term demand threshold would be enough forecast HOVs to accomplish this. A revenue goal for pricing might be meeting a demand threshold that more than breaks even by a given year (i.e., the cost to operate and maintain pricing infrastructure is equal to or less than the revenue generated) if the project's goal is to improve mobility and lane efficiency.

The specific characteristics of the traffic demand that exists in a corridor are particularly important when considering managed lane strategies. Traffic demand on urban roadways is typically variable and changes depending on the time of day, day of the week, and by season. It is common for demand in some radial corridors to be highly directional, with demand for facilities leading into a central business district often being highest in the morning peak periods and demand for outbound directions being highest in the afternoon periods. These patterns cause an imbalance of demand that require solutions that are flexible in their ability to accommodate variable and directional traffic volumes. Routes that connect suburban trips may exhibit bi-directional demand and be congested for more prolonged periods, so the selected concept needs to recognize this. Demand may exist for one particular mode, say transit for a radial corridor, and not for another. Each type of demand should be separately analyzed, even if they will share the managed lane facility.

Other travel demand attributes also serve as criteria for determining which managed lane strategies may be appropriate for a given corridor. The origin and destination patterns of vehicles will inform the appropriate design and operational components for a managed lane and determine whether enough of the demand has common trip characteristics. This attribute is particularly critical for managed lanes since this concept does not work well for frequent entering and exiting movements unless the treatment can be safely applied to right side shoulders. A vast majority of concepts are located on the left side of the roadway next to the median and typically serve longer distance trip patterns, as most managed lane strategies involving dedicated lanes require that trip lengths be long enough to guarantee sufficient and reliable travel time savings to encourage spatial change, modal shifts or toll paying customers. Also, the ability to efficiently handle weaving in and out of a managed lane with minimal disruption can be compromised by the need to provide frequent access points to serve short distance trips. The level of transit and HOV demand must also be taken into consideration, particularly if a goal is to provide benefits for these modes

8.2.2 Capacity

The primary impetus causing metropolitan areas to consider managed lanes is the inability to alleviate current or projected congestion through traditional capacity improvements, whether due to insufficient funding sources, lack of available right-of-way, environmental concerns, limitations on the ability to employ more aggressive traffic control strategies, or other reasons. When these constraints exist, the need to manage demand to ensure maximum utilization of limited capacity becomes important.

Managing demand *does not* mean allowing the lane to reach its vehicle carrying capacity. The capacity a single directional lane can carry does not assure travel reliability as the flow rates become unstable at this point, and speeds and throughput can suddenly deteriorate. This value varies and is affected by the vehicle mix, road geometry, prevailing conditions and a variety of other factors, as defined in the Highway Capacity Manual (HCM). This value is the observed maximum vehicle carrying capacity and cannot be sustained to preserve speed and operational reliability. Managing flow below capacity can better assure travel benefits. Ongoing research sponsored by NCHRP is defining the appropriate values associated with different managed flow rates. In the meantime, the "rule of thumb" various states have adopted is a maximum managed flow threshold of approximately 1600 to 1650 vehicles/hour/lane (vphpl) for a single managed lane, assuming a vehicle mix composed largely of passenger cars, some buses and no heavy trucks. This value generally supports conditions corresponding to LOS C or better for most conditions. Observed maximum flow rates on geometrically restricted HOV lanes typically range from 1500 vphpl to 1750 vphpl. Multi-lane treatments may obtain somewhat higher values approaching 1700 to 1900 vphpl since there is less friction in flow and no constraints caused by the slowest moving vehicle. A single managed lane that is access restricted from other lanes is subject to flow rates governed by the slowest moving vehicle, so the observed capacity in this lane is always lower than would be associated with the adjacent freeway lanes. Finally, the application of certain management strategies across all lanes of traffic, including active traffic management, volume metering, and access controls, may affect the managed flow rates of not only the managed lanes but also general purpose lanes.

Managing vehicle demand below what the public sees as "less than a full lane" is problematic, and deserves special consideration. Certainly HOV goals of moving more people than vehicles (resulting in lanes that look empty but still carry more people than if they were opened to all) and preserving future vehicle carrying capacity on a lane by not trying to fill it up has presented difficulty in sustaining public and political support. Allowing other traffic to access such facilities by adding congestion pricing has been a common response. More fundamentally, the illusion presented to motorists that a managed lane is not being fully utilized if not full represents an ongoing education and outreach need, in which the value of performance monitoring becomes key. Figure 3 below provides a good example. The dual managed lanes on the left are moving more vehicles than the general purpose lanes caught in "gridlock" conditions on the right, and they are moving this flow at a much higher average speed. However, the public may see the left roadway

as being able to move more vehicles than it currently is. Allowing more vehicles onto the managed lanes risks a substantial degradation in LOS, so the operators manage and price the lanes to achieve the highest flow rate without allowing it to degrade. The public perception component associated with managed lanes also needs to be managed with proper awareness and transparency of available data.

8.2.3 Corridor and System Context

Congestion management strategies in general, and managed lanes in particular, are strategies that may be only appropriate at a corridor level in a region where congestion is limited in duration and extent on the region's freeway system. In larger areas where traffic congestion is systemic to the freeway network and may regularly recur for many hours, a regional context to determining operational needs may be appropriate. Regional considerations for managed lanes may be associated with managed lane systems, whereby a network of managed lanes attempt to serve markets that may utilize multiple corridors.

Figure 3: Comparison of Flow Rates on SR 91, Orange County, California (courtesy of Orange County Transportation Authority)



Whether at the corridor or system level, managed lanes need to address specific travel patterns and user groups. The specific operation and design should provide opportunities to create new capacity to manage without significant adversities to existing traffic operations. Regardless of the corridor or system focus, the policy context in which congestion management strategies are being considered and implemented needs to be examined holistically, so that they can complement one another. For example, local ramp metering, incident management and a variety of other strategies for general purpose lanes can work harmoniously with managed lanes, but each strategy serves a different set of needs. Typically, strategies to improve overall traffic flow have been implemented before managed lanes are considered, and often managed lanes are the strategy of "last resort" when it is not possible to provide an acceptable level of travel for all freeway users. Aggressively managing lanes through control of who uses them, how access is afforded to them, and employing tolls to help regulate demand represents a quantum jump in methods to regulate flow so as to maintain a reliable level of service. The system context must take into account support for these steps in locally accepted policies, concurrently address demand management strategies to get more effective use out of a managed lane, and assure that the rules and regulations can be safely and effectively enforced. The flexibility of using all appropriate management tools and understanding the market needs and corridor opportunities and challenges helps frame the appropriate managed lane strategy.

Another common objective often stated at a corridor, system or regional level is *consistency*. The application of consistency has potentially different interpretations including design, operation, regulations and business rules, etc. Historically, HOV lane design standards have generally been consistent in some regions like Los Angeles, Phoenix, Houston and the Bay Area, but not in others as different projects have been implemented. Since the vast majority of HOV lane users are repeat commuters, few elements of consistency have posed safety or operational challenges to any of the affected regions, but as more projects emerge that address a wider range of potential users, consistency for such topics as selection of toll transponders and signing becomes increasingly important. Consistency should be attempted where possible so that new customers can become familiar with managed lanes. This means that different jurisdictions sponsoring projects in the same region that may prefer variances in the design, operation and identifying elements of their projects should partner and strive to meet a common approach. Conversely, unique corridor design constraints and operating needs may justify different types of managed lane treatments for the same region, and perhaps even within the same corridor. Experience has shown that operational safety is not compromised in making these prudent trade-offs.

Parameters typically influencing the specific choice of operation and design include:

1. The regional policy context: Is this the only managed lane project or are others needed or operating in a region? How do market requirements vary from one corridor to another?
2. System connections: Will managed lane projects be enhanced by connections to one another? Will the extra cost of providing direct connections be supported by significant demand?
3. Freeway management versus individual dedicated lane management: Have strategies to improve mobility to all commuters or freeway users been exhausted with mobility still lacking? Are trip patterns supportive of multi-modal demand management strategies?
4. Directionality: Is the observed congestion problems only prevalent in the peak direction, or in both directions?
5. Duration: Is the observed congestion problem only limited to a finite number of hours in the typical peak commute periods, or does congestion (recurrent and non-recurrent) exist or be forecast to exist for longer durations throughout many of the daylight hours along a given corridor, and is congestion isolated to bottlenecks or systemic along the corridor?
6. Market: What markets need mobility relief? What are the most important transportation markets for the corridor and region?
7. ITS roles: Have various ITS strategies been demonstrated to improve traffic before moving forward with managed lanes? An expanded companion investment in ITS is likely to be needed with most managed lanes.

8.3 Managed Lane Strategies - An Expanding Universe of Options

Historically, managed lane implementation in the US and Canada has involved setting aside a dedicated lane or lanes, at least during the respective peak commute period, and restricting use to accomplish desired mobility goals. In Europe, more aggressive lane management is practiced on the entire freeway to achieve these same goals for an expanded number of users. Both approaches have distinct advantages and drawbacks from a safety, performance and implementation perspective (see Table 1).

Table 1: Advantages and Disadvantages of Dedicated Lane and Corridor Management

Approach	Advantages	Disadvantages
Dedicated Lanes	<ul style="list-style-type: none"> • Limited impact to traffic--reserves only a small portion of the roadway to aggressively manage use, and assumes all other lanes may experience congestion regardless of other strategies applied • Keeps at least one lane operating at "free-flow" during congested periods 	<ul style="list-style-type: none"> • Speed differential between segregated traffic streams which often requires physical separation • Not all users can benefit given the limited capacity provided
Managing All Lanes	<ul style="list-style-type: none"> • Achieves improved mobility benefits for all users • Lower cost than adding new lane capacity 	<ul style="list-style-type: none"> • Requires greater management restrictions (such as more restrictive metering and speed management) and still does not assure a breakdown in LOS during peak demand periods • Can be costly and requires a dedicated and ongoing operation, maintenance and enforcement program

Dedicated lane and corridor management strategies can be complementary on a given freeway or region, as exhibited most recently in Minneapolis on I-35W. Specific applications can address mobility from a number of perspectives. Discussions and examples of each of these approaches are provided in the following subsections.

8.3.1 Dedicated Lanes

As presented earlier, the primary strategies used to manage demand on dedicated lane facilities generally fall into one of three categories: eligibility, access, and pricing. Each of these strategies and example lane treatments is described below. Definitions are highlighted in Section 8.3.2.1.

8.3.1.1 Eligibility

One of the most commonly used lane management tools for the past 40 years is restricting use based on vehicle eligibility. Eligibility can be defined in terms of vehicle type (i.e. buses, trucks, motorcycles, or hybrids) or by the number of occupants in a passenger vehicle, such as two or more (HOV 2+) or three or more (HOV 3+) in a vehicle. The latter

definition represents the vast majority of managed lanes found in the US and Canada – high-occupancy vehicle (HOV) lanes. The selection of a lane eligibility policy requires careful analysis to ensure that restricted use will result in sufficient utilization of the managed lane or a benefit for users that justifies the restrictions. One of the goals of vehicle eligibility restrictions is to encourage the use of transit or other high-occupancy modes, or modes that place less of a burden on the transportation system or the environment, such as motorcycles and hybrids. This is accomplished by providing priority treatment for eligible vehicles, particularly during congested peak periods, allowing these vehicles to enjoy travel time savings and more predictable travel times. As such, measures of utilization and of the benefits realized from eligibility restrictions should be expressed in a way to determine whether specific goals of the lane management strategy are being achieved. These measures typically include, but are not limited to:

- person throughput;
- average number of persons per vehicle;
- travel time savings;
- average speeds;
- level of service for transit operations; and
- air quality impacts.

A further component of eligibility restrictions is whether they are put into effect part-time or full-time. The ability to control restrictions by time-of-day preserves managed lane capacity during peak periods and makes it available to all users during other periods. This added flexibility can help ensure that conditions on the managed lane are maintained according to a specified set of standards when demand is at its highest by allowing eligibility restrictions to go into effect during such periods. Perhaps just as importantly, lifting eligibility restrictions during non-peak periods opens up otherwise unutilized capacity to all traffic and potentially avoids situations where criticism is levied towards a policy that does not make sense in non-congested periods.

The following are examples of managed lane strategies involving eligibility restrictions.

HOV Lanes

High-occupancy vehicle (HOV) lanes provide preferential treatment for transit, vanpools, carpools, and other designated vehicles by typically dedicating a lane or portion of the roadway for their exclusive use (see Figure 4). The primary goal of HOV lanes is to increase the people moving capacity of a corridor and allow for more efficient use of freeways by increasing the number of occupants per vehicle. This is accomplished by providing travel time savings and reliability for high occupancy modes to incentivize carpooling and the use of transit.

Figure 4: Example of HOV Lanes in Virginia
(courtesy Virginia DOT)



HOV lanes are present on more than 1200 North American freeway route-miles (Figure 5), and are by far the most common form of managed lane. The dedication of lanes for exclusive use by buses, trucks, or other specific vehicle types is less common as these vehicles typically do not constitute a large enough demand or percentage of the traffic stream during significant portions of the day to warrant a dedicated lane. All HOV lanes accommodate buses, and sometimes other vehicles such as motorcycles and hybrids since the combined demand of each of these modes can usually be accommodated by a single lane. The vast majority of HOV lanes are restricted to two or more occupants per vehicle, and this practice has been prevalent for many years (Figure 6).

The majority of HOV facilities exist as single lanes that are concurrent with adjacent general purpose freeway lanes (Figure 4 above). Most commonly, HOV lanes are separated from mixed use lanes by a painted stripe or buffer, although some are separated by a physical barrier, either fixed or moveable. Depending on the design, HOV lanes may have continuous access to concurrent flow lanes (previous Figure 4) or traffic may only be able to enter and exit at designated access locations (Figure 7). Some HOV lanes are reversible to serve directional demands at different times of the day; these facilities are separated by a permanent barrier and are accessed via exclusive ramps (Figure 8). Contraflow HOV lanes borrow an off-peak direction lane for peak commute purposes, and they use placement of pylons or moveable barriers to safely segregate oncoming traffic flow (Figure 8). (Design treatments used for HOV and other managed lanes are covered later in Section 8.5)

Figure 5: Growth in HOV Lanes, 1969-2000 (Fuhs, Charles and Jon Obenberger, "HOV Facility Development: A Review of National Trends," published in "HOV and Demand Management 2002," Transportation Research Record No. 1781, Transportation Research Board, Washington, DC, 2002.)

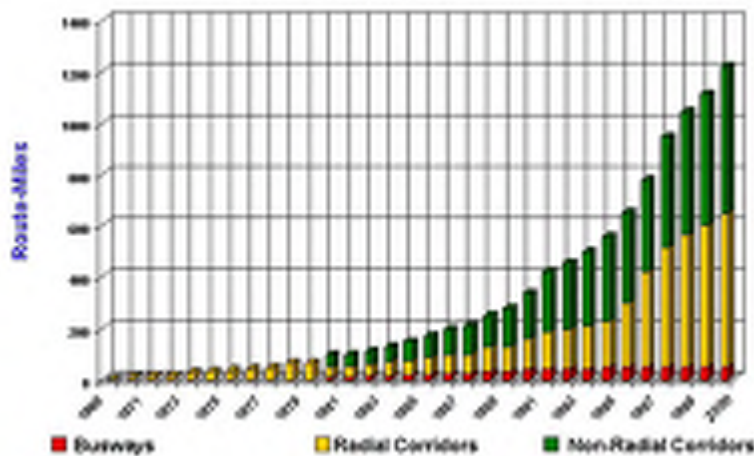


Figure 6: Occupancy Restrictions Common on HOV Lanes (Fuhs, Charles and Jon Obenberger, "HOV Facility Development: A Review of National Trends," published in "HOV and Demand Management 2002," Transportation Research Record No. 1781, Transportation Research Board, Washington, DC, 2002.)

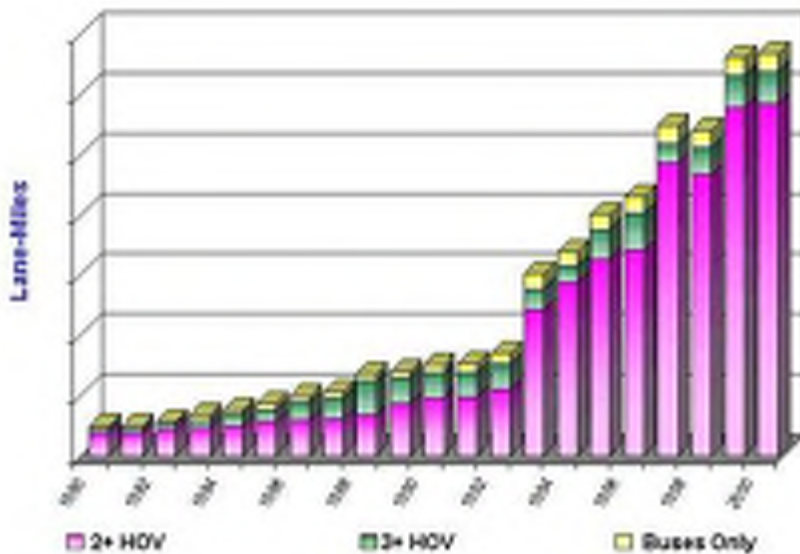


Figure 7: Access Restricted HOV Lanes



Figure 8: Examples of Reversible (left) and Contraflow HOV Lanes (right)



Eligibility restrictions serve as the primary means to manage lane HOV lane performance. The policies that guide these restrictions can be modified in several ways to make the HOV lane operate more efficiently. Eligibility can be varied by time of day and within the peak period. For example, I-10 in Los Angeles, once operational, will restrict use to HOV 3+ and priced vehicles in the peak hours and HOV 2+ and priced users in the off-peak periods. Some lanes are restricted to exclusive use by buses (see next section on busways). However, many HOV lanes allow other eligible vehicles including motorcycles, certified hybrid or alternative fuel vehicles.

The performance of an HOV lane is governed by many factors. These include:

- length of facility;
- design;
- access and other design treatments;
- rates of HOV violations;
- presence of and coordination with transit services;
- availability of support facilities such as park-and-ride lots supporting the different modes; and
- supporting programs and services including rideshare matching, preferential parking and related services.

Experience with HOV lanes around the country has generally shown them to be an effective strategy to provide traffic congestion relief when other options are not feasible or have already been implemented. Effective HOV lane operations provide greater person throughput volumes than adjacent general purpose lanes. However, since these lanes are managed to have less actual vehicle volume than other lanes at capacity, they are often perceived as being underutilized by the public. The term "empty lane syndrome" refers to situations where underutilization of HOV lanes on heavily congested corridors leads to public criticism. In 1998 a 20-mile segment of HOV lanes opened on I-287 in New Jersey. Underutilization of the lanes during peak periods caused such a negative drop in public opinion that the governor announced the elimination of the HOV lanes on this and a nearby successful corridor. A survey of HOV operators revealed that underutilization is a common issue that has resulted in policy changes across the country (Chang, M., J. Wiegmann, A. Smith, and C. Bilotto. *A Review of HOV Lane Performance and Policy Options in the United States*. Publication FHWA-HOP-09-029. FHWA, U.S. Department of Transportation, 2008).

Fixed eligibility restrictions do not always work well in dynamic settings where lane utilization cannot be fully managed in real time. For this reason other tools are increasingly being applied in conjunction with eligibility to gain improved effectiveness in lane performance. HOV performance issues such as underutilization have traditionally been addressed by changes in occupancy requirements and hours of operation. However, changes in occupancy requirements can result in dramatic outcomes for performance. These changes often do not allow for the optimal redistribution of road capacity and can cause HOV facilities to operate at conditions that are less than ideal, even if they are meeting or exceeding person movement goals. As an example, the reversible HOV lane on the I-10 (Katy Freeway) in Houston was originally restricted to buses and vanpools when it opened in 1984. In response to the appearance of underutilization, registered carpools carrying a decal were also permitted to use the facility. The occupancy

requirements for carpools started at HOV 4+ in 1985, but were soon dropped to HOV 2+ in 1986 without the registration process. By 1998 high traffic volumes during the morning peak periods were causing conditions on the HOV lane to deteriorate, so minimum occupancy requirements were raised to HOV 3+ during the peak hours. Immediately after the conversion to HOV 3+, the total morning peak volumes on the lane dropped 62 percent, leaving the lanes once again underutilized (Turnbull, K.F. *Houston Managed Lanes Case Study: The Evolution of the Houston HOV System*. Publication FHWA-OP-04-002. FHWA, U.S. Department of Transportation, 2003).

The breadth of the HOV topic is far too great to be covered in detail in this Handbook, so the following guidance references are provided for additional information:

- [FHWA](#)
- NCHRP Report 414 (published 1998)
- [HOV Pooled Fund Study](#)
- Transportation Research Board's Committee on HOV, HOT, and Managed Lanes [Link is no longer active]
- Transit Cooperative Research Program Report 95: Chapter 2
- AASHTO's Guide for High-Occupancy Vehicle Facilities (published 2003)

Bus Lanes

The HOV concept first manifested itself in the form of a bus-only freeway lane. The first HOV lane implemented in the United States was the I-495 Express Bus Lane (XBL) approaching the Lincoln Tunnel in northern New Jersey in 1969 (Figure 9). This lane borrowed an off-peak direction lane for bus-only use, and today still moves more passengers per hour than any other bus corridor in the nation. (See case study at the end of this chapter for more information). Also in 1969 an interim bus-only lane was opened through a construction work zone on the Shirley Highway (I-395) in northern Virginia near Washington D.C. (Figure 9). This project served such a high volume of buses that, when the corridor reconstruction was completed, dual express lanes were opened and restricted to buses. The term busway is commonly used to refer to facilities that are reserved for exclusive use by buses. A bus-lane, more commonly located on a major arterial or roadway on separate right-of-way, is usually a component of a Bus Rapid Transit (BRT) system and as a result the terms bus-lane, busway, and BRT are sometimes used synonymously. However, there is a distinction between a lane dedicated to exclusive use by buses and BRT, which may include various operational improvements and station design features to provide high quality service for express bus trips. The type of service may also be substantially different, focused on limited express stops enroute or point-to-point nonstop service.

Figure 9: Early Bus-Only Lanes on Freeways in the US
Route 495 XBL (left) and I-395 Shirley Highway Interim Bus Lane During Construction (right)
(right photo courtesy of Northern Virginia Transportation Commission)



Bus operation needs today are normally addressed and integrated into HOV lanes on freeway corridors that experience high levels of congestion and have high use or potential for bus transit services. The purpose of bus lanes and supporting facilities (e.g., transit stations, park-and-ride lots and direct access treatments) is to provide more reliable bus service by cutting down the delay that buses would have to otherwise incur in congested traffic, thereby increasing service efficiency by allowing more peak trips by the same bus and providing patrons a faster trip. Bus-lanes on freeway corridors are usually shared with HOVs and other designated vehicles since buses generally use little capacity. An example is the I-110 Harbor Transitway that carries buses and HOV-2+ vehicles in the median of the freeway. There are six bus stations along the Transitway that serve many bus routes including a BRT route. Although the Transitway serves all types of HOVs and will soon incorporate solo vehicle pricing, it includes several sections where bus-only lanes and separate roadways into stations for buses exist. Houston has a similar approach to serving express bus transit on reversible HOV lanes and express toll lanes with direct access ramps connecting stations and park-and-ride lots.

The use of freeway right side breakdown shoulders by buses is permitted in several states. The Minneapolis/St. Paul metropolitan area has the most bus-only shoulders in the country (Figure 10). Early implementations of bus-only use of shoulders in the region were limited to arterial roads, but the concept was soon expanded to freeways after they were shown to be safe and hugely successful. As of 2006, there were 271 bus-only shoulder miles on freeways in the

Minneapolis/St. Paul metropolitan area (Federal Transit Administration, *Bus-Only Shoulders in the Twin Cities*. FTA-MN-26-7004, June 2007). The Minnesota DOT has instituted a series of guidelines that govern the use of freeway shoulders by buses. These guidelines allow buses to use the shoulder only when mainline speeds are less than 35 mph and prohibit buses from exceeding the speed of adjacent traffic by more than 15 mph, up to a maximum speed of 35 mph.

Figure 10: Bus on Shoulder Lane, Minneapolis, Minnesota (courtesy Minnesota DOT)



Truck Lanes

The goals of various forms of truck lanes are to improve traffic operations and safety, and facilitate the flow of goods (7). Truck lanes fall into the following categories:

- Lane restrictions on existing mixed use lanes
- Separated and dedicated roadways
- Interchange bypass lanes
- Climbing lanes

Lane restrictions typically prohibit trucks from using the far left lane of a freeway. At least three travel lanes are normally needed to implement lane restrictions. Many states have adopted this type of lane restriction because it promotes a more orderly mix of traffic and thereby improves throughput, increases sight distance in leftmost lanes, generally improves safety, and still permits the orderly movement of trucks. Lane restrictions through construction zones are used to move the trucks away from workers and from leftmost lanes that may be narrower than outside lanes. Sometimes truck restrictions are implemented on entire corridors to limit trucks by weight, number of axles, or to completely prohibit them from using a corridor. Example signing is shown in Figure 11.

Figure 11: Example Signing for Truck Restrictions



Separated roadways for trucks are less common. One example is the New Jersey Turnpike, the northern portion of which features completely separated dual roadways, one reserved for passenger cars only, and the other open to both commercial and non-commercial traffic. Access ramps are provided to both roadways at major interchanges (Figure 12). Light trucks are considered as eligible vehicles on some HOV lanes if they carry the requisite persons. Restricted geometrics on many existing concurrent leftmost median lanes limit opportunities to serve large commercial trucks, and sight distance and other freeway lane prohibitions typically mean these vehicles cannot use leftmost lane treatments unless a separate roadway is provided with a minimum of two travel lanes.

Dedicated roadways for trucks are being studied and in at least several cases proposed, but no freeway examples currently exist in the US. There are truck lanes on European motorways leading in and out of the ports in Rotterdam in the Netherlands. Missouri is currently considering using dedicated roadways for trucks on I-70 across the state, and several U.S. port cities are examining truck lanes and roadways.

Figure 12: New Jersey Turnpike Dual Roadways Segregating Truck Movements (courtesy New Jersey Turnpike Authority)



Climbing lanes for trucks typically are built to improve safe operations on grades by separating slow moving heavy vehicles from the rest of traffic. These lanes have become a common practice and AASHTO (8) provides established criteria.

Interchange bypass lanes for trucks have been implemented in Southern California and Portland, Oregon, to improve safety by routing trucks around a major interchange typically containing left hand ramps. This design approach improves the merge condition affecting traffic operations at the interchange. Similar ramp options are provided for trucks on this separate roadway system as are provided for the mainlanes.

8.3.1.2 Access

Regulating access is another tool to manage the flow of traffic on a managed lane facility. Limiting access allows traffic to move with minimal disruptive impacts caused by vehicles frequently entering and exiting. Access to a facility can be limited using direct access ramps, physical separation or lane markings with appropriate signage. Limiting access is often one component of a broader set of lane management strategies. For example, HOV lanes may limit ingress and egress to restrict side friction with adjacent lanes. Barrier separated HOV lanes (concurrent or reversible) are typically accessed using grade-separated ramps which can provide controlled access for vehicles connecting with park-and-ride lots and transit centers. In this way, access treatments can have the time savings benefit of avoiding freeway interchanges burdened by other traffic. Typical examples are shown in Figure 13 and Figure 14. Another important application of direct access ramps is connecting one managed lane to another in a regional system.

Figure 13: Direct Access Ramp to Concurrent HOV Lanes, Seattle, Washington (courtesy Sound Transit)



Figure 14: Direct Access Ramps to a Reversible Lane, Houston, Texas (courtesy of Texas Transportation Institute)



Express Lanes

There are a variety of terms applied to managed lanes employing pricing which are highlighted on the next page. The term "express lanes" has commonly been used for decades to refer to freeway lanes that are segregated from general purpose traffic and are set apart by limiting access to them (Figure 15). Express lanes may operate bi-directionally as a dual-dual roadway like the Dan Ryan Expressway in Chicago, or they may be reversible (also known in Europe as *tidal* flow lanes). The reversible lanes on I-5 in Seattle and I-94 (Kennedy Expressway) in Chicago employ gated access ramping as the sole tool to manage flow into and out of the lanes. Express lanes have a reduced number of entry and exit locations as compared to the general purpose lanes. Most of the express lanes or roadways designed into freeways are not actively managed; they rely on the access design to ensure better flow. By limiting the number of access points, demand is metered into the lanes. Some access ramps, like those on I-5 in Seattle, are restricted to HOVs- to give preference onto the express lanes (Figure 16).

Figure 15: Reversible Express Lanes on I-5 North, Seattle, Washington



Figure 16: HOV Direct Access Ramp, Seattle, Washington



The term "express lanes" is increasingly being used to refer to all limited access managed lane facilities that provide an enhanced level of service through pricing (see subsequent section on HOT lanes), and the new 2009 *Manual on Uniform Traffic Control Devices* (MUTCD) recognizes this identifier for all such facilities on signing.

Definitions

Managed Lanes: A limited number of lanes within an expressway cross section where multiple operating strategies are utilized, and actively adjusted as needed, for the purpose of achieving pre-defined performance objectives ([Managed Lanes, Federal Highway Administration](#), FHWA, *Managed Lanes: A Primer*. FHWA-HOP-05-031, 2008).

Express Lanes: All types of limited access expressway lanes or roadways which are often separated from adjacent general purpose lanes. HOV lanes with limited access employing tolling are also called "express lanes" on signing (Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration, Washington, D.C., 2009)

Express/Toll Lanes: Limited access expressway lanes or roadways separated from adjacent general purpose lanes and employing payment of tolls to manage demand.

High-occupancy/Toll (HOT) Lanes: HOV lanes that allow lower occupant vehicles that do not meet occupancy restrictions established for a HOV lane to use it through payment of a toll ([FHWA, A Guide for HOT Lane Development, 2003](#). Accessed June 26, 2010).

High-occupancy Vehicle (HOV) Lanes: HOV lanes are intended to maximize the person-carrying capacity of the roadway by altering the design or operation to give preference to carpools, vanpools and buses (NCHRP Report 414: *HOV Systems Manual*. TRB, National Research Council, Washington, D.C., 1998).

Truck lanes: Lanes or roadways which primarily serve trucking needs, although general purpose traffic may be permitted to use these lanes. These facilities may employ tolling.

Bypass Ramps

HOV and bus-only ramp meter bypasses represent the most widely applied form of HOV lane treatment, found on a majority of freeway ramps in metropolitan areas like southern California. This operational strategy is used to provide priority treatment for HOVs at metered freeway ramps and in some cases, metered freeway connectors (Figure 17). Typically, this is accomplished by providing a separate lane on the ramp which allows HOVs to bypass the queue that forms as a result of metering. HOV ramp lanes can also be metered, but at a more relaxed rate so HOVs are still offered a time savings. HOV bypass ramps can also be successful at mitigating queue spillbacks at ramps by increasing the capacity and discharging vehicles at a faster rate.

Figure 17: Examples of HOV Ramp Meter Bypasses on Freeways



8.3.1.3 Pricing

Electronic pricing is an appealing component of a managed lane strategy for several reasons. First, pricing serves as a tool to fine-tune managed lane strategies that rely on eligibility and access restrictions. These restrictions alone do not always ensure the most efficient allocation of managed lane capacity as demand changes over time. Furthermore, electronic toll collection technology allows for collection without the delays, costs and space requirements associated with manual toll collection. Another reason for interest in pricing is the potential to generate revenue that can be used to augment costs of operations and possible capital recovery that would otherwise be afforded using existing revenue sources.

Pricing strategies on managed lanes can take on several forms listed below:

- Dynamic tolls – The toll charged to users varies based on real-time traffic conditions on the facility.
- Time-of-day tolls – The toll level changes according to a fixed schedule that often reflects demand by time of day and perhaps, day of week.
- Flat toll – The toll charged to users is constant on a per-trip or per-mile basis.
- Flat rate – Users pay a flat monthly fee for unlimited use of the facility (This approach can be implemented by a vehicle sticker or decal in lieu of electronic toll tag).

The first two pricing strategies listed above are often referred to as congestion pricing, but the terms value pricing and variable pricing have also commonly been used. Congestion pricing charges users more during congested peak

periods and uses the power of the market for shifting demand from rush hour trips to other modes or to other less congested times of the day (FHWA, *Congestion Pricing Primer*. FHWA-HOP-08-039, 2008). Congestion pricing can also help ensure a high level of service on a managed lane facility by allowing the toll to vary based on typical or real-time traffic conditions. The flat toll and flat rate pricing options do not provide the same level of management flexibility, but are easier to implement, may address other needs, and have served as a preliminary step toward the adoption of congestion pricing on facilities in San Diego and Salt Lake City.

Pricing as a managed lane strategy has other benefits. In addition to incentivizing travel during off-peak periods, toll policies on managed lane facilities can also encourage transit and carpool use by providing free or discounted travel for these modes. Also, charging users a toll has the potential to generate a revenue source that can be used locally to finance operations costs and fund future improvements. It should be emphasized, however, that the primary goal of pricing on managed lanes is to ensure efficient operations. The potential for and magnitude of revenue generated by a project is dependent upon a multitude of factors which should be analyzed carefully to ensure any financial goals of a project are feasible.

High-Occupancy/Toll Lanes

In a historic context, pricing has typically been applied as a tool on HOV lanes to utilize existing capacity that is available either as a result of underuse or changes made in creating capacity, such as widening the existing HOV facility or raising occupancy rules. This strategy, referred to as High-Occupancy/Toll (HOT) lanes, allows lower occupant vehicles that do not meet occupancy restrictions established for a HOV lane to use it through payment of a toll. The toll is set to ensure that the lane remains free flowing. In this way, HOT lanes give drivers the option to pay for reliable and time-saving travel or to continue to travel on the general purpose freeway lanes. The term Express Lane is applied to address all projects that incorporate lane pricing including HOT lanes, at least on signing to help address consistency in how motorists see and use these lanes, since all projects of this type restrict access in order to toll users at specific locations. Although HOT lanes have traditionally permitted all designated HOVs to go free, some recent applications have investigated charging lower two-occupant carpools, or potentially charge all HOVs a reduced toll as is now applied on Bay Bridge HOV bypass lanes. All HOT lane projects currently in operation allow either 2+ or 3+ HOVs free use with some conditions such as a requirement to carry a transponder. Links to project websites are provided on the next page.

Example websites where HOT lane projects provide information include the following (accessed December 2010):

- [I-25 HOV/Tolled Express Lanes](#)
- [I-394 MnPass Express Lanes](#)
- [Utah's Express Lanes](#)
- QuickRide [Link no longer active]
- [SR 167 HOT Lanes](#)

Table 2: Carpool Pricing Application on Operational and Pending Managed Lanes

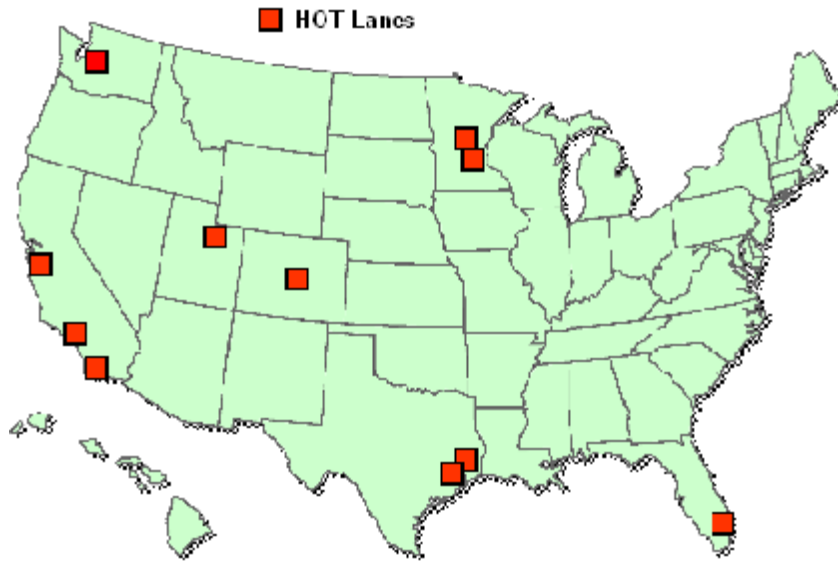
HOV 3+

Carpool Preference Combinations	Free 24/7	Free Peak Periods Only	Free Off- Peak Periods Only	Discount Peak Only, Pay All Other Times	Pay 24/7
<u>HOV</u> 2	Free 24/7				
	I-15 (CA)				
	I-110 (CA) (Pending managed lane facility as of September 2010)				
	I-680 (CA)				
	I-25 (CO)				
	I-394 (MN)				

	I-35W (MN)	
	I-15 (UT)	
	SR 167 (WA)	
Free Peak Periods Only		I-10 (TX)
Free Off- Peak Periods Only	I-10 (CA) (Pending managed lane facility as of September 2010)	
	US 290 (TX)	
Discount Peak Only, Pay All Other Times		I-30 (TX) (Pending managed lane facility as of September 2010)
		I-635 (TX) (Pending managed lane facility as of September 2010)
	SR-91 (CA)	TBX (FL)
	I-95 (FL)	Lp 1 (TX) (Pending managed lane facility as of September 2010)
	I-595 (FL) (Pending managed lane facility as of September 2010)	
Pay 24/7	I-495 (VA) (Pending managed lane facility as of September 2010)	
	I-95 (VA) (Pending managed lane facility as of September 2010)	
	I-395 (VA) (Pending managed lane facility as of September 2010)	

Interest in HOT lanes has been growing in recent years for a variety of reasons. HOT lanes have been implemented in seven states and are being considered by metropolitan transportation agencies and state departments of transportation around the country (Figure 18).

Figure 18: Locations of HOT Lane Operations in the US as of December 2010



The use of electronic collection permits tolls to be collected from users with minimal disruption to travelers. Some of the benefits associated with HOT lanes include (Goodin, G., and L. Gray. *Getting Started with High-Occupancy Toll Lanes: Lessons Learned from the Industry Leaders*. Publication FHWA-HOP-09-052. FHWA, U.S. Department of Transportation, 2009):

- Offering alternatives to congested travel
- Improving freeway efficiency
- Providing incentives for alternative modes of travel
- Sustaining reduced travel times and improved trip reliability
- Reducing emissions
- Generating revenue

The first HOT lane project involving adapting an existing HOV lane was I-15 in San Diego, California (Figure 19). The eight-mile long project originally built in the late 1980s was a good candidate because it operated as reversible lanes behind concrete barriers, allowing for the implementation of one tolling zone to address all users. The introduction of pricing started simplistically as a "decal" program allowing single occupant drivers to purchase a windshield decal for unlimited use on a monthly basis. Electronic toll collection was subsequently deployed through the use of windshield mounted transponders, and then a much more ambitious program was undertaken to expand and lengthen the project.

Figure 19: I-15 Express Lanes, San Diego, California



Some HOT lane projects have incorporated the ability to vary toll levels based on real-time traffic conditions. These projects rely on monitoring equipment such as loop detectors to collect traffic data on the general purpose lanes and/or HOT lane(s). Computer algorithms are then used to raise or lower the toll rate to achieve specified conditions. Most often, the algorithms are programmed to vary the toll rate to ensure a target speed is maintained on the HOT facility. When speeds begin to drop due to increased traffic volumes, toll levels increase to discourage more drivers from entering the lane. Conversely, toll levels are lowered when traffic levels on the HOT facility are low to encourage more drivers to switch from the general purpose lanes. The I-394 and I-35W MnPass Express Lanes in Minneapolis, Minnesota, are examples of facilities that vary tolls in real time. (See case study at the end of this chapter for more information.)

Express Toll Lanes

Express Toll Lanes (ETLs) are another example of a lane pricing strategy. ETL is similar to HOT lanes except that all vehicles are charged a toll to use the lane. These facilities are essentially access restricted tollroads within the freeway right-of-way that are actively managed to preserve free-flow operating conditions. Enforcement is simplified for ETLs. Just like a traditional toll facility, every vehicle must pay, thus the enforcement centers around toll evasion. Enforcement can be automated through license plate readers. Business rules dictate whether those that are detected as not paying will be sent an increased toll charge or a violation notice. ETLs offer a much greater opportunity for revenue generation to be used as a source for repayment of capital costs.

The first newly constructed toll express lane to be introduced in the US was the SR-91 Express Lanes in Orange County, California. This ten-mile project was constructed in an available median and includes four managed lanes (two in each direction) surrounded by eight general purpose lanes. The managed lanes are separated by a painted four-foot buffer and pylons (see Figure 19). Access to the lanes is provided only at the termini to provide express service to long distance travelers traveling through the Santa Ana Canyon between Orange and Riverside Counties. All vehicles are required to carry toll tags to use the lanes. Vehicles with three or more occupants are able to use the facility for free during off-peak hours and at a 50 percent discount during the most congested peak hours. Tolls on SR-91 vary according to a published schedule, with the highest tolls being charged during the morning and afternoon peak periods. Each project has unique business rules to address the corridor and market needs. For SR 91, the toll policy allows tolls to be increased for any time period designated as a "Super Peak" hour ([Orange County Transportation Authority](#), Accessed June 26, 2010.). If traffic volumes are consistently above the predetermined Super Peak levels then tolls can be raised, provided that travelers are notified ten days in advance.

Figure 20: SR-91 Express Lane, Orange County, California
(courtesy Orange County Transportation Authority and California Department of Transportation)



The North Tarrant Express in Dallas-Ft Worth is an example of an ETL project currently under development that will be mostly elevated above the existing freeway (Figure 21).

Figure 21: Express Toll Lanes on SH 183/I-820, Ft Worth, Texas (courtesy of North Tarrant Express)



8.3.2 Corridor Management of All Lanes

Outside the boundaries of dedicating specific lanes for aggressive management, many freeways overseas aggressively manage all freeway lanes using a variety of ITS-oriented tools just now being adopted in the US. These tools are briefly explained in the following section and include:

- Variable speed limits and queue warning
- Lane controls
- Dynamic lanes
- Metering (covered in Chapter 7)
- Junction and access controls

8.3.2.1 Variable Speed Limits and Queue Warning

Variable speed limits (VSL) are intended to manage traffic flow to improve safety and congestion relief by gradually adjusting the speed limit in reaction to factors such as traffic conditions, weather conditions, construction or maintenance activities, and other factors. With the exception of school zones on arterials and a few weather-based applications, use of variable speed limits in the US has been limited, although many transportation agencies have expressed interest in them. Results from European applications have proven to be positive and have spurred the recent development of similar applications within the US in Minneapolis and Seattle. Results from these two early applications will provide more details on concerns over compliance, enforcement, safety benefits, and operational benefits. More information on U.S. applications can be found in the following [FHWA synthesis report](#).

Speed limits that are responsive to changing conditions are more credible and may result in improved compliance based on international experience. In certain conditions, the posted speed limit may be too high for prevailing conditions, and a variable speed limit can provide added safety.

Variable speed limits (VSL) use traffic speed, volume detection, weather information and road surface condition technology to determine appropriate speeds at which drivers should be traveling, given current roadway and traffic conditions (Robinson, Mark, *Examples of Variable Speed Limit Applications*, Speed Management Workshop, TRB 79th Annual Meeting, January 9, 2000). These advisory or regulatory speeds are usually displayed on overhead or side mount changeable message signs (CMS) (see Figure 22). In the U.S. VSL are deployed in Colorado, Massachusetts, Minnesota, Missouri, Nevada, New Jersey and Washington State. Often VSL are part of larger incident management, congestion management, weather advisory, or motorist warning systems. In European countries the VSL installations may be advisory or regulatory in nature (Figure 23). (See case study at the end of this chapter for more information). If regulatory, electronic sensors and overhead cameras can capture license plates of errant drivers and citations can be issued by mail.

Figure 22: Variable Speed Limit Sign with Lane Controls, Seattle, Washington
(courtesy Washington State Department of Transportation)



Figure 23: Variable Speed Limit by Lane, Rotterdam, Netherlands



An example deployment is on the New Jersey Turnpike where enforceable variable speed limit signs have been in use since the late 1960s to provide early warning to motorists of slow traffic or hazardous road conditions. Approximately 120 signs are installed over 148 miles of roadway. The posted speed limits are based on average travel speed and are displayed automatically (manual override used for lane closures and construction zones). The posted speed limit can be reduced from the normal speed limit in five-mph decrements, to 30 mph. The posted speed limit can be reduced for six reasons: accidents; congestion; construction; ice; snow; and fog. The speed warning signs display, "Reduce Speed Ahead" and the reason for the speed reduction. When appropriate, the distance between the warning sign and the beginning of the congestion is displayed on the dynamic warning sign that otherwise provides guidance to one of the two roadways (Figure 24). The New Jersey Turnpike Authority believes that the signs are effective and provide motorists with information on unusual roadway conditions that dictate the need for speed reduction. State Police enforce the reduced speed limits by issuing summonses to those motorists found to be in violation.

Figure 24: New Jersey Turnpike Queue Warning Signage at Ramp (courtesy New Jersey Turnpike Authority)



8.3.2.2 Lane Controls

Lane-use control signals (LCS) are fixed-grid changeable messages signs that use both color and pictogram symbols to convey information. The 2009 *MUTCD* defines LCS as special overhead signals that permit or prohibit the use of specific lanes of a street or highway or that indicate the impending prohibition of their use. LCS's are most commonly used for reversible-lane control, but are also used in non-reversible freeway lane applications. Other applications can include (Finley, M.D.; G. L. Ullman; K. D. Parma; and N. D. Trout. "Yellow Transition Lane Control Signal Symbols for Freeway Traffic Management." Transportation Research Board Paper 01184. Transportation Research Board Meeting, Washington, DC, January 2002, Ullman, G. "Motorists Interpretations of *MUTCD* Freeway Lane Control Signals". Texas Transportation Institute, January 1993):

- Special event traffic management or parking control,
- Restricting traffic from certain lanes at certain hours to facilitate merging traffic from a ramp or other freeway (also called junction control),
- Controlling lane use at toll booths,
- Controlling dynamic lane assignment on tunnels and bridges,
- On a freeway in *ATM* applications, to indicate the need to merge out of a lane that may be temporarily blocked by a crash, breakdown, construction or maintenance activities.

In addition, some agencies use LCS to indicate to motorists that a breakdown shoulder can be used as a travel lane during peak travel periods. I 66 in Virginia uses the left most lane as an *HOV* lane during the peak periods; therefore, the breakdown shoulder is used during this period to allow the same number of general purpose lanes for traffic. The priced dynamic left shoulder lane (PDSL) on I-35W in Minneapolis also uses LCS to indicate when the shoulder lane can be used by designated traffic (Figure 25). In Virginia I-66 allows inbound traffic to operate in the right shoulder when *HOVs* simultaneously use a left general purpose lane during peak periods (Figure 26). (See Section 8.8.3 case study for more discussion of this project.)

Figure 25: Lane Control Signal over I-35W PDSL, Minneapolis, Minnesota



Figure 26: Lane Control Signal on I-66, Virginia Signage over right shoulder lane (left) with leftmost lane restricted to HOVs (right)



8.3.2.3 Dynamic Lanes

The number and directionality of freeway lanes and shoulders can be dynamically managed to serve variable traffic patterns. Common examples include:

- Contraflow lanes
- Reversible lanes
- Part-time shoulder lanes
- Dynamic assignment of bridge and tunnel lanes

A contraflow lane is a freeway lane in the off-peak direction of flow (normally adjacent to the median) that is designated for use by buses or HOVs traveling in the peak direction for a portion of the day (Figure 27). Normally, the contraflow lane is *separated* from the off-peak (or opposite) flow by insertable pylons or movable concrete barriers. In the off-peak, pylons are removed or the barrier is stored next to the median, so that the lane configuration returns to its normal condition. Contraflow offers the opportunity to gain another peak direction lane with rather low capital cost, if an off-peak lane(s) can be borrowed and not degrade the off-peak direction.

Figure 27: H-1 HOV Contraflow Lane, Honolulu, Hawaii (courtesy Hawaii Department of Transportation)



Reversible lanes are dedicated freeway lanes that serve directional peak period demands (i.e., inbound morning trips and outbound afternoon trips). These lanes are physically separated from general purpose lanes and typically operate on a set schedule to provide consistency for travelers and operators.

Dynamic shoulder lanes, such as those on the I-35W PDSL, allow use of the hardened shoulder (either left side or right side) for use by traffic during peak periods. These shoulder lanes are implemented concurrently with lane control signals and often with variable speed limits. Appropriate measures should be used to make sure all stored vehicles are removed from the shoulders prior to opening them to traffic.

Many dynamic lane applications on bridges and tunnels, including contraflow lanes, employ moveable barrier technology to control traffic and minimize head-on collisions. Moveable barriers also tend to keep the dynamic lane speeds at free flow conditions, thus providing lane users with time savings. Moveable Barrier Technology (MBT) provides the opportunity to change the direction of a freeway lane while providing continuous positive protection between opposing flows of traffic (Figure 28). MBT can accomplish these changes quickly, making it possible to respond to changes in traffic volumes that occur within a day. Therefore, MBT provides a strategy to change the capacity of a freeway in the peak direction quickly and easily, with a resulting reduction in congestion (Rathbone, Daniel B, *Moveable Barrier Assisted Traffic Management To Mitigate Congested Highways, Bridges and Tunnels*, DBR Associates, August, 1999).

Figure 28: Moveable Barrier Technology in Honolulu, Hawaii and Dallas, Texas (left photo courtesy Hawaii Department of Transportation)



8.3.2.4 Metering

Metering refers to the use of traffic signals to control the flow of vehicles. This strategy is most often used to manage the flow of vehicles coming onto a facility at on-ramps, but it can also be used to manage traffic on the facility mainlines. This topic is covered in Chapter 7.

8.3.2.5 Junction and Access Controls

Historically, both US and European experience has seen isolated experimentation with active management of ramps beyond more traditional ramp metering. For closing local access ramps during peak demand periods, gates of one sort or another have been applied to dynamically perform this function. For interchanges, the downstream balance between mainline and connector merges may justify closing lanes on one approach upstream to ensure better merging (Figure 29).

Figure 29: Example of Junction Control Illustration from Europe (courtesy of the FHWA 2006 scan tour of managed lanes in Europe)



These approaches to ramp and merge management are typically site-specific and work in conjunction with other active management strategies in promoting better throughput and safe merging. Such examples found from past U.S. freeway experiences are shown in Figure 30.

Figure 30: Junction (left) and Ramp Closure Controls (right)



8.4 Managed Lane Operational Considerations

In operating managed lanes, each of the tools previously presented play both unique and interrelated roles. These include vehicle and user classification, operation period and managing access, and pricing.

8.4.1 Vehicle and User Classification (Eligibility)

Traditionally, managed lanes focusing on promoting person movement (i.e. HOV lanes and bus lanes) have appropriately restricted use based on vehicle and user eligibility. Operating a managed lane based primarily on user restrictions has been and continues to be the most commonly practiced approach in the US, Canada and overseas. This approach also has held the greatest promise in getting more commuting efficiency out of a single lane of pavement and in promoting modal shifts. While a lane restriction by vehicle and user classification may not be responsive to real-time and changing traffic conditions, it is considered relatively easy to enforce, exhibits a low cost to operate and has the longest track record historically (Figure 31).

Figure 31: Lane Restrictions based on Eligibility



In congested settings all available lanes have an important contribution and utility to the transportation network. While lanes dedicated to specific vehicles and users may meet high levels of performance, if they appear empty even during limited periods, public and political credibility in the investment can be lost or eroded over time. Therefore, developing an operating philosophy that is flexible in setting hours of operation, as well as occupancy requirements is important to effectively manage the facility. It has to be realized that both hours of operation and occupancy requirements cannot be changed in real time. To maximize modal and route shift opportunities, both have to be set and established such that drivers know what they are prior to leaving for a trip. It should also be recognized that changing either of these parameters can also have a profound change in the operations of the facility. Thus it is important to have in place a policy for making changes, but in practical terms changes should be rather infrequent.

Transit is one of the biggest beneficiaries for managed lanes, regardless of whether the lanes are operated as a busway, HOV, HOT, or ETL. Any of these strategies offer a reliable trip that is advantageous for transit use and schedule adherence. The level of friction associated with other modes, both enroute and on the downstream (employment) end of the trip regarding parking cost and availability, can drive mode shifting if transit service meets market needs and is quick and convenient. This often means introducing or augmenting express bus services and park & ride facilities in conjunction with freeway managed lane treatments.

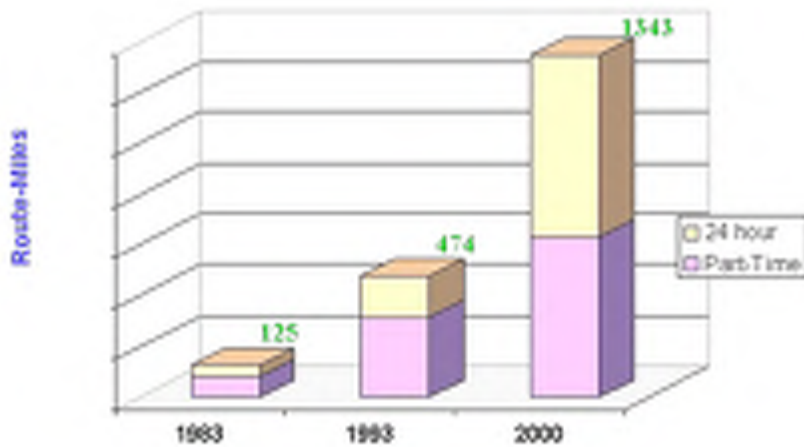
HOV lanes and transportation demand management (TDM) have a very complimentary (and in many cases required) relationship insofar as providing a dedicated roadway facility to move carpools and vanpools and having programs that help form and sustain them. Conversely, relying on other forms of transit investments and not providing facilities that encourage carpooling and vanpooling for employment not easily served by transit misses an important component in an overall TDM and congestion management program. For example, it is hard to expect vanpools and carpooling to be as successful with only a preferential lane incentive unless preferential parking, ridematching services, financial incentives, employer outreach and related programs are in place to encourage mode shifting. Many successful examples exist in Houston, Minneapolis, Virginia and Seattle where average vehicle occupancies (AVO) in affected corridors have climbed from 2.3 to 2.9 or higher as a result of such synergistic programs. Without such treatments and programs, similar corridors in these cities have seen no such changes in AVO rates.

8.4.2 Operation Periods and Managing Access

Determining operation periods and managing access often go hand in hand. This is because a part-time managed lane operation reverts back to general purpose freeway use during parts of the day, making it necessary that all freeway lanes during these periods look and function the same. Otherwise, driver confusion becomes a concern, and this may result in erratic movements that could adversely affect safety.

Operating periods for managed lanes often vary in two primary ways. They either target operation restrictions to peak periods of demand and open to all traffic at other times; or they are open during most daylight hours, if not on a 24/7 basis. Good policy principles support both approaches, and there are widespread examples of both throughout the US as noted in Figure 32 below, which compares operation hours on all managed lane projects over a 30-year period. About the same number of projects has historically supported full time operation as part-time which is largely oriented to peak commute periods only. However, the facility design plays a role in whatever approach is taken.

Figure 32: Comparison of Operating Periods for Managed Lanes, 1970-2000 (Fuhs, Charles and Jon Obenberger, "HOV Facility Development: A Review of National Trends," published in "HOV and Demand Management 2002," Transportation Research Record No. 1781, Transportation Research Board, Washington, DC, 2002)



Targeting a designated peak period provides the managed lane benefits when it is most needed, thereby reducing operation cost and enforcement presence outside these periods. But in so doing, lane benefits cannot be realized for non-recurrent events. If the off-peak period is not congested, then there is not a strong rationale other than presence of an empty lane syndrome that can influence why general flow traffic should need the lane. There are other factors including facility design that can influence the selection of a particular operation period. For example I-77 in Charlotte reflects a 24-hour operation since a portion of the concurrent HOV lane configuration separates from the mainlanes to circumvent an interchange, and allowing general purpose traffic to use the leftmost lane during non-operating periods would have created a potential safety concern by confused motorists where roadways split.

Access into and out of the managed lane should be continuous for part-time operation because the lane serves general traffic. For full time operations, access can be either open or restricted to designated locations. Historically, about 60 percent of HOV lane-miles in the US have been unrestricted or open access, and the other 40 percent have restricted access to designated weave zones largely through pavement markings (Fuhs, Charles and Jon Obenberger, "HOV Facility Development: A Review of National Trends," published in "HOV and Demand Management 2002," Transportation Research Record No. 1781, Transportation Research Board, Washington, DC, 2002). Various safety studies conducted through the years suggest that both approaches to access can be safe and function well. Some access restricted managed lanes are moving toward open access in southern California, while adding tolling to other HOV lanes is creating the need to restrict access between toll zones. Justifications supporting access restrictions include the desire or need to control ingress and egress at designated locations, reduce unnecessary weaving, discouraging short distance trips from using the lanes and limiting violations by queue jumpers. Justifications for allowing open access include allowing greater flexibility in use and allowing weaves and merges to occur at any location.

8.4.3 Pricing Considerations

Pricing can address many different objectives including increasing vehicle throughput (without adversely impacting person movement goals), cost recovery for improved incident management and enforcement, revenue generation for other transportation improvements, improved real-time management on a lane that otherwise relies on eligibility and access restrictions and better public perceptions of utility and equity of use. However, introducing electronic pricing can be politically divisive and can be costly both from a capital and operation/maintenance perspective, particularly for single managed lane settings. The level of use, nature of demand and costs to implement need to be weighed as issues to determine a best strategy. Goals need to be clearly communicated.

The first pricing demonstrations dating from the mid 1990s have been well documented in various case studies (Sullivan, E. *Evaluating the Impacts of the SR 91 Variable-Toll Express Lane Facility: Final Report*. Department of Civil and Environmental Engineering, Cal Poly State Univ., San Luis Obispo, California, 1998, Supernak, J., Golob, J. Golob, T.F., Kaschade, C., Kazimi, C., Schreffler, E., and Steffey, D. San Diego's Interstate 15 Congestion Pricing Project: Attitudinal, Behavioral, and Institutional Issues. In *Transportation Research Record*, No. 1812, Transportation Research Board, Washington, D.C., 2002, pp. 78-86, Burris, M.W., and B.R. Stockton. HOV Lanes in Houston: Six Years of Experience. *Journal of Public Transportation*, 2004) with supporting guidance in several treatises ([FHWA, A Guide for HOT Lane Development, 2003](#). Accessed June 26, 2010). Most early demonstrations took several attempts to obtain public support, and following implementation were generally well accepted based on survey data. Various issues, including where excess revenue is expended, who uses the lanes and associated socio-economic equity concerns, and impacts on transit and ridesharing have been tracked and documented. Most early projects added pricing to existing HOV lanes that were barrier separated and had available capacity to toll. A wide array of business rules have been applied to each project affecting who is free and who pays, how tags are administered, when lanes are open and how transactions are processed and debited from user accounts. These terms of operation need to be carefully

considered in light of potential unintended consequences. For example, I-25 in Denver sets minimum toll rates in peak periods such that toll users would not be paying less than transit users. Revenue leakage and violations have been reduced through applications of back-up license plate recognition (LPR) systems common to many tollroads and use of permanently placed pylons to separate the parallel traffic streams.

When applied as a managed lane strategy, operational parameters for pricing can be implemented in a variety of ways. Not all pricing strategies are suitable in all settings as each project has specific operational, logistical, institutional, and attitudinal barriers associated with it. Therefore, a feasibility study must be undertaken prior to implementation to analyze each of these components and choose the pricing regime that is likely to be the most successful. The following tasks are typically conducted as part of the pre-implementation efforts associated with a pricing project:

- Statement of the particular problem to be addressed through the use of pricing
- Review of existing pricing projects and appropriate state-of-the-art technologies
- Attitudinal surveys of users to gauge reaction and sensitivity to pricing and value of time
- Organization of participating agencies and other stakeholder groups to determine support and respective roles
- Conceptual design and implementation plan (including preliminary schedule and identification of potential funding sources)
- Capital and operational cost estimates, implementation strategies and identifying next steps moving forward

8.4.4 Enforcement Considerations

Because managed lanes require adherence to access, eligibility, and pricing restrictions, effective enforcement policies are necessary to ensure these facilities operate as desired. The ability of a managed lane facility to offer improved travel conditions can be compromised without an appropriate enforcement program. Most successful managed lane projects incorporate a variety of enforcement strategies that may require specific design, tolling or ITS capabilities. The specific strategies chosen depend largely on the design and operational characteristics of the facility. For example, the types of enforcement strategies that are effective and appropriate for concurrent flow HOV lanes may not be needed or appropriate for barrier separated facilities. The type of offenses and goals for managing each may vary. For HOV lanes, an accepted goal or "rule of thumb" for many projects has been a 10 percent occupancy violation rate. Buffer separated facilities may have a recurring problem of violators crossing the buffer on a restricted access facility. Speeding and other offenses may need to be monitored. Pricing projects allows the back office to address toll evasion through LPR, but officers in the field need to know who has paid in order to manage occupancy offenders. Different tactics are appropriate for each type of offense, and each police agency has preferences established through their other traffic management duties.

Enforcement can be classified into four approaches (Cothron, S., D.A. Skowronek, and B.T. Kuhn. Enforcement Issues on Managed Lanes. Research Report 4160-11, Texas Transportation Institute, College Station, TX, 2003):

- Routine enforcement – utilizes existing patrols to monitor managed lane.
- Special enforcement – recruits dedicated resources to monitor managed lane.
- Selective enforcement – targeted for special events or concerns.
- Self enforcement – relies on motorists to self-regulate by calling a number or going on-line to report violators (Figure 33).

Figure 33: Example of Enforcement Strategies (routine enforcement-left, self-enforcement-right)



Enforcement strategies are made more complicated with the augmentation of pricing. Provisions for supporting legislation, enforcement staff availability, complexity of operation rules and design provisions that allow for ease of monitoring and apprehension need to be addressed. The ability to sort out who is a free HOV user versus a paid customer needs to be easily and rapidly communicated to the officer in the field. Currently no technology has received acceptance from respective policing or court systems that can definitively communicate the number of occupants in a

vehicle. This level of automation, if ever adopted, is not a near term option. So the various strategies to address enforcement roles needs to account for the respective business rules, police agency preferences and facility design that can accommodate these requirements. Police presence in the field is an underlying benefit to user compliance, but all regulations will exhibit some level of violations.

Current practice is to provide monitoring for police in the vicinity of each toll zone. Early priced projects on SR 91 in Orange County (California), I-15 in San Diego, I-25 in Denver and I-10 in Houston included rather elaborate self declaration lanes for separating, tolling and monitoring free HOVs from other tolled traffic at tolling points. Most recent projects have dispersed with this capital intensive strategy and focused more on business rules and strategies giving police more electronic tools to enable them to determine potential violators.

8.4.5 Additional Considerations

Other operational considerations of pricing on an existing HOV lane or proposed lane being added include not only the tolling strategy, but also addressing the intended level of demand and guaranteed service being offered. Typically the volume of traffic will be increased based on infilling available lane capacity if a conversion, since optimizing throughput is typically a prerequisite goal. This means that managing lane operations requires that supporting functions are able to address minor and major incidents in a responsive fashion and that the integrity of operation is preserved to assure proper revenue collection. Incident management, enforcement and maintenance services play particularly important roles.

Traditionally on HOV lanes, these roles are embedded within the context of overall freeway operations, and few such managed lanes have dedicated services or frequencies of response different from any other lane. Increasingly, priced lanes are being given priority and revenues collected are applied to pay for this preferential level of attention. Dedicated enforcement presence often under contract assures a high level of compliance. Incident management may entail more frequent remote detection and dedicated backroom monitoring. Maintenance, particularly for mission critical tolling systems and motorist communication, may require a very high reliability with performance responsiveness within an extremely short timeframe. All such aspects frame the overall operational considerations for a priced lane. These aspects are acutely more critical to address in an urban setting where the managed lane may not have the benefit of all the desired geometric design features accommodated on traditional toll roads—where breakdown shoulders may not exist or where sight distances are limited. For example, debris blocking the managed lane located next to the median barrier is more likely to pose a hazard for high volumes of traffic and thus, pose the potential to create a disruption to flow and LOS. Generated revenues are often used to address these shortcomings by commensurately addressing and dedicating responsiveness capability of enforcement, incident management and maintenance forces.

8.5 Managed Lane Design Considerations

This section provides a brief overview of the various issues that should be considered when designing managed lane facilities. Managed lane strategies are intended to be highly specific and adaptable for a broad range of project settings and designs reflect this wide range of operational needs. Therefore, only the AASHTO "Green Book" (AASHTO, *A Policy on Geometric Design of Highways and Streets "Green Book,"* 2004 and subsequent updates) guidance for standard lane and shoulder widths in freeway settings represents best practice. There are various relatively recent sources for specific HOV design applications pertaining to concurrent, reversible and contraflow design practice (NCHRP Report 414: *HOV Systems Manual*. TRB, National Research Council, Washington, D.C., 1998, AASHTO, *Guide for High-Occupancy Vehicle (HOV) Facilities*, 2004, Institute of Transportation Engineers, *Freeway and Interchange Geometric Design Handbook*, Chapter 13, 2005), but there is limited available design guidance that is specific to other specific managed lane elements such as pricing. Further, since a vast majority of managed lane designs have been implemented onto existing freeways in constrained design settings, few projects have been able to address all of the desirable design attributes in a cost feasible manner and difficult trade-offs have been required. Many project designs reflect these compromises. Since all have operated safely and perform reasonably well in meeting their stated operational objectives, there are few "best practices" that are nationally transferable. In many places regional standards of design practice have emerged influenced by operation needs, design constraints and driver expectations (and conversely resulting from driver behavior to the adopted designs).

Each element of a managed lane project should be designed to achieve specific operational goals and fit within the context of a particular design setting. Considerations should also be made to ensure that all design elements work in concert to achieve regional consistency and efficiency. The following design considerations are common to the implementation of managed lanes:

- Lane orientation (left or right)
- Lane separation (if concurrent or contraflow)
- Access treatments and system connections
- Tolling requirements

- Enforcement provisions
- Transit provisions
- Signings and markings
- General ITS provisions

8.5.1 Lane Orientation

Almost all managed lanes are located on the left side next to the median such that long distance travel with limited access is facilitated. Long distance trips are more amenable to generating the time savings needed to create demand. Traffic, right-of-way, existing roadway infrastructure and cost considerations generally dictate the design of dedicated roadway facilities. A left side orientation results in fewer conflicts with mixed traffic since there are few locations where left side ramps intervene. A right side orientation frequently conflicts with local on- and off-movements with the mainlanes, so therefore, either the usage of right side orientations needs to be low to mitigate the magnitude of conflicts, or usage must be restricted to select drivers and vehicles such as buses only (see Figure 34 and 35 for examples).

Figure 34: Right Side HOV Lane on SR 520, Bellevue, Washington



Aside from ramp queue bypasses, left side oriented facilities generally fall into one of the following categories:

- Concurrent flow
- Reversible
- Contraflow

Figure 35: Right Side HOV Lane on I-405, Bellevue, Washington (since reconfigured on left).

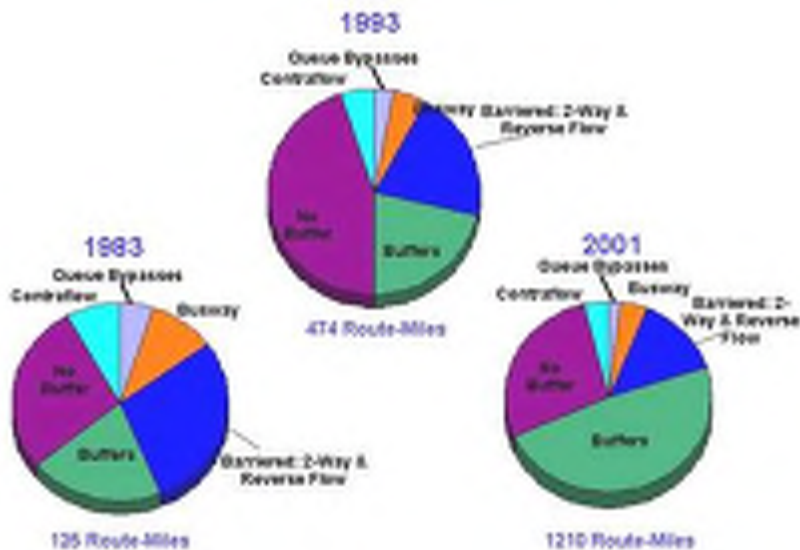


A comparison of trends among HOV lanes for each of these categories can be found for prior years in Figure 36. At least half the concurrent flow lanes in the US have been buffer-separated, and as more lanes are priced, this percentage is expected to increase. Dating from the mid-1980s, concurrent flow lanes (buffer separated and non-separated) represented at least half of all lane-miles, and over time they have become the dominant design. Reversible flow and contraflow designs today represent a small and shrinking fraction (less than 15 percent) of all managed lane designs (Fuhs, Charles and Jon Obenberger, "HOV Facility Development: A Review of National Trends," published in "HOV and Demand Management 2002," Transportation Research Record No. 1781, Transportation Research Board, Washington, DC, 2002, [California Department of Transportation](#), "HOV Guidelines", 2003).

Concurrent flow facilities operate in the same direction of travel. For part-time operation they often take the form of a leftmost general purpose lane that is restricted for use by eligible vehicles for at least a portion of the day, employing median signing and diamond pavement markings as the primary means of communicating the restrictions on use. Exceptions are a designated right side lane or shoulders that are converted to travel lanes during peak periods, as is done in Seattle and Minneapolis. Concurrent flow lanes can provide continuous access or can be separated using a physical barrier or painted continuous access buffer or buffer with designated access points. The hours of operation can also vary; the lanes can be operated full-time or can be restricted to peak periods and revert to general use during other periods.

Concurrent flow lanes are best suited to situations where peak period demand is heavy in both directions or directional demand is only addressed through a lane restriction on the leftmost lane inbound in the morning period and outbound in the evening period. From a design standpoint, concurrent flow lanes are the easiest configuration to implement since they do not require rebuilding a freeway with centerline oriented bridge columns. Also, concurrent lanes do not require complex and costly measures to control directionality throughout the day.

Figure 36: Types of Managed Lane Designs: 1983 to 2001 (Fuhs, Charles and Jon Obenberger, "HOV Facility Development: A Review of National Trends," published in "HOV and Demand Management 2002," Transportation Research Record No. 1781, Transportation Research Board, Washington, DC, 2002)



Conversely, the ease of accessing a concurrent flow lane also makes it much easier to access and to violate, complicating lane management strategies and typically requiring more police presence. Incidents in adjacent lanes can also affect a concurrent lane without barrier separation since mainlane incidents can be more effectively addressed by allowing general traffic to use the managed lane where barriers between the parallel roadways are not present.

Reversible flow lanes are most appropriate on facilities that experience large directional traffic imbalances and are forecast to do so in perpetuity. This characteristic is not found on many urban corridors. Reversible facilities are best suited for long distance trips with limited intermediate access needs along the affected route to minimize traffic disruptions (*NCHRP Synthesis 340: Convertible Roadways and Lanes*, TRB, National Research Council, Washington, D.C., 2004), because any access requires barrier channelization, gating or flyover structures. A directional split of 60/40 is commonly used as a threshold for the level of traffic imbalance needed to warrant a reversible facility (*NCHRP Report 414: HOV Systems Manual*, TRB, National Research Council, Washington, D.C., 1998). A limitation of implementing a reversible flow design is that it cannot serve congestion that may be present in the off-peak traffic direction. If such is the case, then some users, such as deadheading transit buses that need trip reliability to make a second peak direction run during the commute period, will be adversely impacted. All freeway reversible lanes must be separated by "Jersey" barriers in a high speed roadway setting (which is not the case on arterial treatments). They are typically constructed in the median of freeway facilities and may be one, two or more lanes wide. These characteristics have several associated advantages and disadvantages. A facility that changes direction to serve morning and afternoon traffic can be an efficient solution since it allocates capacity specifically to the most congested direction of travel. Reversible lanes offer a much higher guaranteed LOS for transit since side friction from adjacent traffic is removed. Some locales, notably Houston, implemented reversible lanes to address the peak direction alone since width was not available to address both directions of travel. Adapting a reversible flow lane or roadway into a freeway typically requires rebuilding most bridges with center columns.

Costs for reversible lanes may be lower or higher than other treatments that require improvements in both directions, largely based on the infrastructure that has to be negotiated. Many recent reversible lanes implemented in Minneapolis (I-394), Denver (I-25) and San Diego (I-15) were cost effective because the entire freeway was reconstructed at the same time. The I-15 San Diego managed lane extension adopted a hybrid solution that involves up to four lanes with a moveable barrier median, allowing a 2-2 or 3-1 configuration for different parts of the day.

A disadvantage of reversible lanes is the ongoing cost of daily surveillance and lane/ramp reversal activities. These treatments must be designed to prevent wrong way movements, requiring extensive and redundant ITS and traffic control device treatments for each opening, plus a staff complement who must visually inspect the roadway prior to each opening period. Tolling and enforcement is made easier by the barrier environment in which a single field location can be identified to monitor and/or toll all traffic flow. Other unique aspects of reversible lanes require special design considerations such as:

- Ability of emergency personnel to respond to incidents on a facility with limited access
- Need for monitoring and proper deployment/closures during directional changes
- Signs and markings to indicate traffic directionality
- Provisions for enforcement and tolling (if required)

Contraflow lanes, like reversible flow lanes, require perhaps even stronger peak period directional demand. This is because a contraflow lane borrows an off-peak direction lane(s) and converts it to peak direction operation. Therefore contraflow designs can only be implemented if there is unused off-peak direction capacity. Creating congestion in this

opposing direction is not desirable nor is it publicly acceptable. Contraflow lanes are operated only during specific periods, and the leftmost lanes revert to general use otherwise. During operational periods, deployable pylons or moveable barriers are used to separate the contraflow lane from opposing traffic flows. Figure 37 shows examples of contraflow lanes where traffic is separated from opposing flow using these two design strategies.

Figure 37: Examples of Contraflow Lanes on Route 495, New Jersey and I-93, Boston, Massachusetts



Contraflow lanes are an appealing option when excess capacity allows since the cost to implement is relatively low compared to the construction of a dedicated lane. However, the ongoing operating costs associated with deploying and removing the lane before and after each peak period can potentially be significant. If moveable is employed, MBT is probably the safest approach (see previous section 8.3.2.3). Specific supporting design features including a storage garage in the median is desired for a moveable barrier design. General issues to consider when designing contraflow facilities include (Institute of Transportation Engineers, *Freeway and Interchange Geometric Design Handbook*, Chapter 13, 2005):

- Median access points with channelization for traffic to safely crossover at entrance and exit points,
- Changes in posted speeds both for the contraflow lane and opposing flow lanes,
- Space to store deployable barriers and supporting equipment,
- Commitment by a team of personnel to deploy and take down the operation daily,
- Safety concerns associated with proximity of opposing flows at high speeds and incident management if breakdown shoulders within the lane are not feasible.

8.5.2 Lane Separation

The speed differential created by managed lanes located adjacent to other lanes is perhaps the most important design aspect from a safety perspective. HOV guidelines for many years have advocated that the safest operation can result with some form of barrier separation between concurrent traffic streams, and crash rates for barrier-separated projects do bear out a better overall record than for non-separated lane treatments, all other factors being equal. Enforcement is also made easier with barrier separation.

Taking away general purpose lanes for restricted use has not been politically or publicly feasible, and risks adverse impacts in early years of operation including higher levels of congestion and loss of efficiency until volumes build back. For this reason, for many projects to move forward, a softer form of lane separation was applied. The most frequently applied best practice is a narrow buffer that is nominally two to four feet wide (Figure 38). The buffer should provide enough segregation of flow to improve sight distance and if at least four feet in width, can accommodate the installation of pylons where side friction and weaving is particularly problematic (Figure 39). A buffer of six to 10 feet is not considered safe because it can be construed as a refuge area for emergency breakdowns. If separated with pylons breakdown shoulders can be considered part of the overall buffer.

The type of separation treatment used for managed lanes is dictated in part by the intended operation of the lanes. Facilities that are operated part-time and revert to general use during off-peak periods should not be separated in a way that is confusing to drivers during non-restricted periods (Institute of Transportation Engineers, *Freeway and Interchange Geometric Design Handbook*, Chapter 13, 2005). The majority of HOV lanes that operate part-time are separated by a painted line so that the lanes are easily accessible by general purpose traffic when HOV restrictions are not in effect. A wider than standard pavement marking in this instance is required to help differentiate the lane during its restriction.

Figure 38: Examples of Buffer Separation Treatment



Figure 39: Examples of Pylons Placed in a Wide Buffer (left) and Narrow Buffer (right)



The degree of separation can also influence managed lane speeds, throughput and demand. An understanding of the maximum differential for various designs must be part of any determination of feasibility. Thirty years of experience has shown that without full barrier separation, the maximum speed differential to be gained in a concurrent managed lane separated only by pavement markings is about 20 mph over the parallel freeway traffic stream. Thus, if freeway traffic is moving at an average of 20 mph, the managed lane traffic stream will not likely achieve an average speed of more than 40 mph. Physical separation may be preferable for facilities that incorporate tolling to ensure that violation levels are kept to a minimum and the integrity of the facility is maintained.

8.5.3 Access Treatment

The design of access points has an impact on the operating characteristics of a managed lane facility. Access to managed lanes can be unlimited (continuous) or can be restricted to designated locations. In situations where access is limited, the number, location, spacing, and type of access points are all important aspects to consider. Access considerations not only affect the performance of a facility, but also impact enforcement and safety. For example, close spacing and/or frequent access points can degrade operating conditions and impair the ability to provide effective enforcement (FHWA, *Managed Lanes: A Primer*. FHWA-HOP-05-031, 2008). Access on most access restricted concurrent lanes is provided at spacing less frequent than average spacing for the mainlanes.

Access spacing of two to three miles is common for most restricted access treatments. For reversible operations, access is typically much further than this, and for contraflow, the nature of borrowing a lane precludes intermediate access from being considered for safety reasons.

There are a variety of treatments that can be used for managed lane access. Access can be provided at-grade or employing grade-separated ramps. At-grade access is the most commonly used treatment, either at designated locations or open along a lane. Grade separated treatments are commonly reserved for specific high volume locations and where transit support facilities are implemented. The different access treatments typically employed are summarized below:

- **Open or Continuous Access** – This is the most common approach for part-time operations. Open access uses standard pavement markings and allows vehicles to merge into and out of a managed lane anywhere. This approach is the least expensive access treatment since it does not require as much signing, but it is not effective for segment-based tolling where specific zones need to be created to toll users. Traffic signs and pavement markings are employed in accordance with 2009 MUTCD guidelines.
- **Access Zone** – Restricting access to specific locations or zones is applied on a large number of concurrent flow facilities (Figure 40). The access zone (variously called weave zone in some states) allows vehicles to enter and/or exit managed lane(s) from the leftmost general purpose lane (previous Figure 31). Traffic signs and pavement markings are used to regulate access openings in accordance with MUTCD guidelines (Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration, Washington, D.C., 2009). Based on various guidelines (AASHTO, *Guide for High-Occupancy Vehicle (HOV) Facilities*, 2004, [California Department of Transportation, "HOV Guidelines"](#), 2003), the opening needs to be at least 1,000 feet and preferably 2000 feet

in length based on recent research with broken lane lines to distinguish the access zone. Access spacing needs to account for right side ramps, with a minimum 600- to 800-foot merge interval for each respective general purpose lane from/to right-side ramps to help assure that mainlane weaves can be accommodated (AASHTO, *Guide for High-Occupancy Vehicle (HOV) Facilities*, 2004, [California Department of Transportation, "HOV Guidelines"](#), 2003). Where high accessing traffic volumes are anticipated, adding a weave lane between the parallel roadways (Figure 41) can be provided to allow vehicles entering and exiting to accelerate or decelerate and to store potential vehicle queues. There are few examples of this design because of the required additional space, but as more dual lane facilities are implemented, this approach will become more common.

Figure 40: Designated Access Zone Allowing Ingress and Egress

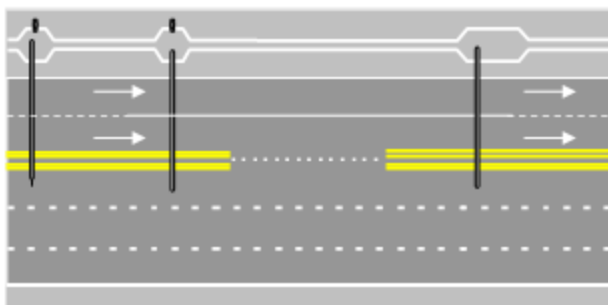


Figure 41: Ingress Zone with a Weave Lane (Left) and Egress Zone on I-495, Suffolk County, New York (right)



- **Slip Ramps** – At-grade slip ramps are generally used to provide terminal access to facilities separated by a barrier, including concurrent and reversible lanes (Figure 42). Slip ramps allow for one-way ingress or egress movements, and therefore reduce weave conflicts that occur at access locations that serve both movements simultaneously. Because slip ramps are provided at-grade, they are relatively inexpensive to implement. Slip ramps for reversible lanes need gates installed to prevent wrong way movements.

Figure 42: Slip Ramps Providing Terminal Access to Managed Lanes, Dallas, Texas (left) and Seattle, Washington (right) ([Texas Transportation Institute Website on Managed Lanes](#))



- **Median Drop Ramps** – These grade-separated access ramps provide direct access for eligible vehicles entering or exiting managed lane facilities located in the median of general purpose lanes (see Figure 43). These ramps may provide access to major streets, park-and-ride lots, or transit stations. This treatment is more costly than at-grade alternatives, but can be effective in promoting transit use of managed lanes. (Refer to section 8.5.6 for more detail on designing for transit needs.)

Figure 43: Median Drop Ramps (elevated-left, depressed-right) (left photo courtesy Sound Transit)



- **Direct Freeway-to-Freeway Connection** – These facilities provide direct connections from a managed lane on one freeway to a managed lane on another freeway (Figure 44). This strategy is warranted when there are high volumes of vehicles anticipated to connect from one facility to another. To save cost and space, two directional ramps often share the same structure and reflect left to left diverge and merge movements.

Figure 44: Freeway-to-Freeway Two-way Connector along I-5 in Orange County, California



8.5.4 Tolling Requirements

Managed lanes that incorporate pricing as a management strategy typically rely on electronic toll collection (ETC) for the collection and processing of toll payments. ETC benefits motorists by allowing them to pay tolls without having to stop and make physical transactions that would otherwise consume time savings. The basic components of an ETC system include:

- In-vehicle transponders (also called toll tags)
- Transponder readers mounted on toll gantries over the lane
- Lane controllers to control lane equipment
- Telecommunications to a back office for administration
- Host computer system to serve as a central database to manage accounts in the back office

To record toll transactions, ETC technology utilizes an on-board windshield mounted transponder that communicates with antennas mounted on overhead gantries. When a vehicle passes under one of these gantries, the on-board transponder is activated and sends a signal to the overhead reader (Figure 45). This signal is encoded with an identification number that is used to reconcile the transaction with the appropriate account. Enforcement is commonly aided by license plate recognition (LPR) cameras that capture the images of license plates (front and rear) for vehicles that are not read by the toll equipment. The license plate information is used to match a vehicle with an account or to identify toll violators. When proactively administered on some tollroads, LPR serves a primary means of "pay by plate" in which tolls are mailed to vehicle owners, thereby eliminating the requirement that a motorist to carry a transponder. However, pay-by-plate is a more expensive method of toll collection for administration purposes.

Figure 45: Electronic Toll Collection Gantry with LPR and Sample Transponder.



Congestion pricing requires additional infrastructure and communications abilities. Since pricing is used to maintain a specified operational threshold, the toll system needs to either be based on a schedule that reflects typical peak demand curves, or it needs to be dynamic and receive real-time traffic input to calculate the toll rate. This real-time traffic information is obtained using loop detectors or other devices capable of detecting characteristics such as traffic volume and speed. A tolling algorithm then uses these characteristics to calculate the appropriate toll to charge. The toll can be raised or lowered in response to traffic conditions as appropriate to influence managed lane operations. However, business rules need to advise customers of the prevailing toll rate. This is typically done upstream of entry points using dynamic signing elements in accordance with guidance found in the 2009 MUTCD (Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration, Washington, D.C., 2009) (see Figure 46). The prevailing price a customer sees when making a choice to use the lane should be guaranteed once they enter. For this reason, the tolling system design opens a customer account at the entrance point but does not process the transaction until the vehicle passes one or more downstream tolling gantries.

Figure 46: Example Managed Lane Pricing Sign from the 2009 MUTCD (Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration, Washington, D.C., 2009)



The implementation of pricing also requires a variety of considerations beyond the necessary tolling infrastructure. A marketing campaign is needed to inform the public how tolling will work, including hours of operations, eligibility requirements, expected toll rates, and how tolls will be collected. Customer service support staff will be needed to manage distribution of toll transponders, manage accounts, and respond to customer questions and concerns. Interoperability of toll technology implemented on a managed lane should also be considered, particularly if a managed lane is implemented in an area with existing or proposed toll facilities, or if other projects are expected to come online in the future. Interoperability requirements may also be codified in state or multi-state agreements and legislation.

8.5.5 Enforcement Provisions

Enforcement on managed lanes has traditionally been accomplished by providing designated enforcement areas. Each type of operation and design offers different approaches to accommodate these areas. On concurrent flow lanes, this approach may require the placement of enforcement areas at regular intervals by widening or designating a monitoring and apprehension area in the median, often by offsetting the median barrier. For reversible, contraflow or queue bypasses, widened shoulders are often applied (Figure 47). Concurrent flow facilities are particularly difficult to enforce since motorists have the ability to freely enter and exit at any point. Therefore, these facilities desirably require special attention to ensure compliance with managed lane policies. Separated facilities provide more of a deterrent for violators, so enforcement activities can be strategically concentrated at access points.

Figure 47: Examples of Enforcement Areas (concurrent flow-left, reversible flow-right)



Recent technology advances have made it possible to automate some of the enforcement responsibilities related to tolling, but in-field presence is still required for occupancy enforcement if HOVs are given priority. The use of ETC for the collection of tolls requires paying users to establish pre-paid toll accounts from which to deduct toll transactions. License plate readers (LPR) capture license plate information for any vehicle that passes under a toll zone without an account or readable toll transponder, which allows operators to collect owed tolls. However, the task of enforcing facilities that offer toll-exemptions for eligible vehicles remains a challenge (Sas, M., S. Carlson, E. Kim, and M. Quant. *Consideration for High Occupancy Vehicle (HOV) to High Occupancy Toll (HOT) Lanes Study*. Publication FHWA-HOP-08-034, FHWA, U.S. Department of Transportation, 2007). Most HOT facilities do not require HOVs and other eligible vehicles to carry a toll transponder, which places the burden of enforcement on visual inspection. In these situations, toll zones can be equipped with beacons that alert nearby enforcement officers when a vehicle passes through without a transponder being read. The activation of the beacon tells the officer to visually inspect the vehicle to ensure that it has the required number of vehicle occupants.

8.5.6 Transit Provisions

Transit design provisions vary in accordance with the intended operation plan. In general such facilities serve to collect and distribute transit patronage and typically fall into the following categories:

- Transit stations (on-line and off-line)
- Park and ride lots
- Park and pool lots

While local transit services may partake of a short segment of a managed lane, the vast majority of service is long-haul express bus-type operations. In this context service may be point-to-point or linked between a series of limited stops, at least in the off-peak period. Seldom does transit station frequency mimic that of light rail or even local service BRT. Point-to-point service may be 20 or more miles in length, and may serve several major employment destinations. As such, stations are often hubs that connect to other local services enroute or at a terminus within a major employment center. Stations are designed and sized to the specific service needs and may be multi-modal serving other transit guideway treatments. These centers provide an interface between transit modes such as between buses offering different services. These facilities may co-exist with park-and-ride lots. Supporting stations and park-and-ride facilities are either located "on-line" in the median (I-110 as an example) or "off-line" with direct access ramps to facilities such as park-and-ride lots (Houston's system is an example). Figure 48 shows such supporting facilities.

Park and ride lots are large gathering sites for motorists to leave their car to take transit. These sites are also drop off and pick up points (often called kiss-and-ride). Park and ride lots need to be strategically located to take maximum advantage of upstream demand, and sized sufficiently to afford decent headways for buses. If point-to-point service is planned, then the lot needs to be big enough to account for full buses leaving at regular headways. If headways are further than 15 minutes apart, patronage will be adversely affected. This means that optimal sizing of park-and-ride lots needs to be from 100 to 300 spaces for linked service and 750 to 1,000 spaces for point-to-point service. An example lot and loading area are shown in Figure 49.

Figure 48: On-Line and Off-Line Transit Stations (I-110 Los Angeles left, I-45 Houston right) (right photo courtesy of Texas Transportation Institute)



Figure 49: Park and Ride Lots (right photo courtesy of Texas Transportation Institute)

Park-and-pool lots are gathering places for less dense areas, serving both as gathering points for ridesharing and bus pooling primarily. Local transit service may also serve these sites. They are often near major cross-roads along a corridor (sometimes on excess public rights-of-way or on leased parking from other land uses), and much further out than express transit service facilities. Examples are shown in Figure 50.

Figure 50: Park-and-Pool Lots

8.5.7 Signing and Markings

Standards on static signing and striping are covered in the 2009 MUTCD (Manual on Uniform Traffic Control Devices (MUTCD), Federal Highway Administration, Washington, D.C., 2009). The manual provides extensive guidance on how managed lanes should be signed and marked to effectively and consistently communicate various lane management strategies to motorists. Chapter 2G lays out standards and guidance related to the signing of managed lanes including signs to define vehicle occupancy, hours of operation, ingress and egress, and pricing. Lane markings for managed lanes are discussed in Chapter 3D. Some of the specific guidance related to dedicated managed lanes in the 2009 MUTCD includes:

- Priced facilities now referred to as Express Lanes (Section 2G.16)
- Painted diamond lane markings relegated to HOV lanes only (Section 2G.16)
- Use of changeable message signs to display toll amount and/or required occupancy in effect (Section 2G.17)
- Use of purple as a background color for signs displaying ETC pictographs (see Figure 51)

Figure 51: Guide Sign for Entrance to Priced Managed Lane (MUTCD Section 2G.18, 2009)

Information pertaining to active traffic management is less obvious in the MUTCD, but examples can be found in the following sections for the following applications:

- Restricting trucks to the right most lane(s) or from using a facility at specific times of day (Section 2B.31 and 2B.39).

- Variable speed limits (Section 2B.13).
- Displaying current toll charged for use of a priced facility (Section 2G.03).
- Lane control signals (Chapter 4M).
- Traffic control signals for freeway ramps (Chapter 4I).

In many of these applications it is possible to apply fixed signs with dynamic elements to communicate changing conditions. Some areas have adopted fully variable matrix signs to communicate this information to address flexible or changing needs in the future.

8.5.8 General ITS Provisions

The ability of Intelligent Transportation Systems to facilitate freeway management strategies is documented in various chapters throughout this handbook. ITS technologies play a critical role in disseminating and gathering information necessary for the successful operation of managed lanes. The implementation of managed lane systems can often take advantage of existing ITS infrastructure on a freeway corridor by integrating or expanding on such systems. Some of the ITS components that are complementary to managed lanes include:

- Traffic detection
- Closed circuit television cameras
- Changeable message signs
- Lane control signals
- Electronic toll collection equipment
- Dynamic pricing algorithms
- License plate recognition

The ability of managed lane operators to respond to changing traffic conditions is vital to maintaining enhanced operating conditions. Traffic management centers (TMCs) serve as a hub for regional communication systems and are therefore ideal interfaces for managed lane operators.

8.6 Planning and Implementation

This section discusses the various tasks and considerations associated with planning and successfully implementing a managed lane project.

8.6.1 Strategy

In order for managed lane systems and facilities to be properly integrated within the freeway system, system-planning needs to occur at various levels, including strategic planning, long-range system planning, short-range planning, and service or operations planning. At the strategic planning level, highway, transit, and tolling agencies need to determine their roles, missions, and types of differential managed lane facilities and services they want to provide in a metropolitan area. Through the long-range planning process, agencies can ensure that managed lane facilities and services are incorporated into the future design of freeway systems and that funding for capital-intensive facilities are programmed into area transportation improvement plans.

Managed lane strategies which do not involve capacity expansion, tolling, and/or pricing are typically supported as part of an operating agency's normal activities, or are addressed during development of other components of the freeway management system (e.g., information dissemination subsystems). Consequently, the primary concern for these strategies is the extent to which introducing the new strategy affects the existing budget for operations and maintenance, and whether this impact can be accommodated through a reallocation of agency funds.

Managed lane options which involve the implementation of tolls and/or congestion pricing can result in revenues that are used to offset the cost of constructing, operating, and maintaining these facilities. Traditionally, toll facilities were converted to "free" roadways once the bonds used to construct the roadway had been paid. Current tolling authority for HOT lanes and congestion pricing applications allows agencies to continue toll operations after bond payment, and to use the revenues to fund other traffic management activities, often required within the corridor from which tolls are collected. As managed lane systems expand into regional networks, this corridor-specific revenue distribution may need to be revisited.

8.6.2 Interagency Roles

Successfully developing and operating managed lane facilities requires agencies that are responsible for the freeway and roadway system, transit services, rideshare programs, and toll collections to actively work together. Interagency

cooperation and coordination is critical to the success of a managed lanes project. Whereas this cooperation is vital, experience also indicates that one agency or group needs to have overall responsibility, and that one individual or a small group of individuals (i.e., "champions") can be instrumental in the development, promotion, and support of managed lane projects.

Table 3 was excerpted from the NCHRP #414, *HOV Systems Manual (NCHRP Report 414: HOV Systems Manual. TRB, National Research Council, Washington, D.C., 1998)* and augmented with additional contemporary managed lane agencies. This table presents the example roles of each agency partner in developing, operating and enforcing a freeway-based managed lane facility.

8.6.3 Systems Planning

Past experience from freeway management projects indicates a preference for implementing managed lane strategies and techniques incrementally where possible to develop operational experience, and to demonstrate the advantages of the techniques to elected officials and to the public. Often, managed lanes were developed under the auspices of small, demonstration-type projects at a location or over a section of freeway where the benefits were expected to be the greatest relative to the cost of implementation. In this way, the partners illustrated the benefits of the strategy and generated the support necessary to proceed with more extensive implementation if desired.

Contemporary planning for managed lanes emphasizes a new shift towards systems planning. Under the context of a managed lane system, individual corridors become a connected network, avoiding gaps which inhibit seamless travel for customers of all eligible users. The reasons for pursuing a managed lane network may include:

- Improving the efficiency of the freeway system by making the best use of available capacity
- Offering congestion relief across the broadest spectrum of the commute shed
- Providing seamless access to free-flow lanes for carpools and buses
- Producing a revenue stream that can be used to finance gap closures and extensions
- Introducing pricing as a tool for transportation financing
- Coordinating regional efforts for managed lane design, traffic management, toll collection, incident management, enforcement, and other components

Table 3: Agencies and Groups Involved in Managed Lane Development and Operations

Agency/Group	Potential Roles and Responsibilities
State Department of Transportation	<ul style="list-style-type: none"> • Overall project management • Developing operations and enforcement plans • Designing and operating the facility • Conducting or assisting with the collection of tolls • Conducting or assisting with customer relations • Staffing multi-agency team/committee • Monitoring the facility performance
Transit Agency	<ul style="list-style-type: none"> • Overall project management or supporting role • Developing or assisting with operations and enforcement plans • Bus and vanpool operations • Enforcement or assisting with enforcement • Monitoring or assisting with monitoring facility performance
State/Local Police	<ul style="list-style-type: none"> • Assist with development of operations, enforcement, and management plans • Responsible for enforcement of managed lane facilities • Responsible for safety management during incidents • Coordination with judicial personnel
Local Municipalities	<ul style="list-style-type: none"> • Arterial connections to managed lane facilities • Developing or assisting with the operations and enforcement plans • Conducting or assisting with the design and operations of the facility • Staffing a multi-agency team or participating on the team
Rideshare Agency	<ul style="list-style-type: none"> • Assist with the development of operations and enforcement plans

- Participate on multi-agency team
- Developing or assisting with the operations and enforcement plans
- Conducting or assisting with the design and operations of the facility
- Developing the toll collection subsystems
- Conducting customer relations
- Monitoring the facility performance
- Assist in multi-agency coordination
- Ensure projects are included in necessary planning, programming, and environmental documentation
- Prepare and approve policies concerning managed lane governance
- Provide funding support
- Approval of planning, programming, design, environmental, and operational documentation

Toll Agency

Metropolitan Planning Organization

Federal Agencies

Significant benefits can accrue from a connected managed lane system. A 2003 performance audit of the Los Angeles HOV system found that fully two-thirds of the travel benefits are lost at gaps in the system where HOV traffic is forced to merge into remaining travel lanes. From a financing and deliverability standpoint, completing a managed lane system can be achieved by considering a network as a whole. Pooling revenues significantly increases bonding capacity and makes it possible to finance development of some corridors that are unlikely to generate the level of revenue required to be financeable on their own. For any given area, whereas most corridors essentially break even (i.e., their revenues cover their operating and maintenance costs), just a few corridors generate net revenue on the order required to secure the bonds. Pooled together for the long term, though, even the "break-even" corridors produce significant net revenues.

While it is important to think of a managed lane network as a single system, geographic sub-areas and corridors can be designated for where sequencing and staging decisions have clear effects on other projects. These decisions provide the framework for a phasing strategy.

8.6.4 Public Interaction

Managed lanes can be politically controversial, especially if they involve the consideration of pricing. Although the public may not initially perceive it, there are inherent differences between traditional toll roads and bridges, road pricing, express toll lanes, and managed lanes that will change the nature of opposition and promotion. Recognizing these differences has proven to be important for advancing any managed lanes project. Opportunities for outreach and coalition-building should be examined, as well as the activity levels of local citizen groups and institutions (example in Figure 52). Potential opinion-setting advocates and opponents, who will influence the opinion of travelers and commuters, can be divided into the following: policy makers, media, business groups, and interest and ideological groups.

- **Policy Makers:** Elected and appointed officials should be kept informed on the use of managed lane facilities. Since elected officials, especially members of the state legislature are often the driving force behind managed lanes and related operational changes, it is important to keep these individuals informed on toll, bus, carpool, and vanpool use.
- **Media:** The broadcast and print media represent an important constituency group. The media has a significant influence on public perceptions and opinions, and represents an important method of getting information out to commuters, the public, and policy makers. Providing representatives from the media with accurate and timely information on managed lane strategies – particularly policy and operational changes – will help ensure that commuters and the public are aware of the changes, understand the reasons why changes are made, and comply with new requirements.
- **Business Groups:** Business groups are typically among the most influential groups to help champion new managed lane initiatives, if those projects are shown to either advance roadway capacity expansion or improve travel time reliability. Attention should be paid to how toll and eligibility policies are structured and promoted. Business groups may oppose specific proposals for concerns regarding disproportionate commercial toll rates, inability to access properties, or managed lane facilities not serving key commercial areas.
- **Interest and Ideological Groups:** Grassroots, special interest, and ideological organizations may become involved with managed lane projects for a variety of reasons and on an ad hoc basis – both in favor and in opposition to the projects. These groups typically organize in response to a particular element of the proposed facility, and use extensive media coverage and grassroots techniques to advance their perspectives. Managing the emergence of these organizations in opposition involves active, extensive, and participatory local involvement in the development of managed lane projects. Furthermore, managing the perceptions of

ideological groups involves outreach in the development of managed lane concepts from a policy perspective, including the consequences and implications of these policies.

Figure 52: Public Outreach for Managed Lanes, Denver, Colorado



Marketing and promoting the managed lane facility is paramount to its successful implementation. More than one facility has either failed or had significant setbacks as a result of not informing or involving the public. The process of successful marketing of managed lanes includes:

- **Public Involvement:** Managed lanes must have public support to be successful. Ensuring that the public is involved early and throughout the planning, design, and implementation stages can help ensure this support. A variety of methods can be used to encourage the participation of commuters, travelers, neighborhood groups, and other organizations. These include meetings, workshops, surveys, focus groups, charettes, and hearings.
- **Public Education:** Building on the early involvement of the public, ongoing public education (and marketing activities) can also enhance the chance of a successful managed lanes project. Experience indicates that ongoing outreach efforts with the public and policy makers are needed even with effective managed lane facilities. Given the turnover in elected and appointed officials, the numerous demands on these individuals, and the multitude of projects and programs vying for the attention of officials and the public, regular updates on the use, effectiveness, and benefits of managed lanes are needed. The ongoing reinforcement of travel options is also important for new residents as well as long-term commuters.
- **Marketing:** Building from the two other elements, promoting the facility's or project's information to a wider audience provides a means to target specific audiences with specific information. The *HOV Marketing Manual* ([HOV Marketing Manual, Federal Highway Administration, 1994 and updated 2003](https://ops.fhwa.dot.gov/freewaymgmt/publications/frwy_mgmt_handbook/revision/jan2011/mgdlaneschp8/sec8.htm)) provides detailed information on marketing managed lanes and should be used as a reference.

8.6.5 Performance Monitoring

Managed lanes primarily concern the ongoing and active management of freeway capacity to ensure free flow speeds and travel time reliability. As a result, the operational scheme must be designed to adapt and change to prevailing trends in traffic. Core to this adaptation is establishing a mechanism for regularly evaluating the effectiveness of the managed lane strategies. It is important to monitor the impacts and benefits of the strategies and techniques to determine if they meet the intended objectives and functions for which they were designed, and, if they continue to provide the benefits over time. Also, it is important that the evaluation data be collected so that they can be collated and disseminated in an ongoing manner to elected officials and the general public. In this way, continued funding for these strategies can be obtained more readily, and expansion of activities to further improve facility operations will be more readily accepted.

Evaluating the effectiveness of specific treatments should not be considered a one-time activity, but should be part of a periodic review of the effectiveness of the component and of the overall system. For each objective associated with managed lanes, (an) appropriate measure(s) of effectiveness should be identified, along with the desired threshold level of change that will be used to determine if the facility has met the objective.

8.7 Emerging Trends

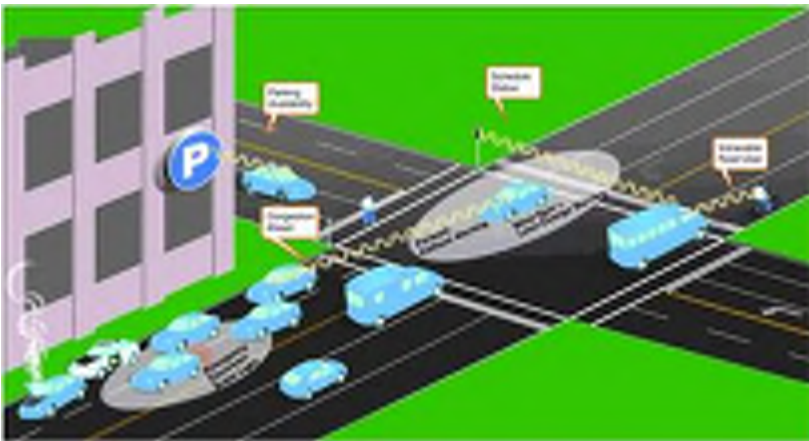
8.7.1 Intelligent Vehicle Systems

Since 1999, the Federal Communications Commission (FCC) has reserved the 5.9 GHz frequency spectrum for the deployment of dedicated short range communications (DSRC). This relatively unused spectrum has been tapped by AASHTO and the USDOT for the integration of information between vehicles and roadway infrastructure. First known as the Vehicle Infrastructure Integration (VII) initiative and now promoted as a system that espouses features and capabilities for the next generation of ITS, current prototype systems do not necessarily require use of the 5.9 GHz spectrum, but could benefit significantly from it.

Two of the primary features for managed lane applications are:

- **Lane-level positioning.** Future systems incorporate an advanced GPS position system (either differential GPS or carrier phase GPS), which allows for positional accuracy of the vehicle relative to the lane in which it is traveling. Lane-level positioning could enable a use-registration system for managed lanes (e.g., reserve a "slot" on the managed lane on approach), reduction in gantry/electronic toll collection equipment in the right of way, and/or differential pricing by lane of travel. These benefits in conjunction with one-another could reduce the cost of deployment of managed lanes and enhance their demand-regulation effectiveness.
- **Vehicle-to-vehicle communication.** Future systems also feature vehicle-to-vehicle communication capabilities (Figure 53), a design feature that first was proposed under the Intelligent Vehicle Highway Systems initiative, the predecessor to ITS. Capable of using 5.9 GHz or 2.4 GHz (Bluetooth) spectrum, newly emerging systems can assist with enhancing safety on freeway corridors, as vehicles would be aware of each other and their movements. Enhanced safety yields benefits in reduced crashes, greater functional capacities per lane, and the use of shoulders for freeway operations.

Figure 53: Proposed Vehicle-to-Vehicle Communication (courtesy www.intellidriveusa.org, 2010)



8.7.2 Managed Lanes within Managed Corridors

Whereas AASHTO and USDOT have established trade-offs for managed lane facility design, future managed lane networks may rely upon an aggressive deployment of active traffic management (ATM) to complement the use of shoulder lanes for capacity expansion. Based upon established practice in Europe and described elsewhere in this chapter, ATM is useful as a safety and operational mitigation device in the use of shoulder lanes. Managed lane operations are able to benefit from selective application of available ATM strategies, notably connector and ramp metering, lane control signals, queue warning, and speed harmonization.

Ramp metering is already prevalent in many U.S. communities and provides benefits in smoothing critical merge activity and in delaying the onset of congestion. However, any sudden and unexpected formation of queues can contribute to unstable flow, loss of throughput and higher incidence of crashes. The implementation of speed harmonization and queue warning to compliment ramp and connector metering would help resolve the unstable traffic parameters leading from entrance ramp to managed lane, especially with use of shoulders.

Altogether, the use of speed harmonization, queue warning, connector and ramp metering, and lane control signalization constitutes a managed corridor, whereby traffic patterns are affected across all lanes of travel. This managed corridor, though, may still benefit from managed lanes within the corridor. Much like a similar application implemented along the I-35W PDSI project, these managed corridor treatments increase efficiency and improve operational safety. As applied on I-35W, the inside shoulder is expanded to 14 feet, with use allowed for eligible traffic during peak periods, reverting to breakdown/refuge only in off-peak periods. ATM is used to manage flows, and provide warnings of downstream incidents. Additionally, emergency refuge areas are constructed every ¼ mile whenever an

interchange is not available downstream. This design section not only assists in implementing a managed lane, but it also serves as a mitigating tool for safety concerns.

8.7.3 Public Private Partnership Delivery

Public Private Partnerships (P3) have started to become an important tool for the implementation of managed lane systems. P3 is most useful for priced managed lane applications, where revenue is generated by the project; however, P3 applications may also be appropriate where project acceleration is desired. As an alternative project delivery mechanism, P3 can take many forms, with escalating levels of leverage and risk in exchange for financing. Private sector participation may be involved in a traditional, fully-segmented procurement approach (design – bid – build) to a fully integrated method requiring a true partnership with the private sector, such as design – build – operate – maintain models. Projects with sufficient revenue to support financing for all or a meaningful portion of the managed lane project development and implementation costs are usually good candidates for long-term private financing when the public entity's goal is to maximize funding capacity. P3 delivery entails a transfer of risk to the private sector partner. For priced managed lanes, this risk transference is typically associated with revenue. The risks associated with revenue collection can be assumed either by the private sector or by the public sector through revenue guarantees or shadow tolling.

Two recent examples illustrate the use of P3 for managed lane development.

- The Virginia I-495 Capital Beltway involves the construction of 56 lane miles of priced managed lanes at a cost of approximately \$2 billion. Four funding sources are used by the P3 developers in this Design-Build arrangement: private activity bonds, private activity, TIFIA loans, and state funds. This project served as a milestone for not only the largest financing of a managed lane project, but also the first time a private activity bond was used for managed lanes.
- Florida's I-595 Express Lanes Corridor project entails not only the construction of three reversible managed lanes (35 lane miles), but also a reconstruction of the entire mainline and frontage roads. The funding model for this \$1.8 billion Design-Build-Finance-Operate-Maintain contract includes \$780 million in bank debt secured by availability payments from the public sector (Florida Department of Transportation) to the private sector developers. Availability payments, made monthly by Florida DOT to the developer, are dependent upon performance, with degradation of service quality and/or performance metrics yielding lower payments.

8.8 Case Study Examples

8.8.1 I-495 Exclusive Bus Lane (XBL) (New Jersey)

The Exclusive Bus Lane (XBL) on New Jersey Route 495 is one of the few examples of a managed lane on a freeway facility dedicated to the exclusive use of buses. The XBL was the nation's first contra-flow bus-only lane on a freeway and paved the way for future implementation of Bus Rapid Transit (BRT) systems around the country. Today the XBL still carries the largest volume of buses and passengers of any HOV lane in North America.

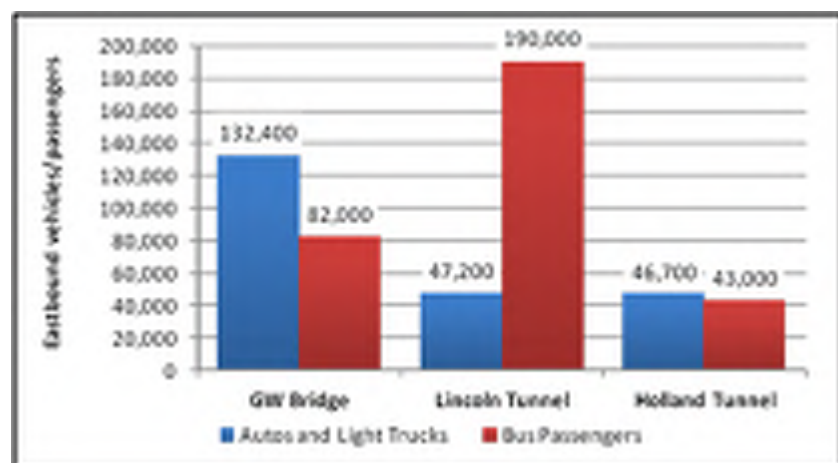
The Port Authority of New York and New Jersey opened the Exclusive Bus Lane on New Jersey Route 495 on December 18, 1970. This contra-flow bus lane operates within a 10-foot lane on a 2.5-mile segment of Route 495 leading from the New Jersey Turnpike to the Lincoln Tunnel and provides a vital link to the Midtown Port Authority Bus Terminal in midtown Manhattan. Each weekday morning from 6-10 a.m., one westbound travel lane is converted to serve buses heading eastbound through the tunnel (Figure 54). The XBL serves over 1,700 buses and carries more than 62,000 passengers to midtown Manhattan every weekday morning, which represents almost 80 percent of the tunnel's peak period inbound person-trips (The Port Authority of New York and New Jersey (PANYNJ). *Annual Report 2006*. Accessed June 26, 2010). Directionality is communicated through the daily placement of plastic pylons that delineate the contraflow lane and use of overhead lane controls.

Figure 54: XBL being Deployed (left) and Operational (right)



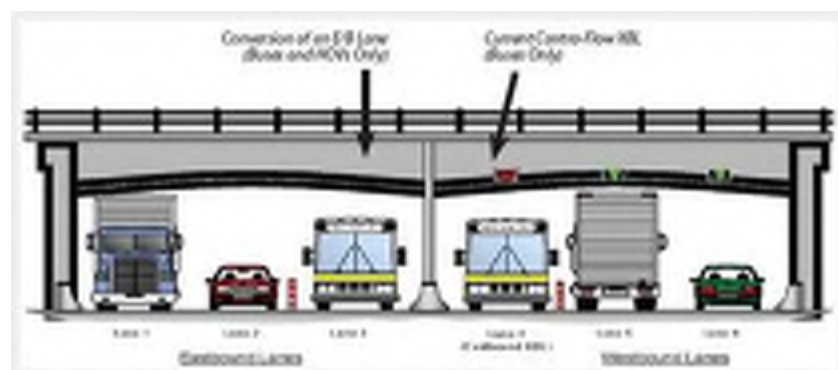
Even before the XBL was implemented, bus volumes through the Lincoln Tunnel were high due to the large number of routes serving commute trips from New Jersey into downtown Manhattan. Figure 55 shows the level of demand in 2008 for eastbound trips over the Hudson River, for which the Lincoln Tunnel serves as one of only three crossing points. Bus volumes have increased dramatically since the inception of the XBL, although the level of growth is slowing due to capacity constraints. When first opened, there were some 800 buses during the four hour AM peak period. That volume grew to 1,600 buses in 1986 and then more slowly to 1,700 buses in 1999 (*TCRP Report 95: Traveler Response to Transportation System Changes, Chapter 14: Road Value Pricing*. TRB, National Research Council, Washington, D.C., 2003). Since 1999, bus volumes have remained fairly constant indicating that the facility has approached its capacity.

Figure 55: 2008 Average Weekday Bus and Car Trips on the George Washington Bridge, Lincoln and Holland Tunnels (Source: Port Authority of New York and New Jersey)



The reputation of the XBL as an express route to bypass congestion is being threatened as the XBL approaches capacity. The XBL is still reported to save bus riders an average of 15 to 20 minutes as compared to travel in the general purpose lanes, but the ability of the XBL to continue to provide meaningful travel time savings as the lane approaches capacity is in jeopardy. The Port Authority projects bus trips across the Hudson River to increase by 18 percent by 2030. In response to growing demand on the XBL, the Port Authority commissioned a study in 2006 that identified four alternatives for helping to alleviate congestion in the Lincoln Tunnel. One option identified was to create a second bus lane by taking one of the eastbound general purpose lanes and operating it as a concurrent bus lane (see Figure 56).

Figure 56: Possible Option to Convert Eastbound General Purpose Lane to HOV (Source: Port Authority of New York and New Jersey)



The dedication of a second bus priority lane would likely leave a significant amount of excess capacity in the bus lane and simultaneously cause increased congestion in the general purpose lanes. As a result, the Port Authority is investigating the application of a HOT strategy for a second bus lane (*VPP Projects Involving Tolls Category: Priced Lanes, Sub-Category: Priced Tollways*, FHWA. Accessed June 26, 2010) [Link no longer active]. This strategy would allow other vehicles to pay to use any excess capacity in the converted general purpose lane. The implementation of a HOT lane in this setting poses several challenges due to the high number of buses, restricted lane and shoulder widths, and prediction that bus traffic is expected to increase significantly in the future.

8.8.2 I-394/I-35W MnPass Lanes (Minneapolis)

The conversion of HOV lanes to HOT operation is becoming increasingly popular, and the I-394 and I-35W MnPass Lanes are two such examples. The MnPass lanes allow single occupant vehicles to pay an electronic toll to use the HOV lanes while transit buses, carpools (HOV-2+) and motorcycles continue to use the lanes for free. When pricing was implemented in May 2005, I-394 was the first project to toll on a facility that is separated from adjacent general purpose lanes by only a painted buffer along much of its distance. The I-35W MnPass lanes opened in 2009 are the first example nationally to incorporate the use of a priced dynamic shoulder lane during peak periods.

I-394 extends 11 miles and connects downtown Minneapolis and I-94 in the east with I-494 and various suburbs in the west. The MnPass facility on this corridor consists of a three-mile section of two barrier-separated reversible lanes and eight miles of buffer-separated diamond lanes (see Figure 57). The reversible section is always tolled when it is operational, while the buffer-separated lanes only operate during morning and evening peak periods (6am-10am and 2pm-7pm) and are open to all traffic otherwise.

Figure 57: I-394 MnPass Lanes (courtesy Minnesota DOT)



I-394 was opened with HOV lanes in 1992, but underutilization and increasing congestion in the general purpose lanes resulted in frequent requests to open the HOV lanes to use by all traffic. In response, the Minnesota Department of Transportation (MnDOT) commissioned a study to evaluate the effectiveness of the lanes. The study was completed in 2001 and found that opening the HOV lanes to all traffic would result in a congested facility and that conversion to HOT operations would be the most cost-effective solution (Cambridge Systematics. *Twin Cities HOV Study: Volume I* [Link no longer active]. Accessed June 26, 2010). A Value Pricing Task Force representing a broad constituency of transportation interests also recommended that the HOV facility on I-394 be converted to HOT lanes. In 2003 the necessary legislation was passed in Minnesota to allow MnDOT to proceed with implementation.

The MnPass lanes on I-35W were implemented more recently in September of 2009 and are currently split into two unconnected segments. The southern portion converted a 5.7 mile NB and a 7.5 mile SB buffer-separated HOV lane into a HOT lane. Like the non-reversible section of the I-394 lanes, these lanes are only tolled during peak periods. Closer to downtown Minneapolis, there is also a 1.2 mile segment called a priced dynamic shoulder lane (PDSL). The PDSL allows eligible and toll-paying vehicles to use the inside shoulder during the morning peak period only. Overhead signs and lane control signals tell motorists whether the PDSL is open to traffic (see Figure 58).

Figure 58: Overhead Lane Controls on PDSL, Minneapolis, Minnesota (courtesy Minnesota DOT)



Tolls for SOVs are calculated according to the level of traffic on the express lanes. The toll level is adjusted as frequently as every three minutes to manage demand and ensure that speeds on the lanes remain at 50-55 miles per hour. Current toll rates average between \$1.00 and \$4.00, with the maximum toll set at \$8.00 ([Minnesota Department of Transportation MnPASS website](#). Accessed June 26, 2010). Electronic signs along the I-394 and I-35W corridors display the current toll to use the lanes and also tell motorists whether the lanes are in operation. These signs read "OPEN" when the lanes are open to general traffic and show a price when tolling is in effect. The one exception is the PDSL, reverts to a breakdown shoulder when it is not being used as a HOV lane. All tolls are collected using electronic toll collection. SOVs who choose to use the lanes must open a MnPass account and obtain and mount a transponder in their vehicles. These transponders communicate with readers mounted on overhead gantries and debit the user's prepaid account each time they use the lanes.

Support for the MnPass projects did not encounter as much public opposition as previous attempts to implement value pricing in Minnesota. Researchers have attributed this to a general change in attitude among the public at large regarding such policies. This shift was driven in large part by the large state budget deficit, growing congestion, and a new awareness among the public regarding transportation issues and value pricing specifically. A 2004 survey, just prior to the development of the facility, found that 6 out of 10 residents within the I-394 corridor supported the idea of giving solo drivers the option paying a toll to use the I-394 HOV lanes (Zmud, J., M. Bradley, and C. Simek, Attitudes and Willingness to Pay for Tolled Facilities. In *Transportation Research Record*, No. 1812, Transportation Research Board, Washington, D.C., 2007, pp. 58-65).

8.8.3 I-66 Dynamic HOV/Shoulder Lane (Virginia)

As the primary east-west highway corridor connecting Washington, D.C. and Northern Virginia, I-66 suffers from heavy commute traffic. Different HOV strategies have been implemented on segments of I-66 to help alleviate congestion during peak periods. As an example, all lanes on the segment of I-66 between the Capital Beltway and the Theodore Roosevelt Bridge are restricted to HOV-2+ vehicles and Dulles Airport traffic during morning and afternoon peak periods.

The 6.5 mile segment of I-66 from the Beltway to U.S. 50 is less restrictive and only reserves the leftmost lane to HOV-2+ use. What makes this segment unique is the fact that while HOV-2+ restrictions are in effect, the right shoulder is converted to use by general purpose vehicles to maintain 3 general purpose lanes in each direction at all times. This dynamic HOV/Shoulder Lane (HOV/SL) on I-66 allows for continuous access to the HOV lane along 15 miles of the corridor west of U.S. 50, and at the same time the operation maintains the same number of three general purpose lanes in each direction without the need for costly expansion (see Figure 59).

Figure 59: Dynamic HOV Lane (leftmost lane) and Dynamic Shoulder Lane (rightmost lane) on I-66



The HOV/SL operates during morning and afternoon peak periods. The left lane operates as an HOV lane from 5:30 am – 9:30 am in the eastbound direction and from 3:00 pm – 7:00 pm in the westbound direction. However, the right shoulder lane is open for longer periods of time since congestion often extends beyond the HOV hours of operation. The shoulder lane remains open to all traffic until 11 am in the eastbound direction and is open for a period starting one hour earlier and ending one hour later than the HOV hours in the westbound direction. Overhead signage and lane control signals inform motorists when the shoulder lane is open to traffic (see Figure 60). A red X over the lane indicates that the shoulder is closed to traffic and a green arrow indicates that the shoulder is available for use as a travel lane.

Figure 60: I-66 Shoulder Lane Control Sign and Signal

There are a total of nine emergency refuge areas located along the HOV/SL segment (4 eastbound and 5 westbound) that provide accommodation for breakdowns and enforcement activities. Each of the three general purpose travel lanes, including the lane converted to HOV use during peak periods, are 12 feet wide. The exterior shoulder that is opened to traffic while HOV operations are in effect is 11 feet wide. Despite the reduced lane width and the movement of vehicles into and out of the shoulder, a study of crash data collected between 2002 and 2004 concluded that the HOV/SL managed lane strategy did not contribute significantly to an increase in crash frequency (Lee, J.T.; Dittberner, R.; and Sripathi, Hari. *Safety Impacts of Freeway Managed-Lane Strategy: Inside Lane for High Occupancy Vehicle use and Right Shoulder Lane as Travel Lane During Peak Periods*, Transportation Research Record, Transportation Research Board, Washington, DC, 2008).

In 2007, typical traffic volumes during the eastbound HOV/SL hours ranged from 19,500 to 27,000 vehicles; with 21,000 to 25,000 vehicles westbound. These compare with 184,000 AADT for the corridor in this segment ([Virginia Department of Transportation. 2007 Traffic Data](#). Accessed June 26, 2010). Within the HOV/SL segment, volume-to-capacity (V/C) ratios ranged between 0.90 and 1.00 in the eastbound direction. In the westbound direction LOS F conditions were common, with V/C ratios between 0.83 and 1.01.

Increasing congestion along the corridor prompted a Major Investment Study for the portion of I-66 outside of the Capital Beltway in 1999. The study recommended the construction of barrier-separated, reversible HOV lanes and the addition of one general purpose lane in each direction (Virginia Department of Transportation. *I-66 Multimodal Transportation and Environmental Study*, 2003. Accessed June 26, 2010. Note: Removed from intranet after access date.). More recently, Virginia DOT commissioned an I-66 Multimodal Transportation and Environmental Study to evaluate improvements that can accommodate future traffic demands. This study is still ongoing.

A study of crash data collected between 2002 and 2004 concluded that the HOV/SL managed lane strategy did not contribute significantly to an increase in crash frequency (Lee, J.T.; Dittberner, R.; and Sripathi, Hari. *Safety Impacts of Freeway Managed-Lane Strategy: Inside Lane for High Occupancy Vehicle use and Right Shoulder Lane as Travel Lane During Peak Periods*, Transportation Research Record, Transportation Research Board, Washington, DC, 2008). Researchers found that high AADT volumes, light conditions, and aggressive behavior by motorists were bigger influencers of crashes than HOV/SL operations.

8.8.4 M42 Active Traffic Management (Great Britain)

The Active Traffic Management (ATM) system in use on Great Britain's M42 motorway is an example of a strategy intended to manage traffic on an entire corridor. The ATM system in use on this section of motorway illustrates how various traffic management strategies can be combined to better manage traffic on a congested corridor. The highlight of the system is the ability to automatically alert drivers to reduce speeds and to allocate temporary use of the shoulder lane during periods of congestion.

The M42 motorway serves as part of a north-east to south-west cross-country route in Great Britain. Between Junction 3a and Junction 7, the 11 mile segment of the motorway forms part of a circumferential route around the city of Birmingham. This six-lane section of motorway serves as an access road to Birmingham Airport as well as several business parks and residential areas, and as a result experiences variable traffic volumes that often lead to vehicle slow-downs. In 2001, the Minister of Transport commissioned the M42 Active Traffic Management Pilot Program with the goal of cutting congestion and increasing capacity using various ATM strategies. Different elements of the ATM

system have come online in phases since construction began in 2003. The completed system includes installation of the following:

- Lightweight gantries
- Dynamic message signs that relay real-time information to motorists
- Lane control signals that indicate whether lane is useable (including shoulder lane) and show current speed limit
- A variety of fixed signs indicating the start and end of the ATM section and the various systems in place
- Closed circuit television cameras that relay information back to traffic management centers
- Roadway sensors that monitor vehicle speeds and automatically trigger changes in speed limits to keep traffic flowing at predetermined levels
- Emergency refuge areas and roadside telephones
- Combined equipment cabinets that contain all roadside equipment for operating signs, signals, and CCTV cameras
- Emergency refuge areas and roadside telephones

The elements listed above are used synchronously to avoid breakdowns in the traffic flow during congested peak periods. When roadway sensors detect that vehicle speeds at a particular location are dropping below a predefined threshold, variable speed limits and dynamic message signs are automatically engaged at upstream locations to alert motorists to the presence of congestion ahead. This process is executed based on an assessment algorithm and does not require any intervention by an operator. Variable speed limits are shown on lane control signals affixed to overhead gantries spaced at regular intervals throughout the corridor (Figure 61). Speeds adjust downward on successive upstream gantries typically in 10 mph increments, and are seldom set below about 40mph even if stop-and-go conditions are present around the incident site. For a typical incident involving a stalled vehicle, the closest gantry might show 40mph, graduating back through the traffic stream showing 50mph and 60mph, respectively, up to the given speed limit.

Figure 61: Variable Speed Limit and Dynamic Message Sign, M42 Motorway, Manchester, United Kingdom (courtesy Highways Agency, UK)



The M42 ATM system also utilizes the outside shoulder as a travel lane during periods of congestion. As shown in Figure 61, dynamic message signs are used to inform motorists about the use of the shoulder as a travel lane. The dynamic shoulder is engaged to relieve congestion and manage incidents. Initially, the shoulder lane was only activated when speeds dropped to 50 mph, but starting in 2008 the shoulder has been used with posted speeds of up to 60 mph (UK Highways Agency. *M42 ATM Monitoring and Evaluation 4-Lane Variable Mandatory Speed Limits: HSR60 6 Month Operation Report*, 2009. [Link is no longer active]). To compensate for the loss of the shoulder as a refuge area during peak periods, the project has added emergency refuge areas spaced at about 1,600 foot intervals (see Figure 62). Emergency call boxes are also provided at each refuge area.

The UK Highways Agency has also commissioned a M42 Active Traffic Management monitoring and evaluation project to evaluate the performance of the pilot project. A report released in June 2008 concluded that the M42 ATM system was successful in reducing congestion, improving travel time reliability, and increasing capacity (UK Highways Agency. *M42 ATM Monitoring and Evaluation Project Summary Report*, 2009.). The report documents a 9 percent increase in observed capacity, a 9 to 24 percent reduction in travel times, and a 22 percent reduction in the variability of travel

times. Furthermore, vehicle emissions have been reduced between 4-10 percent and fuel consumption has been reduced by 4 percent.

Figure 62: M42 Motorway Showing Emergency Pullout, Manchester, United Kingdom.



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Appendix C



Peak Period Traffic Volumes

TOAR Volumes Supersede Traffic Volumes Report Volumes

I-15 Southbound Existing (2019) Peak Period

Adjusted Demand	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121
	SB	SB		SB		SB		SB		SB		SB		SB		SB				SB	
	ON	OFF		ON		OFF		OFF		ON		ON		OFF		ON				OFF	
	SB I-15 North of Hidden Valley	SB Off to Hidden Valley		SB On from Hidden Valley		SB Off to WB SR-91		SB Off to EB SR-91		SB On from EB SR-91		SB On from WB SR-91		SB Off to Magnolia		SB On from Magnolia		SB On from EL		SB Off to Ontario	
04:00			1656	257	1913	1090	823	243	580	673	1253	382	1635	674	961	314	1275	939	2214	247	1967
05:00			2402	174	2576	785	1791	560	1231	996	2227	721	2948	805	2143	306	2449	1484	3933	523	3410
06:00			3011	252	3263	818	2445	884	1561	1372	2933	1262	4195	886	3309	345	3654	1543	5197	863	4334
07:00			4057	436	4493	817	3676	1277	2399	1715	4114	1587	5701	1239	4462	539	5001	1554	6555	834	5721
08:00			4580	382	4962	972	3990	1201	2789	1818	4607	1389	5996	1431	4565	525	5090	1486	6576	1081	5495
09:00			4308	441	4749	1116	3633	1006	2627	1856	4483	1103	5586	1408	4178	452	4630	1094	5724	921	4803
10:00			3932	482	4414	1480	2934	905	2029	2071	4100	1105	5205	1195	4010	487	4497	680	5177	840	4337
11:00			4538	526	5064	1791	3273	899	2374	2180	4554	966	5520	1216	4304	658	4962	524	5486	920	4566
12:00			4381	601	4982	1774	3208	1015	2193	2295	4488	1025	5513	1322	4191	746	4937	441	5378	1002	4376
13:00			4816	586	5402	1910	3492	931	2561	2540	5101	1067	6168	1348	4820	705	5525	384	5909	1043	4866
14:00			5706	640	6346	1980	4366	925	3441	2226	5667	1018	6685	1302	5383	800	6183	375	6558	864	5694
15:00			6134	545	6679	1818	4861	1096	3765	1827	5592	873	6465	1305	5160	648	5808	423	6231	787	5444
16:00			6080	533	6613	1849	4764	1111	3653	1408	5061	895	5956	1427	4529	613	5142	497	5639	636	5003
17:00			4928	459	5387	1614	3773	1128	2645	1643	4288	1224	5512	1329	4183	535	4718	383	5101	569	4532
18:00			5134	434	5568	1643	3925	1089	2836	1942	4778	1168	5946	973	4973	437	5410	265	5675	665	5010
19:00			4473	404	4877	1304	3573	888	2685	2162	4847	1189	6036	854	5182	398	5580	150	5730	899	4831

I-15 Southbound Existing (2019) Peak Period

Adjusted Demand	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142
	SB		SB		SB		SB		SB		SB		SB		SB		SB		SB		SB
	ON		OFF		ON		OFF		ON		OFF		ON		OFF		ON		OFF		ON
	SB On from Ontario		SB Off to El Cerrito		SB On from El Cerrito		SB Off to Cajalco		SB On from Cajalco		SB Off to Weirick		SB On from Weirick		SB Off to Temescal Canyon		SB On from Temescal Canyon		SB Off to Indian Truck Trail		SB On from Indian Truck Trail
04:00	77	2044	22	2022	38	2060	242	1818	50	1868	119	1749	29	1778	292	1486	40	1526	54	1472	56
05:00	116	3526	73	3453	75	3528	279	3249	67	3316	215	3101	35	3136	356	2780	56	2836	97	2739	106
06:00	242	4576	181	4395	160	4555	358	4197	143	4340	347	3993	67	4060	362	3698	115	3813	218	3595	153
07:00	426	6147	474	5673	417	6090	455	5635	165	5800	574	5226	115	5341	455	4886	153	5039	290	4749	177
08:00	349	5844	299	5545	242	5787	526	5261	194	5455	635	4820	96	4916	575	4341	125	4466	245	4221	234
09:00	401	5204	290	4914	204	5118	490	4628	204	4832	534	4298	132	4430	588	3842	180	4022	260	3762	155
10:00	397	4734	297	4437	178	4615	541	4074	190	4264	502	3762	125	3887	621	3266	187	3453	268	3185	196
11:00	463	5029	401	4628	200	4828	627	4201	239	4440	589	3851	154	4005	597	3408	163	3571	361	3210	195
12:00	639	5015	554	4461	254	4715	609	4106	284	4390	686	3704	155	3859	530	3329	221	3550	392	3158	187
13:00	551	5417	582	4835	266	5101	522	4579	308	4887	652	4235	210	4445	593	3852	246	4098	463	3635	166
14:00	577	6271	599	5672	440	6112	446	5666	384	6050	747	5303	263	5566	608	4958	243	5201	523	4678	213
15:00	669	6113	401	5712	679	6391	350	6041	622	6663	780	5883	382	6265	563	5702	377	6079	575	5504	185
16:00	662	5665	348	5317	785	6102	261	5841	740	6581	591	5990	440	6430	460	5970	415	6385	567	5818	202
17:00	647	5179	304	4875	775	5650	240	5410	723	6133	548	5585	387	5972	446	5526	421	5947	540	5407	209
18:00	574	5584	329	5255	537	5792	350	5442	502	5944	631	5313	307	5620	359	5261	299	5560	538	5022	137
19:00	500	5331	447	4884	333	5217	443	4774	271	5045	657	4388	168	4556	356	4200	196	4396	537	3859	101

I-15 Southbound Existing (2019) Peak Period

Adjusted Demand	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
		SB		SB		SB		SB		SB		SB		SB		SB	SB
		OFF		ON		OFF		ON		OFF		ON		OFF		ON	OFF
		SB Off to Lake		SB On from Lake		SB Off to Nichols		SB On from Nichols		SB Off to Central		SB On from Central		SB Off to Main		SB On from Main	SB I-15 South of Main
04:00	1528	83	1445	41	1486	37	1449	124	1573	119	1454	300	1754	30	1724	76	1800
05:00	2845	154	2691	75	2766	83	2683	163	2846	256	2590	464	3054	56	2998	159	3157
06:00	3748	203	3545	180	3725	157	3568	272	3840	366	3474	745	4219	54	4165	263	4428
07:00	4926	235	4691	324	5015	235	4780	402	5182	491	4691	1127	5818	113	5705	467	6172
08:00	4455	240	4215	166	4381	102	4279	306	4585	464	4121	1032	5153	94	5059	362	5421
09:00	3917	238	3679	131	3810	126	3684	244	3928	390	3538	869	4407	88	4319	266	4585
10:00	3381	216	3165	144	3309	152	3157	241	3398	451	2947	912	3859	125	3734	256	3990
11:00	3405	261	3144	141	3285	149	3136	263	3399	491	2908	1007	3915	119	3796	287	4083
12:00	3345	275	3070	130	3200	155	3045	239	3284	524	2760	996	3756	135	3621	295	3916
13:00	3801	416	3385	149	3534	172	3362	282	3644	616	3028	1104	4132	173	3959	314	4273
14:00	4891	513	4378	279	4657	266	4391	326	4717	674	4043	1142	5185	229	4956	396	5352
15:00	5689	608	5081	186	5267	254	5013	276	5289	742	4547	1053	5600	252	5348	379	5727
16:00	6020	717	5303	157	5460	202	5258	276	5534	803	4731	1124	5855	291	5564	343	5907
17:00	5616	705	4911	163	5074	217	4857	264	5121	723	4398	1051	5449	270	5179	313	5492
18:00	5159	651	4508	122	4630	173	4457	268	4725	557	4168	908	5076	220	4856	238	5094
19:00	3960	500	3460	95	3555	108	3447	197	3644	552	3092	757	3849	124	3725	183	3908

I-15 Northbound Existing (2019) Peak Period

	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224
	NB	NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB
	ON	OFF		ON		OFF		ON		OFF		ON		OFF		ON		OFF		ON		OFF		ON
Adjusted Demand	NB I-15 South of Main	NB Off to Main SB		NB On from Main		NB Off to Central		NB On from Central		NB Off to Nichols		NB On from Nichols		NB Off to Lake		NB On from Lake		NB Off to Indian Truck Trail		NB On from Indian Truck Trail		NB Off to Temescal Canyon		NB On from Temescal Canyon
04:00	2816	64	2752	124	2876	305	2571	622	3193	103	3090	124	3214	48	3166	734	3900	69	3831	399	4230	111	4119	423
05:00	3762	146	3616	129	3745	538	3207	590	3797	131	3666	123	3789	71	3718	778	4496	100	4396	528	4924	367	4557	469
06:00	4127	283	3844	107	3951	861	3090	559	3649	138	3511	150	3661	133	3528	696	4224	314	3910	460	4370	580	3790	430
07:00	4310	576	3734	119	3853	1062	2791	650	3441	311	3130	161	3291	227	3064	523	3587	412	3175	334	3509	642	2867	267
08:00	3971	401	3570	95	3665	906	2759	540	3299	119	3180	104	3284	132	3152	504	3656	257	3399	395	3794	811	2983	412
09:00	3764	305	3459	76	3535	860	2675	523	3198	196	3002	85	3087	73	3014	410	3424	202	3222	384	3606	623	2983	457
10:00	3746	347	3399	114	3513	938	2575	486	3061	198	2863	136	2999	114	2885	388	3273	185	3088	439	3527	296	3231	491
11:00	3765	359	3406	100	3506	1071	2435	514	2949	175	2774	110	2884	109	2775	269	3044	164	2880	371	3251	355	2896	481
12:00	3770	388	3382	109	3491	992	2499	531	3030	223	2807	150	2957	153	2804	346	3150	160	2990	332	3322	189	3133	495
13:00	3904	422	3482	89	3571	1050	2521	542	3063	271	2792	156	2948	173	2775	369	3144	182	2962	377	3339	179	3160	570
14:00	4237	508	3729	137	3866	1116	2750	615	3365	321	3044	218	3262	210	3052	383	3435	206	3229	441	3670	221	3449	523
15:00	4332	548	3784	138	3922	1155	2767	545	3312	299	3013	186	3199	199	3000	362	3362	164	3198	389	3587	223	3364	468
16:00	4184	527	3657	126	3783	1177	2606	543	3149	290	2859	132	2991	171	2820	357	3177	175	3002	386	3388	163	3225	430
17:00	4158	403	3755	144	3899	1121	2778	545	3323	339	2984	127	3111	172	2939	319	3258	160	3098	373	3471	154	3317	387
18:00	3547	353	3194	89	3283	1016	2267	402	2669	293	2376	107	2483	128	2355	295	2650	121	2529	305	2834	107	2727	322
19:00	3097	210	2887	74	2961	826	2135	321	2456	227	2229	101	2330	119	2211	210	2421	100	2321	211	2532	81	2451	252

I-15 Northbound Existing (2019) Peak Period

Adjusted Demand	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245
	NB	NB		NB		NB		NB		NB		NB		NB		NB				NB	
	OFF			ON		OFF		ON		OFF		ON		OFF		ON				OFF	
		NB Off to Weirick		NB On from Weirick		NB Off to Cajalco		NB On from Cajalco		NB Off to El Cerrito		NB On from El Cerrito Rd		NB Off to Ontario		NB On from Ontario		NB Off to EL		NB Off to Magnolia	
04:00	4542	80	4462	341	4803	62	4741	218	4959	321	4638	196	4834	233	4601	501	5102	8	5094	277	4817
05:00	5026	78	4948	503	5451	63	5388	422	5830	425	5405	354	5759	343	5416	954	6370	59	6311	456	5855
06:00	4220	89	4131	864	4995	89	4906	556	5489	332	5157	661	5818	460	5358	1347	6705	115	6590	520	6070
07:00	3134	60	3074	996	4070	106	3964	902	4863	298	4565	996	5561	712	4849	1504	6353	125	6228	661	5567
08:00	3395	91	3304	968	4272	132	4140	755	4895	237	4658	698	5356	496	4860	1286	6146	161	5985	619	5366
09:00	3440	100	3340	905	4245	120	4125	570	4677	232	4445	457	4902	362	4540	1213	5753	169	5584	508	5076
10:00	3722	180	3542	748	4290	157	4133	455	4585	148	4437	347	4784	388	4396	1014	5410	202	5208	448	4760
11:00	3377	190	3187	713	3900	147	3753	466	4213	154	4059	365	4424	388	4036	939	4975	227	4748	526	4222
12:00	3628	153	3475	685	4160	155	4005	417	4405	138	4267	363	4630	409	4221	905	5126	325	4801	548	4253
13:00	3730	120	3610	714	4324	191	4133	478	4611	221	4390	346	4736	428	4308	873	5181	591	4590	602	3988
14:00	3972	211	3761	729	4490	203	4287	470	4766	358	4408	492	4900	631	4269	877	5146	897	4249	659	3590
15:00	3832	237	3595	790	4385	184	4201	485	4686	246	4440	366	4806	448	4358	939	5297	820	4477	680	3797
16:00	3655	174	3481	624	4105	185	3920	371	4282	248	4034	313	4347	404	3943	866	4809	743	4066	537	3529
17:00	3704	144	3560	625	4185	175	4010	372	4382	275	4107	349	4456	384	4072	817	4889	821	4068	536	3532
18:00	3049	132	2917	492	3409	134	3275	363	3638	247	3391	339	3730	369	3361	739	4100	792	3308	396	2912
19:00	2703	113	2590	368	2958	96	2862	330	3192	182	3010	257	3267	282	2985	630	3615	753	2862	336	2526

I-15 Northbound Existing (2019) Peak Period

Adjusted Demand	246	247	248	249	250	251	252	253	254	255	256	257	258	259
	NB		NB		NB		NB		NB		NB		NB	
	ON		ON		OFF		OFF		ON		ON		OFF	
	NB Loop On from Magnolia		NB On from Magnolia		NB Off to EB SR-91		NB Off to WB SR-91		NB On from WB SR-91		NB On from EB SR-91		NB Off to Hidden Valley	
04:00	230	5047	338	5385	345	5040	2244	2796	461	3257	467	3724	260	3464
05:00	348	6203	431	6634	891	5743	1721	4022	893	4915	908	5823	309	5514
06:00	697	6767	380	7147	1506	5641	1418	4223	1085	5308	1371	6679	454	6225
07:00	929	6496	370	6866	1504	5362	1230	4132	1313	5445	1592	7037	597	6440
08:00	841	6207	363	6570	1431	5139	1454	3685	1025	4710	1492	6202	518	5684
09:00	680	5756	535	6291	1040	5251	1449	3802	961	4763	1446	6209	442	5767
10:00	744	5504	513	6017	1161	4856	1952	2904	895	3799	1401	5200	488	4712
11:00	614	4836	736	5572	1071	4501	2120	2381	868	3249	1455	4704	625	4079
12:00	513	4766	853	5619	954	4665	1860	2805	881	3686	1566	5252	580	4672
13:00	575	4563	772	5335	1105	4230	2162	2068	931	2999	1557	4556	556	4000
14:00	629	4219	682	4901	1222	3679	2210	1469	887	2356	1583	3939	533	3406
15:00	583	4380	573	4953	1240	3713	2186	1527	860	2387	1438	3825	552	3273
16:00	888	4417	536	4953	1120	3833	1998	1835	863	2698	1465	4163	510	3653
17:00	827	4359	592	4951	1365	3586	1874	1712	1039	2751	1472	4223	749	3474
18:00	830	3742	321	4063	1204	2859	1707	1152	905	2057	1601	3658	486	3172
19:00	658	3184	259	3443	907	2536	1399	1137	855	1992	1491	3483	414	3069

I-15 Southbound Opening Year (2030) Peak Period No Build Alternative Forecast

	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121
		SB		SB		SB		SB		SB		SB		SB				SB	
		ON		OFF		OFF		ON		ON		OFF		ON				OFF	
Adjusted Demand		SB On from Hidden Valley		SB Off to WB SR-91		SB Off to EB SR-91		SB On from EB SR-91		SB On from WB SR-91		SB Off to Magnolia		SB On from Magnolia		SB On from EL		SB Off to Ontario	
04:00	1656	257	1913	1090	823	243	580	673	1253	382	1635	674	961	314	1275	939	2214	247	1967
05:00	2402	174	2576	785	1791	560	1231	996	2227	721	2948	805	2143	306	2449	1484	3933	523	3410
06:00	3011	252	3263	818	2445	884	1561	1372	2933	1262	4195	886	3309	345	3654	1543	5197	863	4334
07:00	4057	436	4493	817	3676	1277	2399	1715	4114	1587	5701	1239	4462	539	5001	1554	6555	834	5721
08:00	4580	382	4962	972	3990	1201	2789	1818	4607	1389	5996	1431	4565	525	5090	1486	6576	1081	5495
09:00	4308	441	4749	1116	3633	1006	2627	1856	4483	1103	5586	1408	4178	452	4630	1094	5724	921	4803
10:00	3932	482	4414	1480	2934	905	2029	2071	4100	1105	5205	1195	4010	487	4497	680	5177	840	4337
11:00	4538	526	5064	1791	3273	899	2374	2180	4554	966	5520	1216	4304	658	4962	524	5486	920	4566
12:00	4381	601	4982	1774	3208	1015	2193	2295	4488	1025	5513	1322	4191	746	4937	441	5378	1002	4376
13:00	4816	586	5402	1910	3492	931	2561	2540	5101	1067	6168	1348	4820	705	5525	384	5909	1043	4866
14:00	5706	640	6346	1980	4366	925	3441	2226	5667	1018	6685	1302	5383	800	6183	375	6558	864	5694
15:00	6134	545	6679	1818	4861	1096	3765	1827	5592	873	6465	1305	5160	648	5808	423	6231	787	5444
16:00	6080	533	6613	1849	4764	1111	3653	1408	5061	895	5956	1427	4529	613	5142	497	5639	636	5003
17:00	4928	459	5387	1614	3773	1128	2645	1643	4288	1224	5512	1329	4183	535	4718	383	5101	569	4532
18:00	5134	434	5568	1643	3925	1089	2836	1942	4778	1168	5946	973	4973	437	5410	265	5675	665	5010
19:00	4473	404	4877	1304	3573	888	2685	2162	4847	1189	6036	854	5182	398	5580	150	5730	899	4831

I-15 Southbound Opening Year (2030) Peak Period No Build Alternative Forecast

Adjusted Demand	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142
	SB		SB		SB		SB		SB		SB		SB		SB		SB		SB		SB
	ON		OFF		ON		OFF		ON		OFF		ON		OFF		ON		OFF		ON
	SB On from Ontario		SB Off to El Cerrito		SB On from El Cerrito		SB Off to Cajalco		SB On from Cajalco		SB Off to Weirick		SB On from Weirick		SB Off to Temescal Canyon		SB On from Temescal Canyon		SB Off to Indian Truck Trail		SB On from Indian Truck Trail
04:00	90	2540	30	2510	40	2550	370	2180	50	2230	130	2100	40	2140	310	1830	50	1880	60	1820	70
05:00	140	3970	100	3870	80	3950	430	3520	70	3590	240	3350	40	3390	380	3010	70	3080	100	2980	130
06:00	290	5530	290	5240	160	5400	590	4810	150	4960	390	4570	80	4650	390	4260	130	4390	220	4170	190
07:00	480	7090	580	6510	420	6930	690	6240	170	6410	620	5790	120	5910	480	5430	170	5600	290	5310	210
08:00	400	6770	410	6360	250	6610	760	5850	200	6050	680	5370	100	5470	600	4870	140	5010	250	4760	270
09:00	460	6180	390	5790	210	6000	750	5250	210	5460	580	4880	140	5020	620	4400	200	4600	260	4340	190
10:00	460	5690	400	5290	180	5470	830	4640	190	4830	540	4290	140	4430	650	3780	210	3990	270	3720	230
11:00	530	6080	540	5540	200	5740	960	4780	240	5020	640	4380	170	4550	630	3920	180	4100	370	3730	230
12:00	730	6050	740	5310	260	5570	930	4640	290	4930	740	4190	170	4360	560	3800	250	4050	400	3650	220
13:00	730	6510	830	5680	380	6060	1500	4560	410	4970	850	4120	290	4410	670	3740	290	4030	470	3560	190
14:00	770	7540	850	6690	620	7310	1280	6030	510	6540	980	5560	360	5920	690	5230	290	5520	530	4990	240
15:00	890	7360	570	6790	960	7750	1010	6740	820	7560	1020	6540	520	7060	640	6420	440	6860	580	6280	210
16:00	860	6780	500	6280	1030	7310	870	6440	920	7360	780	6580	560	7140	510	6630	470	7100	570	6530	220
17:00	840	6270	460	5810	1020	6830	850	5980	910	6890	730	6160	510	6670	500	6170	480	6650	540	6110	230
18:00	770	6700	480	6220	790	7010	960	6050	680	6730	820	5910	430	6340	410	5930	360	6290	540	5750	160
19:00	700	6440	600	5840	580	6420	1050	5370	450	5820	840	4980	290	5270	410	4860	260	5120	540	4580	120

I-15 Southbound Opening Year (2030) Peak Period No Build Alternative Forecast

	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
		SB		SB		SB		SB		SB		SB		SB		SB	SB
		OFF		ON		OFF		ON		OFF		ON		OFF		ON	OFF
Adjusted Demand		SB Off to Lake		SB On from Lake		SB Off to Nichols		SB On from Nichols		SB Off to Central		SB On from Central		SB Off to Main		SB On from Main	SB I-15 South of Main
04:00	1890	120	1770	60	1830	60	1770	140	1910	150	1760	340	2100	50	2050	90	2140
05:00	3110	220	2890	110	3000	120	2880	190	3070	320	2750	520	3270	90	3180	170	3350
06:00	4360	290	4070	270	4340	220	4120	320	4440	470	3970	850	4820	100	4720	290	5010
07:00	5520	320	5200	420	5620	300	5320	450	5770	600	5170	1230	6400	160	6240	490	6730
08:00	5030	330	4700	260	4960	170	4790	350	5140	570	4570	1140	5710	140	5570	390	5960
09:00	4530	330	4200	190	4390	180	4210	280	4490	490	4000	970	4970	140	4830	290	5120
10:00	3950	300	3650	210	3860	220	3640	280	3920	560	3360	1010	4370	190	4180	280	4460
11:00	3960	360	3600	200	3800	210	3590	300	3890	610	3280	1120	4400	180	4220	310	4530
12:00	3870	380	3490	190	3680	220	3460	270	3730	650	3080	1110	4190	210	3980	320	4300
13:00	3750	560	3190	210	3400	250	3150	300	3450	710	2740	1130	3870	290	3580	330	3910
14:00	5230	690	4540	380	4920	380	4540	350	4890	780	4110	1170	5280	380	4900	420	5320
15:00	6490	810	5680	260	5940	370	5570	300	5870	860	5010	1080	6090	420	5670	400	6070
16:00	6750	930	5820	210	6030	280	5750	290	6040	910	5130	1150	6280	440	5840	360	6200
17:00	6340	920	5420	210	5630	300	5330	280	5610	830	4780	1070	5850	420	5430	330	5760
18:00	5910	870	5040	170	5210	250	4960	290	5250	660	4590	930	5520	370	5150	250	5400
19:00	4700	720	3980	150	4130	190	3940	220	4160	660	3500	780	4280	270	4010	200	4210

I-15 Northbound Opening Year (2030) Peak Period No Build Alternative Forecast

	201	202	203	204	205	206	207	262	263	264	265	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224
	NB	NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB
	ON	OFF		ON		OFF		OFF		OFF		ON		OFF		ON		OFF		ON		OFF		ON		OFF		ON
Adjusted Demand	NB I-15 South of Main	NB Off to Main SB		NB On from Main		NB Off to Central		NB Loop Off to Central		NB Hook Off to Dexter		NB On from Central/Dexter		NB Off to Nichols		NB On from Nichols		NB Off to Lake		NB On from Lake		NB Off to Indian Truck Trail		NB On from Indian Truck Trail		NB Off to Temescal Canyon		NB On from Temescal Canyon
04:00	3160	70	3090	340	3430	110	3320	230	3090	60	3030	630	3660	120	3540	260	3800	60	3740	1110	4850	100	4750	400	5150	130	5020	460
05:00	4220	160	4060	360	4420	180	4240	400	3840	100	3740	590	4330	150	4180	260	4440	80	4360	1180	5540	150	5390	530	5920	410	5510	510
06:00	4630	320	4310	290	4600	240	4360	700	3660	160	3500	560	4060	170	3890	300	4190	150	4040	990	5030	460	4570	460	5030	650	4380	460
07:00	4810	610	4200	310	4510	440	4070	700	3370	160	3210	650	3860	340	3520	310	3830	250	3580	820	4400	550	3850	340	4190	720	3470	300
08:00	4470	440	4030	280	4310	280	4030	700	3330	160	3170	540	3710	150	3560	260	3820	150	3670	800	4470	400	4070	400	4470	890	3580	450
09:00	4220	330	3890	210	4100	290	3810	640	3170	150	3020	530	3550	220	3330	180	3510	90	3420	620	4040	290	3750	390	4140	690	3450	500
10:00	4200	380	3820	320	4140	310	3830	700	3130	160	2970	490	3460	230	3230	290	3520	130	3390	590	3980	270	3710	440	4150	330	3820	540
11:00	4230	390	3840	280	4120	360	3760	800	2960	190	2770	520	3290	200	3090	230	3320	130	3190	410	3600	240	3360	380	3740	400	3340	520
12:00	4230	420	3810	300	4110	330	3780	740	3040	170	2870	540	3410	250	3160	320	3480	170	3310	530	3840	230	3610	340	3950	210	3740	540
13:00	4330	460	3870	180	4050	520	3530	330	3200	160	3040	550	3590	320	3270	250	3520	250	3270	410	3680	280	3400	400	3800	180	3620	570
14:00	4700	550	4150	270	4420	550	3870	410	3460	170	3290	620	3910	380	3530	350	3880	300	3580	420	4000	320	3680	460	4140	230	3910	530
15:00	4800	590	4210	270	4480	570	3910	510	3400	170	3230	550	3780	350	3430	300	3730	290	3440	400	3840	250	3590	410	4000	230	3770	470
16:00	4590	560	4030	230	4260	660	3600	430	3170	210	2960	550	3510	340	3170	210	3380	240	3140	390	3530	250	3280	400	3680	170	3510	430
17:00	4570	430	4140	250	4390	600	3790	430	3360	210	3150	550	3700	390	3310	200	3510	240	3270	350	3620	240	3380	390	3770	160	3610	390
18:00	3960	380	3580	190	3770	500	3270	430	2840	210	2630	410	3040	340	2700	180	2880	200	2680	330	3010	200	2810	320	3130	110	3020	330
19:00	3510	240	3270	180	3450	310	3140	430	2710	210	2500	330	2830	280	2550	180	2730	190	2540	240	2780	180	2600	230	2830	90	2740	260

I-15 Northbound Opening Year (2030) Peak Period No Build Alternative Forecast

Adjusted Demand	225	226	227	228	229	230	266	232	231	267	233	234	235	236	237	238	239	240	241	242	243	244	245
		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB	
		OFF		ON		OFF		ON		ON		OFF		ON		OFF		ON		OFF		OFF	
		NB Off to Weirick		NB On from Weirick		NB Off to Cajalco		NB Loop On from Cajalco		NB On from Cajalco		NB Off to El Cerrito		NB On from El Cerrito Rd		NB Off to Ontario		NB On from Ontario		NB Off to EL		NB Off to Magnolia	
04:00	5480	170	5310	490	5800	210	5590	160	5750	170	5920	600	5320	220	5540	310	5230	580	5810	10	5800	400	5400
05:00	6020	170	5850	720	6570	210	6360	300	6660	330	6990	790	6200	400	6600	450	6150	1090	7240	70	7170	650	6520
06:00	4840	180	4660	1260	5920	340	5580	410	5990	510	6500	580	5920	760	6680	630	6050	1540	7590	120	7470	770	6700
07:00	3770	150	3620	1400	5020	350	4670	630	5300	630	5930	540	5390	1100	6490	880	5610	1700	7310	130	7180	920	6260
08:00	4030	180	3850	1370	5220	380	4840	540	5380	580	5960	480	5480	800	6280	670	5610	1480	7090	170	6920	870	6050
09:00	3950	210	3740	1290	5030	390	4640	410	5050	450	5500	430	5070	520	5590	480	5110	1390	6500	180	6320	730	5590
10:00	4360	380	3980	1070	5050	510	4540	330	4870	360	5230	280	4950	390	5340	510	4830	1160	5990	210	5780	640	5140
11:00	3860	400	3460	1020	4480	480	4000	330	4330	370	4700	290	4410	410	4820	510	4310	1080	5390	240	5150	750	4400
12:00	4280	330	3950	980	4930	510	4420	300	4720	330	5050	260	4790	410	5200	540	4660	1040	5700	340	5360	780	4580
13:00	4190	130	4060	790	4850	200	4650	380	5030	570	5600	270	5330	510	5840	530	5310	1050	6360	700	5660	770	4890
14:00	4440	230	4210	800	5010	220	4790	380	5170	560	5730	440	5290	720	6010	780	5230	1050	6280	1070	5210	840	4370
15:00	4240	260	3980	870	4850	200	4650	390	5040	580	5620	300	5320	540	5860	560	5300	1130	6430	980	5450	870	4580
16:00	3940	190	3750	680	4430	200	4230	300	4530	440	4970	310	4660	460	5120	490	4630	1020	5650	890	4760	660	4100
17:00	4000	160	3840	680	4520	190	4330	300	4630	440	5070	330	4740	500	5240	470	4770	970	5740	960	4780	660	4120
18:00	3350	150	3200	550	3750	150	3600	290	3890	430	4320	300	4020	490	4510	460	4050	890	4940	940	4000	520	3480
19:00	3000	130	2870	420	3290	110	3180	270	3450	420	3870	240	3630	400	4030	370	3660	780	4440	920	3520	460	3060

I-15 Northbound Opening Year (2030) Peak Period No Build Alternative Forecast

Adjusted Demand	246	247	248	249	250	251	252	253	254	255	256	257	258	259
	NB		NB		NB		NB		NB		NB		NB	
	ON		ON		OFF		OFF		ON		ON		OFF	
	NB Loop On from Magnolia		NB On from Magnolia		NB Off to WB SR-91		NB Off to EB SR-91		NB On from WB SR-91		NB On from EB SR-91		NB Off to Hidden Valley	
04:00	320	5720	610	6330	350	5980	2320	3660	470	4130	510	4640	320	4320
05:00	480	7000	770	7770	900	6870	1780	5090	900	5990	990	6980	380	6600
06:00	890	7590	490	8080	1510	6570	1460	5110	1090	6200	1500	7700	560	7140
07:00	1140	7400	460	7860	1510	6350	1280	5070	1320	6390	1730	8120	700	7420
08:00	1050	7100	450	7550	1440	6110	1500	4610	1030	5640	1630	7270	630	6640
09:00	930	6520	960	7480	1040	6440	1500	4940	970	5910	1580	7490	530	6960
10:00	1010	6150	920	7070	1170	5900	2020	3880	900	4780	1530	6310	590	5720
11:00	840	5240	1320	6560	1080	5480	2190	3290	870	4160	1590	5750	750	5000
12:00	700	5280	1530	6810	960	5850	1920	3930	890	4820	1710	6530	700	5830
13:00	670	5560	1020	6580	1310	5270	2170	3100	940	4040	1650	5690	580	5110
14:00	740	5110	900	6010	1450	4560	2210	2350	890	3240	1680	4920	550	4370
15:00	680	5260	760	6020	1470	4550	2190	2360	860	3220	1530	4750	570	4180
16:00	980	5080	590	5670	1340	4330	2000	2330	870	3200	1560	4760	530	4230
17:00	910	5030	650	5680	1590	4090	1880	2210	1040	3250	1560	4810	770	4040
18:00	930	4410	360	4770	1420	3350	1710	1640	910	2550	1690	4240	500	3740
19:00	760	3820	300	4120	1110	3010	1400	1610	860	2470	1580	4050	430	3620

I-15 Southbound Opening Year (2030) Peak Period with Build Alternative Forecast

	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121
		SB		SB		SB		SB		SB		SB		SB		SB		SB	
		ON		OFF		OFF		ON		ON		OFF		ON		ON		OFF	
Adjusted Demand		SB On from Hidden Valley		SB Off to WB SR-91		SB Off to EB SR-91		SB On from EB SR-91		SB On from WB SR-91		SB Off to Magnolia		SB On from Magnolia		SB On from EL		SB Off to Ontario	
04:00	1960	280	2240	1090	1150	260	890	800	1690	390	2080	780	1300	370	1670	1110	2780	280	2500
05:00	2840	190	3030	790	2240	590	1650	1180	2830	730	3560	930	2630	370	3000	1490	4490	600	3890
06:00	3710	280	3990	820	3170	950	2220	1860	4080	1270	5350	1060	4290	430	4720	1620	6340	990	5350
07:00	4750	470	5220	820	4400	1340	3060	2210	5270	1590	6860	1410	5450	630	6080	1630	7710	960	6750
08:00	5280	410	5690	980	4710	1260	3450	2290	5740	1390	7130	1610	5520	610	6130	1580	7710	1210	6500
09:00	5090	480	5570	1120	4450	1060	3390	2190	5580	1110	6690	1620	5070	540	5610	1290	6900	1050	5850
10:00	4650	520	5170	1480	3690	960	2730	2440	5170	1110	6280	1370	4910	580	5490	810	6300	950	5350
11:00	5360	570	5930	1800	4130	950	3180	2570	5750	970	6720	1400	5320	780	6100	620	6720	1040	5680
12:00	5180	650	5830	1780	4050	1070	2980	2710	5690	1030	6720	1520	5200	880	6080	520	6600	1140	5460
13:00	5530	650	6180	1910	4270	940	3330	2750	6080	1290	7370	1370	6000	1060	7060	420	7480	1050	6430
14:00	6550	710	7260	1980	5280	930	4350	2410	6760	1230	7990	1320	6670	1210	7880	410	8290	870	7420
15:00	7040	610	7650	1820	5830	1100	4730	1980	6710	1060	7770	1320	6450	980	7430	460	7890	790	7100
16:00	6850	590	7440	1850	5590	1120	4470	1540	6010	1130	7140	1440	5700	870	6570	550	7120	640	6480
17:00	5690	510	6200	1620	4580	1130	3450	1790	5240	1460	6700	1350	5350	790	6140	420	6560	570	5990
18:00	5900	490	6390	1650	4740	1090	3650	2100	5750	1400	7150	990	6160	690	6850	290	7140	670	6470
19:00	5240	460	5700	1310	4390	890	3500	2330	5830	1420	7250	870	6380	650	7030	170	7200	900	6300

I-15 Southbound Opening Year (2030) Peak Period with Build Alternative Forecast

	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142
	SB		SB		SB		SB		SB		SB		SB		SB		SB		SB		SB
	ON		OFF		ON		OFF		ON		OFF		ON		OFF		ON		OFF		ON
Adjusted Demand	SB On from Ontario		SB Off to El Cerrito		SB On from El Cerrito		SB Off to Cajalco		SB On from Cajalco		SB Off to Weirick		SB On from Weirick		SB Off to Temescal Canyon		SB On from Temescal Canyon		SB Off to Indian Truck Trail		SB On from Indian Truck Trail
04:00	100	2600	30	2570	40	2610	380	2230	50	2280	130	2150	40	2190	310	1880	50	1930	50	1880	70
05:00	140	4030	100	3930	80	4010	440	3570	70	3640	230	3410	40	3450	380	3070	70	3140	90	3050	130
06:00	310	5660	290	5370	160	5530	610	4920	150	5070	370	4700	80	4780	390	4390	130	4520	180	4340	190
07:00	500	7250	580	6670	420	7090	700	6390	170	6560	590	5970	120	6090	480	5610	170	5780	250	5530	210
08:00	420	6920	400	6520	250	6770	780	5990	200	6190	650	5540	110	5650	600	5050	140	5190	210	4980	270
09:00	490	6340	390	5950	210	6160	770	5390	210	5600	550	5050	140	5190	620	4570	200	4770	220	4550	180
10:00	480	5830	400	5430	180	5610	850	4760	190	4950	520	4430	140	4570	650	3920	210	4130	230	3900	230
11:00	560	6240	530	5710	200	5910	980	4930	240	5170	610	4560	170	4730	630	4100	180	4280	300	3980	230
12:00	770	6230	740	5490	260	5750	950	4800	290	5090	710	4380	170	4550	560	3990	250	4240	330	3910	220
13:00	780	7210	820	6390	360	6750	1040	5710	330	6040	890	5150	300	5450	690	4760	270	5030	400	4630	180
14:00	810	8230	840	7390	590	7980	890	7090	420	7510	1020	6490	370	6860	710	6150	270	6420	450	5970	230
15:00	940	8040	570	7470	900	8370	700	7670	670	8340	1070	7270	530	7800	650	7150	410	7560	490	7070	200
16:00	910	7390	500	6890	990	7880	580	7300	780	8080	820	7260	570	7830	530	7300	450	7750	490	7260	220
17:00	890	6880	450	6430	980	7410	560	6850	770	7620	770	6850	520	7370	510	6860	450	7310	460	6850	220
18:00	820	7290	480	6810	740	7550	670	6880	550	7430	860	6570	440	7010	430	6580	330	6910	460	6450	150
19:00	740	7040	600	6440	530	6970	770	6200	320	6520	880	5640	300	5940	420	5520	230	5750	460	5290	110

I-15 Southbound Opening Year (2030) Peak Period with Build Alternative Forecast

Adjusted Demand	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
		SB		SB		SB		SB		SB		SB		SB		SB	SB
		OFF		ON		OFF		ON		OFF		ON		OFF		ON	OFF
		SB Off to Lake		SB On from Lake		SB Off to Nichols		SB On from Nichols		SB Off to Central		SB On from Central		SB Off to Main		SB On from Main	SB I-15 South of Main
04:00	1950	120	1830	70	1900	60	1840	150	1990	150	1840	340	2180	50	2130	90	2220
05:00	3180	220	2960	120	3080	130	2950	200	3150	310	2840	520	3360	90	3270	170	3440
06:00	4530	290	4240	290	4530	250	4280	330	4610	460	4150	860	5010	110	4900	290	5190
07:00	5740	320	5420	440	5860	330	5530	460	5990	590	5400	1240	6640	170	6470	490	6960
08:00	5250	330	4920	280	5200	200	5000	370	5370	560	4810	1140	5950	150	5800	390	6190
09:00	4730	330	4400	200	4600	200	4400	290	4690	470	4220	970	5190	140	5050	290	5340
10:00	4130	300	3830	220	4050	240	3810	290	4100	550	3550	1020	4570	200	4370	280	4650
11:00	4210	360	3850	220	4070	240	3830	310	4140	600	3540	1120	4660	190	4470	310	4780
12:00	4130	380	3750	200	3950	250	3700	280	3980	640	3340	1110	4450	220	4230	320	4550
13:00	4810	550	4260	190	4450	240	4210	330	4540	690	3850	1150	5000	290	4710	330	5040
14:00	6200	680	5520	350	5870	370	5500	380	5880	750	5130	1190	6320	380	5940	420	6360
15:00	7270	800	6470	240	6710	350	6360	330	6690	830	5860	1100	6960	420	6540	400	6940
16:00	7480	920	6560	200	6760	270	6490	320	6810	880	5930	1170	7100	440	6660	360	7020
17:00	7070	910	6160	200	6360	290	6070	310	6380	800	5580	1100	6680	420	6260	330	6590
18:00	6600	850	5750	160	5910	240	5670	310	5980	640	5340	950	6290	370	5920	250	6170
19:00	5400	700	4700	130	4830	180	4650	240	4890	630	4260	800	5060	270	4790	200	4990

I-15 Northbound Opening Year (2030) Peak Period with Build Alternative Forecast

	201	202	203	204	205	206	207	262	263	264	265	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224
	NB	NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB
	ON	OFF		ON		OFF		OFF		OFF		ON		OFF		ON		OFF		ON		OFF		ON		OFF		ON
Adjusted Demand	NB I-15 South of Main	NB Off to Main SB		NB On from Main		NB Off to Central		NB Loop Off to Central		NB Hook Off to Dexter		NB On from Central/Dexter		NB Off to Nichols		NB On from Nichols		NB Off to Lake		NB On from Lake		NB Off to Indian Truck Trail		NB On from Indian Truck Trail		NB Off to Temescal Canyon		NB On from Temescal Canyon
04:00	3390	70	3320	460	3780	90	3690	230	3460	50	3410	640	4050	130	3920	280	4200	60	4140	1140	5280	70	5210	260	5470	120	5350	340
05:00	4520	150	4370	480	4850	160	4690	400	4290	90	4200	610	4810	160	4650	280	4930	80	4850	1210	6060	100	5960	340	6300	380	5920	380
06:00	4960	290	4670	400	5070	210	4860	690	4170	150	4020	580	4600	180	4420	320	4740	150	4590	1010	5600	320	5280	320	5600	610	4990	360
07:00	5140	590	4550	410	4960	410	4550	690	3860	150	3710	670	4380	360	4020	330	4350	250	4100	840	4940	420	4520	190	4710	670	4040	200
08:00	4800	410	4390	380	4770	250	4520	690	3830	150	3680	560	4240	160	4080	280	4360	150	4210	820	5030	260	4770	250	5020	840	4180	340
09:00	4530	310	4220	280	4500	260	4240	630	3610	140	3470	540	4010	240	3770	190	3960	90	3870	640	4510	210	4300	250	4550	650	3900	370
10:00	4510	360	4150	420	4570	280	4290	690	3600	150	3450	500	3950	240	3710	310	4020	130	3890	610	4500	190	4310	280	4590	310	4280	390
11:00	4530	370	4160	370	4530	320	4210	790	3420	180	3240	530	3770	220	3550	250	3800	130	3670	420	4090	170	3920	240	4160	370	3790	390
12:00	4530	400	4130	410	4540	300	4240	730	3510	160	3350	550	3900	270	3630	340	3970	170	3800	540	4340	160	4180	210	4390	200	4190	400
13:00	4460	430	4030	180	4210	500	3710	390	3320	160	3160	560	3720	320	3400	260	3660	260	3400	460	3860	240	3620	300	3920	220	3700	620
14:00	4840	520	4320	280	4600	530	4070	480	3590	170	3420	640	4060	380	3680	360	4040	320	3720	470	4190	270	3920	350	4270	270	4000	570
15:00	4950	560	4390	280	4670	550	4120	570	3550	190	3360	570	3930	350	3580	310	3890	300	3590	450	4040	220	3820	310	4130	270	3860	510
16:00	4720	540	4180	240	4420	630	3790	380	3410	150	3260	560	3820	340	3480	210	3690	250	3440	430	3870	220	3650	320	3970	190	3780	460
17:00	4700	410	4290	260	4550	580	3970	380	3590	150	3440	560	4000	390	3610	210	3820	250	3570	390	3960	210	3750	310	4060	180	3880	420
18:00	4080	360	3720	200	3920	470	3450	380	3070	150	2920	420	3340	340	3000	190	3190	210	2980	370	3350	170	3180	240	3420	130	3290	360
19:00	3630	220	3410	190	3600	280	3320	380	2940	150	2790	340	3130	280	2850	180	3030	200	2830	280	3110	150	2960	140	3100	110	2990	290

I-15 Northbound Opening Year (2030) Peak Period with Build Alternative Forecast

	225	226	227	228	229	230	266	232	231	267	233	234	235	236	237	238	239	240	241	242	243	244	245
		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB	
		OFF		ON		OFF		ON		ON		OFF		ON		OFF		ON		OFF		OFF	
Adjusted Demand		NB Off to Weirick		NB On from Weirick		NB Off to Cajalco		NB Loop On from Cajalco		NB On from Cajalco		NB Off to El Cerrito		NB On from El Cerrito Rd		NB Off to Ontario		NB On from Ontario		NB Off to EL		NB Off to Magnolia	
04:00	5690	70	5620	430	6050	90	5960	160	6120	180	6300	560	5740	210	5950	370	5580	510	6090	10	6080	410	5670
05:00	6300	70	6230	620	6850	100	6750	300	7050	350	7400	740	6660	370	7030	550	6480	960	7440	70	7370	680	6690
06:00	5350	80	5270	1090	6360	140	6220	410	6630	540	7170	550	6620	700	7320	790	6530	1350	7880	130	7750	800	6950
07:00	4240	50	4190	1220	5410	160	5250	630	5880	660	6540	510	6030	1030	7060	1040	6020	1510	7530	140	7390	950	6440
08:00	4520	80	4440	1190	5630	180	5450	540	5990	610	6600	450	6150	730	6880	820	6060	1290	7350	170	7180	900	6280
09:00	4270	80	4190	1120	5310	180	5130	410	5540	470	6010	410	5600	480	6080	580	5500	1220	6720	180	6540	750	5790
10:00	4670	150	4520	930	5450	230	5220	330	5550	380	5930	260	5670	370	6040	620	5420	1020	6440	220	6220	660	5560
11:00	4180	160	4020	880	4900	220	4680	330	5010	390	5400	270	5130	380	5510	620	4890	940	5830	240	5590	780	4810
12:00	4590	130	4460	850	5310	230	5080	300	5380	350	5730	240	5490	380	5870	650	5220	910	6130	350	5780	810	4970
13:00	4320	130	4190	740	4930	200	4730	390	5120	600	5720	290	5430	480	5910	560	5350	900	6250	700	5550	810	4740
14:00	4570	230	4340	760	5100	220	4880	380	5260	590	5850	460	5390	680	6070	820	5250	900	6150	1050	5100	880	4220
15:00	4370	250	4120	820	4940	200	4740	390	5130	610	5740	320	5420	510	5930	590	5340	960	6300	960	5340	910	4430
16:00	4240	190	4050	650	4700	200	4500	300	4800	460	5260	320	4940	440	5380	520	4860	890	5750	860	4890	690	4200
17:00	4300	160	4140	650	4790	190	4600	300	4900	460	5360	340	5020	470	5490	500	4990	840	5830	960	4870	690	4180
18:00	3650	140	3510	510	4020	150	3870	300	4170	460	4630	320	4310	460	4770	480	4290	760	5050	930	4120	550	3570
19:00	3280	130	3150	390	3540	110	3430	270	3700	440	4140	250	3890	380	4270	390	3880	650	4530	910	3620	490	3130

I-15 Northbound Opening Year (2030) Peak Period with Build Alternative Forecast

	246	247	248	249	250	251	252	253	254	255	256	257	258	259
	NB		NB		NB		NB		NB		NB		NB	
	ON		ON		OFF		OFF		ON		ON		OFF	
	NB Loop On from Magnolia		NB On from Magnolia		NB Off to WB SR-91		NB Off to EB SR-91		NB On from WB SR-91		NB On from EB SR-91		NB Off to Hidden Valley	
Adjusted Demand														
04:00	300	5970	550	6520	350	6170	2370	3800	470	4270	510	4780	300	4480
05:00	450	7140	700	7840	900	6940	1820	5120	900	6020	990	7010	350	6660
06:00	850	7800	460	8260	1510	6750	1500	5250	1090	6340	1500	7840	520	7320
07:00	1090	7530	440	7970	1510	6460	1310	5150	1320	6470	1730	8200	670	7530
08:00	1000	7280	430	7710	1440	6270	1530	4740	1030	5770	1630	7400	590	6810
09:00	870	6660	860	7520	1040	6480	1530	4950	970	5920	1580	7500	500	7000
10:00	950	6510	830	7340	1170	6170	2060	4110	900	5010	1530	6540	550	5990
11:00	790	5600	1190	6790	1080	5710	2240	3470	870	4340	1590	5930	710	5220
12:00	660	5630	1370	7000	960	6040	1970	4070	890	4960	1710	6670	660	6010
13:00	650	5390	970	6360	1110	5250	2530	2720	940	3660	1650	5310	580	4730
14:00	720	4940	850	5790	1230	4560	2590	1970	890	2860	1680	4540	560	3980
15:00	660	5090	720	5810	1240	4570	2560	2010	860	2870	1530	4400	580	3820
16:00	960	5160	580	5740	1120	4620	2320	2300	870	3170	1560	4730	530	4200
17:00	890	5070	640	5710	1370	4340	2180	2160	1040	3200	1560	4760	770	3990
18:00	910	4480	360	4840	1210	3630	2000	1630	910	2540	1690	4230	510	3720
19:00	740	3870	290	4160	910	3250	1680	1570	860	2430	1580	4010	440	3570

I-15 Southbound Design Year (2050) Peak Period No Build Alternative Forecast

	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121
		SB		SB		SB		SB		SB		SB		SB		SB		SB	
		ON		OFF		OFF		ON		ON		OFF		ON		ON		OFF	
Adjusted Demand		SB On from Hidden Valley		SB Off to WB SR-91		SB Off to EB SR-91		SB On from WB SR-91		SB On from EB SR-91		SB Off to Magnolia		SB On from Magnolia		SB On from EL		SB Off to Ontario	
04:00	2320	300	2620	1090	1530	300	1230	1010	2240	390	2630	790	1840	440	2280	1400	3680	500	3180
05:00	3370	200	3570	790	2780	690	2090	1490	3580	730	4310	950	3360	430	3790	1740	5530	1060	4470
06:00	4560	310	4870	820	4050	1140	2910	2710	5620	1270	6890	1090	5800	540	6340	1750	8090	1790	6300
07:00	5600	490	6090	820	5270	1530	3740	3060	6800	1590	8390	1440	6950	730	7680	1750	9430	1770	7660
08:00	6130	440	6570	980	5590	1460	4130	3100	7230	1390	8620	1630	6990	720	7710	1750	9460	2010	7450
09:00	6040	510	6550	1120	5430	1240	4190	2770	6960	1110	8070	1650	6420	640	7060	1630	8690	1860	6830
10:00	5510	560	6070	1480	4590	1110	3480	3090	6570	1110	7680	1400	6280	690	6970	1020	7990	1690	6300
11:00	6360	610	6970	1800	5170	1110	4060	3250	7310	970	8280	1430	6850	930	7780	790	8570	1850	6720
12:00	6140	690	6830	1780	5050	1250	3800	3420	7220	1030	8250	1550	6700	1050	7750	660	8410	2020	6390
13:00	5620	810	6430	1910	4520	940	3580	2980	6560	1650	8210	1370	6840	1990	8830	460	9290	1700	7590
14:00	6660	890	7550	1980	5570	930	4640	2620	7260	1580	8840	1320	7520	2260	9780	440	10220	1410	8810
15:00	7160	760	7920	1820	6100	1100	5000	2150	7150	1350	8500	1320	7180	1830	9010	500	9510	1280	8230
16:00	6940	710	7650	1850	5800	1120	4680	1680	6360	1510	7870	1440	6430	1520	7950	600	8550	1070	7480
17:00	5790	640	6430	1620	4810	1130	3680	1940	5620	1840	7460	1350	6110	1440	7550	460	8010	1000	7010
18:00	5990	610	6600	1650	4950	1090	3860	2270	6130	1780	7910	990	6920	1340	8260	310	8570	1100	7470
19:00	5330	580	5910	1310	4600	890	3710	2510	6220	1800	8020	870	7150	1310	8460	180	8640	1330	7310

I-15 Southbound Design Year (2050) Peak Period No Build Alternative Forecast

	122	123	124	125	127	161	162	163	128	129	164	165	130	131	132	133	134	135	136	137	138	139	140	141	142
	SB		SB				SB		SB		SB		SB		SB		SB		SB		SB		SB		SB
	ON		OFF				OFF		OFF		ON		ON		OFF		ON		OFF		ON		OFF		ON
Adjusted Demand	SB On from Ontario		SB Off to El Cerrito				SB Off to EB CETAP West		SB Off to Cajalco		SB Loop On from WB CETAP West		SB On from Cajalco		SB Off to Weirick		SB On from Weirick		SB Off to Temescal Canyon		SB On from Temescal Canyon		SB Off to Indian Truck Trail		SB On from Indian Truck Trail
04:00	150	3330	50	3280	3280	3280	1090	2190	260	1930	80	2010	100	2110	190	1920	40	1960	340	1620	140	1760	60	1700	60
05:00	220	4690	150	4540	4540	4540	1260	3280	300	2980	110	3090	160	3250	340	2910	40	2950	410	2540	190	2730	100	2630	120
06:00	540	6840	500	6340	6340	6340	2000	4340	390	3950	250	4200	320	4520	630	3890	80	3970	430	3540	430	3970	220	3750	170
07:00	720	8380	800	7580	7580	7580	2000	5580	490	5090	250	5340	610	5950	860	5090	130	5220	520	4700	470	5170	290	4880	190
08:00	650	8100	620	7480	7480	7480	2000	5480	560	4920	250	5170	470	5640	920	4720	110	4830	640	4190	440	4630	250	4380	250
09:00	750	7580	590	6990	6990	6990	2200	4790	530	4260	310	4570	440	5010	830	4180	150	4330	670	3660	610	4270	260	4010	170
10:00	750	7050	600	6450	6450	6450	2430	4020	580	3440	290	3730	400	4130	780	3350	140	3490	710	2780	640	3420	270	3150	210
11:00	870	7590	810	6780	6780	6780	2810	3970	670	3300	360	3660	470	4130	920	3210	180	3390	680	2710	560	3270	370	2900	210
12:00	1200	7590	1120	6470	6470	6470	2730	3740	650	3090	430	3520	580	4100	1070	3030	180	3210	600	2610	750	3360	400	2960	200
13:00	770	8360	1080	7280	7280	7280	970	6310	1640	4670	90	4760	1370	6130	1080	5050	420	5470	840	4630	360	4990	380	4610	220
14:00	810	9620	1110	8510	8510	8510	1930	6580	1400	5180	110	5290	1890	7180	1230	5950	530	6480	860	5620	360	5980	430	5550	280
15:00	940	9170	740	8430	8430	8430	2610	5820	1100	4720	180	4900	2990	7890	1290	6600	770	7370	800	6570	560	7130	470	6660	240
16:00	900	8380	650	7730	7730	7730	2410	5320	960	4360	160	4520	3390	7910	990	6920	770	7690	630	7060	570	7630	470	7160	260
17:00	890	7900	610	7290	7290	7290	2410	4880	940	3940	160	4100	3330	7430	950	6480	720	7200	620	6580	580	7160	440	6720	260
18:00	810	8280	630	7650	7650	7650	2410	5240	1050	4190	160	4350	2440	6790	1030	5760	640	6400	530	5870	460	6330	440	5890	190
19:00	740	8050	750	7300	7300	7300	2410	4890	1140	3750	160	3910	1570	5480	1050	4430	500	4930	530	4400	360	4760	440	4320	150

I-15 Southbound Design Year (2050) Peak Period No Build Alternative Forecast

Adjusted Demand	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
		SB		SB		SB		SB		SB		SB		SB		SB	SB
		OFF		ON		OFF		ON		OFF		ON		OFF		ON	OFF
		SB Off to Lake		SB On from Lake		SB Off to Nichols		SB On from Nichols		SB Off to Central		SB On from Central		SB Off to Main		SB On from Main	SB I-15 South of Main
04:00	1760	140	1620	70	1690	70	1620	200	1820	160	1660	380	2040	80	1960	90	2050
05:00	2750	260	2490	130	2620	150	2470	260	2730	330	2400	580	2980	140	2840	190	3030
06:00	3920	350	3570	330	3900	270	3630	460	4090	500	3590	970	4560	190	4370	320	4690
07:00	5070	380	4690	470	5160	350	4810	590	5400	620	4780	1360	6140	240	5900	520	6420
08:00	4630	390	4240	310	4550	220	4330	490	4820	590	4230	1260	5490	230	5260	420	5680
09:00	4180	390	3790	220	4010	220	3790	390	4180	510	3670	1080	4750	220	4530	310	4840
10:00	3360	360	3000	240	3240	260	2980	380	3360	590	2770	1130	3900	310	3590	300	3890
11:00	3110	430	2680	240	2920	260	2660	420	3080	640	2440	1250	3690	300	3390	330	3720
12:00	3160	450	2710	220	2930	270	2660	380	3040	680	2360	1230	3590	340	3250	340	3590
13:00	4830	660	4170	300	4470	330	4140	350	4490	970	3520	1050	4570	480	4090	350	4440
14:00	5830	810	5020	550	5570	500	5070	410	5480	1060	4420	1090	5510	630	4880	440	5320
15:00	6900	960	5940	370	6310	480	5830	350	6180	1170	5010	1000	6010	700	5310	420	5730
16:00	7420	1090	6330	290	6620	360	6260	340	6600	1180	5420	1080	6500	690	5810	370	6180
17:00	6980	1080	5900	300	6200	370	5830	330	6160	1100	5060	1010	6070	670	5400	340	5740
18:00	6080	1020	5060	260	5320	330	4990	330	5320	940	4380	860	5240	620	4620	270	4890
19:00	4470	870	3600	230	3830	260	3570	260	3830	930	2900	710	3610	520	3090	210	3300

I-15 Northbound Design Year (2050) Peak Period No Build Alternative Forecast

	201	202	203	204	205	206	207	262	263	264	265	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224
	NB	NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB
	ON	OFF		ON		OFF		OFF		OFF		ON		OFF		ON		OFF		ON		OFF		ON		OFF		ON
Adjusted Demand	NB I-15 South of Main	NB Off to Main SB		NB On from Main		NB Off to Central		NB Loop Off to Central		NB Hook Off to Dexter		NB On from Central		NB Off to Nichols		NB On from Nichols		NB Off to Lake		NB On from Lake		NB Off to Indian Truck Trail		NB On from Indian Truck Trail		NB Off to Temescal Canyon		NB On from Temescal Canyon
04:00	3780	110	3670	570	4240	180	4060	280	3780	70	3710	860	4570	150	4420	480	4900	60	4840	1400	6240	180	6060	620	6680	170	6510	1000
05:00	5050	240	4810	590	5400	310	5090	490	4600	120	4480	810	5290	190	5100	480	5580	90	5490	1480	6970	260	6710	820	7530	560	6970	1110
06:00	5530	530	5000	490	5490	450	5040	850	4190	210	3980	780	4760	230	4530	540	5070	180	4890	1210	6100	830	5270	680	5950	930	5020	930
07:00	5710	820	4890	500	5390	650	4740	850	3890	210	3680	870	4550	400	4150	560	4710	270	4440	1040	5480	930	4550	550	5100	990	4110	770
08:00	5370	650	4720	480	5200	500	4700	850	3850	210	3640	760	4400	210	4190	500	4690	170	4520	1020	5540	770	4770	610	5380	1160	4220	910
09:00	5050	490	4560	350	4910	490	4420	780	3640	200	3440	720	4160	290	3870	330	4200	100	4100	780	4880	520	4360	600	4960	950	4010	1080
10:00	5030	560	4470	520	4990	530	4460	850	3610	210	3400	670	4070	290	3780	530	4310	150	4160	740	4900	480	4420	680	5100	450	4650	1160
11:00	5050	570	4480	460	4940	600	4340	970	3370	240	3130	710	3840	260	3580	430	4010	140	3870	520	4390	430	3960	580	4540	540	4000	1140
12:00	5060	620	4440	500	4940	560	4380	900	3480	230	3250	730	3980	330	3650	580	4230	190	4040	660	4700	420	4280	520	4800	290	4510	1170
13:00	5610	550	5060	330	5390	570	4820	660	4160	190	3970	470	4440	390	4050	420	4470	310	4160	480	4640	400	4240	420	4660	180	4480	1100
14:00	6090	660	5430	500	5930	610	5320	710	4610	200	4410	540	4950	470	4480	590	5070	380	4690	500	5190	450	4740	490	5230	230	5000	1010
15:00	6220	720	5500	510	6010	630	5380	730	4650	210	4440	470	4910	430	4480	500	4980	360	4620	470	5090	360	4730	430	5160	230	4930	900
16:00	5820	640	5180	420	5600	710	4890	650	4240	180	4060	490	4550	420	4130	330	4460	290	4170	450	4620	340	4280	420	4700	170	4530	750
17:00	5790	520	5270	430	5700	650	5050	650	4400	180	4220	490	4710	470	4240	330	4570	290	4280	410	4690	320	4370	410	4780	160	4620	710
18:00	5180	470	4710	380	5090	550	4540	650	3890	180	3710	340	4050	420	3630	310	3940	250	3690	390	4080	290	3790	340	4130	110	4020	650
19:00	4730	330	4400	360	4760	360	4400	650	3750	180	3570	260	3830	360	3470	300	3770	240	3530	300	3830	260	3570	250	3820	90	3730	580

I-15 Northbound Design Year (2050) Peak Period No Build Alternative Forecast

Adjusted Demand	225	226	227	230	231	269	270	266	228	229	232	271	274	275	235	236	237	238	239	240	241	242	243	244	245
		NB		NB			NB		NB		NB		NB			NB		NB		NB		NB		NB	
		OFF		OFF			OFF		ON		ON		ON			ON		OFF		ON		OFF		OFF	
		NB Off to Weirick		NB Off to Cajalco			NB Off to EB CETAP West		NB On from Weirick		NB Loop On from Cajalco		NB On from WB CETAP West			NB On from El Cerrito Rd		NB Off to Ontario		NB On from Ontario		NB Off to EL		NB Off to Magnolia	
04:00	7510	980	6530	480	6050	6050	170	5880	680	6560	220	6780	920	7700	7700	240	7940	1160	6780	700	7480	10	7470	470	7000
05:00	8080	990	7090	490	6600	6600	170	6430	1000	7430	430	7860	1770	9630	9630	430	10060	1590	8470	1330	9800	70	9730	770	8960
06:00	5950	1080	4870	810	4060	4060	290	3770	1780	5550	620	6170	3090	9260	9260	820	10080	1480	8600	1880	10480	140	10340	930	9410
07:00	4880	750	4130	830	3300	3300	290	3010	1920	4930	850	5780	3090	8870	8870	1150	10020	1860	8160	2040	10200	150	10050	1070	8980
08:00	5130	1090	4040	860	3180	3180	290	2890	1890	4780	750	5530	3090	8620	8620	850	9470	1460	8010	1820	9830	190	9640	1030	8610
09:00	5090	1180	3910	920	2990	2990	320	2670	1800	4470	580	5050	2400	7450	7450	550	8000	1150	6850	1690	8540	200	8340	860	7480
10:00	5810	2050	3760	1210	2550	2550	420	2130	1490	3620	460	4080	1910	5990	5990	420	6410	990	5420	1410	6830	240	6590	760	5830
11:00	5140	2160	2980	1130	1850	1850	400	1450	1420	2870	470	3340	1960	5300	5300	440	5740	1010	4730	1310	6040	270	5770	890	4880
12:00	5680	1740	3940	1190	2750	2750	420	2330	1360	3690	420	4110	1750	5860	5860	440	6300	1000	5300	1260	6560	390	6170	920	5250
13:00	5580	180	5400	470	4930	4930	250	4680	910	5590	790	6380	2300	8680	6380	600	6980	1300	5680	1730	7410	940	6470	920	5550
14:00	6010	300	5710	500	5210	5210	270	4940	930	5870	780	6650	2260	8910	6650	840	7490	1950	5540	1740	7280	1430	5850	1000	4850
15:00	5830	320	5510	450	5060	5060	240	4820	1010	5830	800	6630	2330	8960	8960	630	9590	1380	8210	1870	10080	1300	8780	1040	7740
16:00	5280	240	5040	400	4640	4640	190	4450	770	5220	610	5830	1720	7550	5830	540	6370	1270	5100	1620	6720	1200	5520	770	4750
17:00	5330	210	5120	390	4730	4730	190	4540	770	5310	610	5920	1720	7640	5920	580	6500	1240	5260	1570	6830	1250	5580	770	4810
18:00	4670	190	4480	350	4130	4130	190	3940	640	4580	600	5180	1720	6900	5180	570	5750	1190	4560	1490	6050	1240	4810	630	4180
19:00	4310	160	4150	310	3840	3840	190	3650	510	4160	580	4740	1720	6460	4740	480	5220	920	4300	1380	5680	1270	4410	570	3840

I-15 Northbound Design Year (2050) Peak Period No Build Alternative Forecast

	246	247	248	249	250	251	252	253	254	255	256	257	258	259
	NB		NB		NB		NB		NB		NB		NB	
	ON		ON		OFF		OFF		ON		ON		OFF	
	NB Loop On from Magnolia		NB On from Magnolia		NB Off to WB SR-91		NB Off to EB SR-91		NB On from WB SR-91		NB On from EB SR-91		NB Off to Hidden Valley	
Adjusted Demand														
04:00	360	7360	610	7970	350	7620	2640	4980	470	5450	570	6020	380	5640
05:00	540	9500	770	10270	900	9370	2030	7340	900	8240	1100	9340	450	8890
06:00	980	10390	540	10930	1510	9420	1660	7760	1090	8850	1680	10530	690	9840
07:00	1240	10220	500	10720	1510	9210	1470	7740	1320	9060	1900	10960	830	10130
08:00	1150	9760	500	10260	1440	8820	1690	7130	1030	8160	1800	9960	750	9210
09:00	1040	8520	960	9480	1040	8440	1710	6730	970	7700	1750	9450	640	8810
10:00	1140	6970	920	7890	1170	6720	2300	4420	900	5320	1700	7020	710	6310
11:00	940	5820	1320	7140	1080	6060	2490	3570	870	4440	1760	6200	910	5290
12:00	790	6040	1530	7570	960	6610	2190	4420	890	5310	1900	7210	840	6370
13:00	910	6460	1600	8060	1750	6310	2170	4140	980	5120	1960	7080	600	6480
14:00	990	5840	1410	7250	1940	5310	2210	3100	930	4030	1990	6020	580	5440
15:00	920	8660	1190	9850	1970	7880	2190	5690	900	6590	1810	8400	600	7800
16:00	1180	5930	710	6640	1800	4840	2000	2840	910	3750	1850	5600	550	5050
17:00	1100	5910	790	6700	2070	4630	1880	2750	1080	3830	1860	5690	790	4900
18:00	1160	5340	450	5790	1890	3900	1710	2190	950	3140	1990	5130	530	4600
19:00	990	4830	390	5220	1530	3690	1400	2290	900	3190	1880	5070	460	4610

I-15 Southbound Design Year (2050) Peak Period with Build Alternative Forecast

	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121
		SB		SB		SB		SB		SB		SB		SB		SB		SB	
		ON		OFF		OFF		ON		ON		OFF		ON		ON		OFF	
Adjusted Demand		SB On from Hidden Valley		SB Off to WB SR-91		SB Off to EB SR-91		SB On from EB SR-91		SB On from WB SR-91		SB Off to Magnolia		SB On from Magnolia		SB On from EL		SB Off to Ontario	
04:00	2240	300	2540	1090	1450	300	1150	1030	2180	390	2570	790	1780	470	2250	1430	3680	430	3250
05:00	3240	210	3450	790	2660	680	1980	1520	3500	730	4230	950	3280	460	3740	1750	5490	900	4590
06:00	4350	310	4660	820	3840	1120	2720	2790	5510	1270	6780	1090	5690	570	6260	1750	8010	1520	6490
07:00	5400	500	5900	820	5080	1510	3570	3140	6710	1590	8300	1440	6860	770	7630	1750	9380	1490	7890
08:00	5920	440	6360	980	5380	1430	3950	3180	7130	1390	8520	1630	6890	750	7640	1750	9390	1740	7650
09:00	5810	510	6320	1120	5200	1220	3980	2820	6800	1110	7910	1650	6260	670	6930	1660	8590	1580	7010
10:00	5300	560	5860	1480	4380	1090	3290	3150	6440	1110	7550	1400	6150	720	6870	1040	7910	1440	6470
11:00	6120	610	6730	1800	4930	1090	3840	3310	7150	970	8120	1430	6690	980	7670	800	8470	1580	6890
12:00	5910	700	6610	1780	4830	1230	3600	3490	7090	1030	8120	1550	6570	1110	7680	670	8350	1720	6630
13:00	6170	720	6890	1910	4980	940	4040	3140	7180	1690	8870	1370	7500	2180	9680	480	10160	1050	9110
14:00	7310	790	8100	1980	6120	930	5190	2750	7940	1610	9550	1320	8230	2470	10700	470	11170	870	10300
15:00	7860	670	8530	1820	6710	1100	5610	2260	7870	1380	9250	1320	7930	2010	9940	530	10470	790	9680
16:00	7530	640	8170	1850	6320	1120	5200	1780	6980	1540	8520	1440	7080	1650	8730	630	9360	640	8720
17:00	6380	560	6940	1620	5320	1130	4190	2050	6240	1870	8110	1350	6760	1570	8330	480	8810	570	8240
18:00	6580	540	7120	1650	5470	1090	4380	2380	6760	1820	8580	990	7590	1480	9070	330	9400	670	8730
19:00	5920	510	6430	1310	5120	890	4230	2630	6860	1840	8700	870	7830	1440	9270	190	9460	900	8560

I-15 Southbound Design Year (2050) Peak Period with Build Alternative Forecast

	122	123	124	125	162	163	128	129	164	165	130	131	132	133	134	135	136	137	138	139	140	141	142
	SB		SB		SB		SB		SB		SB		SB		SB		SB		SB		SB		SB
	ON		OFF		OFF		OFF		ON		ON		OFF		ON		OFF		ON		OFF		ON
Adjusted Demand	SB On from Ontario		SB Off to El Cerrito		SB Off to EB CETAP West		SB Off to Cajalco		SB Loop On from WB CETAP West		SB On from Cajalco		SB Off to Weirick		SB On from Weirick		SB Off to Temescal Canyon		SB On from Temescal Canyon		SB Off to Indian Truck Trail		SB On from Indian Truck Trail
04:00	160	3410	50	3360	1110	2250	260	1990	110	2100	100	2200	210	1990	40	2030	340	1690	50	1740	30	1710	60
05:00	240	4830	140	4690	1270	3420	300	3120	140	3260	160	3420	380	3040	40	3080	410	2670	70	2740	60	2680	110
06:00	610	7100	460	6640	2030	4610	390	4220	340	4560	330	4890	730	4160	80	4240	430	3810	140	3950	110	3840	160
07:00	790	8680	750	7930	2030	5900	490	5410	340	5750	620	6370	950	5420	130	5550	520	5030	180	5210	180	5030	190
08:00	710	8360	580	7780	2030	5750	560	5190	340	5530	480	6010	1020	4990	110	5100	640	4460	150	4610	140	4470	250
09:00	830	7840	540	7300	2230	5070	530	4540	420	4960	450	5410	930	4480	150	4630	670	3960	210	4170	150	4020	170
10:00	830	7300	560	6740	2470	4270	580	3690	390	4080	410	4490	870	3620	140	3760	710	3050	220	3270	150	3120	210
11:00	960	7850	750	7100	2860	4240	670	3570	490	4060	480	4540	1020	3520	180	3700	680	3020	200	3220	200	3020	210
12:00	1330	7960	1040	6920	2770	4150	650	3500	580	4080	600	4680	1190	3490	180	3670	600	3070	260	3330	220	3110	200
13:00	830	9940	1000	8940	2460	6480	1300	5180	90	5270	1110	6380	1260	5120	440	5560	790	4770	310	5080	460	4620	200
14:00	870	11170	1030	10140	2460	7680	1110	6570	110	6680	1550	8230	1440	6790	550	7340	810	6530	310	6840	520	6320	250
15:00	1010	10690	690	10000	2460	7540	870	6670	170	6840	2440	9280	1500	7780	800	8580	750	7830	470	8300	570	7730	220
16:00	970	9690	610	9080	2270	6810	740	6070	150	6220	2770	8990	1150	7840	800	8640	590	8050	500	8550	570	7980	230
17:00	950	9190	570	8620	2270	6350	720	5630	150	5780	2720	8500	1110	7390	740	8130	580	7550	510	8060	540	7520	240
18:00	880	9610	590	9020	2270	6750	830	5920	150	6070	2000	8070	1190	6880	660	7540	490	7050	380	7430	540	6890	170
19:00	810	9370	710	8660	2270	6390	920	5470	150	5620	1300	6920	1220	5700	520	6220	490	5730	280	6010	540	5470	130

I-15 Southbound Design Year (2050) Peak Period with Build Alternative Forecast

	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159
		SB		SB		SB		SB		SB		SB		SB		SB	SB
		OFF		ON		OFF		ON		OFF		ON		OFF		ON	OFF
Adjusted Demand		SB Off to Lake		SB On from Lake		SB Off to Nichols		SB On from Nichols		SB Off to Central		SB On from Central		SB Off to Main		SB On from Main	SB I-15 South of Main
04:00	1770	150	1620	80	1700	80	1620	210	1830	160	1670	360	2030	80	1950	90	2040
05:00	2790	270	2520	150	2670	170	2500	270	2770	340	2430	560	2990	150	2840	190	3030
06:00	4000	370	3630	380	4010	320	3690	480	4170	500	3670	940	4610	200	4410	320	4730
07:00	5220	400	4820	520	5340	400	4940	610	5550	630	4920	1320	6240	260	5980	520	6500
08:00	4720	410	4310	360	4670	260	4410	510	4920	600	4320	1230	5550	240	5310	420	5730
09:00	4190	410	3780	250	4030	250	3780	400	4180	510	3670	1050	4720	240	4480	310	4790
10:00	3330	380	2950	280	3230	300	2930	400	3330	590	2740	1100	3840	330	3510	300	3810
11:00	3230	450	2780	270	3050	300	2750	430	3180	640	2540	1210	3750	320	3430	330	3760
12:00	3310	480	2830	250	3080	310	2770	390	3160	690	2470	1200	3670	360	3310	340	3650
13:00	4820	690	4130	260	4390	320	4070	470	4540	930	3610	1060	4670	480	4190	350	4540
14:00	6570	850	5720	480	6200	490	5710	540	6250	1020	5230	1100	6330	630	5700	440	6140
15:00	7950	1000	6950	320	7270	470	6800	460	7260	1120	6140	1020	7160	700	6460	420	6880
16:00	8210	1130	7080	260	7340	350	6990	440	7430	1140	6290	1090	7380	690	6690	370	7060
17:00	7760	1120	6640	260	6900	370	6530	430	6960	1060	5900	1020	6920	670	6250	340	6590
18:00	7060	1070	5990	220	6210	330	5880	430	6310	900	5410	870	6280	620	5660	270	5930
19:00	5600	920	4680	190	4870	260	4610	360	4970	890	4080	720	4800	520	4280	210	4490

I-15 Northbound Design Year (2050) Peak Period with Build Alternative Forecast

	201	202	203	204	205	206	207	262	263	264	265	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224
	NB	NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB		NB
	ON	OFF		ON		OFF		OFF		OFF		ON		OFF		ON		OFF		ON		OFF		ON		OFF		ON
Adjusted Demand	NB I-15 South of Main	NB Off to Main SB		NB On from Main		NB Off to Central		NB Loop Off to Central		NB Hook Off to Dexter		NB On from Central		NB Off to Nichols		NB On from Nichols		NB Off to Lake		NB On from Lake		NB Off to Indian Truck Trail		NB On from Indian Truck Trail		NB Off to Temescal Canyon		NB On from Temescal Canyon
04:00	4500	70	4430	980	5410	160	5250	260	4990	70	4920	890	5810	190	5620	530	6150	60	6090	1470	7560	90	7470	310	7780	120	7660	600
05:00	6020	160	5860	1020	6880	290	6590	460	6130	110	6020	850	6870	240	6630	530	7160	90	7070	1550	8620	130	8490	400	8890	390	8500	660
06:00	6580	300	6280	840	7120	420	6700	800	5900	190	5710	810	6520	290	6230	600	6830	180	6650	1260	7910	410	7500	370	7870	620	7250	580
07:00	6760	590	6170	850	7020	620	6400	800	5600	190	5410	900	6310	460	5850	610	6460	270	6190	1090	7280	510	6770	240	7010	680	6330	420
08:00	6420	420	6000	830	6830	470	6360	800	5560	190	5370	790	6160	270	5890	550	6440	180	6260	1070	7330	360	6970	300	7270	850	6420	560
09:00	6020	320	5700	610	6310	450	5860	730	5130	180	4950	750	5700	350	5350	360	5710	100	5610	820	6430	270	6160	300	6460	660	5800	640
10:00	5990	360	5630	910	6540	500	6040	800	5240	190	5050	700	5750	360	5390	580	5970	150	5820	780	6600	240	6360	340	6700	320	6380	690
11:00	6020	380	5640	790	6430	560	5870	910	4960	220	4740	740	5480	320	5160	470	5630	140	5490	540	6030	220	5810	290	6100	380	5720	680
12:00	6030	410	5620	870	6490	520	5970	850	5120	200	4920	760	5680	400	5280	640	5920	190	5730	690	6420	210	6210	260	6470	200	6270	700
13:00	6350	440	5910	350	6260	550	5710	620	5090	170	4920	490	5410	410	5000	450	5450	350	5100	570	5670	370	5300	330	5630	230	5400	1650
14:00	6890	530	6360	540	6900	580	6320	660	5660	180	5480	550	6030	480	5550	620	6170	420	5750	590	6340	420	5920	380	6300	290	6010	1510
15:00	7040	580	6460	550	7010	600	6410	690	5720	180	5540	490	6030	450	5580	530	6110	400	5710	560	6270	340	5930	340	6270	290	5980	1360
16:00	6530	550	5980	450	6430	680	5750	610	5140	160	4980	500	5480	430	5050	350	5400	320	5080	520	5600	320	5280	340	5620	200	5420	1090
17:00	6500	420	6080	460	6540	630	5910	610	5300	160	5140	500	5640	480	5160	350	5510	320	5190	480	5670	310	5360	330	5690	190	5500	1050
18:00	5890	370	5520	410	5930	520	5410	610	4800	160	4640	360	5000	440	4560	330	4890	280	4610	460	5070	270	4800	260	5060	150	4910	980
19:00	5440	230	5210	390	5600	330	5270	610	4660	160	4500	280	4780	370	4410	320	4730	270	4460	370	4830	250	4580	170	4750	120	4630	910

I-15 Northbound Design Year (2050) Peak Period with Build Alternative Forecast

	225	226	227	230	231	269	270	266	228	229	232	271	233	273	274	235	236	237	238	239	240	241	242	243	244	245
		NB		NB			NB		NB		NB				NB		NB		NB		NB		NB		NB	
		OFF		OFF			OFF		ON		ON				ON		ON		OFF		ON		OFF		OFF	
Adjusted Demand		NB Off to Weirick		NB Off to Cajalco			NB Off to EB CETAP West		NB On from Weirick		NB Loop On from Cajalco				NB On from WB CETAP West		NB On from El Cerrito Rd		NB Off to Ontario		NB On from Ontario		NB Off to EL		NB Off to Magnolia	
04:00	8260	130	8130	500	7630	7630	200	7430	470	7900	270	8170	8170	8170	790	8960	220	9180	1430	7750	510	8260	20	8240	510	7730
05:00	9160	160	9000	510	8490	8490	210	8280	690	8970	430	9400	9400	9400	1530	10930	390	11320	1990	9330	960	10290	80	10210	830	9380
06:00	7830	130	7700	850	6850	6850	350	6500	1210	7710	630	8340	8340	8340	2660	11000	730	11730	2070	9660	1350	11010	160	10850	1010	9840
07:00	6750	110	6640	870	5770	5770	350	5420	1340	6760	860	7620	7620	7620	2660	10280	1070	11350	2790	8560	1510	10070	180	9890	1150	8740
08:00	6980	130	6850	900	5950	5950	350	5600	1320	6920	760	7680	7680	7680	2660	10340	770	11110	2090	9020	1290	10310	210	10100	1110	8990
09:00	6440	120	6320	970	5350	5350	390	4960	1240	6200	580	6780	6780	6780	2060	8840	500	9340	1610	7730	1220	8950	230	8720	920	7800
10:00	7070	150	6920	1270	5650	5650	510	5140	1030	6170	470	6640	6640	6640	1650	8290	380	8670	1500	7170	1020	8190	270	7920	820	7100
11:00	6400	150	6250	1190	5060	5060	480	4580	980	5560	480	6040	6040	6040	1690	7730	400	8130	1520	6610	940	7550	310	7240	960	6280
12:00	6970	130	6840	1250	5590	5590	500	5090	940	6030	430	6460	6460	6460	1510	7970	400	8370	1540	6830	910	7740	440	7300	1000	6300
13:00	7050	220	6830	230	6600	6600	340	6260	780	7040	830	7870	7870	7870	2670	10540	600	11140	1710	9430	1350	10780	910	9870	960	8910
14:00	7520	370	7150	240	6910	6910	360	6550	800	7350	810	8160	8160	8160	2630	10790	850	11640	2560	9080	1350	10430	1370	9060	1050	8010
15:00	7340	390	6950	220	6730	6730	330	6400	860	7260	840	8100	8100	8100	2700	10800	630	11430	1800	9630	1450	11080	1260	9820	1080	8740
16:00	6510	300	6210	220	5990	5990	260	5730	670	6400	630	7030	7030	7030	2000	9030	540	9570	1660	7910	1280	9190	1110	8080	800	7280
17:00	6550	260	6290	210	6080	6080	260	5820	680	6500	630	7130	7130	7130	2000	9130	580	9710	1620	8090	1230	9320	1230	8090	800	7290
18:00	5890	240	5650	160	5490	5490	260	5230	540	5770	620	6390	6390	6390	2000	8390	570	8960	1550	7410	1150	8560	1220	7340	660	6680
19:00	5540	200	5340	130	5210	5210	260	4950	420	5370	600	5970	5970	5970	2000	7970	490	8460	1210	7250	1050	8300	1220	7080	600	6480

I-15 Northbound Design Year (2050) Peak Period with Build Alternative Forecast

	246	247	248	249	250	251	252	253	254	255	256	257	258	259
	NB		NB		NB		NB		NB		NB		NB	
	ON		ON		OFF		OFF		ON		ON		OFF	
Adjusted Demand	NB Loop On from Magnolia		NB On from Magnolia		NB Off to WB SR-91		NB Off to EB SR-91		NB On from WB SR-91		NB On from EB SR-91		NB Off to Hidden Valley	
04:00	340	8070	550	8620	350	8270	2990	5280	470	5750	570	6320	330	5990
05:00	510	9890	700	10590	900	9690	2290	7400	900	8300	1100	9400	390	9010
06:00	940	10780	510	11290	1510	9780	1880	7900	1090	8990	1680	10670	590	10080
07:00	1190	9930	480	10410	1510	8900	1680	7220	1320	8540	1900	10440	740	9700
08:00	1100	10090	480	10570	1440	9130	1900	7230	1030	8260	1800	10060	660	9400
09:00	990	8790	860	9650	1040	8610	1930	6680	970	7650	1750	9400	560	8840
10:00	1080	8180	830	9010	1170	7840	2600	5240	900	6140	1700	7840	620	7220
11:00	890	7170	1190	8360	1080	7280	2820	4460	870	5330	1760	7090	790	6300
12:00	750	7050	1370	8420	960	7460	2480	4980	890	5870	1900	7770	730	7040
13:00	800	9710	1330	11040	1110	9930	3300	6630	940	7570	1960	9530	600	8930
14:00	870	8880	1170	10050	1230	8820	3380	5440	890	6330	1990	8320	580	7740
15:00	810	9550	990	10540	1240	9300	3340	5960	860	6820	1810	8630	600	8030
16:00	1080	8360	660	9020	1120	7900	2970	4930	870	5800	1850	7650	560	7090
17:00	1010	8300	720	9020	1370	7650	2800	4850	1040	5890	1860	7750	800	6950
18:00	1050	7730	410	8140	1210	6930	2620	4310	910	5220	1990	7210	530	6680
19:00	880	7360	350	7710	910	6800	2270	4530	860	5390	1880	7270	460	6810

Appendix D



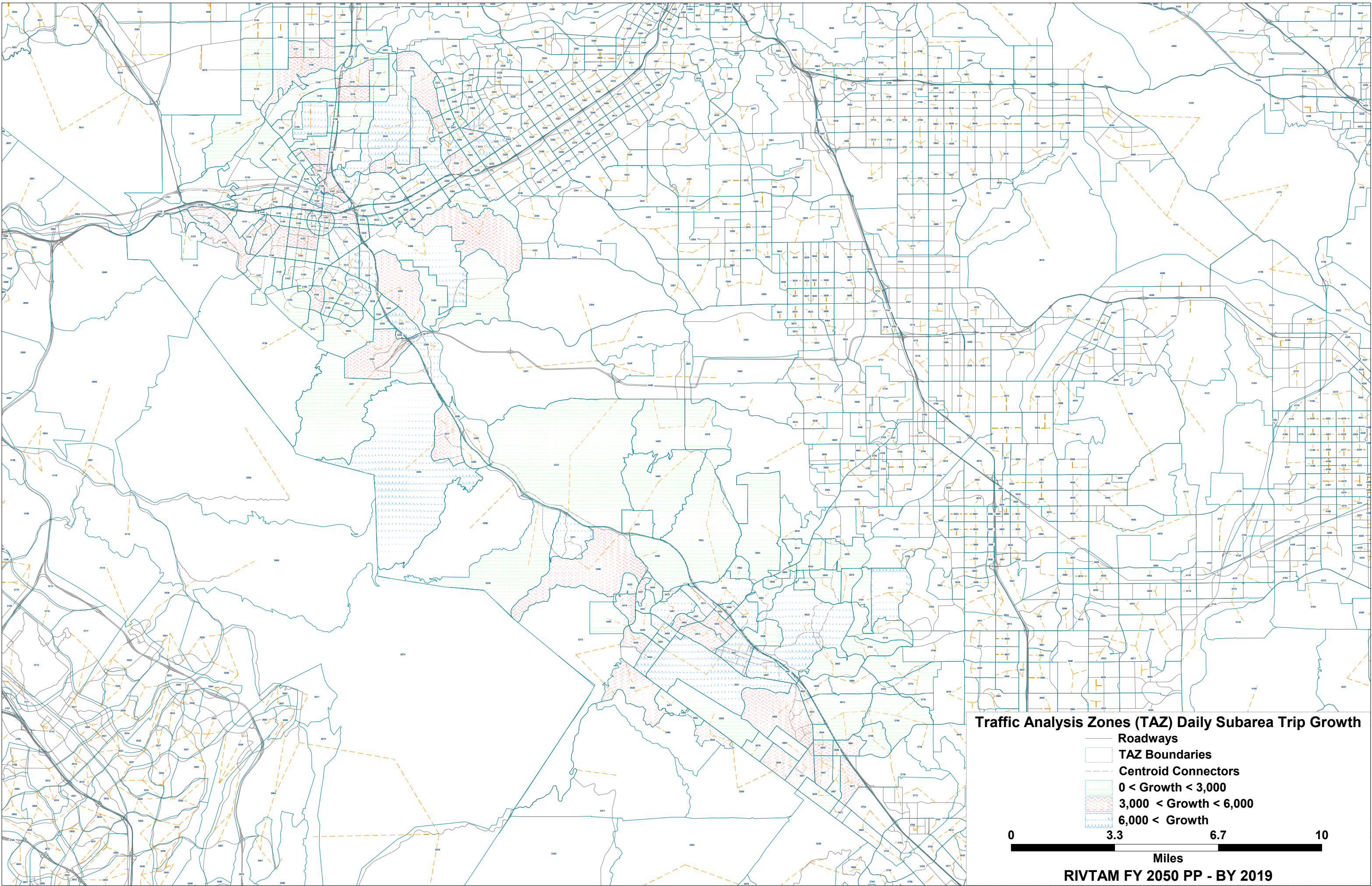
Model Calibration & Model Plots

Metric	Value	Req.	Test
Model Deviation	-5%	+/- 10%	PASS
Meet Max Dev.	97%	> 75%	PASS
RMSE	10%	< 40%	PASS
Correlation	0.95	> 0.88	PASS
Screenline Max Dev.	100%	100%	PASS

Counts	38
Model	38
Check	38

[illegible]

DAILY	Count	Screenline	Location	TDF_ID			Count			Model			Diff	Dev	Max	Test	Diff*2	Fuctional Class	Freeway
100%				AB	BA	AB_Dir	NE	SW	Sum	NE	SW	Sum							
Validation Locations	26194		I-15 NB at Hidden Valley	26194	26194	NB	70,782	0	70,782	71,127	0	71,127	345	0%	16%	PASS	119,365	FREEWAY	90
	26192		I-15 SB at Hidden Valley	26192	26192	SB	0	78,023	78,023	0	67,951	67,951	-10,072	-13%	15%	PASS	101,446,431	FREEWAY	90
	23309		I-15 NB North of Magnolia	23309	23309	NB	88,530	0	88,530	82,696	0	82,696	-5,834	-7%	14%	PASS	34,033,798	FREEWAY	90
	22400		I-15 SB North of Magnolia	22400	22400	SB	0	103,337	103,337	0	89,511	89,511	-13,826	-13%	14%	PASS	191,164,128	FREEWAY	90
	23012		I-15 NB btwn Ontario & Magnolia	23012	23012	NB	76,076	0	76,076	67,737	0	67,737	-8,339	-11%	15%	PASS	69,543,097	FREEWAY	90
	22866		I-15 SB btwn Ontario & Magnolia	22866	22866	SB	0	90,988	90,988	0	76,090	76,090	-14,898	-16%	14%	FAIL	221,936,905	FREEWAY	90
	22873	4	I-15 NB btw El Cerrito & Ontario	22873	22873	NB	76,753	0	76,753	71,552	0	71,552	-5,201	-7%	15%	PASS	27,053,027	FREEWAY	90
	22507	4	I-15 SB btw El Cerrito & Ontario	22507	22507	SB	0	84,378	84,378	0	72,496	72,496	-11,882	-14%	14%	PASS	141,181,934	FREEWAY	90
	2661042	1	I-15 NB btw Cajalco & El Cerrito	2661042	2661042	NB	83,364	0	83,364	75,777	0	75,777	-7,587	-9%	14%	PASS	57,564,751	FREEWAY	90
	22846	1	I-15 SB btw Cajalco & El Cerrito	22846	22846	SB	0	83,296	83,296	0	78,643	78,643	-4,653	-6%	14%	PASS	21,651,755	FREEWAY	90
	23104	2	I-15 NB btwn Cajalco & Dos Lagos	23104	23104	NB	77,655	0	77,655	73,046	0	73,046	-4,609	-6%	15%	PASS	21,244,756	FREEWAY	90
	2661043	2	I-15 SB btwn Cajalco & Dos Lagos	2661043	2661043	SB	0	80,389	80,389	0	73,693	73,693	-6,696	-8%	15%	PASS	44,831,911	FREEWAY	90
	23344		I-15 NB btwn Dos Lagos & Temescal Canyon	23344	23344	NB	67,823	0	67,823	66,981	0	66,981	-842	-1%	17%	PASS	709,734	FREEWAY	90
	23101		I-15 SB btwn Dos Lagos & Temescal Canyon	23101	23101	SB	0	73,050	73,050	0	67,751	67,751	-5,299	-7%	16%	PASS	28,081,354	FREEWAY	90
	22353		I-15 NB btw Temescal Canyon & ITT	22353	22353	NB	65,062	0	65,062	65,461	0	65,461	399	1%	17%	PASS	159,002	FREEWAY	90
	23223		I-15 SB btw Temescal Canyon & ITT	23223	23223	SB	0	67,735	67,735	0	66,734	66,734	-1,001	-1%	17%	PASS	1,002,301	FREEWAY	90
	23226		I-15 NB btw ITT & Lake	23226	23226	NB	61,617	0	61,617	62,595	0	62,595	978	2%	18%	PASS	956,242	FREEWAY	90
	22385		I-15 SB btw ITT & Lake	22385	22385	SB	0	63,090	63,090	0	64,791	64,791	1,701	3%	18%	PASS	2,892,035	FREEWAY	90
	23149		I-15 NB btw Lake & Nichols	23149	23149	NB	56,425	0	56,425	59,499	0	59,499	3,074	5%	19%	PASS	9,450,205	FREEWAY	90
	23080		I-15 SB btw Lake & Nichols	23080	23080	SB	0	57,862	57,862	0	60,938	60,938	3,076	5%	19%	PASS	9,462,280	FREEWAY	90
	2664039	3	I-15 NB btw Nichols & Central	2664039	2664039	NB	58,370	0	58,370	59,589	0	59,589	1,219	2%	19%	PASS	1,487,057	FREEWAY	90
	23175	3	I-15 SB btw Nichols & Central	23175	23175	SB	0	59,547	59,547	0	60,685	60,685	1,138	2%	19%	PASS	1,294,808	FREEWAY	90
	22499		I-15 NB btw Central & Main	22499	22499	NB	65,827	0	65,827	63,684	0	63,684	-2,143	-3%	17%	PASS	4,593,954	FREEWAY	90
	22646		I-15 SB btw Central & Main	22646	22646	SB	0	66,176	66,176	0	61,982	61,982	-4,194	-6%	17%	PASS	17,593,008	FREEWAY	90
	2663861		I-15 NB South of Main	2663861	2663861	NB	70,250	0	70,250	66,207	0	66,207	-4,043	-6%	16%	PASS	16,344,782	FREEWAY	90
	22433		I-15 SB South of Main	22433	22433	SB	0	68,590	68,590	0	62,626	62,626	-5,964	-9%	17%	PASS	35,573,248	FREEWAY	90
	2663861		I-15 NB South of Main	2663861	2663861	NB	70,250	0	70,250	66,207	0	66,207	-4,043	-6%	16%	PASS	16,344,782	FREEWAY	90
	22433		I-15 SB South of Main	22433	22433	SB	0	68,590	68,590	0	62,626	62,626	-5,964	-9%	17%	PASS	35,573,248	FREEWAY	90
	22436		NB I-15 at Olive Street	22436	22436	NB	59,104	0	59,104	54,129	0	54,129	-4,975	-8%	19%	PASS	24,752,154	FREEWAY	90
	2663864		SB I-15 at Olive Street	2663864	2663864	SB	0	59,507	59,507	0	55,929	55,929	-3,578	-6%	19%	PASS	12,799,530	FREEWAY	90
	22430		NB I-15 at Bundy Canyon	22430	22430	NB	57,938	0	57,938	49,254	0	49,254	-8,684	-15%	19%	PASS	75,409,014	FREEWAY	90
	22437		SB I-15 at Bundy Canyon	22437	22437	SB	0	56,993	56,993	0	49,923	49,923	-7,070	-12%	19%	PASS	49,991,908	FREEWAY	90
22742	1	215 NB Cajalco/Ramona	22742	22742	NB	55,266	0	55,266	62,117	0	62,117	6,851	12%	19%	PASS	46,942,146	FREEWAY	90	
22800	1	215 SB Cajalco/Ramona	22800	22800	SB	0	54,150	54,150	0	62,358	62,358	8,208	15%	20%	PASS	67,363,559	FREEWAY	90	
2671180	2	Temescal btw Cajalco & Dos Lagos	2671180	2671180	NB	10,912	9,503	20,415	7,989	9,391	17,381	-3,034	-15%	28%	PASS	9,207,383	MAJOR ARTERIAL		
22597	3	215 NB at Ethanac	22597	22597	NB	53,820	0	53,820	47,937	0	47,937	-5,883	-11%	20%	PASS	34,614,999	FREEWAY	90	
22659	3	215 SB at Ethanac	22659	22659	SB	0	52,658	52,658	0	43,841	43,841	-8,817	-17%	20%	PASS	77,734,992	FREEWAY	90	
2667358	4	Foothill Parkway btw California & Rimpau	2667358	2667358	EB	11,405	9,959	21,364	12,062	12,880	24,942	3,578	17%	27%	PASS	12,800,345	MAJOR ARTERIAL		





Model Plots

<https://spaces.hightail.com/space/3lYHmdbjG0>

Appendix E



Response to Comments Matrix

Interstate 15 Express Lanes Project Southern Extension PA/ED (EA: 0J0820/ID 08-18000063)

Draft Traffic Volumes Report

Response to Comments

Document Submitted: January 28, 2020 Comments Received: March 06, 2020 Comments Response: March 18, 2020				
Organization		Comment	Original Page Number	Response & Page Number
Caltrans	1	Please confirm the proposed standard for post miles. Currently, the project provides two different approaches based on scope of activities.	Page 2	<p>We will provide one set of project limits in the introduction and for the project description. The project limits are from PM 20.3 to PM 38.8 , which includes advance signage and transition striping.</p> <p>Updated page 2.</p>
	2	Please confirm anticipated Opening Year 2027 or 2030	Page 2	<p>In the first submission of the Methodology and Assumptions Memo, the Caltrans Operations Division requested that the analysis years and study periods for the project be in 5-year increments to be consistent with travel demand model forecasting year increments. Although the project is anticipated to open by 2027, an Opening Year analysis year of 2030 was requested and confirmed by the PDT.</p> <p>Per this request, projects opened between 2027 and 2030 would not result in significant differences in volumes as it relates to I-15 where 2027 volumes would be higher than the 2030 volumes. This conclusion is described in greater detail below:</p> <p>Most projects with an opening year between 2027 and 2030 are outside of the study area and would have little effect on the future travel demand of I-15. These projects are listed below:</p> <ul style="list-style-type: none"> RTP ID 3A01WT159: In Western Riverside County in the City of Norco - on Hamner Ave over Santa Ana River 0.5 miles n/o of Sixth Street, replace 2 lane bridge with a 6 lane bridge (bridge no.56c0446). RTP ID 3M04WT005: I- 15 improvements from 6th Street to between Hamner Ave and Sierra Ave – Reconstruct interchange ramps/channelization improvements.

			<ul style="list-style-type: none"> • RTP ID RIV031215: French Valley Pkwy from Jefferson St to Ynez Rd – Construct 2 In nb cd (n/o Winchester IC on-ramps to just n/o Rte 15/215 jct with connectors to Rte 15 and Rte 215 (I-215 pm: 8.43 to 9.75); and construct 6 In oc (Jefferson to Ynez) & ramps, nb/sb aux In, cd Lns (1 In nb & 3 In sb) & modify Winchester Rd ic. <p>The following projects were considered under the 2030 Opening Year and would also not be constructed by 2027.</p> <ul style="list-style-type: none"> • RTP ID 3A01WT151: Construct a four-lane arterial (Ethanac Road) from SR-74 to Keystone Drive (2030) • RTP ID 3A04WT161, RTP ID 3M0729: Widen Horsethief Canyon Rd from Temescal Canyon Road to I-15 from 2 to 4 lanes and reconstruct ramps (PM 28.36 to 29.36, 2030) • RTP ID 3160004: Main Street/I-15 Interchange improvements. Widening of NB Main Street under the freeway from one to two lanes. Add an additional lane to the northbound entrance and exit ramps, widen southbound off-ramp to accommodate one right-turn lane, one left-turn lane, and one shared through-left-turn lane at the Main Street intersection. Install ramp meters & traffic signals at ramp terminal intersections and Camino Del Norte/Main Street Intersection (2028) • RTP ID 3M0728: At I-15 on Temescal Canyon reconstruct/widen Temescal Canyon Interchange from two to four lanes and reconstruct ramps (PM 32.60 to PM 33.60, 2030) <p>All projects considered in the 2030 Opening Year provide additional access to I-15. Although the listed projects would not exist in 2027 conditions, assuming their completion in the analysis year is a conservative approach because additional access to I-15 would increase travel demand to and from the freeway. As a result, the forecasted 2030 volumes would be higher than a forecasted 2027 volume set and would represent a worst-case-scenario.</p> <p>This information has been added to the Volumes Report to provide clarity. Updated page 4 and pages 26-27.</p>
3	Please indicate (could be a separate email) the relative gap applied to ensure accurate assessment of projected benefits.	Page 13	RIVTAM was used to develop forecast volumes for the project. It was considered the most appropriate tool because it includes detailed

				<p>roadway and land use information for local conditions of the study area and Riverside County.</p> <p>Per the SCAG Model User Guide (2008), the relative gap (assignment convergence criteria) applied to the model is 0.01 and is the standard of practice when using RIVTAM (Appendix C: Page 156, User Guide). Because the convergence criteria of 0.01 is applied model wide, the study area should also represent a convergence criteria of 0.01 – this is especially true when using the RIVTAM model; as it is already a subarea model tiered from the SCAG model. Since RIVTAM provides greater detail in Riverside County (and aggregates areas outside of Riverside County), the assignment of traffic is heavily influenced by Riverside County assumptions (whereas the SCAG model is more heavily influenced by Los Angeles County).</p> <p>The model was further refined and calibrated within the study area through an additional subarea calibration. Since the model was able to meet validation criteria in the study area, the model would have to approach convergence (otherwise the subarea model calibration would likely have not been possible as areas outside of the subarea would have generated model noise that would have made this very difficult).</p> <p>The model is representative of existing travel patterns for the study area and is the best tool to show the projected benefits for the corridor.</p> <p>Discussion regarding the relative gap was added to the added to the Volumes Report for informational purposes. Updated page 19.</p>
	4	Senate Bill 743: "Vehicle miles traveled (VMT) will be estimated using both VISSIM model and regional travel demand model for the project to evaluate the change in VMT associated with the project."	Page 22	<p>RCTC and the project team will evaluate vehicle miles traveled (VMT) for the project using both VISSIM and the travel demand model to evaluate the change in VMT associated with the project; however based on Caltrans guidance, VMT may not be needed since tolled lanes that are priced to not increase VMT can be screened out of analysis.</p> <p>OPR Technical Advisory - On Evaluating Transportation Impacts in CEQA, December 2018, Page 20-21 "Projects that would not likely lead to a substantial or measurable increase in vehicle travel, and therefore generally should not require and induce travel analysis, include:</p>

				<p>-Addition of tolled lanes, where tolls are sufficient to mitigate VMT increase”</p> <p>RCTC will work with Caltrans to determine the details of screening out projects of induced travel analysis and identify the requirements necessary to comply with SB 743.</p>
	5	<p>Technical Advisory- On Evaluating Transportation Impacts in CEQA, December 2018, page. 20-21: Projects that would not likely lead to a substantial or measurable increase in vehicle travel, and therefore generally should not require and induce travel analysis, include: Addition of tolled lanes, where tolls are sufficient to mitigate VMT increase</p> <p>Caltrans Guidance may result in additional requests for information on VMT (methods/analysis) and Induced Travel)</p>	Page 20-21	<p>As Caltrans finalizes guidance on SB 743, RCTC is committed to working with Caltrans on SB 743 compliance for the I-15 ELPSE.</p>
	6			<p>This response to comments matrix was added to Appendix E of Volumes Report.</p>

Appendix C

Technical Calculations (Freeway Mainline Segments, Ramps and Express Lanes)

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Confidence

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Number of Vissim Runs	5
Confidence Interval	95%
GEH Confidence Interval	3.0
Failing to Meet CI Target	0
Maximum Required Runs	2

Location Description				Model Results				Confidence Target		Confidence Test	
ID	Location	Lanes	Type	Average Volume	Standard Deviation	95% Conf. Volume	95% Conf. (percent)	GEH Conf. Volume	GEH Conf. (percent)	Meet GEH	Required Runs
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry/Exit	30,882	36	44	0%	529	2%	PASS	1
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	34,159	55	68	0%	557	2%	PASS	1
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	40,526	49	61	0%	606	1%	PASS	1
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	35,047	58	72	0%	564	2%	PASS	1
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	36,374	72	89	0%	574	2%	PASS	1
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	32,546	35	44	0%	543	2%	PASS	1
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	31,666	55	68	0%	536	2%	PASS	1
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	29,207	88	110	0%	515	2%	PASS	1
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	25,972	76	94	0%	486	2%	PASS	1
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	22,956	82	102	0%	457	2%	PASS	1
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	22,143	119	147	1%	449	2%	PASS	1
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	21,559	88	109	1%	443	2%	PASS	1
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	22,472	102	127	1%	452	2%	PASS	1
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	26,199	104	129	0%	488	2%	PASS	1
100015	Southbound I-15: South of Main St On-ramp	3	Entry/Exit	27,733	100	124	0%	502	2%	PASS	1
100101	Northbound I-15: South of Main St Off-ramp	3	Entry/Exit	31,187	27	34	0%	532	2%	PASS	1
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	29,214	62	77	0%	515	2%	PASS	1
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	26,307	97	120	0%	489	2%	PASS	1
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	25,804	62	78	0%	484	2%	PASS	1
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	28,682	69	85	0%	510	2%	PASS	1
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	30,253	89	110	0%	524	2%	PASS	1
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	30,037	63	79	0%	522	2%	PASS	1
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	Mainline	35,522	56	70	0%	568	2%	PASS	1
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	39,224	77	96	0%	596	2%	PASS	1
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	41,328	106	132	0%	612	1%	PASS	1
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	46,701	122	151	0%	651	1%	PASS	1
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	38,153	95	118	0%	588	2%	PASS	1
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	43,384	151	188	0%	627	1%	PASS	1
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	39,332	106	132	0%	597	2%	PASS	1
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Entry/Exit	35,375	133	165	0%	567	2%	PASS	1

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Confidence

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Number of Vissim Runs	5
Confidence Interval	95%
GEH Confidence Interval	3.0
Failing to Meet CI Target	0
Maximum Required Runs	2

Location Description				Model Results				Confidence Target		Confidence Test	
ID	Location	Lanes	Type	Average Volume	Standard Deviation	95% Conf. Volume	95% Conf. (percent)	GEH Conf. Volume	GEH Conf. (percent)	Meet GEH	Required Runs
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	Ramp	3,310	23	29	1%	175	5%	PASS	1
109002	Southbound I-15: WB SR-91 Off-ramp	2	Ramp	9,449	44	55	1%	294	3%	PASS	1
109003	Southbound I-15: EB SR-91 Off-ramp	1	Ramp	7,674	46	58	1%	265	3%	PASS	1
109004	Southbound I-15: EB SR-91 On-ramp	2	Ramp	14,377	24	29	0%	362	3%	PASS	1
109005	Southbound I-15: WB SR-91 On-ramp	1	Ramp	9,174	21	27	0%	290	3%	PASS	1
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Ramp	9,493	83	104	1%	295	3%	PASS	1
109007	Southbound I-15: Magnolia Ave On-ramp	1	Ramp	4,072	26	32	1%	194	5%	PASS	1
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	Ramp	1,345	11	14	1%	112	8%	PASS	1
109009	Southbound I-15: Ontario Ave Off-ramp	1	Ramp	6,939	80	99	1%	252	4%	PASS	1
109010	Southbound I-15: Ontario Ave On-ramp	1	Ramp	3,183	13	16	0%	172	5%	PASS	1
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Ramp	2,575	22	28	1%	155	6%	PASS	1
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	Ramp	1,735	14	17	1%	127	7%	PASS	1
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Ramp	3,885	72	89	2%	189	5%	PASS	2
109014	Southbound I-15: Cajalco Rd On-ramp	1	Ramp	1,476	9	11	1%	118	8%	PASS	1
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Ramp	4,047	38	47	1%	193	5%	PASS	1
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	Ramp	902	7	8	1%	92	10%	PASS	1
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Ramp	4,101	55	69	2%	194	5%	PASS	1
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	Ramp	1,210	17	21	2%	107	9%	PASS	1
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Ramp	2,071	38	48	2%	139	7%	PASS	1
109020	Southbound I-15: Indian Truck Trail On-ramp	1	Ramp	1,404	12	15	1%	115	8%	PASS	1
109021	Southbound I-15: Lake St Off-ramp	1	Ramp	1,793	39	48	3%	129	7%	PASS	1
109022	Southbound I-15: Lake St On-ramp	1	Ramp	1,333	18	23	2%	112	8%	PASS	1
109023	Southbound I-15: Nichols Rd Off-ramp	1	Ramp	1,172	23	29	2%	105	9%	PASS	1
109024	Southbound I-15: Nichols Rd On-ramp	1	Ramp	2,165	9	11	1%	142	7%	PASS	1
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Ramp	3,363	59	74	2%	176	5%	PASS	1
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	Ramp	7,139	21	26	0%	256	4%	PASS	1
109027	Southbound I-15: Main St Off-ramp	1	Ramp	760	35	43	6%	85	11%	PASS	2
109028	Southbound I-15: Main St On-ramp	1	Ramp	2,368	29	37	2%	148	6%	PASS	1
109101	Northbound I-15: Main St Off-ramp	1	Ramp	2,826	68	84	3%	162	6%	PASS	2
109102	Northbound I-15: Main St On-ramp	1	Ramp	868	6	7	1%	91	10%	PASS	1

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Confidence

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Number of Vissim Runs	5
Confidence Interval	95%
GEH Confidence Interval	3.0
Failing to Meet CI Target	0
Maximum Required Runs	2

Location Description				Model Results				Confidence Target		Confidence Test	
ID	Location	Lanes	Type	Average Volume	Standard Deviation	95% Conf. Volume	95% Conf. (percent)	GEH Conf. Volume	GEH Conf. (percent)	Meet GEH	Required Runs
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Ramp	7,244	76	95	1%	258	4%	PASS	1
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	Ramp	4,345	14	18	0%	200	5%	PASS	1
109105	Northbound I-15: Nichols Rd Off-ramp	1	Ramp	1,484	31	38	3%	118	8%	PASS	1
109106	Northbound I-15: Nichols Rd On-ramp	1	Ramp	967	7	9	1%	96	10%	PASS	1
109107	Northbound I-15: Lake St Off-ramp	1	Ramp	986	19	23	2%	96	10%	PASS	1
109108	Northbound I-15: Lake St On-ramp	1	Ramp	3,847	12	15	0%	188	5%	PASS	1
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Ramp	1,770	34	42	2%	128	7%	PASS	1
109110	Northbound I-15: Indian Truck Trail On-ramp	1	Ramp	3,285	13	16	0%	174	5%	PASS	1
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Ramp	3,807	78	96	3%	187	5%	PASS	2
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	Ramp	3,552	11	14	0%	181	5%	PASS	1
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Ramp	938	9	12	1%	94	10%	PASS	1
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	Ramp	6,403	15	19	0%	242	4%	PASS	1
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Ramp	986	18	23	2%	96	10%	PASS	1
109116	Northbound I-15: Cajalco Rd On-ramp	1	Ramp	4,625	20	24	1%	206	4%	PASS	1
109117	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Ramp	2,009	42	52	3%	137	7%	PASS	1
109118	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	Ramp	4,110	20	25	1%	195	5%	PASS	1
109119	Northbound I-15: Ontario Ave Off-ramp	1	Ramp	3,539	57	71	2%	181	5%	PASS	1
109120	Northbound I-15: Ontario Ave On-ramp	1	Ramp	8,930	23	29	0%	286	3%	PASS	1
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Ramp	8,529	89	110	1%	279	3%	PASS	1
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Ramp	4,275	21	26	1%	198	5%	PASS	1
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	Ramp	5,315	13	16	0%	221	4%	PASS	1
109124	Northbound I-15: Magnolia Ave On-ramp	1	Ramp	4,252	24	30	1%	198	5%	PASS	1
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Ramp	23,020	93	115	1%	457	2%	PASS	1
109126	Northbound I-15: WB SR-91 On-ramp	1	Ramp	7,791	25	31	0%	267	3%	PASS	1
109127	Northbound I-15: EB SR-91 On-ramp	1	Ramp	11,209	14	18	0%	320	3%	PASS	1
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Ramp	3,931	95	118	3%	190	5%	PASS	2

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (5:00 - 6:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	24	24	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	84	84	-4%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	2,402	601	2,334	584	3.0	0.7	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	2,576	515	2,485	497	5.0	0.8	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	2,948	590	2,789	558	5.0	1.3	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	2,449	612	2,306	577	5.0	1.5	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	2,488	498	2,339	468	5.0	1.4	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	2,081	520	1,940	485	5.0	1.6	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	2,083	694	1,921	640	5.0	2.1	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	1,871	624	1,690	563	5.0	2.5	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	1,691	564	1,497	499	5.0	2.8	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	1,391	464	1,177	392	5.0	3.4	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	1,400	467	1,154	385	5.0	4.0	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	1,321	440	1,058	353	5.0	4.4	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	1,401	467	1,126	375	5.0	4.5	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	1,609	536	1,347	449	5.0	3.9	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	1,712	571	1,436	479	5.0	4.0	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	3,762	1,254	3,717	1,239	3.0	0.4	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,745	1,248	3,668	1,223	5.0	0.7	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	3,797	1,266	3,693	1,231	5.0	1.0	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	3,789	1,263	3,635	1,212	5.0	1.5	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	4,496	1,499	4,262	1,421	5.0	2.0	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	4,924	1,641	4,618	1,539	5.0	2.6	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	In Queue			4,618	1,539			
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	In Queue			4,705	1,568			
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	4,989	1,663	5,034	1,678	5.0	0.4	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	4,948	1,649	4,980	1,660	5.0	0.3	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	5,612	1,122	5,598	1,120	5.0	0.1	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	4,128	1,032	4,193	1,048	5.0	0.5	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	4,516	1,129	4,577	1,144	5.0	0.5	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	4,047	1,012	3,989	997	5.0	0.5	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (5:00 - 6:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	24	24	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	84	84	-4%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	3,798	950	3,686	921	5.0	0.9	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	174	174	160	160	3.0	1.1	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	785	393	789	395	5.0	0.1	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	560	560	532	532	5.0	1.2	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	996	498	965	482	3.0	0.7	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	721	721	675	675	3.0	1.7	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	805	403	770	385	5.0	0.9	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	306	306	308	308	3.0	0.1	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	39	39	40	40	3.0	0.1	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	523	523	491	491	5.0	1.4	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	116	116	112	112	3.0	0.4	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	73	73	69	69	5.0	0.4	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	75	75	62	62	3.0	1.6	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	279	279	270	270	5.0	0.6	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	67	67	56	56	3.0	1.5	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	215	215	186	186	5.0	2.0	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	35	35	29	29	3.0	1.1	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	356	356	333	333	5.0	1.2	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	56	56	44	44	3.0	1.7	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	97	97	84	84	5.0	1.3	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	106	106	103	103	3.0	0.3	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	154	154	126	126	5.0	2.3	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	75	75	68	68	3.0	0.8	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	83	83	66	66	5.0	1.9	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	163	163	157	157	3.0	0.5	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	256	256	204	204	5.0	3.5	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	464	464	440	440	3.0	1.1	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	56	56	52	52	5.0	0.5	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	159	159	164	164	3.0	0.4	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (5:00 - 6:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	24	24	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	84	84	-4%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	146	146	139	139	5.0	0.6	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	129	129	124	124	3.0	0.4	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	538	538	530	530	5.0	0.4	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	590	590	581	581	3.0	0.4	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	131	131	130	130	5.0	0.1	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	123	123	120	120	3.0	0.3	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	71	71	67	67	5.0	0.4	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	778	778	769	769	3.0	0.3	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	100	100	94	94	5.0	0.6	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	528	528	517	517	3.0	0.5	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	367	367	310	310	5.0	3.1	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	469	469	482	482	3.0	0.6	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	72	72	70	70	5.0	0.2	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	503	503	518	518	3.0	0.7	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	49	49	55	55	5.0	0.9	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	422	422	436	436	3.0	0.7	PASS
109117	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	395	395	384	384	5.0	0.5	PASS
109118	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	354	354	336	336	3.0	1.0	PASS
109119	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	290	290	295	295	5.0	0.3	PASS
109120	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	954	954	923	923	3.0	1.0	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	1,484	1,484	1,400	1,400	5.0	2.2	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	391	196	399	200	5.0	0.3	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	348	348	358	358	3.0	0.5	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	431	431	425	425	3.0	0.3	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	2,270	1,135	2,362	1,181	5.0	1.3	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	893	893	898	898	3.0	0.2	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	908	908	890	890	3.0	0.6	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	249	249	294	294	5.0	2.7	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (6:00 - 7:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	23	23	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	83	83	-3%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	3,011	753	2,943	736	3.0	0.6	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	3,263	653	3,193	639	5.0	0.6	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	4,195	839	4,123	825	5.0	0.5	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	3,654	914	3,543	886	5.0	0.9	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	3,748	750	3,615	723	5.0	1.0	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	3,127	782	3,019	755	5.0	1.0	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	3,106	1,035	2,969	990	5.0	1.4	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	2,891	964	2,742	914	5.0	1.6	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	2,611	870	2,463	821	5.0	1.7	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	2,364	788	2,166	722	5.0	2.4	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	2,299	766	2,065	688	5.0	2.9	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	2,276	759	2,000	667	5.0	3.4	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	2,391	797	2,103	701	5.0	3.5	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	2,770	923	2,464	821	5.0	3.5	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	2,979	993	2,654	885	5.0	3.5	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	4,127	1,376	4,179	1,393	3.0	0.5	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,951	1,317	3,988	1,329	5.0	0.3	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	3,649	1,216	3,673	1,224	5.0	0.2	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	3,661	1,220	3,714	1,238	5.0	0.5	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	4,224	1,408	4,358	1,453	5.0	1.2	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	In Queue			4,267	1,422			
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	In Queue			3,845	1,282			
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	In Queue			4,536	1,512			
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	5,070	1,690	5,017	1,672	5.0	0.4	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	5,429	1,810	5,321	1,774	5.0	0.9	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	6,370	1,274	6,268	1,254	5.0	0.6	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	4,827	1,207	4,649	1,162	5.0	1.3	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	5,449	1,362	5,220	1,305	5.0	1.6	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	5,324	1,331	4,876	1,219	5.0	3.1	PASS

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Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	23	23	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	83	83	-3%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	4,931	1,233	4,467	1,117	5.0	3.4	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	252	252	256	256	3.0	0.2	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	818	409	808	404	5.0	0.2	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	884	884	842	842	5.0	1.4	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	1,372	686	1,362	681	3.0	0.2	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,262	1,262	1,228	1,228	3.0	1.0	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	886	443	863	431	5.0	0.6	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	345	345	309	309	3.0	2.0	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	94	94	82	82	3.0	1.3	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	863	863	821	821	5.0	1.5	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	242	242	240	240	3.0	0.1	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	181	181	177	177	5.0	0.3	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	160	160	143	143	3.0	1.4	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	358	358	355	355	5.0	0.2	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	143	143	138	138	3.0	0.4	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	347	347	319	319	5.0	1.6	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	67	67	69	69	3.0	0.3	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	362	362	355	355	5.0	0.4	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	115	115	105	105	3.0	0.9	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	218	218	188	188	5.0	2.1	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	153	153	143	143	3.0	0.8	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	203	203	191	191	5.0	0.8	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	180	180	180	180	3.0	0.0	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	157	157	147	147	5.0	0.8	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	272	272	283	283	3.0	0.6	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	366	366	348	348	5.0	0.9	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	745	745	732	732	3.0	0.5	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	54	54	58	58	5.0	0.5	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	263	263	278	278	3.0	0.9	PASS

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State facility segments	100%	5.0	23	23	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	83	83	-3%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	283	283	298	298	5.0	0.9	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	107	107	103	103	3.0	0.4	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	861	861	851	851	5.0	0.3	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	559	559	522	522	3.0	1.6	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	138	138	134	134	5.0	0.3	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	150	150	144	144	3.0	0.5	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	133	133	124	124	5.0	0.8	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	696	696	719	719	3.0	0.9	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	314	314	293	293	5.0	1.2	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	460	460	431	431	3.0	1.4	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	579	579	482	482	5.0	4.2	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	430	430	427	427	3.0	0.1	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	78	78	73	73	5.0	0.6	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	864	864	857	857	3.0	0.2	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	74	74	78	78	5.0	0.5	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	556	556	566	566	3.0	0.4	PASS
109117	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	302	302	329	329	5.0	1.5	PASS
109118	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	661	661	636	636	3.0	1.0	PASS
109119	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	406	406	403	403	5.0	0.1	PASS
109120	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	1,347	1,347	1,361	1,361	3.0	0.4	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	1,543	1,543	1,609	1,609	5.0	1.7	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	455	228	485	242	5.0	1.0	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	697	697	699	699	3.0	0.1	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	380	380	368	368	3.0	0.6	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	2,581	1,291	2,680	1,340	5.0	1.4	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,085	1,085	1,032	1,032	3.0	1.6	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,371	1,371	1,321	1,321	3.0	1.4	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	393	393	408	408	5.0	0.7	PASS

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Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	23	23	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	83	83	-2%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/lane)	Total (veh)	Per Lane (veh/lane)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	4,057	1,014	3,998	999	3.0	0.5	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	4,493	899	4,409	882	5.0	0.6	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	5,701	1,140	5,573	1,115	5.0	0.8	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	5,001	1,250	4,860	1,215	5.0	1.0	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	5,128	1,026	4,968	994	5.0	1.0	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	4,720	1,180	4,556	1,139	5.0	1.2	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	4,663	1,554	4,494	1,498	5.0	1.4	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	4,373	1,458	4,195	1,398	5.0	1.6	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	3,914	1,305	3,750	1,250	5.0	1.5	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	3,612	1,204	3,402	1,134	5.0	2.0	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	3,499	1,166	3,263	1,088	5.0	2.3	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	3,588	1,196	3,327	1,109	5.0	2.6	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	3,755	1,252	3,455	1,152	5.0	2.9	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	4,391	1,464	4,095	1,365	5.0	2.6	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	4,745	1,582	4,447	1,482	5.0	2.5	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	4,310	1,437	4,287	1,429	3.0	0.2	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,853	1,284	3,830	1,277	5.0	0.2	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	3,441	1,147	3,409	1,136	5.0	0.3	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	3,291	1,097	3,277	1,092	5.0	0.1	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	3,587	1,196	3,611	1,204	5.0	0.2	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	In Queue			3,718	1,239			
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	In Queue			3,368	1,123			
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	In Queue			4,293	1,431			
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	5,070	1,690	5,074	1,691	5.0	0.0	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	5,764	1,921	5,724	1,908	5.0	0.3	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	6,550	1,310	6,498	1,300	5.0	0.3	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	4,996	1,249	5,018	1,254	5.0	0.2	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	5,626	1,407	5,671	1,418	5.0	0.3	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	5,757	1,439	5,644	1,411	5.0	0.7	PASS

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State facility segments	100%	5.0	23	23	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	83	83	-2%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	5,153	1,288	5,054	1,264	5.0	0.7	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	436	436	421	421	3.0	0.7	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	817	409	822	411	5.0	0.1	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	1,277	1,277	1,257	1,257	5.0	0.6	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	1,715	858	1,665	832	3.0	0.9	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,587	1,587	1,593	1,593	3.0	0.1	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	1,239	620	1,225	613	5.0	0.3	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	539	539	536	536	3.0	0.1	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	127	127	111	111	3.0	1.5	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	834	834	830	830	5.0	0.1	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	426	426	448	448	3.0	1.1	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	474	474	447	447	5.0	1.2	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	417	417	397	397	3.0	1.0	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	455	455	445	445	5.0	0.5	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	165	165	170	170	3.0	0.4	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	574	574	558	558	5.0	0.7	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	115	115	132	132	3.0	1.5	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	455	455	460	460	5.0	0.2	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	153	153	149	149	3.0	0.3	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	290	290	274	274	5.0	0.9	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	177	177	181	181	3.0	0.3	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	235	235	232	232	5.0	0.2	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	324	324	339	339	3.0	0.8	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	235	235	241	241	5.0	0.4	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	402	402	414	414	3.0	0.6	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	491	491	474	474	5.0	0.8	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	1,127	1,127	1,131	1,131	3.0	0.1	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	113	113	107	107	5.0	0.6	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	467	467	484	484	3.0	0.8	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (7:00 - 8:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	23	23	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	83	83	-2%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	576	576	577	577	5.0	0.0	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	119	119	123	123	3.0	0.4	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	1,062	1,062	1,058	1,058	5.0	0.1	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	650	650	641	641	3.0	0.4	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	311	311	299	299	5.0	0.7	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	161	161	151	151	3.0	0.8	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	227	227	214	214	5.0	0.9	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	523	523	511	511	3.0	0.5	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	412	412	386	386	5.0	1.3	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	334	334	351	351	3.0	0.9	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	642	642	630	630	5.0	0.5	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	267	267	269	269	3.0	0.1	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	61	61	63	63	5.0	0.2	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	996	996	1,010	1,010	3.0	0.4	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	108	108	100	100	5.0	0.8	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	902	902	903	903	3.0	0.0	PASS
109117	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	302	302	316	316	5.0	0.8	PASS
109118	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	996	996	963	963	3.0	1.0	PASS
109119	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	718	718	630	630	5.0	3.4	PASS
109120	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	1,504	1,504	1,397	1,397	3.0	2.8	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	1,554	1,554	1,484	1,484	5.0	1.8	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	669	335	643	322	5.0	0.7	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	929	929	918	918	3.0	0.4	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	370	370	381	381	3.0	0.5	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	2,774	1,387	2,918	1,459	5.0	1.9	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,313	1,313	1,330	1,330	3.0	0.5	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,592	1,592	1,555	1,555	3.0	0.9	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	604	604	580	580	5.0	1.0	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (8:00 - 9:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	23	23	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	83	83	2%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	4,580	1,145	4,561	1,140	3.0	0.1	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	4,962	992	4,946	989	5.0	0.1	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	5,996	1,199	6,030	1,206	5.0	0.2	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	5,090	1,273	5,153	1,288	5.0	0.4	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	5,251	1,050	5,333	1,067	5.0	0.5	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	4,519	1,130	4,663	1,166	5.0	1.1	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	4,462	1,487	4,591	1,530	5.0	1.1	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	4,130	1,377	4,257	1,419	5.0	1.1	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	3,591	1,197	3,706	1,235	5.0	1.1	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	3,141	1,047	3,275	1,092	5.0	1.4	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	3,130	1,043	3,271	1,090	5.0	1.4	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	3,056	1,019	3,229	1,076	5.0	1.8	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	3,260	1,087	3,443	1,148	5.0	1.8	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	3,828	1,276	4,008	1,336	5.0	1.7	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	4,096	1,365	4,274	1,425	5.0	1.6	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	3,971	1,324	3,972	1,324	3.0	0.0	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,665	1,222	3,680	1,227	5.0	0.1	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	3,299	1,100	3,323	1,108	5.0	0.2	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	3,284	1,095	3,305	1,102	5.0	0.2	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	3,656	1,219	3,665	1,222	5.0	0.1	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	In Queue			3,857	1,286			
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	In Queue			3,538	1,179			
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	In Queue			4,423	1,474			
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	5,070	1,690	5,059	1,686	5.0	0.1	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	5,532	1,844	5,465	1,822	5.0	0.5	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	6,323	1,265	6,267	1,253	5.0	0.3	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	4,837	1,209	4,898	1,224	5.0	0.4	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	5,423	1,356	5,491	1,373	5.0	0.5	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	5,062	1,266	5,068	1,267	5.0	0.0	PASS

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I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	23	23	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	83	83	2%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	4,545	1,136	4,550	1,138	5.0	0.0	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	382	382	387	387	3.0	0.3	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	972	486	962	481	5.0	0.2	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	1,201	1,201	1,195	1,195	5.0	0.2	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	1,818	909	1,817	909	3.0	0.0	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,389	1,389	1,432	1,432	3.0	1.1	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	1,431	716	1,427	714	5.0	0.1	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	525	525	541	541	3.0	0.7	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	161	161	179	179	3.0	1.4	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	1,081	1,081	1,079	1,079	5.0	0.0	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	349	349	395	395	3.0	2.4	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	299	299	331	331	5.0	1.8	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	242	242	258	258	3.0	1.0	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	526	526	530	530	5.0	0.2	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	194	194	199	199	3.0	0.4	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	635	635	654	654	5.0	0.8	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	96	96	98	98	3.0	0.2	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	575	575	585	585	5.0	0.4	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	125	125	142	142	3.0	1.5	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	245	245	260	260	5.0	0.9	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	234	234	225	225	3.0	0.6	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	240	240	243	243	5.0	0.2	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	166	166	178	178	3.0	0.9	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	102	102	133	133	5.0	2.9	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	306	306	316	316	3.0	0.6	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	464	464	474	474	5.0	0.5	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	1,032	1,032	1,036	1,036	3.0	0.1	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	94	94	100	100	5.0	0.6	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	362	362	357	357	3.0	0.2	PASS

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Confidence and Calibration
Volume Calibration (8:00 - 9:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	23	23	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	83	83	2%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	401	401	412	412	5.0	0.5	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	95	95	104	104	3.0	0.9	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	906	906	904	904	5.0	0.1	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	540	540	546	546	3.0	0.2	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	119	119	129	129	5.0	0.9	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	104	104	111	111	3.0	0.7	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	132	132	140	140	5.0	0.7	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	504	504	497	497	3.0	0.3	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	257	257	287	287	5.0	1.8	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	395	395	425	425	3.0	1.5	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	811	811	797	797	5.0	0.5	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	412	412	420	420	3.0	0.4	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	91	91	93	93	5.0	0.2	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	968	968	947	947	3.0	0.7	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	132	132	140	140	5.0	0.7	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	755	755	751	751	3.0	0.2	PASS
109117	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	236	236	258	258	5.0	1.4	PASS
109118	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	698	698	666	666	3.0	1.2	PASS
109119	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	495	495	558	558	5.0	2.7	PASS
109120	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	1,286	1,286	1,357	1,357	3.0	2.0	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	1,486	1,486	1,376	1,376	5.0	2.9	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	618	309	644	322	5.0	0.7	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	841	841	834	834	3.0	0.2	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	363	363	400	400	3.0	1.9	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	2,878	1,439	3,014	1,507	5.0	1.8	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,025	1,025	1,049	1,049	3.0	0.7	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,492	1,492	1,530	1,530	3.0	1.0	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	517	517	522	522	5.0	0.2	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (9:00 - 10:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	24	24	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	84	84	0%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	4,308	1,077	4,238	1,060	3.0	0.5	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	4,749	950	4,703	941	5.0	0.3	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	5,586	1,117	5,546	1,109	5.0	0.2	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	4,630	1,158	4,635	1,159	5.0	0.0	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	4,814	963	4,815	963	5.0	0.0	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	4,294	1,074	4,303	1,076	5.0	0.1	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	4,208	1,403	4,234	1,411	5.0	0.2	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	3,922	1,307	3,953	1,318	5.0	0.3	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	3,520	1,173	3,537	1,179	5.0	0.2	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	3,112	1,037	3,138	1,046	5.0	0.3	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	3,007	1,002	3,042	1,014	5.0	0.4	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	2,900	967	2,936	979	5.0	0.4	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	3,018	1,006	3,056	1,019	5.0	0.4	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	3,497	1,166	3,573	1,191	5.0	0.7	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	3,675	1,225	3,772	1,257	5.0	0.9	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	3,764	1,255	3,714	1,238	3.0	0.5	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,535	1,178	3,478	1,159	5.0	0.6	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	3,198	1,066	3,150	1,050	5.0	0.5	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	3,087	1,029	3,054	1,018	5.0	0.3	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	3,424	1,141	3,349	1,116	5.0	0.7	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	3,606	1,202	3,669	1,223	5.0	0.6	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	In Queue			3,677	1,226			
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	In Queue			4,522	1,507			
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	5,070	1,690	4,994	1,665	5.0	0.6	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	5,274	1,758	5,223	1,741	5.0	0.4	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	6,086	1,217	5,991	1,198	5.0	0.5	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	4,992	1,248	4,908	1,227	5.0	0.6	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	5,653	1,413	5,581	1,395	5.0	0.5	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (9:00 - 10:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	24	24	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	84	84	0%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	5,326	1,332	5,244	1,311	5.0	0.6	PASS
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	4,841	1,210	4,772	1,193	5.0	0.5	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	441	441	462	462	3.0	1.0	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	1,116	558	1,099	549	5.0	0.4	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	1,006	1,006	1,014	1,014	5.0	0.2	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	1,856	928	1,883	942	3.0	0.4	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,103	1,103	1,074	1,074	3.0	0.9	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	1,408	704	1,397	699	5.0	0.2	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	452	452	472	472	3.0	0.9	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	184	184	181	181	3.0	0.2	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	921	921	928	928	5.0	0.2	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	401	401	423	423	3.0	1.1	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	290	290	294	294	5.0	0.2	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	204	204	222	222	3.0	1.3	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	490	490	502	502	5.0	0.6	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	204	204	206	206	3.0	0.1	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	534	534	544	544	5.0	0.4	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	132	132	129	129	3.0	0.2	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	588	588	574	574	5.0	0.6	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	180	180	171	171	3.0	0.6	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	260	260	253	253	5.0	0.4	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	155	155	154	154	3.0	0.1	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	238	238	243	243	5.0	0.3	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	131	131	130	130	3.0	0.1	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	126	126	118	118	5.0	0.7	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	244	244	237	237	3.0	0.4	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	390	390	404	404	5.0	0.7	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	869	869	910	910	3.0	1.4	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	88	88	79	79	5.0	1.0	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	266	266	268	268	3.0	0.1	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (9:00 - 10:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	24	24	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	84	84	0%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	305	305	300	300	5.0	0.3	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	76	76	76	76	3.0	0.0	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	860	860	850	850	5.0	0.3	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	523	523	526	526	3.0	0.1	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	196	196	185	185	5.0	0.8	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	85	85	93	93	3.0	0.9	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	73	73	76	76	5.0	0.4	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	410	410	388	388	3.0	1.1	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	202	202	208	208	5.0	0.4	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	384	384	392	392	3.0	0.4	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	624	624	696	696	5.0	2.8	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	457	457	440	440	3.0	0.8	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	107	107	108	108	5.0	0.1	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	905	905	911	911	3.0	0.2	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	130	130	132	132	5.0	0.2	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	570	570	603	603	3.0	1.3	PASS
109117	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	253	253	244	244	5.0	0.6	PASS
109118	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	457	457	468	468	3.0	0.5	PASS
109119	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	401	401	417	417	5.0	0.8	PASS
109120	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	1,213	1,213	1,175	1,175	3.0	1.1	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	1,094	1,094	1,082	1,082	5.0	0.4	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	554	277	537	269	5.0	0.5	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	680	680	663	663	3.0	0.6	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	535	535	559	559	3.0	1.0	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	2,734	1,367	2,732	1,366	5.0	0.0	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	961	961	939	939	3.0	0.7	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,446	1,446	1,467	1,467	3.0	0.6	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	485	485	466	466	5.0	0.9	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (10:00 - 11:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	24	24	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	84	84	-1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	3,932	983	3,925	981	3.0	0.1	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	4,414	883	4,390	878	5.0	0.2	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	5,205	1,041	5,281	1,056	5.0	0.5	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	4,497	1,124	4,538	1,135	5.0	0.3	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	4,702	940	4,730	946	5.0	0.2	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	4,259	1,065	4,296	1,074	5.0	0.3	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	4,140	1,380	4,197	1,399	5.0	0.5	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	3,789	1,263	3,849	1,283	5.0	0.6	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	3,412	1,137	3,461	1,154	5.0	0.5	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	2,978	993	3,037	1,012	5.0	0.6	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	2,906	969	2,960	987	5.0	0.6	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	2,834	945	2,896	965	5.0	0.7	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	2,923	974	2,980	993	5.0	0.6	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	3,384	1,128	3,446	1,149	5.0	0.6	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	3,515	1,172	3,573	1,191	5.0	0.6	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	3,746	1,249	3,762	1,254	3.0	0.2	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,513	1,171	3,544	1,181	5.0	0.3	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	3,061	1,020	3,066	1,022	5.0	0.1	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	2,999	1,000	2,995	998	5.0	0.0	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	3,273	1,091	3,272	1,091	5.0	0.0	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	3,527	1,176	3,561	1,187	5.0	0.3	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	In Queue			3,868	1,289			
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	In Queue			4,559	1,520			
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	5,070	1,690	4,871	1,624	5.0	1.6	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	5,265	1,755	5,034	1,678	5.0	1.9	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	5,883	1,177	5,606	1,121	5.0	1.6	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	5,203	1,301	4,922	1,230	5.0	2.0	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	6,003	1,501	5,672	1,418	5.0	2.2	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	5,138	1,285	4,811	1,203	5.0	2.3	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (10:00 - 11:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	24	24	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	84	84	-1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	4,641	1,160	4,343	1,086	5.0	2.2	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	482	482	470	470	3.0	0.6	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	1,480	740	1,437	719	5.0	0.8	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	905	905	906	906	5.0	0.0	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	2,071	1,036	2,115	1,058	3.0	0.7	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,105	1,105	1,117	1,117	3.0	0.4	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	1,195	598	1,233	617	5.0	0.8	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	487	487	494	494	3.0	0.3	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	205	205	187	187	3.0	1.3	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	840	840	847	847	5.0	0.3	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	397	397	406	406	3.0	0.5	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	297	297	290	290	5.0	0.4	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	178	178	190	190	3.0	0.9	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	541	541	538	538	5.0	0.1	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	190	190	191	191	3.0	0.1	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	502	502	519	519	5.0	0.8	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	125	125	129	129	3.0	0.4	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	621	621	624	624	5.0	0.1	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	187	187	191	191	3.0	0.3	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	268	268	266	266	5.0	0.1	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	196	196	192	192	3.0	0.3	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	216	216	225	225	5.0	0.6	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	144	144	162	162	3.0	1.5	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	152	152	156	156	5.0	0.4	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	241	241	239	239	3.0	0.1	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	451	451	451	451	5.0	0.0	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	912	912	925	925	3.0	0.4	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	125	125	125	125	5.0	0.0	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	256	256	253	253	3.0	0.2	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (10:00 - 11:00 AM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	24	24	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	84	84	-1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	347	347	346	346	5.0	0.0	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	114	114	116	116	3.0	0.2	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	938	938	951	951	5.0	0.4	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	486	486	468	468	3.0	0.8	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	198	198	201	201	5.0	0.2	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	136	136	120	120	3.0	1.5	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	114	114	108	108	5.0	0.5	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	388	388	380	380	3.0	0.4	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	185	185	178	178	5.0	0.5	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	439	439	451	451	3.0	0.6	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	296	296	349	349	5.0	3.0	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	491	491	513	513	3.0	1.0	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	181	181	177	177	5.0	0.3	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	748	748	768	768	3.0	0.7	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	159	159	158	158	5.0	0.1	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	455	455	458	458	3.0	0.1	PASS
109117	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	152	152	174	174	5.0	1.8	PASS
109118	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	347	347	336	336	3.0	0.6	PASS
109119	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	396	396	399	399	5.0	0.2	PASS
109120	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	1,014	1,014	976	976	3.0	1.2	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	680	680	682	682	5.0	0.1	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	457	229	476	238	5.0	0.6	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	744	744	718	718	3.0	1.0	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	513	513	511	511	3.0	0.1	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	3,161	1,581	3,063	1,531	5.0	1.2	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	895	895	845	845	3.0	1.7	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,401	1,401	1,360	1,360	3.0	1.1	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	497	497	473	473	5.0	1.1	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (11:00 AM - 12:00 PM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	23	23	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	83	83	1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	4,538	1,135	4,548	1,137	3.0	0.1	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	5,064	1,013	5,085	1,017	5.0	0.1	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	5,520	1,104	5,553	1,111	5.0	0.2	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	4,962	1,241	4,966	1,241	5.0	0.0	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	5,195	1,039	5,190	1,038	5.0	0.0	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	4,738	1,185	4,727	1,182	5.0	0.1	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	4,537	1,512	4,504	1,501	5.0	0.3	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	4,149	1,383	4,075	1,358	5.0	0.7	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	3,714	1,238	3,659	1,220	5.0	0.5	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	3,280	1,093	3,198	1,066	5.0	0.8	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	3,114	1,038	3,032	1,011	5.0	0.9	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	2,994	998	2,911	970	5.0	0.9	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	3,108	1,036	3,026	1,009	5.0	0.9	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	3,624	1,208	3,520	1,173	5.0	1.0	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	3,792	1,264	3,671	1,224	5.0	1.1	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	3,765	1,255	3,777	1,259	3.0	0.1	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,506	1,169	3,505	1,168	5.0	0.0	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	2,949	983	2,944	981	5.0	0.1	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	2,884	961	2,865	955	5.0	0.2	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	3,044	1,015	3,007	1,002	5.0	0.4	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	3,251	1,084	3,222	1,074	5.0	0.3	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	3,377	1,126	3,505	1,168	5.0	1.3	PASS
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	In Queue			4,342	1,447			
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	In Queue			4,720	1,573			
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	4,415	1,472	4,908	1,636	5.0	4.2	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	4,951	990	5,313	1,063	5.0	2.3	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	4,427	1,107	4,791	1,198	5.0	2.7	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	In Queue			5,494	1,374			
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	4,411	1,103	4,578	1,144	5.0	1.2	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (11:00 AM - 12:00 PM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	23	23	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	83	83	1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	3,794	949	3,965	991	5.0	1.4	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	526	526	533	533	3.0	0.3	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	1,791	896	1,793	897	5.0	0.0	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	899	899	922	922	5.0	0.8	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	2,180	1,090	2,152	1,076	3.0	0.4	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	966	966	1,034	1,034	3.0	2.2	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	1,216	608	1,248	624	5.0	0.6	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	658	658	665	665	3.0	0.3	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	233	233	228	228	3.0	0.3	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	920	920	935	935	5.0	0.5	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	463	463	490	490	3.0	1.2	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	401	401	409	409	5.0	0.4	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	200	200	198	198	3.0	0.2	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	627	627	629	629	5.0	0.1	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	239	239	217	217	3.0	1.4	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	589	589	581	581	5.0	0.3	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	154	154	169	169	3.0	1.2	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	597	597	623	623	5.0	1.1	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	163	163	175	175	3.0	0.9	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	361	361	364	364	5.0	0.1	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	195	195	208	208	3.0	0.9	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	261	261	249	249	5.0	0.8	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	141	141	140	140	3.0	0.1	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	149	149	154	154	5.0	0.4	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	263	263	274	274	3.0	0.7	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	491	491	476	476	5.0	0.7	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	1,007	1,007	986	986	3.0	0.7	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	119	119	114	114	5.0	0.5	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	287	287	269	269	3.0	1.1	PASS

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Volume Calibration (11:00 AM - 12:00 PM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	23	23	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	83	83	1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	359	359	370	370	5.0	0.6	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	100	100	108	108	3.0	0.7	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	1,071	1,071	1,080	1,080	5.0	0.3	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	514	514	517	517	3.0	0.1	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	175	175	180	180	5.0	0.4	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	110	110	98	98	3.0	1.2	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	109	109	111	111	5.0	0.2	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	269	269	254	254	3.0	0.9	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	164	164	161	161	5.0	0.2	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	371	371	383	383	3.0	0.6	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	355	355	325	325	5.0	1.6	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	481	481	501	501	3.0	0.9	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	192	192	199	199	5.0	0.5	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	713	713	728	728	3.0	0.6	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	151	151	164	164	5.0	1.0	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	466	466	471	471	3.0	0.2	PASS
109117	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	163	163	167	167	5.0	0.3	PASS
109118	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	365	365	350	350	3.0	0.8	PASS
109119	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	403	403	427	427	5.0	1.2	PASS
109120	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	939	939	874	874	3.0	2.2	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	524	524	482	482	5.0	1.9	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	545	273	534	267	5.0	0.3	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	614	614	613	613	3.0	0.1	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	736	736	741	741	3.0	0.2	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	3,144	1,572	3,277	1,639	5.0	1.7	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	868	868	839	839	3.0	1.0	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,455	1,455	1,507	1,507	3.0	1.3	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	617	617	619	619	5.0	0.1	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (12:00-1:00 PM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	25	25	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	85	85	1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	4,381	1,095	4,335	1,084	3.0	0.3	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	4,982	996	4,948	990	5.0	0.2	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	5,513	1,103	5,630	1,126	5.0	0.7	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	4,937	1,234	5,046	1,261	5.0	0.8	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	5,278	1,056	5,384	1,077	5.0	0.7	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	4,915	1,229	5,043	1,261	5.0	0.9	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	4,615	1,538	4,756	1,585	5.0	1.2	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	4,290	1,430	4,447	1,482	5.0	1.4	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	3,759	1,253	3,899	1,300	5.0	1.3	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	3,450	1,150	3,562	1,187	5.0	1.1	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	3,245	1,082	3,357	1,119	5.0	1.1	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	3,100	1,033	3,201	1,067	5.0	1.0	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	3,184	1,061	3,283	1,094	5.0	1.0	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	3,656	1,219	3,746	1,249	5.0	0.9	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	3,816	1,272	3,906	1,302	5.0	0.8	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	3,770	1,257	3,778	1,259	3.0	0.1	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,491	1,164	3,522	1,174	5.0	0.3	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	3,030	1,010	3,050	1,017	5.0	0.2	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	2,957	986	2,959	986	5.0	0.0	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	3,150	1,050	3,158	1,053	5.0	0.1	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	3,322	1,107	3,342	1,114	5.0	0.2	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	3,628	1,209	3,618	1,206	5.0	0.1	PASS
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	Mainline	4,154	1,385	4,143	1,381	5.0	0.1	PASS
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	4,405	1,468	4,457	1,486	5.0	0.4	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	4,607	1,536	4,675	1,558	5.0	0.6	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	5,062	1,012	5,161	1,032	5.0	0.6	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	4,621	1,155	4,776	1,194	5.0	1.1	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	In Queue			5,677	1,419			
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	4,961	1,240	5,122	1,281	5.0	1.1	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (12:00-1:00 PM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	25	25	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	85	85	1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	4,324	1,081	4,538	1,135	5.0	1.6	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	601	601	620	620	3.0	0.8	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	1,774	887	1,739	869	5.0	0.6	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	1,015	1,015	1,007	1,007	5.0	0.2	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	2,295	1,148	2,417	1,208	3.0	1.8	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,025	1,025	1,020	1,020	3.0	0.2	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	1,322	661	1,330	665	5.0	0.1	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	746	746	749	749	3.0	0.1	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	341	341	338	338	3.0	0.2	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	1,002	1,002	1,007	1,007	5.0	0.2	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	639	639	668	668	3.0	1.1	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	554	554	558	558	5.0	0.2	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	254	254	264	264	3.0	0.6	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	609	609	615	615	5.0	0.2	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	284	284	298	298	3.0	0.8	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	686	686	686	686	5.0	0.0	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	155	155	147	147	3.0	0.7	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	530	530	547	547	5.0	0.7	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	221	221	233	233	3.0	0.8	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	392	392	381	381	5.0	0.6	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	187	187	198	198	3.0	0.8	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	275	275	283	283	5.0	0.5	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	130	130	136	136	3.0	0.5	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	155	155	156	156	5.0	0.1	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	239	239	244	244	3.0	0.3	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	524	524	532	532	5.0	0.3	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	996	996	978	978	3.0	0.6	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	135	135	126	126	5.0	0.8	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	295	295	295	295	3.0	0.0	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (12:00-1:00 PM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	25	25	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	85	85	1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	388	388	385	385	5.0	0.2	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	109	109	114	114	3.0	0.5	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	992	992	1,021	1,021	5.0	0.9	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	531	531	545	545	3.0	0.6	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	223	223	226	226	5.0	0.2	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	150	150	131	131	3.0	1.6	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	153	153	146	146	5.0	0.6	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	346	346	328	328	3.0	1.0	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	160	160	163	163	5.0	0.3	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	332	332	335	335	3.0	0.2	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	189	189	219	219	5.0	2.1	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	495	495	500	500	3.0	0.2	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	159	159	155	155	5.0	0.3	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	685	685	663	663	3.0	0.8	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	166	166	159	159	5.0	0.5	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	417	417	437	437	3.0	1.0	PASS
109117	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	161	161	137	137	5.0	2.0	PASS
109118	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	363	363	355	355	3.0	0.4	PASS
109119	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	450	450	411	411	5.0	1.9	PASS
109120	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	905	905	866	866	3.0	1.3	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	441	441	414	414	5.0	1.3	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	598	299	556	278	5.0	1.2	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	513	513	512	512	3.0	0.0	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	853	853	869	869	3.0	0.5	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	3,136	1,568	2,974	1,487	5.0	2.1	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	881	881	859	859	3.0	0.7	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,566	1,566	1,580	1,580	3.0	0.4	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	637	637	570	570	5.0	2.7	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (5:00 AM - 1:00 PM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	-1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	31,209	7,802	30,882	7,721	3.0	0.9	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	34,503	6,901	34,159	6,832	5.0	0.8	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	40,664	8,133	40,526	8,105	5.0	0.3	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	35,220	8,805	35,047	8,762	5.0	0.5	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	36,604	7,321	36,374	7,275	5.0	0.5	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	32,653	8,163	32,546	8,137	5.0	0.3	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	31,814	10,605	31,666	10,555	5.0	0.5	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	29,415	9,805	29,207	9,736	5.0	0.7	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	26,212	8,737	25,972	8,657	5.0	0.9	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	23,328	7,776	22,956	7,652	5.0	1.4	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	22,600	7,533	22,143	7,381	5.0	1.8	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	22,069	7,356	21,559	7,186	5.0	2.0	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	23,040	7,680	22,472	7,491	5.0	2.2	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	26,759	8,920	26,199	8,733	5.0	2.0	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	28,330	9,443	27,733	9,244	5.0	2.1	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	31,215	10,405	31,187	10,396	3.0	0.1	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	29,259	9,753	29,214	9,738	5.0	0.2	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	26,424	8,808	26,307	8,769	5.0	0.4	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	25,952	8,651	25,804	8,601	5.0	0.5	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	28,854	9,618	28,682	9,561	5.0	0.6	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	30,303	10,101	30,253	10,084	5.0	0.2	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	29,942	9,981	30,037	10,012	5.0	0.3	PASS
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	Mainline	35,383	11,794	35,522	11,841	5.0	0.4	PASS
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	38,957	12,986	39,224	13,075	5.0	0.8	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	41,234	13,745	41,328	13,776	5.0	0.3	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	46,837	9,367	46,701	9,340	5.0	0.3	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	38,031	9,508	38,153	9,538	5.0	0.3	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	43,552	10,888	43,384	10,846	5.0	0.4	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	40,026	10,007	39,332	9,833	5.0	1.7	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (5:00 AM - 1:00 PM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	-1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	36,027	9,007	35,375	8,844	5.0	1.7	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	3,294	3,294	3,310	3,310	3.0	0.3	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	9,553	4,777	9,449	4,725	5.0	0.8	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	7,747	7,747	7,674	7,674	5.0	0.8	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	14,303	7,152	14,377	7,188	3.0	0.4	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	9,158	9,158	9,174	9,174	3.0	0.2	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	9,502	4,751	9,493	4,747	5.0	0.1	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	4,058	4,058	4,072	4,072	3.0	0.2	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	1,384	1,384	1,345	1,345	3.0	1.1	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	6,984	6,984	6,939	6,939	5.0	0.5	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	3,033	3,033	3,183	3,183	3.0	2.7	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	2,569	2,569	2,575	2,575	5.0	0.1	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	1,730	1,730	1,735	1,735	3.0	0.1	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	3,885	3,885	3,885	3,885	5.0	0.0	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	1,486	1,486	1,476	1,476	3.0	0.3	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	4,082	4,082	4,047	4,047	5.0	0.6	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	879	879	902	902	3.0	0.8	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	4,084	4,084	4,101	4,101	5.0	0.3	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	1,200	1,200	1,210	1,210	3.0	0.3	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	2,131	2,131	2,071	2,071	5.0	1.3	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	1,403	1,403	1,404	1,404	3.0	0.0	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	1,822	1,822	1,793	1,793	5.0	0.7	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	1,291	1,291	1,333	1,333	3.0	1.2	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	1,159	1,159	1,172	1,172	5.0	0.4	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	2,130	2,130	2,165	2,165	3.0	0.7	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	3,433	3,433	3,363	3,363	5.0	1.2	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	7,152	7,152	7,139	7,139	3.0	0.2	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	784	784	760	760	5.0	0.9	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	2,355	2,355	2,368	2,368	3.0	0.3	PASS

WSDOT VISSIM REPORT
Confidence and Calibration
Volume Calibration (5:00 AM - 1:00 PM)

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	-1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	2,805	2,805	2,826	2,826	5.0	0.4	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	849	849	868	868	3.0	0.6	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	7,228	7,228	7,244	7,244	5.0	0.2	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	4,393	4,393	4,345	4,345	3.0	0.7	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	1,491	1,491	1,484	1,484	5.0	0.2	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	1,019	1,019	967	967	3.0	1.6	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	1,012	1,012	986	986	5.0	0.8	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	3,914	3,914	3,847	3,847	3.0	1.1	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	1,794	1,794	1,770	1,770	5.0	0.6	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	3,243	3,243	3,285	3,285	3.0	0.7	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	3,863	3,863	3,807	3,807	5.0	0.9	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	3,502	3,502	3,552	3,552	3.0	0.8	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	941	941	938	938	5.0	0.1	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	6,382	6,382	6,403	6,403	3.0	0.3	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	969	969	986	986	5.0	0.5	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	4,543	4,543	4,625	4,625	3.0	1.2	PASS
109117	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	1,964	1,964	2,009	2,009	5.0	1.0	PASS
109118	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	4,241	4,241	4,110	4,110	3.0	2.0	PASS
109119	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	3,559	3,559	3,539	3,539	5.0	0.3	PASS
109120	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	9,162	9,162	8,930	8,930	3.0	2.4	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	8,806	8,806	8,529	8,529	5.0	3.0	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	4,287	2,144	4,275	2,137	5.0	0.1	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	5,366	5,366	5,315	5,315	3.0	0.7	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	4,181	4,181	4,252	4,252	3.0	1.1	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	22,678	11,339	23,020	11,510	5.0	1.6	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	7,921	7,921	7,791	7,791	3.0	1.5	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	11,231	11,231	11,209	11,209	3.0	0.2	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	3,999	3,999	3,931	3,931	5.0	1.1	PASS

VISSIM REPORT
Confidence and Calibration
Volume Confidence
I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Number of Vissim Runs	5
Confidence Interval	95%
GEH Confidence Interval	3.0
Failing to Meet CI Target	0
Maximum Required Runs	3

Location Description				Model Results				Confidence Target		Confidence Test	
ID	Location	Lanes	Type	Average Volume	Standard Deviation	95% Conf. Volume	95% Conf. (percent)	GEH Conf. Volume	GEH Conf. (percent)	Meet GEH	Required Runs
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry/Exit	36,899	36	45	0%	579	2%	PASS	1
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	40,459	60	74	0%	606	1%	PASS	1
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	42,627	129	161	0%	622	1%	PASS	1
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	38,183	96	120	0%	588	2%	PASS	1
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	43,626	97	120	0%	629	1%	PASS	1
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	42,518	40	50	0%	621	1%	PASS	1
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	43,248	43	53	0%	626	1%	PASS	1
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	44,205	55	68	0%	633	1%	PASS	1
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	41,712	39	48	0%	615	1%	PASS	1
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	40,490	82	102	0%	606	1%	PASS	1
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	37,904	55	68	0%	586	2%	PASS	1
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	34,914	43	53	0%	563	2%	PASS	1
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	35,359	74	92	0%	566	2%	PASS	1
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	37,836	112	139	0%	586	2%	PASS	1
100015	Southbound I-15: South of Main St On-ramp	3	Entry/Exit	38,440	130	162	0%	590	2%	PASS	1
100101	Northbound I-15: South of Main St Off-ramp	3	Entry/Exit	27,440	45	56	0%	499	2%	PASS	1
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	25,284	53	65	0%	479	2%	PASS	1
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	21,231	97	121	1%	439	2%	PASS	1
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	20,239	109	135	1%	429	2%	PASS	1
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	21,397	96	119	1%	441	2%	PASS	1
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	22,866	83	102	0%	456	2%	PASS	1
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	24,709	78	97	0%	474	2%	PASS	1
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	Mainline	27,964	80	100	0%	504	2%	PASS	1
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	29,722	96	120	0%	519	2%	PASS	1
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	30,358	101	125	0%	525	2%	PASS	1
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	33,112	70	87	0%	548	2%	PASS	1
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	30,686	75	93	0%	528	2%	PASS	1
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	35,741	77	95	0%	569	2%	PASS	1
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	30,787	120	149	0%	529	2%	PASS	1
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Entry/Exit	27,055	128	159	1%	496	2%	PASS	1

VISSIM REPORT
Confidence and Calibration
Volume Confidence

I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Number of Vissim Runs	5
Confidence Interval	95%
GEH Confidence Interval	3.0
Failing to Meet CI Target	0
Maximum Required Runs	3

Location Description				Model Results				Confidence Target		Confidence Test	
ID	Location	Lanes	Type	Average Volume	Standard Deviation	95% Conf. Volume	95% Conf. (percent)	GEH Conf. Volume	GEH Conf. (percent)	Meet GEH	Required Runs
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	3,553	37	46	1%	181	5%	PASS	1
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	12,023	67	83	1%	331	3%	PASS	1
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	7,056	113	141	2%	254	4%	PASS	2
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	13,800	26	32	0%	355	3%	PASS	1
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	7,441	24	29	0%	261	4%	PASS	1
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	8,581	99	123	1%	280	3%	PASS	1
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	4,131	21	26	1%	195	5%	PASS	1
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	5,443	57	71	1%	224	4%	PASS	1
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	5,454	85	105	2%	224	4%	PASS	2
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	4,347	24	30	1%	200	5%	PASS	1
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	3,061	54	67	2%	168	5%	PASS	1
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	3,796	29	36	1%	187	5%	PASS	1
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	2,620	33	41	2%	156	6%	PASS	1
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	3,577	15	18	1%	182	5%	PASS	1
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	4,651	30	38	1%	207	4%	PASS	1
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	2,200	15	19	1%	143	6%	PASS	1
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	3,416	47	58	2%	178	5%	PASS	1
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	2,231	13	16	1%	144	6%	PASS	1
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	3,728	77	95	3%	185	5%	PASS	2
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	1,202	17	21	2%	106	9%	PASS	1
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	4,110	60	74	2%	195	5%	PASS	1
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	1,192	15	18	2%	106	9%	PASS	1
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	1,436	30	38	3%	116	8%	PASS	1
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	1,934	23	29	1%	134	7%	PASS	1
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	4,684	106	132	3%	208	4%	PASS	3
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	7,183	15	19	0%	257	4%	PASS	1
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	1,569	28	35	2%	121	8%	PASS	1
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	2,205	22	27	1%	143	6%	PASS	1
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	3,002	46	58	2%	167	6%	PASS	1
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	824	14	18	2%	88	11%	PASS	1

VISSIM REPORT
Confidence and Calibration
Volume Confidence

I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Number of Vissim Runs	5
Confidence Interval	95%
GEH Confidence Interval	3.0
Failing to Meet CI Target	0
Maximum Required Runs	3

Location Description				Model Results				Confidence Target		Confidence Test	
ID	Location	Lanes	Type	Average Volume	Standard Deviation	95% Conf. Volume	95% Conf. (percent)	GEH Conf. Volume	GEH Conf. (percent)	Meet GEH	Required Runs
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	7,507	42	52	1%	262	3%	PASS	1
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	3,445	20	25	1%	178	5%	PASS	1
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	2,009	12	15	1%	137	7%	PASS	1
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	991	19	23	2%	97	10%	PASS	1
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	1,161	19	24	2%	105	9%	PASS	1
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	2,271	14	18	1%	145	6%	PASS	1
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	1,111	30	38	3%	102	9%	PASS	1
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	2,525	22	27	1%	153	6%	PASS	1
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	1,180	44	54	5%	105	9%	PASS	2
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	2,983	21	26	1%	166	6%	PASS	1
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	1,121	22	27	2%	103	9%	PASS	1
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	4,345	30	37	1%	200	5%	PASS	1
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	1,198	25	31	3%	106	9%	PASS	1
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	2,924	24	29	1%	164	6%	PASS	1
109117	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	1,766	39	48	3%	128	7%	PASS	1
109118	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	2,377	25	31	1%	149	6%	PASS	1
109119	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	2,972	55	69	2%	166	6%	PASS	1
109120	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	5,697	21	25	0%	229	4%	PASS	1
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	2,435	32	40	2%	150	6%	PASS	1
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	3,778	63	78	2%	187	5%	PASS	1
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	4,959	21	25	1%	214	4%	PASS	1
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	3,804	17	21	1%	187	5%	PASS	1
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	21,786	73	91	0%	445	2%	PASS	1
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	6,190	51	63	1%	238	4%	PASS	1
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	10,595	50	62	1%	311	3%	PASS	1
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	3,748	42	52	1%	186	5%	PASS	1

VISSIM REPORT
Confidence and Calibration
Volume Calibration (1:00 - 2:00 PM)
I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	-2%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	4,816	1,204	4,710	1,178	3.0	0.8	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	5,402	1,080	5,238	1,048	5.0	1.0	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	6,168	1,234	6,004	1,201	5.0	0.9	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	5,525	1,381	5,401	1,350	5.0	0.8	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	6,116	1,223	5,950	1,190	5.0	1.0	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	5,473	1,368	5,484	1,371	5.0	0.1	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	5,173	1,724	5,103	1,701	5.0	0.6	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	4,973	1,658	4,881	1,627	5.0	0.8	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	4,556	1,519	4,409	1,470	5.0	1.3	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	4,227	1,409	4,016	1,339	5.0	1.9	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	3,950	1,317	3,688	1,229	5.0	2.4	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	3,704	1,235	3,411	1,137	5.0	2.8	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	3,821	1,274	3,511	1,170	5.0	3.0	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	4,333	1,444	4,007	1,336	5.0	2.9	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	4,483	1,494	4,149	1,383	5.0	2.9	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	3,904	1,301	3,893	1,298	3.0	0.1	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,571	1,190	3,545	1,182	5.0	0.2	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	3,063	1,021	3,031	1,010	5.0	0.3	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	2,948	983	2,923	974	5.0	0.3	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	3,144	1,048	3,124	1,041	5.0	0.2	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	3,339	1,113	3,299	1,100	5.0	0.4	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	3,730	1,243	3,700	1,233	5.0	0.3	PASS
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	Mainline	4,324	1,441	4,285	1,428	5.0	0.3	PASS
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	4,611	1,537	4,588	1,529	5.0	0.2	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	4,736	1,579	4,697	1,566	5.0	0.3	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	5,181	1,036	5,128	1,026	5.0	0.3	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	4,797	1,199	4,763	1,191	5.0	0.2	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	5,542	1,386	5,562	1,391	5.0	0.1	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	4,765	1,191	4,855	1,214	5.0	0.7	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (1:00 - 2:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	-2%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	4,209	1,052	4,304	1,076	5.0	0.7	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	586	586	537	537	3.0	2.1	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	1,910	955	1,882	941	5.0	0.5	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	931	931	887	887	5.0	1.5	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	2,540	1,270	2,534	1,267	3.0	0.1	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,067	1,067	1,018	1,018	3.0	1.5	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	1,348	674	1,294	647	5.0	1.1	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	705	705	719	719	3.0	0.5	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	591	591	565	565	3.0	1.1	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	1,043	1,043	1,017	1,017	5.0	0.8	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	551	551	563	563	3.0	0.5	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	566	566	582	582	5.0	0.7	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	266	266	232	232	3.0	2.1	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	508	508	516	516	5.0	0.3	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	308	308	301	301	3.0	0.4	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	627	627	630	630	5.0	0.1	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	210	210	201	201	3.0	0.6	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	575	575	562	562	5.0	0.6	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	246	246	222	222	3.0	1.5	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	443	443	438	438	5.0	0.2	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	166	166	162	162	3.0	0.3	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	395	395	376	376	5.0	1.0	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	149	149	148	148	3.0	0.1	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	165	165	169	169	5.0	0.3	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	282	282	288	288	3.0	0.3	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	592	592	569	569	5.0	1.0	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	1,104	1,104	1,073	1,073	3.0	1.0	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	164	164	162	162	5.0	0.2	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	314	314	330	330	3.0	0.9	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (1:00 - 2:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	-2%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	422	422	430	430	5.0	0.4	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	89	89	85	85	3.0	0.5	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	1,050	1,050	1,041	1,041	5.0	0.3	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	542	542	535	535	3.0	0.3	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	271	271	264	264	5.0	0.4	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	156	156	149	149	3.0	0.6	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	173	173	161	161	5.0	0.9	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	369	369	368	368	3.0	0.1	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	182	182	176	176	5.0	0.4	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	377	377	354	354	3.0	1.2	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	179	179	179	179	5.0	0.0	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	570	570	578	578	3.0	0.3	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	120	120	123	123	5.0	0.3	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	714	714	718	718	3.0	0.1	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	191	191	197	197	5.0	0.4	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	478	478	498	498	3.0	0.9	PASS
109117	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	221	221	217	217	5.0	0.3	PASS
109118	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	346	346	331	331	3.0	0.8	PASS
109119	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	428	428	427	427	5.0	0.0	PASS
109120	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	873	873	865	865	3.0	0.3	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	384	384	366	366	5.0	0.9	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	602	301	601	300	5.0	0.0	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	575	575	595	595	3.0	0.8	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	772	772	780	780	3.0	0.3	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	3,265	1,633	3,190	1,595	5.0	0.9	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	931	931	941	941	3.0	0.3	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,557	1,557	1,527	1,527	3.0	0.8	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	556	556	555	555	5.0	0.0	PASS

VISSIM REPORT
Confidence and Calibration
Volume Calibration (2:00 - 3:00 PM)
I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	-3%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	5,706	1,427	5,638	1,409	3.0	0.5	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	6,346	1,269	6,250	1,250	5.0	0.5	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	6,685	1,337	6,610	1,322	5.0	0.4	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	6,183	1,546	6,075	1,519	5.0	0.7	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	7,042	1,408	6,351	1,270	5.0	3.8	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	6,550	1,638	6,557	1,639	5.0	0.0	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	6,425	2,142	6,335	2,112	5.0	0.7	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	6,392	2,131	6,257	2,086	5.0	1.0	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	5,959	1,986	5,775	1,925	5.0	1.4	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	5,632	1,877	5,401	1,800	5.0	1.8	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	5,364	1,788	5,047	1,682	5.0	2.5	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	5,176	1,725	4,790	1,597	5.0	3.2	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	5,252	1,751	4,828	1,609	5.0	3.5	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	5,772	1,924	5,295	1,765	5.0	3.7	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	5,956	1,985	5,439	1,813	5.0	4.0	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	4,237	1,412	4,282	1,427	3.0	0.4	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,866	1,289	3,893	1,298	5.0	0.3	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	3,365	1,122	3,346	1,115	5.0	0.2	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	3,262	1,087	3,235	1,078	5.0	0.3	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	3,435	1,145	3,429	1,143	5.0	0.1	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	3,670	1,223	3,621	1,207	5.0	0.5	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	3,972	1,324	3,908	1,303	5.0	0.6	PASS
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	Mainline	4,490	1,497	4,414	1,471	5.0	0.7	PASS
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	4,757	1,586	4,624	1,541	5.0	1.1	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	4,904	1,635	4,768	1,589	5.0	1.1	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	5,173	1,035	5,064	1,013	5.0	0.7	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	4,798	1,200	4,684	1,171	5.0	0.8	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	5,479	1,370	5,250	1,312	5.0	1.6	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	4,659	1,165	4,321	1,080	5.0	2.5	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (2:00 - 3:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	-3%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	4,149	1,037	3,826	957	5.0	2.6	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	640	640	624	624	3.0	0.6	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	1,980	990	1,955	978	5.0	0.4	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	925	925	916	916	5.0	0.3	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	2,226	1,113	2,243	1,121	3.0	0.3	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,018	1,018	992	992	3.0	0.8	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	1,302	651	1,303	652	5.0	0.0	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	800	800	750	750	3.0	1.8	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	859	859	853	853	3.0	0.2	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	859	859	847	847	5.0	0.4	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	577	577	593	593	3.0	0.7	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	565	565	594	594	5.0	1.2	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	440	440	422	422	3.0	0.9	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	417	417	438	438	5.0	1.0	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	384	384	392	392	3.0	0.4	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	696	696	735	735	5.0	1.5	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	263	263	265	265	3.0	0.1	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	570	570	599	599	5.0	1.2	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	243	243	235	235	3.0	0.5	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	481	481	505	505	5.0	1.1	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	213	213	202	202	3.0	0.7	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	467	467	490	490	5.0	1.0	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	279	279	289	289	3.0	0.6	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	250	250	251	251	5.0	0.1	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	326	326	340	340	3.0	0.8	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	622	622	650	650	5.0	1.1	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	1,142	1,142	1,159	1,159	3.0	0.5	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	212	212	233	233	5.0	1.4	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	396	396	412	412	3.0	0.8	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (2:00 - 3:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	-3%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	508	508	516	516	5.0	0.3	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	137	137	135	135	3.0	0.1	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	1,116	1,116	1,121	1,121	5.0	0.2	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	615	615	575	575	3.0	1.6	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	321	321	309	309	5.0	0.7	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	218	218	209	209	3.0	0.6	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	210	210	204	204	5.0	0.4	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	383	383	396	396	3.0	0.7	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	206	206	212	212	5.0	0.4	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	441	441	414	414	3.0	1.3	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	221	221	221	221	5.0	0.0	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	523	523	524	524	3.0	0.0	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	211	211	193	193	5.0	1.3	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	729	729	720	720	3.0	0.3	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	194	194	193	193	5.0	0.1	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	470	470	474	474	3.0	0.2	PASS
109117	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	345	345	324	324	5.0	1.1	PASS
109118	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	492	492	462	462	3.0	1.4	PASS
109119	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	608	608	605	605	5.0	0.1	PASS
109120	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	877	877	897	897	3.0	0.7	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	375	375	375	375	5.0	0.0	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	630	315	637	318	5.0	0.2	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	629	629	628	628	3.0	0.1	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	682	682	675	675	3.0	0.3	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	3,290	1,645	3,290	1,645	5.0	0.0	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	887	887	822	822	3.0	2.2	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,583	1,583	1,542	1,542	3.0	1.0	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	510	510	501	501	5.0	0.4	PASS

VISSIM REPORT
Confidence and Calibration
Volume Calibration (3:00 - 4:00 PM)
I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	21	21	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	81	81	-1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	6,134	1,534	6,049	1,512	3.0	0.5	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	6,679	1,336	6,572	1,314	5.0	0.6	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	6,465	1,293	6,387	1,277	5.0	0.4	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	In Queue			5,576	1,394			
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	In Queue			6,351	1,270			
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	In Queue			6,204	1,551			
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	In Queue			6,444	2,148			
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	6,600	2,200	6,627	2,209	5.0	0.2	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	6,234	2,078	6,244	2,081	5.0	0.1	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	6,072	2,024	6,047	2,016	5.0	0.2	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	5,708	1,903	5,623	1,874	5.0	0.7	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	5,315	1,772	5,262	1,754	5.0	0.4	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	5,347	1,782	5,278	1,759	5.0	0.5	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	5,691	1,897	5,652	1,884	5.0	0.3	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	5,829	1,943	5,826	1,942	5.0	0.0	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	4,332	1,444	4,305	1,435	3.0	0.2	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,922	1,307	3,886	1,295	5.0	0.3	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	3,312	1,104	3,263	1,088	5.0	0.5	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	3,199	1,066	3,146	1,049	5.0	0.5	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	3,362	1,121	3,314	1,105	5.0	0.5	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	3,587	1,196	3,579	1,193	5.0	0.1	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	3,832	1,277	3,838	1,279	5.0	0.1	PASS
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	In Queue			4,381	1,460			
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	4,686	1,562	4,652	1,551	5.0	0.3	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	4,806	1,602	4,756	1,585	5.0	0.4	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	5,298	1,060	5,207	1,041	5.0	0.6	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	4,875	1,219	4,792	1,198	5.0	0.6	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	5,352	1,338	5,290	1,323	5.0	0.4	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	4,298	1,075	4,182	1,046	5.0	0.9	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (3:00 - 4:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	21	21	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	81	81	-1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	3,759	940	3,645	911	5.0	0.9	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	545	545	529	529	3.0	0.7	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	1,818	909	1,792	896	5.0	0.4	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	1,096	1,096	1,074	1,074	5.0	0.7	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	1,827	914	1,819	909	3.0	0.1	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	873	873	874	874	3.0	0.0	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	1,305	653	1,318	659	5.0	0.3	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	648	648	639	639	3.0	0.3	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	819	819	836	836	3.0	0.6	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	781	781	736	736	5.0	1.6	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	669	669	687	687	3.0	0.7	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	380	380	394	394	5.0	0.7	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	679	679	676	676	3.0	0.1	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	332	332	335	335	5.0	0.2	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	622	622	620	620	3.0	0.1	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	748	748	766	766	5.0	0.7	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	382	382	411	411	3.0	1.5	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	539	539	555	555	5.0	0.7	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	377	377	393	393	3.0	0.8	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	549	549	553	553	5.0	0.2	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	185	185	191	191	3.0	0.4	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	579	579	564	564	5.0	0.6	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	186	186	198	198	3.0	0.9	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	244	244	263	263	5.0	1.2	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	276	276	296	296	3.0	1.2	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	709	709	697	697	5.0	0.4	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	1,053	1,053	1,053	1,053	3.0	0.0	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	241	241	237	237	5.0	0.2	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	379	379	397	397	3.0	0.9	PASS

VISSIM REPORT
Confidence and Calibration
Volume Calibration (3:00 - 4:00 PM)
I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	21	21	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	81	81	-1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	548	548	560	560	5.0	0.5	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	138	138	146	146	3.0	0.7	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	1,155	1,155	1,164	1,164	5.0	0.3	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	545	545	536	536	3.0	0.4	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	299	299	294	294	5.0	0.3	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	186	186	176	176	3.0	0.8	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	199	199	192	192	5.0	0.5	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	362	362	358	358	3.0	0.2	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	164	164	165	165	5.0	0.1	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	389	389	411	411	3.0	1.1	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	223	223	226	226	5.0	0.2	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	468	468	472	472	3.0	0.2	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	237	237	230	230	5.0	0.5	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	790	790	795	795	3.0	0.2	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	184	184	189	189	5.0	0.4	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	485	485	498	498	3.0	0.6	PASS
109117	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	246	246	246	246	5.0	0.0	PASS
109118	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	366	366	352	352	3.0	0.7	PASS
109119	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	447	447	468	468	5.0	1.0	PASS
109120	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	939	939	930	930	3.0	0.3	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	423	423	422	422	5.0	0.0	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	679	340	670	335	5.0	0.2	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	583	583	580	580	3.0	0.1	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	573	573	573	573	3.0	0.0	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	3,352	1,676	3,397	1,699	5.0	0.5	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	860	860	857	857	3.0	0.1	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,438	1,438	1,417	1,417	3.0	0.6	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	539	539	535	535	5.0	0.2	PASS

VISSIM REPORT
Confidence and Calibration
Volume Calibration (4:00 - 5:00 PM)
I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	22	22	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	82	82	1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	6,080	1,520	6,066	1,517	3.0	0.1	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	6,613	1,323	6,631	1,326	5.0	0.1	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	5,956	1,191	5,988	1,198	5.0	0.2	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	In Queue			5,576	1,394			
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	In Queue			6,351	1,270			
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	In Queue			6,204	1,551			
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	In Queue			6,444	2,148			
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	6,750	2,250	6,693	2,231	5.0	0.4	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	6,621	2,207	6,522	2,174	5.0	0.7	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	6,592	2,197	6,469	2,156	5.0	0.9	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	6,245	2,082	6,096	2,032	5.0	1.1	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	5,705	1,902	5,515	1,838	5.0	1.5	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	5,786	1,929	5,569	1,856	5.0	1.7	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	6,130	2,043	5,897	1,966	5.0	1.7	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	6,190	2,063	5,914	1,971	5.0	2.0	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	4,184	1,395	4,183	1,394	3.0	0.0	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,783	1,261	3,805	1,268	5.0	0.2	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	3,149	1,050	3,175	1,058	5.0	0.3	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	2,991	997	3,037	1,012	5.0	0.5	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	3,177	1,059	3,218	1,073	5.0	0.4	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	3,388	1,129	3,480	1,160	5.0	0.9	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	3,655	1,218	3,767	1,256	5.0	1.1	PASS
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	Mainline	4,105	1,368	4,243	1,414	5.0	1.2	PASS
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	4,291	1,430	4,556	1,519	5.0	2.3	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	4,343	1,448	4,600	1,533	5.0	2.2	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	4,782	956	5,030	1,006	5.0	1.6	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	4,285	1,071	4,566	1,142	5.0	2.1	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	5,143	1,286	5,528	1,382	5.0	2.6	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	4,051	1,013	4,520	1,130	5.0	3.6	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (4:00 - 5:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	22	22	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	82	82	1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	3,491	873	3,960	990	5.0	3.8	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	533	533	548	548	3.0	0.7	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	1,849	925	1,845	923	5.0	0.1	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	1,111	1,111	1,101	1,101	5.0	0.3	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	1,408	704	1,390	695	3.0	0.3	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	895	895	920	920	3.0	0.8	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	1,427	714	1,448	724	5.0	0.4	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	613	613	623	623	3.0	0.4	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	781	781	815	815	3.0	1.2	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	632	632	629	629	5.0	0.1	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	662	662	705	705	3.0	1.7	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	333	333	365	365	5.0	1.7	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	785	785	797	797	3.0	0.4	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	248	248	265	265	5.0	1.1	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	740	740	783	783	3.0	1.6	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	569	569	614	614	5.0	1.9	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	440	440	452	452	3.0	0.6	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	444	444	477	477	5.0	1.5	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	415	415	452	452	3.0	1.8	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	549	549	567	567	5.0	0.8	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	202	202	189	189	3.0	0.9	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	697	697	698	698	5.0	0.1	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	157	157	168	168	3.0	0.8	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	195	195	211	211	5.0	1.1	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	276	276	279	279	3.0	0.2	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	780	780	782	782	5.0	0.1	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	1,124	1,124	1,126	1,126	3.0	0.0	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	283	283	291	291	5.0	0.5	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	343	343	337	337	3.0	0.3	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (4:00 - 5:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	22	22	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	82	82	1%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	527	527	524	524	5.0	0.1	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	126	126	138	138	3.0	1.1	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	1,177	1,177	1,179	1,179	5.0	0.1	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	543	543	546	546	3.0	0.1	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	290	290	280	280	5.0	0.6	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	132	132	140	140	3.0	0.7	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	171	171	176	176	5.0	0.3	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	357	357	349	349	3.0	0.4	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	175	175	170	170	5.0	0.4	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	386	386	416	416	3.0	1.5	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	163	163	178	178	5.0	1.2	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	430	430	439	439	3.0	0.4	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	174	174	192	192	5.0	1.4	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	624	624	608	608	3.0	0.7	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	194	194	195	195	5.0	0.0	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	371	371	384	384	3.0	0.7	PASS
109117	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	261	261	258	258	5.0	0.2	PASS
109118	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	313	313	300	300	3.0	0.7	PASS
109119	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	427	427	438	438	5.0	0.5	PASS
109120	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	866	866	845	845	3.0	0.7	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	497	497	464	464	5.0	1.5	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	566	283	592	296	5.0	0.8	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	888	888	877	877	3.0	0.4	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	536	536	569	569	3.0	1.4	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	3,420	1,710	3,366	1,683	5.0	0.7	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	863	863	875	875	3.0	0.4	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,465	1,465	1,490	1,490	3.0	0.7	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	560	560	518	518	5.0	1.8	PASS

VISSIM REPORT
Confidence and Calibration
Volume Calibration (5:00 - 6:00 PM)
I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	22	22	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	82	82	0%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	4,928	1,232	4,862	1,216	3.0	0.5	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	5,387	1,077	5,354	1,071	5.0	0.2	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	5,512	1,102	5,549	1,110	5.0	0.2	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	In Queue			5,576	1,394			
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	In Queue			6,351	1,270			
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	In Queue			6,204	1,551			
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	In Queue			6,444	2,148			
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	6,750	2,250	6,751	2,250	5.0	0.0	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	6,579	2,193	6,569	2,190	5.0	0.1	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	6,546	2,182	6,543	2,181	5.0	0.0	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	6,207	2,069	6,204	2,068	5.0	0.0	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	5,656	1,885	5,640	1,880	5.0	0.1	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	5,700	1,900	5,702	1,901	5.0	0.0	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	6,018	2,006	6,044	2,015	5.0	0.2	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	6,057	2,019	6,103	2,034	5.0	0.3	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	4,158	1,386	4,109	1,370	3.0	0.4	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,899	1,300	3,849	1,283	5.0	0.5	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	3,323	1,108	3,283	1,094	5.0	0.4	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	3,111	1,037	3,079	1,026	5.0	0.3	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	3,258	1,086	3,216	1,072	5.0	0.4	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	3,471	1,157	3,424	1,141	5.0	0.5	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	3,704	1,235	3,614	1,205	5.0	0.9	PASS
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	Mainline	4,185	1,395	4,111	1,370	5.0	0.7	PASS
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	4,382	1,461	4,286	1,429	5.0	0.8	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	4,456	1,485	4,374	1,458	5.0	0.7	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	4,889	978	4,801	960	5.0	0.6	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	4,506	1,127	4,421	1,105	5.0	0.6	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	5,389	1,347	5,324	1,331	5.0	0.4	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	4,661	1,165	4,645	1,161	5.0	0.1	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (5:00 - 6:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	22	22	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	82	82	0%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	3,912	978	3,868	967	5.0	0.4	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	459	459	485	485	3.0	1.2	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	1,614	807	1,591	796	5.0	0.4	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	1,128	1,128	1,115	1,115	5.0	0.4	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	1,643	822	1,683	841	3.0	0.7	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,224	1,224	1,180	1,180	3.0	1.3	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	1,329	665	1,332	666	5.0	0.1	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	535	535	558	558	3.0	1.0	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	821	821	820	820	3.0	0.0	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	571	571	597	597	5.0	1.1	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	647	647	668	668	3.0	0.8	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	311	311	326	326	5.0	0.8	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	775	775	777	777	3.0	0.1	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	246	246	245	245	5.0	0.1	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	723	723	727	727	3.0	0.1	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	558	558	574	574	5.0	0.7	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	387	387	387	387	3.0	0.0	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	454	454	462	462	5.0	0.4	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	421	421	413	413	3.0	0.4	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	548	548	564	564	5.0	0.7	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	209	209	205	205	3.0	0.3	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	714	714	725	725	5.0	0.4	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	163	163	157	157	3.0	0.5	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	220	220	216	216	5.0	0.3	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	264	264	253	253	3.0	0.7	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	733	733	762	762	5.0	1.1	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	1,051	1,051	1,108	1,108	3.0	1.7	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	274	274	274	274	5.0	0.0	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	313	313	315	315	3.0	0.1	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (5:00 - 6:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	22	22	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	82	82	0%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	403	403	402	402	5.0	0.1	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	144	144	144	144	3.0	0.0	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	1,121	1,121	1,110	1,110	5.0	0.3	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	545	545	548	548	3.0	0.1	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	339	339	335	335	5.0	0.2	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	127	127	132	132	3.0	0.4	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	172	172	177	177	5.0	0.4	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	319	319	305	305	3.0	0.8	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	160	160	170	170	5.0	0.8	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	373	373	378	378	3.0	0.2	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	154	154	167	167	5.0	1.0	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	387	387	371	371	3.0	0.8	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	144	144	140	140	5.0	0.4	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	625	625	633	633	3.0	0.3	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	175	175	187	187	5.0	0.9	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	372	372	375	375	3.0	0.1	PASS
109117	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	275	275	284	284	5.0	0.6	PASS
109118	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	349	349	362	362	3.0	0.7	PASS
109119	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	384	384	368	368	5.0	0.8	PASS
109120	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	817	817	804	804	3.0	0.4	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	383	383	381	381	5.0	0.1	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	536	268	531	266	5.0	0.1	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	827	827	820	820	3.0	0.3	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	592	592	604	604	3.0	0.5	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	3,239	1,620	3,197	1,598	5.0	0.5	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,039	1,039	1,015	1,015	3.0	0.7	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,472	1,472	1,504	1,504	3.0	0.8	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	749	749	732	732	5.0	0.6	PASS

VISSIM REPORT
Confidence and Calibration
Volume Calibration (6:00 - 7:00 PM)
I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	24	24	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	84	84	2%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	5,134	1,284	5,070	1,267	3.0	0.4	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	5,568	1,114	5,492	1,098	5.0	0.5	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	5,946	1,189	5,970	1,194	5.0	0.1	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	In Queue			5,576	1,394			
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	In Queue			6,351	1,270			
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	6,450	1,613	6,291	1,573	5.0	1.0	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	6,611	2,204	6,561	2,187	5.0	0.4	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	6,723	2,241	6,821	2,274	5.0	0.7	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	6,328	2,109	6,509	2,170	5.0	1.3	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	6,216	2,072	6,434	2,145	5.0	1.6	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	5,757	1,919	6,046	2,015	5.0	2.2	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	5,165	1,722	5,498	1,833	5.0	2.6	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	5,238	1,746	5,569	1,856	5.0	2.6	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	5,517	1,839	5,862	1,954	5.0	2.6	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	5,511	1,837	5,880	1,960	5.0	2.8	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	3,547	1,182	3,567	1,189	3.0	0.2	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	3,283	1,094	3,323	1,108	5.0	0.4	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	2,669	890	2,687	896	5.0	0.2	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	2,483	828	2,516	839	5.0	0.4	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	2,650	883	2,694	898	5.0	0.5	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	2,834	945	2,918	973	5.0	0.9	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	3,049	1,016	3,156	1,052	5.0	1.1	PASS
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	Mainline	3,409	1,136	3,533	1,178	5.0	1.2	PASS
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	3,638	1,213	3,778	1,259	5.0	1.3	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	3,730	1,243	3,859	1,286	5.0	1.2	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	4,100	820	4,235	847	5.0	0.9	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	3,835	959	3,976	994	5.0	1.1	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	4,590	1,148	4,692	1,173	5.0	0.8	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	4,185	1,046	4,176	1,044	5.0	0.1	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (6:00 - 7:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	24	24	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	84	84	2%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	3,699	925	3,767	942	5.0	0.6	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	434	434	421	421	3.0	0.6	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	1,643	822	1,621	811	5.0	0.4	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	1,089	1,089	1,070	1,070	5.0	0.6	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	1,942	971	2,003	1,001	3.0	1.0	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,168	1,168	1,182	1,182	3.0	0.4	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	973	487	998	499	5.0	0.6	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	437	437	444	444	3.0	0.3	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	792	792	783	783	3.0	0.3	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	678	678	685	685	5.0	0.3	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	574	574	595	595	3.0	0.9	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	376	376	331	331	5.0	2.4	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	537	537	556	556	3.0	0.8	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	390	390	352	352	5.0	2.0	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	502	502	505	505	3.0	0.2	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	702	702	635	635	5.0	2.6	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	307	307	300	300	3.0	0.4	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	411	411	391	391	5.0	1.0	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	299	299	305	305	3.0	0.3	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	596	596	537	537	5.0	2.5	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	137	137	144	144	3.0	0.6	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	714	714	694	694	5.0	0.8	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	122	122	138	138	3.0	1.4	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	195	195	202	202	5.0	0.5	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	268	268	270	270	3.0	0.1	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	629	629	628	628	5.0	0.0	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	908	908	923	923	3.0	0.5	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	244	244	233	233	5.0	0.7	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	238	238	239	239	3.0	0.1	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (6:00 - 7:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	24	24	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	84	84	2%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	353	353	353	353	5.0	0.0	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	89	89	94	94	3.0	0.5	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	1,016	1,016	1,031	1,031	5.0	0.5	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	402	402	385	385	3.0	0.9	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	293	293	291	291	5.0	0.1	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	107	107	95	95	3.0	1.2	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	128	128	127	127	5.0	0.1	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	295	295	289	289	3.0	0.3	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	121	121	123	123	5.0	0.2	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	305	305	321	321	3.0	0.9	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	107	107	120	120	5.0	1.2	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	322	322	334	334	3.0	0.6	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	132	132	128	128	5.0	0.3	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	492	492	497	497	3.0	0.2	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	134	134	141	141	5.0	0.6	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	363	363	367	367	3.0	0.2	PASS
109117	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	247	247	247	247	5.0	0.0	PASS
109118	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	339	339	329	329	3.0	0.5	PASS
109119	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	369	369	378	378	5.0	0.5	PASS
109120	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	739	739	737	737	3.0	0.1	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	265	265	264	264	5.0	0.0	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	396	198	416	208	5.0	0.7	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	830	830	795	795	3.0	1.2	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	321	321	327	327	3.0	0.4	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	2,911	1,456	2,961	1,481	5.0	0.7	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	905	905	852	852	3.0	1.8	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,601	1,601	1,573	1,573	3.0	0.7	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	486	486	505	505	5.0	0.8	PASS

VISSIM REPORT
Confidence and Calibration
Volume Calibration (7:00 - 8:00 PM)
I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	3%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	4,473	1,118	4,504	1,126	3.0	0.2	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	4,877	975	4,922	984	5.0	0.3	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	6,036	1,207	6,118	1,224	5.0	0.5	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	5,580	1,395	5,798	1,449	5.0	1.4	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	6,333	1,267	6,633	1,327	5.0	1.7	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	6,400	1,600	6,427	1,607	5.0	0.2	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	6,254	2,085	6,361	2,120	5.0	0.8	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	6,054	2,018	6,174	2,058	5.0	0.9	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	5,516	1,839	5,683	1,894	5.0	1.3	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	5,320	1,773	5,579	1,860	5.0	2.0	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	4,844	1,615	5,199	1,733	5.0	2.9	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	4,395	1,465	4,798	1,599	5.0	3.4	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	4,469	1,490	4,903	1,634	5.0	3.7	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	4,624	1,541	5,078	1,693	5.0	3.8	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	4,666	1,555	5,129	1,710	5.0	3.8	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	3,097	1,032	3,101	1,034	3.0	0.0	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	2,961	987	2,983	994	5.0	0.2	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	2,456	819	2,446	815	5.0	0.1	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	2,330	777	2,301	767	5.0	0.3	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	2,421	807	2,402	801	5.0	0.2	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	2,532	844	2,544	848	5.0	0.1	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	2,703	901	2,726	909	5.0	0.3	PASS
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	Mainline	2,958	986	2,996	999	5.0	0.4	PASS
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	3,192	1,064	3,238	1,079	5.0	0.5	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	3,267	1,089	3,303	1,101	5.0	0.4	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	3,615	723	3,647	729	5.0	0.2	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	3,465	866	3,483	871	5.0	0.2	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	4,046	1,012	4,095	1,024	5.0	0.4	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	4,086	1,022	4,087	1,022	5.0	0.0	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (7:00 - 8:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	3%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	3,672	918	3,685	921	5.0	0.1	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	404	404	408	408	3.0	0.2	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	1,304	652	1,336	668	5.0	0.6	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	888	888	893	893	5.0	0.2	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	2,162	1,081	2,129	1,064	3.0	0.5	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	1,189	1,189	1,275	1,275	3.0	2.5	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	854	427	888	444	5.0	0.8	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	398	398	398	398	3.0	0.0	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	753	753	771	771	3.0	0.6	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	899	899	943	943	5.0	1.4	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	500	500	536	536	3.0	1.6	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	479	479	470	470	5.0	0.4	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	333	333	335	335	3.0	0.1	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	471	471	468	468	5.0	0.1	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	271	271	249	249	3.0	1.4	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	706	706	697	697	5.0	0.4	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	168	168	183	183	3.0	1.1	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	392	392	372	372	5.0	1.0	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	196	196	210	210	3.0	1.0	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	577	577	564	564	5.0	0.6	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	101	101	108	108	3.0	0.7	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	544	544	563	563	5.0	0.8	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	95	95	95	95	3.0	0.0	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	123	123	125	125	5.0	0.2	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	197	197	209	209	3.0	0.8	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	602	602	596	596	5.0	0.2	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	757	757	742	742	3.0	0.5	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	141	141	138	138	5.0	0.2	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	183	183	176	176	3.0	0.5	PASS

VISSIM REPORT**Confidence and Calibration****Volume Calibration (7:00 - 8:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	3%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	210	210	217	217	5.0	0.5	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	74	74	82	82	3.0	0.9	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	826	826	862	862	5.0	1.2	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	321	321	320	320	3.0	0.0	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	227	227	237	237	5.0	0.6	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	101	101	90	90	3.0	1.1	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	119	119	125	125	5.0	0.5	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	210	210	206	206	3.0	0.3	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	100	100	94	94	5.0	0.6	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	211	211	230	230	3.0	1.3	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	81	81	89	89	5.0	0.9	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	252	252	266	266	3.0	0.8	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	113	113	114	114	5.0	0.1	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	368	368	375	375	3.0	0.3	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	96	96	97	97	5.0	0.1	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	330	330	328	328	3.0	0.1	PASS
109117	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	182	182	190	190	5.0	0.6	PASS
109118	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	257	257	241	241	3.0	1.0	PASS
109119	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	282	282	287	287	5.0	0.3	PASS
109120	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	630	630	620	620	3.0	0.4	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	150	150	162	162	5.0	1.0	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	336	168	331	165	5.0	0.2	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	658	658	665	665	3.0	0.3	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	259	259	276	276	3.0	1.0	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	2,306	1,153	2,384	1,192	5.0	1.1	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	855	855	828	828	3.0	0.9	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	1,491	1,491	1,542	1,542	3.0	1.3	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	414	414	403	403	5.0	0.6	PASS

VISSIM REPORT
Confidence and Calibration Volume
Calibration (1:00 - 8:00 PM)
I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	0%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100001	Southbound I-15: North of Hidden Valley Pkwy On-ramp	4	Entry	37,271	9,318	36,899	9,225	3.0	1.0	PASS
100002	Southbound I-15: Hidden Valley Pkwy to SR-91	5	Mainline	40,872	8,174	40,459	8,092	5.0	0.9	PASS
100003	Southbound I-15: SR-91 to Magnolia Ave	5	Mainline	42,768	8,554	42,627	8,525	5.0	0.3	PASS
100004	Southbound I-15: Magnolia Ave to EB SR-91 Express Lane On-ramp	4	Mainline	38,366	9,592	38,183	9,546	5.0	0.5	PASS
100005	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave	5	Mainline	43,782	8,756	43,626	8,725	5.0	0.3	PASS
100006	Southbound I-15: Ontario Ave to Foothill Pkwy/El Cerrito Rd	4	Mainline	42,948	10,737	42,518	10,630	5.0	1.0	PASS
100007	Southbound I-15: Foothill Pkwy/El Cerrito Rd to Cajalco Rd	3	Mainline	43,753	14,584	43,248	14,416	5.0	1.4	PASS
100008	Southbound I-15: Cajalco Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	44,242	14,747	44,205	14,735	5.0	0.1	PASS
100009	Southbound I-15: Weirick Rd/Dos Lagos Dr to Temescal Canyon Rd	3	Mainline	41,793	13,931	41,712	13,904	5.0	0.2	PASS
100010	Southbound I-15: Temescal Canyon Rd to Indian Truck Trail	3	Mainline	40,605	13,535	40,490	13,497	5.0	0.3	PASS
100011	Southbound I-15: Indian Truck Trail to Lake St	3	Mainline	38,075	12,692	37,904	12,635	5.0	0.5	PASS
100012	Southbound I-15: Lake St to Nichols Rd	3	Mainline	35,116	11,705	34,914	11,638	5.0	0.6	PASS
100013	Southbound I-15: Nichols Rd to Central Ave (SR-74)	3	Mainline	35,613	11,871	35,359	11,786	5.0	0.8	PASS
100014	Southbound I-15: Central Ave (SR-74) to Main St	3	Mainline	38,085	12,695	37,836	12,612	5.0	0.7	PASS
100015	Southbound I-15: South of Main St On-ramp	3	Exit	38,692	12,897	38,440	12,813	5.0	0.7	PASS
100101	Northbound I-15: South of Main St Off-ramp	3	Entry	27,459	9,153	27,440	9,147	3.0	0.1	PASS
100102	Northbound I-15: Main St to Central Ave (SR-74)	3	Mainline	25,285	8,428	25,284	8,428	5.0	0.0	PASS
100103	Northbound I-15: Central Ave (SR-74) to Nichols Rd	3	Mainline	21,337	7,112	21,231	7,077	5.0	0.4	PASS
100104	Northbound I-15: Nichols Rd to Lake St	3	Mainline	20,324	6,775	20,239	6,746	5.0	0.3	PASS
100105	Northbound I-15: Lake St to Indian Truck Trail	3	Mainline	21,447	7,149	21,397	7,132	5.0	0.2	PASS
100106	Northbound I-15: Indian Truck Trail to Temescal Canyon Rd	3	Mainline	22,821	7,607	22,866	7,622	5.0	0.2	PASS
100107	Northbound I-15: Temescal Canyon Rd to Weirick Rd/Dos Lagos Dr	3	Mainline	24,645	8,215	24,709	8,236	5.0	0.2	PASS
100108	Northbound I-15: Weirick Rd/Dos Lagos Dr to Cajalco Rd	3	Mainline	27,856	9,285	27,964	9,321	5.0	0.4	PASS
100109	Northbound I-15: Cajalco Rd to Foothill Pkwy/El Cerrito Rd	3	Mainline	29,557	9,852	29,722	9,907	5.0	0.6	PASS
100110	Northbound I-15: Foothill Pkwy/El Cerrito Rd to Ontario Ave	3	Mainline	30,242	10,081	30,358	10,119	5.0	0.4	PASS
100111	Northbound I-15: Ontario Ave to WB SR-91 Express Lane Off-ramp	5	Mainline	33,038	6,608	33,112	6,622	5.0	0.2	PASS
100112	Northbound I-15: WB SR-91 Express Lane Off-ramp to Magnolia Ave	4	Mainline	30,561	7,640	30,686	7,672	5.0	0.4	PASS
100113	Northbound I-15: Magnolia Ave to SR-91	4	Mainline	35,541	8,885	35,741	8,935	5.0	0.5	PASS
100114	Northbound I-15: SR-91 to Hidden Valley Pkwy	4	Mainline	30,705	7,676	30,787	7,697	5.0	0.2	PASS

VISSIM REPORT**Confidence and Calibration Volume****Calibration (1:00 - 8:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	0%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
100115	Northbound I-15: North of Hidden Valley Pkwy Off-ramp	4	Exit	26,891	6,723	27,055	6,764	5.0	0.5	PASS
109001	Southbound I-15: Hidden Valley Pkwy On-ramp	1	On-Ramp	3,601	3,601	3,553	3,553	3.0	0.8	PASS
109002	Southbound I-15: WB SR-91 Off-ramp	2	Off-Ramp	12,118	6,059	12,023	6,012	5.0	0.6	PASS
109003	Southbound I-15: EB SR-91 Off-ramp	1	Off-Ramp	7,168	7,168	7,056	7,056	5.0	1.3	PASS
109004	Southbound I-15: EB SR-91 On-ramp	2	On-Ramp	13,748	6,874	13,800	6,900	3.0	0.3	PASS
109005	Southbound I-15: WB SR-91 On-ramp	1	On-Ramp	7,434	7,434	7,441	7,441	3.0	0.1	PASS
109006	Southbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	8,538	4,269	8,581	4,291	5.0	0.3	PASS
109007	Southbound I-15: Magnolia Ave On-ramp	1	On-Ramp	4,136	4,136	4,131	4,131	3.0	0.1	PASS
109008	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	1	On-Ramp	5,416	5,416	5,443	5,443	3.0	0.4	PASS
109009	Southbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	5,463	5,463	5,454	5,454	5.0	0.1	PASS
109010	Southbound I-15: Ontario Ave On-ramp	1	On-Ramp	4,180	4,180	4,347	4,347	3.0	2.6	PASS
109011	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	3,010	3,010	3,061	3,061	5.0	0.9	PASS
109012	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	3,815	3,815	3,796	3,796	3.0	0.3	PASS
109013	Southbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	2,612	2,612	2,620	2,620	5.0	0.2	PASS
109014	Southbound I-15: Cajalco Rd On-ramp	1	On-Ramp	3,550	3,550	3,577	3,577	3.0	0.4	PASS
109015	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	4,606	4,606	4,651	4,651	5.0	0.7	PASS
109016	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	2,157	2,157	2,200	2,200	3.0	0.9	PASS
109017	Southbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	3,385	3,385	3,416	3,416	5.0	0.5	PASS
109018	Southbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	2,197	2,197	2,231	2,231	3.0	0.7	PASS
109019	Southbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	3,743	3,743	3,728	3,728	5.0	0.2	PASS
109020	Southbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	1,213	1,213	1,202	1,202	3.0	0.3	PASS
109021	Southbound I-15: Lake St Off-ramp	1	Off-Ramp	4,110	4,110	4,110	4,110	5.0	0.0	PASS
109022	Southbound I-15: Lake St On-ramp	1	On-Ramp	1,151	1,151	1,192	1,192	3.0	1.2	PASS
109023	Southbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	1,392	1,392	1,436	1,436	5.0	1.2	PASS
109024	Southbound I-15: Nichols Rd On-ramp	1	On-Ramp	1,889	1,889	1,934	1,934	3.0	1.0	PASS
109025	Southbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	4,667	4,667	4,684	4,684	5.0	0.3	PASS
109026	Southbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	7,139	7,139	7,183	7,183	3.0	0.5	PASS
109027	Southbound I-15: Main St Off-ramp	1	Off-Ramp	1,559	1,559	1,569	1,569	5.0	0.2	PASS
109028	Southbound I-15: Main St On-ramp	1	On-Ramp	2,166	2,166	2,205	2,205	3.0	0.8	PASS

VISSIM REPORT**Confidence and Calibration Volume****Calibration (1:00 - 8:00 PM)****I-15 Express Lanes Southern Extension****Existing Conditions****PM Peak Period**

Criteria	Target	GEH	Count	Pass	Percent	Test
State facility segments	100%	5.0	26	26	100%	PASS
Entry/exit ramps	100%	3.0/5.0	56	56	100%	PASS
Entry/exit locations	100%	3.0/5.0	4	4	100%	PASS
Local roadway segments	85%	5.0	-	-	-	-
Sum of all segments	5%	-	86	86	0%	PASS

Location Description				Count Volumes		Model Volumes		Calibration Test		
ID	Location	Lanes	Type	Total (veh)	Per Lane (veh/ln)	Total (veh)	Per Lane (veh/ln)	GEH Target	GEH	Meet GEH
109101	Northbound I-15: Main St Off-ramp	1	Off-Ramp	2,971	2,971	3,002	3,002	5.0	0.6	PASS
109102	Northbound I-15: Main St On-ramp	1	On-Ramp	797	797	824	824	3.0	0.9	PASS
109103	Northbound I-15: Central Ave (SR-74) Off-ramp	1	Off-Ramp	7,461	7,461	7,507	7,507	5.0	0.5	PASS
109104	Northbound I-15: Central Ave (SR-74) On-ramp	1	On-Ramp	3,513	3,513	3,445	3,445	3.0	1.1	PASS
109105	Northbound I-15: Nichols Rd Off-ramp	1	Off-Ramp	2,040	2,040	2,009	2,009	5.0	0.7	PASS
109106	Northbound I-15: Nichols Rd On-ramp	1	On-Ramp	1,027	1,027	991	991	3.0	1.1	PASS
109107	Northbound I-15: Lake St Off-ramp	1	Off-Ramp	1,172	1,172	1,161	1,161	5.0	0.3	PASS
109108	Northbound I-15: Lake St On-ramp	1	On-Ramp	2,295	2,295	2,271	2,271	3.0	0.5	PASS
109109	Northbound I-15: Indian Truck Trail Off-ramp	1	Off-Ramp	1,108	1,108	1,111	1,111	5.0	0.1	PASS
109110	Northbound I-15: Indian Truck Trail On-ramp	1	On-Ramp	2,482	2,482	2,525	2,525	3.0	0.9	PASS
109111	Northbound I-15: Temescal Canyon Rd Off-ramp	1	Off-Ramp	1,128	1,128	1,180	1,180	5.0	1.5	PASS
109112	Northbound I-15: Temescal Canyon Rd On-ramp	1	On-Ramp	2,952	2,952	2,983	2,983	3.0	0.6	PASS
109113	Northbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	1	Off-Ramp	1,131	1,131	1,121	1,121	5.0	0.3	PASS
109114	Northbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	1	On-Ramp	4,342	4,342	4,345	4,345	3.0	0.0	PASS
109115	Northbound I-15: Cajalco Rd Off-ramp	1	Off-Ramp	1,168	1,168	1,198	1,198	5.0	0.9	PASS
109116	Northbound I-15: Cajalco Rd On-ramp	1	On-Ramp	2,869	2,869	2,924	2,924	3.0	1.0	PASS
109117	Northbound I-15: Ontario Ave Off-ramp	1	Off-Ramp	1,777	1,777	1,766	1,766	5.0	0.3	PASS
109118	Northbound I-15: Ontario Ave On-ramp	1	On-Ramp	2,462	2,462	2,377	2,377	3.0	1.7	PASS
109119	Northbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	1	Off-Ramp	2,945	2,945	2,972	2,972	5.0	0.5	PASS
109120	Northbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	1	On-Ramp	5,741	5,741	5,697	5,697	3.0	0.6	PASS
109121	Northbound I-15: WB SR-91 Express Lane Off-ramp (Left)	1	Off-Ramp	2,477	2,477	2,435	2,435	5.0	0.9	PASS
109122	Northbound I-15: Magnolia Ave Off-ramp	2	Off-Ramp	3,745	1,873	3,778	1,889	5.0	0.4	PASS
109123	Northbound I-15: Magnolia Ave Loop On-ramp	1	On-Ramp	4,990	4,990	4,959	4,959	3.0	0.4	PASS
109124	Northbound I-15: Magnolia Ave On-ramp	1	On-Ramp	3,735	3,735	3,804	3,804	3.0	1.1	PASS
109125	Northbound I-15: EB & WB SR-91 Off-ramp	2	Off-Ramp	21,783	10,892	21,786	10,893	5.0	0.0	PASS
109126	Northbound I-15: WB SR-91 On-ramp	1	On-Ramp	6,340	6,340	6,190	6,190	3.0	1.9	PASS
109127	Northbound I-15: EB SR-91 On-ramp	1	On-Ramp	10,607	10,607	10,595	10,595	3.0	0.1	PASS
109128	Northbound I-15: Hidden Valley Pkwy Off-ramp	1	Off-Ramp	3,814	3,814	3,748	3,748	5.0	1.1	PASS

Vissim Post-Processor
Average Results from 5 Runs
Network Statistics

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Performance Measure	Vehicle Types	Average	Std. Dev.	Minimum	Maximum
Average Delay (seconds)	All	160.5	12.74	150.1	177.8
Total Delay (hours)	All	7,318	588	6,841	8,119
Average Stopped Delay (seconds)	All	11.8	1.41	10.6	13.5
Total Stopped Delay (hours)	All	538	64	482	616
Total Distance Traveled (miles)	All	1,317,551	2,076	1,315,205	1,320,336
Average Speed (mph)	All	49.7	1.08	48.2	50.6
Average Number of Stops	All	8.2	0.84	7.4	9.2
Total Number of Stops	All	1,349,080	139,010	1,220,419	1,514,196
Total Travel Time (hours)	All	26,541.3	595.0	26,077.9	27,383.2
Vehicles Active	All	3,297	139	3,117	3,500
Vehicles Arrived	All	160,868	94	160,766	160,969

VISSIM Post-Processor
Average Results from 5 Runs
Average Travel Time

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Period

Corridor Travel Time by Time Interval Summary							
Time interval		Measured from Simulation (min)		Observed from Inrix (min)		Difference (sec)	
		SB I-15	NB I-15	SB I-15	NB I-15	SB I-15	NB I-15
1	5:00 - 5:15 AM	18.90	20.27	19.43	18.63	-31.7	+98.0
2	5:15 - 5:30 AM	18.92	20.87	18.56	19.70	+21.6	+70.7
3	5:30 - 5:45 AM	18.92	22.45	18.35	22.85	+34.5	-24.2
4	5:45 - 6:00 AM	18.96	26.23	17.79	23.91	+70.4	+139.4
5	6:00 - 6:15 AM	19.00	31.96	18.66	27.20	+20.4	+285.8
6	6:15 - 6:30 AM	19.04	36.30	19.75	30.32	-42.4	+358.9
7	6:30 - 6:45 AM	19.07	39.69	18.55	35.47	+30.9	+253.2
8	6:45 - 7:00 AM	19.12	42.62	18.54	39.44	+35.0	+190.6
9	7:00 - 7:15 AM	19.17	43.35	19.23	41.31	-3.4	+122.6
10	7:15 - 7:30 AM	19.23	42.73	19.33	42.81	-5.9	-4.7
11	7:30 - 7:45 AM	19.33	43.43	18.89	43.87	+26.3	-26.7
12	7:45 - 8:00 AM	19.33	43.43	18.88	36.74	+26.8	+401.2
13	8:00 - 8:15 AM	19.32	41.56	19.10	35.26	+12.9	+378.1
14	8:15 - 8:30 AM	19.25	42.03	19.43	35.71	-10.6	+379.6
15	8:30 - 8:45 AM	19.27	41.24	19.09	34.65	+10.9	+395.3
16	8:45 - 9:00 AM	19.26	39.27	19.16	34.50	+6.0	+286.1
17	9:00 - 9:15 AM	19.29	36.83	19.12	32.55	+10.1	+256.6
18	9:15 - 9:30 AM	19.25	35.79	19.04	29.10	+12.6	+401.1
19	9:30 - 9:45 AM	19.19	33.89	19.10	27.20	+5.2	+401.8
20	9:45 - 10:00 AM	19.19	31.86	19.28	26.22	-5.1	+338.2
21	10:00 - 10:15 AM	19.19	29.63	19.17	25.52	+1.1	+246.7
22	10:15 - 10:30 AM	19.18	28.09	19.32	25.85	-8.1	+134.7
23	10:30 - 10:45 AM	19.19	27.52	19.32	25.97	-8.3	+92.9
24	10:45 - 11:00 AM	19.18	27.17	19.62	25.68	-26.3	+89.2
25	11:00 - 11:15 AM	19.22	26.38	19.24	26.57	-1.4	-11.8
26	11:15 - 11:30 AM	19.20	24.95	19.17	26.75	+1.6	-108.2
27	11:30 - 11:45 AM	19.24	23.59	19.34	23.82	-5.7	-14.0
28	11:45 - 12:00 PM	19.28	23.24	19.19	21.58	+5.6	+99.7
Average		19.2	33.1	19.1	30.0	+6.5	+186.8
Allowable Tolerance (sec)						± 25.8	± 192.1
Within Validation Statistic?						Yes	Yes

Corridor Performance Measurements		
Stats Summary	Southbound I-15	Northbound I-15
Average Travel Time (min)	19.2	31.7
Average Travel Speed (mph)	68.4	41.4
Average Delay per Vehicle (min)	0.4	12.9
Max Individual Vehicle Delay (min)	0.6	24.7

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
152 NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	5,054	64	100.7%							68.3	0.3	19.1	0.5	C
151 NB I-15: Hidden Valley Pkwy Off-ramp	Diverge	5,644	64	100.4%				580	49	97.0%	66.9	1.8	23.7	1.1	C
150 NB I-15: EB SR-91 On-ramp	Basic	4,084	54	101.4%	1,555	63	97.7%				68.3	0.3	21.4	0.7	C
149 NB I-15: WB SR-91 On-ramp	Merge	2,752	43	101.4%	1,330	83	101.3%				66.5	0.1	18.7	0.7	C
148 NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp	Basic	2,747	44	101.2%							68.8	0.2	13.5	0.4	B
147 NB I-15: EB & WB SR-91 Off-ramp	Diverge	5,671	75	104.0%				2,918	103	106.6%	62.5	5.6	23.2	3.2	C
146 NB I-15: Magnolia Ave On-ramp	Merge	5,294	81	104.2%	381	35	102.9%				63.9	2.0	20.1	1.2	C
145 NB I-15: Magnolia Ave Loop On-ramp	Basic	4,378	64	105.4%	918	55	98.8%				65.1	0.4	20.4	0.6	C
144 NB I-15: Magnolia Ave Off-ramp to Loop On-ramp	Basic	4,379	61	105.4%							67.0	1.1	21.9	0.7	C
143 NB I-15: Magnolia Ave Off-ramp	Diverge	5,018	55	104.2%				643	48	97.1%	66.8	1.4	17.3	0.4	B
142 NB I-15: WB SR-91 Express Lane Off-ramp (Left)	Basic	6,498	80	102.2%				1,484	66	96.4%	67.6	0.2	19.8	0.3	C
141 NB I-15: Ontario Ave On-ramp to WB SR-91 Express Lane Off-ramp	Basic	6,498	84	102.2%							66.7	0.3	20.0	0.3	C
140 NB I-15: Ontario Ave On-ramp	Merge	5,102	108	105.2%	1,397	33	92.9%				63.9	0.4	12.1	0.5	B
139 NB I-15: Ontario Ave Off-ramp to On-ramp (5 Lanes)	Basic	5,102	103	105.2%							68.5	0.2	15.3	0.2	B
138 NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)	Basic	5,102	115	105.2%							66.7	1.0	19.7	0.3	C
137 NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)	Basic	5,102	46	105.2%							61.3	3.8	28.5	1.8	D
136 NB I-15: Ontario Ave Off-ramp	Diverge	5,724	59	102.9%				630	40	88.5%	52.6	9.8	37.8	7.3	E
135 NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp	Merge	4,755	39	104.1%	963	34	96.7%				57.8	5.4	25.4	2.5	C
134 NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp	Basic	4,756	49	104.1%							67.4	0.1	23.7	0.3	C
133 NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	Diverge	5,077	49	104.3%				316	42	105.6%	66.3	0.3	25.2	0.6	C
132 NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp	Basic	5,074	37	104.3%							62.2	0.3	27.2	0.1	D
131 NB I-15: Cajalco Rd On-ramp	Merge	4,176	38	105.4%	903	44	100.1%				21.8	0.2	76.8	1.9	F
130 NB I-15: Cajalco Rd Off-ramp to On-ramp	Basic	4,191	36	105.7%							20.9	0.5	65.2	0.7	F
129 NB I-15: Cajalco Rd Off-ramp	Diverge	4,293	38	105.5%				100	21	94.3%	21.1	0.6	65.9	0.6	F
128 NB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	3,281	53	106.7%	1,010	64	101.4%				10.2	0.3	116.5	2.5	F
127 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	3,292	42	107.1%							13.1	0.5	81.7	2.0	F
126 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	3,360	56	107.2%				63	16	104.3%	8.1	0.3	132.5	2.0	F
125 NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	3,368	59	107.5%							8.8	0.5	123.1	2.3	F
124 NB I-15: Temescal Canyon Rd On-ramp	Merge	3,121	49	108.9%	269	17	100.7%				7.7	0.4	115.3	2.2	F
123 NB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	3,125	43	109.0%							11.3	0.8	85.2	3.2	F
122 NB I-15: Temescal Canyon Rd Off-ramp	Diverge	3,755	87	107.0%				630	76	98.1%	18.8	0.9	66.7	2.3	F
121 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	3,718	72	105.9%							20.2	4.6	64.1	11.7	F
120 NB I-15: Indian Truck Trail On-ramp	Merge	3,339	74	105.2%	351	53	105.0%				21.5	26.2	82.6	38.6	F
119 NB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	3,318	70	104.5%							25.4	23.9	64.4	27.7	F
118 NB I-15: Indian Truck Trail Off-ramp	Diverge	3,640	66	101.5%				386	37	93.6%	30.5	22.0	53.8	26.4	F
117 NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp	Basic	3,611	67	100.7%							56.6	12.4	22.5	6.3	C
116 NB I-15: Lake St On-ramp	Merge	3,078	63	100.5%	511	33	97.6%				67.7	0.2	15.7	0.7	B
115 NB I-15: Lake St Off-ramp to On-ramp	Basic	3,077	56	100.4%							68.3	0.3	15.7	0.5	B
114 NB I-15: Lake St Off-ramp	Diverge	3,281	59	99.7%				214	30	94.1%	67.9	0.5	17.5	1.0	B
113 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	3,277	64	99.6%							68.2	0.1	17.1	0.6	B
112 NB I-15: Nichols Rd On-ramp	Merge	3,117	46	99.6%	151	30	93.7%				68.7	0.1	13.5	0.6	B
111 NB I-15: Nichols Rd Off-ramp to On-ramp	Basic	3,121	47	99.7%							68.5	0.2	15.9	0.4	B
110 NB I-15: Nichols Rd Off-ramp	Diverge	3,411	40	99.1%				299	34	96.1%	67.9	0.4	18.5	0.7	C
109 NB I-15: Central Ave (SR-74) On-ramp to Nichols Rd Off-ramp	Basic	3,409	42	99.1%							68.3	0.2	17.5	0.5	B
108 NB I-15: Central Ave (SR-74) On-ramp	Merge	2,769	46	99.2%	641	41	98.6%				67.9	0.2	14.8	0.3	B
107 NB I-15: Central Ave (SR-74) Off-ramp to On-ramp	Basic	2,772	47	99.3%							68.7	0.1	14.0	0.5	B
106 NB I-15: Central Ave (SR-74) Off-ramp	Diverge	3,828	44	99.3%				1,058	41	99.6%	65.5	1.8	21.6	0.7	C
105 NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp	Basic	3,830	37	99.4%							67.7	0.1	19.4	0.3	C
104 NB I-15: Main St On-ramp	Merge	3,701	41	99.1%	123	21	103.5%				68.4	0.1	15.3	0.4	B
103 NB I-15: Main St Off-ramp to On-ramp	Basic	3,705	45	99.2%							67.6	0.4	18.8	0.5	C
102 NB I-15: Main St Off-ramp	Diverge	4,285	39	99.4%				577	40	100.1%	64.8	2.5	23.7	1.1	C
101 NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp	Basic	4,287	36	99.5%							68.4	0.1	21.6	0.2	C

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 152 - NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

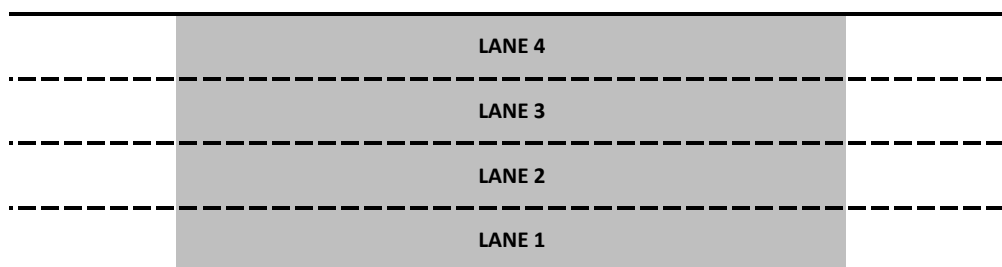
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,203	22	68.3	0.6	18.2	0.9	C
3	1,374	14	68.4	0.3	20.8	0.3	C
2	1,307	20	68.7	0.4	19.7	1.2	C
1	1,171	8	67.9	0.1	17.7	0.4	B
Area	5,054	64	68.3	0.3	19.1	0.5	C
Total	5,054	64	68.3	0.3	19.1	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,021	5,054	64	100.7%	2,796
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 151 - NB I-15: Hidden Valley Pkwy Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,187	17	67.6	1.5	18.4	0.7	C
3	1,364	12	67.6	1.3	21.0	0.9	C
2	1,560	21	66.8	2.7	20.3	1.2	C
1	1,533	14	65.7	1.9	27.0	1.3	D
Area	3,093	35	66.2	2.3	23.7	1.1	C
Total	5,644	64	66.9	1.8	21.7	0.9	C

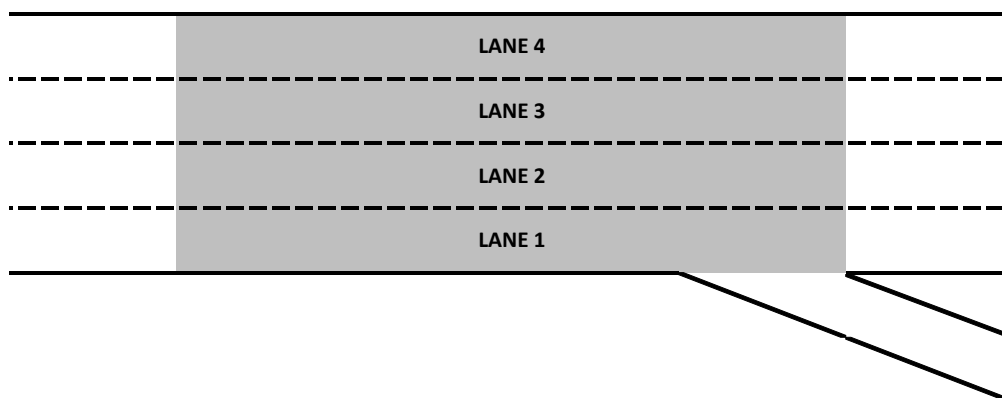
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	580	49
Total	580	49

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,619	5,644	64	100.4%	1,515
On-ramp					
Off-ramp	598	580	49	97.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 150 - NB I-15: EB SR-91 On-ramp

Segment Type - Basic

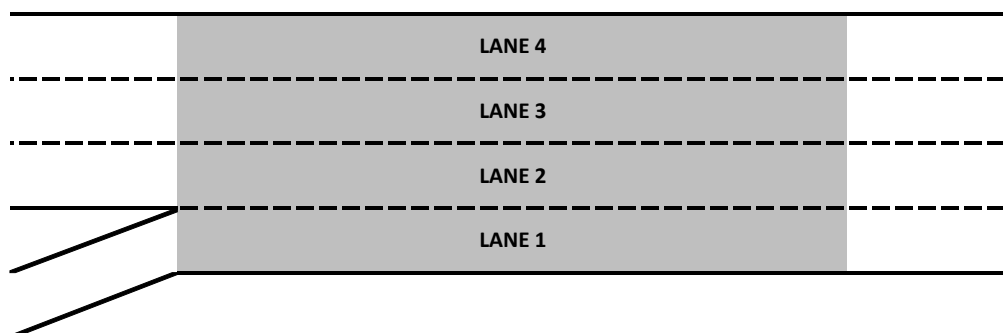
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,180	21	68.7	0.5	17.7	0.5	B
3	1,587	12	68.5	0.3	20.6	0.3	C
2	1,317	22	68.1	0.4	23.4	1.5	C
1	1,555	63	67.9	0.5	23.9	0.7	C
Area	5,639	117	68.3	0.3	21.4	0.7	C
Total	5,639	117	68.3	0.3	21.4	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,555	63	1		
Total	1,555	63	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,027	4,084	54	101.4%	1,514
On-ramp	1,592	1,555	63	97.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 149 - NB I-15: WB SR-91 On-ramp

Segment Type - Merge

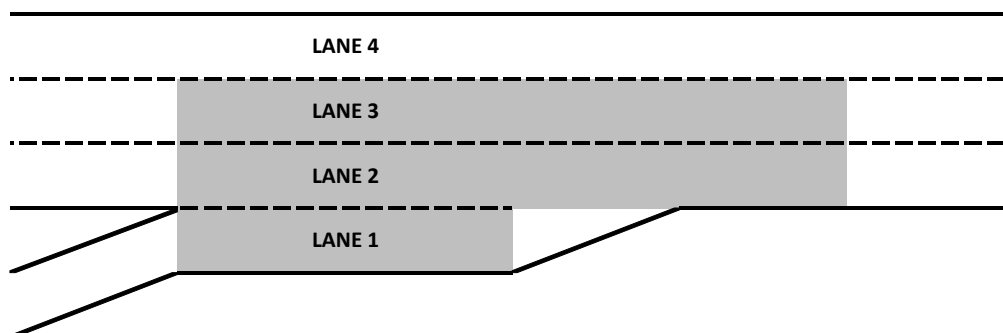
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,033	10	68.7	0.4	15.6	0.3	B
3	1,065	16	67.7	0.3	24.8	0.8	C
2	655	17	64.9	0.2	20.7	1.1	C
1	1,330	83	31.0	0.1	2.8	0.2	A
Area	3,050	116	65.7	0.2	18.7	0.7	C
Total	4,082	126	66.5	0.1	17.8	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,330	83	1		
Total	1,330	83	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,714	2,752	43	101.4%	1,564
On-ramp	1,313	1,330	83	101.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 148 - NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp

Segment Type - Basic

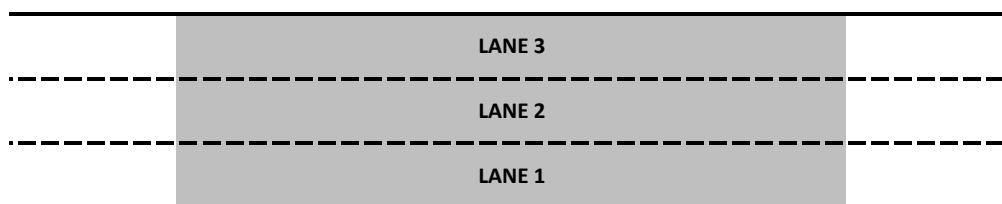
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,072	13	68.7	0.3	16.3	0.6	B
2	1,086	14	68.9	0.2	15.6	0.6	B
1	589	16	68.9	0.4	8.6	0.3	A
Area	2,747	44	68.8	0.2	13.5	0.4	B
Total	2,747	44	68.8	0.2	13.5	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,714	2,747	44	101.2%	3,530
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 147 - NB I-15: EB & WB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,078	14	67.1	1.8	17.0	1.2	B
3	1,152	14	65.7	3.1	18.1	1.1	C
2	2,029	22	60.0	6.8	26.8	3.6	D
1	1,412	26	59.0	9.6	25.2	5.8	C
Area	4,593	62	61.2	6.7	23.2	3.2	C
Total	5,671	75	62.5	5.6	21.6	2.6	C

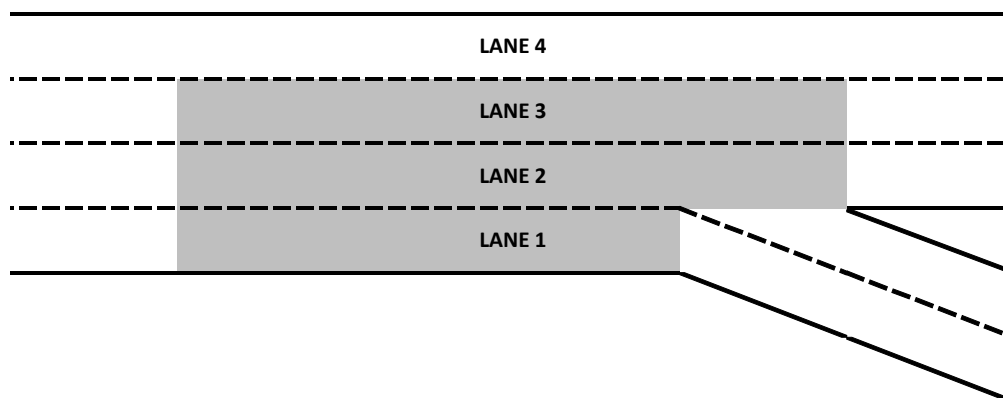
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	965	59
1	1,953	67
Total	2,918	103

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,452	5,671	75	104.0%	1,324
On-ramp					
Off-ramp	2,738	2,918	103	106.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 146 - NB I-15: Magnolia Ave On-ramp

Segment Type - Merge

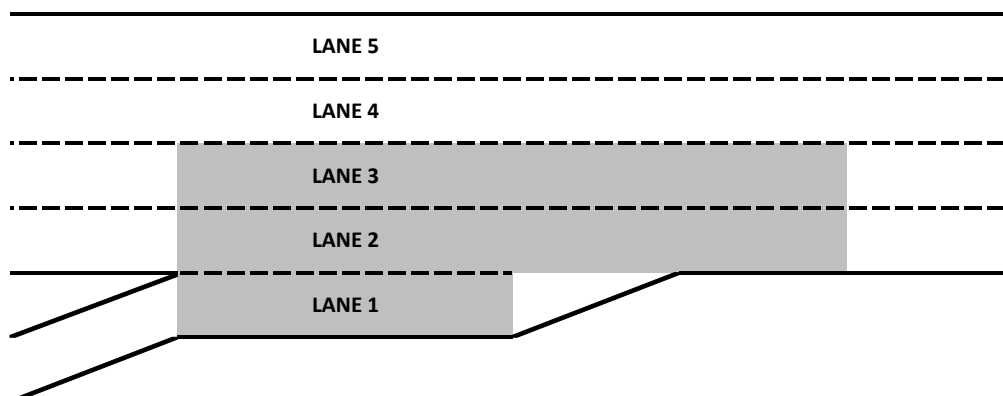
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	969	20	67.8	1.0	14.9	0.7	B
4	2,193	21	66.0	1.2	21.1	0.7	C
3	1,605	22	62.5	2.5	34.8	1.1	D
2	526	18	60.2	3.8	17.5	2.1	B
1	381	35	29.4	0.5	0.8	0.1	A
Area	2,512	74	62.0	2.6	20.1	1.2	C
Total	5,674	116	63.9	2.0	19.2	0.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	381	35	1		
Total	381	35	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,082	5,294	81	104.2%	1,299
On-ramp	370	381	35	102.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 145 - NB I-15: Magnolia Ave Loop On-ramp

Segment Type - Basic

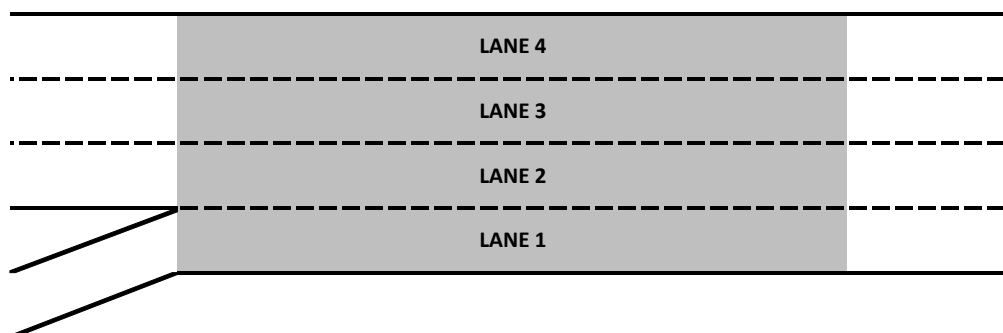
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	870	21	69.0	0.3	13.6	0.5	B
3	1,858	18	66.7	0.6	31.5	1.0	D
2	1,650	25	64.1	0.5	25.5	0.8	C
1	918	55	56.7	0.3	11.2	1.1	B
Area	5,296	118	65.1	0.4	20.4	0.6	C
Total	5,296	118	65.1	0.4	20.4	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	918	55	1		
Total	918	55	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,153	4,378	64	105.4%	847
On-ramp	929	918	55	98.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 144 - NB I-15: Magnolia Ave Off-ramp to Loop On-ramp

Segment Type - Basic

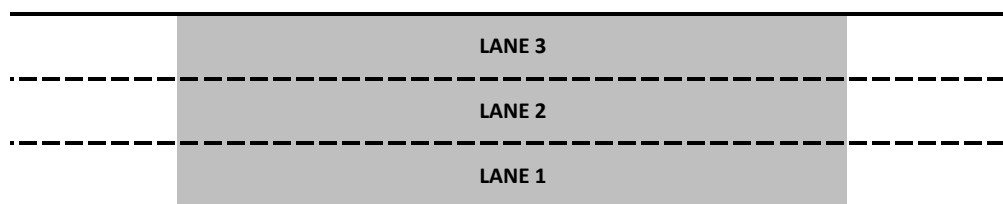
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	891	21	67.8	0.9	16.2	0.8	B
2	1,859	17	67.0	1.0	26.2	1.1	D
1	1,629	22	66.4	1.3	23.4	0.5	C
Area	4,379	61	67.0	1.1	21.9	0.7	C
Total	4,379	61	67.0	1.1	21.9	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,153	4,379	61	105.4%	1,558
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 143 - NB I-15: Magnolia Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,537	16	66.7	1.4	23.2	1.1	C
3	1,532	11	66.4	2.2	23.0	0.4	C
2	1,662	20	66.9	0.9	24.6	0.9	C
1	287	8	69.5	0.4	4.4	0.3	A
Area	3,481	40	66.9	1.4	17.3	0.4	B
Total	5,018	55	66.8	1.4	18.8	0.5	C

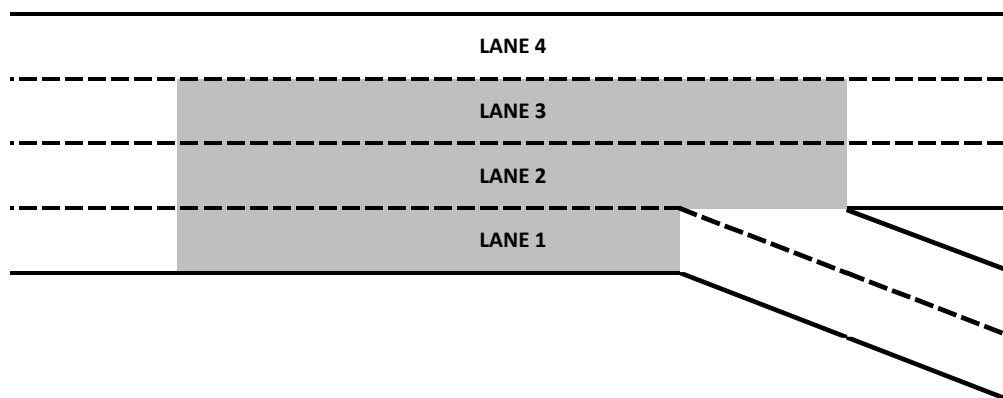
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	263	30
1	380	26
Total	643	48

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,815	5,018	55	104.2%	1,042
On-ramp					
Off-ramp	662	643	48	97.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 142 - NB I-15: WB SR-91 Express Lane Off-ramp (Left)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,482	27	67.3	0.5	23.1	1.7	C
4	1,557	12	67.8	0.2	23.2	0.5	C
3	1,761	16	67.5	0.2	25.2	0.1	C
2	1,480	18	67.5	0.2	24.0	0.8	C
1	217	8	69.4	0.4	3.4	0.5	A
Area	6,498	80	67.6	0.2	19.8	0.3	C
Total	6,498	80	67.6	0.2	19.8	0.3	C

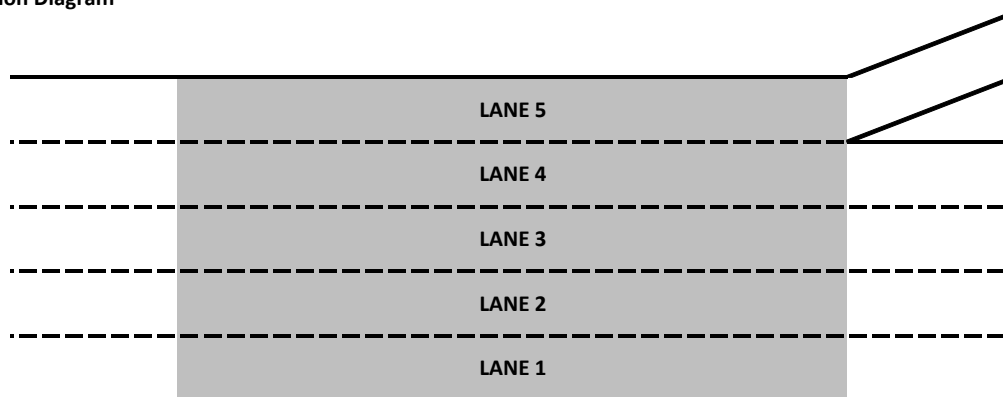
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,484	66
Total	1,484	66

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,355	6,498	80	102.2%	1,500
On-ramp					
Off-ramp	1,540	1,484	66	96.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 141 - NB I-15: Ontario Ave On-ramp to WB SR-91 Express Lane Off-ramp

Segment Type - Basic

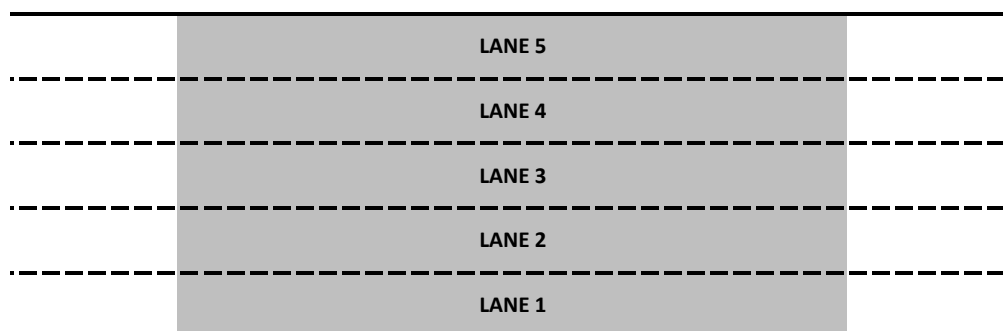
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,465	25	66.4	0.7	22.9	1.7	C
4	1,742	14	66.8	0.3	26.1	0.6	D
3	1,694	20	66.7	0.3	26.5	0.1	D
2	1,390	18	66.7	0.5	21.5	1.0	C
1	207	7	68.8	0.5	3.1	0.4	A
Area	6,498	84	66.7	0.3	20.0	0.3	C
Total	6,498	84	66.7	0.3	20.0	0.3	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,355	6,498	84	102.2%	1,931
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 140 - NB I-15: Ontario Ave On-ramp

Segment Type - Merge

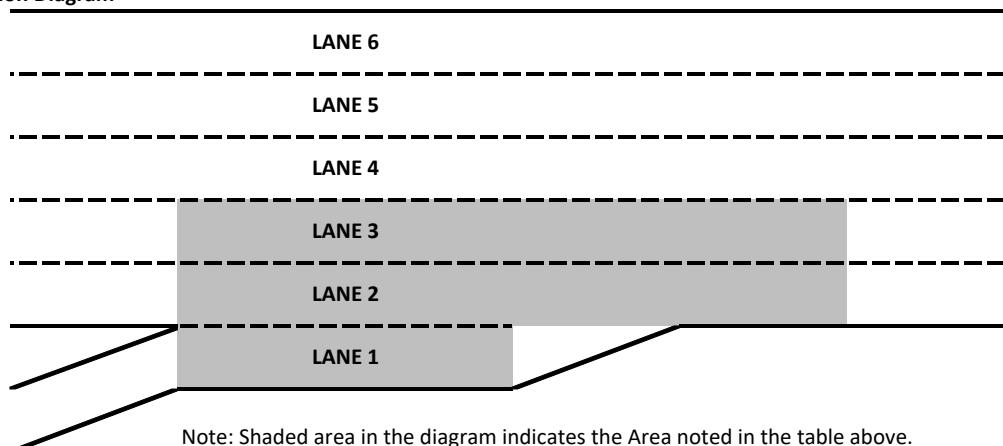
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	1,122	22	68.2	0.4	18.5	1.4	C
5	1,350	14	66.7	0.5	26.1	0.6	D
4	1,501	28	65.7	0.5	28.5	0.3	D
3	658	17	61.1	0.9	19.0	0.9	C
2	470	27	55.7	0.8	8.7	0.4	A
1	1,397	33	23.0	0.4	4.3	0.2	A
Area	2,525	77	56.6	0.8	12.1	0.5	B
Total	6,499	140	63.9	0.4	18.6	0.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,397	33	1		
Total	1,397	33	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,851	5,102	108	105.2%	1,494
On-ramp	1,504	1,397	33	92.9%	
Off-ramp					

Lane Configuration Diagram



Location 139 - NB I-15: Ontario Ave Off-ramp to On-ramp (5 Lanes)

Segment Type - Basic

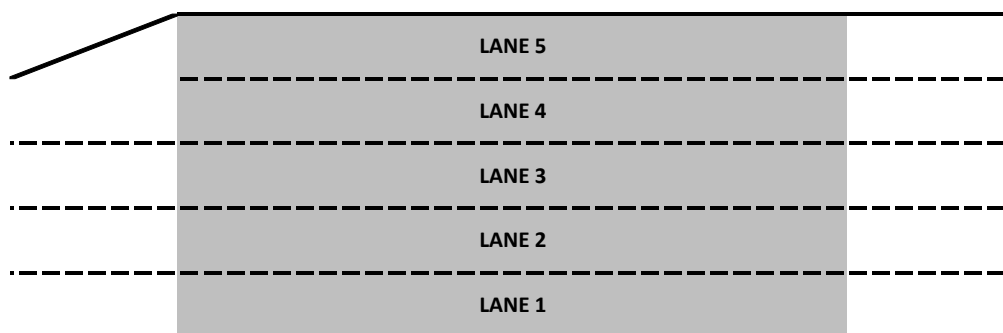
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	906	23	68.6	0.3	12.0	1.3	B
4	1,483	18	68.1	0.2	22.6	0.5	C
3	1,292	20	68.4	0.2	19.8	0.7	C
2	948	13	68.8	0.2	14.2	0.3	B
1	472	30	69.6	1.0	7.9	1.8	A
Area	5,102	103	68.5	0.2	15.3	0.2	B
Total	5,102	103	68.5	0.2	15.3	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,851	5,102	103	105.2%	1,727
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 138 - NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)

Segment Type - Basic

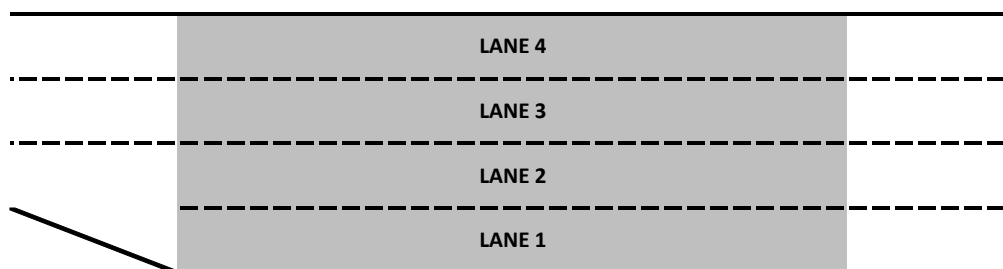
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,793	22	66.4	0.8	27.5	1.0	D
3	1,642	32	66.5	0.9	25.4	0.9	C
2	1,158	11	67.2	1.2	18.3	0.1	C
1	509	51	67.0	1.7	7.5	2.6	A
Area	5,102	115	66.7	1.0	19.7	0.3	C
Total	5,102	115	66.7	1.0	19.7	0.3	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,851	5,102	115	105.2%	1,266
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 137 - NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)

Segment Type - Basic

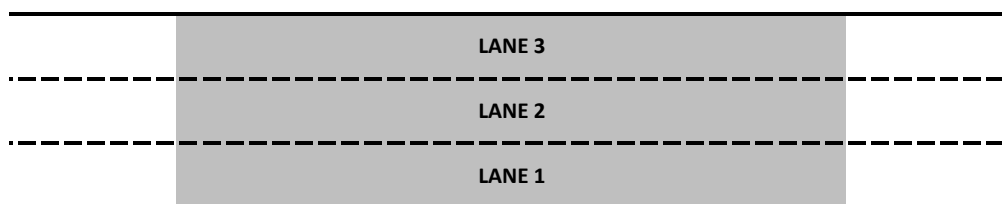
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,929	18	61.9	3.6	31.8	1.5	D
2	1,810	14	61.3	3.7	30.3	1.4	D
1	1,363	13	60.5	4.2	23.5	2.6	C
Area	5,102	46	61.3	3.8	28.5	1.8	D
Total	5,102	46	61.3	3.8	28.5	1.8	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,851	5,102	46	105.2%	196
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 136 - NB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,863	14	54.1	10.7	37.9	7.7	E
2	2,058	25	52.6	10.2	39.5	7.0	E
1	1,803	20	50.9	8.3	36.1	7.6	E
Area	3,861	45	51.8	9.3	37.8	7.3	E
Total	5,724	59	52.6	9.8	37.8	7.4	E

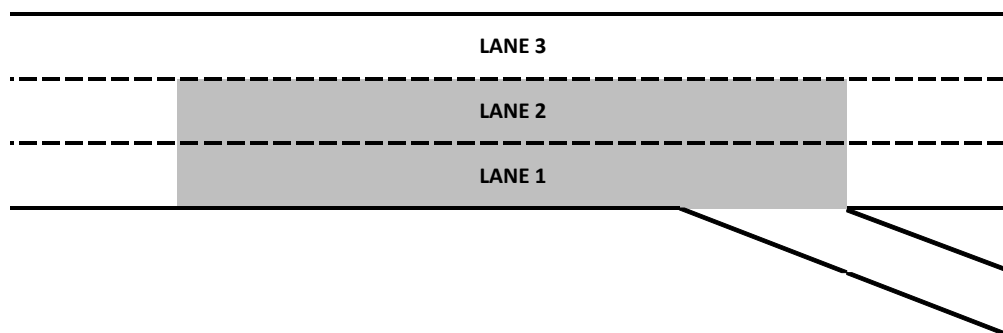
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	630	40
Total	630	40

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,563	5,724	59	102.9%	762
On-ramp					
Off-ramp	712	630	40	88.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 135 - NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Merge

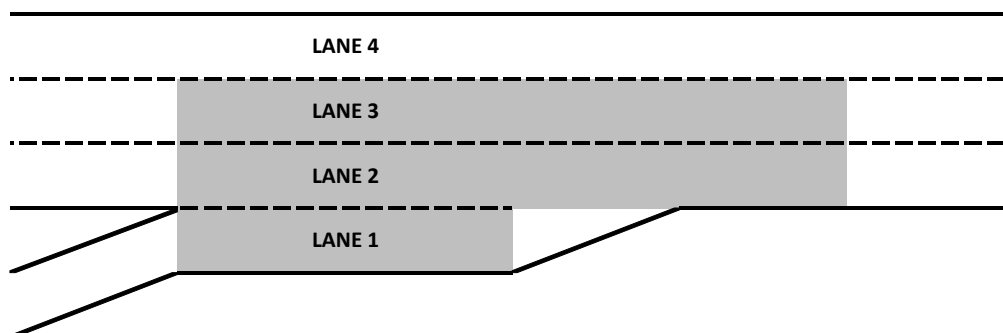
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,565	10	62.2	6.4	27.2	3.0	D
3	1,709	13	60.6	5.4	35.4	2.8	E
2	1,481	16	52.8	5.3	33.3	4.3	D
1	963	34	44.1	1.0	8.0	0.4	A
Area	4,153	63	56.1	5.0	25.4	2.5	C
Total	5,719	73	57.8	5.4	25.8	2.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	963	34	1		
Total	963	34	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,567	4,755	39	104.1%	871
On-ramp	996	963	34	96.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 134 - NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp

Segment Type - Basic

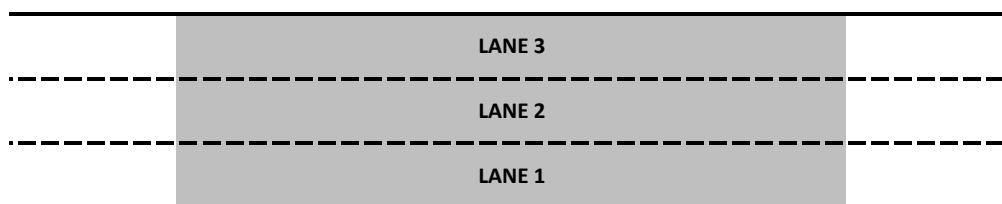
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,567	14	67.6	0.3	23.7	0.7	C
2	1,723	17	67.6	0.2	25.2	0.1	C
1	1,467	18	67.1	0.2	22.1	0.9	C
Area	4,756	49	67.4	0.1	23.7	0.3	C
Total	4,756	49	67.4	0.1	23.7	0.3	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,567	4,756	49	104.1%	2,124
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 133 - NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,760	17	67.0	0.4	25.9	0.9	C
2	1,708	20	66.5	0.5	24.9	0.5	C
1	1,609	11	65.3	0.3	25.4	0.7	C
Area	3,317	31	65.9	0.4	25.2	0.6	C
Total	5,077	49	66.3	0.3	25.4	0.2	C

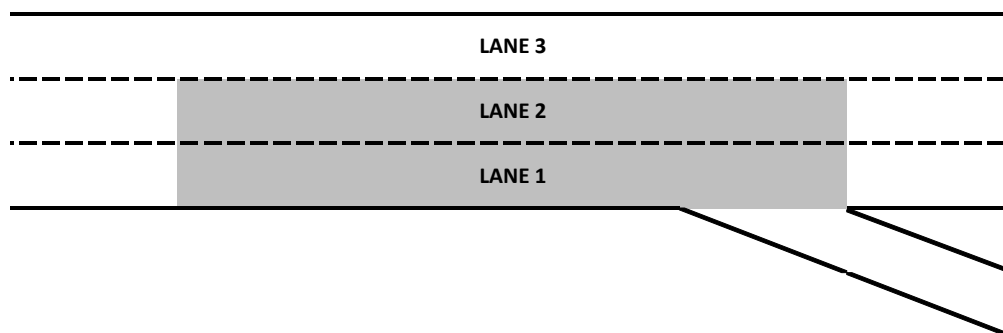
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	316	42
Total	316	42

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,866	5,077	49	104.3%	1,499
On-ramp					
Off-ramp	299	316	42	105.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 132 - NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Basic

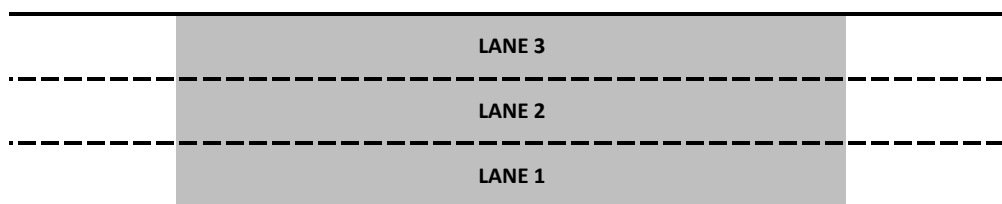
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,718	16	63.8	0.3	27.4	0.2	D
2	1,710	14	61.8	0.5	28.0	0.2	D
1	1,646	7	60.9	0.8	26.3	0.1	D
Area	5,074	37	62.2	0.3	27.2	0.1	D
Total	5,074	37	62.2	0.3	27.2	0.1	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,866	5,074	37	104.3%	1,671
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 131 - NB I-15: Cajalco Rd On-ramp

Segment Type - Merge

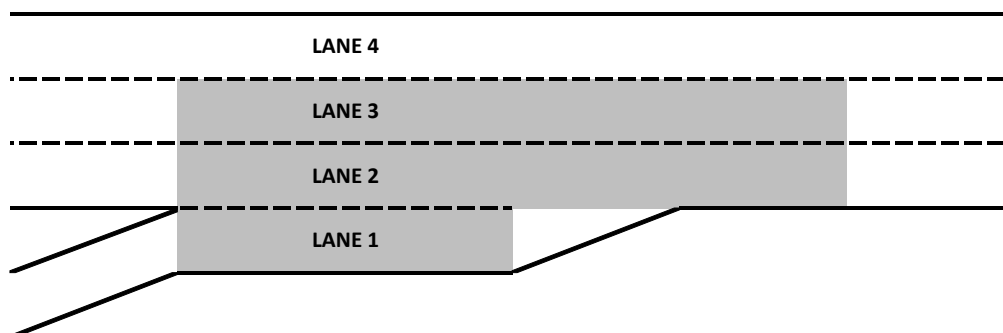
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,596	10	24.7	0.3	75.9	0.5	F
3	1,346	12	22.8	0.3	82.4	1.7	F
2	1,235	16	21.5	0.2	83.9	1.7	F
1	903	44	5.7	0.6	25.4	3.8	C
Area	3,483	72	20.3	0.3	76.8	1.9	F
Total	5,079	82	21.8	0.2	75.2	1.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	903	44	1		
Total	903	44	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,964	4,176	38	105.4%	1,499
On-ramp	902	903	44	100.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 130 - NB I-15: Cajalco Rd Off-ramp to On-ramp

Segment Type - Basic

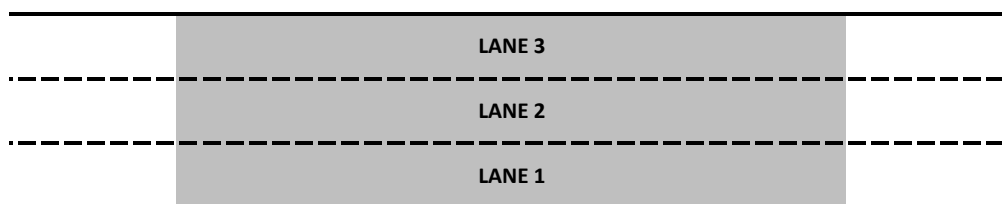
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,464	17	22.2	1.1	65.2	1.2	F
2	1,418	8	21.1	0.6	64.7	1.3	F
1	1,308	11	19.3	1.0	66.5	2.0	F
Area	4,191	36	20.9	0.5	65.2	0.7	F
Total	4,191	36	20.9	0.5	65.2	0.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,964	4,191	36	105.7%	1,994
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 129 - NB I-15: Cajalco Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,476	15	21.2	1.3	67.8	2.5	F
2	1,438	11	21.3	0.6	66.3	0.7	F
1	1,379	12	20.8	0.4	65.6	0.7	F
Area	2,817	23	21.0	0.5	65.9	0.6	F
Total	4,293	38	21.1	0.6	66.5	1.0	F

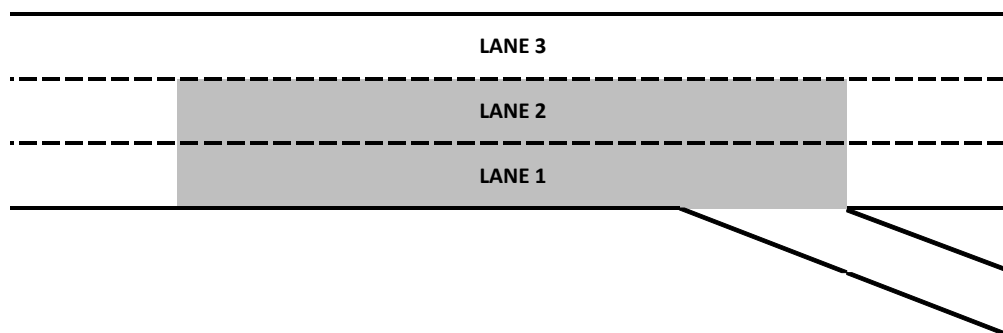
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	100	21
Total	100	21

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,070	4,293	38	105.5%	1,109
On-ramp					
Off-ramp	106	100	21	94.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 128 - NB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

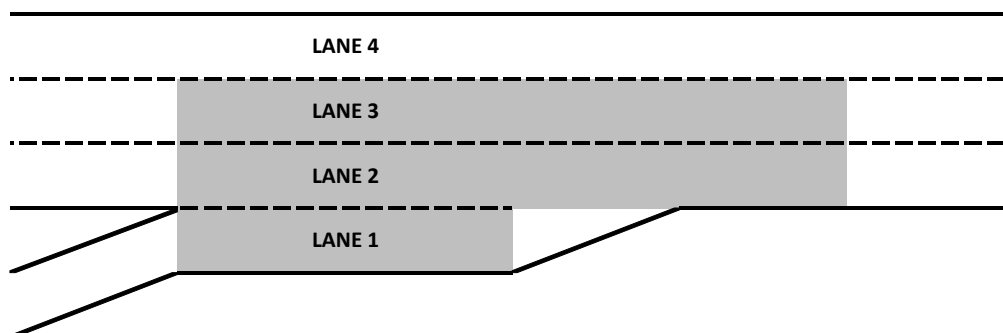
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,326	16	11.8	0.5	120.3	1.6	F
3	1,006	17	10.5	0.5	126.3	1.5	F
2	949	20	8.5	0.3	131.1	3.8	F
1	1,010	64	4.7	0.2	49.8	2.9	F
Area	2,965	101	9.3	0.4	116.5	2.5	F
Total	4,291	117	10.2	0.3	115.1	1.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,010	64	1		
Total	1,010	64	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,074	3,281	53	106.7%	1,497
On-ramp	996	1,010	64	101.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 127 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

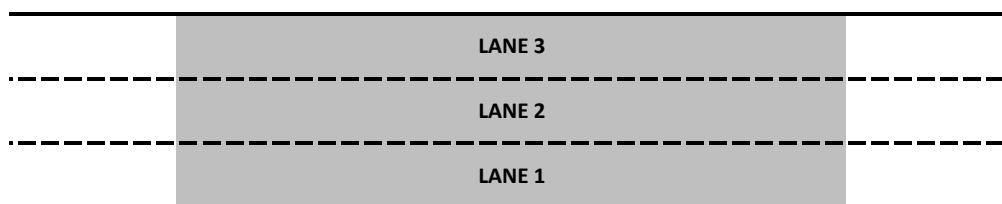
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,203	13	15.2	0.7	79.5	1.8	F
2	1,067	14	12.2	0.7	83.2	2.7	F
1	1,022	15	11.5	0.4	86.2	1.2	F
Area	3,292	42	13.1	0.5	81.7	2.0	F
Total	3,292	42	13.1	0.5	81.7	2.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,074	3,292	42	107.1%	2,543
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 126 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

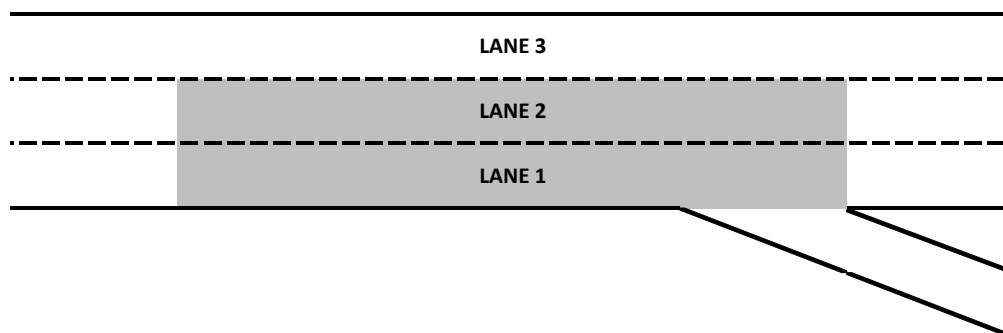
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,172	17	8.4	0.5	136.9	3.8	F
2	1,105	18	8.0	0.3	131.8	2.2	F
1	1,084	20	8.1	0.3	133.2	2.0	F
Area	2,189	38	8.0	0.2	132.5	2.0	F
Total	3,360	56	8.1	0.3	133.8	2.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	63	16
Total			Total	63	16

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,134	3,360	56	107.2%	1,499
On-ramp					
Off-ramp	60	63	16	104.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 125 - NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

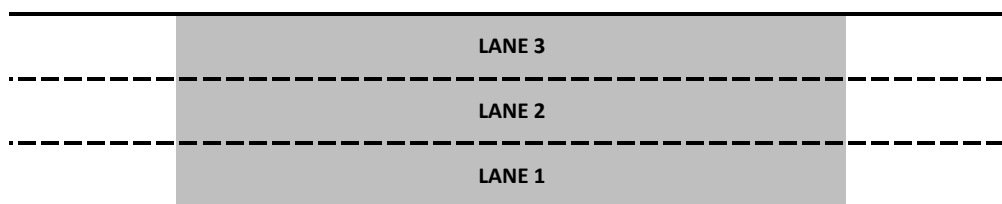
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,174	19	9.1	0.8	124.5	4.0	F
2	1,118	18	9.0	0.4	121.5	2.1	F
1	1,076	22	8.2	0.5	124.7	3.5	F
Area	3,368	59	8.8	0.5	123.1	2.3	F
Total	3,368	59	8.8	0.5	123.1	2.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,134	3,368	59	107.5%	6,786
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 124 - NB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

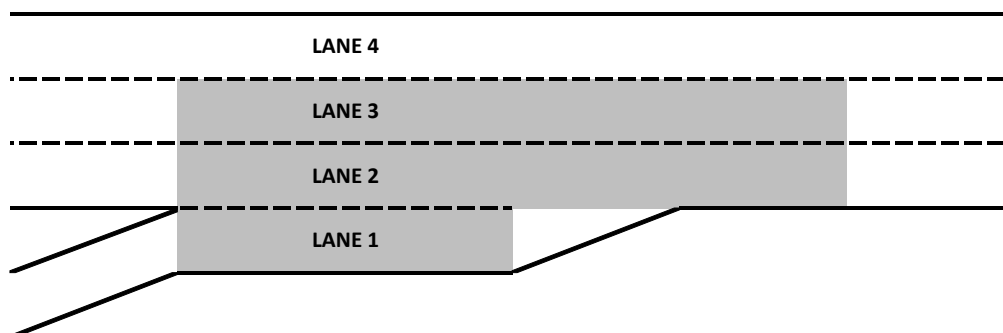
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,160	14	8.3	0.6	135.7	3.0	F
3	1,024	18	7.8	0.5	136.5	3.5	F
2	938	17	6.5	0.4	143.1	4.5	F
1	269	17	4.8	0.9	10.5	1.8	A
Area	2,230	52	7.4	0.3	115.3	2.2	F
Total	3,390	65	7.7	0.4	120.7	2.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	269	17	1		
Total	269	17	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,867	3,121	49	108.9%	1,498
On-ramp	267	269	17	100.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 123 - NB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

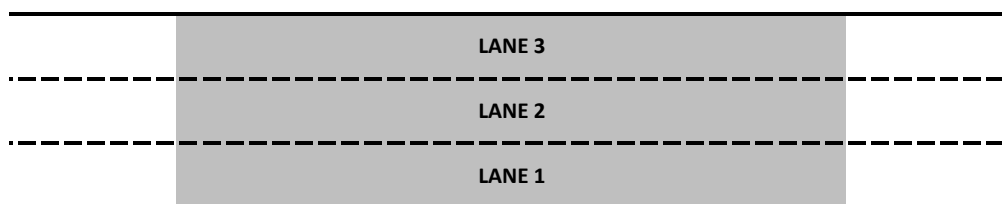
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,121	14	12.6	1.2	82.9	3.9	F
2	1,022	17	11.1	1.0	85.7	3.1	F
1	981	12	9.8	0.7	90.2	3.8	F
Area	3,125	43	11.3	0.8	85.2	3.2	F
Total	3,125	43	11.3	0.8	85.2	3.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,867	3,125	43	109.0%	2,725
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 122 - NB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

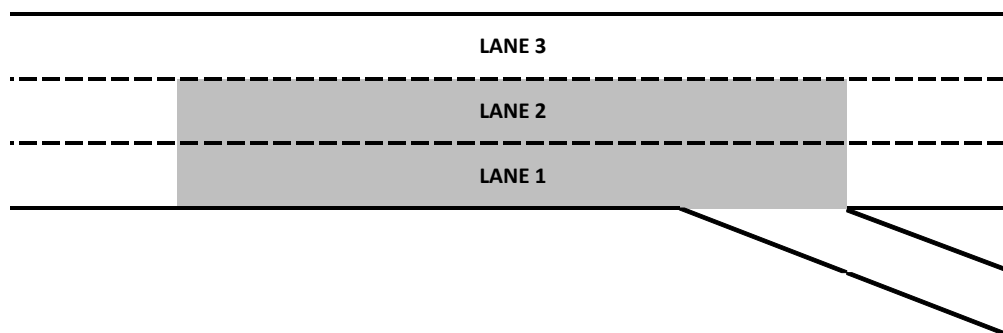
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,330	39	18.6	0.7	69.3	1.1	F
2	1,270	20	19.1	1.1	65.8	2.3	F
1	1,155	28	18.8	1.0	67.6	2.9	F
Area	2,425	48	19.0	1.0	66.7	2.3	F
Total	3,755	87	18.8	0.9	67.5	1.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	630	76
Total			Total	630	76

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,509	3,755	87	107.0%	1,498
On-ramp					
Off-ramp	642	630	76	98.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 121 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

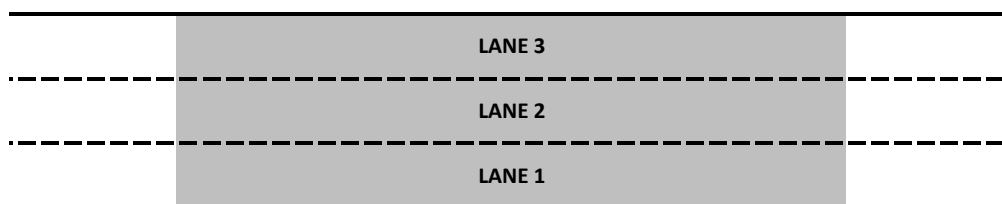
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,280	28	20.3	4.5	64.9	11.9	F
2	1,239	21	20.6	5.1	63.2	11.7	F
1	1,198	23	19.5	4.3	64.3	11.7	F
Area	3,718	72	20.2	4.6	64.1	11.7	F
Total	3,718	72	20.2	4.6	64.1	11.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,509	3,718	72	105.9%	9,350
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 120 - NB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

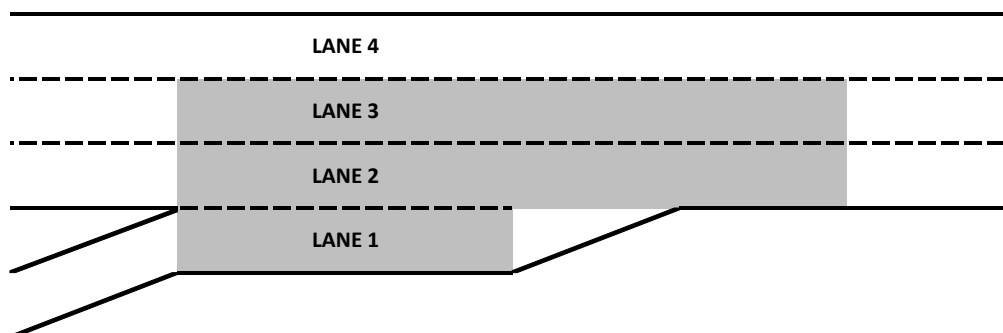
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,170	26	21.3	26.6	108.3	51.7	F
3	1,146	23	21.5	26.3	105.2	49.2	F
2	1,023	24	20.7	26.5	106.3	50.2	F
1	351	53	14.8	9.4	5.9	3.6	A
Area	2,520	100	21.6	26.0	82.6	38.6	F
Total	3,690	126	21.5	26.2	89.7	42.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	351	53	1		
Total	351	53	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,175	3,339	74	105.2%	1,499
On-ramp	334	351	53	105.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 119 - NB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

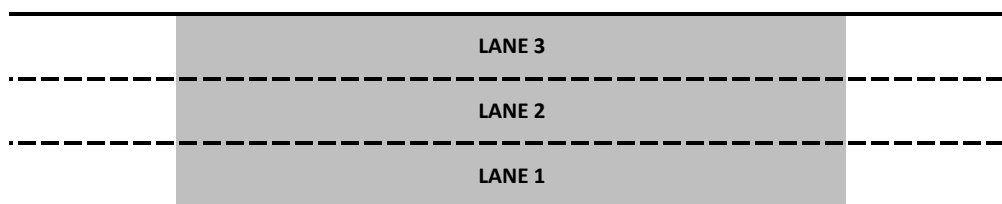
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,126	18	25.7	23.8	65.2	27.9	F
2	1,166	24	25.6	23.9	63.5	26.9	F
1	1,026	28	24.9	24.1	64.9	28.6	F
Area	3,318	70	25.4	23.9	64.4	27.7	F
Total	3,318	70	25.4	23.9	64.4	27.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,175	3,318	70	104.5%	2,922
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 118 - NB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,152	27	30.4	22.4	55.3	28.8	F
2	1,324	22	30.6	22.2	53.8	26.6	F
1	1,163	17	30.6	21.5	54.0	26.3	F
Area	2,487	39	30.6	21.8	53.8	26.4	F
Total	3,640	66	30.5	22.0	54.3	27.2	F

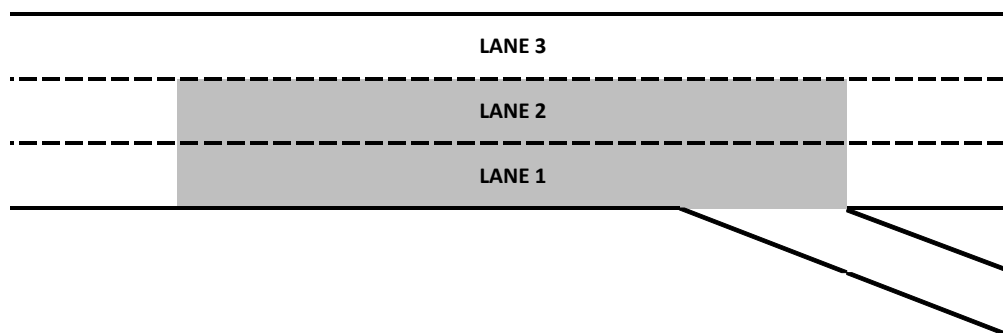
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	386	37
Total	386	37

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,587	3,640	66	101.5%	1,499
On-ramp					
Off-ramp	412	386	37	93.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 117 - NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

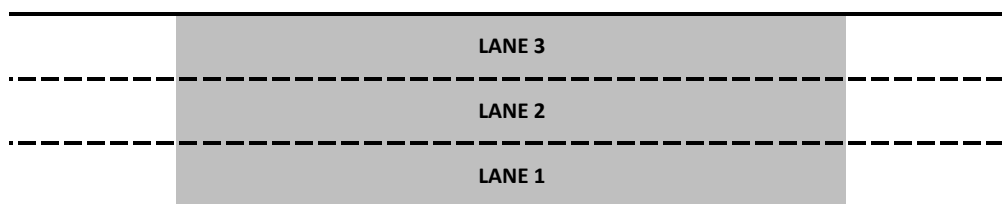
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,183	17	56.5	12.6	21.9	6.1	C
2	1,294	22	57.7	11.7	23.7	6.0	C
1	1,134	27	55.5	13.2	22.1	6.9	C
Area	3,611	67	56.6	12.4	22.5	6.3	C
Total	3,611	67	56.6	12.4	22.5	6.3	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,587	3,611	67	100.7%	13,528
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 116 - NB I-15: Lake St On-ramp

Segment Type - Merge

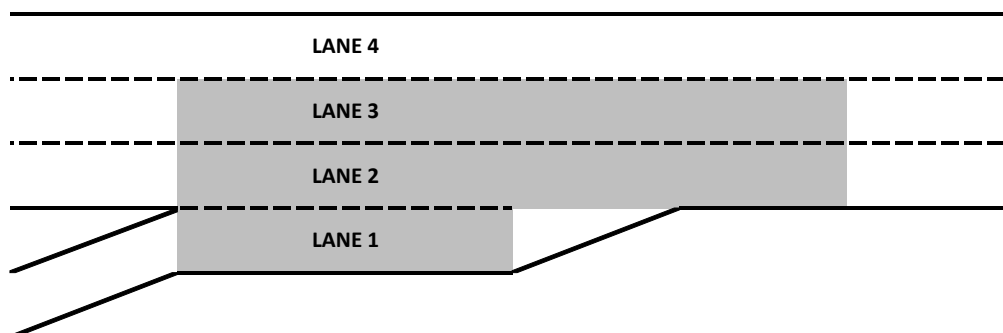
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,023	10	68.7	0.2	16.4	0.4	B
3	1,135	24	68.2	0.2	20.8	1.3	C
2	920	29	67.1	0.5	17.2	0.7	B
1	511	33	33.8	0.2	2.2	0.2	A
Area	2,565	85	67.3	0.3	15.7	0.7	B
Total	3,589	96	67.7	0.2	15.9	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	511	33	1		
Total	511	33	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,064	3,078	63	100.5%	1,499
On-ramp	523	511	33	97.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 115 - NB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

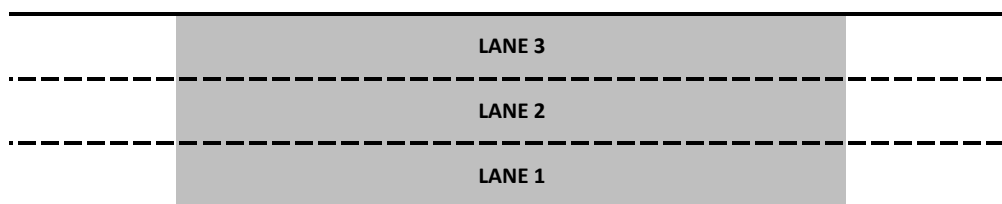
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,025	9	68.3	0.2	15.9	0.4	B
2	1,137	21	68.4	0.3	17.4	0.8	B
1	915	25	68.0	0.5	13.9	0.8	B
Area	3,077	56	68.3	0.3	15.7	0.5	B
Total	3,077	56	68.3	0.3	15.7	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,064	3,077	56	100.4%	3,216
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 114 - NB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,029	15	68.2	0.4	16.0	0.3	B
2	1,229	16	68.1	0.9	17.6	0.7	B
1	1,024	27	67.3	0.4	17.4	1.4	B
Area	2,252	44	67.7	0.6	17.5	1.0	B
Total	3,281	59	67.9	0.5	17.0	0.6	B

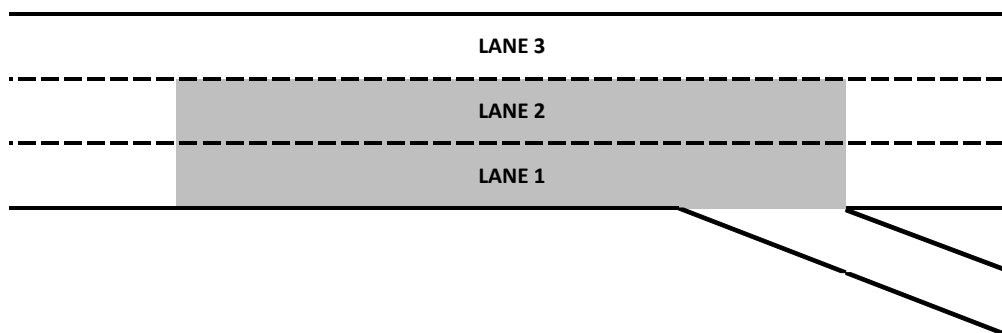
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	214	30
Total	214	30

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,291	3,281	59	99.7%	1,498
On-ramp					
Off-ramp	227	214	30	94.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 113 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

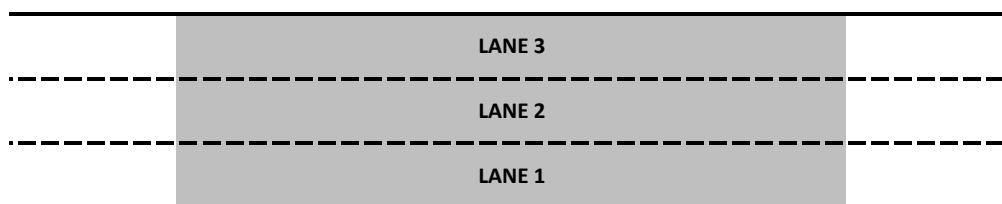
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,046	21	68.3	0.2	16.3	0.4	B
2	1,204	17	68.4	0.2	18.7	0.6	C
1	1,026	26	68.0	0.1	16.3	0.9	B
Area	3,277	64	68.2	0.1	17.1	0.6	B
Total	3,277	64	68.2	0.1	17.1	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,291	3,277	64	99.6%	8,483
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 112 - NB I-15: Nichols Rd On-ramp

Segment Type - Merge

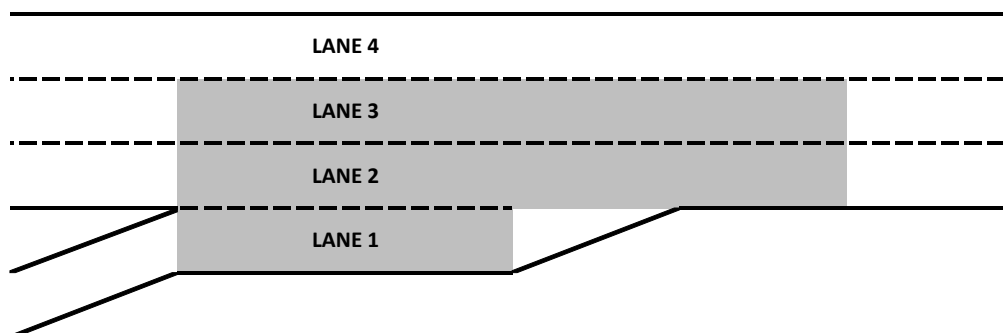
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,033	17	68.8	0.3	15.6	0.3	B
3	1,134	16	68.7	0.2	18.1	1.0	C
2	950	13	68.5	0.2	15.6	0.8	B
1	151	30	39.6	0.3	1.0	0.1	A
Area	2,234	59	68.6	0.1	13.5	0.6	B
Total	3,268	76	68.7	0.1	14.1	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	151	30	1		
Total	151	30	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,130	3,117	46	99.6%	1,499
On-ramp	161	151	30	93.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 111 - NB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

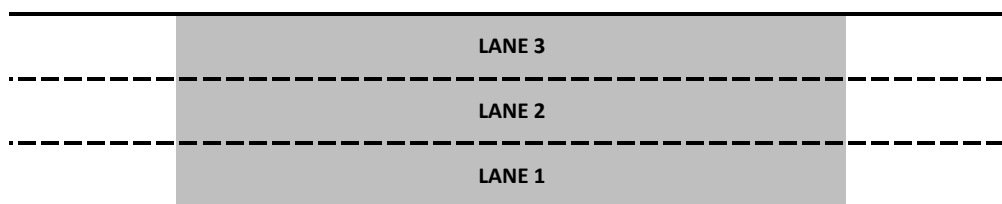
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,031	15	68.6	0.3	15.7	0.4	B
2	1,134	18	68.6	0.2	17.2	0.8	B
1	955	14	68.3	0.1	14.8	0.2	B
Area	3,121	47	68.5	0.2	15.9	0.4	B
Total	3,121	47	68.5	0.2	15.9	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,130	3,121	47	99.7%	3,521
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 110 - NB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,081	12	68.4	0.4	15.4	0.5	B
2	1,227	16	67.9	0.7	17.9	0.9	B
1	1,103	13	67.4	0.3	19.1	0.7	C
Area	2,329	29	67.7	0.5	18.5	0.7	C
Total	3,411	40	67.9	0.4	17.5	0.5	B

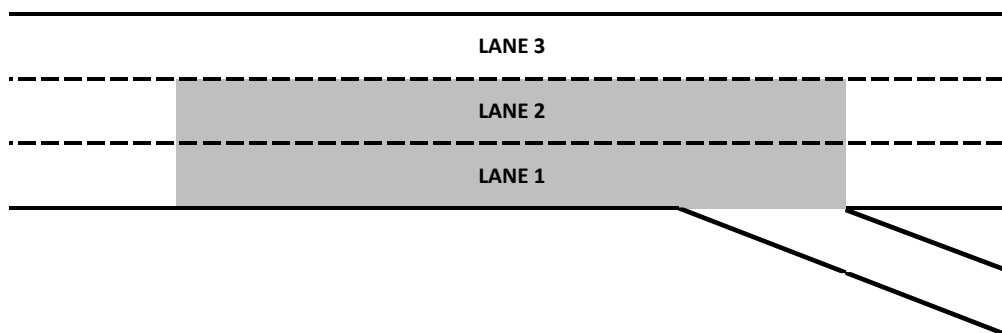
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	299	34
Total	299	34

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,441	3,411	40	99.1%	1,499
On-ramp					
Off-ramp	311	299	34	96.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 109 - NB I-15: Central Ave (SR-74) On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

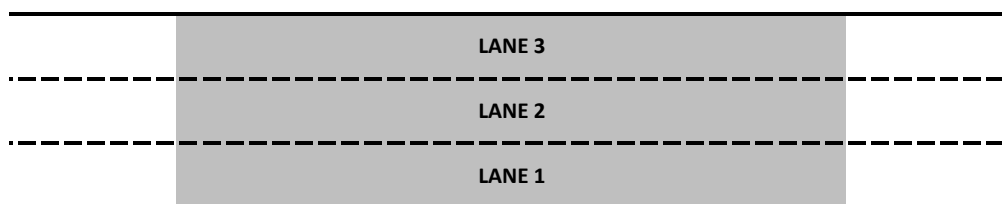
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,073	11	68.4	0.3	16.0	0.3	B
2	1,249	16	68.4	0.3	19.2	0.8	C
1	1,087	15	67.9	0.2	17.3	0.6	B
Area	3,409	42	68.3	0.2	17.5	0.5	B
Total	3,409	42	68.3	0.2	17.5	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,441	3,409	42	99.1%	2,423
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 108 - NB I-15: Central Ave (SR-74) On-ramp

Segment Type - Merge

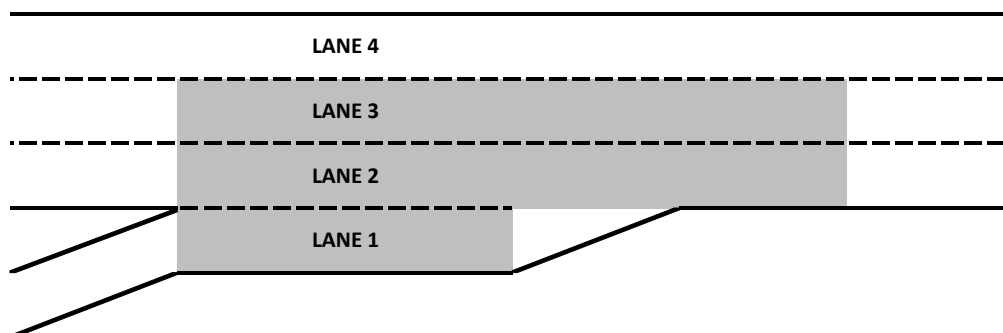
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	967	16	68.7	0.3	14.6	0.5	B
3	1,045	16	68.6	0.3	19.3	0.8	C
2	757	15	67.0	0.3	17.5	0.3	B
1	641	41	34.1	0.1	1.4	0.1	A
Area	2,442	71	67.5	0.3	14.8	0.3	B
Total	3,409	87	67.9	0.2	14.8	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	641	41	1		
Total	641	41	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,791	2,769	46	99.2%	1,498
On-ramp	650	641	41	98.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 107 - NB I-15: Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

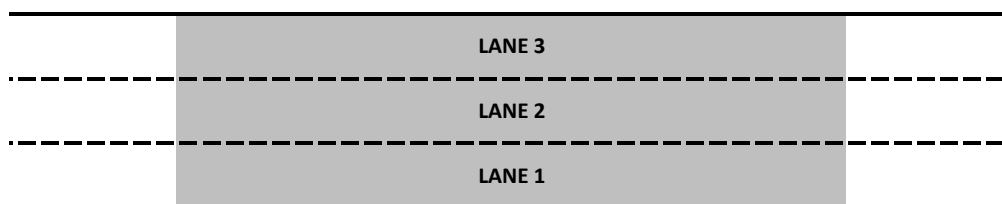
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	984	16	68.7	0.3	15.0	0.7	B
2	1,057	16	68.9	0.2	15.7	0.6	B
1	730	14	68.3	0.2	11.3	0.5	B
Area	2,772	47	68.7	0.1	14.0	0.5	B
Total	2,772	47	68.7	0.1	14.0	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,791	2,772	47	99.3%	2,457
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 106 - NB I-15: Central Ave (SR-74) Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,001	18	66.9	2.1	15.6	0.9	B
2	1,490	12	65.3	2.5	16.7	0.6	B
1	1,337	15	64.6	1.3	26.5	0.8	D
Area	2,827	27	64.9	1.7	21.6	0.7	C
Total	3,828	44	65.5	1.8	19.6	0.7	C

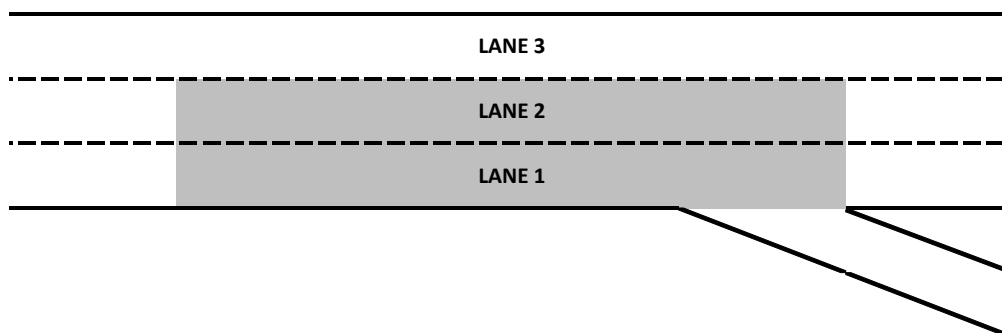
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,058	41
Total	1,058	41

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,853	3,828	44	99.3%	1,499
On-ramp					
Off-ramp	1,062	1,058	41	99.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 105 - NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

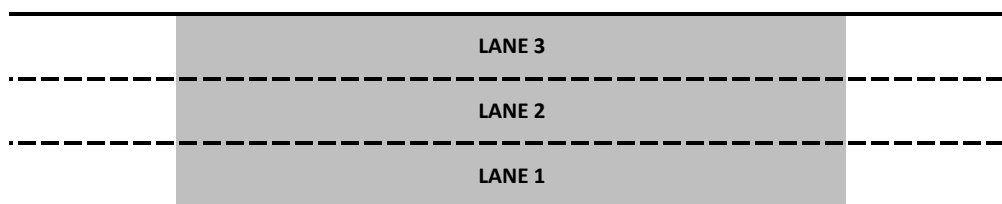
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	977	15	68.4	0.3	14.9	0.5	B
2	1,512	11	67.9	0.1	23.0	0.6	C
1	1,340	11	67.1	0.3	20.2	0.7	C
Area	3,830	37	67.7	0.1	19.4	0.3	C
Total	3,830	37	67.7	0.1	19.4	0.3	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,853	3,830	37	99.4%	1,245
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 104 - NB I-15: Main St On-ramp

Segment Type - Merge

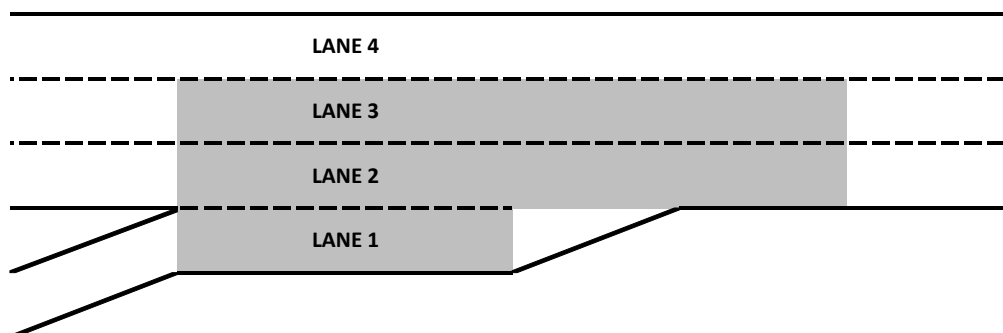
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,246	10	68.5	0.1	18.5	0.5	C
3	1,311	15	68.7	0.1	20.7	0.5	C
2	1,145	16	67.9	0.3	18.0	0.8	C
1	123	21	31.1	0.6	0.3	0.1	A
Area	2,579	52	68.3	0.1	15.3	0.4	B
Total	3,825	62	68.4	0.1	16.2	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	123	21	1		
Total	123	21	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,734	3,701	41	99.1%	1,500
On-ramp	119	123	21	103.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 103 - NB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

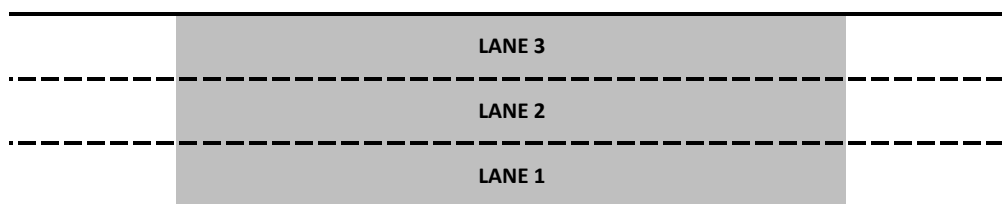
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,257	12	67.6	0.4	19.2	0.6	C
2	1,317	19	67.8	0.3	19.6	0.9	C
1	1,131	14	67.4	0.5	17.5	0.5	B
Area	3,705	45	67.6	0.4	18.8	0.5	C
Total	3,705	45	67.6	0.4	18.8	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,734	3,705	45	99.2%	2,897
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 102 - NB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,417	15	65.3	3.0	20.4	1.1	C
2	1,441	11	64.1	3.1	21.4	1.1	C
1	1,427	13	64.8	1.7	25.9	1.3	C
Area	2,868	24	64.5	2.3	23.7	1.1	C
Total	4,285	39	64.8	2.5	22.6	1.0	C

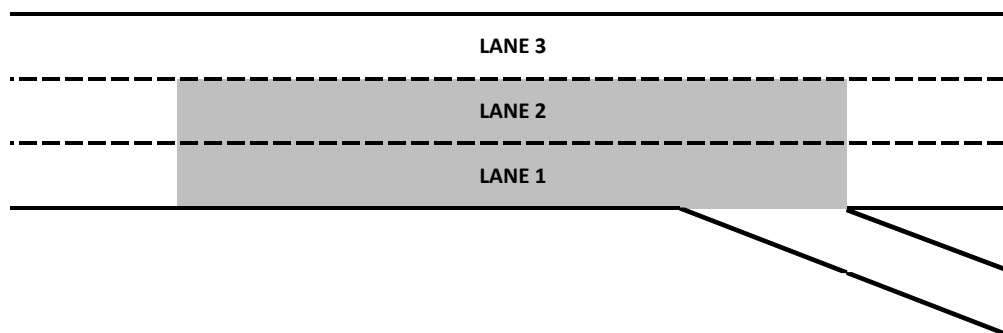
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	577	40
Total	577	40

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,310	4,285	39	99.4%	1,499
On-ramp					
Off-ramp	576	577	40	100.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 101 - NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp

Segment Type - Basic

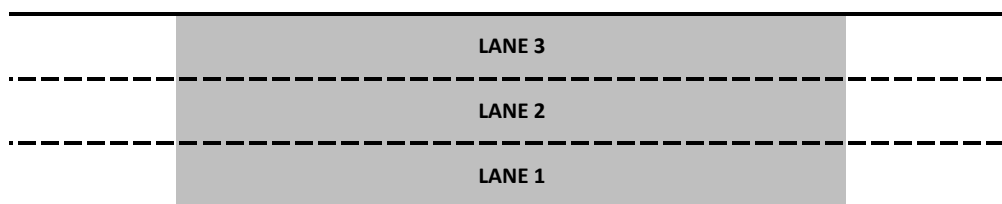
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,422	10	68.4	0.2	21.5	0.4	C
2	1,480	13	68.5	0.2	22.4	0.6	C
1	1,385	12	68.3	0.1	21.0	0.5	C
Area	4,287	36	68.4	0.1	21.6	0.2	C
Total	4,287	36	68.4	0.1	21.6	0.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,310	4,287	36	99.5%	3,906
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Existing Conditions
AM Peak Hour

Location		Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
1	Southbound I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	3,998	54	98.5%	421	52	96.6%	822	52	100.7%	65.6	0.1	17.0	0.5	B
2	Southbound I-15: Hidden Valley Pkwy On-ramp	Merge	3,991	55	98.4%							67.7	0.2	11.2	0.1	B
3	Southbound I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp	Basic	4,409	81	98.1%							67.6	0.1	14.5	0.2	B
4	Southbound I-15: WB SR-91 Off-ramp	Basic	4,409	73	98.1%	1,665	76	97.1%	1,257	72	98.4%	68.0	0.2	14.5	0.2	B
5	Southbound I-15: EB SR-91 Off-ramp	Diverge	3,586	49	97.5%							62.7	2.4	26.0	1.3	D
6	Southbound I-15: EB SR-91 Off-ramp to On-ramp	Basic	2,324	46	96.9%							67.2	0.7	12.9	0.2	B
7	Southbound I-15: EB SR-91 On-ramp	Merge	2,321	49	96.8%	1,593	114	100.4%	1,225	63	98.9%	65.4	0.5	15.4	0.6	B
8	Southbound I-15: WB SR-91 On-ramp	Weave	3,980	63	96.8%							67.5	0.4	15.6	0.6	B
9	Southbound I-15: Magnolia Ave Off-ramp to On-ramp	Basic	4,337	75	97.2%							68.6	0.1	16.7	0.5	B
10	Southbound I-15: Magnolia Ave On-ramp	Merge	4,333	69	97.1%	536	50	99.5%	830	61	99.5%	67.2	0.2	13.0	0.4	B
11	Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	Basic	4,860	75	97.2%	111	17	87.1%				67.7	0.2	15.2	0.5	B
12	Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave Off-ramp	Basic	4,968	87	96.9%	448	42	105.2%				68.5	0.1	15.0	0.4	B
13	Southbound I-15: Ontario Ave Off-ramp	Basic	4,966	85	96.8%				68.2	0.5	15.0	0.4	B			
14	Southbound I-15: Ontario Ave Off-ramp to On-ramp	Basic	4,123	71	96.0%				68.4	0.1	15.8	0.4	B			
15	Southbound I-15: Ontario Ave On-ramp	Merge	4,114	74	95.8%	397	25	95.3%	447	42	94.3%	68.1	0.2	12.5	0.3	B
16	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	Basic	4,556	85	96.5%							67.8	0.3	18.0	0.5	C
17	Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp	Basic	4,110	59	96.8%							68.1	0.3	21.5	0.5	C
18	Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	Merge	4,101	54	96.6%	170	22	103.2%	445	30	97.9%	67.0	0.4	21.6	0.5	C
19	Southbound I-15: Cajalco Rd Off-ramp	Diverge	4,494	63	96.4%							67.4	0.4	24.8	0.4	C
20	Southbound I-15: Cajalco Rd Off-ramp to On-ramp	Basic	4,046	60	96.1%							68.2	0.2	21.3	0.5	C
21	Southbound I-15: Cajalco Rd On-ramp	Merge	4,039	58	96.0%	558	49	97.2%	460	43	101.1%	67.9	0.2	17.9	0.4	B
22	Southbound I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	4,195	70	95.9%							67.8	0.1	22.3	0.4	C
23	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	4,192	67	95.9%							66.1	1.1	23.1	1.0	C
24	Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	3,629	67	95.5%	132	17	114.4%	274	29	94.6%	67.7	0.4	19.2	0.5	C
25	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	3,621	60	95.3%							68.3	0.2	15.3	0.3	B
26	Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp	Basic	3,750	55	95.8%							67.9	0.2	19.9	0.2	C
27	Southbound I-15: Temescal Canyon Rd Off-ramp	Diverge	3,737	56	95.5%	149	30	97.3%	460	43	101.1%	66.4	1.4	20.7	0.6	C
28	Southbound I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	3,270	50	94.5%							67.8	0.6	17.5	0.4	B
29	Southbound I-15: Temescal Canyon Rd On-ramp	Merge	3,263	46	94.3%							68.3	0.2	13.7	0.4	B
30	Southbound I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	3,402	49	94.2%	181	27	102.3%	232	25	98.6%	68.0	0.1	18.1	0.6	C
31	Southbound I-15: Indian Truck Trail Off-ramp	Diverge	3,395	50	94.0%							67.5	0.7	18.5	0.6	C
32	Southbound I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	3,113	48	93.7%							68.0	0.2	16.7	0.3	B
33	Southbound I-15: Indian Truck Trail On-ramp	Merge	3,108	45	93.6%	339	65	104.8%	241	27	102.5%	68.2	0.2	13.8	0.4	B
34	Southbound I-15: Indian Truck Trail On-ramp to Lake St Off-ramp	Basic	3,263	52	93.3%							68.0	0.2	17.6	0.3	B
35	Southbound I-15: Lake St Off-ramp	Diverge	3,247	42	92.8%							67.8	0.1	17.8	0.5	B
36	Southbound I-15: Lake St Off-ramp to On-ramp	Basic	3,015	41	92.4%	414	36	103.1%	474	47	96.5%	68.1	0.1	16.6	0.4	B
37	Southbound I-15: Lake St On-ramp	Merge	3,008	45	92.2%							68.1	0.2	13.9	0.3	B
38	Southbound I-15: Lake St On-ramp to Nichols Rd Off-ramp	Basic	3,327	45	92.7%							67.9	0.2	18.2	0.2	C
39	Southbound I-15: Nichols Rd Off-ramp	Diverge	3,316	51	92.4%	1,131	53	100.4%	107	25	94.5%	67.7	0.3	18.2	0.3	C
40	Southbound I-15: Nichols Rd Off-ramp to On-ramp	Basic	3,067	43	91.5%							68.1	0.2	17.1	0.2	B
41	Southbound I-15: Nichols Rd On-ramp	Merge	3,056	46	91.1%							67.1	0.4	15.5	0.3	B
42	Southbound I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp	Basic	3,455	43	92.0%	474	47	96.5%	107	25	94.5%	67.6	0.3	19.0	0.4	C
43	Southbound I-15: Central Ave (SR-74) Off-ramp	Diverge	3,455	46	92.0%							66.2	1.5	20.0	0.8	C
44	Southbound I-15: Central Ave (SR-74) Off-ramp to On-ramp	Basic	2,978	54	91.2%							67.9	0.4	16.6	0.5	B
45	Southbound I-15: Central Ave (SR-74) On-ramp	Merge	2,976	48	91.2%	1,131	53	100.4%	107	25	94.5%	65.6	0.5	18.9	0.6	C
46	Southbound I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp	Basic	4,095	53	93.3%							66.4	0.4	22.3	0.6	C
47	Southbound I-15: Main St Off-ramp	Diverge	4,096	50	93.3%							67.1	0.2	22.3	0.9	C
48	Southbound I-15: Main St Off-ramp to On-ramp	Basic	3,976	50	92.9%	484	57	103.6%	107	25	94.5%	67.6	0.2	21.4	0.6	C
49	Southbound I-15: Main St On-ramp	Merge	3,970	58	92.8%							67.0	0.3	20.1	0.6	C
50	Southbound I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp	Basic	4,447	67	93.7%							67.1	0.3	24.0	0.8	C

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 1 - Southbound I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

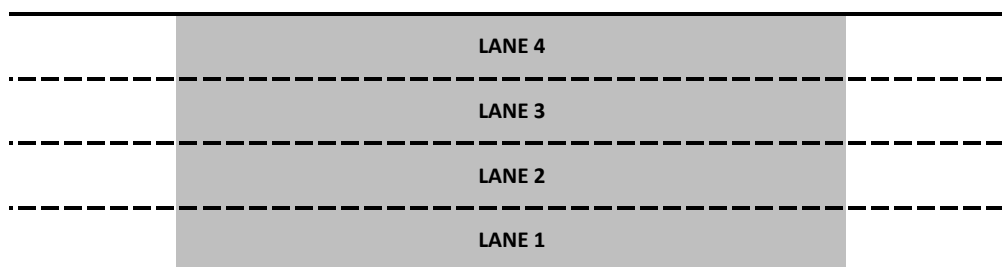
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,009	12	65.8	0.2	16.8	0.5	B
3	1,308	13	65.9	0.1	18.6	0.6	C
2	1,429	19	65.6	0.1	18.6	0.5	C
1	252	11	65.0	0.4	13.8	0.5	B
Area	3,998	54	65.6	0.1	17.0	0.5	B
Total	3,998	54	65.6	0.1	17.0	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,057	3,998	54	98.5%	6,801
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 2 - Southbound I-15: Hidden Valley Pkwy On-ramp

Segment Type - Merge

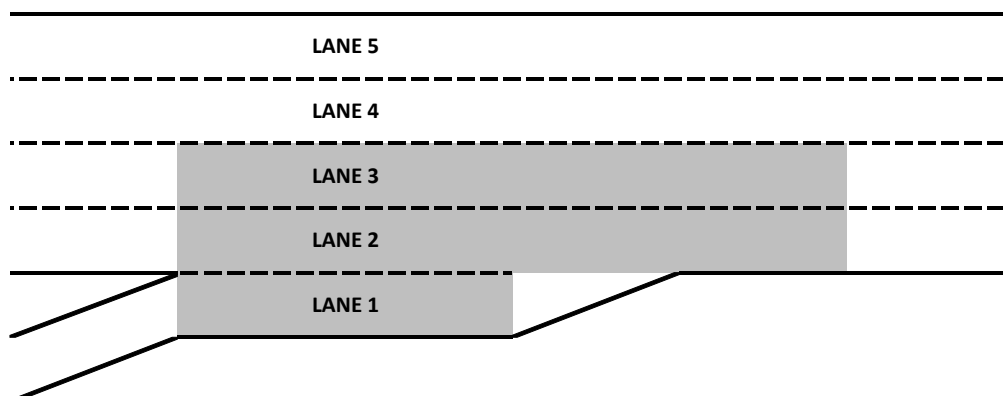
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	932	17	68.8	0.3	17.9	0.2	B
4	1,424	15	67.7	0.1	27.4	0.8	D
3	1,426	14	67.2	0.3	21.5	0.6	C
2	209	9	67.5	0.5	5.4	0.4	A
1	421	52	26.8	0.3	0.7	0.1	A
Area	2,057	76	67.0	0.3	11.2	0.1	B
Total	4,413	108	67.7	0.2	16.4	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	421	52	1		
Total	421	52	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,057	3,991	55	98.4%	1,704
On-ramp	436	421	52	96.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 3 - Southbound I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp

Segment Type - Basic

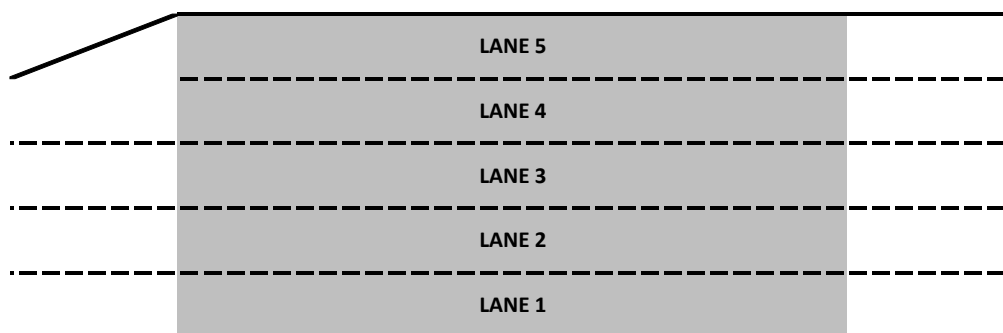
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	321	16	70.1	0.3	6.1	0.4	A
4	1,382	21	68.3	0.0	22.9	0.4	C
3	1,812	13	66.0	0.2	30.0	0.6	D
2	597	18	68.2	0.5	8.7	0.3	A
1	298	14	69.7	0.4	5.0	0.4	A
Area	4,409	81	67.6	0.1	14.5	0.2	B
Total	4,409	81	67.6	0.1	14.5	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,493	4,409	81	98.1%	1,019
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 4 - Southbound I-15: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	493	15	70.9	0.1	8.4	0.2	A
4	1,389	18	68.0	0.1	24.1	0.9	C
3	1,675	12	66.4	0.3	26.6	0.7	D
2	521	15	68.7	0.5	7.7	0.3	A
1	331	13	69.9	0.4	5.7	0.5	A
Area	4,409	73	68.0	0.2	14.5	0.2	B
Total	4,409	73	68.0	0.2	14.5	0.2	B

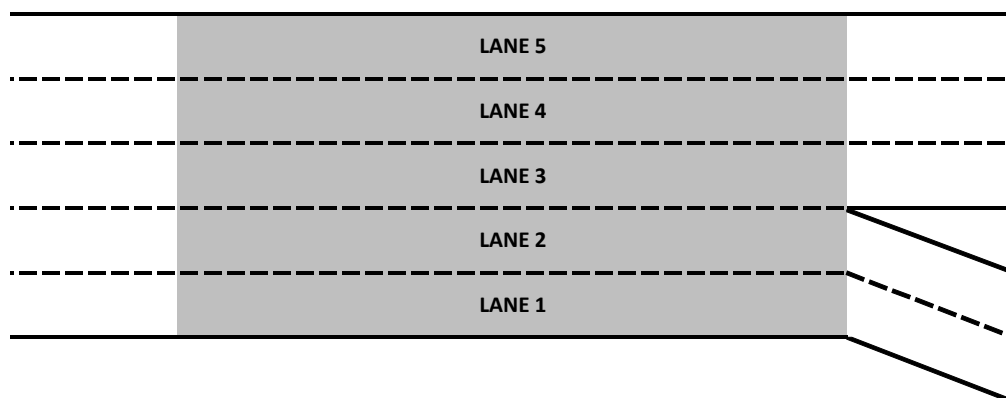
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	467	37
1	355	39
Total	822	52

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,493	4,409	73	98.1%	1,499
On-ramp					
Off-ramp	817	822	52	100.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 5 - Southbound I-15: EB SR-91 Off-ramp

Segment Type - Diverge

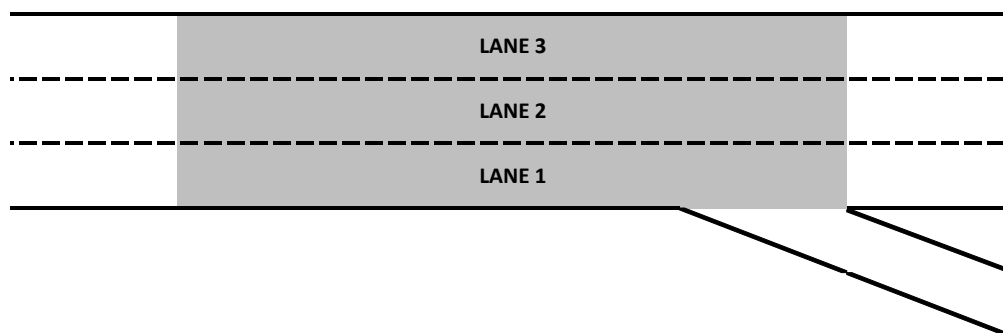
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	536	13	69.0	1.4	10.2	0.6	A
2	1,488	23	61.4	3.6	19.2	1.0	C
1	1,561	12	61.2	2.3	32.9	1.7	D
Area	3,050	36	61.3	2.7	26.0	1.3	D
Total	3,586	49	62.7	2.4	20.7	1.0	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	1,257	72
Total			Total	1,257	72

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,676	3,586	49	97.5%	1,548
On-ramp					
Off-ramp	1,277	1,257	72	98.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 6 - Southbound I-15: EB SR-91 Off-ramp to On-ramp

Segment Type - Basic

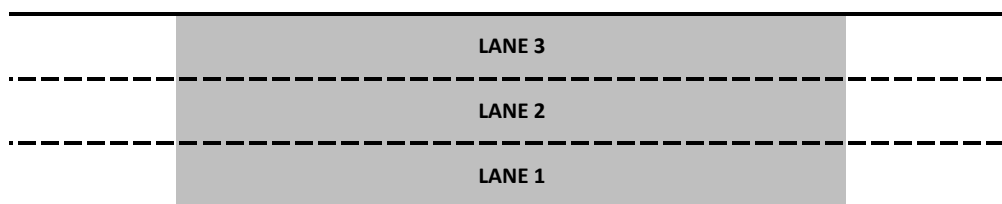
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	608	18	69.2	0.8	10.9	0.7	A
2	742	14	66.8	0.9	13.4	0.5	B
1	973	14	65.8	0.6	14.3	0.7	B
Area	2,324	46	67.2	0.7	12.9	0.2	B
Total	2,324	46	67.2	0.7	12.9	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,399	2,324	46	96.9%	1,546
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 7 - Southbound I-15: EB SR-91 On-ramp

Segment Type - Merge

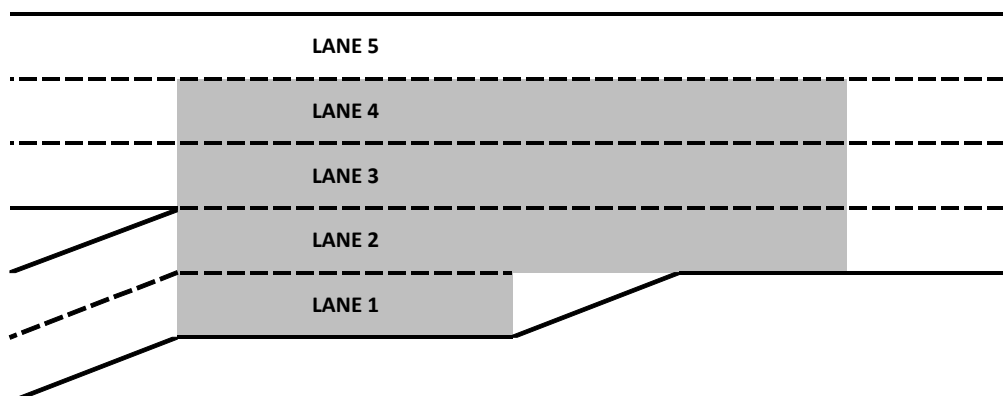
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	616	17	70.5	0.2	9.7	0.1	A
4	727	11	67.9	0.3	13.1	0.2	B
3	979	15	65.6	0.5	17.9	0.6	B
2	761	45	62.2	0.9	22.3	1.3	C
1	903	37	33.9	0.7	2.2	0.2	A
Area	3,370	107	64.4	0.6	15.4	0.6	B
Total	3,986	124	65.4	0.5	14.1	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2	761	45	2		
1	903	37	1		
Total	1,665	76	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,399	2,321	49	96.8%	1,370
On-ramp	1,715	1,665	76	97.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 8 - Southbound I-15: WB SR-91 On-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6			70.1	0.3	12.2	0.8	B
5	728	16	68.4	0.3	16.0	0.4	B
4	925	16	67.3	0.2	19.0	0.6	C
3	946	12	66.1	0.7	21.8	0.8	C
2	1,383	19	53.1	0.8	11.8	0.9	B
1	1,593	114	33.6	0.3	2.0	0.4	A
Area	5,573	177	67.5	0.4	15.6	0.6	B
Total	5,573	177	67.5	0.4	15.6	0.6	B

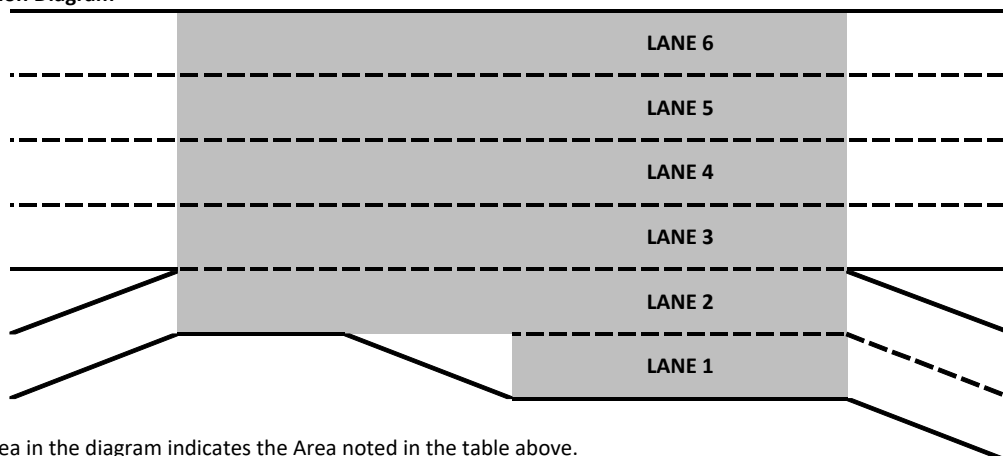
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,593	114
Total	1,593	114

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	857	43
1	368	49
Total	1,225	63

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,114	3,980	63	96.8%	2,546
On-ramp	1,587	1,593	114	100.4%	
Off-ramp	1,239	1,225	63	98.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 9 - Southbound I-15: Magnolia Ave Off-ramp to On-ramp

Segment Type - Basic

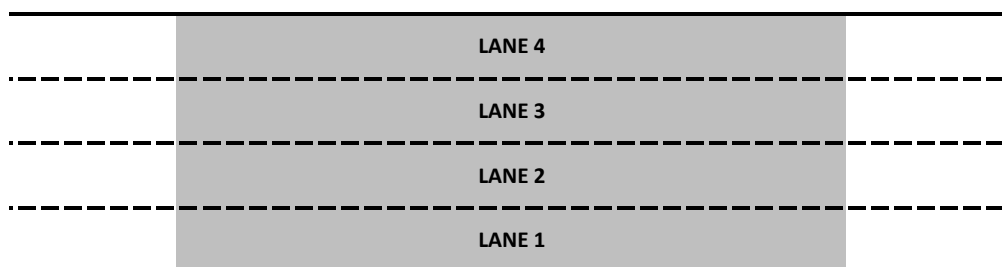
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	885	21	70.2	0.3	13.8	0.9	B
3	1,130	21	68.8	0.2	17.0	0.4	B
2	1,193	13	68.1	0.1	18.4	0.8	C
1	1,130	21	67.8	0.1	17.6	0.5	B
Area	4,337	75	68.6	0.1	16.7	0.5	B
Total	4,337	75	68.6	0.1	16.7	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,462	4,337	75	97.2%	2,362
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 10 - Southbound I-15: Magnolia Ave On-ramp

Segment Type - Merge

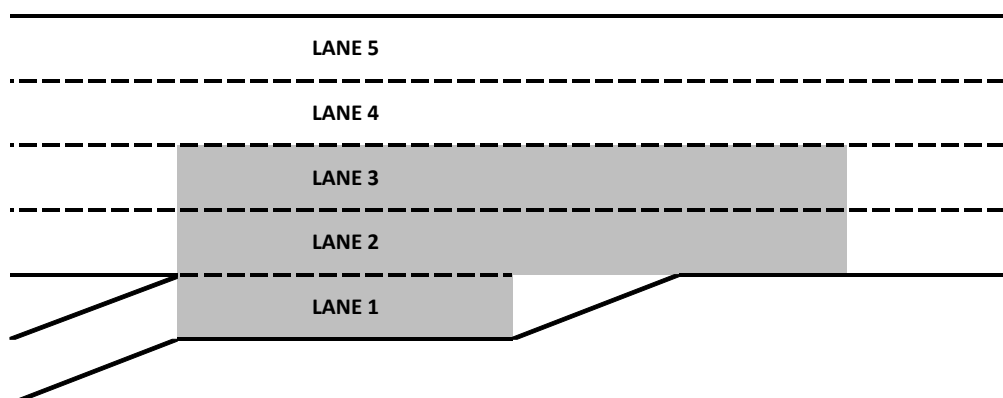
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	922	19	70.1	0.2	15.4	0.9	B
4	1,168	15	67.7	0.3	25.6	0.4	C
3	1,150	17	66.1	0.4	24.9	0.8	C
2	1,093	18	65.6	0.4	7.5	0.2	A
1	536	50	31.8	0.2	1.5	0.0	A
Area	2,779	85	65.3	0.3	13.0	0.4	B
Total	4,869	119	67.2	0.2	16.3	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	536	50	1		
Total	536	50	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,462	4,333	69	97.1%	1,504
On-ramp	539	536	50	99.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 11 - Southbound I-15: EB SR-91 Express Lane On-ramp (Left)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,098	21	70.3	0.2	4.4	0.2	A
4	1,723	21	70.1	0.2	15.9	0.7	B
3	1,749	23	67.3	0.4	24.4	1.0	C
2	291	10	66.0	0.2	26.8	1.0	D
1	111	17	68.9	0.3	4.3	0.4	A
Area	4,971	92	67.7	0.2	15.2	0.5	B
Total	4,971	92	67.7	0.2	15.2	0.5	B

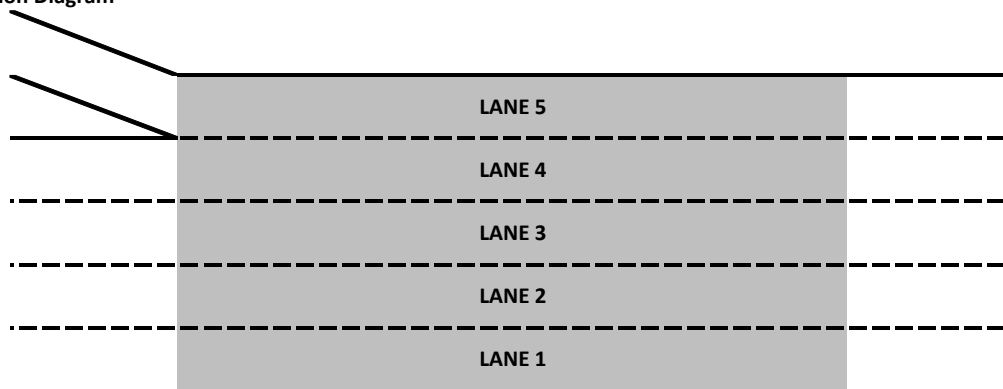
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	111	17
Total	111	17

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,001	4,860	75	97.2%	1,498
On-ramp	127	111	17	87.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 12 - Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave Off-ramp

Segment Type - Basic

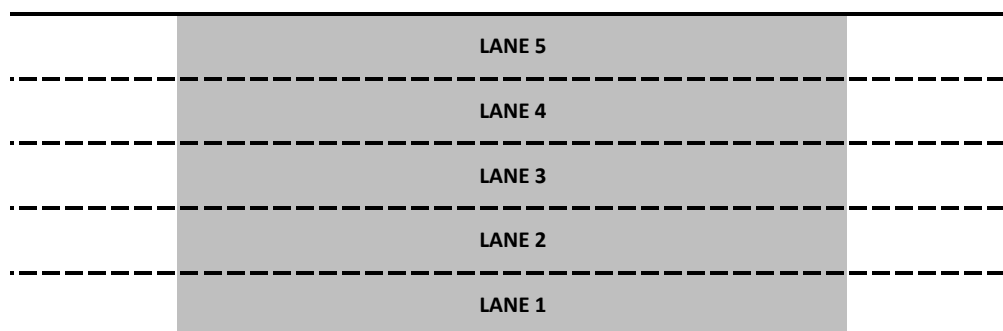
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	387	13	70.9	0.3	6.3	0.3	A
4	1,077	25	70.2	0.2	16.0	0.5	B
3	1,348	15	68.1	0.3	20.5	0.8	C
2	1,709	21	66.8	0.2	26.0	1.2	C
1	447	14	69.3	0.2	6.3	0.8	A
Area	4,968	87	68.5	0.1	15.0	0.4	B
Total	4,968	87	68.5	0.1	15.0	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,128	4,968	87	96.9%	980
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 13 - Southbound I-15: Ontario Ave Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	419	13	71.0	0.4	7.6	0.4	A
4	1,091	23	70.0	0.3	16.3	0.5	B
3	1,336	13	67.8	0.6	19.7	0.9	C
2	1,622	22	66.3	1.1	20.4	0.5	C
1	498	13	68.1	0.3	11.1	1.0	B
Area	4,966	85	68.2	0.5	15.0	0.4	B
Total	4,966	85	68.2	0.5	15.0	0.4	B

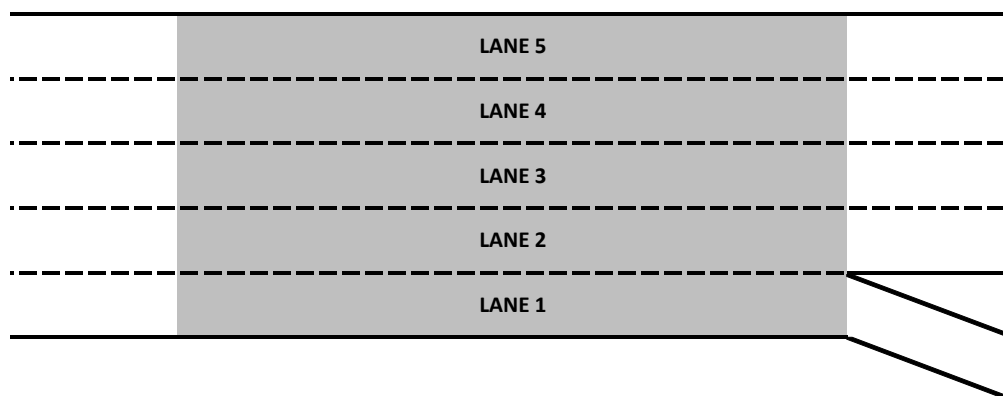
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	830	61
Total	830	61

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,128	4,966	85	96.8%	1,499
On-ramp					
Off-ramp	834	830	61	99.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 14 - Southbound I-15: Ontario Ave Off-ramp to On-ramp

Segment Type - Basic

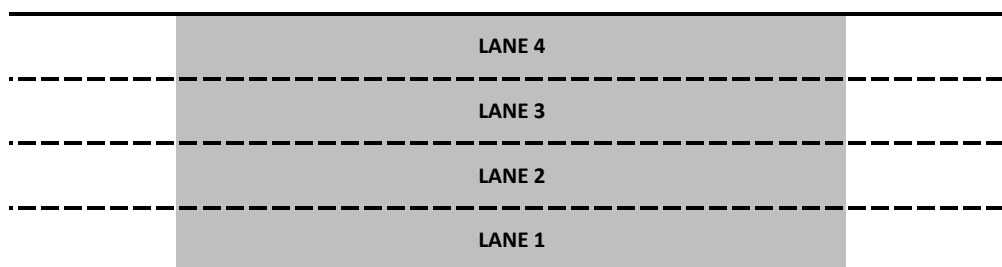
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	749	20	70.9	0.3	11.3	0.6	B
3	1,515	23	68.9	0.2	22.2	0.6	C
2	1,704	19	66.9	0.1	25.8	0.6	C
1	155	9	67.9	0.2	4.0	0.2	A
Area	4,123	71	68.4	0.1	15.8	0.4	B
Total	4,123	71	68.4	0.1	15.8	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,294	4,123	71	96.0%	2,819
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Segment Type - Merge

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	448	42	1		
Total	448	42	Total		

Segment
Length
(ft)

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,294	4,114	74	95.8%	1,498
On-ramp	426	448	42	105.2%	
Off-ramp					

Diagram illustrating a five-lane highway cross-section. The lanes are labeled LANE 1 through LANE 5 from left to right. LANE 1 is the leftmost lane, followed by LANE 2, LANE 3, LANE 4, and LANE 5 on the right. Lanes 2 and 3 are shaded gray. Lane 1 has a solid black line on its left and a dashed black line on its right. Lane 2 has a dashed black line on its left and a solid black line on its right. Lane 3 has a dashed black line on its left and a solid black line on its right. Lane 4 has a dashed black line on its left and a solid black line on its right. Lane 5 has a solid black line on its left and a solid black line on its right. The diagram shows a transition from a single-lane road to a five-lane highway.

4/24/2020

Location 16 - Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	937	27	70.3	0.5	15.5	0.6	B
3	1,625	27	67.8	0.3	24.8	1.0	C
2	1,548	16	66.1	0.3	24.5	0.7	C
1	445	15	68.2	0.2	7.2	0.5	A
Area	4,556	85	67.8	0.3	18.0	0.5	C
Total	4,556	85	67.8	0.3	18.0	0.5	C

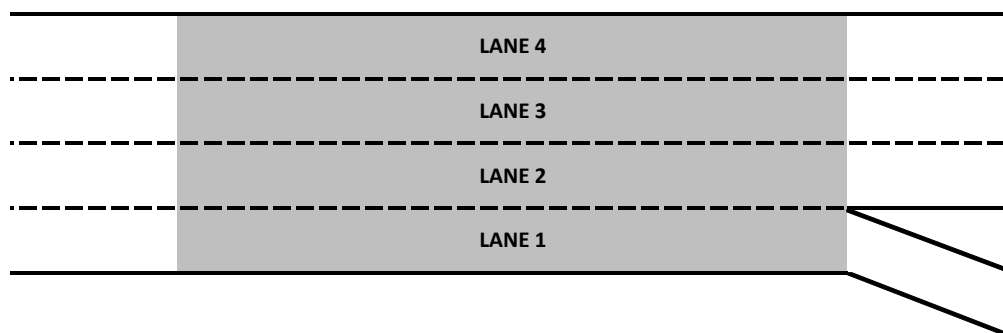
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	447	42
Total	447	42

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,720	4,556	85	96.5%	738
On-ramp					
Off-ramp	474	447	42	94.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 17 - Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp

Segment Type - Basic

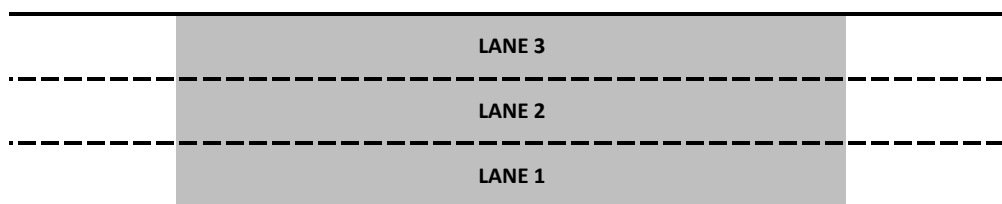
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,168	23	70.0	0.4	18.2	0.6	C
2	1,508	19	67.9	0.2	23.5	1.1	C
1	1,434	17	66.6	0.2	22.9	0.7	C
Area	4,110	59	68.1	0.3	21.5	0.5	C
Total	4,110	59	68.1	0.3	21.5	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,246	4,110	59	96.8%	2,229
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 18 - Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Merge

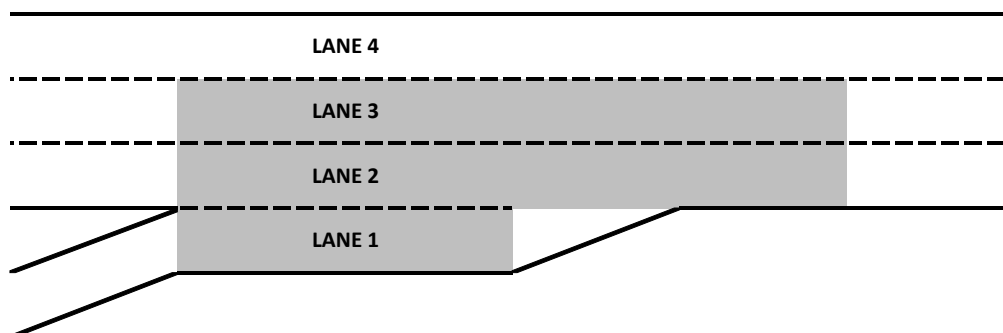
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,204	24	70.2	0.3	20.0	0.8	C
3	1,355	15	67.4	0.5	24.7	0.8	C
2	1,541	15	64.5	0.7	27.0	0.9	D
1	397	25	23.3	0.9	1.2	0.1	A
Area	3,294	56	65.7	0.6	21.6	0.5	C
Total	4,498	80	67.0	0.4	21.1	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	397	25	1		
Total	397	25	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,246	4,101	54	96.6%	1,346
On-ramp	417	397	25	95.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 19 - Southbound I-15: Cajalco Rd Off-ramp

Segment Type - Diverge

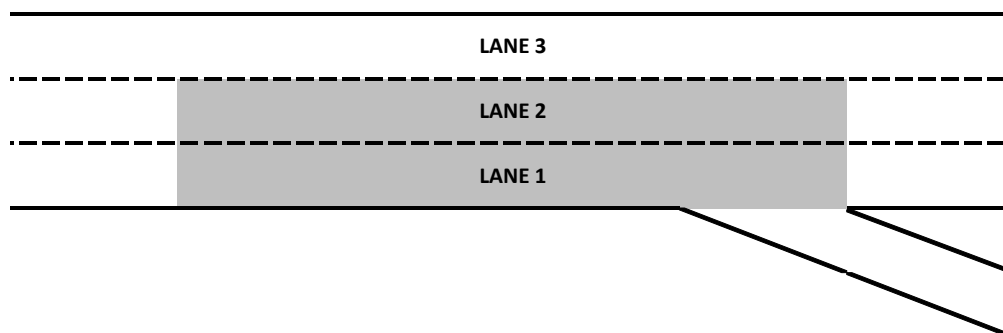
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,342	27	69.3	0.4	22.4	1.1	C
2	1,537	20	67.3	0.4	24.6	0.9	C
1	1,614	17	65.6	0.6	25.0	0.5	C
Area	3,151	37	66.5	0.5	24.8	0.4	C
Total	4,494	63	67.4	0.4	24.0	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	445	30
Total			Total	445	30

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,663	4,494	63	96.4%	1,348
On-ramp					
Off-ramp	455	445	30	97.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 20 - Southbound I-15: Cajalco Rd Off-ramp to On-ramp

Segment Type - Basic

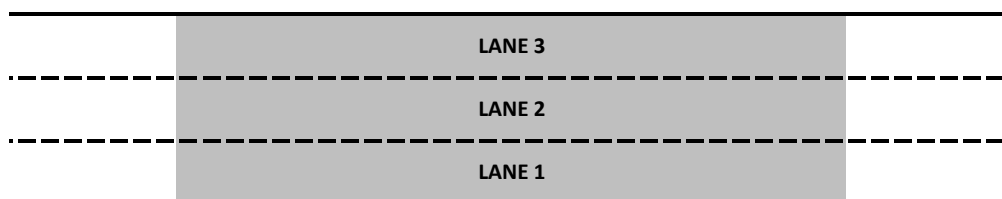
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,424	25	69.5	0.4	22.6	0.7	C
2	1,460	21	67.7	0.2	23.4	0.8	C
1	1,161	13	67.3	0.2	17.9	0.9	B
Area	4,046	60	68.2	0.2	21.3	0.5	C
Total	4,046	60	68.2	0.2	21.3	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,208	4,046	60	96.1%	1,482
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 21 - Southbound I-15: Cajalco Rd On-ramp

Segment Type - Merge

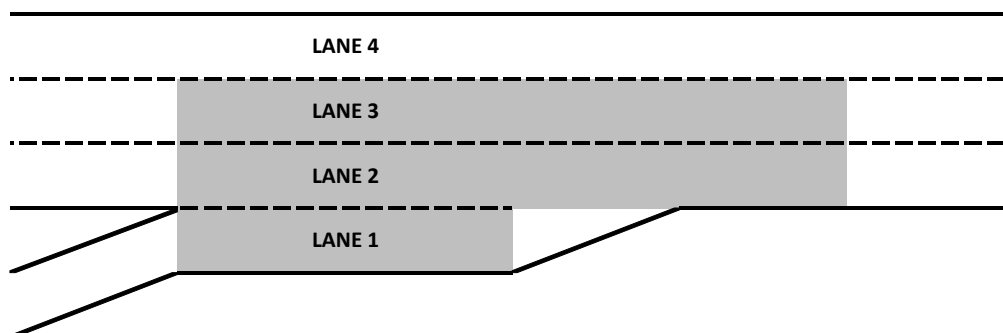
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,426	28	69.8	0.3	22.9	0.4	C
3	1,445	15	67.5	0.2	24.4	0.8	C
2	1,168	15	66.5	0.5	19.3	0.8	C
1	170	22	23.5	0.8	0.5	0.1	A
Area	2,783	53	66.9	0.3	17.9	0.4	B
Total	4,209	81	67.9	0.2	19.3	0.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	170	22	1		
Total	170	22	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,208	4,039	58	96.0%	1,499
On-ramp	165	170	22	103.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 22 - Southbound I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

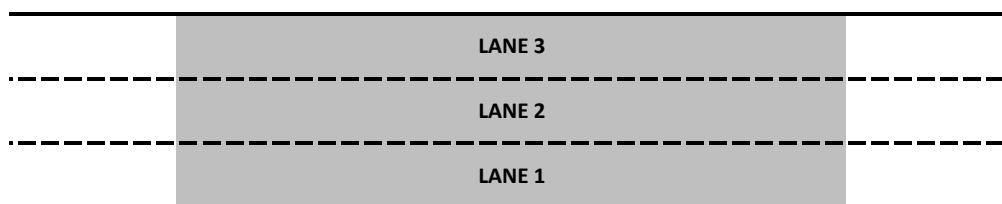
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,353	25	69.3	0.3	21.6	0.3	C
2	1,528	27	67.3	0.2	24.1	0.6	C
1	1,314	18	66.9	0.2	21.3	1.0	C
Area	4,195	70	67.8	0.1	22.3	0.4	C
Total	4,195	70	67.8	0.1	22.3	0.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,373	4,195	70	95.9%	2,055
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 23 - Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,352	22	68.1	1.1	21.1	0.3	C
2	1,297	20	65.7	1.4	21.2	1.0	C
1	1,543	25	64.7	1.1	25.1	1.0	C
Area	2,840	45	65.1	1.2	23.1	1.0	C
Total	4,192	67	66.1	1.1	22.4	0.6	C

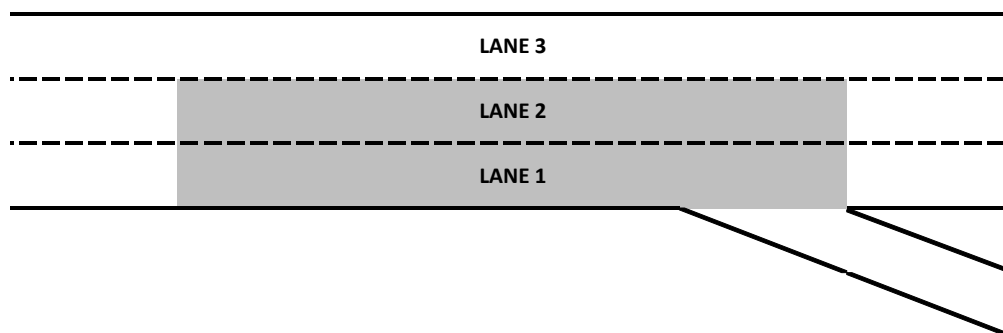
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	558	49
Total	558	49

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,373	4,192	67	95.9%	1,498
On-ramp					
Off-ramp	574	558	49	97.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 24 - Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

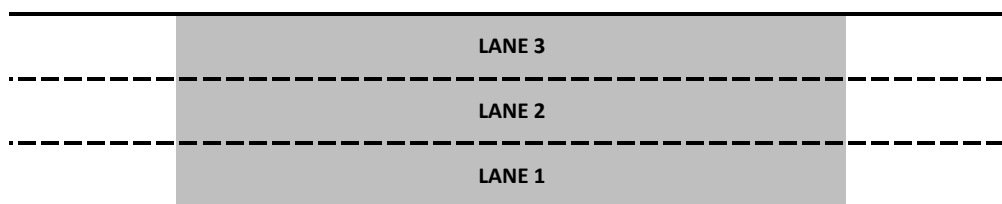
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,350	27	68.6	0.7	20.7	0.5	C
2	1,271	23	67.4	0.2	20.3	1.2	C
1	1,008	18	67.1	0.3	16.5	1.0	B
Area	3,629	67	67.7	0.4	19.2	0.5	C
Total	3,629	67	67.7	0.4	19.2	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,799	3,629	67	95.5%	2,237
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 25 - Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

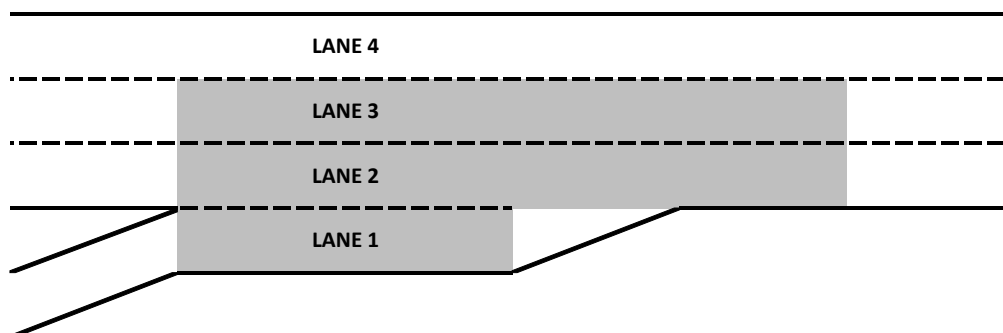
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,332	26	69.5	0.3	20.7	0.7	C
3	1,269	21	67.8	0.3	21.4	0.7	C
2	1,020	14	67.3	0.2	17.1	0.1	B
1	132	17	29.6	1.1	0.3	0.0	A
Area	2,421	52	67.6	0.2	15.3	0.3	B
Total	3,753	78	68.3	0.2	16.8	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	132	17	1		
Total	132	17	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,799	3,621	60	95.3%	1,501
On-ramp	115	132	17	114.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 26 - Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

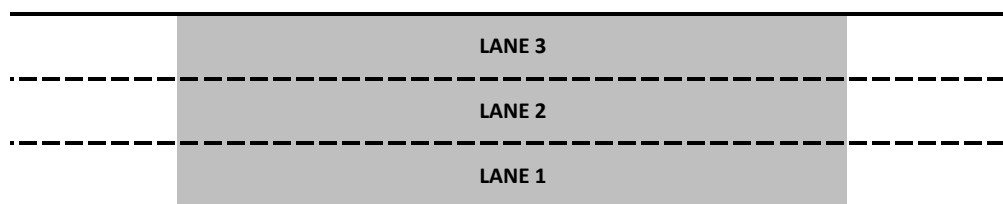
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,325	23	68.8	0.2	20.3	0.5	C
2	1,314	15	67.6	0.2	21.3	0.6	C
1	1,110	16	67.2	0.2	18.1	0.3	C
Area	3,750	55	67.9	0.2	19.9	0.2	C
Total	3,750	55	67.9	0.2	19.9	0.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,914	3,750	55	95.8%	7,458
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 27 - Southbound I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,195	21	67.8	1.3	19.1	0.5	C
2	1,242	16	65.9	2.1	19.6	0.8	C
1	1,299	19	65.5	0.9	21.8	0.4	C
Area	2,542	35	65.7	1.5	20.7	0.6	C
Total	3,737	56	66.4	1.4	20.2	0.5	C

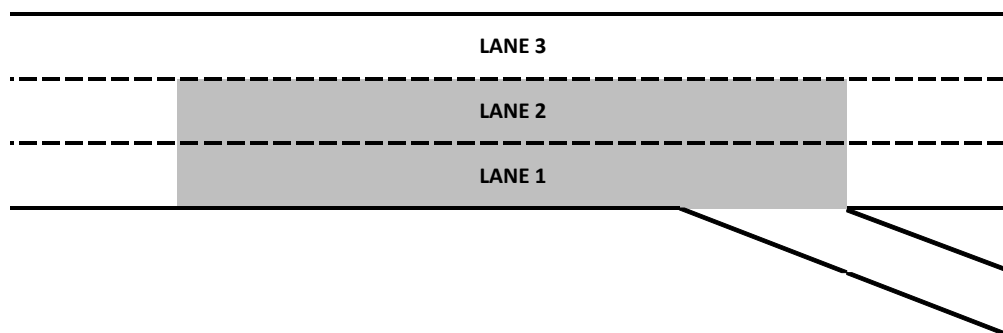
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	460	43
Total	460	43

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,914	3,737	56	95.5%	1,502
On-ramp					
Off-ramp	455	460	43	101.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 28 - Southbound I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

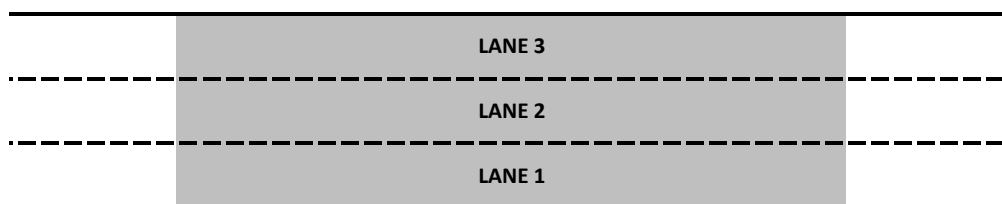
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,178	17	68.6	0.6	18.7	0.6	C
2	1,159	19	67.6	0.4	18.7	0.5	C
1	933	15	67.2	0.8	15.2	0.5	B
Area	3,270	50	67.8	0.6	17.5	0.4	B
Total	3,270	50	67.8	0.6	17.5	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,459	3,270	50	94.5%	2,526
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 29 - Southbound I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

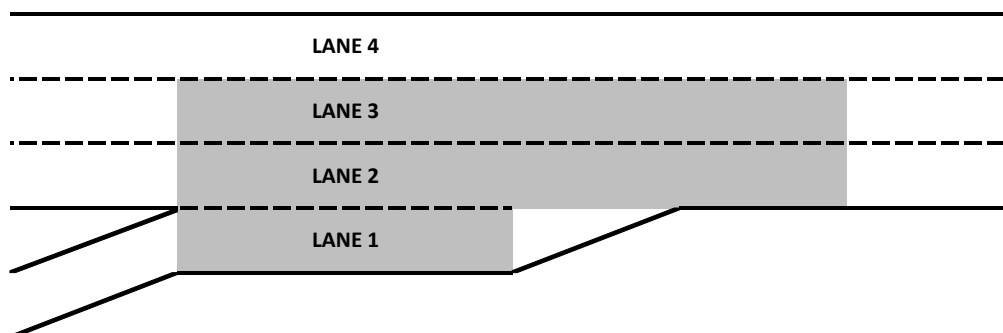
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,165	12	69.3	0.2	18.4	0.5	C
3	1,161	15	68.1	0.2	19.2	0.6	C
2	937	19	67.4	0.5	16.5	0.5	B
1	149	30	35.7	1.0	0.3	0.1	A
Area	2,246	64	67.7	0.2	13.7	0.4	B
Total	3,412	76	68.3	0.2	15.0	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	149	30	1		
Total	149	30	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,459	3,263	46	94.3%	1,502
On-ramp	153	149	30	97.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 30 - Southbound I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

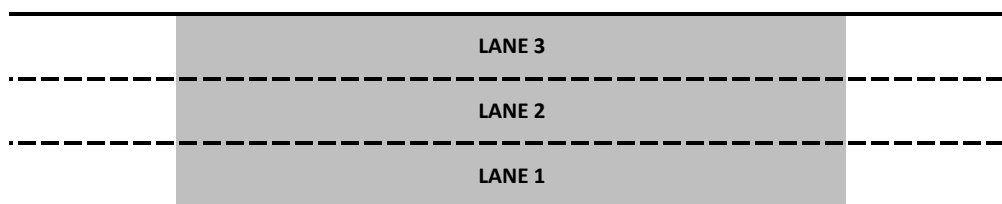
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,181	12	68.8	0.2	18.4	0.7	C
2	1,205	20	67.8	0.2	19.3	0.9	C
1	1,017	17	67.4	0.3	16.8	0.4	B
Area	3,402	49	68.0	0.1	18.1	0.6	C
Total	3,402	49	68.0	0.1	18.1	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,612	3,402	49	94.2%	8,913
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 31 - Southbound I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,113	15	68.7	0.4	17.2	1.0	B
2	1,237	19	67.5	0.9	18.4	0.7	C
1	1,045	16	66.5	0.8	18.6	0.6	C
Area	2,283	34	67.0	0.8	18.5	0.6	C
Total	3,395	50	67.5	0.7	18.1	0.7	C

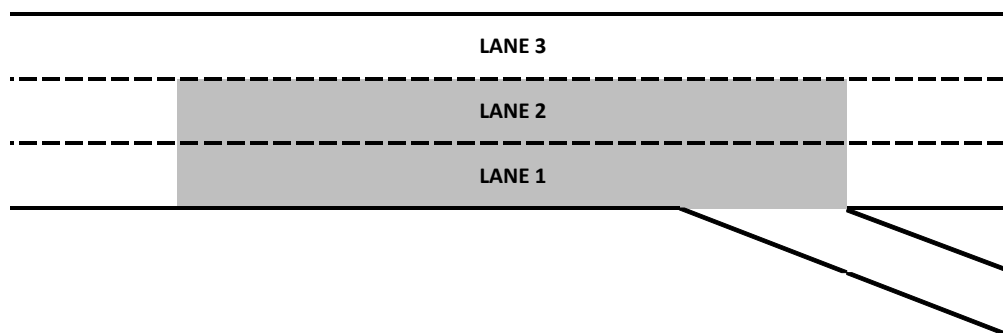
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	274	29
Total	274	29

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,612	3,395	50	94.0%	1,499
On-ramp					
Off-ramp	290	274	29	94.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 32 - Southbound I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

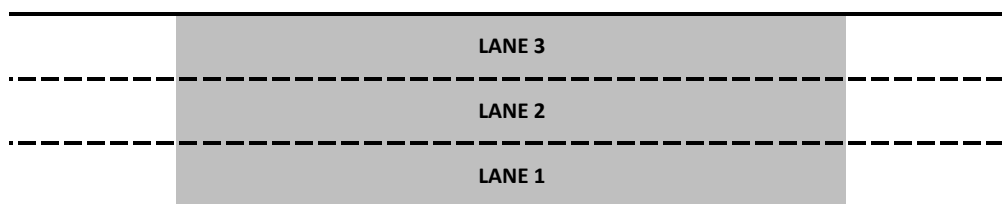
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,105	15	68.5	0.4	17.6	0.6	B
2	1,116	19	67.9	0.2	18.1	0.4	C
1	892	14	67.5	0.2	14.6	0.8	B
Area	3,113	48	68.0	0.2	16.7	0.3	B
Total	3,113	48	68.0	0.2	16.7	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,322	3,113	48	93.7%	3,127
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 33 - Southbound I-15: Indian Truck Trail On-ramp

Segment Type - Merge

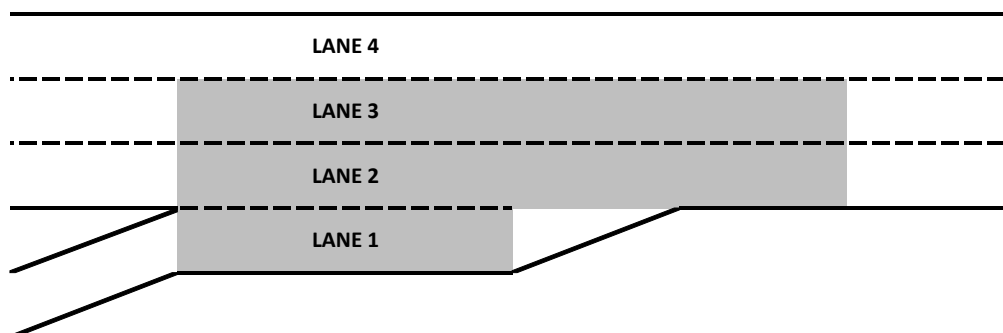
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,097	15	68.9	0.2	17.3	0.4	B
3	1,114	18	68.1	0.0	18.9	0.7	C
2	897	12	67.5	0.4	16.1	0.9	B
1	181	27	32.4	0.8	0.3	0.1	A
Area	2,192	57	67.8	0.2	13.8	0.4	B
Total	3,289	72	68.2	0.2	14.8	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	181	27	1		
Total	181	27	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,322	3,108	45	93.6%	1,501
On-ramp	177	181	27	102.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 34 - Southbound I-15: Indian Truck Trail On-ramp to Lake St Off-ramp

Segment Type - Basic

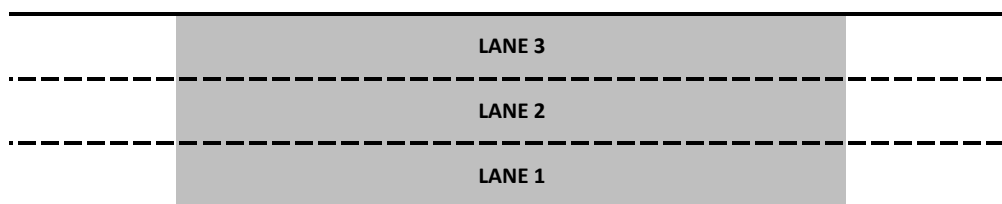
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,135	16	68.5	0.2	17.7	0.4	B
2	1,157	19	67.9	0.3	19.2	0.4	C
1	970	16	67.5	0.2	16.0	0.7	B
Area	3,263	52	68.0	0.2	17.6	0.3	B
Total	3,263	52	68.0	0.2	17.6	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,499	3,263	52	93.3%	13,523
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 35 - Southbound I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,078	9	68.6	0.3	17.2	0.5	B
2	1,184	16	67.8	0.3	18.0	0.6	B
1	985	18	67.0	0.2	17.7	0.4	B
Area	2,169	34	67.4	0.2	17.8	0.5	B
Total	3,247	42	67.8	0.1	17.6	0.3	B

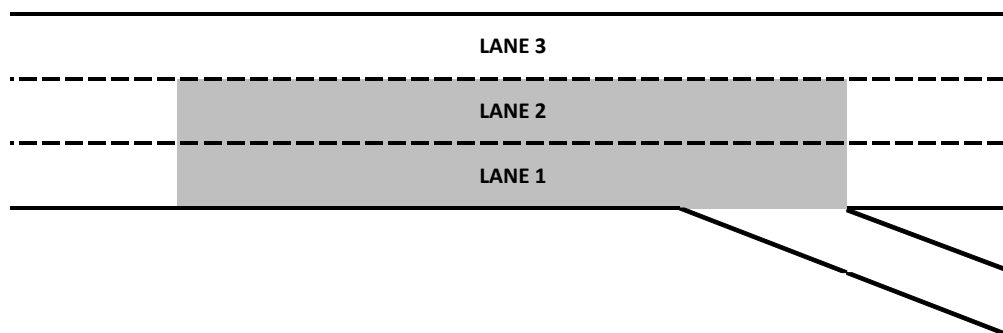
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	232	25
Total	232	25

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,499	3,247	42	92.8%	1,501
On-ramp					
Off-ramp	235	232	25	98.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 36 - Southbound I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

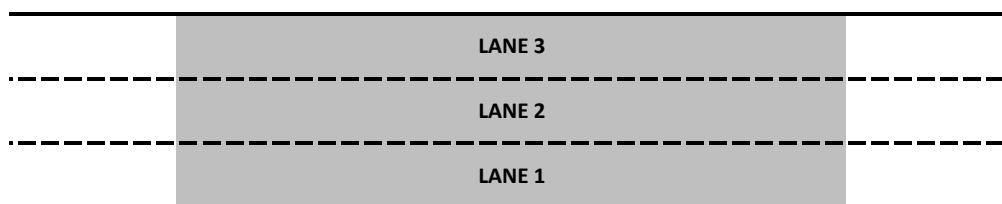
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,079	16	68.6	0.3	17.2	0.6	B
2	1,071	14	68.0	0.3	17.9	0.7	B
1	864	11	67.8	0.2	14.7	0.4	B
Area	3,015	41	68.1	0.1	16.6	0.4	B
Total	3,015	41	68.1	0.1	16.6	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,264	3,015	41	92.4%	3,287
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 37 - Southbound I-15: Lake St On-ramp

Segment Type - Merge

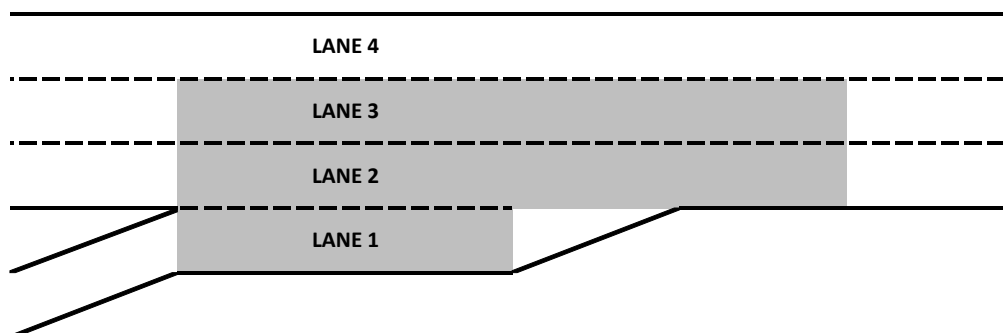
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,079	18	69.1	0.4	17.2	0.6	B
3	1,065	16	68.1	0.3	19.7	0.6	C
2	865	10	67.4	0.4	16.5	0.4	B
1	339	65	39.2	0.5	0.6	0.1	A
Area	2,269	91	67.7	0.3	13.9	0.3	B
Total	3,347	110	68.1	0.2	14.8	0.1	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	339	65	1		
Total	339	65	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,264	3,008	45	92.2%	1,500
On-ramp	324	339	65	104.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 38 - Southbound I-15: Lake St On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

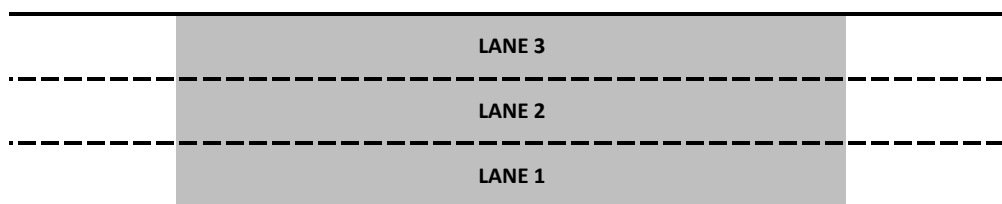
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,142	16	68.4	0.3	18.2	0.4	C
2	1,178	13	67.8	0.2	19.7	0.4	C
1	1,006	16	67.4	0.3	16.7	0.7	B
Area	3,327	45	67.9	0.2	18.2	0.2	C
Total	3,327	45	67.9	0.2	18.2	0.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,588	3,327	45	92.7%	8,752
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 39 - Southbound I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,100	16	68.5	0.3	17.9	0.6	B
2	1,200	17	67.7	0.4	18.7	0.3	C
1	1,016	19	67.0	0.3	17.7	0.8	B
Area	2,216	35	67.4	0.3	18.2	0.3	C
Total	3,316	51	67.7	0.3	18.1	0.2	C

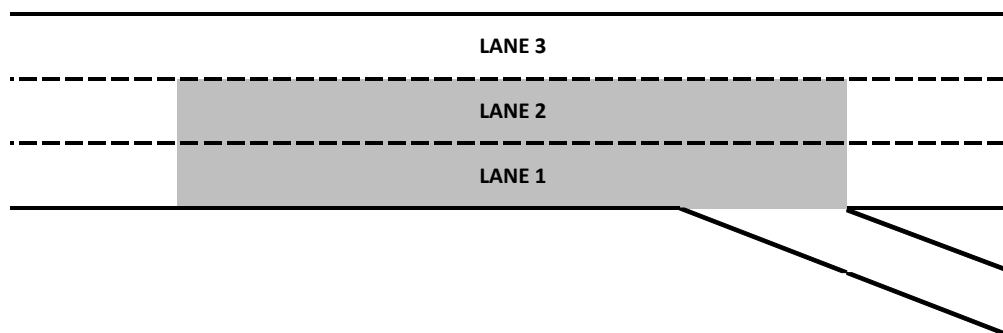
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	241	27
Total	241	27

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,588	3,316	51	92.4%	1,500
On-ramp					
Off-ramp	235	241	27	102.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 40 - Southbound I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

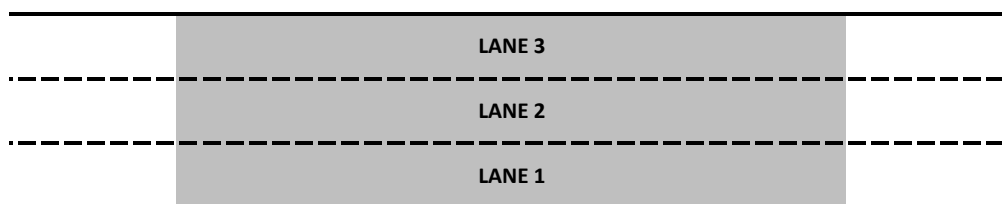
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,100	13	68.5	0.2	18.1	0.5	C
2	1,090	14	67.9	0.2	18.4	0.6	C
1	876	16	67.7	0.4	14.7	0.2	B
Area	3,067	43	68.1	0.2	17.1	0.2	B
Total	3,067	43	68.1	0.2	17.1	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,353	3,067	43	91.5%	3,058
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 41 - Southbound I-15: Nichols Rd On-ramp

Segment Type - Merge

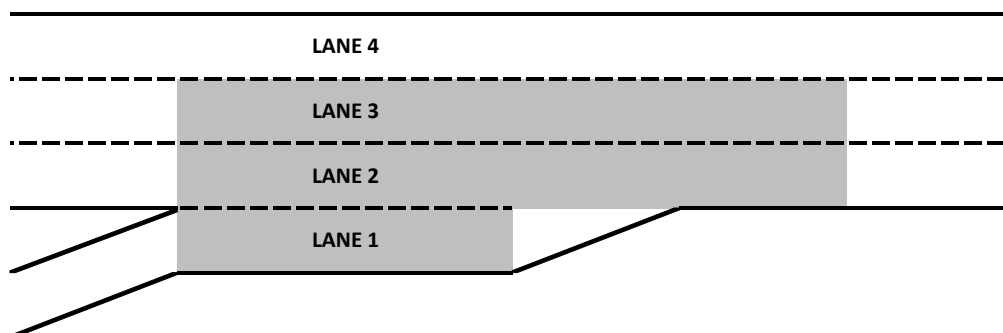
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,090	13	68.4	0.2	18.5	0.7	C
3	1,085	10	67.3	0.4	20.3	0.5	C
2	881	23	65.9	0.9	18.2	0.4	C
1	414	36	30.8	0.6	0.8	0.1	A
Area	2,381	69	66.5	0.6	15.5	0.3	B
Total	3,470	83	67.1	0.4	16.4	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	414	36	1		
Total	414	36	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,353	3,056	46	91.1%	1,500
On-ramp	402	414	36	103.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 42 - Southbound I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

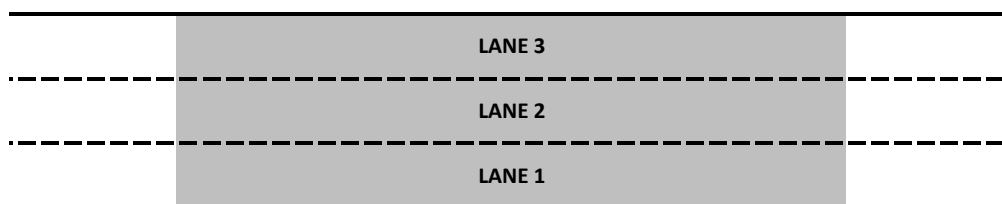
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,058	14	68.5	0.2	18.1	0.6	C
2	1,290	12	67.5	0.6	20.7	0.5	C
1	1,106	16	66.9	0.4	18.2	0.3	C
Area	3,455	43	67.6	0.3	19.0	0.4	C
Total	3,455	43	67.6	0.3	19.0	0.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,755	3,455	43	92.0%	2,332
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 43 - Southbound I-15: Central Ave (SR-74) Off-ramp

Segment Type - Diverge

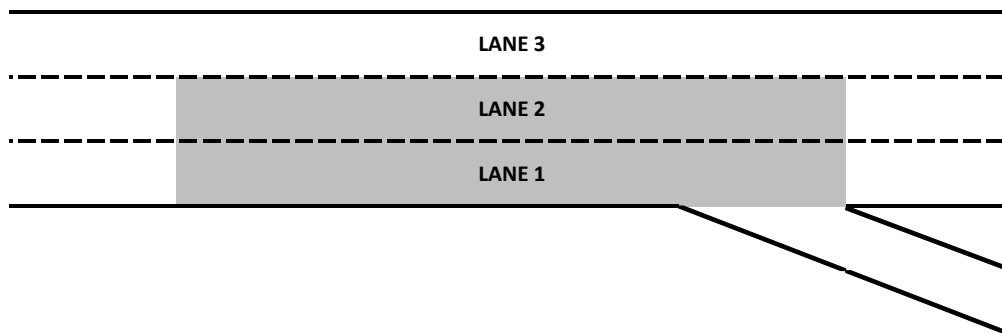
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,064	16	67.7	1.2	17.9	0.9	B
2	1,279	9	65.8	2.2	18.4	0.9	C
1	1,111	20	65.3	1.4	21.6	1.0	C
Area	2,390	30	65.5	1.7	20.0	0.8	C
Total	3,455	46	66.2	1.5	19.3	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	474	47
Total			Total	474	47

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,755	3,455	46	92.0%	1,498
On-ramp					
Off-ramp	491	474	47	96.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 44 - Southbound I-15: Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

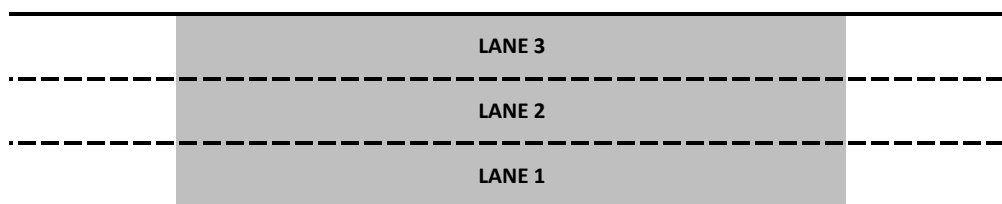
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,058	20	68.2	0.5	17.6	0.5	B
2	1,071	18	67.7	0.3	17.8	0.8	B
1	849	17	67.7	0.4	14.4	0.7	B
Area	2,978	54	67.9	0.4	16.6	0.5	B
Total	2,978	54	67.9	0.4	16.6	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,264	2,978	54	91.2%	3,037
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 45 - Southbound I-15: Central Ave (SR-74) On-ramp

Segment Type - Merge

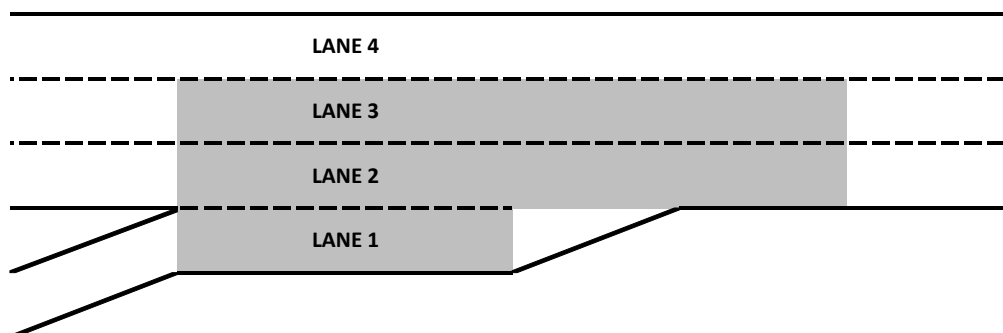
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,058	15	68.6	0.6	18.1	1.3	C
3	1,065	17	66.4	0.5	24.4	1.1	C
2	854	16	63.5	0.8	22.0	0.6	C
1	1,131	53	32.2	0.8	2.8	0.3	A
Area	3,050	87	64.4	0.6	18.9	0.6	C
Total	4,107	102	65.6	0.5	18.7	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,131	53	1		
Total	1,131	53	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,264	2,976	48	91.2%	1,502
On-ramp	1,127	1,131	53	100.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 46 - Southbound I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp

Segment Type - Basic

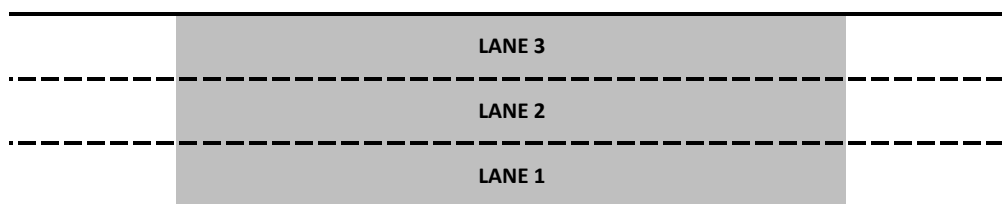
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,305	22	67.5	0.4	21.3	1.0	C
2	1,464	18	66.0	0.5	23.9	1.0	C
1	1,326	14	65.7	0.3	21.6	0.8	C
Area	4,095	53	66.4	0.4	22.3	0.6	C
Total	4,095	53	66.4	0.4	22.3	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,391	4,095	53	93.3%	890
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 47 - Southbound I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,322	20	68.0	0.4	21.6	1.2	C
2	1,451	14	66.9	0.3	22.9	0.9	C
1	1,323	16	66.3	0.2	21.6	0.8	C
Area	2,774	30	66.6	0.2	22.3	0.9	C
Total	4,096	50	67.1	0.2	22.1	0.6	C

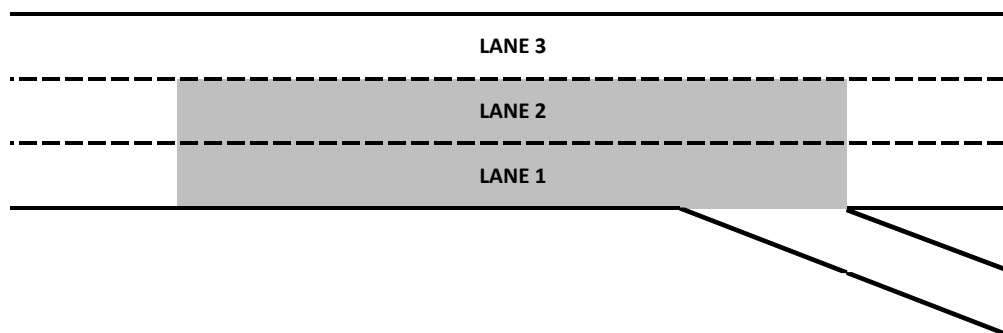
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	107	25
Total	107	25

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,391	4,096	50	93.3%	1,498
On-ramp					
Off-ramp	113	107	25	94.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 48 - Southbound I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

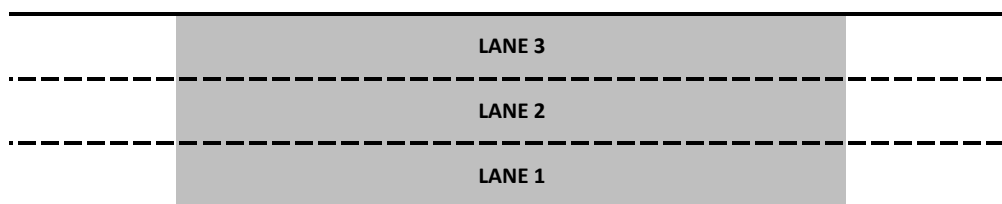
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,363	23	68.1	0.2	21.9	1.2	C
2	1,391	14	67.5	0.2	22.5	0.8	C
1	1,222	13	67.0	0.4	20.0	0.6	C
Area	3,976	50	67.6	0.2	21.4	0.6	C
Total	3,976	50	67.6	0.2	21.4	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,278	3,976	50	92.9%	3,514
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 49 - Southbound I-15: Main St On-ramp

Segment Type - Merge

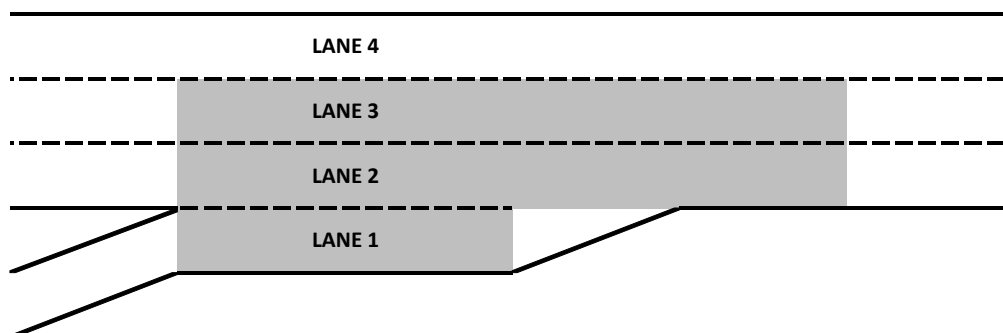
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,358	24	68.5	0.3	22.2	1.5	C
3	1,387	17	67.1	0.2	25.8	1.2	C
2	1,225	17	65.7	0.7	23.0	0.5	C
1	484	57	27.4	0.5	1.1	0.2	A
Area	3,096	91	66.3	0.3	20.1	0.6	C
Total	4,454	115	67.0	0.3	20.7	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	484	57	1		
Total	484	57	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,278	3,970	58	92.8%	1,500
On-ramp	467	484	57	103.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 50 - Southbound I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp

Segment Type - Basic

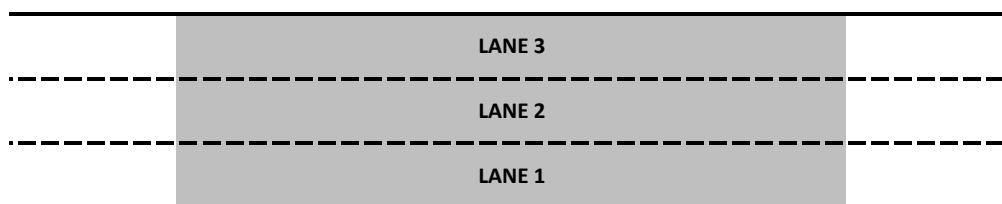
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,509	26	67.7	0.4	24.0	1.2	C
2	1,538	20	66.9	0.3	24.9	1.0	C
1	1,400	21	66.6	0.4	23.1	0.6	C
Area	4,447	67	67.1	0.3	24.0	0.8	C
Total	4,447	67	67.1	0.3	24.0	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,745	4,447	67	93.7%	3,089
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Vissim Post-Processor
Average Results from 5 Runs
Network Statistics

I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Performance Measure	Vehicle Types	Average	Std. Dev.	Minimum	Maximum
Average Delay (seconds)	All	99.4	8.05	90.3	110.4
Total Delay (hours)	All	5,125	417	4,655	5,696
Average Stopped Delay (seconds)	All	3.6	0.40	3.2	4.2
Total Stopped Delay (hours)	All	187	21	166	218
Total Distance Traveled (miles)	All	1,642,809	2,738	1,639,933	1,646,405
Average Speed (mph)	All	56.3	0.80	55.2	57.2
Average Number of Stops	All	3.0	0.66	2.3	3.9
Total Number of Stops	All	547,657	123,284	419,381	720,026
Total Travel Time (hours)	All	29,204.6	427.7	28,770.5	29,830.8
Vehicles Active	All	2,872	56	2,780	2,920
Vehicles Arrived	All	182,732	136	182,571	182,870

VISSIM Post-Processor
Average Results from 5 Runs
Average Travel Time

I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Period

Corridor Travel Time by Time Interval Summary							
Time interval		Measured from Simulation (min)		Observed from Inrix (min)		Difference (sec)	
		SB I-15	NB I-15	SB I-15	NB I-15	SB I-15	NB I-15
1	1:00 - 1:15 PM	19.31	19.82	19.31	18.88	+0.3	+56.3
2	1:15 - 1:30 PM	19.35	19.67	20.36	19.28	-60.4	+23.3
3	1:30 - 1:45 PM	19.37	19.65	21.09	19.16	-102.9	+29.2
4	1:45 - 2:00 PM	19.58	19.80	22.74	18.68	-189.6	+67.3
5	2:00 - 2:15 PM	20.03	20.01	23.88	18.62	-231.2	+83.0
6	2:15 - 2:30 PM	20.55	20.04	25.58	18.39	-301.9	+98.6
7	2:30 - 2:45 PM	21.09	20.15	27.37	18.51	-376.8	+98.5
8	2:45 - 3:00 PM	21.52	21.23	30.68	18.30	-549.7	+175.4
9	3:00 - 3:15 PM	22.84	21.83	30.78	19.72	-476.9	+126.5
10	3:15 - 3:30 PM	24.53	22.15	31.73	20.19	-431.6	+117.7
11	3:30 - 3:45 PM	25.70	22.86	31.93	19.94	-374.0	+175.6
12	3:45 - 4:00 PM	26.96	22.90	32.94	19.70	-358.7	+192.3
13	4:00 - 4:15 PM	29.28	22.25	33.05	19.67	-226.5	+154.9
14	4:15 - 4:30 PM	29.88	21.91	31.76	19.71	-112.9	+132.2
15	4:30 - 4:45 PM	30.84	20.83	30.81	20.76	+1.4	+4.1
16	4:45 - 5:00 PM	32.07	20.37	29.65	21.19	+145.0	-49.6
17	5:00 - 5:15 PM	33.25	20.68	27.23	22.02	+361.2	-80.6
18	5:15 - 5:30 PM	32.28	20.70	24.86	21.27	+445.1	-34.1
19	5:30 - 5:45 PM	31.67	20.65	23.23	21.04	+506.8	-23.6
20	5:45 - 6:00 PM	30.20	20.56	21.19	20.72	+540.2	-9.3
21	6:00 - 6:15 PM	29.21	19.53	20.38	20.75	+529.7	-73.4
22	6:15 - 6:30 PM	28.04	19.17	20.33	20.70	+462.7	-91.4
23	6:30 - 6:45 PM	26.39	19.16	19.79	20.60	+395.8	-86.3
24	6:45 - 7:00 PM	25.16	19.14	19.62	20.94	+332.5	-108.3
25	7:00 - 7:15 PM	23.42	19.12	19.20	20.70	+253.3	-94.8
26	7:15 - 7:30 PM	21.98	19.11	19.30	19.75	+160.4	-38.0
27	7:30 - 7:45 PM	20.87	19.11	19.05	19.72	+109.1	-36.8
28	7:45 - 8:00 PM	19.77	19.08	18.92	19.54	+51.1	-27.9
Average		25.2	20.4	24.9	19.9	+17.9	+27.9
Allowable Tolerance (sec)						± 108.8	± 70.5
Within Validation Statistic?						Yes	Yes

Corridor Performance Measurements		
Stats Summary	Southbound I-15	Northbound I-15
Average Travel Time (min)	25.2	20.4
Average Travel Speed (mph)	52.1	64.3
Average Delay per Vehicle (min)	6.4	1.7
Max Individual Vehicle Delay (min)	14.5	4.2

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
1 Southbound I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	6,049	64	98.6%							64.9	0.0	25.0	0.6	C
2 Southbound I-15: Hidden Valley Pkwy On-ramp	Merge	6,051	66	98.6%	529	69	97.1%				61.9	7.9	17.8	3.0	B
3 Southbound I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp	Basic	6,572	173	98.4%							64.5	3.3	21.4	1.2	C
4 Southbound I-15: WB SR-91 Off-ramp	Basic	6,570	118	98.4%				1,792	51	98.6%	67.3	0.5	20.5	0.3	C
5 Southbound I-15: EB SR-91 Off-ramp	Diverge	4,774	77	98.2%				1,074	72	98.0%	65.3	1.5	29.2	0.8	D
6 Southbound I-15: EB SR-91 Off-ramp to On-ramp	Basic	3,697	67	98.2%							67.8	0.8	19.0	0.9	C
7 Southbound I-15: EB SR-91 On-ramp	Merge	3,696	71	98.2%	1,819	67	99.6%				65.8	0.4	19.7	0.6	C
8 Southbound I-15: WB SR-91 On-ramp	Weave	5,513	85	98.6%	874	60	100.1%	1,318	61	101.0%	68.1	0.2	17.7	0.2	B
9 Southbound I-15: Magnolia Ave Off-ramp to On-ramp	Basic	5,072	75	98.3%							43.5	21.5	33.8	13.9	D
10 Southbound I-15: Magnolia Ave On-ramp	Merge	5,015	354	97.2%	639	48	98.7%				23.4	20.9	53.7	22.7	F
11 Southbound I-15: EB SR-91 Express Lane On-ramp (Left)	Basic	5,576	301	96.0%	836	45	102.1%				22.4	3.0	54.6	6.0	F
12 Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave Off-ramp	Basic	6,351	122	95.8%							21.6	1.6	55.9	3.2	F
13 Southbound I-15: Ontario Ave Off-ramp	Basic	6,342	125	95.7%				736	59	93.5%	20.9	2.3	58.3	6.0	F
14 Southbound I-15: Ontario Ave Off-ramp to On-ramp	Basic	5,546	71	95.0%							24.3	1.4	54.8	1.7	F
15 Southbound I-15: Ontario Ave On-ramp	Merge	5,539	65	94.8%	687	58	102.8%				20.6	0.9	39.1	1.8	E
16 Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	Basic	6,204	67	95.3%				394	34	98.3%	21.0	0.9	71.5	2.2	F
17 Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp	Basic	5,796	49	94.9%							27.5	1.1	68.1	1.5	F
18 Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp	Merge	5,782	54	94.7%	676	41	99.6%				27.6	3.0	63.7	4.8	F
19 Southbound I-15: Cajalco Rd Off-ramp	Diverge	6,444	52	94.9%				335	24	95.8%	29.0	4.1	70.9	8.5	F
20 Southbound I-15: Cajalco Rd Off-ramp to On-ramp	Basic	6,052	51	94.0%							24.3	1.2	81.2	2.5	F
21 Southbound I-15: Cajalco Rd On-ramp	Merge	6,031	56	93.7%	620	39	99.7%				30.7	1.0	61.4	1.2	F
22 Southbound I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	6,627	51	93.9%							53.7	6.2	41.8	5.4	E
23 Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	6,618	59	93.7%				766	60	98.2%	53.8	7.1	42.2	6.2	E
24 Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	5,856	56	93.3%							65.0	1.2	30.3	0.5	D
25 Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	5,854	50	93.2%	411	34	107.6%				63.5	6.3	26.1	2.9	D
26 Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp	Basic	6,244	59	93.7%							65.9	0.8	32.2	0.6	D
27 Southbound I-15: Temescal Canyon Rd Off-ramp	Diverge	6,237	64	93.6%				555	38	98.5%	57.7	7.4	36.7	3.9	E
28 Southbound I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	5,679	67	93.1%							65.6	1.8	29.5	0.9	D
29 Southbound I-15: Temescal Canyon Rd On-ramp	Merge	5,681	67	93.2%	393	40	104.2%				66.2	0.7	24.2	1.0	C
30 Southbound I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	6,047	70	93.4%							65.8	0.8	31.5	1.1	D
31 Southbound I-15: Indian Truck Trail Off-ramp	Diverge	6,017	70	92.9%				553	55	96.1%	56.0	5.8	37.1	3.3	E
32 Southbound I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	5,445	77	92.3%							66.0	0.5	27.8	1.4	D
33 Southbound I-15: Indian Truck Trail On-ramp	Merge	5,445	77	92.3%	191	28	103.1%				64.6	6.3	23.0	2.2	C
34 Southbound I-15: Indian Truck Trail On-ramp to Lake St Off-ramp	Basic	5,623	62	92.4%							66.8	0.1	28.8	0.7	D
35 Southbound I-15: Lake St Off-ramp	Diverge	5,627	72	92.5%				564	43	92.8%	60.9	4.6	31.9	2.5	D
36 Southbound I-15: Lake St Off-ramp to On-ramp	Basic	5,057	75	92.3%							67.1	0.8	25.7	1.4	C
37 Southbound I-15: Lake St On-ramp	Merge	5,063	76	92.4%	198	40	106.6%				68.0	0.2	20.2	1.0	C
38 Southbound I-15: Lake St On-ramp to Nichols Rd Off-ramp	Basic	5,262	78	92.9%							67.0	0.1	27.0	1.2	D
39 Southbound I-15: Nichols Rd Off-ramp	Diverge	5,256	65	92.8%				263	42	103.6%	66.1	1.7	27.5	0.6	D
40 Southbound I-15: Nichols Rd Off-ramp to On-ramp	Basic	4,994	59	92.3%							67.2	0.4	25.4	0.9	C
41 Southbound I-15: Nichols Rd On-ramp	Merge	4,992	57	92.3%	296	23	107.2%				66.5	0.4	21.9	0.9	C
42 Southbound I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp	Basic	5,278	64	92.8%							66.7	0.5	26.9	1.2	D
43 Southbound I-15: Central Ave (SR-74) Off-ramp	Diverge	5,286	67	93.0%				697	58	94.0%	62.9	3.2	29.3	1.8	D
44 Southbound I-15: Central Ave (SR-74) Off-ramp to On-ramp	Basic	4,583	56	92.7%							67.3	0.6	23.2	0.9	C
45 Southbound I-15: Central Ave (SR-74) On-ramp	Merge	4,579	49	92.6%	1,053	50	100.0%				64.5	3.7	24.2	1.6	C
46 Southbound I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp	Basic	5,652	59	94.3%							64.0	0.7	30.0	0.8	D
47 Southbound I-15: Main St Off-ramp	Diverge	5,652	55	94.3%				237	32	94.2%	65.1	1.5	29.8	1.1	D
48 Southbound I-15: Main St Off-ramp to On-ramp	Basic	5,422	55	94.4%							67.2	0.2	27.4	0.8	D
49 Southbound I-15: Main St On-ramp	Merge	5,424	56	94.4%	397	46	104.7%				67.2	0.2	23.9	0.9	C
50 Southbound I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp	Basic	5,826	66	95.1%							66.4	0.2	29.6	1.3	D

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 1 - Southbound I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

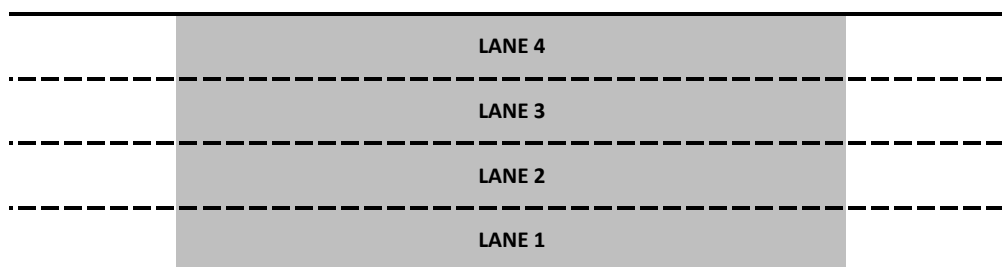
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,538	9	65.0	0.2	24.6	0.5	C
3	1,971	21	65.1	0.1	27.4	0.9	D
2	2,006	21	64.8	0.2	26.9	0.7	D
1	534	13	64.5	0.1	20.9	0.4	C
Area	6,049	64	64.9	0.0	25.0	0.6	C
Total	6,049	64	64.9	0.0	25.0	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,134	6,049	64	98.6%	6,801
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 2 - Southbound I-15: Hidden Valley Pkwy On-ramp

Segment Type - Merge

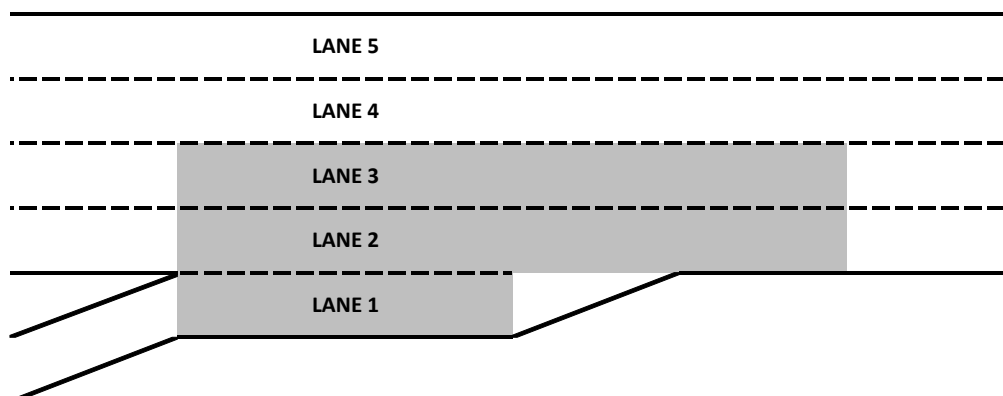
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,362	18	63.0	9.3	29.0	6.3	D
4	2,182	18	61.2	8.5	41.9	6.1	E
3	1,989	18	60.6	8.7	31.5	5.1	D
2	518	12	63.9	4.4	11.5	2.4	B
1	529	69	22.6	0.5	0.9	0.2	A
Area	3,036	99	61.6	6.8	17.8	3.0	B
Total	6,580	135	61.9	7.9	25.7	4.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	529	69	1		
Total	529	69	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,134	6,051	66	98.6%	1,704
On-ramp	545	529	69	97.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 3 - Southbound I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp

Segment Type - Basic

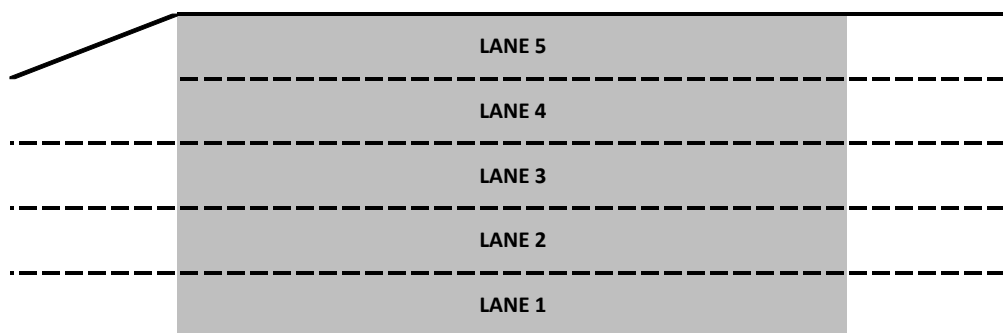
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	752	58	66.3	4.4	13.1	3.8	B
4	1,825	34	65.2	3.4	30.0	0.8	D
3	2,073	28	61.7	3.7	34.9	0.6	D
2	1,160	29	64.7	3.0	16.7	0.7	B
1	763	24	67.7	2.0	12.6	1.5	B
Area	6,572	173	64.5	3.3	21.4	1.2	C
Total	6,572	173	64.5	3.3	21.4	1.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,679	6,572	173	98.4%	1,019
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 4 - Southbound I-15: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,007	41	69.6	1.3	16.1	2.0	B
4	1,821	16	67.0	0.6	29.5	0.6	D
3	1,913	32	65.4	0.6	29.2	1.2	D
2	984	17	67.9	0.2	14.0	0.6	B
1	844	13	69.0	0.6	13.6	0.6	B
Area	6,570	118	67.3	0.5	20.5	0.3	C
Total	6,570	118	67.3	0.5	20.5	0.3	C

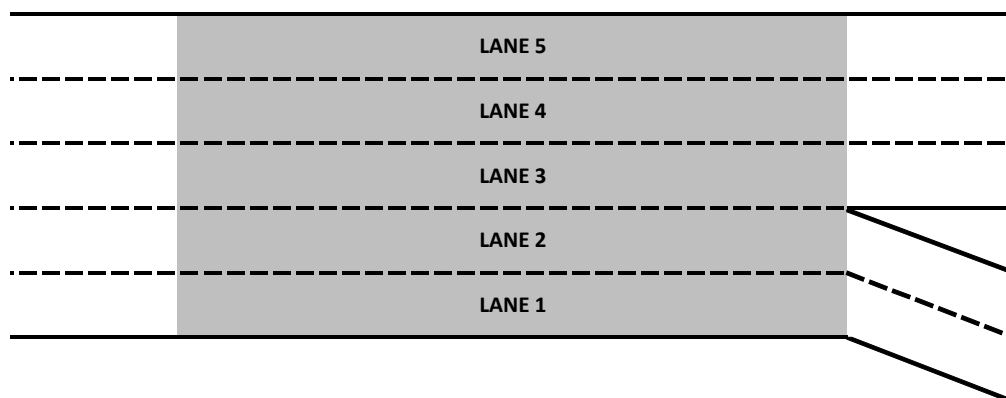
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	921	45
1	872	35
Total	1,792	51

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,679	6,570	118	98.4%	1,499
On-ramp					
Off-ramp	1,818	1,792	51	98.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 5 - Southbound I-15: EB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,100	29	69.4	0.9	17.0	1.7	B
2	1,863	14	65.5	2.3	24.7	0.8	C
1	1,810	34	63.0	1.5	33.8	1.1	D
Area	3,673	48	64.1	1.8	29.2	0.8	D
Total	4,774	77	65.3	1.5	25.1	0.8	C

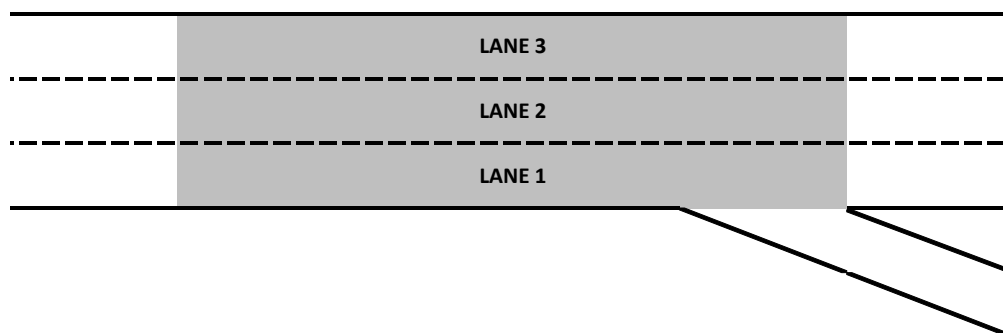
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,074	72
Total	1,074	72

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,861	4,774	77	98.2%	1,548
On-ramp					
Off-ramp	1,096	1,074	72	98.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 6 - Southbound I-15: EB SR-91 Off-ramp to On-ramp

Segment Type - Basic

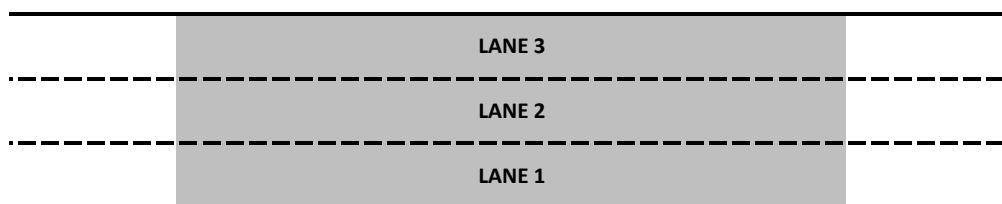
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,106	22	69.6	0.9	17.3	1.3	B
2	1,123	25	67.4	0.7	19.6	1.2	C
1	1,469	20	66.6	1.0	20.1	1.2	C
Area	3,697	67	67.8	0.8	19.0	0.9	C
Total	3,697	67	67.8	0.8	19.0	0.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,765	3,697	67	98.2%	1,546
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 7 - Southbound I-15: EB SR-91 On-ramp

Segment Type - Merge

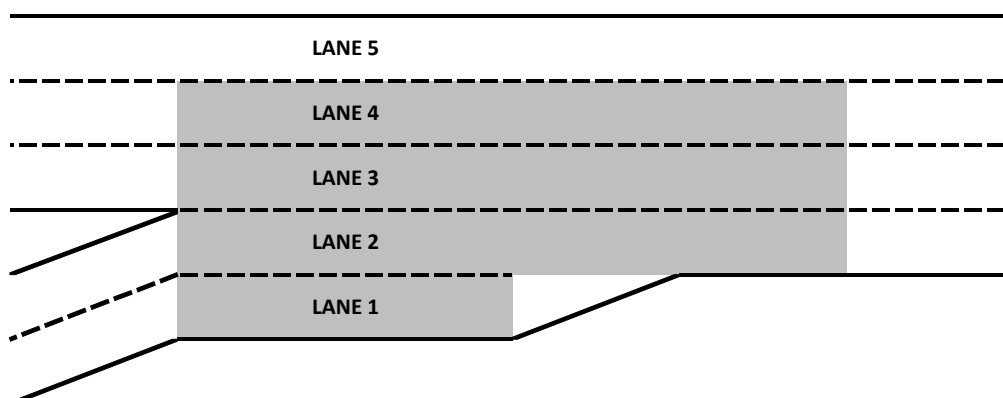
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,102	19	69.9	0.6	16.6	1.1	B
4	1,114	26	68.1	0.3	18.5	0.2	C
3	1,479	19	65.8	0.3	22.6	0.8	C
2	836	39	61.9	0.6	27.9	1.2	D
1	983	35	34.0	0.4	2.2	0.0	A
Area	4,412	119	64.7	0.4	19.7	0.6	C
Total	5,514	138	65.8	0.4	19.0	0.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2	836	39	2		
1	983	35	1		
Total	1,819	67	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,765	3,696	71	98.2%	1,370
On-ramp	1,827	1,819	67	99.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 8 - Southbound I-15: WB SR-91 On-ramp

Segment Type - Weave

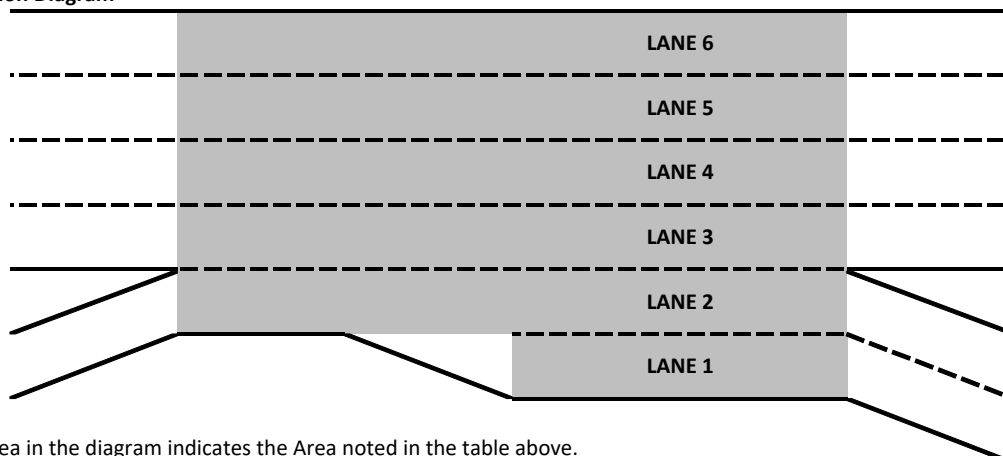
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6			69.6	0.5	17.9	0.8	B
5	1,176	23	68.4	0.2	20.7	0.2	C
4	1,285	24	67.6	0.2	20.9	0.9	C
3	1,247	16	67.0	0.3	21.3	0.9	C
2	1,805	22	54.5	0.4	11.3	0.4	B
1	874	60	34.5	0.4	1.8	0.1	A
Area	6,387	145	68.1	0.2	17.7	0.2	B
Total	6,387	145	68.1	0.2	17.7	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2	966	42
1	874	60	1	352	43
Total	874	60	Total	1,318	61

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,592	5,513	85	98.6%	2,546
On-ramp	873	874	60	100.1%	
Off-ramp	1,305	1,318	61	101.0%	

Lane Configuration Diagram



Location 9 - Southbound I-15: Magnolia Ave Off-ramp to On-ramp

Segment Type - Basic

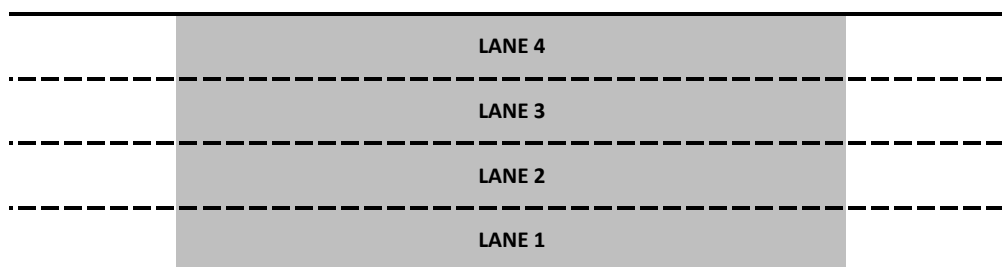
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,266	23	46.6	19.4	33.1	13.4	D
3	1,340	18	41.0	23.4	37.6	15.9	E
2	1,286	17	40.5	23.8	36.5	16.1	E
1	1,180	18	45.4	20.4	30.4	12.6	D
Area	5,072	75	43.5	21.5	33.8	13.9	D
Total	5,072	75	43.5	21.5	33.8	13.9	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,160	5,072	75	98.3%	2,362
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 10 - Southbound I-15: Magnolia Ave On-ramp

Segment Type - Merge

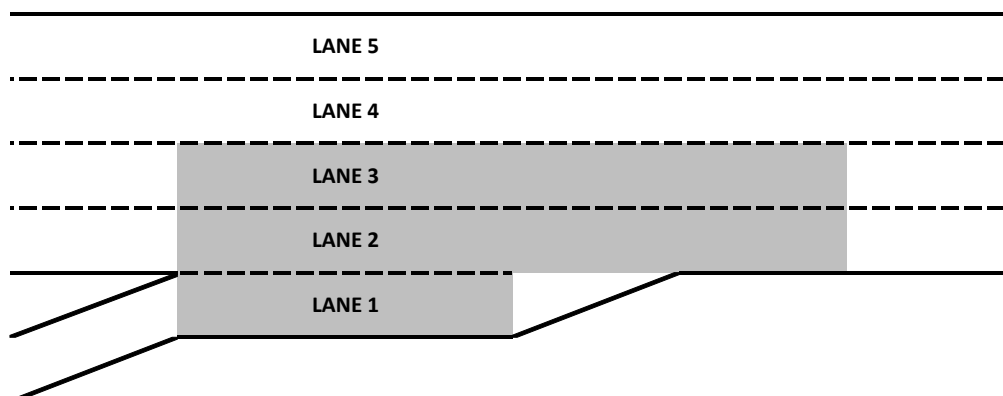
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,421	54	26.2	20.1	87.5	36.0	F
4	1,406	101	20.0	22.6	109.6	42.7	F
3	1,344	80	18.2	22.3	110.0	45.6	F
2	845	119	26.2	20.8	53.0	27.7	F
1	639	48	21.2	4.7	4.4	2.3	A
Area	2,828	246	23.0	20.3	53.7	22.7	F
Total	5,655	402	23.4	20.9	69.6	27.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	639	48	1		
Total	639	48	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,160	5,015	354	97.2%	1,504
On-ramp	648	639	48	98.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 11 - Southbound I-15: EB SR-91 Express Lane On-ramp (Left)

Segment Type - Basic

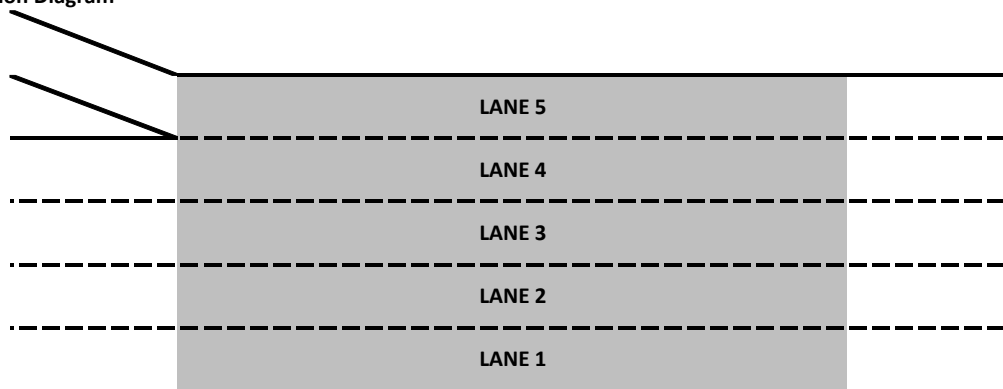
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,821	49	23.9	1.3	60.0	4.0	F
4	1,712	81	22.7	2.8	63.8	4.8	F
3	1,483	89	20.5	2.7	66.0	5.4	F
2	561	82	17.9	3.5	71.7	7.4	F
1	836	45	33.8	14.4	19.1	7.9	C
Area	6,412	346	22.4	3.0	54.6	6.0	F
Total	6,412	346	22.4	3.0	54.6	6.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	836	45	1		
Total	836	45	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,808	5,576	301	96.0%	1,498
On-ramp	819	836	45	102.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 12 - Southbound I-15: EB SR-91 Express Lane On-ramp to Ontario Ave Off-ramp

Segment Type - Basic

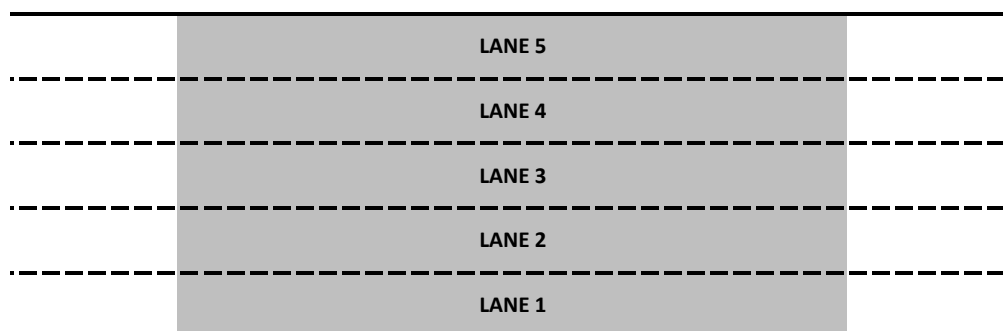
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,479	18	20.4	0.8	70.8	1.9	F
4	1,478	17	19.4	1.7	71.7	3.0	F
3	1,358	33	18.1	1.5	69.2	4.1	F
2	1,387	31	18.4	2.0	68.0	3.5	F
1	648	24	40.5	7.0	17.6	3.8	B
Area	6,351	122	21.6	1.6	55.9	3.2	F
Total	6,351	122	21.6	1.6	55.9	3.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,627	6,351	122	95.8%	980
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 13 - Southbound I-15: Ontario Ave Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,493	23	20.8	0.8	71.0	2.1	F
4	1,474	16	19.2	1.4	73.0	2.7	F
3	1,315	31	15.5	1.4	75.2	4.4	F
2	1,362	32	18.7	1.5	68.7	2.7	F
1	699	23	37.3	16.1	23.7	12.6	C
Area	6,342	125	20.9	2.3	58.3	6.0	F
Total	6,342	125	20.9	2.3	58.3	6.0	F

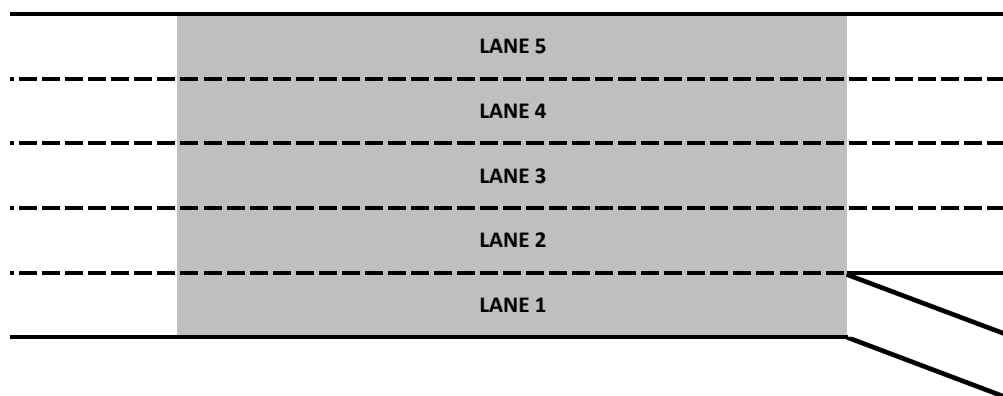
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	736	59
Total	736	59

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,627	6,342	125	95.7%	1,499
On-ramp					
Off-ramp	787	736	59	93.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 14 - Southbound I-15: Ontario Ave Off-ramp to On-ramp

Segment Type - Basic

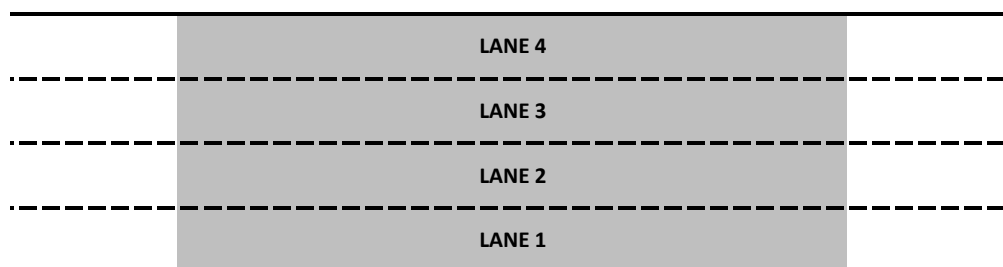
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,800	15	26.9	1.2	63.1	1.4	F
3	1,739	15	24.6	1.7	65.8	1.9	F
2	1,558	25	20.4	1.7	69.6	2.6	F
1	448	15	24.9	0.9	23.3	2.1	C
Area	5,546	71	24.3	1.4	54.8	1.7	F
Total	5,546	71	24.3	1.4	54.8	1.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,840	5,546	71	95.0%	2,819
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 15 - Southbound I-15: Ontario Ave On-ramp

Segment Type - Merge

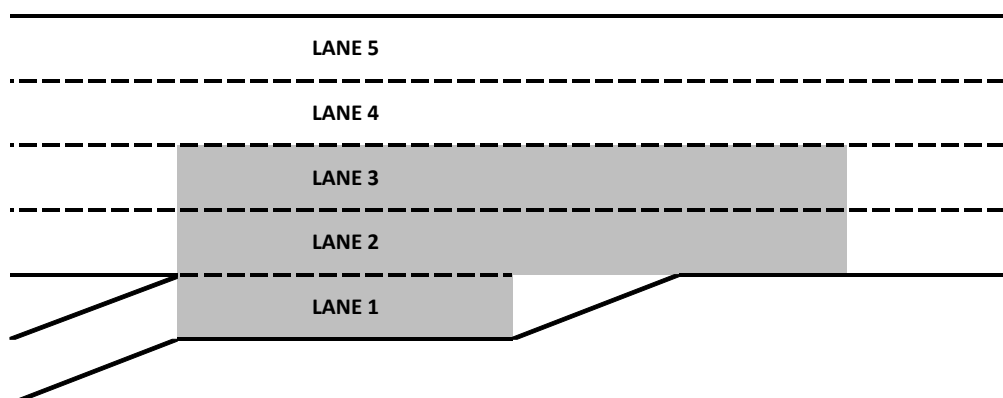
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,836	14	20.1	0.8	93.0	2.4	F
4	1,758	16	18.0	1.0	102.2	2.6	F
3	1,644	23	16.9	1.3	93.4	3.9	F
2	301	12	34.1	3.0	20.5	3.1	C
1	687	58	28.4	0.2	1.3	0.1	A
Area	2,632	92	23.1	1.3	39.1	1.8	E
Total	6,226	123	20.6	0.9	63.5	2.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	687	58	1		
Total	687	58	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,840	5,539	65	94.8%	1,498
On-ramp	669	687	58	102.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 16 - Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Basic

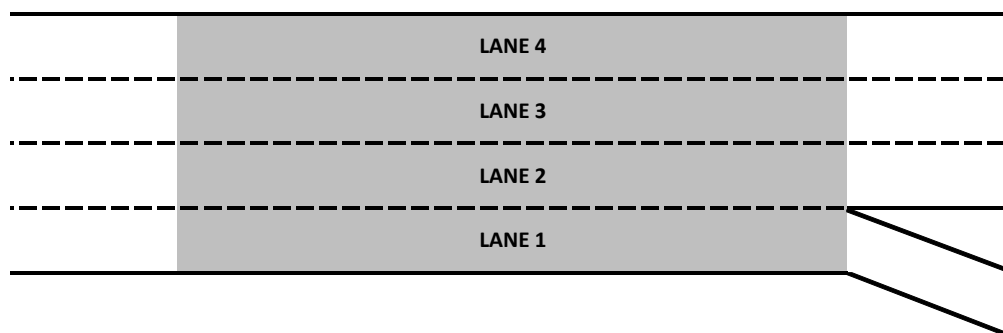
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,997	13	19.5	0.8	100.0	2.9	F
3	1,966	23	19.8	1.2	98.9	3.7	F
2	1,788	22	18.5	0.9	92.5	2.8	F
1	453	10	45.9	5.3	8.9	1.6	A
Area	6,204	67	21.0	0.9	71.5	2.2	F
Total	6,204	67	21.0	0.9	71.5	2.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	394	34
Total			Total	394	34

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,509	6,204	67	95.3%	738
On-ramp					
Off-ramp	401	394	34	98.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 17 - Southbound I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp

Segment Type - Basic

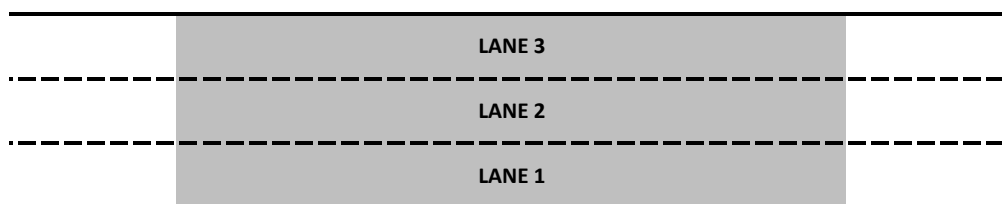
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,037	14	28.8	1.3	68.7	1.9	F
2	1,965	15	27.4	1.9	69.8	2.3	F
1	1,793	20	25.9	0.9	66.2	1.2	F
Area	5,796	49	27.5	1.1	68.1	1.5	F
Total	5,796	49	27.5	1.1	68.1	1.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,108	5,796	49	94.9%	2,229
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 18 - Southbound I-15: Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Merge

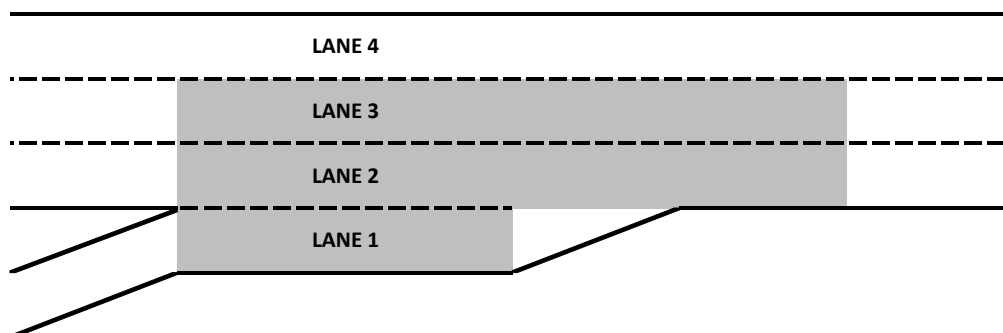
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,065	10	30.2	3.4	71.4	6.5	F
3	1,962	23	28.3	3.3	76.7	6.3	F
2	1,756	21	25.1	2.9	75.0	5.2	F
1	676	41	12.3	1.1	4.9	0.9	A
Area	4,393	85	26.4	2.8	63.7	4.8	F
Total	6,459	95	27.6	3.0	65.7	5.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	676	41	1		
Total	676	41	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,108	5,782	54	94.7%	1,346
On-ramp	679	676	41	99.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 19 - Southbound I-15: Cajalco Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,261	16	28.9	3.8	75.5	8.2	F
2	2,122	19	29.5	4.5	72.5	8.9	F
1	2,061	16	28.6	4.0	69.4	8.1	F
Area	4,183	36	29.1	4.3	70.9	8.5	F
Total	6,444	52	29.0	4.1	72.5	8.4	F

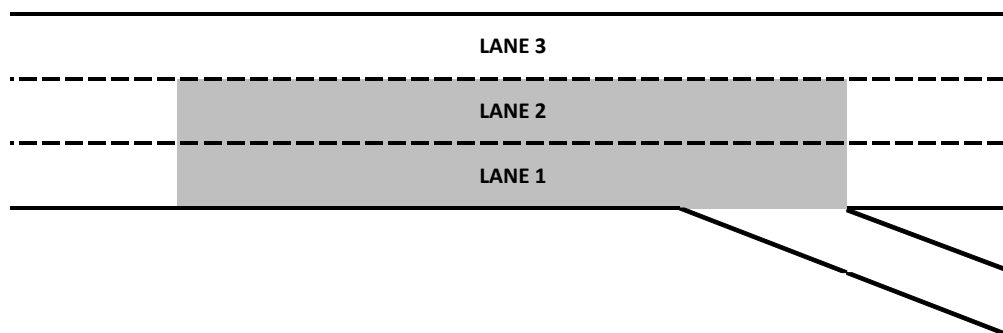
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	335	24
Total	335	24

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,787	6,444	52	94.9%	1,348
On-ramp					
Off-ramp	350	335	24	95.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 20 - Southbound I-15: Cajalco Rd Off-ramp to On-ramp

Segment Type - Basic

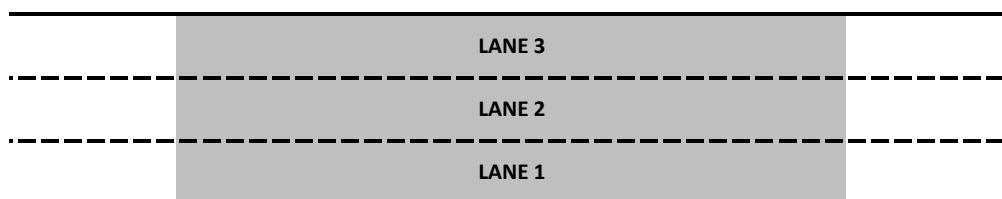
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,171	19	25.4	0.8	82.5	2.2	F
2	2,034	14	24.1	1.4	83.1	3.1	F
1	1,847	19	23.2	1.8	78.3	3.2	F
Area	6,052	51	24.3	1.2	81.2	2.5	F
Total	6,052	51	24.3	1.2	81.2	2.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,437	6,052	51	94.0%	1,482
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 21 - Southbound I-15: Cajalco Rd On-ramp

Segment Type - Merge

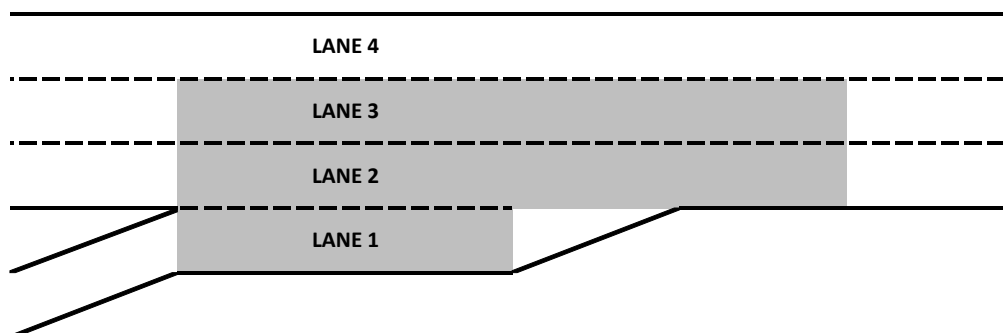
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,151	12	33.6	1.0	68.7	1.6	F
3	2,003	16	31.3	1.0	74.1	1.2	F
2	1,877	27	28.8	1.4	71.9	2.2	F
1	620	39	13.6	1.9	6.9	1.6	A
Area	4,500	82	29.2	1.1	61.4	1.2	F
Total	6,651	94	30.7	1.0	63.2	1.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	620	39	1		
Total	620	39	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,437	6,031	56	93.7%	1,499
On-ramp	622	620	39	99.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 22 - Southbound I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

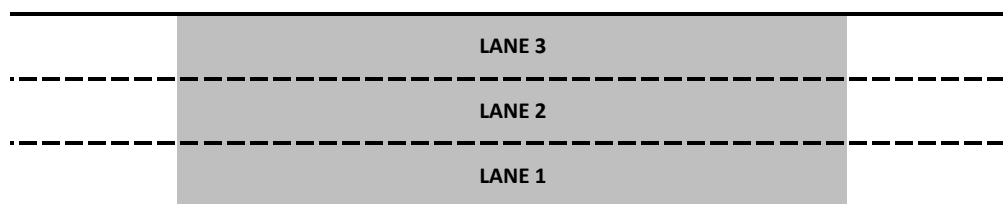
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,232	15	56.2	6.3	41.2	5.0	E
2	2,263	18	53.4	6.2	42.7	5.8	E
1	2,132	19	51.4	6.3	41.6	5.3	E
Area	6,627	51	53.7	6.2	41.8	5.4	E
Total	6,627	51	53.7	6.2	41.8	5.4	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,059	6,627	51	93.9%	2,055
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 23 - Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

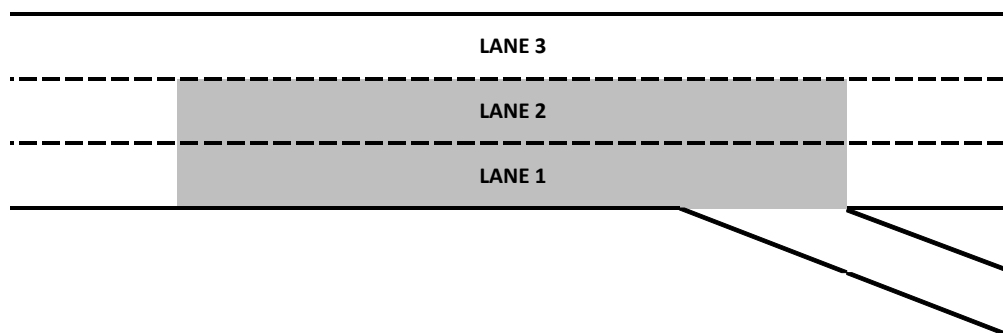
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,285	13	57.1	7.0	41.1	5.4	E
2	2,232	21	53.4	7.8	40.4	6.3	E
1	2,101	25	50.7	6.9	44.1	6.1	E
Area	4,333	46	52.0	7.3	42.2	6.2	E
Total	6,618	59	53.8	7.1	41.8	5.9	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	766	60
Total			Total	766	60

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,059	6,618	59	93.7%	1,498
On-ramp					
Off-ramp	780	766	60	98.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 24 - Southbound I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

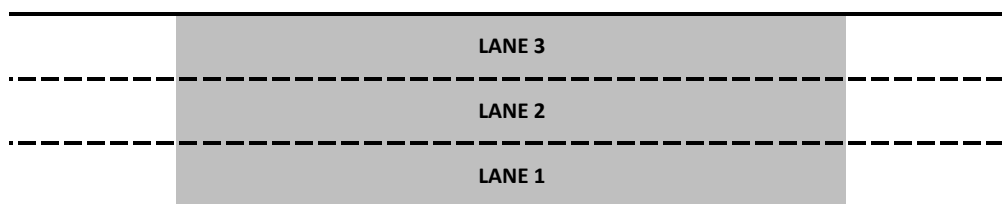
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,172	15	65.7	0.6	33.5	0.7	D
2	1,988	20	65.0	1.3	30.8	0.4	D
1	1,696	21	64.2	1.9	26.7	1.0	D
Area	5,856	56	65.0	1.2	30.3	0.5	D
Total	5,856	56	65.0	1.2	30.3	0.5	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,279	5,856	56	93.3%	2,237
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 25 - Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

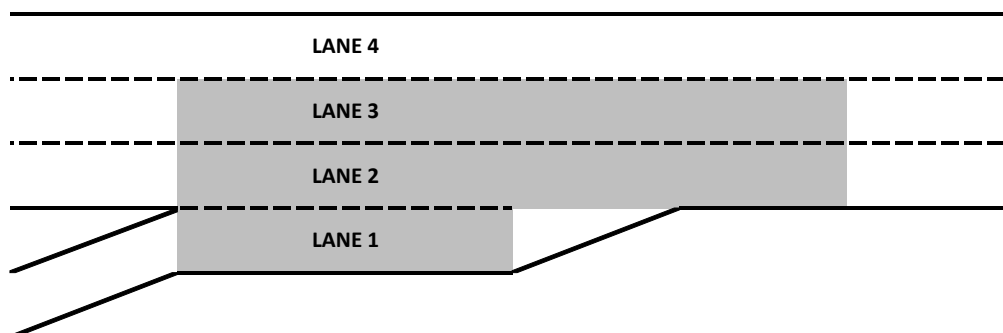
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,109	17	64.9	6.1	33.8	3.4	D
3	1,998	19	63.7	6.0	37.3	3.7	E
2	1,747	14	61.7	7.2	28.2	3.6	D
1	411	34	27.2	1.1	1.7	0.3	A
Area	4,156	68	62.7	6.4	26.1	2.9	D
Total	6,266	85	63.5	6.3	28.2	3.1	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	411	34	1		
Total	411	34	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,279	5,854	50	93.2%	1,502
On-ramp	382	411	34	107.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 26 - Southbound I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

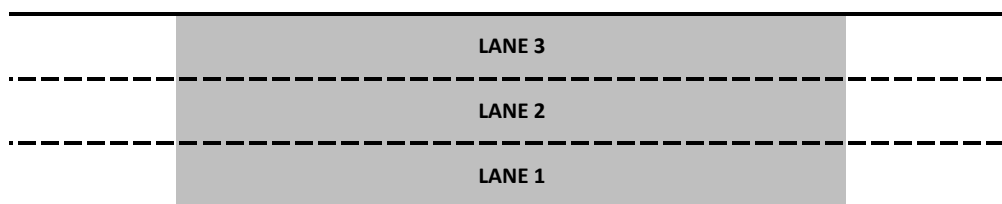
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,165	21	66.1	0.6	33.1	1.0	D
2	2,111	22	65.8	0.8	32.9	0.6	D
1	1,968	16	65.7	0.9	30.5	0.7	D
Area	6,244	59	65.9	0.8	32.2	0.6	D
Total	6,244	59	65.9	0.8	32.2	0.6	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,661	6,244	59	93.7%	7,458
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 27 - Southbound I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,045	22	59.2	6.6	35.0	4.1	E
2	1,987	17	57.0	8.5	35.3	4.3	E
1	2,205	25	56.9	7.4	38.1	3.6	E
Area	4,192	42	57.0	7.8	36.7	3.9	E
Total	6,237	64	57.7	7.4	36.1	3.9	E

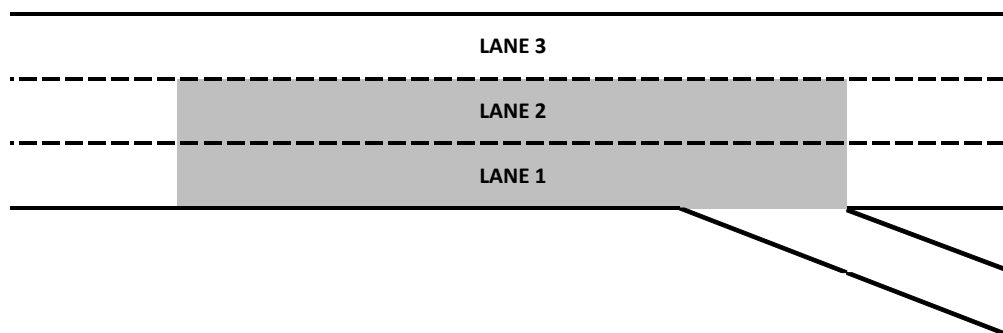
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	555	38
Total	555	38

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,661	6,237	64	93.6%	1,502
On-ramp					
Off-ramp	563	555	38	98.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 28 - Southbound I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

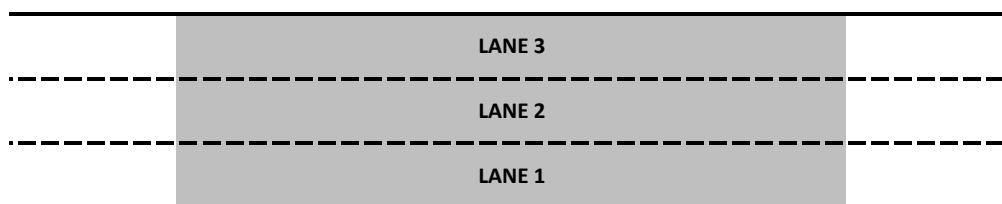
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,978	22	65.7	1.4	31.2	1.3	D
2	1,950	21	65.7	1.9	30.2	0.7	D
1	1,751	24	65.4	2.3	26.9	1.1	D
Area	5,679	67	65.6	1.8	29.5	0.9	D
Total	5,679	67	65.6	1.8	29.5	0.9	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,098	5,679	67	93.1%	2,526
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 29 - Southbound I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

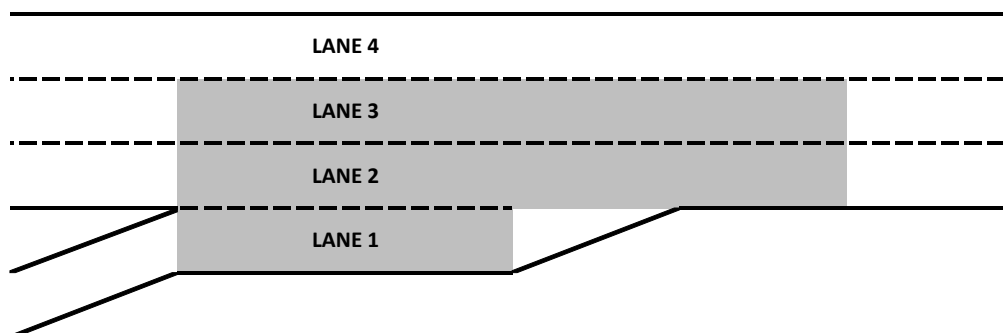
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,959	23	67.4	0.4	31.0	1.6	D
3	1,942	18	66.5	0.6	35.4	2.0	E
2	1,781	25	65.1	1.4	26.6	1.0	D
1	393	40	29.9	1.2	1.6	0.2	A
Area	4,115	84	65.6	0.9	24.2	1.0	C
Total	6,074	107	66.2	0.7	26.1	1.1	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	393	40	1		
Total	393	40	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,098	5,681	67	93.2%	1,502
On-ramp	377	393	40	104.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 30 - Southbound I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

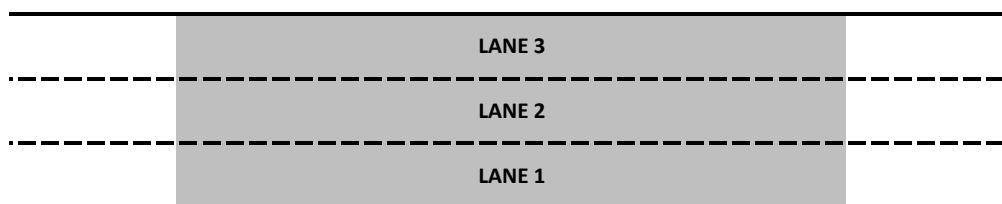
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,034	20	65.9	0.7	31.7	1.2	D
2	2,057	27	65.6	0.8	32.5	1.2	D
1	1,955	23	65.8	1.0	30.3	1.1	D
Area	6,047	70	65.8	0.8	31.5	1.1	D
Total	6,047	70	65.8	0.8	31.5	1.1	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,475	6,047	70	93.4%	8,913
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 31 - Southbound I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,932	20	57.3	5.8	35.1	3.1	E
2	2,078	22	55.0	6.3	35.7	3.2	E
1	2,007	28	55.6	5.5	38.4	3.5	E
Area	4,085	50	55.3	5.8	37.1	3.3	E
Total	6,017	70	56.0	5.8	36.4	3.2	E

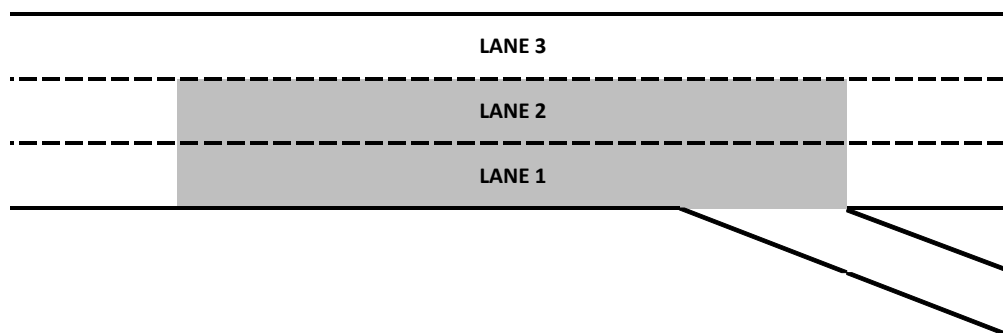
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	553	55
Total	553	55

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,475	6,017	70	92.9%	1,499
On-ramp					
Off-ramp	575	553	55	96.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 32 - Southbound I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

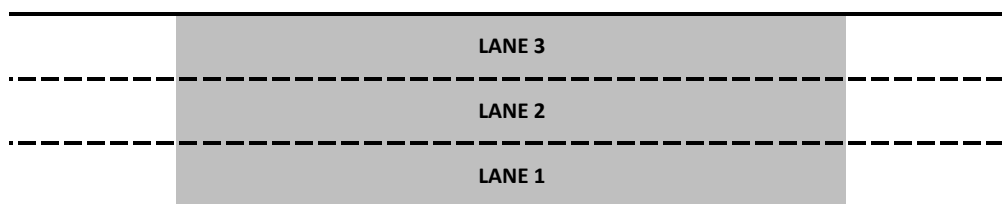
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,879	33	66.0	0.5	29.1	2.0	D
2	1,864	26	66.0	0.5	28.8	1.3	D
1	1,702	18	66.1	1.0	25.5	0.9	C
Area	5,445	77	66.0	0.5	27.8	1.4	D
Total	5,445	77	66.0	0.5	27.8	1.4	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,900	5,445	77	92.3%	3,127
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 33 - Southbound I-15: Indian Truck Trail On-ramp

Segment Type - Merge

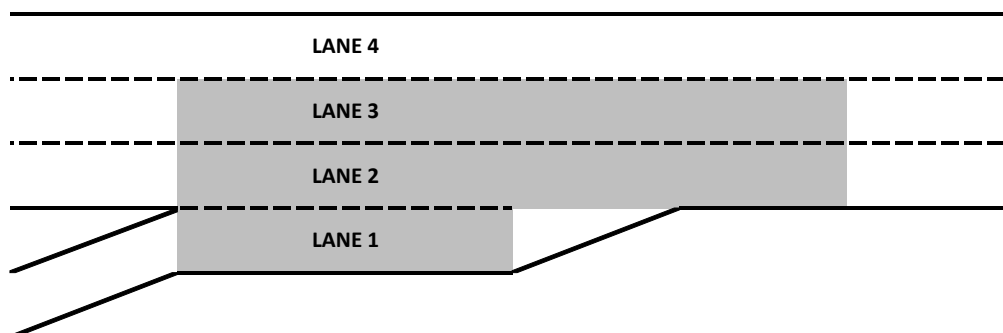
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,852	34	64.8	6.2	29.8	3.3	D
3	1,861	25	64.6	6.5	30.9	2.7	D
2	1,732	18	64.3	6.5	27.4	2.9	D
1	191	28	27.5	0.9	0.5	0.1	A
Area	3,783	71	64.5	6.3	23.0	2.2	C
Total	5,636	105	64.6	6.3	24.9	2.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	191	28	1		
Total	191	28	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,900	5,445	77	92.3%	1,501
On-ramp	185	191	28	103.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 34 - Southbound I-15: Indian Truck Trail On-ramp to Lake St Off-ramp

Segment Type - Basic

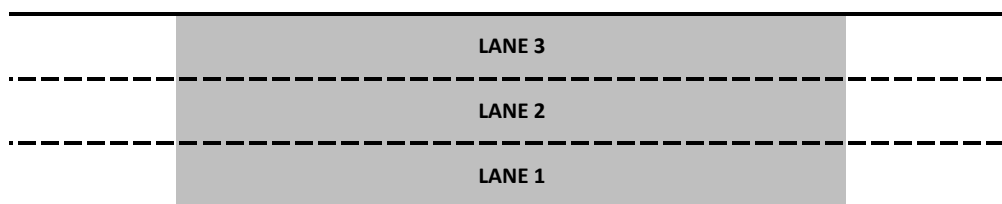
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,888	25	66.7	0.1	28.8	1.1	D
2	1,909	18	66.8	0.2	29.5	0.5	D
1	1,826	19	66.8	0.3	28.1	0.8	D
Area	5,623	62	66.8	0.1	28.8	0.7	D
Total	5,623	62	66.8	0.1	28.8	0.7	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,085	5,623	62	92.4%	13,523
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 35 - Southbound I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,788	24	62.5	4.4	29.5	3.1	D
2	1,956	25	60.0	6.6	30.5	3.1	D
1	1,883	22	60.4	3.3	33.4	2.1	D
Area	3,839	47	60.2	4.7	31.9	2.5	D
Total	5,627	72	60.9	4.6	31.1	2.7	D

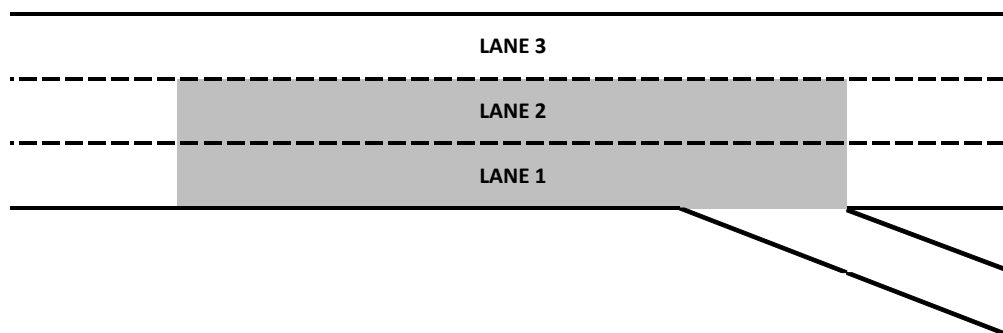
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	564	43
Total	564	43

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,085	5,627	72	92.5%	1,501
On-ramp					
Off-ramp	608	564	43	92.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 36 - Southbound I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

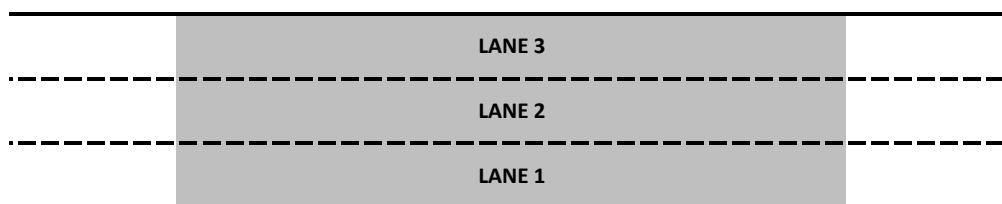
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,753	35	66.8	0.8	26.8	1.9	D
2	1,745	20	67.1	1.0	27.0	1.0	D
1	1,558	21	67.5	0.7	23.4	1.5	C
Area	5,057	75	67.1	0.8	25.7	1.4	C
Total	5,057	75	67.1	0.8	25.7	1.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,477	5,057	75	92.3%	3,287
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 37 - Southbound I-15: Lake St On-ramp

Segment Type - Merge

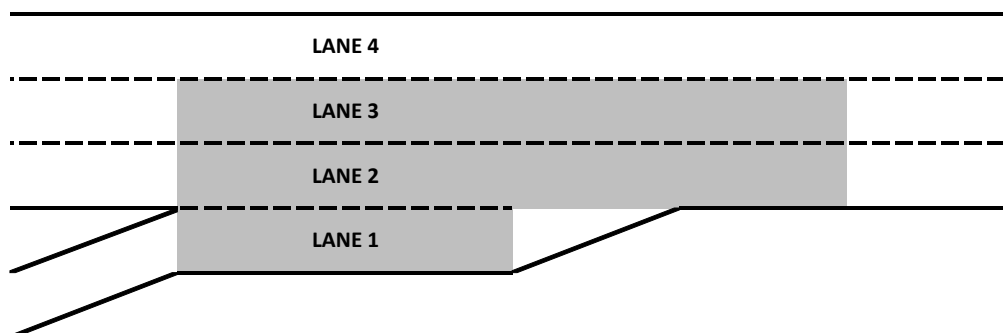
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,719	29	67.8	0.3	25.9	1.7	C
3	1,751	22	67.9	0.2	28.1	1.0	D
2	1,593	25	68.2	0.4	25.0	1.7	C
1	198	40	40.8	0.3	0.4	0.1	A
Area	3,542	87	68.1	0.3	20.2	1.0	C
Total	5,261	116	68.0	0.2	21.7	1.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	198	40	1		
Total	198	40	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,477	5,063	76	92.4%	1,500
On-ramp	186	198	40	106.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 38 - Southbound I-15: Lake St On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

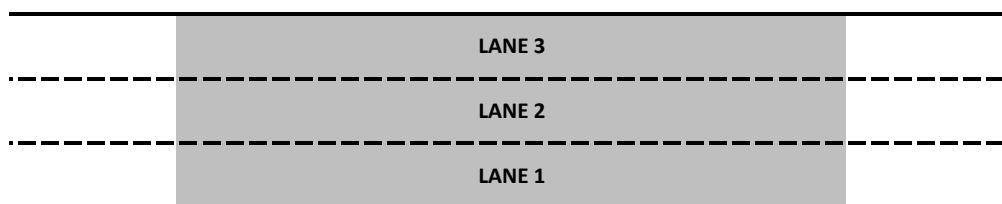
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,745	28	66.8	0.2	26.8	1.7	D
2	1,805	24	67.1	0.1	28.0	0.9	D
1	1,712	26	67.1	0.2	26.2	1.3	D
Area	5,262	78	67.0	0.1	27.0	1.2	D
Total	5,262	78	67.0	0.1	27.0	1.2	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,663	5,262	78	92.9%	8,752
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 39 - Southbound I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,706	25	66.2	1.7	26.5	1.4	D
2	1,817	17	66.4	1.8	27.2	1.0	D
1	1,733	22	65.8	1.6	27.7	0.6	D
Area	3,550	40	66.1	1.7	27.5	0.6	D
Total	5,256	65	66.1	1.7	27.1	0.8	D

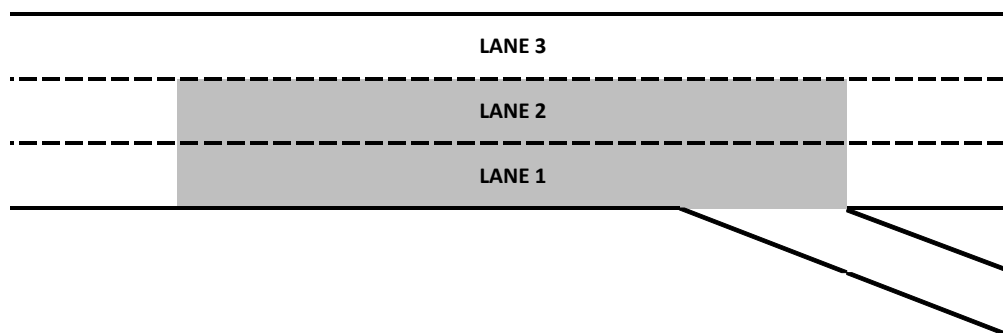
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	263	42
Total	263	42

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,663	5,256	65	92.8%	1,500
On-ramp					
Off-ramp	254	263	42	103.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 40 - Southbound I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

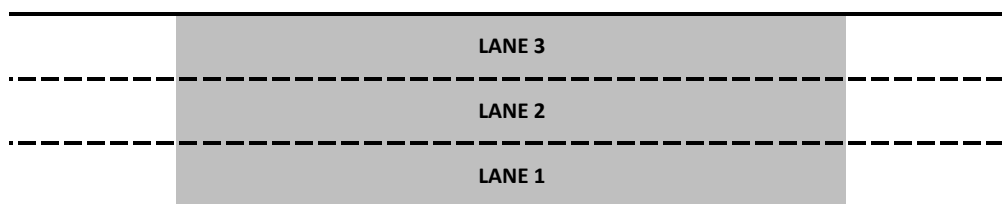
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,691	24	66.9	0.2	25.9	1.4	C
2	1,721	16	67.3	0.5	26.3	0.8	D
1	1,582	19	67.6	0.6	23.9	0.9	C
Area	4,994	59	67.2	0.4	25.4	0.9	C
Total	4,994	59	67.2	0.4	25.4	0.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,409	4,994	59	92.3%	3,058
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 41 - Southbound I-15: Nichols Rd On-ramp

Segment Type - Merge

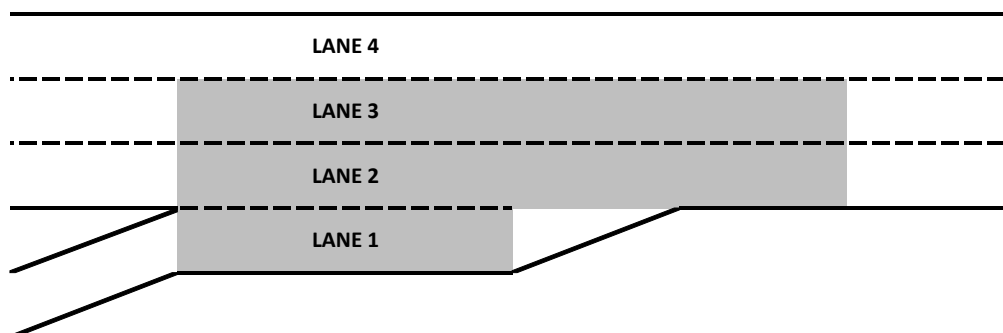
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,675	19	66.9	0.2	25.9	1.2	C
3	1,715	15	66.6	0.5	28.3	0.9	D
2	1,602	22	66.0	0.6	26.4	1.4	D
1	296	23	30.5	0.7	0.7	0.1	A
Area	3,613	61	66.3	0.5	21.9	0.9	C
Total	5,288	80	66.5	0.4	23.0	0.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	296	23	1		
Total	296	23	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,409	4,992	57	92.3%	1,500
On-ramp	276	296	23	107.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 42 - Southbound I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

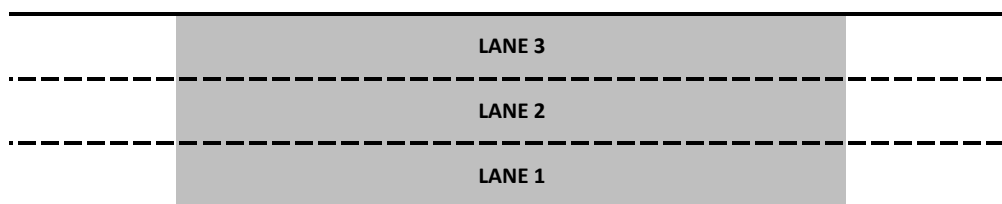
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,601	25	67.2	0.3	25.4	1.6	C
2	1,893	15	66.6	0.6	28.4	0.7	D
1	1,784	24	66.4	0.6	27.0	1.5	D
Area	5,278	64	66.7	0.5	26.9	1.2	D
Total	5,278	64	66.7	0.5	26.9	1.2	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,685	5,278	64	92.8%	2,332
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 43 - Southbound I-15: Central Ave (SR-74) Off-ramp

Segment Type - Diverge

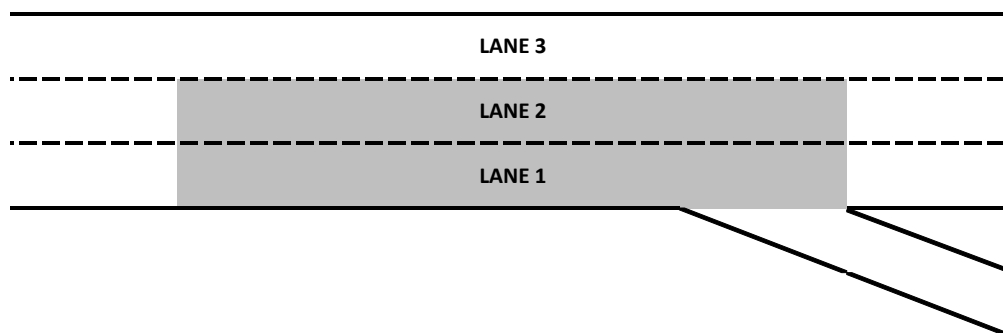
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,637	25	64.2	2.9	25.7	2.2	C
2	1,885	19	63.1	3.8	26.8	1.7	D
1	1,764	22	61.6	3.0	31.7	1.9	D
Area	3,649	41	62.3	3.3	29.3	1.8	D
Total	5,286	67	62.9	3.2	28.1	1.9	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	697	58
Total			Total	697	58

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,685	5,286	67	93.0%	1,498
On-ramp					
Off-ramp	742	697	58	94.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 44 - Southbound I-15: Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

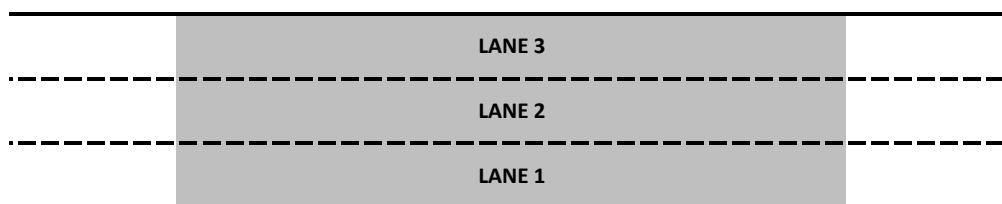
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,618	18	67.2	0.4	25.2	1.0	C
2	1,602	18	67.3	0.7	23.9	0.6	C
1	1,363	20	67.5	0.6	20.6	1.2	C
Area	4,583	56	67.3	0.6	23.2	0.9	C
Total	4,583	56	67.3	0.6	23.2	0.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,943	4,583	56	92.7%	3,037
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 45 - Southbound I-15: Central Ave (SR-74) On-ramp

Segment Type - Merge

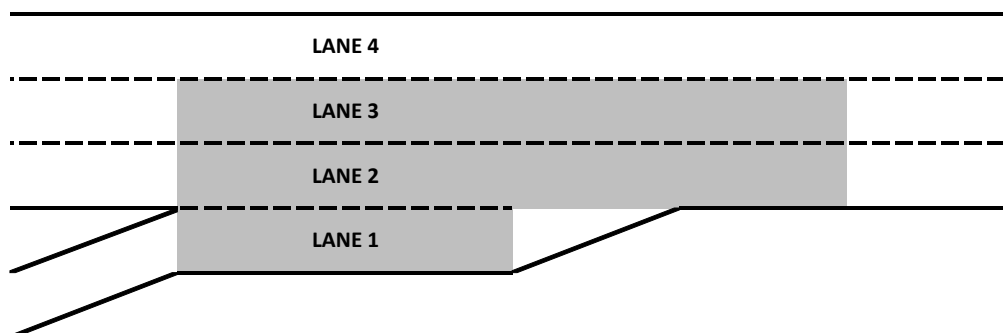
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,587	19	65.3	4.6	25.6	2.2	C
3	1,594	12	64.7	3.6	32.6	2.3	D
2	1,399	19	63.4	3.6	27.9	1.9	D
1	1,053	50	34.2	0.5	2.4	0.2	A
Area	4,045	81	64.1	3.3	24.2	1.6	C
Total	5,632	100	64.5	3.7	24.6	1.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,053	50	1		
Total	1,053	50	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,943	4,579	49	92.6%	1,502
On-ramp	1,053	1,053	50	100.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 46 - Southbound I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp

Segment Type - Basic

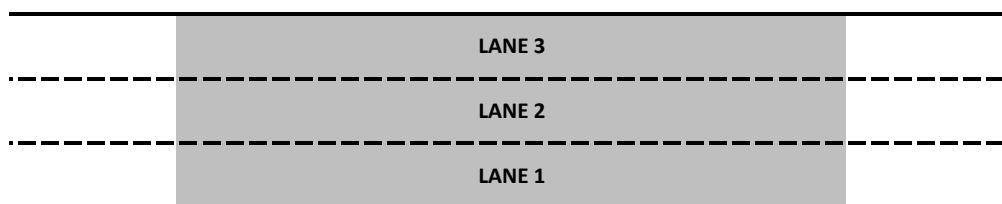
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,818	22	65.1	0.7	28.3	1.4	D
2	1,974	18	63.6	0.8	31.7	0.8	D
1	1,859	18	63.3	1.1	29.9	0.5	D
Area	5,652	59	64.0	0.7	30.0	0.8	D
Total	5,652	59	64.0	0.7	30.0	0.8	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,996	5,652	59	94.3%	890
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 47 - Southbound I-15: Main St Off-ramp

Segment Type - Diverge

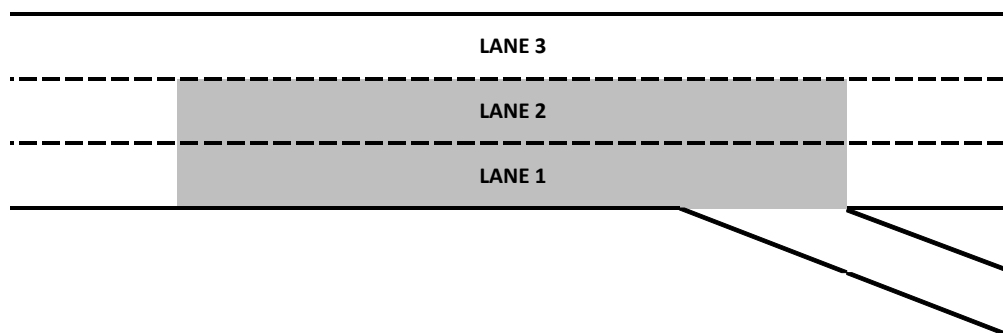
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,853	21	65.9	1.1	28.6	1.2	D
2	1,928	16	65.2	1.7	29.6	1.2	D
1	1,872	18	64.4	1.5	30.1	1.1	D
Area	3,799	34	64.8	1.6	29.8	1.1	D
Total	5,652	55	65.1	1.5	29.4	1.1	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	237	32
Total			Total	237	32

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,996	5,652	55	94.3%	1,498
On-ramp					
Off-ramp	252	237	32	94.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 48 - Southbound I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

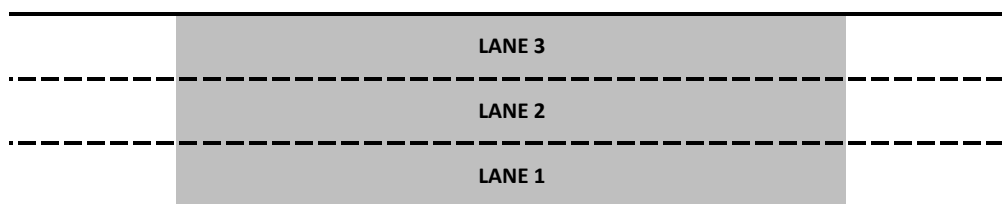
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,850	21	67.1	0.2	28.3	0.9	D
2	1,857	15	67.2	0.3	28.2	0.9	D
1	1,715	19	67.1	0.2	25.8	0.9	C
Area	5,422	55	67.2	0.2	27.4	0.8	D
Total	5,422	55	67.2	0.2	27.4	0.8	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,744	5,422	55	94.4%	3,514
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 49 - Southbound I-15: Main St On-ramp

Segment Type - Merge

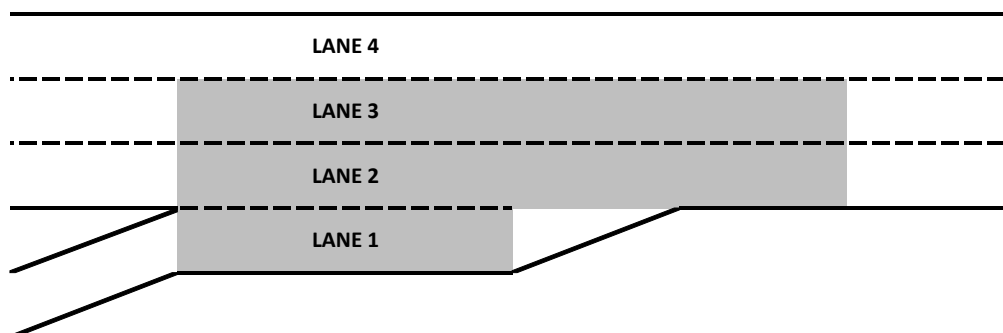
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,830	18	67.6	0.1	28.3	1.3	D
3	1,859	17	67.0	0.4	31.0	1.2	D
2	1,735	20	66.7	0.3	27.6	1.1	D
1	397	46	28.4	0.6	0.8	0.1	A
Area	3,991	84	66.9	0.3	23.9	0.9	C
Total	5,821	102	67.2	0.2	25.2	1.0	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	397	46	1		
Total	397	46	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,744	5,424	56	94.4%	1,500
On-ramp	379	397	46	104.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 50 - Southbound I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp

Segment Type - Basic

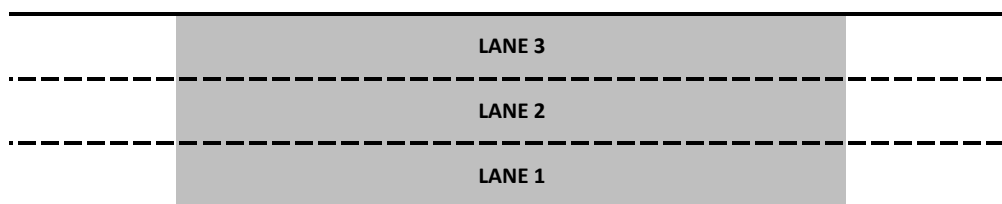
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,950	29	66.6	0.1	29.7	1.7	D
2	1,981	17	66.3	0.3	30.1	1.2	D
1	1,895	20	66.2	0.3	28.9	1.2	D
Area	5,826	66	66.4	0.2	29.6	1.3	D
Total	5,826	66	66.4	0.2	29.6	1.3	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,123	5,826	66	95.1%	3,089
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Existing Conditions
PM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
152 NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	3,645	59	99.3%							69.0	0.1	13.4	0.3	B
151 NB I-15: Hidden Valley Pkwy Off-ramp	Diverge	4,182	73	99.1%				535	50	96.9%	68.3	0.6	17.3	0.2	B
150 NB I-15: EB SR-91 On-ramp	Basic	2,764	57	99.3%	1,417	63	98.5%				68.4	0.4	15.6	0.5	B
149 NB I-15: WB SR-91 On-ramp	Merge	1,904	42	99.0%	857	74	99.6%				67.1	0.5	11.7	0.9	B
148 NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp	Basic	1,905	47	99.0%							68.1	0.4	9.7	0.4	A
147 NB I-15: EB & WB SR-91 Off-ramp	Diverge	5,290	83	98.9%				3,397	72	99.2%	43.1	4.8	33.3	4.2	D
146 NB I-15: Magnolia Ave On-ramp	Merge	4,703	218	98.5%	573	53	99.9%				21.9	1.0	91.1	5.1	F
145 NB I-15: Magnolia Ave Loop On-ramp	Basic	4,119	227	98.2%	580	44	99.5%				22.2	8.6	58.7	21.0	F
144 NB I-15: Magnolia Ave Off-ramp to Loop On-ramp	Basic	4,115	124	98.1%							45.0	28.2	51.1	42.1	F
143 NB I-15: Magnolia Ave Off-ramp	Diverge	4,792	157	98.3%				670	53	98.5%	51.9	22.9	25.5	15.8	C
142 NB I-15: WB SR-91 Express Lane Off-ramp (Left)	Basic	5,210	91	98.4%				422	48	99.8%	59.8	17.9	20.1	10.2	C
141 NB I-15: Ontario Ave On-ramp to WB SR-91 Express Lane Off-ramp	Basic	5,207	75	98.3%							66.8	0.8	16.0	0.6	B
140 NB I-15: Ontario Ave On-ramp	Merge	4,282	65	98.3%	930	64	99.0%				64.8	0.3	9.7	0.4	A
139 NB I-15: Ontario Ave Off-ramp to On-ramp (5 Lanes)	Basic	4,284	62	98.3%							68.3	0.1	12.7	0.2	B
138 NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)	Basic	4,287	53	98.4%							67.3	0.3	16.1	0.2	B
137 NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)	Basic	4,290	45	98.4%							65.7	0.8	22.0	0.4	C
136 NB I-15: Ontario Ave Off-ramp	Diverge	4,756	53	99.0%				468	36	104.5%	64.5	1.2	24.1	0.4	C
135 NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp	Merge	4,406	43	99.2%	352	23	96.2%				65.5	0.5	17.0	0.5	B
134 NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp	Basic	4,408	42	99.3%							66.8	0.6	22.1	0.2	C
133 NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	Diverge	4,647	46	99.2%				246	26	100.0%	64.4	0.9	23.2	0.2	C
132 NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp	Basic	4,652	39	99.3%							59.8	0.3	25.8	0.1	C
131 NB I-15: Cajalco Rd On-ramp	Merge	4,164	45	99.1%	498	22	102.7%				21.3	0.4	66.0	2.5	F
130 NB I-15: Cajalco Rd Off-ramp to On-ramp	Basic	4,177	53	99.4%							22.7	0.8	61.4	1.8	F
129 NB I-15: Cajalco Rd Off-ramp	Diverge	4,381	67	99.9%				189	21	102.7%	27.1	5.9	55.3	10.6	F
128 NB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	3,609	78	100.4%	795	56	100.6%				32.9	24.4	56.4	34.1	F
127 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	3,609	47	100.4%							57.0	14.9	22.8	6.8	C
126 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	3,841	39	100.2%				230	36	96.9%	64.7	1.2	20.2	0.5	C
125 NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	3,838	46	100.2%							67.4	0.1	19.2	0.3	C
124 NB I-15: Temescal Canyon Rd On-ramp	Merge	3,368	44	100.1%	472	19	100.9%				66.0	1.1	16.6	0.3	B
123 NB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	3,368	40	100.1%							68.2	0.2	16.6	0.3	B
122 NB I-15: Temescal Canyon Rd Off-ramp	Diverge	3,578	45	99.7%				226	30	101.3%	67.9	0.2	18.2	0.3	C
121 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	3,579	50	99.8%							68.1	0.2	17.8	0.2	B
120 NB I-15: Indian Truck Trail On-ramp	Merge	3,164	55	98.9%	411	59	105.8%				67.4	0.3	14.9	0.5	B
119 NB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	3,163	56	98.9%							68.1	0.3	15.7	0.5	B
118 NB I-15: Indian Truck Trail Off-ramp	Diverge	3,328	60	99.0%				165	27	100.9%	67.5	0.9	16.7	0.2	B
117 NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp	Basic	3,314	59	98.6%							68.2	0.2	16.5	0.6	B
116 NB I-15: Lake St On-ramp	Merge	2,954	48	98.5%	358	24	98.8%				68.0	0.1	13.7	0.6	B
115 NB I-15: Lake St Off-ramp to On-ramp	Basic	2,950	51	98.3%							68.4	0.1	14.5	0.6	B
114 NB I-15: Lake St Off-ramp	Diverge	3,145	54	98.3%				192	31	96.4%	68.1	0.2	15.9	0.8	B
113 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	3,146	53	98.4%							68.4	0.2	15.5	0.7	B
112 NB I-15: Nichols Rd On-ramp	Merge	2,970	43	98.6%	176	33	94.5%				68.8	0.1	12.4	0.6	B
111 NB I-15: Nichols Rd Off-ramp to On-ramp	Basic	2,972	45	98.6%							68.5	0.1	14.8	0.4	B
110 NB I-15: Nichols Rd Off-ramp	Diverge	3,261	44	98.5%				294	33	98.5%	68.0	0.3	16.9	0.7	B
109 NB I-15: Central Ave (SR-74) On-ramp to Nichols Rd Off-ramp	Basic	3,263	44	98.5%							68.4	0.1	16.3	0.4	B
108 NB I-15: Central Ave (SR-74) On-ramp	Merge	2,727	40	98.6%	536	40	98.4%				68.1	0.2	13.1	0.4	B
107 NB I-15: Central Ave (SR-74) Off-ramp to On-ramp	Basic	2,724	47	98.5%							68.5	0.5	13.7	0.4	B
106 NB I-15: Central Ave (SR-74) Off-ramp	Diverge	3,887	47	99.1%				1,164	62	100.8%	65.5	1.8	22.4	0.3	C
105 NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp	Basic	3,886	46	99.1%							67.4	0.1	20.1	0.5	C
104 NB I-15: Main St On-ramp	Merge	3,745	47	99.0%	146	22	105.9%				67.9	0.1	17.5	0.4	B
103 NB I-15: Main St Off-ramp to On-ramp	Basic	3,747	40	99.0%							67.7	0.6	19.2	0.4	C
102 NB I-15: Main St Off-ramp	Diverge	4,308	41	99.4%				560	49	102.2%	66.5	1.1	23.6	0.6	C
101 NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp	Basic	4,305	36	99.4%							68.3	0.2	22.0	0.1	C

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 152 - NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

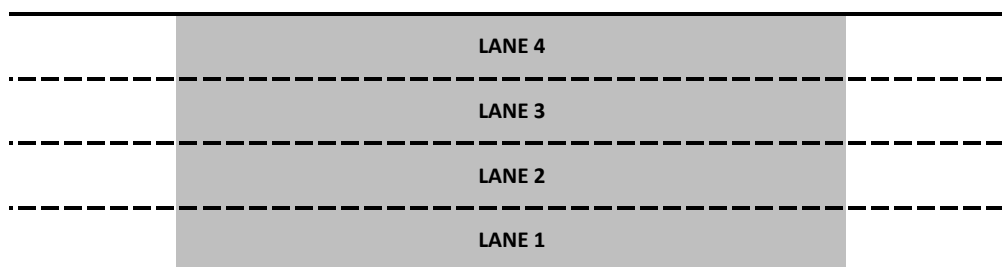
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	885	14	68.7	0.1	13.1	0.2	B
3	987	20	69.3	0.3	14.9	0.9	B
2	923	11	69.7	0.3	13.6	0.3	B
1	850	15	68.2	0.3	12.3	0.6	B
Area	3,645	59	69.0	0.1	13.4	0.3	B
Total	3,645	59	69.0	0.1	13.4	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,670	3,645	59	99.3%	2,796
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 151 - NB I-15: Hidden Valley Pkwy Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	875	16	68.7	0.0	12.7	0.6	B
3	953	20	69.1	0.4	14.5	0.9	B
2	879	16	68.7	1.4	13.5	0.3	B
1	1,475	22	67.0	0.6	21.2	0.2	C
Area	2,354	38	67.7	0.9	17.3	0.2	B
Total	4,182	73	68.3	0.6	15.5	0.4	B

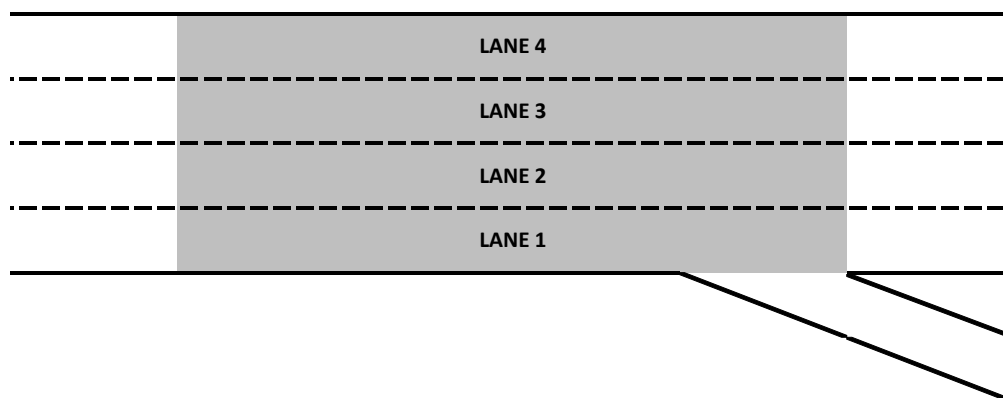
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	535	50
Total	535	50

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,222	4,182	73	99.1%	1,515
On-ramp					
Off-ramp	552	535	50	96.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 150 - NB I-15: EB SR-91 On-ramp

Segment Type - Basic

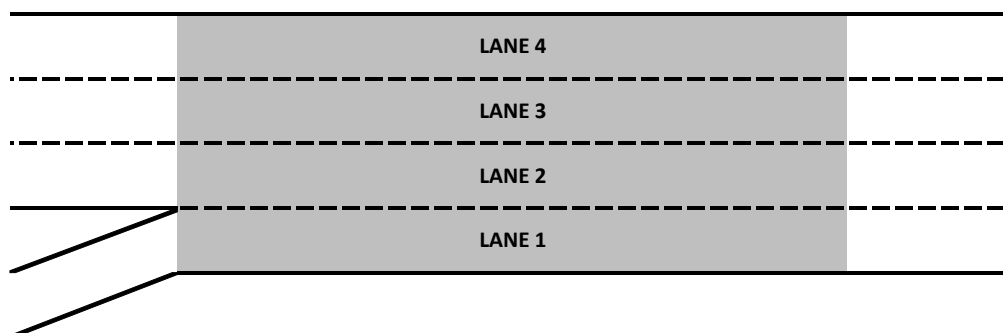
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	874	16	68.8	0.2	12.6	0.8	B
3	917	19	69.1	0.1	14.0	1.0	B
2	972	21	68.5	0.5	15.2	0.3	B
1	1,417	63	67.5	0.8	20.5	0.6	C
Area	4,181	119	68.4	0.4	15.6	0.5	B
Total	4,181	119	68.4	0.4	15.6	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,417	63	1		
Total	1,417	63	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,784	2,764	57	99.3%	1,514
On-ramp	1,438	1,417	63	98.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 149 - NB I-15: WB SR-91 On-ramp

Segment Type - Merge

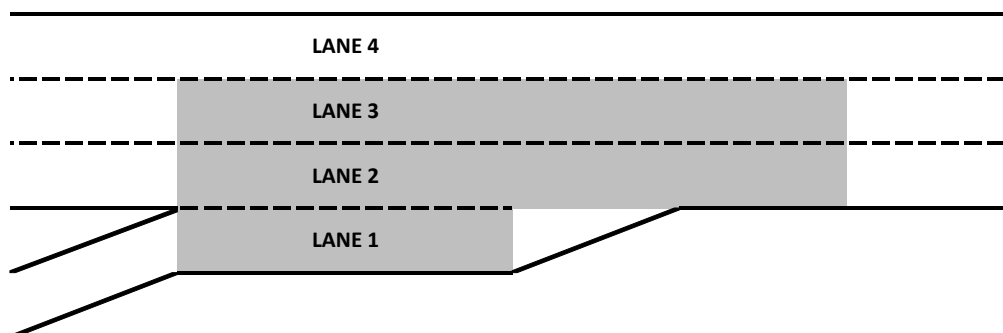
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	770	19	68.7	0.1	12.1	0.3	B
3	771	12	68.5	0.4	14.2	1.0	B
2	363	10	65.5	0.9	14.5	1.2	B
1	857	74	31.2	0.4	1.4	0.2	A
Area	1,991	96	66.3	0.6	11.7	0.9	B
Total	2,761	115	67.1	0.5	11.8	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	857	74	1		
Total	857	74	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,924	1,904	42	99.0%	1,564
On-ramp	860	857	74	99.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 148 - NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp

Segment Type - Basic

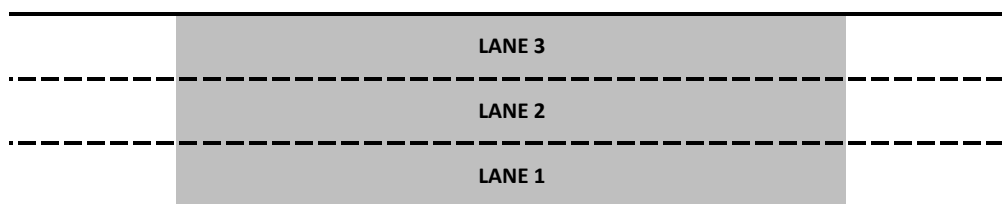
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	903	19	68.2	0.2	13.1	0.3	B
2	700	17	68.1	0.4	11.2	0.7	B
1	301	11	67.9	1.0	4.8	0.5	A
Area	1,905	47	68.1	0.4	9.7	0.4	A
Total	1,905	47	68.1	0.4	9.7	0.4	A

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,924	1,905	47	99.0%	3,530
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 147 - NB I-15: EB & WB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,080	26	58.4	1.8	17.9	1.2	B
3	856	14	48.9	3.9	16.4	0.9	B
2	1,644	18	36.4	6.2	40.4	6.2	E
1	1,710	25	36.1	6.8	45.0	6.8	F
Area	4,210	57	38.9	6.0	33.3	4.2	D
Total	5,290	83	43.1	4.8	28.5	2.6	D

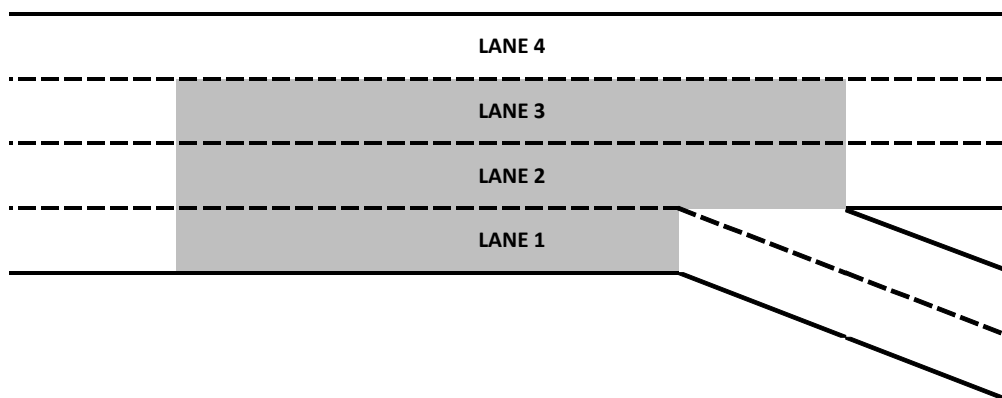
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,448	45
1	1,949	66
Total	3,397	72

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,350	5,290	83	98.9%	1,324
On-ramp					
Off-ramp	3,426	3,397	72	99.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 146 - NB I-15: Magnolia Ave On-ramp

Segment Type - Merge

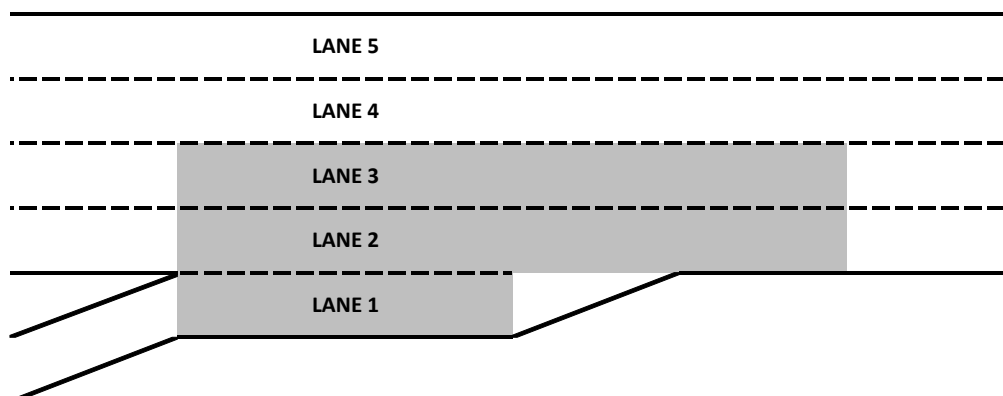
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,027	48	44.5	3.8	26.4	1.6	D
4	1,697	67	19.6	0.3	76.5	0.9	F
3	1,056	39	13.9	0.3	109.2	3.1	F
2	923	64	13.6	0.3	116.0	2.5	F
1	573	53	8.4	1.7	24.6	9.0	C
Area	2,551	156	13.0	0.5	91.1	5.1	F
Total	5,276	271	21.9	1.0	54.0	2.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	573	53	1		
Total	573	53	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,777	4,703	218	98.5%	1,299
On-ramp	573	573	53	99.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 145 - NB I-15: Magnolia Ave Loop On-ramp

Segment Type - Basic

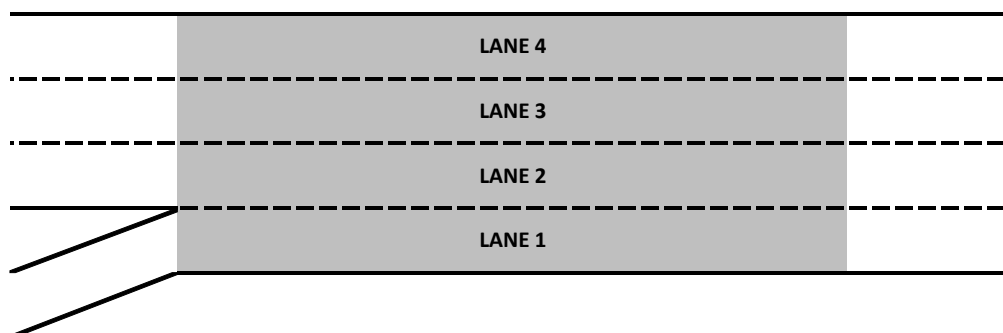
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	943	95	43.1	15.6	28.2	15.5	D
3	1,641	77	20.6	8.7	87.3	24.8	F
2	1,536	55	13.9	8.0	95.8	32.8	F
1	580	44	12.1	6.0	84.9	34.9	F
Area	4,699	272	22.2	8.6	58.7	21.0	F
Total	4,699	272	22.2	8.6	58.7	21.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	580	44	1		
Total	580	44	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,194	4,119	227	98.2%	847
On-ramp	583	580	44	99.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 144 - NB I-15: Magnolia Ave Off-ramp to Loop On-ramp

Segment Type - Basic

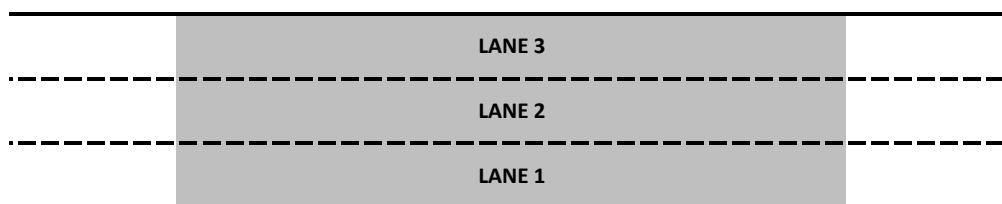
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,581	54	48.0	26.8	44.1	38.6	E
2	1,293	45	43.7	29.5	58.2	47.1	F
1	1,240	26	43.2	29.1	57.5	49.5	F
Area	4,115	124	45.0	28.2	51.1	42.1	F
Total	4,115	124	45.0	28.2	51.1	42.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,194	4,115	124	98.1%	1,558
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 143 - NB I-15: Magnolia Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,523	31	51.7	23.3	40.6	34.2	E
3	1,413	37	49.8	25.9	41.2	35.5	E
2	1,507	44	49.1	26.4	43.4	36.4	E
1	348	45	65.9	7.1	5.9	3.2	A
Area	3,269	125	52.0	22.7	25.5	15.8	C
Total	4,792	157	51.9	22.9	29.2	20.2	D

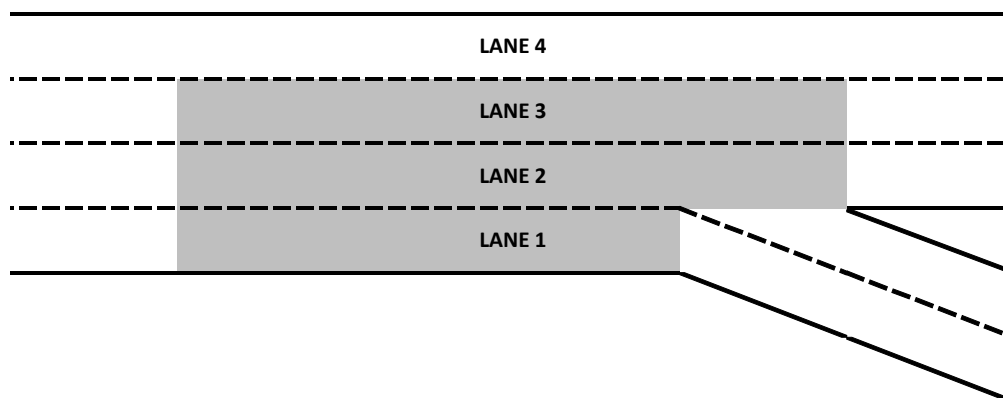
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	212	106
1	458	109
Total	670	53

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,874	4,792	157	98.3%	1,042
On-ramp					
Off-ramp	680	670	53	98.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 142 - NB I-15: WB SR-91 Express Lane Off-ramp (Left)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	421	15	69.1	0.5	6.2	0.6	A
4	1,513	19	59.0	19.8	32.5	21.8	D
3	1,671	22	58.2	20.6	33.4	21.3	D
2	1,382	19	57.4	22.9	32.7	24.7	D
1	222	16	67.6	4.3	4.1	1.5	A
Area	5,210	91	59.8	17.9	20.1	10.2	C
Total	5,210	91	59.8	17.9	20.1	10.2	C

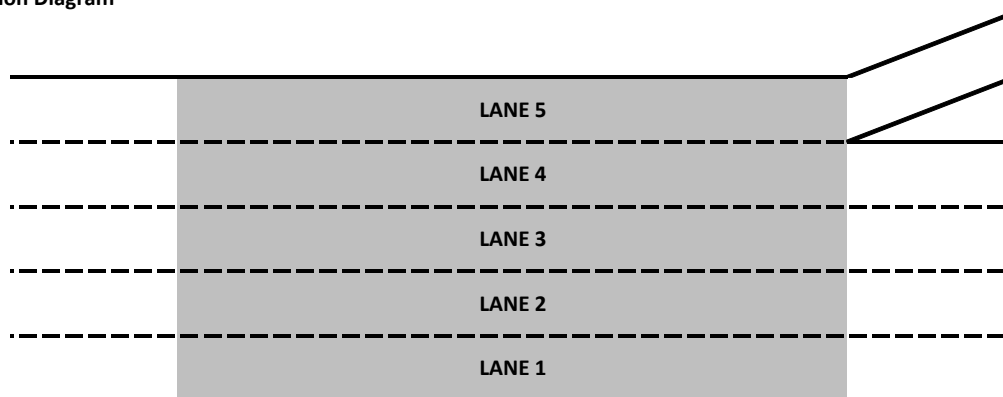
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	422	48
Total	422	48

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,297	5,210	91	98.4%	1,500
On-ramp					
Off-ramp	423	422	48	99.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 141 - NB I-15: Ontario Ave On-ramp to WB SR-91 Express Lane Off-ramp

Segment Type - Basic

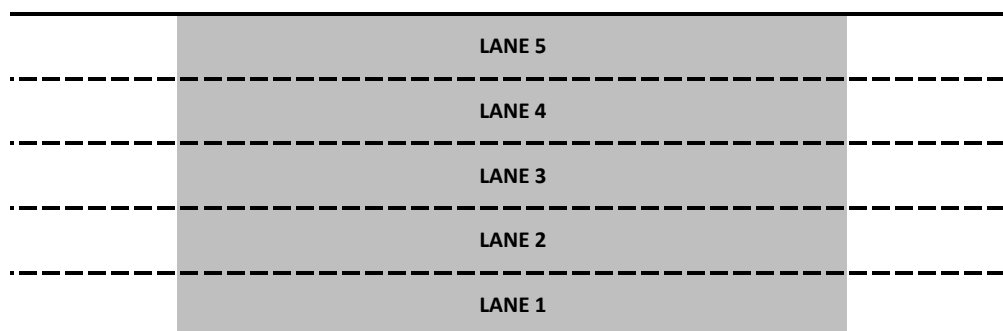
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	418	15	69.2	0.4	6.2	0.6	A
4	1,674	18	66.9	0.6	25.3	1.2	C
3	1,616	15	66.4	0.9	25.0	0.4	C
2	1,292	17	66.3	1.6	20.1	1.1	C
1	206	10	68.3	0.5	3.2	0.5	A
Area	5,207	75	66.8	0.8	16.0	0.6	B
Total	5,207	75	66.8	0.8	16.0	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,297	5,207	75	98.3%	1,931
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 140 - NB I-15: Ontario Ave On-ramp

Segment Type - Merge

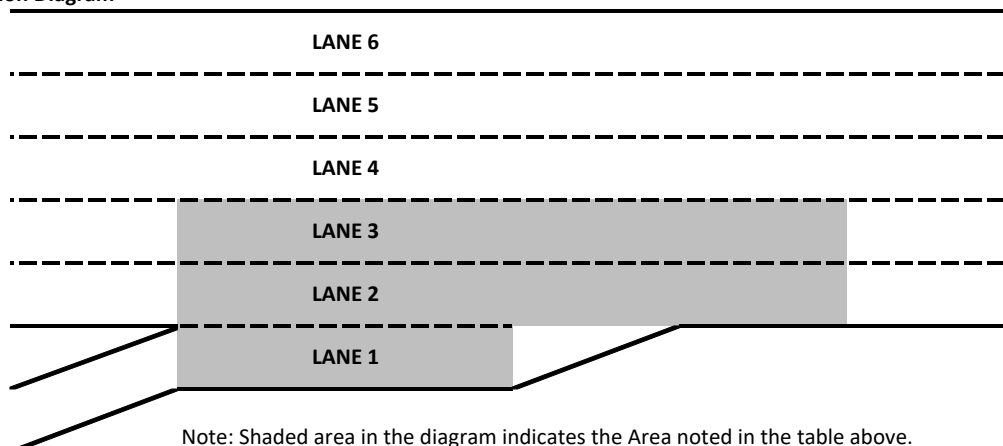
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	334	12	69.5	0.3	5.3	0.5	A
5	1,427	17	67.6	0.3	24.2	0.4	C
4	1,680	15	66.3	0.2	27.8	0.9	D
3	780	15	61.8	0.9	17.3	1.1	B
2	61	5	55.4	0.9	6.5	0.5	A
1	930	64	24.7	0.3	1.6	0.1	A
Area	1,770	85	58.5	0.8	9.7	0.4	A
Total	5,211	129	64.8	0.3	14.6	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	930	64	1		
Total	930	64	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,358	4,282	65	98.3%	1,494
On-ramp	939	930	64	99.0%	
Off-ramp					

Lane Configuration Diagram



Location 139 - NB I-15: Ontario Ave Off-ramp to On-ramp (5 Lanes)

Segment Type - Basic

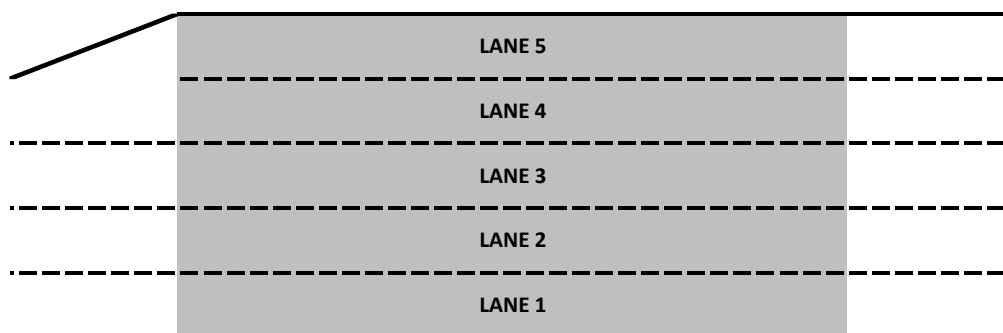
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	276	10	69.2	0.4	3.2	0.4	A
4	1,456	16	68.0	0.2	21.9	0.7	C
3	1,403	17	68.2	0.3	21.4	0.7	C
2	1,086	13	68.3	0.3	15.9	0.5	B
1	63	6	70.8	0.8	0.9	0.3	A
Area	4,284	62	68.3	0.1	12.7	0.2	B
Total	4,284	62	68.3	0.1	12.7	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,358	4,284	62	98.3%	1,727
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 138 - NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)

Segment Type - Basic

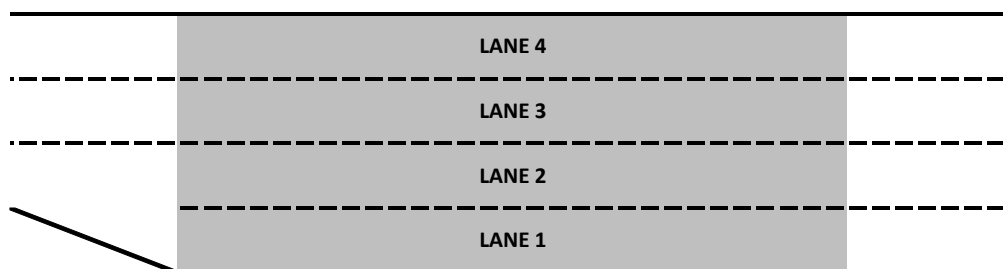
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,588	12	67.3	0.2	23.8	0.8	C
3	1,525	15	67.4	0.6	22.7	0.7	C
2	1,111	18	67.3	0.3	17.0	0.3	B
1	64	7	69.4	1.1	0.8	0.2	A
Area	4,287	53	67.3	0.3	16.1	0.2	B
Total	4,287	53	67.3	0.3	16.1	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,358	4,287	53	98.4%	1,266
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 137 - NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)

Segment Type - Basic

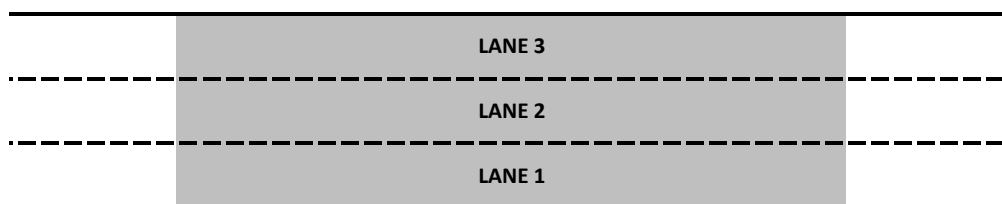
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,617	16	66.2	0.5	24.8	1.0	C
2	1,571	16	65.7	1.1	23.9	0.8	C
1	1,102	14	65.1	0.9	17.2	0.4	B
Area	4,290	45	65.7	0.8	22.0	0.4	C
Total	4,290	45	65.7	0.8	22.0	0.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,358	4,290	45	98.4%	196
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 136 - NB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,567	17	66.2	0.7	24.8	0.9	C
2	1,705	16	64.4	2.0	25.5	0.3	C
1	1,484	20	62.5	1.1	22.8	0.7	C
Area	3,189	36	63.6	1.6	24.1	0.4	C
Total	4,756	53	64.5	1.2	24.3	0.5	C

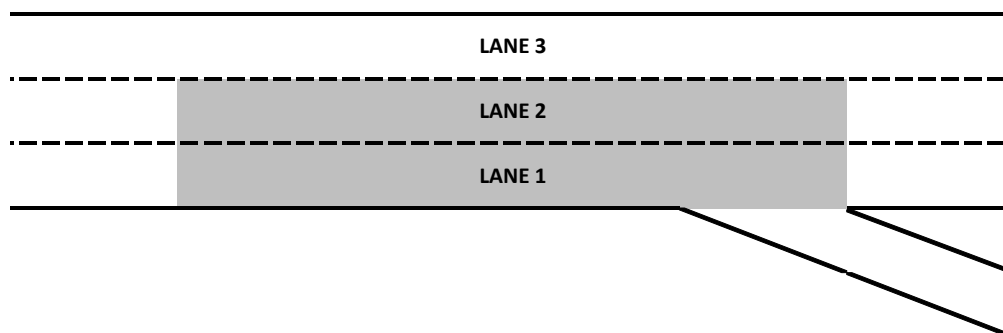
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	468	36
Total	468	36

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,806	4,756	53	99.0%	762
On-ramp					
Off-ramp	448	468	36	104.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 135 - NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Merge

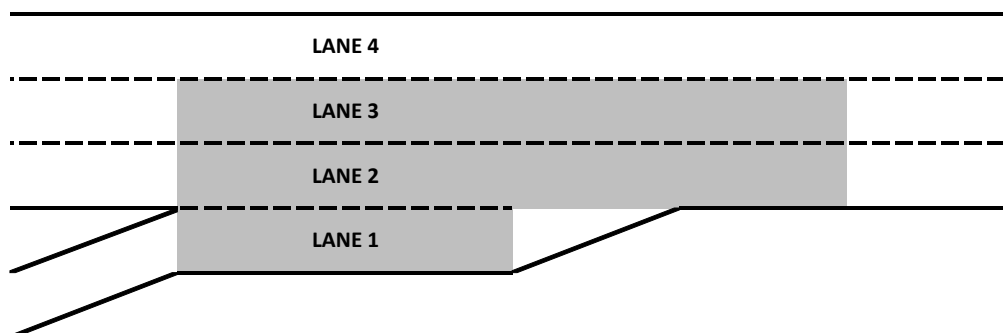
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,467	11	68.3	0.2	22.2	0.4	C
3	1,568	14	66.9	0.3	25.5	0.5	C
2	1,371	18	62.6	1.1	22.3	0.8	C
1	352	23	47.6	2.3	3.3	0.3	A
Area	3,291	55	64.2	0.7	17.0	0.5	B
Total	4,758	66	65.5	0.5	18.3	0.3	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	352	23	1		
Total	352	23	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,440	4,406	43	99.2%	871
On-ramp	366	352	23	96.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 134 - NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp

Segment Type - Basic

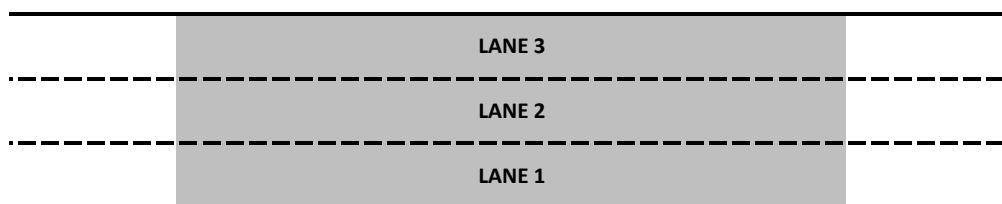
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,486	11	67.2	0.6	23.1	0.2	C
2	1,565	11	66.8	1.0	23.0	0.2	C
1	1,357	20	66.5	0.5	20.1	0.5	C
Area	4,408	42	66.8	0.6	22.1	0.2	C
Total	4,408	42	66.8	0.6	22.1	0.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,440	4,408	42	99.3%	2,124
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 133 - NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,640	14	65.8	0.6	25.4	0.9	C
2	1,533	13	64.1	0.9	23.2	0.7	C
1	1,475	19	63.1	1.6	23.3	0.6	C
Area	3,007	32	63.6	1.2	23.2	0.2	C
Total	4,647	46	64.4	0.9	23.9	0.3	C

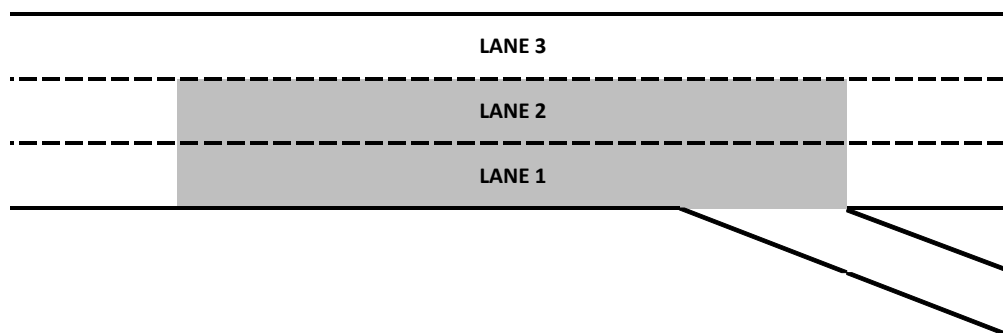
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	246	26
Total	246	26

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,686	4,647	46	99.2%	1,499
On-ramp					
Off-ramp	246	246	26	100.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 132 - NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Basic

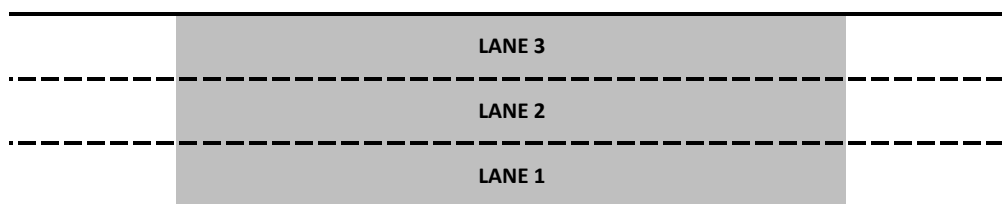
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,599	10	61.7	0.5	26.2	0.4	D
2	1,551	13	59.4	0.3	26.0	0.3	C
1	1,501	16	58.3	1.1	25.4	0.4	C
Area	4,652	39	59.8	0.3	25.8	0.1	C
Total	4,652	39	59.8	0.3	25.8	0.1	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,686	4,652	39	99.3%	1,671
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 131 - NB I-15: Cajalco Rd On-ramp

Segment Type - Merge

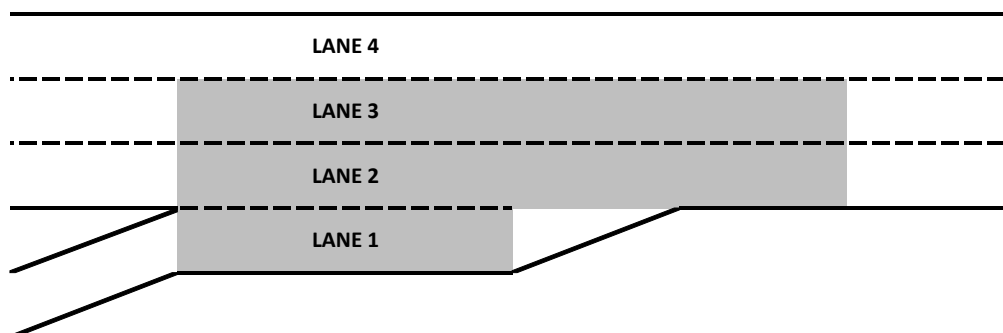
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,499	10	23.3	0.4	76.7	1.9	F
3	1,299	19	22.0	0.4	79.3	2.8	F
2	1,366	16	21.1	0.4	76.7	2.5	F
1	498	22	9.2	0.8	10.0	1.6	A
Area	3,163	57	20.4	0.4	66.0	2.5	F
Total	4,662	67	21.3	0.4	68.9	2.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	498	22	1		
Total	498	22	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,201	4,164	45	99.1%	1,499
On-ramp	485	498	22	102.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 130 - NB I-15: Cajalco Rd Off-ramp to On-ramp

Segment Type - Basic

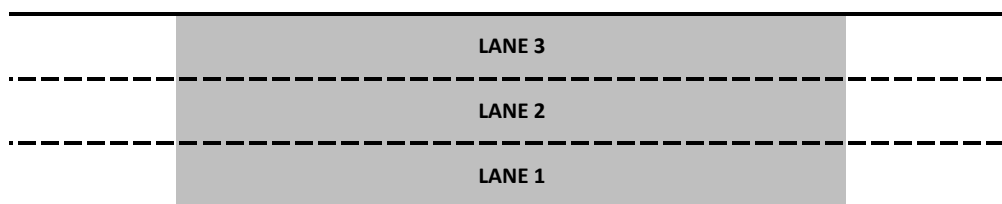
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,474	19	24.0	1.1	61.1	2.1	F
2	1,393	20	21.4	0.7	62.1	1.9	F
1	1,309	14	22.7	0.7	61.5	1.7	F
Area	4,177	53	22.7	0.8	61.4	1.8	F
Total	4,177	53	22.7	0.8	61.4	1.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,201	4,177	53	99.4%	1,994
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 129 - NB I-15: Cajalco Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,472	18	27.0	5.7	56.8	11.3	F
2	1,452	28	26.2	6.3	55.5	11.1	F
1	1,457	21	27.9	5.8	55.3	10.3	F
Area	2,909	48	27.1	6.0	55.3	10.6	F
Total	4,381	67	27.1	5.9	55.8	10.8	F

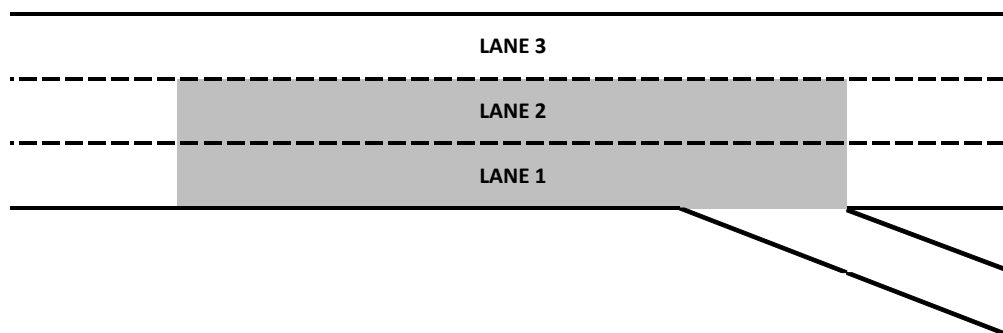
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	189	21
Total	189	21

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,385	4,381	67	99.9%	1,109
On-ramp					
Off-ramp	184	189	21	102.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 128 - NB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

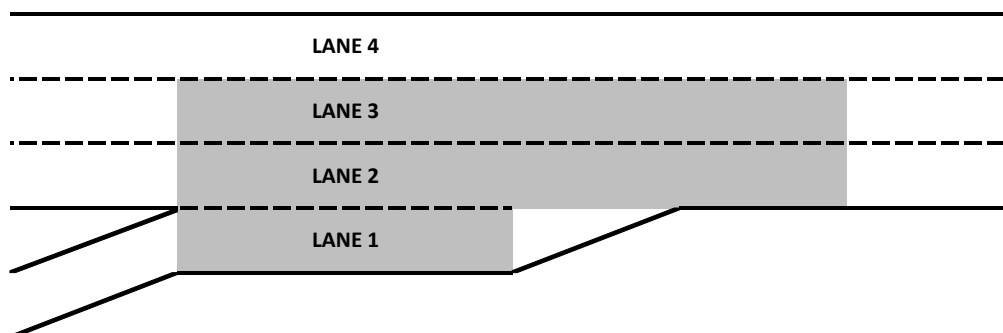
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,245	24	33.3	24.8	70.2	45.2	F
3	1,238	38	32.4	24.9	71.8	41.6	F
2	1,126	16	31.0	23.2	68.9	42.1	F
1	795	56	20.6	9.9	7.9	8.2	A
Area	3,159	110	32.7	24.3	56.4	34.1	F
Total	4,404	134	32.9	24.4	60.1	37.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	795	56	1		
Total	795	56	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,595	3,609	78	100.4%	1,497
On-ramp	790	795	56	100.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 127 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

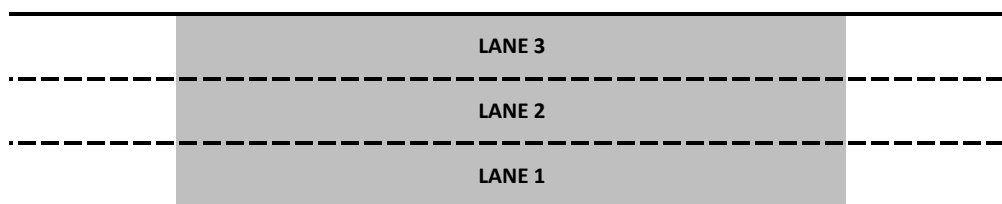
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,239	19	57.7	13.9	23.2	7.1	C
2	1,271	15	56.6	15.5	23.9	6.7	C
1	1,099	13	56.7	15.5	21.2	6.9	C
Area	3,609	47	57.0	14.9	22.8	6.8	C
Total	3,609	47	57.0	14.9	22.8	6.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,595	3,609	47	100.4%	2,543
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 126 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

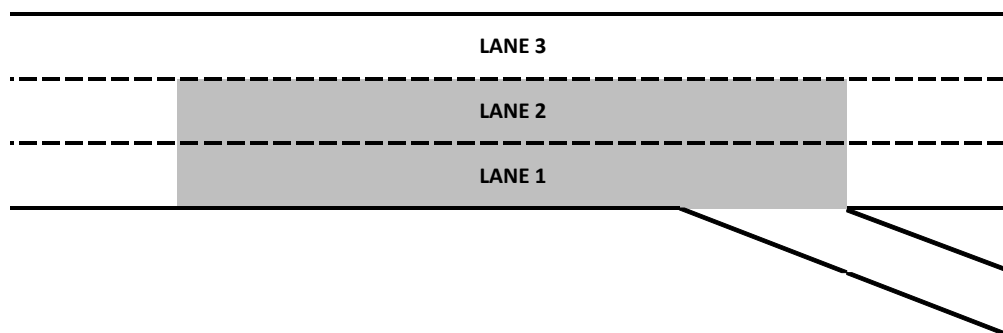
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,267	16	65.0	1.1	19.5	0.9	C
2	1,389	10	64.9	1.1	20.2	0.2	C
1	1,186	13	64.2	1.4	20.2	1.0	C
Area	2,575	23	64.6	1.2	20.2	0.5	C
Total	3,841	39	64.7	1.2	20.0	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	230	36
Total			Total	230	36

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,832	3,841	39	100.2%	1,499
On-ramp					
Off-ramp	237	230	36	96.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 125 - NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

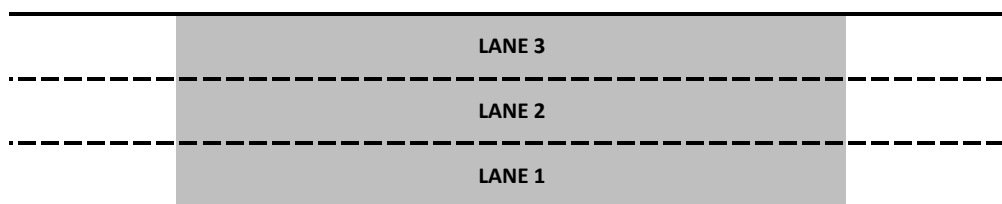
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,322	19	67.7	0.3	19.6	0.6	C
2	1,367	11	67.3	0.1	20.5	0.3	C
1	1,149	15	67.1	0.2	17.7	0.7	B
Area	3,838	46	67.4	0.1	19.2	0.3	C
Total	3,838	46	67.4	0.1	19.2	0.3	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,832	3,838	46	100.2%	6,786
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 124 - NB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

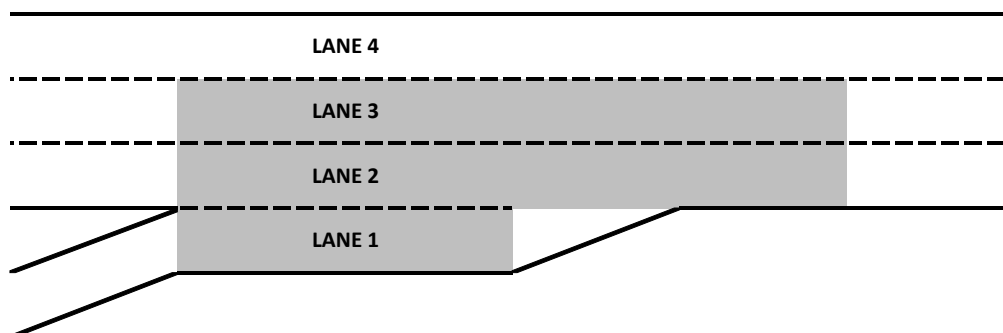
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,121	14	68.2	0.5	18.0	0.2	C
3	1,221	12	66.6	1.0	21.7	0.4	C
2	1,026	17	64.0	1.7	18.0	0.3	B
1	472	19	20.9	1.5	1.2	0.2	A
Area	2,719	49	65.0	1.4	16.6	0.3	B
Total	3,840	63	66.0	1.1	17.0	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	472	19	1		
Total	472	19	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,364	3,368	44	100.1%	1,498
On-ramp	468	472	19	100.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 123 - NB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

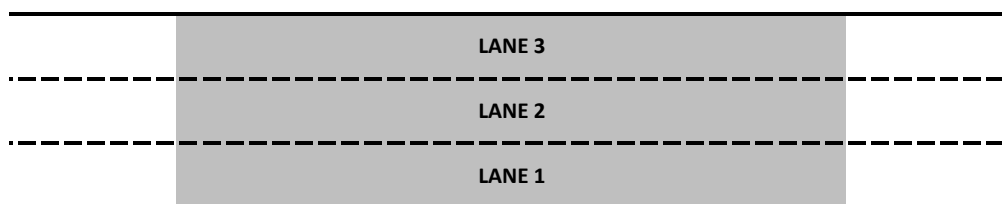
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,132	13	68.4	0.3	16.8	0.6	B
2	1,216	9	68.2	0.1	17.7	0.4	B
1	1,020	18	68.1	0.2	15.4	0.6	B
Area	3,368	40	68.2	0.2	16.6	0.3	B
Total	3,368	40	68.2	0.2	16.6	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,364	3,368	40	100.1%	2,725
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 122 - NB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,130	14	68.4	0.3	16.6	0.5	B
2	1,308	11	68.0	0.2	17.8	0.1	B
1	1,140	20	67.3	0.2	18.6	0.6	C
Area	2,448	31	67.7	0.2	18.2	0.3	C
Total	3,578	45	67.9	0.2	17.7	0.3	B

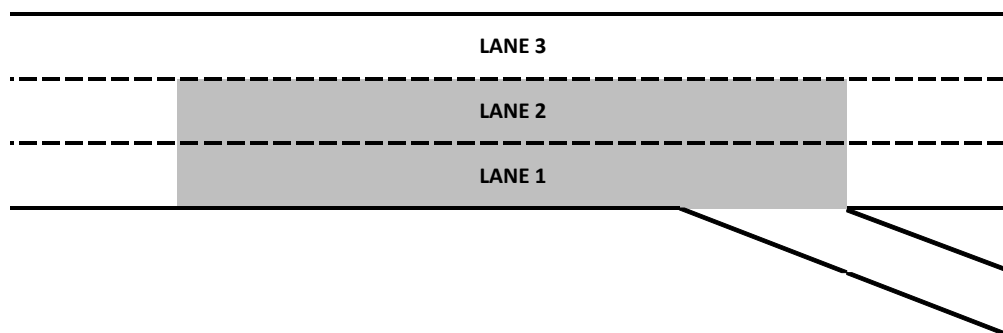
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	226	30
Total	226	30

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,587	3,578	45	99.7%	1,498
On-ramp					
Off-ramp	223	226	30	101.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 121 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

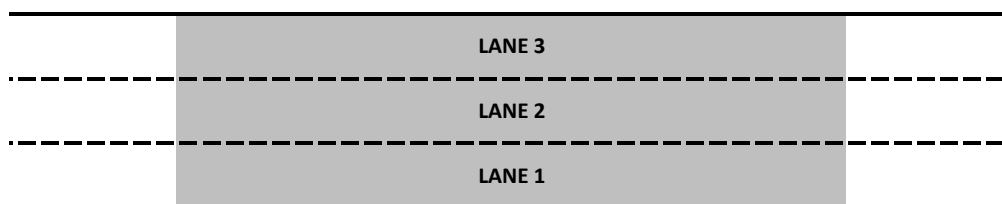
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,176	22	68.4	0.2	17.3	0.5	B
2	1,278	13	68.1	0.2	19.2	0.3	C
1	1,125	15	67.8	0.2	16.9	0.6	B
Area	3,579	50	68.1	0.2	17.8	0.2	B
Total	3,579	50	68.1	0.2	17.8	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,587	3,579	50	99.8%	9,350
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 120 - NB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

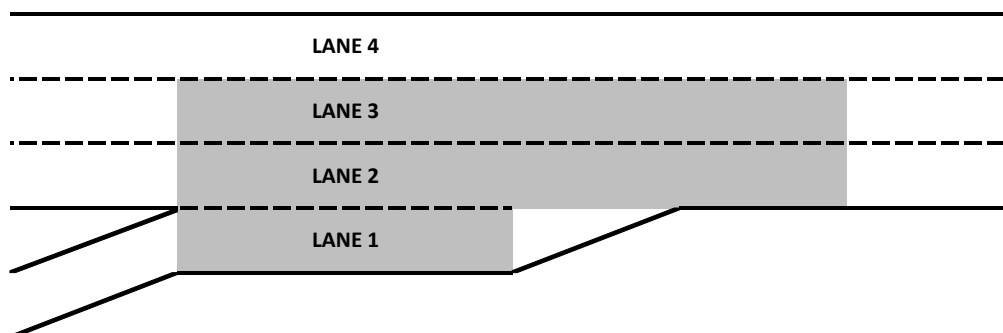
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,061	20	68.7	0.2	16.1	0.7	B
3	1,153	18	67.7	0.3	19.8	0.7	C
2	950	17	66.2	0.5	16.7	0.5	B
1	411	59	29.5	0.6	1.0	0.1	A
Area	2,514	94	66.8	0.4	14.9	0.5	B
Total	3,575	114	67.4	0.3	15.2	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	411	59	1		
Total	411	59	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,198	3,164	55	98.9%	1,499
On-ramp	389	411	59	105.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 119 - NB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

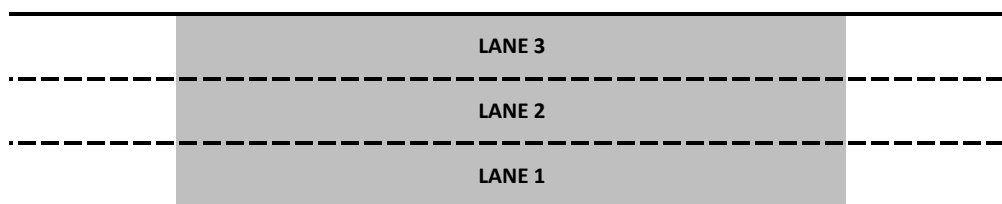
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,066	20	68.2	0.3	15.7	0.8	B
2	1,153	18	68.2	0.1	17.0	0.6	B
1	943	19	68.0	0.5	14.5	0.5	B
Area	3,163	56	68.1	0.3	15.7	0.5	B
Total	3,163	56	68.1	0.3	15.7	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,198	3,163	56	98.9%	2,922
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 118 - NB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,076	22	68.0	0.6	16.1	0.6	B
2	1,215	14	67.5	1.0	16.7	0.5	B
1	1,037	25	67.0	1.0	16.8	0.6	B
Area	2,253	38	67.3	1.0	16.7	0.2	B
Total	3,328	60	67.5	0.9	16.5	0.3	B

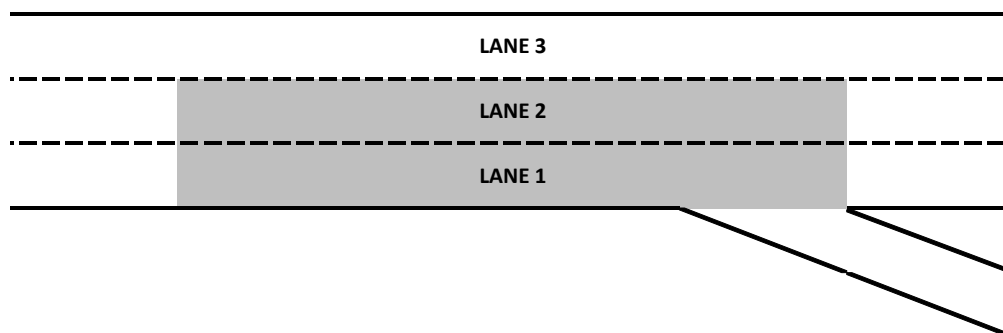
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	165	27
Total	165	27

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,362	3,328	60	99.0%	1,499
On-ramp					
Off-ramp	164	165	27	100.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 117 - NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

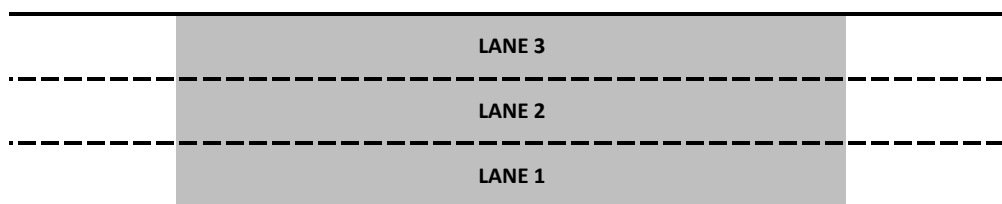
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,095	20	68.4	0.3	16.3	0.9	B
2	1,192	22	68.1	0.1	17.8	0.5	B
1	1,026	18	68.0	0.3	15.3	0.6	B
Area	3,314	59	68.2	0.2	16.5	0.6	B
Total	3,314	59	68.2	0.2	16.5	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,362	3,314	59	98.6%	13,528
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 116 - NB I-15: Lake St On-ramp

Segment Type - Merge

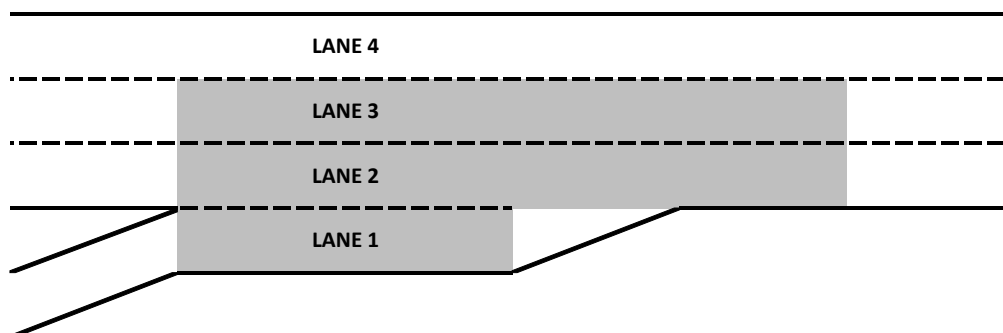
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	987	15	68.8	0.1	14.7	0.9	B
3	1,080	13	68.3	0.1	18.7	0.9	C
2	887	20	67.4	0.4	14.8	0.7	B
1	358	24	33.8	0.4	1.5	0.1	A
Area	2,324	57	67.6	0.2	13.7	0.6	B
Total	3,312	72	68.0	0.1	13.9	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	358	24	1		
Total	358	24	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,000	2,954	48	98.5%	1,499
On-ramp	362	358	24	98.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 115 - NB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

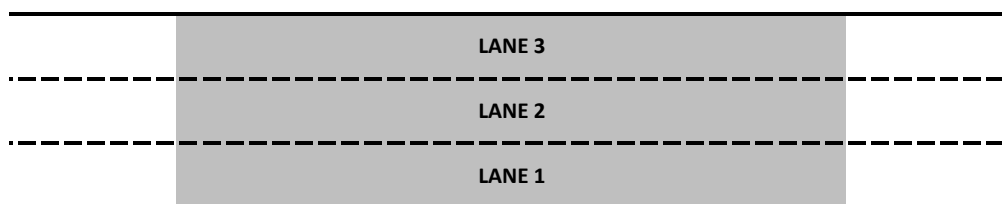
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	989	18	68.6	0.2	14.6	0.8	B
2	1,083	11	68.4	0.2	15.8	0.6	B
1	879	22	68.2	0.2	13.2	1.2	B
Area	2,950	51	68.4	0.1	14.5	0.6	B
Total	2,950	51	68.4	0.1	14.5	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,000	2,950	51	98.3%	3,216
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 114 - NB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	999	18	68.6	0.2	14.7	0.6	B
2	1,160	15	68.3	0.3	15.8	0.7	B
1	986	22	67.6	0.3	16.0	1.3	B
Area	2,146	37	67.9	0.2	15.9	0.8	B
Total	3,145	54	68.1	0.2	15.5	0.6	B

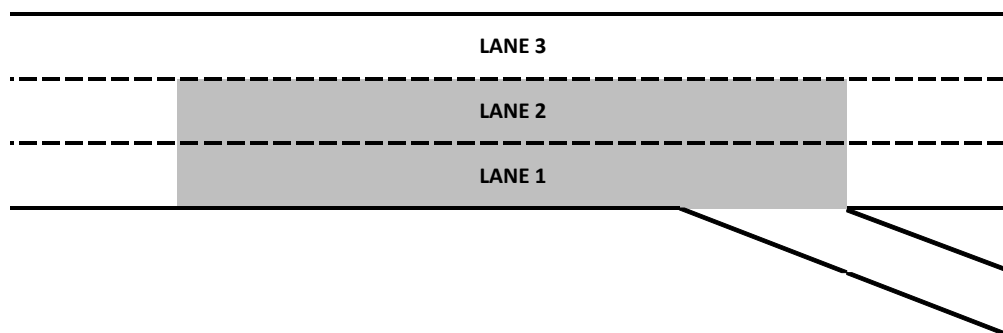
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	192	31
Total	192	31

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,199	3,145	54	98.3%	1,498
On-ramp					
Off-ramp	199	192	31	96.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 113 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

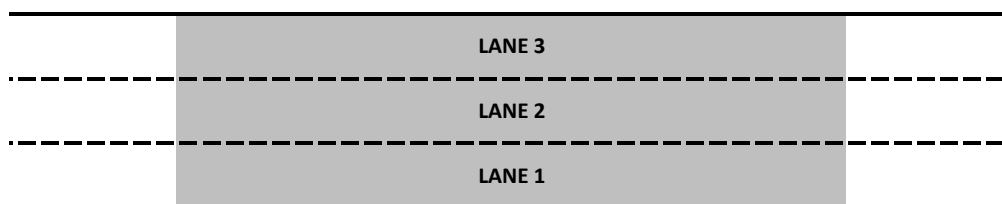
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,017	14	68.5	0.3	15.1	0.3	B
2	1,151	16	68.4	0.2	16.7	0.7	B
1	979	24	68.2	0.2	14.8	1.3	B
Area	3,146	53	68.4	0.2	15.5	0.7	B
Total	3,146	53	68.4	0.2	15.5	0.7	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,199	3,146	53	98.4%	8,483
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 112 - NB I-15: Nichols Rd On-ramp

Segment Type - Merge

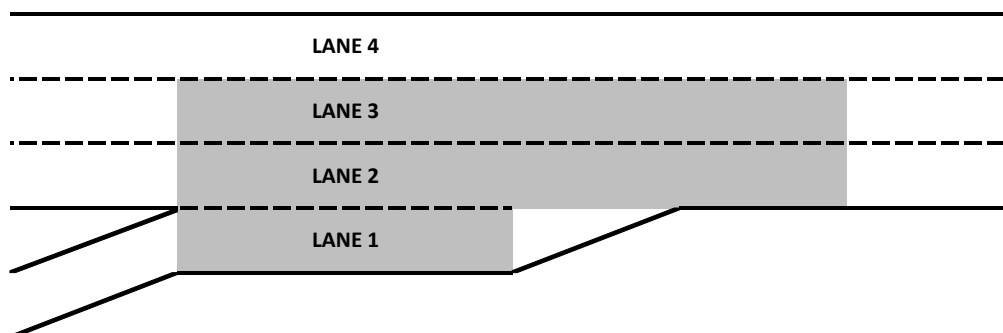
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	975	17	68.9	0.2	14.9	0.3	B
3	1,087	11	68.8	0.2	17.2	0.4	B
2	908	16	68.7	0.2	14.2	1.1	B
1	176	33	39.6	0.4	0.8	0.1	A
Area	2,171	60	68.8	0.1	12.4	0.6	B
Total	3,146	77	68.8	0.1	13.1	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	176	33	1		
Total	176	33	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,013	2,970	43	98.6%	1,499
On-ramp	186	176	33	94.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 111 - NB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

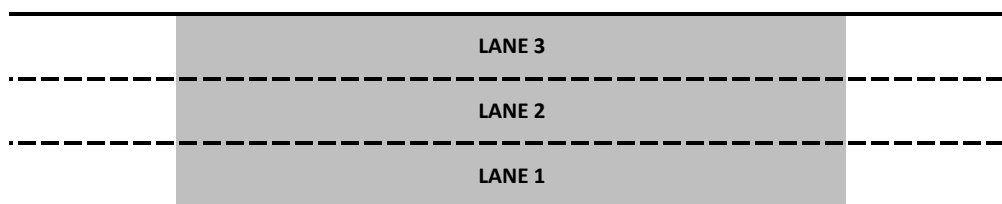
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	982	16	68.5	0.2	14.9	0.2	B
2	1,091	13	68.6	0.1	16.2	0.4	B
1	900	15	68.4	0.2	13.4	0.8	B
Area	2,972	45	68.5	0.1	14.8	0.4	B
Total	2,972	45	68.5	0.1	14.8	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,013	2,972	45	98.6%	3,521
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 110 - NB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,057	17	68.5	0.3	15.0	0.2	B
2	1,170	14	68.0	0.6	16.6	0.6	B
1	1,034	13	67.6	0.2	17.1	0.9	B
Area	2,204	27	67.8	0.3	16.9	0.7	B
Total	3,261	44	68.0	0.3	16.3	0.4	B

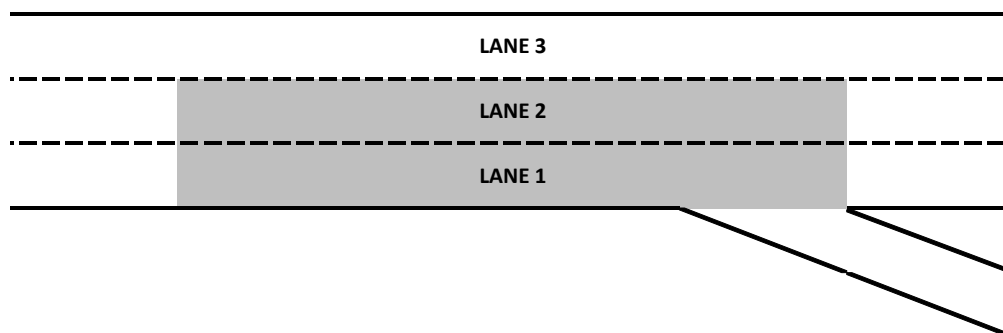
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	294	33
Total	294	33

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,312	3,261	44	98.5%	1,499
On-ramp					
Off-ramp	299	294	33	98.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 109 - NB I-15: Central Ave (SR-74) On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

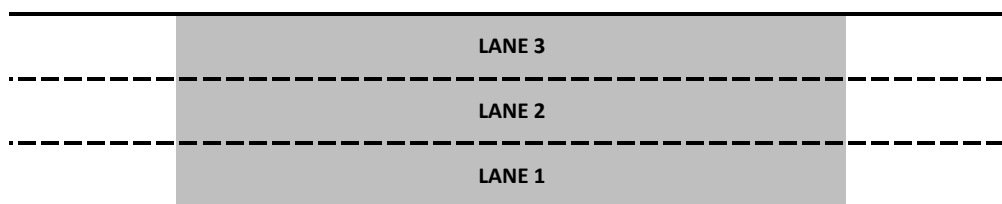
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,051	19	68.5	0.2	16.0	0.3	B
2	1,198	12	68.4	0.2	18.0	0.4	C
1	1,013	13	68.2	0.2	14.8	0.8	B
Area	3,263	44	68.4	0.1	16.3	0.4	B
Total	3,263	44	68.4	0.1	16.3	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,312	3,263	44	98.5%	2,423
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 108 - NB I-15: Central Ave (SR-74) On-ramp

Segment Type - Merge

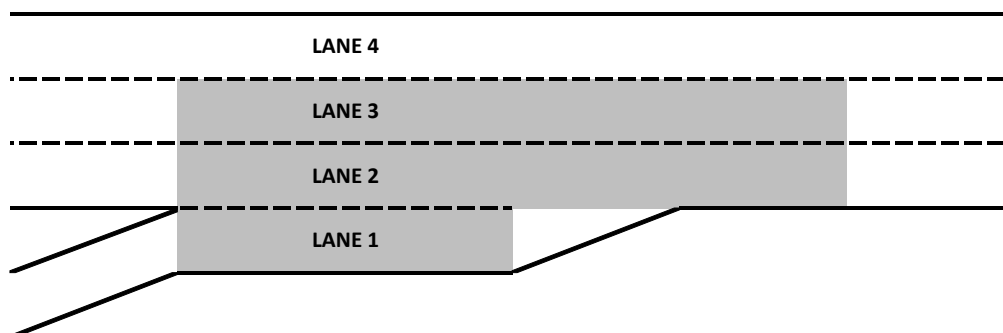
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	976	15	68.9	0.2	15.3	0.8	B
3	1,037	13	68.5	0.2	18.5	0.8	C
2	714	12	67.2	0.4	14.5	0.4	B
1	536	40	33.7	0.7	1.0	0.1	A
Area	2,287	66	67.6	0.3	13.1	0.4	B
Total	3,264	81	68.1	0.2	13.7	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	536	40	1		
Total	536	40	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,767	2,727	40	98.6%	1,498
On-ramp	545	536	40	98.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 107 - NB I-15: Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

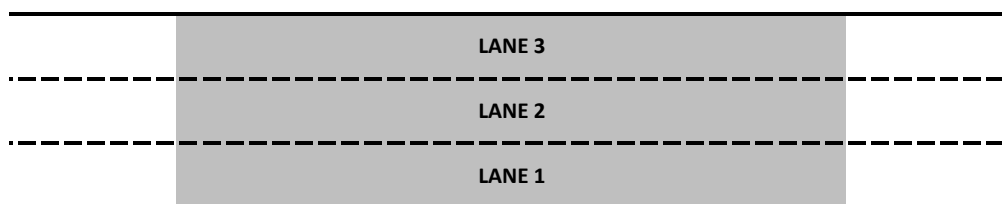
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	997	17	68.5	0.4	15.3	0.7	B
2	1,043	17	68.7	0.5	15.8	0.8	B
1	685	13	68.2	0.7	10.1	0.2	A
Area	2,724	47	68.5	0.5	13.7	0.4	B
Total	2,724	47	68.5	0.5	13.7	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,767	2,724	47	98.5%	2,457
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 106 - NB I-15: Central Ave (SR-74) Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	985	13	67.6	1.7	15.8	0.6	B
2	1,065	10	66.0	3.0	16.9	0.4	B
1	1,838	25	63.9	1.3	27.8	0.8	D
Area	2,903	35	64.8	1.8	22.4	0.3	C
Total	3,887	47	65.5	1.8	20.2	0.4	C

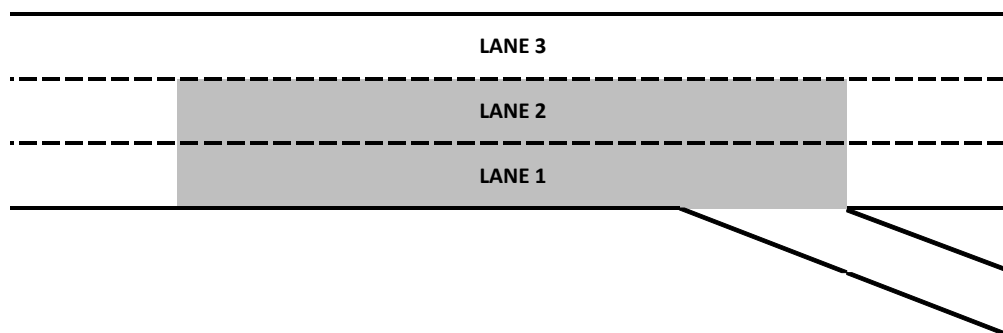
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,164	62
Total	1,164	62

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,922	3,887	47	99.1%	1,499
On-ramp					
Off-ramp	1,155	1,164	62	100.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 105 - NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

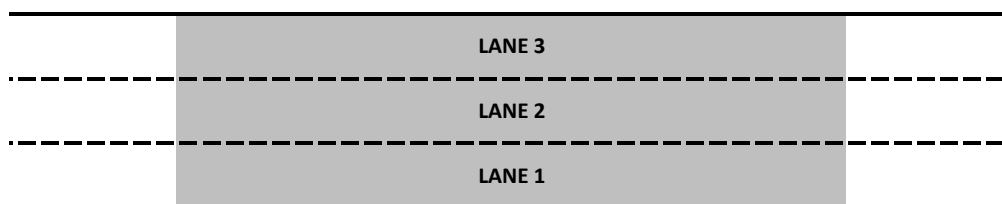
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,000	13	68.5	0.2	15.3	0.8	B
2	1,518	12	67.5	0.2	20.8	0.4	C
1	1,368	20	66.6	0.2	24.1	1.0	C
Area	3,886	46	67.4	0.1	20.1	0.5	C
Total	3,886	46	67.4	0.1	20.1	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,922	3,886	46	99.1%	1,245
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 104 - NB I-15: Main St On-ramp

Segment Type - Merge

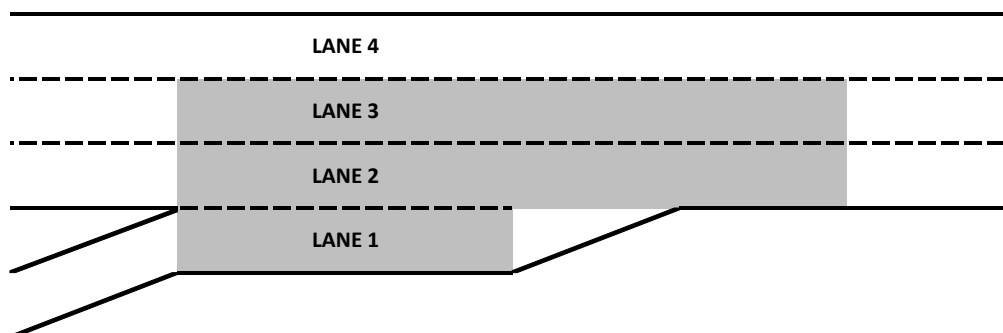
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,260	17	68.7	0.1	15.3	0.8	B
3	1,346	16	68.1	0.2	22.8	0.3	C
2	1,139	13	67.0	0.3	21.3	0.9	C
1	146	22	30.0	0.9	0.4	0.1	A
Area	2,631	51	67.6	0.2	17.5	0.4	B
Total	3,891	69	67.9	0.1	16.9	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	146	22	1		
Total	146	22	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,784	3,745	47	99.0%	1,500
On-ramp	138	146	22	105.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 103 - NB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

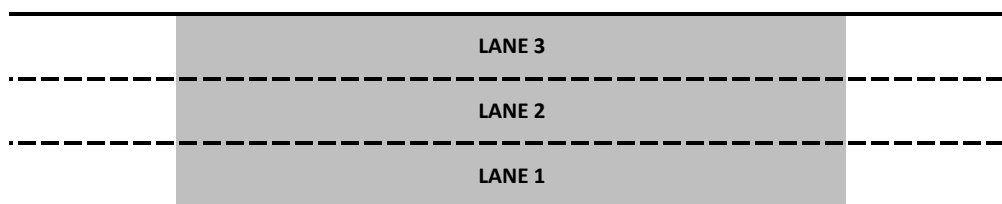
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,272	13	67.6	0.5	19.7	0.8	C
2	1,359	13	68.0	0.5	20.7	0.6	C
1	1,116	14	67.5	1.0	17.1	0.6	B
Area	3,747	40	67.7	0.6	19.2	0.4	C
Total	3,747	40	67.7	0.6	19.2	0.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,784	3,747	40	99.0%	2,897
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 102 - NB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,277	8	67.1	0.9	20.0	0.8	C
2	1,352	16	66.9	1.3	21.5	0.6	C
1	1,679	17	65.7	1.3	25.7	0.8	C
Area	3,030	33	66.2	1.2	23.6	0.6	C
Total	4,308	41	66.5	1.1	22.4	0.6	C

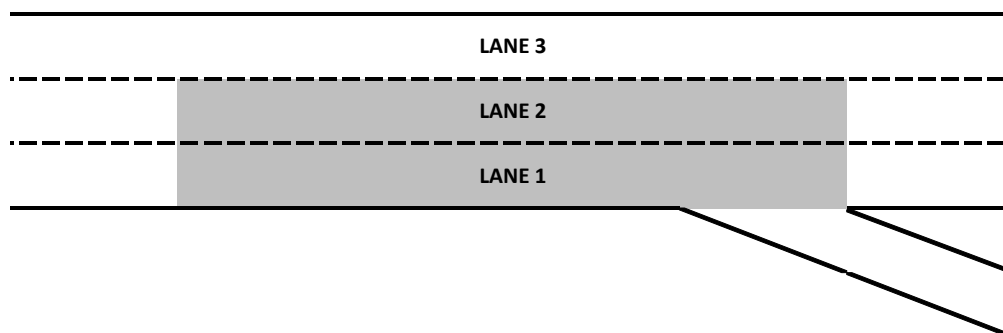
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	560	49
Total	560	49

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,332	4,308	41	99.4%	1,499
On-ramp					
Off-ramp	548	560	49	102.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 101 - NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp

Segment Type - Basic

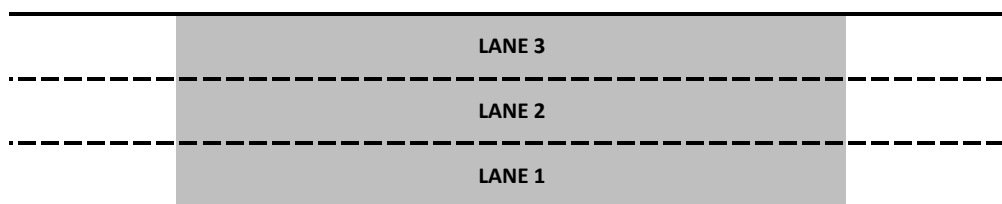
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,283	10	68.4	0.1	20.6	0.3	C
2	1,577	12	68.3	0.2	23.1	0.4	C
1	1,445	13	68.1	0.3	22.3	0.3	C
Area	4,305	36	68.3	0.2	22.0	0.1	C
Total	4,305	36	68.3	0.2	22.0	0.1	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,332	4,305	36	99.4%	3,906
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Vissim Post-Processor
Average Results from 5 Runs
Network Statistics

I-15 Express Lanes Southern Extension
Opening Year No Build
AM Peak Hour

Performance Measure	Vehicle Types	Average	Std. Dev.	Minimum	Maximum
Average Delay (seconds)	All	45.0	2.12	42.4	47.2
Total Delay (hours)	All	2,406	112	2,269	2,523
Average Stopped Delay (seconds)	All	1.5	0.09	1.4	1.6
Total Stopped Delay (hours)	All	78	5	73	84
Total Distance Traveled (miles)	All	1,464,943	3,207	1,461,096	1,468,842
Average Speed (mph)	All	60.0	0.28	59.7	60.4
Average Number of Stops	All	1.5	0.12	1.4	1.7
Total Number of Stops	All	292,671	24,352	265,322	326,022
Total Travel Time (hours)	All	24,418.0	95.9	24,327.2	24,552.1
Vehicles Active	All	4,725	55	4,651	4,803
Vehicles Arrived	All	187,710	235	187,480	188,082

VISSIM Post-Processor
Average Results from 5 Runs
Average Travel Time

I-15 Express Lanes Southern Extension
Opening Year No Build
AM Peak Hour

Corridor Travel Time by Time Interval Summary					
Time interval		Measured from Simulation (min)			
		Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
1	5:00 - 5:15 AM	19.84	20.52	4.93	5.34
2	5:15 - 5:30 AM	19.88	20.59	4.88	5.40
3	5:30 - 5:45 AM	19.93	20.89	4.93	5.41
4	5:45 - 6:00 AM	19.98	21.76	4.92	5.45
5	6:00 - 6:15 AM	19.90	22.70	4.90	5.47
6	6:15 - 6:30 AM	19.91	22.47	4.89	5.47
7	6:30 - 6:45 AM	19.94	21.06	4.90	5.46
8	6:45 - 7:00 AM	20.14	20.44	4.91	5.43
9	7:00 - 7:15 AM	20.30	20.16	4.90	5.46
10	7:15 - 7:30 AM	20.51	19.98	4.90	5.40
11	7:30 - 7:45 AM	20.51	19.83	4.90	5.39
12	7:45 - 8:00 AM	20.40	19.79	4.89	5.38
13	8:00 - 8:15 AM	20.42	20.08	4.90	5.37
14	8:15 - 8:30 AM	20.50	20.32	4.90	5.39
15	8:30 - 8:45 AM	20.56	20.21	4.90	5.36
16	8:45 - 9:00 AM	20.67	20.10	4.91	5.37
17	9:00 - 9:15 AM	20.70	20.31	4.91	5.35
18	9:15 - 9:30 AM	20.63	20.53	4.90	5.35
19	9:30 - 9:45 AM	20.46	20.37	4.92	5.34
20	9:45 - 10:00 AM	20.46	20.37	4.91	5.33
21	10:00 - 10:15 AM	20.44	20.76	4.90	5.33
22	10:15 - 10:30 AM	20.40	21.03	4.92	5.30
23	10:30 - 10:45 AM	20.50	21.76	4.90	5.31
24	10:45 - 11:00 AM	20.54	24.51	4.89	5.31
25	11:00 - 11:15 AM	20.62	30.34	4.92	5.33
26	11:15 - 11:30 AM	20.61	34.17	4.91	5.31
27	11:30 - 11:45 AM	20.59	37.20	4.92	5.29
28	11:45 - 12:00 PM	20.72	40.98	4.92	5.31
Average		20.4	23.0	4.9	5.4

Corridor Performance Measurements				
Stats Summary	Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
Average Travel Time (min)	20.4	23.0	4.9	5.4
Average Travel Speed (mph)	64.5	57.1	69.3	68.4
Average Delay per Vehicle (min)	1.6	4.2	0.0	0.2
Max Individual Vehicle Delay (min)	2.0	22.2	0.0	0.3

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Opening Year No Build
AM Peak Hour

	Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
1	SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	4,373	93	99.6%							65.2	0.6	17.4	0.5	B
2	SB I-15: Hidden Valley Pkwy On-ramp	Merge	4,377	66	99.7%	459	30	99.8%				64.5	0.4	17.6	0.6	B
3	SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp	Basic	4,828	113	99.5%							63.9	0.4	15.6	0.2	B
4	SB I-15: WB SR-91 Off-ramp	Basic	4,818	135	99.3%				762	64	100.3%	63.9	0.2	15.6	0.2	B
5	SB I-15: EB SR-91 Off-ramp	Diverge	4,057	69	99.2%				1,371	94	102.3%	56.2	5.5	28.3	4.0	D
6	SB I-15: EB SR-91 Off-ramp to On-ramp	Basic	2,677	49	97.3%							64.0	1.7	14.5	0.5	B
7	SB I-15: EB SR-91 On-ramp	Merge	2,682	47	97.5%	2,160	51	98.6%				61.8	0.9	18.4	0.6	C
8	SB I-15: WB SR-91 On-ramp	Weave	4,847	93	98.1%	1,606	150	101.0%	1,378	85	97.0%	64.0	0.6	18.9	0.8	C
9	SB I-15: Magnolia Ave Off-ramp to On-ramp	Basic	5,054	101	98.9%							64.8	0.6	20.3	1.1	C
10	SB I-15: Magnolia Ave On-ramp	Merge	5,046	118	98.7%	581	53	95.2%				64.4	0.4	17.8	0.7	B
11	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)	Weave	5,629	159	98.4%	314	24	101.3%	311	41	97.2%	63.9	0.5	17.0	0.9	B
12	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (after EL Access)	Basic	5,632	77	98.6%							63.5	0.6	23.0	1.0	C
13	SB I-15: Ontario Ave Off-ramp	Diverge	5,630	85	98.6%				1,059	44	100.9%	60.7	1.8	25.8	1.5	C
14	SB I-15: Ontario Ave Off-ramp to On-ramp	Basic	4,572	86	98.1%							63.2	0.9	18.7	1.0	C
15	SB I-15: Ontario Ave On-ramp	Merge	4,572	81	98.1%	483	53	100.5%				64.2	1.2	12.5	0.8	B
16	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	Basic	5,056	81	98.4%				650	52	97.0%	61.9	2.7	21.0	1.0	C
17	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp	Basic	4,399	43	98.4%							61.3	0.8	24.6	0.8	C
18	SB I-15: EL On-ramp at Foothill Pkwy/El Cerrito Rd	Basic	4,397	51	98.4%	27	11	90.0%				62.9	0.6	18.1	0.6	C
19	SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp	Weave	4,418	54	98.2%	396	33	94.3%	772	46	97.7%	63.4	0.7	20.2	0.9	C
20	SB I-15: EL On-ramp at Cajalco Rd to Cajalco Rd On-ramp (4 Lane)	Basic	4,032	37	97.6%	286	23	98.6%				65.4	0.4	17.0	0.6	B
21	SB I-15: Cajalco Rd On-ramp	Merge	4,319	56	97.7%	181	17	106.5%				63.9	0.7	12.9	0.3	B
22	SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	4,508	66	98.2%							64.5	0.4	18.0	0.6	B
23	SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Basic	4,512	79	98.3%				575	42	92.7%	65.0	0.2	17.9	0.6	B
24	SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	3,918	35	98.7%							64.8	0.4	20.8	0.7	C
25	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	3,922	56	98.8%	140	15	116.3%				65.0	0.2	15.5	0.6	B
26	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp	Basic	4,046	68	98.9%							64.0	0.5	22.0	1.0	C
27	SB I-15: Temescal Canyon Rd Off-ramp	Diverge	4,036	63	98.7%				488	31	101.7%	63.7	0.7	20.8	1.2	C
28	SB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	3,551	57	98.4%							64.8	0.5	19.4	0.8	C
29	SB I-15: Temescal Canyon Rd On-ramp	Merge	3,549	43	98.3%	167	21	98.2%				65.0	0.5	14.0	0.7	B
30	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	3,699	82	97.8%							63.9	0.5	20.6	0.9	C
31	SB I-15: Indian Truck Trail Off-ramp	Diverge	3,690	47	97.6%				289	29	99.5%	63.4	1.2	19.3	1.1	C
32	SB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	3,403	41	97.5%							64.3	0.8	18.9	1.1	C
33	SB I-15: Indian Truck Trail On-ramp	Merge	3,402	58	97.5%	203	28	96.4%				64.4	0.7	14.9	0.9	B
34	SB I-15: Indian Truck Trail On-ramp to Lake St Off-ramp	Basic	3,572	68	96.5%							63.8	1.0	20.4	1.0	C
35	SB I-15: Lake St Off-ramp	Diverge	3,560	55	96.2%				328	37	102.5%	62.3	2.7	19.4	1.9	C
36	SB I-15: Lake St Off-ramp to On-ramp	Basic	3,217	48	95.2%							64.6	0.7	18.2	0.6	C
37	SB I-15: Lake St On-ramp	Merge	3,219	41	95.2%	431	81	102.6%				64.6	0.4	14.7	0.4	B
38	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp	Basic	3,636	67	95.7%							63.9	0.8	20.3	0.6	C
39	SB I-15: Nichols Rd Off-ramp	Diverge	3,630	63	95.5%				318	34	106.0%	63.6	1.1	19.2	1.0	C
40	SB I-15: Nichols Rd Off-ramp to On-ramp	Basic	3,306	50	94.5%							64.6	0.8	18.3	0.6	C
41	SB I-15: Nichols Rd On-ramp	Merge	3,299	59	94.2%	458	40	101.8%				63.4	0.8	16.2	0.4	B
42	SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp	Basic	3,734	66	94.5%							63.9	0.7	20.8	0.4	C
43	SB I-15: Central Ave (SR-74) Off-ramp	Diverge	3,732	57	94.5%				620	47	99.9%	64.0	1.1	13.7	0.4	B
44	SB I-15: Central Ave (SR-74) Off-ramp to On-ramp	Basic	3,107	76	93.3%							64.8	0.8	17.4	0.5	B
45	SB I-15: Central Ave (SR-74) On-ramp	Merge	3,109	52	93.4%	1,250	58	103.3%				61.1	1.4	16.9	0.9	B
46	SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp	Basic	4,367	50	96.2%							61.1	1.0	24.9	0.9	C
47	SB I-15: Main St Off-ramp	Diverge	4,359	62	96.0%				169	10	105.6%	62.9	0.5	23.1	1.2	C
48	SB I-15: Main St Off-ramp to On-ramp	Basic	4,163	48	95.0%							63.3	0.4	23.2	1.2	C
49	SB I-15: Main St On-ramp SB	Merge	4,149	66	94.7%	526	49	107.2%				62.5	1.3	20.6	1.3	C
50	SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp	Basic	4,670	88	95.9%							61.8	1.4	26.4	1.3	D

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 1 - SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,079	28	66.4	0.9	16.5	1.2	B
3	1,202	24	65.4	0.5	18.1	0.7	C
2	1,154	23	65.0	0.6	19.0	0.8	C
1	938	18	64.0	1.2	15.8	0.5	B
Area	4,373	93	65.2	0.6	17.4	0.5	B
Total	4,373	93	65.2	0.6	17.4	0.5	B

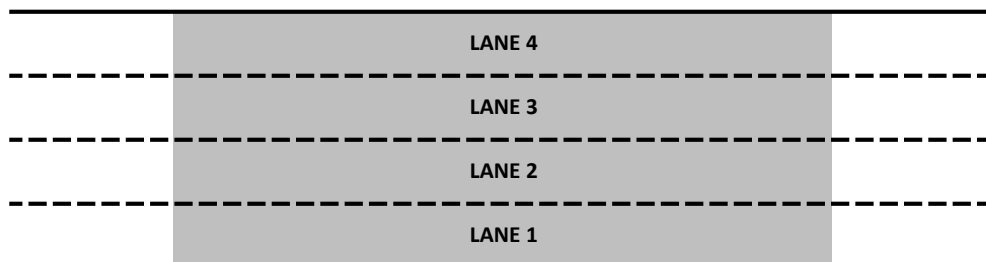
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,390	4,373	93	99.6%	1,784
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 2 - SB I-15: Hidden Valley Pkwy On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,061	25	66.6	0.7	16.7	1.1	B
4	997	11	66.0	0.7	17.6	0.4	B
3	1,282	23	63.6	0.5	23.4	0.7	C
2	1,038	8	62.4	1.1	18.9	0.8	C
1	459	30	25.4	0.6	0.8	0.1	A
Area	2,778	60	63.0	0.7	17.6	0.6	B
Total	4,836	96	64.5	0.4	17.4	0.3	B

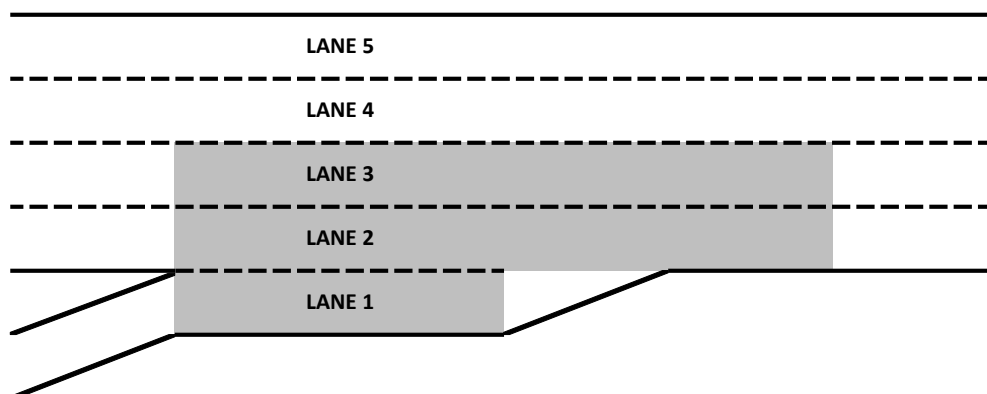
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	459	30
Total	459	30

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,390	4,377	66	99.7%	1,702
On-ramp	460	459	30	99.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 3 - SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,230	25	65.8	0.9	19.5	0.7	C
4	1,437	32	64.6	0.7	23.1	0.8	C
3	1,364	20	61.0	0.3	23.4	0.5	C
2	661	20	64.1	1.0	9.8	0.4	A
1	137	16	66.9	1.1	2.4	0.2	A
Area	4,828	113	63.9	0.4	15.6	0.2	B
Total	4,828	113	63.9	0.4	15.6	0.2	B

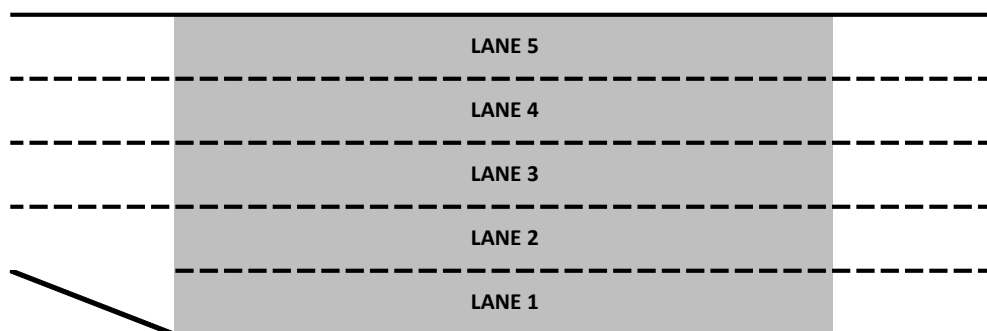
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,850	4,828	113	99.5%	1,019
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 4 - SB I-15: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,324	33	66.5	0.5	16.9	0.7	B
4	1,424	42	64.0	0.5	26.2	0.5	D
3	1,301	26	60.2	0.3	23.2	0.7	C
2	543	16	65.5	0.5	7.9	0.4	A
1	227	18	69.1	0.8	3.9	0.3	A
Area	4,818	135	63.9	0.2	15.6	0.2	B
Total	4,818	135	63.9	0.2	15.6	0.2	B

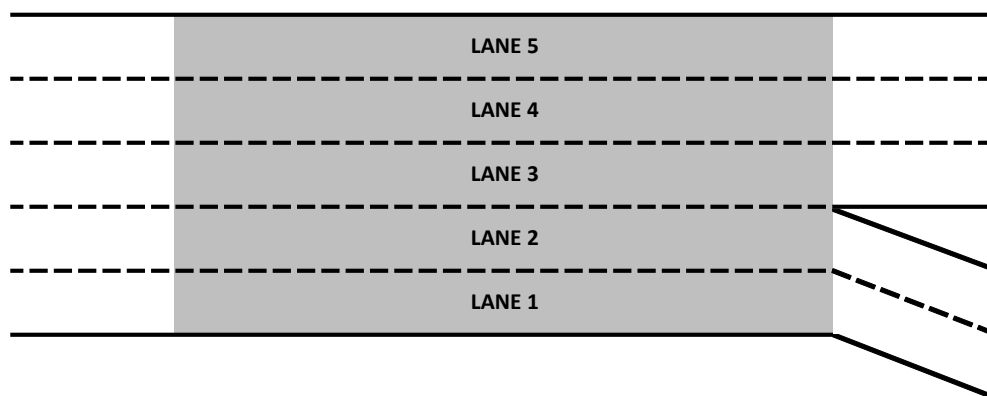
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	483	28
1	280	36
Total	762	64

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,850	4,818	135	99.3%	1,499
On-ramp					
Off-ramp	760	762	64	100.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 5 - SB I-15: EB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,121	22	63.6	3.0	17.9	2.5	B
2	1,620	25	56.1	7.8	22.4	3.0	C
1	1,316	22	51.3	6.1	34.3	5.0	D
Area	2,936	47	53.3	6.8	28.3	4.0	D
Total	4,057	69	56.2	5.5	24.6	3.2	C

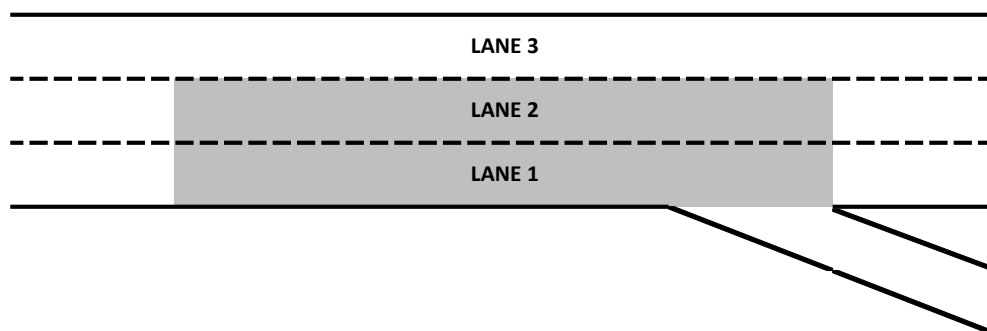
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,371	94
Total	1,371	94

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,090	4,057	69	99.2%	1,545
On-ramp					
Off-ramp	1,340	1,371	94	102.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 6 - SB I-15: EB SR-91 Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	975	18	66.8	1.2	15.2	1.3	B
2	770	13	64.0	2.1	14.7	0.7	B
1	932	19	60.5	1.9	13.8	1.0	B
Area	2,677	49	64.0	1.7	14.5	0.5	B
Total	2,677	49	64.0	1.7	14.5	0.5	B

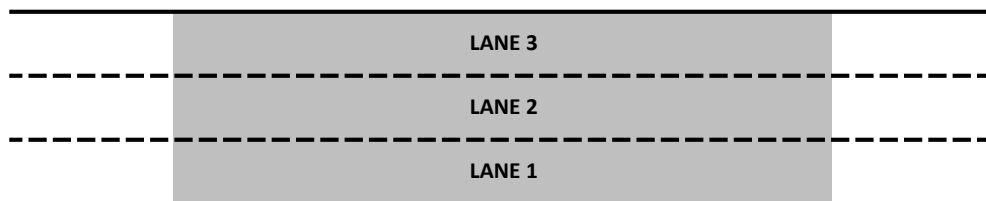
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,750	2,677	49	97.3%	1,549
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 7 - SB I-15: EB SR-91 On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	958	14	67.5	0.7	15.2	0.9	B
4	754	14	65.6	0.7	14.9	0.8	B
3	971	18	61.1	0.9	19.4	0.7	C
2	1,022	36	57.1	1.5	29.8	1.2	D
1	1,139	15	33.6	0.2	2.6	0.1	A
Area	3,885	83	60.3	1.0	18.4	0.6	C
Total	4,842	98	61.8	0.9	17.7	0.5	B

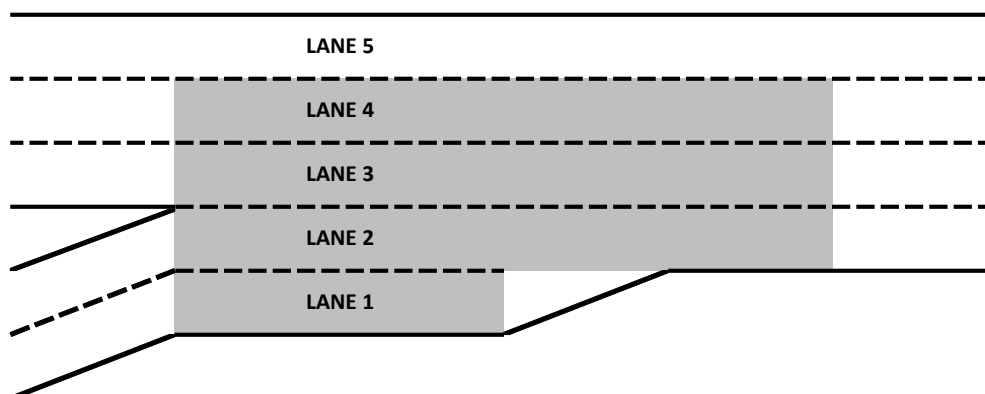
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,022	36
1	1,139	15
Total	2,160	51

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,750	2,682	47	97.5%	1,370
On-ramp	2,190	2,160	51	98.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 8 - SB I-15: WB SR-91 On-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6			67.2	0.5	17.9	1.0	B
5	1,054	20	66.1	0.5	19.8	1.0	C
4	1,064	23	64.3	0.8	20.8	1.2	C
3	990	21	60.4	1.2	24.9	1.2	C
2	1,740	30	49.9	0.9	13.0	0.6	B
1	1,606	150	32.9	0.4	3.6	0.4	A
Area	6,453	243	64.0	0.6	18.9	0.8	C
Total	6,453	243	64.0	0.6	18.9	0.8	C

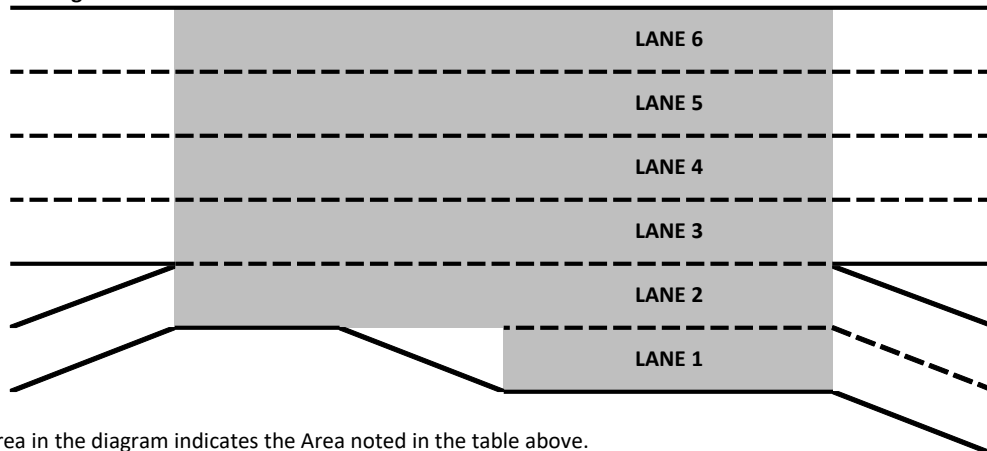
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,606	150
Total	1,606	150

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	799	27
1	579	62
Total	1,378	85

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,940	4,847	93	98.1%	2,539
On-ramp	1,590	1,606	150	101.0%	
Off-ramp	1,420	1,378	85	97.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 9 - SB I-15: Magnolia Ave Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,318	12	66.9	0.5	20.4	1.5	C
3	1,392	37	66.0	0.7	21.9	1.3	C
2	1,271	38	64.2	0.8	20.7	0.7	C
1	1,074	14	61.3	0.9	18.1	1.1	C
Area	5,054	101	64.8	0.6	20.3	1.1	C
Total	5,054	101	64.8	0.6	20.3	1.1	C

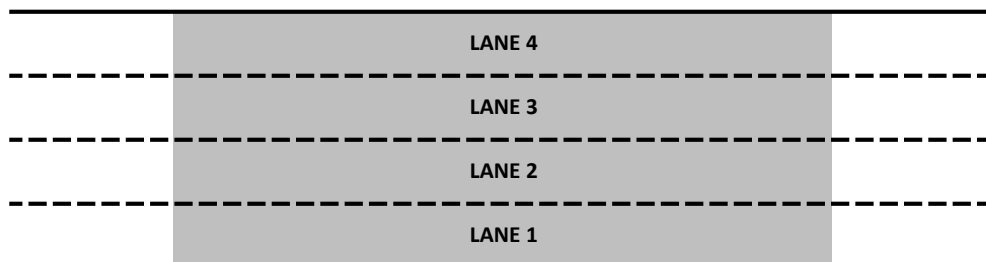
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,110	5,054	101	98.9%	2,362
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 10 - SB I-15: Magnolia Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7			35.0	0.3	0.7	0.1	A
6			35.2	0.2	1.2	0.1	A
5	1,372	20	67.5	0.4	21.0	1.6	C
4	1,416	45	66.1	0.7	24.2	1.3	C
3	1,258	38	63.6	0.6	24.0	0.9	C
2	1,001	16	60.0	0.7	20.9	0.9	C
1	581	53	25.0	1.4	1.4	0.2	A
Area	2,839	107	61.7	0.5	17.8	0.7	B
Total	5,627	171	64.4	0.4	16.6	0.8	B

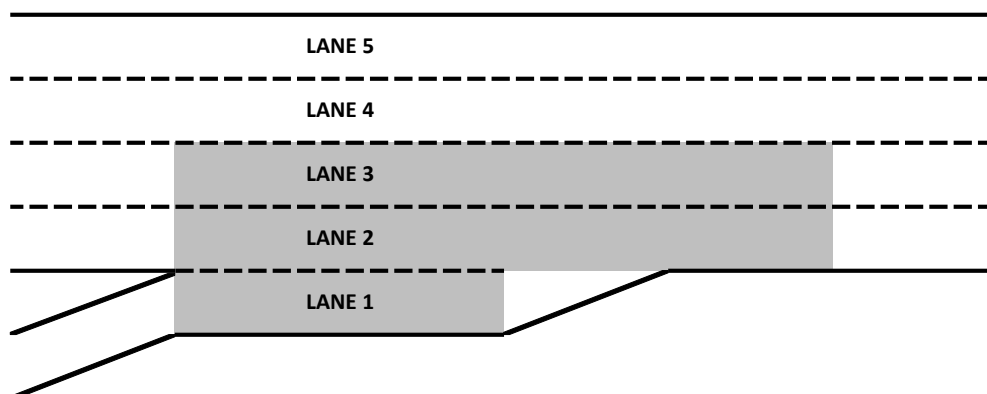
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	581	53
Total	581	53

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,110	5,046	118	98.7%	1,504
On-ramp	610	581	53	95.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 11 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7	1,381	25	48.8	0.5	0.9	0.1	A
6	1,429	49	48.9	0.4	1.7	0.1	A
5	1,419	23	66.7	0.4	21.2	1.5	C
4	1,286	38	65.2	0.7	24.3	1.3	C
3	115	14	62.8	0.8	25.2	0.8	C
2	103	16	59.9	0.7	21.9	1.2	C
1	212	18	7.2	0.6	0.1	0.0	A
Area	5,943	183	63.9	0.5	17.0	0.9	B
Total	5,943	183	63.9	0.5	17.0	0.9	B

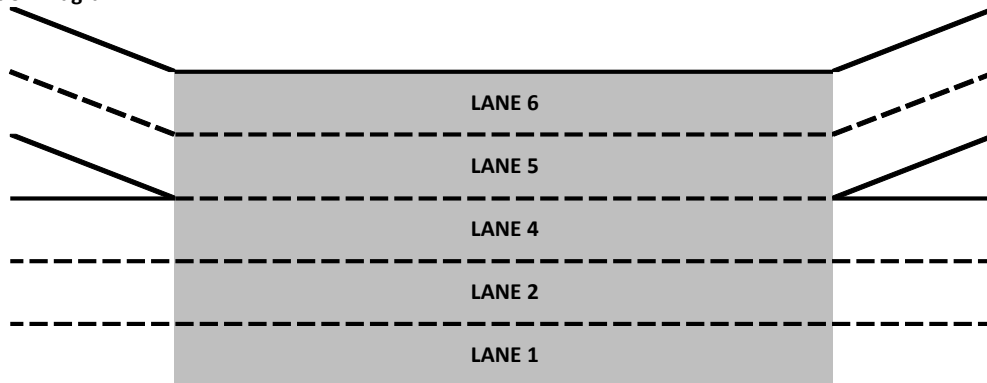
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	103	16
1	212	18
Total	314	24

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	108	16
1	203	28
Total	311	41

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,720	5,629	159	98.4%	3,337
On-ramp	310	314	24	101.3%	
Off-ramp	320	311	41	97.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 12 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (after EL Access)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,343	23	66.9	0.5	20.7	1.7	C
3	1,323	12	65.6	0.7	21.0	1.0	C
2	1,606	30	62.1	0.9	26.6	1.0	D
1	1,361	13	59.8	0.8	23.7	1.3	C
Area	5,632	77	63.5	0.6	23.0	1.0	C
Total	5,632	77	63.5	0.6	23.0	1.0	C

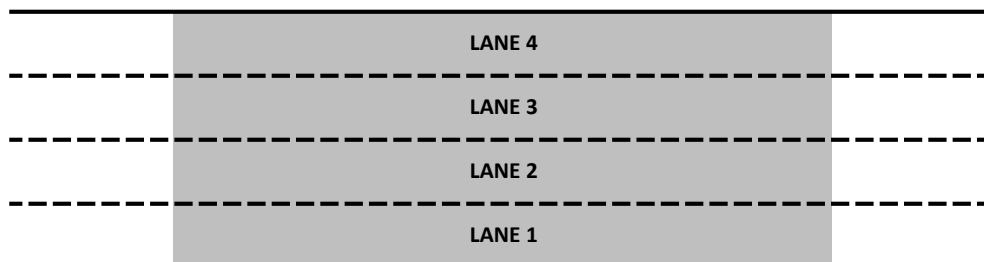
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,710	5,632	77	98.6%	394
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 13 - SB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,352	20	65.5	1.4	21.9	1.9	C
3	1,340	19	64.1	1.5	22.5	1.2	C
2	1,590	30	58.7	2.3	21.1	1.0	C
1	1,349	16	55.1	2.3	30.5	2.0	D
Area	2,939	46	56.6	2.3	25.8	1.5	C
Total	5,630	85	60.7	1.8	23.9	1.4	C

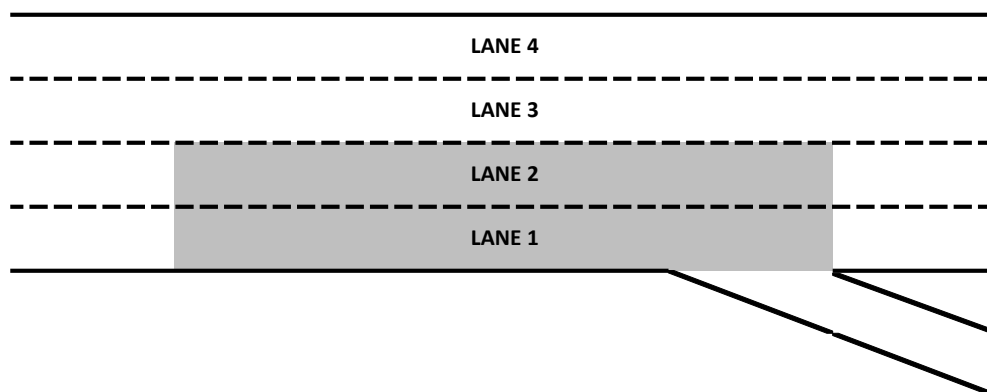
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,059	44
Total	1,059	44

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,710	5,630	85	98.6%	1,504
On-ramp					
Off-ramp	1,050	1,059	44	100.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 14 - SB I-15: Ontario Ave Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,437	33	66.0	0.6	23.2	1.5	C
3	1,673	16	63.7	1.2	25.7	1.0	C
2	1,326	26	59.4	1.0	22.6	1.4	C
1	137	11	62.4	1.5	3.5	0.5	A
Area	4,572	86	63.2	0.9	18.7	1.0	C
Total	4,572	86	63.2	0.9	18.7	1.0	C

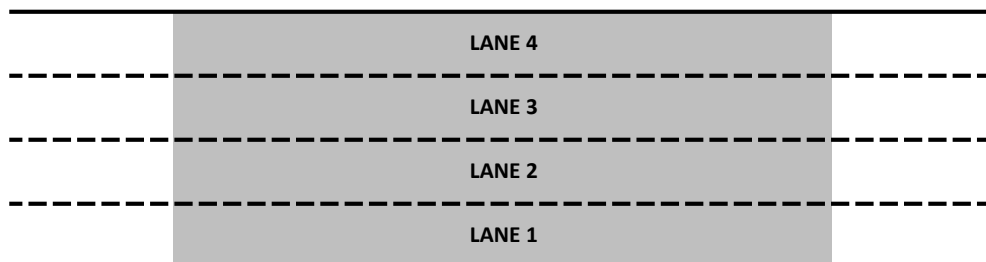
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,660	4,572	86	98.1%	2,820
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 15 - SB I-15: Ontario Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,529	18	66.7	1.6	22.9	1.0	C
4	1,488	11	64.8	1.4	25.8	0.8	C
3	1,299	21	60.4	1.3	22.6	1.4	C
2	257	30	64.6	0.8	9.3	0.9	A
1	483	53	35.7	0.5	0.8	0.0	A
Area	2,038	104	61.6	1.0	12.5	0.8	B
Total	5,055	134	64.2	1.2	17.6	0.5	B

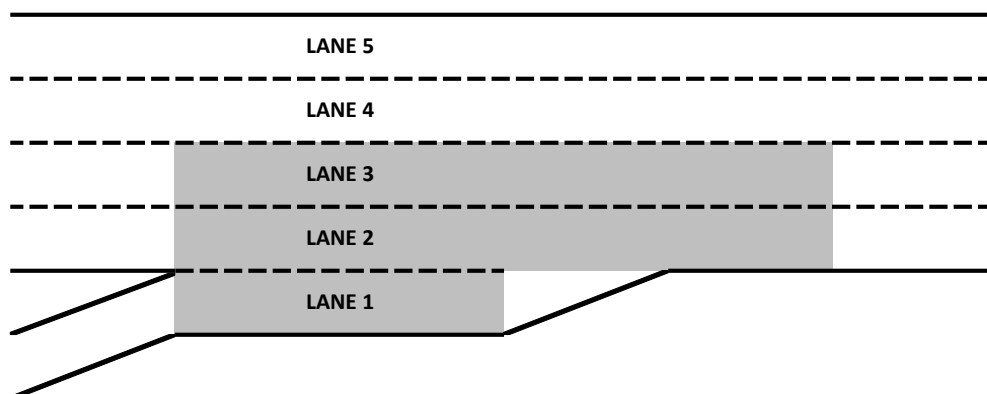
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	483	53
Total	483	53

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,660	4,572	81	98.1%	1,494
On-ramp	480	483	53	100.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 16 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,439	28	64.1	3.3	23.3	1.3	C
3	1,720	11	62.3	2.8	27.7	1.5	D
2	1,250	23	58.0	2.4	22.4	1.5	C
1	648	19	63.5	1.7	10.8	1.4	A
Area	5,056	81	61.9	2.7	21.0	1.0	C
Total	5,056	81	61.9	2.7	21.0	1.0	C

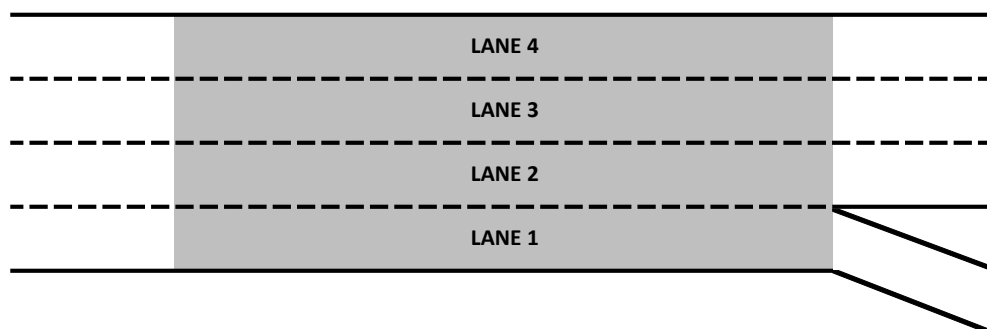
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	650	52
Total	650	52

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,140	5,056	81	98.4%	738
On-ramp					
Off-ramp	670	650	52	97.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 17 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,549	23	64.1	0.8	24.4	1.6	C
2	1,626	8	61.6	1.1	27.3	0.9	D
1	1,224	11	57.5	0.9	22.2	0.7	C
Area	4,399	43	61.3	0.8	24.6	0.8	C
Total	4,399	43	61.3	0.8	24.6	0.8	C

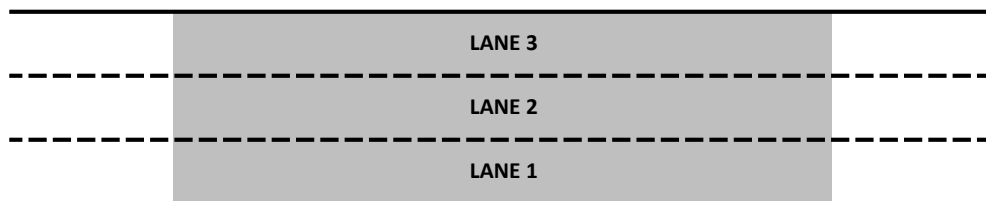
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,470	4,399	43	98.4%	1,130
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 18 - SB I-15: EL On-ramp at Foothill Pkwy/El Cerrito Rd

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,564	21	60.6	3.5	0.1	0.0	A
3	1,628	13	65.6	0.7	24.8	1.4	C
2	1,205	17	63.2	0.7	26.2	1.1	D
1	27	11	58.9	0.7	21.4	0.6	C
Area	4,424	62	62.9	0.6	18.1	0.6	C
Total	4,424	62	62.9	0.6	18.1	0.6	C

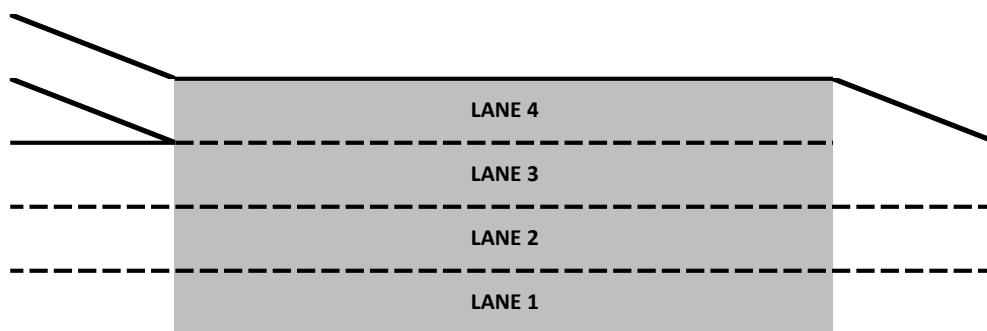
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	27	11
Total	27	11

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,470	4,397	51	98.4%	593
On-ramp	30	27	11	90.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 19 - SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,572	21	66.1	0.6	24.9	0.8	C
3	1,579	10	63.4	0.9	23.5	1.2	C
2	1,268	23	59.2	0.8	22.2	0.9	C
1	396	33	52.4	0.6	6.2	0.9	A
Area	4,814	87	63.4	0.7	20.2	0.9	C
Total	4,814	87	63.4	0.7	20.2	0.9	C

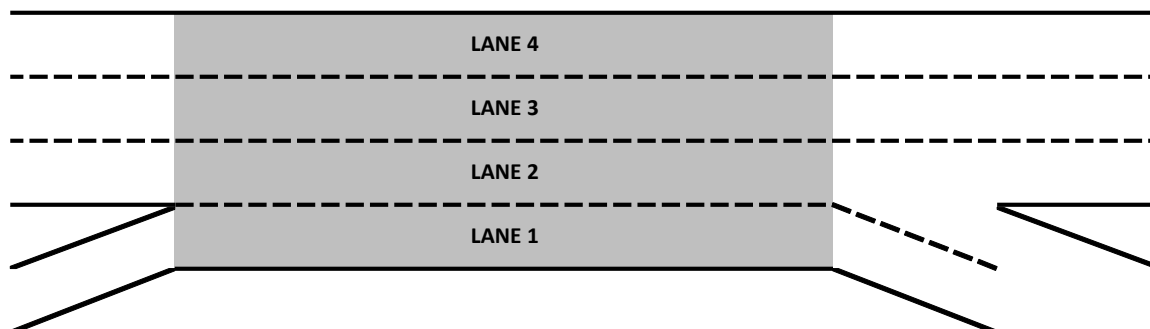
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	396	33
Total	396	33

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	206	10
1	566	36
Total	772	46

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,500	4,418	54	98.2%	2,964
On-ramp	420	396	33	94.3%	
Off-ramp	790	772	46	97.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 20 - SB I-15: EL On-ramp at Cajalco Rd to Cajalco Rd On-ramp (4 Lane)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,616	10	69.6	0.2	10.3	0.6	A
3	1,459	13	67.4	0.3	21.5	0.6	C
2	958	14	64.5	0.7	20.6	0.9	C
1	286	23	60.3	0.4	15.8	1.0	B
Area	4,318	60	65.4	0.4	17.0	0.6	B
Total	4,318	60	65.4	0.4	17.0	0.6	B

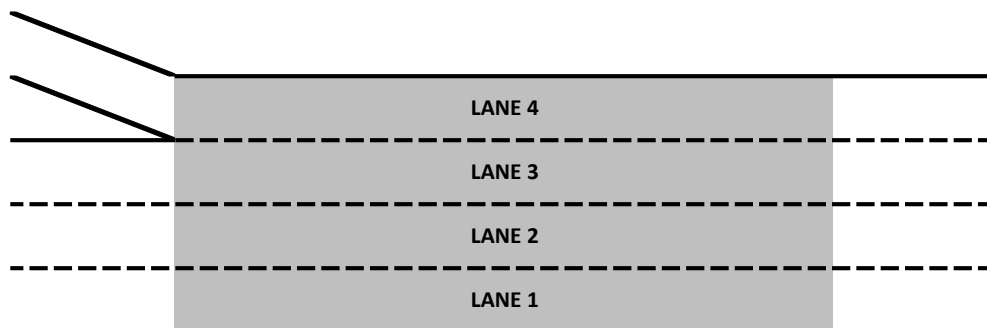
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	286	23
Total	286	23

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,130	4,032	37	97.6%	2,078
On-ramp	290	286	23	98.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 21 - SB I-15: Cajalco Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	829	14	68.7	0.7	15.0	1.2	B
4	1,438	18	65.1	0.9	26.5	1.1	D
3	1,191	11	59.9	1.1	23.7	0.7	C
2	861	12	61.6	1.1	7.0	0.2	A
1	181	17	21.8	0.4	0.4	0.1	A
Area	2,233	40	60.2	1.1	12.9	0.3	B
Total	4,500	73	63.9	0.7	16.4	0.6	B

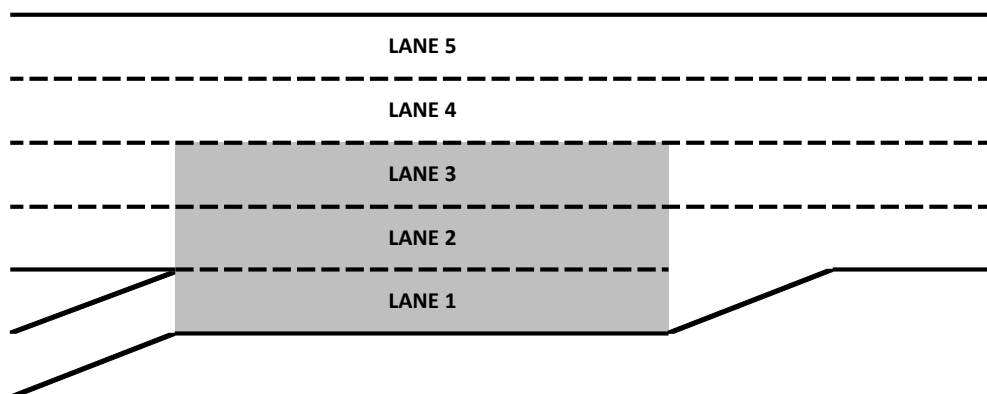
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	181	17
Total	181	17

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,420	4,319	56	97.7%	1,502
On-ramp	170	181	17	106.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 22 - SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,364	20	68.1	0.3	21.2	1.4	C
3	1,506	10	64.8	0.6	23.7	0.8	C
2	1,298	23	59.5	1.0	21.4	0.5	C
1	340	14	65.9	0.7	5.8	0.5	A
Area	4,508	66	64.5	0.4	18.0	0.6	B
Total	4,508	66	64.5	0.4	18.0	0.6	B

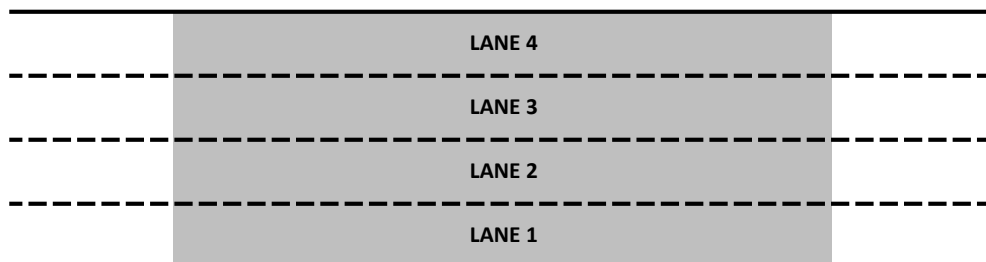
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,590	4,508	66	98.2%	1,675
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 23 - SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,470	19	68.4	0.1	22.7	0.5	C
3	1,496	20	65.0	0.2	22.7	1.0	C
2	995	16	59.3	0.7	16.7	0.6	B
1	552	24	65.3	1.0	9.6	1.0	A
Area	4,512	79	65.0	0.2	17.9	0.6	B
Total	4,512	79	65.0	0.2	17.9	0.6	B

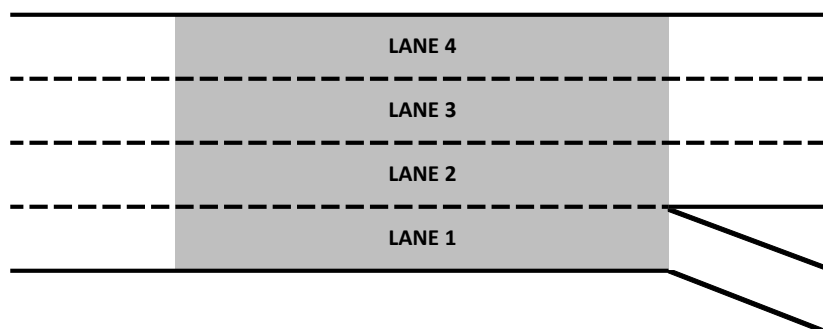
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	575	42
Total	575	42

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,590	4,512	79	98.3%	1,498
On-ramp					
Off-ramp	620	575	42	92.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 24 - SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,591	19	68.0	0.4	24.4	1.1	C
2	1,434	5	64.7	0.6	22.6	0.7	C
1	894	11	58.8	0.6	15.5	0.6	B
Area	3,918	35	64.8	0.4	20.8	0.7	C
Total	3,918	35	64.8	0.4	20.8	0.7	C

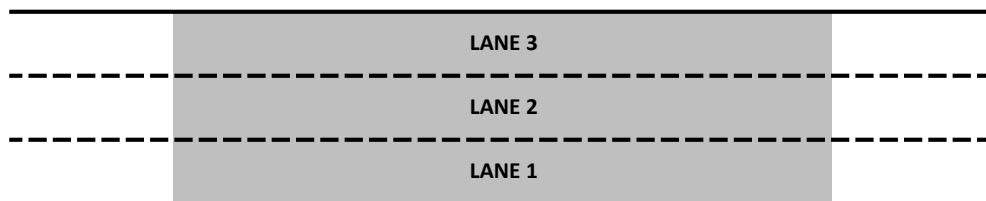
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,970	3,918	35	98.7%	2,237
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 25 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,630	26	68.4	0.3	25.2	0.9	C
3	1,413	14	64.7	0.4	22.8	0.7	C
2	880	16	59.1	0.5	16.2	0.9	B
1	140	15	29.1	1.6	0.3	0.0	A
Area	2,432	45	62.5	0.4	15.5	0.6	B
Total	4,062	71	65.0	0.2	18.2	0.5	C

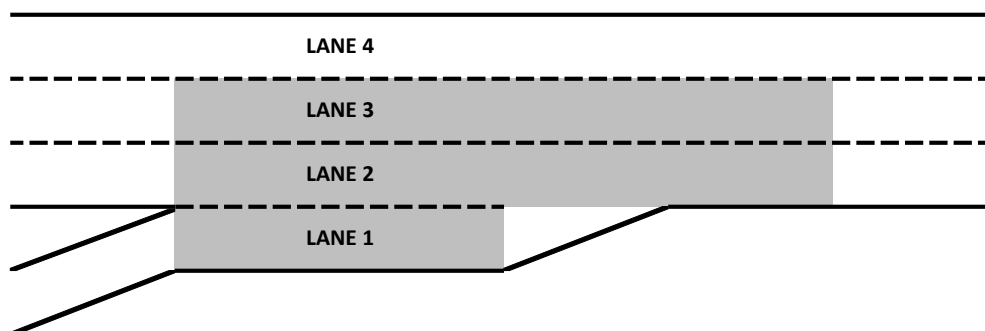
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	140	15
Total	140	15

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,970	3,922	56	98.8%	1,501
On-ramp	120	140	15	116.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 26 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,727	29	67.2	0.3	26.0	0.8	D
2	1,387	21	63.8	0.6	22.9	1.2	C
1	932	18	59.0	0.8	17.2	1.0	B
Area	4,046	68	64.0	0.5	22.0	1.0	C
Total	4,046	68	64.0	0.5	22.0	1.0	C

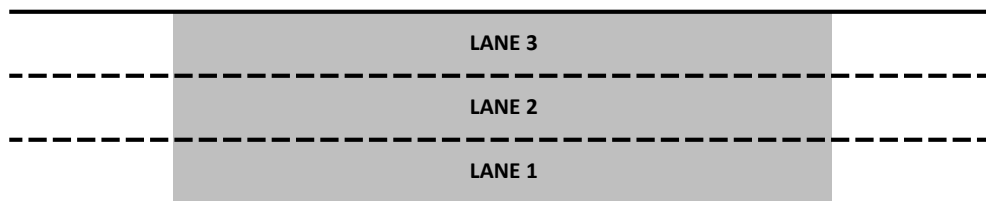
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,090	4,046	68	98.9%	7,458
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 27 - SB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,562	35	67.1	0.6	24.5	1.1	C
2	1,297	10	63.9	0.5	20.6	1.1	C
1	1,178	18	58.9	1.4	21.0	1.4	C
Area	2,475	28	61.5	0.9	20.8	1.2	C
Total	4,036	63	63.7	0.7	22.0	1.1	C

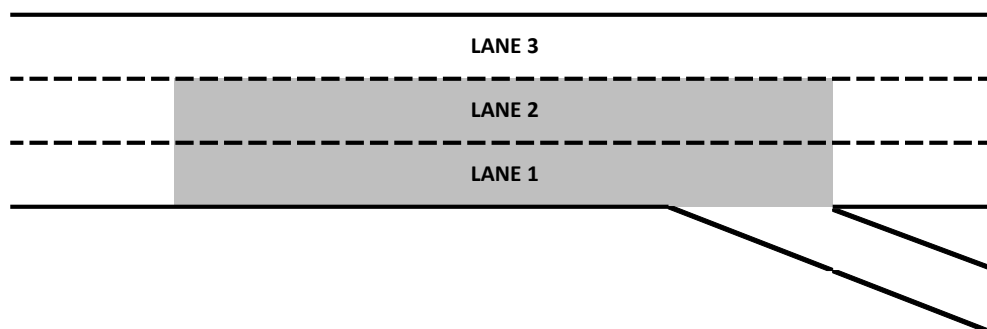
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	488	31
Total	488	31

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,090	4,036	63	98.7%	1,502
On-ramp					
Off-ramp	480	488	31	101.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 28 - SB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,533	24	67.0	0.5	24.2	1.2	C
2	1,196	17	64.5	0.4	19.6	1.0	C
1	822	16	61.3	1.2	14.3	0.6	B
Area	3,551	57	64.8	0.5	19.4	0.8	C
Total	3,551	57	64.8	0.5	19.4	0.8	C

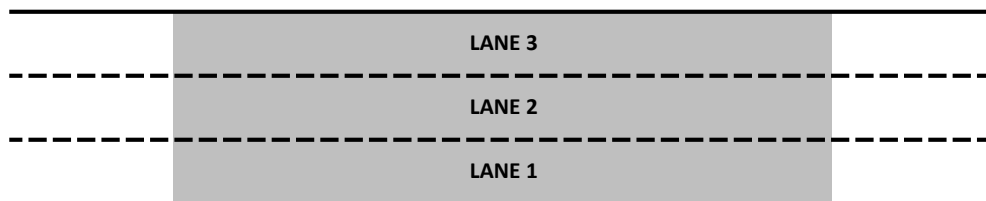
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,610	3,551	57	98.4%	2,526
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 29 - SB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,524	15	67.5	0.4	23.9	1.4	C
3	1,191	3	64.7	0.2	20.3	1.0	C
2	835	25	61.5	1.2	16.1	0.8	B
1	167	21	35.3	0.7	0.3	0.1	A
Area	2,193	49	63.3	0.6	14.0	0.7	B
Total	3,716	64	65.0	0.5	16.7	0.8	B

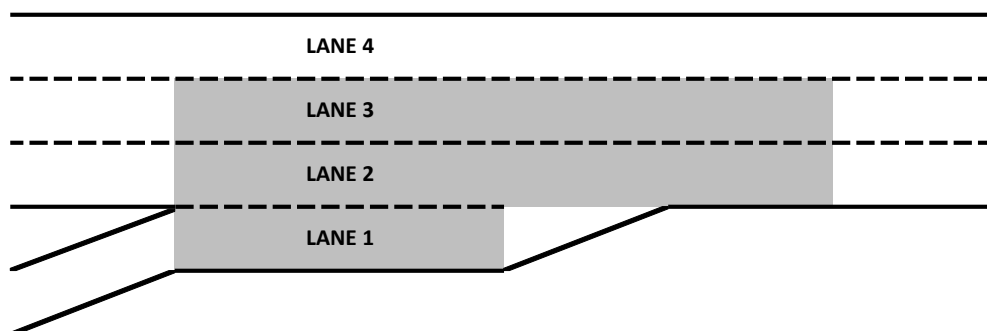
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	167	21
Total	167	21

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,610	3,549	43	98.3%	1,502
On-ramp	170	167	21	98.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 30 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,567	37	66.2	0.5	24.2	1.6	C
2	1,241	17	63.6	0.6	20.9	0.9	C
1	891	28	60.7	1.1	16.8	0.6	B
Area	3,699	82	63.9	0.5	20.6	0.9	C
Total	3,699	82	63.9	0.5	20.6	0.9	C

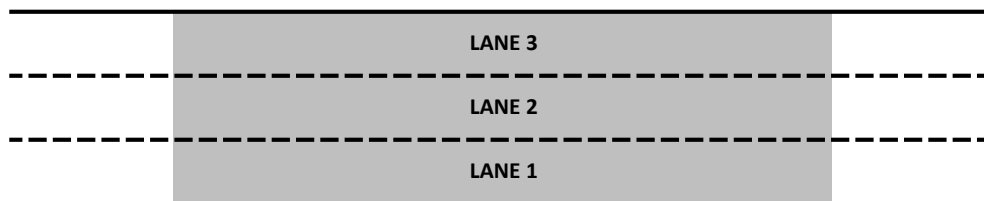
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,780	3,699	82	97.8%	8,913
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 31 - SB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,465	15	65.9	0.7	23.3	1.5	C
2	1,273	15	63.2	1.9	19.6	1.0	C
1	953	18	60.3	1.6	19.0	1.3	C
Area	2,226	33	61.8	1.7	19.3	1.1	C
Total	3,690	47	63.4	1.2	20.6	1.2	C

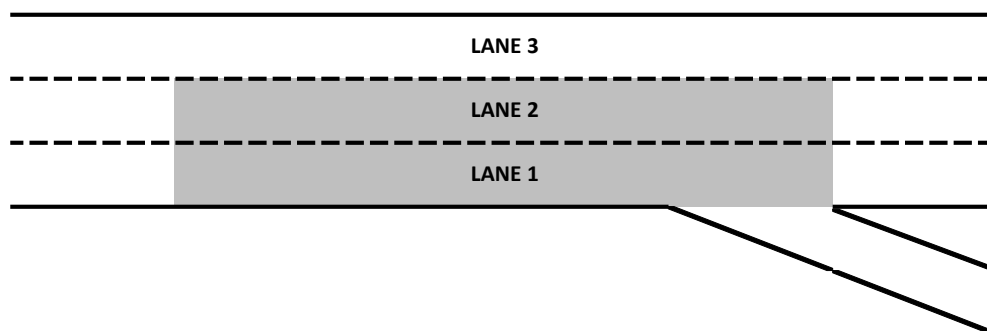
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	289	29
Total	289	29

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,780	3,690	47	97.6%	1,499
On-ramp					
Off-ramp	290	289	29	99.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 32 - SB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,447	21	66.2	0.5	22.6	1.6	C
2	1,138	13	64.1	0.9	19.3	0.9	C
1	819	7	61.5	1.1	14.9	1.1	B
Area	3,403	41	64.3	0.8	18.9	1.1	C
Total	3,403	41	64.3	0.8	18.9	1.1	C

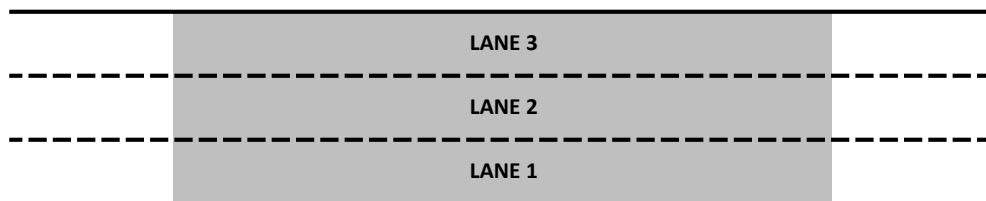
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,490	3,403	41	97.5%	3,127
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 33 - SB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,432	20	66.7	0.5	22.7	1.8	C
3	1,156	16	64.4	1.0	20.6	1.4	C
2	814	22	60.9	1.1	17.0	1.0	B
1	203	28	32.4	1.2	0.4	0.1	A
Area	2,173	66	62.9	0.9	14.9	0.9	B
Total	3,605	86	64.4	0.7	17.1	1.1	B

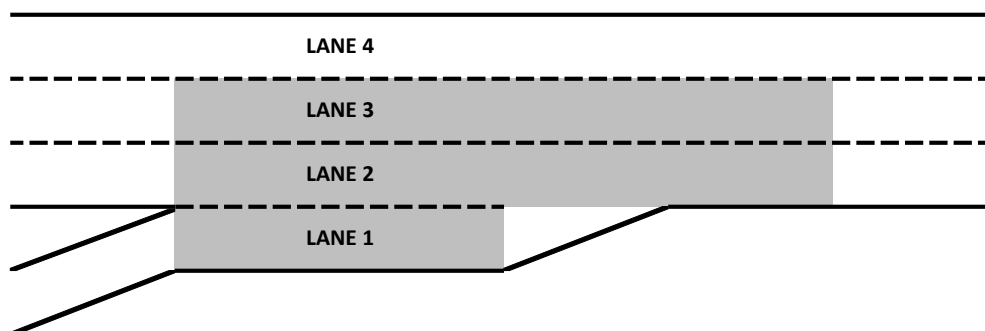
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	203	28
Total	203	28

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,490	3,402	58	97.5%	1,501
On-ramp	210	203	28	96.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 34 - SB I-15: Indian Truck Trail On-ramp to Lake St Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,454	31	65.9	0.9	23.6	0.8	C
2	1,228	23	63.8	1.0	20.9	1.1	C
1	890	14	60.6	1.2	16.7	1.5	B
Area	3,572	68	63.8	1.0	20.4	1.0	C
Total	3,572	68	63.8	1.0	20.4	1.0	C

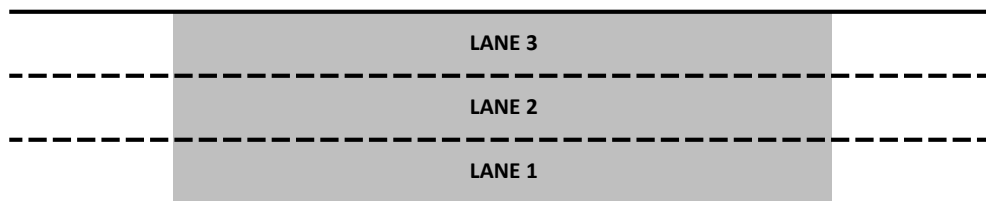
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,700	3,572	68	96.5%	13,523
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 35 - SB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,377	25	65.2	1.8	22.8	1.0	C
2	1,229	8	61.8	4.1	19.6	2.0	C
1	955	22	59.0	2.4	19.3	1.8	C
Area	2,184	30	60.5	3.3	19.4	1.9	C
Total	3,560	55	62.3	2.7	20.5	1.5	C

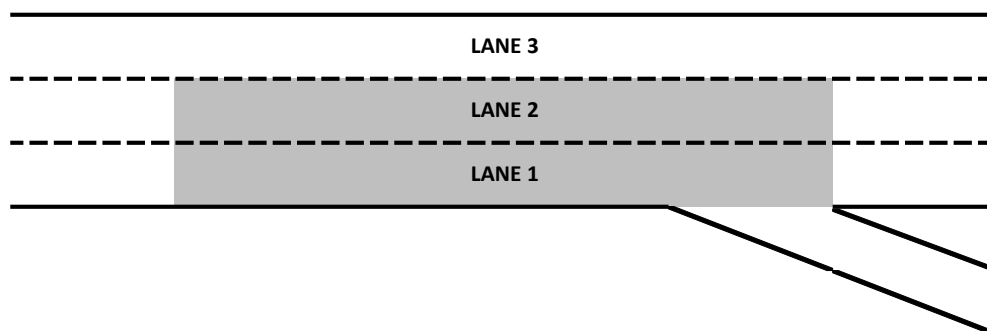
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	328	37
Total	328	37

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,700	3,560	55	96.2%	1,501
On-ramp					
Off-ramp	320	328	37	102.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 36 - SB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,324	18	66.3	0.6	21.9	0.6	C
2	1,126	17	64.4	0.9	18.4	0.6	C
1	768	13	62.0	0.9	14.2	1.1	B
Area	3,217	48	64.6	0.7	18.2	0.6	C
Total	3,217	48	64.6	0.7	18.2	0.6	C

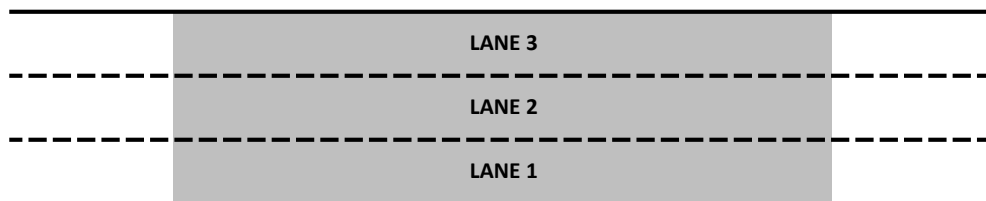
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,380	3,217	48	95.2%	3,287
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 37 - SB I-15: Lake St On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,331	13	67.0	0.5	22.4	0.7	C
3	1,096	11	64.6	0.4	20.0	0.7	C
2	793	17	61.6	0.8	18.2	0.8	C
1	431	81	38.4	0.8	0.8	0.1	A
Area	2,319	108	63.2	0.5	14.7	0.4	B
Total	3,650	122	64.6	0.4	16.8	0.4	B

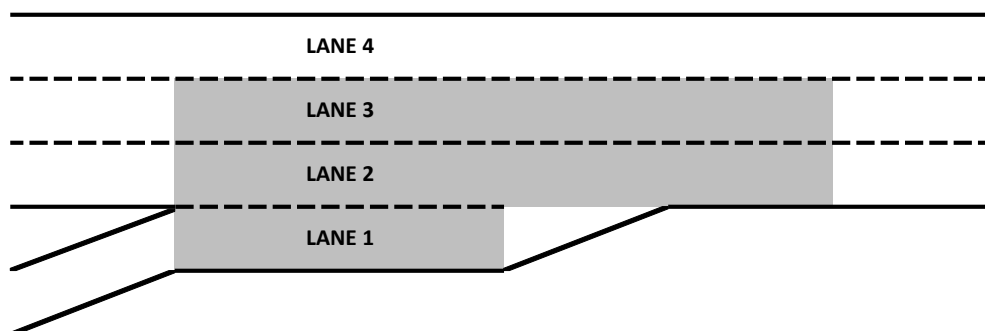
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	431	81
Total	431	81

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,380	3,219	41	95.2%	1,500
On-ramp	420	431	81	102.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 38 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,452	32	65.9	0.8	23.4	0.7	C
2	1,251	19	63.8	0.8	20.8	0.7	C
1	934	16	60.9	0.9	17.0	0.9	B
Area	3,636	67	63.9	0.8	20.3	0.6	C
Total	3,636	67	63.9	0.8	20.3	0.6	C

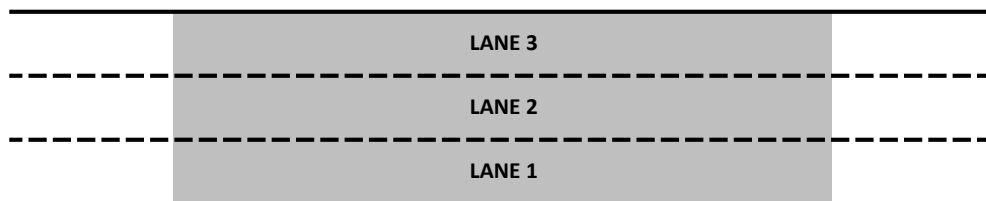
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,800	3,636	67	95.7%	8,752
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 39 - SB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,369	13	66.0	1.0	22.3	0.7	C
2	1,273	16	63.8	1.5	19.4	1.0	C
1	988	34	60.4	1.2	19.1	1.2	C
Area	2,261	49	62.1	1.3	19.2	1.0	C
Total	3,630	63	63.6	1.1	20.2	0.7	C

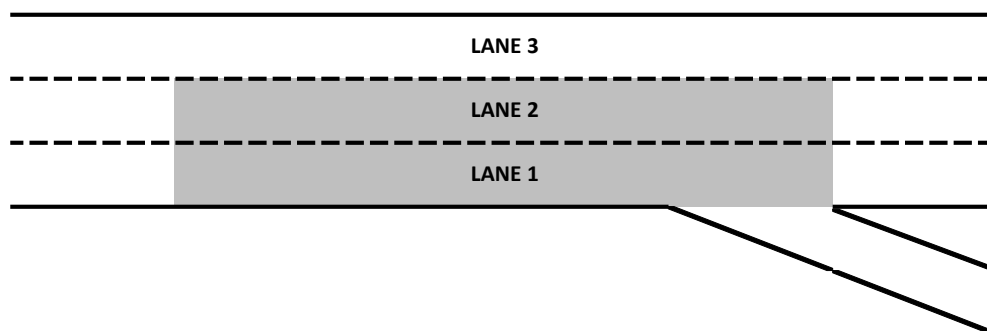
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	318	34
Total	318	34

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,800	3,630	63	95.5%	1,500
On-ramp					
Off-ramp	300	318	34	106.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 40 - SB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,361	15	66.2	0.7	21.7	0.6	C
2	1,122	18	64.5	0.9	18.5	1.1	C
1	823	17	62.4	1.2	14.7	1.2	B
Area	3,306	50	64.6	0.8	18.3	0.6	C
Total	3,306	50	64.6	0.8	18.3	0.6	C

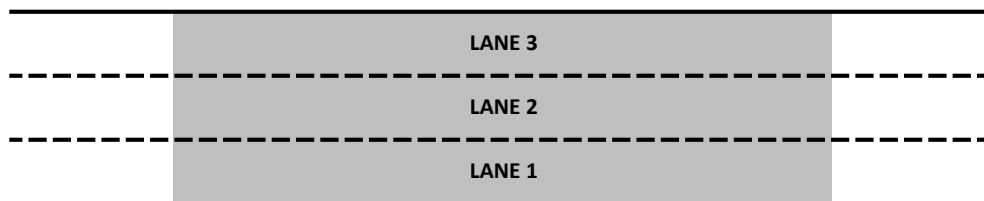
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,500	3,306	50	94.5%	3,058
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 41 - SB I-15: Nichols Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,333	23	65.9	0.7	22.1	0.4	C
3	1,133	18	63.0	1.2	21.5	0.5	C
2	834	18	60.9	1.1	18.7	0.8	C
1	458	40	28.8	1.3	1.0	0.1	A
Area	2,424	76	61.9	0.9	16.2	0.4	B
Total	3,757	99	63.4	0.8	17.9	0.3	B

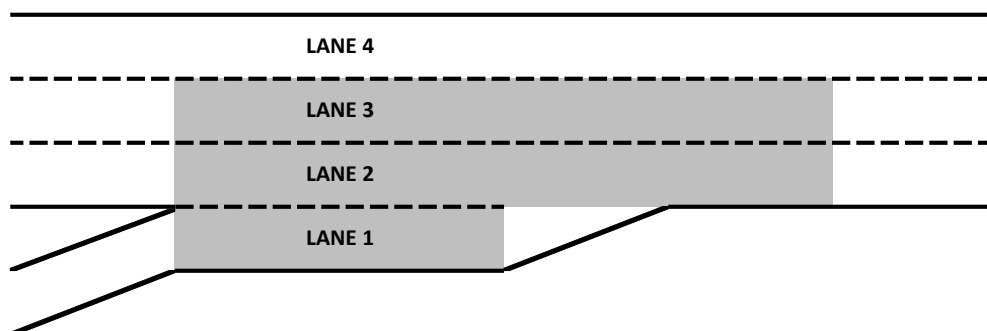
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	458	40
Total	458	40

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,500	3,299	59	94.2%	1,500
On-ramp	450	458	40	101.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 42 - SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,282	33	66.1	0.5	21.8	0.8	C
2	1,378	19	63.6	0.9	22.2	0.8	C
1	1,074	14	61.4	1.1	18.5	1.0	C
Area	3,734	66	63.9	0.7	20.8	0.4	C
Total	3,734	66	63.9	0.7	20.8	0.4	C

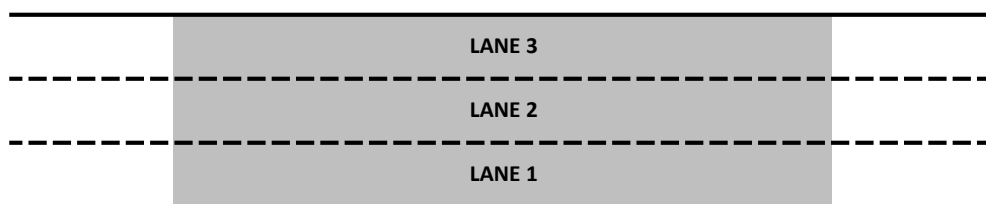
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,950	3,734	66	94.5%	2,332
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 43 - SB I-15: Central Ave (SR-74) Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,297	30	65.9	0.8	20.7	0.6	C
3	1,356	17	63.5	1.7	18.6	1.2	C
2	1,080	9	61.6	1.2	19.4	0.2	C
1			67.2	0.5	3.1	0.3	A
Area	2,435	26	62.9	1.3	13.7	0.4	B
Total	3,732	57	64.0	1.1	15.4	0.3	B

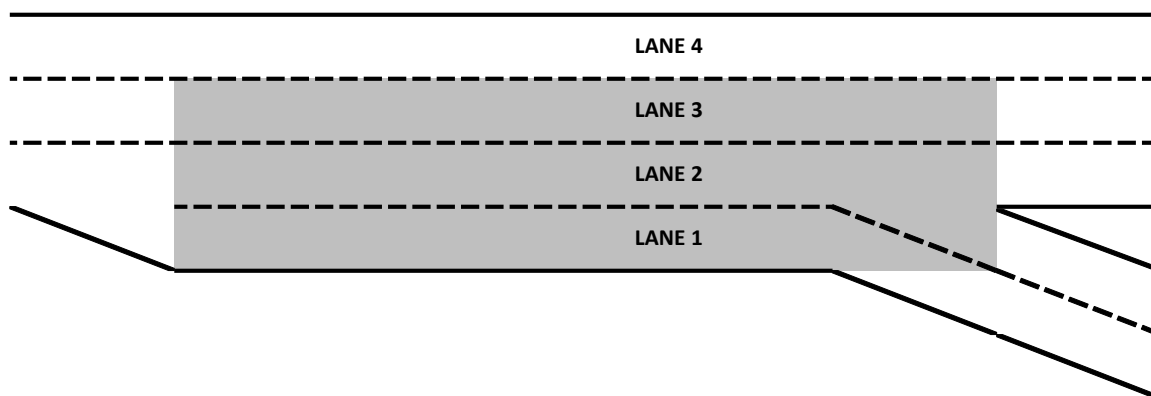
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	306	30
1	314	26
Total	620	47

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,950	3,732	57	94.5%	1,498
On-ramp					
Off-ramp	620	620	47	99.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 44 - SB I-15: Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,284	30	66.3	0.6	21.0	0.9	C
2	1,053	21	64.6	0.8	17.8	0.7	B
1	771	25	62.5	1.1	13.4	1.0	B
Area	3,107	76	64.8	0.8	17.4	0.5	B
Total	3,107	76	64.8	0.8	17.4	0.5	B

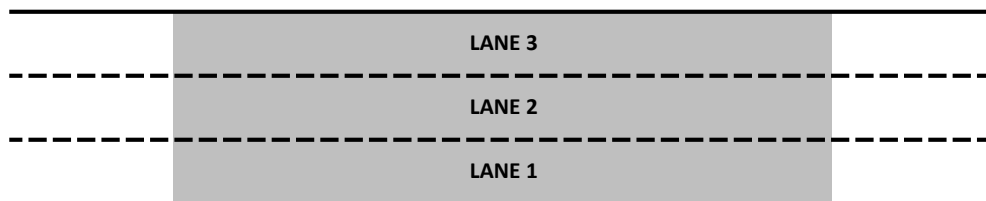
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,330	3,107	76	93.3%	3,037
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 45 - SB I-15: Central Ave (SR-74) On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,272	25	65.5	1.5	24.2	1.2	C
3	1,075	9	61.5	1.5	25.0	1.2	C
2	763	17	57.1	1.4	22.1	1.8	C
1	1,250	58	47.0	0.9	3.6	0.1	A
Area	3,087	84	58.8	1.4	16.9	0.9	B
Total	4,359	110	61.1	1.4	18.6	0.8	C

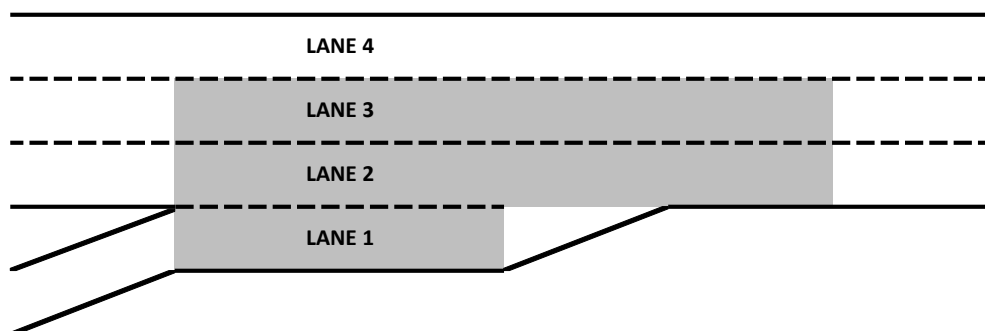
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,250	58
Total	1,250	58

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,330	3,109	52	93.4%	1,502
On-ramp	1,210	1,250	58	103.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 46 - SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,653	18	63.5	1.2	27.3	0.8	D
2	1,474	13	60.3	1.1	25.4	1.2	C
1	1,240	20	58.7	0.7	22.0	1.0	C
Area	4,367	50	61.1	1.0	24.9	0.9	C
Total	4,367	50	61.1	1.0	24.9	0.9	C

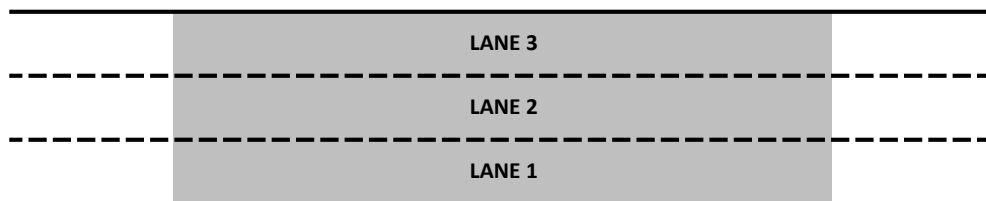
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,540	4,367	50	96.2%	890
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 47 - SB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,652	16	65.2	0.4	25.9	1.4	C
2	1,465	18	62.5	0.6	23.9	0.7	C
1	1,242	28	60.2	0.8	22.2	1.9	C
Area	2,707	45	61.4	0.6	23.1	1.2	C
Total	4,359	62	62.9	0.5	24.0	1.2	C

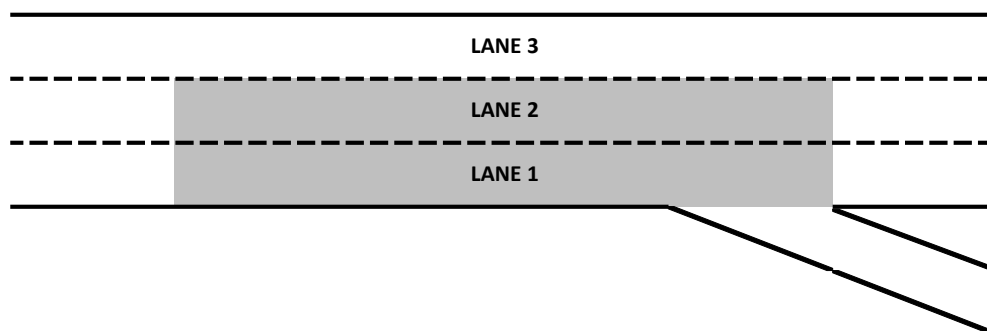
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	169	10
Total	169	10

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,540	4,359	62	96.0%	1,498
On-ramp					
Off-ramp	160	169	10	105.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 48 - SB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,642	15	65.6	0.3	26.1	1.0	D
2	1,404	13	62.9	0.6	23.7	1.2	C
1	1,117	21	60.4	0.6	20.0	1.6	C
Area	4,163	48	63.3	0.4	23.2	1.2	C
Total	4,163	48	63.3	0.4	23.2	1.2	C

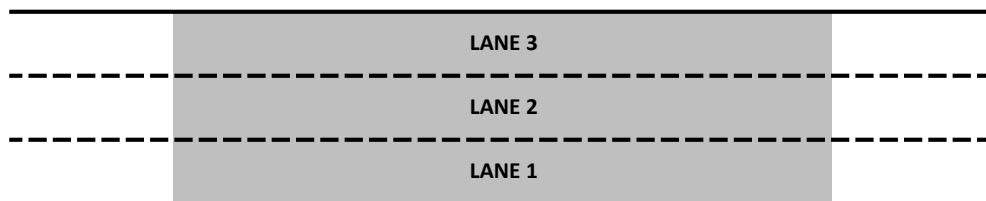
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,380	4,163	48	95.0%	3,514
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 49 - SB I-15: Main St On-ramp SB

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,643	23	65.0	1.9	27.2	1.6	D
3	1,397	19	62.2	1.5	26.2	1.6	D
2	1,109	23	59.4	1.4	23.9	1.5	C
1	526	49	27.5	0.9	1.0	0.2	A
Area	3,031	91	61.0	1.2	20.6	1.3	C
Total	4,674	115	62.5	1.3	22.5	1.2	C

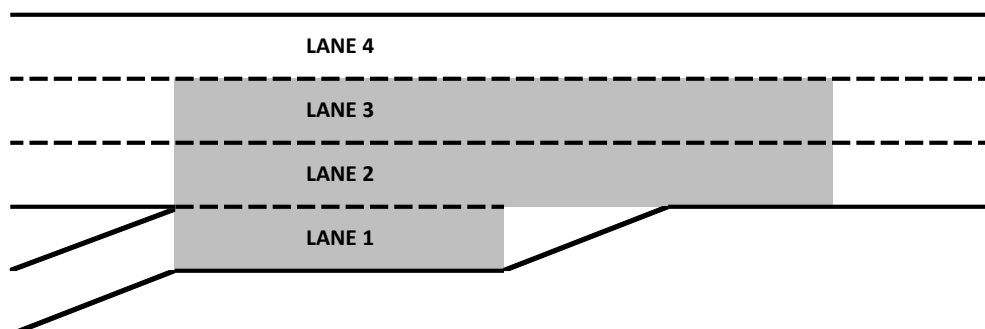
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	526	49
Total	526	49

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,380	4,149	66	94.7%	1,500
On-ramp	490	526	49	107.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 50 - SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,806	47	64.2	1.5	29.2	1.6	D
2	1,559	21	61.3	1.5	26.2	1.3	D
1	1,306	21	59.1	1.4	23.7	1.3	C
Area	4,670	88	61.8	1.4	26.4	1.3	D
Total	4,670	88	61.8	1.4	26.4	1.3	D

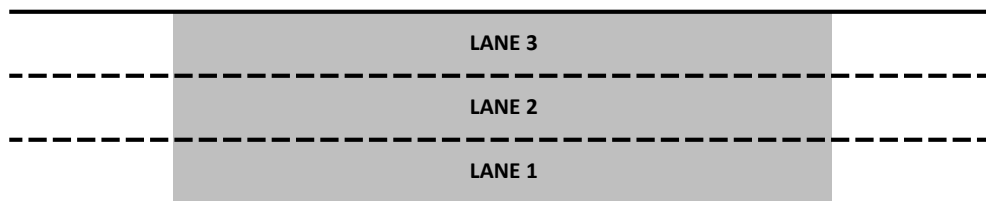
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,870	4,670	88	95.9%	3,089
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Opening Year No Build
AM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
152 NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	3,839	64	101.6%				1,225	113	100.4%	68.1	0.6	11.6	0.4	B
151 NB I-15: Hidden Valley Pkwy Off-ramp	Diverge	4,560	79	101.6%				719	61	101.3%	68.1	0.5	15.8	0.7	B
150 NB I-15: EB SR-91 On-ramp	Merge	3,711	67	102.2%	852	36	99.1%				68.6	0.1	15.6	0.6	B
149 NB I-15: WB SR-91 On-ramp	Merge	2,377	35	102.9%	1,334	87	101.0%				66.5	0.1	17.3	0.8	B
148 NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp	Basic	2,379	31	103.0%							68.8	0.1	11.9	0.4	B
147 NB I-15: EB & WB SR-91 Off-ramp	Diverge	5,202	75	101.0%				2,830	116	99.6%	58.6	7.3	24.0	3.9	C
146 NB I-15: Magnolia Ave On-ramp	Merge	4,731	81	100.9%	469	44	102.0%				62.4	1.9	21.2	1.5	C
145 NB I-15: Magnolia Ave Loop On-ramp	Basic	3,593	61	101.2%	1,139	68	99.9%				64.4	0.3	18.8	0.8	C
144 NB I-15: Magnolia Ave Off-ramp to Loop On-ramp	Basic	3,594	55	101.3%							66.9	0.7	18.6	0.9	C
143 NB I-15: Magnolia Ave Off-ramp	Diverge	4,499	86	101.5%				905	68	102.8%	66.1	0.3	16.5	0.6	B
141 NB I-15: Ontario Ave to Magnolia Ave (EL Access)	Weave	5,024	87	99.5%	2,241	126	108.3%	2,779	139	103.3%	65.3	0.9	19.4	1.0	C
140 NB I-15: Ontario Ave On-ramp	Merge	3,335	63	99.5%	1,685	78	99.1%				63.3	0.7	13.0	0.4	B
138 NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)	Basic	3,335	60	99.6%							68.2	0.3	12.6	0.5	B
137 NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)	Basic	3,335	60	99.5%							65.4	0.4	17.4	0.6	B
136 NB I-15: Ontario Ave Off-ramp	Diverge	4,291	65	99.3%				956	48	98.6%	60.7	1.2	23.7	0.5	C
135 NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp	Merge	3,076	46	100.5%	1,214	46	96.4%				59.8	0.8	19.6	0.7	C
134 NB I-15: EL Access to Foothill Pkwy/El Cerrito Rd On-ramp	Basic	3,074	43	100.5%							67.7	0.4	15.4	0.5	B
133 NB I-15: EL Access at Foothill Pkwy/El Cerrito Rd	Basic	3,788	49	101.6%				721	62	107.6%	66.8	0.7	14.6	0.5	B
132 NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp	Weave	3,674	63	101.2%	642	39	105.2%	522	40	102.4%	67.1	0.7	16.8	0.5	B
131 NB I-15: Cajalco Rd Loop On-ramp	Merge	2,919	60	101.3%	754	44	100.6%				63.2	2.8	18.4	0.7	C
154 NB I-15: EL Access at Cajalco Rd	Basic	4,413	58	103.1%				1,500	83	107.1%	56.3	8.8	22.0	4.8	C
130 NB I-15: Cajalco Rd Off-ramp to EL Access	Basic	4,413	58	103.1%							66.9	0.6	23.9	1.1	C
129 NB I-15: Cajalco Rd Off-ramp	Diverge	4,751	61	102.6%				344	43	98.4%	64.4	1.3	27.2	0.9	D
128 NB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	3,345	53	103.6%	1,402	82	100.2%				64.4	2.1	22.5	1.4	C
127 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	3,345	56	103.6%							67.8	0.2	18.4	0.9	C
126 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	3,489	51	103.2%				150	17	99.9%	67.6	0.2	19.2	0.8	C
125 NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	3,477	51	102.9%							67.7	0.2	19.0	0.9	C
124 NB I-15: Temescal Canyon Rd On-ramp	Merge	3,176	54	103.1%	292	20	97.5%				67.3	0.4	15.6	0.8	B
123 NB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	3,170	53	102.9%							67.8	0.4	17.3	0.9	B
122 NB I-15: Temescal Canyon Rd Off-ramp	Diverge	3,901	61	102.1%				731	41	98.8%	65.2	1.3	22.1	1.2	C
121 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	3,887	59	101.8%							67.7	0.3	20.2	0.6	C
120 NB I-15: Indian Truck Trail On-ramp	Merge	3,474	56	101.0%	402	58	105.7%				67.7	0.5	16.5	0.7	B
119 NB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	3,476	62	101.0%							68.1	0.3	18.0	0.4	C
118 NB I-15: Indian Truck Trail Off-ramp	Diverge	4,023	65	99.8%				549	47	93.0%	67.5	0.2	21.4	0.6	C
117 NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp	Basic	4,019	65	99.7%							67.7	0.1	20.5	0.4	C
116 NB I-15: Lake St On-ramp	Merge	3,206	57	99.9%	816	52	99.5%				67.4	0.1	17.6	0.3	B
115 NB I-15: Lake St Off-ramp to On-ramp	Basic	3,200	59	99.7%							68.3	0.2	16.3	0.5	B
114 NB I-15: Lake St Off-ramp	Diverge	3,428	59	99.1%				233	20	93.2%	68.1	0.1	17.6	0.6	B
113 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	3,423	56	98.9%							68.3	0.1	17.0	0.4	B
112 NB I-15: Nichols Rd On-ramp	Merge	3,139	51	99.7%	287	55	92.6%				68.7	0.1	13.7	0.2	B
111 NB I-15: Nichols Rd Off-ramp to On-ramp	Basic	3,137	46	99.6%							68.5	0.1	15.5	0.4	B
110 NB I-15: Nichols Rd Off-ramp	Diverge	3,483	42	99.8%				354	36	104.1%	67.8	0.1	18.6	0.3	C
109 NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp to Nichols Rd Off-ramp	Merge	2,818	47	100.3%	666	42	97.9%				67.4	0.3	14.7	0.2	B
108 NB I-15: Dexter Ave Off-ramp to On-ramp	Basic	2,811	42	100.0%							68.8	0.2	13.9	0.2	B
153 NB I-15: Dexter Ave Off-ramp	Diverge	2,948	39	99.9%				135	25	96.3%	68.5	0.2	14.5	0.3	B
107 NB I-15: WB Central Ave (SR-74) Off-ramp	Basic	3,660	54	99.7%				711	56	98.8%	68.5	0.2	13.7	0.3	B
106 NB I-15: EB Central Ave (SR-74) Off-ramp	Diverge	4,087	51	99.9%				425	31	101.2%	68.5	0.2	16.3	0.4	B
105 NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp	Basic	4,087	50	99.9%							67.4	0.4	21.0	0.2	C
104 NB I-15: Main St On-ramp	Merge	3,755	49	99.3%	333	23	107.4%				67.7	0.2	17.8	0.4	B
103 NB I-15: Main St Off-ramp to On-ramp	Basic	3,754	49	99.3%							67.6	0.9	19.3	0.2	C
102 NB I-15: Main St Off-ramp	Diverge	4,371	39	99.6%				614	41	100.7%	64.6	3.7	24.8	1.2	C
101 NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp	Basic	4,371	35	99.6%							68.3	0.1	22.4	0.1	C

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 152 - NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,749	32	67.7	0.7	10.5	1.2	A
4	851	13	67.4	1.1	17.1	0.6	B
3	669	10	68.3	0.4	12.1	0.9	B
2	570	9	69.2	0.4	9.7	0.6	A
1			68.7	0.2	8.6	0.6	A
Area	3,839	64	68.1	0.6	11.6	0.4	B
Total	3,839	64	68.1	0.6	11.6	0.4	B

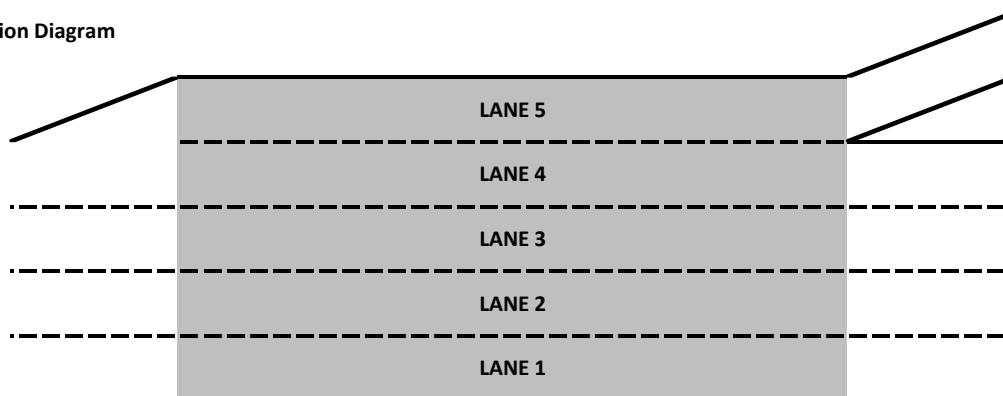
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,225	113
Total	1,225	113

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,780	3,839	64	101.6%	1,446
On-ramp					
Off-ramp	1,220	1,225	113	100.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 151 - NB I-15: Hidden Valley Pkwy Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,000	14	68.7	0.2	18.4	0.7	C
3	1,176	24	68.3	0.3	19.0	0.8	C
2	1,390	27	67.7	1.8	11.8	0.4	B
1	993	14	67.4	0.6	19.8	1.1	C
Area	2,383	40	67.5	1.0	15.8	0.7	B
Total	4,560	79	68.1	0.5	17.2	0.6	B

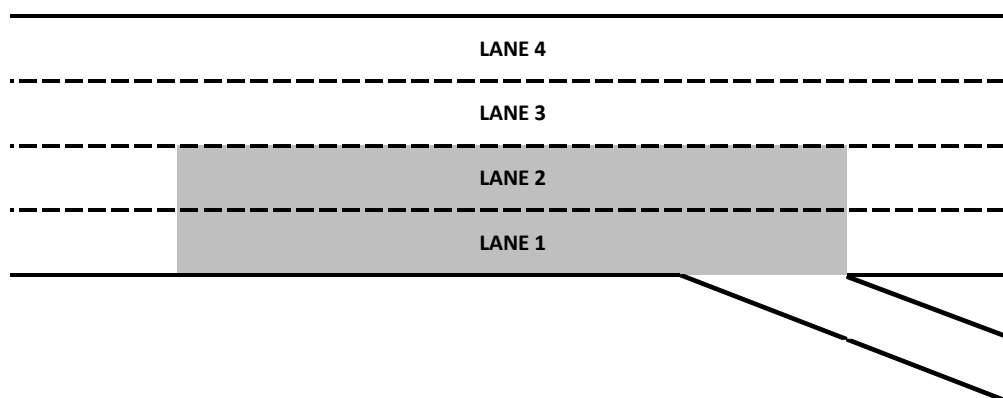
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	719	61
Total	719	61

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,490	4,560	79	101.6%	1,517
On-ramp					
Off-ramp	710	719	61	101.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 150 - NB I-15: EB SR-91 On-ramp

Segment Type - Merge

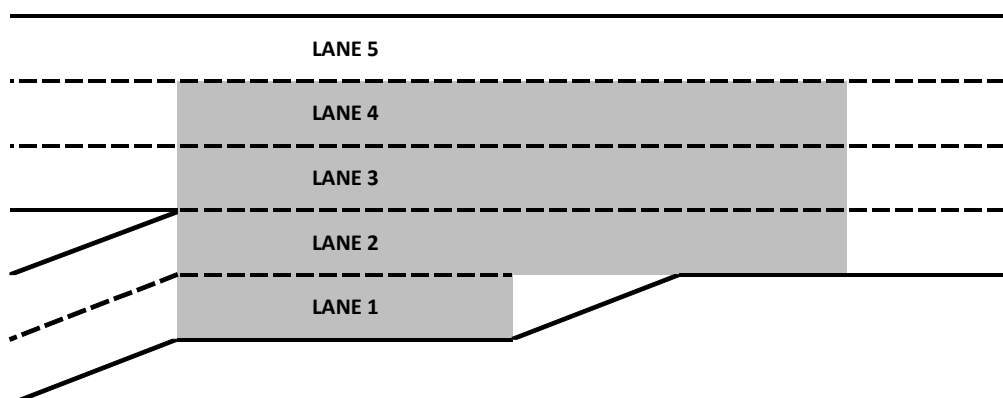
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	996	13	69.5	0.2	15.6	0.6	B
4	1,485	26	68.4	0.3	17.3	0.8	B
3	1,230	19	68.2	0.1	21.5	0.9	C
2	416	31	68.5	0.3	14.2	0.9	B
1	436	14	31.4	0.2	0.9	0.1	A
Area	3,568	90	68.4	0.1	15.6	0.6	B
Total	4,564	103	68.6	0.1	15.6	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2	416	31	2		
1	436	14	1		
Total	852	36	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,630	3,711	67	102.2%	1,509
On-ramp	860	852	36	99.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 149 - NB I-15: WB SR-91 On-ramp

Segment Type - Merge

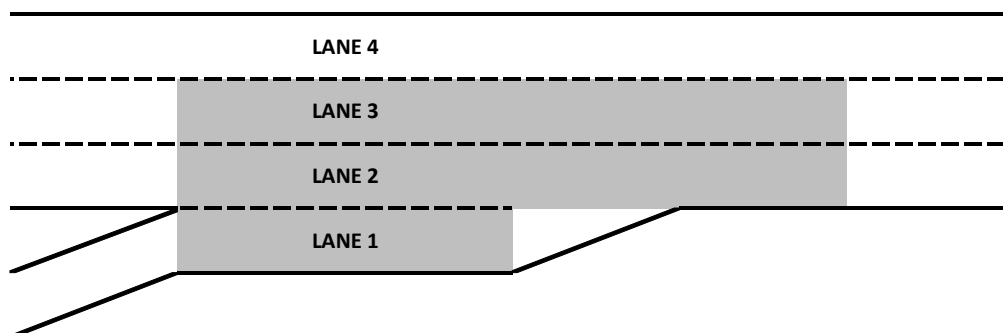
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	892	14	69.2	0.3	13.6	0.7	B
3	930	9	67.5	0.2	22.7	0.7	C
2	555	11	65.1	0.3	19.3	1.2	C
1	1,334	87	31.1	0.1	2.5	0.2	A
Area	2,818	107	65.6	0.1	17.3	0.8	B
Total	3,710	122	66.5	0.1	16.3	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,334	87	1		
Total	1,334	87	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,310	2,377	35	102.9%	1,564
On-ramp	1,320	1,334	87	101.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 148 - NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp

Segment Type - Basic

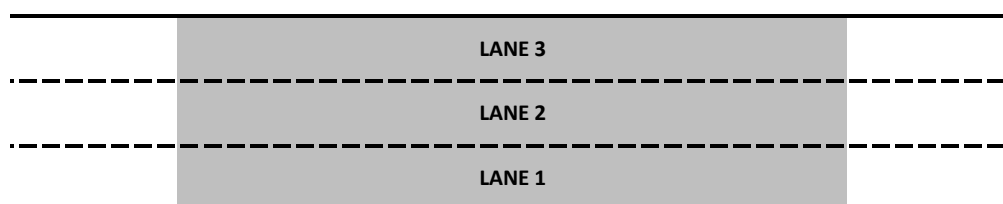
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	909	15	69.1	0.3	14.0	0.9	B
2	954	8	68.8	0.2	14.3	0.3	B
1	516	8	68.4	0.2	7.6	0.4	A
Area	2,379	31	68.8	0.1	11.9	0.4	B
Total	2,379	31	68.8	0.1	11.9	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,310	2,379	31	103.0%	3,525
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 147 - NB I-15: EB & WB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	827	15	65.7	3.0	14.9	2.0	B
3	1,021	11	63.5	4.2	16.7	1.3	B
2	1,962	25	55.5	8.7	28.2	4.5	D
1	1,392	24	53.3	11.7	27.9	6.9	D
Area	4,375	60	56.8	8.6	24.0	3.9	C
Total	5,202	75	58.6	7.3	21.6	3.2	C

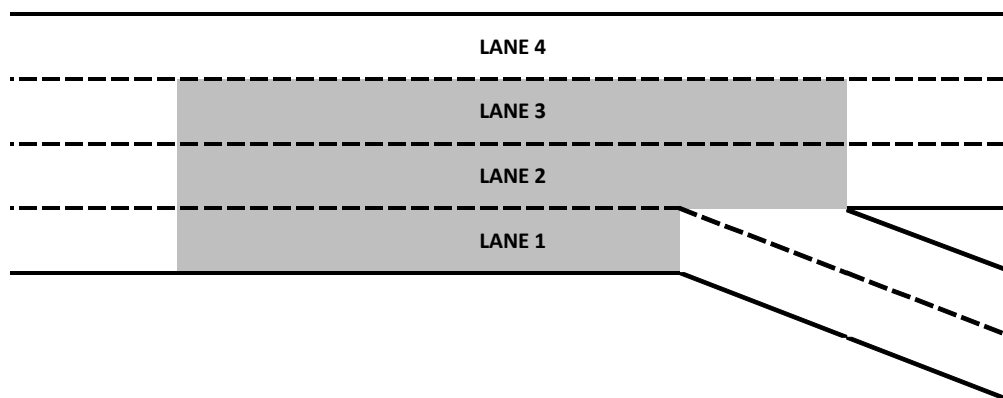
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	934	50
1	1,896	74
Total	2,830	116

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,150	5,202	75	101.0%	1,324
On-ramp					
Off-ramp	2,840	2,830	116	99.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 146 - NB I-15: Magnolia Ave On-ramp

Segment Type - Merge

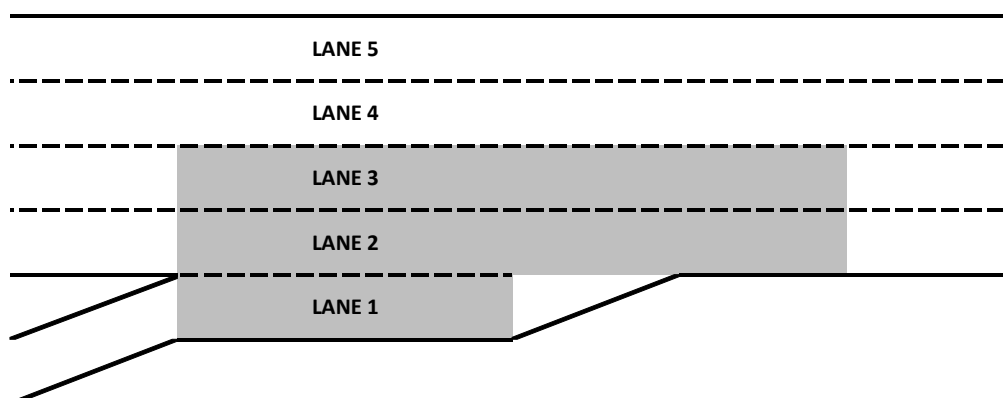
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	558	15	67.8	1.1	10.2	0.7	A
4	1,855	20	65.1	1.0	19.8	1.0	C
3	1,445	25	61.1	2.3	35.0	1.5	E
2	874	21	58.5	3.4	19.5	2.4	C
1	469	44	27.6	2.3	1.3	0.2	A
Area	2,788	90	60.4	2.2	21.2	1.5	C
Total	5,201	125	62.4	1.9	18.4	1.0	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	469	44	1		
Total	469	44	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,690	4,731	81	100.9%	1,292
On-ramp	460	469	44	102.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 145 - NB I-15: Magnolia Ave Loop On-ramp

Segment Type - Basic

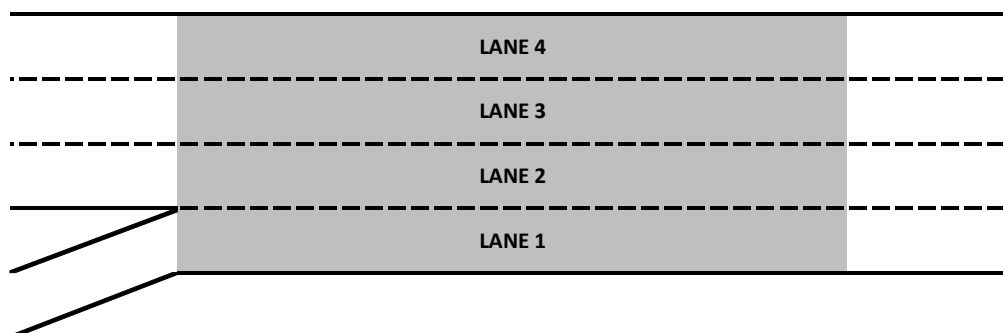
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	502	16	69.0	0.1	8.4	0.7	A
3	1,653	23	66.7	0.5	26.2	0.6	D
2	1,438	22	64.4	0.4	24.7	1.3	C
1	1,139	68	57.2	0.4	16.0	1.1	B
Area	4,732	129	64.4	0.3	18.8	0.8	C
Total	4,732	129	64.4	0.3	18.8	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,139	68	1		
Total	1,139	68	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,550	3,593	61	101.2%	852
On-ramp	1,140	1,139	68	99.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 144 - NB I-15: Magnolia Ave Off-ramp to Loop On-ramp

Segment Type - Basic

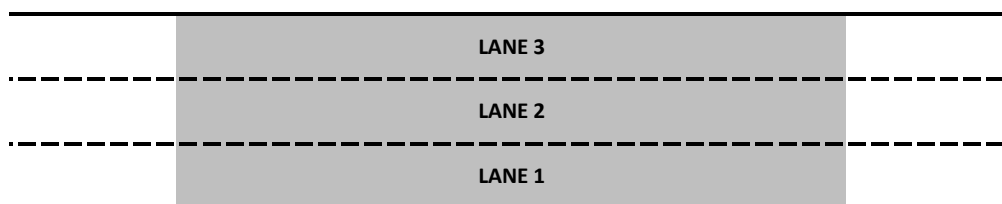
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	534	17	67.8	0.7	11.6	0.7	B
2	1,677	16	66.6	0.6	23.6	0.8	C
1	1,383	22	66.8	0.8	20.4	1.3	C
Area	3,594	55	66.9	0.7	18.6	0.9	C
Total	3,594	55	66.9	0.7	18.6	0.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,550	3,594	55	101.3%	1,562
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 143 - NB I-15: Magnolia Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,253	27	66.3	0.3	19.3	0.7	C
3	1,562	17	65.5	0.7	20.4	1.2	C
2	1,348	27	65.7	0.4	23.1	0.8	C
1	335	15	68.6	0.4	5.9	0.8	A
Area	3,245	59	66.0	0.5	16.5	0.6	B
Total	4,499	86	66.1	0.3	17.2	0.6	B

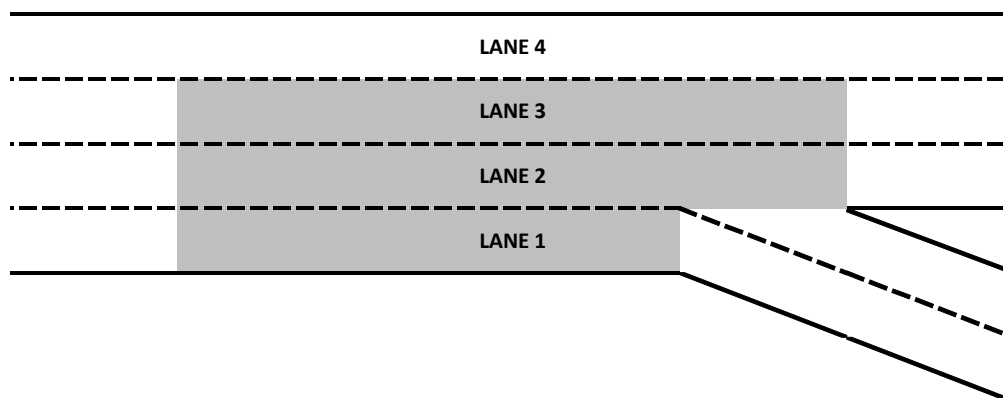
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	395	34
1	510	52
Total	905	68

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,430	4,499	86	101.5%	1,496
On-ramp					
Off-ramp	880	905	68	102.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 141 - NB I-15: Ontario Ave to Magnolia Ave (EL Access)

Segment Type - Weave

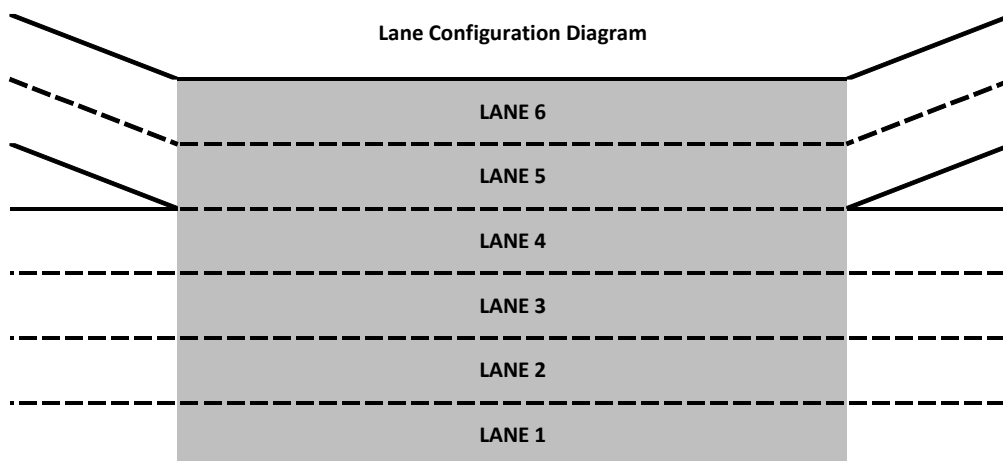
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	1,610	28	49.9	0.4	12.8	0.8	B
5	1,734	19	50.1	0.5	14.6	1.0	B
4	1,439	19	63.3	2.1	27.9	1.5	D
3	241	8	64.1	1.4	27.1	1.2	D
2	930	61	64.8	0.8	20.0	1.4	C
1	1,311	79	68.3	0.7	4.0	0.4	A
Area	7,265	214	65.3	0.9	19.4	1.0	C
Total	7,265	214	65.3	0.9	19.4	1.0	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	930	61
1	1,311	79
Total	2,241	126

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,331	96
1	1,448	65
Total	2,779	139

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,050	5,024	87	99.5%	2,965
On-ramp	2,070	2,241	126	108.3%	
Off-ramp	2,690	2,779	139	103.3%	



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 140 - NB I-15: Ontario Ave On-ramp

Segment Type - Merge

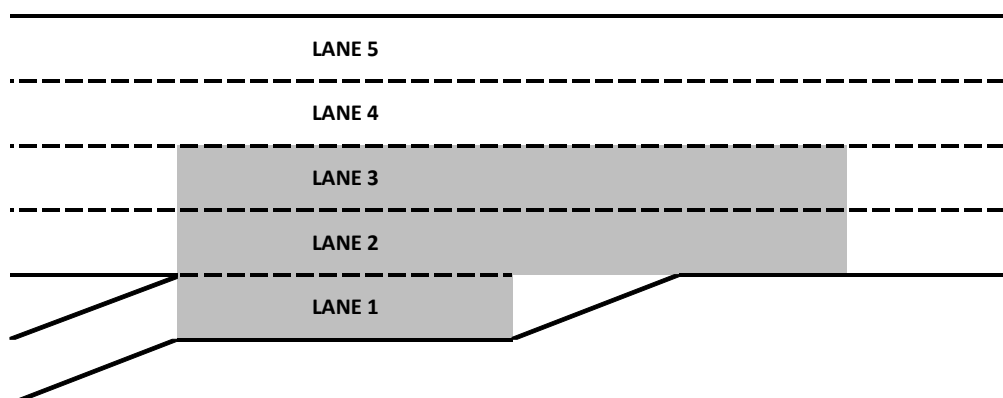
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,204	15	67.9	0.5	20.6	0.9	C
4	1,364	20	65.8	0.7	26.4	0.7	D
3	558	18	61.5	1.1	20.0	0.8	C
2	209	11	58.0	1.1	10.6	0.3	A
1	1,685	78	25.4	0.8	3.5	0.2	A
Area	2,452	106	57.9	1.1	13.0	0.4	B
Total	5,019	141	63.3	0.7	17.4	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,685	78	1		
Total	1,685	78	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,350	3,335	63	99.5%	1,496
On-ramp	1,700	1,685	78	99.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 138 - NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)

Segment Type - Basic

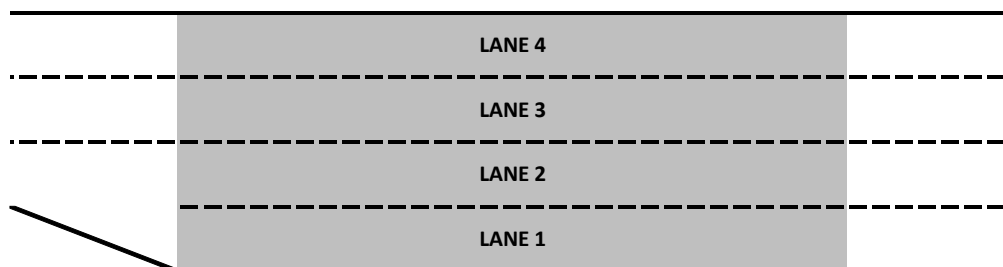
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,248	17	68.4	0.4	18.8	1.0	C
3	1,191	22	67.8	0.2	17.7	0.6	B
2	718	10	68.4	0.4	10.8	0.6	A
1	179	10	68.4	0.4	3.2	0.3	A
Area	3,335	60	68.2	0.3	12.6	0.5	B
Total	3,335	60	68.2	0.3	12.6	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,350	3,335	60	99.6%	3,004
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 137 - NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)

Segment Type - Basic

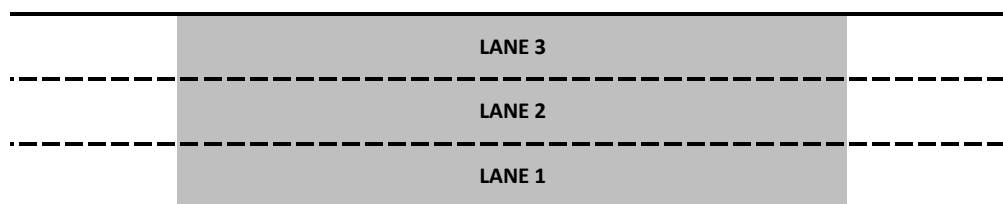
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,316	23	66.3	0.5	20.7	1.1	C
2	1,285	23	65.2	0.4	19.5	0.7	C
1	734	15	64.2	0.8	12.1	0.5	B
Area	3,335	60	65.4	0.4	17.4	0.6	B
Total	3,335	60	65.4	0.4	17.4	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,350	3,335	60	99.5%	197
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 136 - NB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

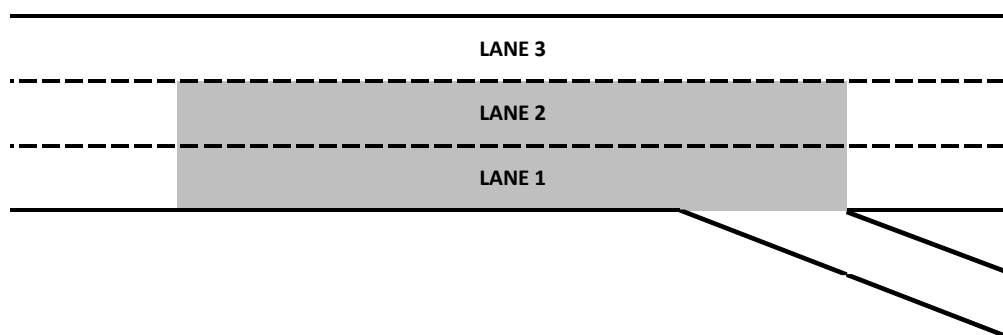
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,232	21	63.6	1.4	21.6	1.3	C
2	1,425	22	61.0	1.5	22.7	0.5	C
1	1,634	22	57.7	1.2	24.9	0.9	C
Area	3,058	43	59.3	1.3	23.7	0.5	C
Total	4,291	65	60.7	1.2	23.0	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	956	48
Total			Total	956	48

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,320	4,291	65	99.3%	763
On-ramp					
Off-ramp	970	956	48	98.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 135 - NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Merge

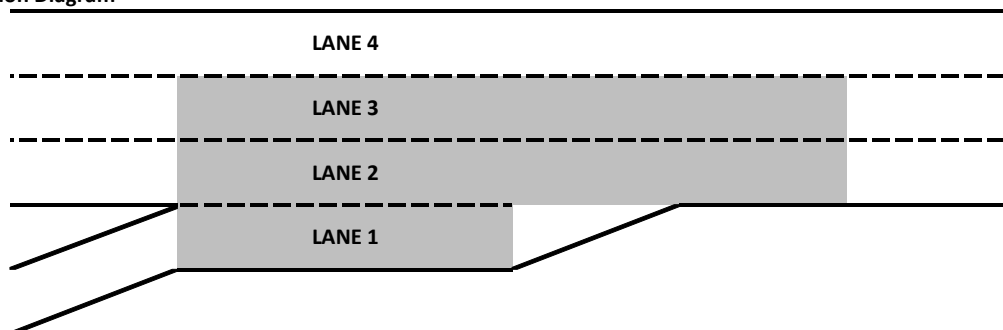
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	760	13	66.9	1.0	14.7	0.6	B
3	1,213	18	63.6	0.6	22.8	0.9	C
2	1,103	16	55.8	0.9	28.4	0.7	D
1	1,214	46	41.5	1.1	8.1	0.7	A
Area	3,530	79	57.8	0.8	19.6	0.7	C
Total	4,291	92	59.8	0.8	18.3	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,214	46	1		
Total	1,214	46	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,060	3,076	46	100.5%	873
On-ramp	1,260	1,214	46	96.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 134 - NB I-15: EL Access to Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Basic

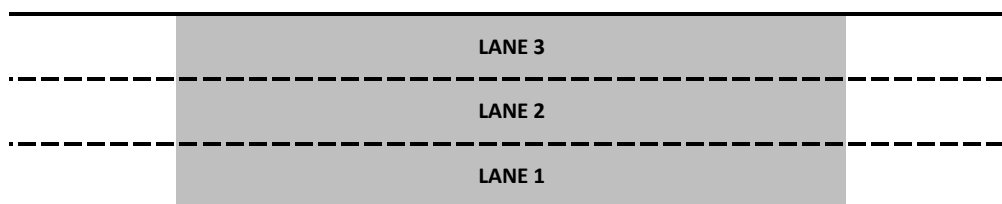
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	746	13	68.1	0.4	11.6	0.6	B
2	1,210	14	67.6	0.5	18.0	0.5	C
1	1,118	16	67.6	0.5	16.6	0.9	B
Area	3,074	43	67.7	0.4	15.4	0.5	B
Total	3,074	43	67.7	0.4	15.4	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,060	3,074	43	100.5%	989
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 133 - NB I-15: EL Access at Foothill Pkwy/El Cerrito Rd

Segment Type - Basic

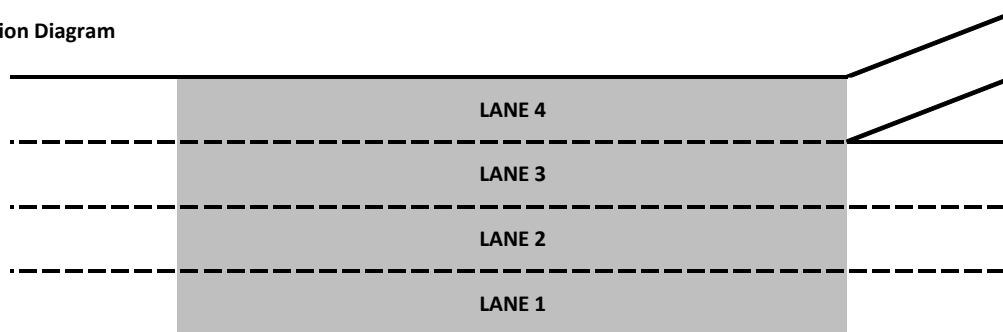
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,551	25	68.3	0.2	5.9	0.7	A
3	1,153	11	66.5	0.4	18.4	0.9	C
2	1,084	13	66.8	0.9	17.6	0.5	B
1			66.6	1.3	16.4	0.5	B
Area	3,788	49	66.8	0.7	14.6	0.5	B
Total	3,788	49	66.8	0.7	14.6	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	721	62
Total			Total	721	62

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,730	3,788	49	101.6%	1,128
On-ramp					
Off-ramp	670	721	62	107.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 132 - NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	919	21	68.1	0.8	15.9	0.7	B
3	1,243	19	67.6	0.5	19.3	0.9	C
2	1,513	23	66.9	0.5	19.1	0.6	C
1	642	39	52.8	1.1	9.8	0.5	A
Area	4,316	101	67.1	0.7	16.8	0.5	B
Total	4,316	101	67.1	0.7	16.8	0.5	B

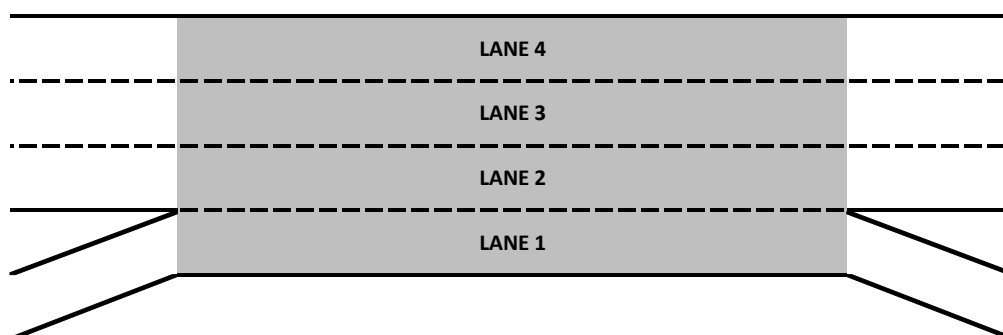
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	642	39
Total	642	39

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	522	40
Total	522	40

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,630	3,674	63	101.2%	2,708
On-ramp	610	642	39	105.2%	
Off-ramp	510	522	40	102.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 131 - NB I-15: Cajalco Rd Loop On-ramp

Segment Type - Merge

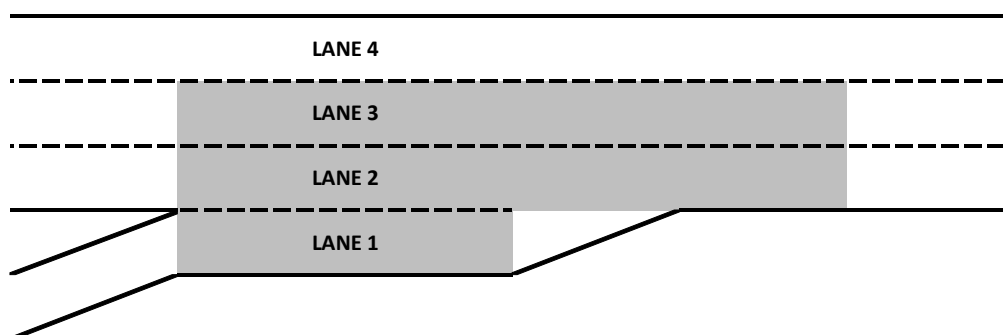
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	655	22	63.8	4.0	13.2	1.8	B
3	1,100	12	64.1	2.9	21.8	0.6	C
2	1,164	27	63.1	2.0	23.2	1.1	C
1	754	44	29.8	0.7	1.7	0.1	A
Area	3,018	83	63.1	2.5	18.4	0.7	C
Total	3,673	104	63.2	2.8	16.9	0.8	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	754	44	1		
Total	754	44	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,880	2,919	60	101.3%	1,307
On-ramp	750	754	44	100.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 154 - NB I-15: EL Access at Cajalco Rd

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,591	23	55.5	8.7	17.0	4.9	B
3	1,675	15	52.3	11.6	28.8	7.5	D
2	1,147	20	56.7	9.9	22.5	4.6	C
1			61.0	5.9	20.5	3.6	C
Area	4,413	58	56.3	8.8	22.0	4.8	C
Total	4,413	58	56.3	8.8	22.0	4.8	C

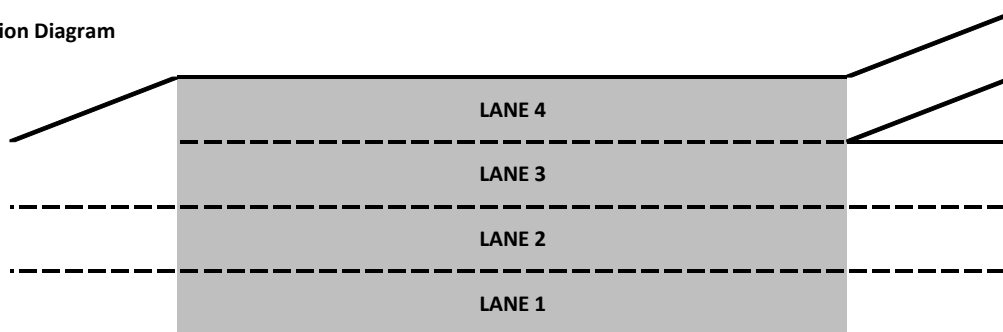
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,500	83
Total	1,500	83

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,280	4,413	58	103.1%	1,406
On-ramp					
Off-ramp	1,400	1,500	83	107.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 130 - NB I-15: Cajalco Rd Off-ramp to EL Access

Segment Type - Basic

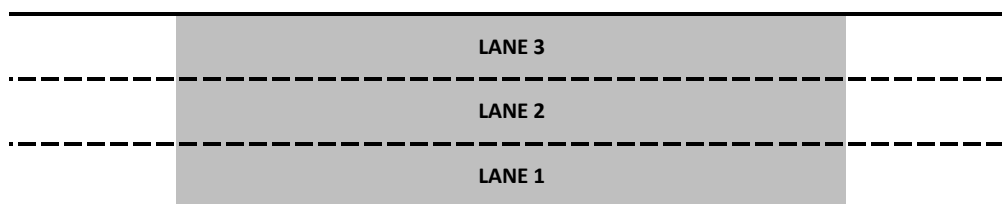
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,527	21	66.9	0.7	25.3	1.4	C
2	1,533	17	66.8	0.5	26.0	1.0	D
1	1,354	20	67.0	0.6	20.3	1.1	C
Area	4,413	58	66.9	0.6	23.9	1.1	C
Total	4,413	58	66.9	0.6	23.9	1.1	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,280	4,413	58	103.1%	1,159
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 129 - NB I-15: Cajalco Rd Off-ramp

Segment Type - Diverge

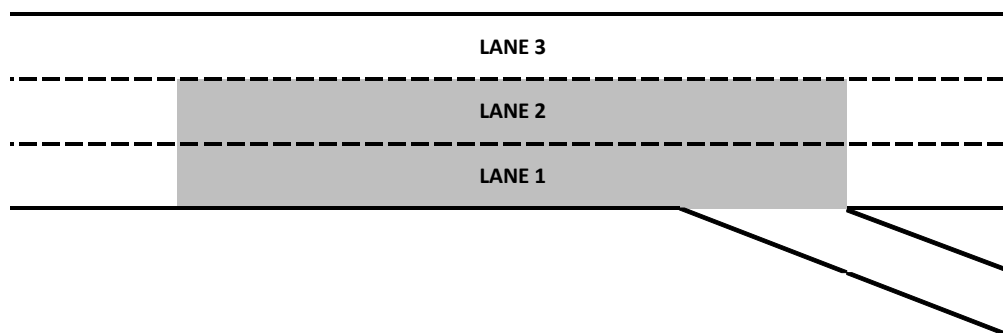
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,416	24	65.7	1.1	24.7	1.6	C
2	1,656	21	64.4	1.0	27.0	1.0	D
1	1,679	16	63.2	2.0	27.5	0.9	D
Area	3,335	37	63.8	1.5	27.2	0.9	D
Total	4,751	61	64.4	1.3	26.4	1.1	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	344	43
Total			Total	344	43

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,630	4,751	61	102.6%	1,109
On-ramp					
Off-ramp	350	344	43	98.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 128 - NB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

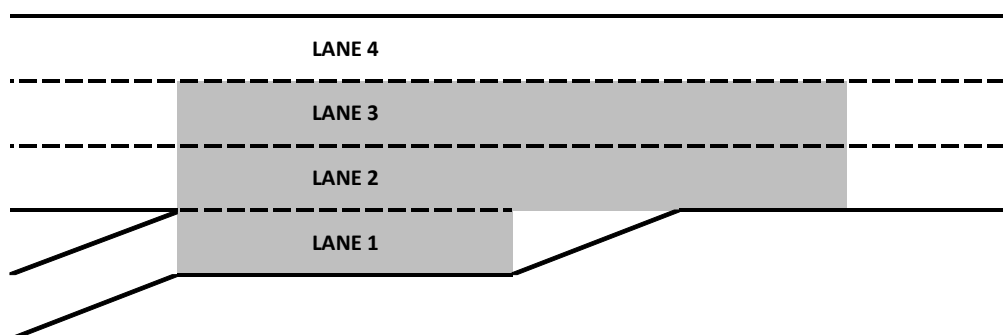
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,085	21	66.9	2.5	21.0	2.1	C
3	1,251	15	65.2	2.1	29.0	1.8	D
2	1,009	17	62.5	2.4	26.4	1.7	D
1	1,402	82	31.3	0.9	3.3	0.3	A
Area	3,663	114	63.4	2.0	22.5	1.4	C
Total	4,747	135	64.4	2.1	22.1	1.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,402	82	1		
Total	1,402	82	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,230	3,345	53	103.6%	1,497
On-ramp	1,400	1,402	82	100.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 127 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

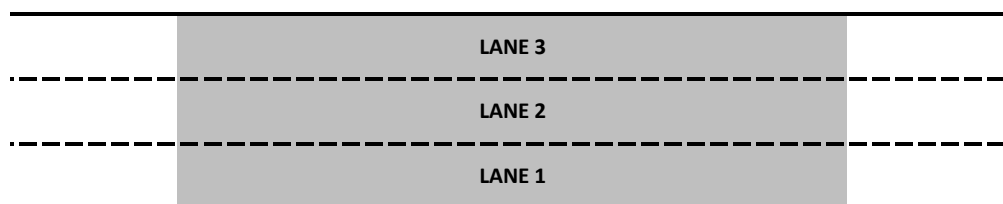
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,140	20	67.8	0.3	18.9	1.2	C
2	1,219	19	67.8	0.1	19.7	0.9	C
1	986	17	67.8	0.3	16.7	0.8	B
Area	3,345	56	67.8	0.2	18.4	0.9	C
Total	3,345	56	67.8	0.2	18.4	0.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,230	3,345	56	103.6%	2,543
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 126 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

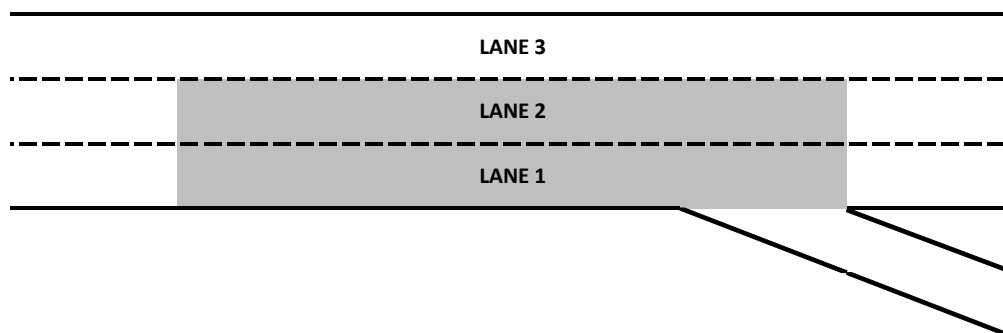
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,145	16	67.8	0.3	18.9	1.2	C
2	1,273	18	67.7	0.1	19.8	0.8	C
1	1,071	17	67.4	0.2	18.7	0.8	C
Area	2,344	35	67.6	0.2	19.2	0.8	C
Total	3,489	51	67.6	0.2	19.1	0.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	150	17
Total			Total	150	17

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,380	3,489	51	103.2%	1,499
On-ramp					
Off-ramp	150	150	17	99.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 125 - NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

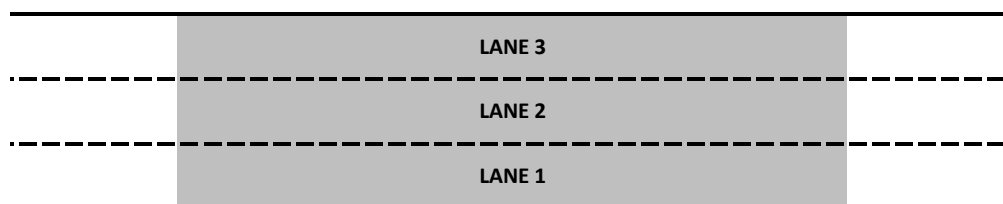
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,169	16	67.9	0.3	19.0	1.0	C
2	1,264	21	67.7	0.2	20.4	1.0	C
1	1,044	15	67.5	0.2	17.5	0.9	B
Area	3,477	51	67.7	0.2	19.0	0.9	C
Total	3,477	51	67.7	0.2	19.0	0.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,380	3,477	51	102.9%	6,786
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 124 - NB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

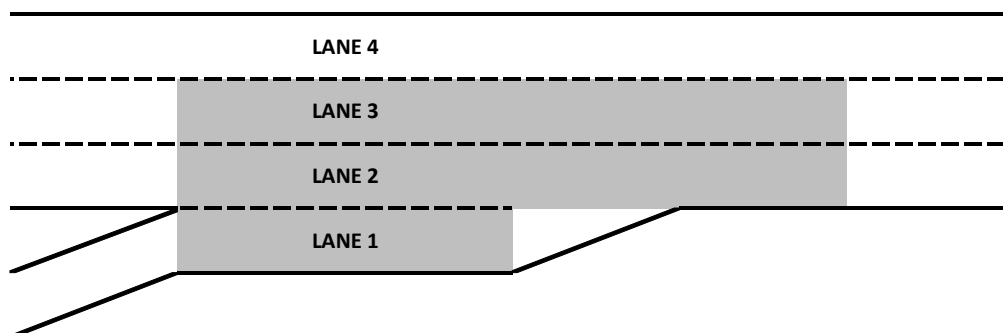
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,104	15	68.2	0.1	18.4	0.6	C
3	1,163	19	67.6	0.3	20.6	1.5	C
2	909	20	66.5	1.0	17.1	0.6	B
1	292	20	22.5	1.1	0.7	0.1	A
Area	2,364	59	66.9	0.6	15.6	0.8	B
Total	3,469	74	67.3	0.4	16.4	0.7	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	292	20	1		
Total	292	20	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,080	3,176	54	103.1%	1,498
On-ramp	300	292	20	97.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 123 - NB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

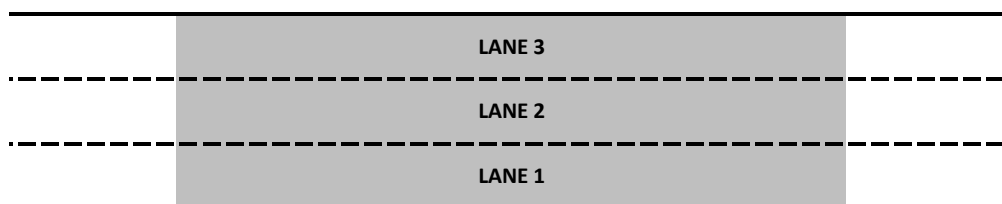
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,117	16	68.0	0.4	18.4	0.9	C
2	1,167	19	67.8	0.4	18.6	0.9	C
1	886	19	67.7	0.5	14.9	1.1	B
Area	3,170	53	67.8	0.4	17.3	0.9	B
Total	3,170	53	67.8	0.4	17.3	0.9	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,080	3,170	53	102.9%	2,725
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 122 - NB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

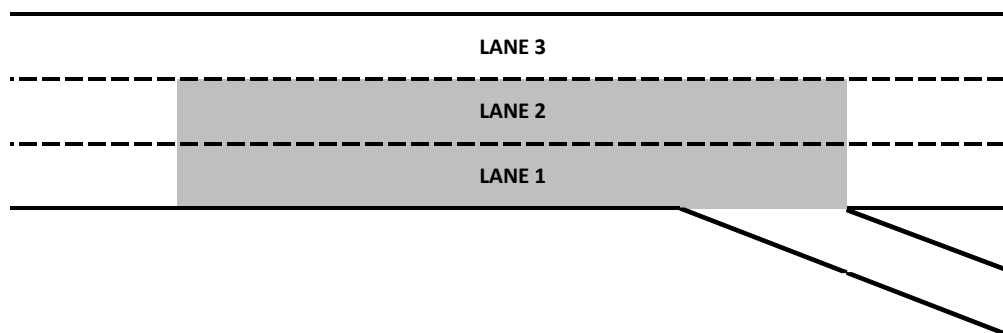
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,124	23	66.4	1.3	19.3	1.1	C
2	1,471	17	64.7	1.8	19.8	1.5	C
1	1,307	20	64.5	1.0	24.4	1.2	C
Area	2,778	38	64.6	1.3	22.1	1.2	C
Total	3,901	61	65.2	1.3	21.1	1.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	731	41
Total			Total	731	41

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,820	3,901	61	102.1%	1,498
On-ramp					
Off-ramp	740	731	41	98.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 121 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

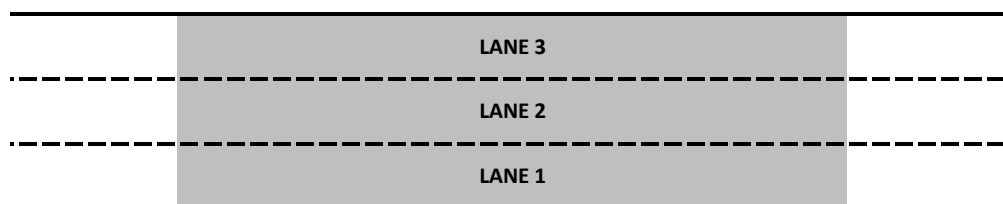
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,273	23	68.0	0.4	19.6	0.6	C
2	1,390	15	67.7	0.2	21.7	0.7	C
1	1,224	21	67.3	0.3	19.4	1.0	C
Area	3,887	59	67.7	0.3	20.2	0.6	C
Total	3,887	59	67.7	0.3	20.2	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,820	3,887	59	101.8%	9,350
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 120 - NB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

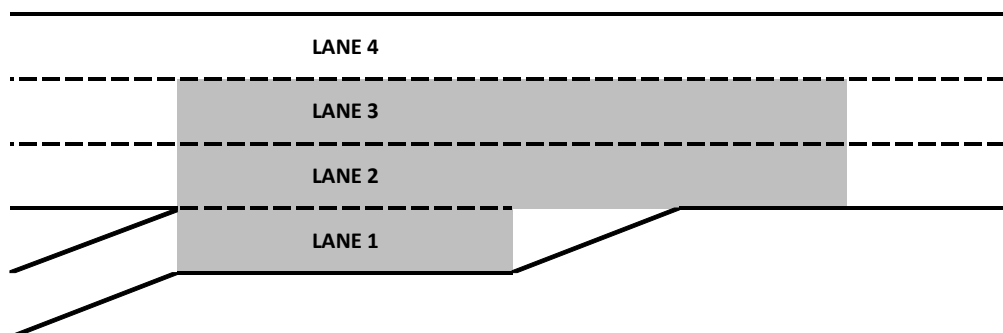
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,171	22	68.3	0.4	18.4	0.3	C
3	1,265	16	67.9	0.3	21.8	1.2	C
2	1,038	18	66.9	0.9	19.1	0.8	C
1	402	58	30.5	1.3	0.7	0.2	A
Area	2,705	92	67.4	0.6	16.5	0.7	B
Total	3,876	115	67.7	0.5	17.0	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	402	58	1		
Total	402	58	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,440	3,474	56	101.0%	1,499
On-ramp	380	402	58	105.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 119 - NB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

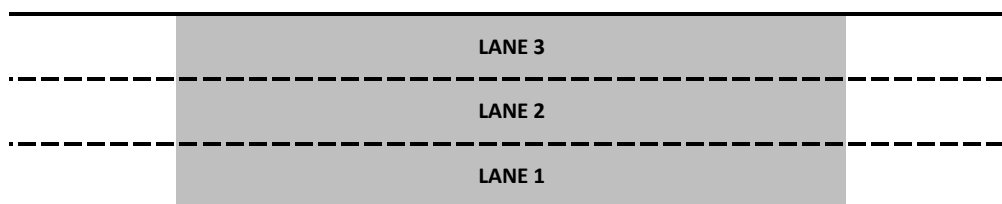
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,182	26	68.2	0.3	18.2	0.4	C
2	1,268	17	68.3	0.2	19.9	0.9	C
1	1,025	19	67.9	0.4	16.0	0.5	B
Area	3,476	62	68.1	0.3	18.0	0.4	C
Total	3,476	62	68.1	0.3	18.0	0.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,440	3,476	62	101.0%	2,922
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 118 - NB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,210	24	68.2	0.3	18.4	0.6	C
2	1,498	17	68.0	0.2	20.2	1.0	C
1	1,316	24	66.4	0.3	22.6	0.8	C
Area	2,813	41	67.2	0.2	21.4	0.6	C
Total	4,023	65	67.5	0.2	20.4	0.5	C

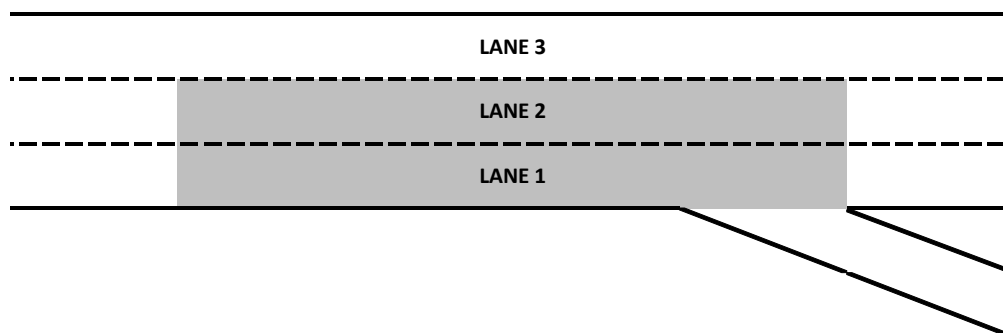
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	549	47
Total	549	47

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,030	4,023	65	99.8%	1,499
On-ramp					
Off-ramp	590	549	47	93.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 117 - NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

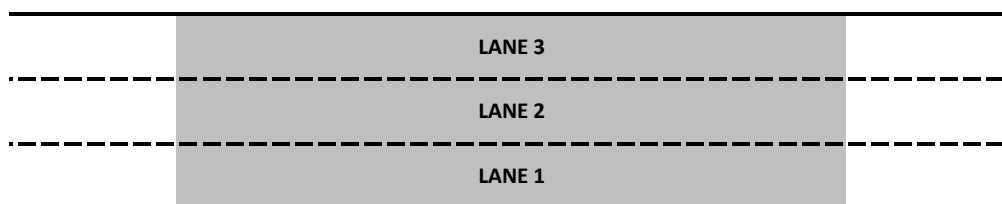
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,305	22	68.0	0.1	19.7	0.6	C
2	1,440	21	67.9	0.1	21.9	0.7	C
1	1,274	22	67.3	0.1	20.0	0.9	C
Area	4,019	65	67.7	0.1	20.5	0.4	C
Total	4,019	65	67.7	0.1	20.5	0.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,030	4,019	65	99.7%	13,528
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 116 - NB I-15: Lake St On-ramp

Segment Type - Merge

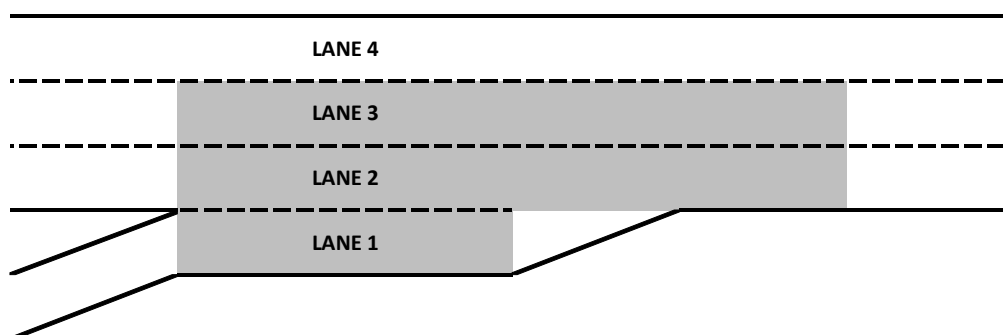
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,051	19	68.6	0.1	16.6	0.6	B
3	1,191	17	67.9	0.3	22.8	0.3	C
2	964	22	66.8	0.2	19.5	0.6	C
1	816	52	33.7	0.2	2.9	0.1	A
Area	2,971	90	67.0	0.2	17.6	0.3	B
Total	4,022	109	67.4	0.1	17.3	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	816	52	1		
Total	816	52	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,210	3,206	57	99.9%	1,499
On-ramp	820	816	52	99.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 115 - NB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

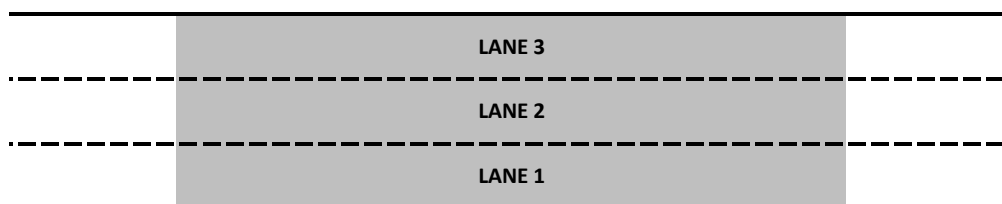
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,055	20	68.3	0.1	15.8	0.8	B
2	1,191	18	68.4	0.2	18.3	0.6	C
1	954	22	68.0	0.2	14.7	0.6	B
Area	3,200	59	68.3	0.2	16.3	0.5	B
Total	3,200	59	68.3	0.2	16.3	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,210	3,200	59	99.7%	3,216
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 114 - NB I-15: Lake St Off-ramp

Segment Type - Diverge

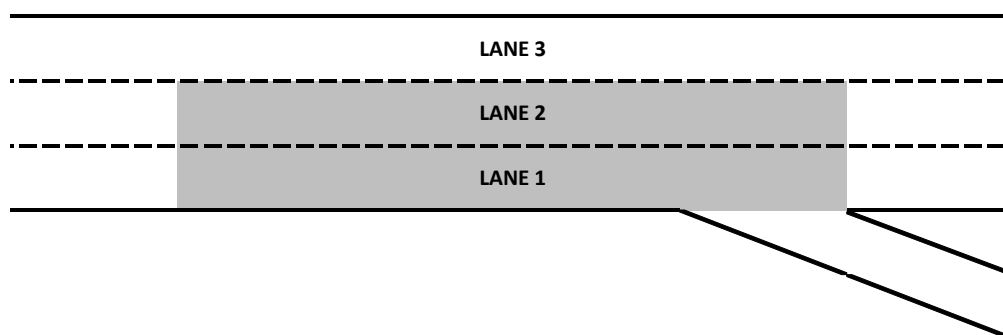
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,064	21	68.3	0.1	15.9	0.5	B
2	1,281	16	68.4	0.2	18.2	0.7	C
1	1,084	22	67.7	0.2	17.0	0.7	B
Area	2,365	38	68.0	0.2	17.6	0.6	B
Total	3,428	59	68.1	0.1	17.0	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	233	20
Total			Total	233	20

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,460	3,428	59	99.1%	1,498
On-ramp					
Off-ramp	250	233	20	93.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 113 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

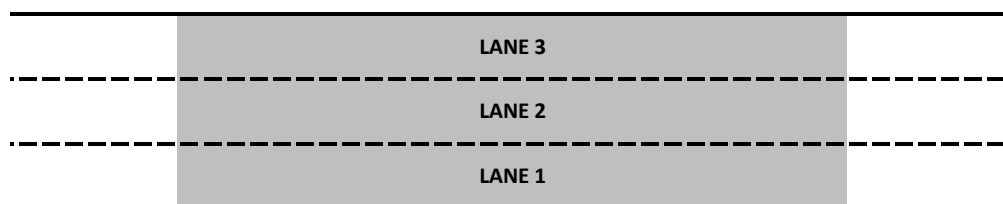
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,093	16	68.4	0.1	16.2	0.4	B
2	1,252	15	68.4	0.1	18.9	0.4	C
1	1,078	26	67.9	0.1	15.9	1.0	B
Area	3,423	56	68.3	0.1	17.0	0.4	B
Total	3,423	56	68.3	0.1	17.0	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,460	3,423	56	98.9%	8,483
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 112 - NB I-15: Nichols Rd On-ramp

Segment Type - Merge

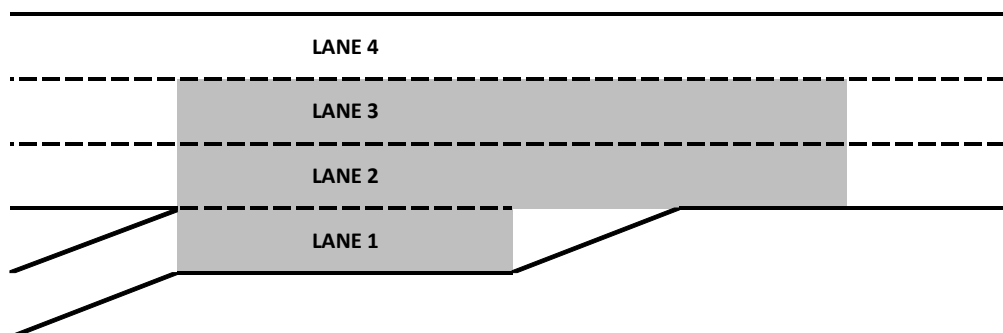
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,030	19	68.9	0.2	15.0	1.0	B
3	1,163	14	68.8	0.1	18.3	0.3	C
2	947	18	68.3	0.2	15.8	0.4	B
1	287	55	39.3	0.3	1.3	0.2	A
Area	2,397	87	68.6	0.1	13.7	0.2	B
Total	3,427	105	68.7	0.1	14.1	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	287	55	1		
Total	287	55	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,150	3,139	51	99.7%	1,499
On-ramp	310	287	55	92.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 111 - NB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

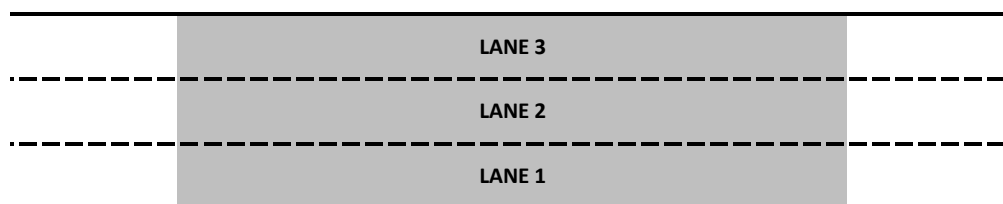
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,026	17	68.6	0.2	15.5	0.2	B
2	1,165	16	68.7	0.2	17.2	0.8	B
1	946	13	68.3	0.1	13.8	0.7	B
Area	3,137	46	68.5	0.1	15.5	0.4	B
Total	3,137	46	68.5	0.1	15.5	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,150	3,137	46	99.6%	3,521
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 110 - NB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,075	11	68.4	0.3	14.6	0.7	B
2	1,273	16	68.2	0.4	18.2	0.3	C
1	1,135	15	67.0	0.3	18.9	0.8	C
Area	2,408	32	67.6	0.2	18.6	0.3	C
Total	3,483	42	67.8	0.1	17.2	0.2	B

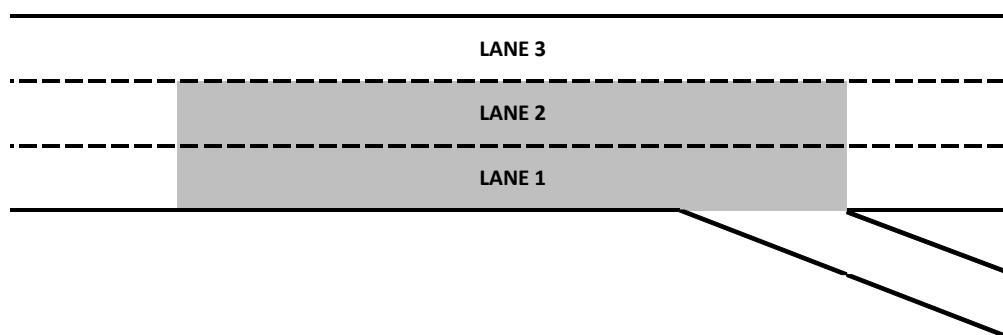
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	354	36
Total	354	36

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,490	3,483	42	99.8%	1,488
On-ramp					
Off-ramp	340	354	36	104.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 109 - NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp to Nichols Rd Off-ramp

Segment Type - Merge

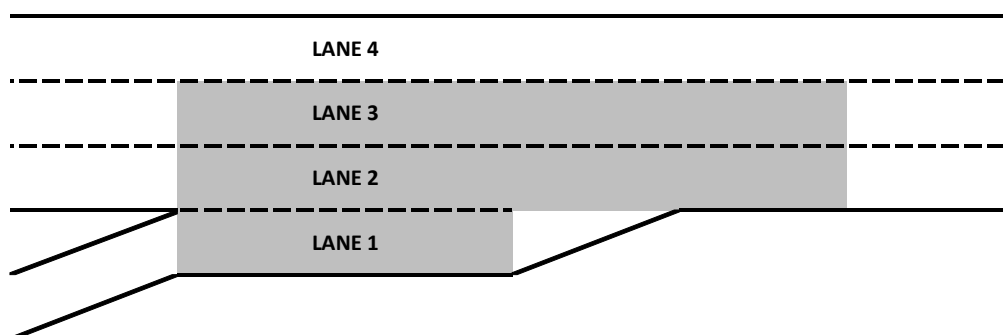
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	951	12	68.7	0.3	14.9	0.4	B
3	1,043	20	68.3	0.2	19.3	0.1	C
2	824	15	66.1	0.4	16.9	0.6	B
1	666	42	29.7	0.7	1.3	0.2	A
Area	2,533	77	66.8	0.3	14.7	0.2	B
Total	3,484	89	67.4	0.3	14.8	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	666	42	1		
Total	666	42	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,810	2,818	47	100.3%	1,486
On-ramp	680	666	42	97.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 108 - NB I-15: Dexter Ave Off-ramp to On-ramp

Segment Type - Basic

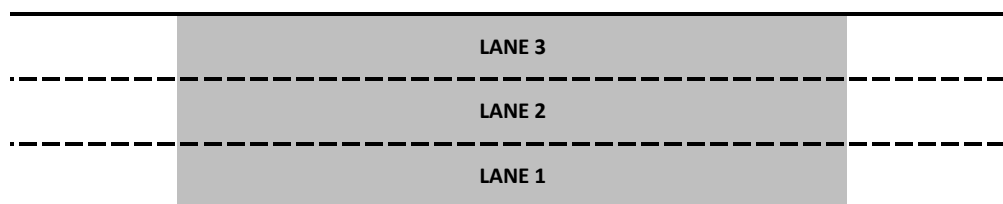
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	951	12	68.6	0.3	14.4	0.2	B
2	1,047	15	68.9	0.1	15.4	0.7	B
1	813	15	68.8	0.2	12.1	0.7	B
Area	2,811	42	68.8	0.2	13.9	0.2	B
Total	2,811	42	68.8	0.2	13.9	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,810	2,811	42	100.0%	2,598
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 153 - NB I-15: Dexter Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	977	14	68.5	0.2	14.9	0.4	B
2	1,045	11	68.8	0.2	15.4	0.6	B
1	925	15	68.1	0.2	13.6	0.5	B
Area	1,970	26	68.5	0.2	14.5	0.3	B
Total	2,948	39	68.5	0.2	14.6	0.2	B

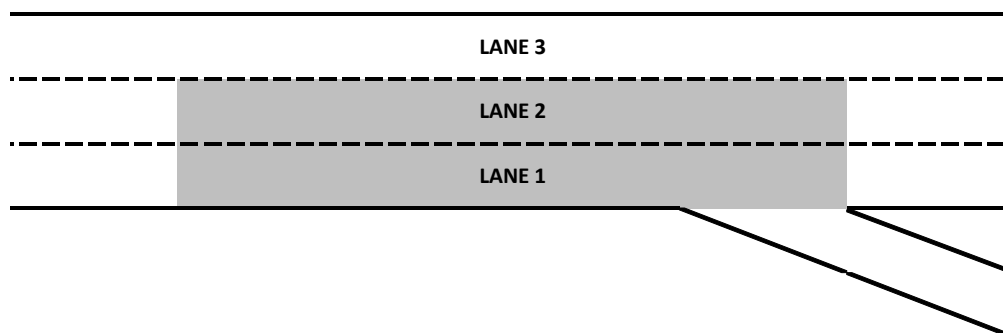
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	135	25
Total	135	25

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,950	2,948	39	99.9%	940
On-ramp					
Off-ramp	140	135	25	96.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 107 - NB I-15: WB Central Ave (SR-74) Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,006	15	68.8	0.2	15.0	0.4	B
3	1,089	13	68.9	0.1	15.5	0.5	B
2	1,194	15	68.2	0.5	12.0	0.3	B
1	371	11	68.0	0.5	12.4	1.0	B
Area	3,660	54	68.5	0.2	13.7	0.3	B
Total	3,660	54	68.5	0.2	13.7	0.3	B

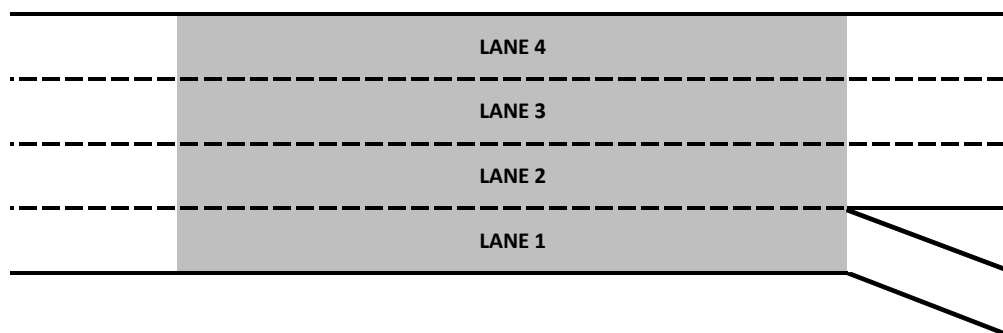
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	711	56
Total	711	56

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,670	3,660	54	99.7%	1,366
On-ramp					
Off-ramp	720	711	56	98.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 106 - NB I-15: EB Central Ave (SR-74) Off-ramp

Segment Type - Diverge

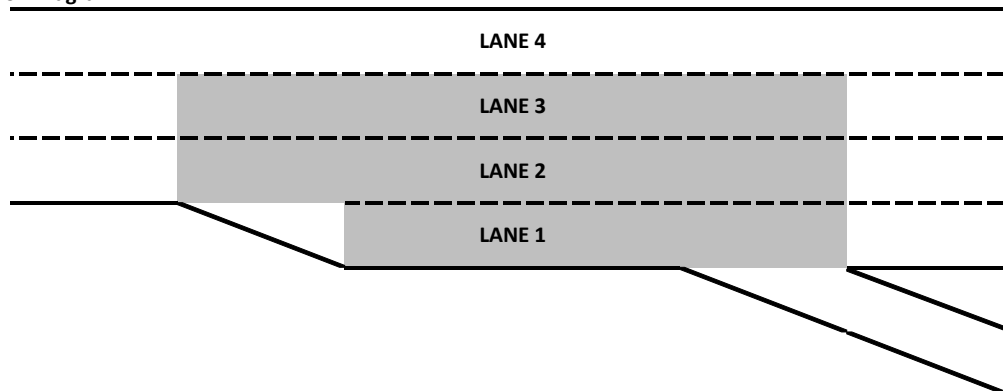
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,080	13	68.9	0.2	16.0	0.4	B
3	1,447	14	68.7	0.3	16.3	0.3	B
2	1,560	24	67.7	0.2	21.2	0.9	C
1			55.4	0.3	8.2	0.6	A
Area	3,007	38	68.3	0.2	16.3	0.4	B
Total	4,087	51	68.5	0.2	16.2	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	425	31
Total			Total	425	31

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,090	4,087	51	99.9%	1,498
On-ramp					
Off-ramp	420	425	31	101.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 105 - NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

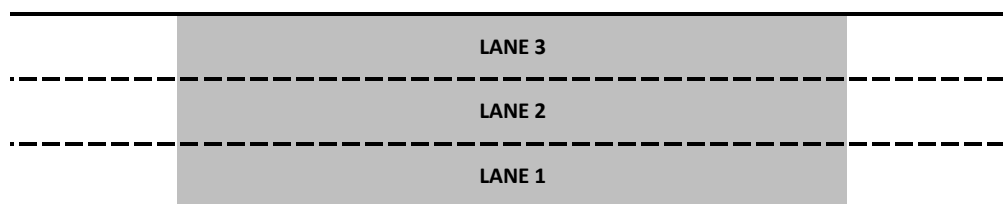
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,068	14	68.6	0.3	16.3	0.4	B
2	1,439	14	67.6	0.5	22.2	0.7	C
1	1,580	23	66.3	0.5	24.5	0.4	C
Area	4,087	50	67.4	0.4	21.0	0.2	C
Total	4,087	50	67.4	0.4	21.0	0.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,090	4,087	50	99.9%	1,245
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 104 - NB I-15: Main St On-ramp

Segment Type - Merge

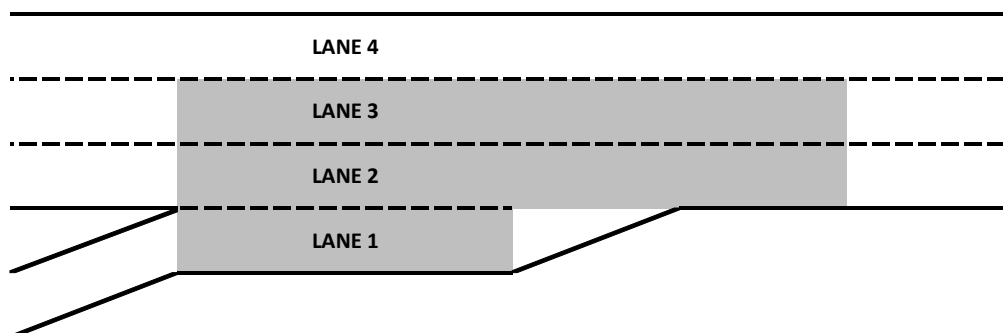
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,173	14	68.6	0.2	17.6	0.7	B
3	1,371	16	68.0	0.2	23.7	0.8	C
2	1,211	18	67.0	0.3	20.7	0.8	C
1	333	23	28.4	0.7	0.8	0.0	A
Area	2,915	57	67.3	0.2	17.8	0.4	B
Total	4,088	71	67.7	0.2	17.7	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	333	23	1		
Total	333	23	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,780	3,755	49	99.3%	1,500
On-ramp	310	333	23	107.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 103 - NB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

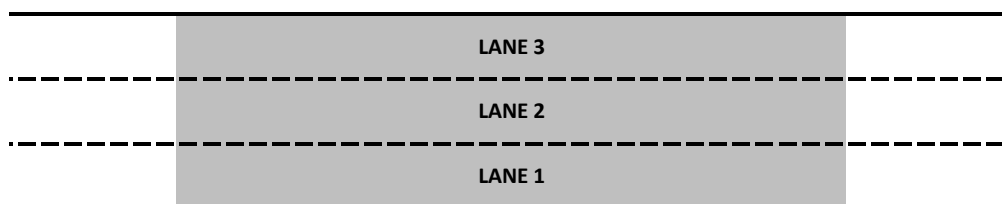
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,278	15	67.5	0.9	19.8	0.5	C
2	1,327	17	67.8	0.9	20.6	0.6	C
1	1,149	17	67.4	0.9	17.4	0.8	B
Area	3,754	49	67.6	0.9	19.3	0.2	C
Total	3,754	49	67.6	0.9	19.3	0.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,780	3,754	49	99.3%	2,897
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 102 - NB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,448	14	65.7	2.9	20.6	1.8	C
2	1,467	17	64.0	5.1	22.5	0.9	C
1	1,455	9	64.2	3.1	27.2	1.5	D
Area	2,923	26	64.1	4.0	24.8	1.2	C
Total	4,371	39	64.6	3.7	23.4	1.3	C

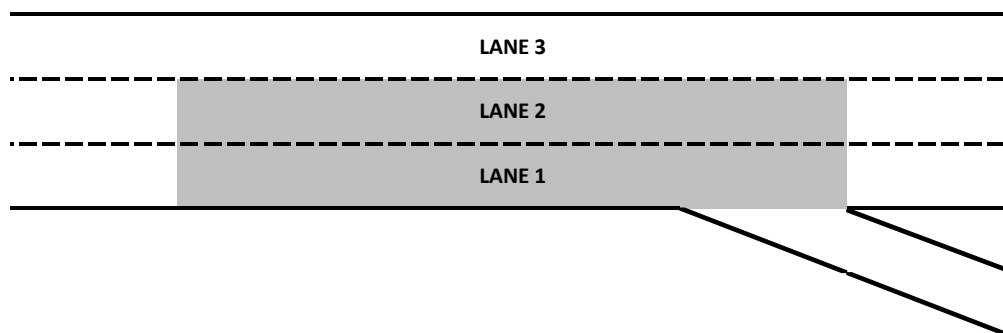
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	614	41
Total	614	41

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,390	4,371	39	99.6%	1,499
On-ramp					
Off-ramp	610	614	41	100.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 101 - NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp

Segment Type - Basic

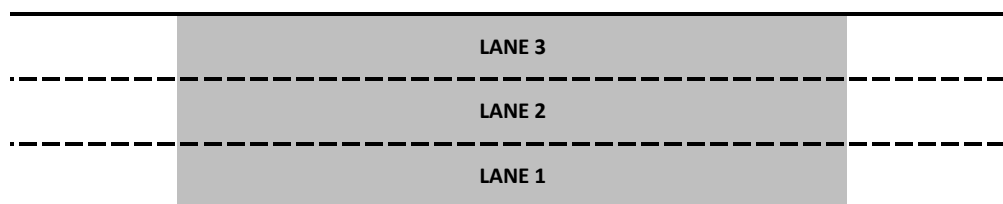
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,452	12	68.3	0.2	22.4	0.6	C
2	1,517	15	68.5	0.2	23.0	0.6	C
1	1,401	8	68.2	0.1	21.6	0.2	C
Area	4,371	35	68.3	0.1	22.4	0.1	C
Total	4,371	35	68.3	0.1	22.4	0.1	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,390	4,371	35	99.6%	3,906
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Opening Year No Build
AM Peak Hour

Location		Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
200	SB I-15 EL: WB SR-91 Off-ramp	Basic	216	12	98.3%				56	14	93.3%	69.9	0.2	1.7	0.2	A
210	SB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp	Basic	160	8	100.0%							69.8	0.2	2.4	0.2	A
201	SB I-15 EL: EB SR-91 On-ramp	Basic	160	8	99.8%	142	19	94.9%				69.8	0.3	2.2	0.1	A
202	SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia	Basic	301	14	97.2%							69.9	0.3	2.2	0.1	A
203	SB I-15 EL: EL Access S of Magnolia to EL Egress at El Cerrito	Basic	300	13	93.8%							69.3	1.0	4.4	0.5	A
204	SB I-15 EL: EL Egress at El Cerrito	Basic	300	14	93.8%				25	12	83.3%	69.6	0.2	2.3	0.2	A
205	SB I-15 EL: EL Egress at El Cerrito to EL Egress at Cajalco	Basic	276	9	95.2%							69.3	0.2	4.2	0.3	A
300	NB I-15 EL: EL Ingress at Cajalco	Basic	1,513	40	108.0%							52.8	4.6	31.4	5.3	D
301	NB I-15 EL: EL Ingress at El Cerrito	Basic	1,512	39	108.0%	721	63	107.6%				66.4	0.8	18.5	1.4	C
302	NB I-15 EL: EL Ingress at El Cerrito to EL Access N of Ontario	Basic	2,247	45	108.5%							68.9	0.2	18.5	1.4	C
303	NB I-15 EL: EL Access at Ontario to WB SR-91 Off-ramp	Basic	2,784	49	103.5%							65.3	1.7	22.9	1.4	C
304	NB I-15 EL: WB SR-91 Off-ramp	Basic	2,789	63	103.7%				1,601	104	100.7%	66.2	0.5	23.2	1.5	C
305	NB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp	Basic	1,199	26	109.0%							66.5	0.6	21.5	1.4	C
306	NB I-15 EL: EB SR-91 On-ramp	Basic	1,201	29	109.2%	831	58	95.5%				68.7	0.2	16.5	1.0	B

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 200 - SB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	86	6	69.7	0.6	1.6	0.3	A
1	130	7	70.1	0.3	1.8	0.2	A
Area	216	12	69.9	0.2	1.7	0.2	A
Total	216	12	69.9	0.2	1.7	0.2	A

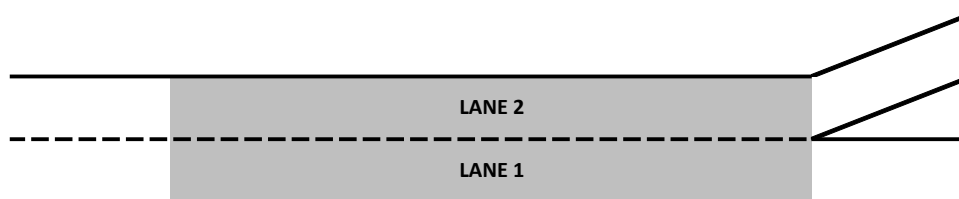
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	56	14
Total	56	14

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	220	216	12	98.3%	1,496
On-ramp					
Off-ramp	60	56	14	93.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 210 - SB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	160	8	69.8	0.2	2.4	0.2	A
Area	160	8	69.8	0.2	2.4	0.2	A
Total	160	8	69.8	0.2	2.4	0.2	A

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	160	160	8	100.0%	6,571
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 201 - SB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	160	8	69.6	0.6	2.0	0.4	A
1	142	19	70.0	0.3	2.4	0.2	A
Area	302	26	69.8	0.3	2.2	0.1	A
Total	302	26	69.8	0.3	2.2	0.1	A

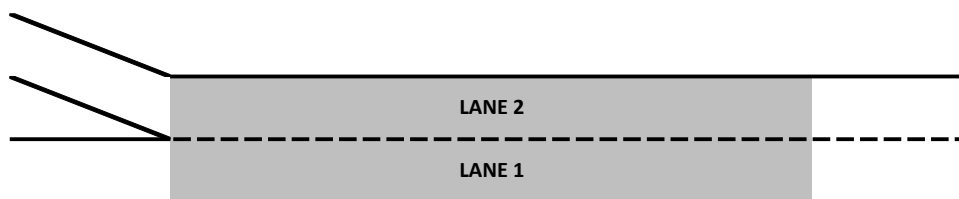
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	142	19
Total	142	19

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	160	160	8	99.8%	1,500
On-ramp	150	142	19	94.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 202 - SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	135	6	69.6	0.7	2.0	0.3	A
1	166	7	70.1	0.3	2.5	0.2	A
Area	301	14	69.9	0.3	2.2	0.1	A
Total	301	14	69.9	0.3	2.2	0.1	A

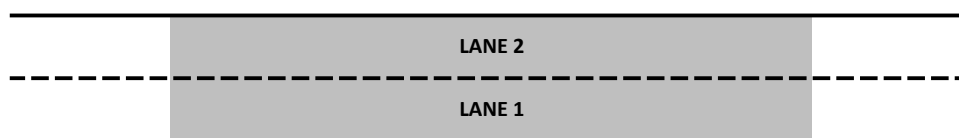
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	310	301	14	97.2%	2,496
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 203 - SB I-15 EL: EL Access S of Magnolia to EL Egress at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	107	5	69.2	1.7	3.0	0.4	A
1	193	8	69.6	0.6	1.4	0.2	A
Area	300	13	69.3	1.0	4.4	0.5	A
Total	300	13	69.3	1.0	2.2	0.3	A

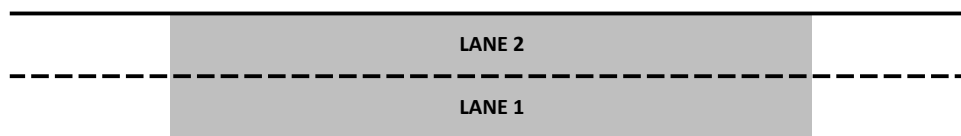
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	320	300	13	93.8%	6,828
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 204 - SB I-15 EL: EL Egress at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	275	10	69.4	0.2	4.3	0.3	A
1	25	4	71.3	0.6	0.3	0.1	A
Area	300	14	69.6	0.2	2.3	0.2	A
Total	300	14	69.6	0.2	2.3	0.2	A

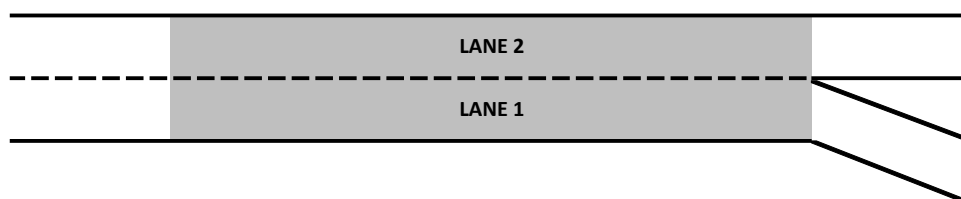
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	25	12
Total	25	12

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	320	300	14	93.8%	1,501
On-ramp					
Off-ramp	30	25	12	83.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 205 - SB I-15 EL: EL Egress at El Cerrito to EL Egress at Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	276	9	69.3	0.2	4.2	0.3	A
Area	276	9	69.3	0.2	4.2	0.3	A
Total	276	9	69.3	0.2	4.2	0.3	A

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	290	276	9	95.2%	3,794
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 300 - NB I-15 EL: EL Ingress at Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	1,513	40	52.8	4.6	31.4	5.3	D
Area	1,513	40	52.8	4.6	31.4	5.3	D
Total	1,513	40	52.8	4.6	31.4	5.3	D

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,400	1,513	40	108.0%	5,237
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 301 - NB I-15 EL: EL Ingress at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,512	39	67.1	0.2	25.9	2.3	C
1	721	63	64.7	2.1	11.1	1.6	B
Area	2,233	102	66.4	0.8	18.5	1.4	C
Total	2,233	102	66.4	0.8	18.5	1.4	C

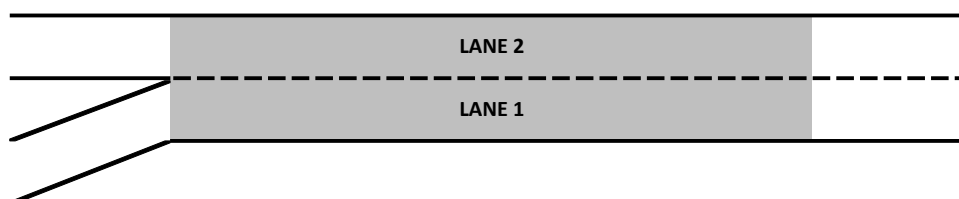
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	721	63
Total	721	63

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,400	1,512	39	108.0%	1,500
On-ramp	670	721	63	107.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 302 - NB I-15 EL: EL Ingress at El Cerrito to EL Access N of Ontario

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,124	25	68.1	0.2	20.3	1.6	C
1	1,122	19	69.7	0.3	16.6	1.2	B
Area	2,247	45	68.9	0.2	18.5	1.4	C
Total	2,247	45	68.9	0.2	18.5	1.4	C

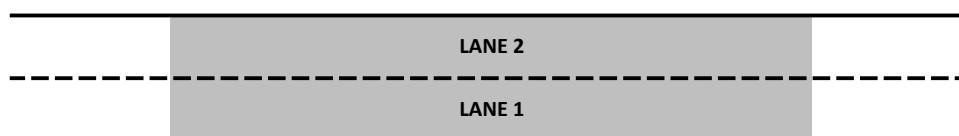
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,070	2,247	45	108.5%	6,294
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 303 - NB I-15 EL: EL Access at Ontario to WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,331	26	65.3	2.0	22.8	1.5	C
1	1,453	24	65.3	1.4	23.0	1.4	C
Area	2,784	49	65.3	1.7	22.9	1.4	C
Total	2,784	49	65.3	1.7	22.9	1.4	C

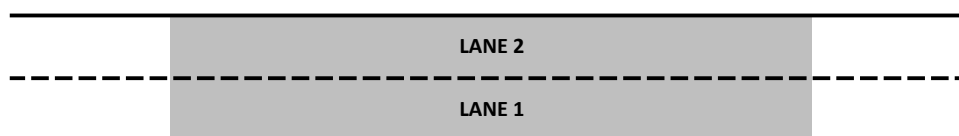
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,690	2,784	49	103.5%	3,113
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 304 - NB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,580	42	66.0	0.8	24.9	1.9	C
1	1,209	21	66.5	0.6	21.5	1.4	C
Area	2,789	63	66.2	0.5	23.2	1.5	C
Total	2,789	63	66.2	0.5	23.2	1.5	C

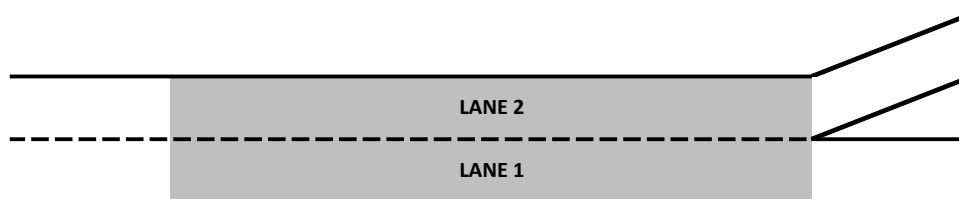
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,601	104
Total	1,601	104

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,690	2,789	63	103.7%	1,501
On-ramp					
Off-ramp	1,590	1,601	104	100.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 305 - NB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	1,199	26	66.5	0.6	21.5	1.4	C
Area	1,199	26	66.5	0.6	21.5	1.4	C
Total	1,199	26	66.5	0.6	21.5	1.4	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,100	1,199	26	109.0%	1,501
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 306 - NB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,201	29	69.3	0.2	15.0	0.7	B
1	831	58	68.1	0.2	18.0	1.4	B
Area	2,032	87	68.7	0.2	16.5	1.0	B
Total	2,032	87	68.7	0.2	16.5	1.0	B

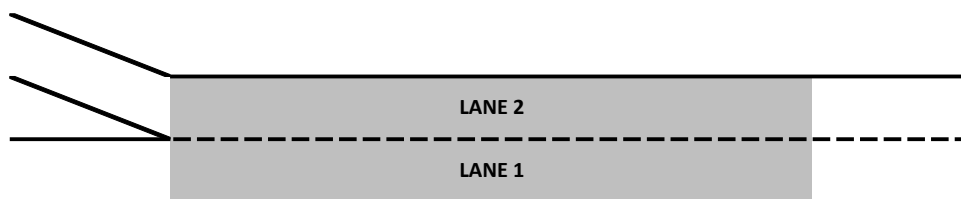
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	831	58
Total	831	58

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,100	1,201	29	109.2%	1,498
On-ramp	870	831	58	95.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Vissim Post-Processor
Average Results from 5 Runs
Network Statistics

I-15 Express Lanes Southern Extension
Opening Year No Build
PM Peak Hour

Performance Measure	Vehicle Types	Average	Std. Dev.	Minimum	Maximum
Average Delay (seconds)	All	431.0	24.59	406.0	464.4
Total Delay (hours)	All	26,074	1,505	24,526	28,101
Average Stopped Delay (seconds)	All	17.1	1.09	15.7	18.5
Total Stopped Delay (hours)	All	1035	67	951	1118
Total Distance Traveled (miles)	All	1,868,845	2,365	1,864,644	1,870,160
Average Speed (mph)	All	34.8	0.96	33.5	35.7
Average Number of Stops	All	23.8	1.82	21.5	26.1
Total Number of Stops	All	5,176,224	399,941	4,678,319	5,691,943
Total Travel Time (hours)	All	53,787.6	1,525.4	52,175.7	55,825.8
Vehicles Active	All	4,719	156	4,482	4,868
Vehicles Arrived	All	213,068	281	212,580	213,292

VISSIM Post-Processor
Average Results from 5 Runs
Average Travel Time

I-15 Express Lanes Southern Extension
Opening Year No Build
PM Peak Hour

Corridor Travel Time by Time Interval Summary					
Time interval		Measured from Simulation (min)			
		Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
1	1:00 - 1:15 PM	20.47	44.88	8.40	8.78
2	1:15 - 1:30 PM	20.30	45.08	10.25	10.63
3	1:30 - 1:45 PM	20.41	49.28	12.56	12.94
4	1:45 - 2:00 PM	20.68	51.80	16.22	16.58
5	2:00 - 2:15 PM	21.09	54.31	17.54	17.84
6	2:15 - 2:30 PM	21.50	59.45	19.03	19.32
7	2:30 - 2:45 PM	21.89	61.61	18.38	18.67
8	2:45 - 3:00 PM	22.01	64.27	17.75	18.03
9	3:00 - 3:15 PM	22.84	66.32	18.10	18.36
10	3:15 - 3:30 PM	25.44	67.90	18.05	18.12
11	3:30 - 3:45 PM	28.63	68.16	17.58	17.66
12	3:45 - 4:00 PM	31.09	65.72	5.17	5.33
13	4:00 - 4:15 PM	34.34	61.50	5.34	5.35
14	4:15 - 4:30 PM	38.29	57.78	5.59	5.35
15	4:30 - 4:45 PM	40.85	57.42	5.58	5.33
16	4:45 - 5:00 PM	44.45	57.08	5.66	5.31
17	5:00 - 5:15 PM	47.15	56.61	5.73	5.33
18	5:15 - 5:30 PM	48.64	61.52	5.59	5.30
19	5:30 - 5:45 PM	49.79	55.22	5.42	5.31
20	5:45 - 6:00 PM	48.77	50.33	5.38	5.35
21	6:00 - 6:15 PM	48.88	49.67	5.45	5.32
22	6:15 - 6:30 PM	47.13	44.67	5.17	5.33
23	6:30 - 6:45 PM	44.04	38.73	5.18	5.35
24	6:45 - 7:00 PM	39.59	33.46	5.18	5.32
25	7:00 - 7:15 PM	36.50	28.63	5.12	5.30
26	7:15 - 7:30 PM	33.65	22.94	5.09	5.31
27	7:30 - 7:45 PM	31.20	19.69	5.07	5.29
28	7:45 - 8:00 PM	30.03	19.48	5.05	5.29
Average		33.6	50.5	9.5	9.5

Corridor Performance Measurements				
Stats Summary	Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
Average Travel Time (min)	33.6	50.5	5.2	5.3
Average Travel Speed (mph)	39.1	26.0	57.7	57.9
Average Delay per Vehicle (min)	14.8	31.7	-1.7	-1.9
Max Individual Vehicle Delay (min)	31.0	49.4	12.1	12.1

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Opening Year No Build
PM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
1 SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	5,004	74	100.5%							67.8	0.2	17.0	0.6	B
2 SB I-15: Hidden Valley Pkwy On-ramp	Merge	5,006	83	100.5%	688	31	107.5%				66.5	0.2	19.0	0.4	C
3 SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp	Basic	5,698	90	101.4%							67.2	0.2	15.2	0.4	B
4 SB I-15: WB SR-91 Off-ramp	Basic	5,703	84	101.5%				1,240	19	102.4%	67.4	0.2	15.1	0.4	B
5 SB I-15: EB SR-91 Off-ramp	Diverge	4,473	69	101.4%				1,110	58	100.9%	65.7	0.4	22.9	0.7	C
6 SB I-15: EB SR-91 Off-ramp to On-ramp	Basic	3,361	65	101.5%							42.1	19.5	24.9	12.2	C
7 SB I-15: EB SR-91 On-ramp	Merge	3,365	79	101.6%	1,946	46	103.5%				7.7	1.5	112.5	10.1	F
8 SB I-15: WB SR-91 On-ramp	Weave	5,308	81	102.3%	1,050	49	100.0%	1,368	68	103.6%	11.0	1.0	94.0	2.3	F
9 SB I-15: Magnolia Ave Off-ramp to On-ramp	Basic	5,001	105	101.6%							8.3	1.0	130.1	5.1	F
10 SB I-15: Magnolia Ave On-ramp	Merge	5,007	115	101.8%	923	60	102.5%				17.1	0.4	103.5	3.7	F
11 SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)	Weave	5,930	174	101.9%	2,002	26	97.2%	2,079	65	98.5%	19.0	0.6	67.1	0.6	F
12 SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (after EL Access)	Basic	5,889	131	102.1%							9.8	0.6	123.8	1.8	F
13 SB I-15: Ontario Ave Off-ramp	Diverge	5,888	127	102.0%				998	56	98.8%	10.9	0.5	108.6	2.0	F
14 SB I-15: Ontario Ave Off-ramp to On-ramp	Basic	4,711	82	99.0%							9.1	0.8	105.8	2.8	F
15 SB I-15: Ontario Ave On-ramp	Merge	4,623	81	97.1%	899	7	97.7%				10.3	1.8	86.2	19.0	F
16 SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	Basic	5,434	115	95.7%				643	77	102.0%	12.4	1.7	96.6	6.5	F
17 SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp	Basic	4,718	82	93.4%							15.8	1.7	91.0	4.2	F
18 SB I-15: EL On-ramp at Foothill Pkwy/El Cerrito Rd	Basic	4,711	79	93.3%	320	26	88.8%				15.0	1.4	74.2	3.1	F
19 SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp	Weave	4,961	109	91.7%	872	33	101.3%	784	39	95.5%	15.9	1.3	87.9	3.2	F
20 SB I-15: EL On-ramp at Cajalco Rd to Cajalco Rd On-ramp (4 Lane)	Basic	4,953	70	90.9%	1,750	44	100.0%				15.6	0.9	100.2	2.4	F
21 SB I-15: Cajalco Rd On-ramp	Merge	6,583	156	91.4%	852	88	103.8%				20.2	1.2	75.8	3.1	F
22 SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	7,383	68	92.1%							34.2	1.8	52.5	2.1	F
23 SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Basic	7,379	101	92.0%				1,093	69	98.4%	32.6	3.2	55.5	4.5	F
24 SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	6,233	64	90.2%							28.4	1.2	74.4	2.8	F
25 SB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	6,206	71	89.8%	557	27	96.0%				29.9	0.7	60.6	1.9	F
26 SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp	Basic	6,736	57	89.9%							50.6	11.1	47.2	11.0	F
27 SB I-15: Temescal Canyon Rd Off-ramp	Diverge	6,734	50	89.9%				604	62	92.9%	45.2	11.3	52.0	11.3	F
28 SB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	6,094	64	89.1%							35.9	10.2	61.8	14.1	F
29 SB I-15: Temescal Canyon Rd On-ramp	Merge	6,079	45	88.9%	493	44	98.6%				33.4	3.4	52.9	4.8	F
30 SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	6,538	69	89.1%							57.6	4.7	41.5	4.1	E
31 SB I-15: Indian Truck Trail Off-ramp	Diverge	6,530	68	89.0%				549	28	94.7%	51.9	5.2	44.1	4.7	E
32 SB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	5,954	88	88.1%							61.0	3.0	35.2	2.0	E
33 SB I-15: Indian Truck Trail On-ramp	Merge	5,941	99	87.9%	262	15	96.9%				50.6	9.9	34.1	7.5	D
34 SB I-15: Indian Truck Trail On-ramp to Lake St Off-ramp	Basic	6,196	54	88.1%							58.6	2.7	38.3	2.3	E
35 SB I-15: Lake St Off-ramp	Diverge	6,132	57	87.2%				562	33	86.5%	56.6	6.1	40.7	6.2	E
36 SB I-15: Lake St Off-ramp to On-ramp	Basic	5,583	60	87.5%							63.5	0.6	31.4	1.1	D
37 SB I-15: Lake St On-ramp	Merge	5,598	63	87.7%	258	24	99.2%				62.1	4.4	24.9	2.1	C
38 SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp	Basic	5,802	78	87.4%							61.6	1.0	33.4	1.3	D
39 SB I-15: Nichols Rd Off-ramp	Diverge	5,830	94	87.8%				327	29	88.2%	58.8	5.1	34.4	5.0	D
40 SB I-15: Nichols Rd Off-ramp to On-ramp	Basic	5,545	74	88.4%							62.6	1.5	31.4	1.3	D
41 SB I-15: Nichols Rd On-ramp	Merge	5,538	56	88.3%	295	32	98.2%				59.6	1.4	27.4	1.7	D
42 SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp	Basic	5,820	72	88.6%							60.5	2.8	34.5	2.1	D
43 SB I-15: Central Ave (SR-74) Off-ramp	Diverge	5,831	66	88.8%				905	76	89.6%	63.1	1.2	22.1	0.8	C
44 SB I-15: Central Ave (SR-74) Off-ramp to On-ramp	Basic	4,953	86	89.1%							64.0	0.9	28.2	1.1	D
45 SB I-15: Central Ave (SR-74) On-ramp	Merge	4,950	86	89.0%	1,235	22	106.4%				44.9	9.3	34.8	8.6	D
46 SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp	Basic	6,175	90	91.9%							54.5	2.6	39.2	2.8	E
47 SB I-15: Main St Off-ramp	Diverge	6,178	87	91.9%				418	40	99.5%	59.6	1.6	35.9	2.1	E
48 SB I-15: Main St Off-ramp to On-ramp	Basic	5,758	100	91.4%							63.4	0.7	31.4	1.5	D
49 SB I-15: Main St On-ramp SB	Merge	5,749	91	91.3%	390	16	97.5%				59.1	9.7	28.4	5.9	D
50 SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp	Basic	6,132	82	91.5%							61.4	0.8	33.7	1.3	D

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 1 - SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

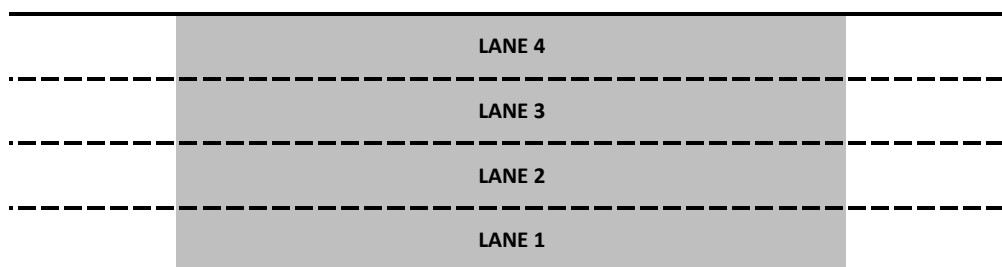
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,260	30	67.8	0.5	15.2	0.6	B
3	1,372	5	68.0	0.3	17.7	0.2	B
2	1,301	19	67.9	0.1	19.5	1.1	C
1	1,071	20	67.3	0.2	15.6	1.0	B
Area	5,004	74	67.8	0.2	17.0	0.6	B
Total	5,004	74	67.8	0.2	17.0	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,980	5,004	74	100.5%	1,784
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 2 - SB I-15: Hidden Valley Pkwy On-ramp

Segment Type - Merge

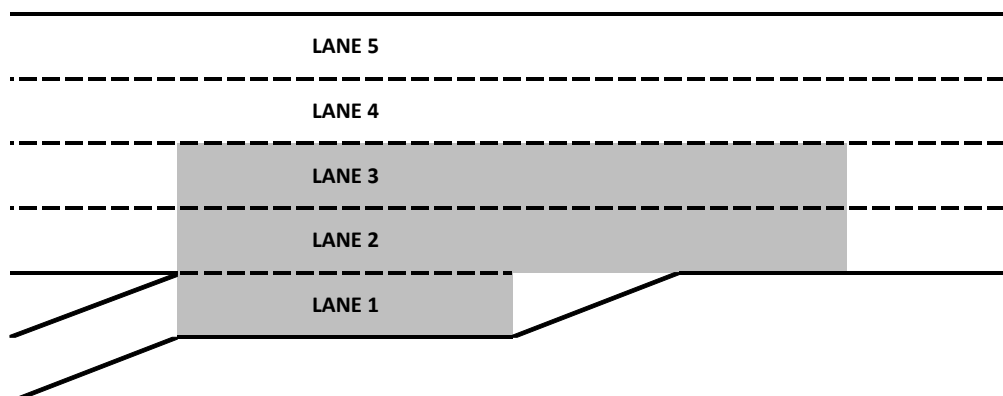
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,226	35	68.3	0.3	15.0	1.1	B
4	1,058	17	68.5	0.2	15.4	0.5	B
3	1,463	9	66.1	0.2	26.2	0.3	D
2	1,260	22	64.9	0.8	19.3	1.0	C
1	688	31	22.8	0.4	1.3	0.2	A
Area	3,411	62	65.2	0.4	19.0	0.4	C
Total	5,694	115	66.5	0.2	17.3	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	688	31	1		
Total	688	31	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,980	5,006	83	100.5%	1,702
On-ramp	640	688	31	107.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 3 - SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp

Segment Type - Basic

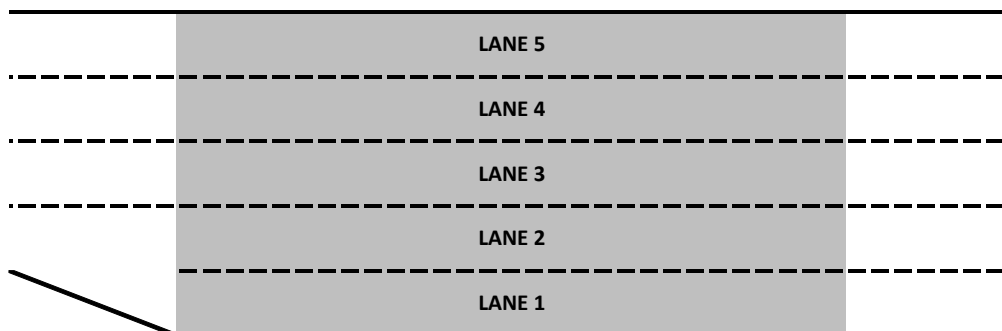
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,479	32	68.0	0.3	16.4	1.0	B
4	1,546	28	67.9	0.4	20.5	0.7	C
3	1,413	4	65.8	0.2	22.1	0.9	C
2	943	11	66.9	0.4	13.5	0.5	B
1	318	16	68.7	0.5	3.6	0.3	A
Area	5,698	90	67.2	0.2	15.2	0.4	B
Total	5,698	90	67.2	0.2	15.2	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,620	5,698	90	101.4%	1,019
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 4 - SB I-15: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,537	27	68.4	0.2	13.0	0.7	B
4	1,546	32	67.5	0.3	22.8	0.6	C
3	1,372	10	66.1	0.3	21.6	1.0	C
2	803	3	67.1	0.2	12.1	0.3	B
1	446	13	69.9	0.3	6.0	0.6	A
Area	5,703	84	67.4	0.2	15.1	0.4	B
Total	5,703	84	67.4	0.2	15.1	0.4	B

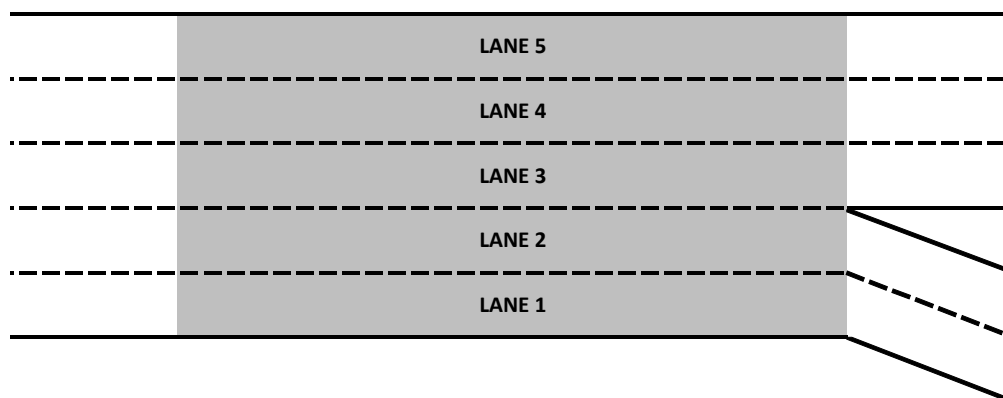
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	697	12
1	543	24
Total	1,240	19

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,620	5,703	84	101.5%	1,499
On-ramp					
Off-ramp	1,210	1,240	19	102.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 5 - SB I-15: EB SR-91 Off-ramp

Segment Type - Diverge

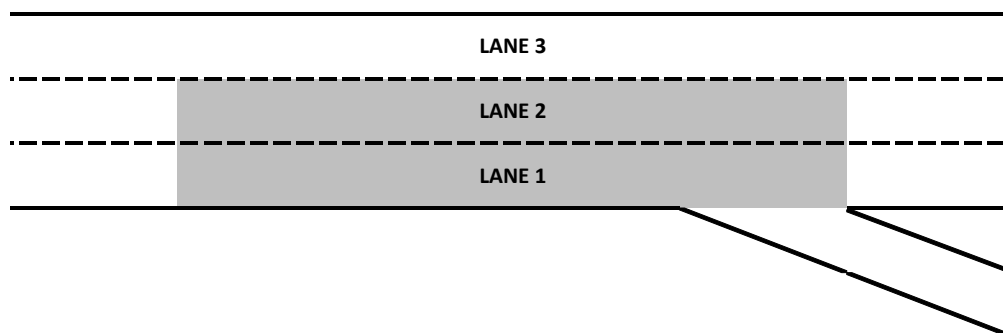
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,376	19	68.5	0.3	11.8	0.8	B
2	1,717	25	67.1	0.4	18.5	0.4	C
1	1,381	25	63.4	0.6	27.3	1.1	D
Area	3,097	49	65.0	0.5	22.9	0.7	C
Total	4,473	69	65.7	0.4	19.2	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	1,110	58
Total			Total	1,110	58

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,410	4,473	69	101.4%	1,545
On-ramp					
Off-ramp	1,100	1,110	58	100.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 6 - SB I-15: EB SR-91 Off-ramp to On-ramp

Segment Type - Basic

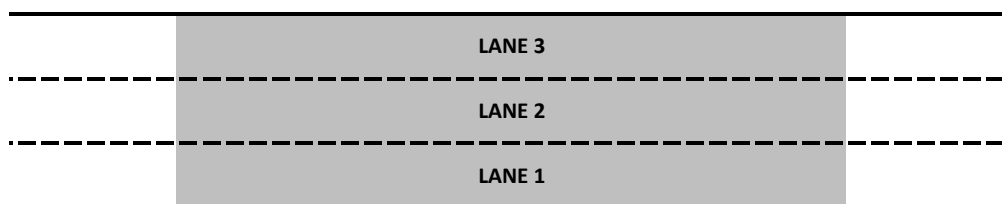
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,109	20	47.0	19.9	21.0	11.0	C
2	928	21	47.0	19.0	25.1	12.9	C
1	1,324	24	30.4	23.0	38.7	21.8	E
Area	3,361	65	42.1	19.5	24.9	12.2	C
Total	3,361	65	42.1	19.5	24.9	12.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,310	3,361	65	101.5%	1,549
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 7 - SB I-15: EB SR-91 On-ramp

Segment Type - Merge

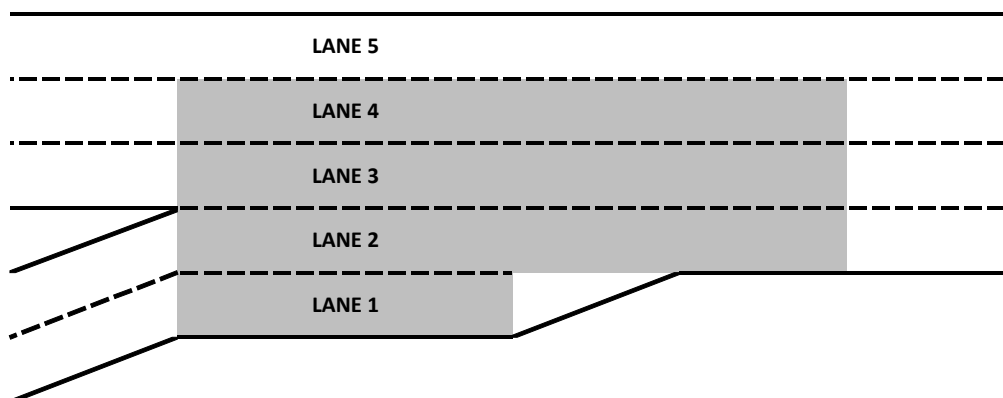
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,093	23	10.4	1.9	118.9	14.5	F
4	914	26	8.7	2.2	123.3	18.6	F
3	1,359	21	6.0	1.3	152.4	14.8	F
2	897	18	2.8	0.5	178.7	6.5	F
1	1,049	37	0.5	0.4	107.3	12.4	F
Area	4,218	103	6.3	1.4	112.5	10.1	F
Total	5,310	125	7.7	1.5	107.6	9.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2	897	18	2		
1	1,049	37	1		
Total	1,946	46	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,310	3,365	79	101.6%	1,370
On-ramp	1,880	1,946	46	103.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 8 - SB I-15: WB SR-91 On-ramp

Segment Type - Weave

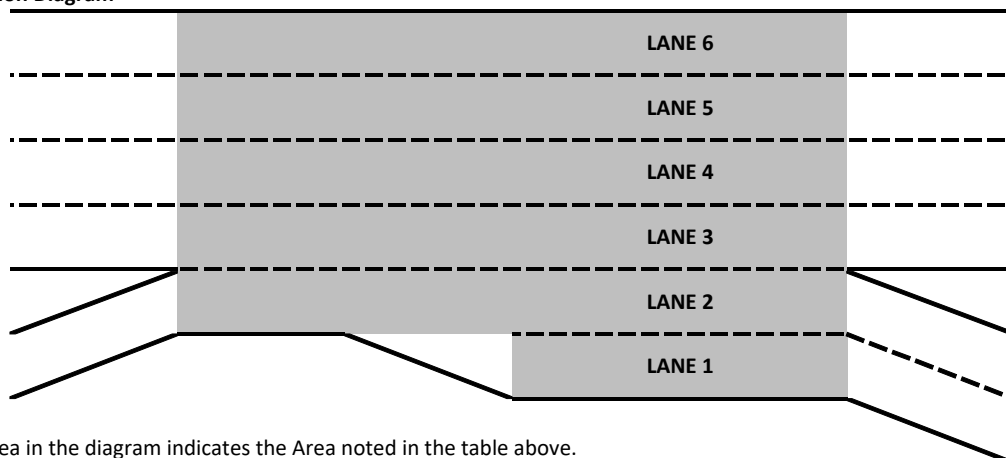
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6			9.3	1.1	133.4	6.5	F
5	1,223	33	7.1	1.0	143.3	7.7	F
4	1,132	18	6.0	1.0	159.0	9.8	F
3	1,051	6	6.6	1.3	146.7	8.9	F
2	1,903	24	13.4	5.3	50.4	7.9	F
1	1,050	49	22.6	0.6	6.9	0.5	A
Area	6,358	131	11.0	1.0	94.0	2.3	F
Total	6,358	131	11.0	1.0	94.0	2.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2	836	42
1	1,050	49	1	532	33
Total	1,050	49	Total	1,368	68

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,190	5,308	81	102.3%	2,539
On-ramp	1,050	1,050	49	100.0%	
Off-ramp	1,320	1,368	68	103.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 9 - SB I-15: Magnolia Ave Off-ramp to On-ramp

Segment Type - Basic

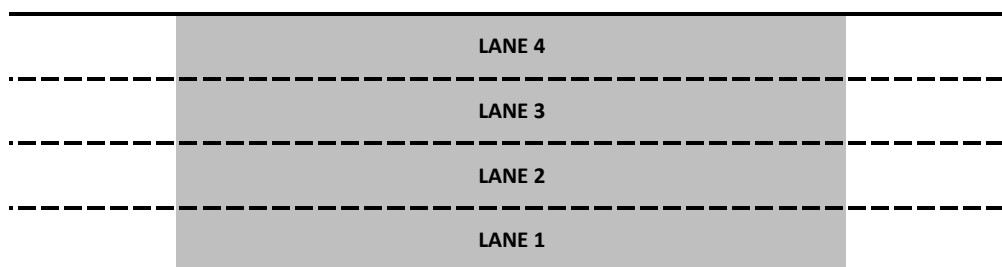
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,393	42	9.9	1.1	127.7	6.4	F
3	1,334	23	7.0	1.2	143.0	9.0	F
2	1,173	28	5.0	0.7	162.6	5.5	F
1	1,101	12	9.7	1.2	125.1	5.5	F
Area	5,001	105	8.3	1.0	130.1	5.1	F
Total	5,001	105	8.3	1.0	130.1	5.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,920	5,001	105	101.6%	2,362
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 10 - SB I-15: Magnolia Ave On-ramp

Segment Type - Merge

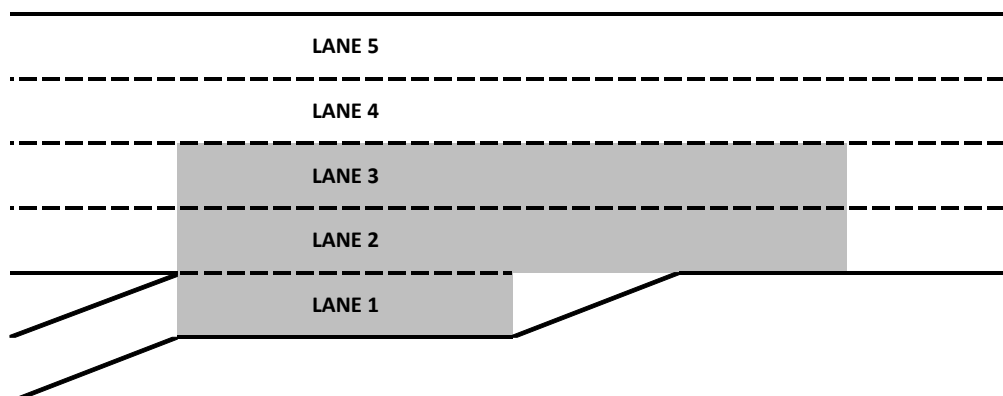
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7			34.2	0.2	4.8	0.2	A
6			32.2	0.5	7.0	0.4	A
5	1,440	40	10.1	1.7	129.7	7.9	F
4	1,362	28	7.9	1.1	135.7	7.3	F
3	1,159	21	7.3	0.7	147.2	4.6	F
2	1,047	25	8.2	0.6	130.1	3.5	F
1	923	60	10.2	1.1	20.8	5.7	C
Area	3,128	107	9.6	0.5	103.5	3.7	F
Total	5,929	175	17.1	0.4	71.6	1.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	923	60	1		
Total	923	60	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,920	5,007	115	101.8%	1,504
On-ramp	900	923	60	102.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 11 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7	1,450	40	43.4	0.5	10.1	0.6	A
6	1,438	17	36.4	0.8	10.7	0.3	A
5	1,468	40	11.9	1.1	121.2	4.4	F
4	1,302	34	9.7	1.0	127.8	5.5	F
3	273	23	9.0	0.9	136.7	5.3	F
2	840	34	9.5	0.9	126.8	4.6	F
1	1,162	12	2.4	0.5	4.7	1.4	A
Area	7,931	200	19.0	0.6	67.1	0.6	F
Total	7,931	200	19.0	0.6	67.1	0.6	F

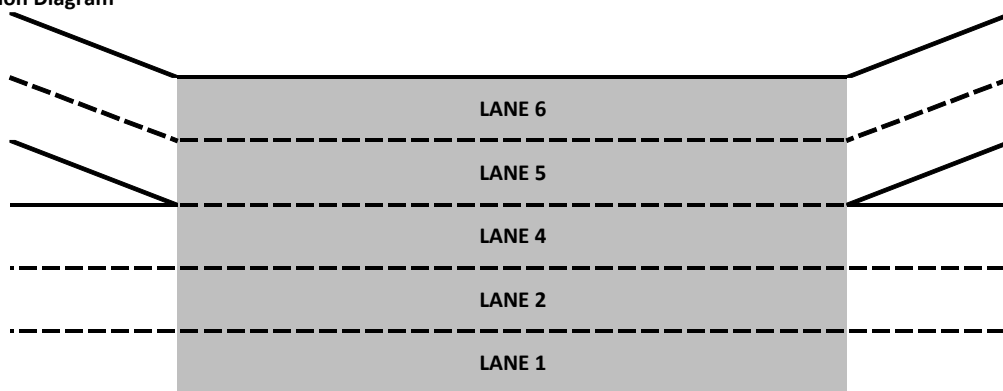
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	840	34
1	1,162	12
Total	2,002	26

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	995	40
1	1,085	32
Total	2,079	65

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,820	5,930	174	101.9%	3,337
On-ramp	2,060	2,002	26	97.2%	
Off-ramp	2,110	2,079	65	98.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 12 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (after EL Access)

Segment Type - Basic

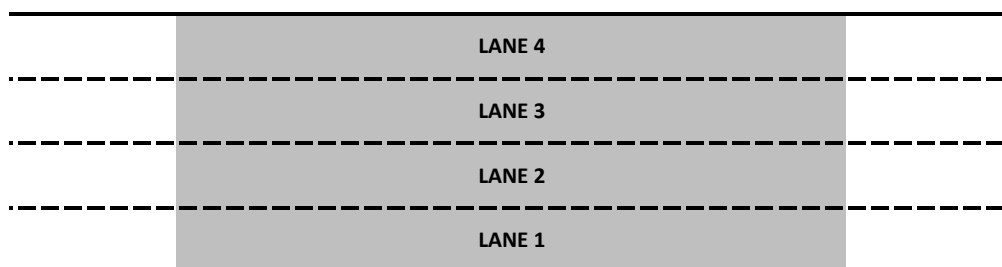
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,461	40	10.7	0.8	123.9	4.0	F
3	1,372	19	6.6	1.1	145.8	9.6	F
2	1,599	25	11.1	1.1	122.6	4.0	F
1	1,457	47	9.7	0.7	124.8	2.3	F
Area	5,889	131	9.8	0.6	123.8	1.8	F
Total	5,889	131	9.8	0.6	123.8	1.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,770	5,889	131	102.1%	394
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 13 - SB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,477	36	10.9	1.1	122.3	5.6	F
3	1,384	13	4.9	0.7	155.6	8.4	F
2	1,586	35	8.0	0.7	137.9	3.5	F
1	1,441	42	15.7	0.8	104.1	1.5	F
Area	3,027	78	12.6	0.6	108.6	2.0	F
Total	5,888	127	10.9	0.5	110.4	2.0	F

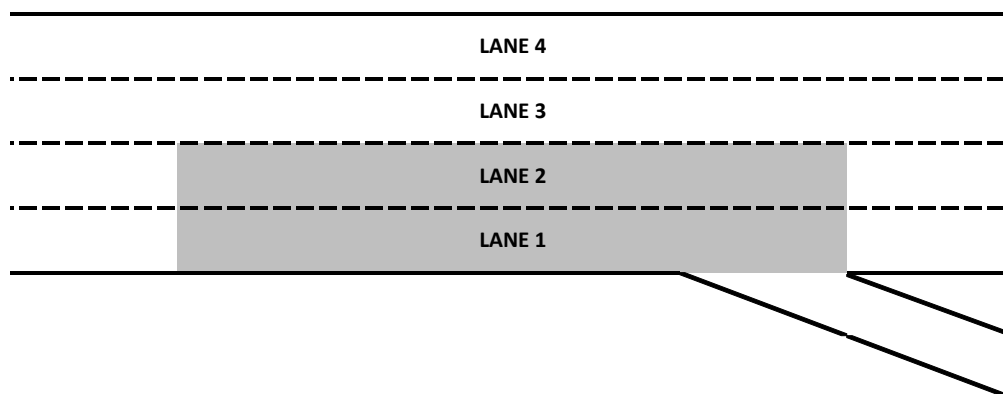
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	998	56
Total	998	56

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,770	5,888	127	102.0%	1,504
On-ramp					
Off-ramp	1,010	998	56	98.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 14 - SB I-15: Ontario Ave Off-ramp to On-ramp

Segment Type - Basic

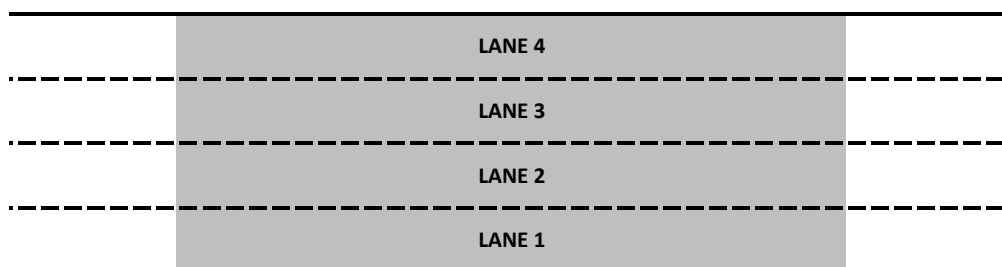
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,550	16	10.9	1.1	120.9	4.3	F
3	1,515	23	4.9	0.8	152.5	6.9	F
2	1,298	18	4.5	1.0	160.2	9.2	F
1	350	25	12.9	1.4	85.5	11.2	F
Area	4,711	82	9.1	0.8	105.8	2.8	F
Total	4,711	82	9.1	0.8	105.8	2.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,760	4,711	82	99.0%	2,820
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 15 - SB I-15: Ontario Ave On-ramp

Segment Type - Merge

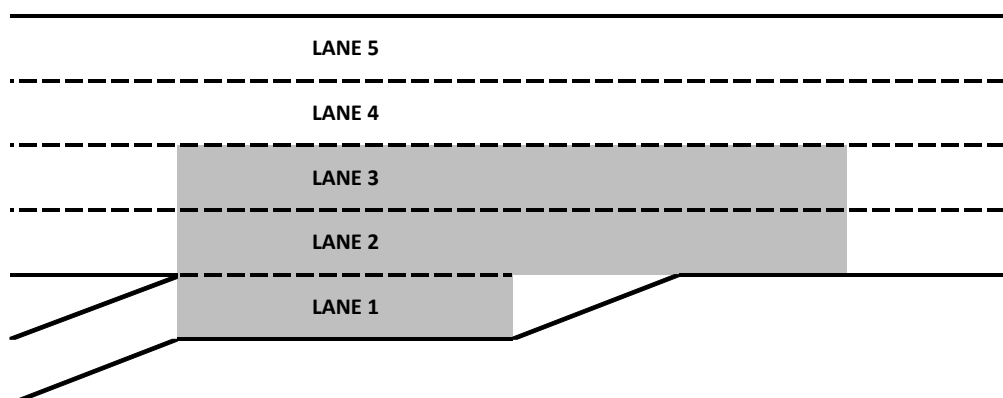
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,605	16	12.2	1.0	121.3	3.8	F
4	1,388	11	8.2	1.3	140.6	6.7	F
3	1,175	30	5.5	1.5	152.2	10.1	F
2	456	24	12.1	2.9	93.6	20.6	F
1	899	7	11.2	7.0	26.6	18.0	D
Area	2,530	61	10.1	2.8	86.2	19.0	F
Total	5,522	88	10.3	1.8	101.6	11.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	899	7	1		
Total	899	7	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,760	4,623	81	97.1%	1,494
On-ramp	920	899	7	97.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 16 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Basic

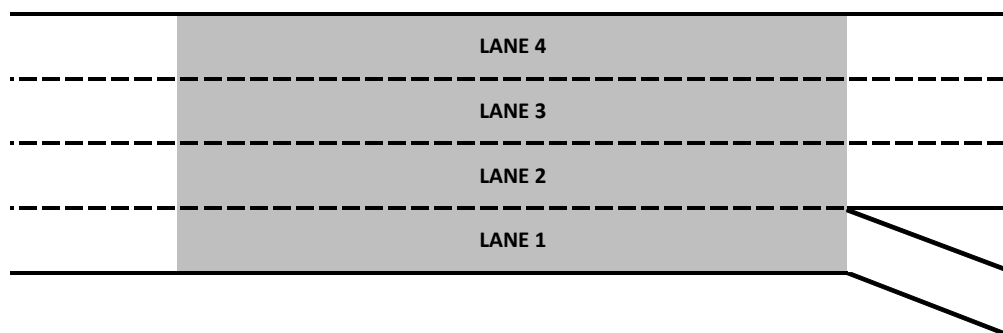
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,790	18	12.7	1.0	120.7	3.8	F
3	1,589	25	11.6	2.0	125.2	8.2	F
2	1,306	21	8.9	1.6	131.0	8.9	F
1	750	51	20.0	4.6	33.2	8.4	D
Area	5,434	115	12.4	1.7	96.6	6.5	F
Total	5,434	115	12.4	1.7	96.6	6.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	643	77
Total			Total	643	77

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,680	5,434	115	95.7%	738
On-ramp					
Off-ramp	630	643	77	102.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 17 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp

Segment Type - Basic

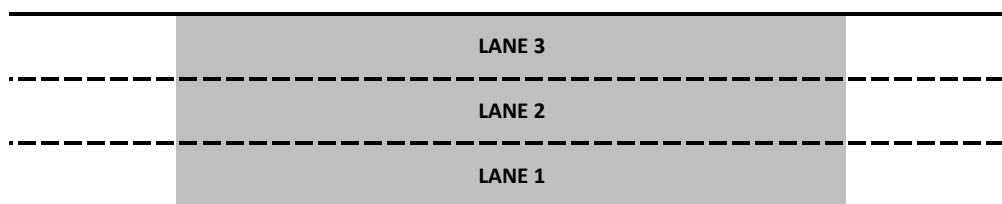
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,774	21	17.3	1.7	90.1	4.0	F
2	1,583	39	15.9	2.3	93.1	6.2	F
1	1,361	23	13.9	1.4	92.5	3.9	F
Area	4,718	82	15.8	1.7	91.0	4.2	F
Total	4,718	82	15.8	1.7	91.0	4.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,050	4,718	82	93.4%	754
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 18 - SB I-15: EL On-ramp at Foothill Pkwy/El Cerrito Rd

Segment Type - Basic

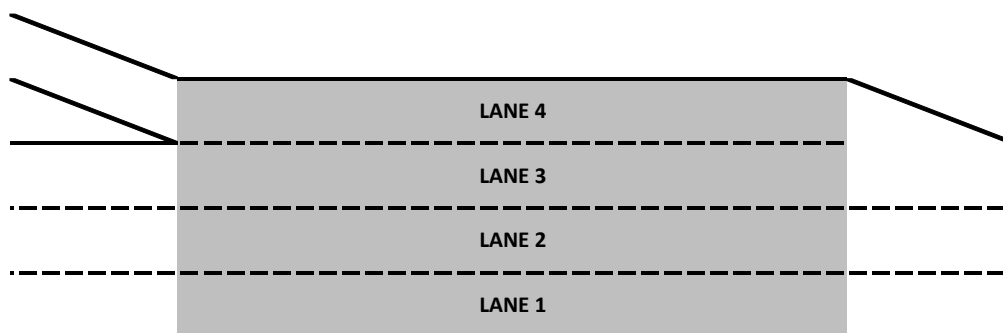
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,775	21	62.4	0.5	1.8	0.5	A
3	1,585	34	15.7	2.0	103.0	7.1	F
2	1,351	25	13.4	2.0	109.1	7.8	F
1	320	26	11.4	1.2	110.8	4.5	F
Area	5,030	105	15.0	1.4	74.2	3.1	F
Total	5,030	105	15.0	1.4	74.2	3.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	320	26	1		
Total	320	26	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,050	4,711	79	93.3%	603
On-ramp	360	320	26	88.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 19 - SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,790	30	15.2	1.3	107.6	4.2	F
3	1,684	45	13.8	1.7	110.4	6.0	F
2	1,488	34	12.9	1.1	110.0	4.0	F
1	872	33	21.8	2.3	19.0	2.0	C
Area	5,833	142	15.9	1.3	87.9	3.2	F
Total	5,833	142	15.9	1.3	87.9	3.2	F

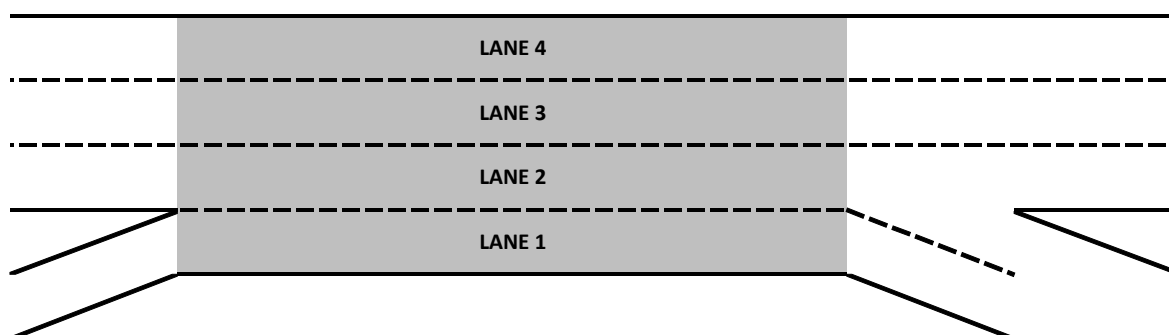
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	872	33
Total	872	33

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	62	21
1	722	28
Total	784	39

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,410	4,961	109	91.7%	3,331
On-ramp	860	872	33	101.3%	
Off-ramp	820	784	39	95.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 20 - SB I-15: EL On-ramp at Cajalco Rd to Cajalco Rd On-ramp (4 Lane)

Segment Type - Basic

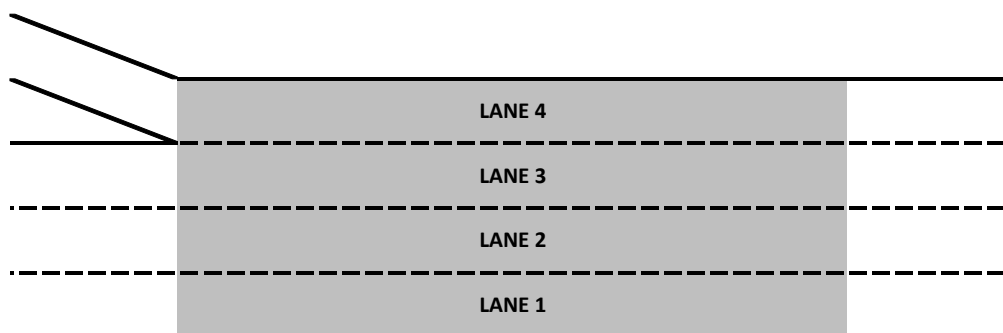
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,812	18	18.4	0.7	98.3	2.2	F
3	1,589	30	12.0	1.3	117.4	5.8	F
2	1,553	21	12.3	0.8	112.6	3.2	F
1	1,750	44	18.3	1.1	92.2	3.1	F
Area	6,703	114	15.6	0.9	100.2	2.4	F
Total	6,703	114	15.6	0.9	100.2	2.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,750	44	1		
Total	1,750	44	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,450	4,953	70	90.9%	2,078
On-ramp	1,750	1,750	44	100.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 21 - SB I-15: Cajalco Rd On-ramp

Segment Type - Merge

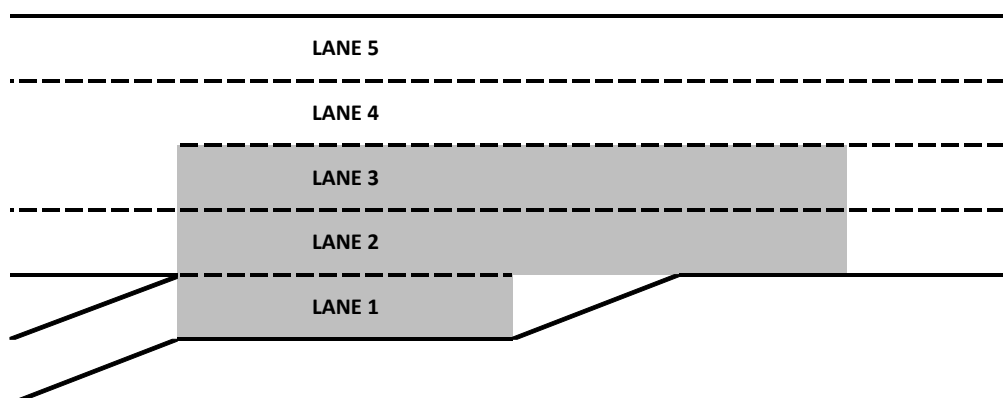
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,988	11	11.6	0.6	55.1	1.6	F
4	1,540	61	20.8	1.6	104.0	4.5	F
3	1,237	37	17.7	1.0	106.4	3.6	F
2	1,819	48	18.4	1.3	90.2	4.1	F
1	852	88	24.4	1.1	39.1	2.7	E
Area	3,907	173	19.5	1.1	75.8	3.1	F
Total	7,435	245	20.2	1.2	82.3	2.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	852	88	1		
Total	852	88	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,200	6,583	156	91.4%	1,500
On-ramp	820	852	88	103.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 22 - SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

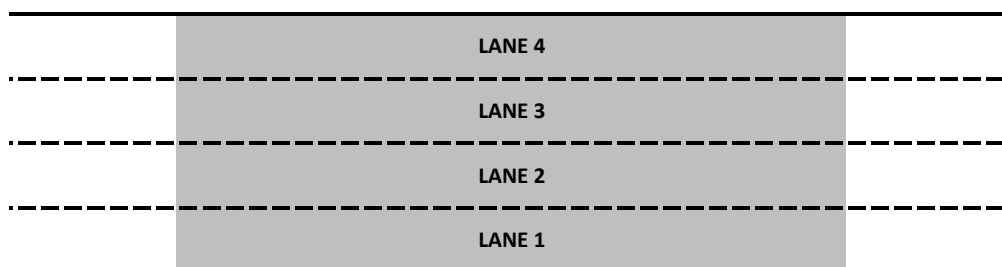
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,385	16	33.1	1.9	67.9	2.7	F
3	2,144	11	32.3	1.8	67.1	3.1	F
2	2,097	16	30.6	2.0	67.7	3.0	F
1	758	25	54.2	2.0	13.2	1.1	B
Area	7,383	68	34.2	1.8	52.5	2.1	F
Total	7,383	68	34.2	1.8	52.5	2.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	8,020	7,383	68	92.1%	1,675
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 23 - SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

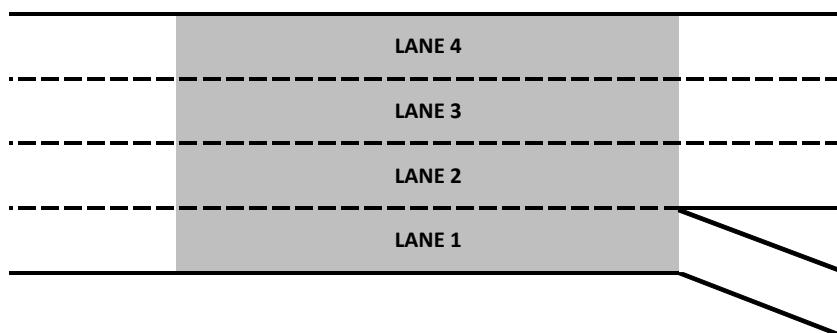
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,375	43	30.8	5.2	73.0	8.5	F
3	2,126	13	29.2	5.1	73.5	9.5	F
2	1,924	16	28.9	4.0	69.6	8.4	F
1	955	28	53.4	11.9	17.7	4.6	B
Area	7,379	101	32.6	3.2	55.5	4.5	F
Total	7,379	101	32.6	3.2	55.5	4.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	1,093	69
Total			Total	1,093	69

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	8,020	7,379	101	92.0%	1,498
On-ramp					
Off-ramp	1,110	1,093	69	98.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 24 - SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

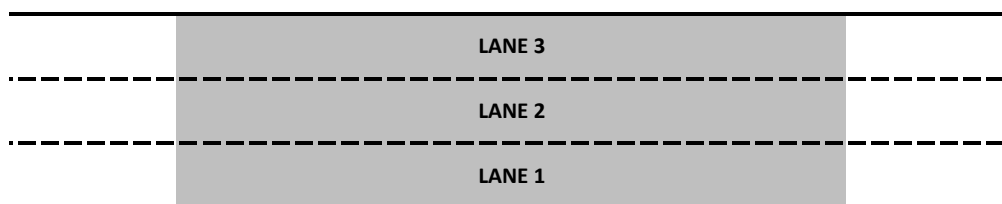
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,258	14	28.4	1.4	76.5	2.9	F
2	2,088	25	28.0	0.9	75.4	2.5	F
1	1,887	25	28.7	1.4	71.3	3.1	F
Area	6,233	64	28.4	1.2	74.4	2.8	F
Total	6,233	64	28.4	1.2	74.4	2.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,910	6,233	64	90.2%	2,237
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 25 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

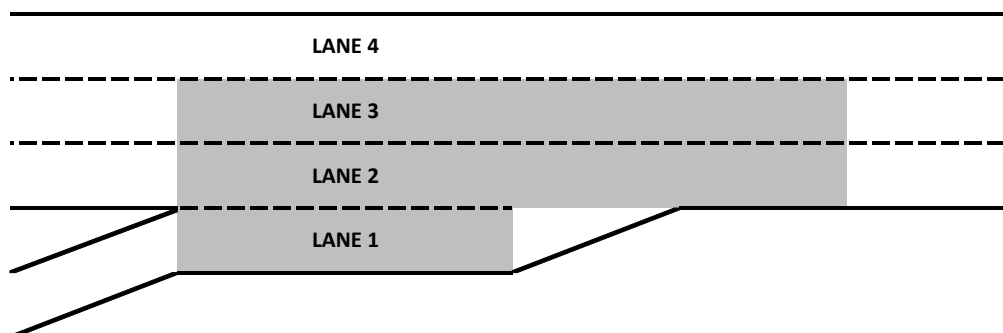
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,214	27	31.8	0.4	71.6	1.5	F
3	1,999	19	29.8	0.7	77.7	2.0	F
2	1,993	25	29.3	1.1	73.2	2.5	F
1	557	27	19.2	0.8	5.3	0.8	A
Area	4,549	71	29.1	0.9	60.6	1.9	F
Total	6,763	98	29.9	0.7	63.6	1.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	557	27	1		
Total	557	27	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,910	6,206	71	89.8%	1,502
On-ramp	580	557	27	96.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 26 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

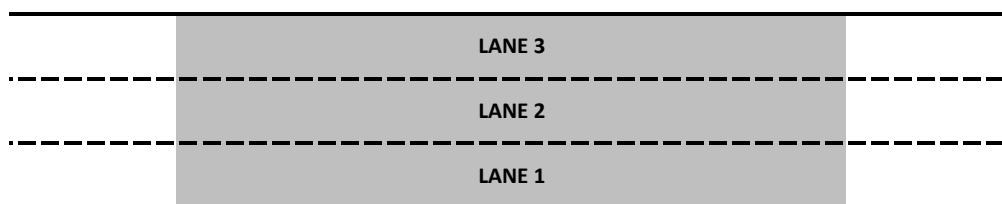
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,482	11	52.7	11.5	47.6	10.8	F
2	2,241	23	50.4	10.9	47.6	10.5	F
1	2,013	23	48.4	11.0	46.5	11.8	F
Area	6,736	57	50.6	11.1	47.2	11.0	F
Total	6,736	57	50.6	11.1	47.2	11.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,490	6,736	57	89.9%	7,458
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 27 - SB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

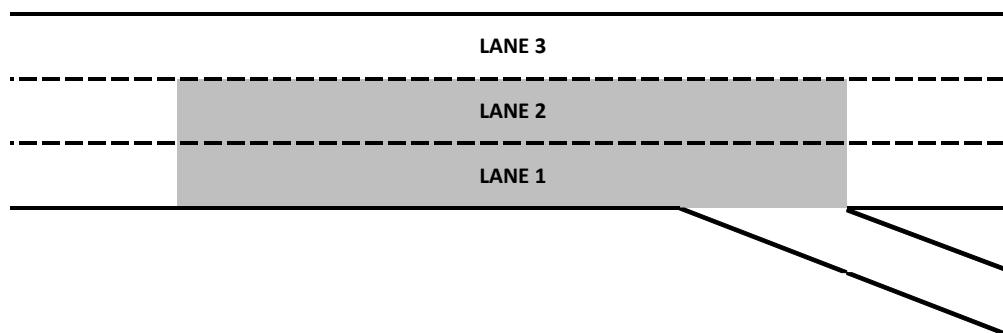
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,389	22	46.5	12.1	53.1	11.2	F
2	2,130	15	45.9	11.3	51.0	10.7	F
1	2,216	13	43.1	10.4	53.2	11.9	F
Area	4,345	28	44.5	10.9	52.0	11.3	F
Total	6,734	50	45.2	11.3	52.4	11.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	604	62
Total			Total	604	62

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,490	6,734	50	89.9%	1,502
On-ramp					
Off-ramp	650	604	62	92.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 28 - SB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

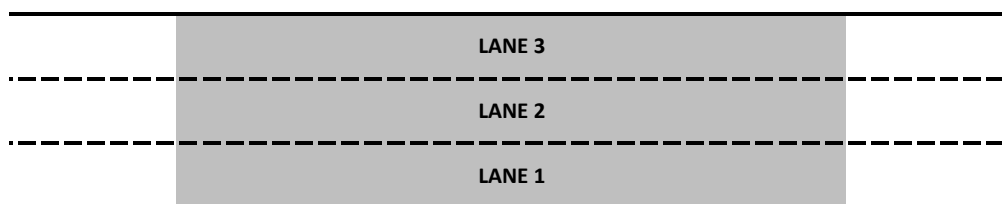
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,279	31	36.7	10.4	63.7	13.7	F
2	2,022	11	35.7	10.5	62.4	13.9	F
1	1,793	23	35.2	9.5	59.2	14.9	F
Area	6,094	64	35.9	10.2	61.8	14.1	F
Total	6,094	64	35.9	10.2	61.8	14.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,840	6,094	64	89.1%	2,526
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 29 - SB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

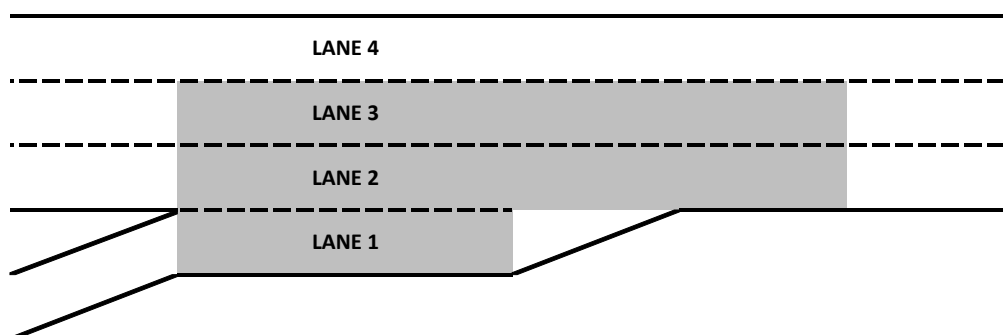
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,232	22	34.8	3.4	66.7	5.0	F
3	1,996	12	33.1	3.8	69.9	5.7	F
2	1,851	11	32.8	2.7	66.8	6.8	F
1	493	44	25.8	1.4	2.5	0.4	A
Area	4,340	67	32.7	3.3	52.9	4.8	F
Total	6,572	89	33.4	3.4	56.6	4.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	493	44	1		
Total	493	44	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,840	6,079	45	88.9%	1,502
On-ramp	500	493	44	98.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 30 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

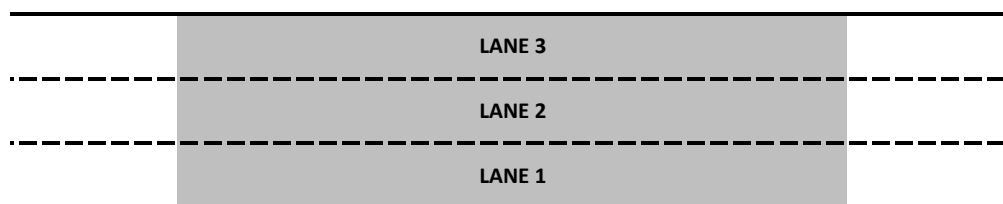
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,406	28	59.2	4.7	41.7	3.8	E
2	2,158	16	57.4	5.0	41.9	4.2	E
1	1,974	25	56.1	4.3	41.1	4.3	E
Area	6,538	69	57.6	4.7	41.5	4.1	E
Total	6,538	69	57.6	4.7	41.5	4.1	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,340	6,538	69	89.1%	8,913
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 31 - SB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

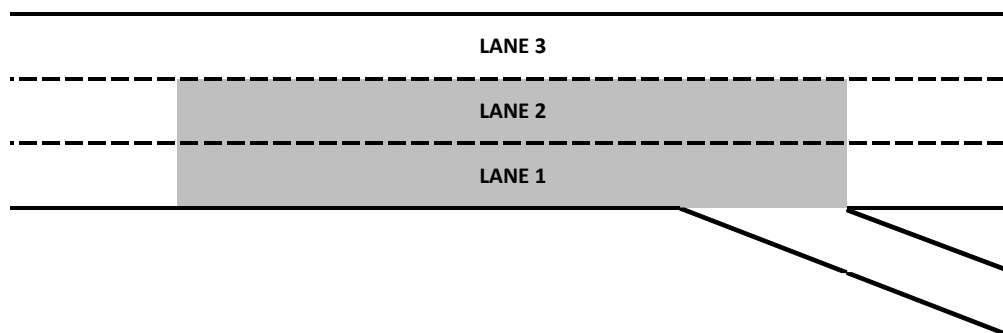
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,321	25	55.5	5.4	42.5	4.0	E
2	2,164	30	50.4	6.3	43.1	5.1	E
1	2,045	13	49.6	4.2	45.1	4.5	F
Area	4,209	43	50.0	5.2	44.1	4.7	E
Total	6,530	68	51.9	5.2	43.4	4.4	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	549	28
Total			Total	549	28

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,340	6,530	68	89.0%	1,499
On-ramp					
Off-ramp	580	549	28	94.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 32 - SB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

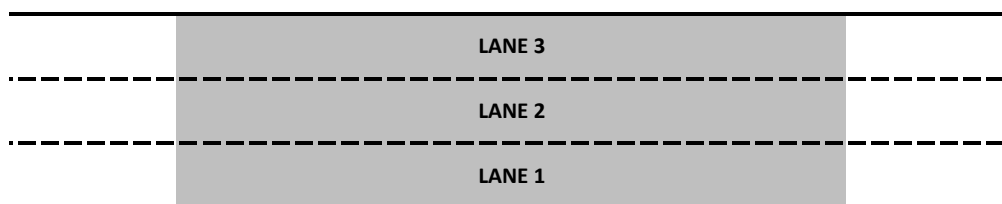
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,215	16	61.6	3.1	36.8	2.1	E
2	1,961	34	61.0	3.0	35.8	2.0	E
1	1,779	38	60.4	3.1	32.9	2.2	D
Area	5,954	88	61.0	3.0	35.2	2.0	E
Total	5,954	88	61.0	3.0	35.2	2.0	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,760	5,954	88	88.1%	3,127
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 33 - SB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

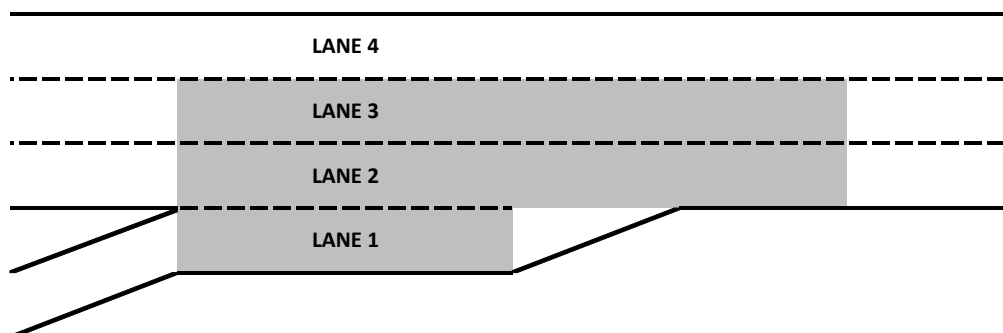
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,172	23	52.0	10.1	44.8	9.5	E
3	1,966	21	50.2	9.7	44.7	9.1	E
2	1,804	56	49.2	9.7	41.9	9.9	E
1	262	15	26.5	1.9	0.7	0.1	A
Area	4,031	91	49.8	9.8	34.1	7.5	D
Total	6,203	114	50.6	9.9	37.1	8.0	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	262	15	1		
Total	262	15	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,760	5,941	99	87.9%	1,501
On-ramp	270	262	15	96.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 34 - SB I-15: Indian Truck Trail On-ramp to Lake St Off-ramp

Segment Type - Basic

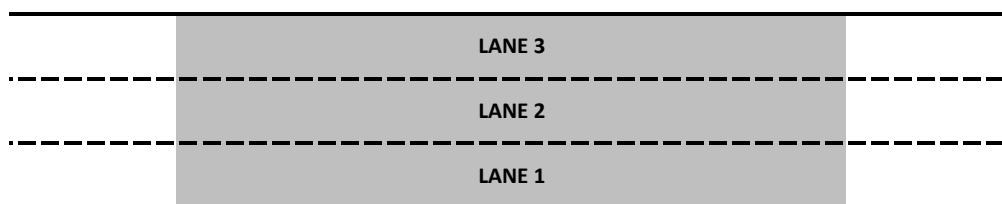
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,228	11	60.1	2.4	38.7	2.2	E
2	2,066	23	58.5	2.6	38.6	2.3	E
1	1,903	19	57.2	3.1	37.5	2.4	E
Area	6,196	54	58.6	2.7	38.3	2.3	E
Total	6,196	54	58.6	2.7	38.3	2.3	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,030	6,196	54	88.1%	13,523
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 35 - SB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,129	19	60.0	5.4	37.8	5.9	E
2	2,028	15	57.1	6.3	38.4	5.5	E
1	1,976	23	52.8	6.8	43.1	7.0	E
Area	4,004	37	54.9	6.5	40.7	6.2	E
Total	6,132	57	56.6	6.1	39.7	6.0	E

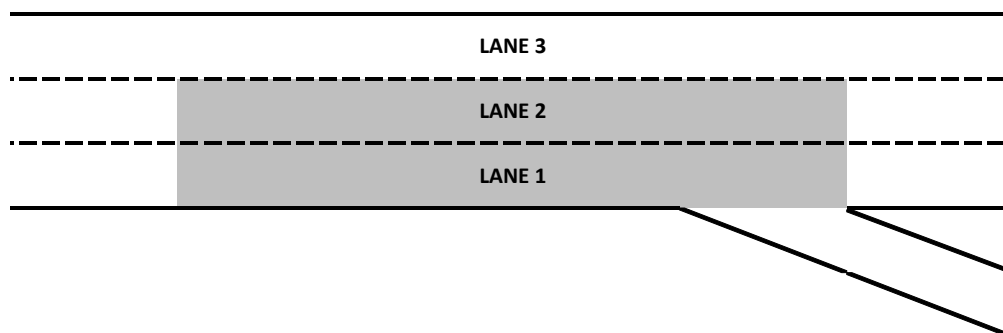
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	562	33
Total	562	33

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,030	6,132	57	87.2%	1,501
On-ramp					
Off-ramp	650	562	33	86.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 36 - SB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

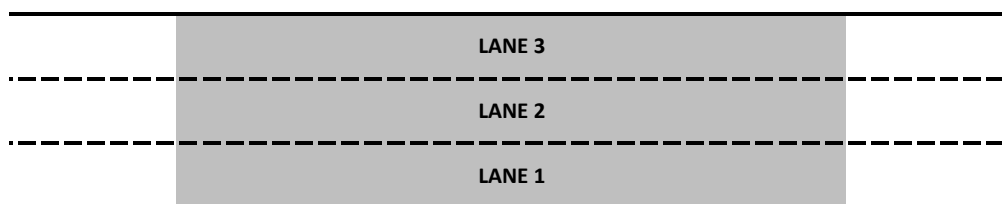
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,064	21	64.2	0.7	33.8	1.1	D
2	1,858	22	63.2	0.7	31.5	1.1	D
1	1,662	18	63.0	0.8	29.0	1.5	D
Area	5,583	60	63.5	0.6	31.4	1.1	D
Total	5,583	60	63.5	0.6	31.4	1.1	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,380	5,583	60	87.5%	3,287
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 37 - SB I-15: Lake St On-ramp

Segment Type - Merge

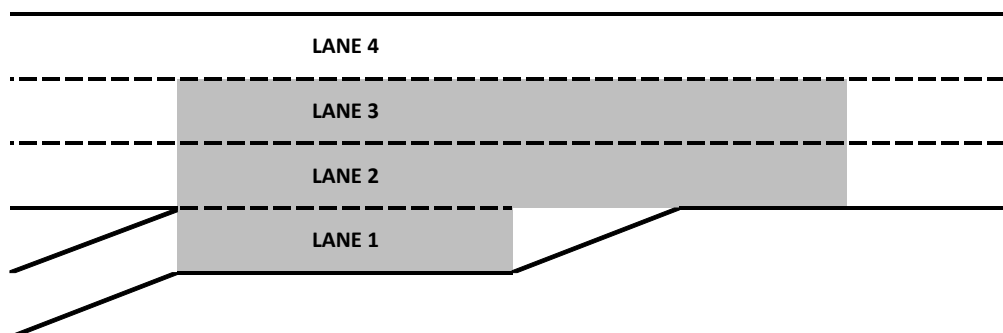
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,062	23	62.7	4.8	33.7	2.8	D
3	1,847	24	61.7	4.3	33.8	3.0	D
2	1,690	16	61.1	4.7	31.7	2.6	D
1	258	24	40.5	0.4	0.4	0.1	A
Area	3,794	64	61.7	4.2	24.9	2.1	C
Total	5,856	87	62.1	4.4	27.3	2.2	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	258	24	1		
Total	258	24	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,380	5,598	63	87.7%	1,500
On-ramp	260	258	24	99.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 38 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

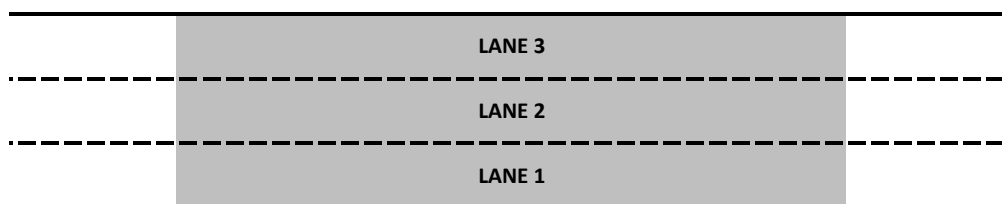
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,104	32	62.7	1.2	33.9	1.1	D
2	1,940	28	61.3	1.1	34.2	1.4	D
1	1,758	19	60.5	1.1	32.0	1.5	D
Area	5,802	78	61.6	1.0	33.4	1.3	D
Total	5,802	78	61.6	1.0	33.4	1.3	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,640	5,802	78	87.4%	8,752
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 39 - SB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

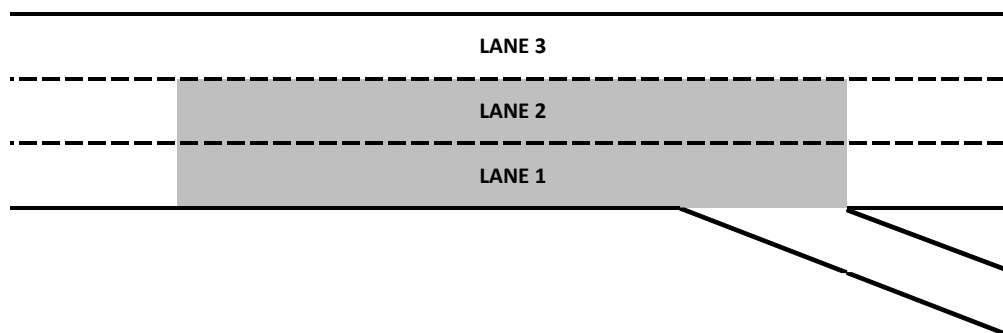
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,063	23	61.2	4.6	34.6	4.4	D
2	1,974	31	58.8	5.8	34.4	5.2	D
1	1,794	40	56.3	4.9	34.4	4.8	D
Area	3,767	71	57.6	5.3	34.4	5.0	D
Total	5,830	94	58.8	5.1	34.4	4.7	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	327	29
Total			Total	327	29

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,640	5,830	94	87.8%	1,500
On-ramp					
Off-ramp	370	327	29	88.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 40 - SB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

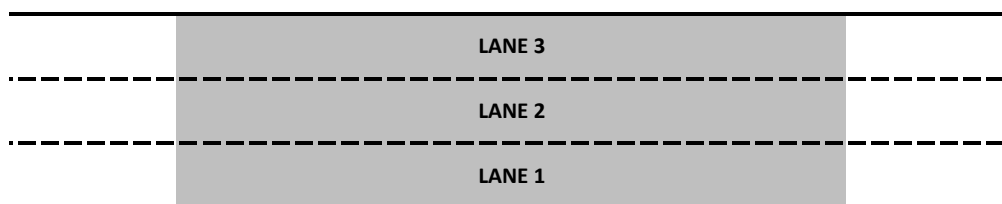
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,024	25	63.3	1.5	32.7	1.1	D
2	1,874	25	62.8	1.5	32.5	1.4	D
1	1,648	24	61.6	1.6	29.0	1.7	D
Area	5,545	74	62.6	1.5	31.4	1.3	D
Total	5,545	74	62.6	1.5	31.4	1.3	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,270	5,545	74	88.4%	3,058
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 41 - SB I-15: Nichols Rd On-ramp

Segment Type - Merge

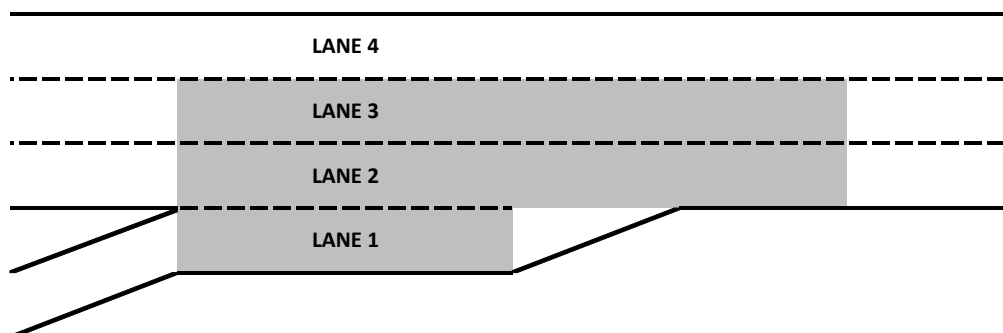
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,020	21	62.1	0.7	33.6	2.0	D
3	1,855	20	59.0	1.8	35.0	2.1	E
2	1,664	15	57.0	2.5	33.6	2.1	D
1	295	32	28.9	1.8	0.8	0.1	A
Area	3,813	66	58.2	1.9	27.4	1.7	D
Total	5,833	88	59.6	1.4	29.1	1.7	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	295	32	1		
Total	295	32	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,270	5,538	56	88.3%	1,500
On-ramp	300	295	32	98.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 42 - SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

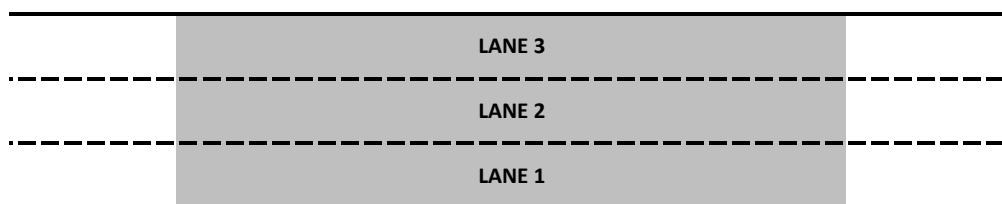
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,911	26	61.7	2.8	33.5	2.4	D
2	2,067	21	60.3	2.5	35.7	1.9	E
1	1,842	25	59.3	3.0	34.2	2.2	D
Area	5,820	72	60.5	2.8	34.5	2.1	D
Total	5,820	72	60.5	2.8	34.5	2.1	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,570	5,820	72	88.6%	2,332
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 43 - SB I-15: Central Ave (SR-74) Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,975	25	64.3	1.3	31.1	1.5	D
3	2,018	16	62.4	1.5	29.5	1.2	D
2	1,839	25	61.5	1.5	31.0	1.0	D
1			67.2	0.8	5.8	0.4	A
Area	3,857	41	62.5	1.3	22.1	0.8	C
Total	5,831	66	63.1	1.2	24.3	0.9	C

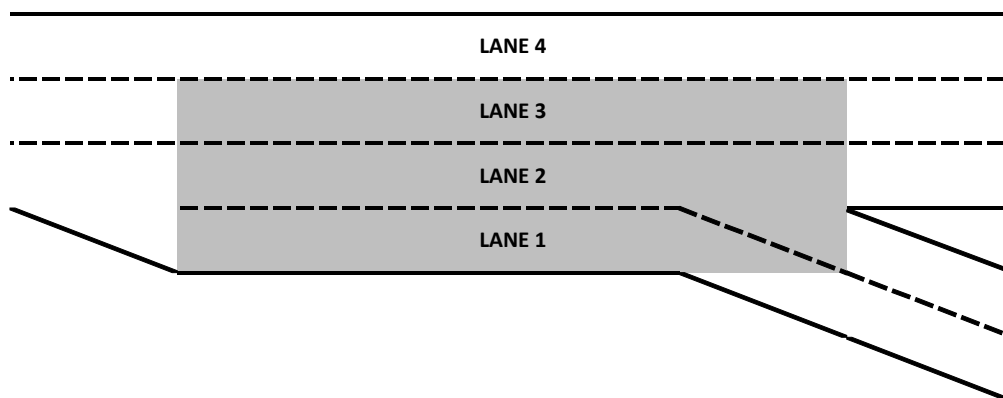
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	303	26
1	602	49
Total	905	76

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,570	5,831	66	88.8%	1,498
On-ramp					
Off-ramp	1,010	905	76	89.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 44 - SB I-15: Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

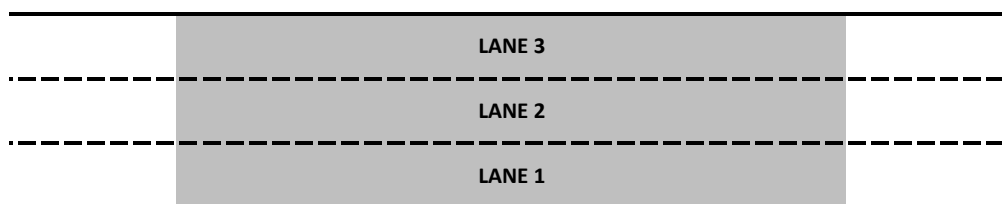
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,860	25	64.4	0.8	30.2	1.2	D
2	1,687	32	64.2	0.9	28.8	1.0	D
1	1,406	28	63.3	1.2	25.5	1.3	C
Area	4,953	86	64.0	0.9	28.2	1.1	D
Total	4,953	86	64.0	0.9	28.2	1.1	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,560	4,953	86	89.1%	3,037
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 45 - SB I-15: Central Ave (SR-74) On-ramp

Segment Type - Merge

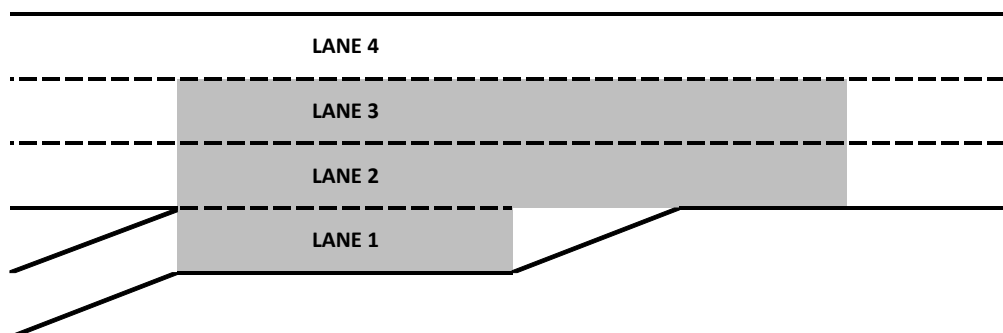
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,821	26	46.7	9.4	45.1	12.2	F
3	1,688	11	44.7	10.0	52.2	12.1	F
2	1,442	48	42.6	9.5	47.7	13.4	F
1	1,235	22	45.6	3.4	5.2	1.1	A
Area	4,364	81	44.1	9.2	34.8	8.6	D
Total	6,184	107	44.9	9.3	37.4	9.5	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,235	22	1		
Total	1,235	22	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,560	4,950	86	89.0%	1,502
On-ramp	1,160	1,235	22	106.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 46 - SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp

Segment Type - Basic

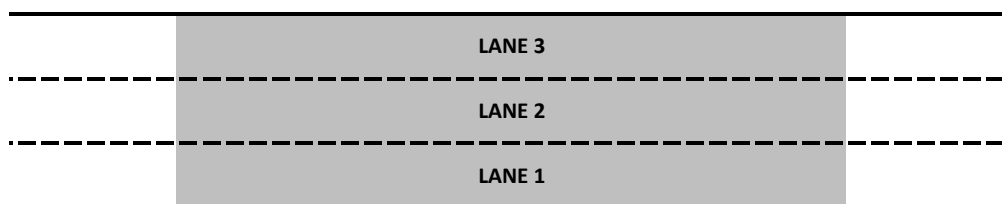
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,163	25	56.7	2.7	38.5	2.8	E
2	2,091	32	54.1	2.4	40.0	2.5	E
1	1,922	33	52.6	2.8	39.2	3.6	E
Area	6,175	90	54.5	2.6	39.2	2.8	E
Total	6,175	90	54.5	2.6	39.2	2.8	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,720	6,175	90	91.9%	890
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 47 - SB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,167	25	62.2	1.6	35.3	2.0	E
2	2,083	22	59.6	1.6	35.2	1.9	E
1	1,928	40	56.8	1.7	36.5	2.4	E
Area	4,011	62	58.2	1.7	35.9	2.1	E
Total	6,178	87	59.6	1.6	35.6	2.0	E

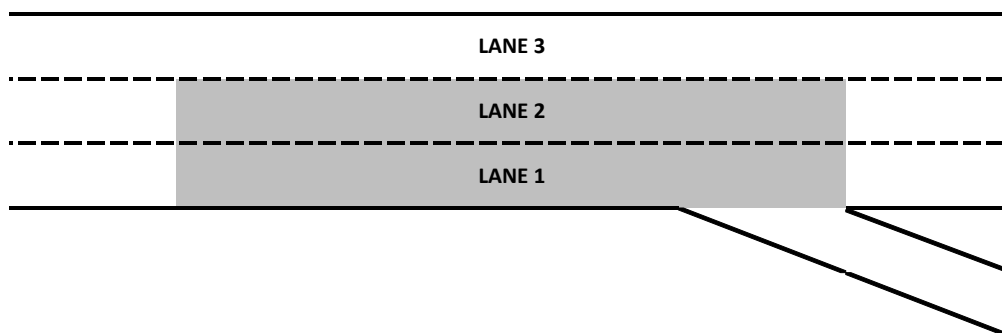
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	418	40
Total	418	40

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,720	6,178	87	91.9%	1,498
On-ramp					
Off-ramp	420	418	40	99.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 48 - SB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

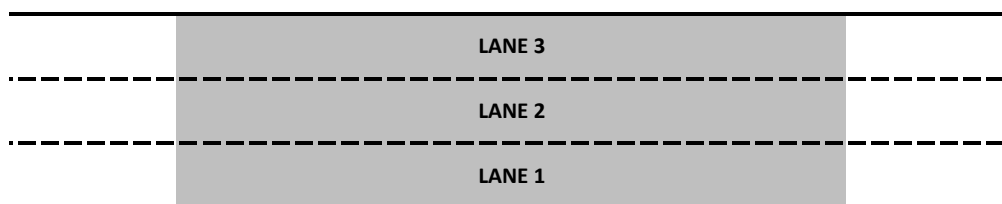
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,150	11	64.0	1.0	33.1	1.6	D
2	1,903	41	63.5	0.6	32.1	1.3	D
1	1,706	47	62.5	0.8	29.0	1.9	D
Area	5,758	100	63.4	0.7	31.4	1.5	D
Total	5,758	100	63.4	0.7	31.4	1.5	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,300	5,758	100	91.4%	3,514
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 49 - SB I-15: Main St On-ramp SB

Segment Type - Merge

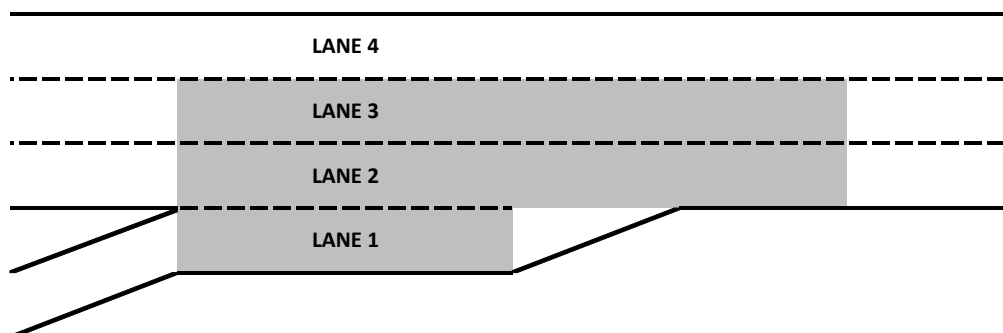
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,098	33	60.1	9.7	36.5	6.5	E
3	1,932	26	58.8	9.3	36.0	7.2	E
2	1,719	31	58.0	9.5	34.0	7.3	D
1	390	16	27.8	1.6	0.6	0.2	A
Area	4,041	73	58.6	9.7	28.4	5.9	D
Total	6,139	106	59.1	9.7	30.7	6.1	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	390	16	1		
Total	390	16	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,300	5,749	91	91.3%	1,500
On-ramp	400	390	16	97.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 50 - SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp

Segment Type - Basic

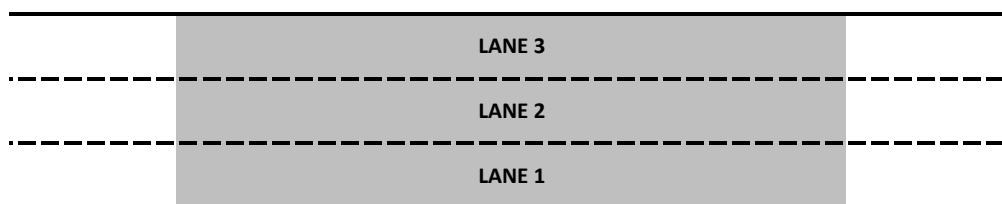
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,192	24	62.4	0.6	34.6	1.6	D
2	2,052	29	61.4	1.0	34.4	1.5	D
1	1,888	29	60.4	1.1	32.2	1.3	D
Area	6,132	82	61.4	0.8	33.7	1.3	D
Total	6,132	82	61.4	0.8	33.7	1.3	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,700	6,132	82	91.5%	3,089
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Opening Year No Build
PM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
152 NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	3,576	66	97.7%							68.7	0.3	11.1	0.3	B
151 NB I-15: Hidden Valley Pkwy Off-ramp	Diverge	4,105	79	97.0%				534	47	93.7%	68.0	0.6	16.5	0.8	B
150 NB I-15: EB SR-91 On-ramp	Merge	2,986	54	95.7%	1,119	103	100.8%				68.8	0.2	14.8	0.6	B
149 NB I-15: WB SR-91 On-ramp	Merge	2,162	54	95.7%	826	57	96.0%				66.9	0.3	13.9	0.9	B
148 NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp	Basic	2,160	50	95.6%							67.9	0.3	11.0	0.4	B
147 NB I-15: EB & WB SR-91 Off-ramp	Diverge	5,419	52	94.1%				3,260	58	93.1%	50.0	2.8	29.2	2.0	D
146 NB I-15: Magnolia Ave On-ramp	Merge	4,654	67	93.1%	763	33	100.4%				24.7	0.8	71.5	1.2	F
145 NB I-15: Magnolia Ave Loop On-ramp	Basic	3,987	61	92.3%	666	36	97.9%				16.9	1.0	77.5	3.0	F
144 NB I-15: Magnolia Ave Off-ramp to Loop On-ramp	Basic	3,984	55	92.2%							15.4	0.8	90.1	1.8	F
143 NB I-15: Magnolia Ave Off-ramp	Diverge	4,802	75	92.5%				816	53	93.7%	16.4	1.1	64.5	5.6	F
141 NB I-15: Ontario Ave to Magnolia Ave (EL Access)	Weave	4,888	92	93.3%	1,246	95	94.4%	1,343	98	98.0%	23.0	0.7	47.1	0.8	F
140 NB I-15: Ontario Ave On-ramp	Merge	3,782	88	92.0%	1,107	33	98.0%				14.6	0.4	47.6	0.7	F
138 NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)	Basic	3,776	81	91.9%							13.5	0.9	73.1	1.8	F
137 NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)	Basic	3,774	83	91.8%							11.2	0.8	110.0	3.3	F
136 NB I-15: Ontario Ave Off-ramp	Diverge	4,416	83	94.6%				644	57	115.0%	12.7	0.9	102.6	3.9	F
135 NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp	Merge	3,755	91	93.4%	654	35	100.7%				10.3	1.1	94.7	8.7	F
134 NB I-15: EL Access to Foothill Pkwy/El Cerrito Rd On-ramp	Basic	3,751	83	93.3%							10.6	0.7	112.8	1.4	F
133 NB I-15: EL Access at Foothill Pkwy/El Cerrito Rd	Basic	4,048	85	94.6%				295	41	113.5%	13.2	0.8	77.6	1.3	F
132 NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp	Weave	3,934	84	95.5%	471	51	102.5%	369	34	122.9%	9.2	0.8	114.7	2.7	F
131 NB I-15: Cajalco Rd Loop On-ramp	Merge	3,397	83	94.1%	536	45	105.1%				9.9	0.9	100.9	5.3	F
154 NB I-15: EL Access at Cajalco Rd	Basic	4,363	104	93.4%				966	104	91.2%	18.9	1.1	66.2	0.8	F
130 NB I-15: Cajalco Rd Off-ramp to EL Access	Basic	4,357	122	93.3%							14.1	1.5	102.7	4.2	F
129 NB I-15: Cajalco Rd Off-ramp	Diverge	4,553	126	93.5%				210	33	104.9%	15.1	2.0	101.9	7.0	F
128 NB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	3,666	126	91.7%	876	70	100.6%				13.1	1.7	93.7	6.6	F
127 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	3,663	116	91.6%							12.7	1.5	108.5	5.4	F
126 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	3,895	121	91.4%				228	30	87.7%	14.6	3.1	102.2	13.6	F
125 NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	3,897	117	91.5%							20.2	14.3	90.8	34.1	F
124 NB I-15: Temescal Canyon Rd On-ramp	Merge	3,419	109	90.2%	462	47	98.2%				24.2	24.2	75.5	33.9	F
123 NB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	3,415	115	90.1%							26.3	23.8	77.4	40.1	F
122 NB I-15: Temescal Canyon Rd Off-ramp	Diverge	3,610	107	89.8%				210	28	91.1%	33.3	22.3	59.7	42.2	F
121 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	3,634	136	90.4%							48.6	24.7	36.4	25.2	E
120 NB I-15: Indian Truck Trail On-ramp	Merge	3,292	161	91.2%	419	56	102.1%				67.8	0.5	14.4	0.6	B
119 NB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	3,302	156	91.5%							68.2	0.1	15.5	0.4	B
118 NB I-15: Indian Truck Trail Off-ramp	Diverge	3,552	161	92.0%				238	48	95.4%	68.0	0.3	16.9	0.3	B
117 NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp	Basic	3,769	87	97.6%							68.2	0.2	16.4	0.4	B
116 NB I-15: Lake St On-ramp	Merge	3,442	58	99.5%	381	42	95.4%				68.2	0.2	13.3	0.4	B
115 NB I-15: Lake St Off-ramp to On-ramp	Basic	3,444	56	99.5%							68.4	0.2	14.7	0.5	B
114 NB I-15: Lake St Off-ramp	Diverge	3,735	59	99.6%				294	33	101.3%	68.1	0.3	16.2	0.6	B
113 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	3,734	56	99.6%							68.4	0.3	15.6	0.9	B
112 NB I-15: Nichols Rd On-ramp	Merge	3,428	61	99.4%	299	67	99.8%				68.7	0.2	12.3	0.6	B
111 NB I-15: Nichols Rd Off-ramp to On-ramp	Basic	3,419	52	99.1%							68.5	0.3	14.5	0.9	B
110 NB I-15: Nichols Rd Off-ramp	Diverge	3,774	60	99.3%				351	26	100.3%	67.5	0.4	17.2	0.9	B
109 NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp to Nichols Rd Off-ramp	Merge	3,107	60	99.0%	663	36	100.5%				67.5	0.6	13.5	0.8	B
108 NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp	Basic	3,111	62	99.1%							68.8	0.3	13.4	0.7	B
153 NB I-15: Dexter Ave Off-ramp	Diverge	3,304	65	98.6%				198	21	94.5%	68.5	0.2	14.5	0.7	B
107 NB I-15: WB Central Ave (SR-74) Off-ramp	Basic	3,914	80	98.6%				605	50	97.5%	68.7	0.3	12.7	0.4	B
106 NB I-15: EB Central Ave (SR-74) Off-ramp	Diverge	4,403	72	98.3%				488	57	95.7%	68.6	0.1	15.3	0.5	B
105 NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp	Basic	4,403	60	98.3%							67.7	0.3	19.5	0.7	C
104 NB I-15: Main St On-ramp	Merge	4,136	58	98.3%	266	34	98.6%				68.0	0.2	16.5	0.6	B
103 NB I-15: Main St Off-ramp to On-ramp	Basic	4,135	74	98.2%							68.2	0.3	18.5	0.5	C
102 NB I-15: Main St Off-ramp	Diverge	4,721	60	98.3%				583	42	98.8%	66.6	2.1	21.8	0.9	C
101 NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp	Basic	4,721	68	98.4%							68.5	0.1	20.4	0.6	C

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 152 - NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,205	19	68.7	0.2	3.9	0.3	A
4	881	16	68.3	0.4	15.1	0.7	B
3	799	17	68.7	0.7	13.7	0.4	B
2	692	15	69.2	0.3	12.3	0.8	B
1			68.6	0.3	10.7	0.8	A
Area	3,576	66	68.7	0.3	11.1	0.3	B
Total	3,576	66	68.7	0.3	11.1	0.3	B

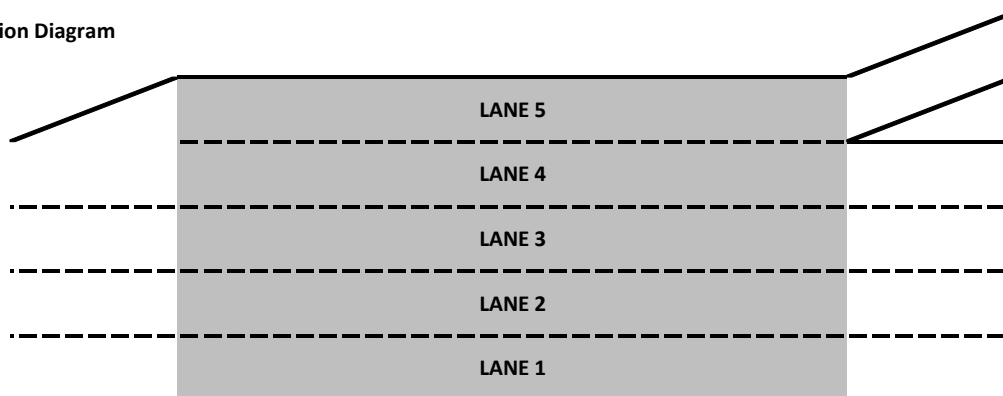
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	456	34
Total	456	34

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,660	3,576	66	97.7%	1,446
On-ramp					
Off-ramp		456	34		

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 151 - NB I-15: Hidden Valley Pkwy Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	923	15	68.4	0.4	15.4	0.7	B
3	1,006	19	68.4	0.7	16.3	0.3	B
2	890	20	67.6	1.3	13.2	0.8	B
1	1,285	25	67.4	0.4	19.8	0.9	C
Area	2,176	45	67.5	0.6	16.5	0.8	B
Total	4,105	79	68.0	0.6	16.2	0.3	B

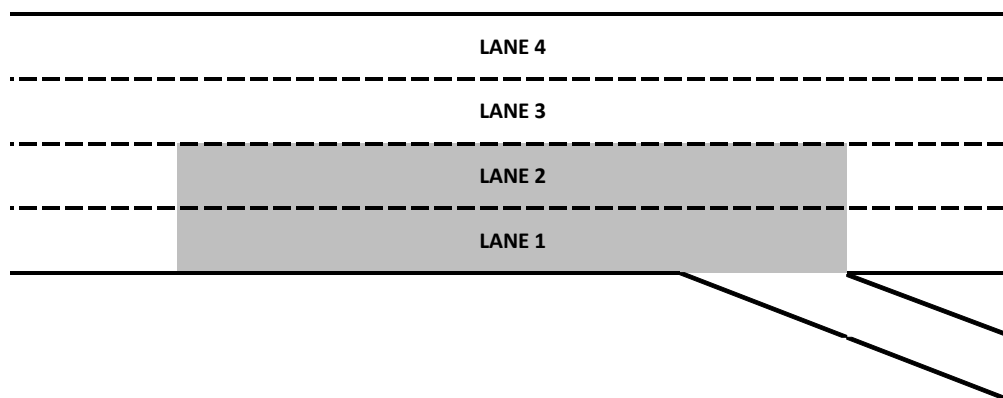
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	534	47
Total	534	47

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,230	4,105	79	97.0%	1,517
On-ramp					
Off-ramp	570	534	47	93.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 150 - NB I-15: EB SR-91 On-ramp

Segment Type - Merge

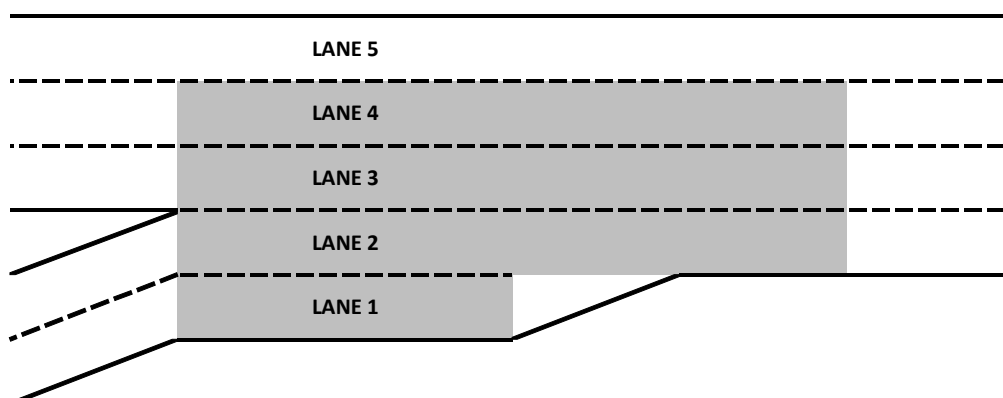
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	919	16	68.8	0.2	13.5	0.2	B
4	1,001	16	69.1	0.2	15.9	1.2	B
3	1,066	20	68.6	0.3	17.4	0.8	B
2	554	51	68.7	0.3	16.5	0.7	B
1	565	55	31.5	0.3	1.2	0.1	A
Area	3,187	141	68.8	0.2	14.8	0.6	B
Total	4,105	157	68.8	0.2	14.5	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2	554	51	2		
1	565	55	1		
Total	1,119	103	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,120	2,986	54	95.7%	1,509
On-ramp	1,110	1,119	103	100.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 149 - NB I-15: WB SR-91 On-ramp

Segment Type - Merge

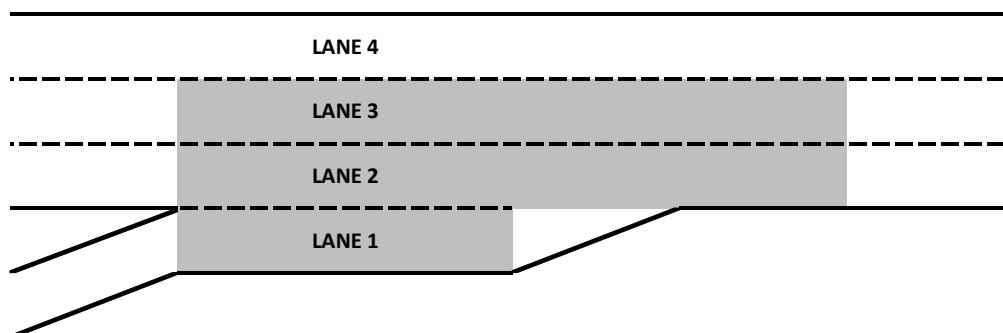
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	808	16	68.5	0.2	12.7	0.2	B
3	844	17	68.3	0.2	16.8	1.2	B
2	510	21	65.6	0.5	17.2	1.2	B
1	826	57	31.3	0.3	1.8	0.2	A
Area	2,180	95	66.3	0.4	13.9	0.9	B
Total	2,988	111	66.9	0.3	13.6	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	826	57	1		
Total	826	57	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,260	2,162	54	95.7%	1,564
On-ramp	860	826	57	96.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 148 - NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp

Segment Type - Basic

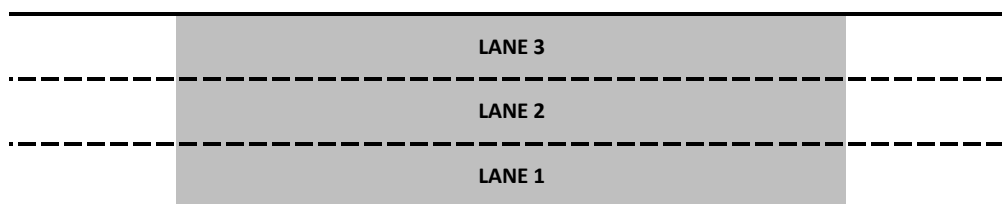
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	964	18	68.2	0.2	14.0	0.5	B
2	757	14	68.0	0.4	13.1	0.6	B
1	440	18	67.1	0.8	6.0	0.6	A
Area	2,160	50	67.9	0.3	11.0	0.4	B
Total	2,160	50	67.9	0.3	11.0	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,260	2,160	50	95.6%	3,525
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 147 - NB I-15: EB & WB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,095	18	58.7	1.7	18.9	1.1	C
3	946	12	55.1	1.7	17.3	1.1	B
2	1,667	10	45.0	3.3	33.8	2.4	D
1	1,712	11	45.8	4.0	37.1	3.1	E
Area	4,325	33	47.7	3.1	29.2	2.0	D
Total	5,419	52	50.0	2.8	26.4	1.6	D

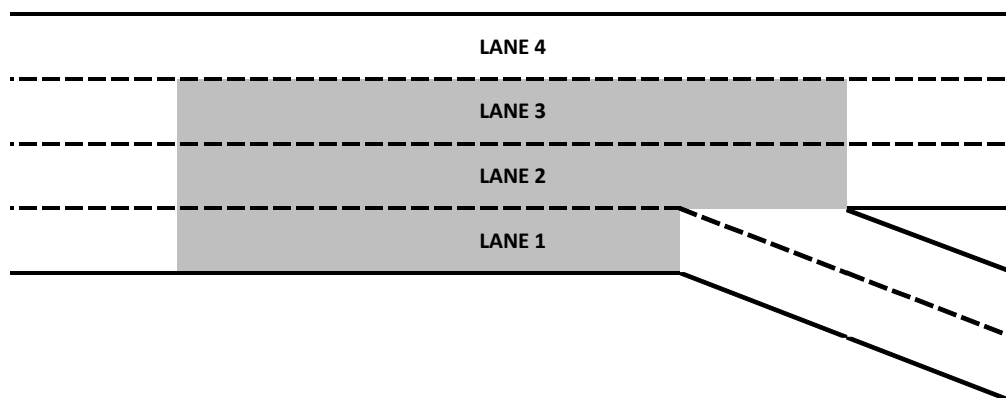
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,355	55
1	1,904	17
Total	3,260	58

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,760	5,419	52	94.1%	1,324
On-ramp					
Off-ramp	3,500	3,260	58	93.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 146 - NB I-15: Magnolia Ave On-ramp

Segment Type - Merge

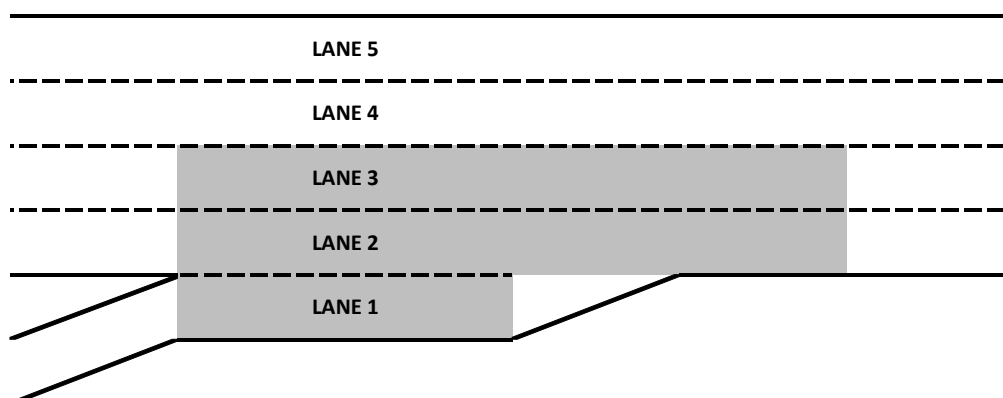
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	968	26	45.4	2.0	25.2	1.3	C
4	1,562	11	24.2	0.9	63.1	2.1	F
3	723	13	17.6	0.6	96.3	1.7	F
2	1,401	17	18.5	0.3	99.0	1.4	F
1	763	33	17.3	0.5	4.1	0.2	A
Area	2,887	63	17.8	0.4	71.5	1.2	F
Total	5,417	100	24.7	0.8	51.1	1.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	763	33	1		
Total	763	33	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,000	4,654	67	93.1%	1,292
On-ramp	760	763	33	100.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 145 - NB I-15: Magnolia Ave Loop On-ramp

Segment Type - Basic

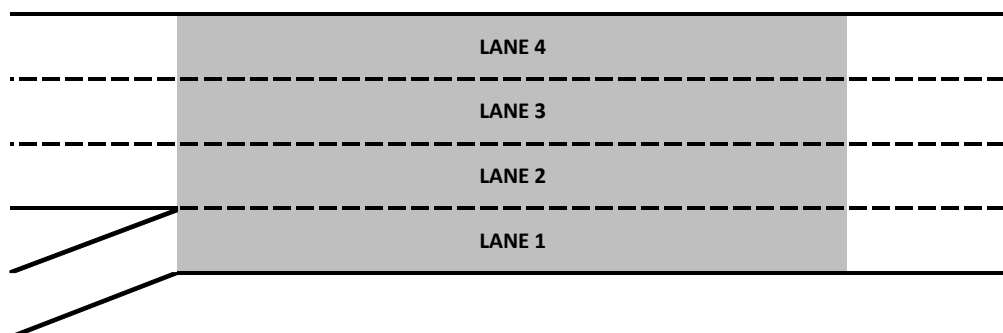
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,185	22	32.0	2.3	34.7	2.1	D
3	1,415	21	14.3	1.0	110.0	2.8	F
2	1,388	18	9.4	0.6	117.2	4.2	F
1	666	36	14.0	0.8	105.0	2.4	F
Area	4,653	96	16.9	1.0	77.5	3.0	F
Total	4,653	96	16.9	1.0	77.5	3.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	666	36	1		
Total	666	36	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,320	3,987	61	92.3%	852
On-ramp	680	666	36	97.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 144 - NB I-15: Magnolia Ave Off-ramp to Loop On-ramp

Segment Type - Basic

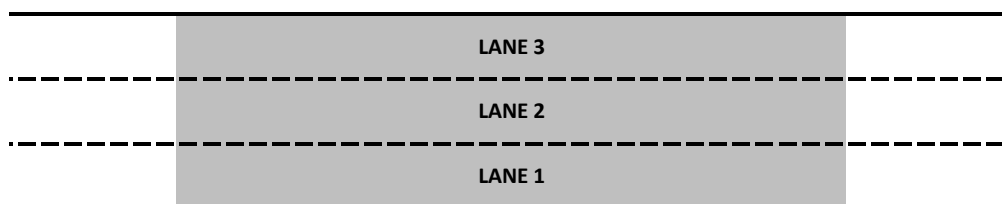
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,404	15	20.9	0.9	72.6	3.0	F
2	1,308	23	12.4	0.9	111.7	2.2	F
1	1,272	18	12.1	0.9	104.3	3.1	F
Area	3,984	55	15.4	0.8	90.1	1.8	F
Total	3,984	55	15.4	0.8	90.1	1.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,320	3,984	55	92.2%	1,562
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 143 - NB I-15: Magnolia Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,752	16	18.0	0.7	97.8	1.7	F
3	1,352	31	12.1	0.8	108.0	3.8	F
2	1,173	16	10.7	0.5	106.9	3.4	F
1	525	11	34.3	8.3	15.9	3.7	B
Area	3,050	59	15.4	1.6	64.5	5.6	F
Total	4,802	75	16.4	1.1	72.3	4.1	F

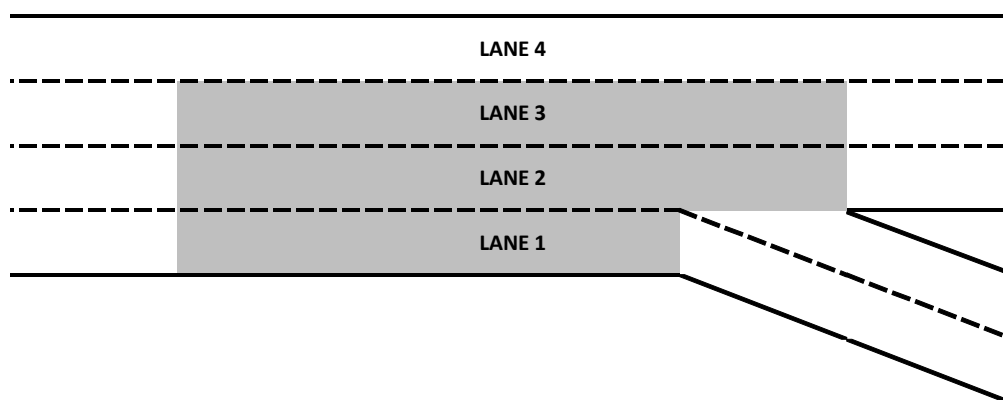
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	224	46
1	591	58
Total	816	53

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,190	4,802	75	92.5%	1,496
On-ramp					
Off-ramp	870	816	53	93.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 141 - NB I-15: Ontario Ave to Magnolia Ave (EL Access)

Segment Type - Weave

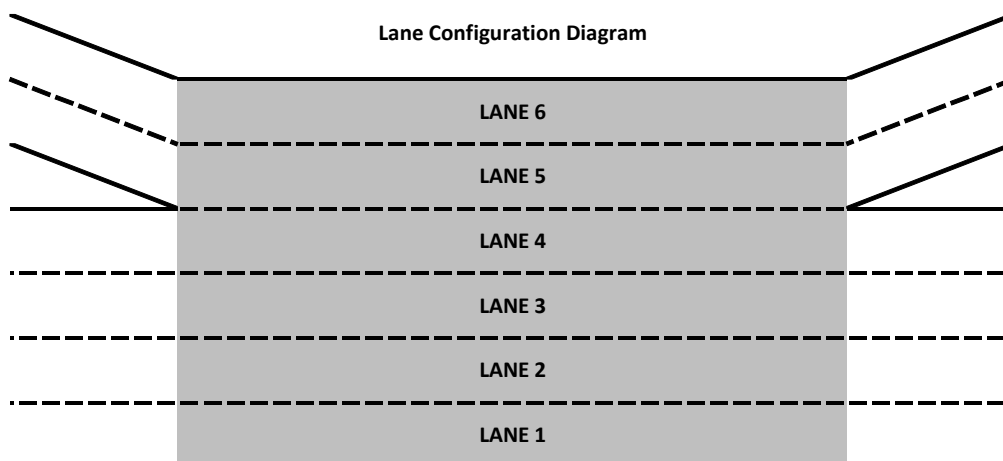
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	1,569	15	48.1	0.8	8.0	0.5	A
5	1,266	29	41.3	1.3	7.5	0.6	A
4	1,278	25	15.6	0.9	104.8	2.4	F
3	775	12	12.9	1.2	107.2	4.2	F
2	549	46	11.1	0.7	108.2	3.1	F
1	697	60	30.2	3.5	15.5	2.0	B
Area	6,134	187	23.0	0.7	47.1	0.8	F
Total	6,134	187	23.0	0.7	47.1	0.8	F

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	549	46
1	697	60
Total	1,246	95

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	803	66
1	540	47
Total	1,343	98

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,240	4,888	92	93.3%	2,965
On-ramp	1,320	1,246	95	94.4%	
Off-ramp	1,370	1,343	98	98.0%	



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 140 - NB I-15: Ontario Ave On-ramp

Segment Type - Merge

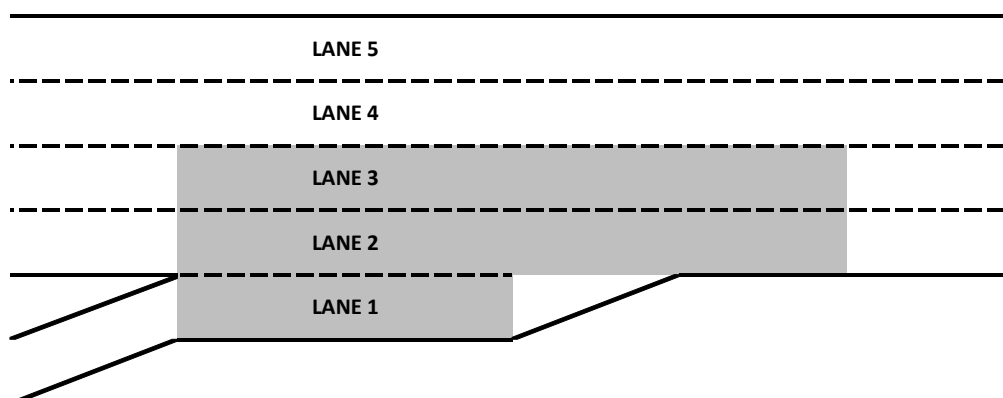
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,422	15	13.2	0.4	115.7	2.0	F
4	1,025	35	10.7	1.0	120.4	4.8	F
3	1,041	24	10.3	0.6	117.4	3.9	F
2	294	15	25.2	0.4	34.6	1.8	D
1	1,107	33	23.9	0.4	2.3	0.1	A
Area	2,443	71	17.9	0.4	47.6	0.7	F
Total	4,890	121	14.6	0.4	74.1	0.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,107	33	1		
Total	1,107	33	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,110	3,782	88	92.0%	1,496
On-ramp	1,130	1,107	33	98.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 138 - NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)

Segment Type - Basic

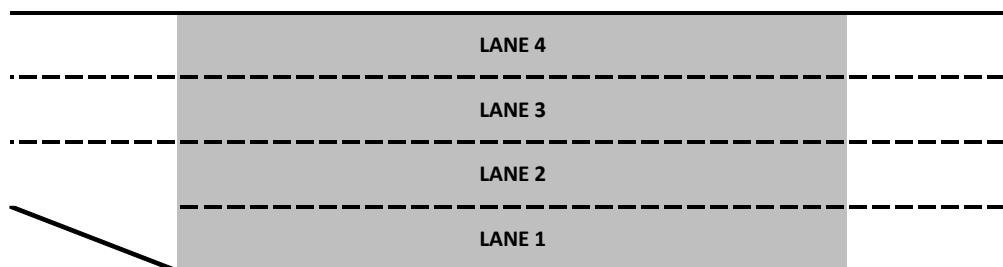
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,395	13	12.5	0.6	113.2	2.5	F
3	1,052	28	10.5	1.1	113.8	4.1	F
2	1,038	26	10.3	0.9	110.9	5.5	F
1	290	14	58.3	1.4	3.3	0.6	A
Area	3,776	81	13.5	0.9	73.1	1.8	F
Total	3,776	81	13.5	0.9	73.1	1.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,110	3,776	81	91.9%	3,004
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 137 - NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)

Segment Type - Basic

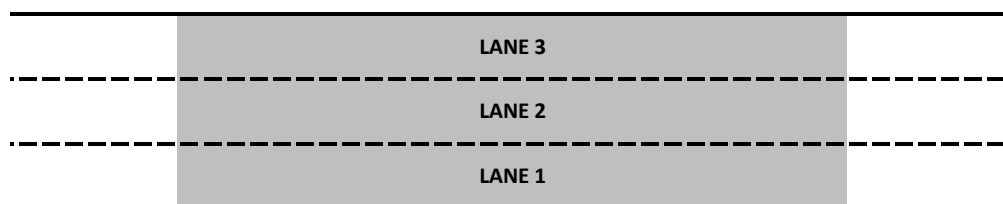
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,387	22	11.5	0.9	116.1	3.8	F
2	1,137	29	10.0	1.1	113.7	5.6	F
1	1,250	32	11.8	1.4	103.4	6.4	F
Area	3,774	83	11.2	0.8	110.0	3.3	F
Total	3,774	83	11.2	0.8	110.0	3.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,110	3,774	83	91.8%	197
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 136 - NB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

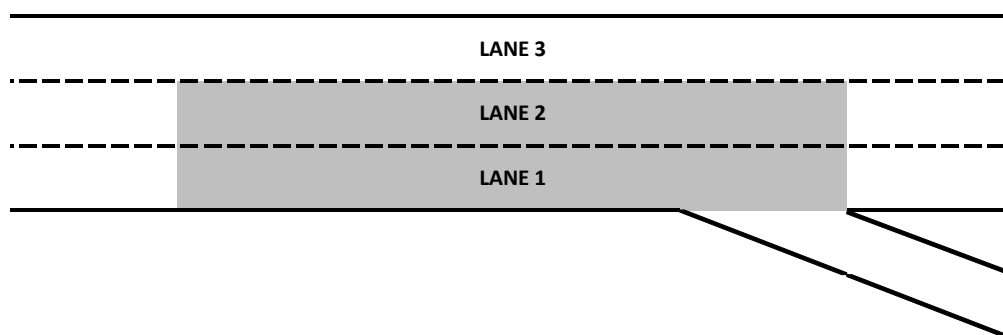
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,489	29	11.4	0.5	119.3	2.9	F
2	1,425	23	11.4	1.1	112.5	3.7	F
1	1,501	30	15.0	1.5	96.8	4.3	F
Area	2,926	53	13.3	1.3	102.6	3.9	F
Total	4,416	83	12.7	0.9	107.5	3.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	644	57
Total			Total	644	57

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,670	4,416	83	94.6%	763
On-ramp					
Off-ramp	560	644	57	115.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 135 - NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Merge

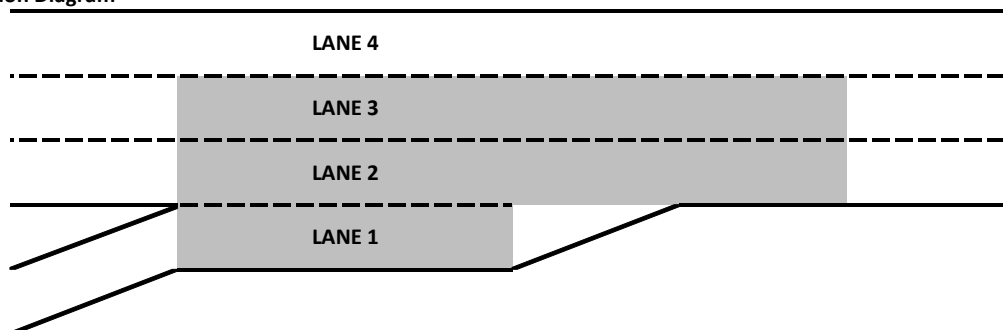
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,573	30	11.1	0.6	125.3	2.3	F
3	1,263	26	9.8	1.0	126.4	4.3	F
2	920	35	8.6	1.5	125.3	4.9	F
1	654	35	13.2	3.6	37.7	15.7	E
Area	2,837	96	9.9	1.5	94.7	8.7	F
Total	4,410	126	10.3	1.1	101.6	6.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	654	35	1		
Total	654	35	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,020	3,755	91	93.4%	873
On-ramp	650	654	35	100.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 134 - NB I-15: EL Access to Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Basic

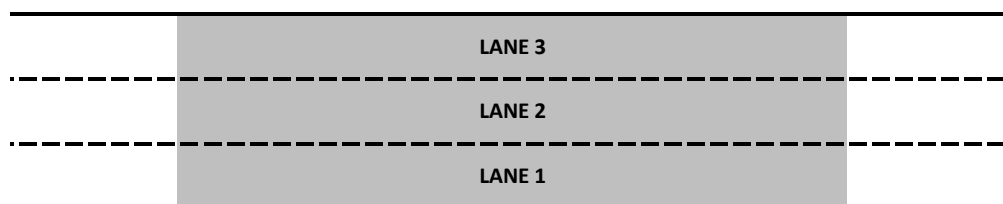
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,553	28	12.2	0.5	113.9	1.7	F
2	1,275	21	9.7	1.6	117.3	5.8	F
1	923	33	9.2	1.3	115.2	5.4	F
Area	3,751	83	10.6	0.7	112.8	1.4	F
Total	3,751	83	10.6	0.7	112.8	1.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,020	3,751	83	93.3%	989
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 133 - NB I-15: EL Access at Foothill Pkwy/El Cerrito Rd

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,741	28	46.8	0.4	2.9	0.8	A
3	1,334	27	14.1	0.8	109.8	3.0	F
2	973	30	11.0	1.2	115.3	4.7	F
1			10.4	1.4	113.1	6.1	F
Area	4,048	85	13.2	0.8	77.6	1.3	F
Total	4,048	85	13.2	0.8	77.6	1.3	F

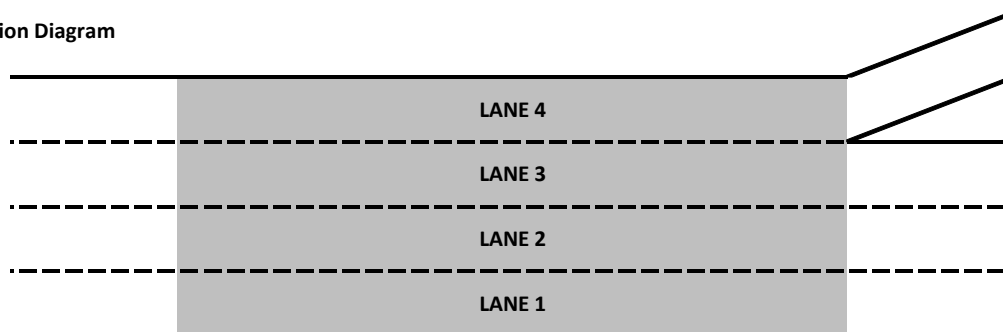
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	295	41
Total	295	41

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,280	4,048	85	94.6%	1,128
On-ramp					
Off-ramp	260	295	41	113.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 132 - NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,533	24	11.7	0.4	117.1	2.4	F
3	1,235	23	8.7	1.3	122.6	6.3	F
2	1,166	37	6.9	0.8	122.7	2.7	F
1	471	51	6.1	0.9	104.7	4.5	F
Area	4,405	135	9.2	0.8	114.7	2.7	F
Total	4,405	135	9.2	0.8	114.7	2.7	F

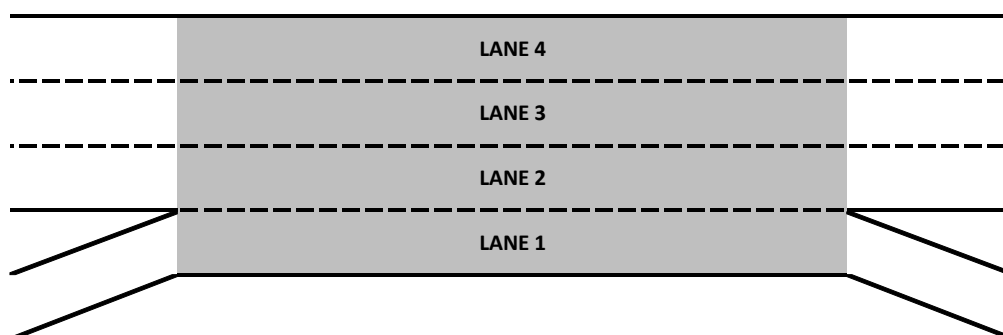
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	471	51
Total	471	51

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	369	34
Total	369	34

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,120	3,934	84	95.5%	2,708
On-ramp	460	471	51	102.5%	
Off-ramp	300	369	34	122.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 131 - NB I-15: Cajalco Rd Loop On-ramp

Segment Type - Merge

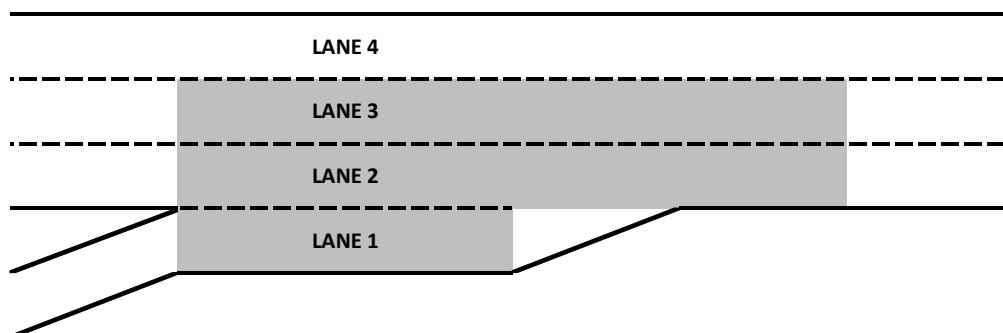
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,489	17	11.1	0.5	124.0	3.1	F
3	1,111	35	9.1	1.0	127.3	4.9	F
2	797	31	8.7	1.5	120.2	4.7	F
1	536	45	6.8	2.1	13.4	4.0	B
Area	2,444	111	9.1	1.3	100.9	5.3	F
Total	3,933	129	9.9	0.9	106.2	3.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	536	45	1		
Total	536	45	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,610	3,397	83	94.1%	1,307
On-ramp	510	536	45	105.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 154 - NB I-15: EL Access at Cajalco Rd

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,919	28	45.3	1.0	21.5	2.0	C
3	1,470	32	14.6	1.3	106.0	4.7	F
2	974	44	11.7	1.1	108.2	3.9	F
1			10.9	1.3	113.9	5.4	F
Area	4,363	104	18.9	1.1	66.2	0.8	F
Total	4,363	104	18.9	1.1	66.2	0.8	F

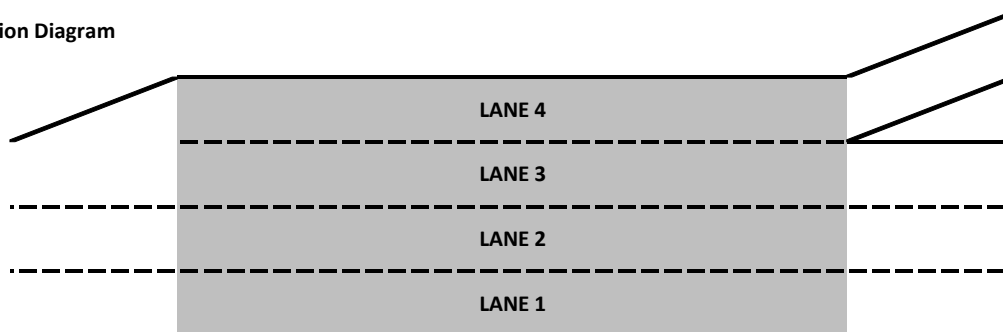
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	966	104
Total	966	104

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,670	4,363	104	93.4%	1,406
On-ramp					
Off-ramp	1,060	966	104	91.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 130 - NB I-15: Cajalco Rd Off-ramp to EL Access

Segment Type - Basic

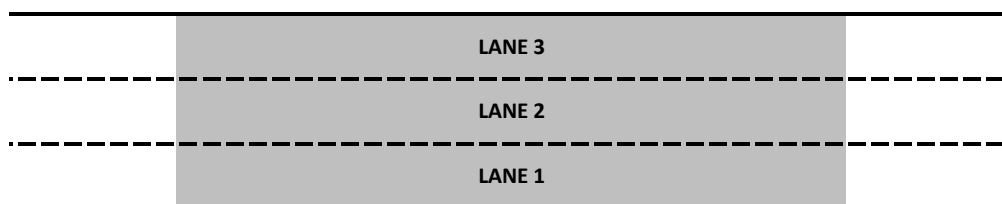
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,836	29	17.0	1.3	101.1	4.6	F
2	1,428	34	12.9	1.9	108.6	6.2	F
1	1,092	59	11.5	1.9	108.6	7.7	F
Area	4,357	122	14.1	1.5	102.7	4.2	F
Total	4,357	122	14.1	1.5	102.7	4.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,670	4,357	122	93.3%	1,159
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 129 - NB I-15: Cajalco Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,761	39	16.2	1.6	102.1	5.5	F
2	1,488	31	13.9	2.4	104.8	7.1	F
1	1,304	56	15.0	2.3	99.5	7.3	F
Area	2,792	88	14.4	2.3	101.9	7.0	F
Total	4,553	126	15.1	2.0	101.4	5.9	F

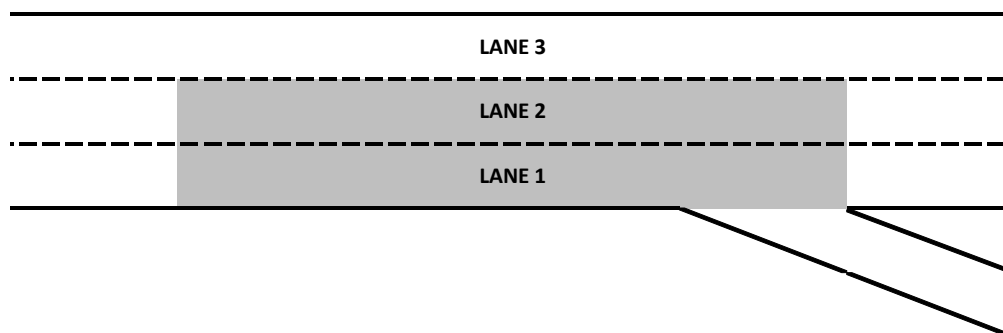
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	210	33
Total	210	33

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,870	4,553	126	93.5%	1,109
On-ramp					
Off-ramp	200	210	33	104.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 128 - NB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

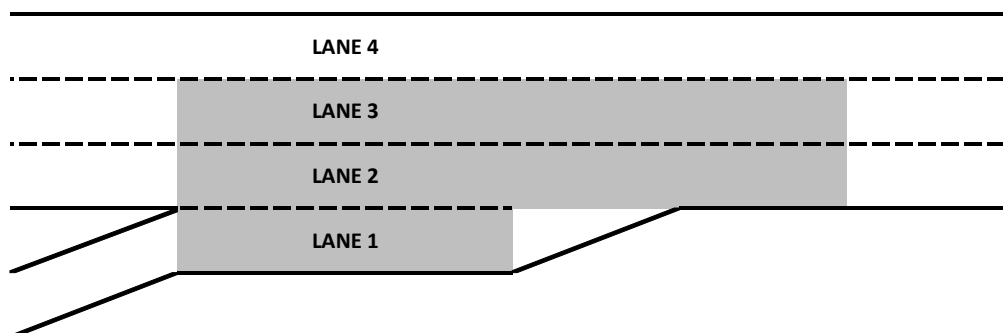
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,632	36	14.5	1.6	111.9	6.8	F
3	1,190	43	12.9	1.9	115.2	6.0	F
2	844	47	11.0	1.6	116.6	6.8	F
1	876	70	9.6	2.3	18.7	5.0	C
Area	2,910	160	12.3	1.9	93.7	6.6	F
Total	4,542	196	13.1	1.7	98.0	5.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	876	70	1		
Total	876	70	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,000	3,666	126	91.7%	1,497
On-ramp	870	876	70	100.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 127 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

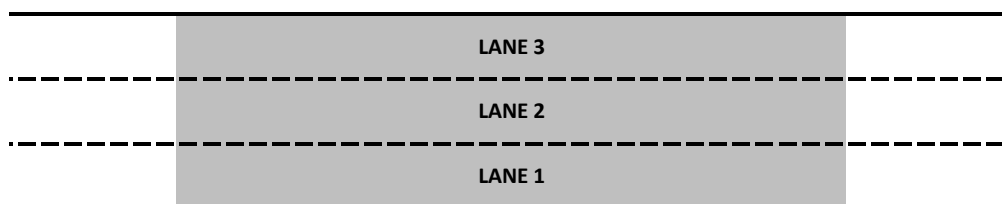
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,581	20	14.6	1.7	107.4	5.7	F
2	1,176	44	12.1	1.6	110.9	6.0	F
1	906	52	10.7	1.8	114.0	8.8	F
Area	3,663	116	12.7	1.5	108.5	5.4	F
Total	3,663	116	12.7	1.5	108.5	5.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,000	3,663	116	91.6%	2,543
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 126 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

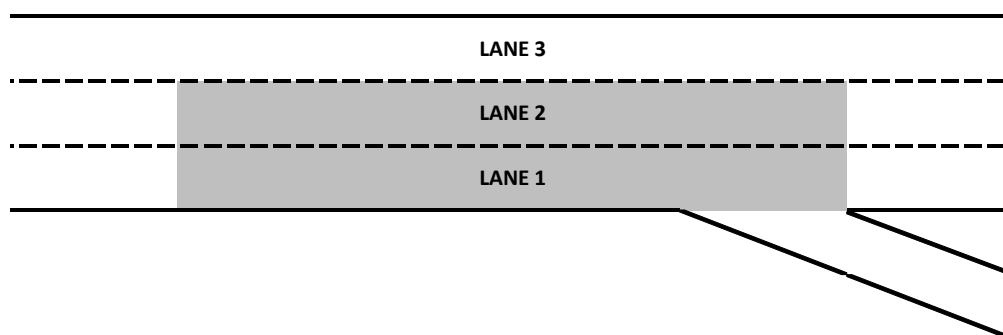
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,564	29	15.5	3.1	102.8	14.0	F
2	1,259	45	14.3	3.4	101.7	13.7	F
1	1,071	47	13.9	3.1	102.8	13.6	F
Area	2,330	92	14.1	3.3	102.2	13.6	F
Total	3,895	121	14.6	3.1	102.0	13.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	228	30
Total			Total	228	30

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,260	3,895	121	91.4%	1,499
On-ramp					
Off-ramp	260	228	30	87.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 125 - NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

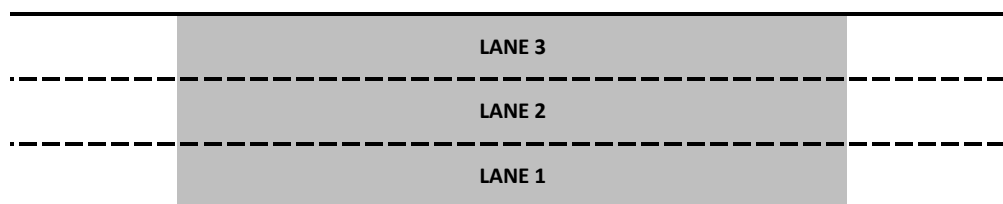
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,524	30	20.9	14.5	92.5	34.3	F
2	1,282	41	20.4	14.6	89.1	33.3	F
1	1,092	47	19.4	13.9	91.5	35.1	F
Area	3,897	117	20.2	14.3	90.8	34.1	F
Total	3,897	117	20.2	14.3	90.8	34.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,260	3,897	117	91.5%	6,786
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 124 - NB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

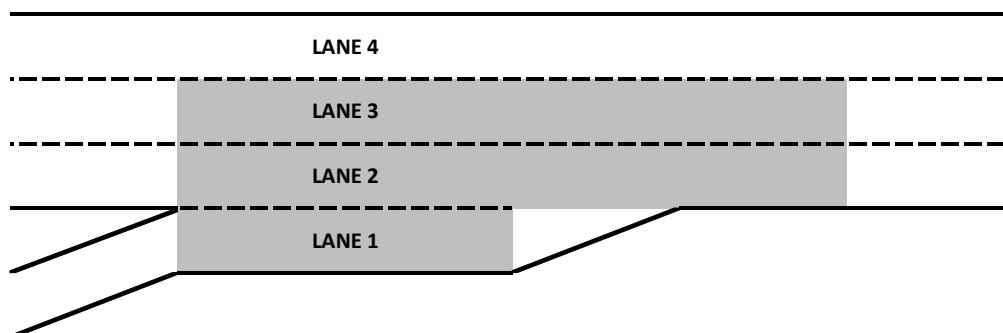
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,440	28	24.3	24.7	95.0	43.5	F
3	1,080	43	24.4	24.0	91.7	40.0	F
2	899	38	23.6	24.3	93.1	43.4	F
1	462	47	13.2	6.0	3.8	2.2	A
Area	2,441	128	24.2	23.9	75.5	33.9	F
Total	3,880	156	24.2	24.2	81.1	36.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	462	47	1		
Total	462	47	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,790	3,419	109	90.2%	1,498
On-ramp	470	462	47	98.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 123 - NB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

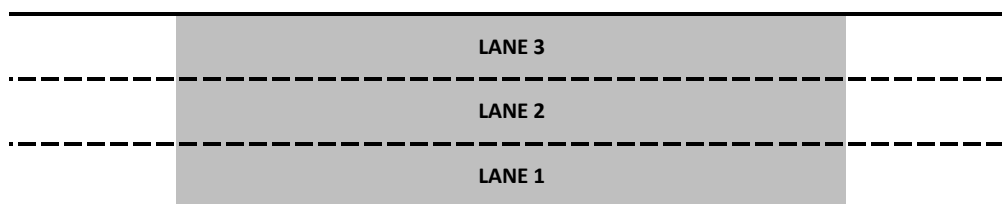
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,414	29	26.9	23.6	78.4	40.4	F
2	1,086	43	25.9	24.0	76.9	39.5	F
1	915	44	25.9	23.9	77.5	41.0	F
Area	3,415	115	26.3	23.8	77.4	40.1	F
Total	3,415	115	26.3	23.8	77.4	40.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,790	3,415	115	90.1%	2,725
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 122 - NB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,439	36	33.2	22.7	62.5	45.0	F
2	1,150	34	33.3	22.4	59.9	42.5	F
1	1,021	37	33.4	21.9	59.5	42.1	F
Area	2,171	71	33.3	22.1	59.7	42.2	F
Total	3,610	107	33.3	22.3	60.6	43.1	F

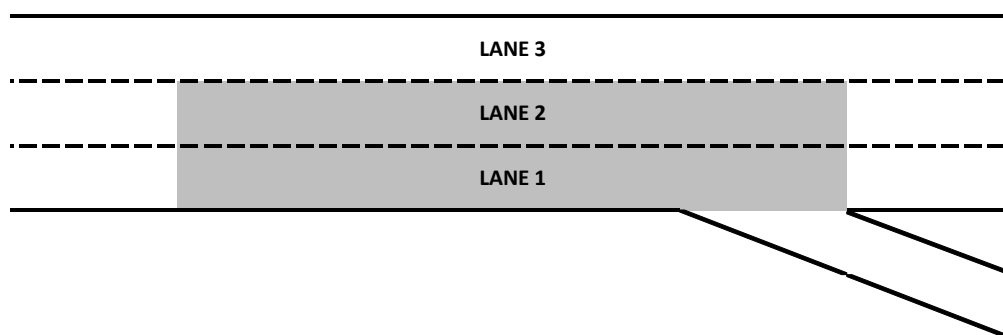
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	210	28
Total	210	28

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,020	3,610	107	89.8%	1,498
On-ramp					
Off-ramp	230	210	28	91.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 121 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

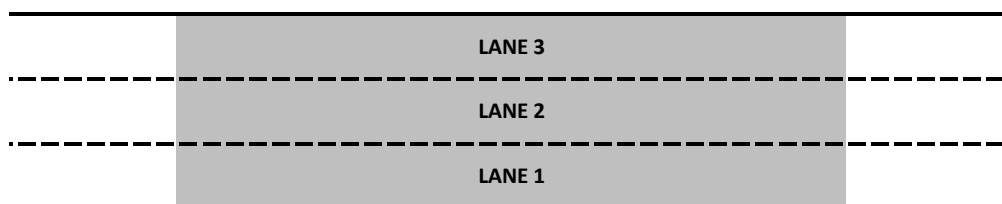
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,421	35	48.5	25.1	36.9	25.7	E
2	1,183	46	49.0	24.2	36.7	24.5	E
1	1,030	55	48.1	24.9	35.8	25.6	E
Area	3,634	136	48.6	24.7	36.4	25.2	E
Total	3,634	136	48.6	24.7	36.4	25.2	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,020	3,634	136	90.4%	9,350
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 120 - NB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

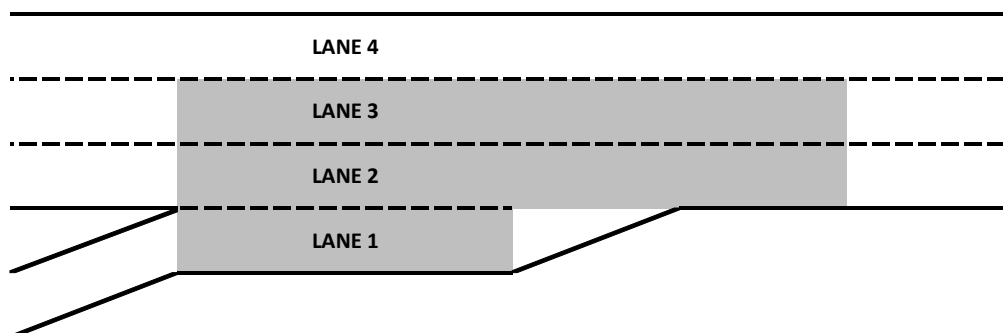
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,295	40	68.1	1.2	15.9	0.9	B
3	1,086	62	67.8	0.4	19.2	0.6	C
2	911	59	67.5	0.5	16.5	1.0	B
1	419	56	31.2	0.7	0.6	0.1	A
Area	2,415	178	67.6	0.3	14.4	0.6	B
Total	3,711	218	67.8	0.5	14.8	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	419	56	1		
Total	419	56	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,610	3,292	161	91.2%	1,499
On-ramp	410	419	56	102.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 119 - NB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

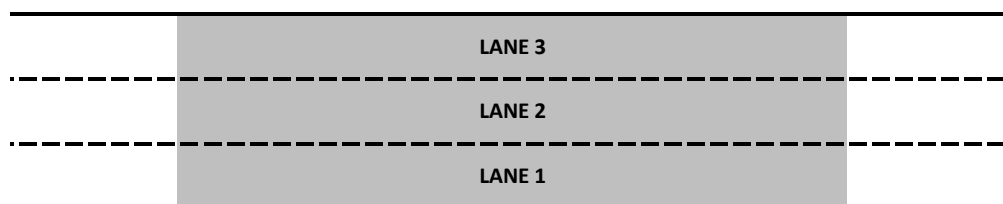
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,271	32	68.2	0.2	15.6	0.8	B
2	1,108	65	68.2	0.2	17.0	0.5	B
1	923	59	68.2	0.2	13.9	0.7	B
Area	3,302	156	68.2	0.1	15.5	0.4	B
Total	3,302	156	68.2	0.1	15.5	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,610	3,302	156	91.5%	2,922
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 118 - NB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,292	35	68.3	0.2	15.6	0.8	B
2	1,212	63	68.1	0.3	17.0	0.6	B
1	1,048	64	67.5	0.4	16.9	0.7	B
Area	2,260	127	67.8	0.3	16.9	0.3	B
Total	3,552	161	68.0	0.3	16.5	0.3	B

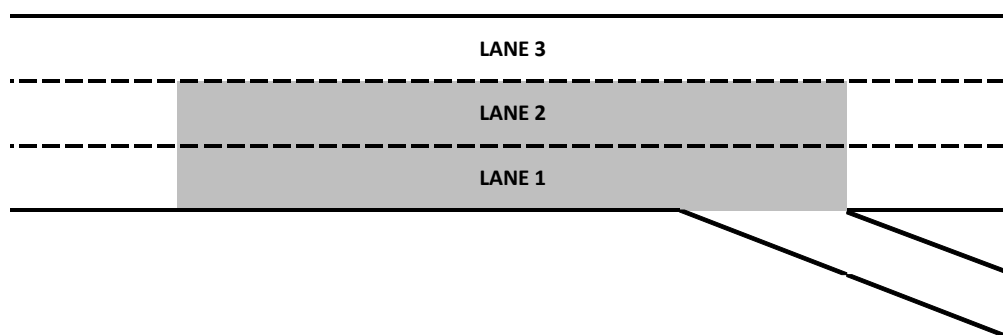
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	238	48
Total	238	48

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,860	3,552	161	92.0%	1,499
On-ramp					
Off-ramp	250	238	48	95.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 117 - NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

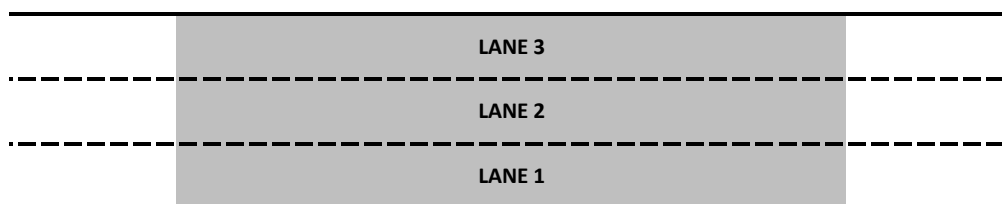
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,275	28	68.4	0.1	16.2	0.7	B
2	1,317	33	68.1	0.2	17.8	0.3	B
1	1,178	26	68.0	0.2	15.3	0.6	B
Area	3,769	87	68.2	0.2	16.4	0.4	B
Total	3,769	87	68.2	0.2	16.4	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,860	3,769	87	97.6%	13,528
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 116 - NB I-15: Lake St On-ramp

Segment Type - Merge

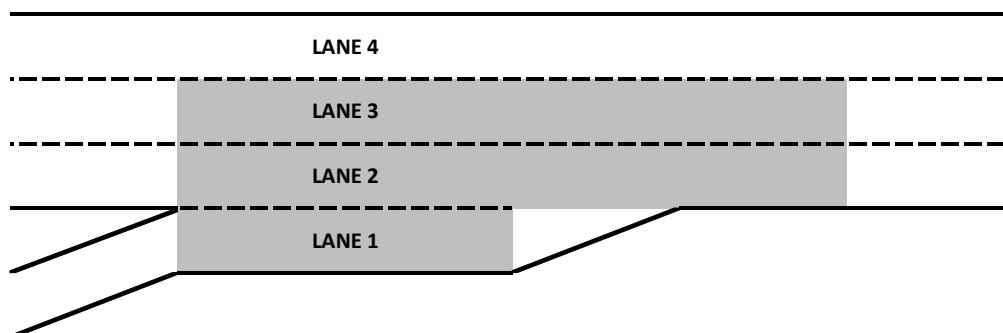
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,151	20	68.8	0.2	14.8	1.1	B
3	1,243	20	68.3	0.3	18.8	0.5	C
2	1,048	18	68.0	0.1	14.0	0.6	B
1	381	42	34.3	0.2	1.3	0.0	A
Area	2,673	80	68.0	0.2	13.3	0.4	B
Total	3,824	100	68.2	0.2	13.7	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	381	42	1		
Total	381	42	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,460	3,442	58	99.5%	1,499
On-ramp	400	381	42	95.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 115 - NB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

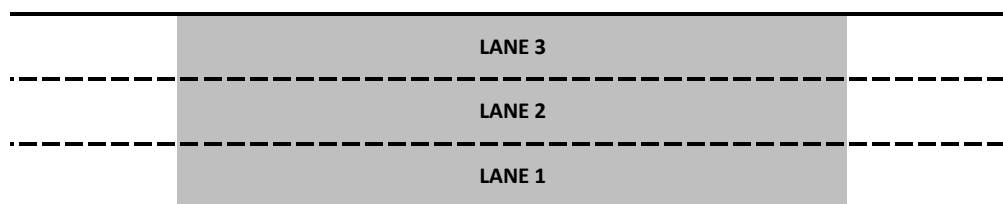
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,166	23	68.4	0.3	14.5	0.9	B
2	1,245	18	68.5	0.3	16.6	0.7	B
1	1,033	15	68.2	0.1	13.0	0.5	B
Area	3,444	56	68.4	0.2	14.7	0.5	B
Total	3,444	56	68.4	0.2	14.7	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,460	3,444	56	99.5%	3,216
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 114 - NB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,182	20	68.5	0.3	14.5	1.0	B
2	1,357	25	68.4	0.3	16.8	0.6	B
1	1,196	15	67.5	0.3	15.7	0.7	B
Area	2,552	40	68.0	0.3	16.2	0.6	B
Total	3,735	59	68.1	0.3	15.6	0.7	B

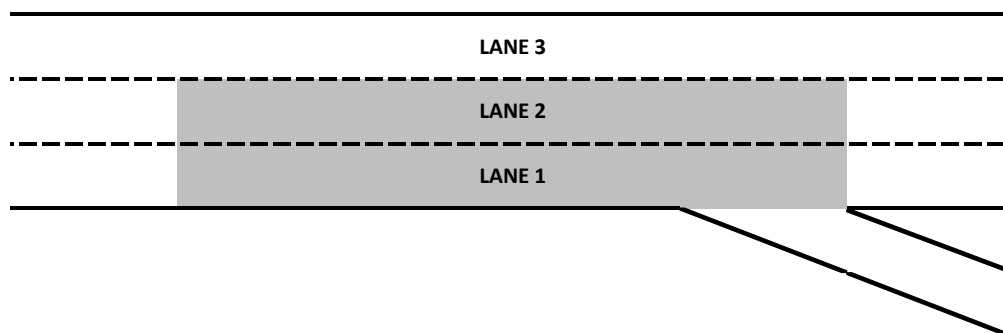
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	294	33
Total	294	33

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,750	3,735	59	99.6%	1,498
On-ramp					
Off-ramp	290	294	33	101.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 113 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

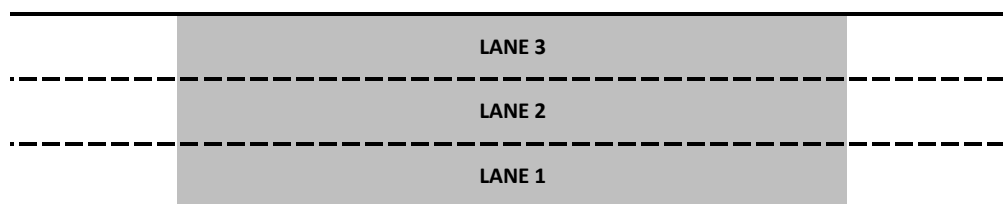
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,234	19	68.6	0.4	15.2	1.2	B
2	1,334	21	68.5	0.4	17.2	0.8	B
1	1,165	15	68.1	0.2	14.4	0.9	B
Area	3,734	56	68.4	0.3	15.6	0.9	B
Total	3,734	56	68.4	0.3	15.6	0.9	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,750	3,734	56	99.6%	8,483
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 112 - NB I-15: Nichols Rd On-ramp

Segment Type - Merge

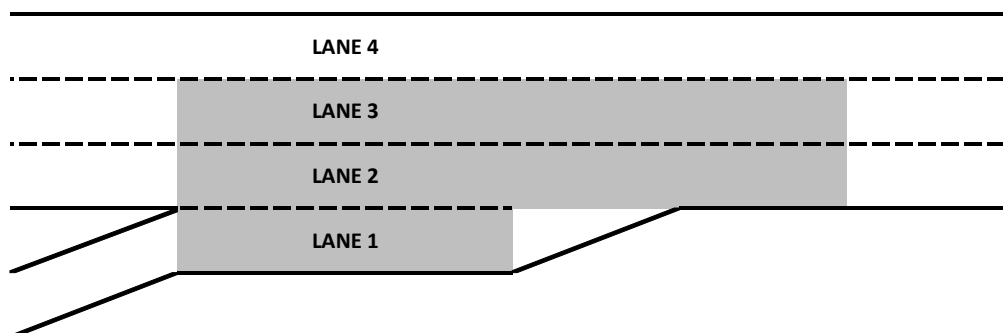
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,162	22	68.9	0.3	14.6	1.2	B
3	1,244	20	68.8	0.3	17.2	0.9	B
2	1,023	19	68.4	0.3	13.6	0.6	B
1	299	67	39.3	0.3	1.0	0.1	A
Area	2,566	106	68.6	0.2	12.3	0.6	B
Total	3,728	128	68.7	0.2	12.9	0.7	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	299	67	1		
Total	299	67	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,450	3,428	61	99.4%	1,499
On-ramp	300	299	67	99.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 111 - NB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

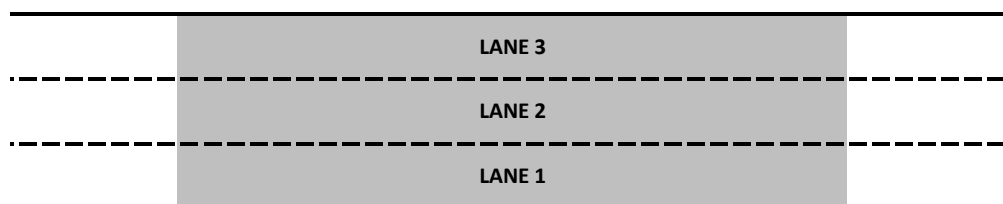
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,168	21	68.5	0.4	14.5	1.4	B
2	1,250	16	68.7	0.3	15.9	1.0	B
1	1,002	15	68.3	0.2	13.0	0.5	B
Area	3,419	52	68.5	0.3	14.5	0.9	B
Total	3,419	52	68.5	0.3	14.5	0.9	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,450	3,419	52	99.1%	3,521
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 110 - NB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

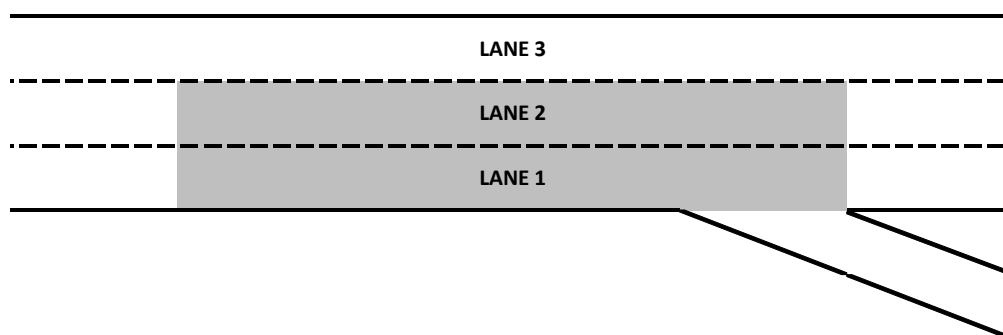
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,220	28	67.9	0.4	14.4	1.5	B
2	1,384	14	67.5	0.1	16.8	1.0	B
1	1,170	18	67.1	0.9	17.6	0.9	B
Area	2,554	32	67.3	0.4	17.2	0.9	B
Total	3,774	60	67.5	0.4	16.3	1.1	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	351	26
Total			Total	351	26

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,800	3,774	60	99.3%	1,488
On-ramp					
Off-ramp	350	351	26	100.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 109 - NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp to Nichols Rd Off-ramp

Segment Type - Merge

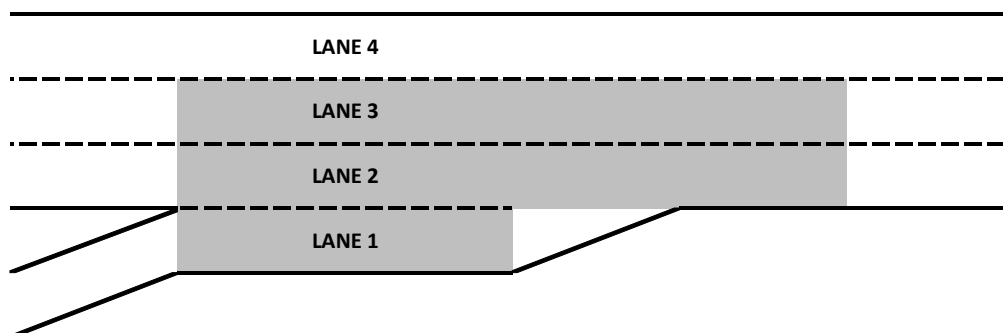
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,061	24	68.5	0.6	14.5	1.5	B
3	1,138	17	68.1	0.7	18.2	1.0	C
2	908	18	66.6	0.7	15.2	1.0	B
1	663	36	29.5	1.0	1.1	0.2	A
Area	2,709	72	67.0	0.7	13.5	0.8	B
Total	3,770	96	67.5	0.6	13.8	0.9	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	663	36	1		
Total	663	36	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,140	3,107	60	99.0%	1,486
On-ramp	660	663	36	100.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 108 - NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

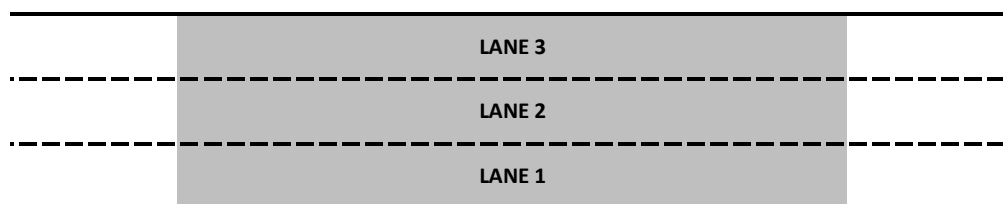
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,075	26	68.6	0.3	14.0	1.0	B
2	1,147	20	68.9	0.3	15.0	0.7	B
1	889	17	68.7	0.2	11.2	0.6	B
Area	3,111	62	68.8	0.3	13.4	0.7	B
Total	3,111	62	68.8	0.3	13.4	0.7	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,140	3,111	62	99.1%	2,598
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 153 - NB I-15: Dexter Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,085	26	68.7	0.2	13.9	0.7	B
2	1,145	23	68.7	0.3	15.2	0.9	B
1	1,073	16	68.0	0.2	13.7	0.8	B
Area	2,218	39	68.4	0.3	14.5	0.7	B
Total	3,304	65	68.5	0.2	14.3	0.7	B

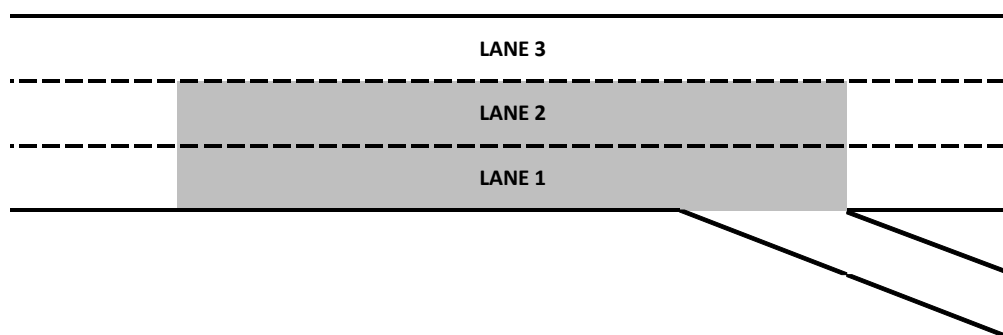
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	198	21
Total	198	21

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,350	3,304	65	98.6%	940
On-ramp					
Off-ramp	210	198	21	94.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 107 - NB I-15: WB Central Ave (SR-74) Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,122	24	68.8	0.4	13.9	0.8	B
3	1,228	20	68.9	0.3	15.7	0.7	B
2	1,204	18	68.6	0.2	11.8	0.9	B
1	359	17	68.3	0.5	9.5	0.2	A
Area	3,914	80	68.7	0.3	12.7	0.4	B
Total	3,914	80	68.7	0.3	12.7	0.4	B

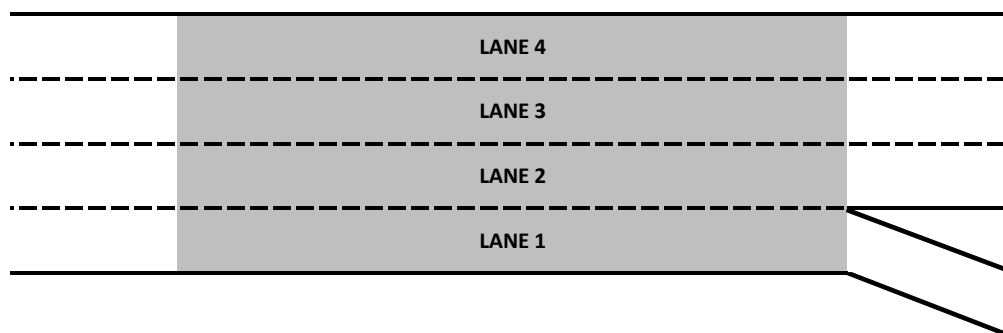
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	605	50
Total	605	50

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,970	3,914	80	98.6%	1,366
On-ramp					
Off-ramp	620	605	50	97.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 106 - NB I-15: EB Central Ave (SR-74) Off-ramp

Segment Type - Diverge

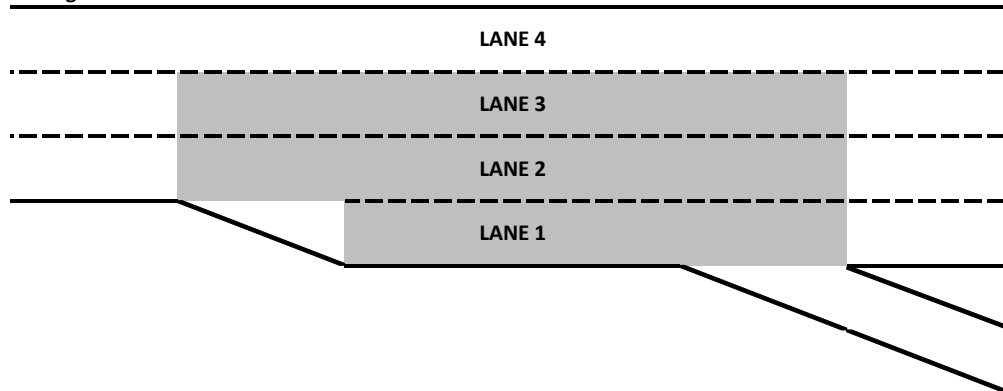
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,233	25	68.7	0.4	14.8	0.8	B
3	1,553	17	68.9	0.4	16.5	0.7	B
2	1,617	30	68.1	0.1	19.1	0.9	C
1			55.5	0.5	7.2	0.3	A
Area	3,170	46	68.6	0.2	15.3	0.5	B
Total	4,403	72	68.6	0.1	15.2	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	488	57
Total			Total	488	57

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,480	4,403	72	98.3%	1,498
On-ramp					
Off-ramp	510	488	57	95.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 105 - NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

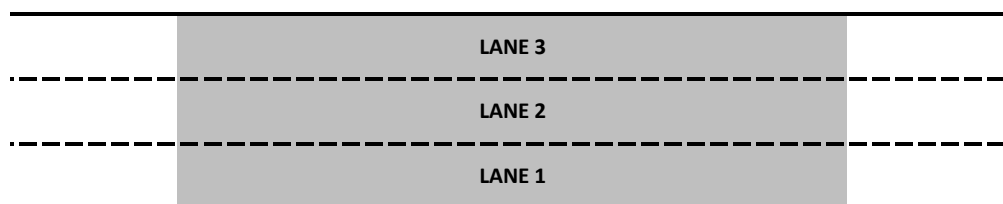
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,211	20	68.4	0.4	15.1	1.0	B
2	1,569	18	68.0	0.4	20.8	0.7	C
1	1,623	22	66.9	0.4	22.7	1.4	C
Area	4,403	60	67.7	0.3	19.5	0.7	C
Total	4,403	60	67.7	0.3	19.5	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,480	4,403	60	98.3%	1,245
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 104 - NB I-15: Main St On-ramp

Segment Type - Merge

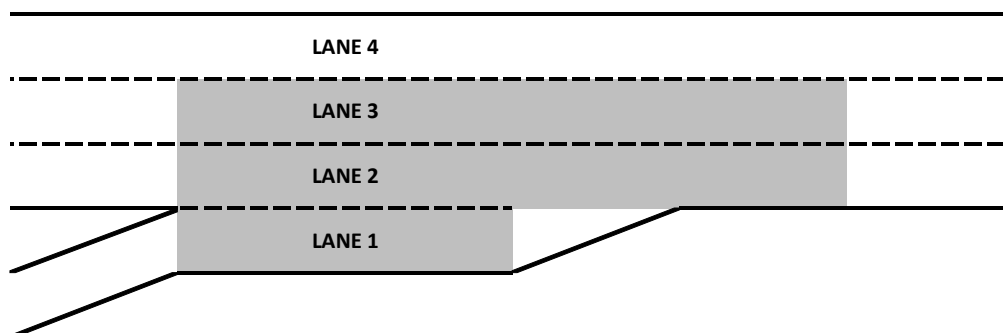
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,288	19	68.7	0.4	16.5	0.8	B
3	1,509	17	68.5	0.4	19.9	0.9	C
2	1,339	21	67.3	0.2	21.6	0.8	C
1	266	34	28.0	1.1	0.5	0.1	A
Area	3,114	72	67.8	0.3	16.5	0.6	B
Total	4,403	91	68.0	0.2	16.5	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	266	34	1		
Total	266	34	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,210	4,136	58	98.3%	1,500
On-ramp	270	266	34	98.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 103 - NB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

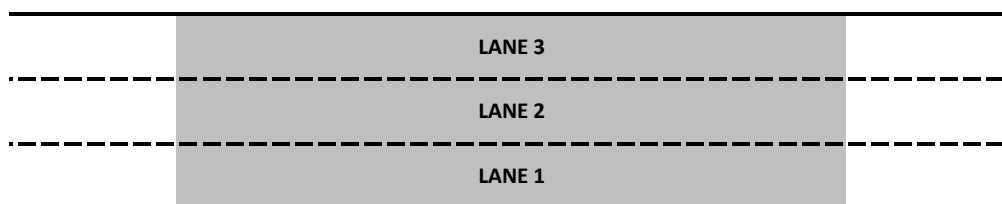
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,287	24	68.2	0.4	17.6	0.6	B
2	1,532	23	68.3	0.3	20.3	0.8	C
1	1,316	27	68.2	0.2	17.5	0.9	B
Area	4,135	74	68.2	0.3	18.5	0.5	C
Total	4,135	74	68.2	0.3	18.5	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,210	4,135	74	98.2%	2,897
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 102 - NB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,417	16	67.5	1.4	19.0	0.8	C
2	1,478	19	66.4	3.0	20.6	0.6	C
1	1,826	25	66.0	2.0	23.0	1.3	C
Area	3,304	44	66.2	2.5	21.8	0.9	C
Total	4,721	60	66.6	2.1	20.9	0.8	C

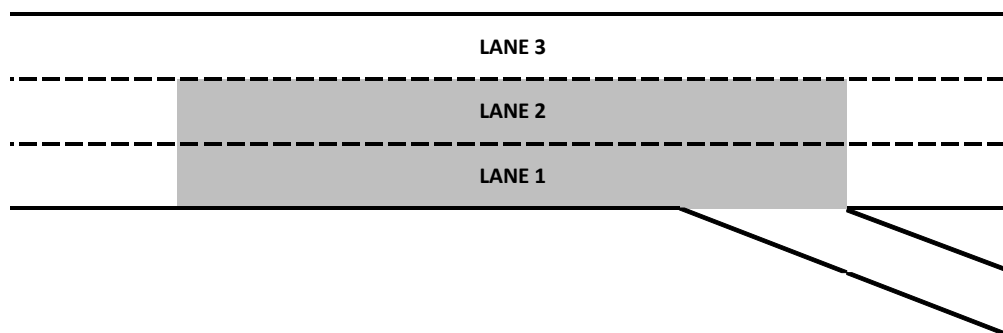
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	583	42
Total	583	42

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,800	4,721	60	98.3%	1,499
On-ramp					
Off-ramp	590	583	42	98.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 101 - NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp

Segment Type - Basic

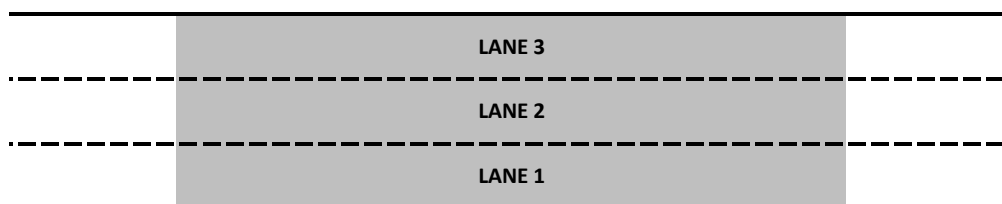
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,423	22	68.7	0.2	19.3	0.3	C
2	1,690	24	68.6	0.2	21.2	0.3	C
1	1,608	22	68.3	0.1	20.7	1.3	C
Area	4,721	68	68.5	0.1	20.4	0.6	C
Total	4,721	68	68.5	0.1	20.4	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,800	4,721	68	98.4%	3,906
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Opening Year No Build
PM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
200 SB I-15 EL: WB SR-91 Off-ramp	Basic	1,719	32	96.6%				583	43	95.5%	68.8	0.1	8.9	0.5	A
210 SB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp	Basic	1,137	23	97.2%							68.2	0.2	11.2	0.8	B
201 SB I-15 EL: EB SR-91 On-ramp	Basic	1,136	19	97.1%	878	44	98.6%				68.8	0.3	11.8	0.7	B
202 SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia	Basic	2,009	24	97.5%							68.7	0.3	11.8	0.6	B
203 SB I-15 EL: EL Access S of Magnolia to EL Egress at El Cerrito	Basic	2,052	37	97.2%							63.7	1.9	25.1	1.7	C
204 SB I-15 EL: EL Egress at El Cerrito	Basic	2,046	43	97.0%				324	34	89.9%	63.8	1.0	13.7	0.5	B
205 SB I-15 EL: EL Egress at El Cerrito to EL Egress at Cajalco	Basic	1,719	29	98.3%							64.9	2.0	25.0	0.8	C
300 NB I-15 EL: EL Ingress at Cajalco	Basic	963	46	90.9%							59.2	3.4	20.3	2.6	C
301 NB I-15 EL: EL Ingress at El Cerrito	Basic	960	44	90.6%	296	44	114.0%				67.3	0.1	10.5	1.0	A
302 NB I-15 EL: EL Ingress at El Cerrito to EL Access N of Ontario	Basic	1,254	40	95.0%							69.4	0.2	10.4	1.0	A
303 NB I-15 EL: EL Access at Ontario to WB SR-91 Off-ramp	Basic	1,357	45	99.0%							67.8	0.6	10.1	0.7	A
304 NB I-15 EL: WB SR-91 Off-ramp	Basic	1,354	46	98.8%				814	79	99.3%	68.5	0.3	10.3	0.7	A
305 NB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp	Basic	539	21	98.0%							68.7	0.6	8.7	0.6	A
306 NB I-15 EL: EB SR-91 On-ramp	Basic	539	20	98.1%	379	29	90.1%				69.5	0.3	7.7	0.5	A

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 200 - SB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	876	20	68.6	0.2	10.0	0.4	A
1	843	13	69.1	0.1	7.8	0.5	A
Area	1,719	32	68.8	0.1	8.9	0.5	A
Total	1,719	32	68.8	0.1	8.9	0.5	A

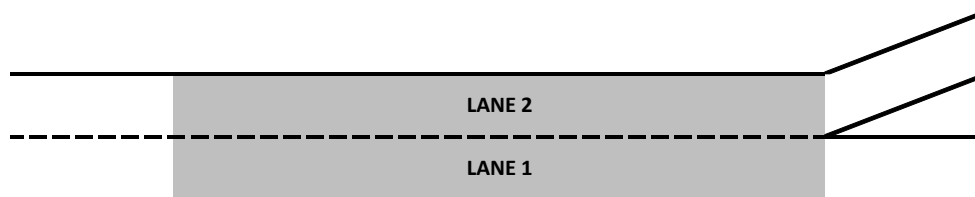
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	583	43
Total	583	43

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,780	1,719	32	96.6%	1,496
On-ramp					
Off-ramp	610	583	43	95.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 210 - SB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	1,137	23	68.2	0.2	11.2	0.8	B
Area	1,137	23	68.2	0.2	11.2	0.8	B
Total	1,137	23	68.2	0.2	11.2	0.8	B

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,170	1,137	23	97.2%	6,571
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 201 - SB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,136	19	68.5	0.5	11.9	0.5	B
1	878	44	69.0	0.4	11.6	0.9	B
Area	2,014	64	68.8	0.3	11.8	0.7	B
Total	2,014	64	68.8	0.3	11.8	0.7	B

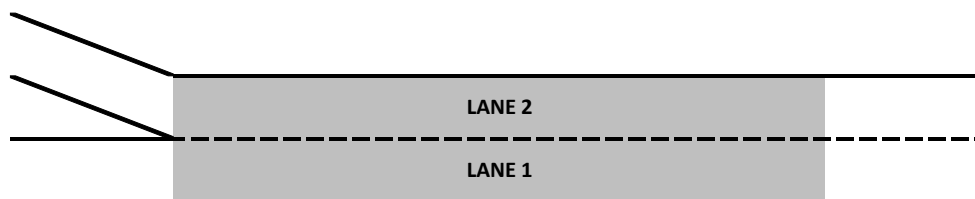
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	878	44
Total	878	44

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,170	1,136	19	97.1%	1,500
On-ramp	890	878	44	98.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 202 - SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	959	10	68.4	0.3	11.6	0.4	B
1	1,051	14	68.9	0.3	11.9	1.0	B
Area	2,009	24	68.7	0.3	11.8	0.6	B
Total	2,009	24	68.7	0.3	11.8	0.6	B

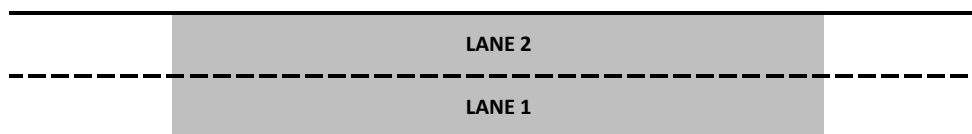
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,060	2,009	24	97.5%	2,496
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 203 - SB I-15 EL: EL Access S of Magnolia to EL Egress at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	998	21	62.8	2.2	10.9	1.0	A
1	1,054	15	64.5	1.7	14.2	1.0	B
Area	2,052	37	63.7	1.9	25.1	1.7	C
Total	2,052	37	63.7	1.9	12.6	0.9	B

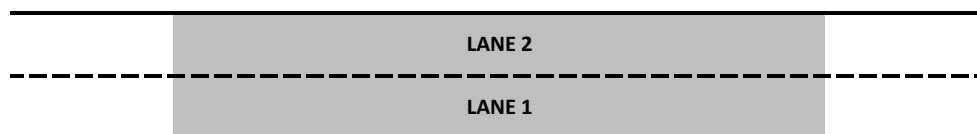
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,110	2,052	37	97.2%	6,828
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 204 - SB I-15 EL: EL Egress at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,696	28	63.3	1.1	25.2	1.2	C
1	350	15	68.7	0.8	2.3	0.4	A
Area	2,046	43	63.8	1.0	13.7	0.5	B
Total	2,046	43	63.8	1.0	13.7	0.5	B

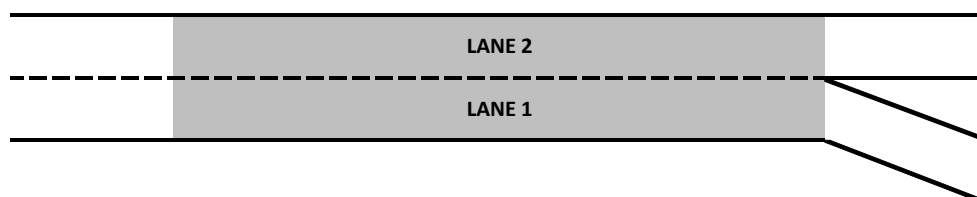
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	324	34
Total	324	34

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,110	2,046	43	97.0%	1,199
On-ramp					
Off-ramp	360	324	34	89.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 205 - SB I-15 EL: EL Egress at El Cerrito to EL Egress at Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	1,719	29	64.9	2.0	25.0	0.8	C
Area	1,719	29	64.9	2.0	25.0	0.8	C
Total	1,719	29	64.9	2.0	25.0	0.8	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,750	1,719	29	98.3%	4,080
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 300 - NB I-15 EL: EL Ingress at Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	963	46	59.2	3.4	20.3	2.6	C
Area	963	46	59.2	3.4	20.3	2.6	C
Total	963	46	59.2	3.4	20.3	2.6	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,060	963	46	90.9%	5,237
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 301 - NB I-15 EL: EL Ingress at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	960	44	67.8	0.1	18.4	1.6	C
1	296	44	63.5	1.3	2.5	0.5	A
Area	1,256	88	67.3	0.1	10.5	1.0	A
Total	1,256	88	67.3	0.1	10.5	1.0	A

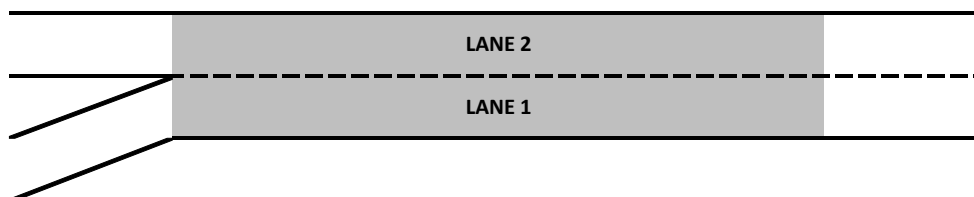
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	296	44
Total	296	44

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,060	960	44	90.6%	1,500
On-ramp	260	296	44	114.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 302 - NB I-15 EL: EL Ingress at El Cerrito to EL Access N of Ontario

Segment Type - Basic

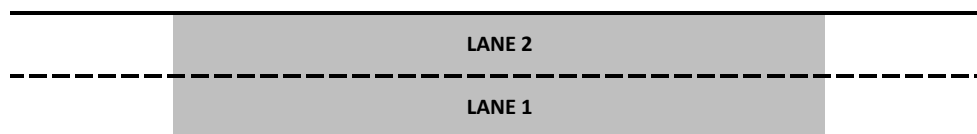
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	694	19	68.4	0.1	13.8	1.3	B
1	559	21	71.2	0.4	7.0	0.7	A
Area	1,254	40	69.4	0.2	10.4	1.0	A
Total	1,254	40	69.4	0.2	10.4	1.0	A

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,320	1,254	40	95.0%	6,294
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 303 - NB I-15 EL: EL Access at Ontario to WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	772	22	67.7	0.7	12.1	0.6	B
1	584	23	68.1	0.6	8.1	1.1	A
Area	1,357	45	67.8	0.6	10.1	0.7	A
Total	1,357	45	67.8	0.6	10.1	0.7	A

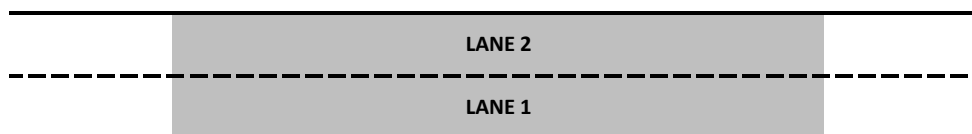
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,370	1,357	45	99.0%	3,113
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 304 - NB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	807	27	68.4	0.5	12.0	1.4	B
1	547	20	68.7	0.6	8.7	0.6	A
Area	1,354	46	68.5	0.3	10.3	0.7	A
Total	1,354	46	68.5	0.3	10.3	0.7	A

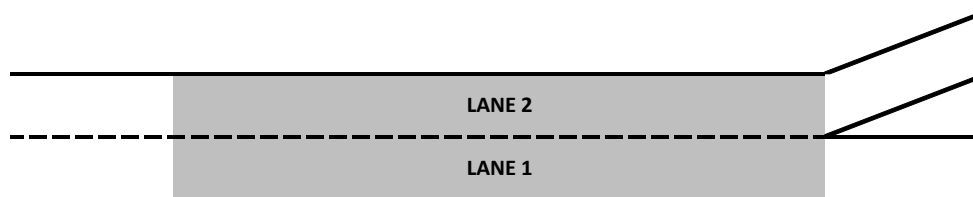
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	814	79
Total	814	79

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,370	1,354	46	98.8%	1,501
On-ramp					
Off-ramp	820	814	79	99.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 305 - NB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	539	21	68.7	0.6	8.7	0.6	A
Area	539	21	68.7	0.6	8.7	0.6	A
Total	539	21	68.7	0.6	8.7	0.6	A

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	550	539	21	98.0%	1,501
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 306 - NB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	539	20	70.0	0.2	8.0	0.7	A
1	379	29	68.8	0.6	7.3	0.4	A
Area	918	49	69.5	0.3	7.7	0.5	A
Total	918	49	69.5	0.3	7.7	0.5	A

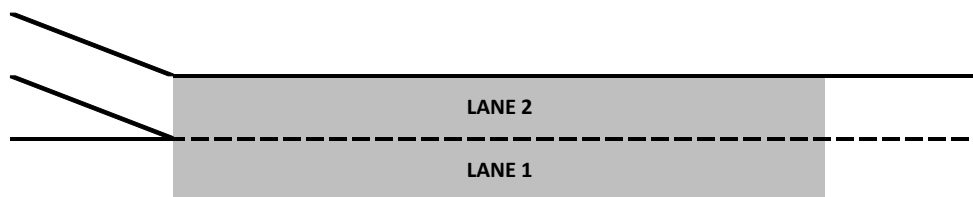
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	379	29
Total	379	29

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	550	539	20	98.1%	1,498
On-ramp	420	379	29	90.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Vissim Post-Processor
Average Results from 5 Runs
Network Statistics

I-15 Express Lanes Southern Extension
Opening Year Plus Project
AM Peak Hour

Performance Measure	Vehicle Types	Average	Std. Dev.	Minimum	Maximum
Average Delay (seconds)	All	42.9	2.57	40.8	47.2
Total Delay (hours)	All	2,283	139	2,168	2,516
Average Stopped Delay (seconds)	All	1.2	0.22	1.0	1.6
Total Stopped Delay (hours)	All	65	12	53	84
Total Distance Traveled (miles)	All	1,571,606	2,672	1,567,941	1,574,833
Average Speed (mph)	All	60.8	0.33	60.2	61.0
Average Number of Stops	All	1.4	0.28	1.2	1.9
Total Number of Stops	All	269,252	53,769	221,706	358,841
Total Travel Time (hours)	All	25,861.4	154.3	25,729.7	26,113.5
Vehicles Active	All	5,075	183	4,869	5,351
Vehicles Arrived	All	186,519	102	186,424	186,688

**VISSIM Post-Processor
Average Results from 5 Runs
Average Travel Time**

**I-15 Express Lanes Southern Extension
Opening Year Plus Project
AM Peak Hour**

Corridor Travel Time by Time Interval Summary					
Time interval		Measured from Simulation (min)			
		Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
1	5:00 - 5:15 AM	20.00	20.35	18.85	19.29
2	5:15 - 5:30 AM	19.93	20.36	18.82	19.45
3	5:30 - 5:45 AM	19.95	20.56	18.80	19.53
4	5:45 - 6:00 AM	20.01	20.83	18.90	19.66
5	6:00 - 6:15 AM	20.01	20.83	18.81	19.63
6	6:15 - 6:30 AM	20.04	20.54	18.82	19.55
7	6:30 - 6:45 AM	20.12	20.41	18.96	19.51
8	6:45 - 7:00 AM	20.35	20.26	18.90	19.45
9	7:00 - 7:15 AM	20.61	20.15	18.89	19.39
10	7:15 - 7:30 AM	20.72	19.94	18.97	19.30
11	7:30 - 7:45 AM	20.68	19.92	18.90	19.30
12	7:45 - 8:00 AM	20.63	19.84	18.92	20.48
13	8:00 - 8:15 AM	20.66	19.99	18.92	20.55
14	8:15 - 8:30 AM	20.76	20.18	18.96	20.54
15	8:30 - 8:45 AM	20.78	20.11	18.91	20.50
16	8:45 - 9:00 AM	20.87	20.09	18.93	20.47
17	9:00 - 9:15 AM	20.95	20.33	18.97	20.46
18	9:15 - 9:30 AM	20.87	20.58	18.92	20.44
19	9:30 - 9:45 AM	20.70	20.51	18.92	20.43
20	9:45 - 10:00 AM	20.68	20.42	18.96	20.44
21	10:00 - 10:15 AM	20.68	20.71	18.94	20.43
22	10:15 - 10:30 AM	20.75	21.19	18.92	20.40
23	10:30 - 10:45 AM	20.79	21.75	18.93	20.37
24	10:45 - 11:00 AM	20.80	25.44	18.93	20.35
25	11:00 - 11:15 AM	20.94	31.39	18.96	20.38
26	11:15 - 11:30 AM	20.84	34.57	18.95	20.37
27	11:30 - 11:45 AM	20.79	38.30	18.98	20.45
28	11:45 - 12:00 PM	20.95	43.33	18.98	20.39
Average		20.6	23.0	18.9	20.1

Corridor Performance Measurements				
Stats Summary	Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
Average Travel Time (min)	20.6	23.0	18.9	20.5
Average Travel Speed (mph)	63.8	57.2	69.6	68.1
Average Delay per Vehicle (min)	1.8	4.2	0.2	1.8
Max Individual Vehicle Delay (min)	2.2	24.6	0.2	1.8

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Opening Year Plus Project
AM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
152 NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	3,861	77	101.9%				1,202	102	101.8%	66.5	0.2	11.9	0.5	B
151 NB I-15: Hidden Valley Pkwy Off-ramp	Diverge	4,535	73	101.7%				671	53	100.2%	64.6	0.6	15.3	1.0	B
150 NB I-15: EB SR-91 On-ramp	Merge	3,685	81	102.1%	849	36	99.9%				66.0	0.4	15.0	0.6	B
149 NB I-15: WB SR-91 On-ramp	Merge	2,350	48	102.6%	1,334	87	101.0%				64.5	0.4	17.4	0.8	B
148 NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp	Basic	2,352	51	102.7%							66.5	0.6	12.4	0.4	B
147 NB I-15: EB & WB SR-91 Off-ramp	Diverge	5,196	73	101.1%				2,842	117	99.7%	57.3	3.8	23.8	2.4	C
146 NB I-15: Magnolia Ave On-ramp	Merge	4,747	77	101.0%	451	36	102.4%				57.9	1.8	22.9	1.1	C
145 NB I-15: Magnolia Ave Loop On-ramp	Basic	3,665	59	101.5%	1,085	77	99.5%				61.6	0.4	19.8	0.8	C
144 NB I-15: Magnolia Ave Off-ramp to Loop On-ramp	Basic	3,661	57	101.4%							62.5	1.0	20.3	1.1	C
143 NB I-15: Magnolia Ave Off-ramp	Diverge	4,578	74	101.3%				913	58	100.3%	63.9	0.7	16.9	1.0	B
141 NB I-15: Ontario Ave to Magnolia Ave (EL Access)	Weave	4,952	101	100.9%	2,511	156	105.5%	2,882	132	104.1%	63.9	1.0	20.3	0.9	C
140 NB I-15: Ontario Ave On-ramp	Merge	3,440	73	101.2%	1,506	95	99.7%				61.9	0.6	13.9	0.4	B
138 NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)	Basic	3,442	74	101.2%							65.5	0.4	13.4	0.6	B
137 NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)	Basic	3,443	62	101.3%							62.8	0.4	18.6	0.8	C
136 NB I-15: Ontario Ave Off-ramp	Diverge	4,417	57	100.2%				973	62	96.4%	58.8	1.9	24.6	0.9	C
135 NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp	Merge	3,414	63	101.0%	1,000	31	97.1%				58.4	1.2	19.9	0.6	C
133 NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp (EL Access)	Weave	3,823	80	101.1%	2,087	77	105.4%	2,501	125	105.1%	65.5	0.6	19.0	0.8	C
132 NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp	Weave	3,646	60	100.4%	666	45	105.7%	488	41	101.6%	65.3	0.3	17.0	0.7	B
131 NB I-15: Cajalco Rd Loop On-ramp	Merge	2,887	58	100.6%	760	43	100.0%				64.1	0.8	16.2	0.6	B
170 NB I-15: Cajalco Rd Off-ramp to Loop On-ramp	Basic	2,887	61	100.6%							65.0	0.8	15.0	0.5	B
130 NB I-15: Cajalco Rd Off-ramp to Loop On-ramp (EL Ingress)	Basic	3,211	58	100.3%				324	31	98.2%	66.1	0.4	12.2	0.2	B
129 NB I-15: Cajalco Rd Off-ramp	Diverge	3,364	50	100.1%				154	30	96.3%	65.0	0.9	12.4	0.4	B
128 NB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	2,156	51	100.7%	1,211	62	99.2%				63.1	0.9	14.7	0.3	B
127 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	2,156	50	100.7%							65.5	0.9	11.2	0.7	B
126 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	2,199	49	100.4%				50	16	100.0%	65.5	0.8	10.8	0.8	A
125 NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	2,200	39	100.4%							65.4	0.8	11.4	0.6	B
124 NB I-15: Temescal Canyon Rd On-ramp	Merge	2,000	44	100.5%	199	23	99.4%				65.0	0.8	8.9	0.5	A
123 NB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	2,001	45	100.5%							65.4	0.9	10.3	0.6	A
122 NB I-15: Temescal Canyon Rd Off-ramp	Diverge	2,655	40	99.8%				653	46	97.5%	65.5	0.2	13.9	0.3	B
121 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	2,654	45	99.8%							66.3	0.7	13.4	0.6	B
160 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp (EL Access)	Weave	2,730	63	100.0%	1,631	79	103.2%	1,712	66	103.8%	66.4	0.4	13.7	0.4	B
159 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	2,729	58	99.9%							66.0	0.7	14.0	0.7	B
120 NB I-15: Indian Truck Trail On-ramp	Merge	2,451	53	99.2%	276	44	106.2%				66.1	0.4	10.8	0.7	A
119 NB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	2,447	52	99.1%							66.2	0.2	12.4	0.6	B
118 NB I-15: Indian Truck Trail Off-ramp	Diverge	2,824	55	97.7%				384	30	91.5%	65.4	0.6	14.6	0.7	B
117 NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp	Basic	2,834	55	98.1%							65.9	0.3	14.7	0.6	B
158 NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp (EL Access)	Weave	3,092	71	98.2%	1,347	112	102.0%	1,610	114	101.9%	66.9	0.3	13.7	0.6	B
116 NB I-15: Lake St On-ramp	Merge	2,256	56	97.7%	832	53	99.1%				65.8	0.3	12.6	0.5	B
115 NB I-15: Lake St Off-ramp to On-ramp	Basic	2,256	62	97.7%							66.9	0.4	11.4	0.4	B
114 NB I-15: Lake St Off-ramp	Diverge	2,502	60	97.8%				247	30	98.6%	66.5	0.3	12.7	0.4	B
113 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	2,500	57	97.7%							66.8	0.4	12.8	0.4	B
157 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp (EL Ingress)	Basic	2,883	62	98.4%				380	40	102.7%	67.0	0.4	11.6	0.4	B
156 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	2,885	60	98.5%							65.8	0.4	14.7	0.2	B
112 NB I-15: Nichols Rd On-ramp	Merge	2,576	56	99.1%	306	52	92.7%				67.0	0.1	10.7	0.3	A
111 NB I-15: Nichols Rd Off-ramp to On-ramp	Basic	2,572	50	98.9%							67.1	0.2	13.0	0.3	B
110 NB I-15: Nichols Rd Off-ramp	Diverge	2,941	50	99.4%				375	25	104.1%	66.2	0.4	15.9	0.6	B
109 NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp	Merge	2,272	53	100.1%	673	42	97.5%				65.7	0.3	12.8	0.5	B
108 NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp	Basic	2,272	57	100.1%							67.2	0.2	11.6	0.3	B
155 NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp (EL Ingress)	Basic	3,350	53	100.0%				950	66	100.0%	67.0	0.3	12.6	0.2	B
153 NB I-15: Dexter Ave Off-ramp	Diverge	3,350	53	100.0%				132	26	101.4%	66.7	0.1	13.2	0.3	B
107 NB I-15: WB Central Ave (SR-74) Off-ramp	Basic	4,045	65	99.6%				689	38	97.0%	66.1	0.3	15.8	0.3	B
106 NB I-15: EB Central Ave (SR-74) Off-ramp	Diverge	4,431	47	99.6%				388	47	99.6%	66.4	0.3	17.1	0.5	B
105 NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp	Basic	4,433	51	99.6%							64.7	1.0	23.6	0.3	C
104 NB I-15: Main St On-ramp	Merge	4,007	57	99.2%	424	19	103.5%				65.5	0.2	19.3	0.5	C
103 NB I-15: Main St Off-ramp to On-ramp	Basic	4,004	55	99.1%							65.7	0.4	21.1	0.3	C
102 NB I-15: Main St Off-ramp	Diverge	4,600	53	99.4%				596	53	101.0%	62.5	2.0	26.5	0.7	D
101 NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp	Basic	4,606	42	99.5%							65.8	0.4	24.6	0.3	C

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 152 - NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,759	31	67.5	0.3	16.1	1.8	B
4	833	16	66.7	0.5	11.0	0.6	A
3	716	18	66.1	0.5	12.3	0.2	B
2	552	11	65.9	0.8	10.9	0.5	A
1			65.9	0.5	9.4	0.3	A
Area	3,861	77	66.5	0.2	11.9	0.5	B
Total	3,861	77	66.5	0.2	11.9	0.5	B

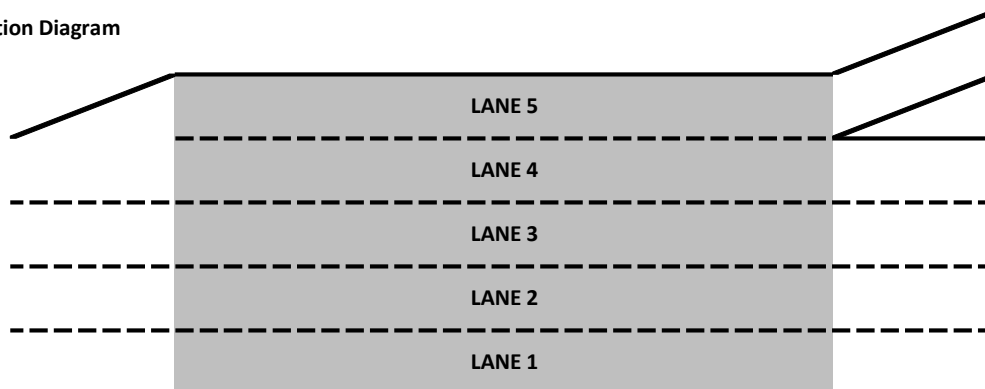
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,202	102
Total	1,202	102

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,790	3,861	77	101.9%	1,446
On-ramp					
Off-ramp	1,180	1,202	102	101.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 151 - NB I-15: Hidden Valley Pkwy Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,310	26	64.5	1.3	27.5	2.1	D
3	1,293	14	64.9	0.4	13.6	0.6	B
2	980	16	64.5	0.1	11.2	0.8	B
1	952	17	64.6	0.6	19.3	1.3	C
Area	1,932	33	64.6	0.4	15.3	1.0	B
Total	4,535	73	64.6	0.6	17.9	0.9	B

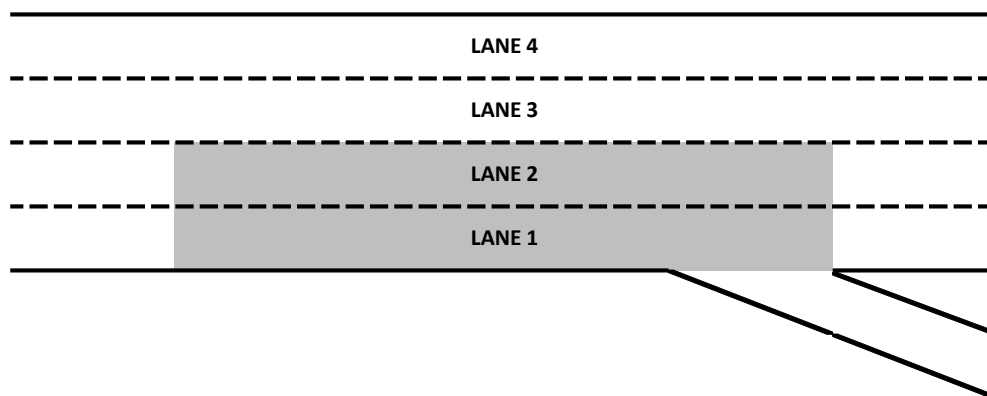
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	671	53
Total	671	53

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,460	4,535	73	101.7%	1,517
On-ramp					
Off-ramp	670	671	53	100.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 150 - NB I-15: EB SR-91 On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,115	22	67.2	0.5	19.4	1.4	C
4	1,360	20	65.5	0.5	20.6	0.8	C
3	1,210	20	65.0	0.5	16.7	0.9	B
2	423	39	66.0	0.4	13.8	1.0	B
1	426	16	30.1	0.3	0.9	0.0	A
Area	3,419	95	65.5	0.4	15.0	0.6	B
Total	4,534	117	66.0	0.4	16.0	0.7	B

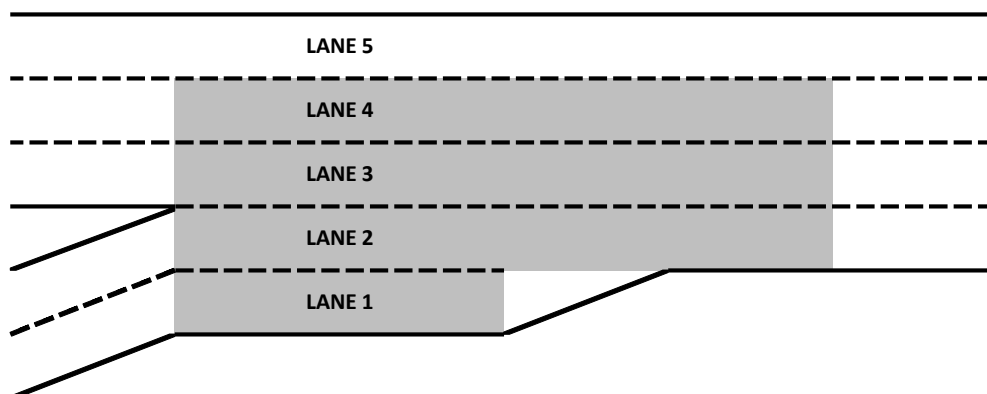
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	423	39
1	426	16
Total	849	36

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,610	3,685	81	102.1%	1,509
On-ramp	850	849	36	99.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 149 - NB I-15: WB SR-91 On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	964	19	67.6	0.5	14.8	0.9	B
3	852	15	65.0	0.5	21.8	1.2	C
2	535	15	62.9	0.4	20.5	0.8	C
1	1,334	87	30.9	0.1	2.5	0.2	A
Area	2,720	117	63.4	0.4	17.4	0.8	B
Total	3,684	136	64.5	0.4	16.6	0.8	B

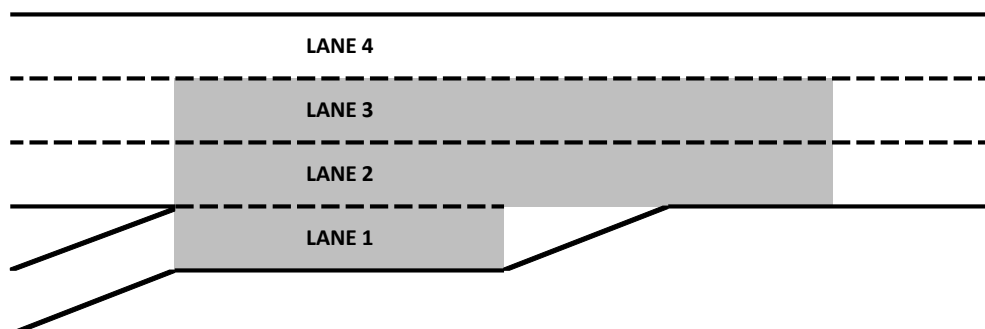
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,334	87
Total	1,334	87

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,290	2,350	48	102.6%	1,564
On-ramp	1,320	1,334	87	101.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 148 - NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,007	22	67.5	0.6	15.6	0.5	B
2	875	15	66.1	0.7	13.8	0.5	B
1	471	13	65.2	0.6	7.6	0.8	A
Area	2,352	51	66.5	0.6	12.4	0.4	B
Total	2,352	51	66.5	0.6	12.4	0.4	B

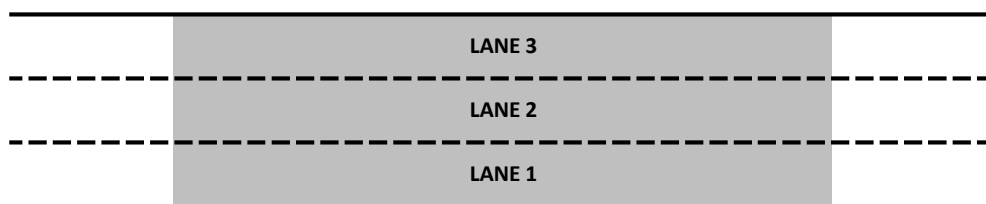
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,290	2,352	51	102.7%	3,525
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 147 - NB I-15: EB & WB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	992	22	64.2	2.2	17.3	1.2	B
3	976	18	61.1	3.2	16.8	1.5	B
2	1,710	18	52.9	4.1	26.6	2.4	D
1	1,518	16	53.7	5.6	28.2	3.6	D
Area	4,204	52	55.4	4.3	23.8	2.4	C
Total	5,196	73	57.3	3.8	22.1	1.9	C

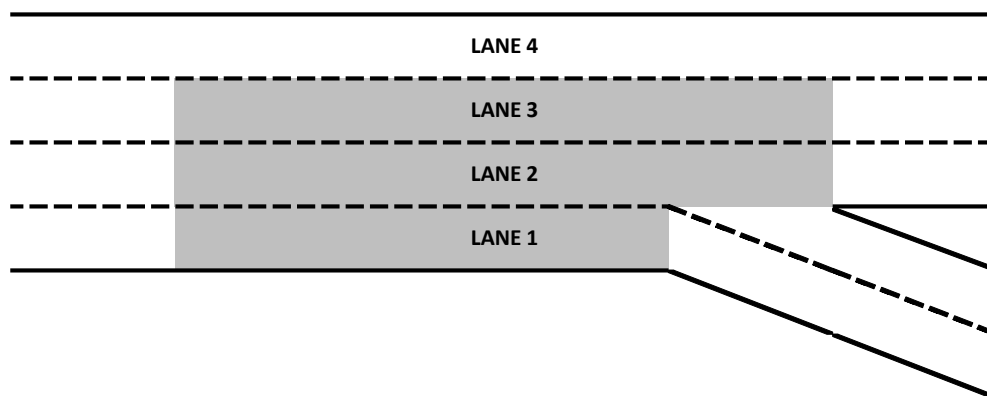
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	927	62
1	1,914	67
Total	2,842	117

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,140	5,196	73	101.1%	1,324
On-ramp					
Off-ramp	2,850	2,842	117	99.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 146 - NB I-15: Magnolia Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	654	13	64.9	1.4	12.6	0.8	B
4	1,727	16	60.2	1.5	20.5	0.8	C
3	1,343	21	55.0	2.0	35.4	1.4	E
2	1,023	27	55.0	3.3	23.5	1.6	C
1	451	36	29.1	2.1	1.3	0.1	A
Area	2,817	83	55.6	2.2	22.9	1.1	C
Total	5,197	112	57.9	1.8	20.0	0.9	C

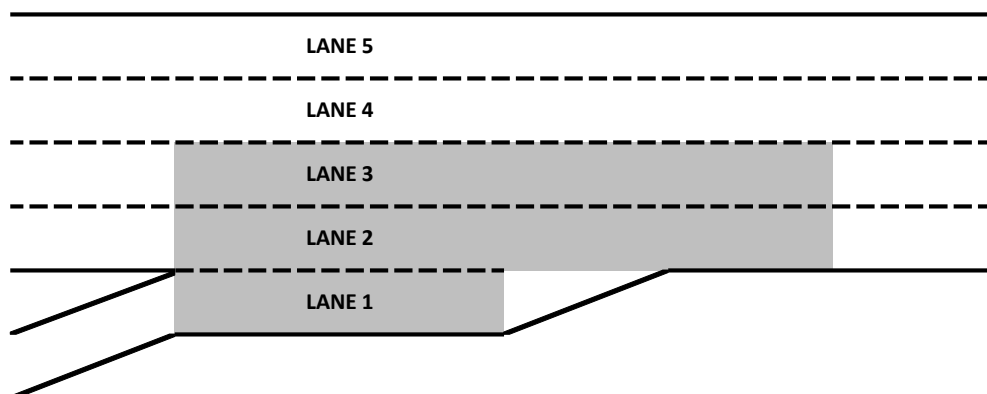
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	451	36
Total	451	36

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,700	4,747	77	101.0%	1,292
On-ramp	440	451	36	102.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 145 - NB I-15: Magnolia Ave Loop On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	609	11	67.1	0.8	10.1	0.3	A
3	1,652	19	62.1	0.9	27.4	0.7	D
2	1,404	30	61.3	0.4	24.4	1.6	C
1	1,085	77	57.2	0.5	17.5	1.2	B
Area	4,750	136	61.6	0.4	19.8	0.8	C
Total	4,750	136	61.6	0.4	19.8	0.8	C

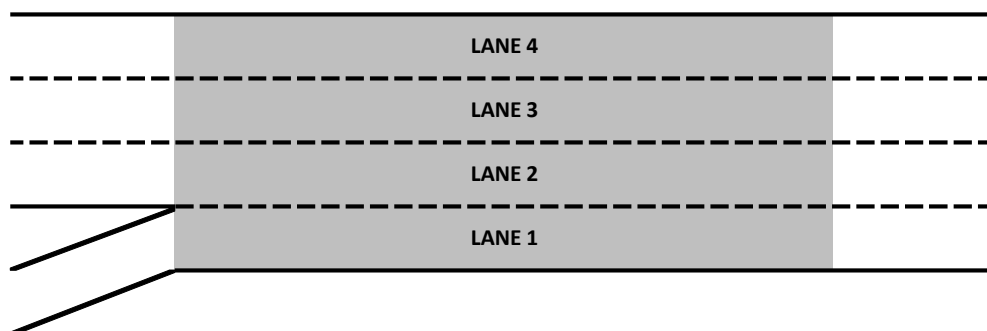
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,085	77
Total	1,085	77

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,610	3,665	59	101.5%	852
On-ramp	1,090	1,085	77	99.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 144 - NB I-15: Magnolia Ave Off-ramp to Loop On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	675	12	65.2	0.9	14.1	0.5	B
2	1,681	17	61.9	1.4	25.6	0.9	C
1	1,305	27	61.3	0.8	21.2	1.9	C
Area	3,661	57	62.5	1.0	20.3	1.1	C
Total	3,661	57	62.5	1.0	20.3	1.1	C

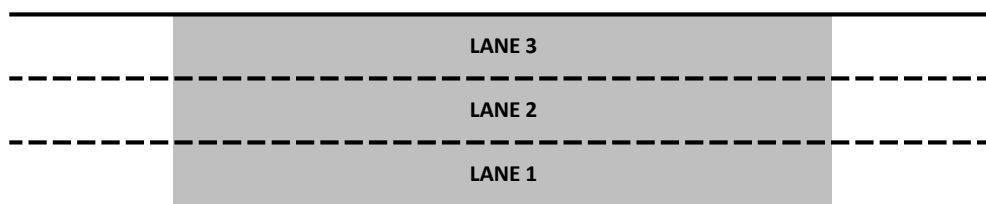
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,610	3,661	57	101.4%	1,562
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 143 - NB I-15: Magnolia Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,376	16	65.3	1.2	21.5	1.0	C
3	1,468	17	63.1	0.9	21.0	0.5	C
2	1,364	29	62.0	0.5	23.1	1.9	C
1	369	13	68.2	0.4	6.5	0.9	A
Area	3,202	59	63.3	0.4	16.9	1.0	B
Total	4,578	74	63.9	0.7	18.0	0.9	C

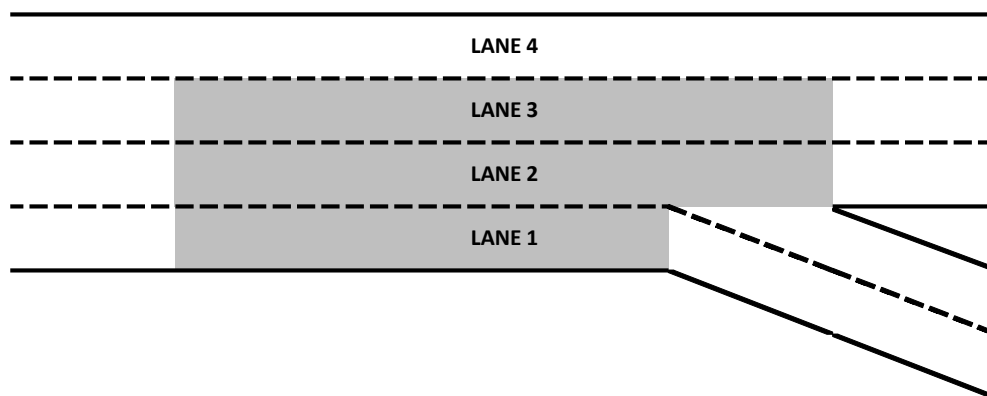
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	323	47
1	590	41
Total	913	58

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,520	4,578	74	101.3%	1,496
On-ramp					
Off-ramp	910	913	58	100.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 141 - NB I-15: Ontario Ave to Magnolia Ave (EL Access)

Segment Type - Weave

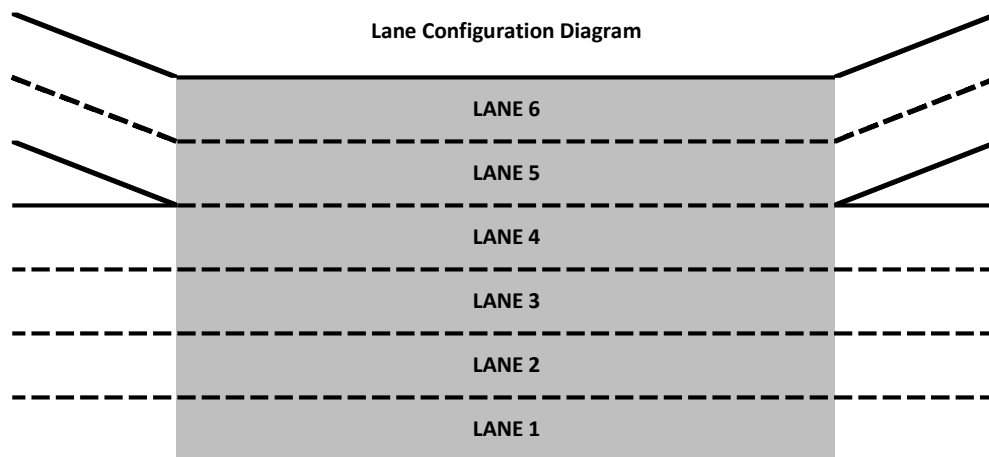
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	1,621	29	50.2	0.1	14.5	1.1	B
5	1,581	21	49.4	0.3	15.8	0.8	B
4	1,488	25	62.8	2.1	28.5	1.0	D
3	262	10	61.6	1.4	26.8	1.0	D
2	1,088	95	61.8	1.0	21.6	1.5	C
1	1,423	78	68.2	0.5	4.1	0.6	A
Area	7,463	258	63.9	1.0	20.3	0.9	C
Total	7,463	258	63.9	1.0	20.3	0.9	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,088	95
1	1,423	78
Total	2,511	156

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,402	102
1	1,480	68
Total	2,882	132

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,910	4,952	101	100.9%	2,965
On-ramp	2,380	2,511	156	105.5%	
Off-ramp	2,770	2,882	132	104.1%	



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 140 - NB I-15: Ontario Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,240	18	66.2	0.4	21.6	1.0	C
4	1,130	21	63.2	0.4	24.0	1.1	C
3	665	17	60.5	1.2	22.1	0.5	C
2	405	17	59.2	1.3	10.7	0.6	A
1	1,506	95	26.8	1.0	3.5	0.3	A
Area	2,576	129	58.1	1.3	13.9	0.4	B
Total	4,946	167	61.9	0.6	17.7	0.6	B

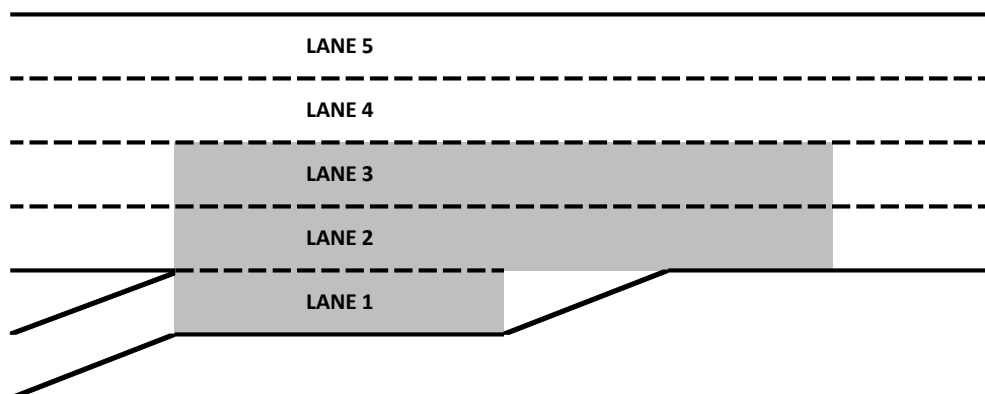
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,506	95
Total	1,506	95

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,400	3,440	73	101.2%	1,496
On-ramp	1,510	1,506	95	99.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 138 - NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,303	20	66.1	0.7	20.0	0.6	C
3	1,111	22	64.5	0.3	17.3	0.6	B
2	728	14	64.8	0.6	11.7	0.8	B
1	301	19	68.2	0.3	4.7	0.7	A
Area	3,442	74	65.5	0.4	13.4	0.6	B
Total	3,442	74	65.5	0.4	13.4	0.6	B

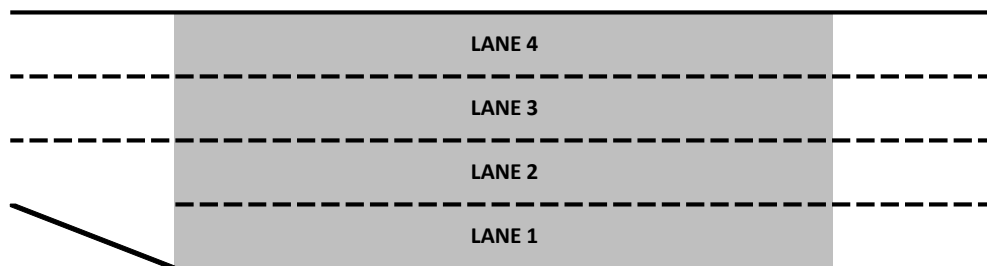
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,400	3,442	74	101.2%	3,004
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 137 - NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,441	22	64.2	0.7	22.8	0.9	C
2	1,248	17	62.4	0.3	20.0	0.8	C
1	754	23	60.9	1.0	13.2	1.4	B
Area	3,443	62	62.8	0.4	18.6	0.8	C
Total	3,443	62	62.8	0.4	18.6	0.8	C

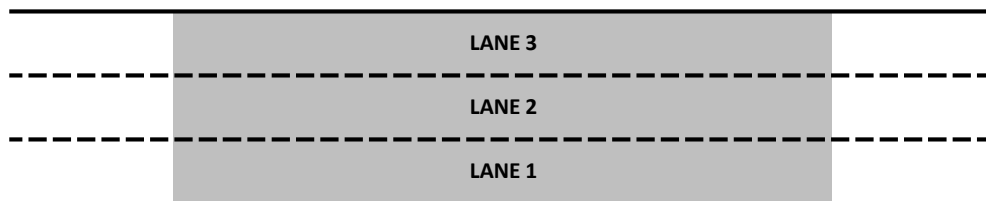
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,400	3,443	62	101.3%	197
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 136 - NB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,389	23	62.6	1.5	23.6	1.9	C
2	1,334	17	59.2	2.5	22.7	0.9	C
1	1,693	17	54.4	2.1	26.7	1.3	D
Area	3,027	35	56.7	2.3	24.6	0.9	C
Total	4,417	57	58.8	1.9	24.2	1.1	C

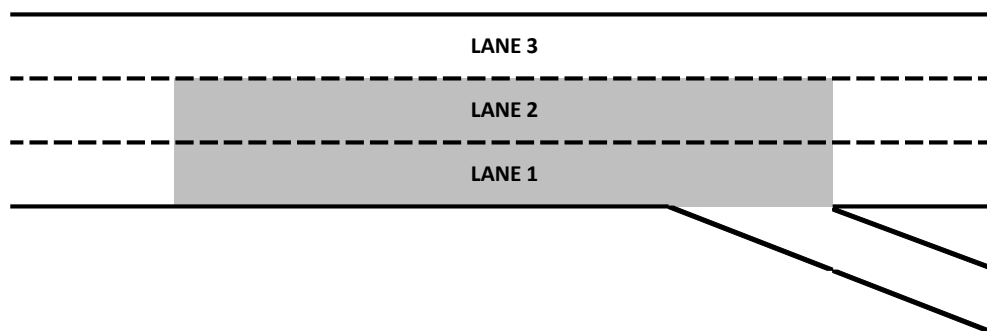
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	973	62
Total	973	62

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,410	4,417	57	100.2%	763
On-ramp					
Off-ramp	1,010	973	62	96.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 135 - NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	988	19	65.7	0.6	17.5	0.9	B
3	1,330	18	61.3	1.1	22.5	0.9	C
2	1,096	26	53.6	1.9	31.0	0.4	D
1	1,000	31	40.9	1.6	6.4	0.8	A
Area	3,426	76	55.9	1.5	19.9	0.6	C
Total	4,414	94	58.4	1.2	19.2	0.6	C

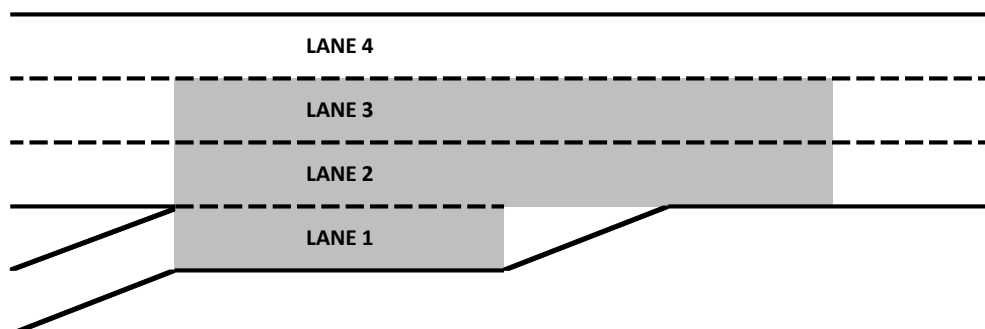
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,000	31
Total	1,000	31

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,380	3,414	63	101.0%	873
On-ramp	1,030	1,000	31	97.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 133 - NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,523	18	63.9	0.6	17.7	1.6	B
4	1,212	16	63.8	0.4	19.0	1.1	C
3	1,088	28	65.8	0.7	19.0	0.9	C
2	1,007	53	64.0	1.1	20.1	0.7	C
1	1,080	42	62.8	0.9	17.2	1.5	B
Area	5,910	157	65.5	0.6	19.0	0.8	C
Total	5,910	157	65.5	0.6	19.0	0.8	C

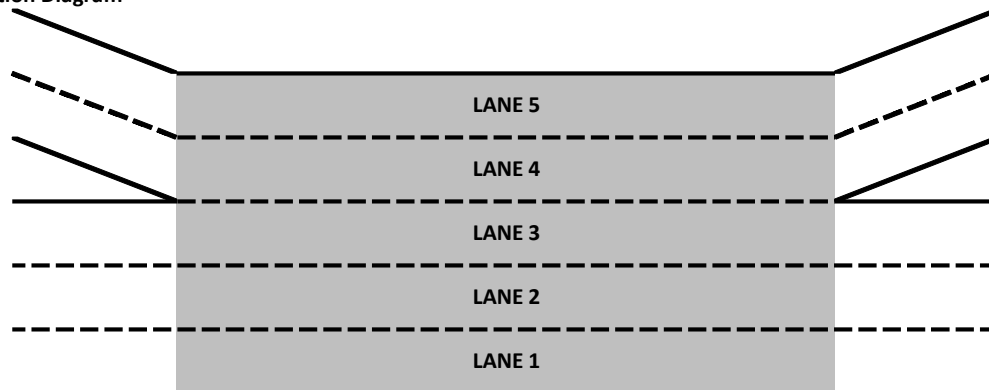
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,007	53
1	1,080	42
Total	2,087	77

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,169	80
1	1,333	63
Total	2,501	125

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,780	3,823	80	101.1%	2,115
On-ramp	1,980	2,087	77	105.4%	
Off-ramp	2,380	2,501	125	105.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 132 - NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,139	21	67.1	0.3	19.4	0.8	C
3	1,190	24	65.6	0.4	18.9	1.1	C
2	1,316	15	63.8	0.4	17.0	0.3	B
1	666	45	51.9	0.1	9.7	0.7	A
Area	4,312	104	65.3	0.3	17.0	0.7	B
Total	4,312	104	65.3	0.3	17.0	0.7	B

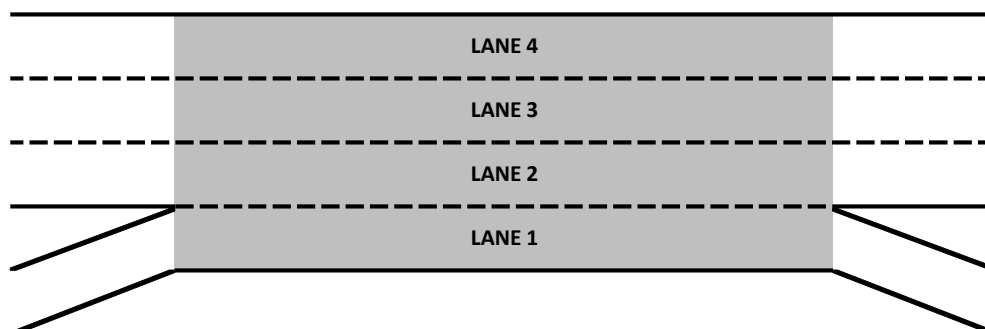
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	666	45
Total	666	45

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	488	41
Total	488	41

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,630	3,646	60	100.4%	2,708
On-ramp	630	666	45	105.7%	
Off-ramp	480	488	41	101.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 131 - NB I-15: Cajalco Rd Loop On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	992	22	66.3	0.8	16.0	0.9	B
3	1,088	16	64.5	1.2	20.0	0.5	C
2	807	20	62.2	1.0	19.6	1.2	C
1	760	43	30.1	0.5	1.5	0.2	A
Area	2,656	79	63.2	0.9	16.2	0.6	B
Total	3,647	101	64.1	0.8	16.2	0.6	B

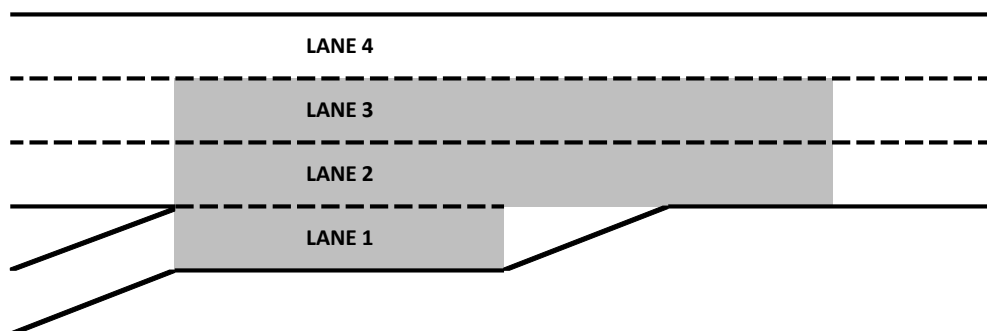
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	760	43
Total	760	43

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,870	2,887	58	100.6%	1,305
On-ramp	760	760	43	100.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 170 - NB I-15: Cajalco Rd Off-ramp to Loop On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,075	24	66.2	0.9	16.1	0.6	B
2	1,019	18	65.0	0.9	16.1	0.7	B
1	794	19	63.4	1.2	12.7	1.1	B
Area	2,887	61	65.0	0.8	15.0	0.5	B
Total	2,887	61	65.0	0.8	15.0	0.5	B

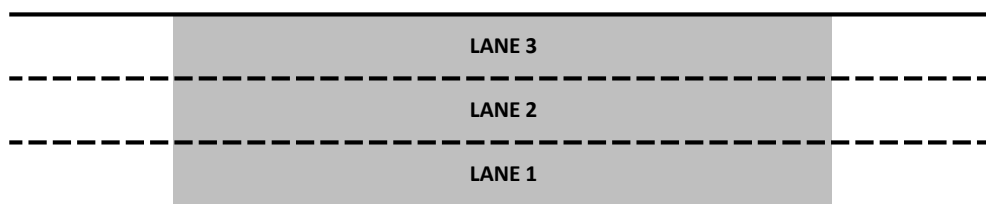
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,870	2,887	61	100.6%	1,693
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 130 - NB I-15: Cajalco Rd Off-ramp to Loop On-ramp (EL Ingress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,344	17	68.7	0.4	3.8	0.2	A
3	1,062	24	66.9	0.6	17.1	1.1	B
2	805	16	65.7	0.5	15.6	0.6	B
1			64.6	0.1	12.3	0.3	B
Area	3,211	58	66.1	0.4	12.2	0.2	B
Total	3,211	58	66.1	0.4	12.2	0.2	B

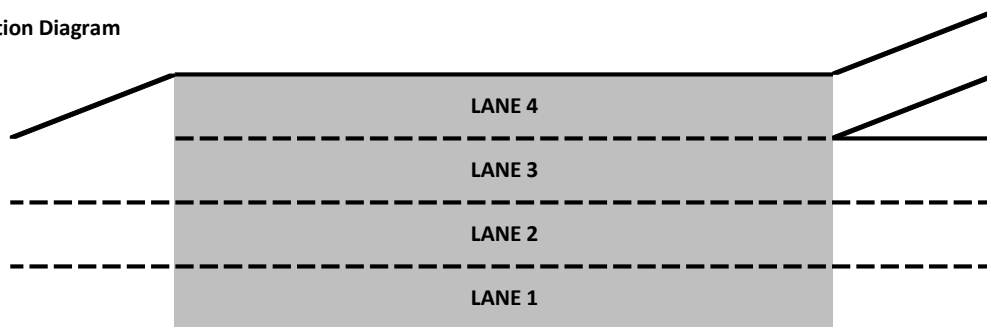
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	324	31
Total	324	31

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,200	3,211	58	100.3%	1,000
On-ramp					
Off-ramp	330	324	31	98.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 129 - NB I-15: Cajalco Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,156	18	66.1	0.7	18.9	0.7	C
2	1,215	20	65.0	1.1	17.7	0.3	B
1	994	11	63.4	1.3	15.3	0.8	B
Area	2,208	31	64.3	1.1	12.4	0.4	B
Total	3,364	50	65.0	0.9	17.3	0.5	B

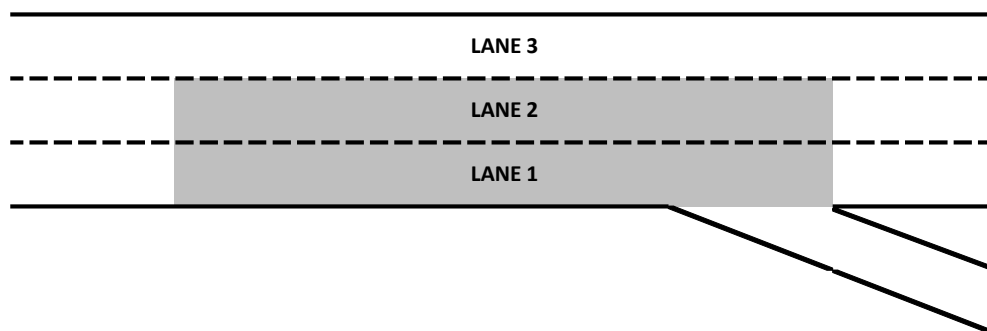
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	154	30
Total	154	30

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,360	3,364	50	100.1%	1,046
On-ramp					
Off-ramp	160	154	30	96.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 128 - NB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	813	17	66.2	0.7	15.1	0.9	B
3	817	18	64.2	1.0	18.3	0.5	C
2	525	16	61.0	1.2	17.8	0.4	B
1	1,211	62	28.6	3.5	2.3	0.1	A
Area	2,553	96	61.8	1.1	14.7	0.3	B
Total	3,366	113	63.1	0.9	14.8	0.4	B

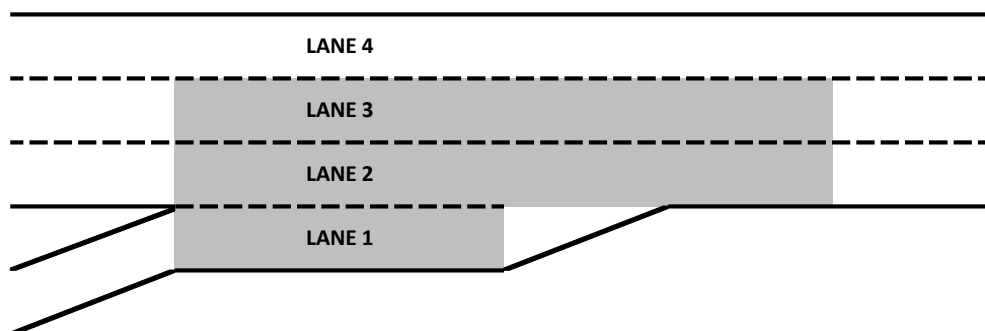
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,211	62
Total	1,211	62

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,140	2,156	51	100.7%	1,487
On-ramp	1,220	1,211	62	99.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 127 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	836	17	66.6	0.7	12.8	1.1	B
2	802	14	65.8	1.1	12.5	0.7	B
1	518	19	63.3	0.9	8.3	0.9	A
Area	2,156	50	65.5	0.9	11.2	0.7	B
Total	2,156	50	65.5	0.9	11.2	0.7	B

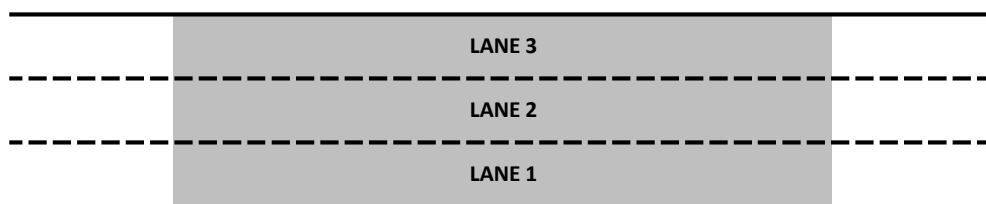
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,140	2,156	50	100.7%	2,537
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 126 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	840	14	66.6	0.7	12.6	0.8	B
2	813	16	65.8	1.1	12.4	0.6	B
1	546	19	63.4	0.7	9.2	1.1	A
Area	1,359	35	64.8	0.9	10.8	0.8	A
Total	2,199	49	65.5	0.8	11.4	0.7	B

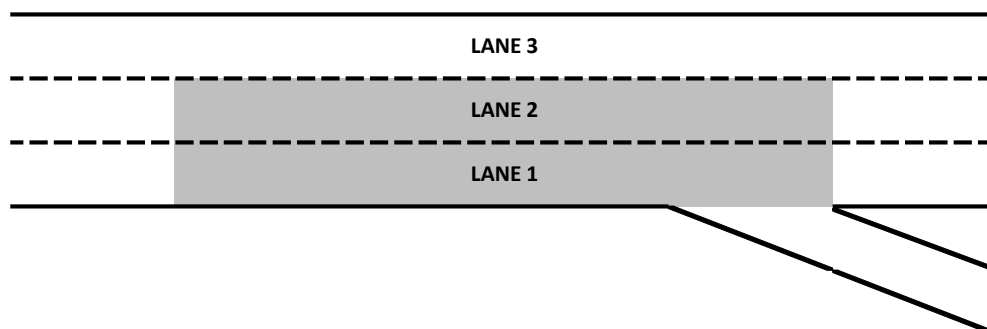
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	50	16
Total	50	16

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,190	2,199	49	100.4%	1,499
On-ramp					
Off-ramp	50	50	16	100.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 125 - NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	833	17	66.6	0.7	12.9	0.9	B
2	818	12	65.6	1.0	12.7	0.4	B
1	549	10	63.3	0.8	8.8	0.8	A
Area	2,200	39	65.4	0.8	11.4	0.6	B
Total	2,200	39	65.4	0.8	11.4	0.6	B

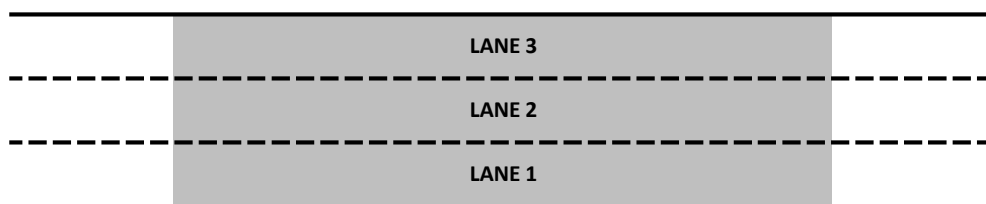
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,190	2,200	39	100.4%	6,786
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 124 - NB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	800	13	66.8	0.5	12.8	0.7	B
3	750	18	65.4	1.1	12.6	0.5	B
2	451	13	62.0	0.7	8.8	0.7	A
1	199	23	22.5	0.8	0.4	0.1	A
Area	1,399	54	63.8	0.9	8.9	0.5	A
Total	2,199	67	65.0	0.8	10.0	0.5	A

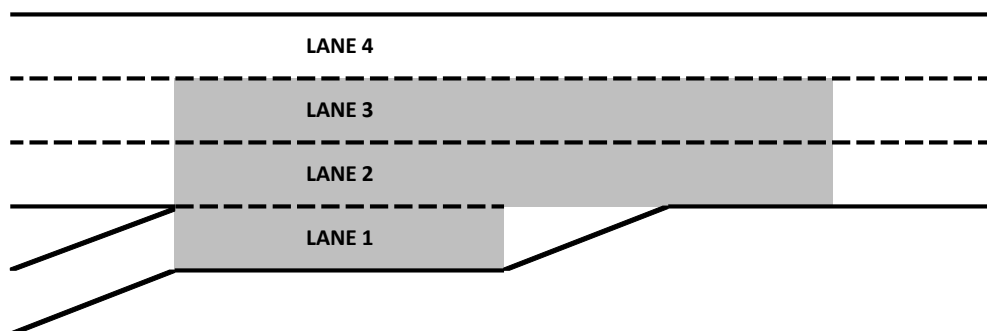
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	199	23
Total	199	23

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,990	2,000	44	100.5%	1,498
On-ramp	200	199	23	99.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 123 - NB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	806	16	66.7	0.6	12.3	0.8	B
2	748	16	65.7	1.1	11.5	0.6	B
1	446	12	62.8	1.2	7.2	0.7	A
Area	2,001	45	65.4	0.9	10.3	0.6	A
Total	2,001	45	65.4	0.9	10.3	0.6	A

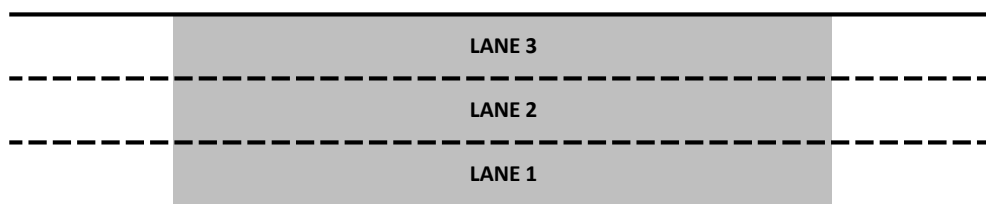
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,990	2,001	45	100.5%	2,725
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 122 - NB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	818	16	67.3	0.4	11.9	0.6	B
2	1,071	13	66.0	0.5	11.5	0.8	B
1	766	11	63.8	0.6	16.3	0.4	B
Area	1,837	24	64.8	0.2	13.9	0.3	B
Total	2,655	40	65.5	0.2	13.3	0.4	B

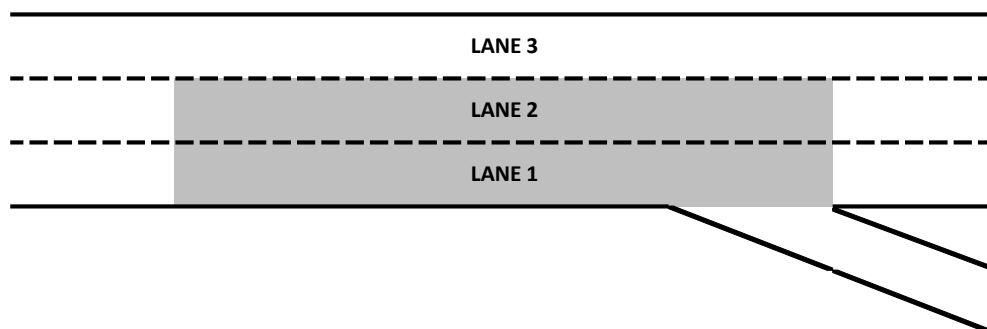
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	653	46
Total	653	46

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,660	2,655	40	99.8%	1,498
On-ramp					
Off-ramp	670	653	46	97.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 121 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,010	15	67.1	0.5	14.2	0.9	B
2	983	17	66.4	0.6	15.3	0.9	B
1	662	13	65.0	1.3	10.8	0.5	A
Area	2,654	45	66.3	0.7	13.4	0.6	B
Total	2,654	45	66.3	0.7	13.4	0.6	B

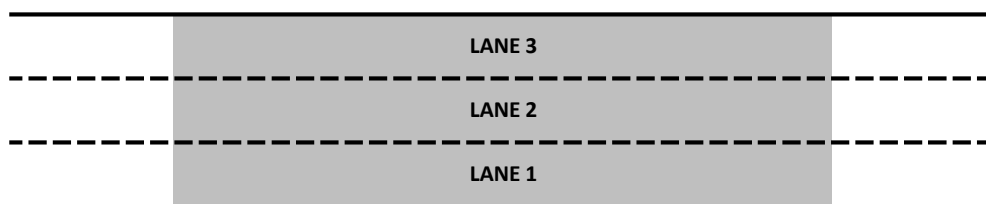
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,660	2,654	45	99.8%	5,648
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 160 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,061	19	45.5	0.2	9.1	0.4	A
4	981	20	45.6	0.2	9.2	0.3	A
3	689	17	66.9	0.5	15.8	0.8	B
2	809	51	65.7	0.7	14.8	0.7	B
1	821	36	63.0	0.4	10.3	0.9	A
Area	4,361	143	66.4	0.4	13.7	0.4	B
Total	4,361	143	66.4	0.4	13.7	0.4	B

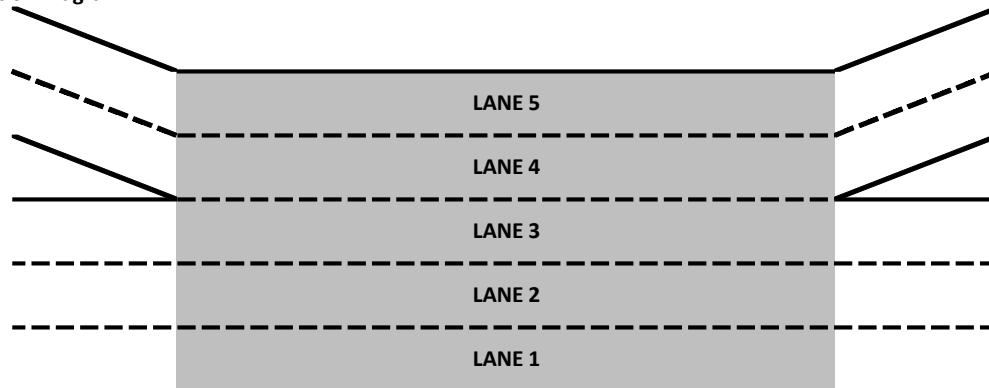
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	809	51
1	821	36
Total	1,631	79

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	832	52
1	881	39
Total	1,712	66

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,730	2,730	63	100.0%	2,991
On-ramp	1,580	1,631	79	103.2%	
Off-ramp	1,650	1,712	66	103.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 159 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,016	20	66.9	0.5	15.3	0.9	B
2	1,020	21	66.1	0.5	15.3	1.3	B
1	692	18	64.7	1.5	11.3	0.4	B
Area	2,729	58	66.0	0.7	14.0	0.7	B
Total	2,729	58	66.0	0.7	14.0	0.7	B

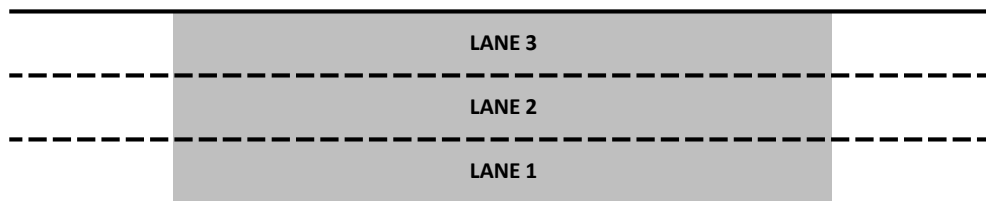
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,730	2,729	58	99.9%	697
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 120 - NB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	941	19	67.2	0.3	14.7	0.7	B
3	918	17	66.3	0.3	15.2	1.2	B
2	592	17	64.7	1.0	11.6	0.6	B
1	276	44	30.7	1.0	0.5	0.1	A
Area	1,786	79	65.5	0.5	10.8	0.7	A
Total	2,727	97	66.1	0.4	11.9	0.6	B

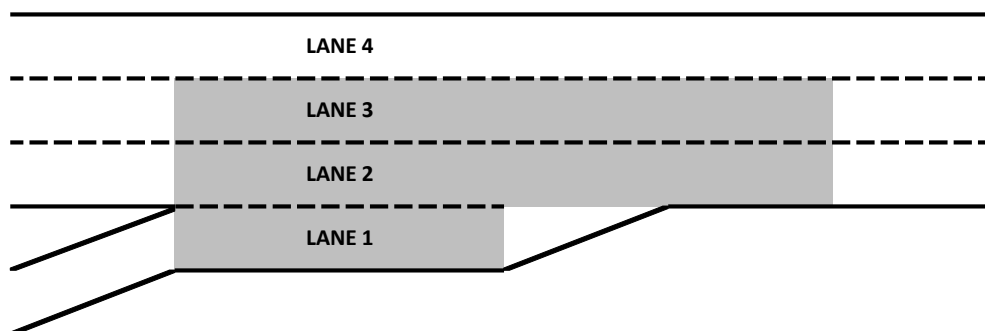
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	276	44
Total	276	44

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,470	2,451	53	99.2%	1,499
On-ramp	260	276	44	106.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 119 - NB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	958	17	66.9	0.4	14.0	0.8	B
2	906	13	66.4	0.5	14.0	0.5	B
1	583	22	64.8	0.4	9.2	0.6	A
Area	2,447	52	66.2	0.2	12.4	0.6	B
Total	2,447	52	66.2	0.2	12.4	0.6	B

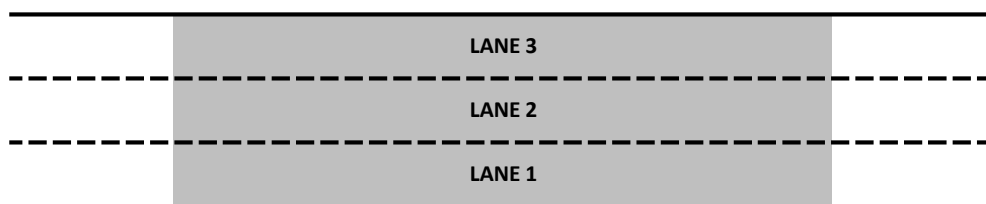
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,470	2,447	52	99.1%	2,922
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 118 - NB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	971	20	66.7	0.6	14.2	0.6	B
2	1,091	20	66.0	0.5	14.4	0.6	B
1	763	15	63.5	1.2	14.8	1.0	B
Area	1,853	36	64.8	0.7	14.6	0.7	B
Total	2,824	55	65.4	0.6	14.5	0.7	B

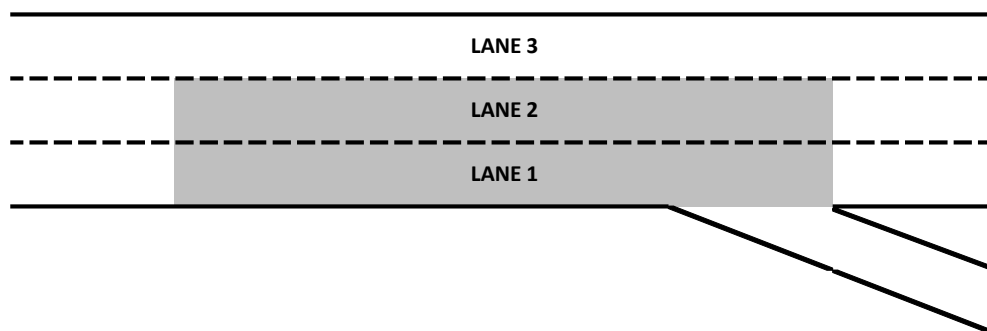
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	384	30
Total	384	30

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,890	2,824	55	97.7%	1,499
On-ramp					
Off-ramp	420	384	30	91.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 117 - NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,056	21	67.0	0.5	15.6	0.7	B
2	1,066	21	66.3	0.3	16.9	0.7	B
1	712	13	63.9	0.4	11.6	0.7	B
Area	2,834	55	65.9	0.3	14.7	0.6	B
Total	2,834	55	65.9	0.3	14.7	0.6	B

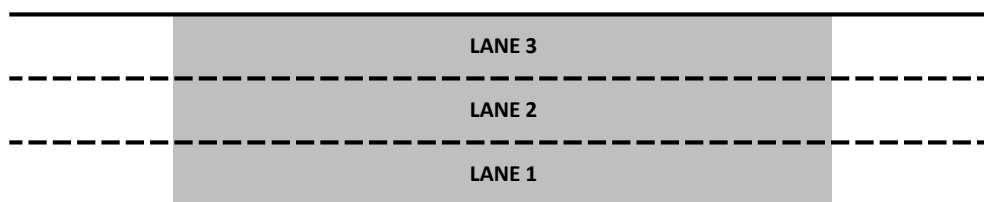
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,890	2,834	55	98.1%	10,492
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 158 - NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,239	33	46.4	0.2	6.8	0.6	A
4	1,029	15	47.3	0.1	7.6	0.7	A
3	824	17	67.0	0.4	16.4	0.5	B
2	650	60	66.8	0.4	16.6	0.7	B
1	697	57	64.2	0.6	12.6	1.0	B
Area	4,439	183	66.9	0.3	13.7	0.6	B
Total	4,439	183	66.9	0.3	13.7	0.6	B

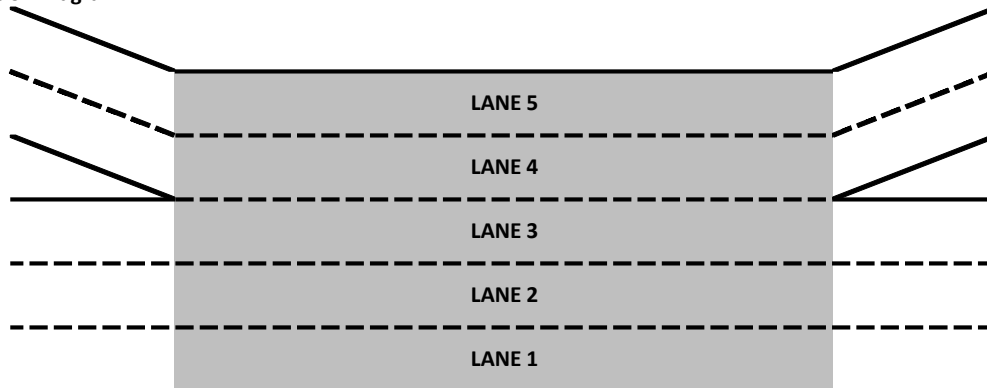
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	650	60
1	697	57
Total	1,347	112

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	734	57
1	875	65
Total	1,610	114

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,150	3,092	71	98.2%	3,029
On-ramp	1,320	1,347	112	102.0%	
Off-ramp	1,580	1,610	114	101.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 116 - NB I-15: Lake St On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	856	26	67.6	0.3	15.8	0.7	B
3	854	13	66.7	0.2	16.5	0.8	B
2	546	17	63.9	0.4	13.2	0.6	B
1	832	53	33.0	0.1	2.6	0.2	A
Area	2,232	83	64.9	0.3	12.6	0.5	B
Total	3,089	109	65.8	0.3	13.5	0.5	B

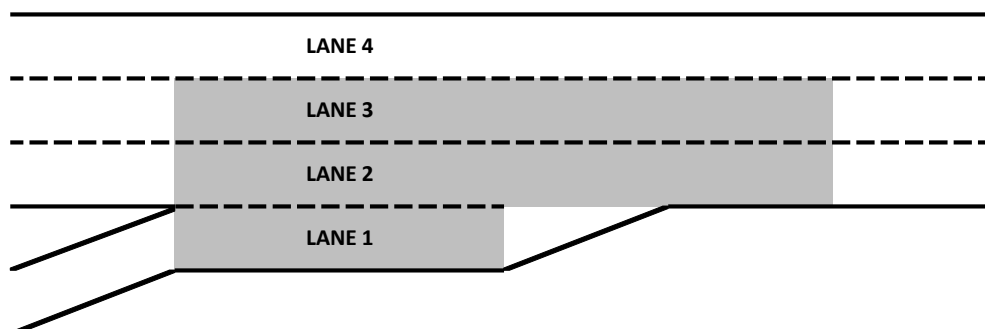
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	832	53
Total	832	53

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,310	2,256	56	97.7%	1,499
On-ramp	840	832	53	99.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 115 - NB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	848	25	67.7	0.4	12.8	0.5	B
2	861	17	67.3	0.4	13.0	0.4	B
1	547	20	65.0	0.8	8.4	0.5	A
Area	2,256	62	66.9	0.4	11.4	0.4	B
Total	2,256	62	66.9	0.4	11.4	0.4	B

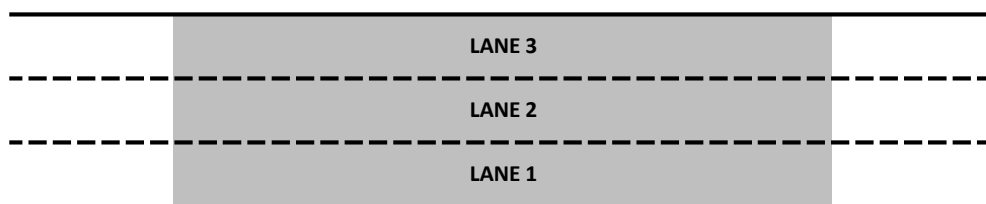
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,310	2,256	62	97.7%	3,216
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 114 - NB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	854	26	67.8	0.3	12.9	0.8	B
2	981	18	66.9	0.3	13.1	0.4	B
1	668	16	64.7	0.7	12.3	0.8	B
Area	1,649	34	65.8	0.4	12.7	0.4	B
Total	2,502	60	66.5	0.3	12.7	0.3	B

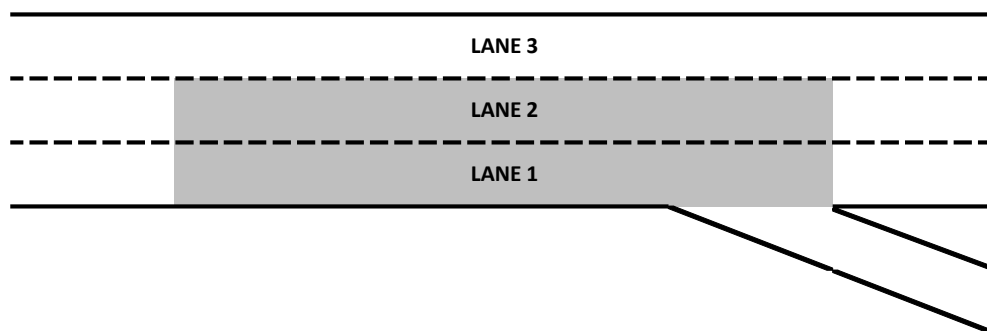
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	247	30
Total	247	30

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,560	2,502	60	97.8%	1,498
On-ramp					
Off-ramp	250	247	30	98.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 113 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	879	29	67.4	0.2	13.2	0.4	B
2	955	13	67.2	0.4	14.9	0.4	B
1	666	15	65.3	1.0	10.5	0.6	A
Area	2,500	57	66.8	0.4	12.8	0.4	B
Total	2,500	57	66.8	0.4	12.8	0.4	B

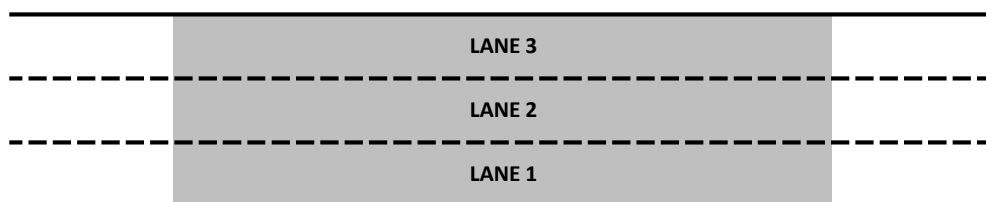
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,560	2,500	57	97.7%	6,270
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 157 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp (EL Ingress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	755	15	53.5	0.2	3.4	0.3	A
3	951	16	67.2	0.2	13.9	0.5	B
2	1,177	31	67.4	0.5	14.9	0.6	B
1			65.5	0.7	11.5	0.7	B
Area	2,883	62	67.0	0.4	11.6	0.4	B
Total	2,883	62	67.0	0.4	11.6	0.4	B

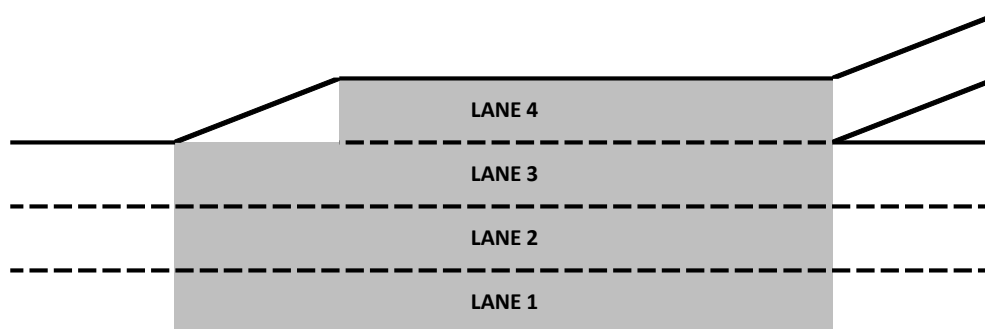
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	380	40
Total	380	40

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,930	2,883	62	98.4%	1,501
On-ramp					
Off-ramp	370	380	40	102.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 156 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	753	13	65.9	0.4	18.8	0.6	C
2	952	18	66.2	0.8	13.9	0.7	B
1	1,180	29	65.0	0.8	11.6	0.5	B
Area	2,885	60	65.8	0.4	14.7	0.2	B
Total	2,885	60	65.8	0.4	14.7	0.2	B

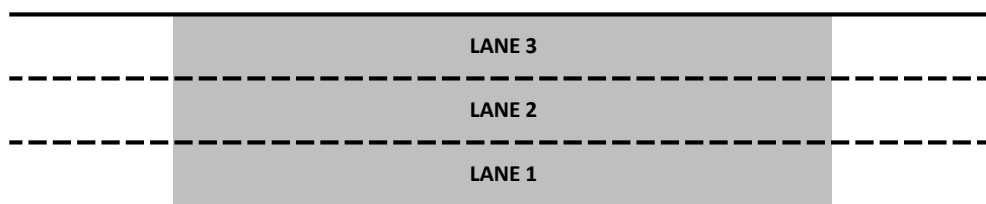
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,930	2,885	60	98.5%	703
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 112 - NB I-15: Nichols Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	956	27	67.5	0.2	15.9	1.0	B
3	1,006	18	67.4	0.3	15.2	0.1	B
2	614	11	65.6	0.5	11.4	0.6	B
1	306	52	38.6	0.5	1.1	0.1	A
Area	1,926	81	66.7	0.2	10.7	0.3	A
Total	2,882	108	67.0	0.1	12.2	0.4	B

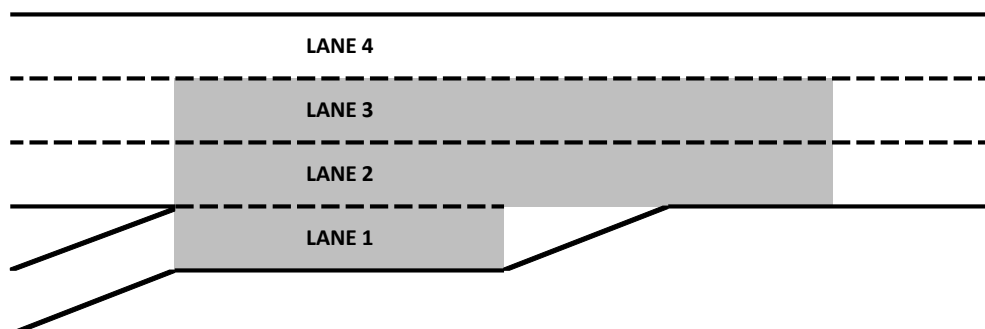
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	306	52
Total	306	52

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,600	2,576	56	99.1%	1,499
On-ramp	330	306	52	92.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 111 - NB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	909	23	67.5	0.3	13.9	0.9	B
2	946	17	67.5	0.3	14.5	0.4	B
1	716	10	65.8	0.4	10.5	0.3	A
Area	2,572	50	67.1	0.2	13.0	0.3	B
Total	2,572	50	67.1	0.2	13.0	0.3	B

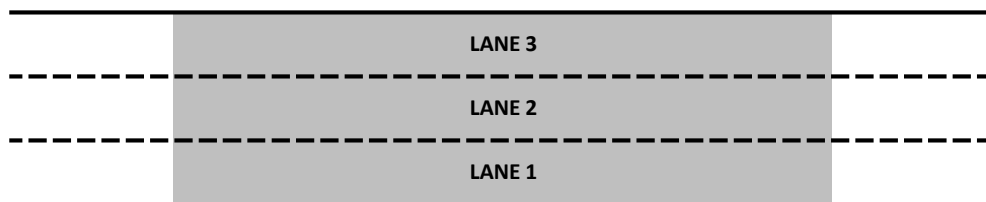
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,600	2,572	50	98.9%	3,521
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 110 - NB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	931	22	67.2	0.3	12.8	1.2	B
2	1,058	19	66.5	0.4	15.2	1.2	B
1	952	9	65.0	0.8	16.7	0.6	B
Area	2,010	28	65.7	0.6	15.9	0.6	B
Total	2,941	50	66.2	0.4	14.9	0.8	B

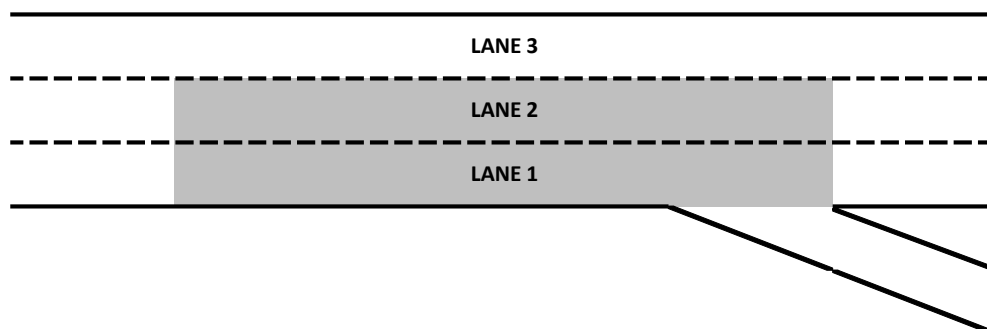
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	375	25
Total	375	25

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,960	2,941	50	99.4%	1,488
On-ramp					
Off-ramp	360	375	25	104.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 109 - NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	771	17	67.3	0.4	12.3	1.0	B
3	854	24	66.8	0.4	16.1	1.2	B
2	647	13	64.2	0.8	15.2	0.5	B
1	673	42	29.9	0.5	1.2	0.1	A
Area	2,173	78	65.1	0.5	12.8	0.5	B
Total	2,945	95	65.7	0.3	12.6	0.6	B

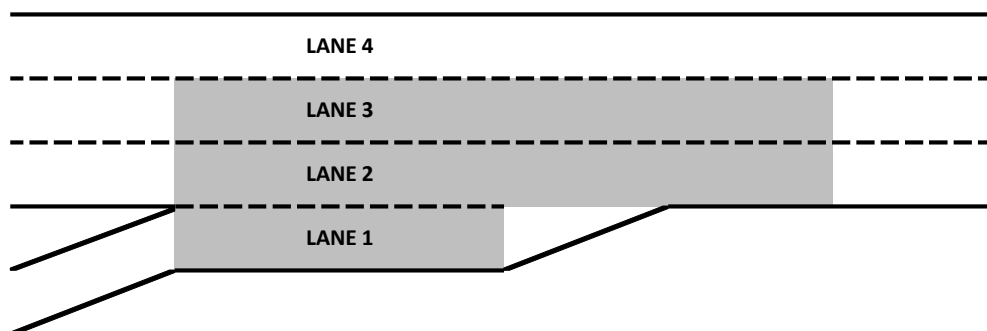
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	673	42
Total	673	42

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,270	2,272	53	100.1%	1,486
On-ramp	690	673	42	97.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 108 - NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	750	20	67.6	0.3	12.2	0.6	B
2	858	23	67.2	0.3	12.4	0.3	B
1	665	14	66.7	0.2	10.3	0.4	A
Area	2,272	57	67.2	0.2	11.6	0.3	B
Total	2,272	57	67.2	0.2	11.6	0.3	B

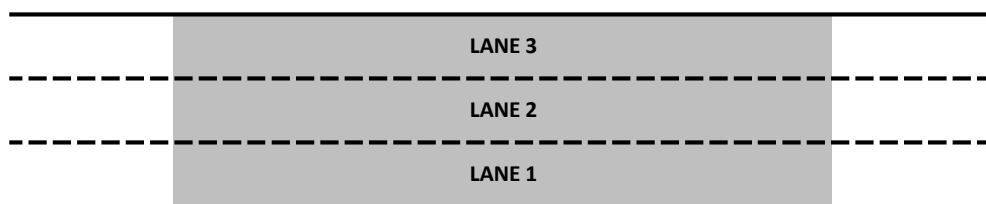
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,270	2,272	57	100.1%	1,949
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 155 - NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp (EL Ingress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,588	17	68.1	0.2	12.5	0.7	B
3	921	20	67.2	0.2	13.0	0.4	B
2	841	16	66.9	0.4	13.3	0.5	B
1			65.9	0.6	11.8	0.5	B
Area	3,350	53	67.0	0.3	12.6	0.2	B
Total	3,350	53	67.0	0.3	12.6	0.2	B

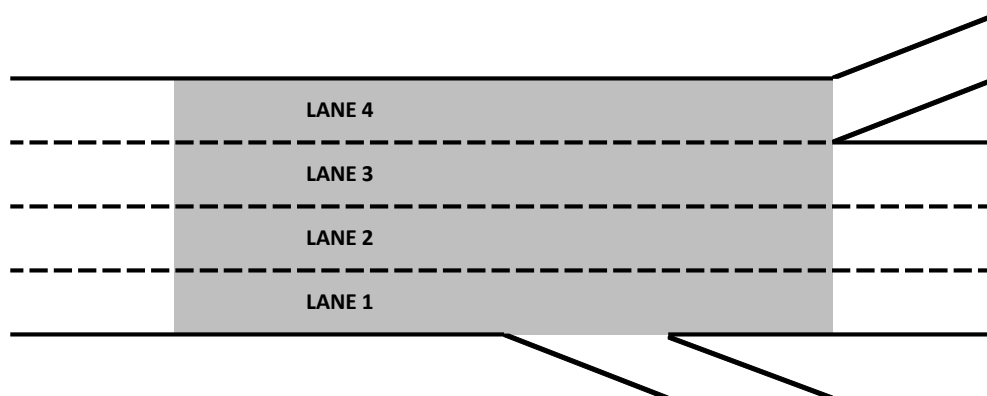
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	950	66
Total	950	66

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,350	3,350	53	100.0%	1,585
On-ramp					
Off-ramp	950	950	66	100.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 153 - NB I-15: Dexter Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4			67.8	0.8	10.4	0.5	A
3	1,588	17	66.6	0.4	13.0	0.7	B
2	921	20	66.7	0.6	14.0	0.5	B
1	841	16	65.7	0.4	12.5	0.8	B
Area	1,762	36	66.2	0.3	13.2	0.3	B
Total	3,350	53	66.7	0.1	12.5	0.3	B

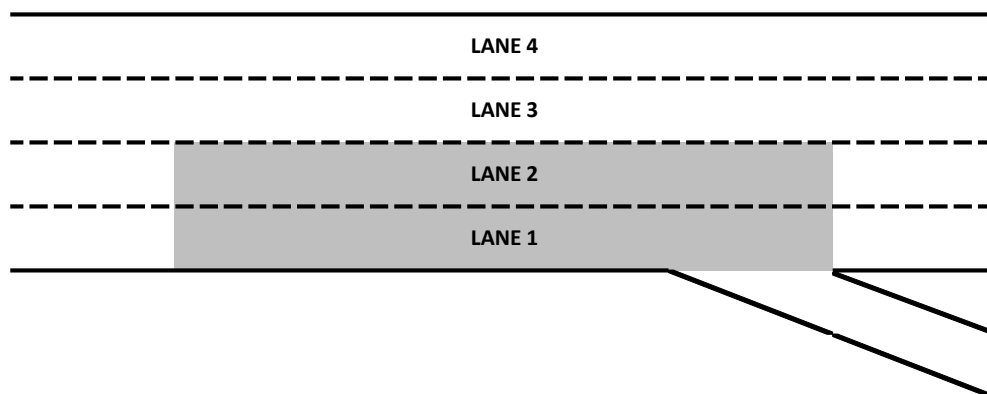
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	132	26
Total	132	26

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,350	3,350	53	100.0%	940
On-ramp					
Off-ramp	130	132	26	101.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 107 - NB I-15: WB Central Ave (SR-74) Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,295	19	65.9	0.2	25.5	0.8	C
3	1,334	16	66.7	0.4	14.6	0.3	B
2	1,018	16	66.0	0.6	10.6	0.4	A
1	399	14	65.7	0.5	12.5	0.4	B
Area	4,045	65	66.1	0.3	15.8	0.3	B
Total	4,045	65	66.1	0.3	15.8	0.3	B

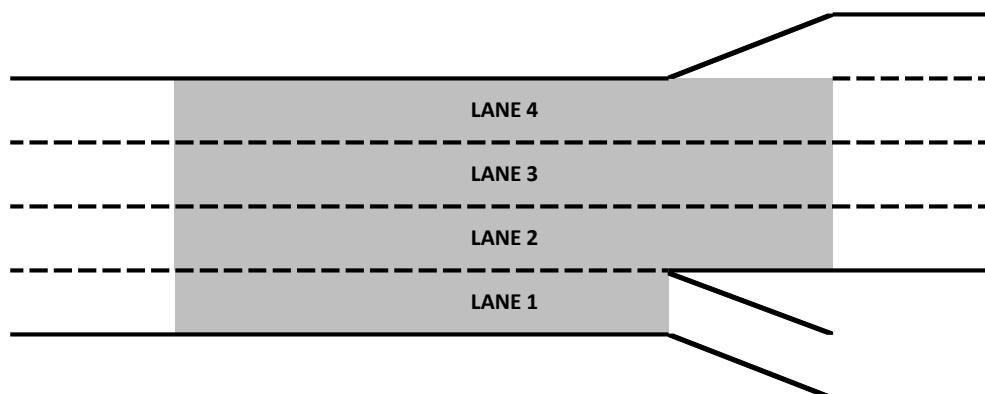
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	689	38
Total	689	38

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,060	4,045	65	99.6%	1,365
On-ramp					
Off-ramp	710	689	38	97.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 106 - NB I-15: EB Central Ave (SR-74) Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,320	18	66.9	0.5	20.7	0.7	C
3	1,530	16	66.5	0.2	21.3	0.2	C
2	1,581	12	65.5	0.4	19.0	0.6	C
1			53.7	0.3	7.6	0.8	A
Area	3,111	28	66.2	0.2	17.1	0.5	B
Total	4,431	47	66.4	0.3	18.0	0.4	C

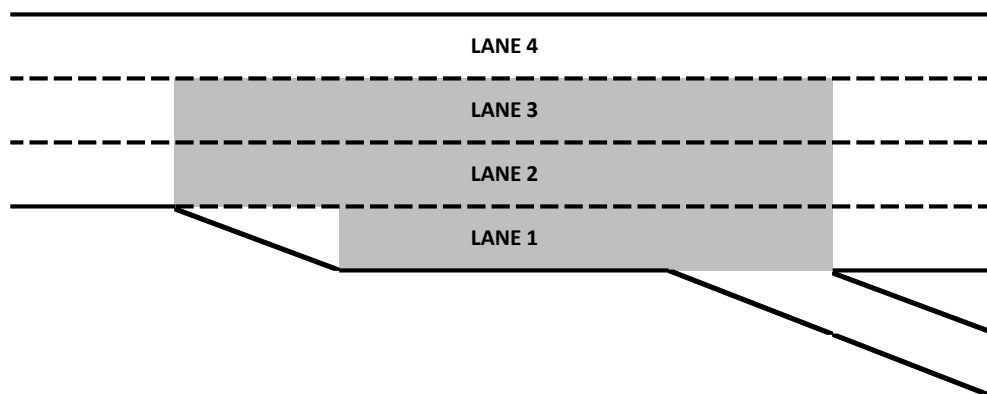
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	388	47
Total	388	47

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,450	4,431	47	99.6%	1,498
On-ramp					
Off-ramp	390	388	47	99.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 105 - NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,280	19	66.4	0.8	20.4	0.4	C
2	1,565	19	65.1	0.7	25.2	0.8	C
1	1,588	13	62.8	1.7	25.4	1.1	C
Area	4,433	51	64.7	1.0	23.6	0.3	C
Total	4,433	51	64.7	1.0			

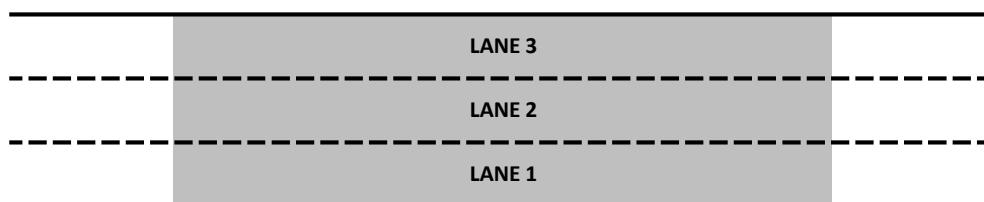
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,450	4,433	51	99.6%	1,245
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 104 - NB I-15: Main St On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,341	20	66.9	0.3	21.1	0.7	C
3	1,449	25	65.8	0.2	26.2	0.8	D
2	1,216	12	64.2	0.6	21.8	0.9	C
1	424	19	28.3	0.2	1.0	0.1	A
Area	3,090	56	64.9	0.3	19.3	0.5	C
Total	4,431	76	65.5	0.2	19.8	0.3	C

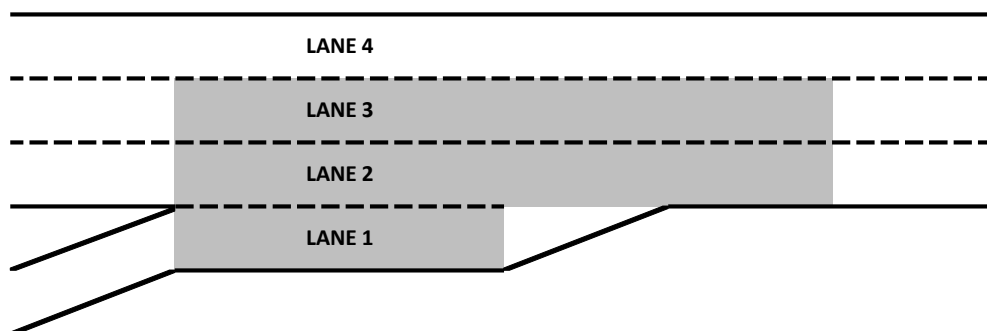
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	424	19
Total	424	19

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,040	4,007	57	99.2%	1,500
On-ramp	410	424	19	103.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 103 - NB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,437	16	66.0	0.4	22.7	0.2	C
2	1,415	21	65.9	0.5	22.3	0.7	C
1	1,152	18	65.3	0.7	18.2	0.6	C
Area	4,004	55	65.7	0.4	21.1	0.3	C
Total	4,004	55	65.7	0.4	21.1	0.3	C

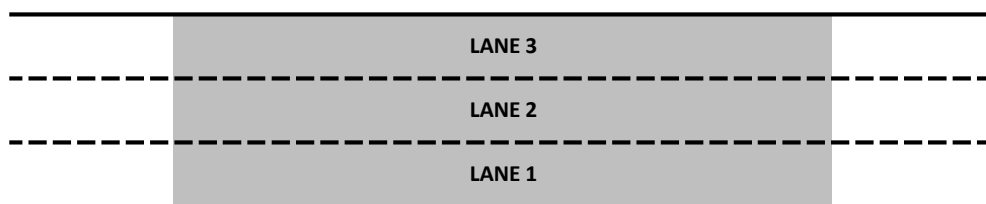
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,040	4,004	55	99.1%	2,897
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 102 - NB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,581	19	64.4	1.4	23.3	1.2	C
2	1,567	17	62.1	3.4	25.2	0.6	C
1	1,452	18	61.1	1.5	27.8	1.1	D
Area	3,019	35	61.6	2.3	26.5	0.7	D
Total	4,600	53	62.5	2.0	25.4	0.8	C

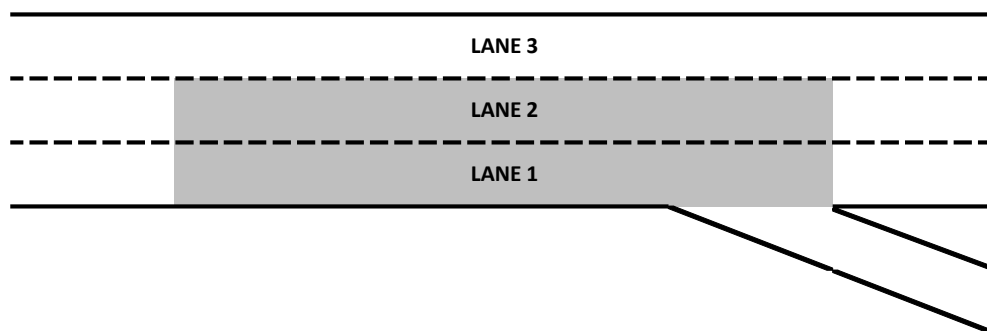
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	596	53
Total	596	53

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,630	4,600	53	99.4%	1,499
On-ramp					
Off-ramp	590	596	53	101.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 101 - NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,564	14	66.2	0.5	25.1	0.5	C
2	1,579	13	66.1	0.3	25.5	0.4	C
1	1,462	15	65.1	0.6	23.1	0.4	C
Area	4,606	42	65.8	0.4	24.6	0.3	C
Total	4,606	42	65.8	0.4	24.6	0.3	C

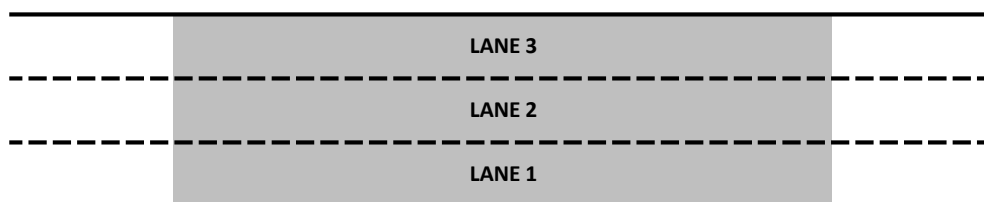
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,630	4,606	42	99.5%	3,906
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Opening Year Plus Project
AM Peak Hour

Location		Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vp/ln)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
1	SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	4,461	67	98.7%							65.1	0.6	17.9	0.5	B
2	SB I-15: Hidden Valley Pkwy On-ramp	Merge	4,461	58	98.7%	449	48	95.5%				64.3	0.7	17.9	0.3	B
3	SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp	Basic	4,909	74	98.4%							63.9	0.5	16.0	0.3	B
4	SB I-15: WB SR-91 Off-ramp	Basic	4,908	76	98.4%				762	41	100.3%	63.7	0.7	16.2	0.3	B
5	SB I-15: EB SR-91 Off-ramp	Diverge	4,140	62	97.9%				1,335	74	99.6%	57.3	4.7	28.2	2.6	D
6	SB I-15: EB SR-91 Off-ramp to On-ramp	Basic	2,803	61	97.0%							64.1	1.3	15.2	0.6	B
7	SB I-15: EB SR-91 On-ramp	Merge	2,800	61	96.9%	2,219	80	98.2%				61.9	1.0	19.1	0.5	C
8	SB I-15: WB SR-91 On-ramp to Magnolia Ave Off-ramp	Weave	5,021	90	97.5%	1,597	114	100.4%	1,374	71	97.4%	64.0	0.7	19.5	0.9	C
9	SB I-15: Magnolia Ave Off-ramp to On-ramp	Basic	5,237	96	98.3%							64.7	0.6	21.3	1.0	C
10	SB I-15: Magnolia Ave On-ramp	Merge	5,227	91	98.1%	623	47	99.0%				64.2	0.4	18.7	0.6	C
11	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)	Weave	5,850	113	98.2%	312	29	97.6%	335	34	95.8%	63.7	0.6	17.9	0.6	B
12	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp	Basic	5,829	92	98.3%							62.9	0.6	24.4	0.8	C
13	SB I-15: Ontario Ave Off-ramp	Diverge	5,831	89	98.3%				984	43	102.5%	61.1	1.0	26.2	0.5	D
14	SB I-15: Ontario Ave Off-ramp to On-ramp	Basic	4,842	78	97.4%							62.6	1.1	20.3	0.7	C
15	SB I-15: Ontario Ave On-ramp	Merge	4,843	74	97.4%	523	46	104.7%				63.9	0.5	13.1	0.5	B
16	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	Basic	5,359	90	98.0%				635	63	96.2%	62.0	0.8	22.4	0.7	C
17	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp (EL Access)	Weave	4,722	63	98.2%	335	33	95.7%	323	34	94.9%	62.2	0.6	17.5	0.4	B
19	SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp	Weave	4,729	70	98.1%	399	28	94.9%	868	66	99.8%	63.0	0.5	21.5	0.7	C
20	SB I-15: Cajalco Rd Off-ramp to On-ramp	Basic	4,252	68	97.3%							63.2	0.5	23.4	0.8	C
21	SB I-15: Cajalco Rd On-ramp to Weirick Road/Dos Lagos Dr Off-Ramp	Weave	4,249	60	97.2%	176	22	103.5%	571	33	96.7%	63.1	0.8	19.0	1.0	C
22	SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp (EL Access)	Weave	4,420	84	97.4%	320	30	94.1%	269	28	86.7%	63.4	0.6	14.4	0.7	B
24	SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	3,897	68	97.9%							63.8	0.6	21.4	0.5	C
25	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	3,895	71	97.9%	135	17	112.8%				64.0	0.9	16.4	1.3	B
26	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp	Basic	4,026	63	98.2%							63.3	0.4	22.5	0.7	C
27	SB I-15: Temescal Canyon Rd Off-ramp	Diverge	4,014	71	97.9%				467	39	97.4%	62.4	0.8	22.0	0.9	C
28	SB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	3,541	73	97.8%							64.4	0.3	19.6	0.8	C
29	SB I-15: Temescal Canyon Rd On-ramp	Merge	3,543	63	97.9%	170	32	100.1%				64.4	0.3	14.8	0.4	B
30	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	3,708	65	97.8%							62.8	0.8	21.2	0.9	C
52	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp (EL Access)	Weave	3,700	79	97.6%	265	25	85.5%	273	21	88.1%	63.4	0.9	15.2	0.8	B
53	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	3,684	67	97.2%							62.6	1.0	21.3	1.4	C
31	SB I-15: Indian Truck Trail Off-ramp	Diverge	3,680	67	97.1%				260	38	104.0%	61.0	3.2	21.1	2.1	C
32	SB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	3,416	73	96.5%							63.7	0.9	19.4	0.8	C
33	SB I-15: Indian Truck Trail On-ramp	Merge	3,416	82	96.5%	211	30	100.7%				64.1	0.8	15.1	0.5	B
34	SB I-15: Indian Truck Trail On-ramp to Lake St Off-ramp	Basic	3,619	71	96.5%							63.2	1.3	20.8	0.9	C
54	SB I-15: Indian Truck Trail On-ramp to Lake St Off-ramp (EL Access)	Weave	3,614	56	96.4%	270	27	87.0%	258	24	86.1%	63.6	1.0	14.9	0.7	B
35	SB I-15: Lake St Off-ramp	Diverge	3,630	55	96.5%				308	30	96.4%	62.7	1.1	20.3	1.2	C
36	SB I-15: Lake St Off-ramp to On-ramp	Basic	3,315	58	96.4%							63.7	0.9	19.3	0.8	C
37	SB I-15: Lake St On-ramp	Merge	3,307	53	96.1%	446	72	101.5%				63.8	0.6	15.8	0.5	B
38	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp	Basic	3,727	52	96.0%							62.9	0.7	21.5	0.4	C
55	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp (EL Egress)	Basic	3,715	56	95.7%	46	15	91.2%				64.9	0.3	15.7	0.4	B
56	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp	Basic	3,751	68	95.4%							65.0	0.4	15.6	0.4	B
39	SB I-15: Nichols Rd Off-ramp	Basic	3,750	70	95.4%				329	36	99.8%	63.3	1.2	16.3	0.6	B
40	SB I-15: Nichols Rd Off-ramp to On-ramp	Basic	3,407	73	94.6%							63.6	0.7	19.7	0.8	C
41	SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp	Weave	3,405	79	94.6%	472	51	102.7%	667	59	99.6%	64.3	0.5	16.4	0.8	B
57	SB I-15: Central Ave (SR-74) (EL Egress)	Basic	3,861	85	95.1%	205	19	82.2%				63.7	1.0	14.3	0.4	B
44	SB I-15: Central Ave (SR-74) Off-ramp to On-ramp	Basic	2,563	42	70.4%							62.8	0.7	14.7	0.4	B
45	SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp	Weave	3,392	69	93.2%	1,248	64	100.7%	169	24	99.3%	63.2	1.0	19.9	0.5	C
48	SB I-15: Main St Off-ramp to On-ramp	Basic	4,458	80	94.6%							63.2	0.8	25.1	0.9	C
49	SB I-15: Main St On-ramp	Merge	4,448	73	94.4%	503	58	102.7%				62.9	0.8	21.4	1.0	C
50	SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp	Basic	4,930	66	94.8%							61.7	1.0	28.2	1.1	D

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 1 - SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

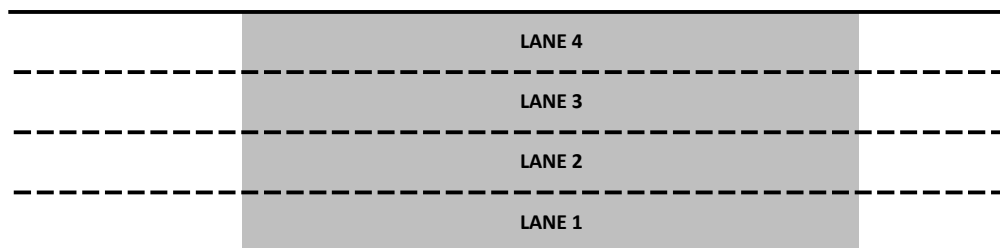
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,105	16	66.6	0.3	17.6	1.0	B
3	1,225	13	65.2	0.8	18.5	0.8	C
2	1,173	18	64.6	0.8	19.2	0.3	C
1	958	20	63.7	1.0	16.4	0.7	B
Area	4,461	67	65.1	0.6	17.9	0.5	B
Total	4,461	67	65.1	0.6	17.9	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,520	4,461	67	98.7%	1,784
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 2 - SB I-15: Hidden Valley Pkwy On-ramp

Segment Type - Merge

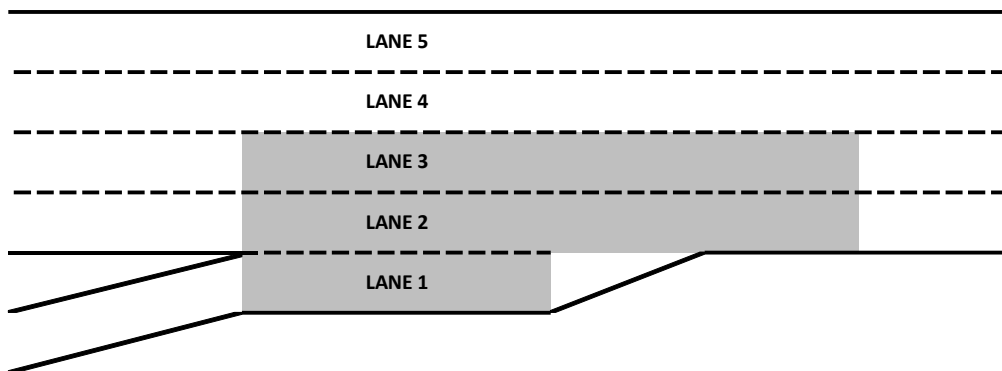
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,087	18	66.7	0.6	17.7	0.9	B
4	1,027	9	65.9	0.6	18.2	0.7	C
3	1,275	14	63.2	1.0	24.0	0.2	C
2	1,073	17	62.0	1.0	19.1	0.6	C
1	449	48	24.5	0.9	0.9	0.1	A
Area	2,796	79	62.5	1.0	17.9	0.3	B
Total	4,910	106	64.3	0.7	17.9	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	449	48	1		
Total	449	48	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,520	4,461	58	98.7%	1,702
On-ramp	470	449	48	95.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 3 - SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp

Segment Type - Basic

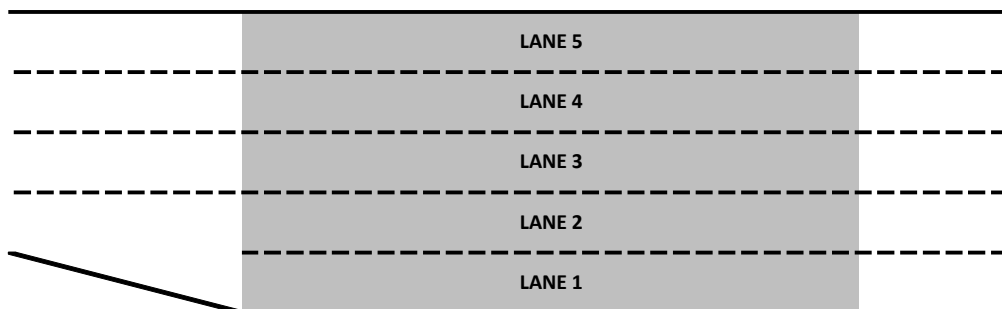
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,267	19	65.9	0.7	20.7	1.2	C
4	1,450	20	64.7	0.5	23.5	0.4	C
3	1,390	14	60.9	0.9	24.0	0.6	C
2	656	12	63.7	0.9	9.8	0.3	A
1	147	10	66.6	0.8	2.4	0.2	A
Area	4,909	74	63.9	0.5	16.0	0.3	B
Total	4,909	74	63.9	0.5	16.0	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,990	4,909	74	98.4%	1,019
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 4 - SB I-15: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,371	22	66.5	0.6	17.7	1.6	B
4	1,431	18	63.5	0.9	27.1	0.6	D
3	1,332	14	60.3	1.2	24.2	0.5	C
2	546	9	65.1	0.9	8.1	0.5	A
1	229	13	68.9	0.6	4.0	0.3	A
Area	4,908	76	63.7	0.7	16.2	0.3	B
Total	4,908	76	63.7	0.7	16.2	0.3	B

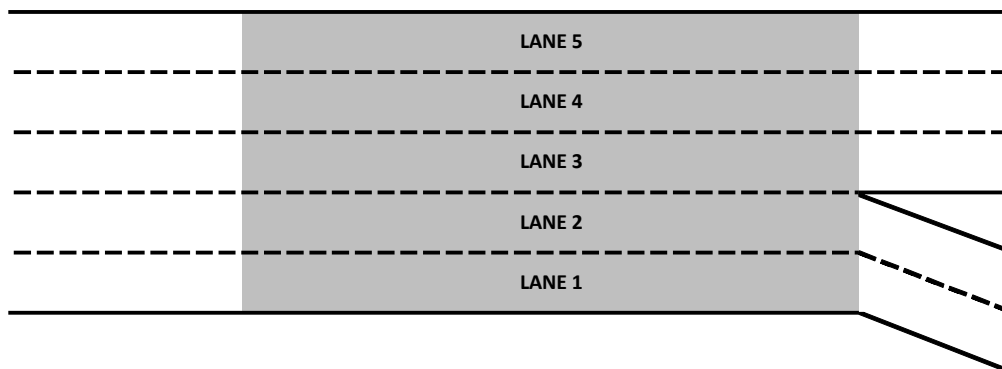
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	483	26
1	280	40
Total	762	41

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,990	4,908	76	98.4%	1,499
On-ramp					
Off-ramp	760	762	41	100.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 5 - SB I-15: EB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	LOS
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,158	28	63.4	4.3	18.5	2.8	C
2	1,648	17	57.6	6.5	22.4	2.3	C
1	1,334	16	53.1	4.2	34.0	3.0	D
Area	2,982	33	55.0	5.1	28.2	2.6	D
Total	4,140	62	57.3	4.7	24.8	2.6	C

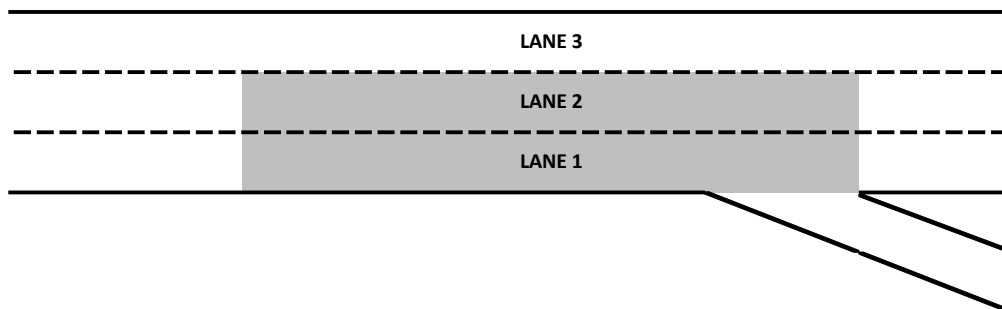
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,335	74
Total	1,335	74

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,230	4,140	62	97.9%	1,545
On-ramp					
Off-ramp	1,340	1,335	74	99.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 6 - SB I-15: EB SR-91 Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,025	25	66.6	1.2	16.2	1.3	B
2	802	17	63.9	1.8	15.1	0.7	B
1	976	19	61.4	1.2	14.4	0.9	B
Area	2,803	61	64.1	1.3	15.2	0.6	B
Total	2,803	61	64.1	1.3	15.2	0.6	B

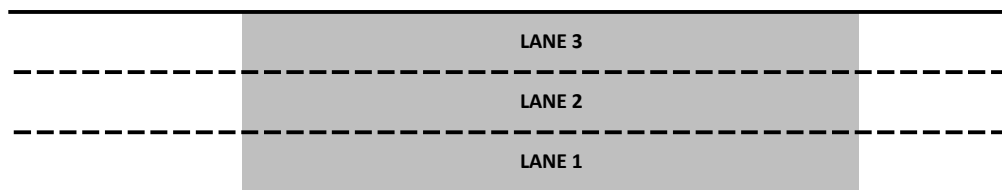
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,890	2,803	61	97.0%	1,549
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 7 - SB I-15: EB SR-91 On-ramp

Segment Type - Merge

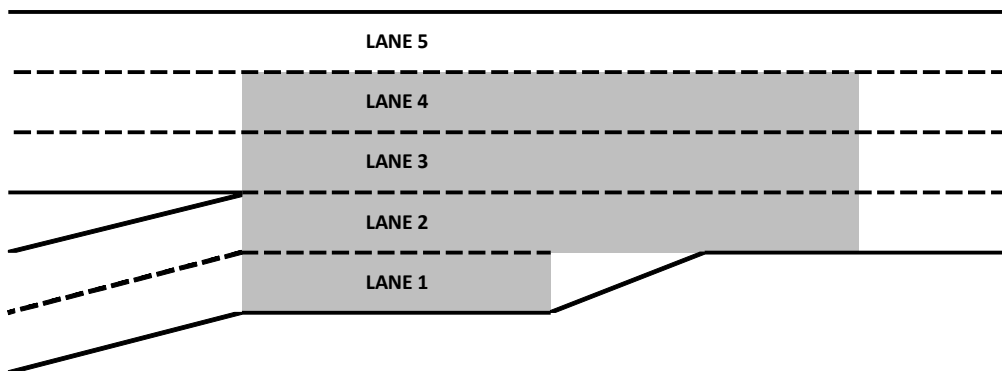
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	986	22	67.6	0.6	15.9	1.4	B
4	802	15	65.6	1.2	15.7	0.7	B
3	1,012	20	61.4	1.2	20.6	0.9	C
2	1,049	48	57.2	1.5	30.2	0.9	D
1	1,170	36	33.4	0.8	2.7	0.2	A
Area	4,033	119	60.5	1.2	19.1	0.5	C
Total	5,019	142	61.9	1.0	18.3	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2	1,049	48	2		
1	1,170	36	1		
Total	2,219	80	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,890	2,800	61	96.9%	1,370
On-ramp	2,260	2,219	80	98.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 8 - SB I-15: WB SR-91 On-ramp to Magnolia Ave Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6			67.3	0.6	19.0	1.9	C
5	1,101	29	65.8	1.0	20.6	0.8	C
4	1,125	14	64.2	0.8	22.0	1.7	C
3	1,052	25	60.3	1.2	25.6	0.7	C
2	1,744	22	49.7	1.1	13.0	0.6	B
1	1,597	114	32.7	0.3	3.6	0.4	A
Area	6,618	203	64.0	0.7	19.5	0.9	C
Total	6,618	203	64.0	0.7	19.5	0.9	C

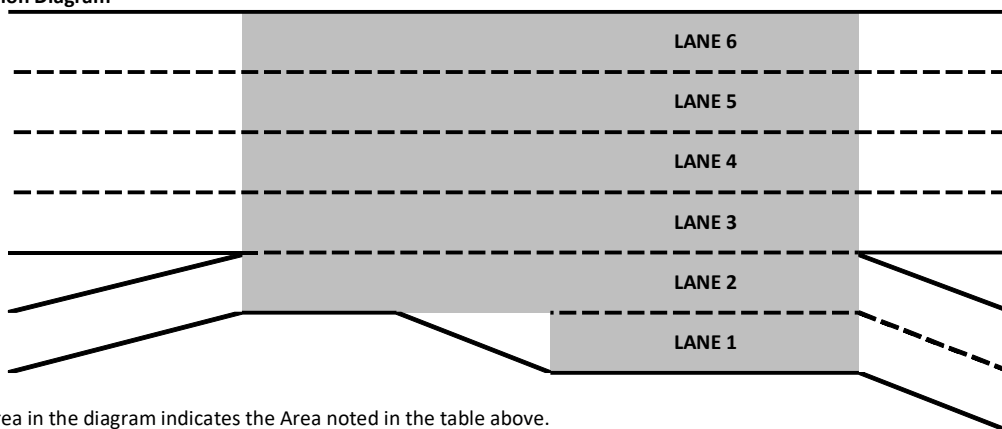
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,597	114
Total	1,597	114

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	784	50
1	590	61
Total	1,374	71

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,150	5,021	90	97.5%	2,539
On-ramp	1,590	1,597	114	100.4%	
Off-ramp	1,410	1,374	71	97.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 9 - SB I-15: Magnolia Ave Off-ramp to On-ramp

Segment Type - Basic

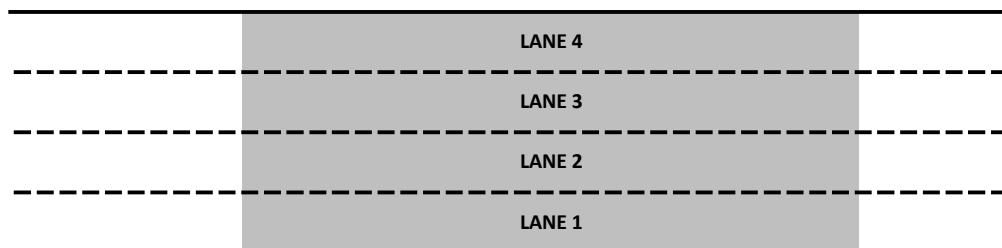
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,378	31	67.0	0.6	21.7	1.5	C
3	1,420	28	65.7	1.0	22.7	1.2	C
2	1,327	20	64.0	0.6	21.7	1.1	C
1	1,112	18	61.5	1.0	19.0	1.0	C
Area	5,237	96	64.7	0.6	21.3	1.0	C
Total	5,237	96	64.7	0.6	21.3	1.0	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,330	5,237	96	98.3%	2,362
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 10 - SB I-15: Magnolia Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7			35.3	0.3	0.7	0.1	A
6			35.1	0.2	1.2	0.1	A
5	1,431	32	67.4	0.6	22.6	1.5	C
4	1,461	21	65.6	0.8	24.9	1.2	C
3	1,297	21	63.1	0.5	25.3	0.8	C
2	1,038	17	60.0	0.6	21.9	1.1	C
1	623	47	25.0	0.9	1.5	0.2	A
Area	2,958	85	61.5	0.4	18.7	0.6	C
Total	5,850	139	64.2	0.4	17.5	0.6	B

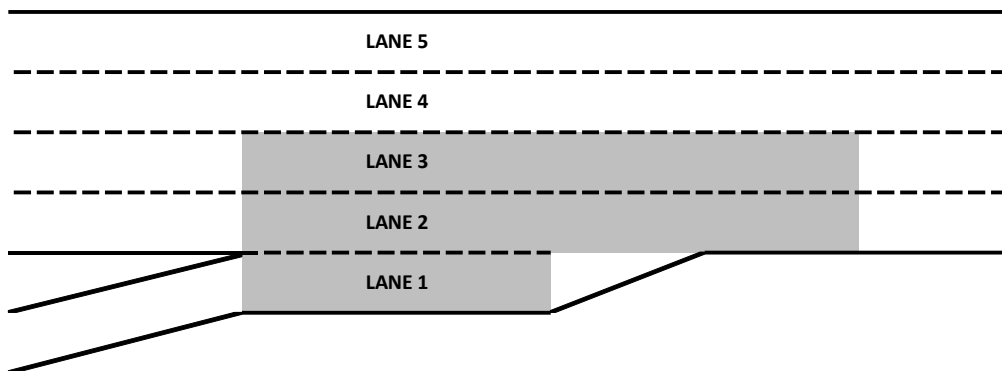
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	623	47
Total	623	47

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,330	5,227	91	98.1%	1,504
On-ramp	630	623	47	99.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 11 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7	1,441	32	49.3	0.5	1.1	0.1	A
6	1,477	21	48.8	0.3	1.9	0.2	A
5	1,468	23	66.7	0.9	22.9	1.7	C
4	1,330	19	64.9	0.6	25.2	1.2	C
3	135	12	62.2	0.6	26.4	0.6	D
2	102	15	59.8	0.7	22.8	0.9	C
1	210	20	7.2	0.4	0.1	0.0	A
Area	6,163	142	63.7	0.6	17.9	0.6	B
Total	6,163	142	63.7	0.6	17.9	0.6	B

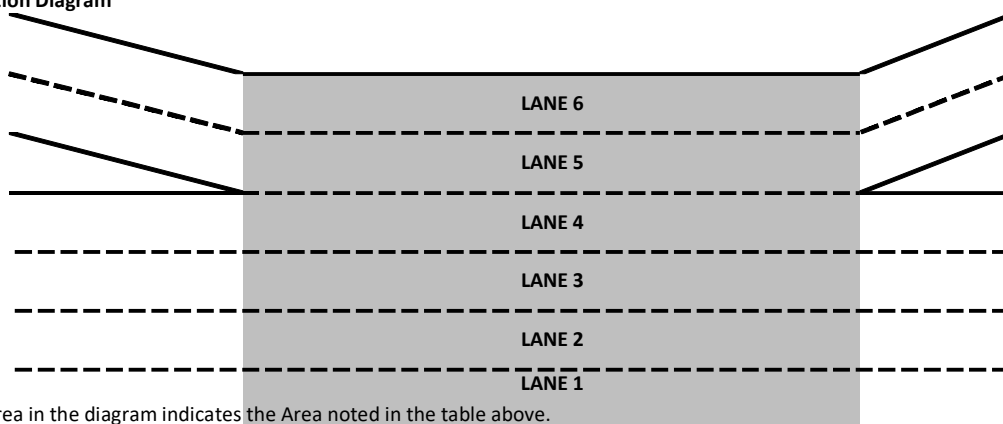
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	102	15
1	210	20
Total	312	29

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	106	12
1	229	25
Total	335	34

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,960	5,850	113	98.2%	3,337
On-ramp	320	312	29	97.6%	
Off-ramp	350	335	34	95.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 12 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp

Segment Type - Basic

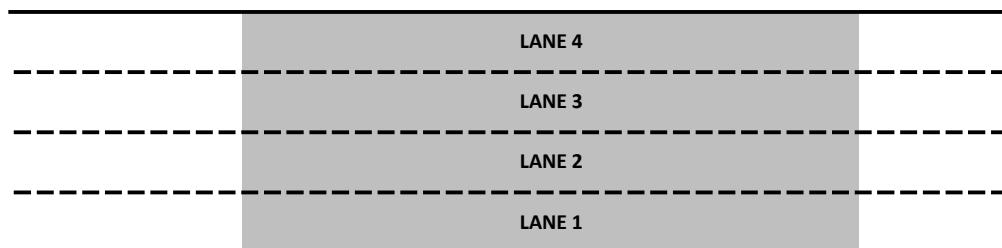
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,441	28	66.7	0.7	22.9	1.6	C
3	1,415	27	65.2	0.6	22.8	1.7	C
2	1,614	14	60.8	0.9	27.4	0.4	D
1	1,360	23	58.8	1.1	24.7	0.8	C
Area	5,829	92	62.9	0.6	24.4	0.8	C
Total	5,829	92	62.9	0.6	24.4	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,930	5,829	92	98.3%	394
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 13 - SB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,455	29	65.8	1.0	24.0	1.4	C
3	1,425	24	64.4	0.9	23.7	1.2	C
2	1,605	16	59.3	1.3	21.6	0.4	C
1	1,346	20	55.1	1.4	30.9	0.9	D
Area	2,951	36	56.9	1.3	26.2	0.5	D
Total	5,831	89	61.1	1.0	24.9	0.7	C

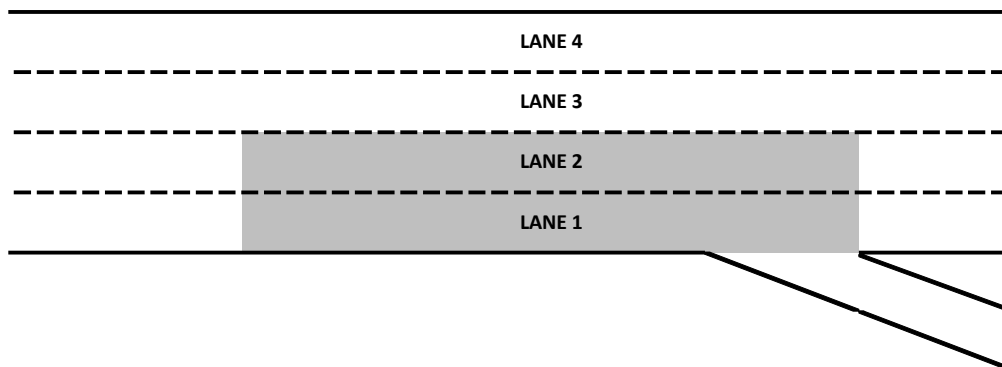
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	984	43
Total	984	43

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,930	5,831	89	98.3%	1,504
On-ramp					
Off-ramp	960	984	43	102.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 14 - SB I-15: Ontario Ave Off-ramp to On-ramp

Segment Type - Basic

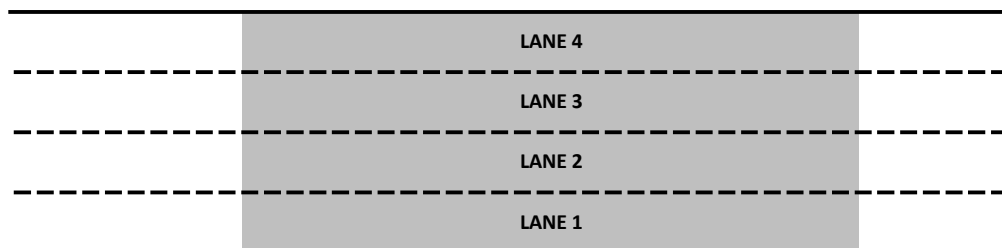
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,576	28	65.6	1.1	25.6	1.3	C
3	1,720	23	63.0	1.1	27.6	0.7	D
2	1,407	19	58.8	1.1	24.6	0.9	C
1	140	9	61.9	0.6	3.6	0.5	A
Area	4,842	78	62.6	1.1	20.3	0.7	C
Total	4,842	78	62.6	1.1	20.3	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,970	4,842	78	97.4%	2,820
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 15 - SB I-15: Ontario Ave On-ramp

Segment Type - Merge

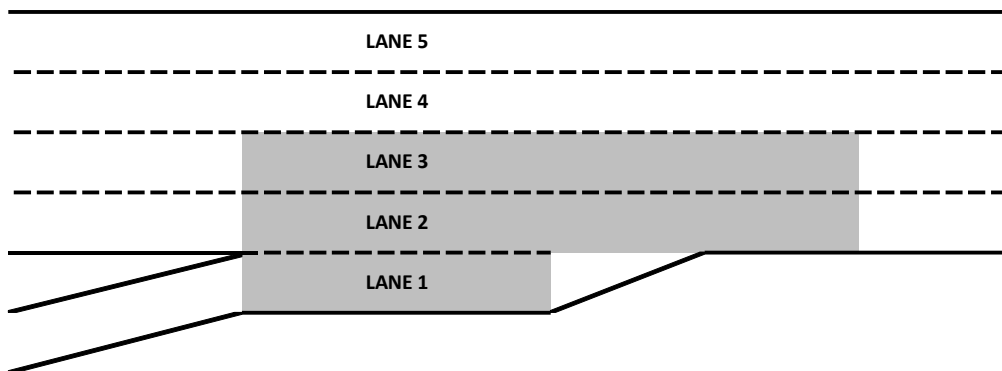
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	LOS
12							
11							
10							
9							
8							
7							
6							
5	1,671	28	67.1	0.7	25.8	1.4	C
4	1,563	20	64.3	0.8	27.3	0.7	D
3	1,356	16	59.7	0.5	24.5	0.8	C
2	253	10	64.3	0.7	9.0	0.5	A
1	523	46	35.5	0.3	0.8	0.1	A
Area	2,133	72	60.9	0.4	13.1	0.5	B
Total	5,366	120	63.9	0.5	18.9	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	523	46	1		
Total	523	46	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,970	4,843	74	97.4%	1,494
On-ramp	500	523	46	104.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 16 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,592	22	65.3	1.2	26.4	1.4	D
3	1,814	27	62.2	0.7	29.3	0.8	D
2	1,321	18	56.9	0.5	24.2	0.6	C
1	631	24	63.7	2.3	10.1	0.7	A
Area	5,359	90	62.0	0.8	22.4	0.7	C
Total	5,359	90	62.0	0.8	22.4	0.7	C

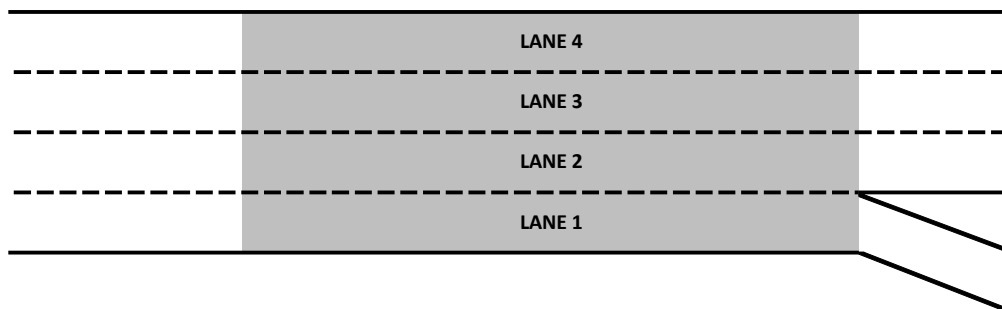
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	635	63
Total	635	63

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,470	5,359	90	98.0%	738
On-ramp					
Off-ramp	660	635	63	96.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 17 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,657	22	63.5	0.3	1.5	0.2	A
4	1,758	19	62.6	0.3	2.9	0.4	A
3	1,306	14	64.4	1.0	27.5	1.2	D
2	228	26	62.0	0.6	27.6	0.9	D
1	107	16	57.9	0.5	24.8	0.4	C
Area	5,057	96	62.2	0.6	17.5	0.4	B
Total	5,057	96	62.2	0.6	17.5	0.4	B

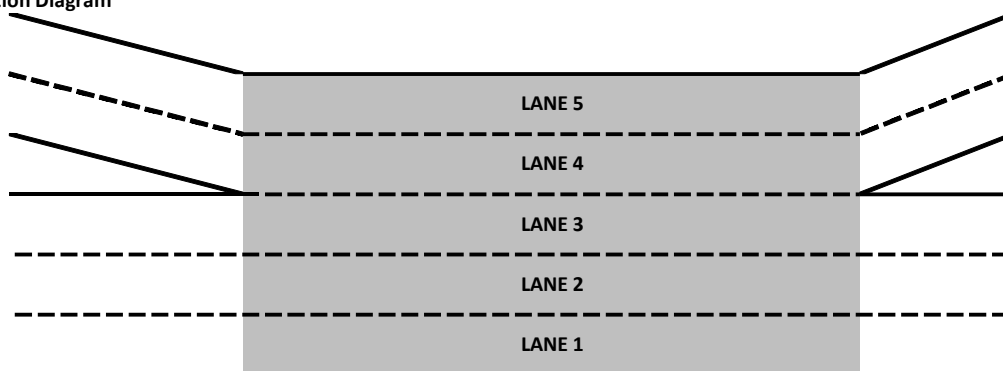
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	228	26
1	107	16
Total	335	33

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	113	16
1	210	25
Total	323	34

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,810	4,722	63	98.2%	2,219
On-ramp	350	335	33	95.7%	
Off-ramp	340	323	34	94.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 19 - SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,683	27	65.2	0.9	26.8	1.4	D
3	1,478	21	63.1	0.3	25.0	1.1	C
2	1,568	22	59.0	0.6	23.2	0.5	C
1	399	28	53.7	0.4	7.2	0.9	A
Area	5,128	98	63.0	0.5	21.5	0.7	C
Total	5,128	98	63.0	0.5	21.5	0.7	C

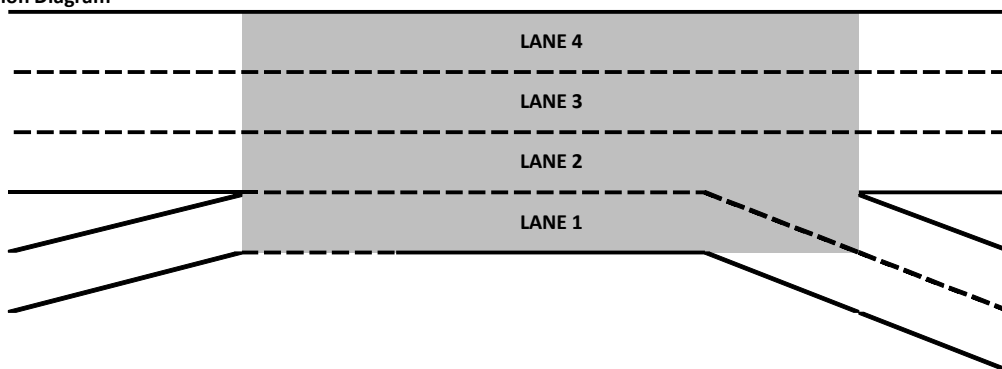
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	399	28
Total	399	28

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	219	23
1	649	60
Total	868	66

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,820	4,729	70	98.1%	2,775
On-ramp	420	399	28	94.9%	
Off-ramp	870	868	66	99.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 20 - SB I-15: Cajalco Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,707	32	65.4	0.8	26.7	1.7	D
2	1,470	14	63.3	0.4	24.4	0.9	C
1	1,075	22	59.7	0.6	19.4	0.5	C
Area	4,252	68	63.2	0.5	23.4	0.8	C
Total	4,252	68	63.2	0.5	23.4	0.8	C

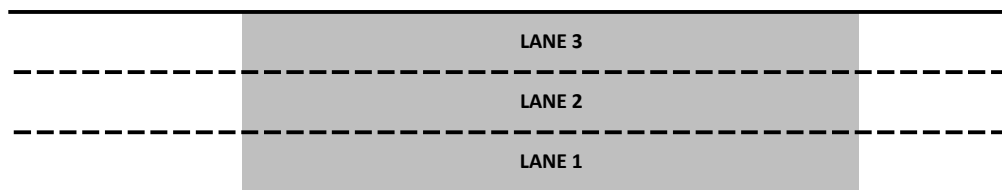
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,370	4,252	68	97.3%	1,294
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 21 - SB I-15: Cajalco Rd On-ramp to Weirick Road/Dos Lagos Dr Off-Ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,681	28	65.4	1.0	25.2	1.3	C
3	1,475	16	63.1	0.8	24.2	1.3	C
2	1,092	16	59.4	0.9	20.6	1.3	C
1	176	22	54.1	0.6	2.6	0.2	A
Area	4,425	82	63.1	0.8	19.0	1.0	C
Total	4,425	82	63.1	0.8	19.0	1.0	C

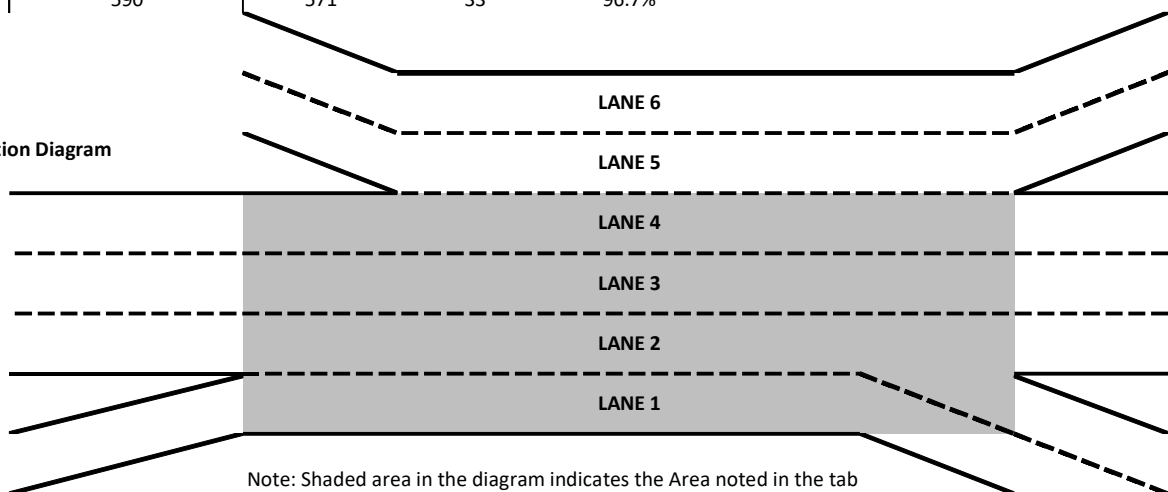
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	176	22
Total	176	22

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	195	17
1	376	29
Total	571	33

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,370	4,249	60	97.2%	5,304
On-ramp	170	176	22	103.5%	
Off-ramp	590	571	33	96.7%	

Lane Configuration Diagram



Location 22 - SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp (EL Access)

Segment Type - Weave

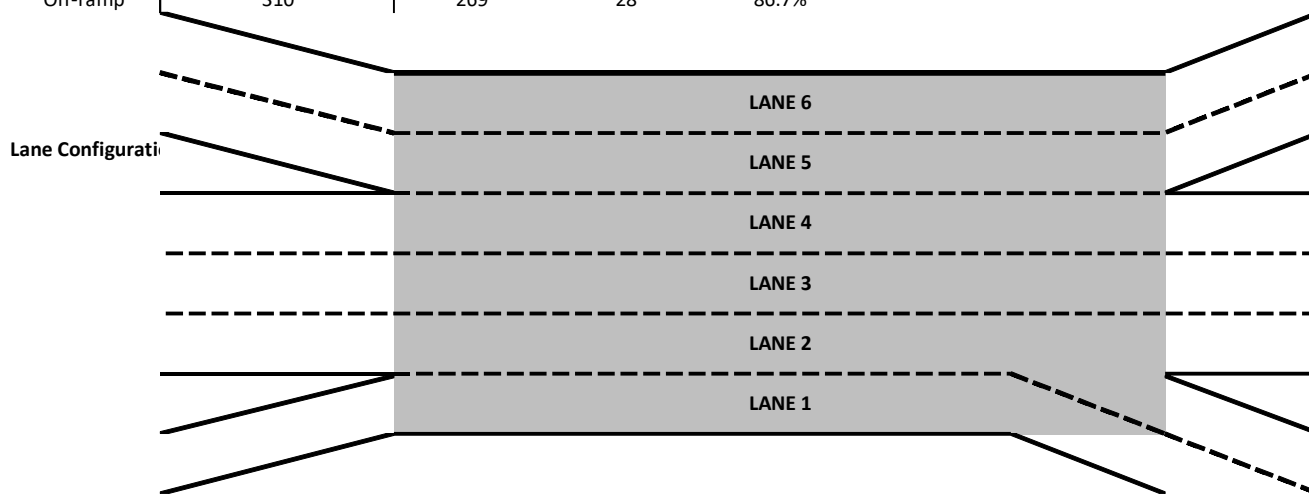
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	LOS
12							
11							
10							
9							
8							
7							
6	1,680	29	46.9	0.5	1.0	0.1	A
5	1,494	20	46.3	0.3	1.8	0.2	A
4	1,132	24	65.4	1.0	25.4	1.4	C
3	114	5	63.1	0.5	24.9	1.4	C
2	93	15	59.3	0.8	21.1	1.2	C
1	227	20	68.0	0.7	2.5	0.2	A
Area	4,740	113	63.4	0.6	14.4	0.7	B
Total	4,740	113	63.4	0.6	14.4	0.7	B

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	93	15
1	227	20
Total	320	30

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	96	18
1	173	14
Total	269	28

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,540	4,420	84	97.4%	3,004
On-ramp	340	320	30	94.1%	
Off-ramp	310	269	28	86.7%	



Location 24 - SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,553	24	65.8	0.8	24.9	1.0	C
2	1,369	21	63.9	0.7	22.2	0.5	C
1	975	23	60.5	0.7	17.2	0.3	B
Area	3,897	68	63.8	0.6	21.4	0.5	C
Total	3,897	68	63.8	0.6	21.4	0.5	C

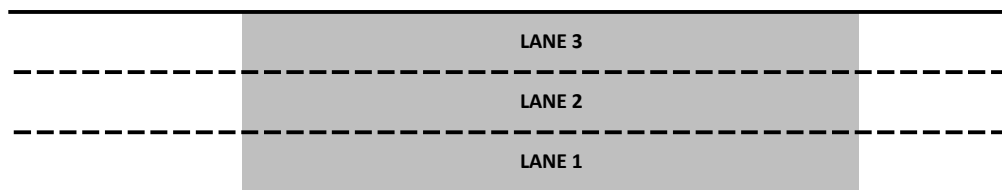
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,980	3,897	68	97.9%	1,755
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 25 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

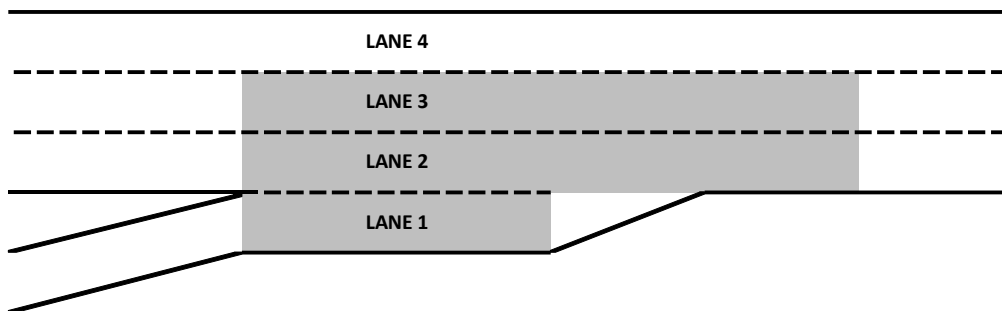
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,536	18	66.3	0.8	24.1	0.9	C
3	1,361	27	64.3	0.9	22.7	2.0	C
2	999	25	60.3	1.1	18.4	1.4	C
1	135	17	28.4	1.3	0.4	0.1	A
Area	2,495	70	62.6	0.9	16.4	1.3	B
Total	4,031	88	64.0	0.9	18.6	1.1	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	135	17	1		
Total	135	17	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,980	3,895	71	97.9%	1,501
On-ramp	120	135	17	112.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 26 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

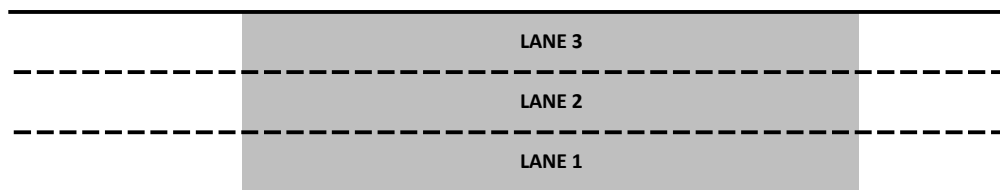
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,560	27	65.4	0.5	25.1	1.1	C
2	1,398	15	63.3	0.6	23.5	0.5	C
1	1,068	21	60.1	0.4	18.9	0.6	C
Area	4,026	63	63.3	0.4	22.5	0.7	C
Total	4,026	63	63.3	0.4	22.5	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,100	4,026	63	98.2%	7,458
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 27 - SB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	LOS
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,462	26	65.8	0.5	23.6	1.4	C
2	1,297	18	62.5	0.6	21.6	1.1	C
1	1,255	27	58.2	1.8	22.4	1.0	C
Area	2,552	45	60.4	1.1	22.0	0.9	C
Total	4,014	71	62.4	0.8	22.5	1.0	C

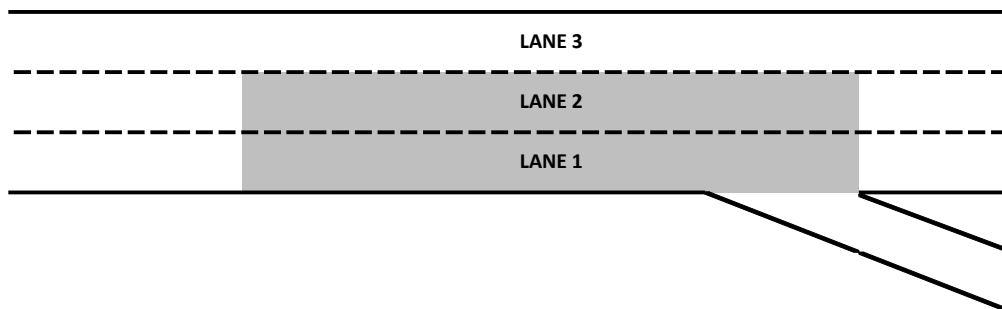
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	467	39
Total	467	39

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,100	4,014	71	97.9%	1,502
On-ramp					
Off-ramp	480	467	39	97.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 28 - SB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,419	25	66.1	0.4	23.1	1.4	C
2	1,217	23	64.3	0.5	20.6	0.8	C
1	905	25	61.6	0.6	15.2	0.6	B
Area	3,541	73	64.4	0.3	19.6	0.8	C
Total	3,541	73	64.4	0.3	19.6	0.8	C

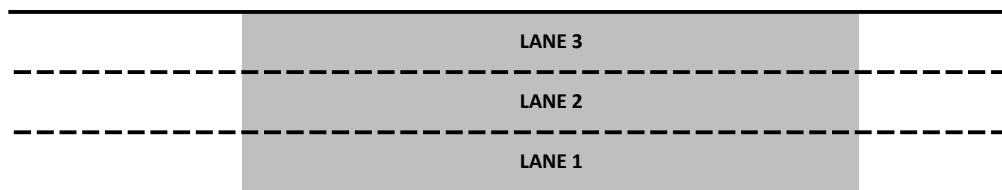
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,620	3,541	73	97.8%	2,526
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 29 - SB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

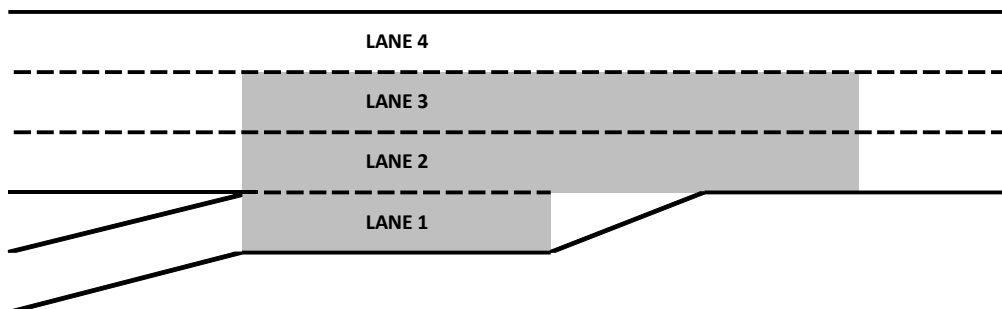
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,408	24	66.6	0.5	22.9	1.7	C
3	1,215	17	64.1	0.7	21.3	0.5	C
2	920	22	61.4	0.9	17.3	0.9	B
1	170	32	35.6	0.4	0.4	0.1	A
Area	2,305	70	63.0	0.4	14.8	0.4	B
Total	3,713	95	64.4	0.3	17.0	0.7	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	170	32	1		
Total	170	32	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,620	3,543	63	97.9%	1,502
On-ramp	170	170	32	100.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 30 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,426	29	64.9	1.0	23.7	1.7	C
2	1,279	17	62.5	1.1	21.7	0.6	C
1	1,003	19	60.2	0.9	18.2	0.9	C
Area	3,708	65	62.8	0.8	21.2	0.9	C
Total	3,708	65	62.8	0.8	21.2	0.9	C

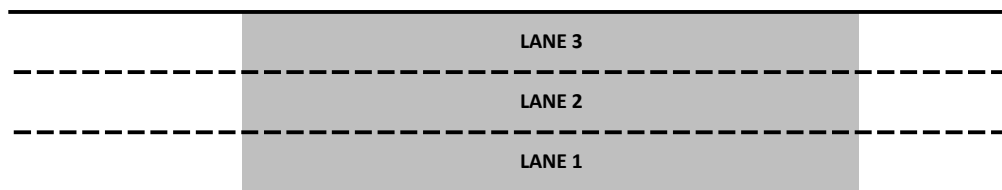
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,790	3,708	65	97.8%	4,808
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 52 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,448	30	47.3	0.5	1.0	0.2	A
4	1,263	19	46.1	0.2	1.7	0.1	A
3	989	21	65.1	1.1	23.6	2.0	C
2	159	13	62.7	0.9	21.4	0.6	C
1	106	21	60.4	1.3	18.2	1.1	C
Area	3,965	104	63.4	0.9	15.2	0.8	B
Total	3,965	104	63.4	0.9	15.2	0.8	B

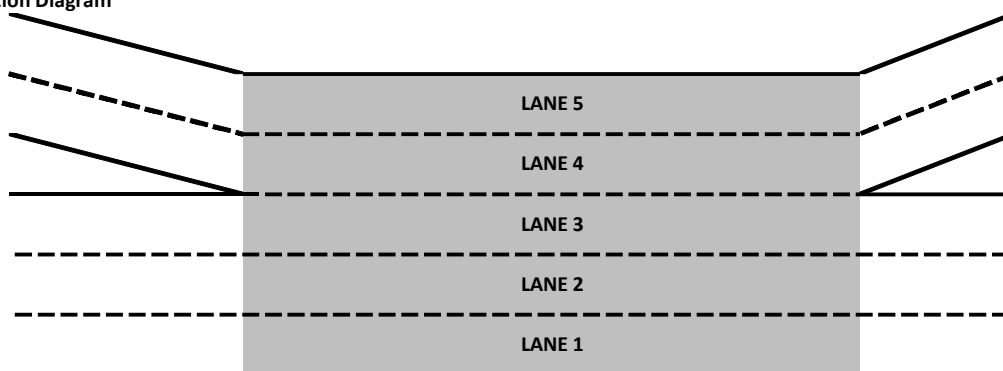
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	159	13
1	106	21
Total	265	25

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	165	16
1	108	22
Total	273	21

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,790	3,700	79	97.6%	3,000
On-ramp	310	265	25	85.5%	
Off-ramp	310	273	21	88.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 53 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,353	31	64.9	0.9	22.8	2.0	C
2	1,315	22	62.4	1.0	22.5	1.2	C
1	1,016	14	59.7	1.3	18.7	1.4	C
Area	3,684	67	62.6	1.0	21.3	1.4	C
Total	3,684	67	62.6	1.0	21.3	1.4	C

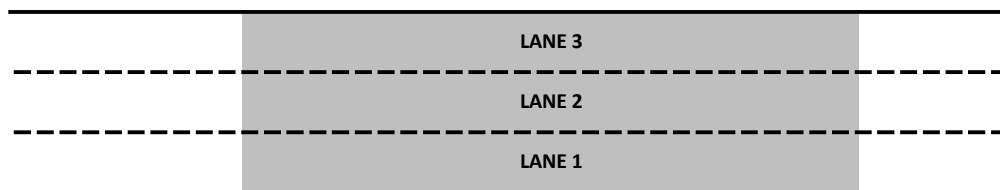
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,790	3,684	67	97.2%	1,096
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 31 - SB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	LOS
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,357	29	63.8	2.5	23.5	2.2	C
2	1,315	19	60.7	4.1	21.7	2.1	C
1	1,008	18	57.7	3.2	20.5	2.1	C
Area	2,323	38	59.3	3.7	21.1	2.1	C
Total	3,680	67	61.0	3.2	21.8	2.0	C

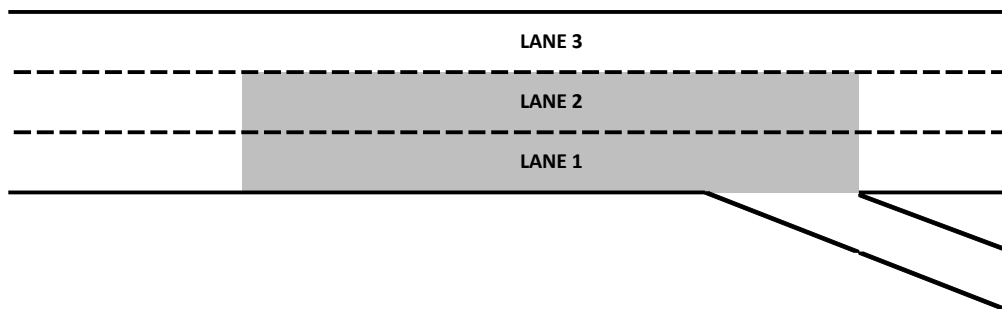
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	260	38
Total	260	38

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,790	3,680	67	97.1%	1,499
On-ramp					
Off-ramp	250	260	38	104.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 32 - SB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,345	32	65.3	0.9	22.6	1.2	C
2	1,174	18	63.6	0.9	19.7	0.9	C
1	896	23	61.3	1.5	15.9	1.3	B
Area	3,416	73	63.7	0.9	19.4	0.8	C
Total	3,416	73	63.7	0.9	19.4	0.8	C

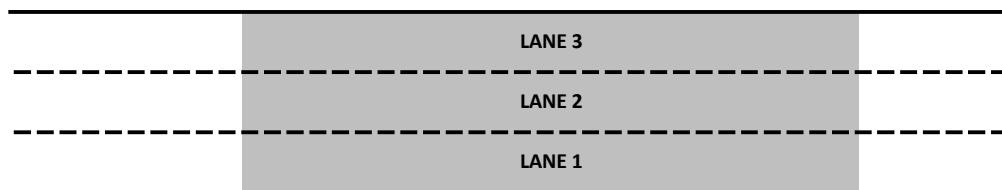
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,540	3,416	73	96.5%	3,127
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 33 - SB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,320	33	66.1	0.6	22.5	1.2	C
3	1,191	25	63.8	0.8	20.7	1.1	C
2	905	24	61.5	1.6	17.4	1.4	B
1	211	30	31.5	1.2	0.5	0.1	A
Area	2,308	79	62.8	0.9	15.1	0.5	B
Total	3,627	113	64.1	0.8	17.1	0.5	B

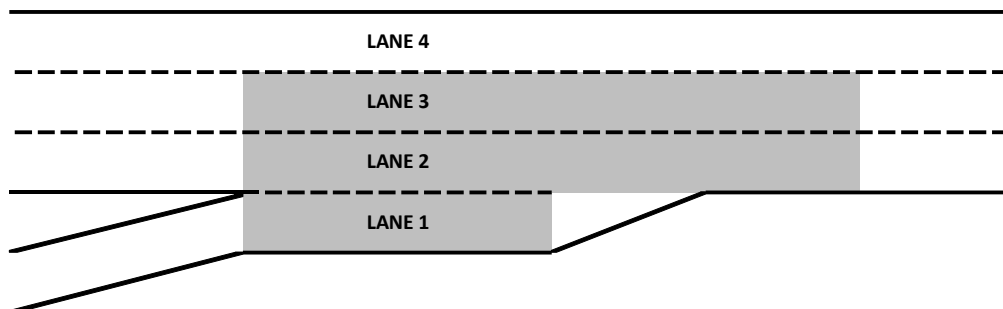
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	211	30
Total	211	30

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,540	3,416	82	96.5%	1,501
On-ramp	210	211	30	100.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 34 - SB I-15: Indian Truck Trail On-ramp to Lake St Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	LOS
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,395	19	65.1	1.1	23.1	0.8	C
2	1,255	22	63.0	1.4	21.4	0.9	C
1	969	30	60.7	1.6	17.9	1.4	B
Area	3,619	71	63.2	1.3	20.8	0.9	C
Total	3,619	71	63.2	1.3	20.8	0.9	C

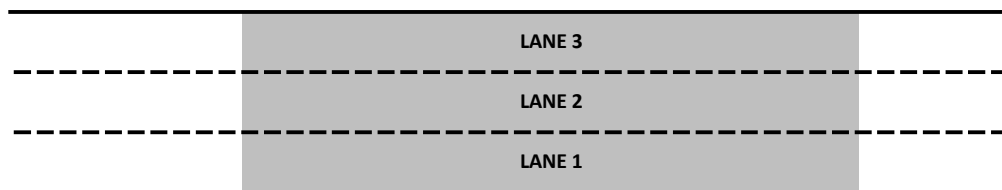
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,750	3,619	71	96.5%	10,562
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 54 - SB I-15: Indian Truck Trail On-ramp to Lake St Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,392	19	48.1	0.3	1.2	0.4	A
4	1,257	14	46.7	0.3	1.6	0.1	A
3	964	17	65.3	1.0	22.7	1.2	C
2	111	21	62.9	1.3	21.6	1.0	C
1	158	11	60.6	1.4	17.8	1.0	B
Area	3,883	83	63.6	1.0	14.9	0.7	B
Total	3,883	83	63.6	1.0	14.9	0.7	B

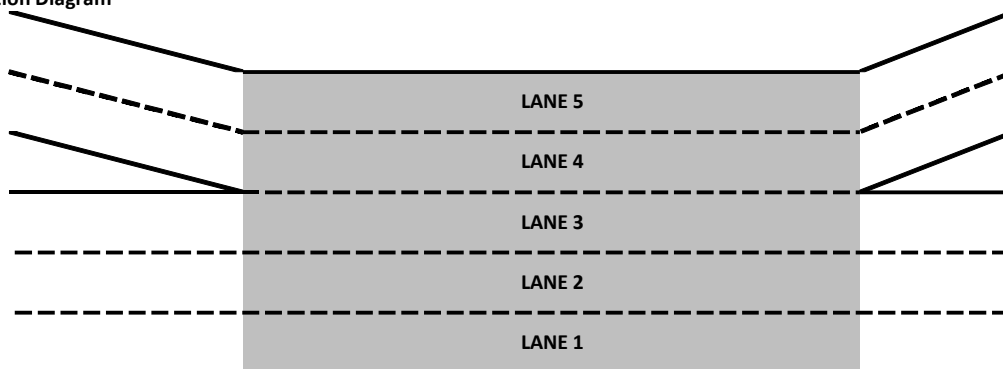
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	111	21
1	158	11
Total	270	27

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	114	21
1	144	12
Total	258	24

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,750	3,614	56	96.4%	2,955
On-ramp	310	270	27	87.0%	
Off-ramp	300	258	24	86.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 35 - SB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	LOS
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,324	21	65.4	0.7	22.1	1.0	C
2	1,268	15	62.7	0.8	20.6	1.1	C
1	1,039	19	59.4	2.0	19.9	1.5	C
Area	2,306	34	61.1	1.4	20.3	1.2	C
Total	3,630	55	62.7	1.1	20.9	1.0	C

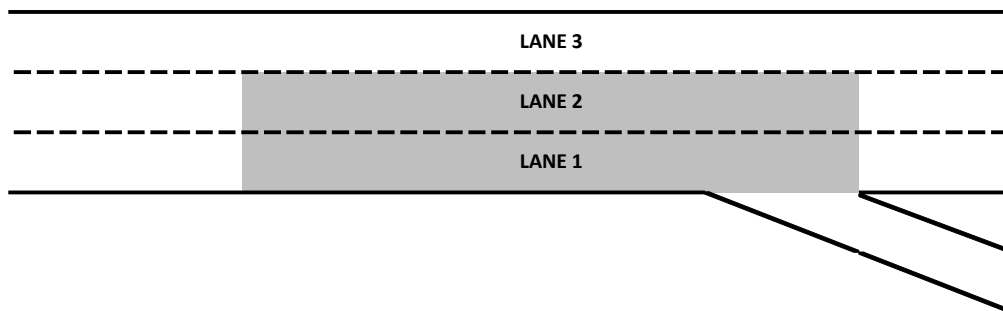
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	308	30
Total	308	30

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,760	3,630	55	96.5%	1,501
On-ramp					
Off-ramp	320	308	30	96.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 36 - SB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	LOS
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,286	25	65.5	0.6	21.9	0.9	C
2	1,152	15	63.4	1.3	19.9	0.9	C
1	878	19	61.2	1.2	16.1	1.0	B
Area	3,315	58	63.7	0.9	19.3	0.8	C
Total	3,315	58	63.7	0.9	19.3	0.8	C

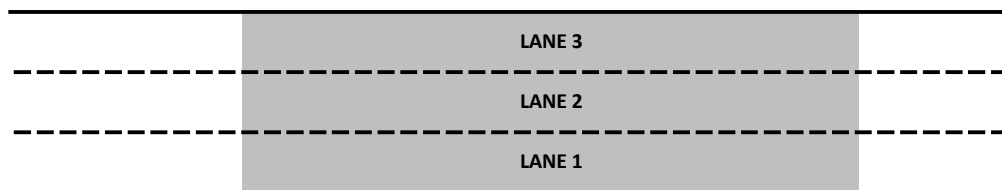
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,440	3,315	58	96.4%	3,287
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 37 - SB I-15: Lake St On-ramp

Segment Type - Merge

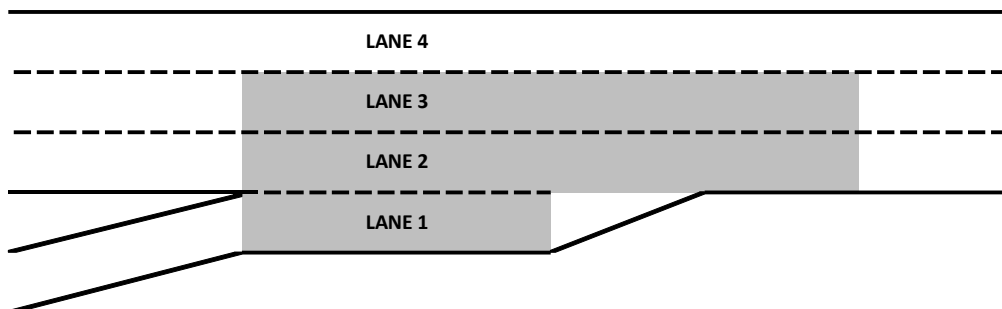
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,279	16	66.1	0.5	22.2	0.9	C
3	1,151	19	63.7	0.8	21.4	0.4	C
2	877	18	61.1	1.3	19.7	0.9	C
1	446	72	38.1	1.4	0.9	0.2	A
Area	2,474	109	62.5	0.9	15.8	0.5	B
Total	3,754	125	63.8	0.6	17.6	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	446	72	1		
Total	446	72	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,440	3,307	53	96.1%	1,500
On-ramp	440	446	72	101.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 38 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,403	21	64.8	0.6	23.5	0.7	C
2	1,301	15	62.9	0.6	22.2	0.7	C
1	1,023	16	60.3	1.1	18.9	0.3	C
Area	3,727	52	62.9	0.7	21.5	0.4	C
Total	3,727	52	62.9	0.7	21.5	0.4	C

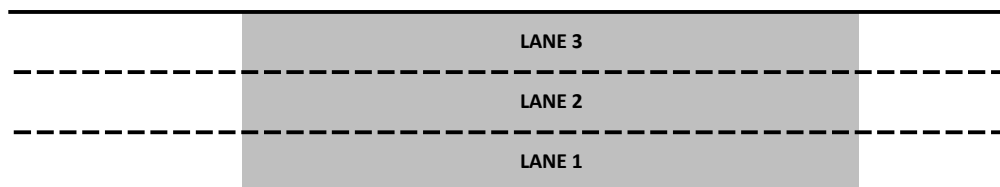
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,880	3,727	52	96.0%	5,941
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 55 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp (EL Egress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,416	22	69.5	0.5	6.1	0.6	A
3	1,287	17	66.8	0.3	19.8	0.8	C
2	1,012	18	64.0	0.4	19.7	0.6	C
1	46	15	61.7	0.6	17.4	0.7	B
Area	3,761	71	64.9	0.3	15.7	0.4	B
Total	3,761	71	64.9	0.3	15.7	0.4	B

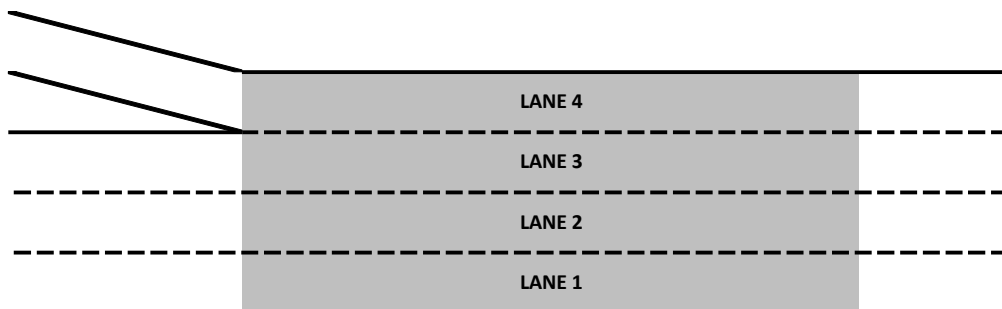
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	46	15
Total	46	15

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,880	3,715	56	95.7%	1,500
On-ramp	50	46	15	91.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 56 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

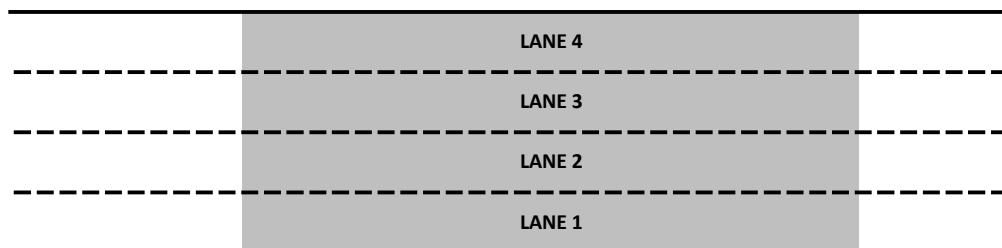
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	610	21	69.4	0.6	9.4	0.6	A
3	1,101	17	66.5	0.5	18.1	0.9	C
2	1,135	18	63.9	0.6	18.7	0.5	C
1	904	12	61.7	0.6	16.1	0.7	B
Area	3,751	68	65.0	0.4	15.6	0.4	B
Total	3,751	68	65.0	0.4	15.6	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,930	3,751	68	95.4%	1,308
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 39 - SB I-15: Nichols Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	677	23	68.8	0.6	12.1	0.7	B
3	1,096	17	65.6	0.7	19.8	0.9	C
2	1,103	16	61.0	1.3	18.0	0.7	B
1	874	13	57.1	2.8	14.7	0.6	B
Area	1,977	29	59.3	1.8	16.3	0.6	B
Total	3,750	70	63.3	1.2	16.1	0.3	B

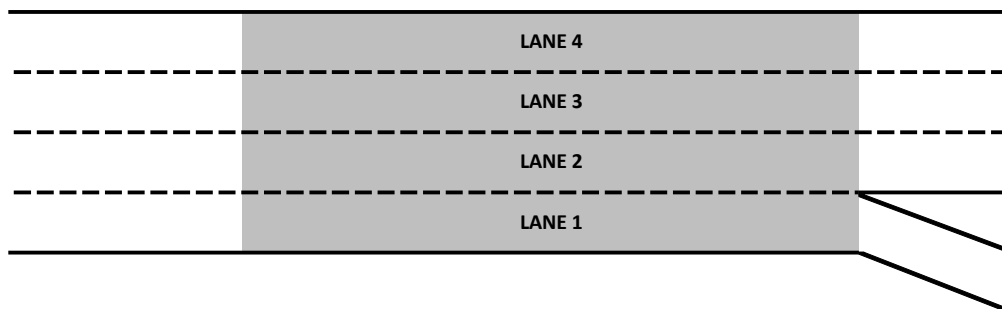
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	329	36
Total	329	36

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,930	3,750	70	95.4%	1,499
On-ramp					
Off-ramp	330	329	36	99.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 40 - SB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,165	36	67.5	0.7	19.3	0.9	C
2	1,275	17	63.8	0.8	22.0	1.0	C
1	966	20	58.6	0.6	18.0	0.9	B
Area	3,407	73	63.6	0.7	19.7	0.8	C
Total	3,407	73	63.6	0.7	19.7	0.8	C

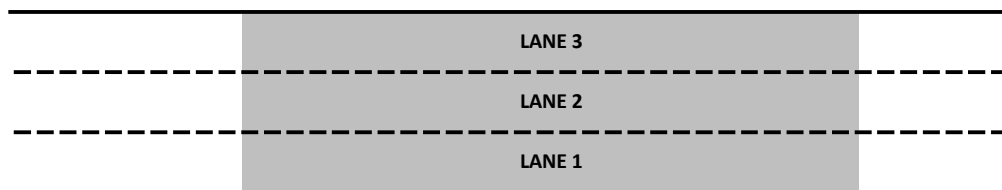
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,600	3,407	73	94.6%	3,058
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 41 - SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5			5.0	0.0	0.3	0.0	A
4	1,277	39	67.6	0.6	21.9	0.9	C
3	1,256	22	64.2	0.5	21.6	1.0	C
2	872	18	59.3	0.6	18.0	1.2	B
1	472	51	66.3	1.0	4.1	0.5	A
Area	3,877	130	64.3	0.5	16.4	0.8	B
Total	3,877	130	64.3	0.5	16.1	0.8	B

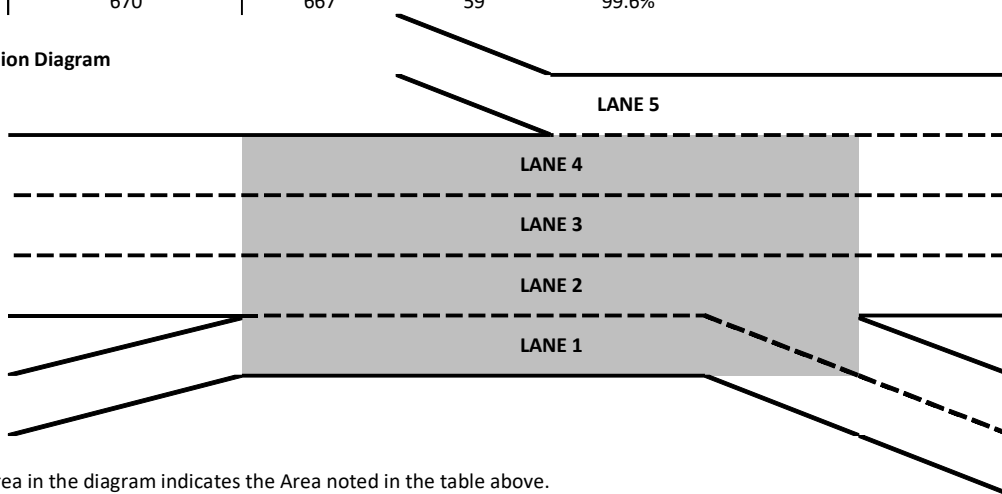
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	472	51
Total	472	51

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	240	24
1	427	50
Total	667	59

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,600	3,405	79	94.6%	5,329
On-ramp	460	472	51	102.7%	
Off-ramp	670	667	59	99.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 57 - SB I-15: Central Ave (SR-74) (EL Egress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,331	34	68.4	0.6	6.6	0.6	A
4	1,139	14	66.2	1.3	23.1	0.8	C
3	992	19	61.3	0.9	21.5	0.7	C
2	398	17	58.1	1.5	8.2	0.5	A
1	205	19	14.3	0.2	1.3	0.1	A
Area	4,066	104	63.7	1.0	14.3	0.4	B
Total	4,066	104	63.7	1.0	14.3	0.4	B

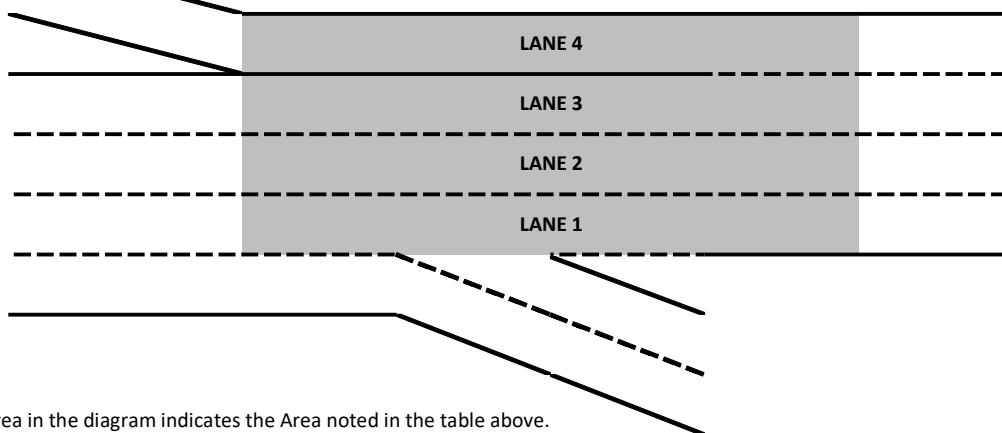
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	205	19
Total	205	19

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,060	3,861	85	95.1%	1,797
On-ramp	250	205	19	82.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 44 - SB I-15: Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,439	24	66.1	0.9	23.8	0.7	C
2	1,125	18	58.5	0.3	20.4	0.7	C
1	0	0	33.9	11.3	0.2	0.2	A
Area	2,563	42	62.8	0.7	14.7	0.4	B
Total	2,563	42	62.8	0.7	14.7	0.4	B

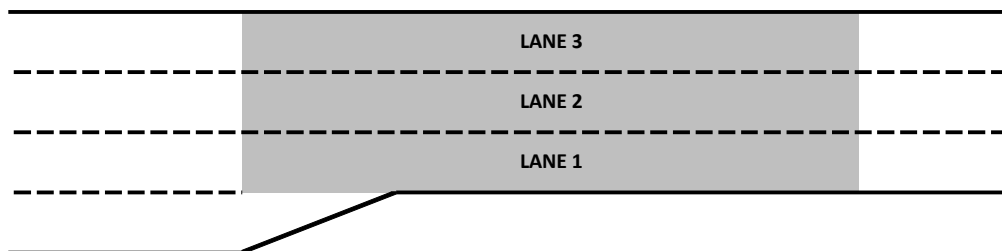
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,640	2,563	42	70.4%	372
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 45 - SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	839	27	67.4	0.8	23.4	0.5	C
3	1,436	24	63.7	1.1	26.3	0.7	D
2	1,117	18	57.9	1.1	21.7	0.9	C
1	1,248	64	42.9	0.9	2.4	0.2	A
Area	4,640	134	63.2	1.0	19.9	0.5	C
Total	4,640	134	63.2	1.0	19.9	0.5	C

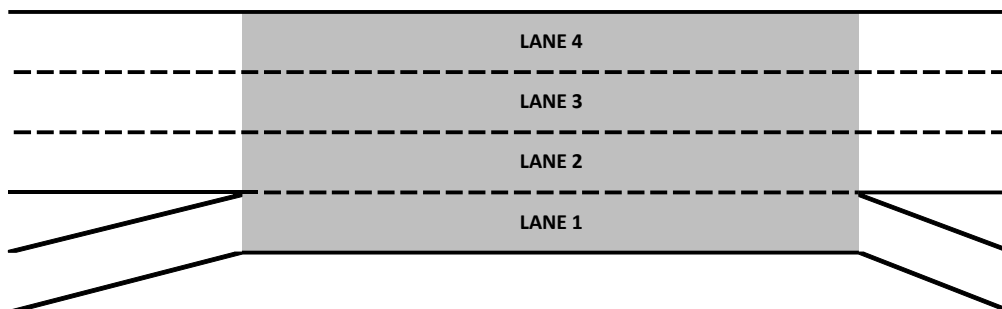
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,248	64
Total	1,248	64

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	169	24
Total	169	24

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,640	3,392	69	93.2%	5,633
On-ramp	1,240	1,248	64	100.7%	
Off-ramp	170	169	24	99.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 48 - SB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,831	32	66.8	0.6	29.2	1.1	D
2	1,559	24	62.8	0.7	26.0	0.7	D
1	1,067	24	57.6	1.1	20.2	1.0	C
Area	4,458	80	63.2	0.8	25.1	0.9	C
Total	4,458	80	63.2	0.8	25.1	0.9	C

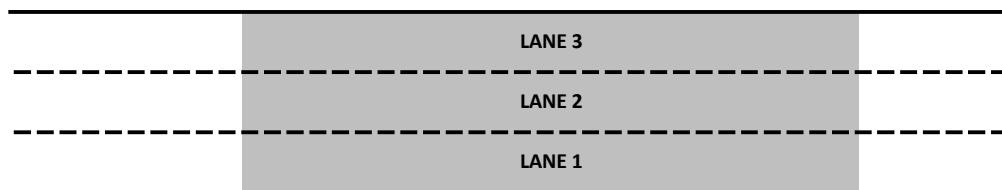
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,710	4,458	80	94.6%	3,013
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 49 - SB I-15: Main St On-ramp

Segment Type - Merge

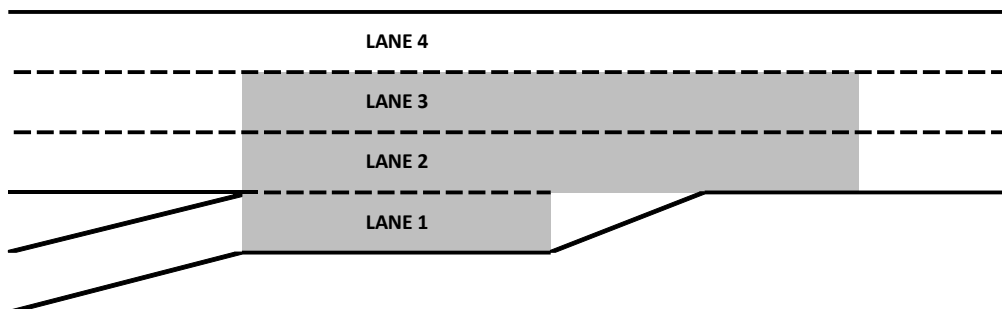
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,847	28	67.1	0.5	30.3	1.1	D
3	1,527	25	62.3	0.8	28.1	0.6	D
2	1,074	20	57.2	1.1	24.2	2.0	C
1	503	58	27.2	0.9	1.0	0.1	A
Area	3,104	103	60.1	1.0	21.4	1.0	C
Total	4,951	131	62.9	0.8	23.9	0.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	503	58	1		
Total	503	58	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,710	4,448	73	94.4%	1,500
On-ramp	490	503	58	102.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 50 - SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,966	23	65.5	1.0	32.0	1.2	D
2	1,655	26	61.0	0.9	28.6	0.9	D
1	1,309	17	56.8	1.1	24.3	1.6	C
Area	4,930	66	61.7	1.0	28.2	1.1	D
Total	4,930	66	61.7	1.0	28.2	1.1	D

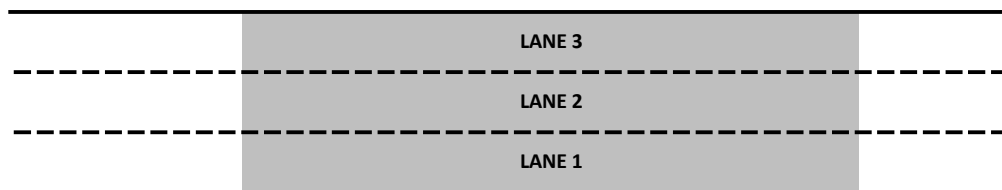
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,200	4,930	66	94.8%	3,089
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Opening Year Plus Project
AM Peak Hour

Location			Facility Type			Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
						Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
200	SB I-15 EL: WB SR-91 Off-ramp		Basic			224	11	97.2%				56	15	92.7%	69.8	0.4	1.8	0.2	A
201	SB I-15 EL: EB SR-91 On-ramp		Basic			168	8	98.8%	144	17	96.3%				69.8	0.3	2.4	0.1	A
202	SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia		Basic			312	12	97.6%							69.9	0.3	2.4	0.1	A
203	SB I-15 EL: EL Access S of Magnolia to EL Access at El Cerrito		Basic			335	12	95.6%							69.4	0.7	2.4	0.2	A
204	SB I-15 EL: EL Access at El Cerrito Rd to EL Access S of Cajalco		Basic			321	11	94.4%							69.8	0.3	2.4	0.3	A
205	SB I-15 EL: EL Access S of Cajalco to EL Access S of Temescal Canyon		Basic			266	15	85.7%							69.8	0.4	1.9	0.1	A
206	SB I-15 EL: EL Access S of Temescal Canyon to EL Access S of Indian Truck		Basic			271	14	87.5%							69.8	0.3	2.1	0.3	A
207	SB I-15 EL: EL Access S of Indian Truck to EL Egress S of Lake		Basic			258	15	85.9%							69.8	0.2	2.1	0.3	A
208	SB I-15 EL: EL Egress S of Lake		Basic			258	17	86.1%				46	15	91.2%	69.5	0.1	2.1	0.3	A
308	NB I-15 EL: EL Ingress N of Nichols		Basic			951	33	100.1%	381	41	102.9%				69.2	0.2	10.0	0.7	A
309	NB I-15 EL: EL Ingress N of Nichols to EL Access N of Lake		Basic			1,342	38	101.6%							68.9	0.2	10.3	0.6	A
310	NB I-15 EL: EL Access N of Lake to EL Access N of Indian Truck		Basic			1,625	41	102.8%							68.4	0.2	13.1	0.7	B
311	NB I-15 EL: EL Access N of Indian Truck to EL Ingress at Cajalco		Basic			1,732	24	105.0%							67.7	0.3	11.4	0.4	B
314	NB I-15 EL: EL Ingress at Cajalco		Merge			1,751	31	106.1%	324	31	98.2%				67.5	0.3	13.3	0.6	B
312	NB I-15 EL: EL Ingress at Cajalco to EL Access at El Cerrito		Basic			2,083	35	105.2%							66.7	0.5	18.2	0.9	C
302	NB I-15 EL: EL Access at El Cerrito to EL Access N of Ontario		Basic			2,505	46	105.3%							65.6	1.1	20.9	1.6	C
303	NB I-15 EL: EL Access N of Ontario to WB SR-91 Off-ramp		Basic			2,885	49	104.2%							62.4	2.7	25.2	2.2	C
304	NB I-15 EL: WB SR-91 Off-ramp		Basic			2,893	55	104.4%				1,630	76	100.6%	65.5	0.5	24.6	1.0	C
306	NB I-15 EL: EB SR-91 On-ramp		Basic			1,273	28	110.7%	834	58	94.8%				68.7	0.1	17.6	0.6	B

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 200 - SB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	89	6	69.5	0.7	1.6	0.3	A
1	134	5	69.9	0.3	2.0	0.2	A
Area	224	11	69.8	0.4	1.8	0.2	A
Total	224	11	69.8	0.4	1.8	0.2	A

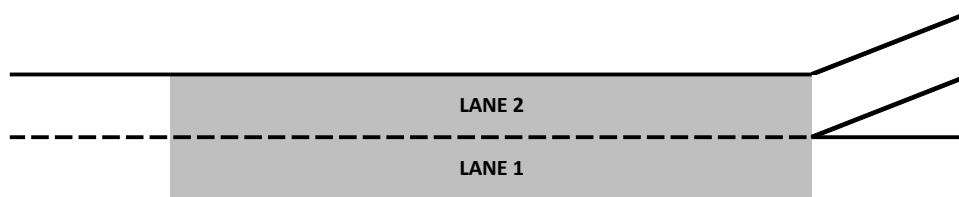
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	56	15
Total	56	15

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	230	224	11	97.2%	1,496
On-ramp					
Off-ramp	60	56	15	92.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 201 - SB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	168	8	69.7	0.9	2.2	0.3	A
1	144	17	69.9	0.4	2.6	0.3	A
Area	312	25	69.8	0.3	2.4	0.1	A
Total	312	25	69.8	0.3	2.4	0.1	A

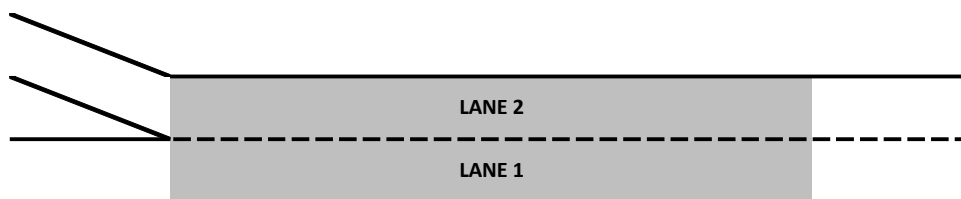
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	144	17
Total	144	17

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	170	168	8	98.8%	1,500
On-ramp	150	144	17	96.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 202 - SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	141	6	69.8	0.8	2.1	0.3	A
1	172	6	69.9	0.4	2.6	0.3	A
Area	312	12	69.9	0.3	2.4	0.1	A
Total	312	12	69.9	0.3	2.4	0.1	A

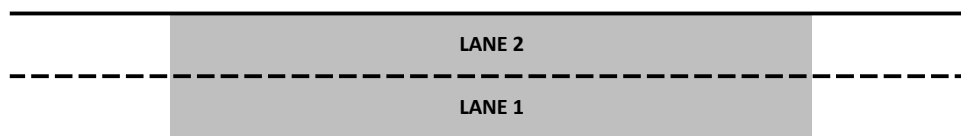
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	320	312	12	97.6%	2,496
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 203 - SB I-15 EL: EL Access S of Magnolia to EL Access at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	115	4	70.3	0.6	1.5	0.1	A
1	220	8	69.0	1.1	3.3	0.4	A
Area	335	12	69.4	0.7	2.4	0.2	A
Total	335	12	69.4	0.7	2.4	0.2	A

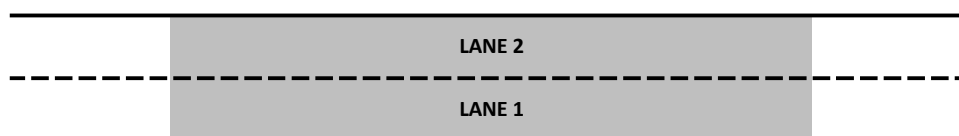
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	350	335	12	95.6%	7,133
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 204 - SB I-15 EL: EL Access at El Cerrito Rd to EL Access S of Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	117	5	70.4	0.4	1.6	0.2	A
1	204	6	69.6	0.3	3.2	0.5	A
Area	321	11	69.8	0.3	2.4	0.3	A
Total	321	11	69.8	0.3	2.4	0.3	A

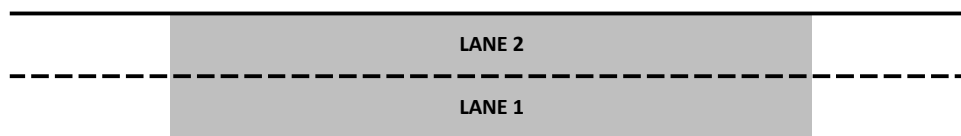
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	340	321	11	94.4%	5,784
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 205 - SB I-15 EL: EL Access S of Cajalco to EL Access S of Temescal Canyon

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	105	7	70.5	0.8	1.4	0.2	A
1	161	8	69.4	0.4	2.5	0.2	A
Area	266	15	69.8	0.4	1.9	0.1	A
Total	266	15	69.8	0.4	1.9	0.1	A

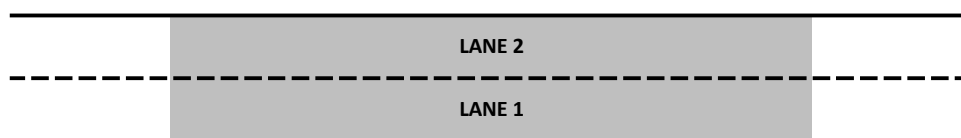
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	310	266	15	85.7%	23,650
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 206 - SB I-15 EL: EL Access S of Temescal Canyon to EL Access S of Indian Truck

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	115	8	71.0	0.7	1.8	0.5	A
1	156	6	69.0	0.2	2.5	0.2	A
Area	271	14	69.8	0.3	2.1	0.3	A
Total	271	14	69.8	0.3	2.1	0.3	A

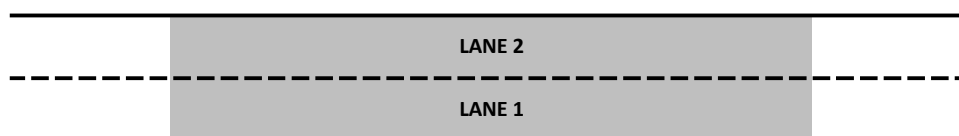
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	310	271	14	87.5%	18,779
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 207 - SB I-15 EL: EL Access S of Indian Truck to EL Egress S of Lake

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	117	10	70.7	0.3	1.9	0.6	A
1	141	5	68.9	0.4	2.3	0.2	A
Area	258	15	69.8	0.2	2.1	0.3	A
Total	258	15	69.8	0.2	2.1	0.3	A

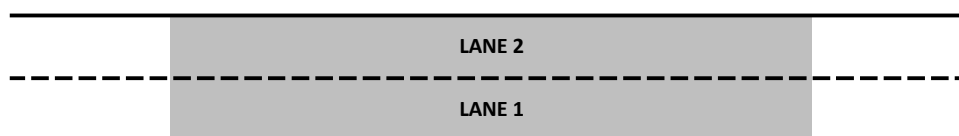
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	300	258	15	85.9%	10,977
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 208 - SB I-15 EL: EL Egress S of Lake

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	212	11	69.4	0.2	3.5	0.7	A
1	46	6	70.0	0.8	0.8	0.2	A
Area	258	17	69.5	0.1	2.1	0.3	A
Total	258	17	69.5	0.1	2.1	0.3	A

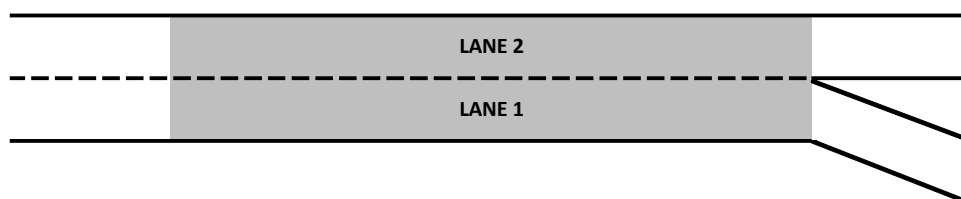
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	46	15
Total	46	15

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	300	258	17	86.1%	1,500
On-ramp					
Off-ramp	50	46	15	91.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 308 - NB I-15 EL: EL Ingress N of Nichols

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	951	33	68.5	0.3	10.9	0.9	A
1	381	41	69.9	0.2	9.1	0.7	A
Area	1,331	74	69.2	0.2	10.0	0.7	A
Total	1,331	74	69.2	0.2	10.0	0.7	A

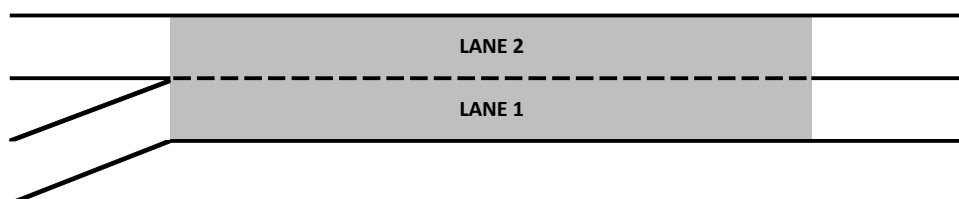
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	381	41
Total	381	41

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	950	951	33	100.1%	1,498
On-ramp	370	381	41	102.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 309 - NB I-15 EL: EL Ingress N of Nichols to EL Access N of Lake

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	708	20	68.3	0.3	10.0	0.9	A
1	634	19	69.6	0.3	10.6	0.4	A
Area	1,342	38	68.9	0.2	10.3	0.6	A
Total	1,342	38	68.9	0.2	10.3	0.6	A

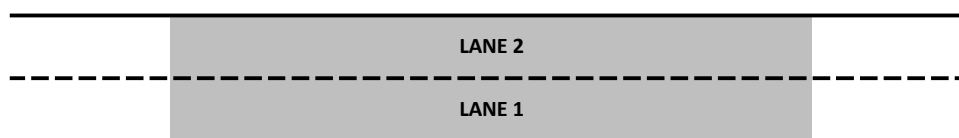
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,320	1,342	38	101.6%	11,215
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 310 - NB I-15 EL: EL Access N of Lake to EL Access N of Indian Truck

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	822	21	68.4	0.2	13.2	0.7	B
1	803	20	68.5	0.1	13.0	0.7	B
Area	1,625	41	68.4	0.2	13.1	0.7	B
Total	1,625	41	68.4	0.2	13.1	0.7	B

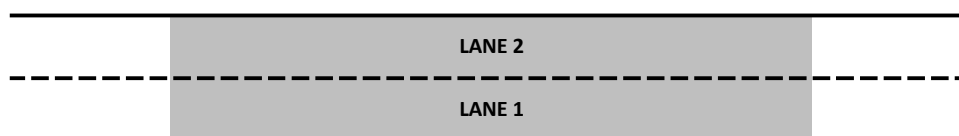
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,580	1,625	41	102.8%	18,145
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 311 - NB I-15 EL: EL Access N of Indian Truck to EL Ingress at Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	857	9					
5	875	14					
4							
3							
2			67.9	0.3	12.6	0.5	B
1			67.5	0.5	13.1	0.3	B
Area	0	0	67.7	0.3	11.4	0.4	B
Total	1,732	24	67.7	0.3	12.8	0.4	B

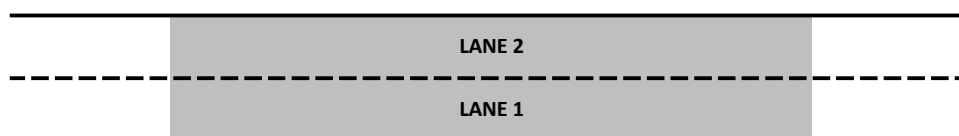
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,650	1,732	24	105.0%	26,270
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 314 - NB I-15 EL: EL Ingress at Cajalco

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	874	16	67.5	0.3	14.2	0.8	B
2	877	15	67.3	0.5	15.5	0.8	B
1	324	31	23.7	0.2	1.5	0.2	A
Area	2,075	61	67.5	0.3	13.3	0.6	B
Total	2,075	61	67.5	0.3	13.3	0.6	B

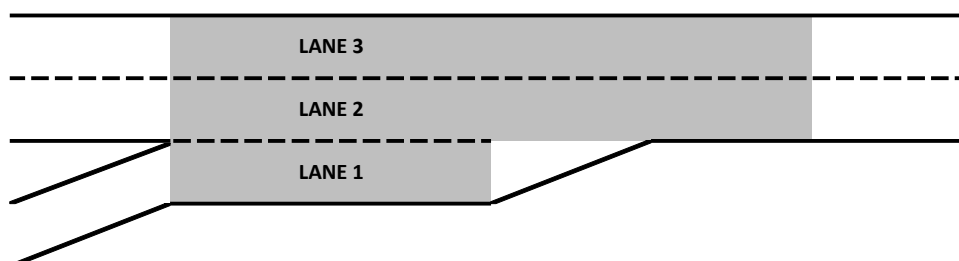
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	324	31
Total	324	31

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,650	1,751	31	106.1%	1,594
On-ramp	330	324	31	98.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 312 - NB I-15 EL: EL Ingress at Cajalco to EL Access at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	998	15	67.0	1.0	17.3	1.0	B
1	1,085	20	66.4	1.0	19.2	0.8	C
Area	2,083	35	66.7	0.5	18.2	0.9	C
Total	2,083	35	66.7	0.5	18.2	0.9	C

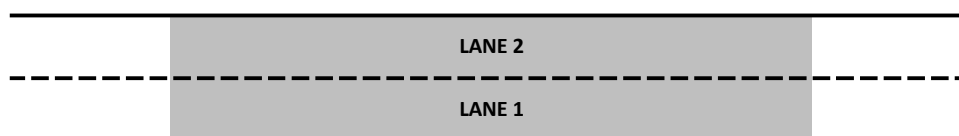
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,980	2,083	35	105.2%	4,125
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 302 - NB I-15 EL: EL Access at El Cerrito to EL Access N of Ontario

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,214	27	66.0	1.0	19.7	2.0	C
1	1,291	20	65.2	1.5	22.1	1.5	C
Area	2,505	46	65.6	1.1	20.9	1.6	C
Total	2,505	46	65.6	1.1	20.9	1.6	C

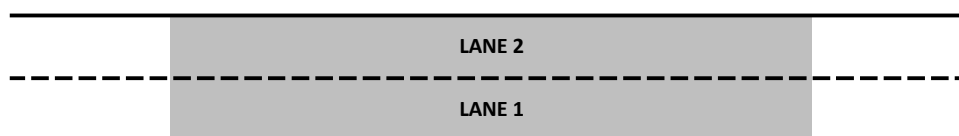
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,380	2,505	46	105.3%	6,919
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 303 - NB I-15 EL: EL Access N of Ontario to WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,399	29	63.2	2.6	25.1	2.7	C
1	1,487	21	61.5	3.0	25.4	1.8	C
Area	2,885	49	62.4	2.7	25.2	2.2	C
Total	2,885	49	62.4	2.7	25.2	2.2	C

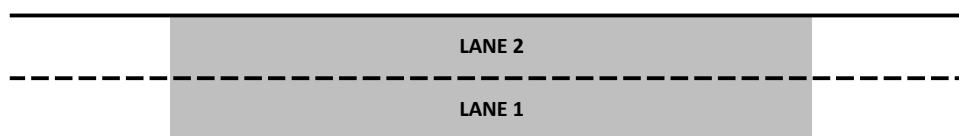
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,770	2,885	49	104.2%	3,113
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 304 - NB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,614	25	65.6	0.3	24.8	1.1	C
1	1,279	30	65.5	1.2	24.5	1.0	C
Area	2,893	55	65.5	0.5	24.6	1.0	C
Total	2,893	55	65.5	0.5	24.6	1.0	C

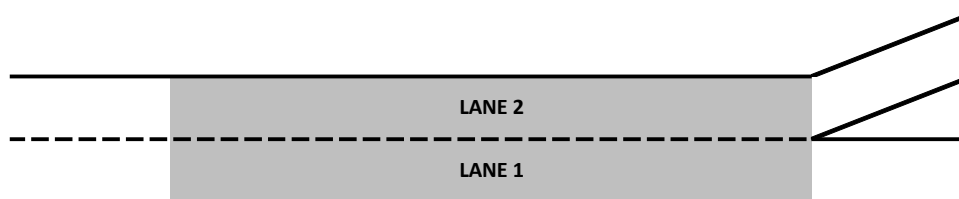
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,630	76
Total	1,630	76

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,770	2,893	55	104.4%	1,501
On-ramp					
Off-ramp	1,620	1,630	76	100.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 306 - NB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,273	28	69.4	0.1	15.9	0.6	B
1	834	58	68.0	0.2	19.4	0.7	C
Area	2,107	87	68.7	0.1	17.6	0.6	B
Total	2,107	87	68.7	0.1	17.6	0.6	B

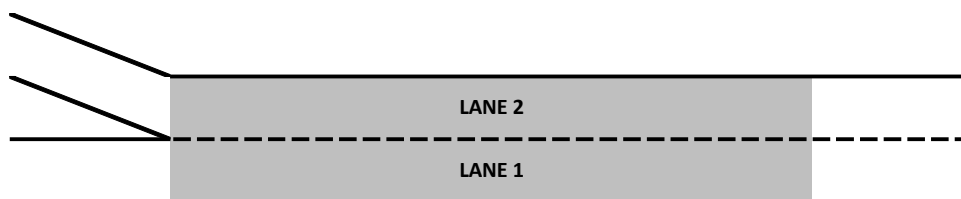
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	834	58
Total	834	58

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,150	1,273	28	110.7%	1,498
On-ramp	880	834	58	94.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Vissim Post-Processor
Average Results from 5 Runs
Network Statistics

I-15 Express Lanes Southern Extension
Opening Year Plus Project
PM Peak Hour

Performance Measure	Vehicle Types	Average	Std. Dev.	Minimum	Maximum
Average Delay (seconds)	All	398.4	35.68	352.1	444.7
Total Delay (hours)	All	24,372	2,175	21,542	27,205
Average Stopped Delay (seconds)	All	15.3	1.85	13.5	17.6
Total Stopped Delay (hours)	All	936	113	824	1079
Total Distance Traveled (miles)	All	2,024,613	1,906	2,023,146	2,027,819
Average Speed (mph)	All	37.3	1.50	35.4	39.3
Average Number of Stops	All	22.6	3.41	19.1	26.6
Total Number of Stops	All	4,971,125	748,678	4,200,368	5,855,425
Total Travel Time (hours)	All	54,358.9	2,162.7	51,525.7	57,175.8
Vehicles Active	All	3,867	327	3,592	4,331
Vehicles Arrived	All	216,348	443	215,886	216,883

Corridor Travel Time by Time Interval Summary					
Time interval		Measured from Simulation (min)			
		Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
1	1:00 - 1:15 PM	20.71	47.23	19.00	19.22
2	1:15 - 1:30 PM	20.51	44.00	19.09	19.23
3	1:30 - 1:45 PM	20.72	48.62	19.06	19.22
4	1:45 - 2:00 PM	21.18	52.25	19.09	19.24
5	2:00 - 2:15 PM	21.92	54.08	19.29	19.22
6	2:15 - 2:30 PM	21.77	59.00	19.47	19.20
7	2:30 - 2:45 PM	21.84	62.47	19.57	19.22
8	2:45 - 3:00 PM	22.37	67.17	20.13	19.19
9	3:00 - 3:15 PM	22.37	68.78	20.14	19.22
10	3:15 - 3:30 PM	22.95	69.78	20.59	19.29
11	3:30 - 3:45 PM	25.06	69.39	21.34	19.28
12	3:45 - 4:00 PM	27.53	69.22	21.78	22.47
13	4:00 - 4:15 PM	29.83	68.45	21.96	22.45
14	4:15 - 4:30 PM	32.62	67.16	21.76	22.26
15	4:30 - 4:45 PM	34.47	64.41	21.73	22.24
16	4:45 - 5:00 PM	36.40	65.04	21.48	21.97
17	5:00 - 5:15 PM	39.55	65.18	21.85	22.40
18	5:15 - 5:30 PM	41.13	72.17	21.49	22.08
19	5:30 - 5:45 PM	40.27	66.12	21.33	21.95
20	5:45 - 6:00 PM	38.82	63.67	21.07	21.74
21	6:00 - 6:15 PM	39.13	64.79	21.34	21.98
22	6:15 - 6:30 PM	38.74	59.79	21.13	21.77
23	6:30 - 6:45 PM	36.62	54.84	20.81	21.43
24	6:45 - 7:00 PM	34.37	48.29	20.91	21.55
25	7:00 - 7:15 PM	31.25	42.37	20.59	21.25
26	7:15 - 7:30 PM	28.38	36.24	20.66	21.34
27	7:30 - 7:45 PM	24.17	29.98	20.48	21.20
28	7:45 - 8:00 PM	20.80	23.92	19.94	20.80
Average		29.1	57.3	20.6	20.8

Corridor Performance Measurements				
Stats Summary	Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
Average Travel Time (min)	29.1	57.3	20.6	21.4
Average Travel Speed (mph)	45.1	22.9	69.1	68.3
Average Delay per Vehicle (min)	10.4	38.6	1.9	2.7
Max Individual Vehicle Delay (min)	22.4	53.4	3.2	3.7

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Opening Year Plus Project
PM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
152 NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	3,583	67	96.3%				425	32	98.8%	65.6	0.2	11.2	0.4	B
151 NB I-15: Hidden Valley Pkwy Off-ramp	Diverge	4,145	82	96.4%				562	55	96.8%	64.2	0.3	16.5	0.4	B
150 NB I-15: EB SR-91 On-ramp	Merge	3,023	71	94.8%	1,121	101	101.0%				64.6	0.4	14.7	0.2	B
149 NB I-15: WB SR-91 On-ramp	Merge	2,193	53	94.1%	826	57	96.0%				63.6	0.3	13.7	0.6	B
148 NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp	Basic	2,195	60	94.2%							64.9	0.7	11.4	0.6	B
147 NB I-15: EB & WB SR-91 Off-ramp	Diverge	5,467	67	92.8%				3,270	73	91.9%	47.6	4.1	29.7	3.2	D
146 NB I-15: Magnolia Ave On-ramp	Merge	4,744	64	91.8%	726	32	100.9%				23.3	0.5	69.8	1.7	F
145 NB I-15: Magnolia Ave Loop On-ramp	Basic	4,099	63	90.9%	647	39	98.0%				15.3	0.8	76.9	2.9	F
144 NB I-15: Magnolia Ave Off-ramp to Loop On-ramp	Basic	4,098	53	90.9%							15.2	0.7	88.9	1.6	F
143 NB I-15: Magnolia Ave Off-ramp	Diverge	4,906	71	90.5%				820	74	90.1%	16.3	1.5	66.3	7.2	F
141 NB I-15: Ontario Ave to Magnolia Ave (EL Access)	Weave	4,910	88	90.8%	1,408	123	99.1%	1,415	98	100.3%	23.3	0.8	46.8	0.5	F
140 NB I-15: Ontario Ave On-ramp	Merge	3,977	78	89.4%	940	41	97.9%				14.1	0.7	49.7	1.4	F
138 NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)	Basic	3,964	79	89.1%							14.0	0.7	68.0	1.2	F
137 NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)	Basic	3,959	69	89.0%							11.6	0.7	107.0	3.3	F
136 NB I-15: Ontario Ave Off-ramp	Diverge	4,514	65	90.8%				563	55	108.3%	13.8	1.0	95.9	4.6	F
135 NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp	Merge	3,844	78	89.0%	657	33	101.1%				10.8	0.5	94.3	3.3	F
133 NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp (EL Access)	Weave	3,933	75	89.2%	1,309	115	98.4%	1,410	101	99.3%	26.1	0.7	42.1	1.6	E
132 NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp	Weave	3,783	70	89.6%	520	51	101.9%	374	50	116.9%	9.3	0.7	110.5	3.9	F
131 NB I-15: Cajalco Rd Loop On-ramp	Merge	3,258	92	87.6%	522	46	104.3%				9.2	0.7	108.4	6.3	F
170 NB I-15: Cajalco Rd Off-ramp to Loop On-ramp	Basic	3,252	79	87.4%							10.3	0.3	107.3	1.1	F
130 NB I-15: Cajalco Rd Off-ramp to Loop On-ramp (EL Ingress)	Basic	3,442	97	87.4%				201	44	91.3%	12.2	1.3	71.7	1.4	F
129 NB I-15: Cajalco Rd Off-ramp	Diverge	3,631	93	87.7%				187	40	93.3%	9.6	0.9	87.7	2.5	F
128 NB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	3,015	71	91.4%	628	105	74.7%				8.7	0.5	108.7	3.8	F
127 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	3,018	71	91.5%							9.2	0.8	112.2	3.9	F
126 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	3,245	76	91.4%				220	28	87.8%	8.8	0.4	124.1	2.4	F
125 NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	3,242	70	91.3%							8.8	0.6	115.4	3.1	F
124 NB I-15: Temescal Canyon Rd On-ramp	Merge	2,677	58	88.1%	541	75	106.0%				7.6	0.4	117.5	6.3	F
123 NB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	2,673	62	87.9%							8.5	0.5	112.2	1.7	F
122 NB I-15: Temescal Canyon Rd Off-ramp	Diverge	2,899	72	87.6%				236	32	87.3%	7.7	0.5	129.7	6.6	F
121 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	2,900	68	87.6%							8.0	0.5	111.7	5.1	F
160 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp (EL Access)	Weave	2,962	93	92.0%	1,212	77	101.0%	1,131	77	101.9%	20.5	0.4	53.0	1.5	F
159 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	2,980	70	92.5%							7.5	0.7	120.9	4.2	F
120 NB I-15: Indian Truck Trail On-ramp	Merge	2,674	83	95.5%	425	55	101.3%				7.6	1.2	105.0	11.7	F
119 NB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	2,728	75	97.4%							31.0	20.2	46.9	38.8	F
118 NB I-15: Indian Truck Trail Off-ramp	Diverge	2,975	46	98.5%				226	24	102.7%	62.4	1.2	15.9	0.4	B
117 NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp	Basic	2,961	52	98.0%							62.4	1.5	16.5	0.6	B
158 NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp (EL Access)	Weave	3,006	78	97.3%	1,165	75	103.1%	1,224	81	102.0%	64.1	1.0	13.7	0.3	B
116 NB I-15: Lake St On-ramp	Merge	2,582	45	97.8%	425	41	94.5%				62.1	3.5	12.5	1.1	B
115 NB I-15: Lake St Off-ramp to On-ramp	Basic	2,583	56	97.8%							63.4	0.7	14.1	0.4	B
114 NB I-15: Lake St Off-ramp	Diverge	2,877	57	97.9%				295	31	98.5%	62.4	1.2	15.5	0.5	B
113 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	2,865	49	97.4%							63.2	0.6	15.6	0.2	B
157 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp (EL Ingress)	Basic	3,090	47	98.1%				237	38	113.0%	63.7	1.3	13.3	0.5	B
156 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	3,088	48	98.0%							62.7	1.6	17.0	0.7	B
112 NB I-15: Nichols Rd On-ramp	Merge	2,778	60	97.8%	308	69	99.2%				64.1	0.6	12.3	0.5	B
111 NB I-15: Nichols Rd Off-ramp to On-ramp	Basic	2,779	56	97.8%							64.0	0.6	15.0	0.3	B
110 NB I-15: Nichols Rd Off-ramp	Diverge	3,126	50	98.0%				352	35	100.5%	61.8	1.5	18.0	0.4	C
109 NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp	Merge	2,445	44	97.4%	688	36	101.1%				62.5	0.5	14.5	0.3	B
108 NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp	Basic	2,444	37	97.4%							64.0	0.7	13.4	0.3	B
155 NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp (EL Ingress)	Basic	3,577	62	98.8%				947	95	103.0%	64.3	0.6	14.3	0.4	B
153 NB I-15: Dexter Ave Off-ramp	Diverge	3,577	62	98.8%				183	28	96.5%	63.6	0.7	16.1	0.5	B
107 NB I-15: WB Central Ave (SR-74) Off-ramp	Basic	4,125	75	98.2%				556	46	95.9%	63.0	0.7	17.0	0.6	B
106 NB I-15: EB Central Ave (SR-74) Off-ramp	Diverge	4,595	75	98.4%				469	33	99.8%	62.9	0.6	18.6	0.4	C
105 NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp	Basic	4,595	66	98.4%							58.7	1.4	27.1	0.9	D
104 NB I-15: Main St On-ramp	Merge	4,322	63	98.5%	278	31	99.4%				61.0	1.1	21.2	0.7	C
103 NB I-15: Main St Off-ramp to On-ramp	Basic	4,320	60	98.4%							61.8	0.7	24.3	1.0	C
102 NB I-15: Main St Off-ramp	Diverge	4,877	65	98.5%				550	38	98.1%	60.2	1.1	27.7	1.4	D
101 NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp	Basic	4,879	78	98.6%							61.8	0.8	27.4	1.2	D

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 152 - NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

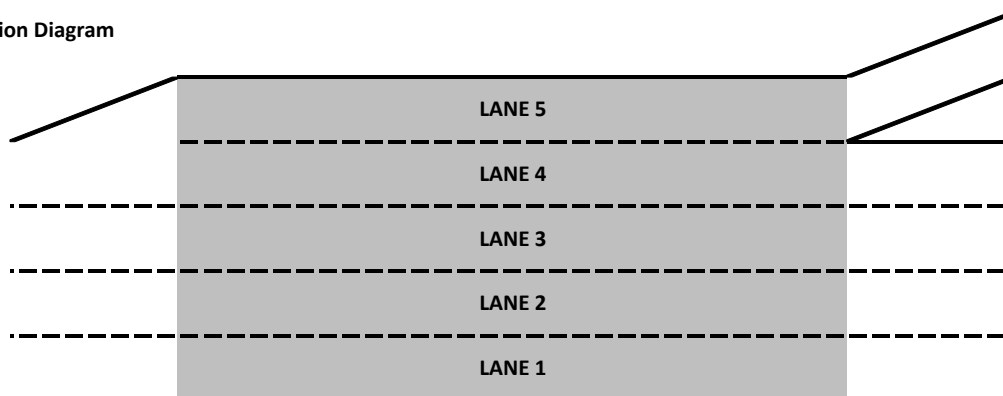
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,182	18	68.6	0.4	6.0	0.4	A
4	916	20	65.9	0.3	12.7	1.0	B
3	892	18	65.4	0.5	14.0	0.9	B
2	593	10	65.6	0.7	13.4	0.4	B
1			63.4	0.8	10.2	0.7	A
Area	3,583	67	65.6	0.2	11.2	0.4	B
Total	3,583	67	65.6	0.2	11.2	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	425	32
Total			Total	425	32

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,720	3,583	67	96.3%	1,446
On-ramp					
Off-ramp	430	425	32	98.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 151 - NB I-15: Hidden Valley Pkwy Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	999	22	65.4	0.5	18.4	1.0	C
3	1,064	21	65.0	0.3	14.2	0.8	B
2	853	15	65.0	0.7	14.0	0.5	B
1	1,228	24	61.6	0.4	19.0	0.4	C
Area	2,082	39	63.1	0.4	16.5	0.4	B
Total	4,145	82	64.2	0.3	16.4	0.4	B

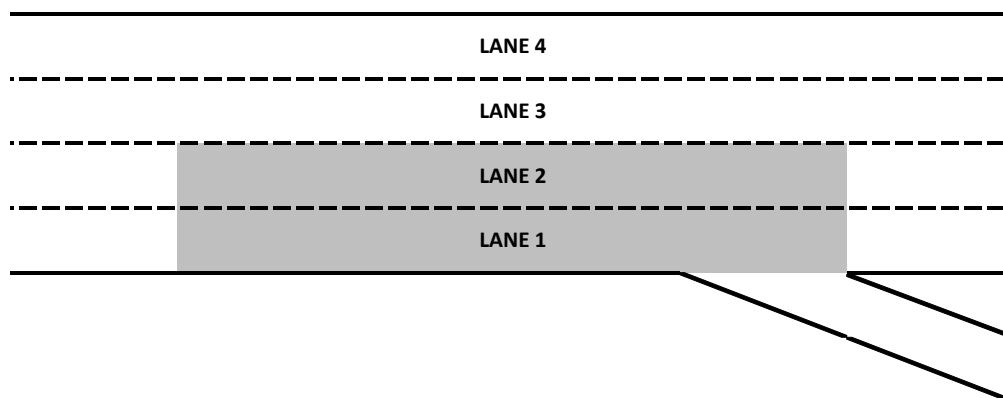
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	562	55
Total	562	55

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,300	4,145	82	96.4%	1,517
On-ramp					
Off-ramp	580	562	55	96.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 150 - NB I-15: EB SR-91 On-ramp

Segment Type - Merge

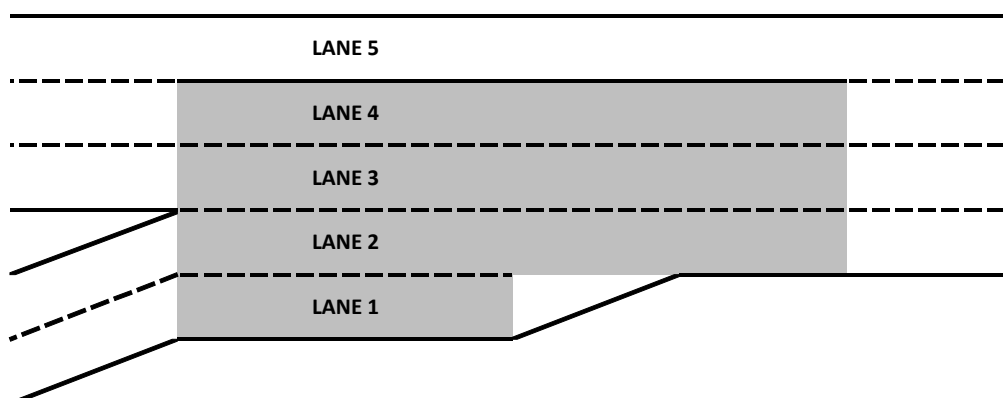
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	918	21	65.6	0.8	15.2	0.9	B
4	966	19	65.2	0.6	16.4	0.5	B
3	1,140	23	64.2	0.6	16.2	0.8	B
2	557	62	63.4	0.7	16.9	1.0	B
1	564	47	28.7	0.7	1.4	0.1	A
Area	3,226	151	64.2	0.4	14.7	0.2	B
Total	4,144	172	64.6	0.4	14.8	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2	557	62	2		
1	564	47	1		
Total	1,121	101	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,190	3,023	71	94.8%	1,509
On-ramp	1,110	1,121	101	101.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 149 - NB I-15: WB SR-91 On-ramp

Segment Type - Merge

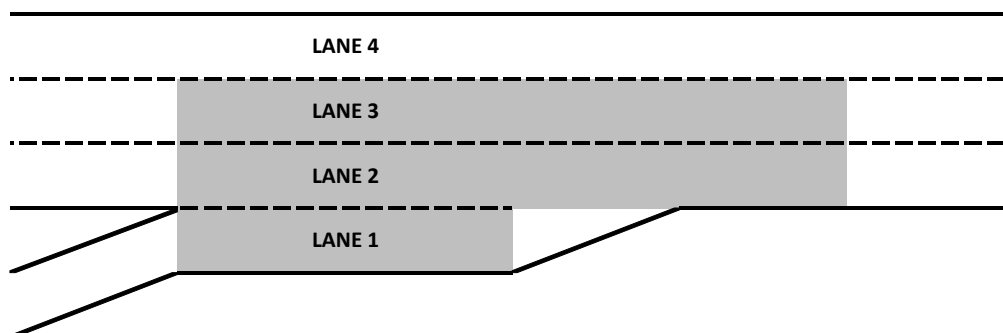
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	772	18	65.7	0.5	13.2	0.7	B
3	822	15	64.2	0.5	15.8	0.5	B
2	599	20	62.3	0.5	17.9	1.2	B
1	826	57	30.8	0.2	1.6	0.1	A
Area	2,247	92	62.8	0.3	13.7	0.6	B
Total	3,019	110	63.6	0.3	13.5	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	826	57	1		
Total	826	57	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,330	2,193	53	94.1%	1,564
On-ramp	860	826	57	96.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 148 - NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp

Segment Type - Basic

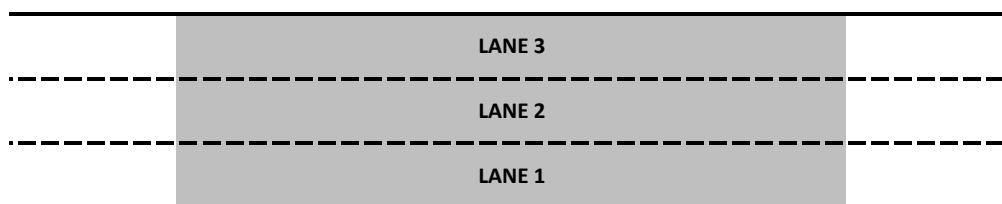
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	943	22	65.2	0.8	13.9	0.2	B
2	786	19	64.1	0.5	12.8	0.8	B
1	466	20	65.5	1.3	7.5	1.2	A
Area	2,195	60	64.9	0.7	11.4	0.6	B
Total	2,195	60	64.9	0.7	11.4	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,330	2,195	60	94.2%	3,525
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 147 - NB I-15: EB & WB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,128	26	57.8	2.0	19.2	0.4	C
3	960	20	51.5	2.6	17.9	1.1	B
2	1,676	12	42.8	5.2	34.3	4.4	D
1	1,703	10	42.5	5.6	37.5	5.6	E
Area	4,339	41	44.7	4.7	29.7	3.2	D
Total	5,467	67	47.6	4.1	26.7	2.2	D

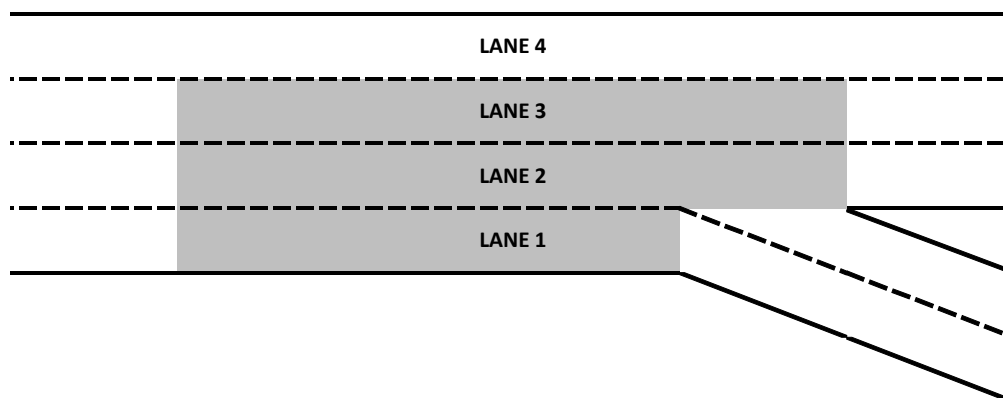
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,372	68
1	1,898	38
Total	3,270	73

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,890	5,467	67	92.8%	1,324
On-ramp					
Off-ramp	3,560	3,270	73	91.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 146 - NB I-15: Magnolia Ave On-ramp

Segment Type - Merge

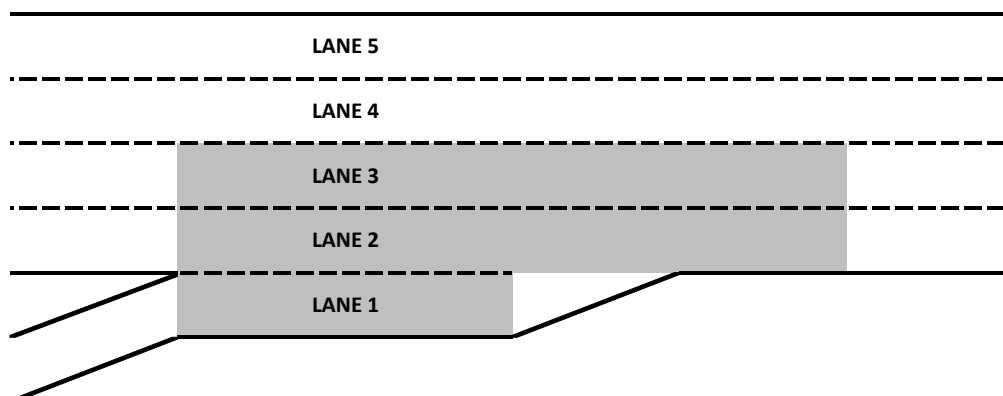
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,007	31	40.9	1.9	26.3	3.3	D
4	1,586	9	22.7	0.3	65.1	2.3	F
3	756	14	16.7	0.2	93.9	2.7	F
2	1,395	10	17.6	0.4	97.4	2.2	F
1	726	32	13.8	0.3	14.3	1.2	B
Area	2,877	55	17.7	0.3	69.8	1.7	F
Total	5,470	96	23.3	0.5	52.2	1.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	726	32	1		
Total	726	32	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,170	4,744	64	91.8%	1,292
On-ramp	720	726	32	100.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 145 - NB I-15: Magnolia Ave Loop On-ramp

Segment Type - Basic

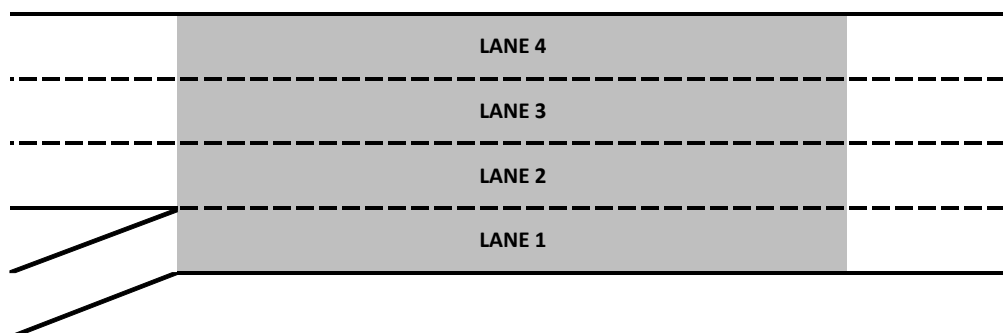
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,193	20	29.3	2.4	36.8	3.3	E
3	1,466	21	12.7	0.3	113.0	2.5	F
2	1,439	21	7.5	0.2	119.5	5.2	F
1	647	39	11.9	0.2	108.7	1.6	F
Area	4,746	102	15.3	0.8	76.9	2.9	F
Total	4,746	102	15.3	0.8	76.9	2.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	647	39	1		
Total	647	39	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,510	4,099	63	90.9%	852
On-ramp	660	647	39	98.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 144 - NB I-15: Magnolia Ave Off-ramp to Loop On-ramp

Segment Type - Basic

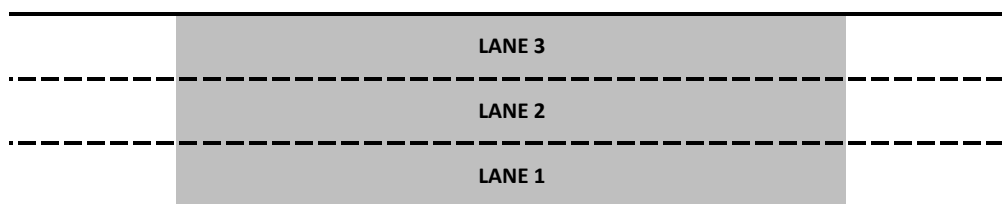
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,409	11	20.5	1.1	72.3	2.0	F
2	1,386	22	11.8	0.8	111.0	3.4	F
1	1,302	20	12.3	0.9	102.0	4.3	F
Area	4,098	53	15.2	0.7	88.9	1.6	F
Total	4,098	53	15.2	0.7	88.9	1.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,510	4,098	53	90.9%	1,562
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 143 - NB I-15: Magnolia Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,763	13	18.0	0.3	97.5	1.4	F
3	1,389	16	11.8	0.6	104.5	1.5	F
2	1,232	27	11.0	1.4	102.2	6.1	F
1	522	14	28.8	9.2	23.8	4.9	C
Area	3,144	57	15.3	2.2	66.3	7.2	F
Total	4,906	71	16.3	1.5	73.4	4.9	F

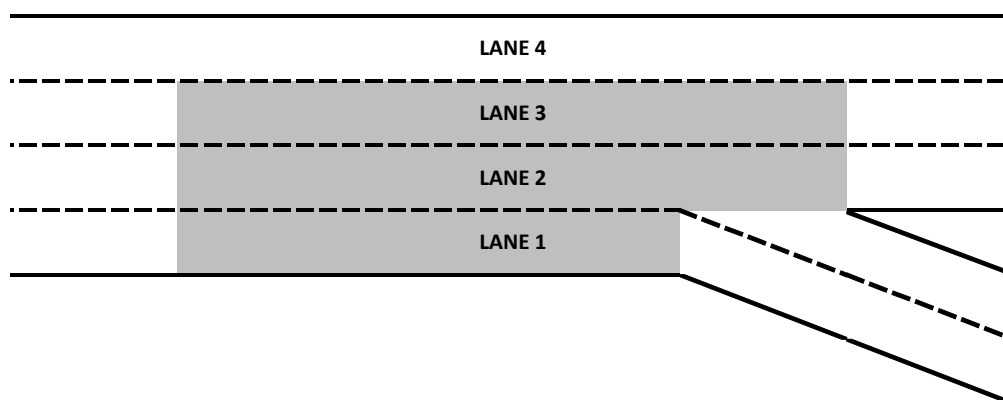
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	217	35
1	603	77
Total	820	74

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,420	4,906	71	90.5%	1,496
On-ramp					
Off-ramp	910	820	74	90.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 141 - NB I-15: Ontario Ave to Magnolia Ave (EL Access)

Segment Type - Weave

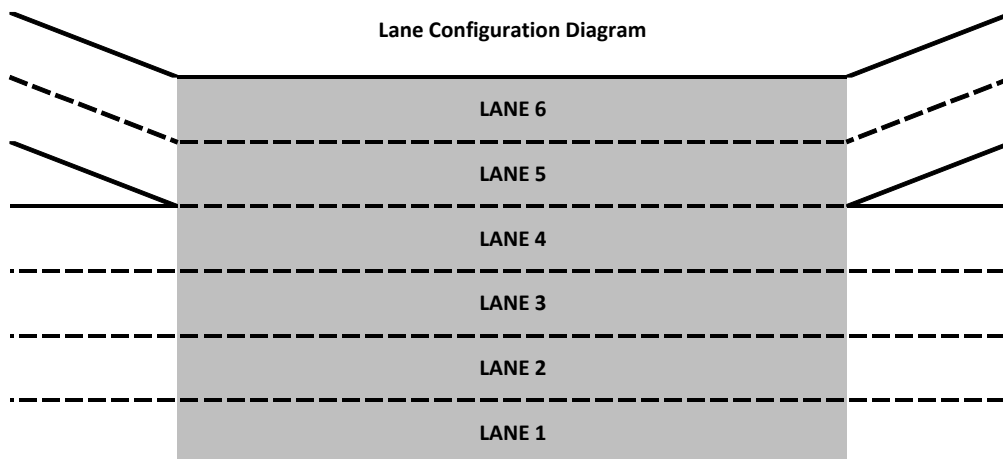
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	1,554	16	48.5	0.6	7.3	0.6	A
5	1,321	20	42.4	0.7	7.3	0.5	A
4	1,292	29	16.4	0.5	101.9	1.7	F
3	743	15	12.9	0.4	105.0	2.0	F
2	611	59	11.4	0.9	103.3	3.4	F
1	796	72	29.4	3.2	19.5	1.4	C
Area	6,317	211	23.3	0.8	46.8	0.5	F
Total	6,317	211	23.3	0.8	46.8	0.5	F

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	611	59
1	796	72
Total	1,408	123

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	843	62
1	572	58
Total	1,415	98

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,410	4,910	88	90.8%	2,965
On-ramp	1,420	1,408	123	99.1%	
Off-ramp	1,410	1,415	98	100.3%	



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 140 - NB I-15: Ontario Ave On-ramp

Segment Type - Merge

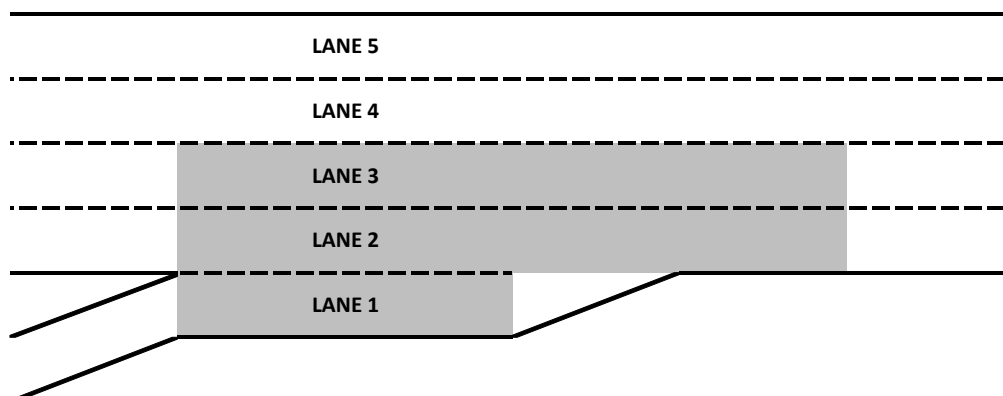
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,441	17	12.7	0.7	117.2	2.3	F
4	1,085	26	10.4	0.9	117.8	4.1	F
3	1,125	20	9.9	0.9	114.8	2.8	F
2	326	16	23.2	1.8	41.4	2.5	E
1	940	41	22.9	0.8	2.5	0.3	A
Area	2,391	76	17.2	1.3	49.7	1.4	F
Total	4,917	119	14.1	0.7	75.2	1.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	940	41	1		
Total	940	41	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,450	3,977	78	89.4%	1,496
On-ramp	960	940	41	97.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 138 - NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)

Segment Type - Basic

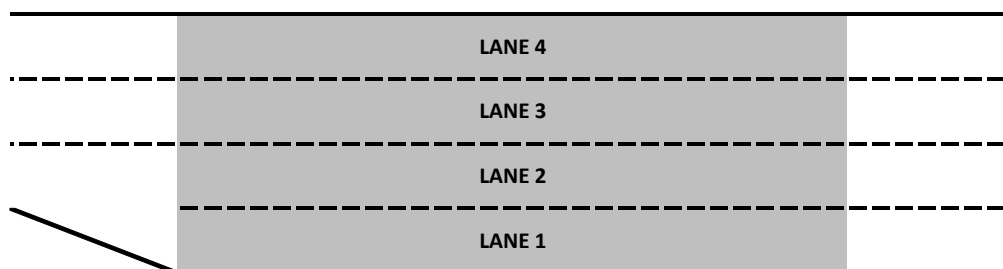
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,420	18	12.4	0.6	113.7	2.6	F
3	1,112	23	9.0	0.9	115.7	5.6	F
2	1,112	22	9.6	0.7	111.0	3.0	F
1	321	16	57.2	1.3	4.9	0.6	A
Area	3,964	79	14.0	0.7	68.0	1.2	F
Total	3,964	79	14.0	0.7	68.0	1.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,450	3,964	79	89.1%	3,004
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 137 - NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)

Segment Type - Basic

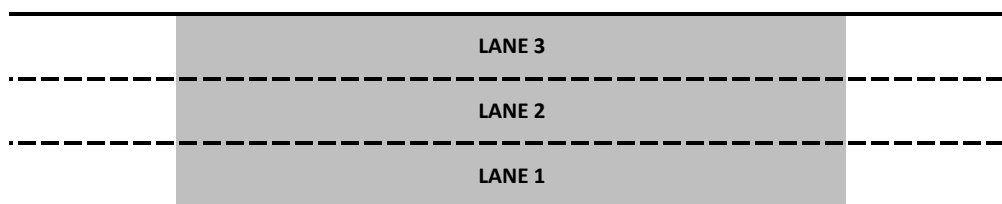
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,419	17	12.1	0.7	112.8	3.1	F
2	1,209	25	10.3	1.3	109.8	7.4	F
1	1,332	26	12.2	1.1	101.6	5.3	F
Area	3,959	69	11.6	0.7	107.0	3.3	F
Total	3,959	69	11.6	0.7	107.0	3.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,450	3,959	69	89.0%	197
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 136 - NB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

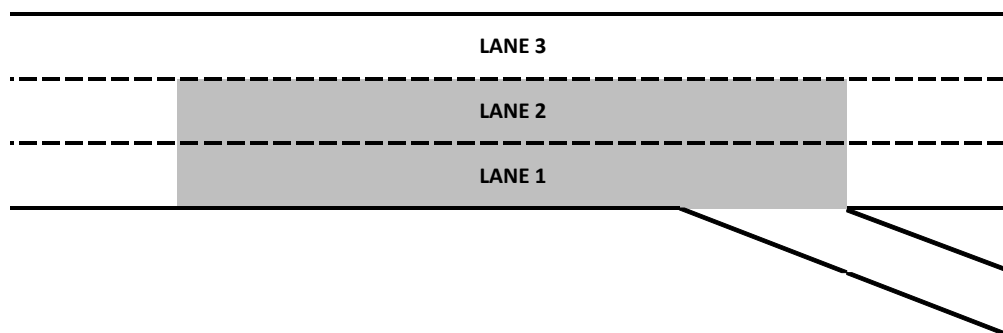
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,511	15	12.3	0.6	115.5	3.3	F
2	1,459	24	12.2	1.3	107.6	5.0	F
1	1,544	26	16.6	1.6	89.1	5.0	F
Area	3,003	50	14.6	1.4	95.9	4.6	F
Total	4,514	65	13.8	1.0	101.7	4.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	563	55
Total			Total	563	55

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,970	4,514	65	90.8%	763
On-ramp					
Off-ramp	520	563	55	108.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 135 - NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Merge

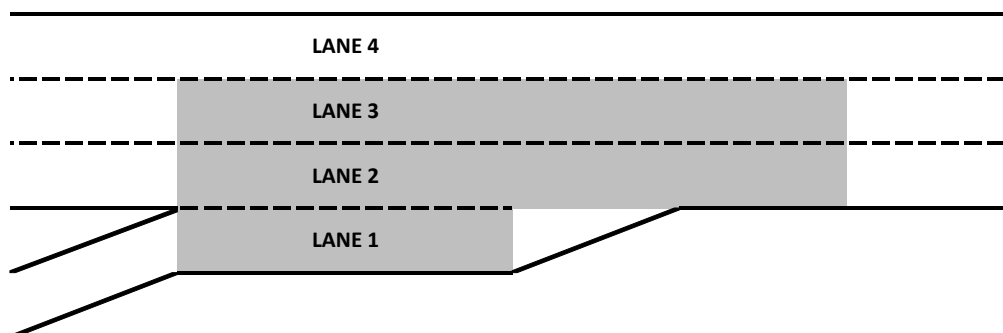
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,551	13	12.2	0.3	120.3	3.2	F
3	1,255	32	11.0	1.0	119.3	5.6	F
2	1,038	32	8.4	1.0	122.1	3.8	F
1	657	33	10.7	1.4	45.8	6.4	F
Area	2,950	97	10.1	0.7	94.3	3.3	F
Total	4,501	111	10.8	0.5	99.8	2.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	657	33	1		
Total	657	33	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,320	3,844	78	89.0%	873
On-ramp	650	657	33	101.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 133 - NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,640	20	61.9	1.0	10.9	0.8	A
4	1,278	26	58.7	2.1	10.7	0.8	A
3	1,015	25	14.7	0.7	105.6	2.8	F
2	633	51	11.6	1.4	108.7	5.2	F
1	676	68	10.1	1.1	103.8	4.6	F
Area	5,242	190	26.1	0.7	42.1	1.6	E
Total	5,242	190	26.1	0.7	42.1	1.6	E

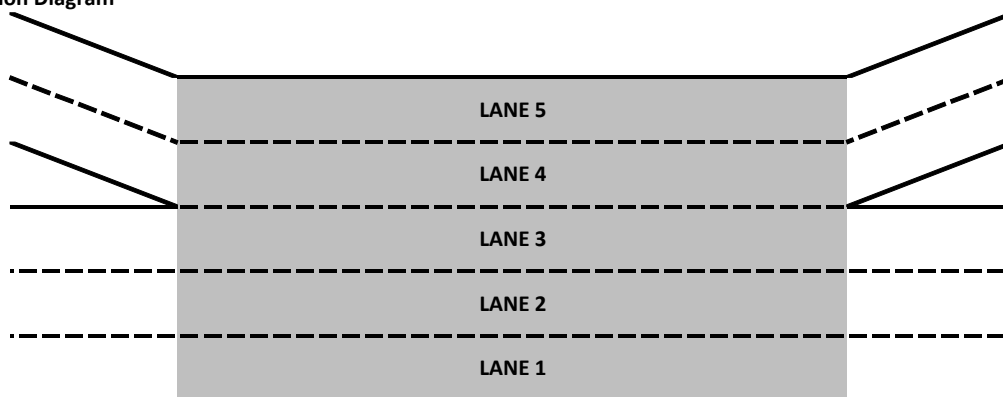
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	633	51
1	676	68
Total	1,309	115

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	759	62
1	651	50
Total	1,410	101

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,410	3,933	75	89.2%	2,115
On-ramp	1,330	1,309	115	98.4%	
Off-ramp	1,420	1,410	101	99.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 132 - NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,449	15	12.5	0.9	113.7	4.1	F
3	1,176	28	8.7	1.1	119.9	2.9	F
2	1,158	28	6.2	0.6	121.4	6.1	F
1	520	51	5.4	0.7	107.7	5.6	F
Area	4,303	122	9.3	0.7	110.5	3.9	F
Total	4,303	122	9.3	0.7	110.5	3.9	F

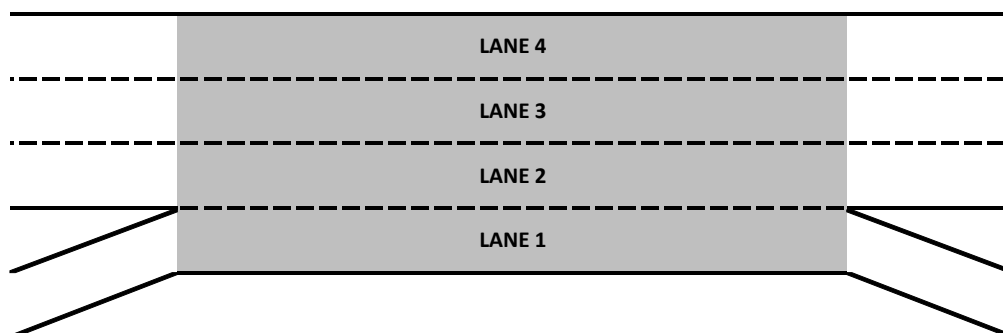
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	520	51
Total	520	51

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	374	50
Total	374	50

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,220	3,783	70	89.6%	2,708
On-ramp	510	520	51	101.9%	
Off-ramp	320	374	50	116.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 131 - NB I-15: Cajalco Rd Loop On-ramp

Segment Type - Merge

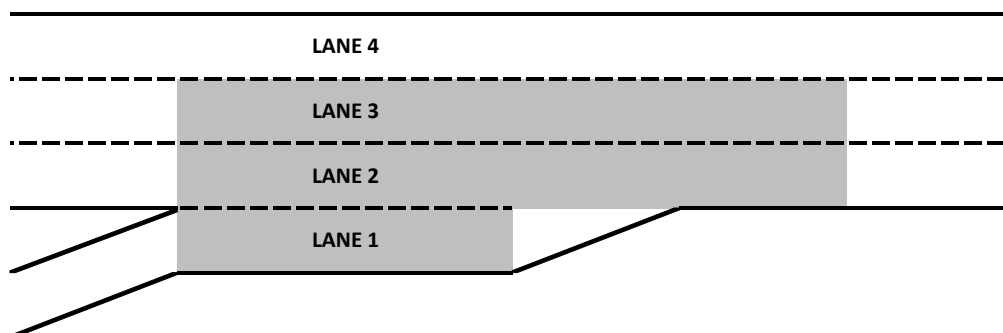
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,421	17	11.5	0.6	121.3	3.1	F
3	1,081	39	8.8	1.2	124.5	5.0	F
2	756	37	6.5	0.9	123.1	10.3	F
1	522	46	2.5	0.7	41.8	9.5	E
Area	2,358	122	7.5	1.0	108.4	6.3	F
Total	3,779	139	9.2	0.7	106.6	2.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	522	46	1		
Total	522	46	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,720	3,258	92	87.6%	1,305
On-ramp	500	522	46	104.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 170 - NB I-15: Cajalco Rd Off-ramp to Loop On-ramp

Segment Type - Basic

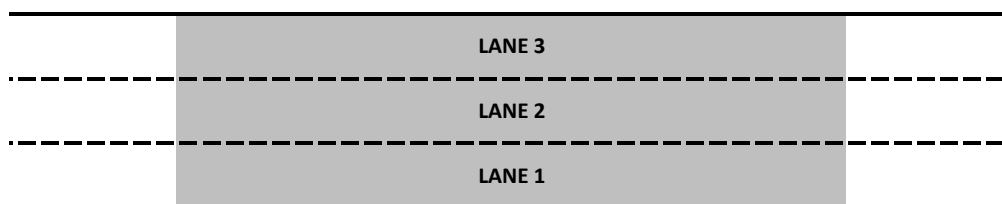
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,445	16	12.7	0.6	111.7	2.5	F
2	1,044	28	9.5	0.6	112.9	5.5	F
1	763	35	7.3	0.9	114.9	4.9	F
Area	3,252	79	10.3	0.3	107.3	1.1	F
Total	3,252	79	10.3	0.3	107.3	1.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,720	3,252	79	87.4%	1,693
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 130 - NB I-15: Cajalco Rd Off-ramp to Loop On-ramp (EL Ingress)

Segment Type - Basic

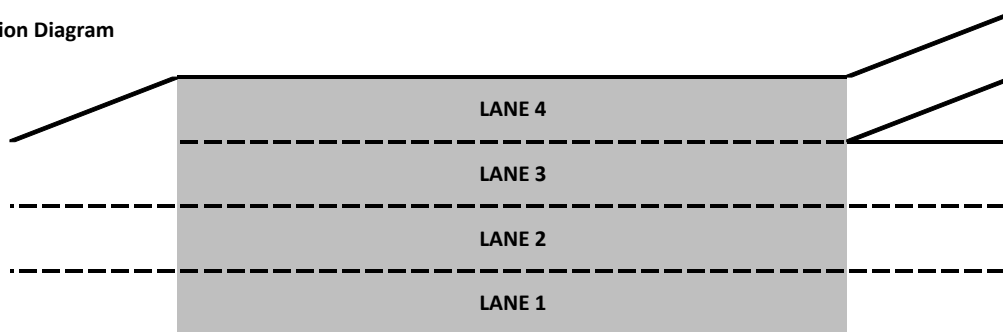
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,538	24	47.4	1.1	3.7	1.4	A
3	1,142	35	12.8	1.0	112.1	4.5	F
2	762	38	9.9	1.0	115.0	6.1	F
1			6.6	1.5	114.9	4.5	F
Area	3,442	97	12.2	1.3	71.7	1.4	F
Total	3,442	97	12.2	1.3	71.7	1.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	201	44
Total			Total	201	44

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,940	3,442	97	87.4%	1,000
On-ramp					
Off-ramp	220	201	44	91.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 129 - NB I-15: Cajalco Rd Off-ramp

Segment Type - Diverge

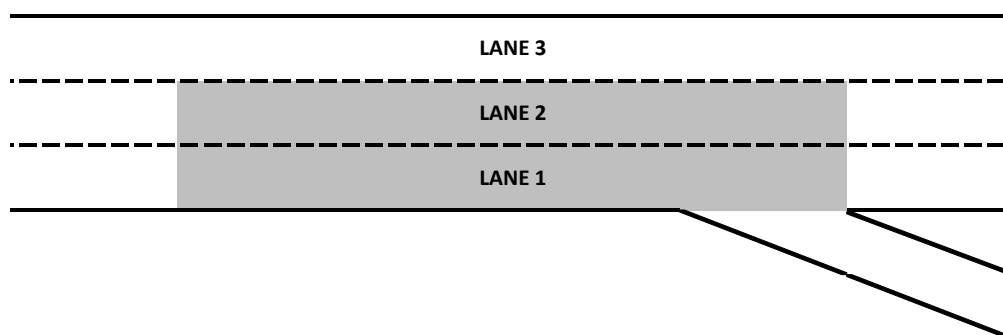
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,391	19	11.7	1.0	116.8	4.5	F
2	1,247	30	8.8	1.4	118.2	5.0	F
1	993	44	7.0	1.1	119.3	3.6	F
Area	2,240	74	8.1	1.2	87.7	2.5	F
Total	3,631	93	9.6	0.9	112.1	2.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	187	40
Total			Total	187	40

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,140	3,631	93	87.7%	1,046
On-ramp					
Off-ramp	200	187	40	93.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 128 - NB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

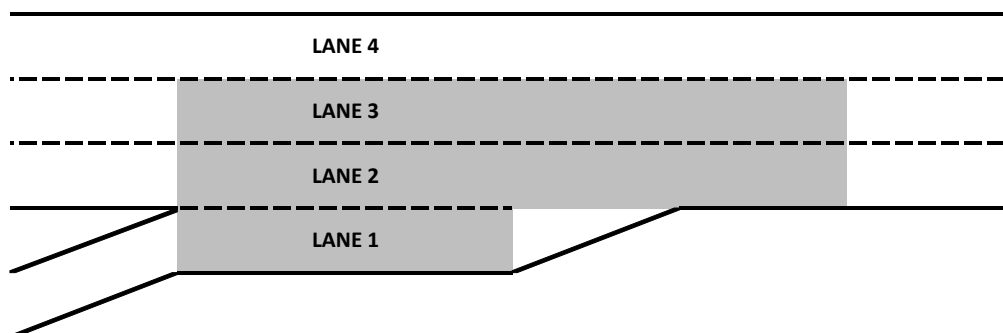
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,367	18	11.2	0.6	117.4	3.1	F
3	930	20	8.4	1.2	121.2	5.0	F
2	717	33	6.1	0.7	120.6	4.0	F
1	628	105	1.4	0.2	81.0	4.3	F
Area	2,276	158	6.9	0.7	108.7	3.8	F
Total	3,643	177	8.7	0.5	104.1	1.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	628	105	1		
Total	628	105	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,300	3,015	71	91.4%	1,487
On-ramp	840	628	105	74.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 127 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

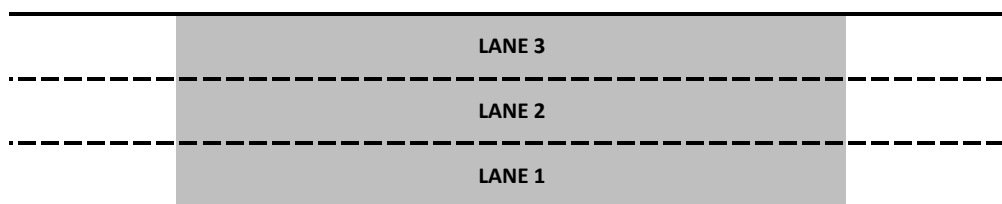
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,353	20	11.9	1.1	116.1	4.8	F
2	929	20	7.7	0.4	122.5	3.4	F
1	736	30	6.1	1.1	126.9	5.0	F
Area	3,018	71	9.2	0.8	112.2	3.9	F
Total	3,018	71	9.2	0.8	112.2	3.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,300	3,018	71	91.5%	2,537
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 126 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

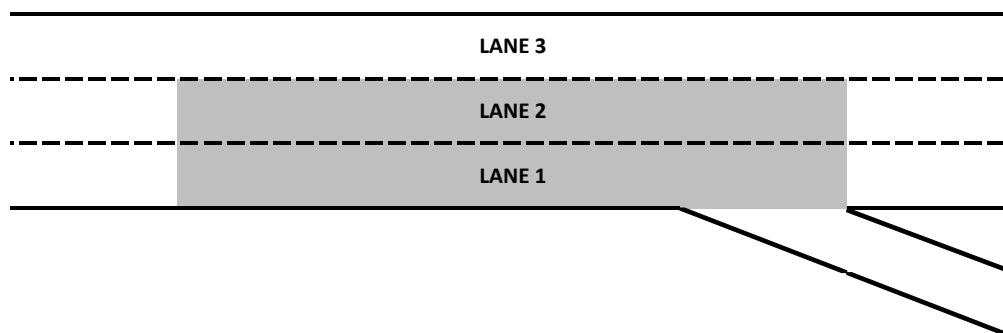
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,382	21	11.2	0.8	118.2	3.6	F
2	1,021	23	7.4	0.6	125.3	5.4	F
1	843	31	6.5	1.1	126.4	6.4	F
Area	1,863	54	7.0	0.5	124.1	2.4	F
Total	3,245	76	8.8	0.4	115.5	4.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	220	28
Total			Total	220	28

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,550	3,245	76	91.4%	1,499
On-ramp					
Off-ramp	250	220	28	87.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 125 - NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

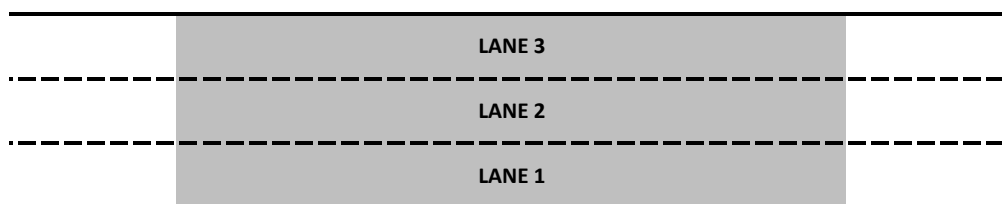
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,367	17	11.1	0.7	119.0	2.8	F
2	1,034	20	7.8	0.6	121.7	4.7	F
1	840	33	6.1	0.6	128.2	5.6	F
Area	3,242	70	8.8	0.6	115.4	3.1	F
Total	3,242	70	8.8	0.6	115.4	3.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,550	3,242	70	91.3%	6,786
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 124 - NB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

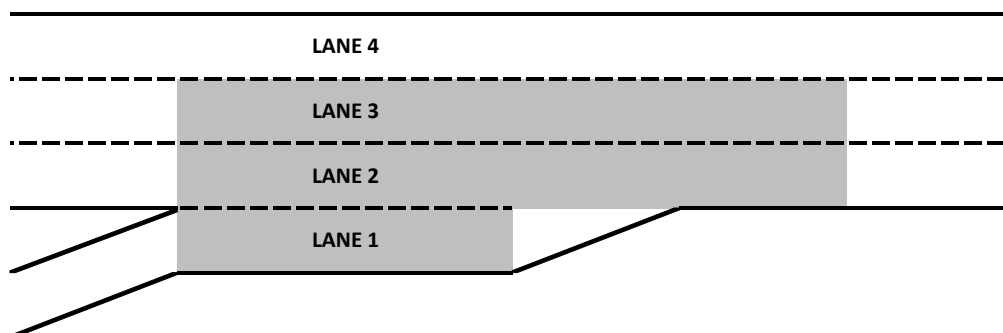
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,306	16	10.1	0.6	127.6	3.1	F
3	845	22	7.0	0.5	129.0	5.2	F
2	526	21	4.7	0.3	131.7	7.7	F
1	541	75	1.0	0.1	60.7	3.6	F
Area	1,912	118	5.7	0.4	117.5	6.3	F
Total	3,218	134	7.6	0.4	111.2	4.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	541	75	1		
Total	541	75	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,040	2,677	58	88.1%	1,498
On-ramp	510	541	75	106.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 123 - NB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

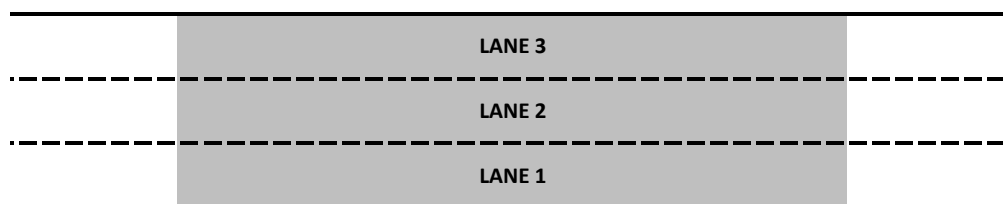
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,287	17	11.0	0.5	119.2	2.1	F
2	838	23	7.6	1.0	122.1	5.8	F
1	549	23	4.6	1.1	138.9	11.0	F
Area	2,673	62	8.5	0.5	112.2	1.7	F
Total	2,673	62	8.5	0.5	112.2	1.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,040	2,673	62	87.9%	2,725
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 122 - NB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,318	19	10.3	0.7	122.1	3.5	F
2	913	27	6.2	0.7	123.9	3.5	F
1	667	25	4.1	0.4	146.3	7.4	F
Area	1,581	52	5.3	0.6	129.7	6.6	F
Total	2,899	72	7.7	0.5	113.7	4.6	F

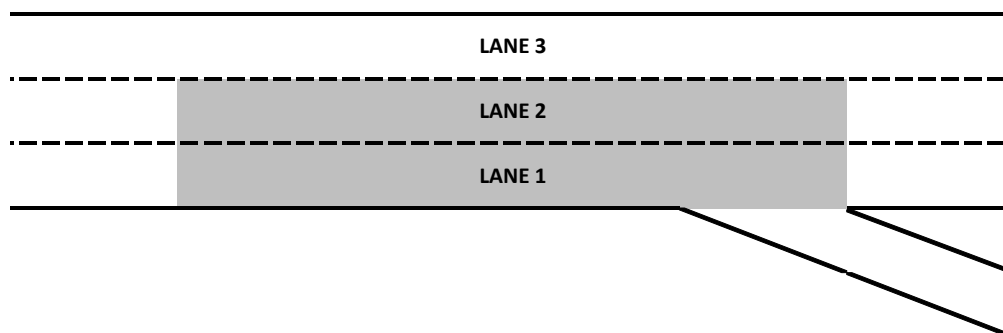
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	236	32
Total	236	32

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,310	2,899	72	87.6%	1,498
On-ramp					
Off-ramp	270	236	32	87.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 121 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

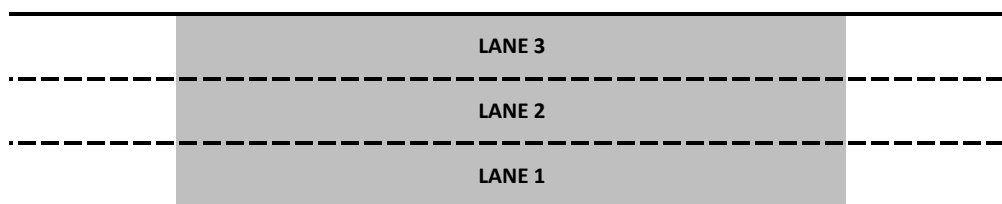
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,336	21	10.7	0.8	120.0	4.6	F
2	916	19	6.7	0.3	126.6	3.1	F
1	648	28	3.8	0.3	145.0	3.1	F
Area	2,900	68	8.0	0.5	111.7	5.1	F
Total	2,900	68	8.0	0.5	111.7	5.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,310	2,900	68	87.6%	5,648
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 160 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,195	16	43.6	0.6	7.1	0.6	A
4	1,019	30	35.8	1.7	7.2	0.7	A
3	748	34	10.0	0.3	123.0	1.6	F
2	548	51	8.4	0.8	120.6	7.0	F
1	664	39	5.4	1.1	129.7	4.5	F
Area	4,174	170	20.5	0.4	53.0	1.5	F
Total	4,174	170	20.5	0.4	53.0	1.5	F

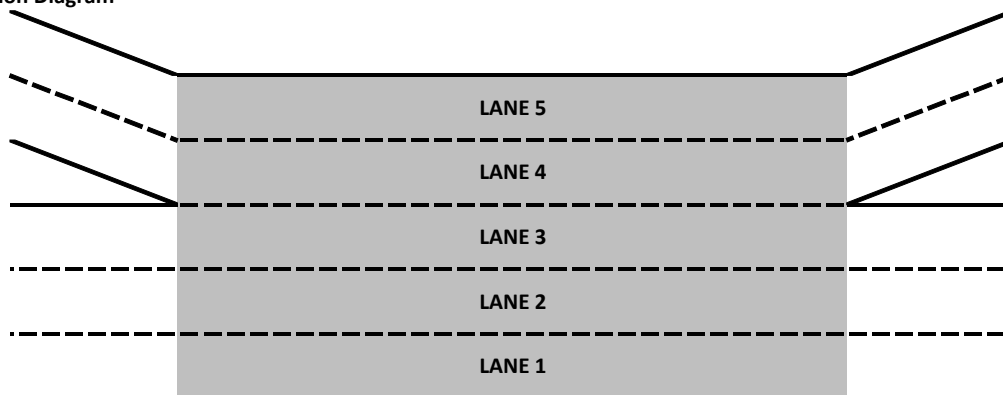
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	548	51
1	664	39
Total	1,212	77

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	683	66
1	448	58
Total	1,131	77

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,220	2,962	93	92.0%	2,991
On-ramp	1,200	1,212	77	101.0%	
Off-ramp	1,110	1,131	77	101.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 159 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

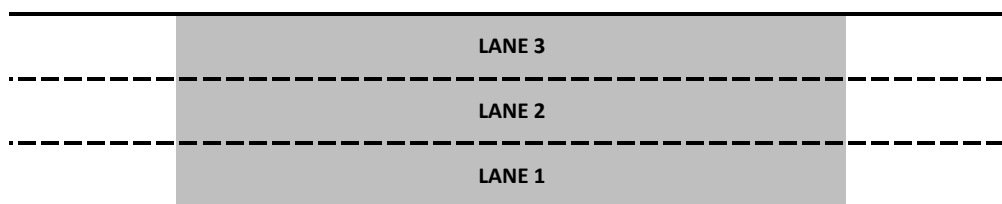
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,152	15	8.5	0.8	129.7	6.8	F
2	1,055	27	7.8	0.6	119.5	5.3	F
1	772	29	5.1	0.8	130.8	4.9	F
Area	2,980	70	7.5	0.7	120.9	4.2	F
Total	2,980	70	7.5	0.7	120.9	4.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,220	2,980	70	92.5%	697
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 120 - NB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

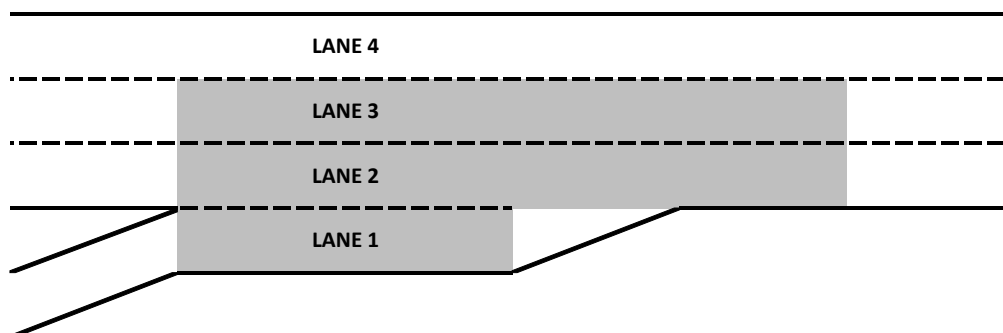
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,064	20	8.8	0.8	129.2	8.3	F
3	907	35	7.9	1.2	124.0	10.6	F
2	703	28	5.0	1.2	129.8	10.6	F
1	425	55	3.9	2.9	26.8	15.5	D
Area	2,036	118	6.7	1.5	105.0	11.7	F
Total	3,099	138	7.6	1.2	109.0	8.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	425	55	1		
Total	425	55	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,800	2,674	83	95.5%	1,499
On-ramp	420	425	55	101.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 119 - NB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

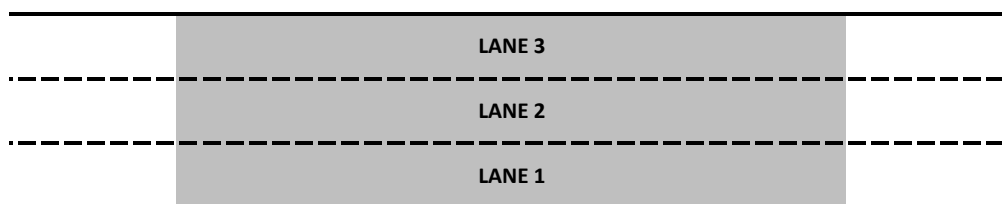
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,036	22	33.7	20.7	49.1	40.1	F
2	953	32	31.3	21.0	48.9	40.0	F
1	739	21	26.1	18.8	50.0	46.3	F
Area	2,728	75	31.0	20.2	46.9	38.8	F
Total	2,728	75	31.0	20.2	46.9	38.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,800	2,728	75	97.4%	2,922
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 118 - NB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,051	14	64.1	1.3	17.3	0.8	B
2	1,065	15	62.4	0.7	16.5	0.5	B
1	859	17	60.4	1.9	15.3	1.0	B
Area	1,924	32	61.5	1.2	15.9	0.4	B
Total	2,975	46	62.4	1.2	16.3	0.4	B

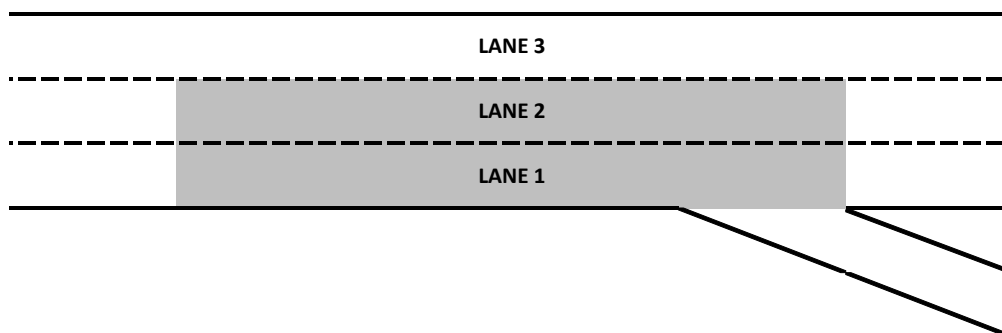
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	226	24
Total	226	24

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,020	2,975	46	98.5%	1,499
On-ramp					
Off-ramp	220	226	24	102.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 117 - NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

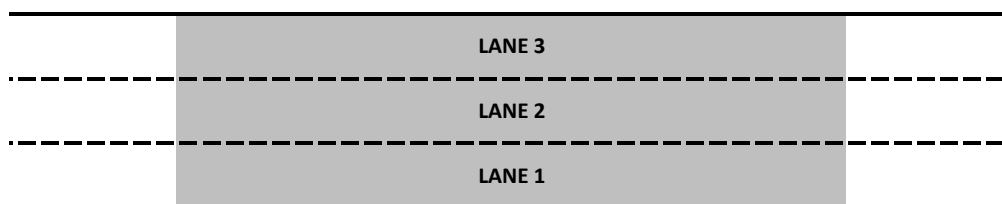
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,112	21	64.2	1.3	18.0	0.7	B
2	1,035	18	62.2	1.2	17.6	0.5	B
1	814	13	60.3	2.1	13.9	0.9	B
Area	2,961	52	62.4	1.5	16.5	0.6	B
Total	2,961	52	62.4	1.5	16.5	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,020	2,961	52	98.0%	10,492
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 158 - NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,158	20	46.5	0.1	5.2	0.4	A
4	1,030	21	47.8	0.1	5.4	0.5	A
3	818	13	64.0	1.0	18.2	0.4	C
2	553	44	62.7	1.2	16.9	0.6	B
1	611	55	61.2	1.7	14.1	0.7	B
Area	4,171	153	64.1	1.0	13.7	0.3	B
Total	4,171	153	64.1	1.0	13.7	0.3	B

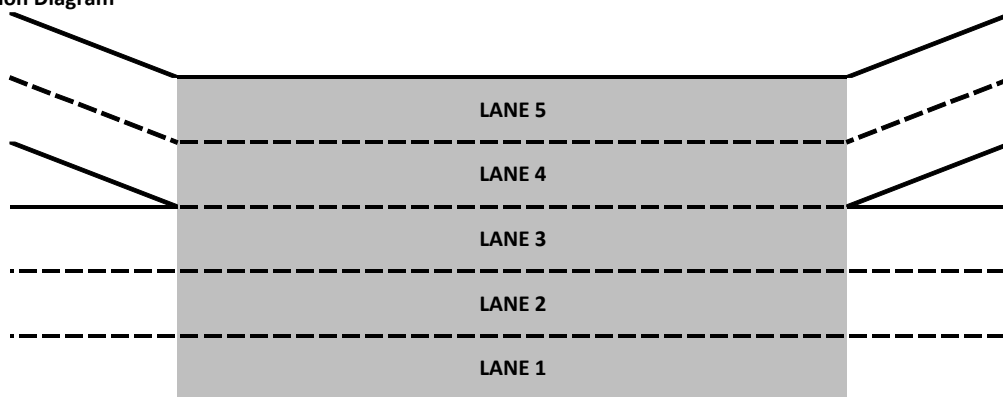
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	553	44
1	611	55
Total	1,165	75

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	585	51
1	639	41
Total	1,224	81

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,090	3,006	78	97.3%	3,029
On-ramp	1,130	1,165	75	103.1%	
Off-ramp	1,200	1,224	81	102.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 116 - NB I-15: Lake St On-ramp

Segment Type - Merge

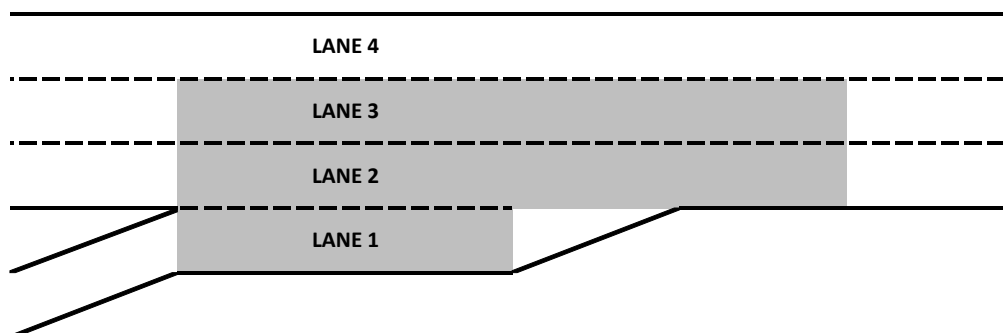
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	978	17	63.8	3.8	17.0	1.9	B
3	918	18	62.1	3.7	16.9	1.3	B
2	686	10	60.2	3.6	13.5	1.6	B
1	425	41	32.7	0.4	1.6	0.1	A
Area	2,029	69	61.2	3.4	12.5	1.1	B
Total	3,007	86	62.1	3.5	13.8	1.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	425	41	1		
Total	425	41	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,640	2,582	45	97.8%	1,499
On-ramp	450	425	41	94.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 115 - NB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

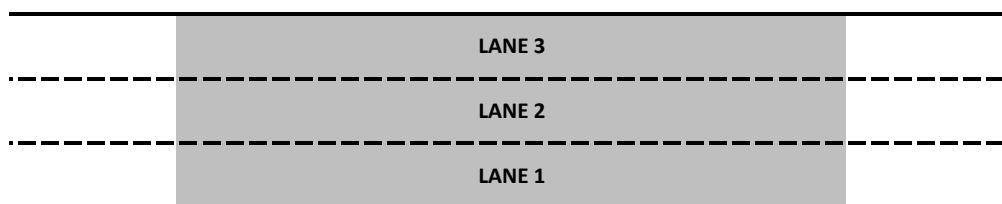
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	998	16	65.2	0.8	16.5	0.4	B
2	923	21	62.9	0.3	14.6	0.6	B
1	662	19	61.1	1.2	11.3	0.5	B
Area	2,583	56	63.4	0.7	14.1	0.4	B
Total	2,583	56	63.4	0.7	14.1	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,640	2,583	56	97.8%	3,216
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 114 - NB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,003	15	64.7	1.0	16.7	0.5	B
2	1,045	22	62.3	1.2	15.6	0.6	B
1	830	19	59.7	1.5	15.5	0.5	B
Area	1,874	42	61.0	1.3	15.5	0.5	B
Total	2,877	57	62.4	1.2	15.9	0.5	B

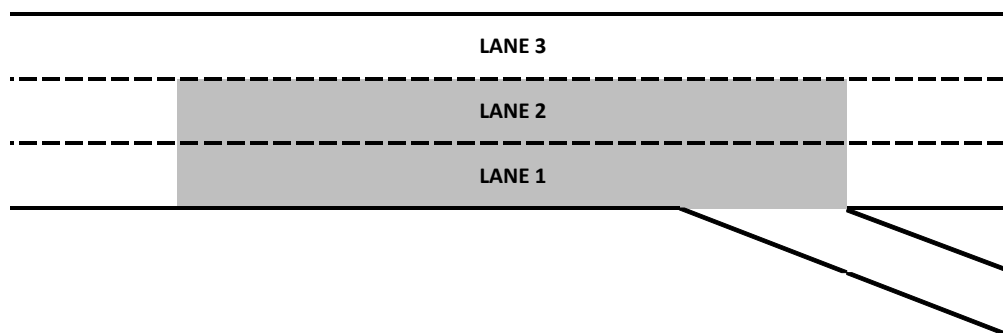
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	295	31
Total	295	31

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,940	2,877	57	97.9%	1,498
On-ramp					
Off-ramp	300	295	31	98.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 113 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

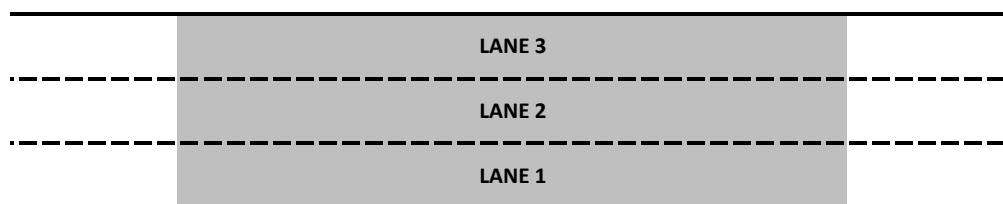
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,062	12	65.0	0.6	16.5	0.4	B
2	1,031	19	63.2	0.4	17.0	0.3	B
1	771	17	61.0	1.1	13.2	0.2	B
Area	2,865	49	63.2	0.6	15.6	0.2	B
Total	2,865	49	63.2	0.6	15.6	0.2	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,940	2,865	49	97.4%	6,270
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 157 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp (EL Ingress)

Segment Type - Basic

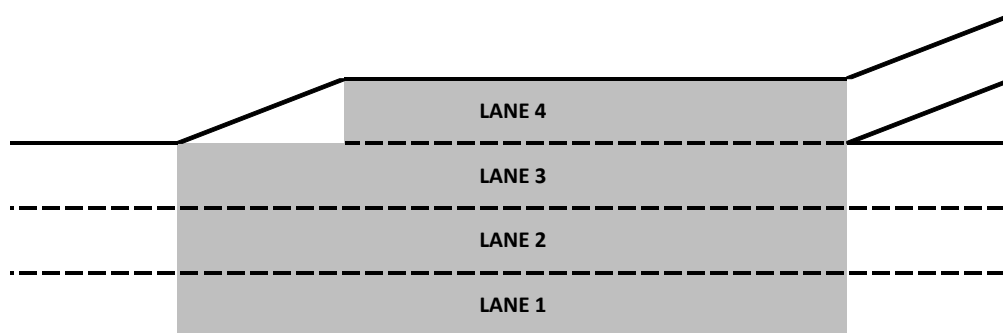
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	839	20	53.3	0.2	2.5	0.4	A
3	1,042	12	64.9	1.6	17.3	0.9	B
2	1,209	14	63.2	1.4	16.4	0.3	B
1			61.8	1.4	14.1	1.1	B
Area	3,090	47	63.7	1.3	13.3	0.5	B
Total	3,090	47	63.7	1.3	13.3	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	237	38
Total			Total	237	38

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,150	3,090	47	98.1%	1,501
On-ramp					
Off-ramp	210	237	38	113.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 156 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

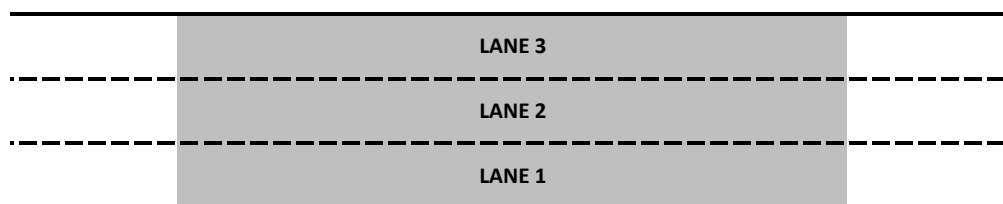
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	832	20	64.0	1.4	20.1	0.9	C
2	1,041	17	62.5	1.7	16.8	0.4	B
1	1,216	12	61.1	2.0	14.2	1.1	B
Area	3,088	48	62.7	1.6	17.0	0.7	B
Total	3,088	48	62.7	1.6	17.0	0.7	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,150	3,088	48	98.0%	703
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 112 - NB I-15: Nichols Rd On-ramp

Segment Type - Merge

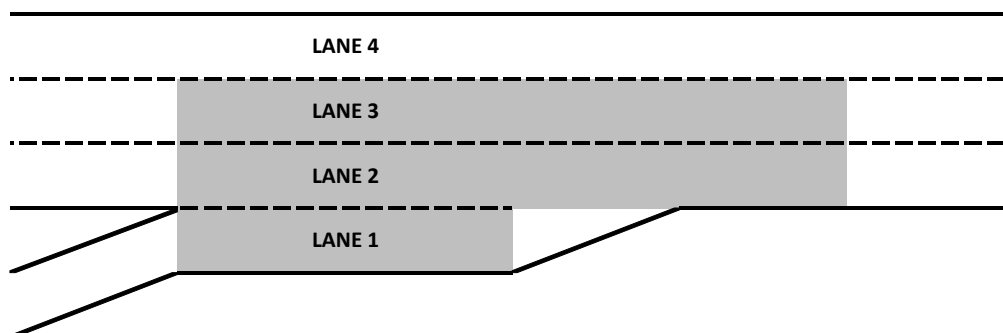
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,033	18	65.7	0.3	18.3	0.4	C
3	1,023	19	63.6	0.8	17.0	0.6	B
2	722	23	62.2	1.2	13.4	0.9	B
1	308	69	37.3	0.3	1.3	0.2	A
Area	2,052	111	63.1	0.8	12.3	0.5	B
Total	3,085	129	64.1	0.6	14.0	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	308	69	1		
Total	308	69	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,840	2,778	60	97.8%	1,499
On-ramp	310	308	69	99.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 111 - NB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

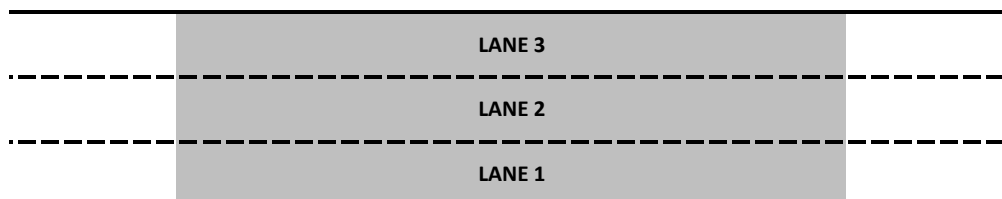
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,010	17	65.4	0.5	16.5	0.5	B
2	992	17	63.6	0.7	16.0	0.5	B
1	776	21	62.6	0.9	12.6	0.7	B
Area	2,779	56	64.0	0.6	15.0	0.3	B
Total	2,779	56	64.0	0.6	15.0	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,840	2,779	56	97.8%	3,521
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 110 - NB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,052	14	63.8	1.4	16.7	0.7	B
2	1,092	15	61.6	1.7	17.5	0.3	B
1	982	20	60.2	1.5	18.6	0.6	C
Area	2,074	35	60.9	1.6	18.0	0.4	C
Total	3,126	50	61.8	1.5	17.6	0.3	B

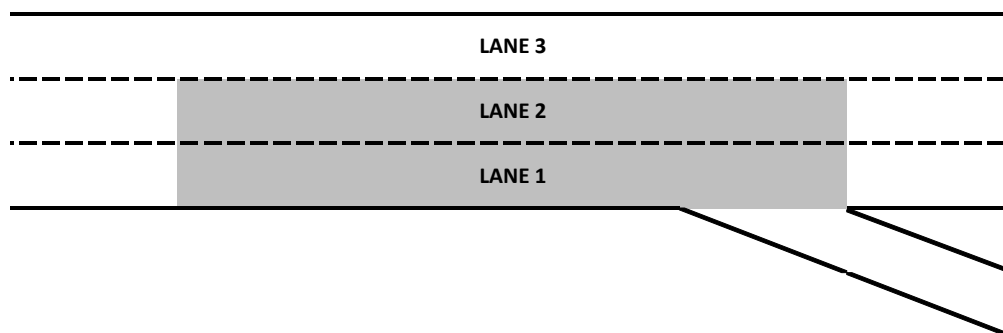
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	352	35
Total	352	35

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,190	3,126	50	98.0%	1,488
On-ramp					
Off-ramp	350	352	35	100.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 109 - NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp

Segment Type - Merge

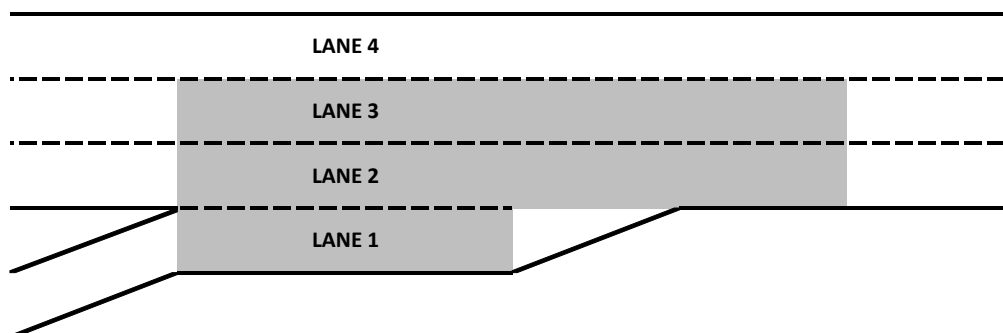
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	858	13	64.8	0.5	15.8	0.4	B
3	884	14	62.9	1.0	18.5	0.6	C
2	702	17	60.5	0.5	16.9	0.9	B
1	688	36	28.6	0.9	1.4	0.2	A
Area	2,274	68	61.5	0.7	14.5	0.3	B
Total	3,132	80	62.5	0.5	14.9	0.1	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	688	36	1		
Total	688	36	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,510	2,445	44	97.4%	1,486
On-ramp	680	688	36	101.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 108 - NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

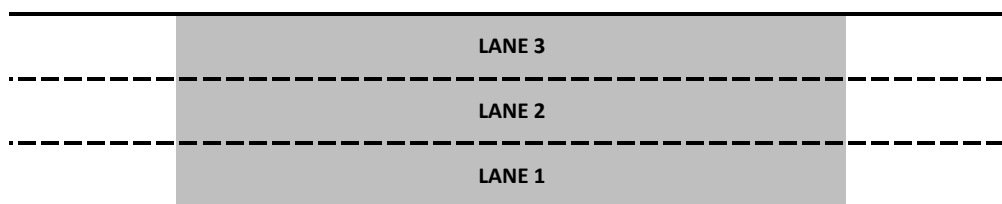
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	836	11	64.9	0.6	13.8	0.4	B
2	889	11	64.0	1.0	14.7	0.5	B
1	720	16	62.9	0.6	11.7	0.8	B
Area	2,444	37	64.0	0.7	13.4	0.3	B
Total	2,444	37	64.0	0.7	13.4	0.3	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,510	2,444	37	97.4%	1,949
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 155 - NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp (EL Ingress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,596	24	66.7	0.5	12.9	0.9	B
3	993	15	64.7	0.6	14.4	0.4	B
2	988	24	63.6	1.1	15.7	0.4	B
1			62.3	0.3	14.4	1.2	B
Area	3,577	62	64.3	0.6	14.3	0.4	B
Total	3,577	62	64.3	0.6	14.3	0.4	B

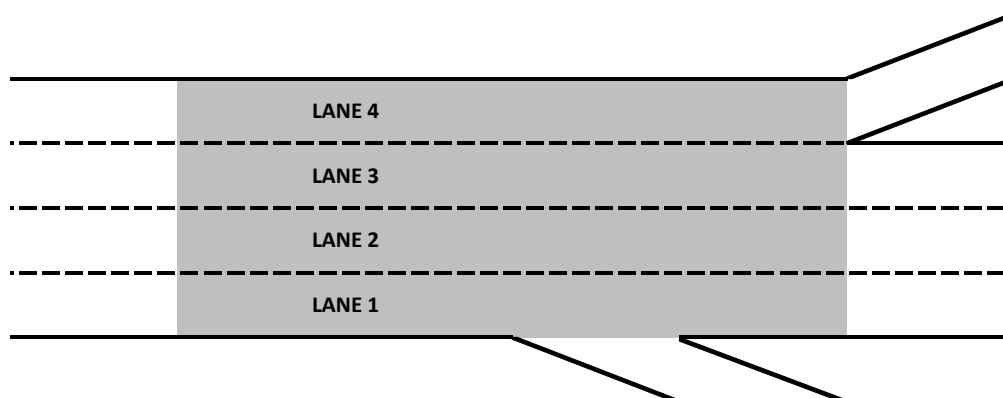
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	947	95
Total	947	95

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,620	3,577	62	98.8%	1,585
On-ramp					
Off-ramp	920	947	95	103.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 153 - NB I-15: Dexter Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,596	24	66.0	0.7	11.7	0.8	B
3	993	15	64.3	0.7	15.2	0.5	B
2	988	24	63.2	1.2	16.1	0.3	B
1			61.5	0.3	16.0	1.3	B
Area	988	24	62.4	0.8	16.1	0.5	B
Total	3,577	62	63.6	0.7	14.7	0.5	B

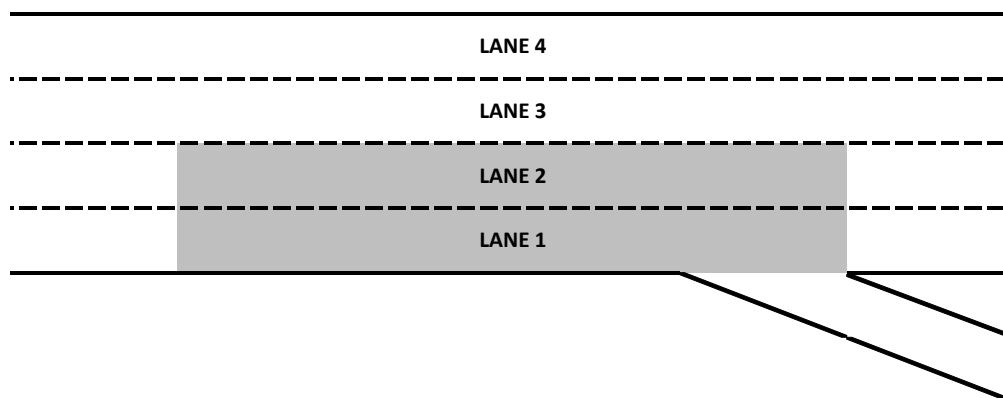
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	183	28
Total	183	28

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,620	3,577	62	98.8%	940
On-ramp					
Off-ramp	190	183	28	96.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 107 - NB I-15: WB Central Ave (SR-74) Off-ramp

Segment Type - Basic

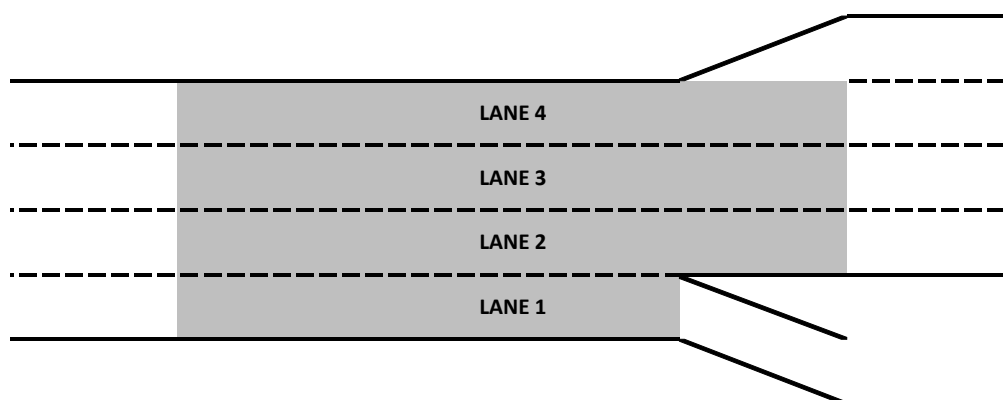
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,388	19	62.7	1.2	26.7	1.2	D
3	1,350	20	63.3	1.3	17.1	0.4	B
2	930	21	63.2	0.2	13.0	0.9	B
1	457	15	62.9	2.1	11.4	1.1	B
Area	4,125	75	63.0	0.7	17.0	0.6	B
Total	4,125	75	63.0	0.7	17.0	0.6	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	556	46
Total			Total	556	46

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,200	4,125	75	98.2%	1,365
On-ramp					
Off-ramp	580	556	46	95.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 106 - NB I-15: EB Central Ave (SR-74) Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,515	20	63.6	0.8	24.0	0.9	C
3	1,504	23	62.4	1.0	23.4	0.5	C
2	1,576	32	61.9	0.2	19.2	0.4	C
1			51.2	0.4	9.6	0.6	A
Area	3,080	55	62.6	0.5	18.6	0.4	C
Total	4,595	75	62.9	0.6	20.0	0.5	C

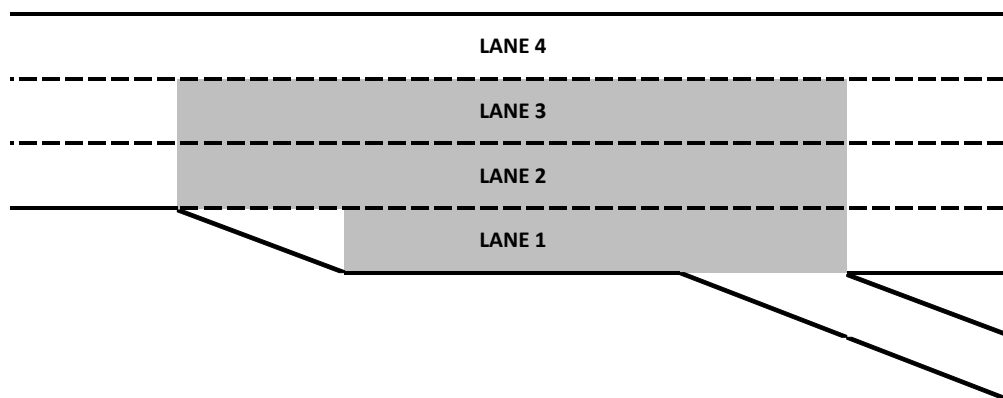
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	469	33
Total	469	33

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,670	4,595	75	98.4%	1,498
On-ramp					
Off-ramp	470	469	33	99.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 105 - NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

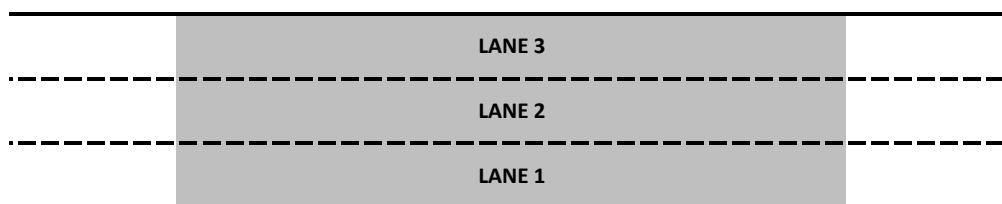
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,492	21	61.1	1.1	25.1	1.4	C
2	1,578	20	58.9	1.6	27.9	0.4	D
1	1,526	24	56.1	1.7	28.5	1.3	D
Area	4,595	66	58.7	1.4	27.1	0.9	D
Total	4,595	66	58.7	1.4			

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,670	4,595	66	98.4%	1,245
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 104 - NB I-15: Main St On-ramp

Segment Type - Merge

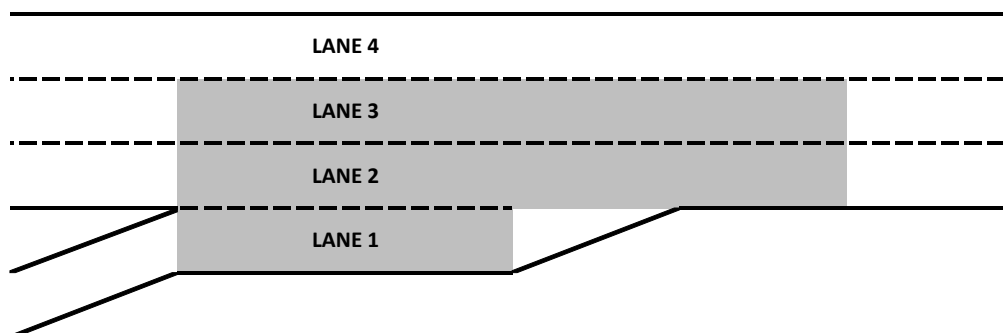
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,493	22	63.2	1.0	24.4	1.4	C
3	1,504	12	61.3	1.7	25.5	0.8	C
2	1,325	29	58.4	1.4	27.7	1.0	D
1	278	31	27.2	0.9	0.7	0.1	A
Area	3,107	73	60.0	1.3	21.2	0.7	C
Total	4,600	95	61.0	1.1	22.1	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	278	31	1		
Total	278	31	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,390	4,322	63	98.5%	1,500
On-ramp	280	278	31	99.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 103 - NB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

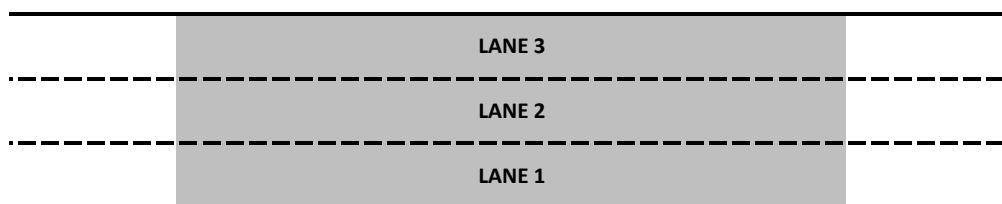
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,486	24	62.7	0.4	25.5	1.4	C
2	1,544	15	61.5	1.2	25.4	1.0	C
1	1,290	21	61.0	0.8	22.1	1.1	C
Area	4,320	60	61.8	0.7	24.3	1.0	C
Total	4,320	60	61.8	0.7	24.3	1.0	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,390	4,320	60	98.4%	2,897
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 102 - NB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,649	25	62.4	0.3	28.1	1.4	D
2	1,526	15	60.7	1.5	26.8	0.8	D
1	1,702	25	57.3	1.9	28.7	2.1	D
Area	3,228	40	59.0	1.7	27.7	1.4	D
Total	4,877	65	60.2	1.1	27.8	1.4	D

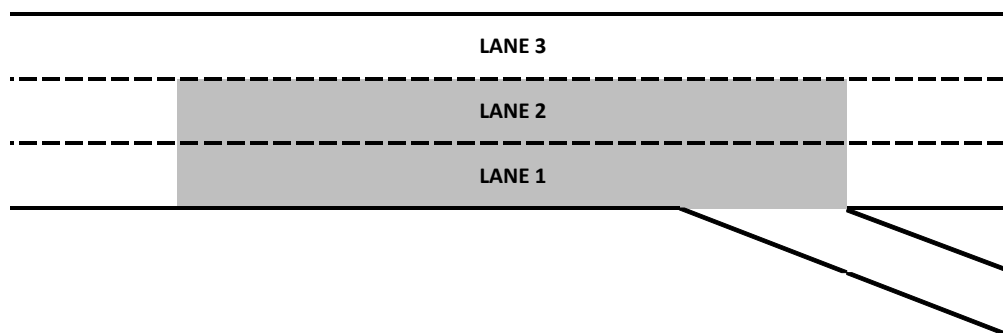
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	550	38
Total	550	38

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,950	4,877	65	98.5%	1,499
On-ramp					
Off-ramp	560	550	38	98.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 101 - NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp

Segment Type - Basic

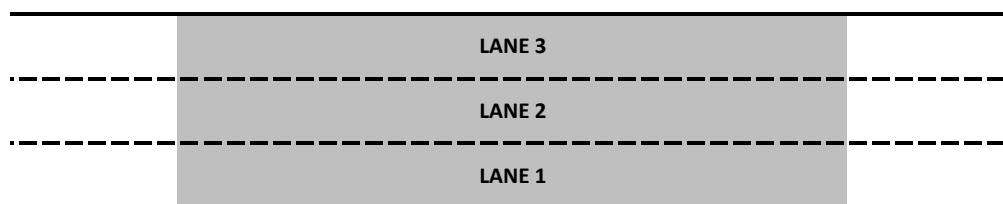
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,598	27	63.2	0.5	27.3	0.9	D
2	1,700	18	61.6	1.3	28.0	0.9	D
1	1,580	33	60.6	0.6	26.9	2.0	D
Area	4,879	78	61.8	0.8	27.4	1.2	D
Total	4,879	78	61.8	0.8	27.4	1.2	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,950	4,879	78	98.6%	3,906
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Opening Year Plus Project
PM Peak Hour

	Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vp/ln)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
1	SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	5,092	78	98.7%							64.9	0.9	20.7	1.0	C
2	SB I-15: Hidden Valley Pkwy On-ramp	Merge	5,103	78	98.9%	649	36	106.4%				63.3	1.0	22.1	0.8	C
3	SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp	Basic	5,760	90	99.8%							63.4	1.3	18.9	1.0	C
4	SB I-15: WB SR-91 Off-ramp	Basic	5,760	88	99.8%				1,198	60	99.0%	63.9	0.9	18.7	0.8	C
5	SB I-15: EB SR-91 Off-ramp	Diverge	4,558	53	100.0%				1,100	57	100.0%	57.8	7.1	28.8	4.0	D
6	SB I-15: EB SR-91 Off-ramp to On-ramp	Basic	3,468	51	100.2%							64.5	0.6	18.9	0.4	C
7	SB I-15: EB SR-91 On-ramp	Merge	3,465	62	100.1%	1,976	39	101.9%				62.2	0.7	20.3	0.7	C
8	SB I-15: WB SR-91 On-ramp to Magnolia Ave Off-ramp	Weave	5,445	68	100.8%	1,033	90	97.4%	1,325	72	100.4%	64.8	0.2	18.9	0.5	C
9	SB I-15: Magnolia Ave Off-ramp to On-ramp	Basic	5,162	78	100.4%							65.0	0.4	20.6	0.6	C
10	SB I-15: Magnolia Ave On-ramp	Merge	5,161	74	100.4%	994	36	101.5%				63.2	0.9	19.4	0.7	C
11	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)	Weave	6,157	110	100.6%	2,131	69	97.8%	2,368	82	97.9%	63.5	0.8	22.1	0.6	C
12	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp	Basic	5,934	90	100.9%							63.6	0.7	24.1	0.6	C
13	SB I-15: Ontario Ave Off-ramp	Diverge	5,933	87	100.9%				803	43	101.6%	61.9	2.0	25.2	1.4	C
14	SB I-15: Ontario Ave Off-ramp to On-ramp	Basic	5,135	75	100.9%							62.0	0.8	21.3	0.7	C
15	SB I-15: Ontario Ave On-ramp	Merge	5,141	80	101.0%	904	5	96.1%				57.0	6.9	16.7	2.7	B
16	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	Basic	6,050	96	100.3%				648	48	104.5%	47.4	16.2	36.6	14.8	E
17	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp (EL Access)	Weave	5,411	131	100.0%	2,368	83	97.8%	2,394	81	97.7%	54.5	3.2	29.6	2.7	D
19	SB I-15: Foothill Pkwy/El Cerrito Rd On-ramp to Cajalco Rd Off-ramp	Weave	5,407	66	100.5%	901	11	93.9%	767	67	102.2%	58.6	0.2	28.0	0.9	D
20	SB I-15: Cajalco Rd Off-ramp to On-ramp	Basic	5,544	74	99.2%							61.3	0.7	30.8	0.5	D
21	SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Weave	5,541	75	99.1%	669	83	99.9%	1,071	65	100.1%	58.7	1.2	28.6	0.8	D
22	SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp (EL Access)	Weave	6,205	126	99.1%	2,384	68	97.3%	2,264	80	88.1%	59.2	0.9	25.6	0.6	C
24	SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	5,234	72	103.2%							60.7	2.2	29.5	1.1	D
25	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	5,232	72	103.2%	513	23	96.8%				54.6	8.0	28.0	4.4	D
26	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp	Basic	5,741	68	102.5%							58.5	1.8	33.8	1.8	D
27	SB I-15: Temescal Canyon Rd Off-ramp	Diverge	5,743	71	102.6%				599	65	101.6%	53.0	5.6	37.8	5.6	E
28	SB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	5,147	59	102.7%							60.9	0.5	29.4	1.1	D
29	SB I-15: Temescal Canyon Rd On-ramp	Merge	5,149	58	102.8%	405	34	98.8%				56.9	6.5	25.5	3.3	C
30	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	5,534	77	102.1%							58.8	1.0	32.6	1.2	D
52	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp (EL Access)	Weave	5,532	89	102.1%	2,246	75	87.4%	2,323	99	86.7%	61.3	0.8	27.0	0.7	D
53	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	5,443	66	102.5%							55.9	5.3	33.2	3.7	D
31	SB I-15: Indian Truck Trail Off-ramp	Diverge	5,443	66	102.5%				582	53	100.4%	53.1	6.1	35.1	4.8	E
32	SB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	4,869	67	102.9%							61.0	1.0	27.6	0.8	D
33	SB I-15: Indian Truck Trail On-ramp	Merge	4,879	79	103.2%	194	14	97.2%				61.9	0.5	21.6	0.6	C
34	SB I-15: Indian Truck Trail On-ramp to Lake St Off-ramp	Basic	5,042	63	102.3%							59.7	1.1	29.2	0.7	D
54	SB I-15: Indian Truck Trail On-ramp to Lake St Off-ramp (EL Access)	Weave	5,047	116	102.4%	2,295	66	85.6%	2,148	70	85.9%	60.8	1.6	26.1	1.3	D
35	SB I-15: Lake St Off-ramp	Diverge	5,197	71	101.7%				637	44	96.5%	54.3	4.8	33.0	3.7	D
36	SB I-15: Lake St Off-ramp to On-ramp	Basic	4,558	59	102.4%							62.4	1.0	25.3	1.0	C
37	SB I-15: Lake St On-ramp	Merge	4,572	62	102.7%	231	36	96.3%				61.6	3.5	19.5	2.1	C
38	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp	Basic	4,803	80	102.4%							60.5	1.0	27.4	0.9	D
55	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp (EL Egress)	Basic	4,789	85	102.1%	866	45	81.7%				60.2	5.2	24.7	2.5	C
56	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp	Basic	5,614	104	97.6%							47.0	23.8	41.5	25.9	E
39	SB I-15: Nichols Rd Off-ramp	Basic	5,598	102	97.4%				347	46	99.0%	36.6	20.8	56.9	38.1	F
40	SB I-15: Nichols Rd Off-ramp to On-ramp	Basic	5,156	91	95.5%							33.3	18.6	64.8	32.0	F
41	SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp	Weave	5,101	110	94.5%	328	49	99.3%	895	88	91.3%	27.5	18.0	60.1	20.1	F
57	SB I-15: Central Ave (SR-74) (EL Egress)	Basic	5,249	183	91.6%	1,264	61	87.8%				22.7	4.6	63.1	8.6	F
44	SB I-15: Central Ave (SR-74) Off-ramp to On-ramp	Basic	5,530	146	89.3%							22.8	1.2	59.7	2.6	F
45	SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp	Weave	5,530	145	89.3%	1,253	41	105.3%	392	27	93.2%	26.3	1.1	67.1	1.8	F
48	SB I-15: Main St Off-ramp to On-ramp	Basic	6,295	54	90.4%							28.5	2.0	73.8	3.8	F
49	SB I-15: Main St On-ramp	Merge	6,294	67	90.4%	405	29	101.3%				33.0	2.4	55.6	2.9	F
50	SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp	Basic	6,695	61	91.0%							55.4	4.7	40.8	4.4	E

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 1 - SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,306	23	66.7	0.3	20.4	1.2	C
3	1,407	22	65.1	0.8	20.9	1.4	C
2	1,307	15	64.2	1.4	22.0	0.7	C
1	1,072	17	63.6	1.5	19.3	1.0	C
Area	5,092	78	64.9	0.9	20.7	1.0	C
Total	5,092	78	64.9	0.9	20.7	1.0	C

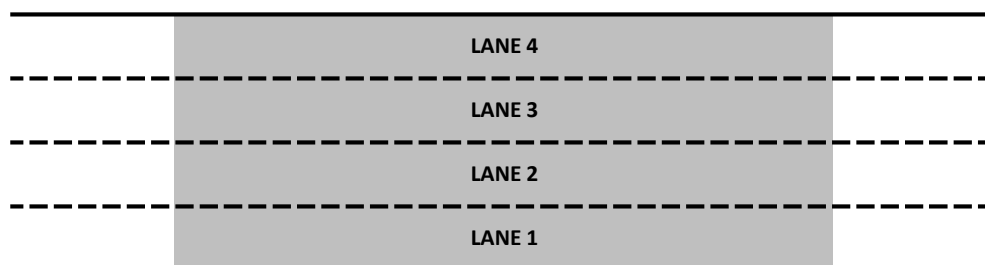
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,160	5,092	78	98.7%	1,784
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 2 - SB I-15: Hidden Valley Pkwy On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,267	23	66.7	0.3	20.6	1.6	C
4	1,110	20	65.9	0.8	20.6	1.3	C
3	1,474	18	61.8	1.7	29.3	0.9	D
2	1,253	17	60.4	2.0	23.4	1.2	C
1	649	36	21.7	0.7	1.7	0.1	A
Area	3,375	70	60.8	1.7	22.1	0.8	C
Total	5,752	114	63.3	1.0	21.4	1.0	C

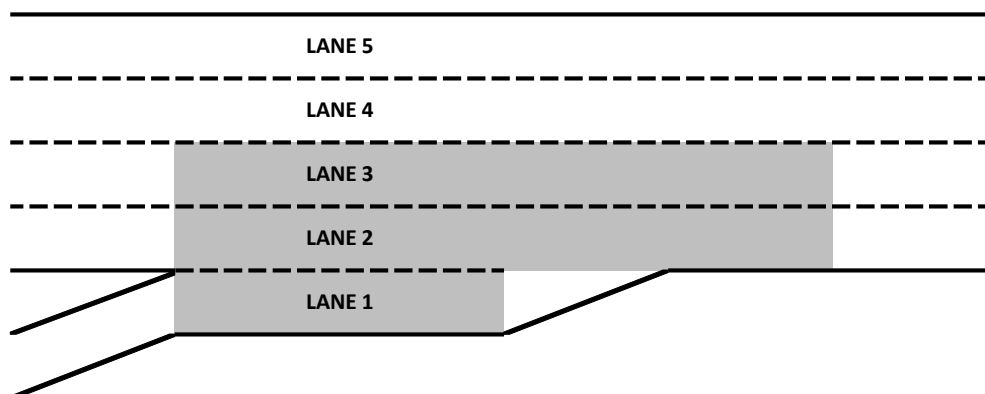
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	649	36
Total	649	36

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,160	5,103	78	98.9%	1,702
On-ramp	610	649	36	106.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 3 - SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,482	32	65.6	0.9	23.8	1.9	C
4	1,616	13	64.0	1.4	26.3	0.7	D
3	1,435	17	60.3	1.8	25.5	0.9	C
2	927	13	63.0	1.6	13.9	0.8	B
1	299	14	66.2	1.6	5.2	1.0	A
Area	5,760	90	63.4	1.3	18.9	1.0	C
Total	5,760	90	63.4	1.3	18.9	1.0	C

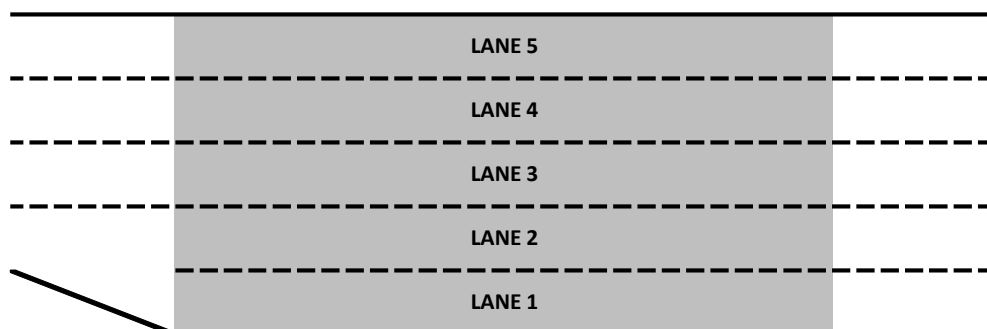
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,770	5,760	90	99.8%	1,019
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 4 - SB I-15: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,561	33	66.1	0.6	21.2	1.2	C
4	1,594	12	63.4	1.3	28.5	1.2	D
3	1,402	15	60.5	1.6	25.0	0.5	C
2	768	7	64.6	0.9	11.0	0.4	A
1	434	20	68.8	0.6	8.0	1.2	A
Area	5,760	88	63.9	0.9	18.7	0.8	C
Total	5,760	88	63.9	0.9	18.7	0.8	C

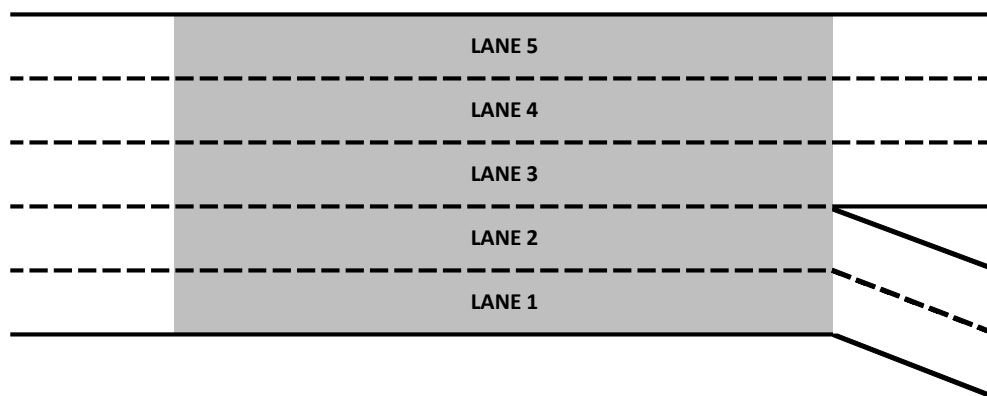
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	660	28
1	538	60
Total	1,198	60

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,770	5,760	88	99.8%	1,499
On-ramp					
Off-ramp	1,210	1,198	60	99.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 5 - SB I-15: EB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,390	24	62.6	7.5	20.0	4.2	C
2	1,742	18	58.1	8.7	25.2	3.9	C
1	1,426	12	54.1	5.7	32.6	4.1	D
Area	3,168	29	55.9	7.0	28.8	4.0	D
Total	4,558	53	57.8	7.1	25.8	4.0	C

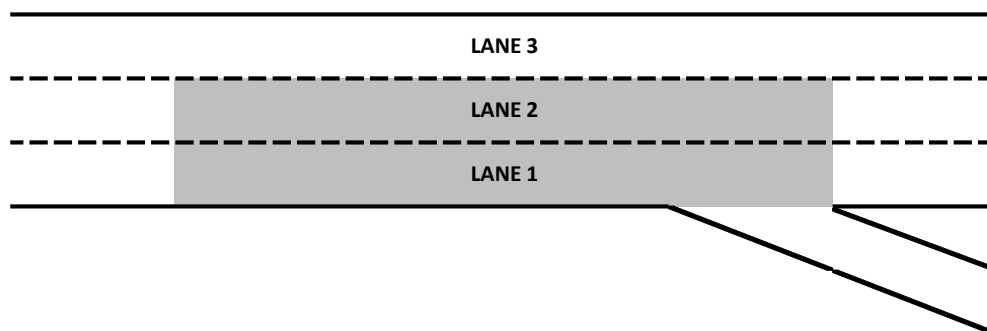
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,100	57
Total	1,100	57

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,560	4,558	53	100.0%	1,545
On-ramp					
Off-ramp	1,100	1,100	57	100.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 6 - SB I-15: EB SR-91 Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,172	19	67.3	0.5	18.1	0.7	C
2	954	14	64.5	0.8	18.4	0.3	C
1	1,342	17	61.9	0.8	20.2	0.9	C
Area	3,468	51	64.5	0.6	18.9	0.4	C
Total	3,468	51	64.5	0.6	18.9	0.4	C

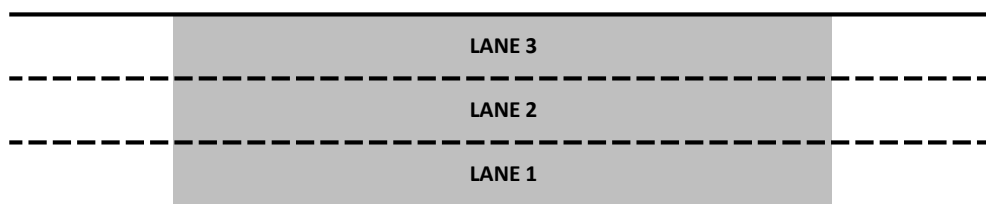
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,460	3,468	51	100.2%	1,549
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 7 - SB I-15: EB SR-91 On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,153	19	67.7	0.3	18.4	0.9	C
4	945	11	65.7	0.6	17.4	0.5	B
3	1,368	20	61.1	0.7	22.3	0.8	C
2	913	33	57.5	1.2	31.5	1.3	D
1	1,064	18	33.6	0.6	2.3	0.1	A
Area	4,289	82	60.7	0.8	20.3	0.7	C
Total	5,441	101	62.2	0.7	19.8	0.5	C

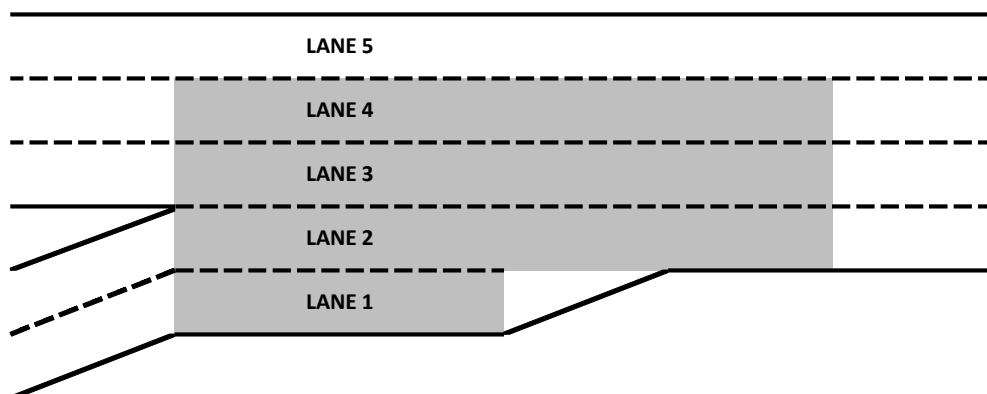
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	913	33
1	1,064	18
Total	1,976	39

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,460	3,465	62	100.1%	1,370
On-ramp	1,940	1,976	39	101.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 8 - SB I-15: WB SR-91 On-ramp to Magnolia Ave Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6			67.0	0.4	20.4	1.0	C
5	1,246	20	65.9	0.3	21.0	0.8	C
4	1,213	11	63.7	0.4	20.6	0.4	C
3	1,103	15	62.3	0.6	23.3	0.7	C
2	1,883	22	51.8	0.4	11.9	0.8	B
1	1,033	90	33.4	0.3	3.0	0.2	A
Area	6,477	158	64.8	0.2	18.9	0.5	C
Total	6,477	158	64.8	0.2	18.9	0.5	C

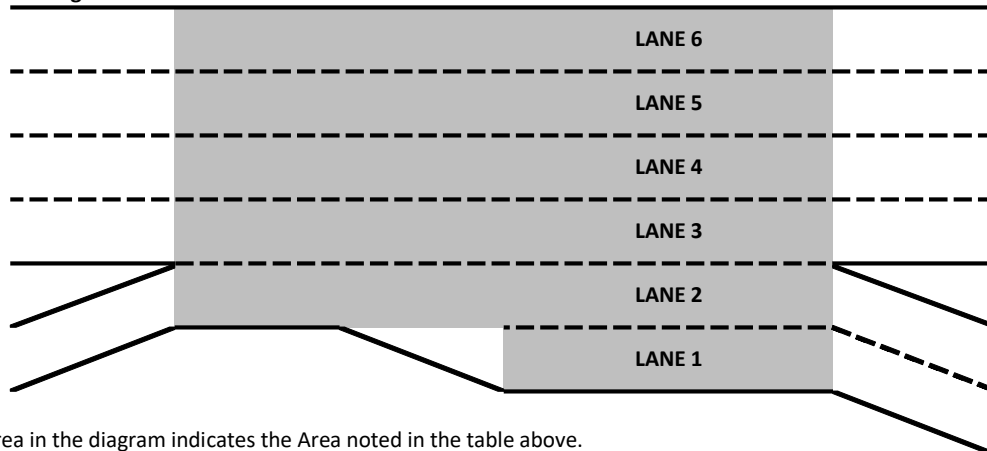
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,033	90
Total	1,033	90

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	821	51
1	504	51
Total	1,325	72

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,400	5,445	68	100.8%	2,539
On-ramp	1,060	1,033	90	97.4%	
Off-ramp	1,320	1,325	72	100.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 9 - SB I-15: Magnolia Ave Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,392	20	66.9	0.4	21.8	0.9	C
3	1,394	11	65.9	0.5	22.2	0.5	C
2	1,241	22	63.5	0.4	20.0	1.4	C
1	1,135	25	62.9	0.7	18.4	1.0	C
Area	5,162	78	65.0	0.4	20.6	0.6	C
Total	5,162	78	65.0	0.4	20.6	0.6	C

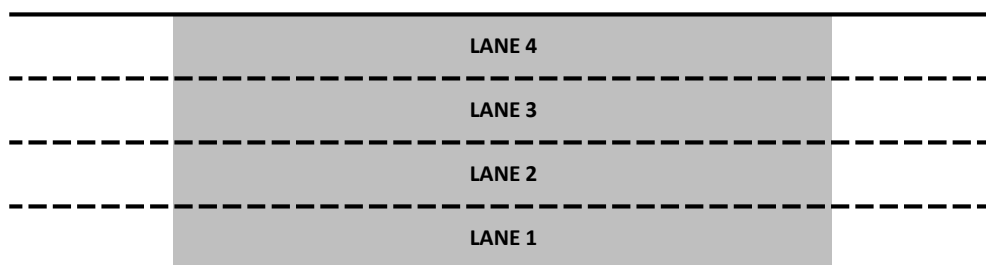
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,140	5,162	78	100.4%	2,362
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 10 - SB I-15: Magnolia Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7			34.7	0.1	6.7	0.3	A
6			34.3	0.1	7.4	0.2	A
5	1,432	19	66.6	1.2	25.8	1.5	C
4	1,433	11	64.5	1.1	27.9	1.1	D
3	1,213	22	61.1	1.0	26.7	1.2	D
2	1,083	22	57.4	1.0	20.8	0.5	C
1	994	36	22.0	0.6	3.1	0.3	A
Area	3,291	80	58.8	0.9	19.4	0.7	C
Total	6,156	109	63.2	0.9	21.0	0.8	C

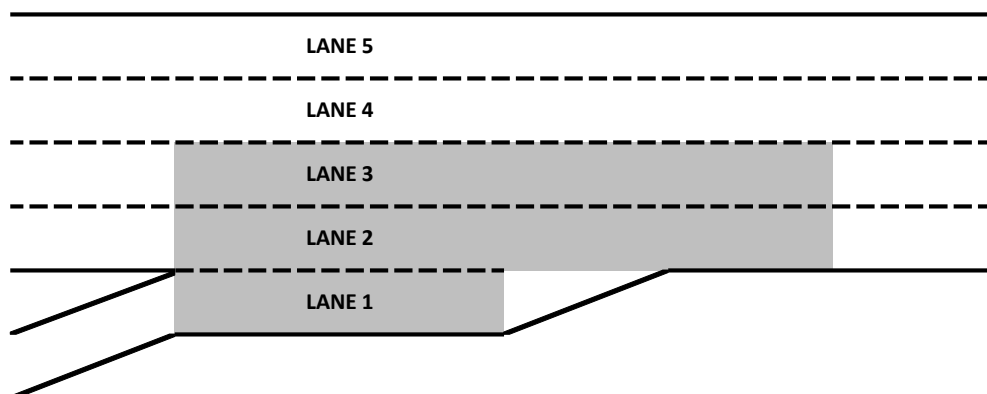
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	994	36
Total	994	36

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,140	5,161	74	100.4%	1,504
On-ramp	980	994	36	101.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 11 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7	1,446	20	48.3	0.2	9.8	0.5	A
6	1,508	13	47.6	0.1	10.9	0.4	A
5	1,576	25	65.1	1.1	27.6	1.4	D
4	1,314	16	63.4	1.3	27.7	0.8	D
3	313	12	61.1	0.9	26.4	0.6	D
2	932	50	59.5	1.0	21.5	0.4	C
1	1,199	43	6.5	0.2	0.3	0.1	A
Area	8,288	179	63.5	0.8	22.1	0.6	C
Total	8,288	179	63.5	0.8	22.1	0.6	C

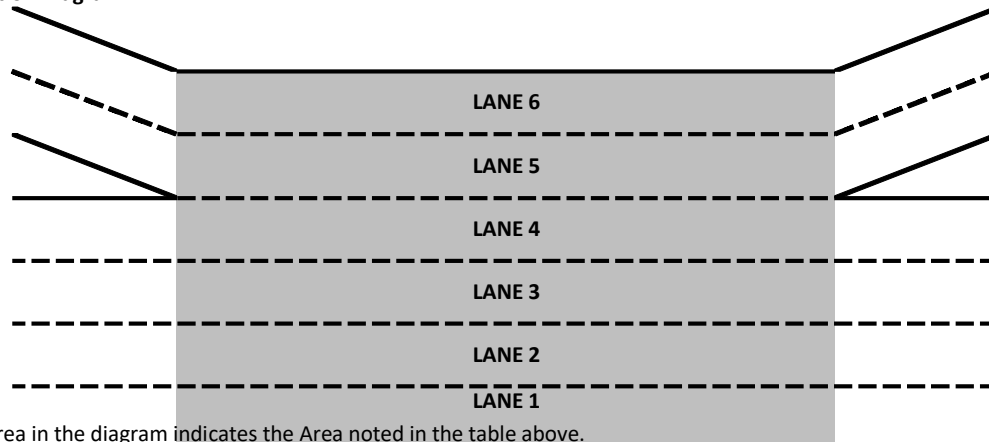
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	932	50
1	1,199	43
Total	2,131	69

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,120	60
1	1,248	56
Total	2,368	82

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,120	6,157	110	100.6%	3,337
On-ramp	2,180	2,131	69	97.8%	
Off-ramp	2,420	2,368	82	97.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 12 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,524	34	67.0	0.3	23.5	0.7	C
3	1,423	17	64.6	1.1	22.9	0.9	C
2	1,562	15	61.6	0.8	26.4	0.9	D
1	1,425	24	61.0	0.8	24.1	0.7	C
Area	5,934	90	63.6	0.7	24.1	0.6	C
Total	5,934	90	63.6	0.7	24.1	0.6	C

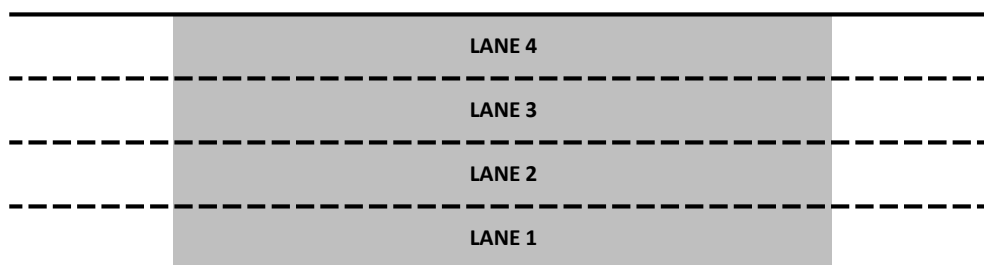
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,880	5,934	90	100.9%	394
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 13 - SB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,537	32	65.9	1.2	24.5	1.8	C
3	1,422	15	64.0	1.8	23.3	0.9	C
2	1,566	20	59.7	3.6	22.0	1.4	C
1	1,408	20	57.8	2.1	28.5	1.5	D
Area	2,974	41	58.6	2.7	25.2	1.4	C
Total	5,933	87	61.9	2.0	24.5	1.1	C

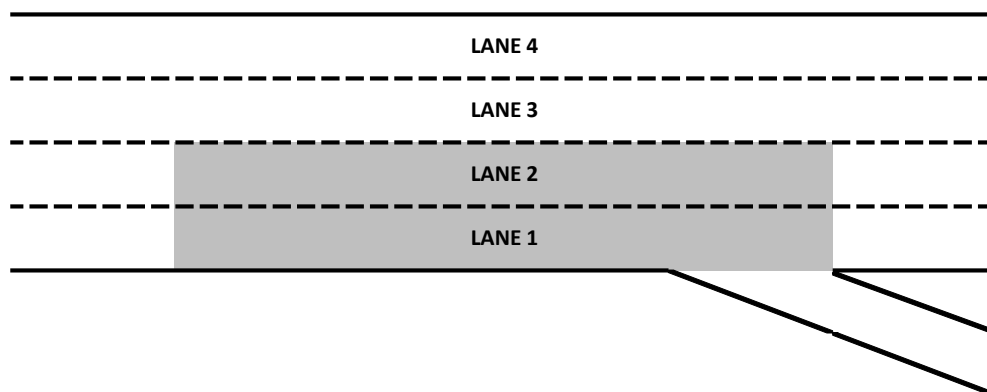
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	803	43
Total	803	43

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,880	5,933	87	100.9%	1,504
On-ramp					
Off-ramp	790	803	43	101.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 14 - SB I-15: Ontario Ave Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,655	32	65.3	0.9	26.5	1.4	D
3	1,824	11	62.3	0.7	28.7	0.6	D
2	1,507	25	57.7	1.1	25.8	0.9	C
1	149	9	62.6	1.3	4.3	0.5	A
Area	5,135	75	62.0	0.8	21.3	0.7	C
Total	5,135	75	62.0	0.8	21.3	0.7	C

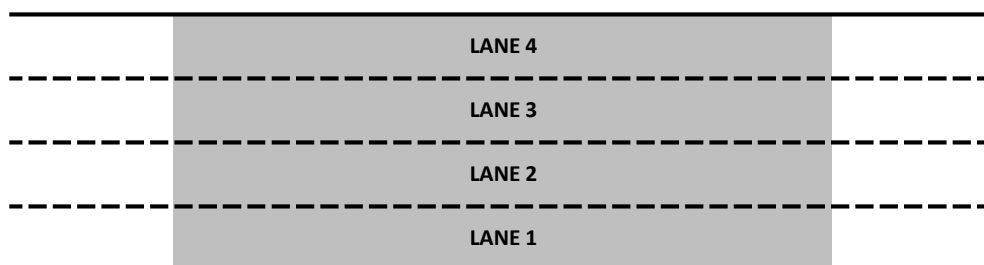
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,090	5,135	75	100.9%	2,820
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 15 - SB I-15: Ontario Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,773	27	59.9	9.0	33.4	7.1	D
4	1,746	22	56.9	7.8	34.8	5.6	D
3	1,347	16	52.6	7.0	29.7	6.1	D
2	275	15	57.4	2.4	12.6	1.5	B
1	904	5	28.9	1.0	1.8	0.2	A
Area	2,525	35	54.0	4.8	16.7	2.7	B
Total	6,045	84	57.0	6.9	24.1	4.3	C

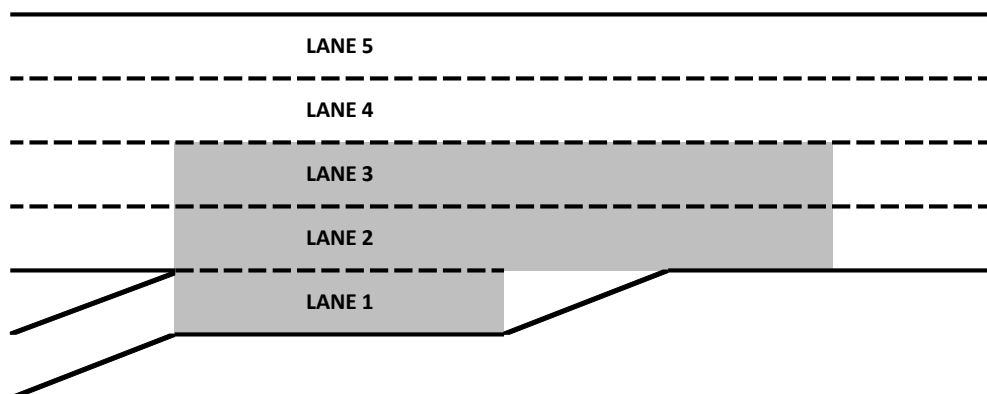
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	904	5
Total	904	5

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,090	5,141	80	101.0%	1,494
On-ramp	940	904	5	96.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 16 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,082	26	47.5	19.7	51.4	24.2	F
3	1,848	13	44.8	18.0	47.9	21.4	F
2	1,472	40	43.2	16.8	42.0	22.7	E
1	648	16	61.3	4.7	12.5	1.6	B
Area	6,050	96	47.4	16.2	36.6	14.8	E
Total	6,050	96	47.4	16.2	36.6	14.8	E

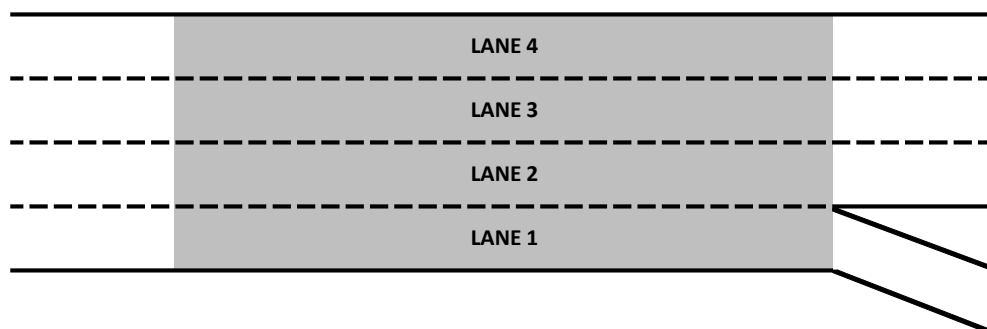
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	648	48
Total	648	48

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,030	6,050	96	100.3%	738
On-ramp					
Off-ramp	620	648	48	104.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 17 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	2,148	25	59.2	0.3	15.0	1.1	B
4	1,840	25	57.8	0.5	15.5	0.7	B
3	1,423	58	52.0	4.2	39.5	3.6	E
2	1,245	52	49.3	4.8	38.1	4.3	E
1	1,123	53	48.0	3.8	35.2	5.7	E
Area	7,778	214	54.5	3.2	29.6	2.7	D
Total	7,778	214	54.5	3.2	29.6	2.7	D

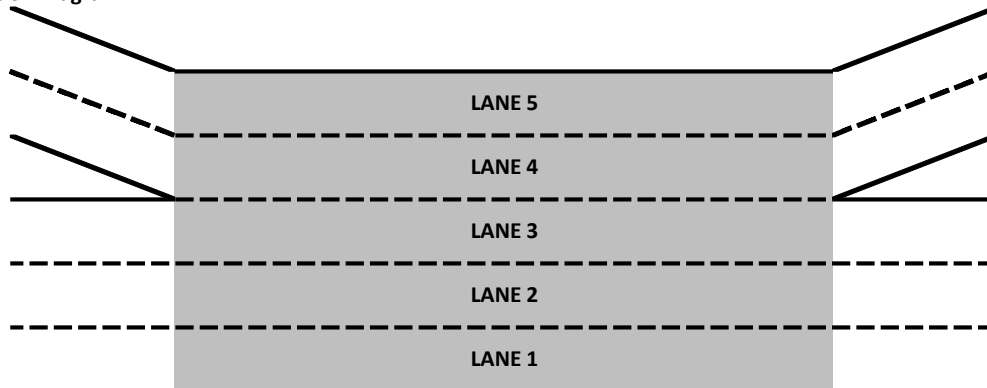
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,245	52
1	1,123	53
Total	2,368	83

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,212	57
1	1,182	54
Total	2,394	81

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,410	5,411	131	100.0%	2,213
On-ramp	2,420	2,368	83	97.8%	
Off-ramp	2,450	2,394	81	97.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 19 - SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,884	23	62.6	0.5	34.0	1.0	D
3	1,849	16	57.4	0.5	34.2	0.9	D
2	1,674	27	55.0	0.5	32.5	1.4	D
1	901	11	47.8	0.4	6.3	0.6	A
Area	6,308	76	58.6	0.2	28.0	0.9	D
Total	6,308	76	58.6	0.2	28.0	0.9	D

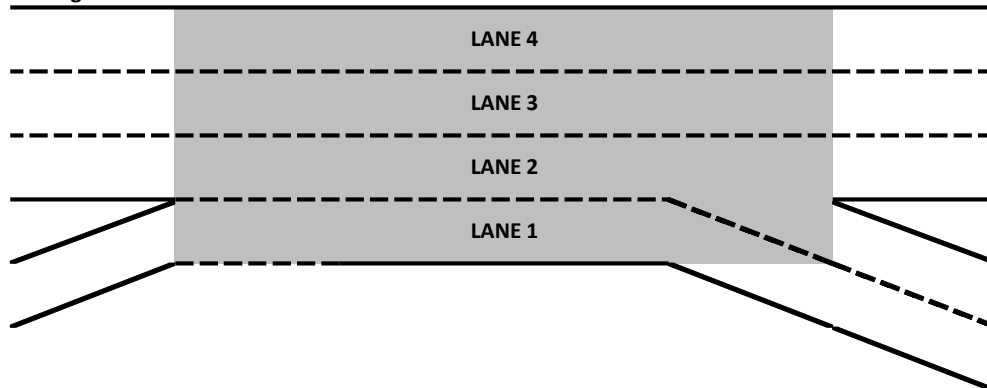
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	901	11
Total	901	11

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	154	31
1	613	49
Total	767	67

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,380	5,407	66	100.5%	2,813
On-ramp	960	901	11	93.9%	
Off-ramp	750	767	67	102.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 20 - SB I-15: Cajalco Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,157	23	63.9	1.1	34.4	0.5	D
2	1,810	19	60.6	0.8	30.2	0.8	D
1	1,578	31	58.7	1.1	28.0	0.6	D
Area	5,544	74	61.3	0.7	30.8	0.5	D
Total	5,544	74	61.3	0.7	30.8	0.5	D

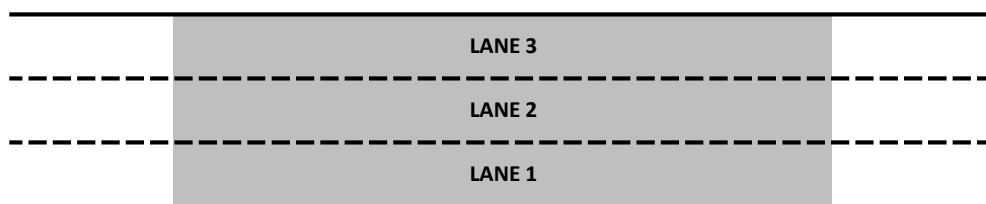
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,590	5,544	74	99.2%	1,294
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 21 - SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Weave

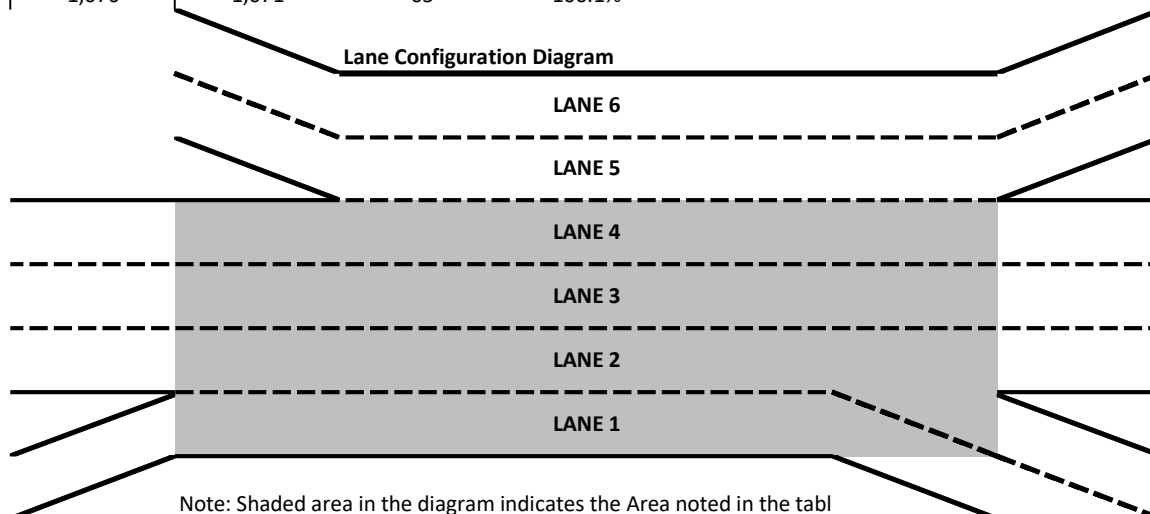
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,139	22	60.9	1.3	36.3	0.8	E
3	1,814	20	57.3	1.8	34.4	0.9	D
2	1,588	33	56.1	1.4	31.6	1.1	D
1	669	83	52.2	0.2	6.6	0.7	A
Area	6,211	158	58.7	1.2	28.6	0.8	D
Total	6,211	158	58.7	1.2	28.6	0.8	D

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	669	83
Total	669	83

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	232	33
1	840	50
Total	1,071	65

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,590	5,541	75	99.1%	5,047
On-ramp	670	669	83	99.9%	
Off-ramp	1,070	1,071	65	100.1%	



Location 22 - SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp (EL Access)

Segment Type - Weave

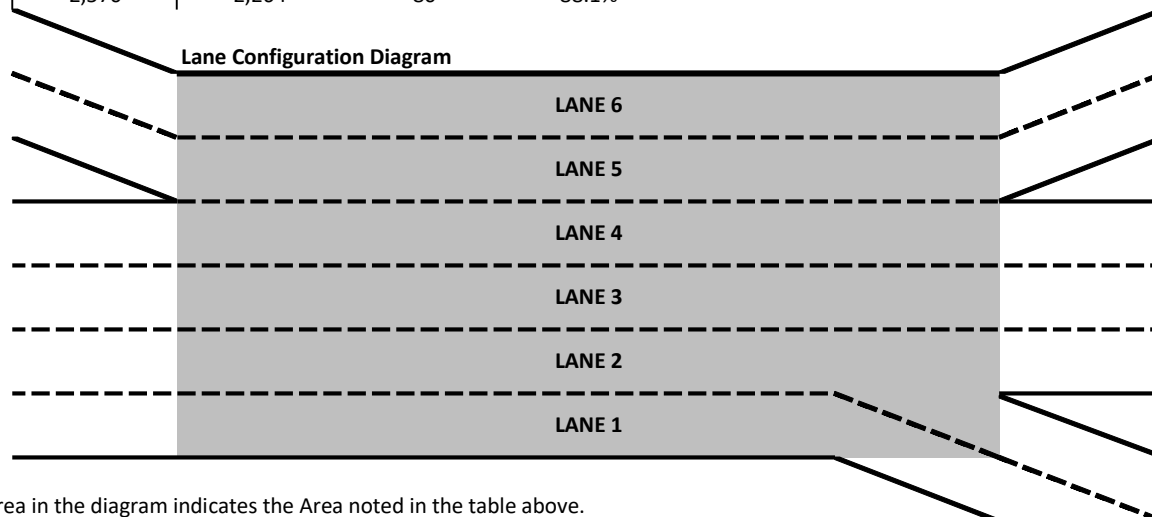
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	2,259	29	45.6	0.1	10.6	0.3	A
5	1,958	18	44.5	0.3	11.0	0.5	A
4	1,673	28	59.2	1.5	38.0	0.8	E
3	315	15	55.7	1.2	37.1	0.9	E
2	1,035	44	54.9	1.4	34.3	1.3	D
1	1,349	61	66.8	0.4	6.4	0.9	A
Area	8,589	194	59.2	0.9	25.6	0.6	C
Total	8,589	194	59.2	0.9	25.6	0.6	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,035	44
1	1,349	61
Total	2,384	68

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,143	40
1	1,121	61
Total	2,264	80

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,260	6,205	126	99.1%	3,004
On-ramp	2,450	2,384	68	97.3%	
Off-ramp	2,570	2,264	80	88.1%	



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 24 - SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,029	24	63.6	2.1	33.2	1.2	D
2	1,745	19	60.1	2.5	29.2	1.0	D
1	1,460	30	57.5	2.2	26.4	1.5	D
Area	5,234	72	60.7	2.2	29.5	1.1	D
Total	5,234	72	60.7	2.2	29.5	1.1	D

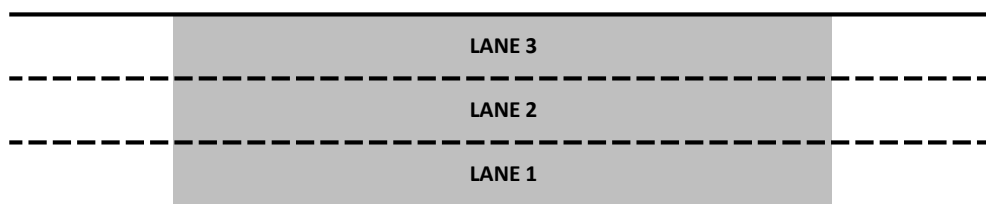
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,070	5,234	72	103.2%	1,755
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 25 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,027	18	57.8	8.7	38.7	5.4	E
3	1,733	26	53.9	8.2	37.2	5.7	E
2	1,471	28	50.8	6.8	32.8	5.4	D
1	513	23	25.9	1.6	2.0	0.2	A
Area	3,717	77	52.6	7.5	28.0	4.4	D
Total	5,745	95	54.6	8.0	30.9	4.7	D

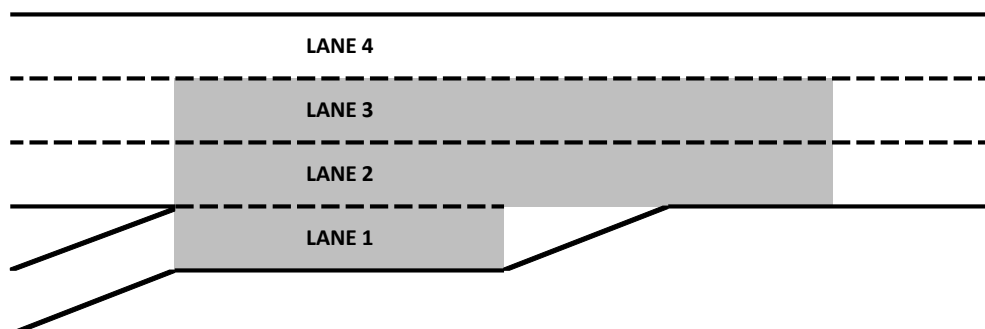
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	513	23
Total	513	23

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,070	5,232	72	103.2%	1,502
On-ramp	530	513	23	96.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 26 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,163	19	61.8	1.5	35.9	1.9	E
2	1,888	21	57.3	2.2	33.8	1.7	D
1	1,690	28	55.6	1.9	32.0	2.1	D
Area	5,741	68	58.5	1.8	33.8	1.8	D
Total	5,741	68	58.5	1.8	33.8	1.8	D

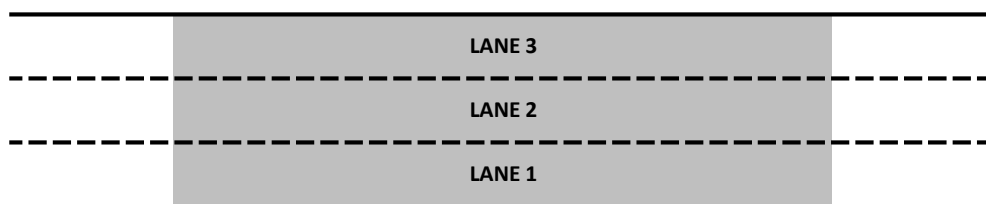
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,600	5,741	68	102.5%	7,458
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 27 - SB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,071	23	58.2	4.9	38.0	4.9	E
2	1,780	21	50.7	7.2	36.5	6.0	E
1	1,892	27	49.2	5.1	39.3	5.2	E
Area	3,672	48	49.9	6.1	37.8	5.6	E
Total	5,743	71	53.0	5.6	37.6	5.2	E

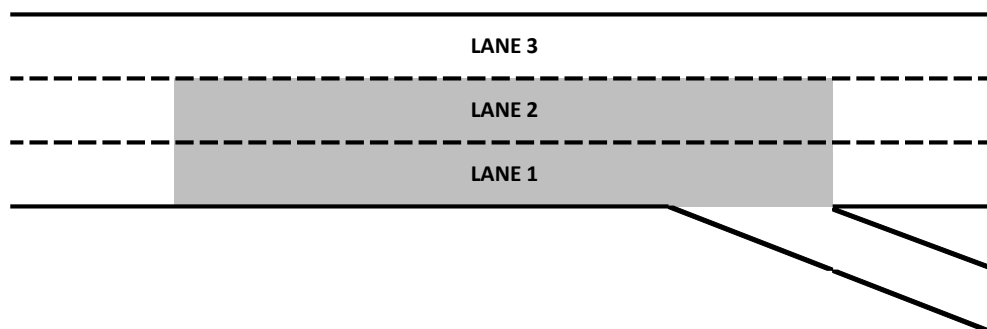
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	599	65
Total	599	65

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,600	5,743	71	102.6%	1,502
On-ramp					
Off-ramp	590	599	65	101.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 28 - SB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,974	21	63.4	0.6	33.1	1.2	D
2	1,688	15	59.7	0.7	28.8	1.0	D
1	1,485	24	58.8	0.7	26.5	1.3	D
Area	5,147	59	60.9	0.5	29.4	1.1	D
Total	5,147	59	60.9	0.5	29.4	1.1	D

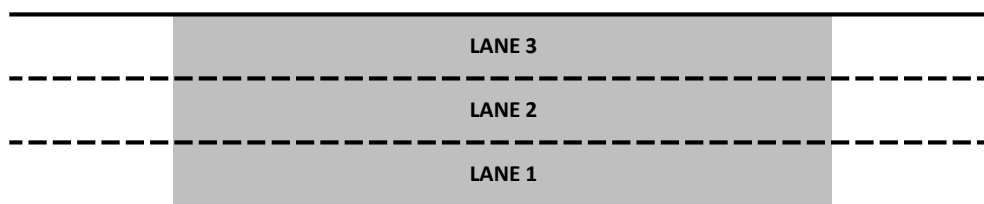
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,010	5,147	59	102.7%	2,526
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 29 - SB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,958	22	60.2	6.9	35.5	4.5	E
3	1,689	15	55.8	6.3	34.6	4.1	D
2	1,502	21	54.1	6.0	31.2	4.5	D
1	405	34	29.6	1.2	1.2	0.2	A
Area	3,596	71	55.0	6.2	25.5	3.3	C
Total	5,554	93	56.9	6.5	28.2	3.6	D

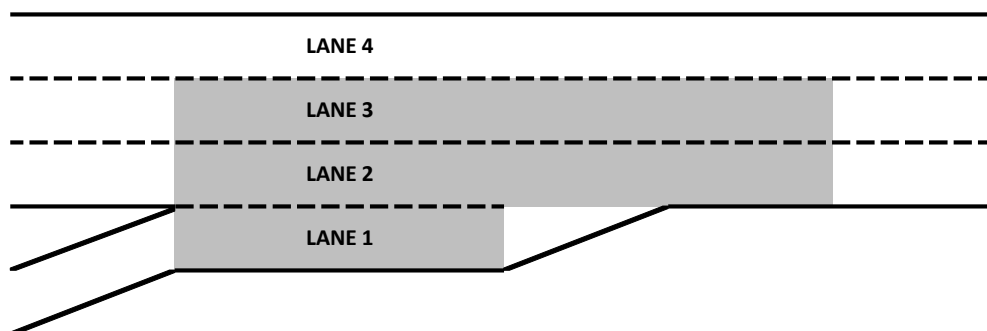
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	405	34
Total	405	34

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,010	5,149	58	102.8%	1,502
On-ramp	410	405	34	98.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 30 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,043	32	61.2	0.9	34.7	1.3	D
2	1,838	18	58.0	1.4	32.9	1.3	D
1	1,654	28	56.9	0.7	30.3	1.4	D
Area	5,534	77	58.8	1.0	32.6	1.2	D
Total	5,534	77	58.8	1.0	32.6	1.2	D

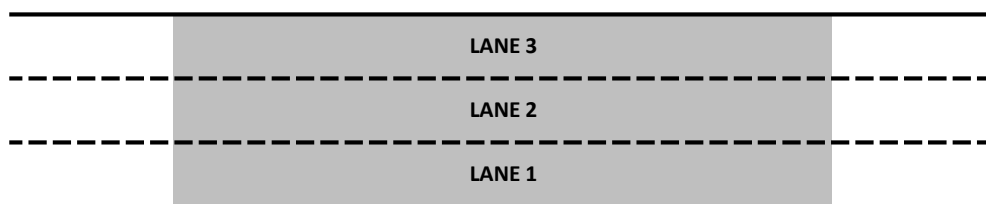
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,420	5,534	77	102.1%	4,808
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 52 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	2,142	21	45.4	0.1	11.6	0.8	B
4	1,804	20	45.0	0.1	11.9	0.7	B
3	1,586	27	61.5	1.0	33.5	1.3	D
2	1,161	43	58.8	1.4	31.4	0.6	D
1	1,084	52	57.5	0.9	29.0	0.8	D
Area	7,778	164	61.3	0.8	27.0	0.7	D
Total	7,778	164	61.3	0.8	27.0	0.7	D

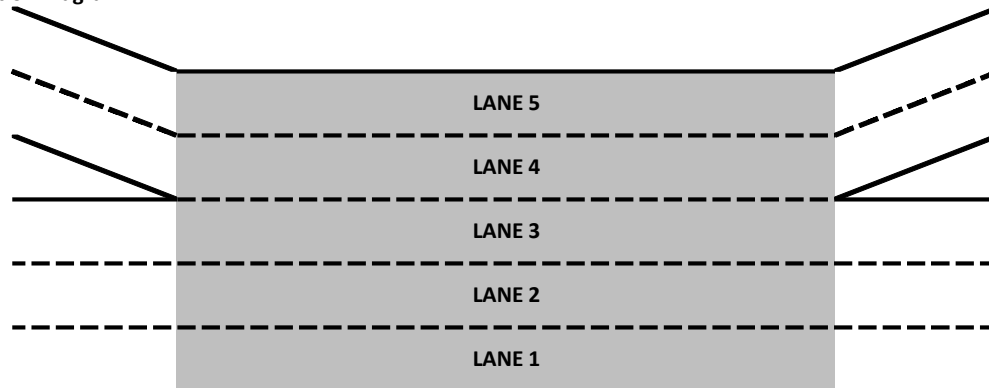
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,161	43
1	1,084	52
Total	2,246	75

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,164	61
1	1,158	46
Total	2,323	99

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,420	5,532	89	102.1%	3,000
On-ramp	2,570	2,246	75	87.4%	
Off-ramp	2,680	2,323	99	86.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 53 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,899	17	59.7	5.2	32.4	3.9	D
2	1,870	27	54.5	5.4	35.1	3.3	E
1	1,674	22	53.1	5.4	32.5	4.4	D
Area	5,443	66	55.9	5.3	33.2	3.7	D
Total	5,443	66	55.9	5.3	33.2	3.7	D

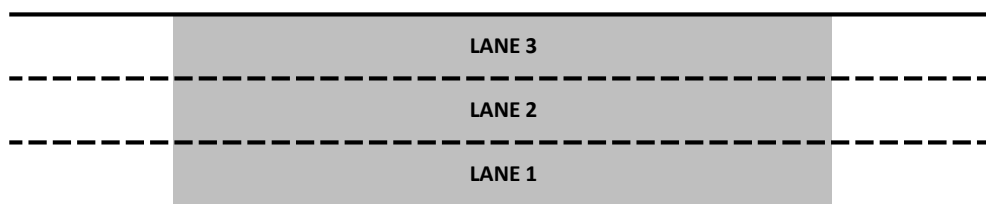
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,310	5,443	66	102.5%	1,096
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 31 - SB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,931	18	57.3	6.3	34.4	4.4	D
2	1,850	24	51.5	7.3	33.5	4.5	D
1	1,662	24	50.1	4.9	36.8	5.1	E
Area	3,512	48	50.8	6.0	35.1	4.8	E
Total	5,443	66	53.1	6.1	34.7	4.5	D

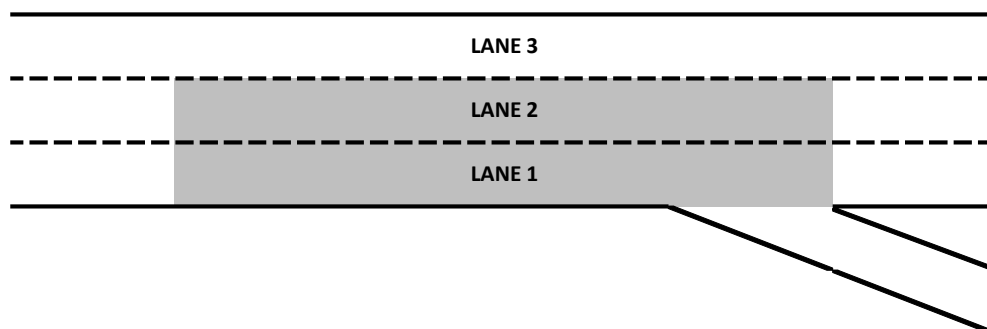
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	582	53
Total	582	53

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,310	5,443	66	102.5%	1,499
On-ramp					
Off-ramp	580	582	53	100.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 32 - SB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,838	25	63.2	0.8	30.4	1.0	D
2	1,620	16	60.5	1.3	27.7	0.8	D
1	1,412	26	58.8	1.1	24.7	1.0	C
Area	4,869	67	61.0	1.0	27.6	0.8	D
Total	4,869	67	61.0	1.0	27.6	0.8	D

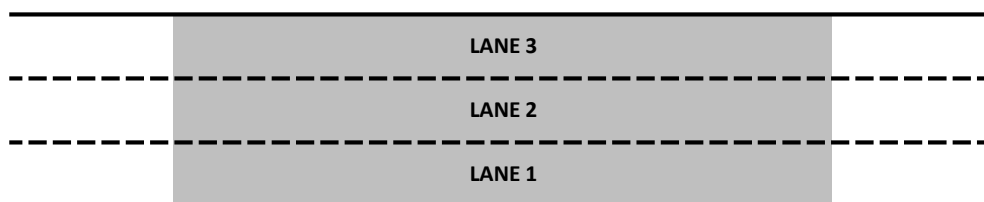
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,730	4,869	67	102.9%	3,127
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 33 - SB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,837	27	64.5	0.5	29.7	0.8	D
3	1,634	22	61.5	0.9	29.0	0.5	D
2	1,409	31	59.0	0.4	25.6	1.0	C
1	194	14	27.1	1.0	0.5	0.0	A
Area	3,237	67	60.4	0.6	21.6	0.6	C
Total	5,074	94	61.9	0.5	23.8	0.5	C

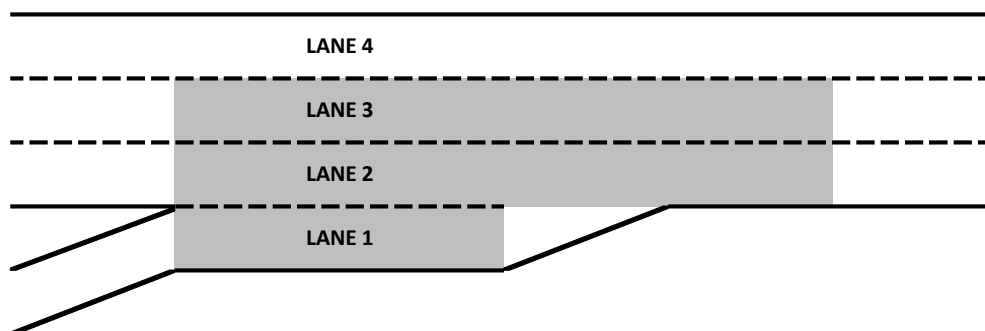
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	194	14
Total	194	14

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,730	4,879	79	103.2%	1,501
On-ramp	200	194	14	97.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 34 - SB I-15: Indian Truck Trail On-ramp to Lake St Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,865	24	62.2	1.1	30.8	0.7	D
2	1,693	18	59.3	1.3	29.7	0.5	D
1	1,484	20	57.1	1.3	27.1	1.1	D
Area	5,042	63	59.7	1.1	29.2	0.7	D
Total	5,042	63	59.7	1.1	29.2	0.7	D

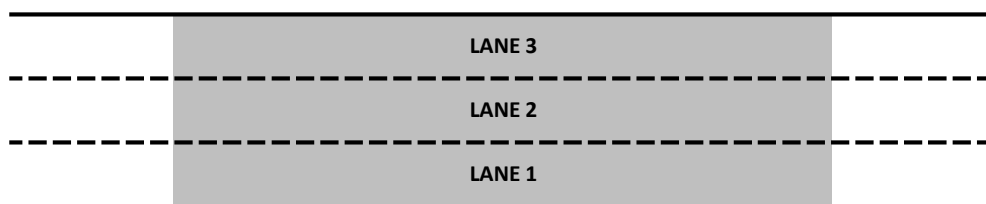
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,930	5,042	63	102.3%	10,562
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 54 - SB I-15: Indian Truck Trail On-ramp to Lake St Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,884	35	46.0	0.2	11.3	0.5	B
4	1,683	25	45.7	0.1	11.4	0.4	B
3	1,480	23	61.5	2.0	30.6	1.9	D
2	1,088	38	58.2	2.1	31.6	1.7	D
1	1,207	61	56.2	1.9	29.2	2.3	D
Area	7,343	182	60.8	1.6	26.1	1.3	D
Total	7,343	182	60.8	1.6	26.1	1.3	D

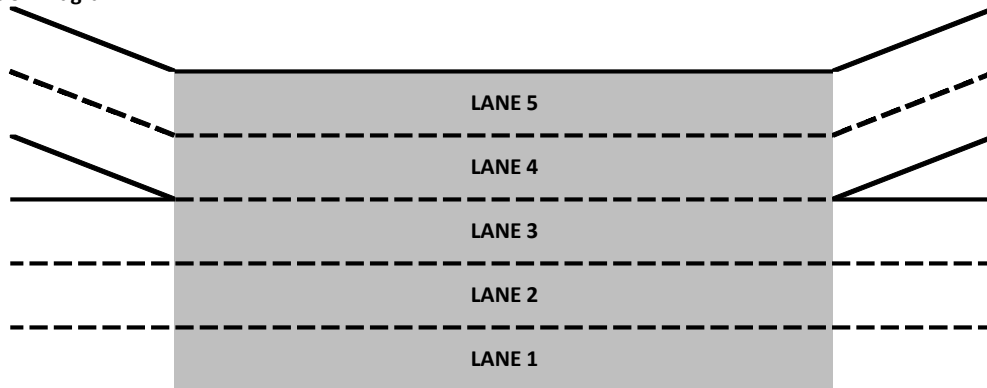
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,088	38
1	1,207	61
Total	2,295	66

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,088	48
1	1,060	50
Total	2,148	70

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,930	5,047	116	102.4%	2,955
On-ramp	2,680	2,295	66	85.6%	
Off-ramp	2,500	2,148	70	85.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 35 - SB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,774	22	58.8	5.0	31.9	2.9	D
2	1,721	20	52.9	5.6	31.1	4.0	D
1	1,702	29	50.9	4.1	34.9	3.5	D
Area	3,423	49	51.9	4.7	33.0	3.7	D
Total	5,197	71	54.3	4.8	32.5	3.4	D

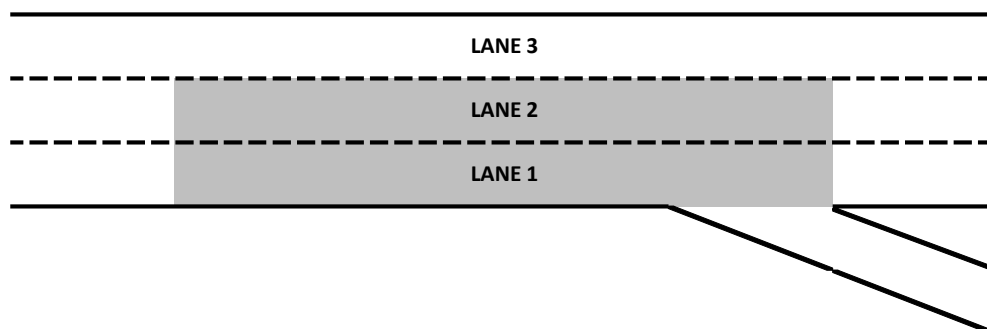
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	637	44
Total	637	44

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,110	5,197	71	101.7%	1,501
On-ramp					
Off-ramp	660	637	44	96.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 36 - SB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,710	21	64.4	0.9	27.7	1.1	D
2	1,513	18	62.0	0.9	25.9	1.0	C
1	1,335	21	60.4	1.2	22.3	1.2	C
Area	4,558	59	62.4	1.0	25.3	1.0	C
Total	4,558	59	62.4	1.0	25.3	1.0	C

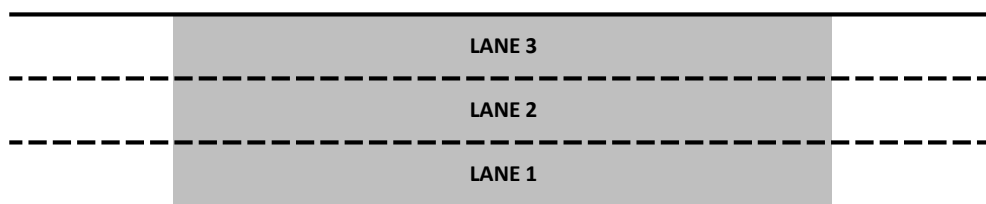
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,450	4,558	59	102.4%	3,287
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 37 - SB I-15: Lake St On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,690	20	63.7	3.9	28.0	1.8	D
3	1,536	21	60.9	3.1	26.2	3.0	D
2	1,345	21	59.7	3.8	24.9	2.6	C
1	231	36	38.1	1.5	0.5	0.1	A
Area	3,112	78	60.5	3.3	19.5	2.1	C
Total	4,803	98	61.6	3.5	21.8	2.0	C

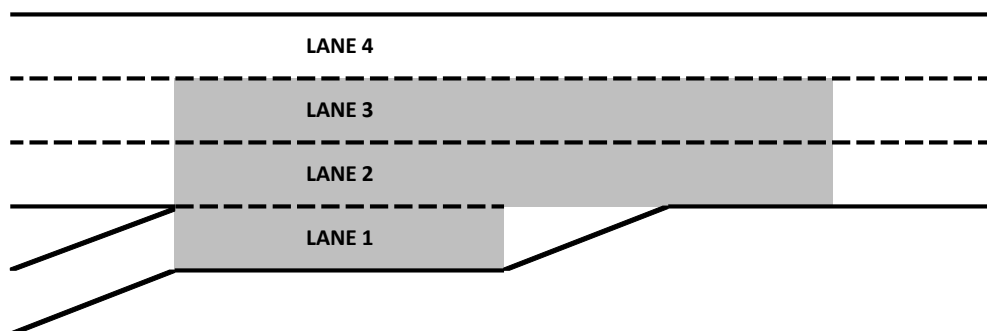
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	231	36
Total	231	36

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,450	4,572	62	102.7%	1,500
On-ramp	240	231	36	96.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 38 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,758	27	62.7	1.1	29.3	1.5	D
2	1,615	25	60.1	1.1	27.6	0.8	D
1	1,430	28	58.3	1.1	25.3	0.8	C
Area	4,803	80	60.5	1.0	27.4	0.9	D
Total	4,803	80	60.5	1.0	27.4	0.9	D

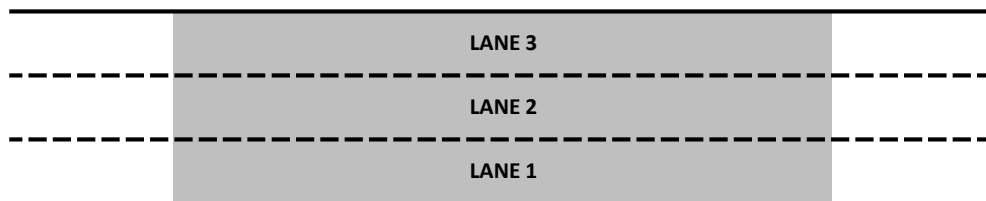
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,690	4,803	80	102.4%	5,941
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 55 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp (EL Egress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,771	28	64.7	4.7	20.3	2.5	C
3	1,611	27	62.0	5.0	27.0	2.1	D
2	1,407	30	58.4	5.4	26.7	3.0	D
1	866	45	55.6	6.2	25.2	3.1	C
Area	5,654	130	60.2	5.2	24.7	2.5	C
Total	5,654	130	60.2	5.2	24.7	2.5	C

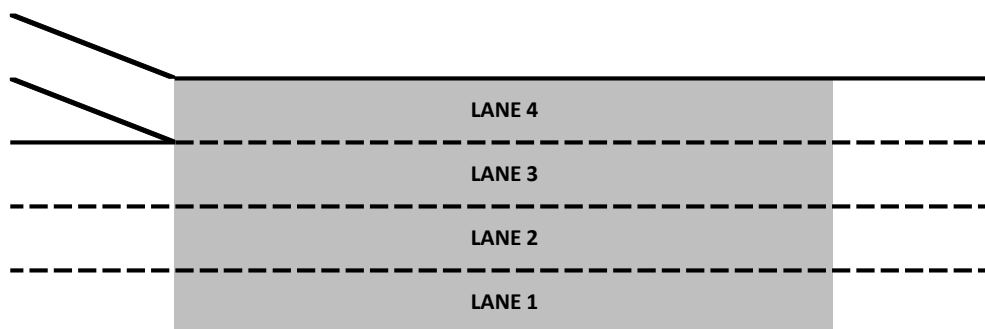
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	866	45
Total	866	45

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,690	4,789	85	102.1%	1,500
On-ramp	1,060	866	45	81.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 56 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,374	28	51.1	23.4	39.5	24.8	E
3	1,501	19	48.1	24.3	42.8	26.1	E
2	1,458	25	44.5	24.0	44.2	27.8	E
1	1,281	33	43.2	23.9	42.4	29.0	E
Area	5,614	104	47.0	23.8	41.5	25.9	E
Total	5,614	104	47.0	23.8	41.5	25.9	E

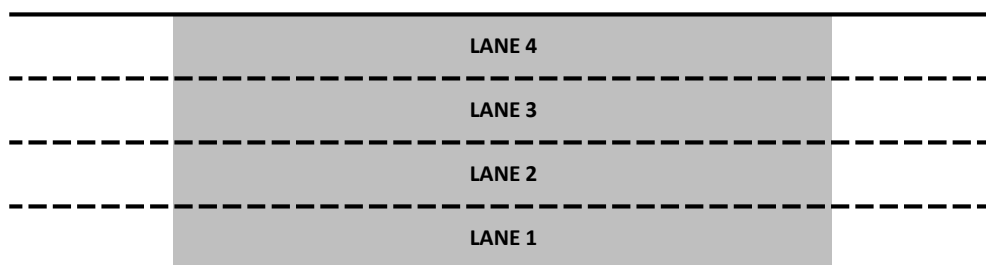
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,750	5,614	104	97.6%	1,308
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 39 - SB I-15: Nichols Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,424	24	43.2	22.3	53.0	33.7	F
3	1,514	21	38.8	22.5	58.0	35.9	F
2	1,419	32	31.6	21.0	59.3	39.2	F
1	1,241	25	28.4	16.6	55.1	37.4	F
Area	2,661	57	30.3	19.0	56.9	38.1	F
Total	5,598	102	36.6	20.8	53.5	33.5	F

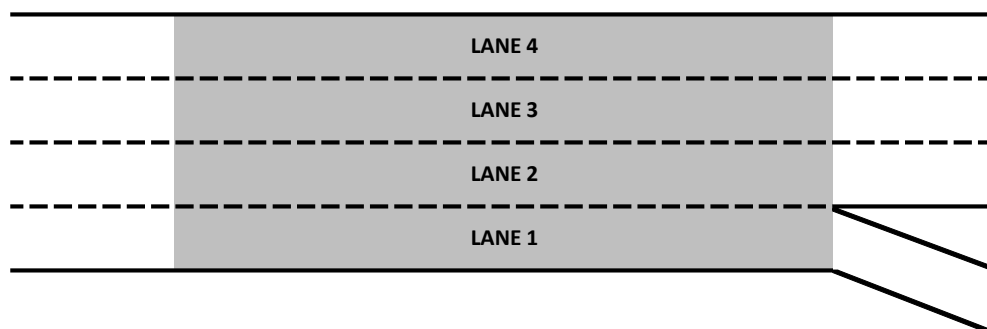
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	347	46
Total	347	46

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,750	5,598	102	97.4%	1,499
On-ramp					
Off-ramp	350	347	46	99.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 40 - SB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,942	36	36.1	19.8	67.3	32.2	F
2	1,771	34	32.3	18.9	68.0	33.4	F
1	1,443	21	30.5	16.7	60.1	30.7	F
Area	5,156	91	33.3	18.6	64.8	32.0	F
Total	5,156	91	33.3	18.6	64.8	32.0	F

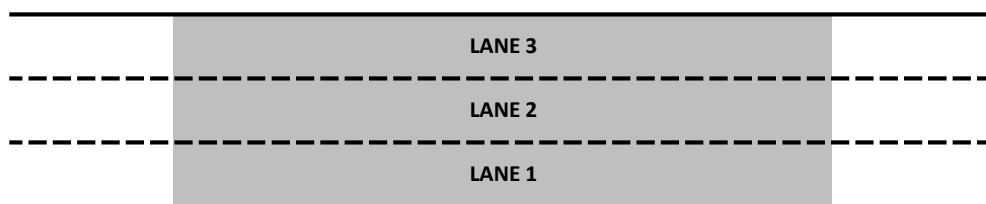
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,400	5,156	91	95.5%	3,058
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 41 - SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5			4.7	0.1	1.3	0.1	A
4	1,981	43	27.8	19.4	83.4	28.5	F
3	1,731	39	23.4	19.8	89.4	32.2	F
2	1,390	28	22.9	17.9	81.1	29.9	F
1	328	49	47.2	10.4	9.9	2.6	A
Area	5,429	159	26.9	18.4	60.1	20.1	F
Total	5,429	159	27.5	18.0	58.3	19.3	F

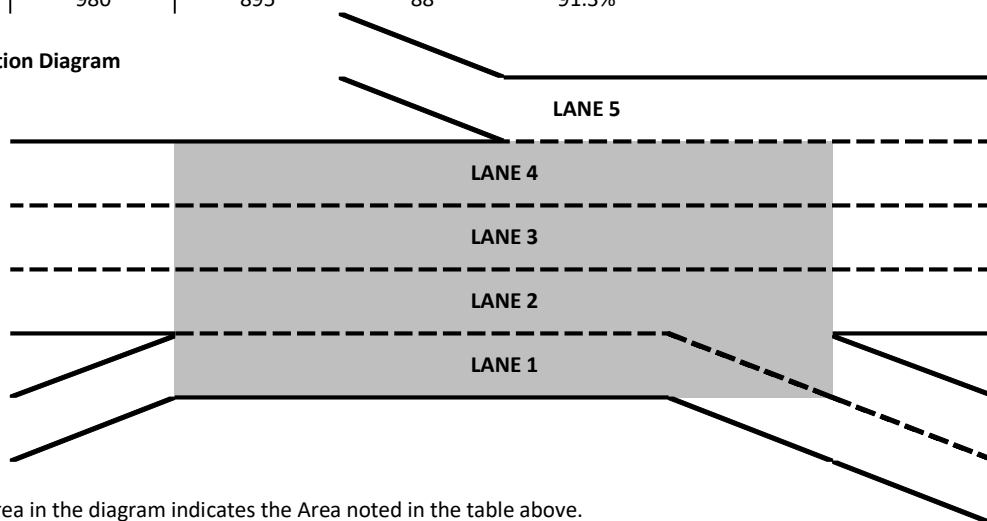
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	328	49
Total	328	49

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	171	78
1	724	76
Total	895	88

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,400	5,101	110	94.5%	5,329
On-ramp	330	328	49	99.3%	
Off-ramp	980	895	88	91.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 57 - SB I-15: Central Ave (SR-74) (EL Egress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,799	48	39.4	2.6	51.2	5.5	F
4	1,365	77	20.0	5.7	94.4	16.9	F
3	1,398	27	11.8	5.6	110.3	24.8	F
2	688	32	13.9	4.7	72.0	18.2	F
1	1,264	61	9.6	3.1	3.6	1.0	A
Area	6,513	244	22.7	4.6	63.1	8.6	F
Total	6,513	244	22.7	4.6	63.1	8.6	F

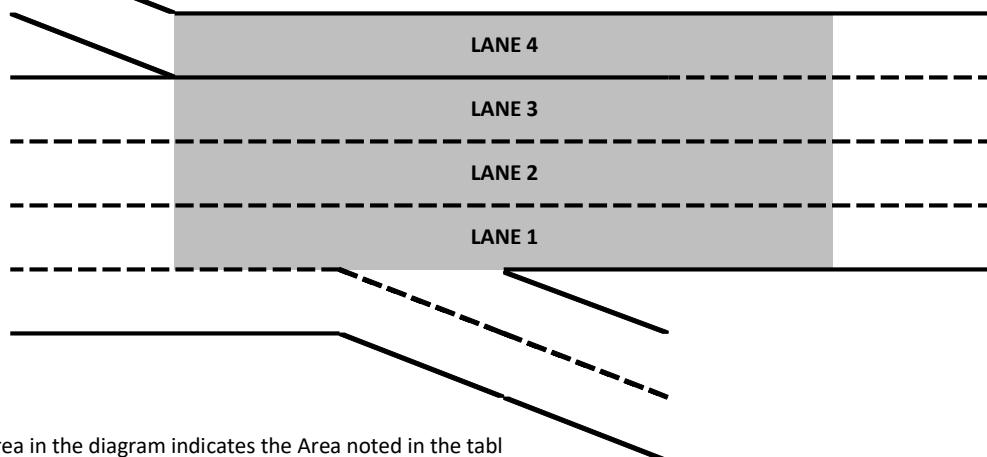
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,264	61
Total	1,264	61

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,730	5,249	183	91.6%	1,797
On-ramp	1,440	1,264	61	87.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the tabl

Location 44 - SB I-15: Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,052	59	26.6	2.2	79.5	4.4	F
3	2,035	42	25.0	1.2	81.5	4.7	F
2	1,443	46	14.4	1.5	80.3	3.7	F
1	0	0	3.0	0.4	49.5	7.6	F
Area	5,530	146	22.8	1.2	59.7	2.6	F
Total	5,530	146	22.8	1.2	59.7	2.6	F

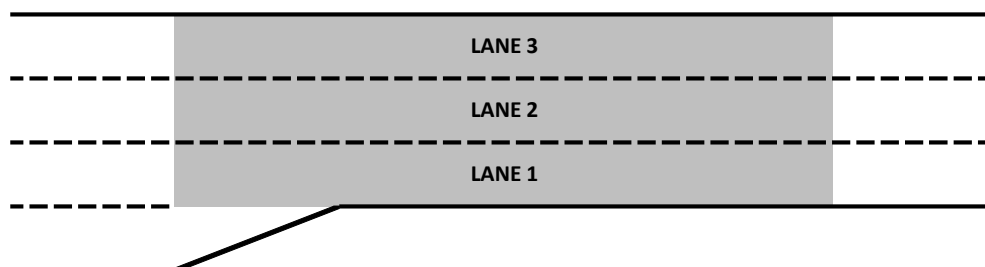
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,190	5,530	146	89.3%	372
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 45 - SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,057	58	27.0	1.5	80.1	2.4	F
3	2,009	41	25.0	1.2	82.3	2.5	F
2	1,464	46	22.9	1.1	78.9	2.3	F
1	1,253	41	29.3	3.4	11.7	1.1	B
Area	6,783	185	26.3	1.1	67.1	1.8	F
Total	6,783	185	26.3	1.1	67.1	1.8	F

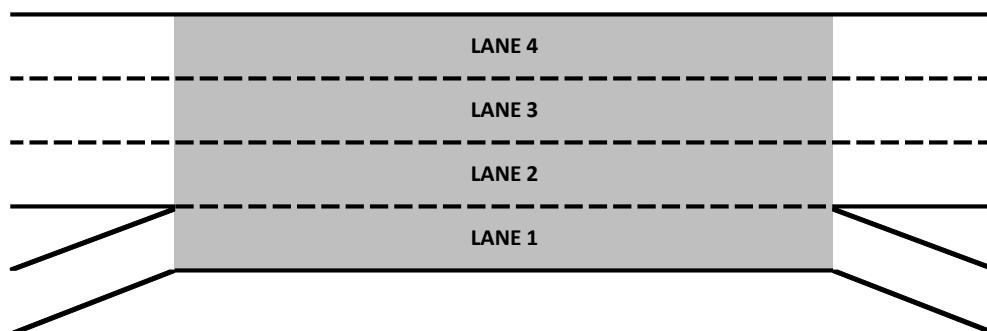
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,253	41
Total	1,253	41

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	392	27
Total	392	27

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,190	5,530	145	89.3%	5,633
On-ramp	1,190	1,253	41	105.3%	
Off-ramp	420	392	27	93.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 48 - SB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,228	23	29.2	2.1	76.3	3.8	F
2	2,114	13	28.6	1.8	74.6	3.7	F
1	1,953	18	27.7	2.1	70.7	4.0	F
Area	6,295	54	28.5	2.0	73.8	3.8	F
Total	6,295	54	28.5	2.0	73.8	3.8	F

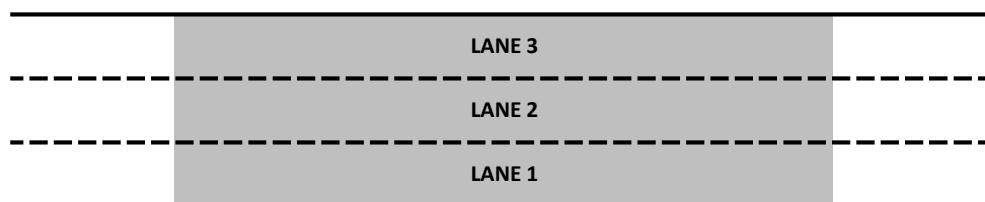
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,960	6,295	54	90.4%	3,013
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 49 - SB I-15: Main St On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,224	22	35.7	2.5	66.0	3.3	F
3	2,093	24	32.9	2.1	70.2	3.4	F
2	1,977	22	31.3	2.2	66.0	3.6	F
1	405	29	19.2	1.8	2.8	0.7	A
Area	4,475	75	31.6	2.3	55.6	2.9	F
Total	6,699	96	33.0	2.4	58.5	3.1	F

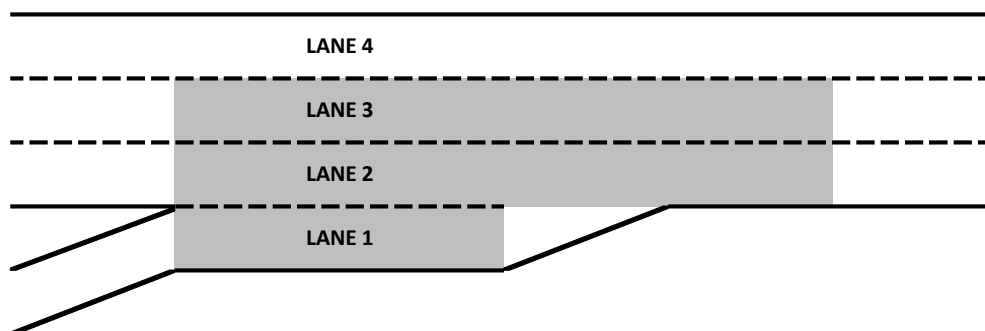
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	405	29
Total	405	29

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,960	6,294	67	90.4%	1,500
On-ramp	400	405	29	101.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 50 - SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,433	17	58.2	4.5	42.1	4.1	E
2	2,223	18	55.0	4.8	41.2	4.3	E
1	2,039	25	52.4	5.0	39.3	4.8	E
Area	6,695	61	55.4	4.7	40.8	4.4	E
Total	6,695	61	55.4	4.7	40.8	4.4	E

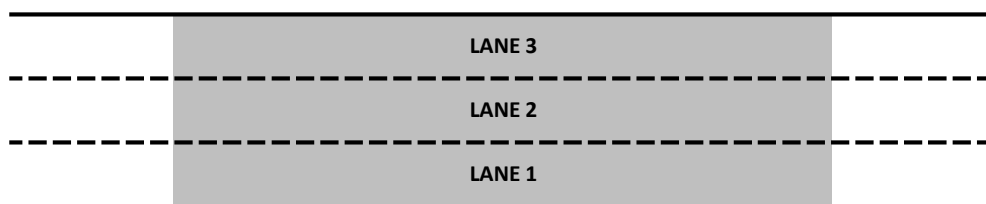
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,360	6,695	61	91.0%	3,089
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Opening Year Plus Project
PM Peak Hour

Location		Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
200	SB I-15 EL: WB SR-91 Off-ramp	Basic	1,828	39	97.2%	903	47	99.3%	589	47	96.6%	67.9	0.5	13.7	0.9	B
201	SB I-15 EL: EB SR-91 On-ramp	Basic	1,233	17	97.1%				68.4	0.1	16.0	0.4	B			
202	SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia	Basic	2,134	26	97.9%				68.3	0.1	16.0	0.4	B			
203	SB I-15 EL: EL Access S of Magnolia to EL Access at El Cerrito	Basic	2,367	35	97.8%				67.2	0.3	16.9	0.9	B			
204	SB I-15 EL: EL Access at El Cerrito Rd to EL Access S of Cajalco	Basic	2,390	40	97.5%				67.7	0.1	17.5	0.8	B			
205	SB I-15 EL: EL Access S of Cajalco to EL Access S of Temescal Canyon	Basic	2,257	38	87.8%				67.5	0.3	15.4	0.8	B			
206	SB I-15 EL: EL Access S of Temescal Canyon to EL Access S of Indian Truck	Basic	2,311	39	86.2%				67.6	0.2	17.9	0.9	B			
207	SB I-15 EL: EL Access S of Indian Truck to EL Egress S of Lake	Basic	2,142	26	85.7%				67.4	0.2	16.9	0.4	B			
208	SB I-15 EL: EL Egress S of Lake	Basic	2,134	33	85.4%				65.1	0.4	17.5	0.5	B			
308	NB I-15 EL: EL Ingress N of Nichols	Basic	935	21	101.6%				237	38	112.8%	69.2	0.2	8.9	0.4	A
309	NB I-15 EL: EL Ingress N of Nichols to EL Access N of Lake	Basic	1,169	30	103.4%	200	43	90.7%				69.1	0.3	8.9	0.5	A
310	NB I-15 EL: EL Access N of Lake to EL Access N of Indian Truck	Basic	1,216	31	101.3%							69.0	0.1	9.3	0.7	A
311	NB I-15 EL: EL Access N of Indian Truck to EL Ingress at Cajalco	Basic	1,125	34	101.4%							68.4	0.6	7.0	0.3	A
314	NB I-15 EL: EL Ingress at Cajalco	Merge	1,114	27	100.4%							68.5	0.3	7.7	0.4	A
312	NB I-15 EL: EL Ingress at Cajalco to EL Access at El Cerrito	Basic	1,310	35	98.5%							68.9	0.3	10.4	0.4	A
302	NB I-15 EL: EL Access at El Cerrito to EL Access N of Ontario	Basic	1,408	33	99.2%				68.3	0.3	11.0	0.4	A			
303	NB I-15 EL: EL Access N of Ontario to WB SR-91 Off-ramp	Basic	1,412	38	100.2%				66.9	0.5	11.4	0.6	B			
304	NB I-15 EL: WB SR-91 Off-ramp	Basic	1,406	35	99.7%				830	50	97.7%	68.2	0.3	11.4	0.5	B
306	NB I-15 EL: EB SR-91 On-ramp	Basic	571	20	101.9%				378	29	90.1%	69.4	0.2	7.2	0.3	A

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 200 - SB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	928	18	67.4	1.1	14.4	0.9	B
1	900	21	68.5	0.2	12.9	0.9	B
Area	1,828	39	67.9	0.5	13.7	0.9	B
Total	1,828	39	67.9	0.5	13.7	0.9	B

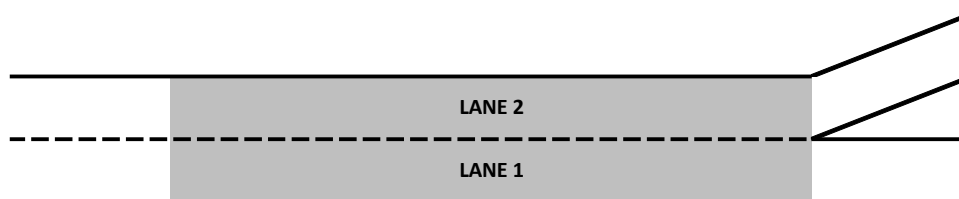
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	589	47
Total	589	47

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,880	1,828	39	97.2%	1,496
On-ramp					
Off-ramp	610	589	47	96.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 201 - SB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,233	17	68.6	0.1	14.7	0.5	B
1	903	47	68.3	0.1	17.3	0.6	B
Area	2,136	64	68.4	0.1	16.0	0.4	B
Total	2,136	64	68.4	0.1	16.0	0.4	B

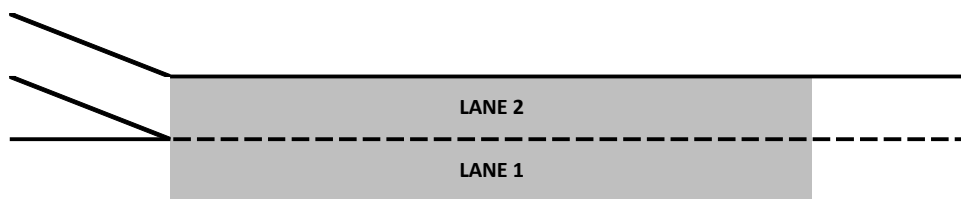
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	903	47
Total	903	47

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,270	1,233	17	97.1%	1,500
On-ramp	910	903	47	99.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 202 - SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,027	13	68.6	0.2	15.3	0.6	B
1	1,107	14	68.1	0.1	16.8	0.4	B
Area	2,134	26	68.3	0.1	16.0	0.4	B
Total	2,134	26	68.3	0.1	16.0	0.4	B

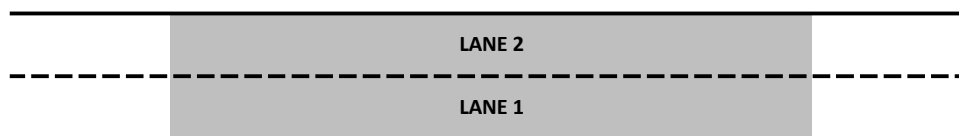
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,180	2,134	26	97.9%	2,496
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 203 - SB I-15 EL: EL Access S of Magnolia to EL Access at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,156	17	67.9	0.4	16.3	1.2	B
1	1,211	19	66.6	0.3	17.5	0.8	B
Area	2,367	35	67.2	0.3	16.9	0.9	B
Total	2,367	35	67.2	0.3	16.9	0.9	B

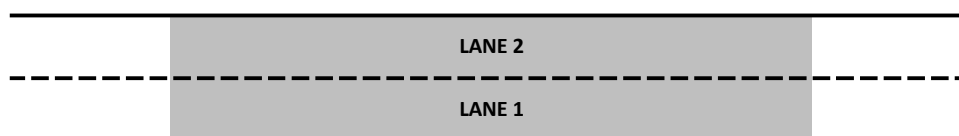
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,420	2,367	35	97.8%	7,133
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 204 - SB I-15 EL: EL Access at El Cerrito Rd to EL Access S of Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,191	19	68.1	0.2	17.5	0.9	B
1	1,199	22	67.2	0.3	17.6	0.9	B
Area	2,390	40	67.7	0.1	17.5	0.8	B
Total	2,390	40	67.7	0.1	17.5	0.8	B

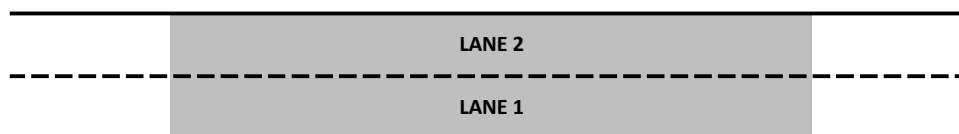
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,450	2,390	40	97.5%	5,784
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 205 - SB I-15 EL: EL Access S of Cajalco to EL Access S of Temescal Canyon

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,133	15	67.8	0.3	15.8	0.8	B
1	1,124	23	67.2	0.4	15.1	1.0	B
Area	2,257	38	67.5	0.3	15.4	0.8	B
Total	2,257	38	67.5	0.3	15.4	0.8	B

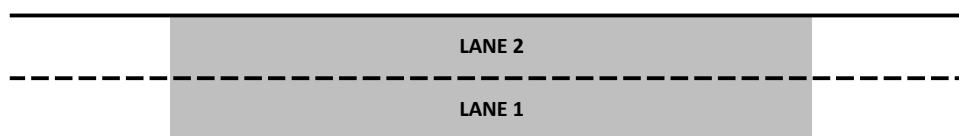
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,570	2,257	38	87.8%	23,650
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 206 - SB I-15 EL: EL Access S of Temescal Canyon to EL Access S of Indian Truck

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,156	21	67.7	0.2	17.9	1.2	B
1	1,155	18	67.4	0.2	18.0	0.8	B
Area	2,311	39	67.6	0.2	17.9	0.9	B
Total	2,311	39	67.6	0.2	17.9	0.9	B

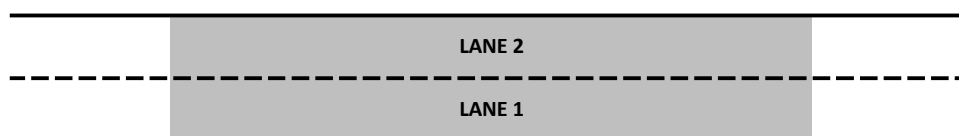
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,680	2,311	39	86.2%	18,779
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 207 - SB I-15 EL: EL Access S of Indian Truck to EL Egress S of Lake

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,084	12	67.5	0.2	17.0	0.7	B
1	1,057	13	67.2	0.2	16.8	0.4	B
Area	2,142	26	67.4	0.2	16.9	0.4	B
Total	2,142	26	67.4	0.2	16.9	0.4	B

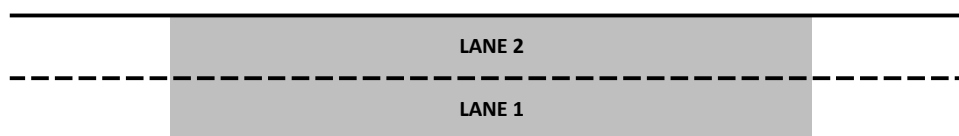
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,500	2,142	26	85.7%	10,977
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 208 - SB I-15 EL: EL Egress S of Lake

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,252	17	64.6	0.6	19.3	1.1	C
1	882	16	65.8	0.9	15.7	0.3	B
Area	2,134	33	65.1	0.4	17.5	0.5	B
Total	2,134	33	65.1	0.4	17.5	0.5	B

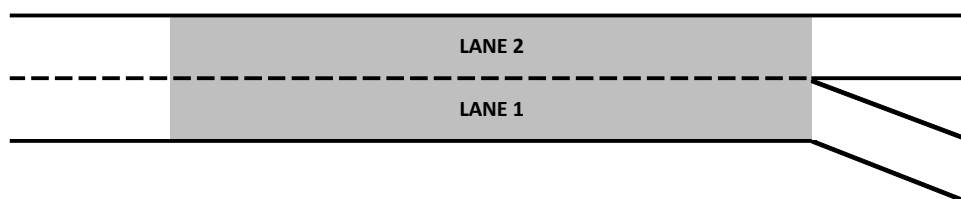
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	867	44
Total	867	44

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,500	2,134	33	85.4%	1,500
On-ramp					
Off-ramp	1,060	867	44	81.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 308 - NB I-15 EL: EL Ingress N of Nichols

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	935	21	68.2	0.2	10.9	0.6	A
1	237	38	70.7	0.3	6.9	0.5	A
Area	1,172	59	69.2	0.2	8.9	0.4	A
Total	1,172	59	69.2	0.2	8.9	0.4	A

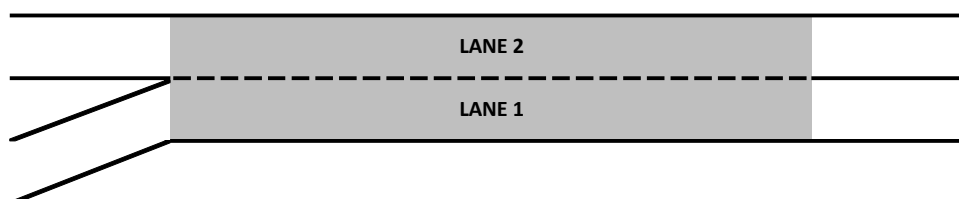
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	237	38
Total	237	38

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	920	935	21	101.6%	1,498
On-ramp	210	237	38	112.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 309 - NB I-15 EL: EL Ingress N of Nichols to EL Access N of Lake

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	598	18	67.9	0.2	9.0	0.5	A
1	571	12	70.3	0.3	8.7	0.7	A
Area	1,169	30	69.1	0.3	8.9	0.5	A
Total	1,169	30	69.1	0.3	8.9	0.5	A

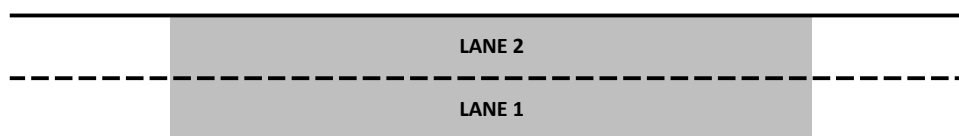
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,130	1,169	30	103.4%	11,215
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 310 - NB I-15 EL: EL Access N of Lake to EL Access N of Indian Truck

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	619	15	68.3	0.1	9.2	0.8	A
1	597	16	69.7	0.2	9.3	0.8	A
Area	1,216	31	69.0	0.1	9.3	0.7	A
Total	1,216	31	69.0	0.1	9.3	0.7	A

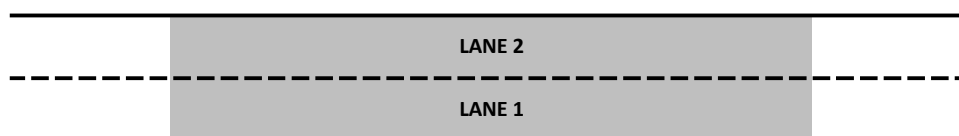
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,200	1,216	31	101.3%	18,145
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 311 - NB I-15 EL: EL Access N of Indian Truck to EL Ingress at Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	581	17					
5	544	18					
4							
3							
2			68.1	0.4	8.5	1.1	A
1			68.7	0.8	7.2	1.2	A
Area	0	0	68.4	0.6	7.0	0.3	A
Total	1,125	34	68.4	0.6	7.8	0.3	A

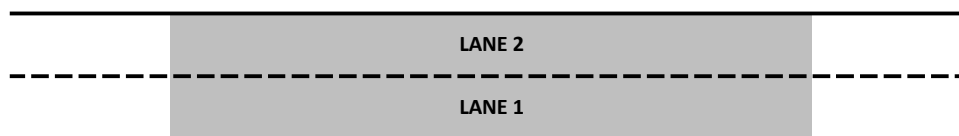
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,110	1,125	34	101.4%	26,270
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 314 - NB I-15 EL: EL Ingress at Cajalco

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	561	7	68.1	0.3	8.0	0.5	A
2	553	20	69.3	0.5	9.0	0.5	A
1	200	43	22.3	0.1	1.2	0.3	A
Area	1,314	70	68.5	0.3	7.7	0.4	A
Total	1,314	70	68.5	0.3	7.7	0.4	A

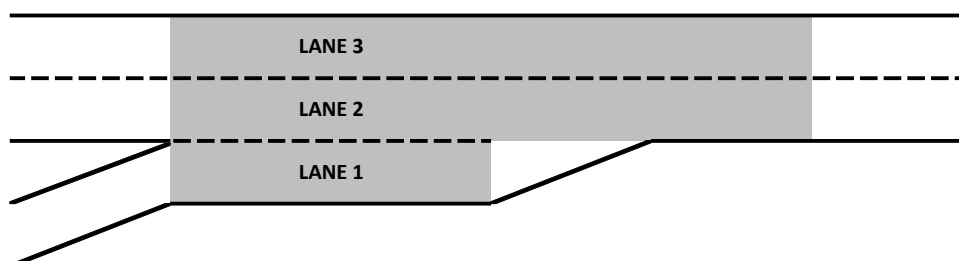
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	200	43
Total	200	43

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,110	1,114	27	100.4%	1,594
On-ramp	220	200	43	90.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 312 - NB I-15 EL: EL Ingress at Cajalco to EL Access at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	620	13	68.1	0.3	9.7	0.8	A
1	690	22	69.5	0.3	11.2	0.8	B
Area	1,310	35	68.9	0.3	10.4	0.4	A
Total	1,310	35	68.9	0.3	10.4	0.4	A

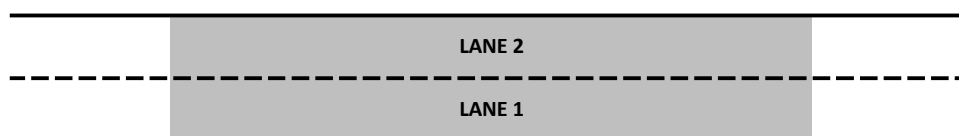
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,330	1,310	35	98.5%	4,125
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 302 - NB I-15 EL: EL Access at El Cerrito to EL Access N of Ontario

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	726	13	68.2	0.5	11.9	0.7	B
1	682	21	68.5	0.6	10.0	0.4	A
Area	1,408	33	68.3	0.3	11.0	0.4	A
Total	1,408	33	68.3	0.3	11.0	0.4	A

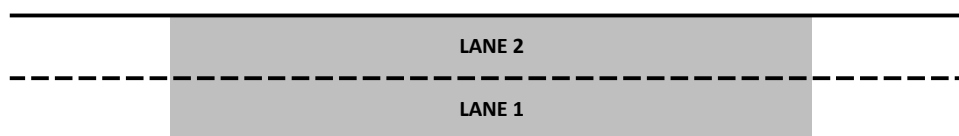
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,420	1,408	33	99.2%	6,919
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 303 - NB I-15 EL: EL Access N of Ontario to WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	803	22	67.3	0.4	13.2	0.8	B
1	609	16	66.3	0.7	9.5	0.5	A
Area	1,412	38	66.9	0.5	11.4	0.6	B
Total	1,412	38	66.9	0.5	11.4	0.6	B

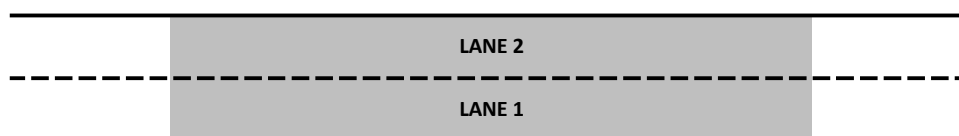
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,410	1,412	38	100.2%	3,113
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 304 - NB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	823	18	67.8	0.4	13.7	0.4	B
1	583	17	68.8	0.3	9.0	0.9	A
Area	1,406	35	68.2	0.3	11.4	0.5	B
Total	1,406	35	68.2	0.3	11.4	0.5	B

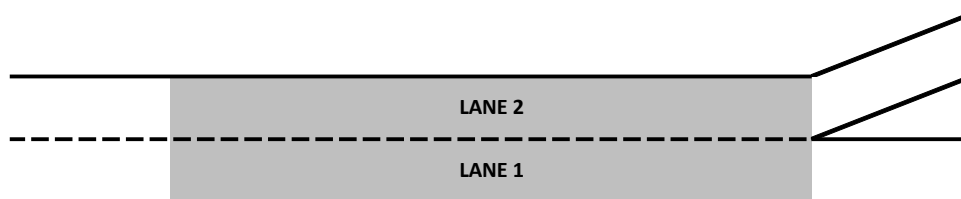
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	830	50
Total	830	50

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,410	1,406	35	99.7%	1,501
On-ramp					
Off-ramp	850	830	50	97.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 306 - NB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	571	20	69.9	0.2	6.6	0.4	A
1	378	29	68.9	0.4	7.8	0.4	A
Area	949	49	69.4	0.2	7.2	0.3	A
Total	949	49	69.4	0.2	7.2	0.3	A

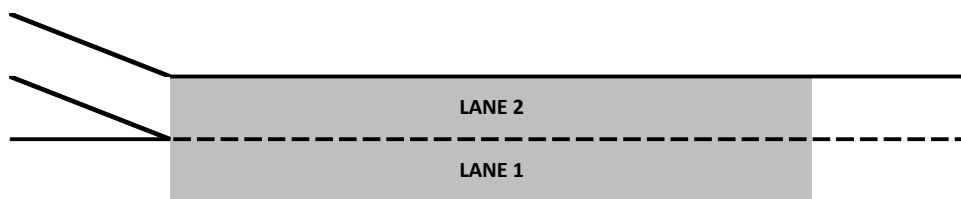
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	378	29
Total	378	29

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	560	571	20	101.9%	1,498
On-ramp	420	378	29	90.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Vissim Post-Processor
Average Results from 5 Runs
Network Statistics

I-15 Express Lanes Southern Extension
Design Year No Build
AM Peak Hour

Performance Measure	Vehicle Types	Average	Std. Dev.	Minimum	Maximum
Average Delay (seconds)	All	549.3	9.81	534.2	561.1
Total Delay (hours)	All	36,686	600	35,761	37,400
Average Stopped Delay (seconds)	All	25.8	1.62	23.3	27.5
Total Stopped Delay (hours)	All	1726	107	1559	1838
Total Distance Traveled (miles)	All	1,673,876	5,589	1,666,424	1,681,998
Average Speed (mph)	All	27.0	0.32	26.7	27.5
Average Number of Stops	All	37.3	2.01	34.1	39.2
Total Number of Stops	All	8,979,141	474,642	8,212,330	9,416,605
Total Travel Time (hours)	All	61,901.5	523.9	61,095.7	62,502.9
Vehicles Active	All	10,580	110	10,409	10,704
Vehicles Arrived	All	229,846	356	229,535	230,455

VISSIM Post-Processor
Average Results from 5 Runs
Average Travel Time

I-15 Express Lanes Southern Extension
Design Year No Build
AM Peak Hour

Corridor Travel Time by Time Interval Summary					
Time interval		Measured from Simulation (min)			
		Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
1	5:00 - 5:15 AM	19.96	36.37	4.90	5.41
2	5:15 - 5:30 AM	20.04	44.36	4.90	5.39
3	5:30 - 5:45 AM	20.04	54.85	4.89	5.43
4	5:45 - 6:00 AM	20.11	69.14	4.92	5.43
5	6:00 - 6:15 AM	20.21	83.20	4.92	5.47
6	6:15 - 6:30 AM	20.13	94.87	4.89	5.49
7	6:30 - 6:45 AM	20.30	99.51	4.88	5.45
8	6:45 - 7:00 AM	20.91	95.64	4.89	5.45
9	7:00 - 7:15 AM	21.17	90.84	4.90	5.47
10	7:15 - 7:30 AM	21.23	84.73	4.91	5.45
11	7:30 - 7:45 AM	21.17	80.67	4.89	5.43
12	7:45 - 8:00 AM	20.85	78.28	4.90	5.44
13	8:00 - 8:15 AM	21.26	78.55	4.91	5.51
14	8:15 - 8:30 AM	21.75	81.28	4.91	5.48
15	8:30 - 8:45 AM	22.41	79.41	4.91	5.48
16	8:45 - 9:00 AM	23.52	75.47	4.92	5.51
17	9:00 - 9:15 AM	23.75	73.73	4.92	5.43
18	9:15 - 9:30 AM	23.79	76.13	4.91	5.41
19	9:30 - 9:45 AM	23.18	84.74	4.92	5.38
20	9:45 - 10:00 AM	23.11	89.21	4.92	5.39
21	10:00 - 10:15 AM	22.81	92.32	4.93	5.36
22	10:15 - 10:30 AM	22.63	96.87	4.92	5.36
23	10:30 - 10:45 AM	22.63	101.48	4.91	5.35
24	10:45 - 11:00 AM	22.84	103.75	4.90	5.34
25	11:00 - 11:15 AM	23.36	104.73	4.93	5.33
26	11:15 - 11:30 AM	23.53	102.21	4.93	5.30
27	11:30 - 11:45 AM	23.76	95.31	4.92	5.31
28	11:45 - 12:00 PM	24.45	50.26	4.93	5.31
Average		22.0	82.1	4.9	5.4

Corridor Performance Measurements				
Stats Summary	Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
Average Travel Time (min)	22.0	82.1	4.9	5.4
Average Travel Speed (mph)	59.8	16.0	70.1	67.5
Average Delay per Vehicle (min)	3.2	63.3	0.0	0.2
Max Individual Vehicle Delay (min)	5.7	86.0	0.0	0.3

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Design Year No Build
AM Peak Hour

	Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
1	SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	5,224	104	98.9%							64.4	0.5	21.0	0.6	C
2	SB I-15: Hidden Valley Pkwy On-ramp	Merge	5,221	88	98.9%	493	29	98.5%				63.6	0.4	20.9	0.6	C
3	SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp	Basic	5,721	55	99.0%							57.2	11.7	20.6	5.8	C
4	SB I-15: WB SR-91 Off-ramp	Basic	5,726	67	99.1%				819	45	98.6%	55.6	13.9	22.1	8.9	C
5	SB I-15: EB SR-91 Off-ramp	Diverge	4,905	89	99.1%				1,552	49	100.7%	35.9	12.1	53.7	13.3	F
6	SB I-15: EB SR-91 Off-ramp to On-ramp	Basic	3,369	57	98.8%							61.6	1.9	18.6	0.6	C
7	SB I-15: EB SR-91 On-ramp	Merge	3,372	80	98.9%	3,020	66	99.3%				56.4	3.3	26.4	2.3	D
8	SB I-15: WB SR-91 On-ramp to Magnolia Ave Off-ramp	Weave	6,398	75	99.2%	1,625	148	100.9%	1,342	42	96.5%	61.7	1.1	24.4	1.1	C
9	SB I-15: Magnolia Ave Off-ramp to On-ramp	Basic	6,677	104	100.1%							62.9	0.9	27.1	1.2	D
10	SB I-15: Magnolia Ave On-ramp	Merge	6,669	141	100.0%	667	42	93.9%				59.2	6.3	25.2	4.0	C
11	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)	Weave	7,337	147	99.4%	420	41	97.7%	385	36	98.6%	58.5	3.2	23.8	2.1	C
12	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (after EL Access)	Basic	7,390	83	99.6%							49.1	8.7	38.3	7.4	E
13	SB I-15: Ontario Ave Off-ramp	Diverge	7,390	81	99.6%				1,331	54	104.0%	42.2	3.3	50.2	5.8	F
14	SB I-15: Ontario Ave Off-ramp to On-ramp	Basic	6,058	76	98.7%							58.7	1.5	26.5	1.6	D
15	SB I-15: Ontario Ave On-ramp	Merge	6,057	59	98.6%	679	54	99.9%				60.2	3.4	19.8	1.5	C
16	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	Basic	6,727	74	98.6%				1,242	27	101.0%	52.4	6.2	33.5	4.8	D
17	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp	Basic	5,489	82	98.2%							57.1	1.1	32.9	1.6	D
18	SB I-15: EL On-ramp at Foothill Pkwy/El Cerrito Rd	Basic	5,485	73	98.1%	61	5	100.8%				60.0	0.3	23.8	0.8	C
19	SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp	Weave	5,543	78	98.1%	396	33	94.3%	1,400	45	95.2%	61.8	0.4	25.4	0.9	C
20	SB I-15: EL On-ramp at Cajalco Rd to Cajalco Rd On-ramp (4 Lane)	Basic	4,536	55	98.6%	324	25	95.3%				64.8	0.3	19.1	0.7	C
21	SB I-15: Cajalco Rd On-ramp	Merge	4,842	84	98.0%	294	18	105.0%				62.3	1.0	15.1	0.8	B
22	SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	5,136	49	98.4%							63.4	0.6	20.9	1.0	C
23	SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	5,141	74	98.5%				672	18	97.3%	64.0	0.3	20.7	0.8	C
24	SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	4,473	56	98.7%							63.7	0.3	24.2	0.7	C
25	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	4,478	54	98.8%	152	18	116.9%				64.0	0.5	18.2	0.5	C
26	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp	Basic	4,628	83	99.3%							63.0	0.2	25.3	0.3	C
27	SB I-15: Temescal Canyon Rd Off-ramp	Diverge	4,611	61	98.9%				561	40	100.2%	60.1	4.0	24.8	2.5	C
28	SB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	4,060	59	99.0%							63.7	0.4	22.2	0.7	C
29	SB I-15: Temescal Canyon Rd On-ramp	Merge	4,048	74	98.7%	154	28	95.9%				64.4	0.3	16.1	0.6	B
30	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	4,167	78	97.8%							63.3	0.6	23.2	0.8	C
31	SB I-15: Indian Truck Trail Off-ramp	Diverge	4,165	81	97.8%				328	25	105.8%	62.7	1.6	21.9	1.4	C
32	SB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	3,834	76	97.1%							63.9	0.6	21.1	1.0	C
33	SB I-15: Indian Truck Trail On-ramp	Merge	3,830	76	97.0%	176	30	97.5%				63.5	1.7	16.1	1.2	B
60	SB I-15: Indian Truck Trail On-ramp to Horsethief Rd Off-ramp	Basic	4,003	76	96.9%							62.5	1.4	22.4	1.0	C
61	SB I-15: Horsethief Rd Off-ramp	Diverge	4,004	64	96.9%				513	25	94.9%	61.5	2.0	22.1	1.2	C
62	SB I-15: Horsethief Rd Off-ramp to On-ramp	Basic	3,481	65	96.9%							64.7	1.0	18.9	1.0	C
63	SB I-15: Horsethief Rd On-ramp	Merge	3,484	80	97.0%	300	30	103.3%				64.0	0.7	15.3	0.7	B
34	SB I-15: Horsethief Rd On-ramp to Lake St Off-ramp	Basic	3,771	83	97.2%							63.1	0.9	20.7	0.6	C
35	SB I-15: Lake St Off-ramp	Diverge	3,764	94	97.0%				372	43	103.2%	62.0	3.6	20.2	1.7	C
36	SB I-15: Lake St Off-ramp to On-ramp	Basic	3,374	71	95.9%							63.8	0.7	18.6	0.6	C
37	SB I-15: Lake St On-ramp	Merge	3,370	69	95.7%	597	55	102.9%				63.0	1.5	16.6	0.6	B
38	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp	Basic	3,946	70	96.2%							62.9	1.0	21.9	0.7	C
39	SB I-15: Nichols Rd Off-ramp	Diverge	3,931	59	95.9%				354	46	101.0%	62.3	0.7	21.2	0.8	C
40	SB I-15: Nichols Rd Off-ramp to On-ramp	Basic	3,580	60	95.5%							64.0	0.2	19.7	0.7	C
41	SB I-15: Nichols Rd On-ramp	Merge	3,571	75	95.2%	465	44	101.1%				62.2	0.8	17.5	0.6	B
42	SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp	Basic	4,020	76	95.5%							62.6	1.2	22.4	0.7	C
43	SB I-15: Central Ave (SR-74) Off-ramp	Diverge	4,021	69	95.5%				827	33	99.6%	63.6	0.7	14.9	0.4	B
44	SB I-15: Central Ave (SR-74) Off-ramp to On-ramp	Basic	3,162	68	93.5%							64.5	0.6	17.4	0.5	B
45	SB I-15: Central Ave (SR-74) On-ramp	Merge	3,149	70	93.2%	1,397	69	102.7%				60.9	1.7	18.0	1.0	B
46	SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp	Basic	4,505	85	95.0%							60.8	2.0	25.7	1.2	C
47	SB I-15: Main St Off-ramp	Diverge	4,498	88	94.9%				249	28	103.5%	62.5	1.4	24.2	1.1	C
48	SB I-15: Main St Off-ramp to On-ramp	Basic	4,214	70	93.6%							63.2	0.9	23.4	0.9	C
49	SB I-15: Main St On-ramp SB	Merge	4,210	82	93.5%	561	52	107.8%				59.7	5.5	22.1	3.5	C
50	SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp	Basic	4,758	103	94.8%							61.1	1.6	27.1	1.9	D

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 1 - SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

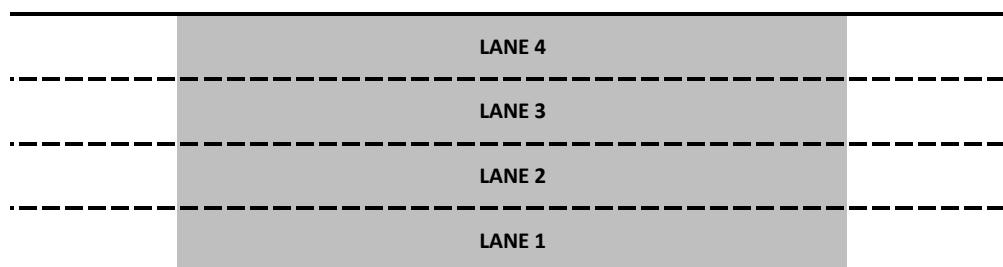
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,296	32	65.9	0.9	20.3	0.9	C
3	1,441	32	64.7	0.6	21.5	0.4	C
2	1,359	10	64.4	0.4	23.0	0.5	C
1	1,130	30	62.4	0.8	19.4	1.1	C
Area	5,224	104	64.4	0.5	21.0	0.6	C
Total	5,224	104	64.4	0.5	21.0	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,280	5,224	104	98.9%	1,784
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 2 - SB I-15: Hidden Valley Pkwy On-ramp

Segment Type - Merge

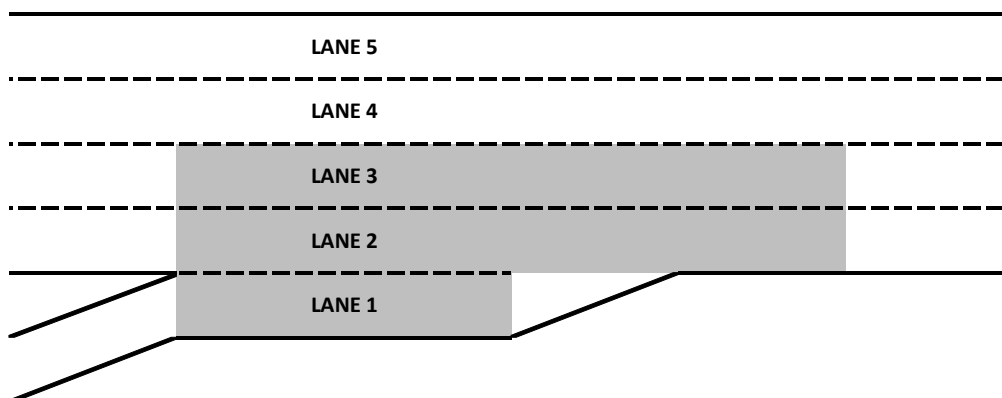
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,283	21	66.2	0.4	20.5	0.9	C
4	1,228	23	65.2	0.5	21.5	0.4	C
3	1,460	8	62.6	0.5	27.9	0.5	D
2	1,251	37	60.7	0.7	22.3	0.9	C
1	493	29	24.5	0.7	1.0	0.2	A
Area	3,203	74	61.7	0.5	20.9	0.6	C
Total	5,713	117	63.6	0.4	20.9	0.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	493	29	1		
Total	493	29	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,280	5,221	88	98.9%	1,702
On-ramp	500	493	29	98.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 3 - SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp

Segment Type - Basic

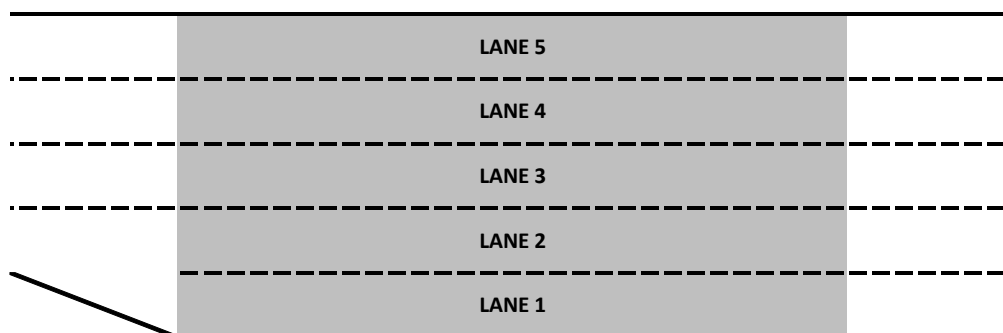
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,545	17	59.4	11.7	27.8	9.2	D
4	1,736	11	56.7	13.7	31.4	9.7	D
3	1,556	11	52.8	15.0	32.0	11.7	D
2	689	8	60.3	4.8	10.4	1.2	A
1	197	8	64.3	4.3	3.3	1.5	A
Area	5,721	55	57.2	11.7	20.6	5.8	C
Total	5,721	55	57.2	11.7	20.6	5.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,780	5,721	55	99.0%	1,019
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 4 - SB I-15: WB SR-91 Off-ramp

Segment Type - Basic

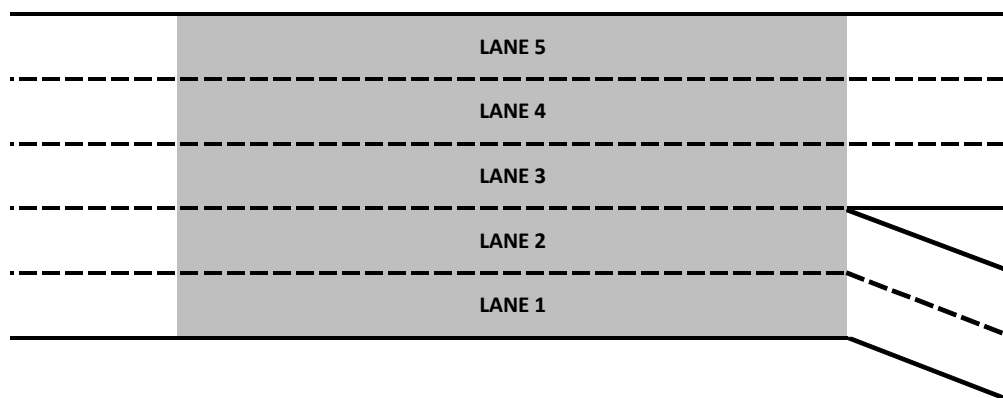
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,656	14	58.5	13.9	27.7	14.6	D
4	1,695	13	53.8	16.0	38.4	18.0	E
3	1,540	17	49.8	18.8	38.1	23.3	E
2	550	12	60.6	8.8	7.9	0.9	A
1	286	11	67.8	2.1	5.0	1.7	A
Area	5,726	67	55.6	13.9	22.1	8.9	C
Total	5,726	67	55.6	13.9	22.1	8.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2	477	43
1			1	342	28
Total			Total	819	45

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,780	5,726	67	99.1%	1,499
On-ramp					
Off-ramp	830	819	45	98.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 5 - SB I-15: EB SR-91 Off-ramp

Segment Type - Diverge

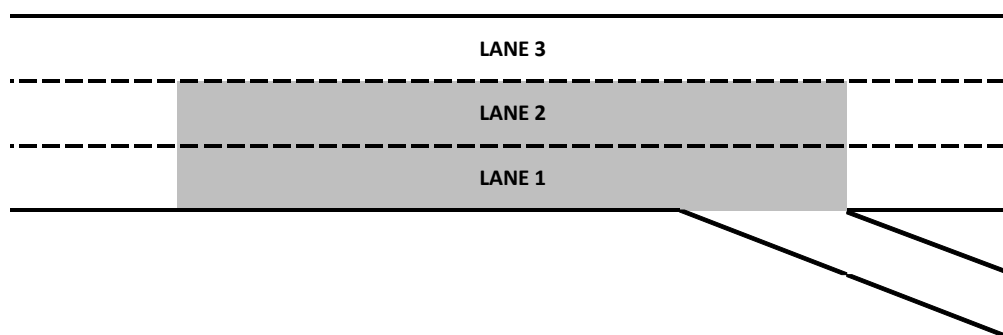
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,623	32	43.7	12.7	40.4	11.1	E
2	1,815	30	32.9	14.7	47.4	13.5	F
1	1,467	28	31.0	10.2	60.2	13.0	F
Area	3,282	57	31.8	12.2	53.7	13.3	F
Total	4,905	89	35.9	12.1	47.9	11.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	1,552	49
Total			Total	1,552	49

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,950	4,905	89	99.1%	1,545
On-ramp					
Off-ramp	1,540	1,552	49	100.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 6 - SB I-15: EB SR-91 Off-ramp to On-ramp

Segment Type - Basic

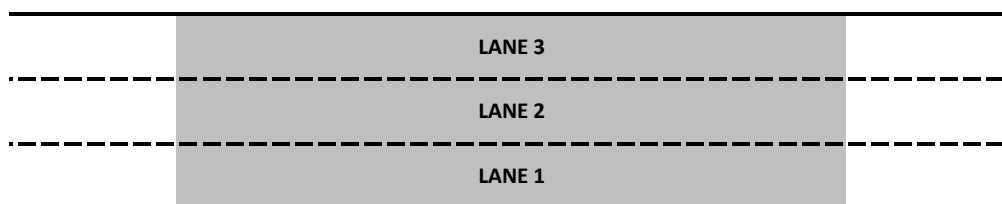
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,253	28	63.9	1.7	20.6	0.9	C
2	957	10	60.9	2.3	17.7	0.5	B
1	1,160	20	59.2	2.1	17.5	1.3	B
Area	3,369	57	61.6	1.9	18.6	0.6	C
Total	3,369	57	61.6	1.9	18.6	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,410	3,369	57	98.8%	1,549
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 7 - SB I-15: EB SR-91 On-ramp

Segment Type - Merge

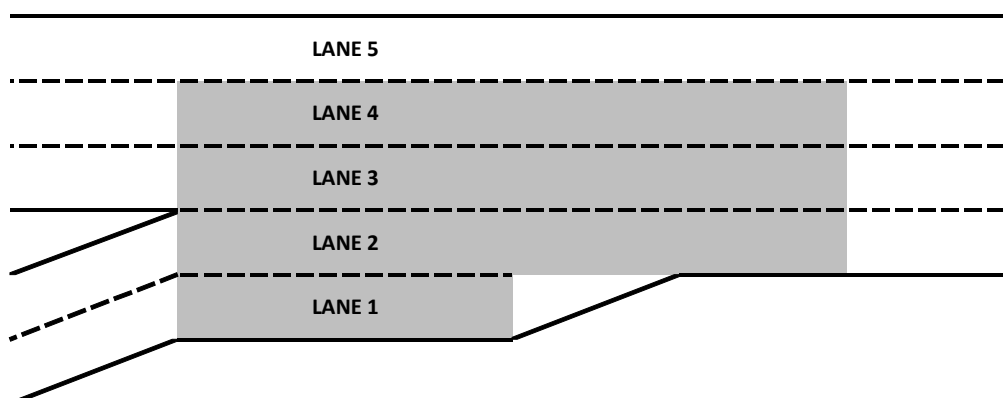
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,230	25	63.1	3.8	21.5	1.7	C
4	976	13	60.3	3.3	21.3	2.6	C
3	1,166	31	55.5	3.0	29.5	2.2	D
2	1,459	27	50.3	3.6	41.1	3.1	E
1	1,561	49	31.2	2.3	4.2	0.7	A
Area	5,161	120	54.6	3.2	26.4	2.3	D
Total	6,391	146	56.4	3.3	25.3	2.1	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2	1,459	27	2		
1	1,561	49	1		
Total	3,020	66	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,410	3,372	80	98.9%	1,370
On-ramp	3,040	3,020	66	99.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 8 - SB I-15: WB SR-91 On-ramp to Magnolia Ave Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6			64.8	1.2	26.3	1.1	D
5	1,454	14	63.0	1.2	26.6	1.7	D
4	1,481	22	61.2	1.1	28.3	1.7	D
3	1,478	16	57.9	1.5	30.9	1.8	D
2	1,986	23	49.1	1.6	13.5	0.7	B
1	1,625	148	33.0	0.6	3.8	0.5	A
Area	8,023	223	61.7	1.1	24.4	1.1	C
Total	8,023	223	61.7	1.1	24.4	1.1	C

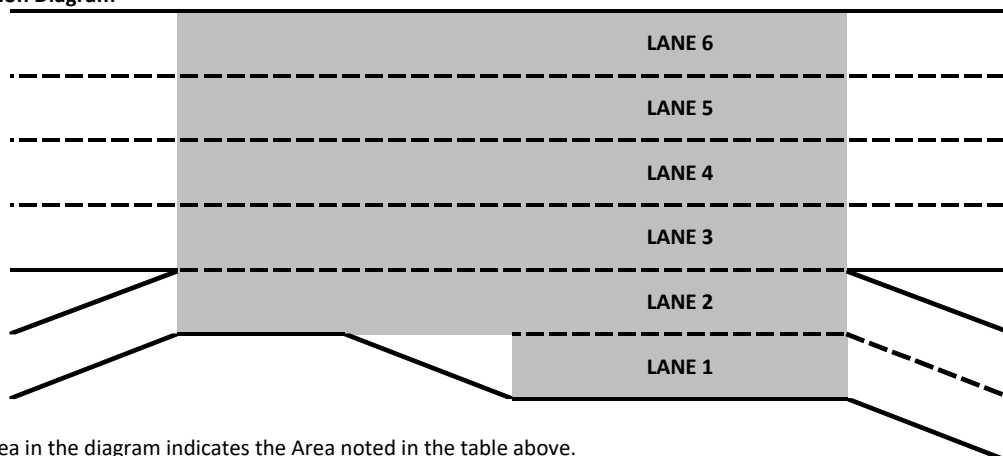
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,625	148
Total	1,625	148

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	755	33
1	587	11
Total	1,342	42

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,450	6,398	75	99.2%	2,539
On-ramp	1,610	1,625	148	100.9%	
Off-ramp	1,390	1,342	42	96.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 9 - SB I-15: Magnolia Ave Off-ramp to On-ramp

Segment Type - Basic

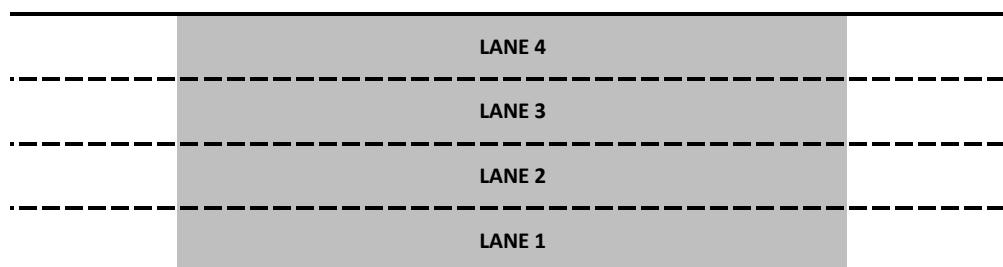
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,769	35	65.1	0.9	28.3	1.0	D
3	1,754	40	63.3	1.1	27.9	0.7	D
2	1,703	14	62.1	0.8	27.1	1.9	D
1	1,451	15	60.4	1.1	25.0	1.8	C
Area	6,677	104	62.9	0.9	27.1	1.2	D
Total	6,677	104	62.9	0.9	27.1	1.2	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,670	6,677	104	100.1%	2,362
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 10 - SB I-15: Magnolia Ave On-ramp

Segment Type - Merge

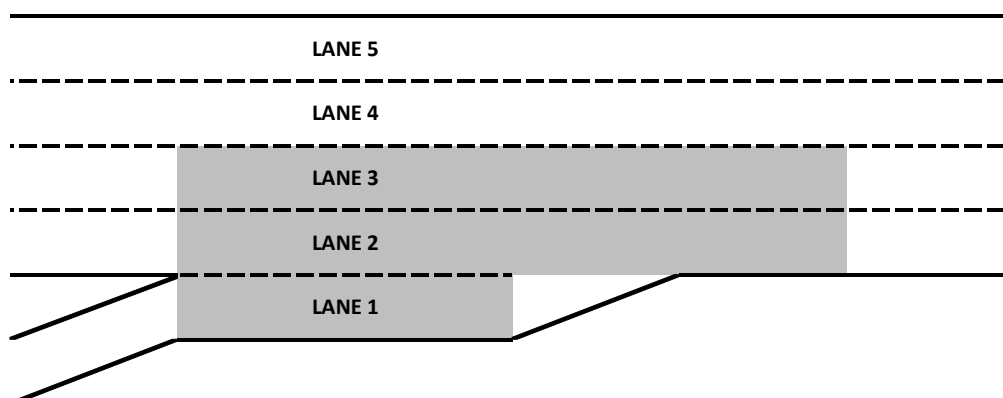
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7			35.0	0.2	0.9	0.1	A
6			34.8	0.5	1.6	0.2	A
5	1,802	47	62.1	6.2	31.2	5.2	D
4	1,758	55	60.3	6.2	32.1	5.3	D
3	1,694	19	58.5	6.4	33.4	4.7	D
2	1,417	21	55.5	5.9	30.2	5.7	D
1	667	42	24.1	0.7	1.8	0.1	A
Area	3,777	81	57.2	5.9	25.2	4.0	C
Total	7,336	183	59.2	6.3	23.3	3.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	667	42	1		
Total	667	42	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,670	6,669	141	100.0%	1,504
On-ramp	710	667	42	93.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 11 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7	1,808	40	48.9	0.3	1.4	0.2	A
6	1,769	47	48.4	0.5	2.1	0.3	A
5	1,915	17	61.7	3.0	31.1	3.1	D
4	1,675	33	59.2	3.0	32.3	3.3	D
3	171	10	57.0	3.5	34.8	2.6	D
2	145	21	55.0	3.3	31.9	3.4	D
1	275	20	6.9	0.3	0.2	0.0	A
Area	7,757	188	58.5	3.2	23.8	2.1	C
Total	7,757	188	58.5	3.2	23.8	2.1	C

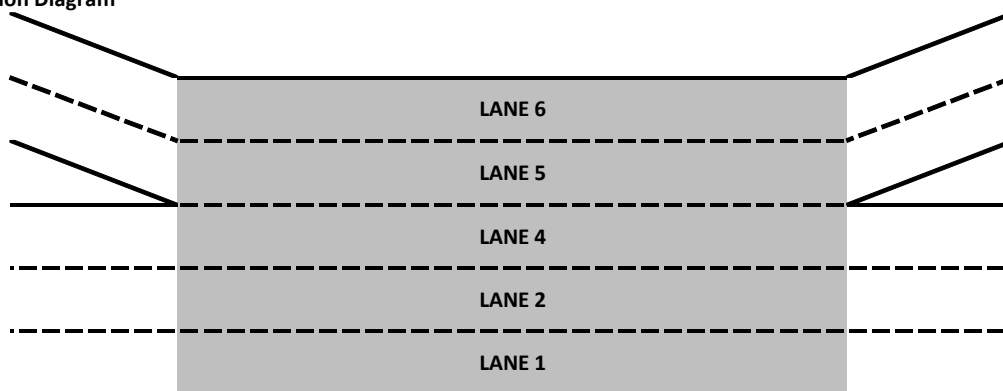
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	145	21
1	275	20
Total	420	41

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	150	25
1	235	20
Total	385	36

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,380	7,337	147	99.4%	3,337
On-ramp	430	420	41	97.7%	
Off-ramp	390	385	36	98.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 12 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (after EL Access)

Segment Type - Basic

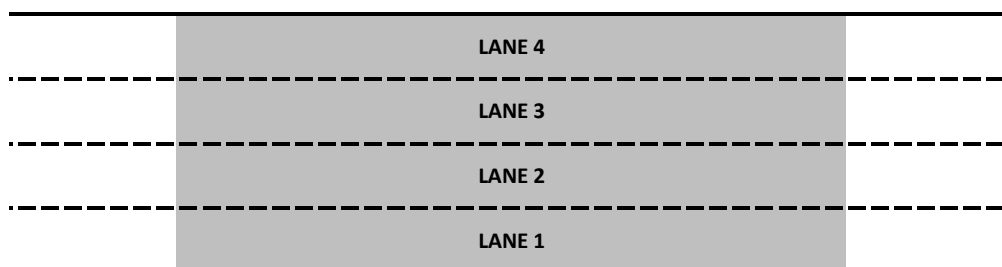
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,847	31	58.7	7.5	33.6	5.5	D
3	1,753	25	54.1	8.7	33.4	6.6	D
2	1,987	13	45.4	9.1	44.3	9.3	E
1	1,804	14	37.3	11.0	48.6	14.0	F
Area	7,390	83	49.1	8.7	38.3	7.4	E
Total	7,390	83	49.1	8.7	38.3	7.4	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,420	7,390	83	99.6%	394
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 13 - SB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,876	37	50.6	4.2	41.1	3.7	E
3	1,768	18	47.4	2.7	39.1	3.4	E
2	1,976	12	36.4	4.2	42.3	5.6	E
1	1,771	14	32.3	3.7	58.5	6.3	F
Area	3,747	26	34.2	3.8	50.2	5.8	F
Total	7,390	81	42.2	3.3	43.6	4.2	E

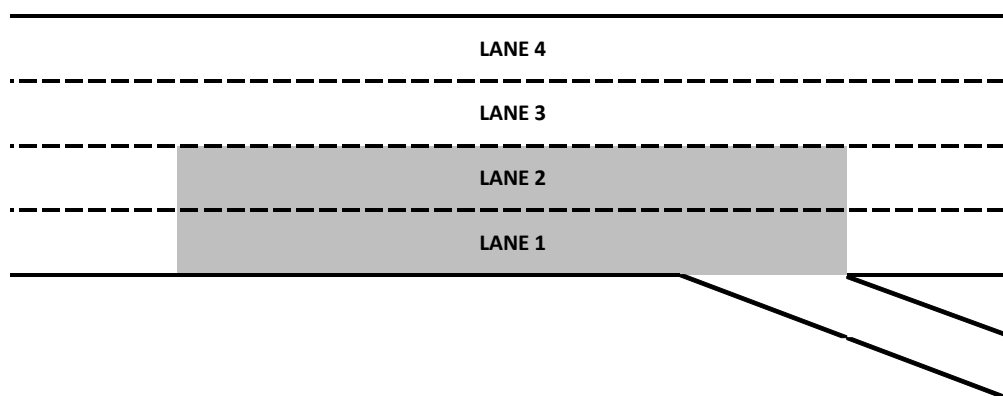
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,331	54
Total	1,331	54

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,420	7,390	81	99.6%	1,504
On-ramp					
Off-ramp	1,280	1,331	54	104.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 14 - SB I-15: Ontario Ave Off-ramp to On-ramp

Segment Type - Basic

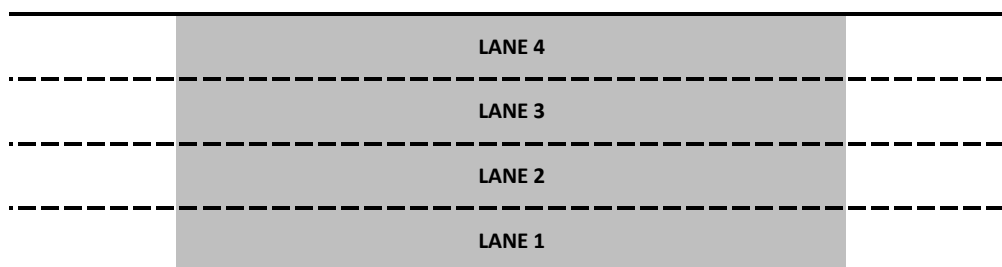
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,926	23	62.0	2.0	32.0	1.4	D
3	2,004	21	58.2	1.5	34.2	1.9	D
2	1,783	22	55.2	1.3	32.8	2.1	D
1	346	11	60.6	0.9	7.5	1.0	A
Area	6,058	76	58.7	1.5	26.5	1.6	D
Total	6,058	76	58.7	1.5	26.5	1.6	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,140	6,058	76	98.7%	2,820
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 15 - SB I-15: Ontario Ave On-ramp

Segment Type - Merge

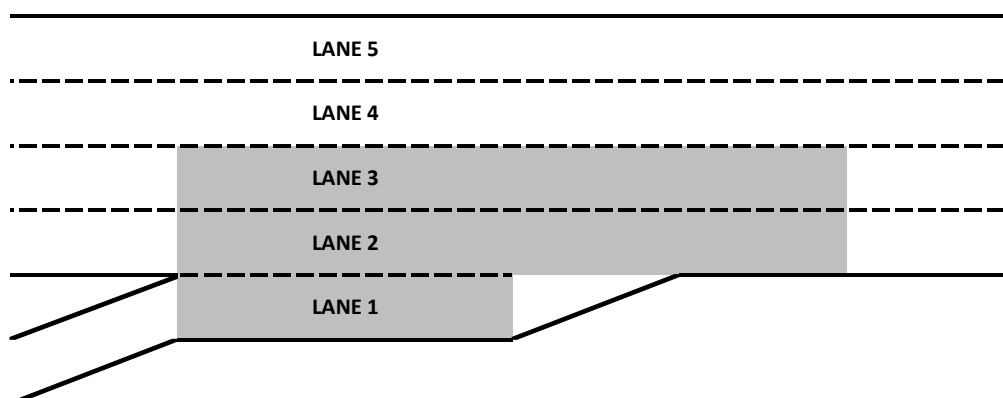
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,958	14	62.6	4.8	31.7	4.4	D
4	1,744	28	59.8	4.6	33.3	4.3	D
3	1,737	8	56.0	4.2	33.3	3.7	D
2	620	9	62.5	0.8	17.7	2.2	B
1	679	54	35.1	0.4	1.3	0.1	A
Area	3,035	71	58.7	2.4	19.8	1.5	C
Total	6,736	113	60.2	3.4	25.3	2.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	679	54	1		
Total	679	54	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,140	6,057	59	98.6%	1,494
On-ramp	680	679	54	99.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 16 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,753	15	54.7	8.1	34.8	6.2	D
3	2,056	23	51.8	7.5	39.9	7.0	E
2	1,698	23	47.9	7.7	37.4	8.0	E
1	1,221	13	56.4	3.0	23.0	3.8	C
Area	6,727	74	52.4	6.2	33.5	4.8	D
Total	6,727	74	52.4	6.2	33.5	4.8	D

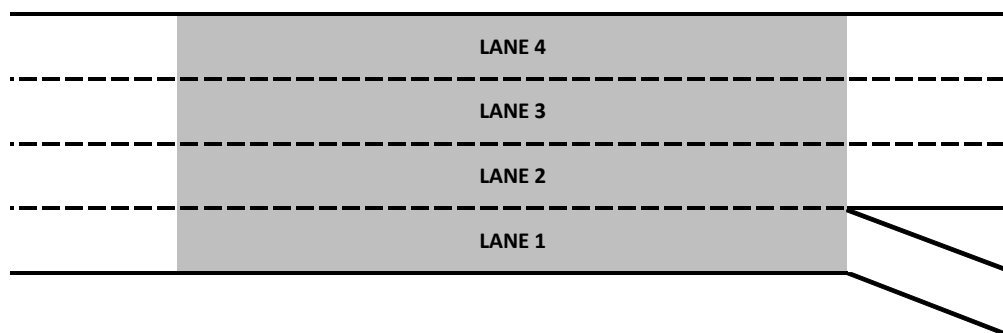
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,242	27
Total	1,242	27

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,820	6,727	74	98.6%	738
On-ramp					
Off-ramp	1,230	1,242	27	101.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 17 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp

Segment Type - Basic

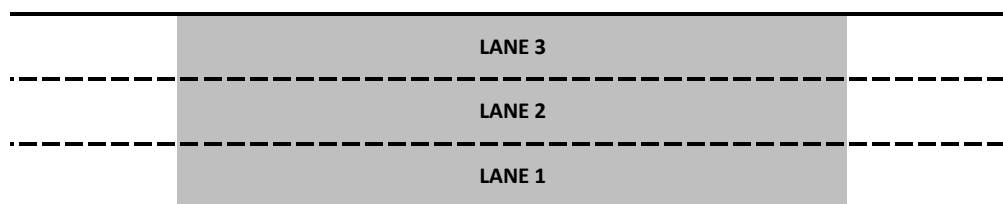
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,877	22	60.5	1.4	32.3	1.5	D
2	1,930	33	56.9	0.7	34.5	2.0	D
1	1,682	27	53.6	1.8	32.2	1.6	D
Area	5,489	82	57.1	1.1	32.9	1.6	D
Total	5,489	82	57.1	1.1	32.9	1.6	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,590	5,489	82	98.2%	1,130
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 18 - SB I-15: EL On-ramp at Foothill Pkwy/El Cerrito Rd

Segment Type - Basic

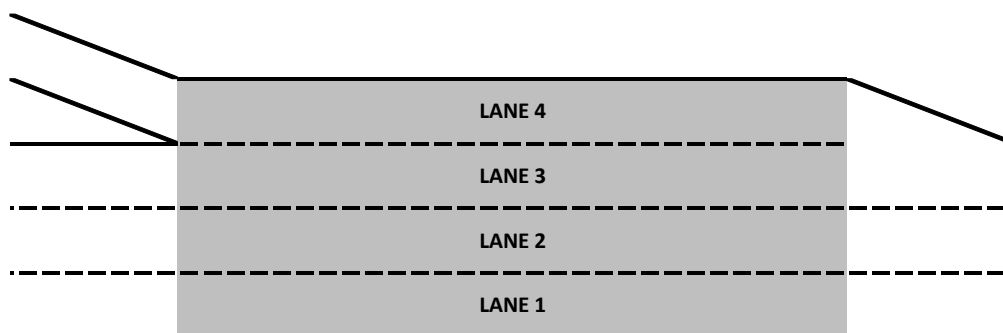
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,883	25	52.4	9.4	0.4	0.1	A
3	1,901	30	62.9	0.5	31.5	1.3	D
2	1,701	18	59.9	0.6	33.0	1.7	D
1	61	5	56.7	1.5	30.4	0.9	D
Area	5,545	78	60.0	0.3	23.8	0.8	C
Total	5,545	78	60.0	0.3	23.8	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	61	5	1		
Total	61	5	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,590	5,485	73	98.1%	593
On-ramp	60	61	5	100.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 19 - SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,879	36	64.1	0.6	29.5	1.2	D
3	1,805	29	61.7	0.5	27.1	0.8	D
2	1,860	13	57.9	1.1	28.9	0.8	D
1	396	33	51.5	0.7	11.4	0.9	B
Area	5,939	110	61.8	0.4	25.4	0.9	C
Total	5,939	110	61.8	0.4	25.4	0.9	C

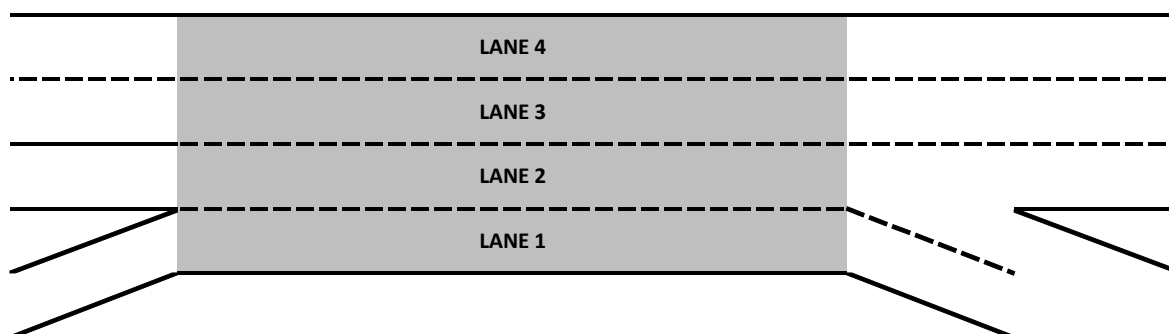
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	396	33
Total	396	33

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	356	21
1	1,044	41
Total	1,400	45

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,650	5,543	78	98.1%	2,964
On-ramp	420	396	33	94.3%	
Off-ramp	1,470	1,400	45	95.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 20 - SB I-15: EL On-ramp at Cajalco Rd to Cajalco Rd On-ramp (4 Lane)

Segment Type - Basic

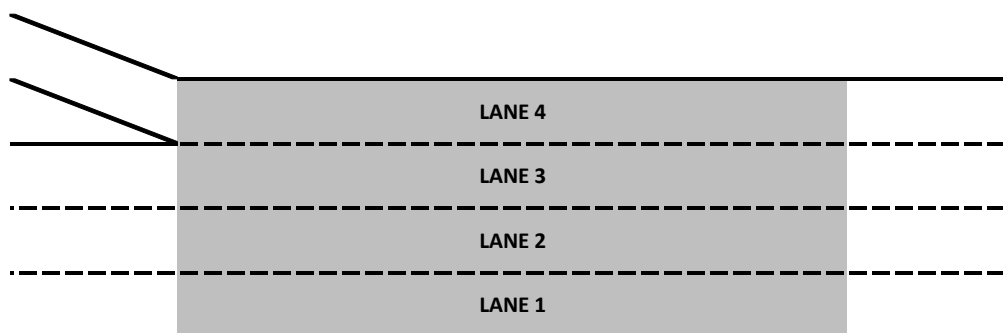
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,804	19	69.0	0.4	13.2	1.0	B
3	1,642	23	66.4	0.5	23.3	0.8	C
2	1,091	13	63.6	0.1	21.8	0.6	C
1	324	25	60.5	0.8	18.4	0.8	C
Area	4,860	81	64.8	0.3	19.1	0.7	C
Total	4,860	81	64.8	0.3	19.1	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	324	25	1		
Total	324	25	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,600	4,536	55	98.6%	2,078
On-ramp	340	324	25	95.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 21 - SB I-15: Cajalco Rd On-ramp

Segment Type - Merge

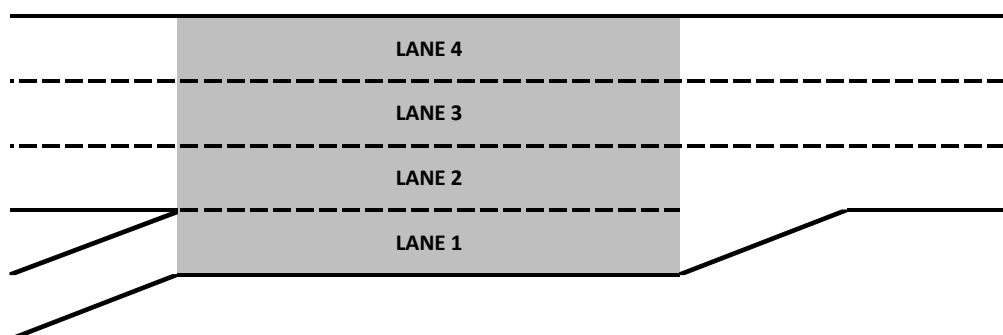
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,007	17	67.2	0.9	19.2	1.4	C
4	1,509	22	63.3	1.4	29.5	1.1	D
3	1,294	29	57.7	1.3	26.6	1.5	D
2	1,033	16	60.4	1.8	9.2	0.7	A
1	294	18	21.1	0.6	0.6	0.1	A
Area	2,621	64	58.3	1.1	15.1	0.8	B
Total	5,136	103	62.3	1.0	19.2	1.0	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	294	18	1		
Total	294	18	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,940	4,842	84	98.0%	1,502
On-ramp	280	294	18	105.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 22 - SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

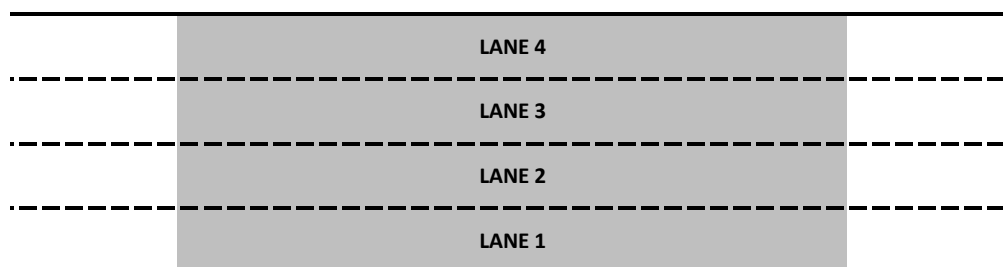
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,650	19	67.1	0.5	25.6	1.5	C
3	1,594	16	63.4	0.8	26.3	0.9	D
2	1,460	7	58.5	0.6	24.6	1.1	C
1	433	7	65.4	0.9	7.3	0.7	A
Area	5,136	49	63.4	0.6	20.9	1.0	C
Total	5,136	49	63.4	0.6	20.9	1.0	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,220	5,136	49	98.4%	1,675
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 23 - SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

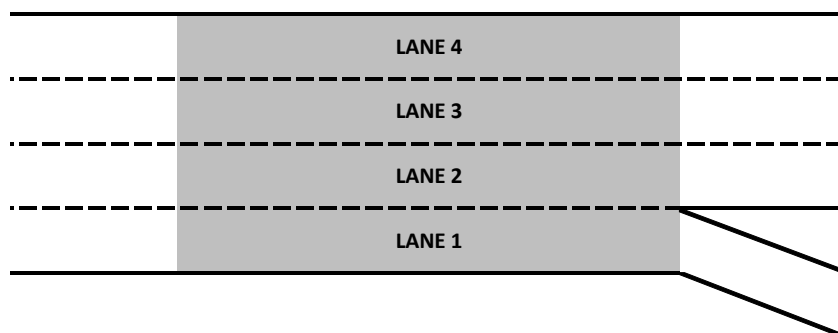
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,732	26	67.4	0.3	27.2	1.2	D
3	1,592	18	64.0	0.5	25.7	0.7	C
2	1,181	19	58.7	0.3	19.6	0.8	C
1	637	10	64.2	1.1	10.6	0.9	A
Area	5,141	74	64.0	0.3	20.7	0.8	C
Total	5,141	74	64.0	0.3	20.7	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	672	18
Total			Total	672	18

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,220	5,141	74	98.5%	1,498
On-ramp					
Off-ramp	690	672	18	97.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 24 - SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

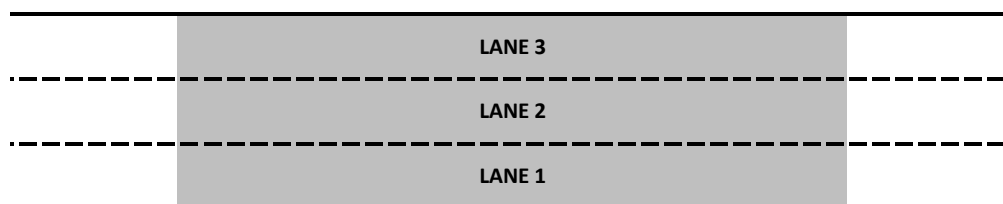
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,812	13	67.1	0.3	27.8	0.8	D
2	1,566	14	63.5	0.4	25.7	0.8	C
1	1,095	29	58.2	0.3	19.3	0.8	C
Area	4,473	56	63.7	0.3	24.2	0.7	C
Total	4,473	56	63.7	0.3	24.2	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,530	4,473	56	98.7%	2,237
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 25 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

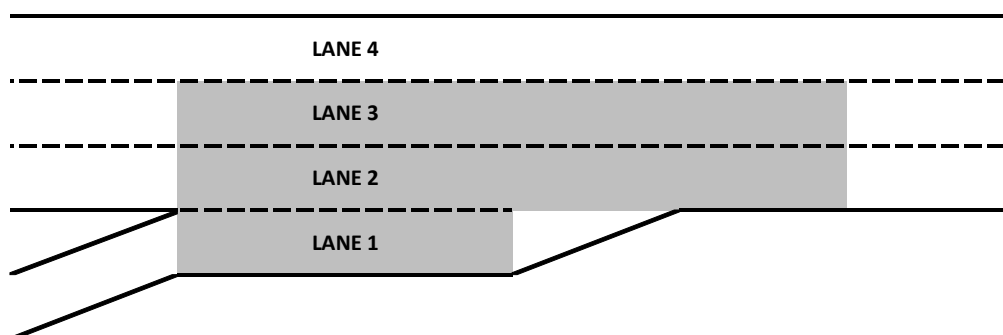
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,836	16	67.5	0.4	28.3	0.3	D
3	1,542	14	63.7	0.6	25.6	0.7	C
2	1,100	24	58.5	0.8	20.3	0.7	C
1	152	18	27.7	1.7	0.3	0.1	A
Area	2,794	57	61.6	0.5	18.2	0.5	C
Total	4,630	73	64.0	0.5	21.0	0.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	152	18	1		
Total	152	18	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,530	4,478	54	98.8%	1,501
On-ramp	130	152	18	116.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 26 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

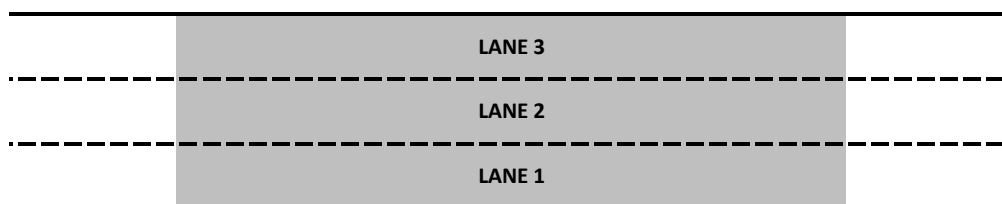
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,894	35	66.3	0.1	28.8	0.4	D
2	1,541	16	62.7	0.4	25.9	0.5	C
1	1,193	32	58.3	0.5	21.3	0.5	C
Area	4,628	83	63.0	0.2	25.3	0.3	C
Total	4,628	83	63.0	0.2	25.3	0.3	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,660	4,628	83	99.3%	7,458
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 27 - SB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,769	23	64.5	3.7	27.9	2.0	D
2	1,424	18	59.5	5.1	24.1	2.7	C
1	1,419	20	55.0	3.5	25.7	2.3	C
Area	2,842	38	57.3	4.3	24.8	2.5	C
Total	4,611	61	60.1	4.0	25.8	2.3	C

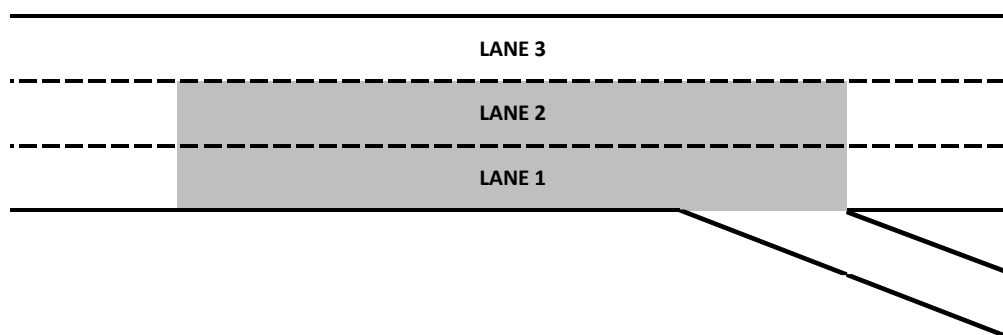
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	561	40
Total	561	40

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,660	4,611	61	98.9%	1,502
On-ramp					
Off-ramp	560	561	40	100.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 28 - SB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

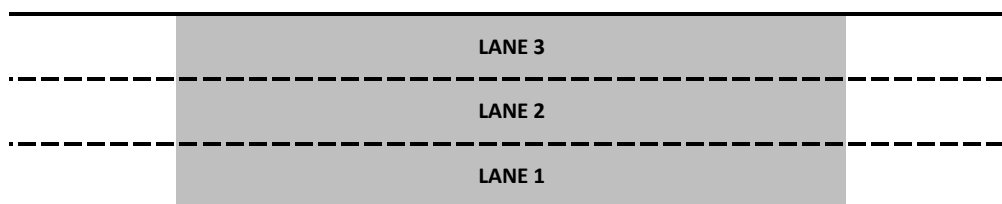
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,710	18	66.2	0.3	26.8	0.6	D
2	1,341	11	63.2	0.6	22.0	1.0	C
1	1,009	30	60.2	0.9	17.9	0.7	B
Area	4,060	59	63.7	0.4	22.2	0.7	C
Total	4,060	59	63.7	0.4	22.2	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,100	4,060	59	99.0%	2,526
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 29 - SB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

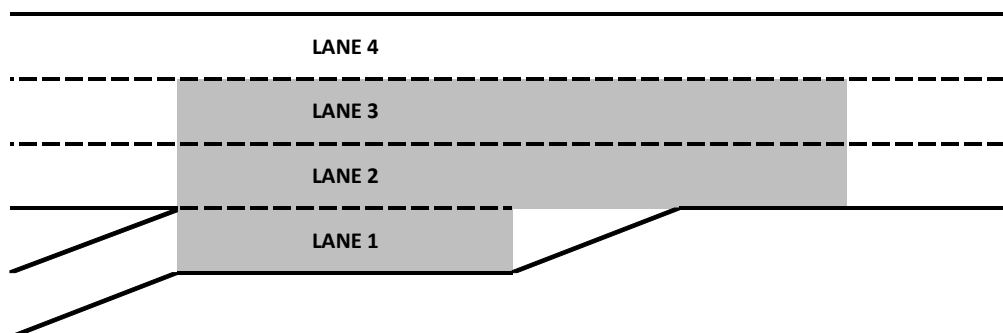
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,692	17	67.2	0.1	26.5	0.9	D
3	1,334	20	63.9	0.7	22.5	0.9	C
2	1,023	37	60.8	0.4	19.3	1.0	C
1	154	28	35.2	1.9	0.3	0.1	A
Area	2,510	85	62.5	0.4	16.1	0.6	B
Total	4,202	102	64.4	0.3	18.9	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	154	28	1		
Total	154	28	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,100	4,048	74	98.7%	1,502
On-ramp	160	154	28	95.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 30 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

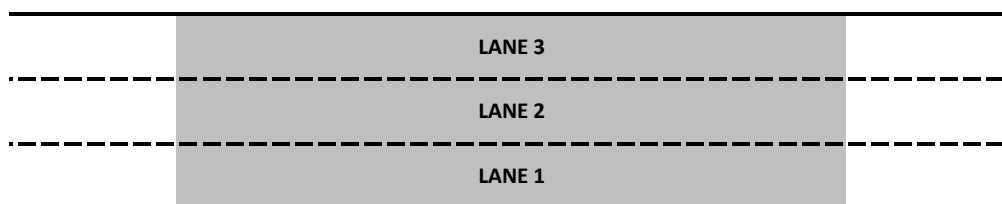
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,713	22	65.8	0.3	26.5	1.0	D
2	1,363	37	63.0	1.0	23.4	0.5	C
1	1,092	19	59.9	0.9	19.7	1.1	C
Area	4,167	78	63.3	0.6	23.2	0.8	C
Total	4,167	78	63.3	0.6	23.2	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,260	4,167	78	97.8%	8,913
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 31 - SB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,645	23	65.8	1.0	25.7	1.3	C
2	1,377	28	62.3	2.0	22.0	1.0	C
1	1,143	30	59.2	2.0	21.7	1.8	C
Area	2,520	59	60.8	2.0	21.9	1.4	C
Total	4,165	81	62.7	1.6	23.1	1.3	C

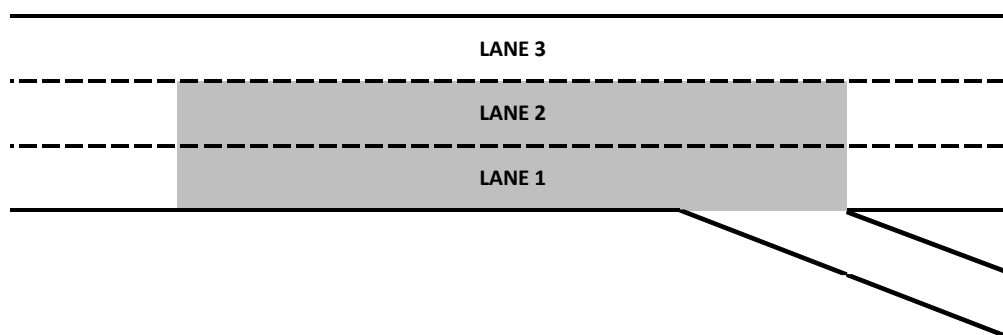
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	328	25
Total	328	25

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,260	4,165	81	97.8%	1,499
On-ramp					
Off-ramp	310	328	25	105.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 32 - SB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

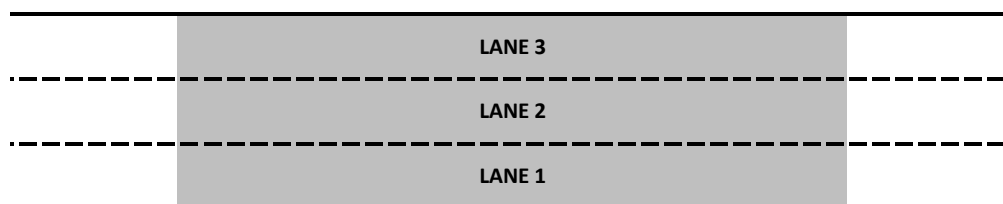
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,596	20	66.3	0.4	25.7	1.0	C
2	1,250	25	63.4	0.9	20.6	1.0	C
1	989	30	60.6	0.8	17.1	1.2	B
Area	3,834	76	63.9	0.6	21.1	1.0	C
Total	3,834	76	63.9	0.6	21.1	1.0	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,950	3,834	76	97.1%	3,127
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 33 - SB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

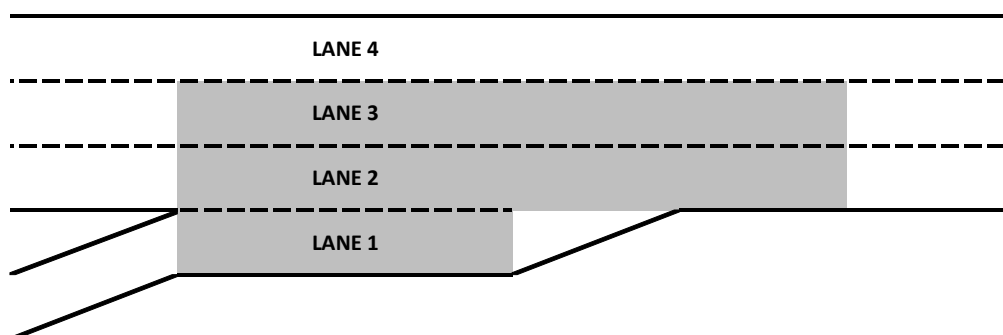
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,595	23	65.8	1.8	24.8	1.0	C
3	1,229	24	63.1	1.9	21.8	1.2	C
2	1,007	29	60.5	1.8	19.1	1.8	C
1	176	30	31.8	0.9	0.4	0.1	A
Area	2,411	83	62.1	1.6	16.1	1.2	B
Total	4,006	107	63.5	1.7	18.5	1.1	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	176	30	1		
Total	176	30	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,950	3,830	76	97.0%	1,501
On-ramp	180	176	30	97.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 60 - SB I-15: Indian Truck Trail On-ramp to Horsethief Rd Off-ramp

Segment Type - Basic

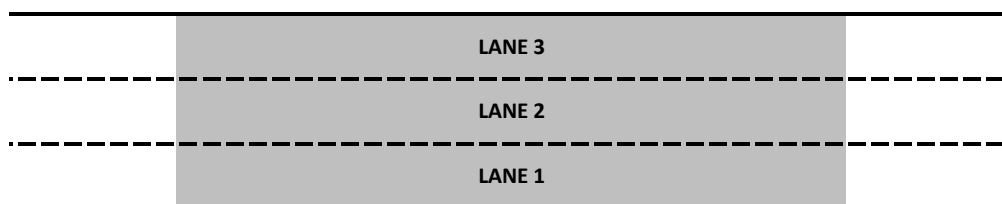
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,600	27	65.1	1.0	24.3	1.0	C
2	1,278	33	62.2	1.6	23.4	1.2	C
1	1,125	16	59.3	2.1	19.6	1.6	C
Area	4,003	76	62.5	1.4	22.4	1.0	C
Total	4,003	76	62.5	1.4	22.4	1.0	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,130	4,003	76	96.9%	2,521
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 61 - SB I-15: Horsethief Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,485	15	65.6	1.5	24.2	1.0	C
2	1,381	30	61.2	2.8	20.9	1.1	C
1	1,138	19	57.1	1.9	23.3	1.7	C
Area	2,519	49	59.1	2.3	22.1	1.2	C
Total	4,004	64	61.5	2.0	22.7	1.1	C

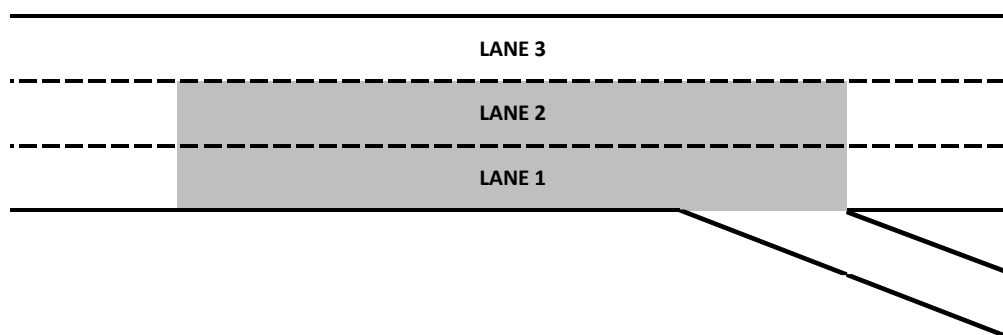
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	513	25
Total	513	25

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,130	4,004	64	96.9%	1,499
On-ramp					
Off-ramp	540	513	25	94.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 62 - SB I-15: Horsethief Rd Off-ramp to On-ramp

Segment Type - Basic

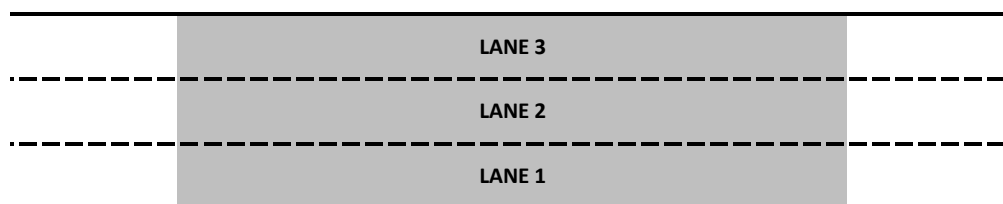
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,443	27	66.3	0.8	22.4	1.4	C
2	1,176	32	64.5	1.3	19.3	0.8	C
1	863	6	62.1	1.1	15.0	1.3	B
Area	3,481	65	64.7	1.0	18.9	1.0	C
Total	3,481	65	64.7	1.0	18.9	1.0	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,590	3,481	65	96.9%	2,801
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 63 - SB I-15: Horsethief Rd On-ramp

Segment Type - Merge

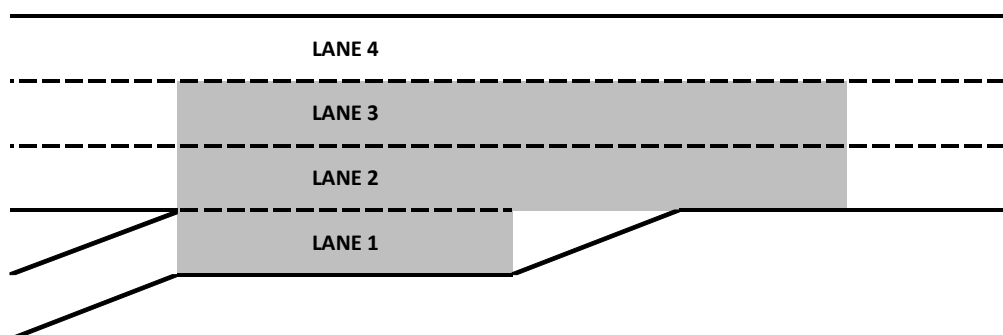
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,429	31	66.6	0.4	22.7	0.4	C
3	1,173	29	63.8	1.1	20.8	1.3	C
2	883	20	60.8	1.1	17.3	0.8	B
1	300	30	27.8	1.4	0.7	0.1	A
Area	2,355	79	62.4	1.0	15.3	0.7	B
Total	3,784	110	64.0	0.7	17.4	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	300	30	1		
Total	300	30	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,590	3,484	80	97.0%	1,497
On-ramp	290	300	30	103.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 34 - SB I-15: Horsethief Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

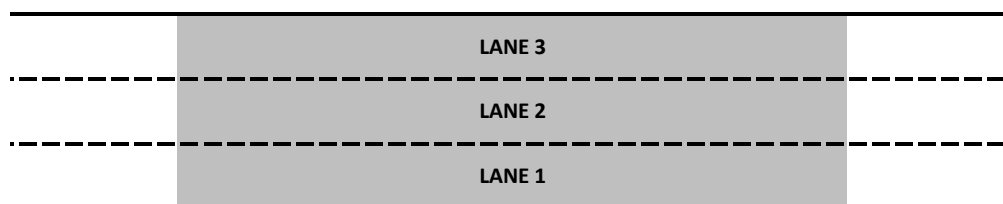
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,492	24	65.1	0.9	23.3	0.4	C
2	1,260	27	62.8	0.9	21.2	0.7	C
1	1,019	32	60.6	0.6	17.8	1.0	B
Area	3,771	83	63.1	0.9	20.7	0.6	C
Total	3,771	83	63.1	0.9	20.7	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,880	3,771	83	97.2%	5,189
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 35 - SB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,383	42	64.2	3.3	22.2	0.6	C
2	1,260	9	62.3	4.1	20.3	1.4	C
1	1,122	42	58.8	3.2	20.1	2.1	C
Area	2,381	52	60.6	3.7	20.2	1.7	C
Total	3,764	94	62.0	3.6	20.9	1.3	C

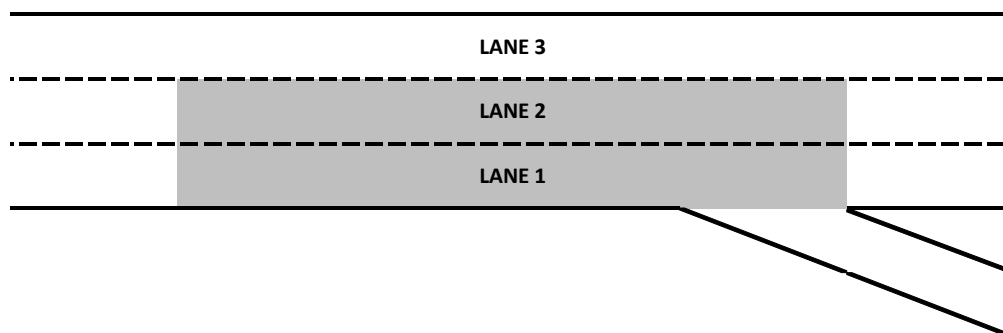
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	372	43
Total	372	43

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,880	3,764	94	97.0%	1,501
On-ramp					
Off-ramp	360	372	43	103.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 36 - SB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

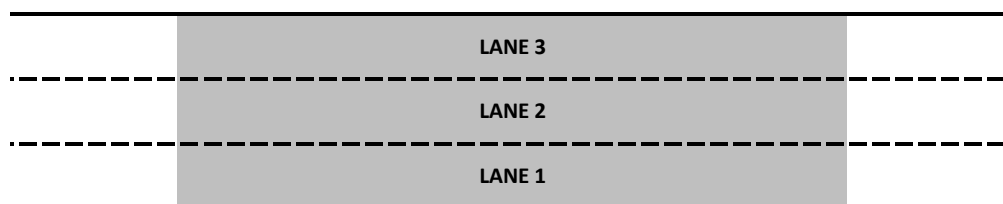
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,361	37	65.5	0.6	21.9	0.6	C
2	1,147	8	63.5	0.7	19.1	1.0	C
1	867	26	61.2	0.9	14.9	0.9	B
Area	3,374	71	63.8	0.7	18.6	0.6	C
Total	3,374	71	63.8	0.7	18.6	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,520	3,374	71	95.9%	3,287
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 37 - SB I-15: Lake St On-ramp

Segment Type - Merge

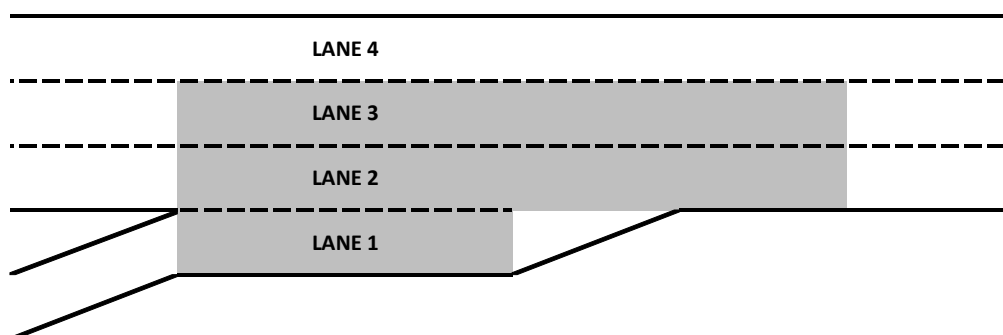
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,351	28	65.4	2.1	22.8	0.8	C
3	1,142	10	63.0	1.7	22.2	1.0	C
2	877	31	59.9	0.9	20.5	0.7	C
1	597	55	38.1	0.9	1.3	0.2	A
Area	2,616	96	61.6	1.2	16.6	0.6	B
Total	3,967	124	63.0	1.5	18.3	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	597	55	1		
Total	597	55	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,520	3,370	69	95.7%	1,500
On-ramp	580	597	55	102.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 38 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

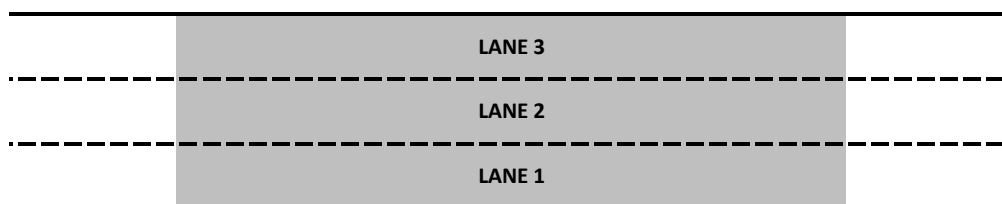
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,527	23	65.1	0.9	23.6	0.7	C
2	1,361	18	63.0	1.3	22.9	0.8	C
1	1,058	28	59.9	1.0	19.2	1.0	C
Area	3,946	70	62.9	1.0	21.9	0.7	C
Total	3,946	70	62.9	1.0	21.9	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,100	3,946	70	96.2%	8,752
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 39 - SB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,482	25	65.2	1.1	22.8	0.8	C
2	1,363	21	62.1	1.0	21.6	0.6	C
1	1,086	13	58.9	0.7	20.8	0.9	C
Area	2,449	33	60.6	0.8	21.2	0.8	C
Total	3,931	59	62.3	0.7	21.7	0.7	C

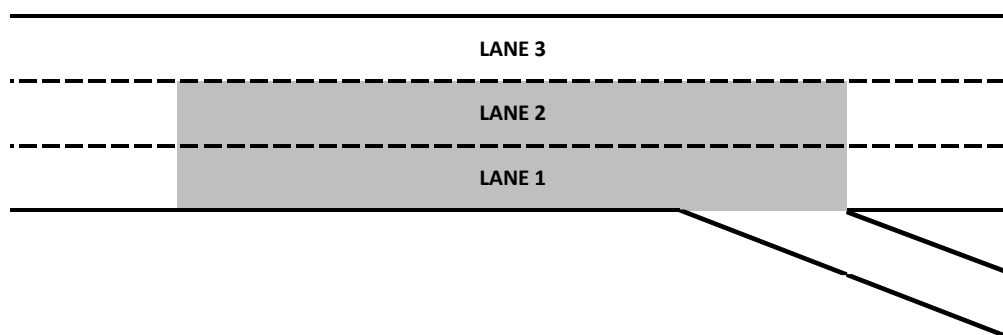
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	354	46
Total	354	46

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,100	3,931	59	95.9%	1,500
On-ramp					
Off-ramp	350	354	46	101.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 40 - SB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

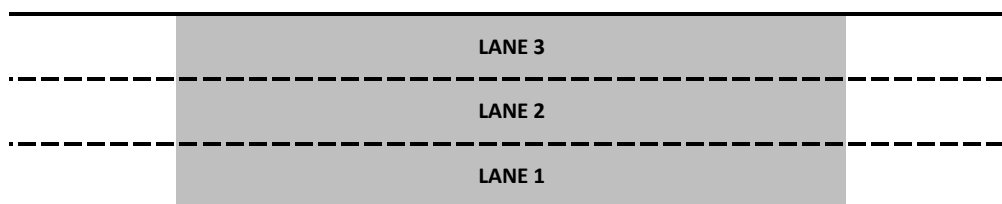
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,447	12	65.9	0.3	23.4	0.7	C
2	1,197	21	63.6	0.6	20.0	1.3	C
1	937	27	61.5	0.4	15.7	1.1	B
Area	3,580	60	64.0	0.2	19.7	0.7	C
Total	3,580	60	64.0	0.2	19.7	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,750	3,580	60	95.5%	3,058
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 41 - SB I-15: Nichols Rd On-ramp

Segment Type - Merge

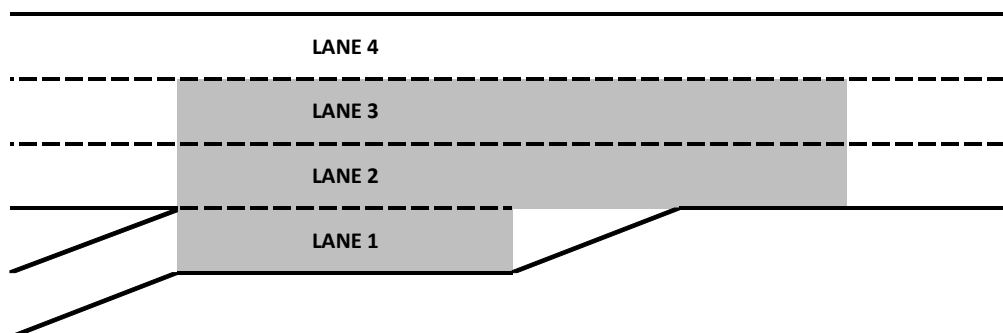
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,426	18	65.3	1.1	23.0	0.7	C
3	1,192	29	61.8	1.2	22.7	0.9	C
2	954	28	58.9	0.7	20.7	1.0	C
1	465	44	29.9	1.1	1.0	0.2	A
Area	2,610	101	60.5	0.8	17.5	0.6	B
Total	4,036	119	62.2	0.8	19.1	0.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	465	44	1		
Total	465	44	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,750	3,571	75	95.2%	1,500
On-ramp	460	465	44	101.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 42 - SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

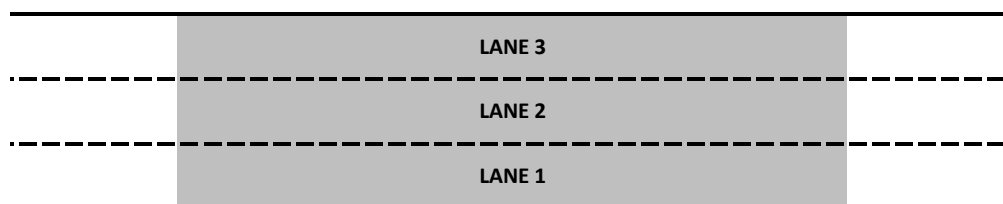
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,348	22	65.0	1.5	22.7	0.4	C
2	1,479	19	62.2	1.3	24.0	1.1	C
1	1,193	35	60.3	0.7	20.6	1.3	C
Area	4,020	76	62.6	1.2	22.4	0.7	C
Total	4,020	76	62.6	1.2	22.4	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,210	4,020	76	95.5%	2,332
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 43 - SB I-15: Central Ave (SR-74) Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,371	21	65.7	0.7	21.2	0.9	C
3	1,441	22	62.9	1.0	19.5	1.0	C
2	1,209	25	61.3	0.5	21.0	0.6	C
1			67.3	0.5	4.2	0.3	A
Area	2,650	47	62.6	0.7	14.9	0.4	B
Total	4,021	69	63.6	0.7	16.5	0.4	B

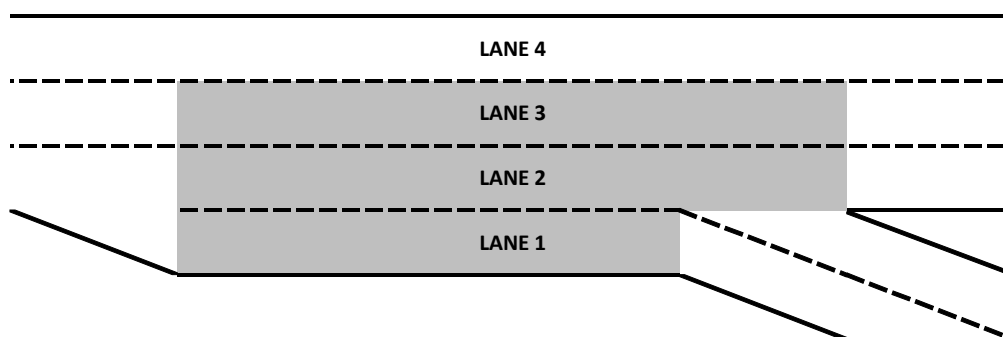
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	385	40
1	442	24
Total	827	33

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,210	4,021	69	95.5%	1,498
On-ramp					
Off-ramp	830	827	33	99.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 44 - SB I-15: Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

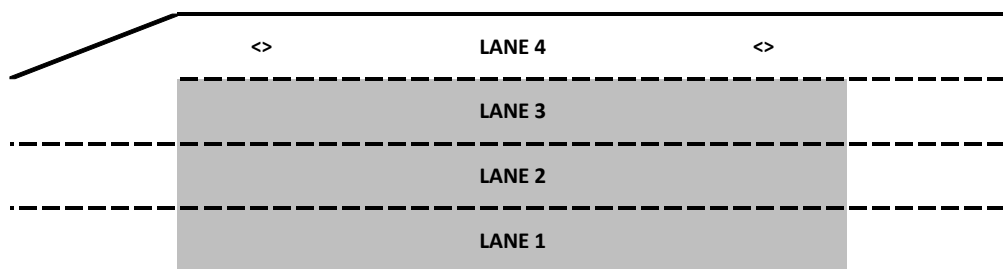
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,292	33	66.0	0.3	20.4	0.8	C
2	1,072	11	64.6	0.7	18.6	0.5	C
1	798	25	62.0	0.8	13.3	0.7	B
Area	3,162	68	64.5	0.6	17.4	0.5	B
Total	3,162	68	64.5	0.6	17.4	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,380	3,162	68	93.5%	3,038
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 45 - SB I-15: Central Ave (SR-74) On-ramp

Segment Type - Merge

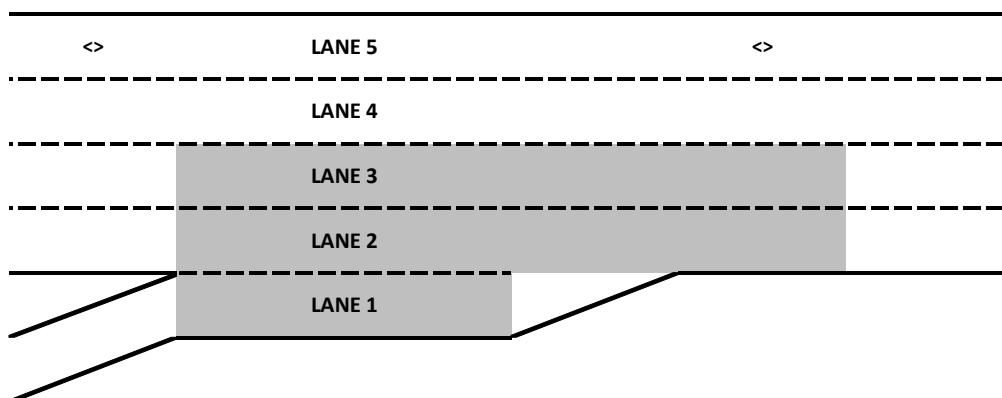
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,266	26	64.9	1.8	23.0	1.3	C
3	1,053	11	61.4	1.9	26.7	1.2	D
2	830	33	57.5	1.6	23.5	1.6	C
1	1,397	69	43.4	8.0	3.9	0.5	A
Area	3,280	112	59.0	1.7	18.0	1.0	B
Total	4,545	139	60.9	1.7	19.2	1.0	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,397	69	1		
Total	1,397	69	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,380	3,149	70	93.2%	1,502
On-ramp	1,360	1,397	69	102.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 46 - SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp

Segment Type - Basic

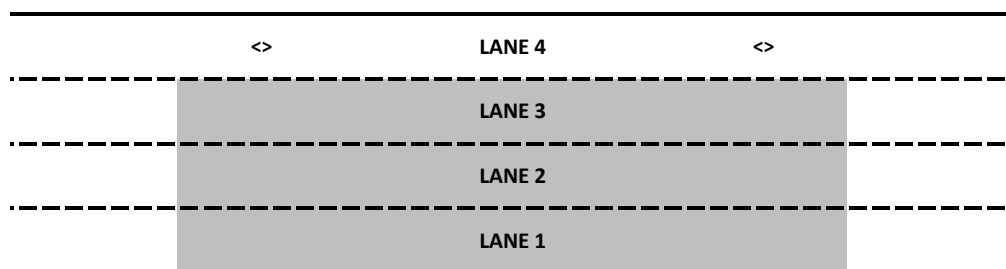
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,616	36	63.1	2.0	26.3	1.2	D
2	1,553	30	60.3	1.9	26.7	1.2	D
1	1,337	18	58.7	2.2	24.2	1.5	C
Area	4,505	85	60.8	2.0	25.7	1.2	C
Total	4,505	85	60.8	2.0	25.7	1.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,740	4,505	85	95.0%	890
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 47 - SB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,624	31	65.0	1.1	26.1	0.9	D
2	1,545	33	62.2	1.6	24.4	1.5	C
1	1,329	24	60.0	1.8	24.1	1.0	C
Area	2,874	57	61.1	1.7	24.2	1.1	C
Total	4,498	88	62.5	1.4	24.8	1.0	C

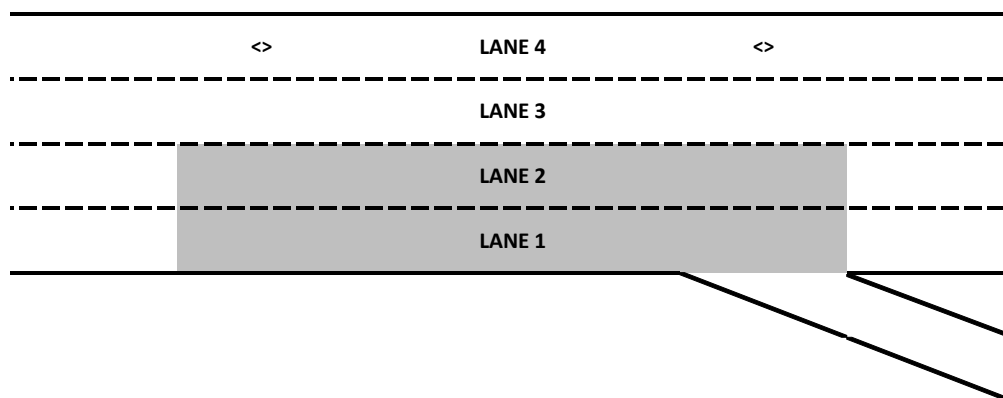
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	249	28
Total	249	28

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,740	4,498	88	94.9%	1,498
On-ramp					
Off-ramp	240	249	28	103.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 48 - SB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

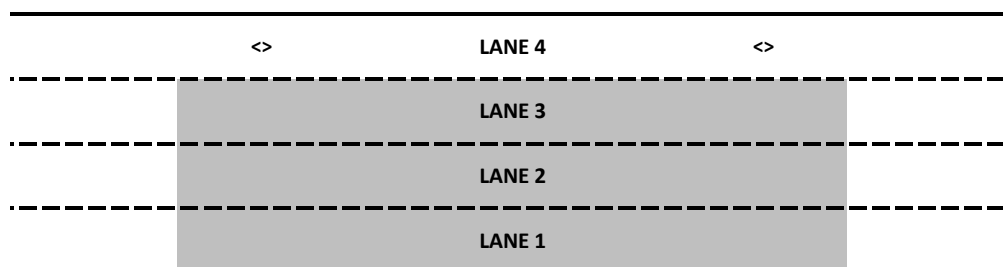
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,657	25	65.2	0.6	26.1	0.6	D
2	1,423	16	62.7	1.1	24.2	0.9	C
1	1,134	28	60.9	1.3	20.1	1.3	C
Area	4,214	70	63.2	0.9	23.4	0.9	C
Total	4,214	70	63.2	0.9	23.4	0.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,500	4,214	70	93.6%	3,512
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 49 - SB I-15: Main St On-ramp SB

Segment Type - Merge

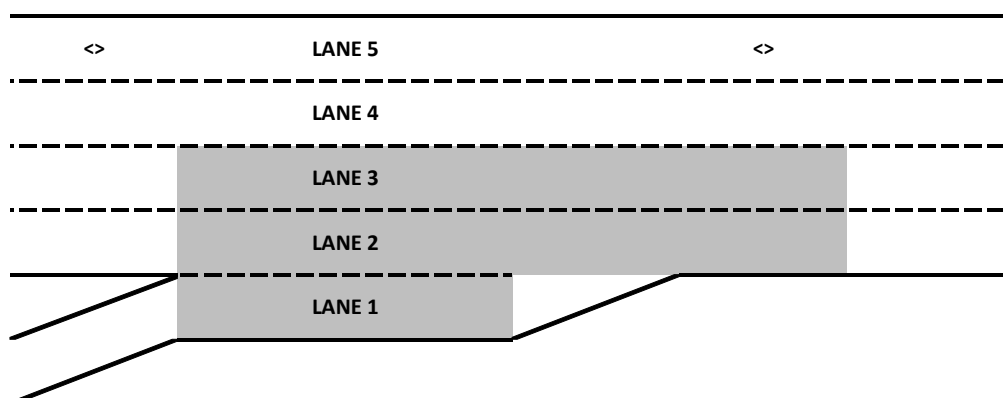
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,660	35	62.7	5.0	28.8	3.6	D
3	1,419	11	58.9	5.9	28.2	4.3	D
2	1,131	35	56.3	5.5	25.6	4.1	C
1	561	52	26.7	1.6	1.1	0.2	A
Area	3,110	98	58.0	5.7	22.1	3.5	C
Total	4,770	134	59.7	5.5	24.0	3.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	561	52	1		
Total	561	52	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,500	4,210	82	93.5%	1,500
On-ramp	520	561	52	107.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 50 - SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp

Segment Type - Basic

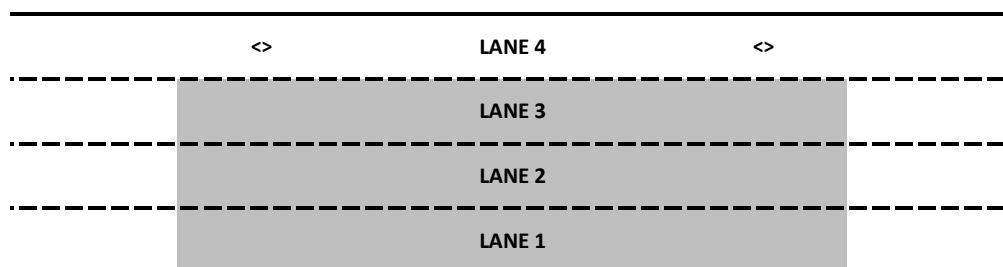
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,815	45	63.5	1.1	29.1	1.9	D
2	1,595	26	60.6	1.9	27.9	2.0	D
1	1,348	32	58.5	2.0	24.3	2.2	C
Area	4,758	103	61.1	1.6	27.1	1.9	D
Total	4,758	103	61.1	1.6	27.1	1.9	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,020	4,758	103	94.8%	3,090
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Design Year No Build
AM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
152 NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	4,584	81	103.2%				1,205	113	98.8%	67.8	0.5	14.0	0.8	B
151 NB I-15: Hidden Valley Pkwy Off-ramp	Diverge	5,417	90	102.6%				834	45	99.2%	67.6	0.5	19.1	0.5	C
150 NB I-15: EB SR-91 On-ramp	Merge	4,452	72	103.3%	971	50	100.1%				68.1	0.2	18.5	0.9	C
149 NB I-15: WB SR-91 On-ramp	Merge	3,055	54	104.3%	1,396	88	101.2%				66.0	0.4	20.8	1.1	C
148 NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp	Basic	3,053	62	104.2%							68.0	0.7	15.6	0.8	B
147 NB I-15: EB & WB SR-91 Off-ramp	Diverge	5,880	125	101.7%				2,827	102	99.2%	57.5	9.9	27.2	6.6	D
146 NB I-15: Magnolia Ave On-ramp	Merge	5,475	91	102.0%	411	37	100.2%				55.9	8.6	25.9	5.4	C
145 NB I-15: Magnolia Ave Loop On-ramp	Basic	4,475	65	102.6%	999	71	99.0%				65.0	0.8	21.6	0.8	C
144 NB I-15: Magnolia Ave Off-ramp to Loop On-ramp	Basic	4,476	67	102.7%							65.7	1.5	23.6	0.8	C
143 NB I-15: Magnolia Ave Off-ramp	Diverge	5,567	83	100.5%				1,099	68	93.1%	64.7	1.8	20.7	0.8	C
141 NB I-15: Ontario Ave to Magnolia Ave (EL Access)	Weave	5,978	122	98.8%	2,504	77	105.2%	2,924	92	101.2%	63.7	1.0	23.0	0.8	C
140 NB I-15: Ontario Ave On-ramp	Merge	4,213	106	99.8%	1,753	29	95.8%				60.1	3.8	17.2	1.4	B
138 NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)	Basic	4,214	100	99.9%							66.2	0.1	16.7	0.5	B
137 NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)	Basic	4,217	71	99.9%							56.4	0.4	25.9	0.8	C
136 NB I-15: Ontario Ave Off-ramp	Diverge	5,570	76	97.2%				1,359	77	90.0%	42.5	4.9	43.6	4.9	E
135 NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp	Merge	3,949	67	96.8%	1,611	67	97.7%				40.7	6.9	38.5	6.5	E
134 NB I-15: EL Access to Foothill Pkwy/El Cerrito Rd On-ramp	Basic	3,947	54	96.7%							62.4	2.4	21.6	1.1	C
133 NB I-15: EL Access at Foothill Pkwy/El Cerrito Rd	Basic	4,873	63	94.8%				932	49	87.9%	57.6	6.1	22.6	2.7	C
132 NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp	Weave	4,153	70	110.7%	1,658	24	68.8%	942	51	92.4%	63.1	2.4	24.0	1.1	C
131 NB I-15: Cajalco Rd Loop On-ramp	Merge	3,203	62	114.4%	950	41	100.0%				65.0	0.7	20.3	0.8	C
154 NB I-15: EL Access at Cajalco Rd	Basic	4,772	61	115.8%				1,570	67	118.9%	64.4	1.5	19.4	0.5	C
130 NB I-15: Cajalco Rd Off-ramp to EL Access	Basic	4,770	64	115.8%							64.0	0.4	25.9	0.7	C
129 NB I-15: Cajalco Rd Off-ramp	Diverge	6,325	50	110.2%				1,557	71	96.1%	47.7	2.9	45.2	2.4	F
128 NB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	4,772	68	113.9%	1,549	78	99.9%				23.2	0.9	84.6	2.2	F
127 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	4,776	58	114.0%							16.5	0.5	96.0	1.8	F
126 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	4,936	60	113.7%				149	32	99.1%	16.3	0.7	102.4	3.5	F
125 NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	4,938	56	113.8%							16.1	0.6	100.1	1.9	F
124 NB I-15: Temescal Canyon Rd On-ramp	Merge	4,352	59	115.8%	591	26	102.0%				14.2	0.8	93.7	2.5	F
123 NB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	4,357	58	115.9%							13.2	0.9	108.2	3.7	F
122 NB I-15: Temescal Canyon Rd Off-ramp	Diverge	5,004	65	111.0%				652	49	86.9%	16.8	1.0	96.9	2.4	F
121 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	4,988	69	110.6%							16.2	0.9	99.2	2.0	F
120 NB I-15: Indian Truck Trail On-ramp	Merge	4,200	68	111.4%	765	63	103.4%				13.5	1.0	96.9	4.9	F
119 NB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	4,201	77	111.4%							12.2	0.8	110.3	2.3	F
118 NB I-15: Indian Truck Trail Off-ramp	Diverge	4,965	75	106.3%				772	74	85.8%	14.5	1.4	103.9	5.3	F
168 NB I-15: Horsethief Rd On-ramp to Indian Truck Trail Off-ramp	Basic	4,954	65	106.1%							15.1	1.3	100.9	3.6	F
167 NB I-15: Horsethief Rd On-ramp	Merge	4,309	78	107.2%	624	53	96.1%				12.8	1.1	102.8	5.0	F
166 NB I-15: Horsethief Rd Off-ramp to On-ramp	Basic	4,296	75	106.9%							11.9	1.1	109.8	2.5	F
165 NB I-15: Horsethief Rd Off-ramp	Diverge	4,849	85	101.2%				569	59	73.9%	13.3	1.3	109.4	4.5	F
117 NB I-15: Horsethief Rd On-ramp to Indian Truck Trail Off-ramp	Basic	4,816	92	100.6%							13.2	1.2	107.7	3.3	F
116 NB I-15: Lake St On-ramp	Merge	3,565	64	92.1%	1,210	136	131.5%				10.2	0.8	126.6	3.2	F
115 NB I-15: Lake St Off-ramp to On-ramp	Basic	3,550	66	91.7%							9.1	0.4	119.2	1.4	F
114 NB I-15: Lake St Off-ramp	Diverge	3,692	61	89.6%				152	29	60.7%	9.3	0.4	128.8	2.8	F
113 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	3,668	59	89.0%							9.4	0.5	120.5	2.0	F
112 NB I-15: Nichols Rd On-ramp	Merge	3,036	67	84.6%	589	67	111.2%				7.6	0.4	138.4	6.2	F
111 NB I-15: Nichols Rd Off-ramp to On-ramp	Basic	3,020	65	84.1%							7.3	0.3	128.8	5.8	F
110 NB I-15: Nichols Rd Off-ramp	Diverge	3,211	48	81.3%				222	24	61.6%	7.4	0.4	144.5	3.0	F
109 NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp to Nichols Rd Off-ramp	Merge	2,597	52	80.4%	597	71	82.9%				6.6	0.3	140.5	5.5	F
108 NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp	Basic	2,573	60	79.7%							6.3	0.3	126.8	3.8	F
153 NB I-15: Dexter Ave Off-ramp	Diverge	2,667	71	78.0%				133	28	70.2%	5.9	0.2	158.4	2.4	F
107 NB I-15: WB Central Ave (SR-74) Off-ramp	Basic	3,237	114	75.6%				603	64	70.1%	5.2	0.3	144.8	4.9	F
106 NB I-15: EB Central Ave (SR-74) Off-ramp	Diverge	3,632	114	74.3%				436	54	71.5%	6.3	0.4	154.1	4.3	F
105 NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp	Basic	3,613	108	73.9%							8.5	0.5	146.3	3.0	F
104 NB I-15: Main St On-ramp	Merge	3,035	114	69.6%	542	54	102.2%				8.9	1.1	147.2	2.7	F
103 NB I-15: Main St Off-ramp to On-ramp	Basic	3,013	106	69.1%							12.6	1.3	134.7	4.8	F
102 NB I-15: Main St Off-ramp	Diverge	3,390	118	67.3%				433	50	63.6%	10.8	2.0	152.2	6.1	F
101 NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp	Basic	3,340	108	66.3%							14.1	0.7	151.8	6.0	F

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 152 - NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

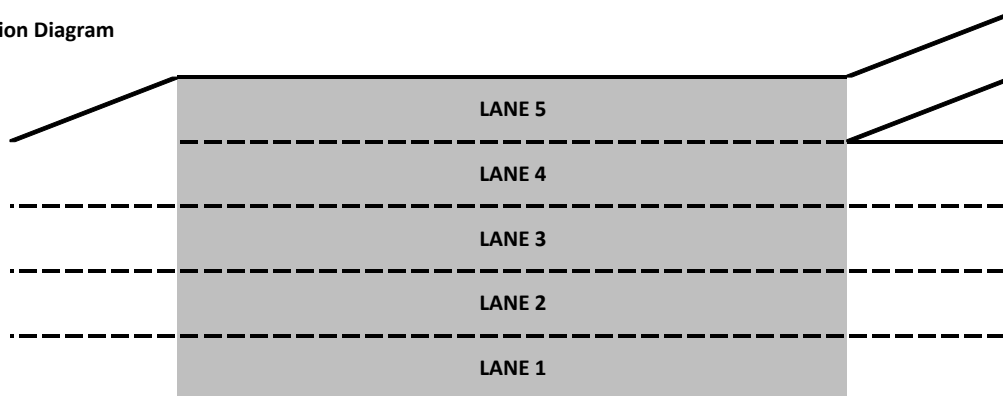
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,966	38	67.4	0.6	11.0	1.4	B
4	1,086	20	66.9	0.7	20.2	1.3	C
3	859	12	67.8	0.8	15.6	1.0	B
2	672	11	68.9	0.3	12.9	0.4	B
1			68.6	0.2	10.4	0.6	A
Area	4,584	81	67.8	0.5	14.0	0.8	B
Total	4,584	81	67.8	0.5	14.0	0.8	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	1,205	113
Total			Total	1,205	113

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,440	4,584	81	103.2%	1,446
On-ramp					
Off-ramp	1,220	1,205	113	98.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 151 - NB I-15: Hidden Valley Pkwy Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,205	21	67.9	0.6	22.0	1.4	C
3	1,393	31	67.9	0.5	22.3	1.9	C
2	1,627	18	67.5	0.9	15.0	0.7	B
1	1,192	20	66.9	0.3	23.2	0.8	C
Area	2,819	38	67.1	0.5	19.1	0.5	C
Total	5,417	90	67.6	0.5	20.6	0.9	C

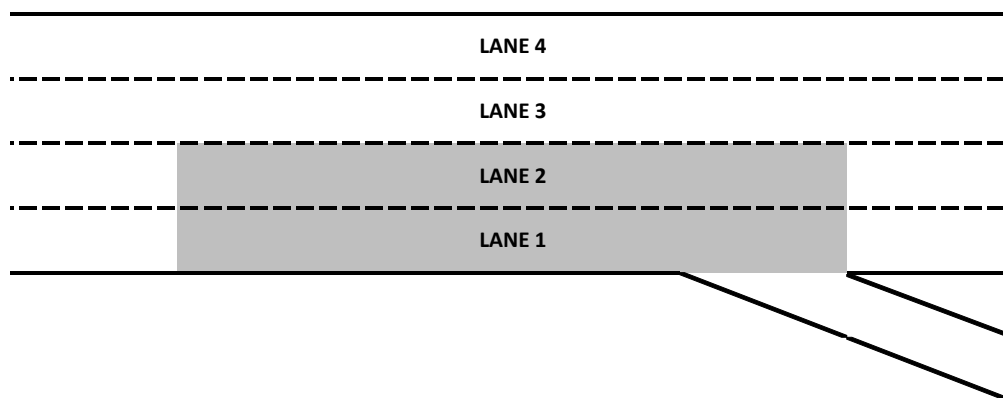
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	834	45
Total	834	45

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,280	5,417	90	102.6%	1,517
On-ramp					
Off-ramp	840	834	45	99.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 150 - NB I-15: EB SR-91 On-ramp

Segment Type - Merge

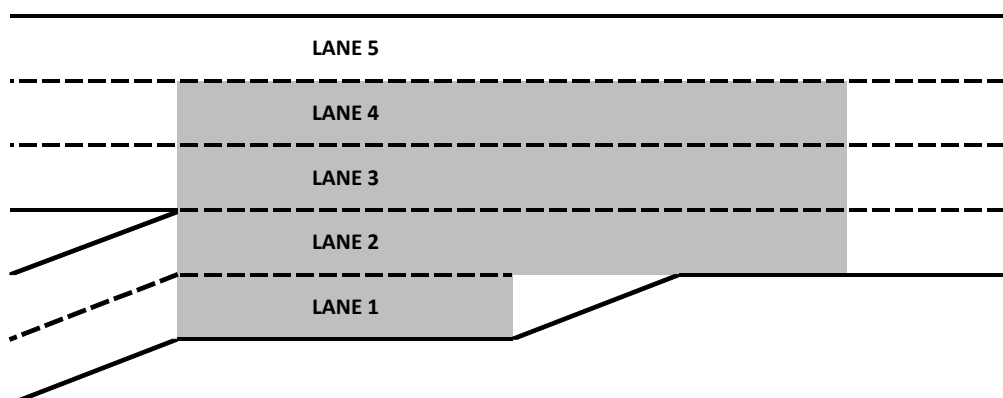
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,227	18	68.8	0.4	18.7	1.1	C
4	1,727	27	68.1	0.4	20.6	1.7	C
3	1,498	19	67.6	0.2	25.3	0.9	C
2	481	26	67.9	0.2	17.2	0.7	B
1	490	31	31.2	0.2	1.1	0.1	A
Area	4,195	103	67.8	0.2	18.5	0.9	C
Total	5,423	121	68.1	0.2	18.6	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2	481	26	2		
1	490	31	1		
Total	971	50	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,310	4,452	72	103.3%	1,509
On-ramp	970	971	50	100.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 149 - NB I-15: WB SR-91 On-ramp

Segment Type - Merge

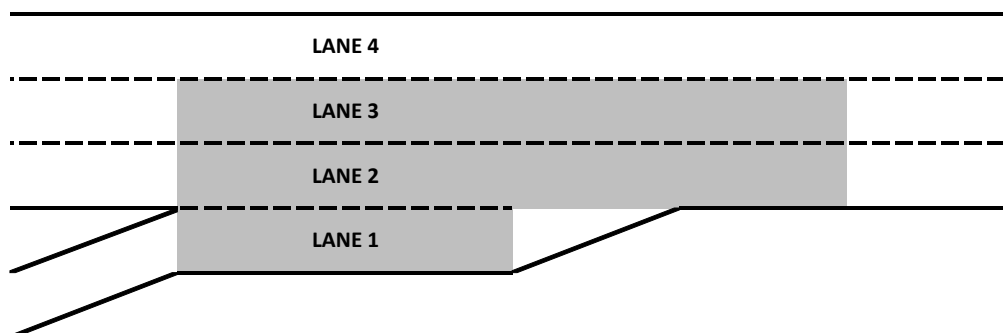
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,100	24	68.6	0.4	16.4	1.0	B
3	1,154	16	67.1	0.3	27.3	1.7	D
2	801	14	64.4	0.6	23.5	1.0	C
1	1,396	88	30.9	0.2	3.0	0.3	A
Area	3,351	118	65.2	0.4	20.8	1.1	C
Total	4,451	143	66.0	0.4	19.6	1.0	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,396	88	1		
Total	1,396	88	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,930	3,055	54	104.3%	1,564
On-ramp	1,380	1,396	88	101.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 148 - NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp

Segment Type - Basic

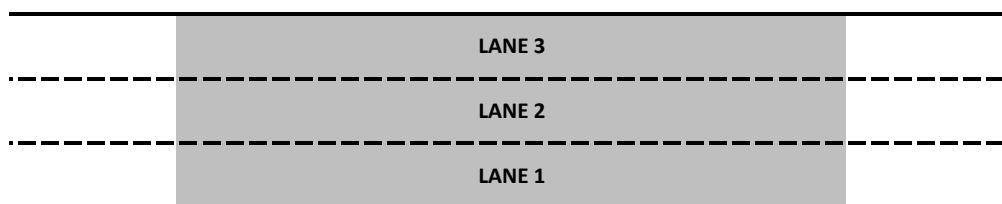
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,143	29	68.0	0.7	17.4	0.9	B
2	1,175	17	68.2	0.6	17.9	0.9	B
1	735	17	67.8	0.9	11.5	1.0	B
Area	3,053	62	68.0	0.7	15.6	0.8	B
Total	3,053	62	68.0	0.7	15.6	0.8	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,930	3,053	62	104.2%	3,525
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 147 - NB I-15: EB & WB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,117	34	61.2	7.4	21.6	5.5	C
3	1,270	29	59.1	9.6	23.0	4.6	C
2	2,026	35	55.0	10.9	30.3	6.7	D
1	1,468	27	55.2	12.2	28.5	9.1	D
Area	4,763	91	56.3	10.9	27.2	6.6	D
Total	5,880	125	57.5	9.9	25.7	6.1	C

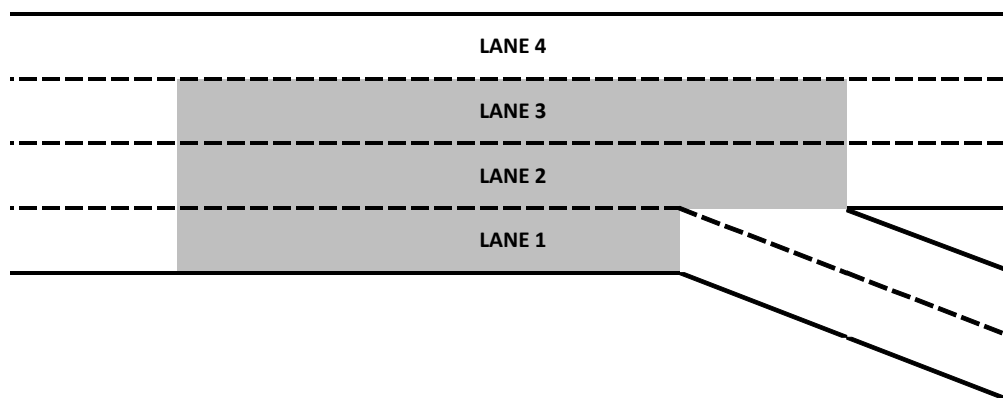
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	924	90
1	1,904	65
Total	2,827	102

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,780	5,880	125	101.7%	1,324
On-ramp					
Off-ramp	2,850	2,827	102	99.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 146 - NB I-15: Magnolia Ave On-ramp

Segment Type - Merge

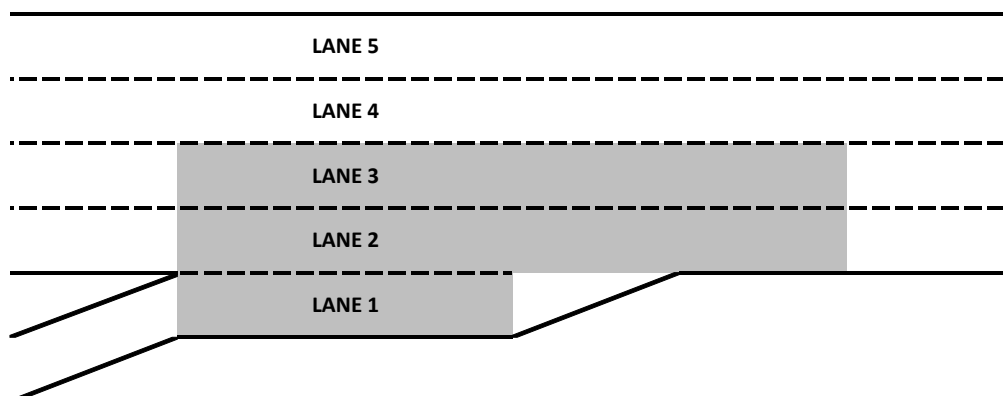
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	862	22	60.5	6.5	17.9	4.5	B
4	1,982	21	57.3	8.2	26.4	5.2	D
3	1,631	23	54.2	9.3	42.5	6.7	E
2	1,001	24	51.7	10.8	24.6	7.5	C
1	411	37	28.9	3.6	1.0	0.1	A
Area	3,043	85	53.8	9.9	25.9	5.4	C
Total	5,886	128	55.9	8.6	24.1	4.9	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	411	37	1		
Total	411	37	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,370	5,475	91	102.0%	1,292
On-ramp	410	411	37	100.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 145 - NB I-15: Magnolia Ave Loop On-ramp

Segment Type - Basic

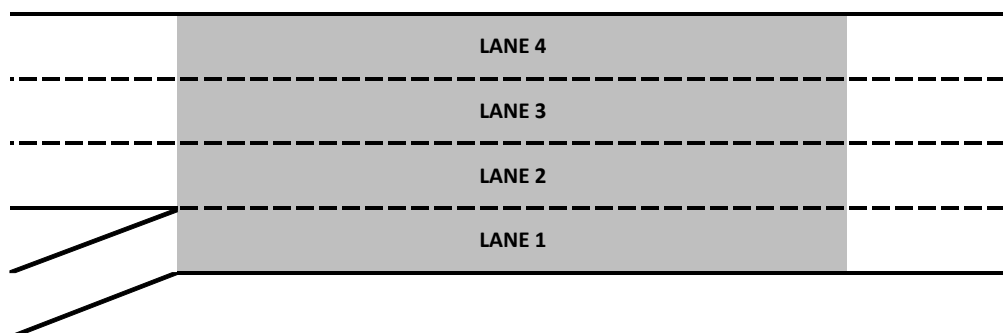
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	830	19	68.7	0.5	12.9	1.1	B
3	1,894	16	66.1	0.8	29.8	0.7	D
2	1,751	30	65.1	1.0	27.4	1.0	D
1	999	71	59.3	1.0	16.6	1.5	B
Area	5,474	136	65.0	0.8	21.6	0.8	C
Total	5,474	136	65.0	0.8	21.6	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	999	71	1		
Total	999	71	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,360	4,475	65	102.6%	852
On-ramp	1,010	999	71	99.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 144 - NB I-15: Magnolia Ave Off-ramp to Loop On-ramp

Segment Type - Basic

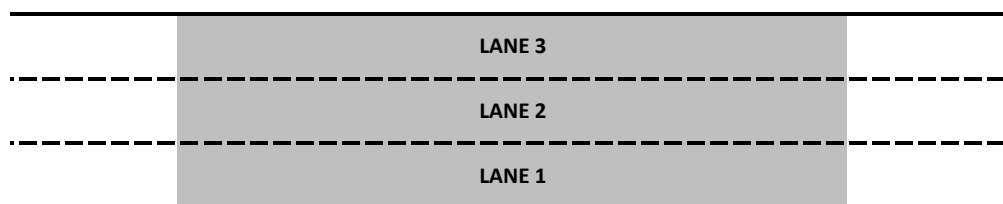
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	853	23	67.0	1.2	16.5	0.9	B
2	1,909	18	65.4	1.6	28.3	1.0	D
1	1,714	26	65.3	1.6	26.0	0.8	C
Area	4,476	67	65.7	1.5	23.6	0.8	C
Total	4,476	67	65.7	1.5	23.6	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,360	4,476	67	102.7%	1,562
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 143 - NB I-15: Magnolia Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,563	22	64.9	1.9	25.2	1.0	C
3	1,838	31	64.0	2.5	25.6	1.3	C
2	1,717	18	64.0	1.6	28.4	1.0	D
1	449	13	67.9	0.6	8.2	0.5	A
Area	4,004	62	64.6	1.8	20.7	0.8	C
Total	5,567	83	64.7	1.8	21.8	0.8	C

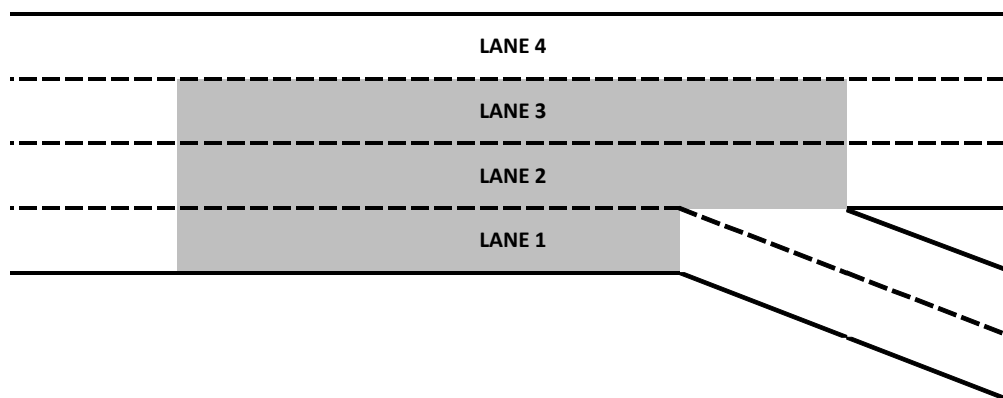
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	390	41
1	709	48
Total	1,099	68

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,540	5,567	83	100.5%	1,496
On-ramp					
Off-ramp	1,180	1,099	68	93.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 141 - NB I-15: Ontario Ave to Magnolia Ave (EL Access)

Segment Type - Weave

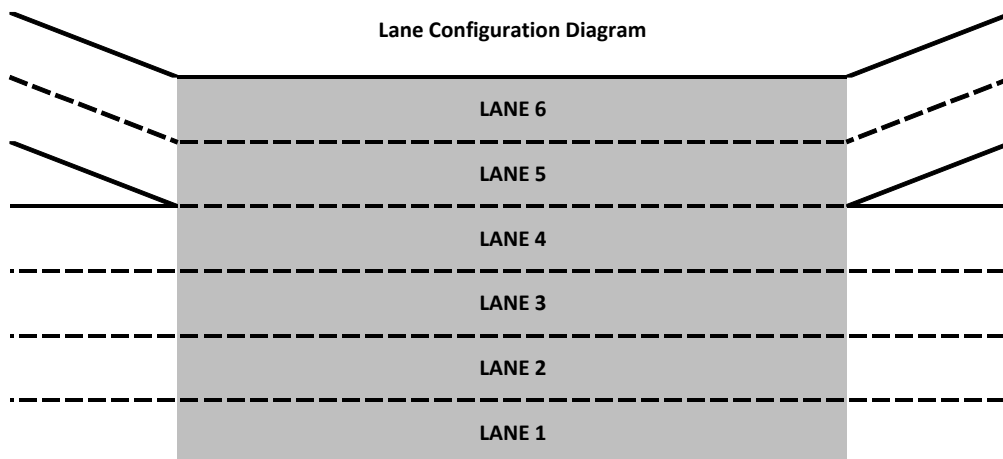
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	1,889	27	50.0	0.1	12.7	0.5	B
5	2,033	25	49.8	0.2	15.4	0.2	B
4	1,737	25	61.6	1.6	33.5	1.2	D
3	319	14	62.0	1.3	32.3	1.1	D
2	1,034	55	62.7	1.1	26.7	1.5	D
1	1,469	52	67.1	0.9	5.8	0.5	A
Area	8,482	198	63.7	1.0	23.0	0.8	C
Total	8,482	198	63.7	1.0	23.0	0.8	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,034	55
1	1,469	52
Total	2,504	77

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,400	75
1	1,524	59
Total	2,924	92

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,050	5,978	122	98.8%	2,965
On-ramp	2,380	2,504	77	105.2%	
Off-ramp	2,890	2,924	92	101.2%	



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 140 - NB I-15: Ontario Ave On-ramp

Segment Type - Merge

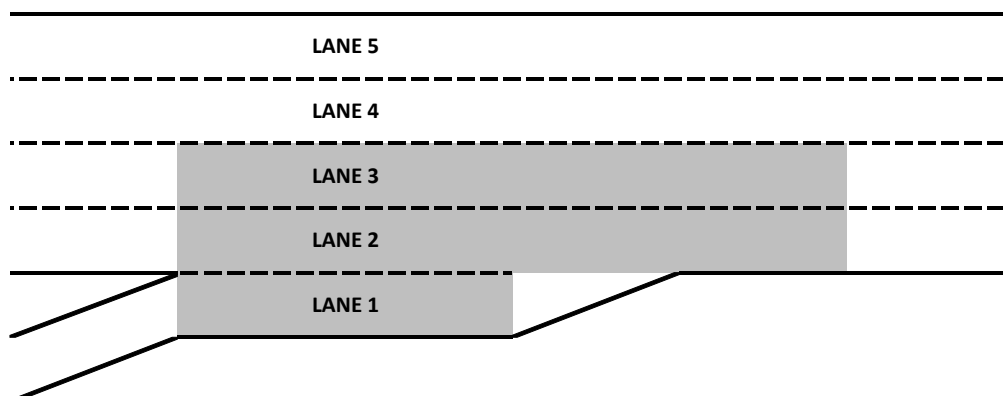
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,328	31	64.3	5.2	25.6	3.4	C
4	1,423	18	62.6	4.1	33.2	2.9	D
3	843	24	58.1	3.8	26.6	2.7	D
2	619	33	55.8	2.4	13.1	1.1	B
1	1,753	29	24.7	0.5	5.5	0.3	A
Area	3,216	86	55.3	2.7	17.2	1.4	B
Total	5,967	135	60.1	3.8	22.4	2.2	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,753	29	1		
Total	1,753	29	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,220	4,213	106	99.8%	1,496
On-ramp	1,830	1,753	29	95.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 138 - NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)

Segment Type - Basic

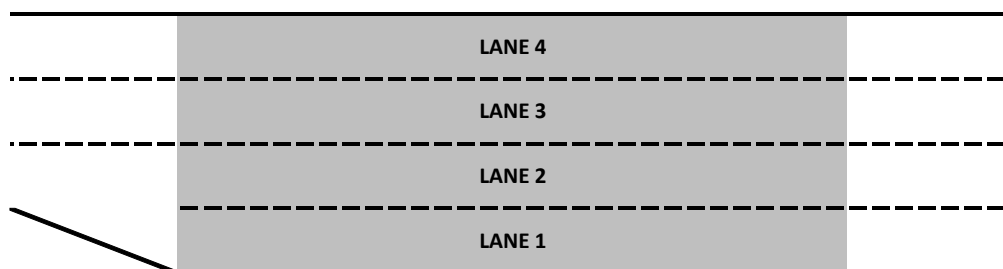
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,384	25	66.3	0.2	22.0	1.2	C
3	1,274	24	66.1	0.2	19.6	0.5	C
2	944	19	66.1	0.3	15.0	0.5	B
1	612	32	66.0	0.6	10.0	0.6	A
Area	4,214	100	66.2	0.1	16.7	0.5	B
Total	4,214	100	66.2	0.1	16.7	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,220	4,214	100	99.9%	3,004
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 137 - NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)

Segment Type - Basic

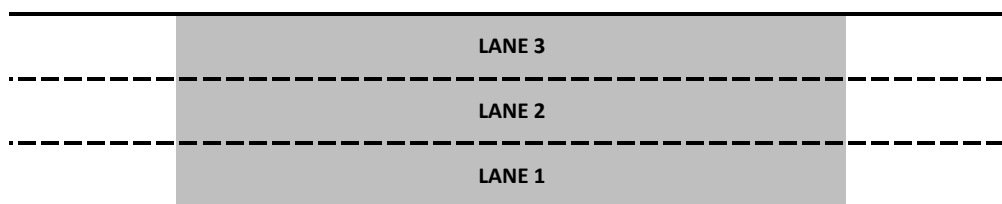
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,719	26	57.6	0.7	31.4	1.7	D
2	1,447	19	56.2	0.7	26.2	0.8	D
1	1,051	26	54.5	0.7	20.2	1.2	C
Area	4,217	71	56.4	0.4	25.9	0.8	C
Total	4,217	71	56.4	0.4	25.9	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,220	4,217	71	99.9%	197
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 136 - NB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

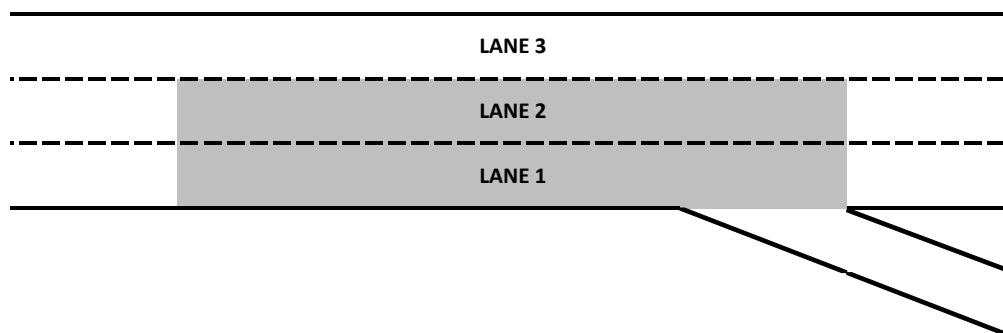
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,800	39	46.0	5.3	41.7	5.2	E
2	1,726	18	42.9	5.6	40.9	4.6	E
1	2,044	20	38.4	4.3	46.6	5.3	F
Area	3,770	37	40.6	4.9	43.6	4.9	E
Total	5,570	76	42.5	4.9	42.8	4.8	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	1,359	77
Total			Total	1,359	77

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,730	5,570	76	97.2%	763
On-ramp					
Off-ramp	1,510	1,359	77	90.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 135 - NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Merge

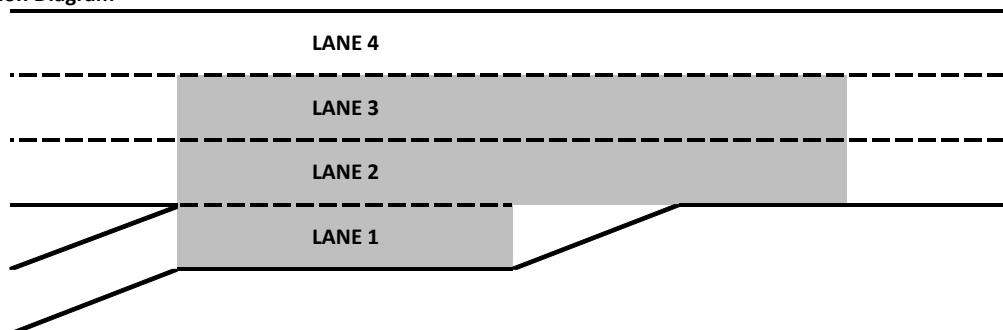
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,061	30	49.0	7.2	30.0	6.1	D
3	1,542	18	45.0	7.4	39.0	6.2	E
2	1,345	20	32.9	7.3	61.1	11.6	F
1	1,611	67	32.1	5.6	17.5	3.4	B
Area	4,499	104	37.9	7.0	38.5	6.5	E
Total	5,560	134	40.7	6.9	35.8	6.2	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,611	67	1		
Total	1,611	67	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,080	3,949	67	96.8%	873
On-ramp	1,650	1,611	67	97.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 134 - NB I-15: EL Access to Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Basic

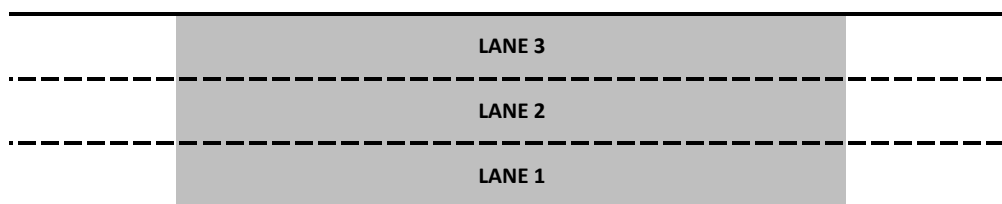
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	992	23	63.9	1.5	16.7	1.5	B
2	1,523	19	62.3	2.4	24.6	1.1	C
1	1,432	12	61.3	3.5	23.5	1.0	C
Area	3,947	54	62.4	2.4	21.6	1.1	C
Total	3,947	54	62.4	2.4	21.6	1.1	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,080	3,947	54	96.7%	989
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 133 - NB I-15: EL Access at Foothill Pkwy/El Cerrito Rd

Segment Type - Basic

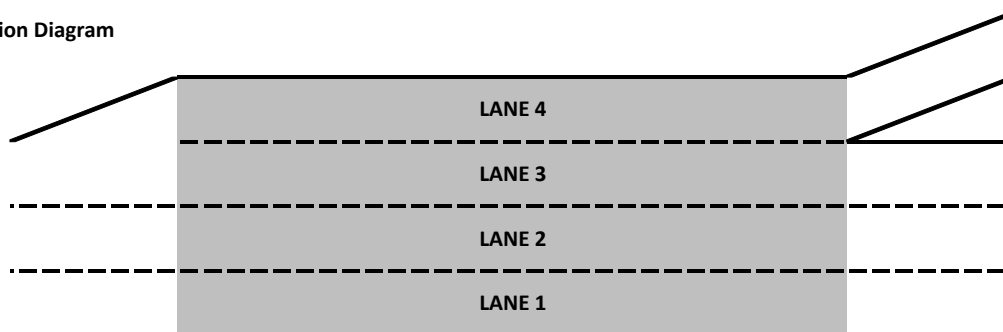
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,006	27	61.9	3.2	10.3	0.7	A
3	1,494	23	54.7	8.3	29.5	4.6	D
2	1,374	13	56.6	6.2	26.8	3.8	D
1			58.0	6.2	24.5	2.7	C
Area	4,873	63	57.6	6.1	22.6	2.7	C
Total	4,873	63	57.6	6.1	22.6	2.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	932	49
Total			Total	932	49

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,140	4,873	63	94.8%	1,128
On-ramp					
Off-ramp	1,060	932	49	87.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 132 - NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,132	26	65.7	2.2	22.0	1.2	C
3	1,340	24	64.9	2.2	24.4	1.2	C
2	1,681	21	62.6	2.2	25.1	0.5	C
1	1,658	24	47.8	3.6	20.2	1.7	C
Area	5,811	95	63.1	2.4	24.0	1.1	C
Total	5,811	95	63.1	2.4	24.0	1.1	C

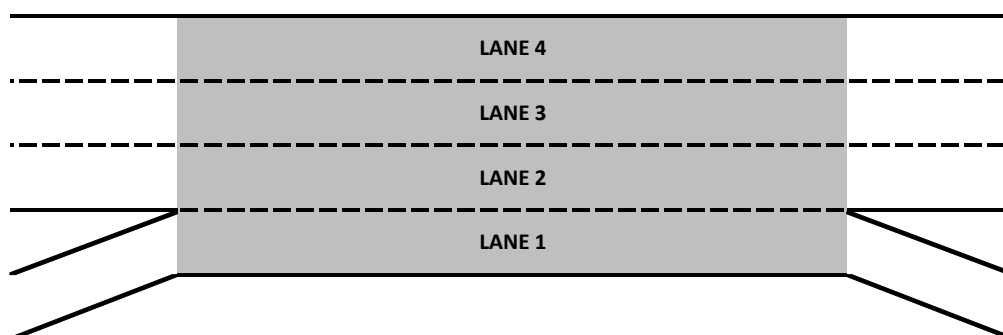
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,658	24
Total	1,658	24

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	942	51
Total	942	51

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,750	4,153	70	110.7%	2,708
On-ramp	2,410	1,658	24	68.8%	
Off-ramp	1,020	942	51	92.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 131 - NB I-15: Cajalco Rd Loop On-ramp

Segment Type - Merge

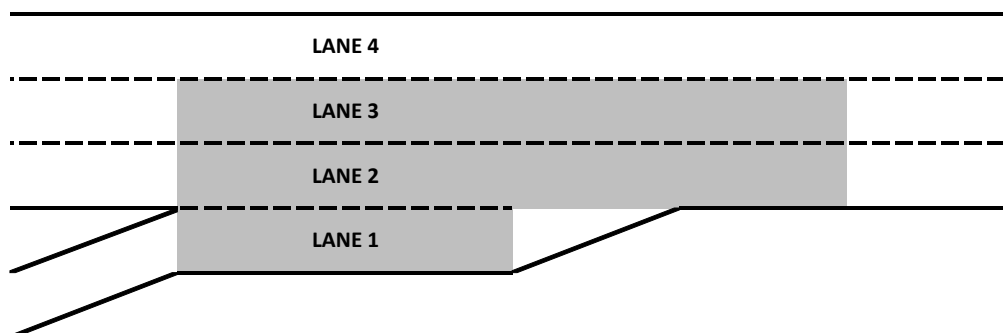
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	884	17	67.0	0.4	16.3	1.0	B
3	1,240	16	65.8	0.7	24.9	1.0	C
2	1,079	29	63.7	1.0	24.5	1.1	C
1	950	41	30.2	0.8	2.1	0.2	A
Area	3,270	86	64.4	0.8	20.3	0.8	C
Total	4,153	103	65.0	0.7	19.2	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	950	41	1		
Total	950	41	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,800	3,203	62	114.4%	1,307
On-ramp	950	950	41	100.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 154 - NB I-15: EL Access at Cajalco Rd

Segment Type - Basic

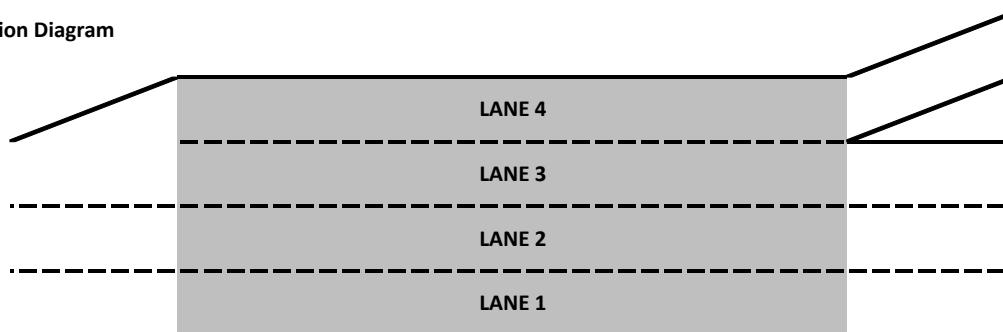
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,004	18	64.7	1.5	11.9	0.7	B
3	1,771	24	64.2	1.9	27.0	0.7	D
2	997	18	64.3	1.9	21.5	0.7	C
1			64.8	1.1	17.0	0.7	B
Area	4,772	61	64.4	1.5	19.4	0.5	C
Total	4,772	61	64.4	1.5	19.4	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	1,570	67
Total			Total	1,570	67

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,120	4,772	61	115.8%	1,406
On-ramp					
Off-ramp	1,320	1,570	67	118.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 130 - NB I-15: Cajalco Rd Off-ramp to EL Access

Segment Type - Basic

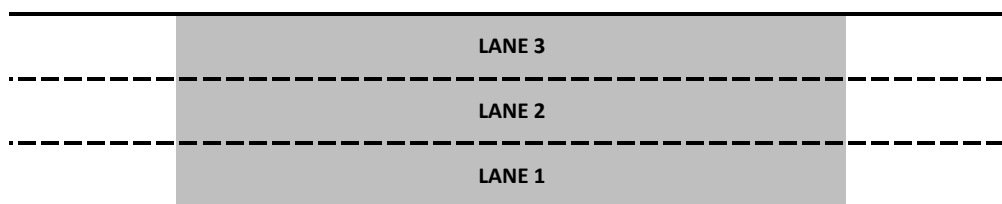
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,018	21	64.9	0.7	32.7	0.7	D
2	1,586	17	63.8	0.2	27.4	0.8	D
1	1,166	26	62.3	0.4	17.6	1.0	B
Area	4,770	64	64.0	0.4	25.9	0.7	C
Total	4,770	64	64.0	0.4	25.9	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,120	4,770	64	115.8%	1,159
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 129 - NB I-15: Cajalco Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,213	20	54.4	2.9	40.4	2.1	E
2	1,869	14	47.7	4.2	39.4	3.1	E
1	2,243	16	40.6	2.1	51.7	2.1	F
Area	4,112	30	44.0	3.1	45.2	2.4	F
Total	6,325	50	47.7	2.9	43.2	2.2	E

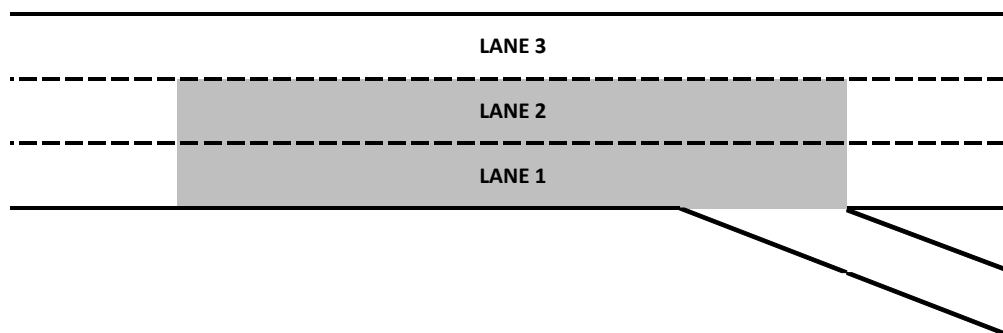
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,557	71
Total	1,557	71

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,740	6,325	50	110.2%	1,109
On-ramp					
Off-ramp	1,620	1,557	71	96.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 128 - NB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

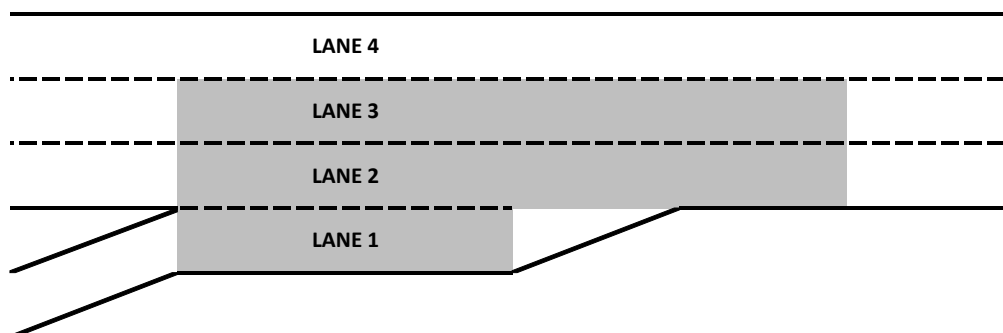
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,946	16	30.6	1.2	72.3	2.0	F
3	1,664	22	23.8	0.9	88.6	2.2	F
2	1,163	29	17.0	0.6	103.7	3.1	F
1	1,549	78	8.6	0.8	38.0	2.7	E
Area	4,376	129	19.5	0.7	84.6	2.2	F
Total	6,321	146	23.2	0.9	77.3	2.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,549	78	1		
Total	1,549	78	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,190	4,772	68	113.9%	1,497
On-ramp	1,550	1,549	78	99.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 127 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

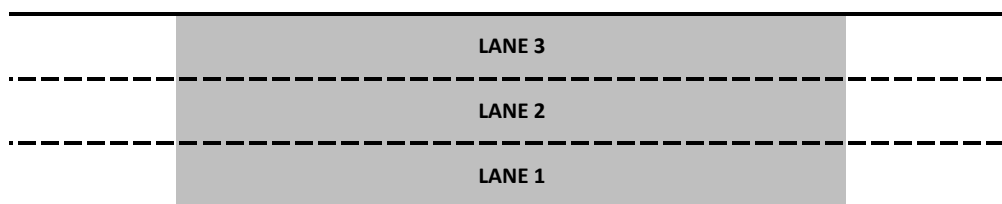
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,933	12	20.9	0.5	91.4	1.7	F
2	1,619	18	15.6	0.8	103.5	2.5	F
1	1,224	29	10.8	0.6	113.9	3.3	F
Area	4,776	58	16.5	0.5	96.0	1.8	F
Total	4,776	58	16.5	0.5	96.0	1.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,190	4,776	58	114.0%	2,543
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 126 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

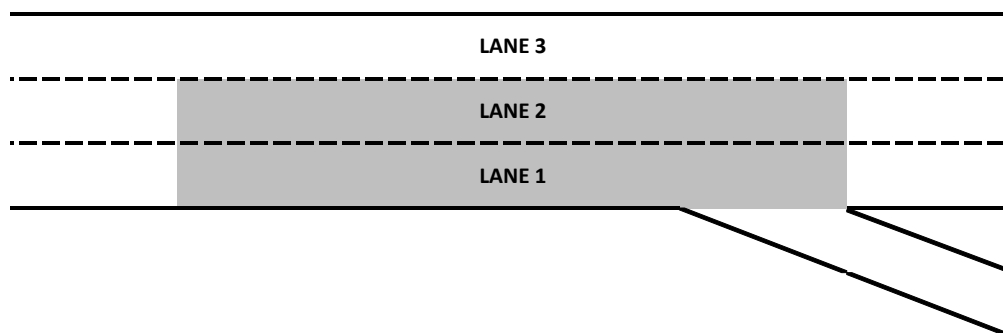
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,833	17	18.9	0.7	96.1	2.6	F
2	1,660	18	16.1	1.2	102.0	3.7	F
1	1,444	25	13.0	0.6	105.3	3.4	F
Area	3,104	43	14.7	0.8	102.4	3.5	F
Total	4,936	60	16.3	0.7	98.8	2.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	149	32
Total			Total	149	32

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,340	4,936	60	113.7%	1,499
On-ramp					
Off-ramp	150	149	32	99.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 125 - NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

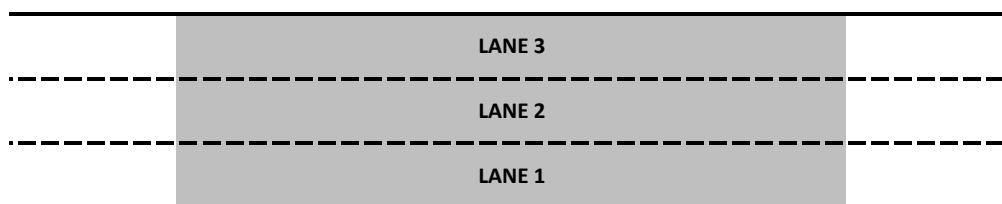
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,760	19	17.6	0.5	99.2	1.7	F
2	1,668	15	16.2	0.6	101.8	1.6	F
1	1,511	22	14.2	1.1	101.7	3.6	F
Area	4,938	56	16.1	0.6	100.1	1.9	F
Total	4,938	56	16.1	0.6	100.1	1.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,340	4,938	56	113.8%	6,786
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 124 - NB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

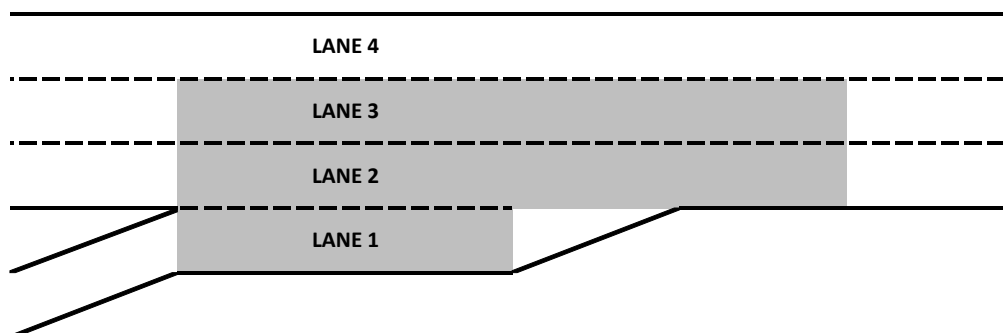
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,652	21	14.9	0.9	110.1	3.6	F
3	1,488	18	14.6	0.9	111.6	2.6	F
2	1,212	20	13.0	0.9	109.1	4.1	F
1	591	26	7.0	1.3	12.9	2.3	B
Area	3,291	65	13.8	0.8	93.7	2.5	F
Total	4,944	85	14.2	0.8	98.2	2.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	591	26	1		
Total	591	26	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,760	4,352	59	115.8%	1,498
On-ramp	580	591	26	102.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 123 - NB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

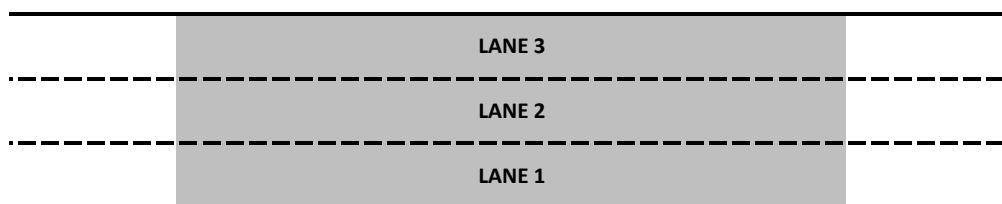
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,623	15	14.7	1.0	106.9	3.8	F
2	1,480	24	13.2	1.4	110.2	4.9	F
1	1,254	19	11.1	0.6	112.5	4.4	F
Area	4,357	58	13.2	0.9	108.2	3.7	F
Total	4,357	58	13.2	0.9	108.2	3.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,760	4,357	58	115.9%	2,725
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 122 - NB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

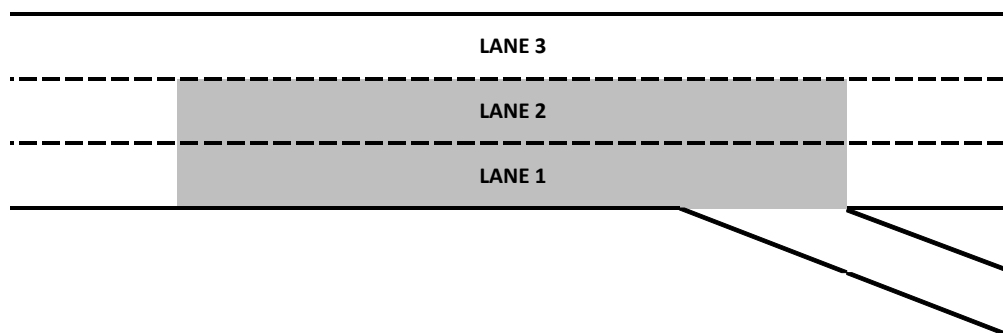
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,811	20	16.7	1.4	101.6	4.2	F
2	1,725	17	16.5	0.7	98.4	2.0	F
1	1,468	28	17.2	1.3	95.6	3.0	F
Area	3,193	45	16.8	0.9	96.9	2.4	F
Total	5,004	65	16.8	1.0	98.4	2.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	652	49
Total			Total	652	49

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,510	5,004	65	111.0%	1,498
On-ramp					
Off-ramp	750	652	49	86.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 121 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

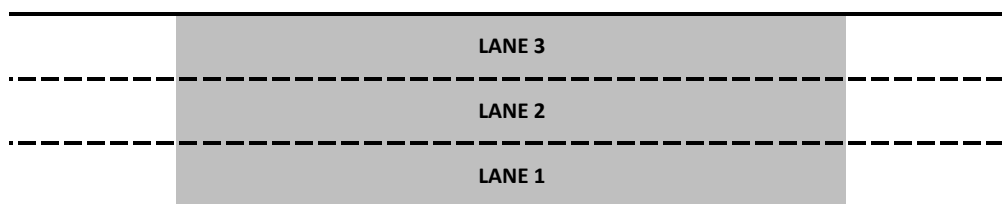
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,770	22	17.2	0.8	100.4	2.3	F
2	1,685	20	16.6	0.9	100.2	2.1	F
1	1,532	27	14.5	1.1	98.6	2.2	F
Area	4,988	69	16.2	0.9	99.2	2.0	F
Total	4,988	69	16.2	0.9	99.2	2.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,510	4,988	69	110.6%	9,350
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 120 - NB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

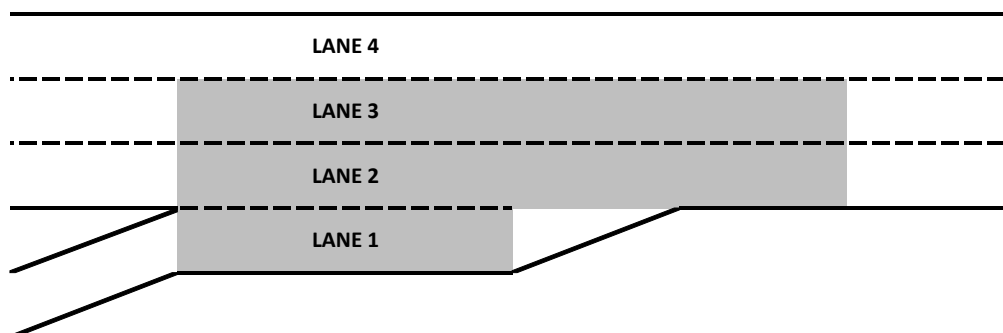
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,634	19	14.5	1.1	111.8	4.1	F
3	1,426	25	13.9	1.1	115.0	4.3	F
2	1,140	24	12.1	0.8	109.8	3.1	F
1	765	63	6.6	1.6	23.9	6.4	C
Area	3,331	112	12.9	1.1	96.9	4.9	F
Total	4,965	131	13.5	1.0	100.4	4.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	765	63	1		
Total	765	63	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,770	4,200	68	111.4%	1,499
On-ramp	740	765	63	103.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 119 - NB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

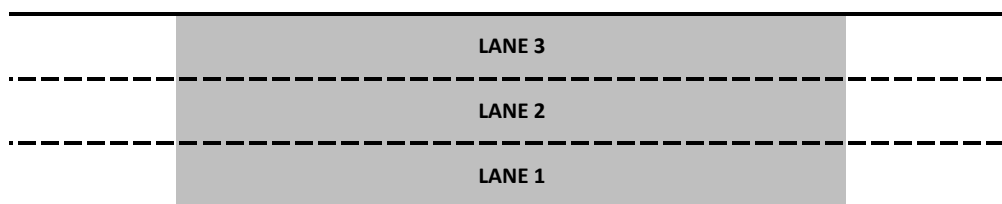
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,587	25	14.2	0.7	108.5	2.4	F
2	1,424	23	11.8	0.9	115.9	3.7	F
1	1,189	29	9.7	1.2	115.1	4.9	F
Area	4,201	77	12.2	0.8	110.3	2.3	F
Total	4,201	77	12.2	0.8	110.3	2.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,770	4,201	77	111.4%	2,922
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 118 - NB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

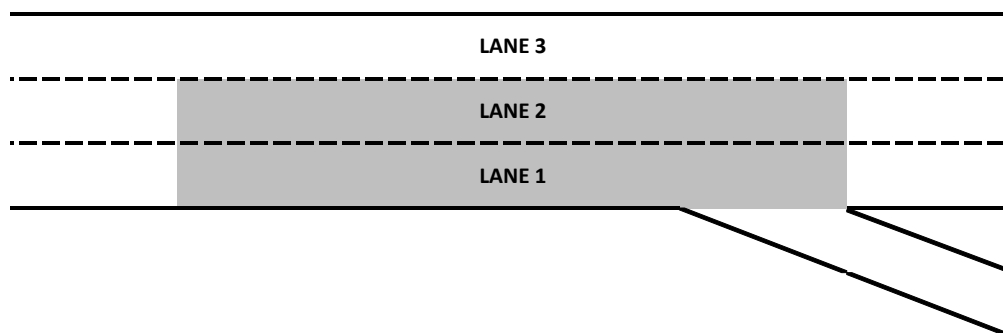
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,841	29	15.2	1.3	105.7	3.7	F
2	1,695	15	14.2	1.2	105.8	4.8	F
1	1,429	31	14.1	1.8	102.1	6.0	F
Area	3,124	46	14.2	1.5	103.9	5.3	F
Total	4,965	75	14.5	1.4	104.3	4.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	772	74
Total			Total	772	74

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,670	4,965	75	106.3%	1,499
On-ramp					
Off-ramp	900	772	74	85.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 168 - NB I-15: Horsethief Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

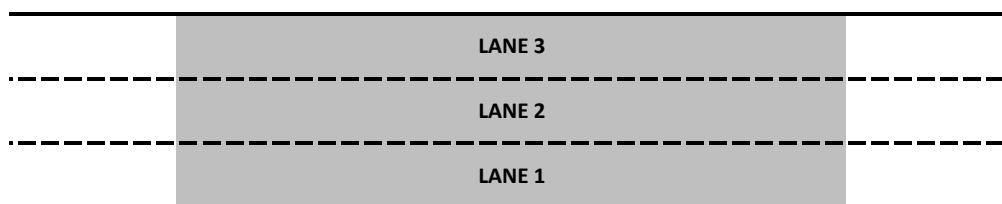
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,823	20	18.1	1.4	97.4	3.9	F
2	1,711	19	14.7	1.2	106.9	4.1	F
1	1,420	27	11.5	1.6	108.9	5.7	F
Area	4,954	65	15.1	1.3	100.9	3.6	F
Total	4,954	65	15.1	1.3	100.9	3.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,670	4,954	65	106.1%	2,252
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 167 - NB I-15: Horsethief Rd On-ramp

Segment Type - Merge

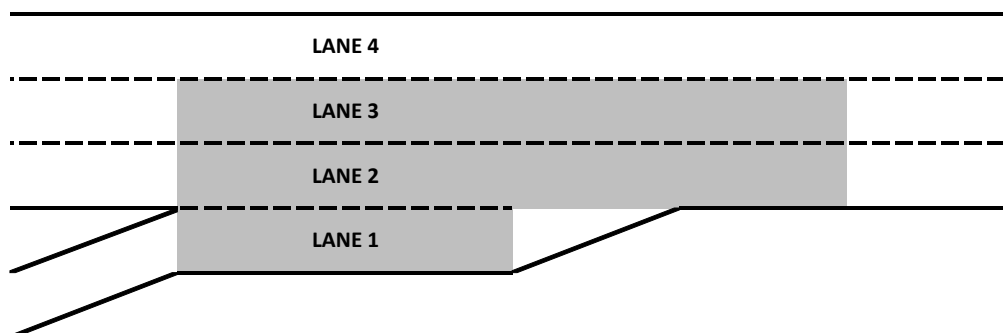
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,696	17	16.1	1.0	106.9	3.1	F
3	1,450	29	12.6	1.0	119.6	4.2	F
2	1,163	32	9.5	1.4	118.6	4.3	F
1	624	53	4.9	1.5	30.6	9.5	D
Area	3,238	113	10.9	1.2	102.8	5.0	F
Total	4,933	130	12.8	1.1	100.4	3.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	624	53	1		
Total	624	53	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,020	4,309	78	107.2%	1,498
On-ramp	650	624	53	96.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 166 - NB I-15: Horsethief Rd Off-ramp to On-ramp

Segment Type - Basic

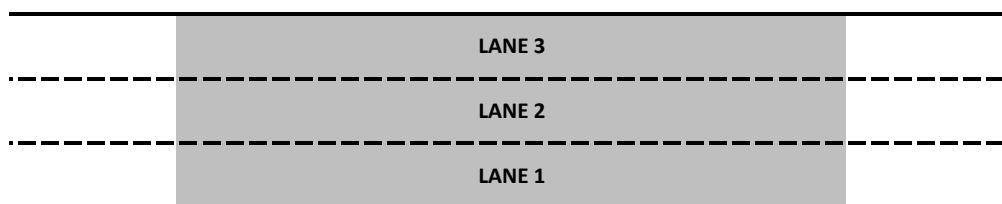
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,647	19	14.7	1.1	107.3	3.6	F
2	1,453	27	11.1	1.3	119.5	5.2	F
1	1,195	30	8.8	1.3	118.2	3.4	F
Area	4,296	75	11.9	1.1	109.8	2.5	F
Total	4,296	75	11.9	1.1	109.8	2.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,020	4,296	75	106.9%	2,763
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 165 - NB I-15: Horsethief Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,785	27	14.5	1.3	108.0	3.6	F
2	1,731	28	13.0	1.6	111.1	5.0	F
1	1,334	30	12.1	1.7	108.1	4.4	F
Area	3,064	58	12.6	1.6	109.4	4.5	F
Total	4,849	85	13.3	1.3	108.2	3.5	F

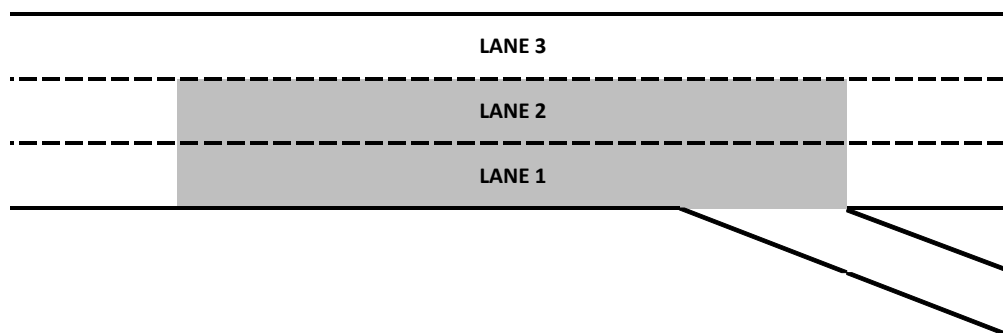
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	569	59
Total	569	59

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,790	4,849	85	101.2%	1,499
On-ramp					
Off-ramp	770	569	59	73.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 117 - NB I-15: Horsethief Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

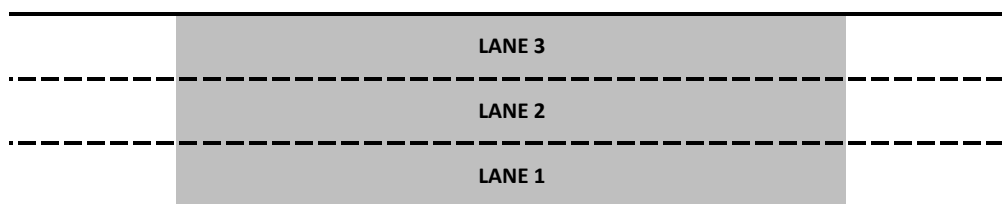
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,787	26	15.3	1.5	105.3	4.1	F
2	1,632	26	13.2	1.0	112.2	3.6	F
1	1,397	40	10.3	1.3	114.2	4.3	F
Area	4,816	92	13.2	1.2	107.7	3.3	F
Total	4,816	92	13.2	1.2	107.7	3.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,790	4,816	92	100.6%	5,500
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 116 - NB I-15: Lake St On-ramp

Segment Type - Merge

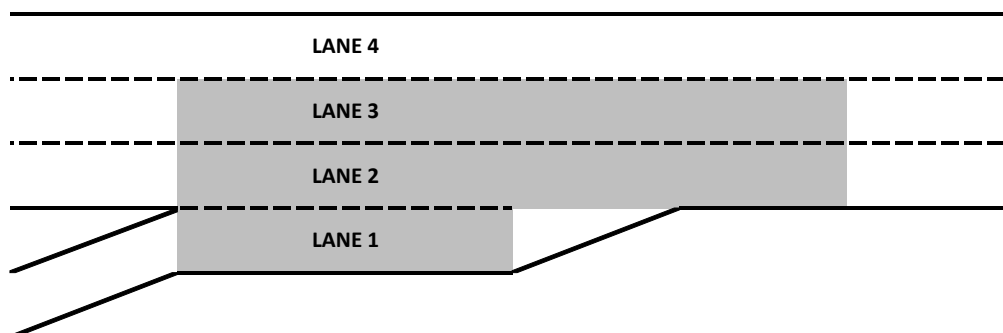
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,582	20	13.1	1.1	117.1	3.5	F
3	1,175	24	10.6	0.7	129.7	3.1	F
2	808	20	7.5	1.1	132.6	4.3	F
1	1,210	136	2.8	0.6	85.6	5.8	F
Area	3,193	180	8.5	0.7	126.6	3.2	F
Total	4,775	199	10.2	0.8	117.1	0.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,210	136	1		
Total	1,210	136	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,870	3,565	64	92.1%	1,499
On-ramp	920	1,210	136	131.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 115 - NB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

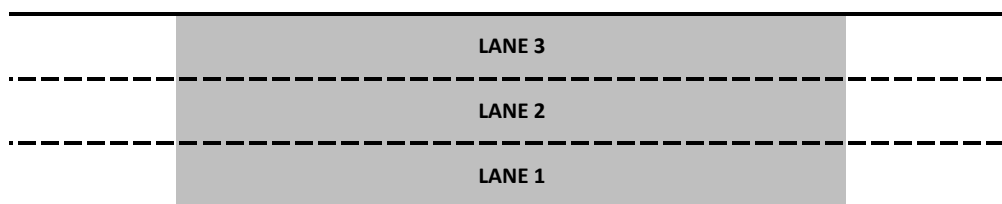
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,502	19	11.9	0.6	117.0	2.0	F
2	1,204	25	8.1	0.5	134.9	3.6	F
1	844	23	5.3	0.8	144.9	6.0	F
Area	3,550	66	9.1	0.4	119.2	1.4	F
Total	3,550	66	9.1	0.4	119.2	1.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,870	3,550	66	91.7%	3,216
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 114 - NB I-15: Lake St Off-ramp

Segment Type - Diverge

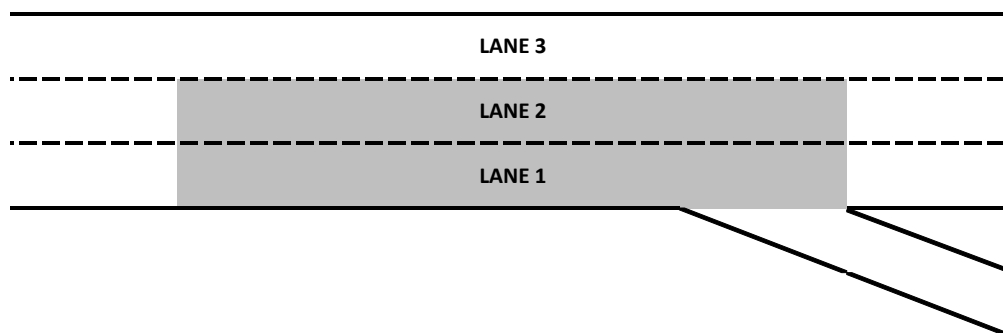
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,470	14	11.5	0.5	118.0	2.1	F
2	1,249	22	8.8	0.5	130.0	2.2	F
1	973	26	6.6	1.0	134.0	6.6	F
Area	2,222	48	7.9	0.5	128.8	2.8	F
Total	3,692	61	9.3	0.4	120.8	1.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	152	29
Total			Total	152	29

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,120	3,692	61	89.6%	1,498
On-ramp					
Off-ramp	250	152	29	60.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 113 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

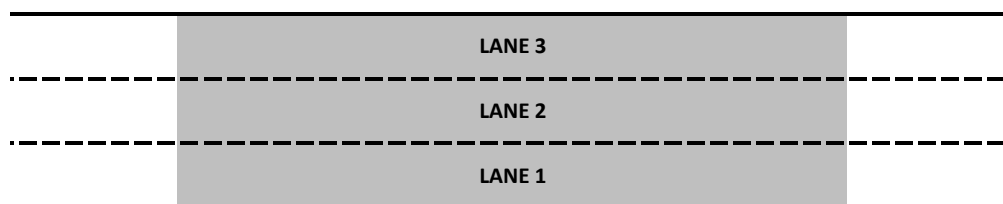
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,430	17	11.5	0.5	117.9	2.5	F
2	1,247	18	9.1	0.6	127.5	2.8	F
1	991	23	6.8	0.9	133.1	5.5	F
Area	3,668	59	9.4	0.5	120.5	2.0	F
Total	3,668	59	9.4	0.5	120.5	2.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,120	3,668	59	89.0%	8,483
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 112 - NB I-15: Nichols Rd On-ramp

Segment Type - Merge

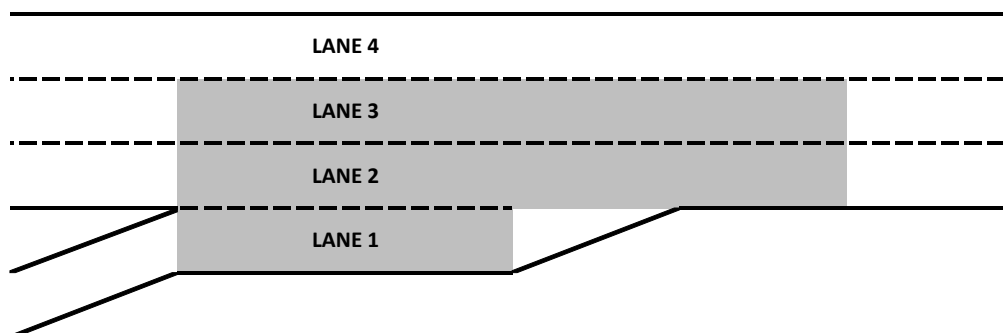
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,315	17	10.3	0.7	130.0	2.9	F
3	940	19	7.5	0.4	146.5	4.3	F
2	780	31	4.9	0.6	147.2	9.1	F
1	589	67	1.7	0.1	101.0	1.6	F
Area	2,310	117	5.9	0.3	138.4	6.2	F
Total	3,625	133	7.6	0.4	125.2	4.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	589	67	1		
Total	589	67	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,590	3,036	67	84.6%	1,499
On-ramp	530	589	67	111.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 111 - NB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

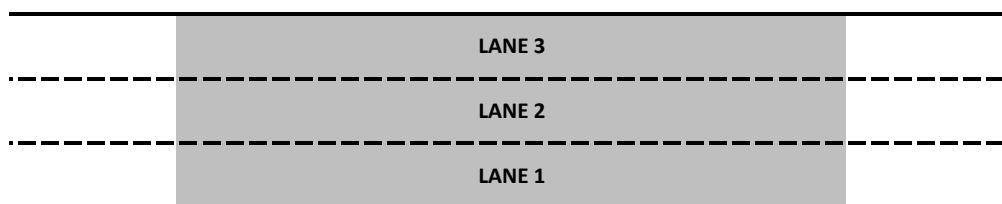
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,285	15	9.6	0.5	127.6	1.7	F
2	963	18	6.1	0.4	148.8	4.8	F
1	772	32	4.5	1.0	152.8	7.8	F
Area	3,020	65	7.3	0.3	128.8	5.8	F
Total	3,020	65	7.3	0.3	128.8	5.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,590	3,020	65	84.1%	3,521
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 110 - NB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

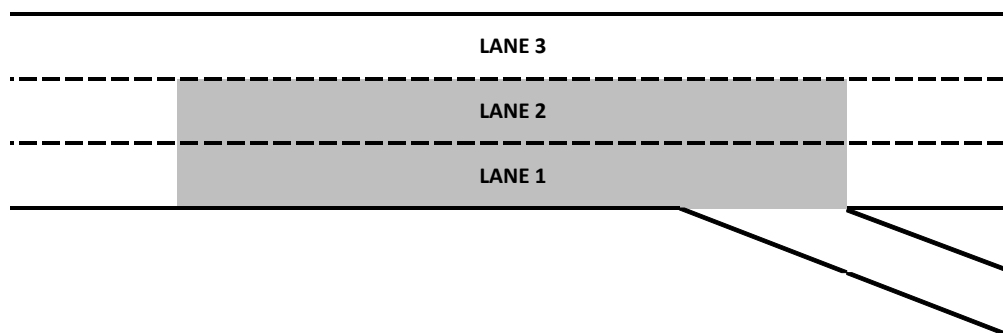
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,309	11	9.5	0.6	127.5	3.9	F
2	1,045	16	6.6	0.3	145.8	3.8	F
1	856	22	5.2	0.4	147.5	5.7	F
Area	1,901	37	5.9	0.3	144.5	3.0	F
Total	3,211	48	7.4	0.4	131.7	3.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	222	24
Total			Total	222	24

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,950	3,211	48	81.3%	1,488
On-ramp					
Off-ramp	360	222	24	61.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 109 - NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp to Nichols Rd Off-ramp

Segment Type - Merge

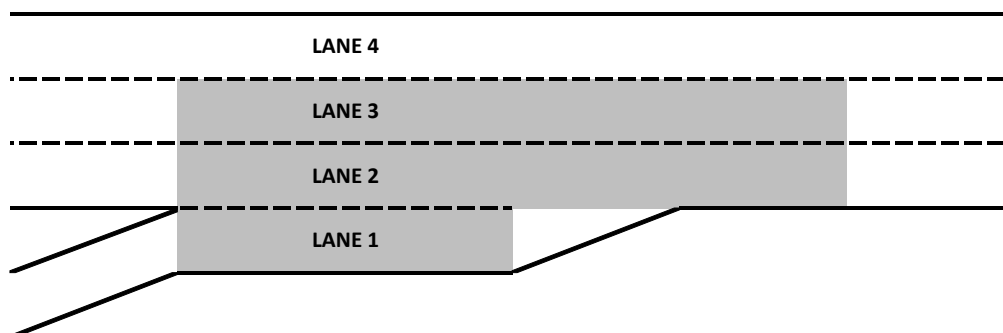
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,273	13	9.2	0.4	133.1	2.9	F
3	771	23	6.0	0.3	156.4	5.1	F
2	553	17	3.8	0.3	160.2	4.8	F
1	597	71	1.2	0.2	78.1	4.7	F
Area	1,920	111	4.7	0.2	140.5	5.5	F
Total	3,194	123	6.6	0.3	124.4	3.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	597	71	1		
Total	597	71	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,230	2,597	52	80.4%	1,486
On-ramp	720	597	71	82.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 108 - NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

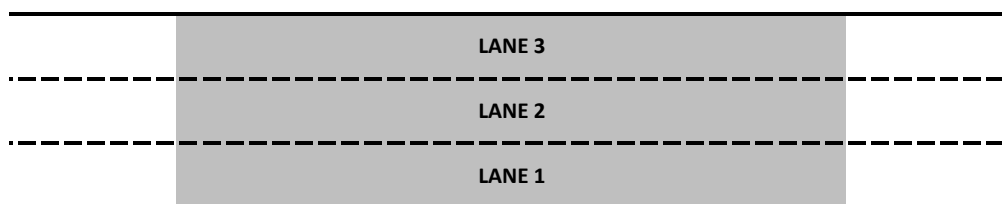
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,247	17	8.9	0.5	131.5	2.9	F
2	768	26	4.4	0.5	163.4	6.2	F
1	558	17	2.9	0.1	175.0	1.9	F
Area	2,573	60	6.3	0.3	126.8	3.8	F
Total	2,573	60	6.3	0.3	126.8	3.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,230	2,573	60	79.7%	2,598
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 153 - NB I-15: Dexter Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	73	8	14.5	1.1	4.2	0.6	A
3	1,152	20	7.5	0.3	141.4	1.5	F
2	788	24	4.7	0.3	157.9	3.8	F
1	653	19	3.5	0.3	165.3	2.3	F
Area	1,441	43	4.2	0.3	158.4	2.4	F
Total	2,667	71	5.9	0.2	103.8	2.8	F

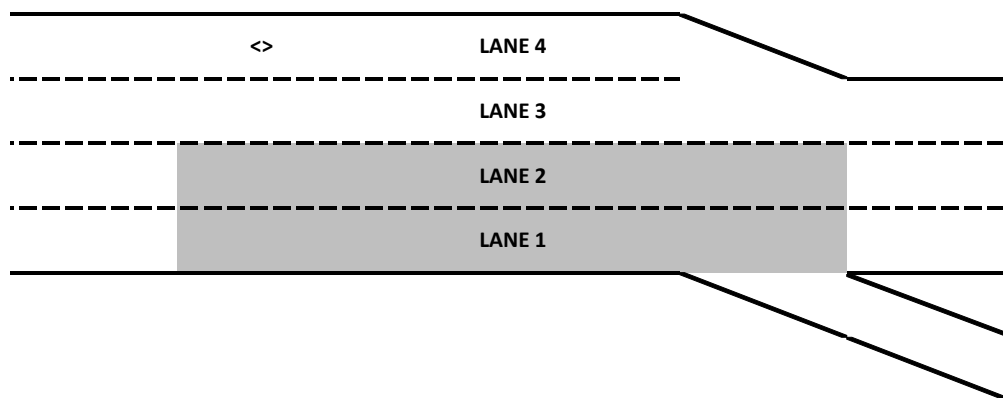
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	133	28
Total	133	28

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,420	2,667	71	78.0%	939
On-ramp					
Off-ramp	190	133	28	70.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 107 - NB I-15: WB Central Ave (SR-74) Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	273	21	15.1	1.0	13.5	2.7	B
4	1,005	14	6.1	0.5	152.4	4.2	F
3	735	27	3.8	0.3	161.4	4.3	F
2	677	30	2.4	0.1	169.1	4.6	F
1	547	22	3.8	0.4	163.9	3.7	F
Area	2,964	93	4.4	0.2	144.8	4.9	F
Total	3,237	114	5.2	0.3	106.2	3.0	F

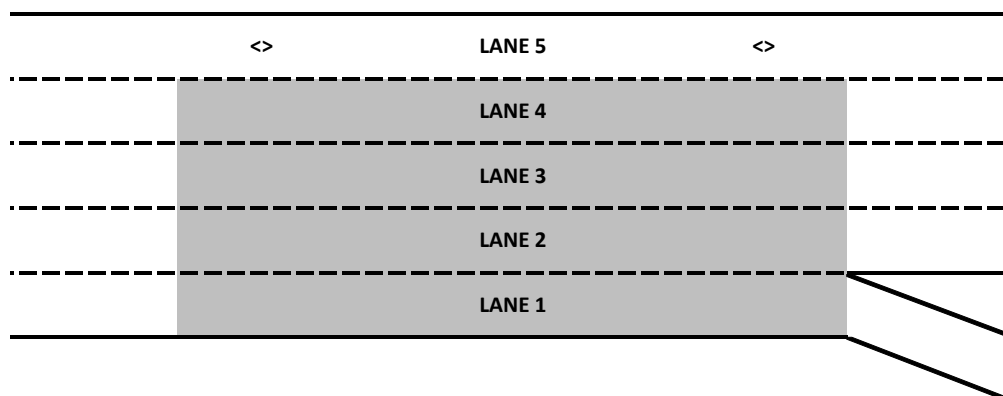
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	603	64
Total	603	64

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,280	3,237	114	75.6%	1,369
On-ramp					
Off-ramp	860	603	64	70.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 106 - NB I-15: EB Central Ave (SR-74) Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	336	21	20.6	3.5	15.9	4.6	B
4	1,130	27	5.4	0.3	158.6	3.1	F
3	1,053	31	3.8	0.3	161.2	6.4	F
2	1,114	35	4.6	0.5	150.0	6.2	F
1			3.3	0.3	128.0	4.2	F
Area	2,167	67	4.2	0.2	154.1	4.3	F
Total	3,632	114	6.3	0.4	98.7	4.8	F

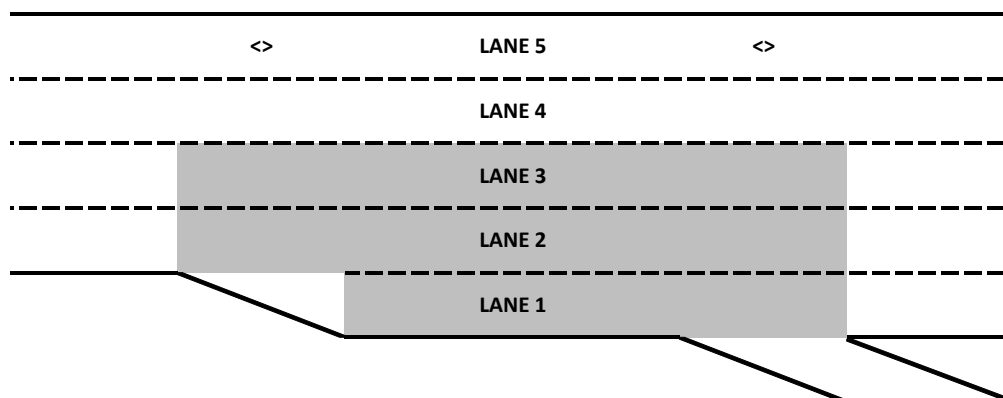
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	436	54
Total	436	54

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,890	3,632	114	74.3%	1,498
On-ramp					
Off-ramp	610	436	54	71.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 105 - NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

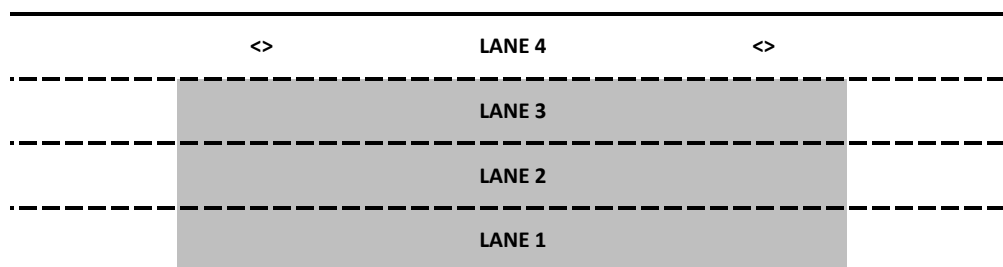
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	341	18	28.5	5.7	12.2	3.9	B
3	1,177	31	6.0	0.3	154.5	2.9	F
2	1,095	29	5.7	0.6	146.9	8.9	F
1	1,001	31	6.1	0.8	140.7	6.4	F
Area	3,273	91	5.9	0.2	146.3	3.0	F
Total	3,613	108	8.5	0.5	87.1	5.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,890	3,613	108	73.9%	1,245
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 104 - NB I-15: Main St On-ramp

Segment Type - Merge

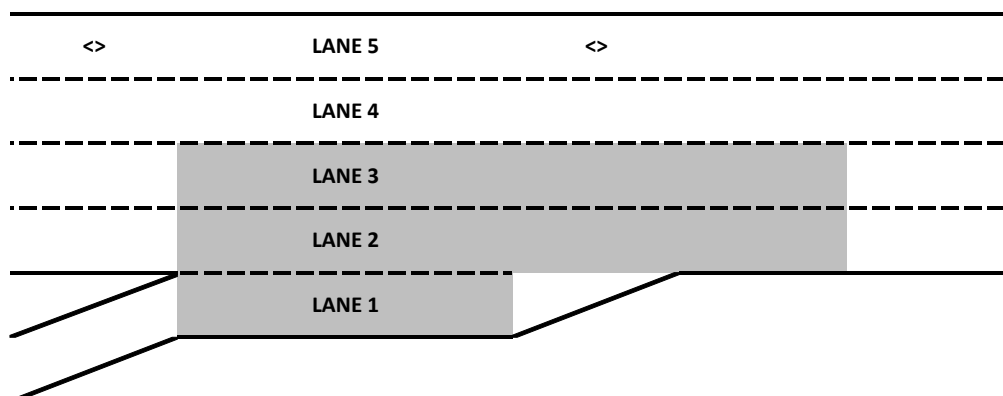
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	412	15	34.0	3.8	10.6	1.4	A
4	1,282	26	7.1	0.3	150.0	2.4	F
3	675	46	4.8	0.2	156.5	6.5	F
2	667	27	3.9	0.5	157.3	6.6	F
1	542	54	1.3	0.1	72.8	5.8	F
Area	1,884	126	4.1	0.1	147.2	2.7	F
Total	3,577	168	8.9	1.1	74.0	7.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	542	54	1		
Total	542	54	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,360	3,035	114	69.6%	1,500
On-ramp	530	542	54	102.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 103 - NB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

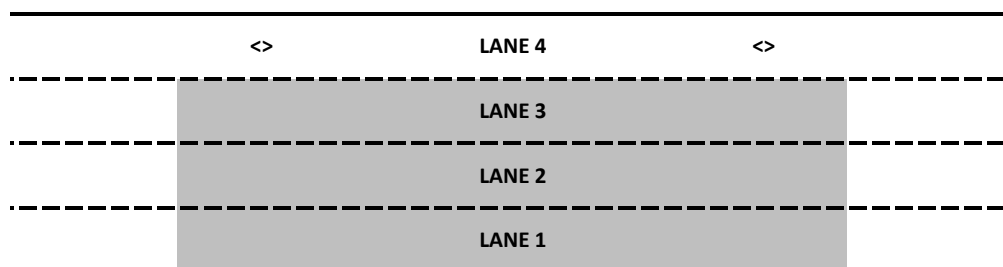
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	428	17	51.9	4.5	7.5	0.2	A
3	1,252	25	7.1	0.3	145.2	2.7	F
2	665	36	2.8	0.2	169.8	8.8	F
1	667	28	3.3	0.2	168.7	6.4	F
Area	2,585	89	5.1	0.2	134.7	4.8	F
Total	3,013	106	12.6	1.3	48.6	4.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,360	3,013	106	69.1%	2,898
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 102 - NB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	484	15	42.5	10.3	9.8	2.1	A
3	1,165	35	6.1	1.0	150.5	6.7	F
2	918	25	3.5	0.3	159.3	8.5	F
1	823	43	5.0	0.6	155.1	7.1	F
Area	1,741	68	4.4	0.3	152.2	6.1	F
Total	3,390	118	10.8	2.0	62.5	10.5	F

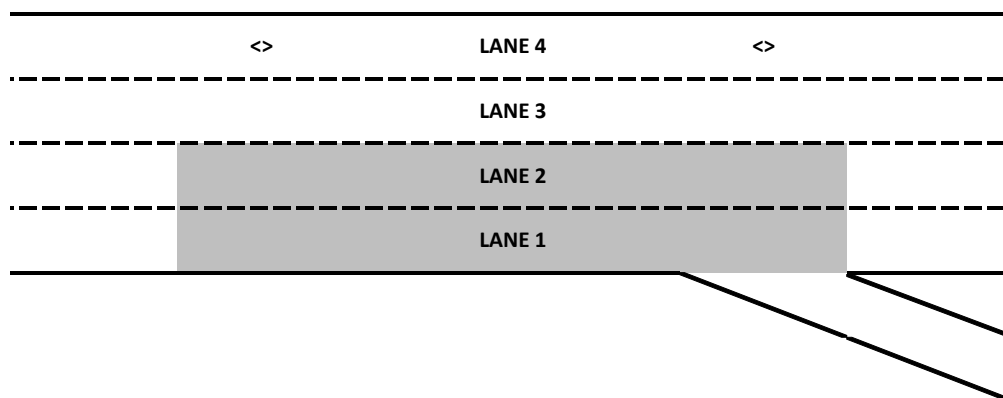
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	433	50
Total	433	50

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,040	3,390	118	67.3%	1,499
On-ramp					
Off-ramp	680	433	50	63.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 101 - NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp

Segment Type - Basic

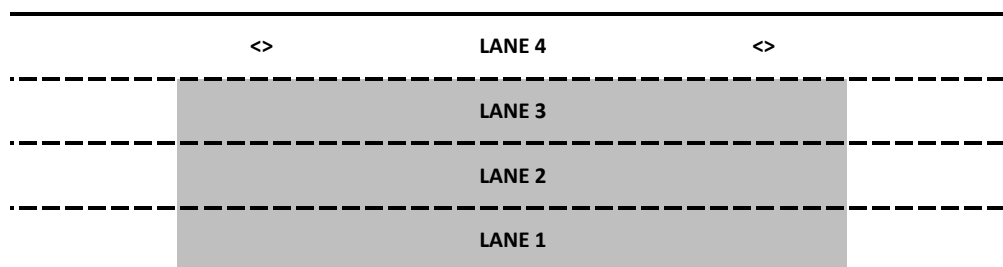
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	487	17	64.1	0.2	6.4	0.5	A
3	1,161	20	6.0	0.5	154.5	5.0	F
2	912	34	4.0	0.2	160.1	2.8	F
1	780	36	4.0	0.3	161.7	2.7	F
Area	2,853	91	4.9	0.2	151.8	6.0	F
Total	3,340	108	14.1	0.7	46.6	2.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,040	3,340	108	66.3%	3,905
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Design Year No Build
AM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
200 SB I-15 EL: WB SR-91 Off-ramp	Basic	272	12	97.1%				60	14	100.3%	69.9	0.5	2.1	0.2	A
210 SB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp	Basic	212	9	96.5%							69.7	0.6	3.4	0.3	A
201 SB I-15 EL: EB SR-91 On-ramp	Basic	213	9	97.0%	193	23	87.7%				69.7	0.3	3.1	0.3	A
202 SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia	Basic	407	16	92.6%							69.7	0.3	3.1	0.3	A
203 SB I-15 EL: EL Access S of Magnolia to EL Egress at El Cerrito	Basic	380	14	95.1%							69.1	0.6	5.4	0.4	A
204 SB I-15 EL: EL Egress at El Cerrito	Basic	380	13	95.0%				59	13	97.7%	69.5	0.5	2.9	0.2	A
205 SB I-15 EL: EL Egress at El Cerrito to EL Egress at Cajalco	Basic	320	7	94.1%							69.5	0.5	4.9	0.4	A
300 NB I-15 EL: EL Ingress at Cajalco	Basic	1,563	20	118.4%							59.8	1.5	25.1	1.0	C
301 NB I-15 EL: EL Ingress at El Cerrito	Basic	1,564	21	118.5%	927	53	87.5%				64.3	1.0	19.7	0.6	C
302 NB I-15 EL: EL Ingress at El Cerrito to EL Access N of Ontario	Basic	2,496	33	104.9%							68.2	0.2	19.2	0.7	C
303 NB I-15 EL: EL Access at Ontario to WB SR-91 Off-ramp	Basic	2,919	43	101.0%							64.3	1.8	23.3	0.6	C
304 NB I-15 EL: WB SR-91 Off-ramp	Basic	2,919	43	101.0%				1,557	73	95.5%	65.5	1.0	23.6	0.3	C
305 NB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp	Basic	1,369	20	108.6%							65.5	1.0	22.6	1.0	C
306 NB I-15 EL: EB SR-91 On-ramp	Basic	1,372	19	108.9%	952	75	97.1%				68.5	0.1	18.0	0.5	C

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 200 - SB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	117	6	69.8	1.0	1.8	0.3	A
1	155	6	69.9	0.5	2.5	0.2	A
Area	272	12	69.9	0.5	2.1	0.2	A
Total	272	12	69.9	0.5	2.1	0.2	A

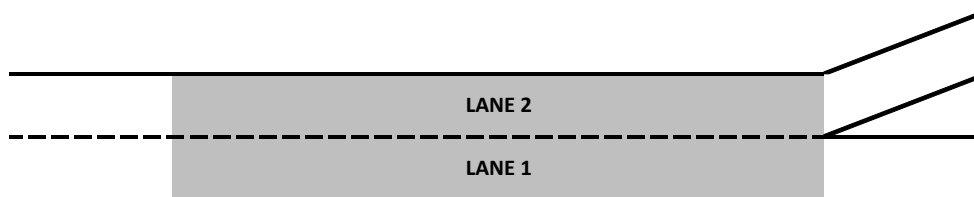
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	60	14
Total	60	14

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	280	272	12	97.1%	1,496
On-ramp					
Off-ramp	60	60	14	100.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 210 - SB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	212	9	69.7	0.6	3.4	0.3	A
Area	212	9	69.7	0.6	3.4	0.3	A
Total	212	9	69.7	0.6	3.4	0.3	A

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	220	212	9	96.5%	6,571
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 201 - SB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	213	9	69.3	0.7	2.8	0.4	A
1	193	23	69.9	0.6	3.5	0.4	A
Area	406	32	69.7	0.3	3.1	0.3	A
Total	406	32	69.7	0.3	3.1	0.3	A

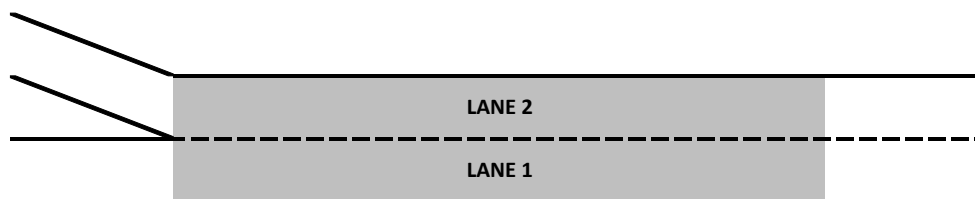
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	193	23
Total	193	23

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	220	213	9	97.0%	1,500
On-ramp	220	193	23	87.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 202 - SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	187	8	69.5	0.8	2.7	0.3	A
1	221	8	69.9	0.7	3.4	0.3	A
Area	407	16	69.7	0.3	3.1	0.3	A
Total	407	16	69.7	0.3	3.1	0.3	A

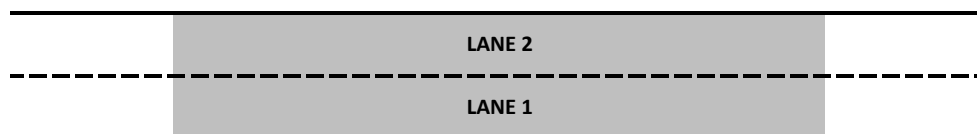
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	440	407	16	92.6%	2,496
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 203 - SB I-15 EL: EL Access S of Magnolia to EL Egress at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	146	7	69.0	0.7	3.4	0.3	A
1	234	7	69.4	0.5	2.0	0.2	A
Area	380	14	69.1	0.6	5.4	0.4	A
Total	380	14	69.1	0.6	2.7	0.2	A

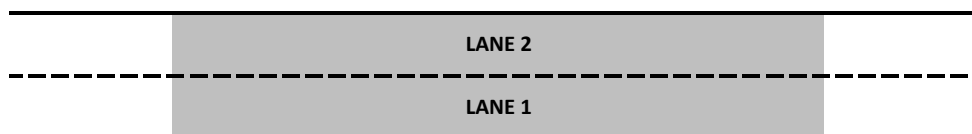
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	400	380	14	95.1%	6,828
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 204 - SB I-15 EL: EL Egress at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	320	8	69.5	0.5	4.9	0.4	A
1	60	5	69.8	0.8	0.9	0.1	A
Area	380	13	69.5	0.5	2.9	0.2	A
Total	380	13	69.5	0.5	2.9	0.2	A

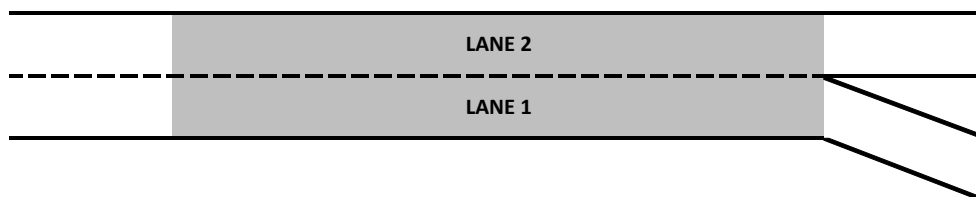
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	59	13
Total	59	13

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	400	380	13	95.0%	1,501
On-ramp					
Off-ramp	60	59	13	97.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 205 - SB I-15 EL: EL Egress at El Cerrito to EL Egress at Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	320	7	69.5	0.5	4.9	0.4	A
Area	320	7	69.5	0.5	4.9	0.4	A
Total	320	7	69.5	0.5	4.9	0.4	A

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	340	320	7	94.1%	3,794
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 300 - NB I-15 EL: EL Ingress at Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	1,563	20	59.8	1.5	25.0	1.0	C
Area	1,563	20	59.8	1.5	25.1	1.0	C
Total	1,563	20	59.8	1.5	25.1	1.0	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,320	1,563	20	118.4%	5,237
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 301 - NB I-15 EL: EL Ingress at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,564	21	65.9	1.2	22.7	0.6	C
1	927	53	62.0	1.0	16.7	0.8	B
Area	2,491	74	64.3	1.0	19.7	0.6	C
Total	2,491	74	64.3	1.0	19.7	0.6	C

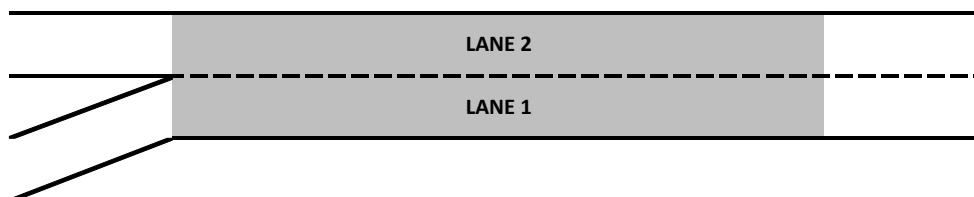
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	927	53
Total	927	53

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,320	1,564	21	118.5%	1,500
On-ramp	1,060	927	53	87.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 302 - NB I-15 EL: EL Ingress at El Cerrito to EL Access N of Ontario

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,180	19	67.3	0.5	19.3	1.1	C
1	1,317	14	69.1	0.1	19.2	0.7	C
Area	2,496	33	68.2	0.2	19.2	0.7	C
Total	2,496	33	68.2	0.2	19.2	0.7	C

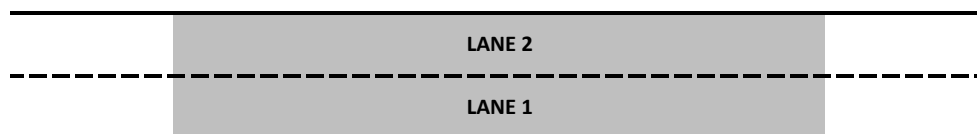
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,380	2,496	33	104.9%	6,294
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 303 - NB I-15 EL: EL Access at Ontario to WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,400	23	64.5	1.7	22.7	1.0	C
1	1,519	19	64.1	2.0	23.8	0.6	C
Area	2,919	43	64.3	1.8	23.3	0.6	C
Total	2,919	43	64.3	1.8	23.3	0.6	C

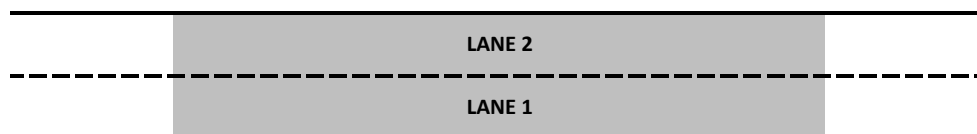
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,890	2,919	43	101.0%	3,113
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 304 - NB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,548	27	65.5	1.3	24.7	1.0	C
1	1,371	16	65.5	1.0	22.6	1.0	C
Area	2,919	43	65.5	1.0	23.6	0.3	C
Total	2,919	43	65.5	1.0	23.6	0.3	C

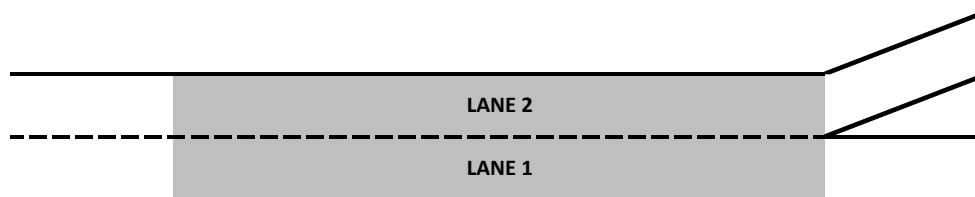
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,557	73
Total	1,557	73

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,890	2,919	43	101.0%	1,501
On-ramp					
Off-ramp	1,630	1,557	73	95.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 305 - NB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	1,369	20	65.5	1.0	22.6	1.0	C
Area	1,369	20	65.5	1.0	22.6	1.0	C
Total	1,369	20	65.5	1.0	22.6	1.0	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,260	1,369	20	108.6%	1,501
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 306 - NB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,372	19	69.1	0.2	17.3	0.4	B
1	952	75	67.9	0.1	18.7	0.9	C
Area	2,324	95	68.5	0.1	18.0	0.5	C
Total	2,324	95	68.5	0.1	18.0	0.5	C

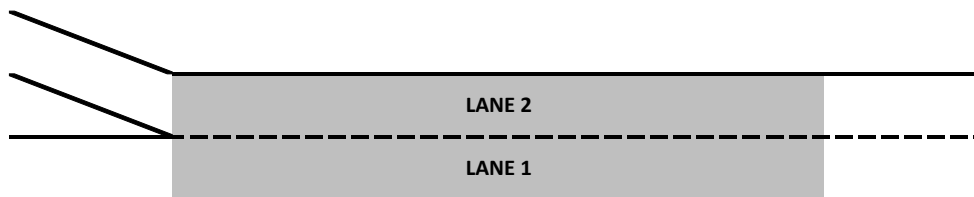
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	952	75
Total	952	75

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,260	1,372	19	108.9%	1,498
On-ramp	980	952	75	97.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Vissim Post-Processor
Average Results from 5 Runs
Network Statistics

I-15 Express Lanes Southern Extension
Design Year No Build
PM Peak Hour

Performance Measure	Vehicle Types	Average	Std. Dev.	Minimum	Maximum
Average Delay (seconds)	All	799.9	11.72	782.0	813.6
Total Delay (hours)	All	56,372	759	55,285	57,129
Average Stopped Delay (seconds)	All	54.0	2.50	50.4	56.8
Total Stopped Delay (hours)	All	3809	165	3565	3991
Total Distance Traveled (miles)	All	1,792,393	12,308	1,781,404	1,806,636
Average Speed (mph)	All	21.6	0.25	21.3	22.0
Average Number of Stops	All	77.1	3.27	72.6	80.2
Total Number of Stops	All	19,567,947	763,986	18,474,329	20,277,837
Total Travel Time (hours)	All	83,097.1	718.1	82,217.3	83,965.3
Vehicles Active	All	9,367	148	9,186	9,497
Vehicles Arrived	All	244,357	984	243,285	245,462

VISSIM Post-Processor
Average Results from 5 Runs
Average Travel Time

I-15 Express Lanes Southern Extension
Design Year No Build
PM Peak Hour

Corridor Travel Time by Time Interval Summary					
Time interval		Measured from Simulation (min)			
		Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
1	1:00 - 1:15 PM	24.32	89.09	4.93	5.34
2	1:15 - 1:30 PM	24.08	98.05	4.95	5.36
3	1:30 - 1:45 PM	23.84	112.77	4.95	5.38
4	1:45 - 2:00 PM	24.41	122.35	4.97	5.41
5	2:00 - 2:15 PM	24.55	124.83	5.02	5.42
6	2:15 - 2:30 PM	24.20	129.69	5.03	5.38
7	2:30 - 2:45 PM	23.90	134.27	5.03	5.40
8	2:45 - 3:00 PM	23.50	137.63	5.04	5.41
9	3:00 - 3:15 PM	23.20	142.15	5.06	5.40
10	3:15 - 3:30 PM	23.92	145.93	5.08	5.38
11	3:30 - 3:45 PM	24.45	146.16	5.06	5.40
12	3:45 - 4:00 PM	23.86	147.67	5.07	5.40
13	4:00 - 4:15 PM	23.23	149.09	5.07	5.44
14	4:15 - 4:30 PM	22.55	149.66	5.06	5.46
15	4:30 - 4:45 PM	21.75	148.63	5.06	5.44
16	4:45 - 5:00 PM	21.31	146.10	5.06	5.48
17	5:00 - 5:15 PM	21.03	147.80	5.02	5.47
18	5:15 - 5:30 PM	20.72	146.90	5.02	5.55
19	5:30 - 5:45 PM	20.52	147.86	5.02	5.48
20	5:45 - 6:00 PM	20.68	145.15	5.02	5.49
21	6:00 - 6:15 PM	20.54	145.09	5.01	5.43
22	6:15 - 6:30 PM	20.20	143.00	5.02	5.41
23	6:30 - 6:45 PM	19.96	138.26	5.02	5.44
24	6:45 - 7:00 PM	19.94	128.70	5.04	5.43
25	7:00 - 7:15 PM	19.86	115.98	5.03	5.58
26	7:15 - 7:30 PM	19.78	101.09	5.03	5.56
27	7:30 - 7:45 PM	19.71	87.06	5.02	5.52
28	7:45 - 8:00 PM	19.64	70.88	5.00	5.46
Average		22.1	130.1	5.0	5.4

Corridor Performance Measurements				
Stats Summary	Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
Average Travel Time (min)	22.1	130.1	5.0	5.4
Average Travel Speed (mph)	59.3	10.1	69.3	68.4
Average Delay per Vehicle (min)	3.4	111.3	0.1	0.2
Max Individual Vehicle Delay (min)	5.8	130.9	0.2	0.4

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Design Year No Build
PM Peak Hour

	Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
1	SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	5,444	78	100.4%							68.4	0.2	20.6	1.0	C
2	SB I-15: Hidden Valley Pkwy On-ramp	Merge	5,455	67	100.6%	803	17	105.7%				64.2	4.1	24.6	2.2	C
3	SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp	Basic	6,249	119	101.1%							65.9	1.5	19.5	1.0	C
4	SB I-15: WB SR-91 Off-ramp	Basic	6,242	103	101.0%				1,220	39	100.8%	66.9	0.7	19.2	0.8	C
5	SB I-15: EB SR-91 Off-ramp	Diverge	5,033	73	101.3%				1,113	47	100.2%	58.8	7.8	33.5	5.0	D
6	SB I-15: EB SR-91 Off-ramp to On-ramp	Basic	3,937	68	102.0%							65.6	2.1	20.3	1.4	C
7	SB I-15: EB SR-91 On-ramp	Merge	3,937	96	102.0%	2,180	52	104.8%				63.6	0.6	21.8	0.5	C
8	SB I-15: WB SR-91 On-ramp to Magnolia Ave Off-ramp	Weave	6,124	119	103.1%	402	45	100.5%	854	54	102.9%	67.3	0.4	18.1	0.6	C
9	SB I-15: Magnolia Ave Off-ramp to On-ramp	Basic	5,710	105	103.6%							60.8	16.5	24.4	10.2	C
10	SB I-15: Magnolia Ave On-ramp	Merge	5,697	203	103.4%	943	62	102.4%				56.7	19.0	34.4	31.3	D
11	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)	Weave	6,631	399	103.1%	2,521	85	95.9%	2,199	49	98.6%	46.3	12.2	36.0	9.3	E
12	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (after EL Access)	Basic	6,902	388	101.0%							41.9	24.6	53.1	33.3	F
13	SB I-15: Ontario Ave Off-ramp	Diverge	6,893	395	100.9%				1,193	65	100.3%	34.3	22.6	63.6	30.3	F
14	SB I-15: Ontario Ave Off-ramp to On-ramp	Basic	5,573	501	98.8%							26.1	21.9	68.2	29.8	F
15	SB I-15: Ontario Ave On-ramp	Merge	5,501	330	97.5%	903	1	83.6%				21.7	13.6	54.4	18.5	F
16	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	Basic	6,348	246	94.5%				1,227	132	99.0%	23.5	9.5	69.5	17.9	F
17	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp	Basic	5,095	188	93.0%							23.2	5.5	72.1	12.3	F
18	SB I-15: EL On-ramp at Foothill Pkwy/El Cerrito Rd	Basic	5,083	196	92.7%	659	42	134.4%				20.4	2.4	67.8	6.1	F
19	SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp	Weave	5,716	390	95.7%	901	1	84.2%	2,158	158	92.2%	18.9	0.5	68.8	1.5	F
20	SB I-15: EL On-ramp at Cajalco Rd to Cajalco Rd On-ramp (4 Lane	Basic	4,260	240	90.6%	1,538	57	88.4%				19.1	1.1	74.6	2.7	F
51	SB I-15: EL On-ramp at Cajalco Rd to Cajalco Rd On-ramp (3 Lane	Basic	5,739	136	89.1%							23.8	1.6	79.9	3.8	F
21	SB I-15: Cajalco Rd On-ramp	Merge	5,736	120	89.1%	860	72	103.6%				30.5	0.7	62.2	1.4	F
22	SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	6,571	79	90.4%							58.1	1.0	37.8	0.6	E
23	SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	6,573	69	90.4%				817	18	91.7%	57.9	7.0	38.1	4.9	E
24	SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	5,752	59	90.1%							64.9	1.9	29.8	1.1	D
25	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	5,755	46	90.2%	396	30	101.4%				57.2	13.1	28.9	7.0	D
26	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp	Basic	6,136	59	90.6%							65.4	2.5	31.7	1.5	D
27	SB I-15: Temescal Canyon Rd Off-ramp	Diverge	6,136	77	90.6%				545	37	92.4%	62.4	4.5	33.4	2.7	D
28	SB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	5,585	76	90.4%							66.3	2.0	28.4	0.9	D
29	SB I-15: Temescal Canyon Rd On-ramp	Merge	5,583	77	90.3%	615	49	99.1%				57.4	12.7	29.6	7.1	D
30	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	6,175	62	90.8%							64.7	3.5	32.4	2.3	D
31	SB I-15: Indian Truck Trail Off-ramp	Diverge	6,167	76	90.7%				628	37	96.6%	56.9	14.2	39.7	13.7	E
32	SB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	5,537	76	90.0%							66.6	0.5	28.4	0.4	D
33	SB I-15: Indian Truck Trail On-ramp	Merge	5,535	76	90.0%	253	19	97.1%				67.4	0.2	23.2	0.3	C
60	SB I-15: Indian Truck Trail On-ramp to Horsethief Rd Off-ramp	Basic	5,770	76	90.0%							63.9	4.8	30.9	2.2	D
61	SB I-15: Horsethief Rd Off-ramp	Diverge	5,759	76	89.8%				975	25	96.5%	57.9	9.0	36.6	6.8	E
62	SB I-15: Horsethief Rd Off-ramp to On-ramp	Basic	4,772	52	88.4%							66.1	1.2	25.7	0.5	C
63	SB I-15: Horsethief Rd On-ramp	Merge	4,764	45	88.2%	638	54	99.6%				62.3	7.6	25.0	3.5	C
34	SB I-15: Horsethief Rd On-ramp to Lake St Off-ramp	Basic	5,387	56	89.2%							65.9	1.0	29.0	0.7	D
35	SB I-15: Lake St Off-ramp	Diverge	5,377	70	89.0%				623	38	94.4%	61.4	6.0	31.4	3.1	D
36	SB I-15: Lake St Off-ramp to On-ramp	Basic	4,730	74	87.9%							66.8	1.0	25.2	0.6	C
37	SB I-15: Lake St On-ramp	Merge	4,722	74	87.8%	180	23	94.5%				68.0	0.2	19.4	0.3	C
38	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp	Basic	4,871	62	87.4%							67.1	0.1	26.0	0.4	C
39	SB I-15: Nichols Rd Off-ramp	Diverge	4,864	60	87.3%				370	47	100.0%	65.9	0.9	27.0	0.7	D
40	SB I-15: Nichols Rd Off-ramp to On-ramp	Basic	4,493	54	86.4%							67.2	0.1	24.0	0.5	C
41	SB I-15: Nichols Rd On-ramp	Merge	4,494	47	86.4%	337	41	99.1%				66.5	0.1	20.8	0.2	C
42	SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp	Basic	4,826	76	87.1%							66.7	0.2	25.8	0.3	C
43	SB I-15: Central Ave (SR-74) Off-ramp	Diverge	4,820	66	87.0%				1,350	50	91.8%	65.9	1.7	18.9	1.0	C
44	SB I-15: Central Ave (SR-74) Off-ramp to On-ramp	Basic	3,408	72	83.7%							67.7	0.6	18.5	0.7	C
45	SB I-15: Central Ave (SR-74) On-ramp	Merge	3,406	64	83.7%	1,401	17	104.6%				65.1	0.4	19.4	0.6	C
46	SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp	Basic	4,771	76	88.2%							65.3	0.6	26.0	0.7	C
47	SB I-15: Main St Off-ramp	Diverge	4,756	75	87.9%				647	30	92.4%	63.3	3.9	27.7	2.1	D
48	SB I-15: Main St Off-ramp to On-ramp	Basic	4,070	60	86.4%							67.3	0.8	21.7	0.7	C
49	SB I-15: Main St On-ramp SB	Merge	4,049	71	86.0%	420	28	99.9%				67.4	0.4	19.5	0.8	C
50	SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp	Basic	4,448	62	86.7%							67.3	0.3	23.5	0.7	C

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 1 - SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

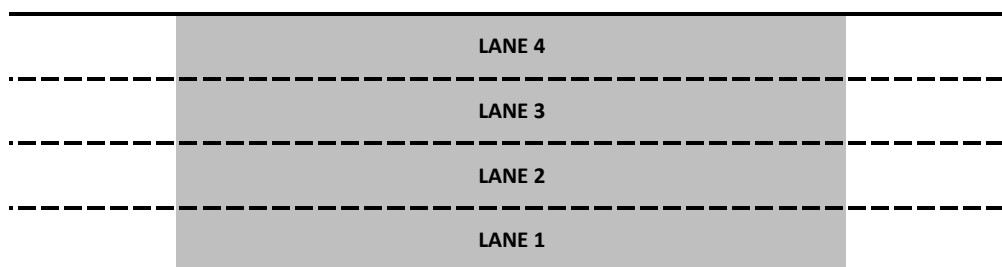
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,389	23	66.4	0.5	21.8	1.3	C
3	1,511	13	64.5	0.7	21.8	1.5	C
2	1,369	13	63.9	1.3	22.9	1.1	C
1	1,180	16	63.1	1.4	21.0	1.5	C
Area	5,448	64	64.5	0.9	21.9	1.3	C
Total	5,448	64	64.5	0.9	21.9	1.3	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,420	5,448	64	100.5%	1,784
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Segment Type - Merge

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	803	17	1		
Total	803	17	Total		

Segment
Length
(ft)

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,420	5,459	102	100.7%	1,702
On-ramp	760	803	17	105.7%	
Off-ramp					

Diagram illustrating a five-lane highway cross-section. The lanes are labeled LANE 1 through LANE 5 from left to right. Lanes 2 and 3 are shaded gray. Lane 1 is bounded by a solid black line on the left and a dashed black line on the right. Lane 2 is bounded by a dashed black line on the left and a solid black line on the right. Lane 3 is bounded by a solid black line on the left and a dashed black line on the right. Lane 4 is bounded by a dashed black line on the left and a solid black line on the right. Lane 5 is bounded by a solid black line on the left and a dashed black line on the right. The right side of the diagram shows a solid black line and a dashed black line.

9/13/2021

Location 3 - SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp

Segment Type - Basic

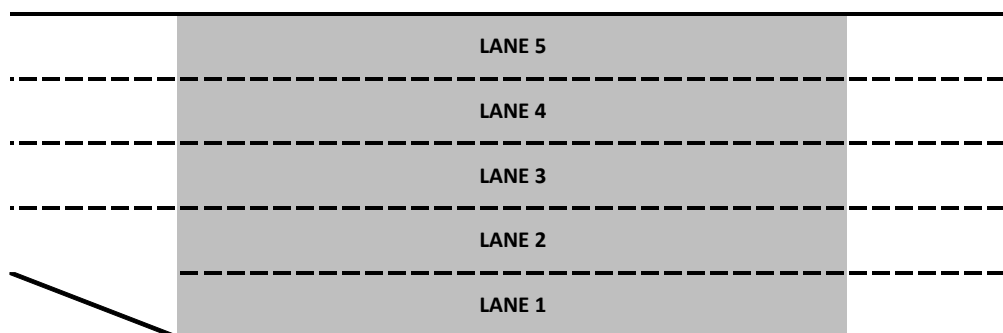
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,644	50	64.0	1.6	26.9	2.9	D
4	1,756	21	61.5	2.6	29.4	1.6	D
3	1,570	13	57.9	2.7	29.3	1.6	D
2	914	20	62.0	2.0	14.0	0.7	B
1	362	17	65.5	2.0	5.5	0.8	A
Area	6,244	121	61.5	2.1	21.0	1.4	C
Total	6,244	121	61.5	2.1	21.0	1.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,180	6,244	121	101.0%	1,019
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 4 - SB I-15: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,726	50	65.1	1.0	24.4	2.3	C
4	1,721	24	61.9	1.4	31.4	1.6	D
3	1,554	16	59.1	2.2	28.7	1.2	D
2	750	11	65.2	0.3	10.7	0.7	A
1	488	11	69.0	0.6	7.9	0.5	A
Area	6,238	112	62.9	1.2	20.6	1.0	C
Total	6,238	112	62.9	1.2	20.6	1.0	C

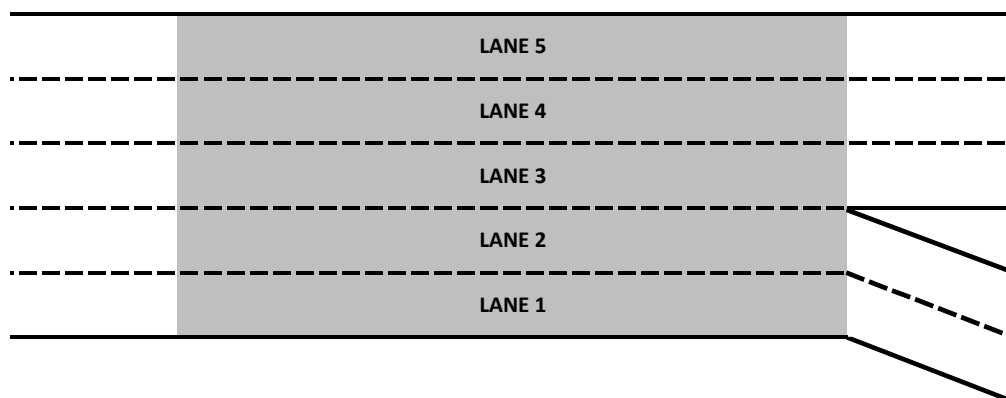
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	658	13
1	562	31
Total	1,220	34

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,180	6,238	112	100.9%	1,499
On-ramp					
Off-ramp	1,210	1,220	34	100.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 5 - SB I-15: EB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,574	40	61.8	4.1	25.6	3.7	C
2	1,892	19	56.3	6.4	29.3	3.3	D
1	1,564	25	52.0	3.6	37.1	2.9	E
Area	3,456	44	54.0	4.7	33.2	3.1	D
Total	5,030	84	56.4	4.4	30.5	3.2	D

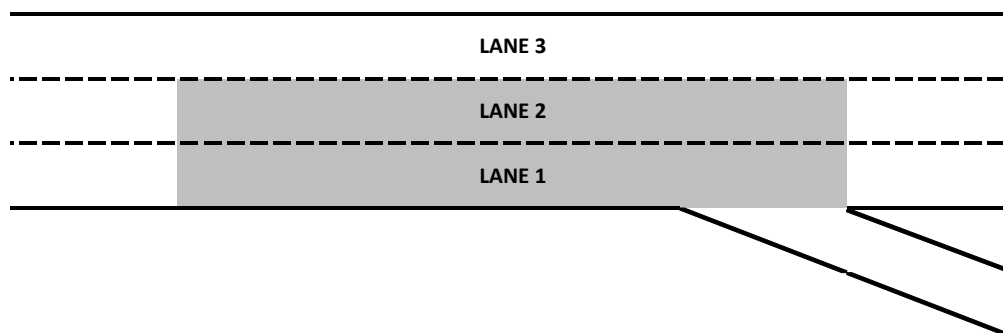
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,110	51
Total	1,110	51

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,970	5,030	84	101.2%	1,545
On-ramp					
Off-ramp	1,110	1,110	51	100.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 6 - SB I-15: EB SR-91 Off-ramp to On-ramp

Segment Type - Basic

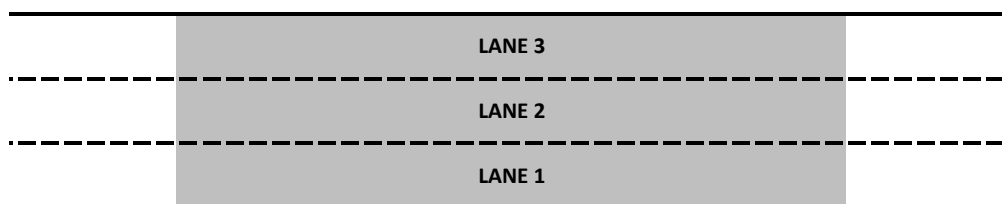
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,394	49	65.0	1.0	22.0	1.8	C
2	1,153	18	62.6	1.9	20.8	1.0	C
1	1,384	23	59.9	2.0	21.2	1.6	C
Area	3,930	90	62.6	1.5	21.3	1.4	C
Total	3,930	90	62.6	1.5	21.3	1.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,860	3,930	90	101.8%	1,549
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 7 - SB I-15: EB SR-91 On-ramp

Segment Type - Merge

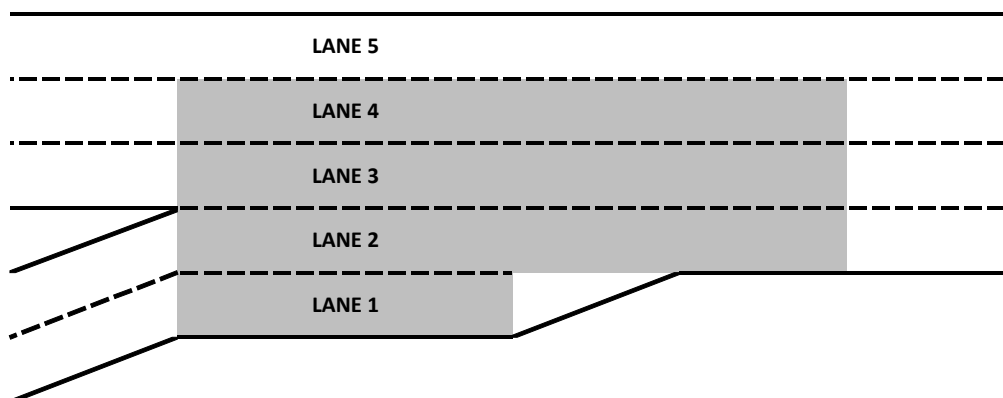
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,388	55	59.6	10.4	26.2	7.4	D
4	1,179	22	57.2	11.1	26.1	7.1	D
3	1,366	16	51.6	12.9	32.0	10.9	D
2	1,046	33	47.2	14.8	42.0	15.7	E
1	1,197	81	24.5	12.1	8.0	7.7	A
Area	4,787	152	50.9	13.7	28.9	10.1	D
Total	6,175	207	53.0	12.8	28.0	9.0	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2	1,046	33	2		
1	1,197	81	1		
Total	2,243	108	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,860	3,932	99	101.9%	1,370
On-ramp	2,080	2,243	108	107.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 8 - SB I-15: WB SR-91 On-ramp to Magnolia Ave Off-ramp

Segment Type - Weave

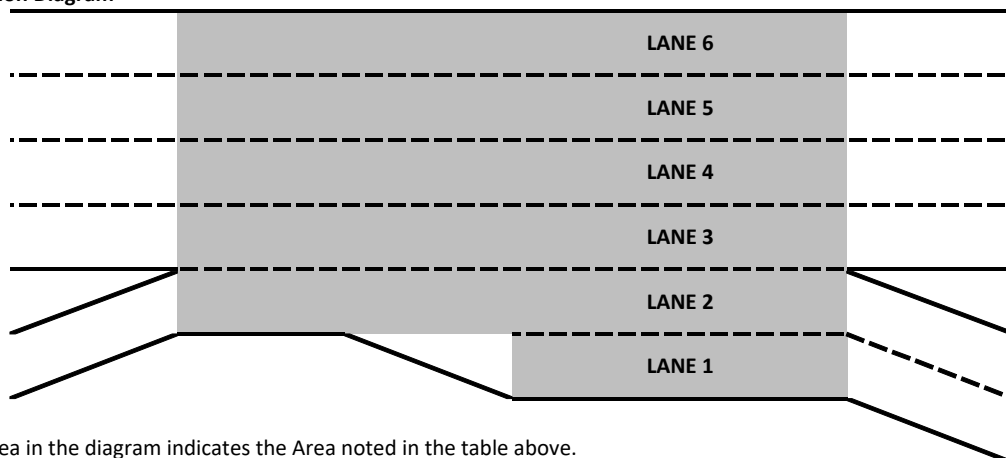
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6			49.9	18.0	38.9	18.5	E
5	1,560	39	49.4	17.4	38.2	17.3	E
4	1,481	25	47.8	17.0	37.0	17.4	E
3	1,342	49	46.4	16.6	36.8	17.5	E
2	1,821	22	50.7	3.3	8.6	1.1	A
1	402	45	32.8	1.7	2.0	0.7	A
Area	6,606	180	50.0	15.9	29.6	12.5	D
Total	6,606	180	50.0	15.9	29.6	12.5	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2	585	47
1	402	45	1	273	62
Total	402	45	Total	857	59

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,940	6,204	135	104.4%	2,539
On-ramp	400	402	45	100.5%	
Off-ramp	830	857	59	103.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 9 - SB I-15: Magnolia Ave Off-ramp to On-ramp

Segment Type - Basic

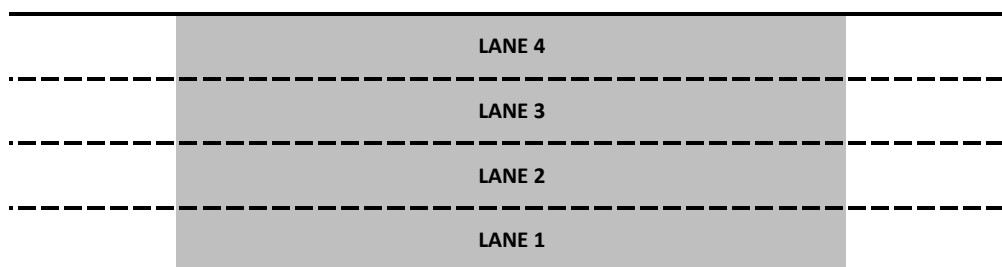
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,644	28	42.3	22.4	52.5	27.4	F
3	1,561	50	41.1	21.8	51.6	27.4	F
2	1,356	60	39.0	22.0	51.2	29.2	F
1	1,295	55	38.3	22.2	50.4	29.0	F
Area	5,856	194	40.3	22.1	51.2	28.1	F
Total	5,856	194	40.3	22.1	51.2	28.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,510	5,856	194	106.3%	2,362
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 10 - SB I-15: Magnolia Ave On-ramp

Segment Type - Merge

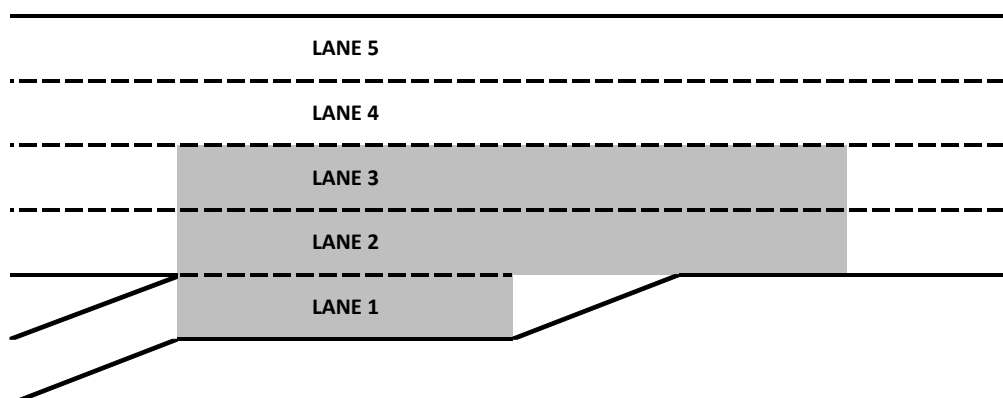
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7			34.3	0.5	7.1	0.6	A
6			32.4	1.9	9.8	1.9	A
5	1,729	69	42.4	22.1	57.4	28.1	F
4	1,550	53	39.7	22.1	60.4	30.7	F
3	1,340	55	38.2	21.3	61.6	31.5	F
2	1,276	63	36.2	20.9	59.1	31.8	F
1	943	62	18.2	6.0	7.4	4.6	A
Area	3,558	180	37.3	20.7	48.3	25.1	F
Total	6,836	301	42.8	18.8	43.7	19.9	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	943	62	1		
Total	943	62	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,510	5,894	240	107.0%	1,504
On-ramp	920	943	62	102.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 11 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7	1,742	62	47.0	1.1	11.2	1.7	B
6	1,594	61	42.8	4.3	12.0	1.5	B
5	1,586	51	45.1	17.3	52.8	21.9	F
4	1,506	51	42.2	17.5	54.5	22.9	F
3	415	103	39.4	18.0	58.4	25.6	F
2	1,048	37	36.9	19.3	58.1	28.0	F
1	1,471	52	4.8	2.5	2.2	1.9	A
Area	9,360	416	44.9	15.6	41.3	15.4	E
Total	9,360	416	44.9	15.6	41.3	15.4	E

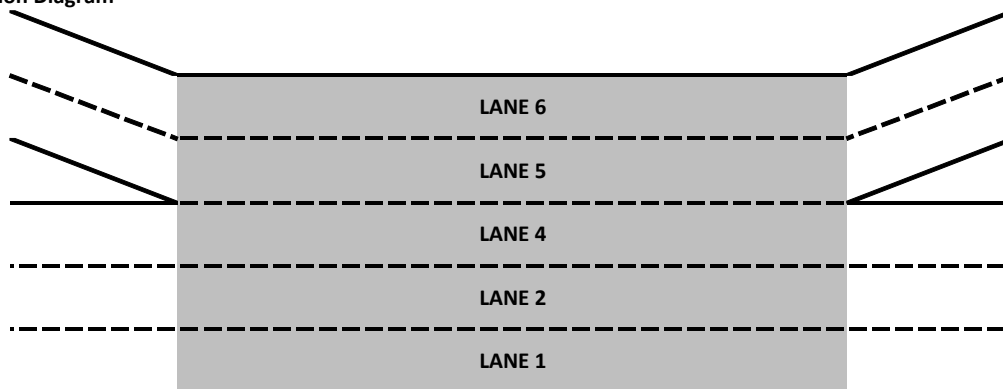
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,048	37
1	1,471	52
Total	2,519	79

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,152	139
1	1,057	128
Total	2,209	59

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,430	6,841	337	106.4%	3,337
On-ramp	2,630	2,519	79	95.8%	
Off-ramp	2,230	2,209	59	99.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 12 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (after EL Access)

Segment Type - Basic

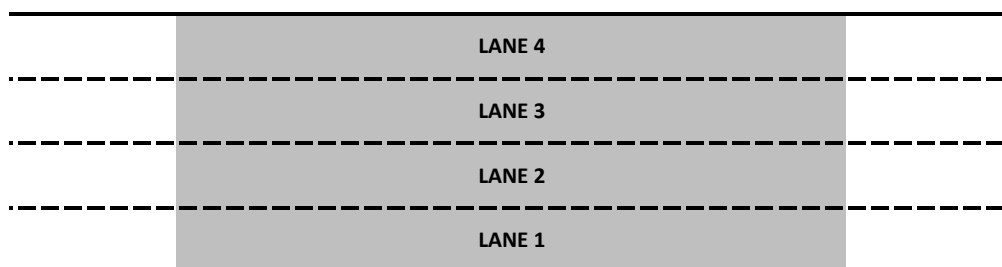
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,967	101	52.3	12.8	43.3	14.9	E
3	1,752	82	48.7	13.0	42.6	14.5	E
2	1,870	16	42.0	15.1	54.1	19.2	F
1	1,671	52	35.8	18.4	60.6	25.6	F
Area	7,260	250	45.1	14.4	47.9	16.5	F
Total	7,260	250	45.1	14.4	47.9	16.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,830	7,260	250	106.3%	394
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 13 - SB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,963	93	49.7	12.3	46.9	15.3	F
3	1,787	86	46.4	11.1	45.0	14.3	F
2	1,862	25	38.8	11.9	46.8	14.6	F
1	1,649	57	36.0	11.1	59.6	15.8	F
Area	3,511	81	37.3	11.3	53.1	15.0	F
Total	7,261	261	43.1	11.2	48.5	14.5	F

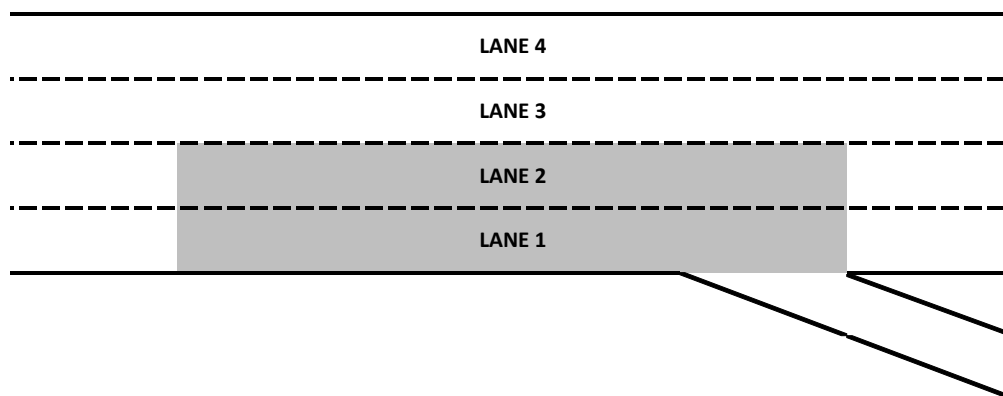
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,248	75
Total	1,248	75

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,830	7,261	261	106.3%	1,504
On-ramp					
Off-ramp	1,190	1,248	75	104.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 14 - SB I-15: Ontario Ave Off-ramp to On-ramp

Segment Type - Basic

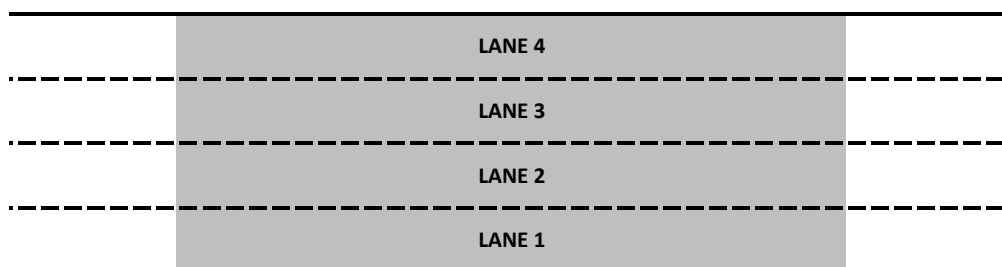
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,875	74	41.6	19.1	54.8	25.1	F
3	1,888	39	38.5	18.9	57.1	26.2	F
2	1,692	12	35.0	18.5	59.0	30.8	F
1	576	89	46.7	15.8	16.4	12.0	B
Area	6,031	214	39.4	18.3	45.8	22.3	F
Total	6,031	214	39.4	18.3	45.8	22.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,640	6,031	214	106.9%	2,820
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 15 - SB I-15: Ontario Ave On-ramp

Segment Type - Merge

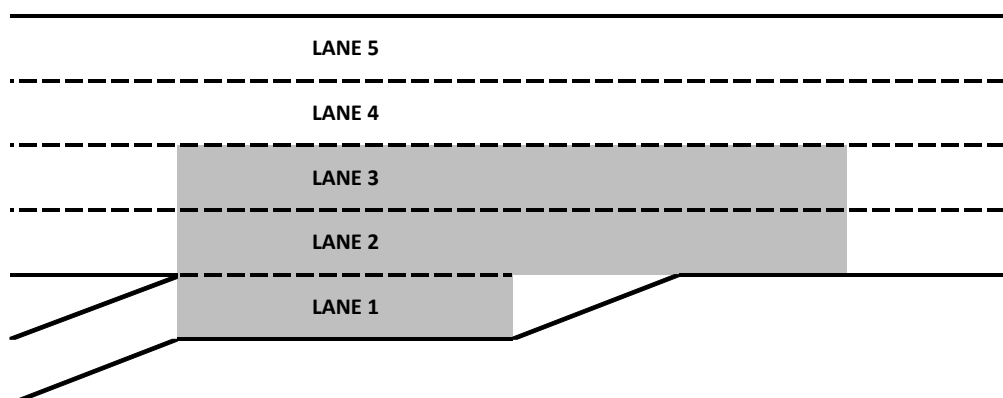
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,873	33	37.5	22.9	68.9	33.1	F
4	1,671	18	35.0	21.3	69.8	33.8	F
3	1,655	28	33.0	19.9	67.3	33.6	F
2	819	76	42.0	13.3	34.3	14.3	D
1	906	6	26.7	1.6	2.5	0.3	A
Area	3,380	110	37.2	16.4	37.0	15.9	E
Total	6,923	161	36.8	19.7	50.3	22.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	906	6	1		
Total	906	6	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,640	6,017	155	106.7%	1,494
On-ramp	1,080	906	6	83.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 16 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,064	30	41.7	19.6	58.7	24.4	F
3	1,892	32	40.5	18.8	56.1	25.6	F
2	1,636	86	38.8	17.3	52.9	26.2	F
1	1,334	42	44.5	10.6	36.8	10.3	E
Area	6,925	189	41.4	16.4	49.8	19.7	F
Total	6,925	189	41.4	16.4	49.8	19.7	F

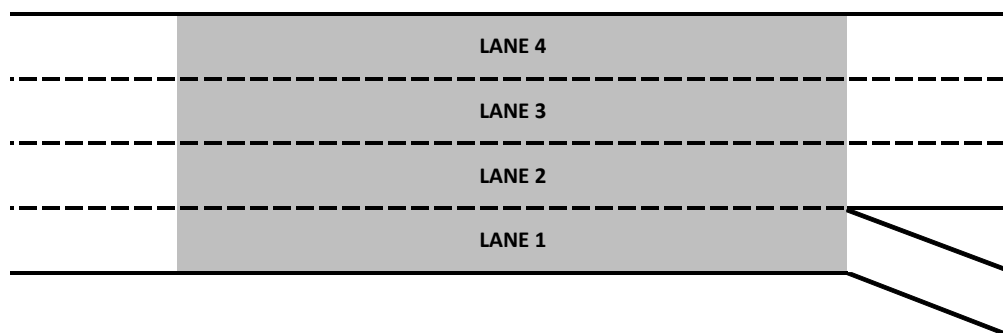
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,326	91
Total	1,326	91

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,720	6,925	189	103.1%	738
On-ramp					
Off-ramp	1,240	1,326	91	106.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 17 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp

Segment Type - Basic

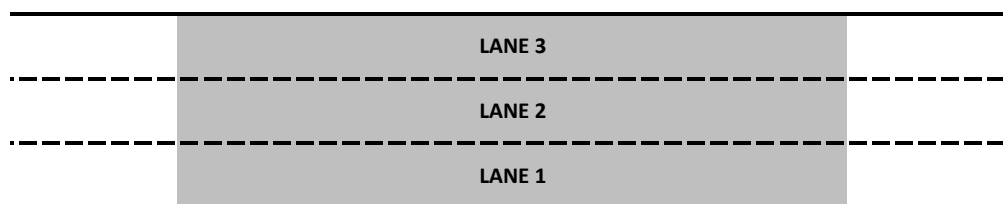
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,064	16	44.1	16.1	51.2	15.2	F
2	1,855	32	42.2	15.6	49.2	17.6	F
1	1,693	62	40.3	15.2	48.1	19.3	F
Area	5,611	109	42.4	15.8	49.4	17.3	F
Total	5,611	109	42.4	15.8	49.4	17.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,480	5,611	109	102.4%	754
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 18 - SB I-15: EL On-ramp at Foothill Pkwy/El Cerrito Rd

Segment Type - Basic

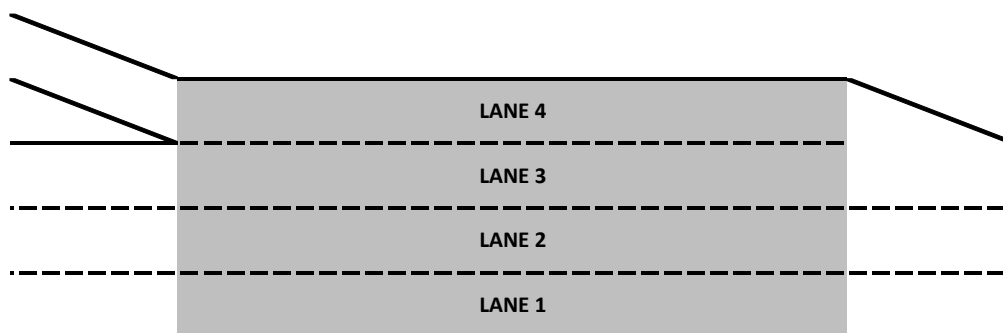
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,052	11	64.6	2.2	6.5	2.2	A
3	1,854	40	46.7	14.3	49.8	14.2	F
2	1,707	49	44.1	12.7	47.8	13.6	F
1	660	49	43.5	11.8	43.2	14.2	E
Area	6,272	148	46.3	12.0	36.0	10.2	E
Total	6,272	148	46.3	12.0	36.0	10.2	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	660	49	1		
Total	660	49	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,480	5,613	100	102.4%	603
On-ramp	490	660	49	134.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 19 - SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,809	92	53.8	2.9	28.3	1.4	D
3	2,199	19	46.1	3.0	44.3	4.2	E
2	2,248	44	43.9	2.8	47.8	5.1	F
1	901	6	47.7	1.9	31.1	4.2	D
Area	7,157	161	47.0	2.7	38.0	3.6	E
Total	7,157	161	47.0	2.7	38.0	3.6	E

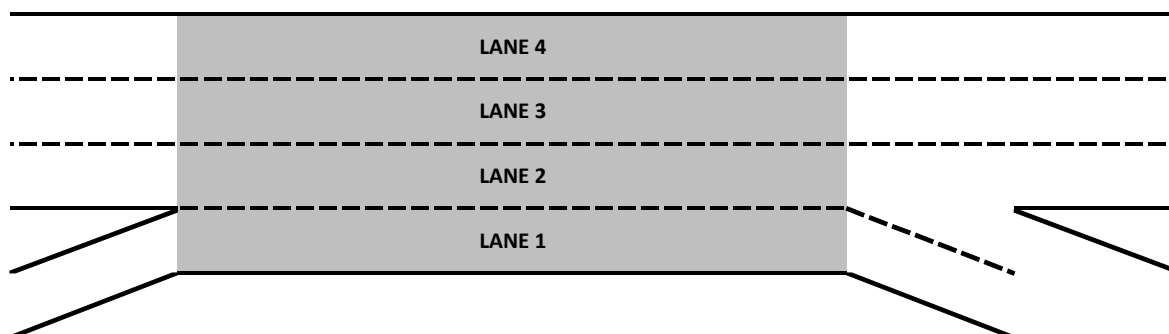
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	901	6
Total	901	6

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	700	54
1	1,643	65
Total	2,343	88

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,970	6,256	155	104.8%	3,331
On-ramp	1,070	901	6	84.2%	
Off-ramp	2,340	2,343	88	100.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 20 - SB I-15: EL On-ramp at Cajalco Rd to Cajalco Rd On-ramp (4 Lane)

Segment Type - Basic

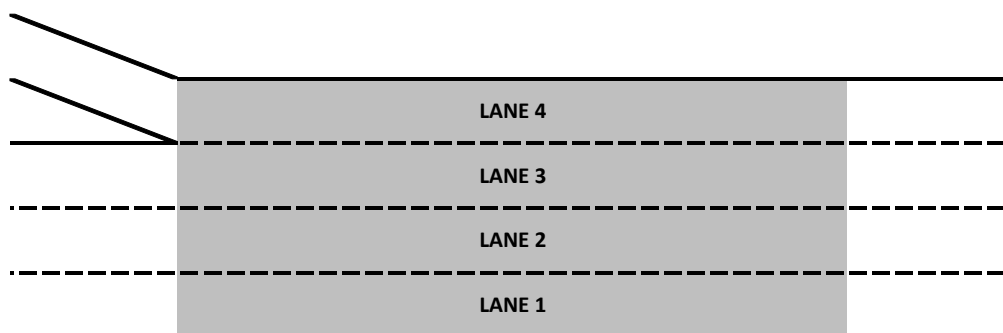
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,013	28	61.3	13.0	31.5	14.4	D
3	1,669	47	59.4	15.3	35.7	17.2	E
2	1,121	22	56.8	13.6	29.9	16.6	D
1	1,549	50	56.0	10.9	24.7	13.0	C
Area	6,351	148	58.8	13.2	30.0	14.2	D
Total	6,351	148	58.8	13.2	30.0	14.2	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,549	50	1		
Total	1,549	50	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,700	4,802	98	102.2%	2,078
On-ramp	1,740	1,549	50	89.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 21 - SB I-15: Cajalco Rd On-ramp

Segment Type - Merge

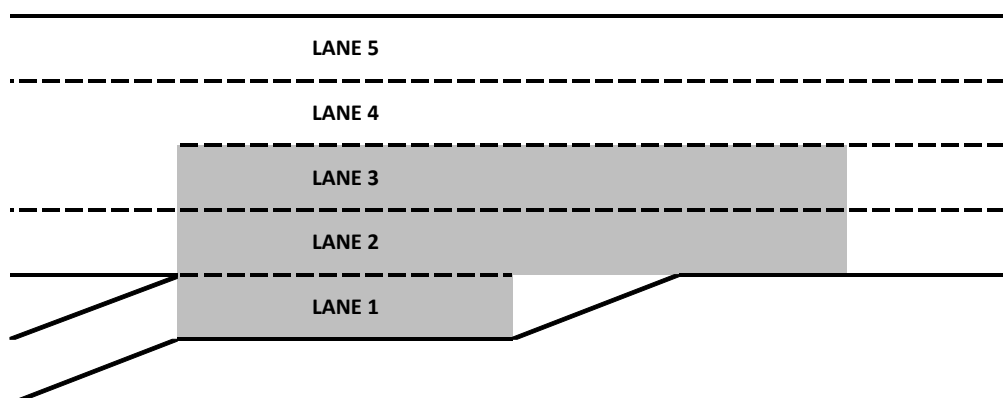
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,841	49	18.1	6.1	38.1	13.1	E
4	1,722	96	31.9	9.1	71.9	18.9	F
3	1,401	43	29.0	9.3	67.9	19.9	F
2	1,360	146	33.2	11.6	54.1	18.2	F
1	859	73	38.4	12.2	20.3	10.5	C
Area	3,619	262	32.1	10.2	46.6	15.8	F
Total	7,181	407	32.0	9.6	54.0	16.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	859	73	1		
Total	859	73	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,440	6,323	334	98.2%	1,500
On-ramp	830	859	73	103.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 22 - SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

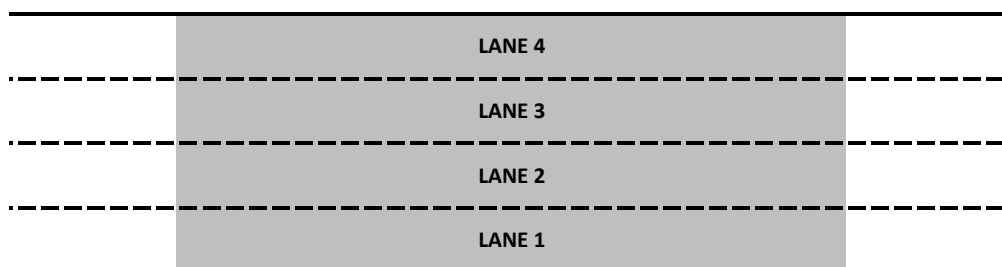
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,343	29	55.5	11.4	43.4	11.1	E
3	2,133	30	52.0	10.3	43.0	10.3	E
2	2,040	21	48.2	9.6	42.7	10.2	E
1	619	25	60.0	5.0	10.7	1.9	A
Area	7,134	105	52.8	9.9	34.7	7.9	D
Total	7,134	105	52.8	9.9	34.7	7.9	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,270	7,134	105	98.1%	1,675
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 23 - SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

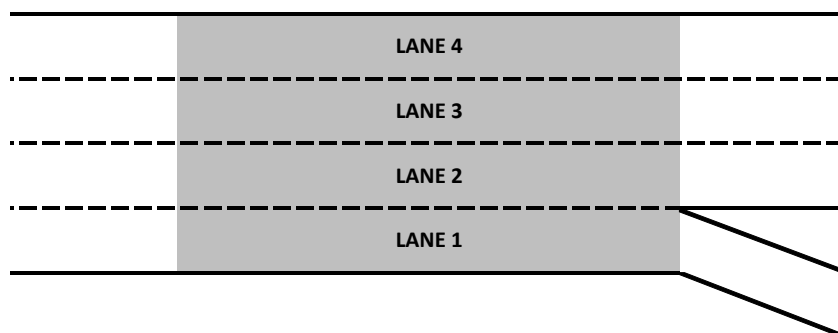
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,351	45	53.8	13.9	45.7	11.7	F
3	2,122	20	51.5	12.8	43.9	12.0	E
2	1,898	32	48.4	11.6	39.7	11.9	E
1	765	16	60.2	8.6	14.1	2.7	B
Area	7,135	112	52.5	11.3	35.2	8.1	E
Total	7,135	112	52.5	11.3	35.2	8.1	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	871	28
Total			Total	871	28

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,270	7,135	112	98.1%	1,498
On-ramp					
Off-ramp	890	871	28	97.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 24 - SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

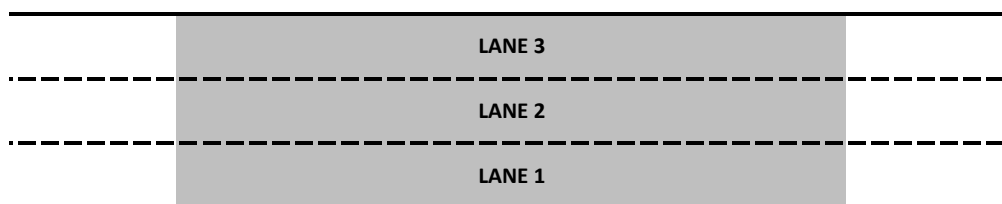
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,300	11	42.8	14.6	57.8	15.3	F
2	2,118	20	40.6	13.2	56.0	15.5	F
1	1,804	30	39.4	12.2	51.1	15.8	F
Area	6,221	61	41.1	13.5	54.9	15.6	F
Total	6,221	61	41.1	13.5	54.9	15.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,380	6,221	61	97.5%	2,237
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 25 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

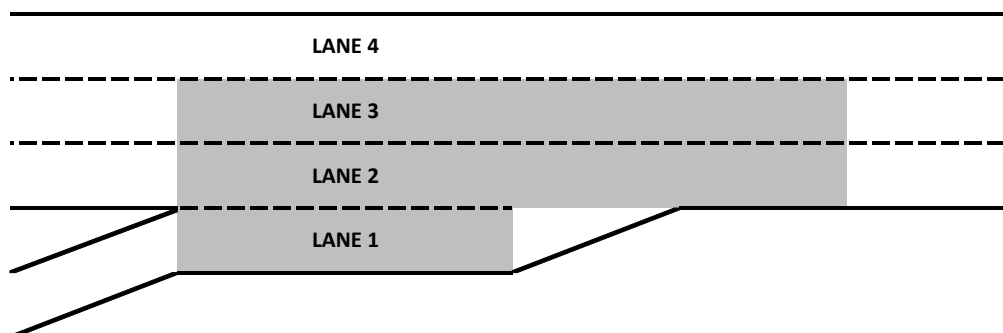
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,285	15	36.2	4.1	64.9	6.2	F
3	2,066	25	33.4	4.2	68.3	8.0	F
2	1,850	21	31.3	4.7	64.8	9.6	F
1	396	30	21.1	3.4	4.2	1.5	A
Area	4,312	77	32.1	4.6	53.3	7.3	F
Total	6,597	92	33.5	4.5	56.4	6.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	396	30	1		
Total	396	30	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,380	6,201	62	97.2%	1,502
On-ramp	390	396	30	101.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 26 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

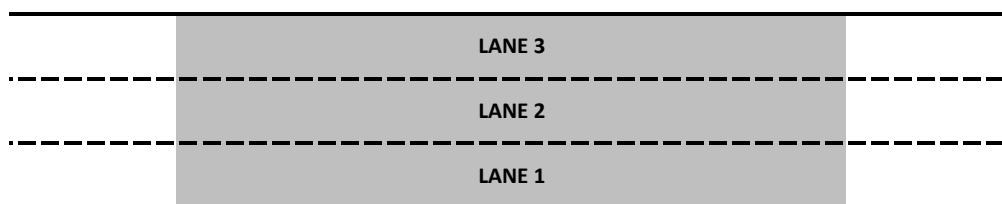
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,423	9	57.7	3.5	41.7	2.2	E
2	2,171	37	54.3	2.9	40.8	2.3	E
1	1,923	19	52.3	2.6	39.2	2.6	E
Area	6,516	66	54.9	3.0	40.5	2.4	E
Total	6,516	66	54.9	3.0	40.5	2.4	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,770	6,516	66	96.2%	7,458
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 27 - SB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,342	16	49.3	8.6	48.5	6.8	F
2	2,059	32	45.7	8.5	47.7	7.7	F
1	2,091	25	43.9	6.0	48.8	6.6	F
Area	4,149	57	44.8	7.2	48.2	7.1	F
Total	6,491	73	46.4	7.7	48.2	7.0	F

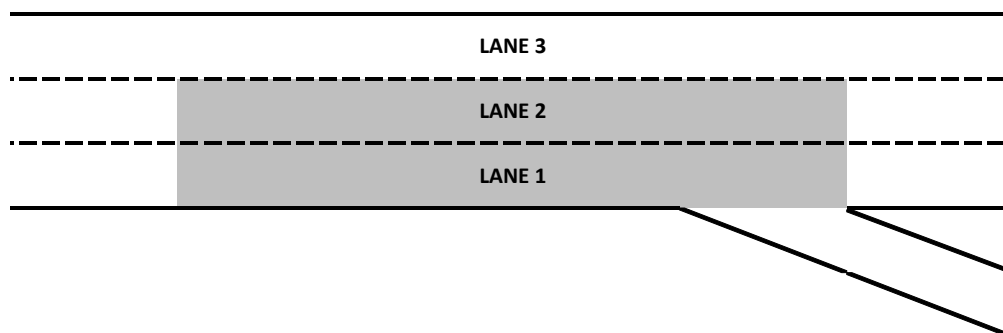
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	572	39
Total	572	39

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,770	6,491	73	95.9%	1,502
On-ramp					
Off-ramp	590	572	39	96.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 28 - SB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

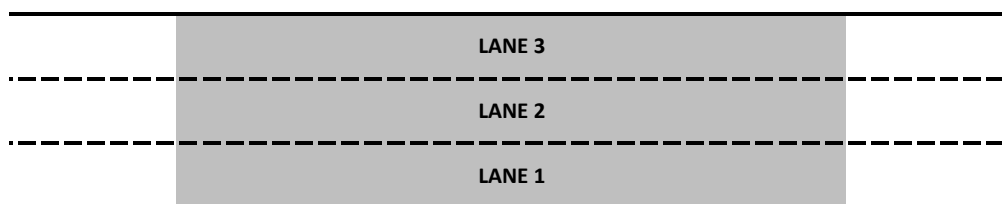
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,207	40	47.6	16.5	51.5	18.5	F
2	1,960	28	46.2	15.4	48.8	18.1	F
1	1,727	30	44.6	15.1	46.4	19.2	F
Area	5,893	97	46.2	15.7	48.9	18.6	F
Total	5,893	97	46.2	15.7	48.9	18.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,180	5,893	97	95.4%	2,526
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 29 - SB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

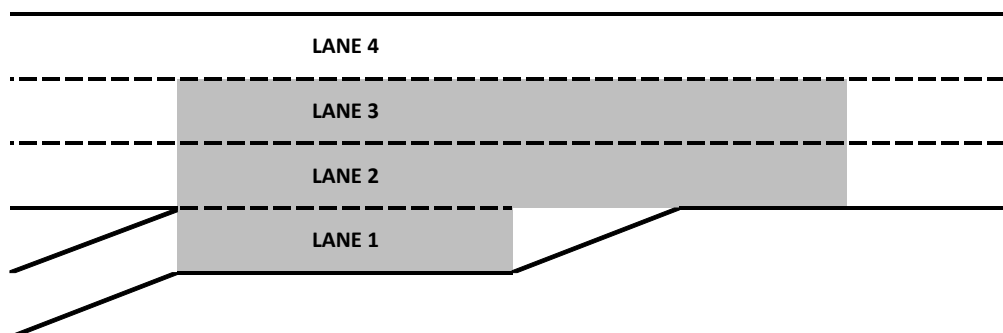
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,145	24	35.8	4.2	63.4	7.1	F
3	1,940	20	33.3	3.5	66.4	7.3	F
2	1,792	28	32.8	3.3	62.7	7.3	F
1	615	49	27.5	0.4	3.1	0.3	A
Area	4,346	96	33.2	3.3	50.1	5.5	F
Total	6,491	120	34.1	3.6	53.7	5.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	615	49	1		
Total	615	49	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,180	5,877	71	95.1%	1,502
On-ramp	620	615	49	99.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 30 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

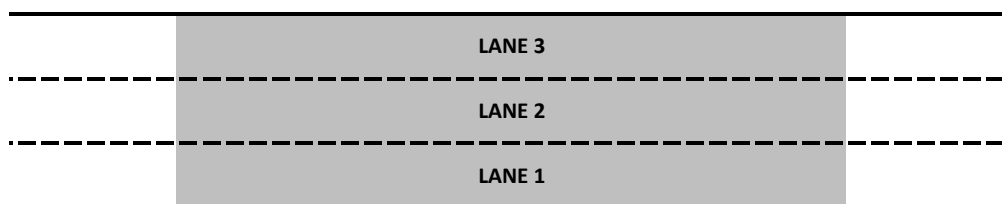
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,368	10	55.6	4.8	43.1	4.4	E
2	2,124	33	52.8	4.6	42.5	4.4	E
1	1,932	11	51.4	4.5	41.3	4.6	E
Area	6,423	54	53.4	4.6	42.3	4.5	E
Total	6,423	54	53.4	4.6	42.3	4.5	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,800	6,423	54	94.4%	8,913
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 31 - SB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,267	26	52.0	8.5	46.6	7.6	F
2	2,132	25	46.9	9.1	46.6	9.2	F
1	1,969	21	44.2	7.2	50.3	7.9	F
Area	4,100	46	45.5	8.1	48.4	8.6	F
Total	6,367	72	47.8	8.2	47.6	8.1	F

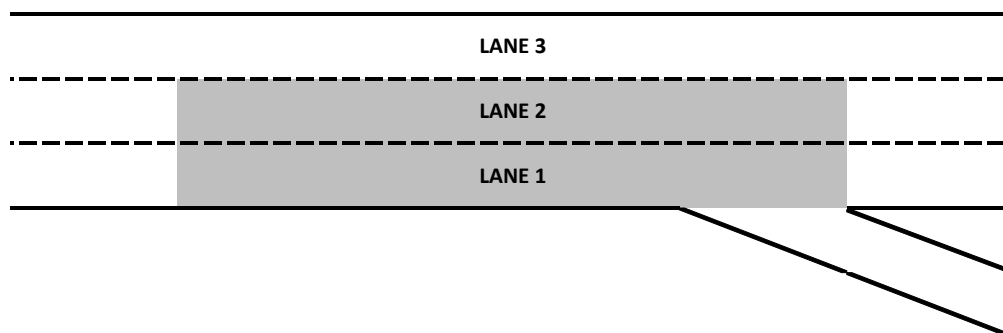
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	635	86
Total	635	86

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,800	6,367	72	93.6%	1,499
On-ramp					
Off-ramp	650	635	86	97.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 32 - SB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

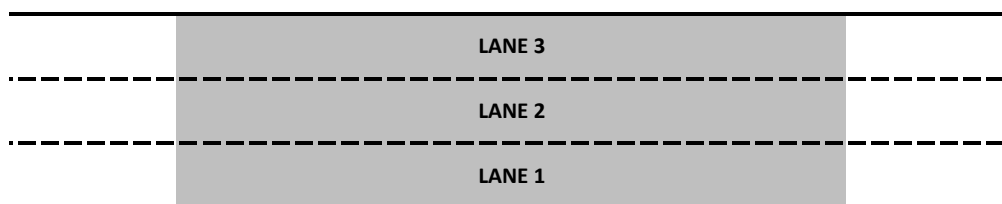
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,167	23	62.6	1.3	35.7	1.5	E
2	1,873	23	60.4	1.1	33.3	1.1	D
1	1,664	13	59.7	1.6	30.2	1.2	D
Area	5,703	58	61.0	1.3	33.1	1.2	D
Total	5,703	58	61.0	1.3	33.1	1.2	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,150	5,703	58	92.7%	3,127
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 33 - SB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

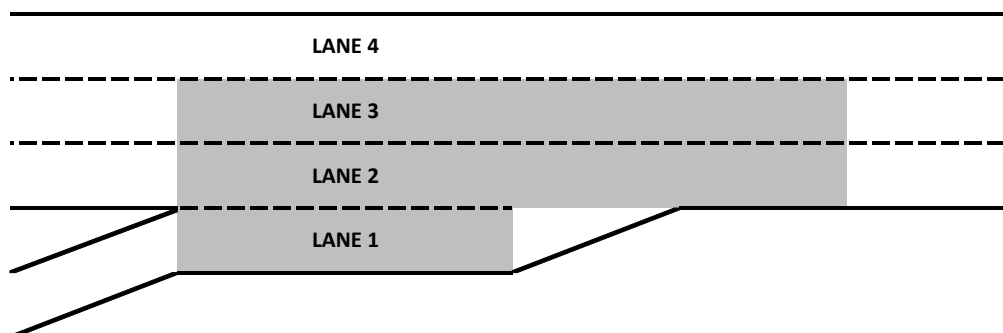
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,145	19	59.5	7.7	38.2	5.6	E
3	1,873	17	56.6	8.0	38.1	5.8	E
2	1,680	23	55.5	7.8	35.5	6.1	E
1	253	19	30.3	1.2	0.6	0.1	A
Area	3,805	59	56.3	8.1	29.0	4.7	D
Total	5,950	78	57.5	7.9	31.6	4.9	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	253	19	1		
Total	253	19	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,150	5,697	59	92.6%	1,501
On-ramp	260	253	19	97.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 60 - SB I-15: Indian Truck Trail On-ramp to Horsethief Rd Off-ramp

Segment Type - Basic

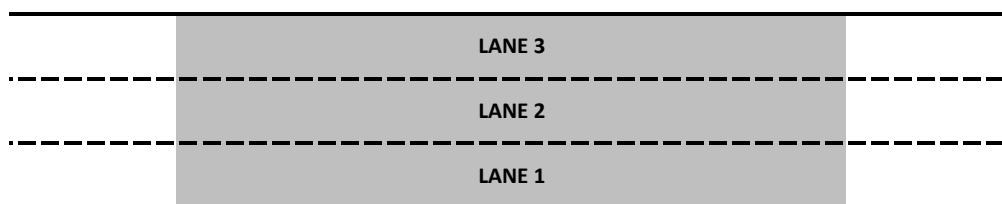
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,156	16	58.6	2.0	37.2	1.1	E
2	1,933	25	54.8	2.2	39.3	1.0	E
1	1,868	13	53.0	1.9	38.1	2.2	E
Area	5,956	54	55.5	2.0	38.1	1.3	E
Total	5,956	54	55.5	2.0	38.1	1.3	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,410	5,956	54	92.9%	2,521
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 61 - SB I-15: Horsethief Rd Off-ramp

Segment Type - Diverge

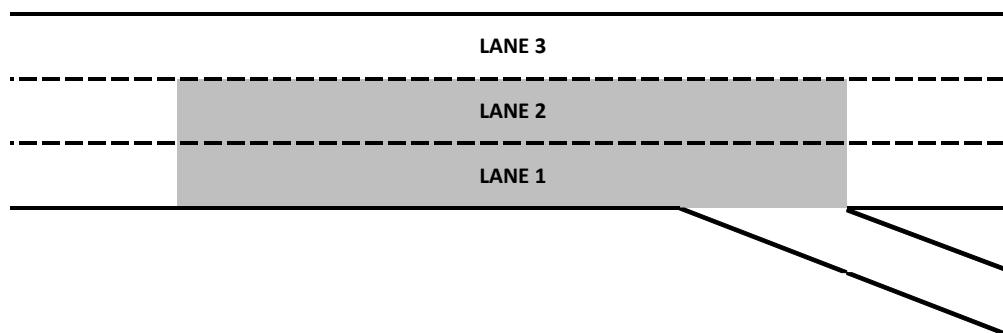
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,049	30	55.9	7.4	40.3	6.3	E
2	2,022	18	49.4	10.5	40.9	8.9	E
1	1,884	6	46.2	9.1	48.2	9.5	F
Area	3,906	23	47.7	9.7	44.5	9.2	E
Total	5,955	53	50.6	8.9	42.7	7.9	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	1,017	42
Total			Total	1,017	42

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,410	5,955	53	92.9%	1,499
On-ramp					
Off-ramp	1,010	1,017	42	100.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 62 - SB I-15: Horsethief Rd Off-ramp to On-ramp

Segment Type - Basic

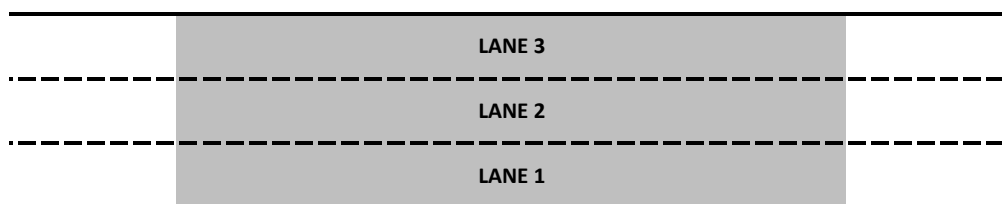
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,915	33	64.0	0.9	31.8	1.4	D
2	1,659	24	62.2	1.1	29.0	0.8	D
1	1,337	35	61.5	0.6	24.5	1.8	C
Area	4,911	91	62.7	0.8	28.4	1.2	D
Total	4,911	91	62.7	0.8	28.4	1.2	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,400	4,911	91	90.9%	2,801
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 63 - SB I-15: Horsethief Rd On-ramp

Segment Type - Merge

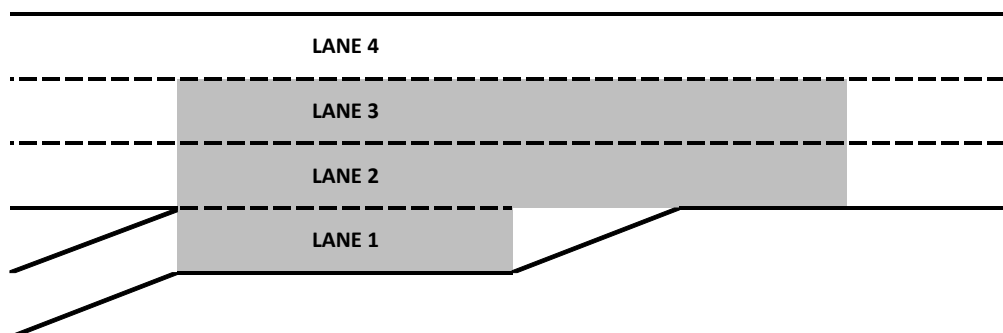
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,872	33	61.5	7.4	33.0	5.6	D
3	1,640	16	58.8	6.9	34.0	6.1	D
2	1,383	36	56.6	7.6	31.4	6.1	D
1	638	54	27.6	1.0	1.5	0.3	A
Area	3,661	107	57.8	7.2	26.4	4.9	D
Total	5,532	140	59.1	7.3	28.2	5.1	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	638	54	1		
Total	638	54	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,400	4,895	86	90.6%	1,497
On-ramp	640	638	54	99.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 34 - SB I-15: Horsethief Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

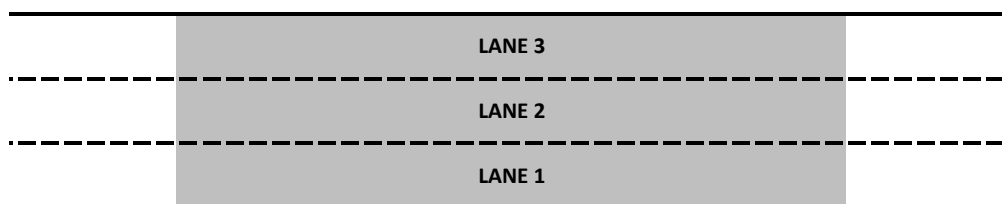
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,028	19	62.5	1.0	33.4	1.4	D
2	1,846	12	60.0	1.2	33.5	1.2	D
1	1,634	23	59.4	1.1	31.0	1.6	D
Area	5,507	54	60.7	1.0	32.6	1.3	D
Total	5,507	54	60.7	1.0	32.6	1.3	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,040	5,507	54	91.2%	5,189
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 35 - SB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,926	23	61.0	4.9	33.9	2.8	D
2	1,810	23	56.4	6.5	32.5	3.5	D
1	1,756	27	53.0	3.5	36.2	2.8	E
Area	3,566	49	54.7	4.8	34.3	3.1	D
Total	5,492	72	56.9	4.8	34.1	3.0	D

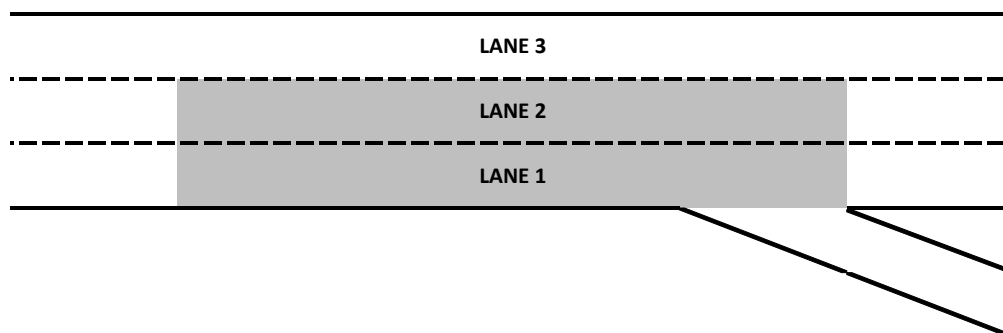
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	629	61
Total	629	61

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,040	5,492	72	90.9%	1,501
On-ramp					
Off-ramp	660	629	61	95.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 36 - SB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

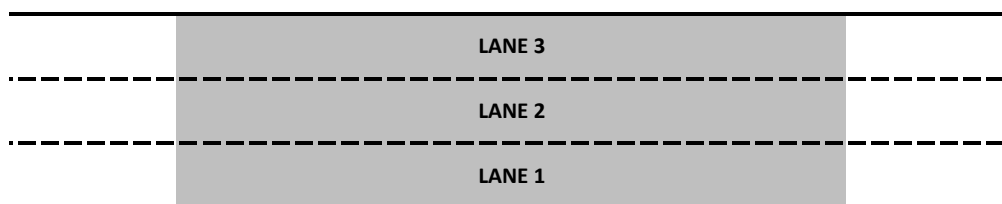
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,870	17	64.3	0.6	31.2	1.0	D
2	1,611	11	62.4	1.0	27.9	1.5	D
1	1,359	22	61.6	1.3	24.3	1.0	C
Area	4,839	49	62.9	0.8	27.8	1.1	D
Total	4,839	49	62.9	0.8	27.8	1.1	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,380	4,839	49	89.9%	3,287
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 37 - SB I-15: Lake St On-ramp

Segment Type - Merge

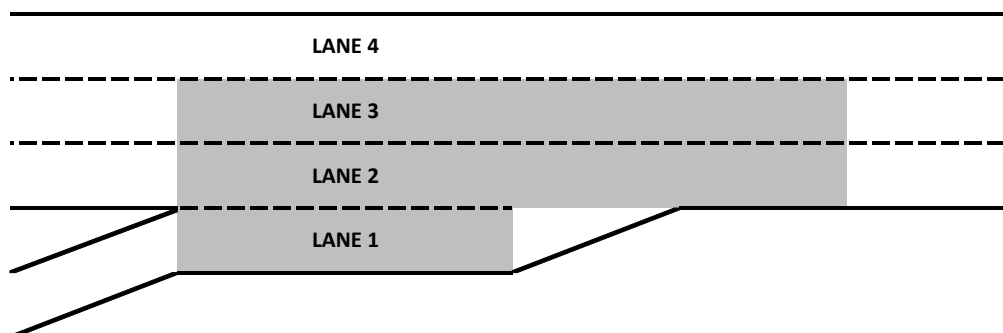
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,832	25	63.4	5.1	30.9	3.2	D
3	1,611	10	61.7	4.5	29.5	3.2	D
2	1,395	16	60.8	5.2	26.8	3.4	D
1	180	23	38.8	1.4	0.4	0.1	A
Area	3,185	49	61.5	4.4	21.4	2.5	C
Total	5,016	74	62.2	4.6	24.0	2.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	180	23	1		
Total	180	23	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,380	4,837	51	89.9%	1,500
On-ramp	190	180	23	94.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 38 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

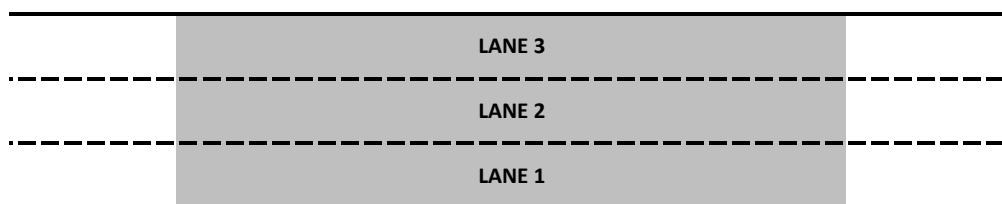
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,856	22	63.4	1.1	30.5	1.1	D
2	1,673	16	61.5	1.7	29.7	1.2	D
1	1,462	17	60.3	2.1	27.0	1.6	D
Area	4,991	55	61.8	1.6	29.0	1.2	D
Total	4,991	55	61.8	1.6	29.0	1.2	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,570	4,991	55	89.6%	8,752
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 39 - SB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,780	18	64.2	1.1	29.7	1.4	D
2	1,697	29	61.2	1.1	28.9	1.1	D
1	1,486	16	58.0	1.7	29.2	0.9	D
Area	3,183	45	59.7	1.3	29.0	0.7	D
Total	4,963	64	61.3	1.2	29.2	0.9	D

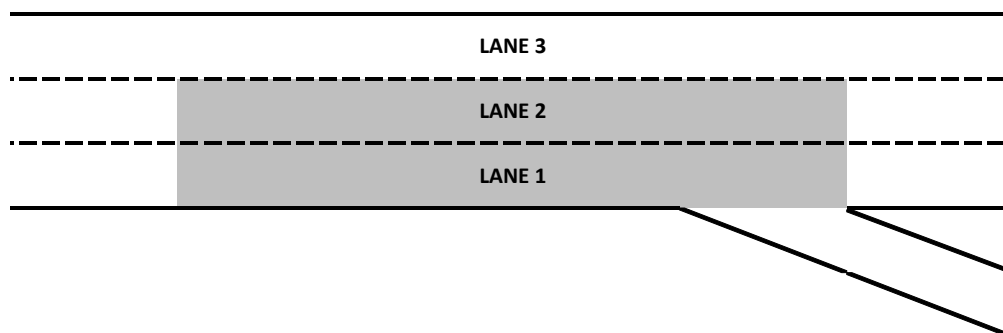
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	369	46
Total	369	46

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,570	4,963	64	89.1%	1,500
On-ramp					
Off-ramp	370	369	46	99.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 40 - SB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

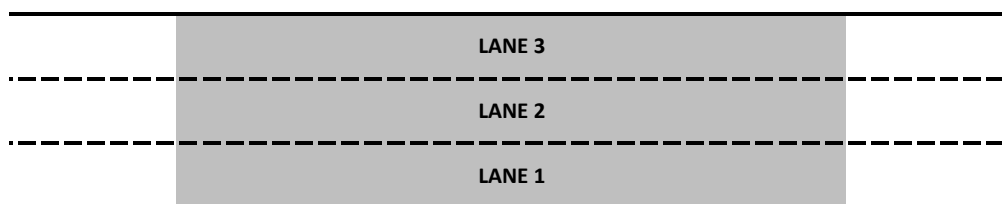
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,741	39	64.3	1.3	29.4	1.2	D
2	1,552	12	62.3	1.3	27.1	1.3	D
1	1,278	25	61.3	2.1	23.9	1.8	C
Area	4,571	76	62.8	1.5	26.8	1.3	D
Total	4,571	76	62.8	1.5	26.8	1.3	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,200	4,571	76	87.9%	3,058
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 41 - SB I-15: Nichols Rd On-ramp

Segment Type - Merge

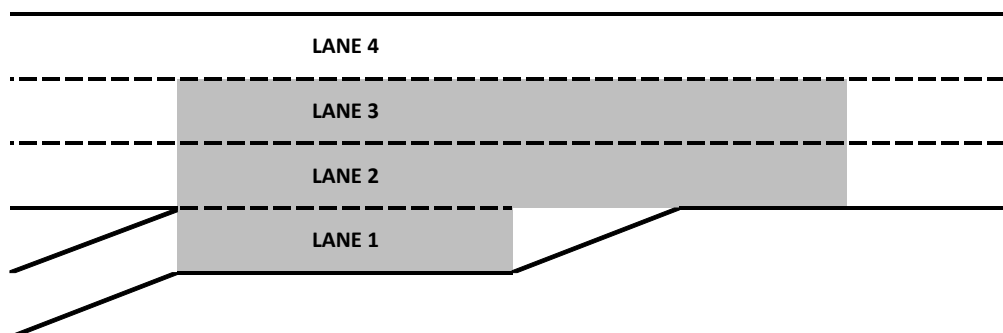
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,751	44	63.1	2.6	30.6	1.6	D
3	1,555	15	59.4	3.6	30.4	2.9	D
2	1,278	22	57.6	4.1	28.2	3.1	D
1	337	41	28.0	3.2	0.9	0.3	A
Area	3,170	78	58.5	3.8	23.5	2.4	C
Total	4,921	122	60.2	3.3	25.5	2.1	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	337	41	1		
Total	337	41	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,200	4,584	81	88.1%	1,500
On-ramp	340	337	41	99.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 42 - SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

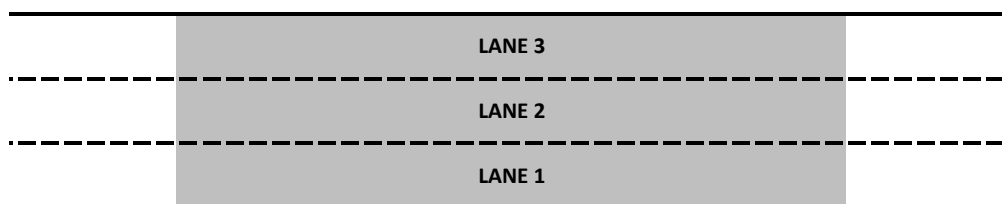
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,487	19	63.4	1.3	27.6	1.6	D
2	1,872	20	60.5	1.6	31.5	1.5	D
1	1,569	26	59.3	1.8	28.5	1.4	D
Area	4,927	65	61.1	1.5	29.2	1.3	D
Total	4,927	65	61.1	1.5	29.2	1.3	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,540	4,927	65	88.9%	2,332
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 43 - SB I-15: Central Ave (SR-74) Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,549	14	65.1	1.0	24.6	1.0	C
3	1,810	19	63.1	1.2	22.9	0.8	C
2	1,569	9	61.7	1.0	27.2	0.7	D
1			66.1	1.0	8.8	0.9	A
Area	3,379	28	62.9	1.0	19.6	0.8	C
Total	4,927	42	63.6	1.0	20.9	0.8	C

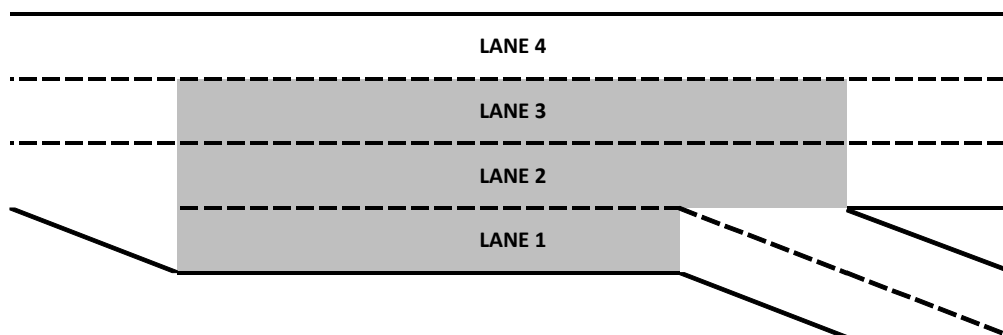
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	590	42
1	774	42
Total	1,364	76

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,540	4,927	42	88.9%	1,498
On-ramp					
Off-ramp	1,470	1,364	76	92.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 44 - SB I-15: Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

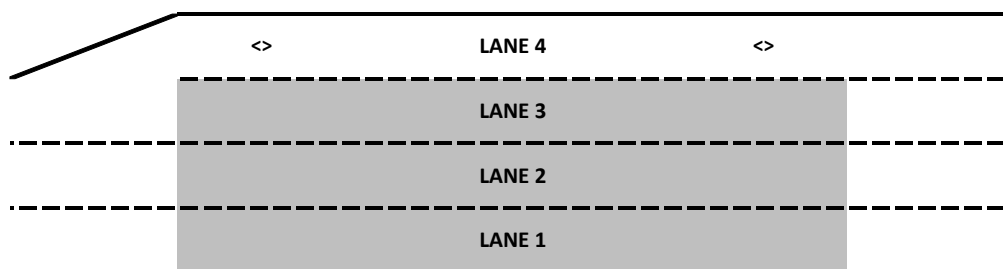
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,387	30	66.1	0.5	22.6	1.4	C
2	1,205	18	65.5	0.8	21.0	1.0	C
1	884	11	63.6	1.1	16.1	0.4	B
Area	3,476	60	65.2	0.7	19.9	0.7	C
Total	3,476	60	65.2	0.7	19.9	0.7	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,070	3,476	60	85.4%	3,038
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 45 - SB I-15: Central Ave (SR-74) On-ramp

Segment Type - Merge

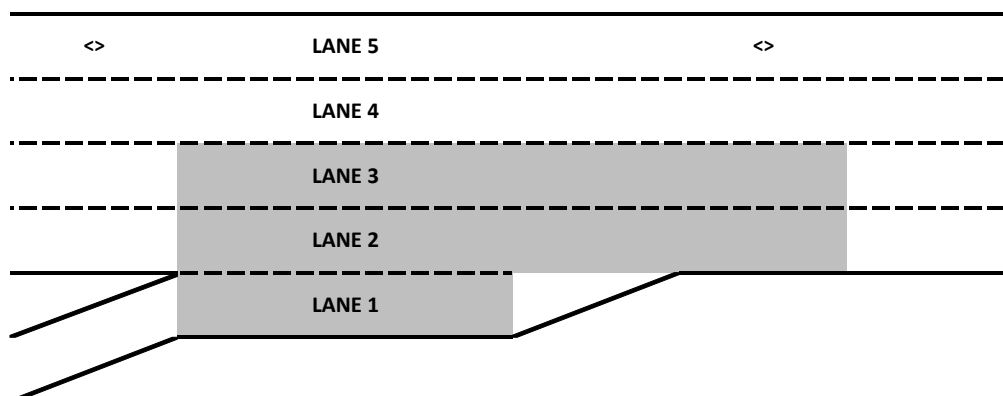
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,343	28	65.2	2.1	24.2	1.6	C
3	1,205	22	62.5	2.5	30.0	1.5	D
2	899	7	58.4	1.9	26.4	2.0	D
1	1,401	17	49.0	0.9	4.6	0.2	A
Area	3,505	46	59.9	2.1	20.3	1.2	C
Total	4,848	74	61.5	2.0	21.2	1.3	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,401	17	1		
Total	1,401	17	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,070	3,447	57	84.7%	1,502
On-ramp	1,340	1,401	17	104.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 46 - SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp

Segment Type - Basic

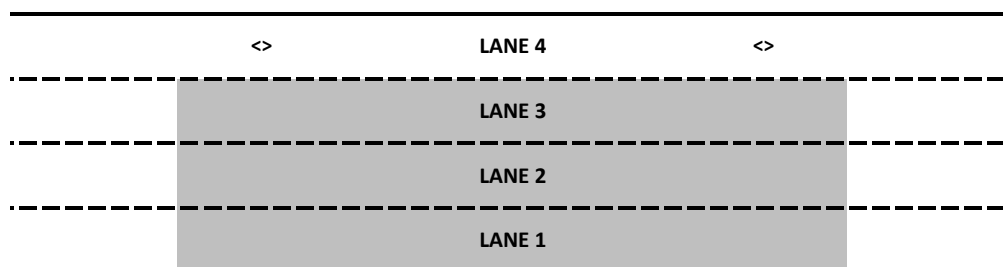
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,582	25	63.6	1.7	27.2	1.5	D
2	1,690	8	60.7	2.1	30.0	1.0	D
1	1,509	28	58.7	1.5	27.9	2.1	D
Area	4,780	61	61.0	1.7	28.3	1.5	D
Total	4,780	61	61.0	1.7	28.3	1.5	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,410	4,780	61	88.4%	890
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 47 - SB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,605	25	61.9	3.6	28.7	2.6	D
2	1,678	11	57.7	5.8	27.9	2.5	D
1	1,483	24	55.9	4.8	31.3	3.5	D
Area	3,161	35	56.8	5.2	29.6	3.0	D
Total	4,766	61	58.6	4.6	29.2	2.8	D

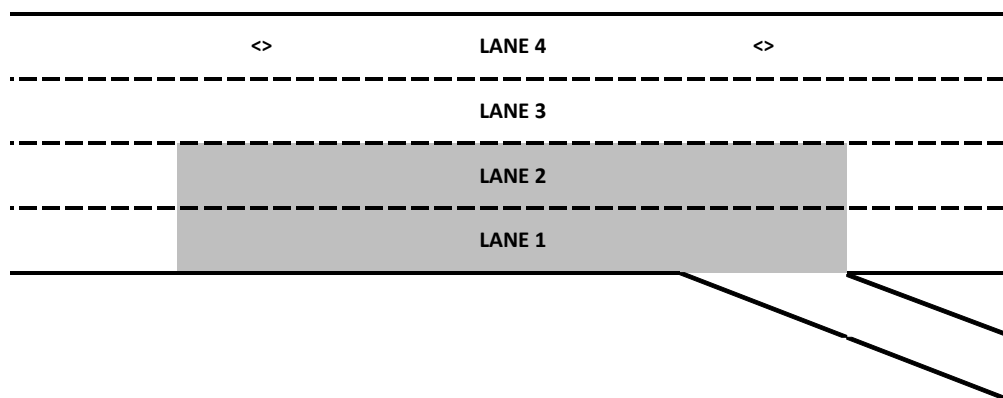
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	648	28
Total	648	28

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,410	4,766	61	88.1%	1,498
On-ramp					
Off-ramp	700	648	28	92.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 48 - SB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

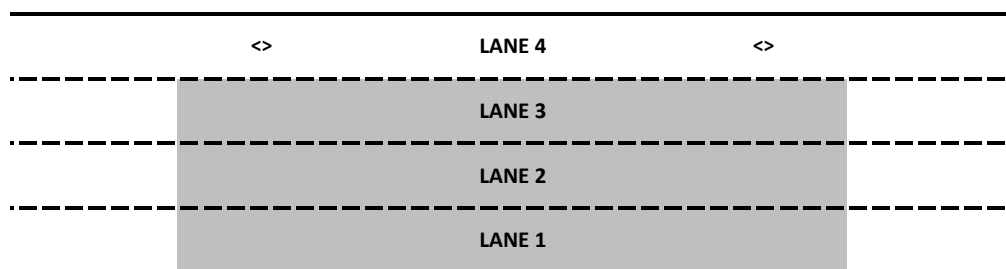
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,577	28	65.5	0.7	25.6	1.1	C
2	1,397	24	64.3	1.2	23.2	0.8	C
1	1,098	18	63.0	0.8	19.1	1.2	C
Area	4,072	71	64.4	0.8	22.6	0.5	C
Total	4,072	71	64.4	0.8	22.6	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,710	4,072	71	86.4%	3,512
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 49 - SB I-15: Main St On-ramp SB

Segment Type - Merge

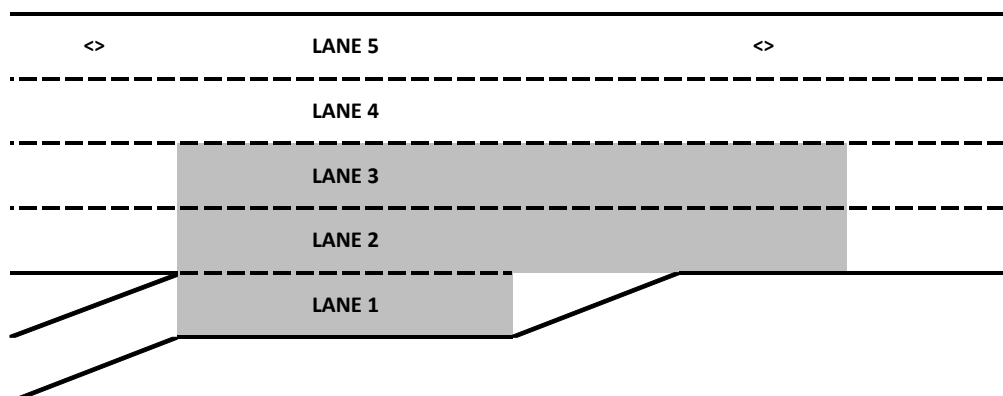
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,553	27	66.3	0.4	25.2	1.1	C
3	1,381	17	64.3	0.9	25.3	0.5	C
2	1,106	36	62.5	0.9	22.4	1.3	C
1	420	28	28.2	0.9	0.9	0.1	A
Area	2,907	81	63.6	0.7	19.5	0.7	C
Total	4,459	107	64.5	0.6	21.1	0.3	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	420	28	1		
Total	420	28	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,710	4,040	80	85.8%	1,500
On-ramp	420	420	28	99.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 50 - SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp

Segment Type - Basic

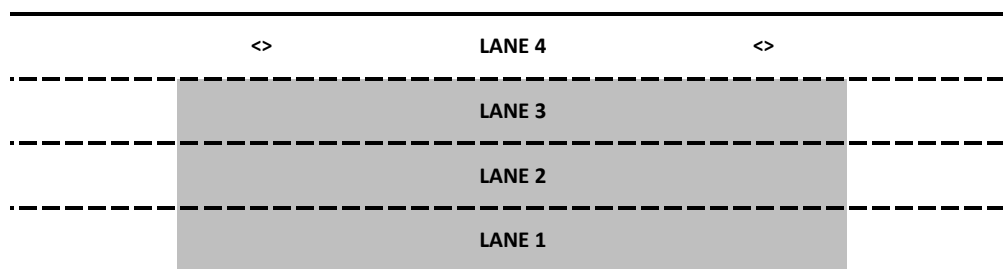
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,664	30	65.4	0.6	26.8	0.7	D
2	1,486	14	63.6	0.9	25.1	0.7	C
1	1,279	13	62.0	1.1	22.2	0.9	C
Area	4,428	57	63.8	0.8	24.7	0.5	C
Total	4,428	57	63.8	0.8	24.7	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,130	4,428	57	86.3%	3,090
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Design Year No Build
PM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
152 NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	5,891	73	83.3%				1,033	75	98.4%	66.7	1.0	17.9	0.4	B
151 NB I-15: Hidden Valley Pkwy Off-ramp	Diverge	6,366	68	83.0%				477	55	79.5%	66.1	1.5	21.9	1.0	C
150 NB I-15: EB SR-91 On-ramp	Merge	4,924	60	76.9%	1,444	134	113.7%				66.8	0.5	21.0	0.7	C
149 NB I-15: WB SR-91 On-ramp	Merge	3,866	58	72.7%	1,054	72	97.6%				63.7	2.1	21.3	1.0	C
148 NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp	Basic	3,873	64	72.8%							65.2	0.7	20.1	0.4	C
147 NB I-15: EB & WB SR-91 Off-ramp	Diverge	6,063	60	72.0%				2,193	115	70.7%	46.9	2.6	31.5	2.0	D
146 NB I-15: Magnolia Ave On-ramp	Merge	4,589	58	65.0%	1,478	75	108.6%				20.5	1.2	86.1	3.7	F
145 NB I-15: Magnolia Ave Loop On-ramp	Basic	3,652	56	60.4%	942	41	93.3%				16.8	1.1	68.4	4.8	F
144 NB I-15: Magnolia Ave Off-ramp to Loop On-ramp	Basic	3,650	51	60.3%							15.9	0.9	75.6	2.4	F
143 NB I-15: Magnolia Ave Off-ramp	Diverge	4,312	86	61.1%				654	63	64.7%	14.3	0.6	77.1	1.9	F
141 NB I-15: Ontario Ave to Magnolia Ave (EL Access)	Weave	4,768	120	63.2%	1,543	105	58.4%	2,000	96	64.1%	24.8	0.6	46.9	0.8	F
140 NB I-15: Ontario Ave On-ramp	Merge	3,125	78	53.3%	1,650	31	98.2%				11.4	0.4	70.2	0.9	F
138 NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)	Basic	3,131	80	53.4%							12.4	0.9	64.0	2.5	F
137 NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)	Basic	3,134	66	53.5%							8.9	0.2	116.6	3.3	F
136 NB I-15: Ontario Ave Off-ramp	Diverge	3,710	87	55.5%				571	57	69.6%	10.6	0.4	108.3	1.1	F
135 NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp	Merge	2,953	54	52.0%	762	98	76.2%				8.4	0.5	115.1	3.5	F
134 NB I-15: EL Access to Foothill Pkwy/El Cerrito Rd On-ramp	Basic	2,959	56	52.1%							9.7	0.9	101.4	4.8	F
133 NB I-15: EL Access at Foothill Pkwy/El Cerrito Rd	Basic	3,387	67	51.6%				420	53	47.2%	13.7	0.7	61.0	1.0	F
132 NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp	Weave	3,169	69	64.8%	632	56	26.2%	385	45	52.7%	9.2	0.7	105.8	5.5	F
131 NB I-15: Cajalco Rd Loop On-ramp	Merge	2,811	70	67.1%	365	45	52.1%				8.9	0.8	105.1	3.4	F
154 NB I-15: EL Access at Cajalco Rd	Basic	3,940	82	66.3%				1,120	90	64.0%	19.2	0.6	53.9	1.3	F
130 NB I-15: Cajalco Rd Off-ramp to EL Access	Basic	3,943	95	66.4%							14.2	1.1	91.7	4.4	F
129 NB I-15: Cajalco Rd Off-ramp	Diverge	4,673	126	68.5%				722	88	82.0%	15.6	1.0	100.6	4.0	F
128 NB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	3,610	70	64.9%	1,073	135	85.1%				13.5	0.7	101.0	2.8	F
127 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	3,624	71	65.2%							11.8	1.3	100.4	4.0	F
126 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	3,798	74	64.9%				177	28	61.0%	11.9	1.2	115.3	6.5	F
125 NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	3,806	77	65.1%							11.4	0.1	109.2	1.5	F
124 NB I-15: Temescal Canyon Rd On-ramp	Merge	3,157	68	59.5%	642	108	118.9%				9.7	0.2	112.1	4.4	F
123 NB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	3,164	62	59.6%							9.1	0.3	113.0	4.4	F
122 NB I-15: Temescal Canyon Rd Off-ramp	Diverge	3,309	60	59.6%				142	22	59.3%	9.2	0.3	123.6	2.8	F
121 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	3,303	61	59.5%							9.3	0.7	115.9	4.3	F
120 NB I-15: Indian Truck Trail On-ramp	Merge	2,732	66	55.1%	580	73	98.4%				7.9	0.4	121.1	3.5	F
119 NB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	2,729	69	55.0%							8.1	0.3	115.3	2.5	F
118 NB I-15: Indian Truck Trail Off-ramp	Diverge	2,973	61	56.0%				242	28	69.1%	8.2	0.4	133.6	3.2	F
168 NB I-15: Horsethief Rd On-ramp to Indian Truck Trail Off-ramp	Basic	2,970	60	55.9%							8.7	0.4	115.9	1.4	F
167 NB I-15: Horsethief Rd On-ramp	Merge	2,600	57	53.1%	374	38	91.2%				7.7	0.2	121.5	3.9	F
166 NB I-15: Horsethief Rd Off-ramp to On-ramp	Basic	2,597	52	53.0%							7.7	0.3	114.7	2.1	F
165 NB I-15: Horsethief Rd Off-ramp	Diverge	2,904	46	54.2%				282	49	61.4%	8.0	0.4	134.8	4.1	F
117 NB I-15: Horsethief Rd On-ramp to Indian Truck Trail Off-ramp	Basic	2,906	53	54.2%							8.3	0.3	115.4	2.4	F
116 NB I-15: Lake St On-ramp	Merge	2,565	43	51.4%	331	36	89.5%				7.3	0.1	124.8	8.1	F
115 NB I-15: Lake St Off-ramp to On-ramp	Basic	2,570	49	51.5%							7.4	0.2	116.5	3.8	F
114 NB I-15: Lake St Off-ramp	Diverge	2,698	74	51.5%				130	31	52.2%	7.4	0.3	136.1	3.2	F
113 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	2,728	74	52.1%							7.9	0.7	119.7	1.9	F
112 NB I-15: Nichols Rd On-ramp	Merge	2,382	53	49.5%	379	63	88.1%				6.9	0.3	127.6	8.7	F
111 NB I-15: Nichols Rd Off-ramp to On-ramp	Basic	2,384	53	49.6%							7.1	0.5	115.8	3.4	F
110 NB I-15: Nichols Rd Off-ramp	Diverge	2,631	68	50.1%				232	34	52.8%	7.1	0.1	137.1	5.4	F
109 NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp to Nichols Rd Off-ramp	Merge	2,300	48	52.4%	342	62	39.8%				6.8	0.6	122.1	9.6	F
108 NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp	Basic	2,301	43	52.4%							6.7	0.3	111.3	5.3	F
153 NB I-15: Dexter Ave Off-ramp	Diverge	2,405	63	52.4%				99	22	49.6%	6.5	0.3	142.1	6.2	F
107 NB I-15: WB Central Ave (SR-74) Off-ramp	Basic	2,812	98	52.6%				402	72	52.9%	6.0	0.3	119.8	4.7	F
106 NB I-15: EB Central Ave (SR-74) Off-ramp	Diverge	3,186	101	52.9%				355	96	52.9%	7.7	0.9	141.7	6.9	F
105 NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp	Basic	3,185	100	52.9%							9.8	1.0	129.5	5.5	F
104 NB I-15: Main St On-ramp	Merge	2,769	87	50.3%	438	55	86.0%				10.4	0.7	124.4	8.2	F
103 NB I-15: Main St Off-ramp to On-ramp	Basic	2,783	83	50.5%							11.2	0.8	113.7	7.3	F
102 NB I-15: Main St Off-ramp	Diverge	3,138	102	50.4%				346	57	48.7%	11.9	0.5	136.9	4.8	F
101 NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp	Basic	3,147	98	50.6%							11.9	0.7	113.7	4.0	F

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 152 - NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

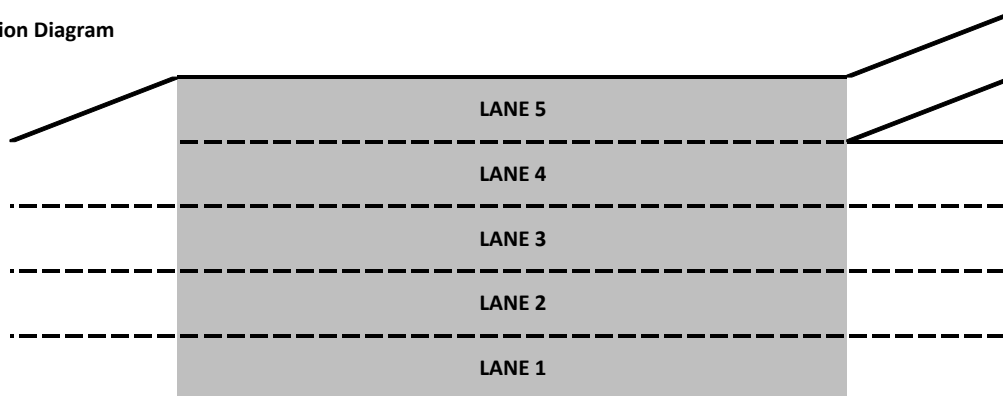
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	2,137	21	67.4	0.5	9.6	0.4	A
4	1,431	12	65.3	1.2	23.9	1.2	C
3	1,266	18	66.5	1.5	21.0	0.9	C
2	1,056	21	67.4	1.0	18.6	0.7	C
1			67.4	1.1	16.5	0.2	B
Area	5,891	73	66.7	1.0	17.9	0.4	B
Total	5,891	73	66.7	1.0	17.9	0.4	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	1,033	75
Total			Total	1,033	75

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,070	5,891	73	83.3%	1,446
On-ramp					
Off-ramp	1,050	1,033	75	98.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 151 - NB I-15: Hidden Valley Pkwy Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,590	12	66.3	1.2	26.8	0.4	D
3	1,653	11	66.5	1.3	26.2	0.6	D
2	1,524	23	65.7	2.3	20.6	0.7	C
1	1,598	21	65.8	1.5	23.2	1.3	C
Area	3,122	44	65.7	1.8	21.9	1.0	C
Total	6,366	68	66.1	1.5	24.2	0.7	C

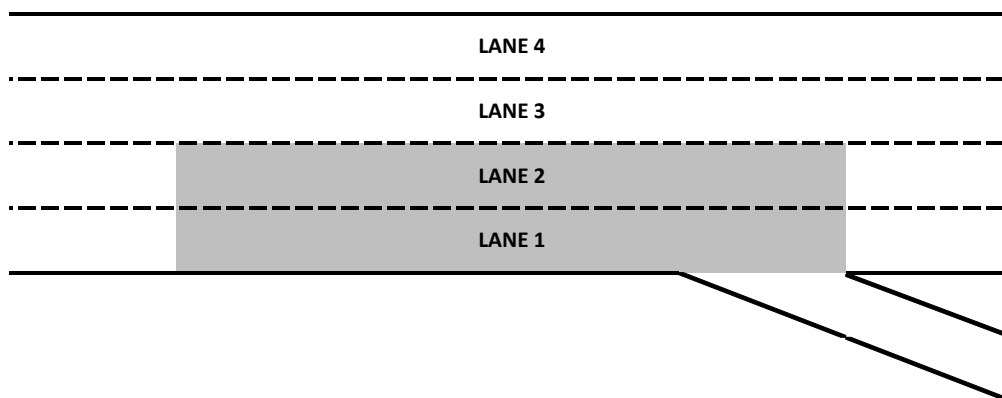
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	477	55
Total	477	55

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,670	6,366	68	83.0%	1,517
On-ramp					
Off-ramp	600	477	55	79.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 150 - NB I-15: EB SR-91 On-ramp

Segment Type - Merge

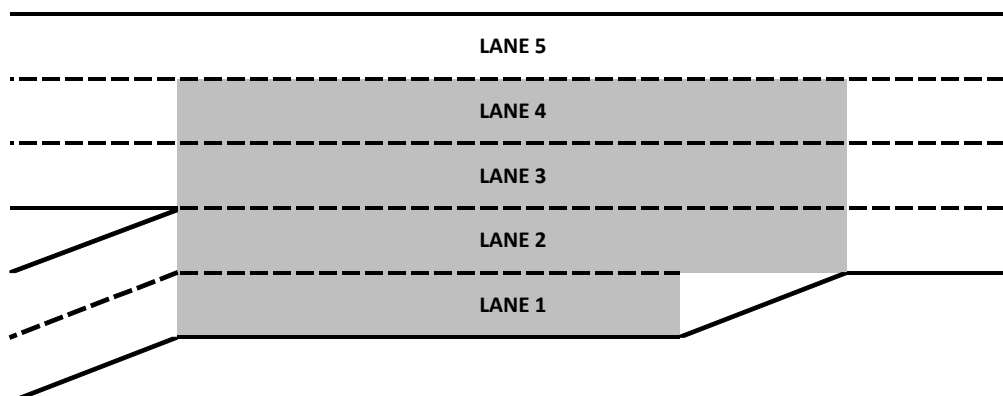
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,588	17	67.4	0.4	23.7	0.4	C
4	1,692	15	67.1	0.4	25.1	0.7	C
3	1,644	26	66.4	0.6	24.5	1.3	C
2	721	82	66.3	1.0	21.4	1.3	C
1	723	55	30.5	0.4	1.7	0.1	A
Area	4,780	178	66.6	0.6	21.0	0.7	C
Total	6,368	195	66.8	0.5	21.6	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2	721	82	2		
1	723	55	1		
Total	1,444	134	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,400	4,924	60	76.9%	1,509
On-ramp	1,270	1,444	134	113.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 149 - NB I-15: WB SR-91 On-ramp

Segment Type - Merge

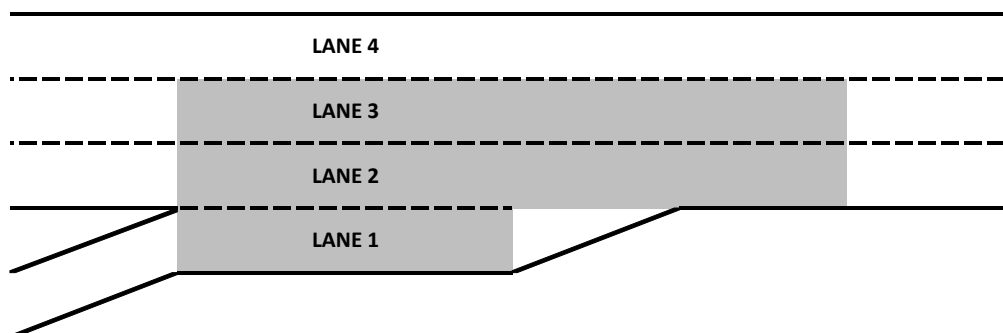
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,343	16	65.8	2.7	22.6	1.4	C
3	1,368	19	64.4	2.2	26.9	1.2	D
2	1,155	24	61.4	2.0	25.4	1.4	C
1	1,054	72	29.9	0.4	2.5	0.1	A
Area	3,577	115	62.7	2.0	21.3	1.0	C
Total	4,920	131	63.7	2.1	21.6	1.1	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,054	72	1		
Total	1,054	72	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,320	3,866	58	72.7%	1,564
On-ramp	1,080	1,054	72	97.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 148 - NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp

Segment Type - Basic

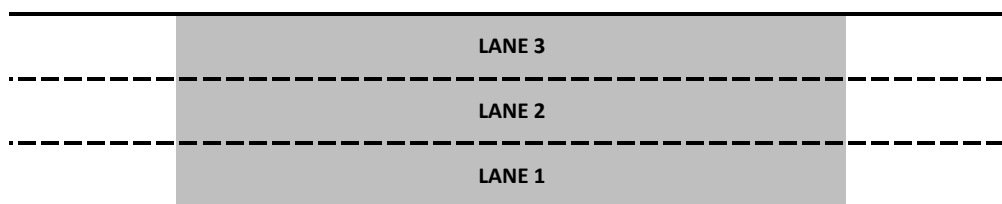
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,480	16	66.1	0.5	22.1	0.6	C
2	1,309	19	65.0	0.9	21.1	0.7	C
1	1,084	29	64.2	0.8	17.1	0.6	B
Area	3,873	64	65.2	0.7	20.1	0.4	C
Total	3,873	64	65.2	0.7	20.1	0.4	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,320	3,873	64	72.8%	3,525
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 147 - NB I-15: EB & WB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,645	18	51.8	1.8	31.5	1.6	D
3	1,440	15	48.2	2.7	30.8	1.3	D
2	1,628	10	43.5	2.9	34.5	2.0	D
1	1,349	17	42.8	4.4	29.5	3.4	D
Area	4,418	43	44.9	3.0	31.5	2.0	D
Total	6,063	60	46.9	2.6	31.4	1.8	D

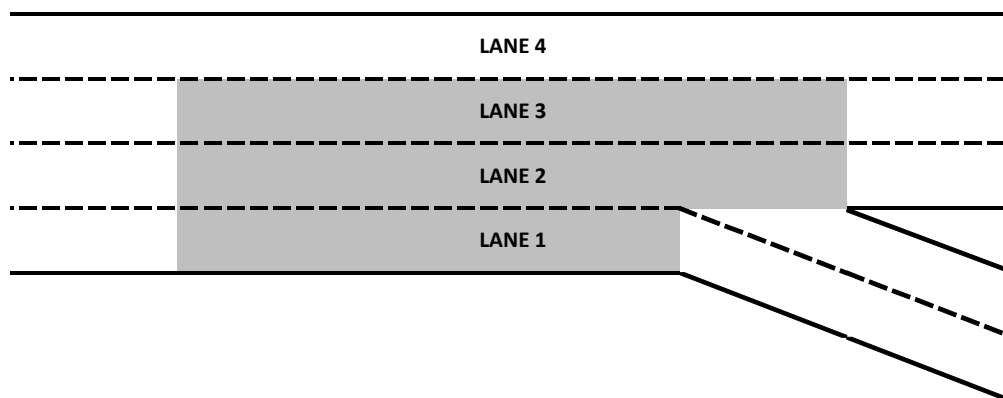
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	816	75
1	1,377	60
Total	2,193	115

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	8,420	6,063	60	72.0%	1,324
On-ramp					
Off-ramp	3,100	2,193	115	70.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 146 - NB I-15: Magnolia Ave On-ramp

Segment Type - Merge

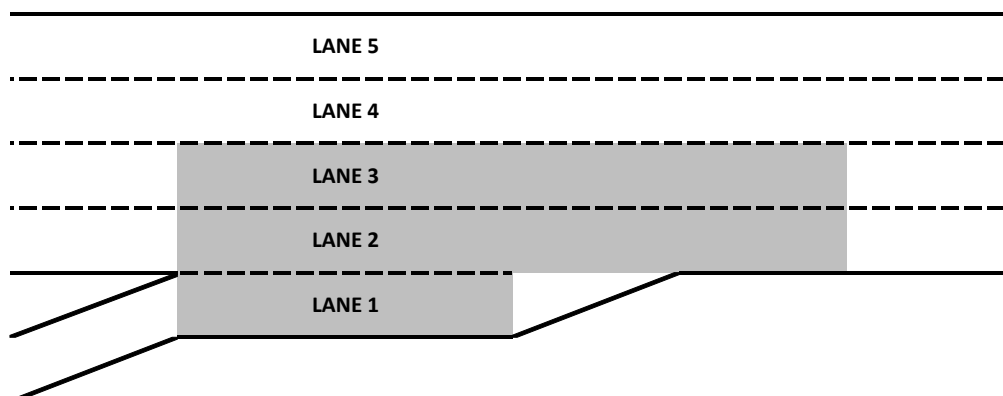
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,733	27	31.4	3.0	58.0	7.4	F
4	1,467	9	19.1	0.6	82.7	3.1	F
3	457	11	13.6	0.6	95.7	1.7	F
2	931	12	15.4	0.6	101.0	2.8	F
1	1,478	75	6.6	0.9	45.6	5.5	F
Area	2,866	97	13.9	0.7	86.1	3.7	F
Total	6,066	133	20.5	1.2	65.1	3.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,478	75	1		
Total	1,478	75	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,060	4,589	58	65.0%	1,292
On-ramp	1,360	1,478	75	108.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 145 - NB I-15: Magnolia Ave Loop On-ramp

Segment Type - Basic

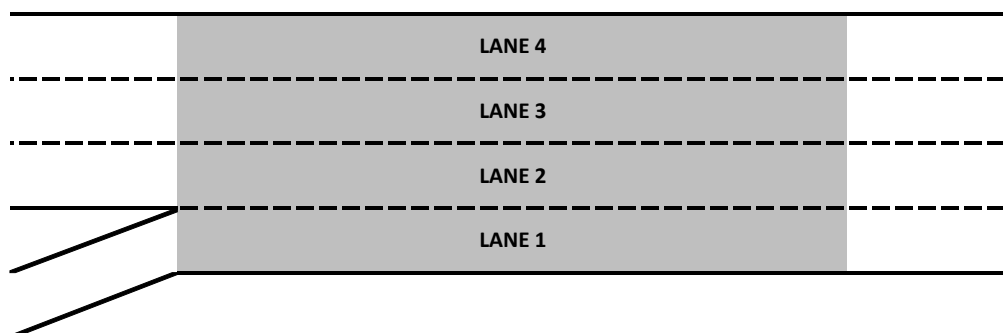
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,678	16	29.0	3.2	60.0	7.3	F
3	1,438	21	13.2	0.3	110.1	1.9	F
2	536	18	4.6	0.2	105.8	2.5	F
1	942	41	6.6	0.3	141.9	5.9	F
Area	4,594	97	16.8	1.1	68.4	4.8	F
Total	4,594	97	16.8	1.1	68.4	4.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	942	41	1		
Total	942	41	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,050	3,652	56	60.4%	852
On-ramp	1,010	942	41	93.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 144 - NB I-15: Magnolia Ave Off-ramp to Loop On-ramp

Segment Type - Basic

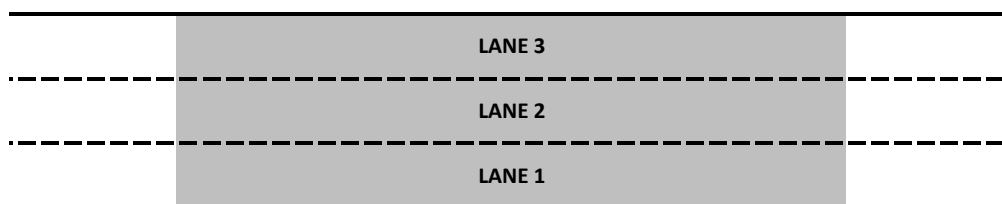
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,648	18	21.9	1.2	77.4	3.2	F
2	1,435	19	12.7	1.0	103.7	2.8	F
1	567	15	5.4	0.4	107.8	5.7	F
Area	3,650	51	15.9	0.9	75.6	2.4	F
Total	3,650	51	15.9	0.9	75.6	2.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,050	3,650	51	60.3%	1,562
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 143 - NB I-15: Magnolia Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,769	31	19.1	1.0	96.3	1.9	F
3	1,237	14	10.9	0.6	109.5	2.5	F
2	837	27	6.3	0.4	109.4	2.7	F
1	469	14	15.3	1.5	38.0	2.9	E
Area	2,543	55	10.7	0.7	77.1	1.9	F
Total	4,312	86	14.3	0.6	75.4	1.8	F

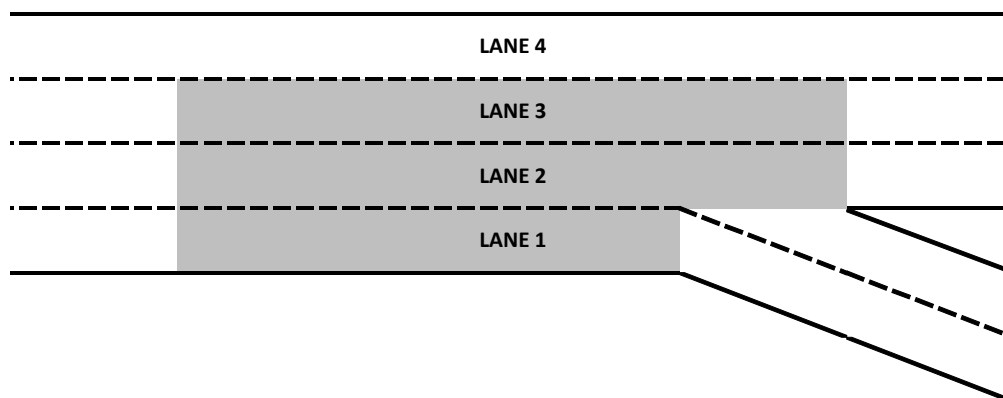
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	237	45
1	417	52
Total	654	63

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,060	4,312	86	61.1%	1,496
On-ramp					
Off-ramp	1,010	654	63	64.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 141 - NB I-15: Ontario Ave to Magnolia Ave (EL Access)

Segment Type - Weave

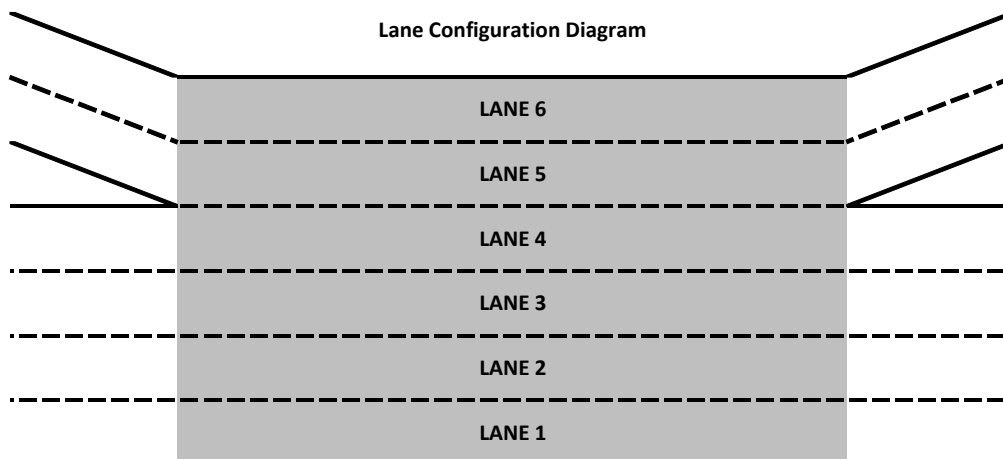
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	1,495	19	45.7	0.6	12.0	0.8	B
5	1,164	28	40.6	0.9	11.1	0.7	B
4	1,251	35	16.2	0.7	103.5	2.0	F
3	857	19	12.0	0.7	110.6	2.5	F
2	714	51	9.1	1.0	107.6	4.3	F
1	829	71	22.8	2.0	25.1	2.6	C
Area	6,311	224	24.8	0.6	46.9	0.8	F
Total	6,311	224	24.8	0.6	46.9	0.8	F

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	714	51
1	829	71
Total	1,543	105

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,136	69
1	864	43
Total	2,000	96

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,540	4,768	120	63.2%	2,965
On-ramp	2,640	1,543	105	58.4%	
Off-ramp	3,120	2,000	96	64.1%	



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 140 - NB I-15: Ontario Ave On-ramp

Segment Type - Merge

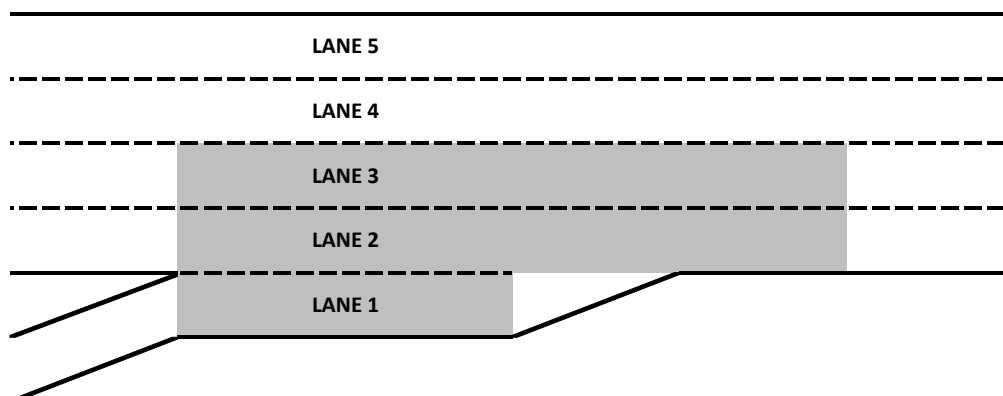
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,347	16	11.4	0.5	123.3	1.7	F
4	805	21	8.0	0.3	129.4	2.3	F
3	705	22	8.1	1.0	121.1	2.5	F
2	268	18	15.0	1.0	80.1	4.5	F
1	1,650	31	13.2	1.1	12.1	1.7	B
Area	2,623	71	12.8	0.7	70.2	0.9	F
Total	4,775	109	11.4	0.4	91.0	1.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,650	31	1		
Total	1,650	31	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,860	3,125	78	53.3%	1,496
On-ramp	1,680	1,650	31	98.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 138 - NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)

Segment Type - Basic

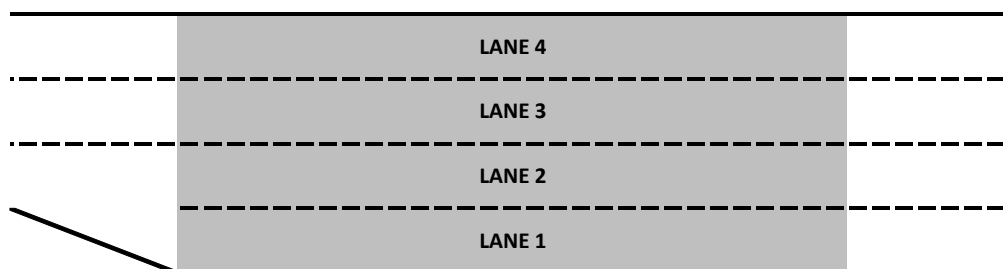
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,321	19	10.9	0.4	119.8	3.8	F
3	822	22	6.5	0.1	129.2	2.5	F
2	721	20	5.8	0.4	124.6	3.9	F
1	268	18	53.8	1.2	5.3	1.3	A
Area	3,131	80	12.4	0.9	64.0	2.5	F
Total	3,131	80	12.4	0.9	64.0	2.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,860	3,131	80	53.4%	3,004
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 137 - NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)

Segment Type - Basic

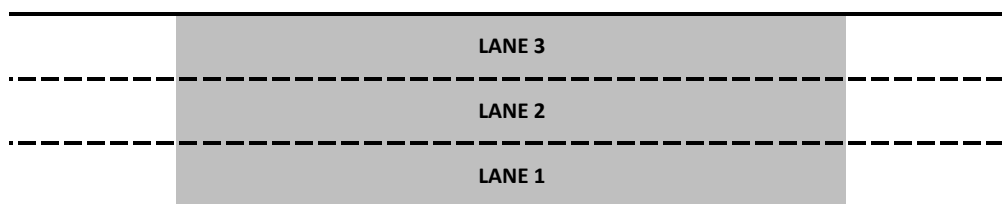
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,299	17	10.6	0.4	120.4	3.6	F
2	880	17	7.1	0.4	126.4	4.1	F
1	955	32	8.4	1.0	114.0	2.4	F
Area	3,134	66	8.9	0.2	116.6	3.3	F
Total	3,134	66	8.9	0.2	116.6	3.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,860	3,134	66	53.5%	197
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 136 - NB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

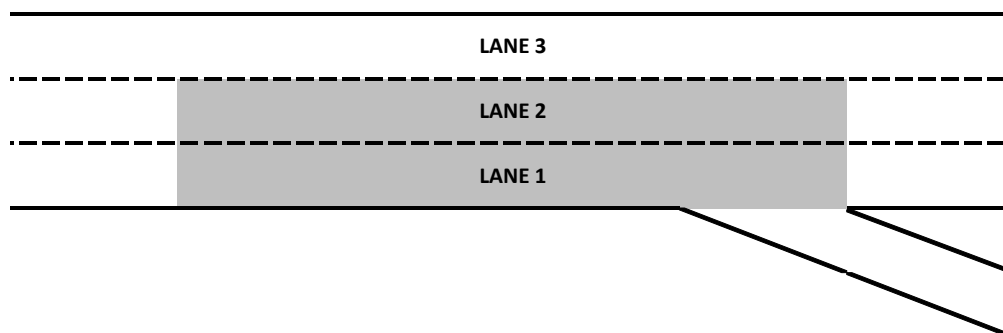
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,370	23	10.8	0.8	122.0	4.7	F
2	1,113	31	8.8	0.7	120.3	3.6	F
1	1,227	34	12.0	0.9	101.7	1.4	F
Area	2,340	65	10.5	0.7	108.3	1.1	F
Total	3,710	87	10.6	0.4	112.5	2.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	571	57
Total			Total	571	57

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,680	3,710	87	55.5%	763
On-ramp					
Off-ramp	820	571	57	69.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 135 - NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Merge

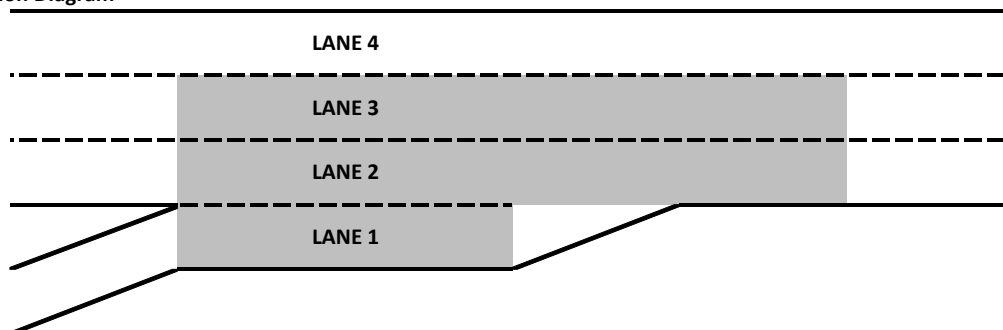
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,433	24	11.0	1.2	126.6	6.0	F
3	1,070	19	8.6	0.3	128.8	3.0	F
2	450	11	5.6	0.3	127.1	2.2	F
1	762	98	4.1	0.5	118.5	3.2	F
Area	2,282	128	6.8	0.2	115.1	3.5	F
Total	3,715	152	8.4	0.5	111.2	6.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	762	98	1		
Total	762	98	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,680	2,953	54	52.0%	873
On-ramp	1,000	762	98	76.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 134 - NB I-15: EL Access to Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Basic

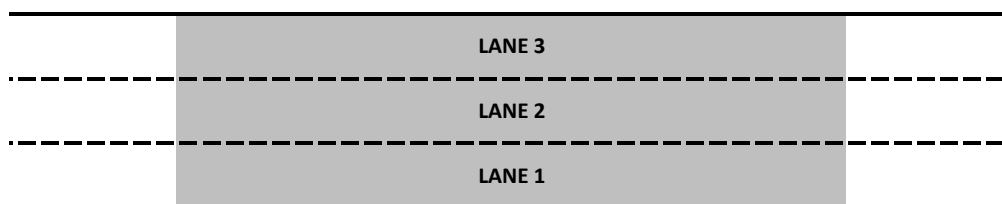
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,423	24	12.2	1.0	114.7	5.0	F
2	1,082	20	9.0	1.2	120.4	6.5	F
1	454	13	4.1	0.3	116.7	2.4	F
Area	2,959	56	9.7	0.9	101.4	4.8	F
Total	2,959	56	9.7	0.9	101.4	4.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,680	2,959	56	52.1%	989
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 133 - NB I-15: EL Access at Foothill Pkwy/El Cerrito Rd

Segment Type - Basic

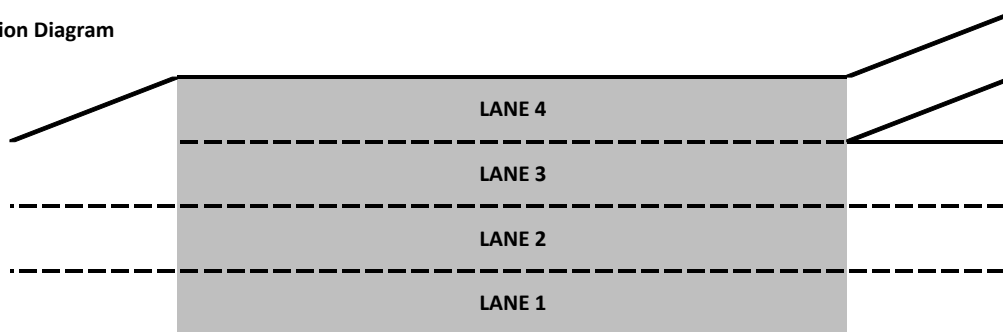
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,672	21	46.5	0.6	7.0	1.0	A
3	1,142	23	13.0	0.9	112.4	4.1	F
2	572	24	8.6	0.7	121.0	5.8	F
1			4.2	0.4	120.2	3.8	F
Area	3,387	67	13.7	0.7	61.0	1.0	F
Total	3,387	67	13.7	0.7	61.0	1.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	420	53
Total			Total	420	53

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,570	3,387	67	51.6%	1,128
On-ramp					
Off-ramp	890	420	53	47.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 132 - NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,466	23	12.7	1.2	114.5	4.7	F
3	1,058	16	9.0	0.6	119.9	3.9	F
2	645	30	4.9	0.9	121.2	2.7	F
1	632	56	3.7	0.5	125.3	7.8	F
Area	3,801	126	9.2	0.7	105.8	5.5	F
Total	3,801	126	9.2	0.7	105.8	5.5	F

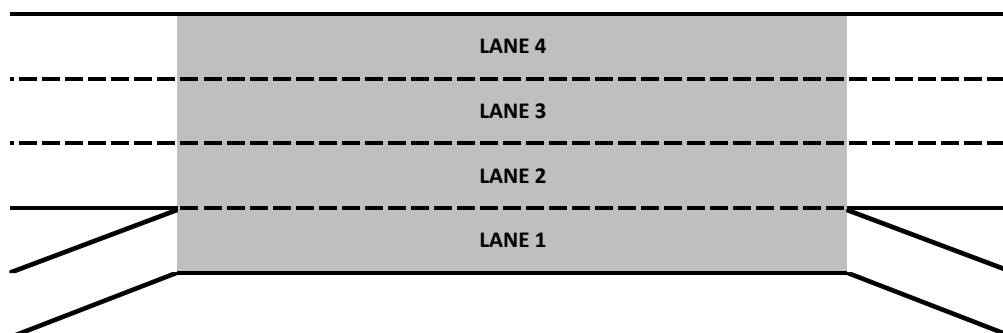
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	632	56
Total	632	56

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	385	45
Total	385	45

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,890	3,169	69	64.8%	2,708
On-ramp	2,410	632	56	26.2%	
Off-ramp	730	385	45	52.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 131 - NB I-15: Cajalco Rd Loop On-ramp

Segment Type - Merge

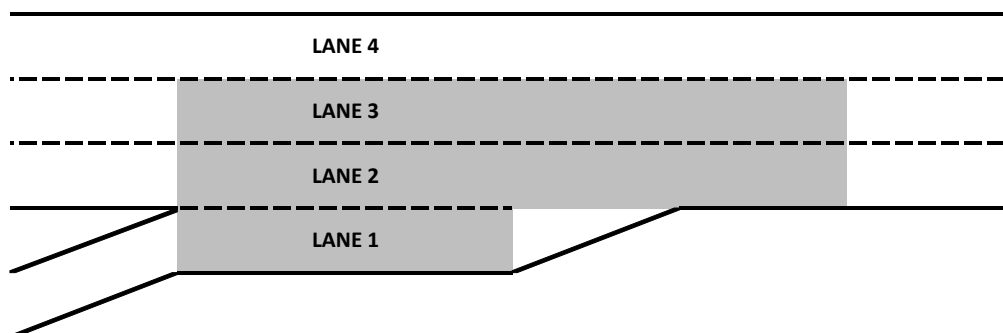
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,413	25	11.9	1.3	121.5	6.2	F
3	981	29	8.1	0.4	130.5	4.9	F
2	416	16	4.4	0.7	121.4	4.1	F
1	365	45	1.0	0.2	75.9	5.7	F
Area	1,763	90	6.4	0.3	105.1	3.4	F
Total	3,176	115	8.9	0.8	100.2	5.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	365	45	1		
Total	365	45	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,190	2,811	70	67.1%	1,307
On-ramp	700	365	45	52.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 154 - NB I-15: EL Access at Cajalco Rd

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,933	25	47.3	1.4	20.2	1.5	C
3	1,378	29	14.4	0.8	105.8	2.3	F
2	629	27	9.2	0.7	119.8	5.2	F
1			4.7	0.5	122.0	3.4	F
Area	3,940	82	19.2	0.6	53.9	1.3	F
Total	3,940	82	19.2	0.6	53.9	1.3	F

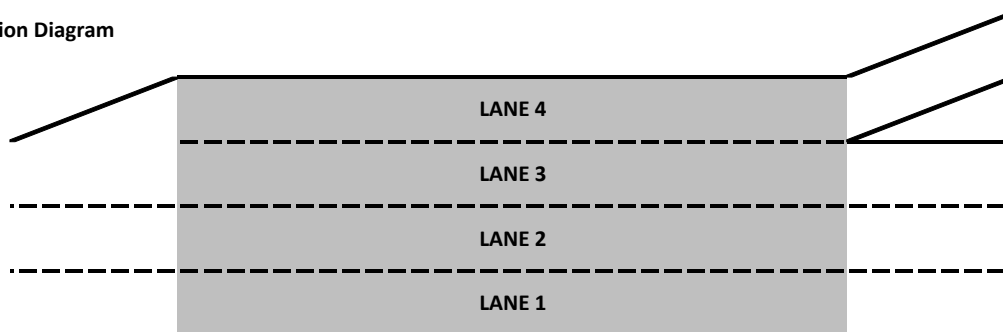
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,120	90
Total	1,120	90

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,940	3,940	82	66.3%	1,406
On-ramp					
Off-ramp	1,750	1,120	90	64.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 130 - NB I-15: Cajalco Rd Off-ramp to EL Access

Segment Type - Basic

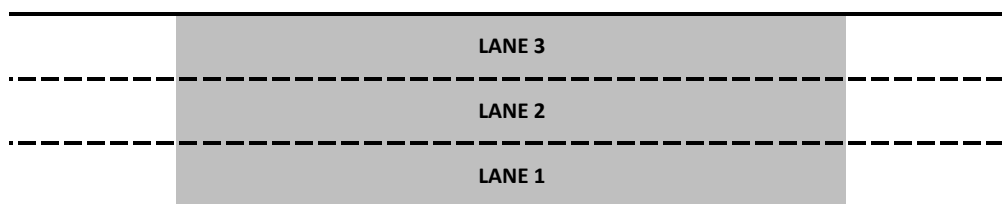
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,823	21	18.8	1.4	96.5	4.0	F
2	1,336	31	12.2	1.4	111.7	5.4	F
1	784	43	6.1	0.7	118.6	5.0	F
Area	3,943	95	14.2	1.1	91.7	4.4	F
Total	3,943	95	14.2	1.1	91.7	4.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,940	3,943	95	66.4%	1,159
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 129 - NB I-15: Cajalco Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,863	36	18.8	1.4	95.9	3.7	F
2	1,496	32	14.0	1.3	102.5	4.6	F
1	1,314	58	12.7	0.7	99.6	3.8	F
Area	2,810	90	13.4	0.8	100.6	4.0	F
Total	4,673	126	15.6	1.0	96.4	3.5	F

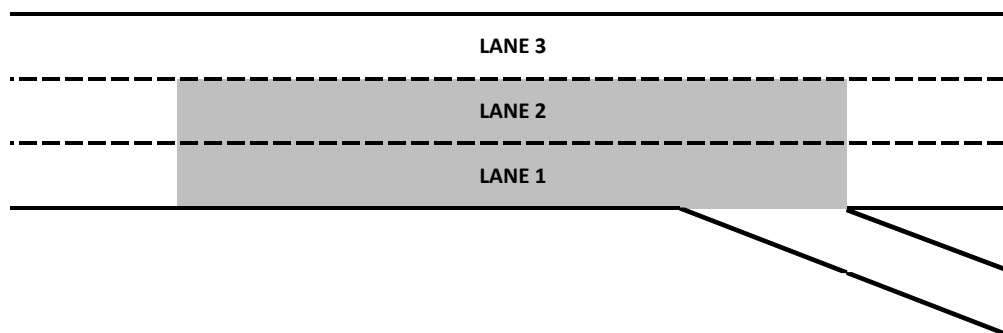
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	722	88
Total	722	88

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,820	4,673	126	68.5%	1,109
On-ramp					
Off-ramp	880	722	88	82.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 128 - NB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

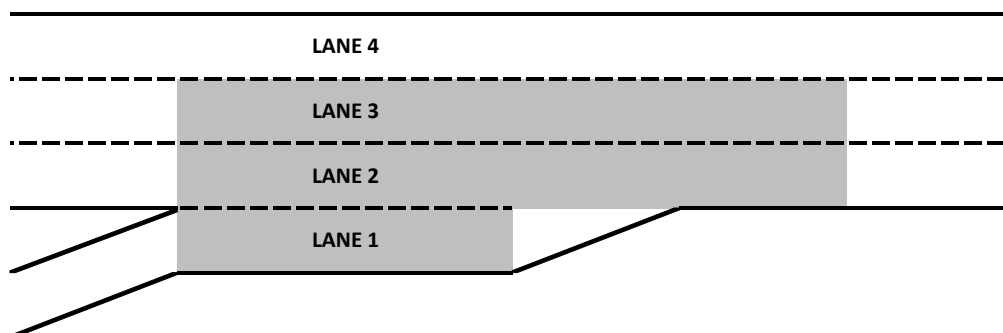
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,707	23	17.9	1.2	101.1	2.6	F
3	1,260	31	13.8	0.6	112.4	2.5	F
2	643	16	7.7	0.4	120.0	3.7	F
1	1,073	135	3.0	0.3	68.8	4.2	F
Area	2,976	182	10.6	0.4	101.0	2.8	F
Total	4,683	205	13.5	0.7	94.6	3.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,073	135	1		
Total	1,073	135	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,560	3,610	70	64.9%	1,497
On-ramp	1,260	1,073	135	85.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 127 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

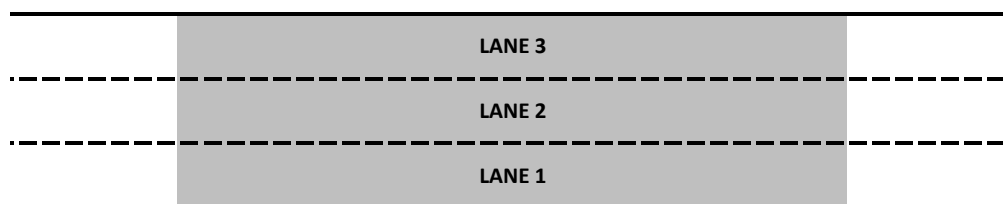
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,679	24	15.8	1.6	105.0	4.8	F
2	1,230	28	9.8	1.3	121.1	6.8	F
1	715	18	5.6	0.8	126.0	5.8	F
Area	3,624	71	11.8	1.3	100.4	4.0	F
Total	3,624	71	11.8	1.3	100.4	4.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,560	3,624	71	65.2%	2,543
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 126 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

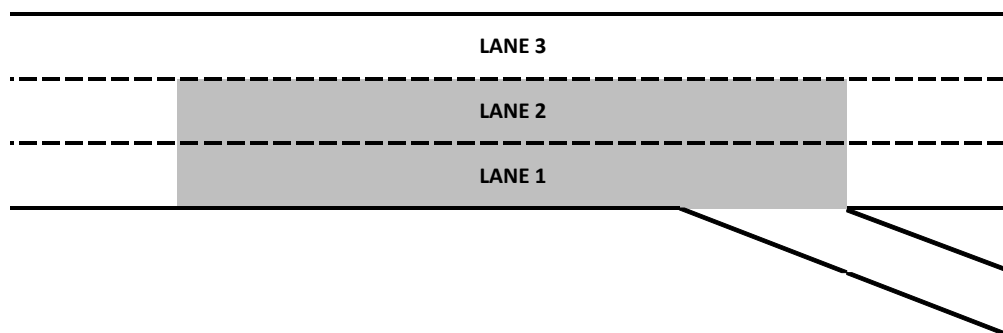
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,605	25	15.4	1.2	106.1	2.9	F
2	1,282	30	10.4	1.5	116.9	7.5	F
1	911	19	7.6	1.2	119.6	6.7	F
Area	2,193	49	9.2	1.4	115.3	6.5	F
Total	3,798	74	11.9	1.2	104.9	3.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	177	28
Total			Total	177	28

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,850	3,798	74	64.9%	1,499
On-ramp					
Off-ramp	290	177	28	61.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 125 - NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

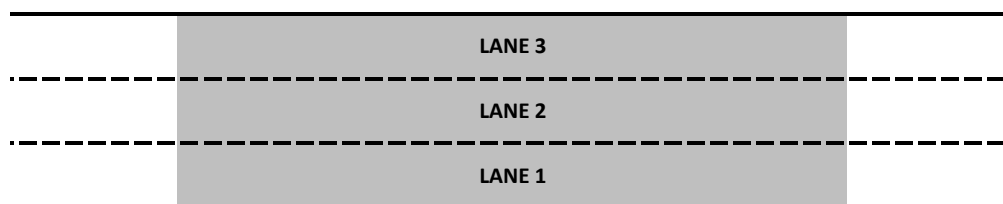
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,548	25	13.6	0.4	111.0	1.4	F
2	1,302	26	11.0	0.5	115.8	1.3	F
1	956	25	8.3	0.7	113.9	4.2	F
Area	3,806	77	11.4	0.1	109.2	1.5	F
Total	3,806	77	11.4	0.1	109.2	1.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,850	3,806	77	65.1%	6,786
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 124 - NB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

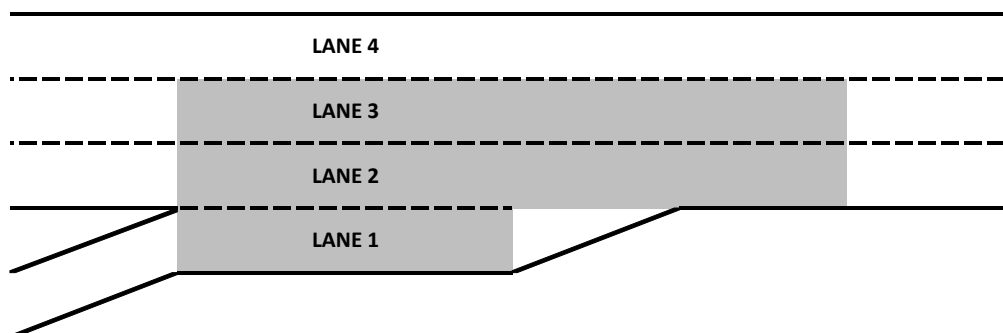
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,452	14	11.8	0.5	121.8	1.8	F
3	1,044	20	9.9	0.4	124.9	2.2	F
2	661	33	7.3	0.6	119.7	5.5	F
1	642	108	1.8	0.6	51.2	14.8	F
Area	2,347	161	8.2	0.4	112.1	4.4	F
Total	3,799	175	9.7	0.2	110.7	1.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	642	108	1		
Total	642	108	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,310	3,157	68	59.5%	1,498
On-ramp	540	642	108	118.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 123 - NB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

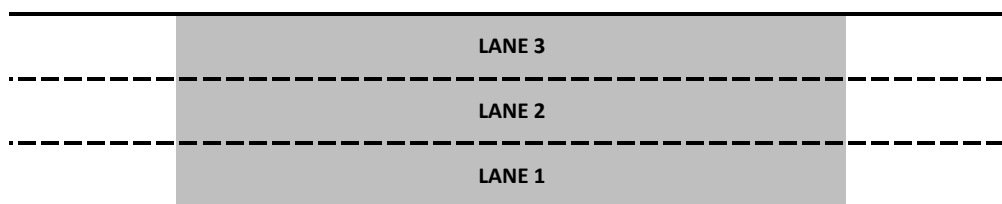
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,424	15	12.0	0.6	117.0	2.2	F
2	1,050	22	7.6	0.7	131.4	6.4	F
1	689	25	5.5	0.7	127.7	5.9	F
Area	3,164	62	9.1	0.3	113.0	4.4	F
Total	3,164	62	9.1	0.3	113.0	4.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,310	3,164	62	59.6%	2,725
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 122 - NB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,417	17	11.5	0.5	118.9	1.7	F
2	1,104	19	8.4	0.7	127.2	3.6	F
1	787	24	6.5	0.7	124.4	4.1	F
Area	1,892	43	7.6	0.6	123.6	2.8	F
Total	3,309	60	9.2	0.3	116.9	3.0	F

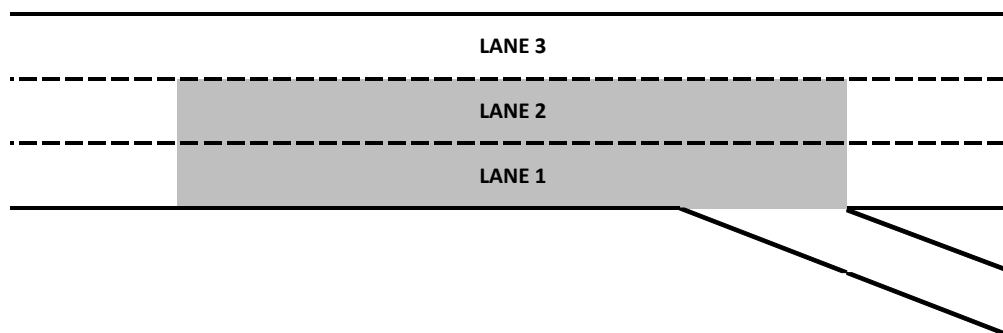
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	142	22
Total	142	22

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,550	3,309	60	59.6%	1,498
On-ramp					
Off-ramp	240	142	22	59.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 121 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

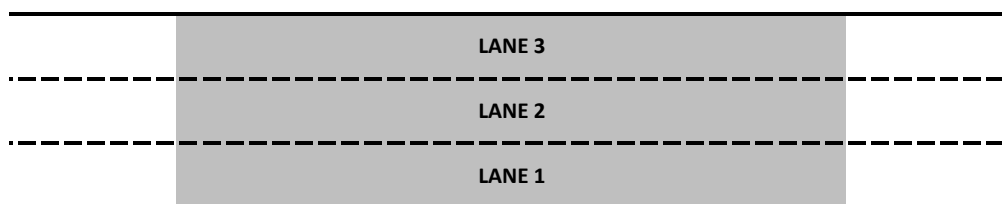
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,389	23	11.6	1.1	118.6	4.9	F
2	1,116	17	8.5	0.5	126.5	6.2	F
1	798	20	6.2	0.9	126.3	7.0	F
Area	3,303	61	9.3	0.7	115.9	4.3	F
Total	3,303	61	9.3	0.7	115.9	4.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,550	3,303	61	59.5%	9,350
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 120 - NB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

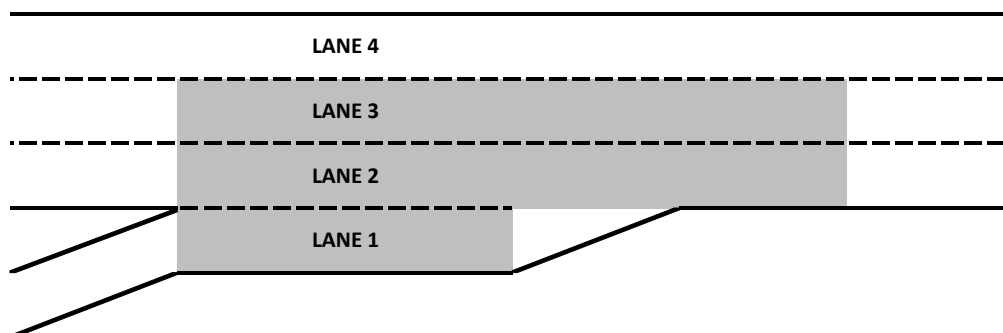
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,329	19	10.4	0.8	127.8	3.9	F
3	867	26	7.7	0.4	136.7	4.3	F
2	536	21	5.0	0.6	133.4	6.5	F
1	580	73	1.4	0.2	70.2	0.9	F
Area	1,983	120	6.1	0.4	121.1	3.5	F
Total	3,312	139	7.9	0.4	114.5	2.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	580	73	1		
Total	580	73	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,960	2,732	66	55.1%	1,499
On-ramp	590	580	73	98.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 119 - NB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

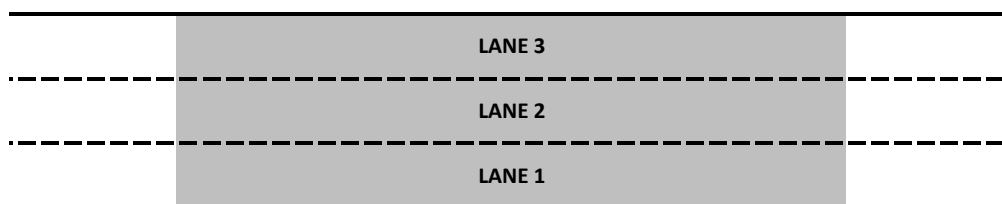
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,309	17	10.8	0.4	121.2	2.1	F
2	873	24	6.5	0.3	137.0	3.2	F
1	547	27	4.1	0.3	141.0	4.6	F
Area	2,729	69	8.1	0.3	115.3	2.5	F
Total	2,729	69	8.1	0.3	115.3	2.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,960	2,729	69	55.0%	2,922
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 118 - NB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

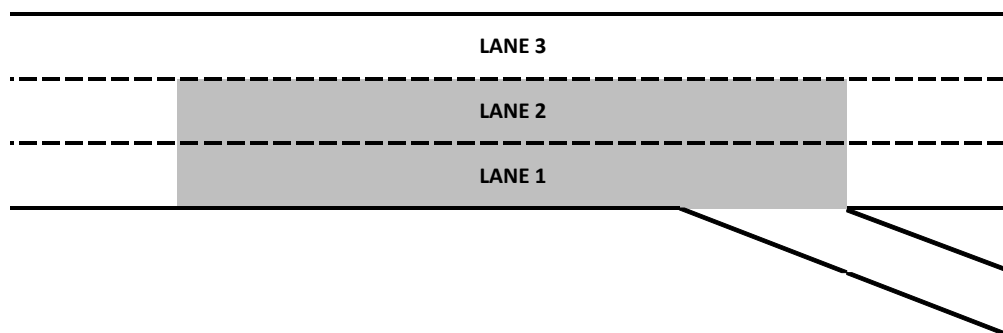
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,355	20	11.0	0.6	120.7	3.2	F
2	955	16	6.5	0.3	137.4	3.6	F
1	663	24	5.0	0.7	135.0	4.1	F
Area	1,619	40	5.8	0.4	133.6	3.2	F
Total	2,973	61	8.2	0.4	117.4	1.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	242	28
Total			Total	242	28

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,310	2,973	61	56.0%	1,499
On-ramp					
Off-ramp	350	242	28	69.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 168 - NB I-15: Horsethief Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

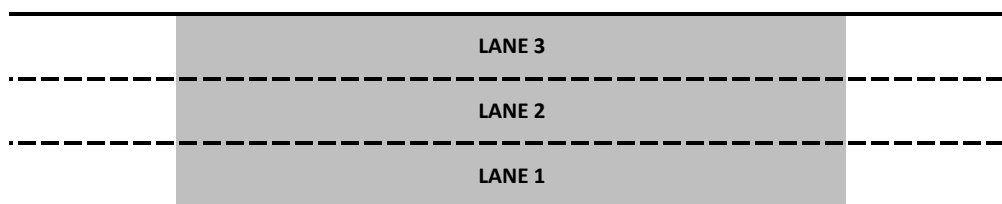
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,351	19	11.3	0.5	119.9	3.1	F
2	977	16	7.6	0.5	130.1	4.3	F
1	642	26	5.2	0.8	133.7	4.5	F
Area	2,970	60	8.7	0.4	115.9	1.4	F
Total	2,970	60	8.7	0.4	115.9	1.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,310	2,970	60	55.9%	2,252
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 167 - NB I-15: Horsethief Rd On-ramp

Segment Type - Merge

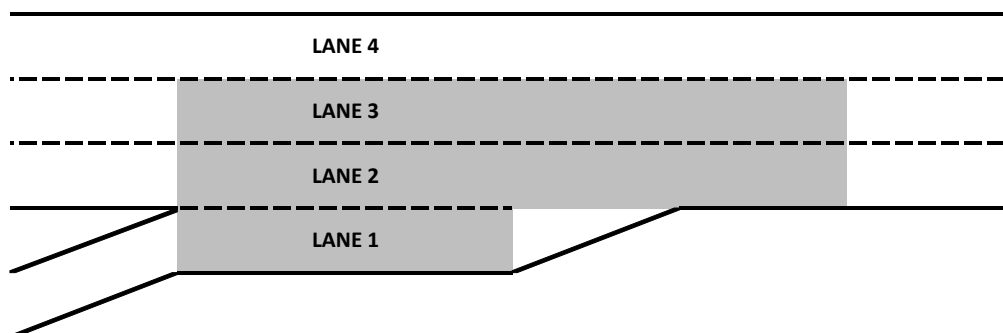
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,316	13	10.7	0.2	127.2	0.9	F
3	784	19	6.7	0.4	138.9	4.0	F
2	499	24	4.0	0.2	140.4	2.1	F
1	374	38	1.4	0.2	63.1	9.1	F
Area	1,658	82	5.3	0.2	121.5	3.9	F
Total	2,974	95	7.7	0.2	109.2	2.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	374	38	1		
Total	374	38	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,900	2,600	57	53.1%	1,498
On-ramp	410	374	38	91.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 166 - NB I-15: Horsethief Rd Off-ramp to On-ramp

Segment Type - Basic

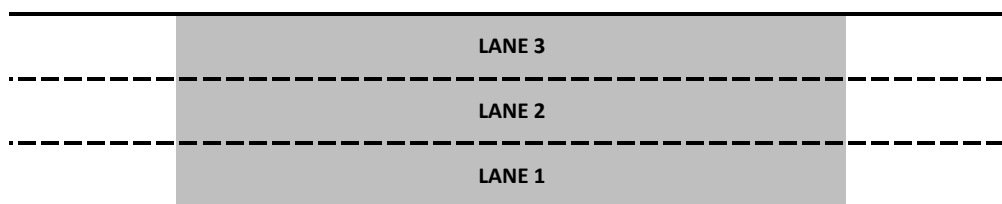
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,291	12	10.5	0.4	123.4	1.9	F
2	798	16	5.8	0.6	139.3	6.0	F
1	507	24	3.9	0.3	141.5	3.1	F
Area	2,597	52	7.7	0.3	114.7	2.1	F
Total	2,597	52	7.7	0.3	114.7	2.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,900	2,597	52	53.0%	2,763
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 165 - NB I-15: Horsethief Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,341	15	10.6	0.6	122.3	3.3	F
2	957	14	6.3	0.6	137.9	6.9	F
1	606	17	5.4	0.5	134.1	3.3	F
Area	1,563	31	5.9	0.4	134.8	4.1	F
Total	2,904	46	8.0	0.4	120.2	2.9	F

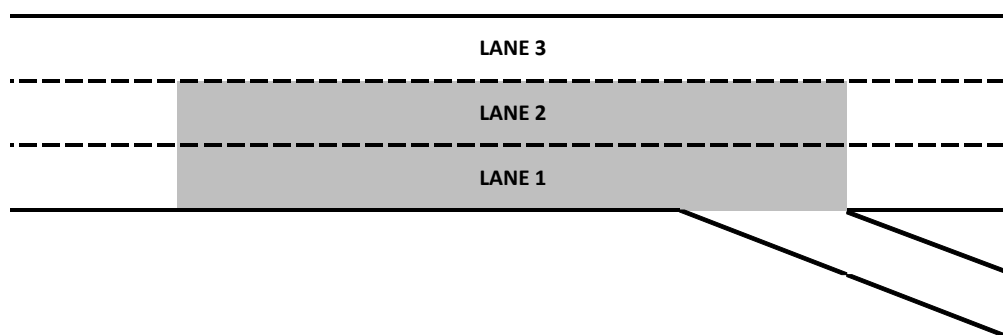
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	282	49
Total	282	49

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,360	2,904	46	54.2%	1,499
On-ramp					
Off-ramp	460	282	49	61.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 117 - NB I-15: Horsethief Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

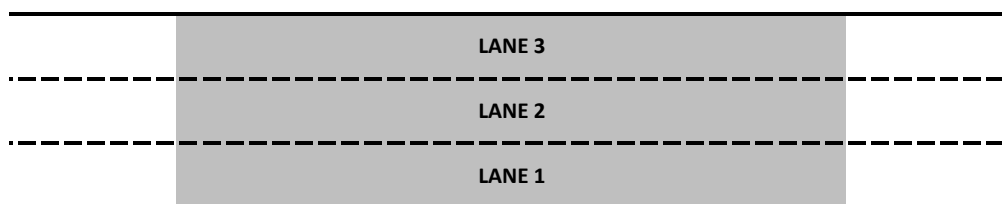
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,359	17	11.0	0.5	120.4	1.6	F
2	938	19	7.0	0.3	134.8	3.9	F
1	610	18	4.6	0.4	134.3	4.2	F
Area	2,906	53	8.3	0.3	115.4	2.4	F
Total	2,906	53	8.3	0.3	115.4	2.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,360	2,906	53	54.2%	5,500
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 116 - NB I-15: Lake St On-ramp

Segment Type - Merge

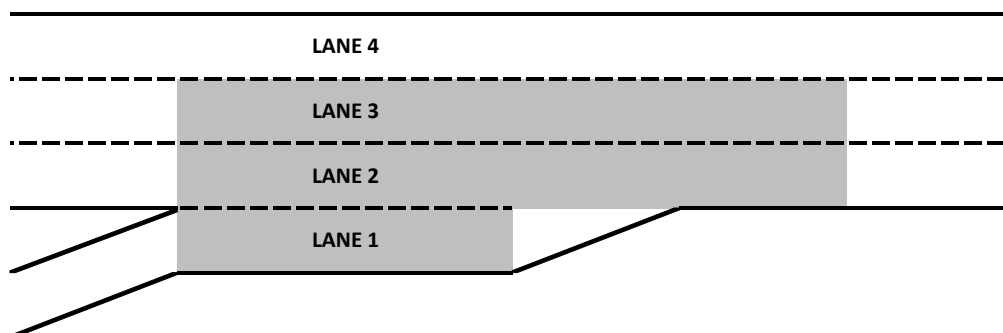
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,287	10	10.0	0.4	129.8	2.5	F
3	813	14	6.5	0.5	141.8	5.3	F
2	464	19	3.7	0.2	135.3	7.2	F
1	331	36	1.1	0.2	96.7	5.7	F
Area	1,609	69	5.0	0.4	124.8	8.1	F
Total	2,896	79	7.3	0.1	112.1	2.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	331	36	1		
Total	331	36	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,990	2,565	43	51.4%	1,499
On-ramp	370	331	36	89.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 115 - NB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

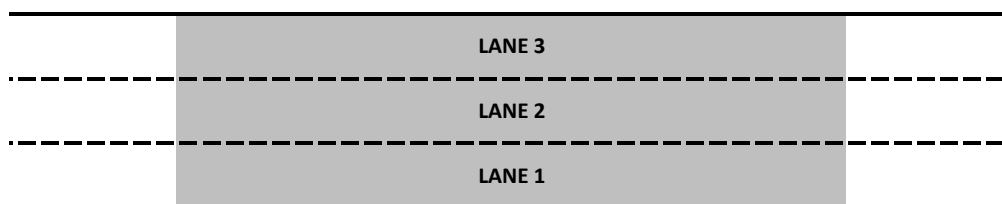
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,258	14	9.9	0.6	126.1	3.1	F
2	839	16	5.7	0.4	143.3	5.9	F
1	473	20	3.6	0.2	139.4	6.4	F
Area	2,570	49	7.4	0.2	116.5	3.8	F
Total	2,570	49	7.4	0.2	116.5	3.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,990	2,570	49	51.5%	3,216
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 114 - NB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,268	16	9.7	0.7	126.7	3.8	F
2	854	23	5.9	0.3	141.2	3.4	F
1	576	35	4.5	0.5	136.9	6.8	F
Area	1,430	58	5.3	0.3	136.1	3.2	F
Total	2,698	74	7.4	0.3	121.6	5.1	F

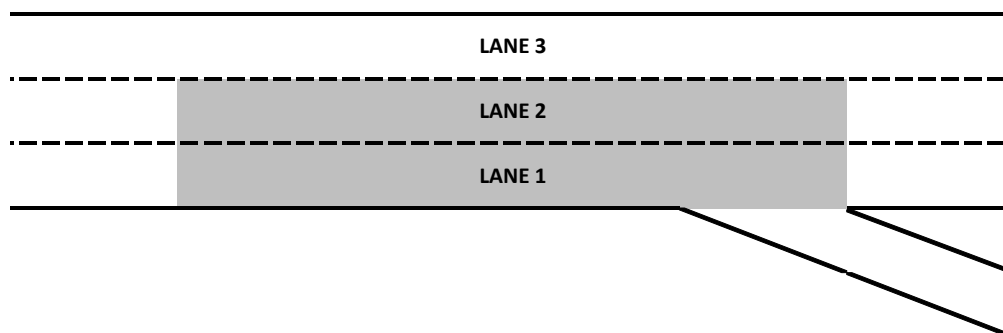
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	130	31
Total	130	31

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,240	2,698	74	51.5%	1,498
On-ramp					
Off-ramp	250	130	31	52.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 113 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

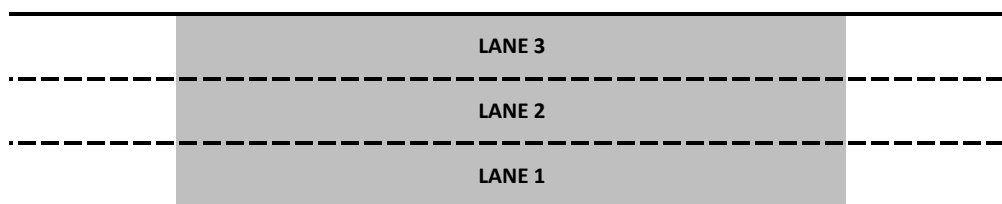
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,255	18	10.2	0.6	124.2	2.2	F
2	881	20	6.7	1.0	136.8	8.3	F
1	592	36	4.9	1.2	133.4	10.3	F
Area	2,728	74	7.9	0.7	119.7	1.9	F
Total	2,728	74	7.9	0.7	119.7	1.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,240	2,728	74	52.1%	8,483
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 112 - NB I-15: Nichols Rd On-ramp

Segment Type - Merge

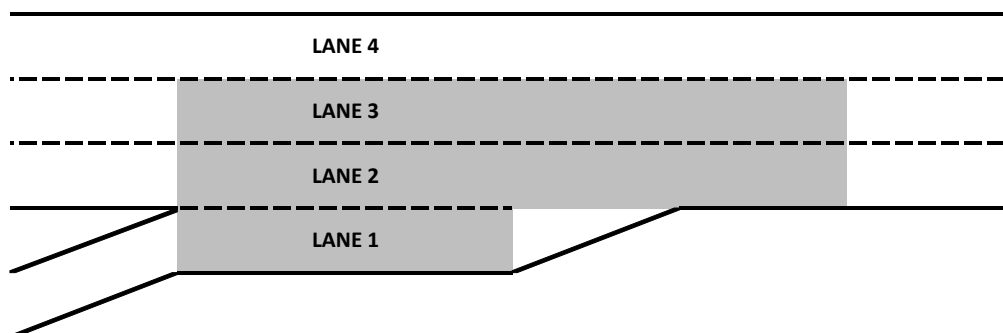
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,225	18	9.6	0.5	131.8	2.3	F
3	755	20	6.0	0.7	139.9	7.8	F
2	402	16	3.5	0.3	143.0	7.4	F
1	379	63	1.2	0.1	97.7	5.1	F
Area	1,536	99	4.7	0.4	127.6	8.7	F
Total	2,761	117	6.9	0.3	112.7	4.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	379	63	1		
Total	379	63	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,810	2,382	53	49.5%	1,499
On-ramp	430	379	63	88.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 111 - NB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

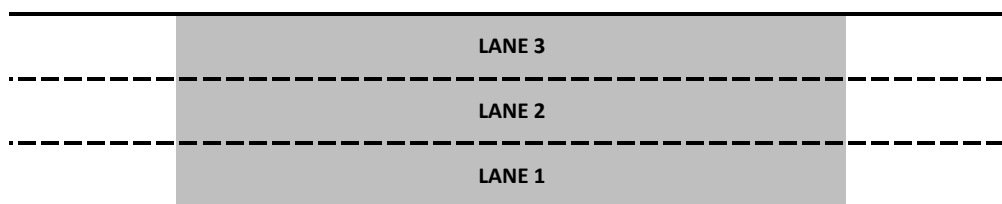
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,210	13	9.5	0.6	127.6	4.0	F
2	768	24	5.8	0.8	136.4	7.5	F
1	407	16	3.3	0.3	145.4	5.2	F
Area	2,384	53	7.1	0.5	115.8	3.4	F
Total	2,384	53	7.1	0.5	115.8	3.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,810	2,384	53	49.6%	3,521
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 110 - NB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,265	21	9.7	0.2	126.0	1.5	F
2	834	21	5.5	0.3	138.6	6.3	F
1	533	26	3.6	0.3	148.0	3.7	F
Area	1,366	46	4.7	0.2	137.1	5.4	F
Total	2,631	68	7.1	0.1	117.4	4.0	F

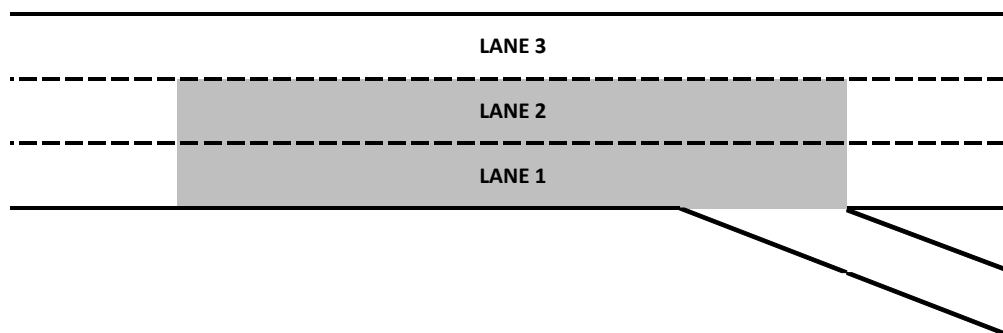
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	232	34
Total	232	34

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,250	2,631	68	50.1%	1,488
On-ramp					
Off-ramp	440	232	34	52.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 109 - NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp to Nichols Rd Off-ramp

Segment Type - Merge

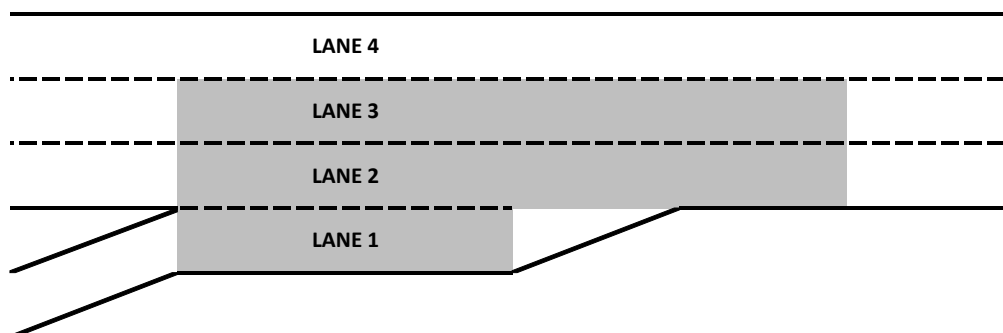
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,236	15	9.5	0.8	132.3	5.0	F
3	690	21	5.5	0.6	140.2	2.4	F
2	375	12	3.0	0.4	146.6	8.8	F
1	342	62	0.8	0.2	81.0	3.3	F
Area	1,407	95	4.3	0.4	122.1	9.6	F
Total	2,643	110	6.8	0.6	107.4	7.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	342	62	1		
Total	342	62	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,390	2,300	48	52.4%	1,486
On-ramp	860	342	62	39.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 108 - NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

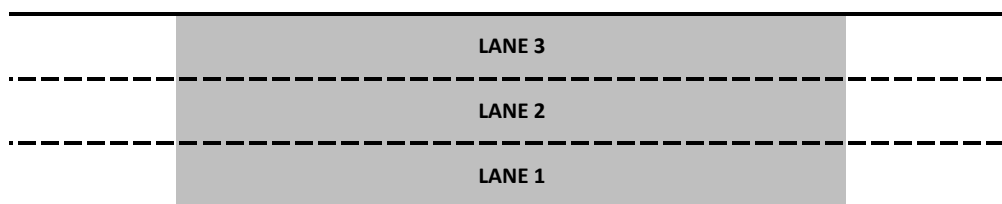
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,220	12	9.2	0.5	128.7	2.6	F
2	696	19	4.7	0.5	147.8	8.2	F
1	385	11	2.2	0.2	161.6	5.9	F
Area	2,301	43	6.7	0.3	111.3	5.3	F
Total	2,301	43	6.7	0.3	111.3	5.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,390	2,301	43	52.4%	2,598
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 153 - NB I-15: Dexter Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	28	4	18.2	2.3	0.8	0.5	A
3	1,203	13	8.9	0.4	130.1	2.2	F
2	692	19	4.8	0.4	144.7	7.9	F
1	481	27	2.8	0.2	159.7	3.9	F
Area	1,174	46	4.0	0.3	142.1	6.2	F
Total	2,405	63	6.5	0.3	88.1	2.5	F

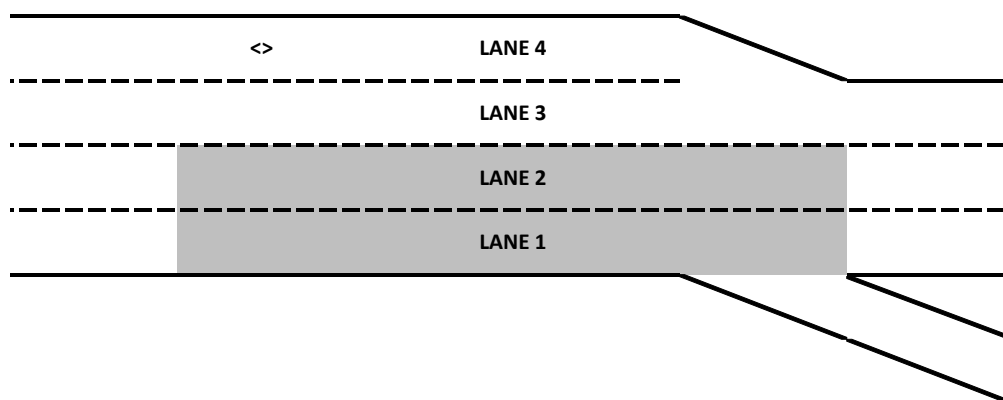
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	99	22
Total	99	22

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,590	2,405	63	52.4%	939
On-ramp					
Off-ramp	200	99	22	49.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 107 - NB I-15: WB Central Ave (SR-74) Off-ramp

Segment Type - Basic

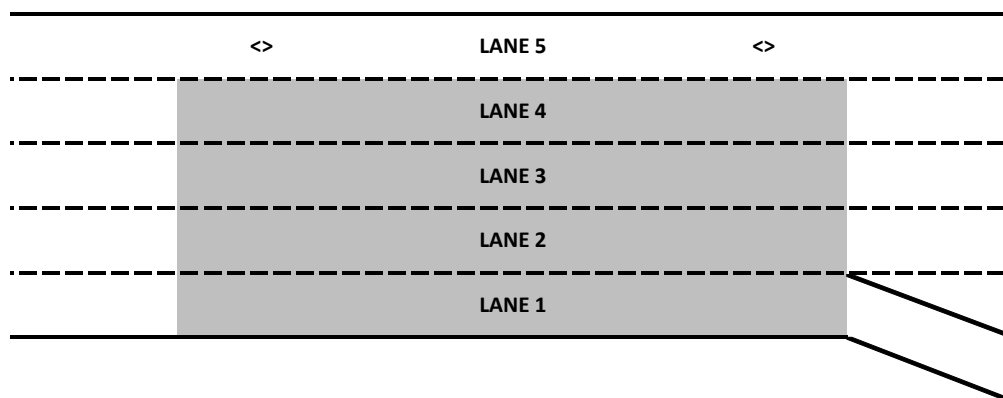
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	177	7	19.0	1.1	5.6	1.3	A
4	1,074	16	8.2	0.5	134.7	2.1	F
3	658	22	4.5	0.6	145.2	8.4	F
2	491	32	2.2	0.4	157.0	4.1	F
1	413	21	3.4	0.5	162.2	7.7	F
Area	2,635	91	5.5	0.4	119.8	4.7	F
Total	2,812	98	6.0	0.3	91.0	4.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	402	72
Total			Total	402	72

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,350	2,812	98	52.6%	1,369
On-ramp					
Off-ramp	760	402	72	52.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 106 - NB I-15: EB Central Ave (SR-74) Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	215	7	36.0	7.9	5.6	1.2	A
4	1,142	23	7.9	0.6	137.5	3.9	F
3	913	37	5.2	0.8	134.3	8.1	F
2	916	34	4.2	0.7	145.9	8.3	F
1			2.9	0.6	128.3	7.8	F
Area	1,829	71	4.5	0.6	141.7	6.9	F
Total	3,186	101	7.7	0.9	83.0	6.6	F

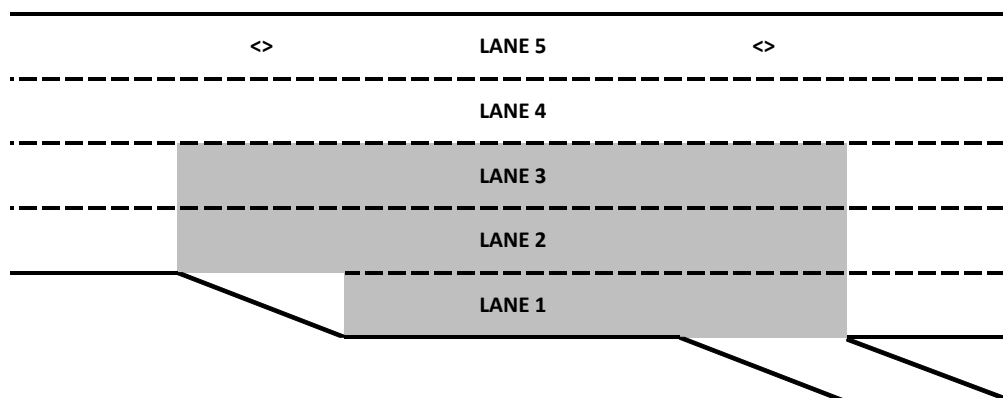
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	355	96
Total	355	96

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,020	3,186	101	52.9%	1,498
On-ramp					
Off-ramp	670	355	96	52.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 105 - NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

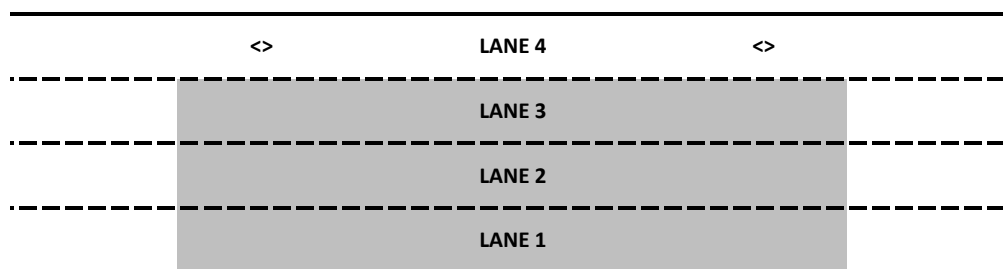
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	220	7	44.9	9.6	4.9	1.5	A
3	1,159	24	8.5	0.9	133.6	5.5	F
2	945	37	6.9	0.7	129.3	4.7	F
1	861	32	5.5	0.5	139.4	2.4	F
Area	2,965	93	7.2	0.5	129.5	5.5	F
Total	3,185	100	9.8	1.0	76.9	6.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,020	3,185	100	52.9%	1,245
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 104 - NB I-15: Main St On-ramp

Segment Type - Merge

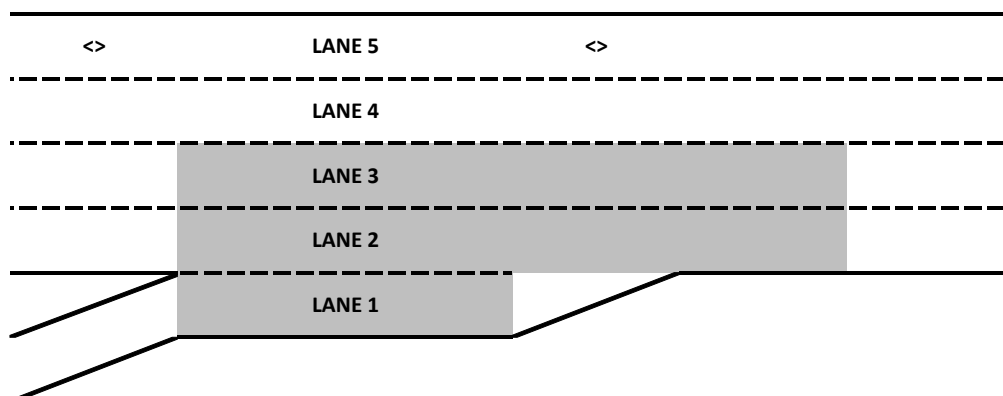
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	239	6	51.7	5.5	4.4	0.5	A
4	1,276	33	9.5	1.3	132.6	5.5	F
3	775	25	6.7	0.8	135.2	7.0	F
2	478	23	4.8	0.8	142.9	9.7	F
1	438	55	1.1	0.1	77.0	4.4	F
Area	1,691	103	5.5	0.7	124.4	8.2	F
Total	3,207	142	10.4	0.7	67.8	4.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	438	55	1		
Total	438	55	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,510	2,769	87	50.3%	1,500
On-ramp	510	438	55	86.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 103 - NB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

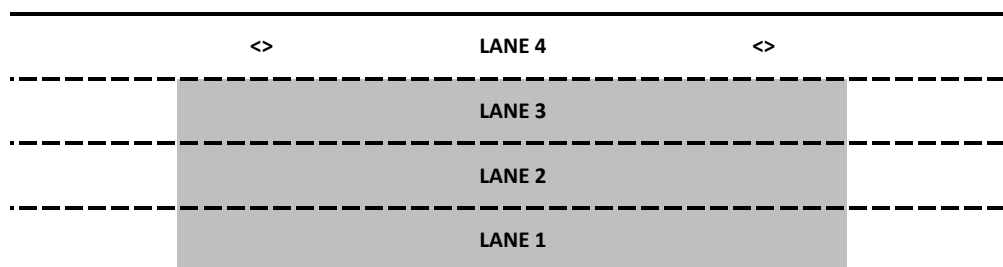
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	248	6	50.0	6.7	5.0	1.0	A
3	1,255	28	10.0	1.1	125.2	5.0	F
2	778	24	5.9	0.7	130.7	4.4	F
1	502	26	3.4	0.8	154.5	11.3	F
Area	2,535	77	7.5	0.8	113.7	7.3	F
Total	2,783	83	11.2	0.8	62.1	4.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,510	2,783	83	50.5%	2,898
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 102 - NB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	267	6	62.2	0.5	3.8	0.3	A
3	1,292	28	9.9	0.6	125.6	4.1	F
2	863	34	5.5	0.6	130.4	5.7	F
1	716	34	4.6	0.5	146.2	6.5	F
Area	1,579	68	5.1	0.5	136.9	4.8	F
Total	3,138	102	11.9	0.5	60.0	2.1	F

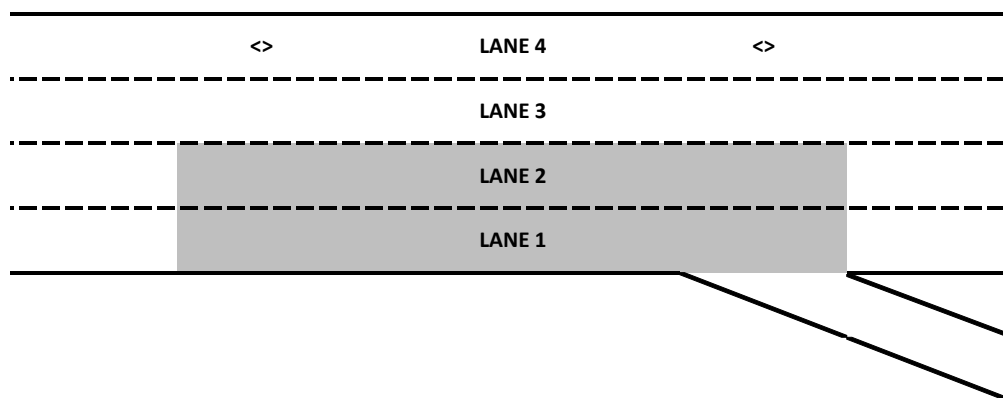
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	346	57
Total	346	57

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,220	3,138	102	50.4%	1,499
On-ramp					
Off-ramp	710	346	57	48.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 101 - NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp

Segment Type - Basic

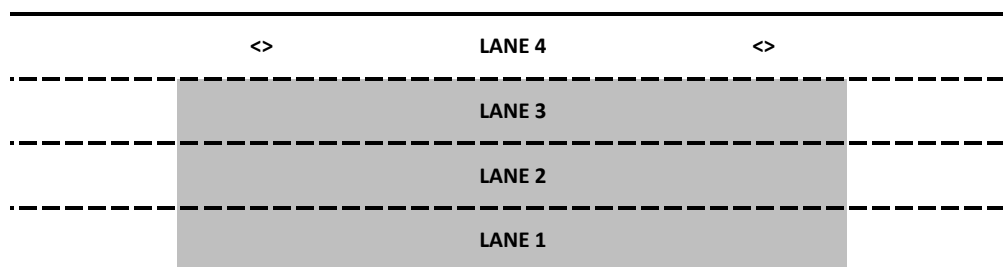
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	270	8	57.1	4.8	4.3	0.6	A
3	1,315	25	10.4	0.7	122.9	4.0	F
2	933	35	6.4	0.5	128.7	6.1	F
1	628	31	3.6	0.3	152.3	6.5	F
Area	2,876	90	7.8	0.5	113.7	4.0	F
Total	3,147	98	11.9	0.7	60.7	2.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,220	3,147	98	50.6%	3,905
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Design Year No Build
PM Peak Hour

Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
200 SB I-15 EL: WB SR-91 Off-ramp	Basic	2,068	37	98.5%				598	41	98.1%	67.8	0.2	15.6	1.0	B
210 SB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp	Basic	1,467	26	98.4%							66.6	0.3	22.5	1.6	C
201 SB I-15 EL: EB SR-91 On-ramp	Basic	1,466	29	98.4%	1,082	57	94.9%				68.2	0.2	19.1	0.7	C
202 SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia	Basic	2,542	37	96.7%							68.0	0.2	19.0	0.7	C
203 SB I-15 EL: EL Access S of Magnolia to EL Egress at El Cerrito	Basic	2,196	38	98.5%							67.5	0.6	31.8	1.3	D
204 SB I-15 EL: EL Egress at El Cerrito	Basic	2,191	36	98.2%				653	48	133.3%	65.0	0.7	17.6	0.6	B
205 SB I-15 EL: EL Egress at El Cerrito to EL Egress at Cajalco	Basic	1,540	21	88.5%							65.5	1.0	24.3	1.2	C
300 NB I-15 EL: EL Ingress at Cajalco	Basic	1,112	31	63.6%							63.1	1.4	16.9	1.0	B
301 NB I-15 EL: EL Ingress at El Cerrito	Basic	1,115	30	63.7%	431	61	48.5%				66.6	0.4	11.9	0.2	B
302 NB I-15 EL: EL Ingress at El Cerrito to EL Access N of Ontario	Basic	1,546	38	58.6%							69.2	0.1	11.8	0.2	B
303 NB I-15 EL: EL Access at Ontario to WB SR-91 Off-ramp	Basic	2,017	32	64.6%							66.2	1.2	15.3	0.6	B
304 NB I-15 EL: WB SR-91 Off-ramp	Basic	2,018	44	64.7%				771	47	55.5%	67.4	0.5	15.4	0.6	B
305 NB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp	Basic	1,249	24	72.2%							67.0	0.6	19.0	1.2	C
306 NB I-15 EL: EB SR-91 On-ramp	Basic	1,254	24	72.5%	531	29	73.8%				68.9	0.2	13.3	0.9	B

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 200 - SB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,050	23	67.6	0.1	15.5	1.2	B
1	1,018	14	68.0	0.3	15.7	1.0	B
Area	2,068	37	67.8	0.2	15.6	1.0	B
Total	2,068	37	67.8	0.2	15.6	1.0	B

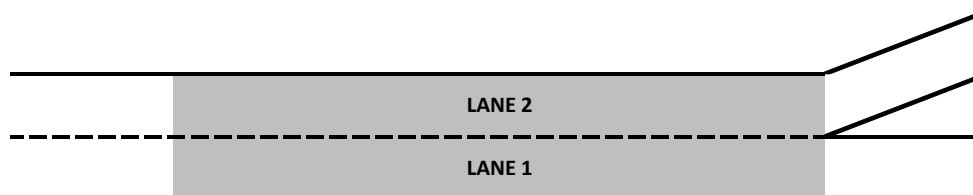
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	598	41
Total	598	41

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,100	2,068	37	98.5%	1,496
On-ramp					
Off-ramp	610	598	41	98.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 210 - SB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	1,467	26	66.6	0.3	22.5	1.6	C
Area	1,467	26	66.6	0.3	22.5	1.6	C
Total	1,467	26	66.6	0.3	22.5	1.6	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,490	1,467	26	98.4%	6,571
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 201 - SB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,466	29	68.4	0.2	17.9	0.4	B
1	1,082	57	68.0	0.2	20.4	1.3	C
Area	2,548	86	68.2	0.2	19.1	0.7	C
Total	2,548	86	68.2	0.2	19.1	0.7	C

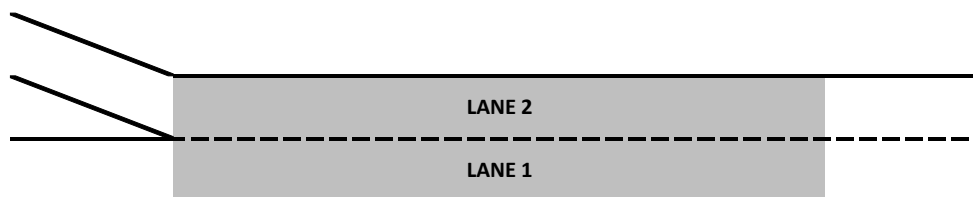
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,082	57
Total	1,082	57

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,490	1,466	29	98.4%	1,500
On-ramp	1,140	1,082	57	94.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 202 - SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,230	21	68.3	0.2	18.5	0.4	C
1	1,312	16	67.8	0.3	19.5	1.0	C
Area	2,542	37	68.0	0.2	19.0	0.7	C
Total	2,542	37	68.0	0.2	19.0	0.7	C

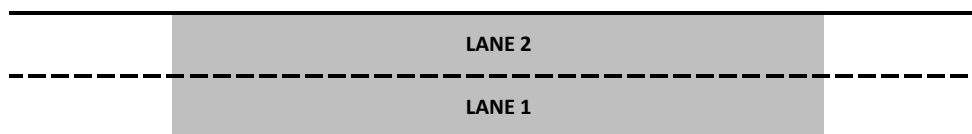
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,630	2,542	37	96.7%	2,496
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 203 - SB I-15 EL: EL Access S of Magnolia to EL Egress at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,109	19	67.0	0.5	15.6	1.0	B
1	1,087	19	68.1	0.8	16.2	1.8	B
Area	2,196	38	67.5	0.6	31.8	1.3	D
Total	2,196	38	67.5	0.6	15.9	0.6	B

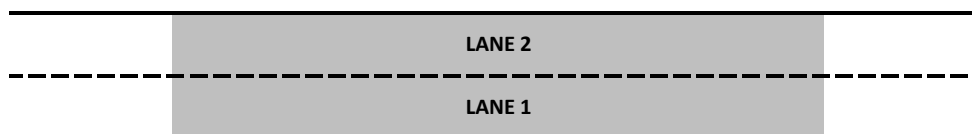
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,230	2,196	38	98.5%	6,828
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 204 - SB I-15 EL: EL Egress at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,523	17	63.7	1.0	24.8	1.2	C
1	668	19	67.9	0.4	10.4	0.7	A
Area	2,191	36	65.0	0.7	17.6	0.6	B
Total	2,191	36	65.0	0.7	17.6	0.6	B

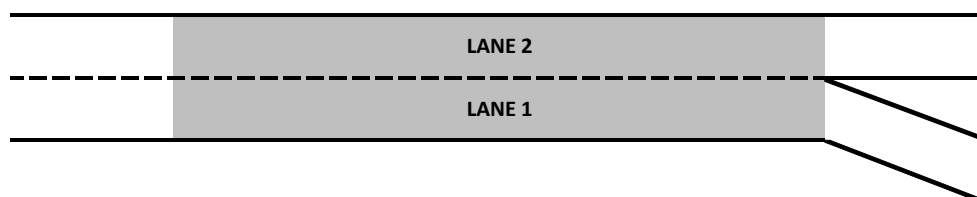
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	653	48
Total	653	48

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,230	2,191	36	98.2%	1,199
On-ramp					
Off-ramp	490	653	48	133.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 205 - SB I-15 EL: EL Egress at El Cerrito to EL Egress at Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	1,540	21	65.5	1.0	24.3	1.2	C
Area	1,540	21	65.5	1.0	24.3	1.2	C
Total	1,540	21	65.5	1.0	24.3	1.2	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,740	1,540	21	88.5%	4,080
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 300 - NB I-15 EL: EL Ingress at Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	1,112	31	63.1	1.4	16.9	1.0	B
Area	1,112	31	63.1	1.4	16.9	1.0	B
Total	1,112	31	63.1	1.4	16.9	1.0	B

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,750	1,112	31	63.6%	5,237
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 301 - NB I-15 EL: EL Ingress at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,115	30	67.4	0.3	17.1	0.6	B
1	431	61	64.7	0.7	6.7	0.9	A
Area	1,547	91	66.6	0.4	11.9	0.2	B
Total	1,547	91	66.6	0.4	11.9	0.2	B

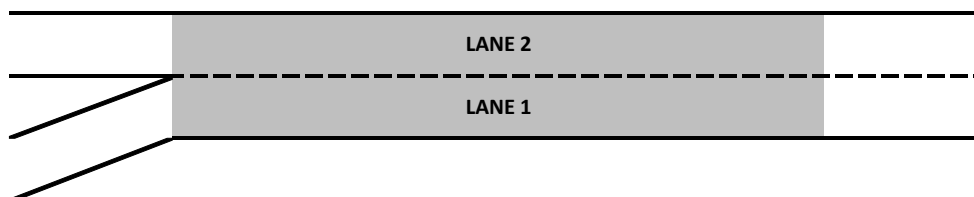
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	431	61
Total	431	61

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,750	1,115	30	63.7%	1,500
On-ramp	890	431	61	48.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 302 - NB I-15 EL: EL Ingress at El Cerrito to EL Access N of Ontario

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	802	21	68.4	0.2	13.4	0.6	B
1	744	16	70.3	0.2	10.2	0.6	A
Area	1,546	38	69.2	0.1	11.8	0.2	B
Total	1,546	38	69.2	0.1	11.8	0.2	B

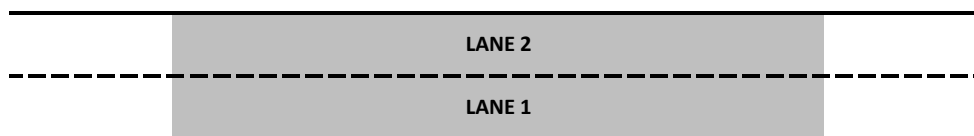
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,640	1,546	38	58.6%	6,294
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 303 - NB I-15 EL: EL Access at Ontario to WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,076	15	66.5	1.2	16.9	0.6	B
1	941	17	65.7	1.2	13.6	0.8	B
Area	2,017	32	66.2	1.2	15.3	0.6	B
Total	2,017	32	66.2	1.2	15.3	0.6	B

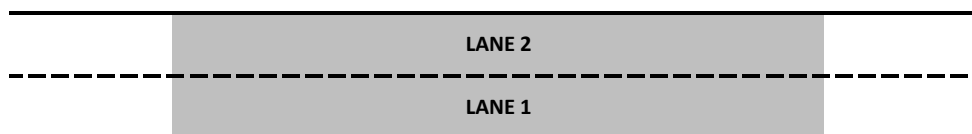
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,120	2,017	32	64.6%	3,113
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 304 - NB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	785	18	68.0	0.4	11.9	0.6	B
1	1,233	26	67.0	0.6	19.0	1.2	C
Area	2,018	44	67.4	0.5	15.4	0.6	B
Total	2,018	44	67.4	0.5	15.4	0.6	B

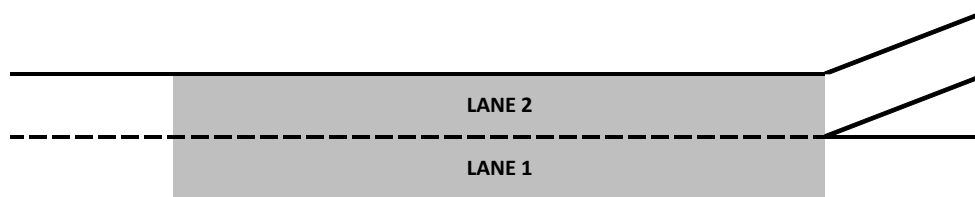
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	771	47
Total	771	47

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,120	2,018	44	64.7%	1,501
On-ramp					
Off-ramp	1,390	771	47	55.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 305 - NB I-15 EL: WB SR-91 Off-ramp to EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2							
1	1,249	24	67.0	0.6	19.0	1.2	C
Area	1,249	24	67.0	0.6	19.0	1.2	C
Total	1,249	24	67.0	0.6	19.0	1.2	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,730	1,249	24	72.2%	1,501
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 306 - NB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,254	24	69.9	0.4	11.3	1.0	B
1	531	29	68.1	0.2	15.3	0.8	B
Area	1,785	52	68.9	0.2	13.3	0.9	B
Total	1,785	52	68.9	0.2	13.3	0.9	B

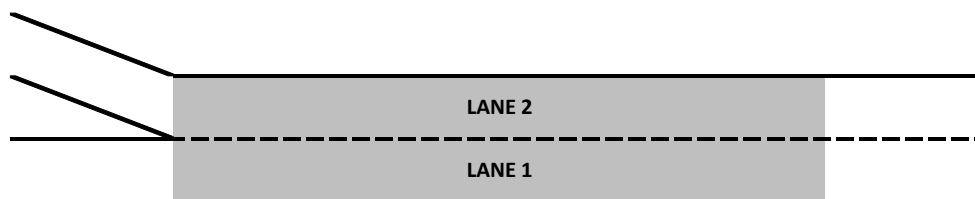
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	531	29
Total	531	29

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,730	1,254	24	72.5%	1,498
On-ramp	720	531	29	73.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Vissim Post-Processor
Average Results from 5 Runs
Network Statistics

I-15 Express Lanes Southern Extension
Design Year Plus Project
AM Peak Hour

Performance Measure	Vehicle Types	Average	Std. Dev.	Minimum	Maximum
Average Delay (seconds)	All	646.0	10.37	637.1	662.8
Total Delay (hours)	All	42,328	632	41,615	43,306
Average Stopped Delay (seconds)	All	31.8	0.79	31.0	32.8
Total Stopped Delay (hours)	All	2086	47	2037	2144
Total Distance Traveled (miles)	All	1,922,607	8,565	1,912,305	1,932,576
Average Speed (mph)	All	27.0	0.29	26.5	27.2
Average Number of Stops	All	46.8	1.43	45.5	48.8
Total Number of Stops	All	11,037,121	315,803	10,752,621	11,476,244
Total Travel Time (hours)	All	71,233.6	581.8	70,451.2	72,070.5
Vehicles Active	All	12,053	161	11,900	12,269
Vehicles Arrived	All	223,834	594	223,201	224,510

VISSIM Post-Processor
Average Results from 5 Runs
Average Travel Time

I-15 Express Lanes Southern Extension
Design Year Plus Project
AM Peak Hour

Corridor Travel Time by Time Interval Summary					
Time interval		Measured from Simulation (min)			
		Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
1	5:00 - 5:15 AM	20.10	26.21	18.87	19.77
2	5:15 - 5:30 AM	20.05	28.93	18.95	19.90
3	5:30 - 5:45 AM	20.09	33.50	18.94	20.16
4	5:45 - 6:00 AM	20.26	42.21	18.86	20.46
5	6:00 - 6:15 AM	20.40	52.67	18.83	20.46
6	6:15 - 6:30 AM	20.40	63.50	18.91	20.48
7	6:30 - 6:45 AM	20.51	74.00	18.88	20.30
8	6:45 - 7:00 AM	20.96	82.71	18.90	20.14
9	7:00 - 7:15 AM	21.42	95.49	18.93	19.98
10	7:15 - 7:30 AM	21.50	113.49	18.98	20.10
11	7:30 - 7:45 AM	21.56	123.23	18.93	21.48
12	7:45 - 8:00 AM	21.42	126.70	18.94	22.90
13	8:00 - 8:15 AM	21.78	130.07	18.94	26.26
14	8:15 - 8:30 AM	22.31	132.23	18.92	33.32
15	8:30 - 8:45 AM	22.66	121.12	19.00	30.19
16	8:45 - 9:00 AM	23.25	112.26	18.98	29.85
17	9:00 - 9:15 AM	23.82	106.38	19.03	28.85
18	9:15 - 9:30 AM	24.35	107.99	19.11	27.17
19	9:30 - 9:45 AM	24.96	114.25	19.11	25.60
20	9:45 - 10:00 AM	24.95	122.39	19.13	25.80
21	10:00 - 10:15 AM	24.42	129.57	19.12	26.56
22	10:15 - 10:30 AM	23.55	133.85	19.12	30.36
23	10:30 - 10:45 AM	24.10	132.07	19.09	29.74
24	10:45 - 11:00 AM	24.11	130.55	19.12	29.88
25	11:00 - 11:15 AM	24.37	131.83	19.15	29.21
26	11:15 - 11:30 AM	24.48	130.34	19.14	28.10
27	11:30 - 11:45 AM	25.04	118.97	19.14	28.06
28	11:45 - 12:00 PM	25.11	109.51	19.14	26.32
Average		22.6	100.9	19.0	25.1

Corridor Performance Measurements				
Stats Summary	Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
Average Travel Time (min)	22.6	100.9	19.0	26.3
Average Travel Speed (mph)	58.2	13.0	69.5	66.4
Average Delay per Vehicle (min)	3.8	82.2	0.3	7.5
Max Individual Vehicle Delay (min)	6.4	115.1	0.4	14.6

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Design Year Plus Project
AM Peak Hour

Location		Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
1	SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	5,236	67	98.4%							64.3	0.6	21.3	0.6	C
2	SB I-15: Hidden Valley Pkwy On-ramp	Merge	5,228	76	98.3%	468	57	95.6%				63.5	0.8	21.3	0.4	C
3	SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp	Basic	5,700	73	98.1%							61.6	1.6	19.3	0.6	C
4	SB I-15: WB SR-91 Off-ramp	Basic	5,703	79	98.2%				844	49	100.5%	60.5	3.8	19.6	1.5	C
5	SB I-15: EB SR-91 Off-ramp	Diverge	4,858	52	97.7%				1,430	64	97.3%	49.2	7.0	38.3	6.4	E
6	SB I-15: EB SR-91 Off-ramp to On-ramp	Basic	3,415	58	97.6%							62.0	1.6	19.0	0.7	C
7	SB I-15: EB SR-91 On-ramp	Merge	3,417	59	97.6%	3,133	118	99.8%				59.2	1.1	25.9	0.8	C
8	SB I-15: WB SR-91 On-ramp to Magnolia Ave Off-ramp	Weave	6,552	82	98.7%	1,643	106	100.8%	1,348	48	97.0%	61.6	0.6	25.3	0.9	C
9	SB I-15: Magnolia Ave Off-ramp to On-ramp	Basic	6,850	104	99.6%							62.5	0.7	28.3	1.2	D
10	SB I-15: Magnolia Ave On-ramp	Merge	6,850	99	99.6%	738	52	98.4%				53.9	7.7	28.2	4.4	D
11	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)	Weave	7,585	119	99.4%	428	38	97.4%	421	38	100.3%	55.4	3.7	25.8	2.0	C
12	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp	Basic	7,581	87	99.1%							51.0	9.1	37.3	6.6	E
13	SB I-15: Ontario Ave Off-ramp	Diverge	7,581	93	99.1%				1,129	81	100.8%	46.1	8.0	45.0	7.6	E
14	SB I-15: Ontario Ave Off-ramp to On-ramp	Basic	6,457	87	98.9%							52.7	3.6	31.6	3.1	D
15	SB I-15: Ontario Ave On-ramp	Merge	6,455	88	98.9%	759	52	102.6%				54.2	10.1	23.9	5.7	C
16	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	Basic	7,216	101	99.3%				1,239	34	100.7%	50.0	9.2	38.0	7.7	E
17	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp (EL Access)	Weave	5,975	85	98.9%	424	37	100.9%	382	41	100.6%	56.8	0.7	24.1	1.1	C
19	SB I-15: Foothill Pkwy/El Cerrito Rd On-ramp to Cajalco Rd Off-ramp	Weave	6,020	79	99.0%	399	28	94.9%	1,497	82	100.5%	61.3	0.8	27.2	1.3	D
20	SB I-15: Cajalco Rd Off-ramp to On-ramp	Basic	4,907	72	97.9%							61.8	0.7	27.0	1.4	D
21	SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Weave	4,908	78	98.0%	295	28	101.6%	679	44	97.0%	60.8	1.2	22.7	1.2	C
22	SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp (EL Access)	Weave	5,199	94	98.1%	380	37	100.1%	322	35	97.5%	61.1	1.4	17.1	1.0	B
24	SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	4,566	71	98.2%							61.6	0.6	25.4	1.2	C
25	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	4,565	73	98.2%	147	20	113.4%				62.4	0.4	20.0	1.0	C
26	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp	Basic	4,698	75	98.3%							60.4	0.9	26.8	1.1	D
27	SB I-15: Temescal Canyon Rd Off-ramp	Diverge	4,726	67	98.9%				605	44	99.1%	57.8	3.0	27.9	2.4	D
28	SB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	4,113	60	98.6%							62.2	1.0	22.9	1.0	C
29	SB I-15: Temescal Canyon Rd On-ramp	Merge	4,109	55	98.5%	189	31	99.7%				63.1	0.6	17.5	0.8	B
30	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	4,287	60	98.3%							61.0	1.8	24.5	1.3	C
52	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp (EL Access)	Weave	4,281	75	98.2%	317	33	96.2%	299	29	90.7%	61.6	1.4	17.7	0.9	B
53	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	4,281	66	98.2%							61.1	1.6	24.3	1.3	C
31	SB I-15: Indian Truck Trail Off-ramp	Diverge	4,278	68	98.1%				293	46	97.8%	59.3	3.5	24.8	2.7	C
32	SB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	3,958	77	97.5%							62.1	0.5	22.5	1.3	C
33	SB I-15: Indian Truck Trail On-ramp	Merge	3,958	72	97.5%	204	26	101.9%				61.4	1.8	18.1	0.7	C
60	SB I-15: Indian Truck Trail On-ramp to Horsethief Rd Off-ramp	Basic	4,171	76	97.9%							60.6	2.0	24.3	1.1	C
61	SB I-15: Horsethief Rd Off-ramp	Diverge	4,174	72	98.0%				331	46	94.6%	60.7	2.3	24.2	1.6	C
62	SB I-15: Horsethief Rd Off-ramp to On-ramp	Basic	3,832	54	98.0%							62.4	0.9	21.8	0.7	C
63	SB I-15: Horsethief Rd On-ramp	Merge	3,826	51	97.8%	279	36	99.7%				62.3	1.4	18.1	0.9	C
34	SB I-15: Horsethief Rd On-ramp to Lake St Off-ramp	Basic	4,096	60	97.8%							61.0	1.0	23.5	1.0	C
54	SB I-15: Horsethief Rd On-ramp to Lake St Off-ramp (EL Access)	Weave	4,087	72	97.6%	291	42	88.2%	287	38	89.7%	62.3	0.6	16.4	0.7	B
35	SB I-15: Lake St Off-ramp	Diverge	4,084	58	97.2%				235	33	97.8%	60.3	2.3	23.1	1.5	C
36	SB I-15: Lake St Off-ramp to On-ramp	Basic	3,831	76	96.7%							62.5	1.0	21.3	1.2	C
37	SB I-15: Lake St On-ramp	Merge	3,818	70	96.4%	346	66	104.8%				62.8	1.1	17.2	1.2	B
38	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp	Basic	4,155	76	96.9%							61.5	0.9	23.5	0.8	C
55	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp (EL Egress)	Basic	4,141	61	96.5%	62	15	89.1%				64.0	0.4	17.2	0.4	B
56	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp	Basic	4,201	76	96.4%							64.6	0.7	17.1	0.6	B
39	SB I-15: Nichols Rd Off-ramp	Basic	4,196	73	96.2%				570	38	100.1%	60.4	2.5	19.6	1.0	C
40	SB I-15: Nichols Rd Off-ramp to On-ramp	Basic	3,615	66	95.4%							62.3	1.3	20.6	1.1	C
41	SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp	Weave	3,607	58	95.2%	620	44	99.9%	868	60	100.9%	64.0	0.4	17.5	0.2	B
57	SB I-15: Central Ave (SR-74) (EL Egress)	Basic	4,201	80	95.3%	223	24	89.0%				65.1	0.3	14.7	0.2	B
44	SB I-15: Central Ave (SR-74) Off-ramp to On-ramp	Basic	3,546	69	93.3%							66.0	0.2	5.5	0.1	A
45	SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp	Weave	3,545	70	93.3%	1,336	63	100.5%	241	32	96.5%	62.6	0.4	20.7	0.5	C
48	SB I-15: Main St Off-ramp to On-ramp	Basic	4,606	65	94.4%							62.9	0.3	25.9	0.8	C
49	SB I-15: Main St On-ramp	Merge	4,601	67	94.3%	535	60	102.8%				55.8	5.9	24.2	2.7	C
50	SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp	Basic	5,122	76	94.9%							60.8	0.3	29.6	1.1	D

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 1 - SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,294	19	65.7	1.1	20.0	0.9	C
3	1,384	12	64.0	0.5	21.6	0.6	C
2	1,371	22	63.9	0.5	22.9	0.6	C
1	1,187	14	63.4	0.9	20.7	0.7	C
Area	5,236	67	64.3	0.6	21.3	0.6	C
Total	5,236	67	64.3	0.6	21.3	0.6	C

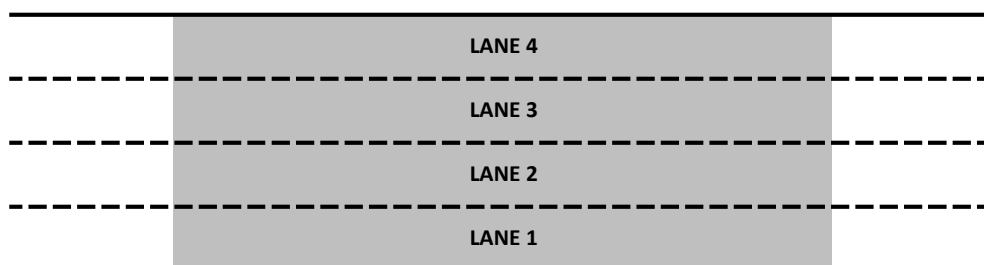
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,320	5,236	67	98.4%	1,784
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 2 - SB I-15: Hidden Valley Pkwy On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,276	25	66.0	1.0	20.2	0.9	C
4	1,162	17	64.9	0.9	21.6	1.1	C
3	1,469	22	62.1	0.9	28.1	0.6	D
2	1,320	13	61.4	0.7	23.3	0.7	C
1	468	57	24.7	0.7	1.0	0.1	A
Area	3,258	92	61.8	0.8	21.3	0.4	C
Total	5,696	133	63.5	0.8	21.1	0.5	C

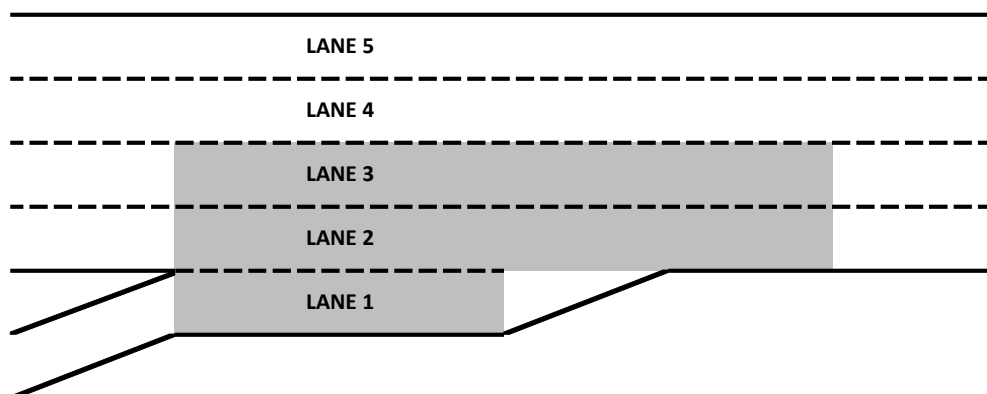
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	468	57
Total	468	57

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,320	5,228	76	98.3%	1,702
On-ramp	490	468	57	95.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 3 - SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,511	23	64.2	1.5	24.8	1.3	C
4	1,687	15	61.9	1.8	28.7	1.2	D
3	1,595	14	58.2	2.1	28.9	1.1	D
2	705	13	62.1	1.8	11.1	0.5	B
1	201	9	65.9	0.6	3.3	0.2	A
Area	5,700	73	61.6	1.6	19.3	0.6	C
Total	5,700	73	61.6	1.6	19.3	0.6	C

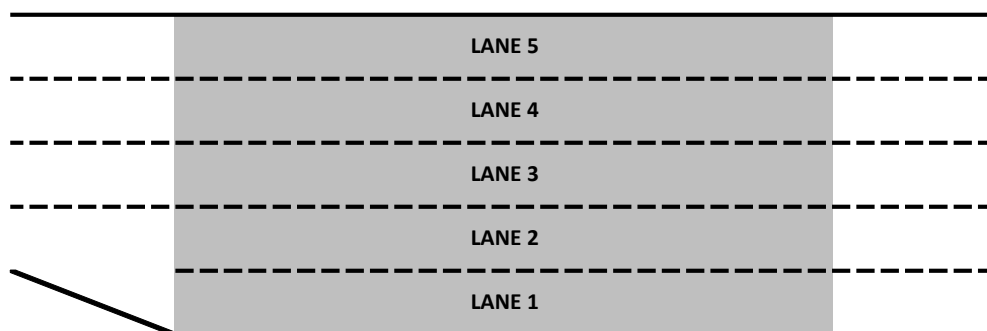
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,810	5,700	73	98.1%	1,019
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 4 - SB I-15: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,637	26	63.5	3.8	23.2	2.3	C
4	1,643	16	59.6	3.6	32.5	2.6	D
3	1,560	14	55.6	5.9	30.0	3.8	D
2	568	11	65.2	0.7	8.1	0.4	A
1	295	12	69.3	0.2	5.1	0.3	A
Area	5,703	79	60.5	3.8	19.6	1.5	C
Total	5,703	79	60.5	3.8	19.6	1.5	C

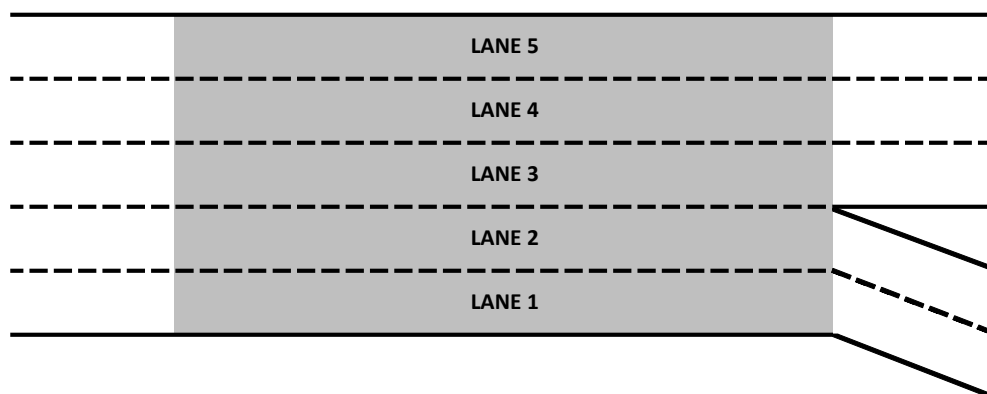
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	494	26
1	350	39
Total	844	49

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,810	5,703	79	98.2%	1,499
On-ramp					
Off-ramp	840	844	49	100.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 5 - SB I-15: EB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,464	28	58.1	5.9	27.3	4.4	D
2	1,825	11	48.5	8.4	31.3	5.3	D
1	1,568	13	42.3	7.7	45.8	7.8	F
Area	3,394	24	45.0	7.9	38.3	6.4	E
Total	4,858	52	49.2	7.0	34.1	5.3	D

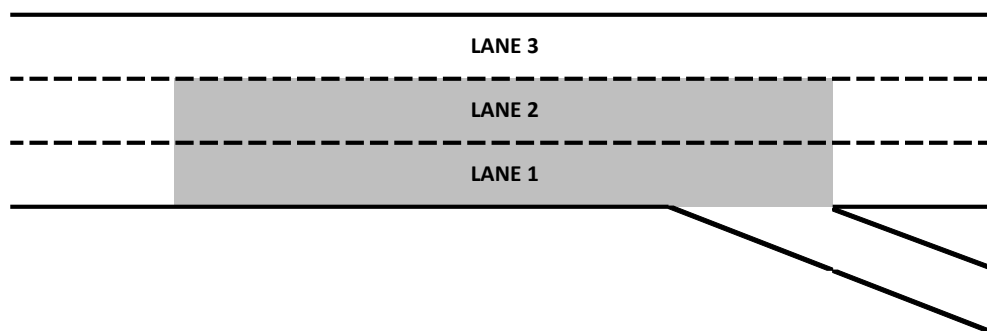
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,430	64
Total	1,430	64

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,970	4,858	52	97.7%	1,545
On-ramp					
Off-ramp	1,470	1,430	64	97.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 6 - SB I-15: EB SR-91 Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,276	18	64.8	1.4	21.3	0.9	C
2	1,000	18	61.2	1.9	18.2	0.4	C
1	1,139	22	59.1	1.5	17.5	1.4	B
Area	3,415	58	62.0	1.6	19.0	0.7	C
Total	3,415	58	62.0	1.6	19.0	0.7	C

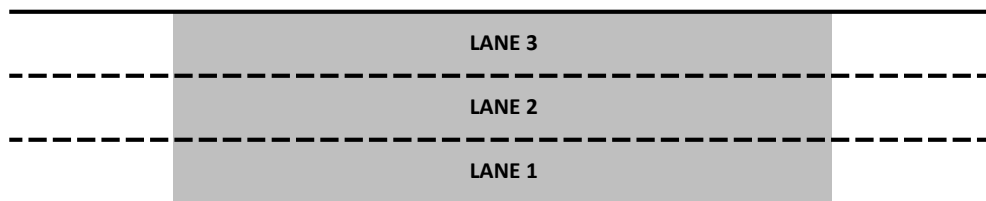
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,500	3,415	58	97.6%	1,549
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 7 - SB I-15: EB SR-91 On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,246	16	66.3	0.9	21.7	0.9	C
4	1,001	16	62.9	1.5	21.2	0.8	C
3	1,169	25	58.5	1.4	28.4	1.3	D
2	1,530	72	53.1	1.3	40.4	1.1	E
1	1,604	48	32.2	0.7	4.2	0.3	A
Area	5,304	161	57.3	1.2	25.9	0.8	C
Total	6,550	177	59.2	1.1	24.9	0.8	C

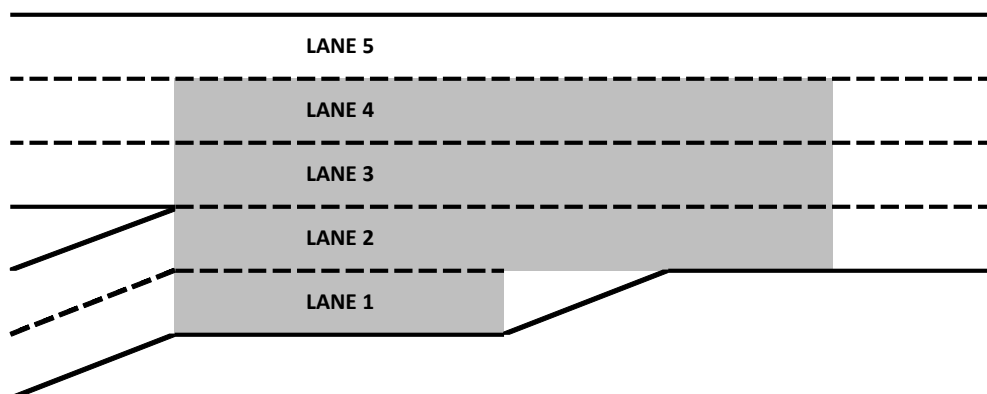
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,530	72
1	1,604	48
Total	3,133	118

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,500	3,417	59	97.6%	1,370
On-ramp	3,140	3,133	118	99.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 8 - SB I-15: WB SR-91 On-ramp to Magnolia Ave Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6			65.2	0.9	27.3	1.5	D
5	1,517	29	63.1	1.0	28.0	0.9	D
4	1,544	19	61.2	1.0	29.2	1.6	D
3	1,471	19	57.2	0.8	32.0	1.2	D
2	2,020	16	48.7	1.0	13.8	0.4	B
1	1,643	106	32.6	0.3	4.0	0.4	A
Area	8,195	188	61.6	0.6	25.3	0.9	C
Total	8,195	188	61.6	0.6	25.3	0.9	C

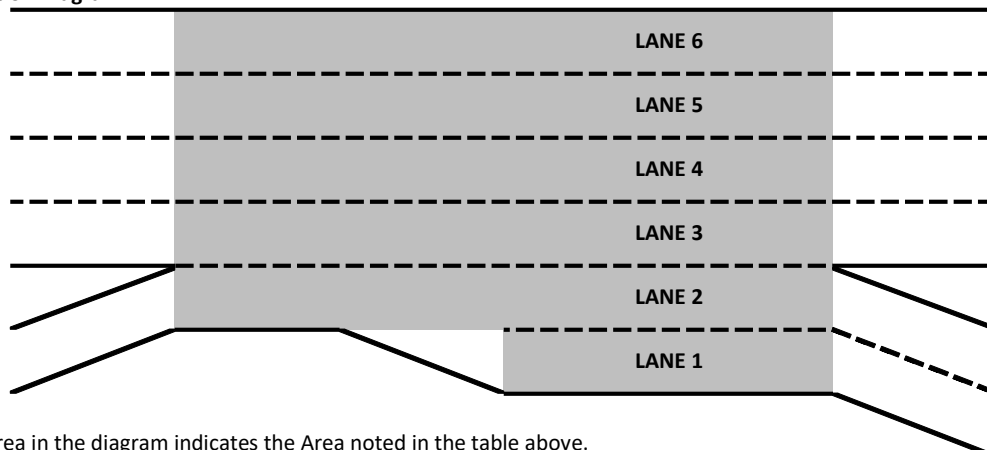
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,643	106
Total	1,643	106

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	751	48
1	597	37
Total	1,348	48

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,640	6,552	82	98.7%	2,539
On-ramp	1,630	1,643	106	100.8%	
Off-ramp	1,390	1,348	48	97.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 9 - SB I-15: Magnolia Ave Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,881	33	65.2	0.8	30.2	1.3	D
3	1,802	24	63.2	0.6	29.1	1.6	D
2	1,685	26	61.7	0.7	28.3	1.5	D
1	1,481	20	59.3	1.3	25.9	1.3	C
Area	6,850	104	62.5	0.7	28.3	1.2	D
Total	6,850	104	62.5	0.7	28.3	1.2	D

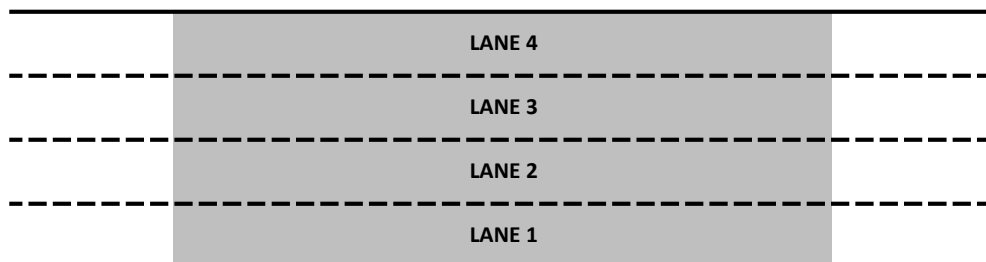
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,880	6,850	104	99.6%	2,362
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 10 - SB I-15: Magnolia Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7			35.1	0.2	1.1	0.2	A
6			34.5	0.6	1.8	0.3	A
5	1,930	28	56.6	8.4	35.6	6.2	E
4	1,818	29	55.1	8.4	36.4	4.8	E
3	1,668	19	52.9	7.5	36.7	5.4	E
2	1,435	24	50.2	6.9	34.5	5.8	D
1	738	52	22.8	2.0	2.1	0.3	A
Area	3,841	94	51.8	7.2	28.2	4.4	D
Total	7,588	151	53.9	7.7	26.3	3.9	D

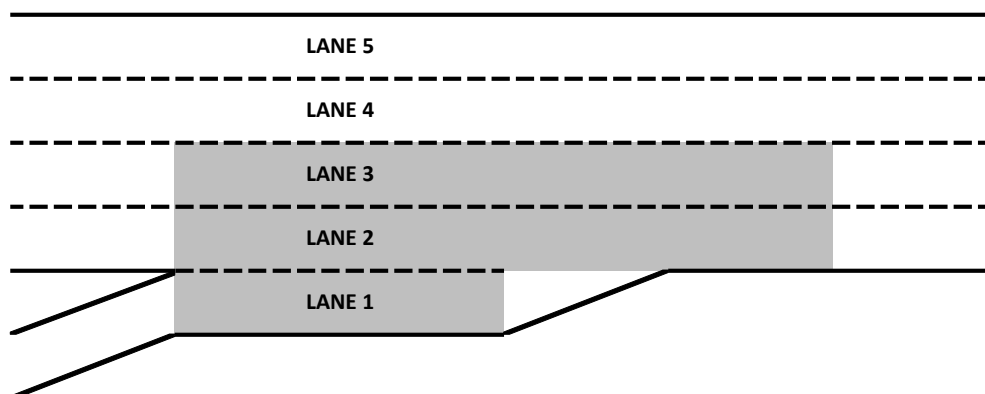
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	738	52
Total	738	52

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,880	6,850	99	99.6%	1,504
On-ramp	750	738	52	98.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 11 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7	1,933	24	48.9	0.4	1.6	0.3	A
6	1,838	28	48.2	0.8	2.3	0.3	A
5	1,885	25	58.6	3.8	34.2	3.3	D
4	1,739	21	56.2	4.3	35.2	2.0	E
3	190	10	53.6	3.5	36.8	2.8	E
2	150	23	51.2	3.4	35.1	3.4	E
1	278	26	6.3	0.9	0.3	0.1	A
Area	8,014	157	55.4	3.7	25.8	2.0	C
Total	8,014	157	55.4	3.7	25.8	2.0	C

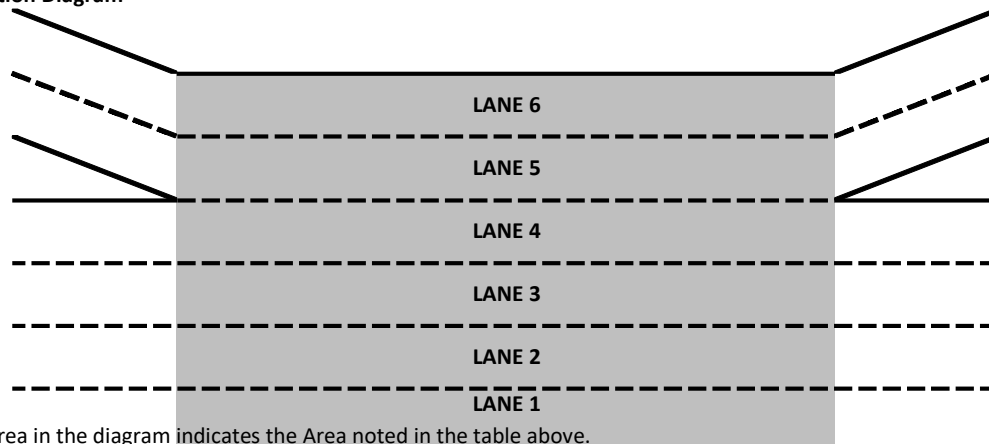
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	150	23
1	278	26
Total	428	38

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	159	26
1	262	25
Total	421	38

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,630	7,585	119	99.4%	3,337
On-ramp	440	428	38	97.4%	
Off-ramp	420	421	38	100.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 12 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,988	25	58.3	7.3	33.1	5.2	D
3	1,823	19	54.8	8.5	33.7	5.8	D
2	1,955	20	47.7	9.7	42.2	8.4	E
1	1,815	24	42.8	12.2	43.6	10.1	E
Area	7,581	87	51.0	9.1	37.3	6.6	E
Total	7,581	87	51.0	9.1	37.3	6.6	E

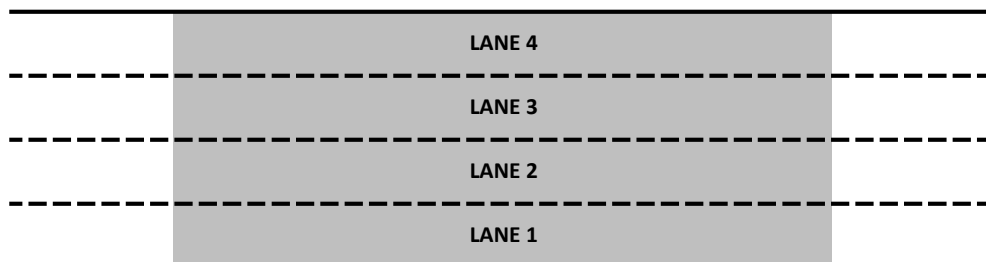
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,650	7,581	87	99.1%	394
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 13 - SB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,007	26	52.9	8.5	39.0	7.6	E
3	1,834	25	49.3	8.5	38.3	6.8	E
2	1,959	13	41.8	8.9	39.5	7.3	E
1	1,781	29	39.3	7.3	50.6	8.0	F
Area	3,740	42	40.4	8.0	45.0	7.6	E
Total	7,581	93	46.1	8.0	41.1	7.0	E

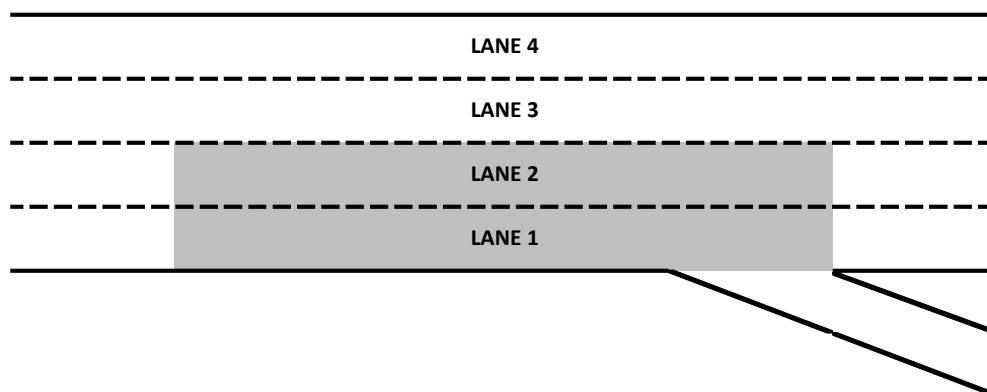
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,129	81
Total	1,129	81

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,650	7,581	93	99.1%	1,504
On-ramp					
Off-ramp	1,120	1,129	81	100.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 14 - SB I-15: Ontario Ave Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,072	26	56.0	4.3	38.3	3.7	E
3	2,096	23	51.8	3.6	40.0	3.8	E
2	1,896	24	49.0	3.6	39.3	4.3	E
1	393	14	56.7	1.5	9.4	1.1	A
Area	6,457	87	52.7	3.6	31.6	3.1	D
Total	6,457	87	52.7	3.6	31.6	3.1	D

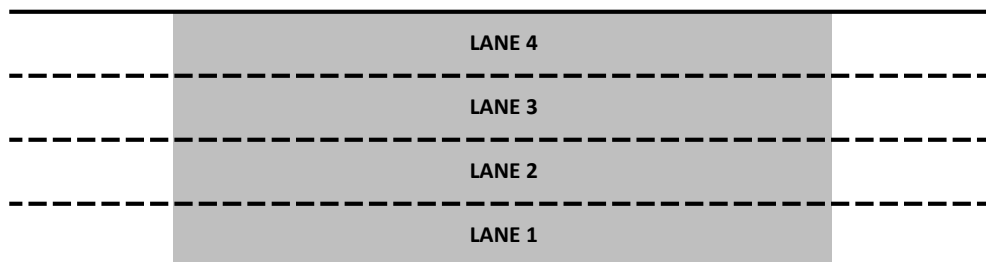
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,530	6,457	87	98.9%	2,820
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 15 - SB I-15: Ontario Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	2,106	22	56.5	11.7	38.2	8.9	E
4	1,878	24	53.5	11.3	41.1	9.7	E
3	1,815	24	50.1	10.6	41.4	10.5	E
2	655	18	57.7	7.4	20.5	5.4	C
1	759	52	35.0	0.5	1.5	0.2	A
Area	3,230	94	53.3	8.3	23.9	5.7	C
Total	7,214	140	54.2	10.1	30.6	7.1	D

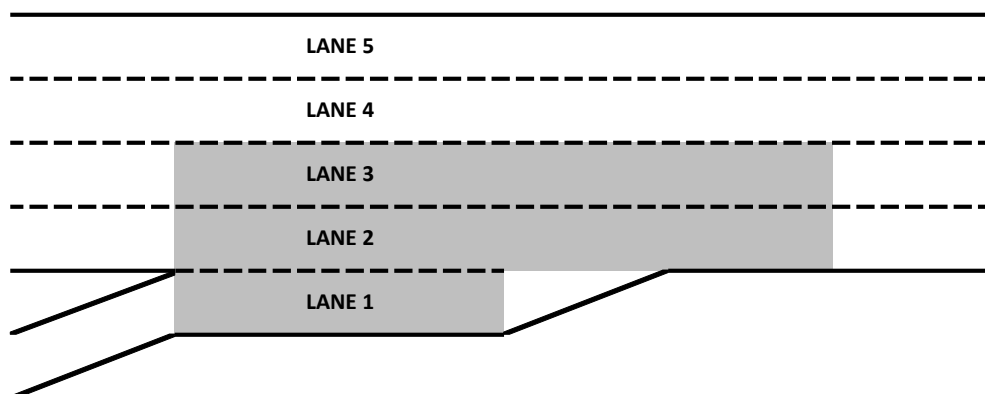
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	759	52
Total	759	52

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,530	6,455	88	98.9%	1,494
On-ramp	740	759	52	102.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 16 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,924	26	54.5	10.5	39.2	9.6	E
3	2,163	30	49.9	10.1	45.2	9.3	F
2	1,894	30	45.9	10.1	43.3	9.9	E
1	1,235	14	48.6	12.1	26.9	8.5	D
Area	7,216	101	50.0	9.2	38.0	7.7	E
Total	7,216	101	50.0	9.2	38.0	7.7	E

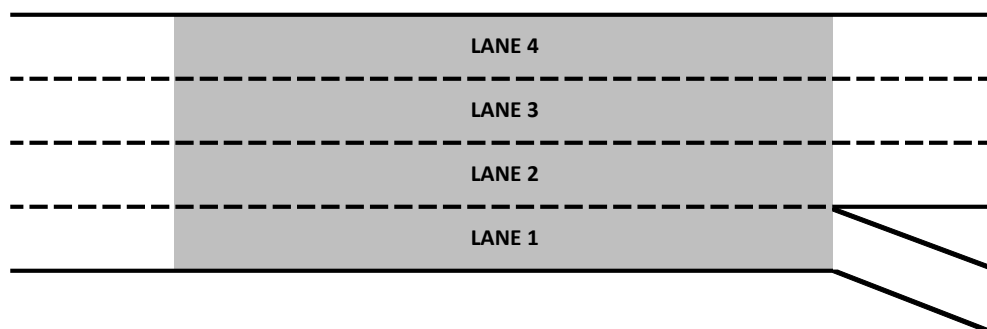
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,239	34
Total	1,239	34

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,270	7,216	101	99.3%	738
On-ramp					
Off-ramp	1,230	1,239	34	100.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 17 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	2,055	17	63.4	0.4	2.1	0.3	A
4	2,071	35	62.4	0.4	3.1	0.4	A
3	1,849	23	59.4	1.3	36.1	1.6	E
2	281	23	55.9	1.1	36.8	1.7	E
1	142	23	52.6	0.4	38.2	2.1	E
Area	6,398	122	56.8	0.7	24.1	1.1	C
Total	6,398	122	56.8	0.7	24.1	1.1	C

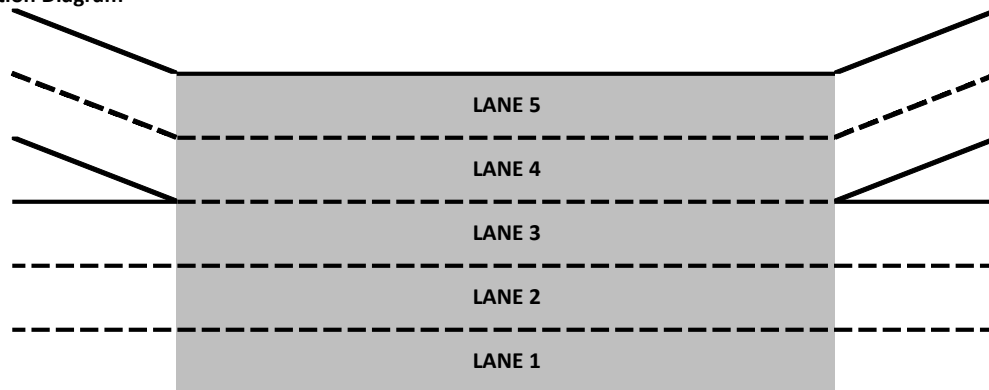
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	281	23
1	142	23
Total	424	37

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	149	24
1	234	28
Total	382	41

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,040	5,975	85	98.9%	2,219
On-ramp	420	424	37	100.9%	
Off-ramp	380	382	41	100.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 19 - SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,051	21	63.4	1.2	31.8	1.5	D
3	1,762	25	61.0	0.8	29.5	1.4	D
2	2,207	34	57.5	1.4	29.8	1.4	D
1	399	28	52.5	0.6	13.1	0.8	B
Area	6,419	107	61.3	0.8	27.2	1.3	D
Total	6,419	107	61.3	0.8	27.2	1.3	D

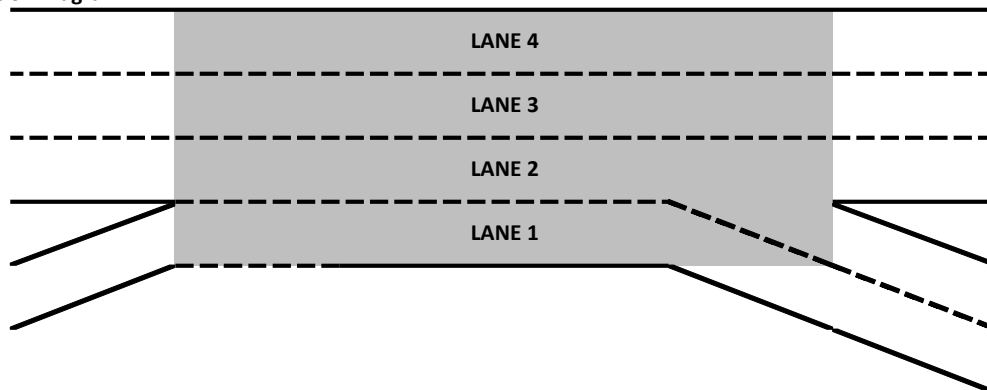
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	399	28
Total	399	28

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	356	34
1	1,141	79
Total	1,497	82

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,080	6,020	79	99.0%	2,775
On-ramp	420	399	28	94.9%	
Off-ramp	1,490	1,497	82	100.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 20 - SB I-15: Cajalco Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,924	29	63.3	1.2	30.2	1.6	D
2	1,662	20	61.8	0.7	27.7	1.4	D
1	1,321	24	59.7	0.8	23.0	1.9	C
Area	4,907	72	61.8	0.7	27.0	1.4	D
Total	4,907	72	61.8	0.7	27.0	1.4	D

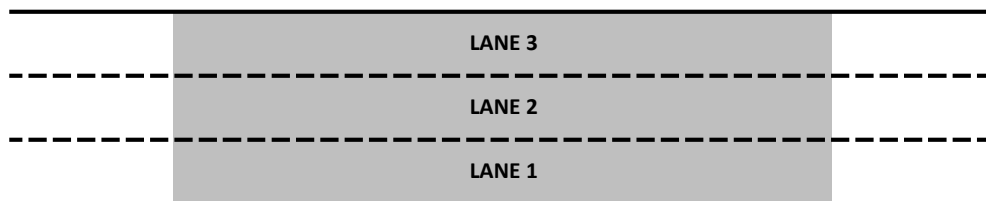
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,010	4,907	72	97.9%	1,294
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 21 - SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Weave

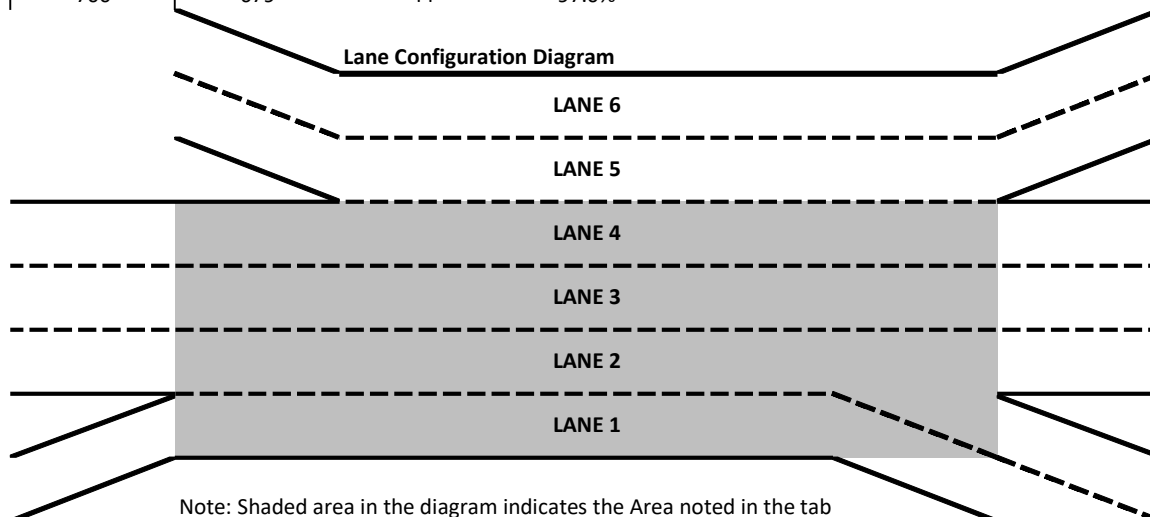
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,873	28	62.8	1.2	29.0	1.1	D
3	1,644	20	60.6	1.5	28.3	1.4	D
2	1,390	30	57.8	1.1	25.5	2.0	C
1	295	28	52.5	1.4	3.6	0.3	A
Area	5,202	106	60.8	1.2	22.7	1.2	C
Total	5,202	106	60.8	1.2	22.7	1.2	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	295	28
Total	295	28

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	179	23
1	500	43
Total	679	44

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,010	4,908	78	98.0%	5,047
On-ramp	290	295	28	101.6%	
Off-ramp	700	679	44	97.0%	



Location 22 - SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp (EL Access)

Segment Type - Weave

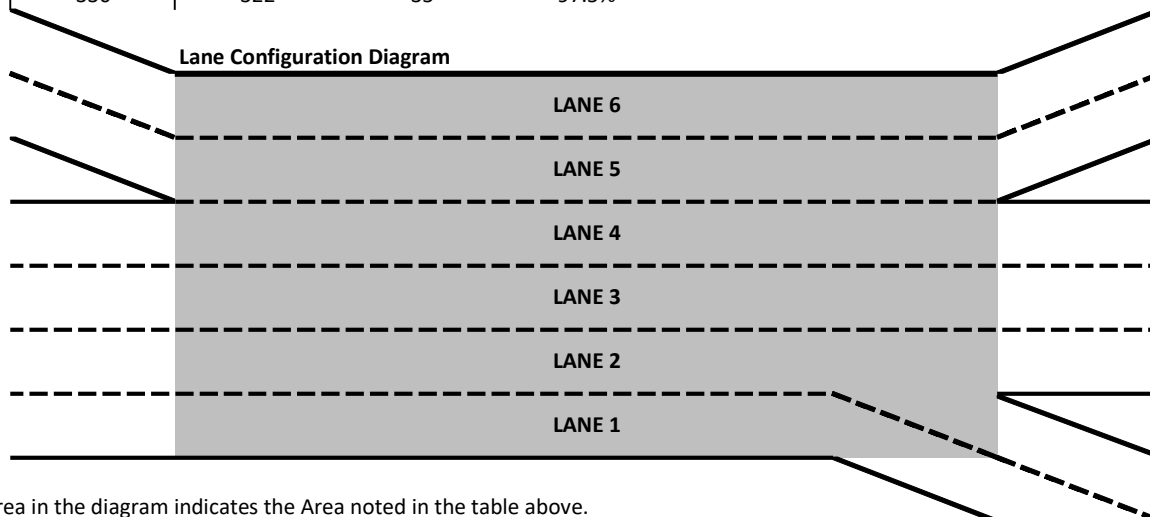
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	1,886	21	47.0	0.2	1.1	0.1	A
5	1,673	23	46.1	0.1	2.0	0.4	A
4	1,460	29	62.7	1.3	29.0	1.3	D
3	179	7	60.4	1.9	28.8	1.9	D
2	117	20	57.7	1.4	26.7	2.3	D
1	264	31	66.6	1.8	3.6	0.4	A
Area	5,579	131	61.1	1.4	17.1	1.0	B
Total	5,579	131	61.1	1.4	17.1	1.0	B

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	117	20
1	264	31
Total	380	37

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	121	19
1	201	27
Total	322	35

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,300	5,199	94	98.1%	3,004
On-ramp	380	380	37	100.1%	
Off-ramp	330	322	35	97.5%	



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations

I-15 Express Lanes Southern Extension
Design Year Plus Project
AM Peak Hour

Location 24 - SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,723	17	63.4	0.7	27.8	1.0	D
2	1,571	19	61.8	1.2	26.2	0.7	D
1	1,272	36	58.9	1.1	22.3	2.0	C
Area	4,566	71	61.6	0.6	25.4	1.2	C
Total	4,566	71	61.6	0.6	25.4	1.2	C

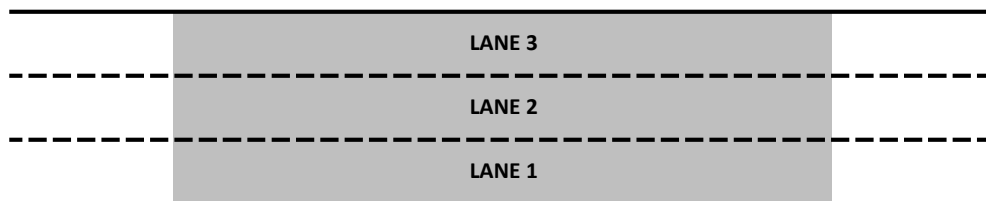
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,650	4,566	71	98.2%	1,755
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 25 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,705	23	64.3	0.7	27.8	1.0	D
3	1,567	19	62.8	0.9	27.0	1.3	D
2	1,293	31	59.1	1.0	23.2	1.6	C
1	147	20	28.4	0.8	0.4	0.1	A
Area	3,008	70	61.3	0.3	20.0	1.0	C
Total	4,713	93	62.4	0.4	22.2	0.8	C

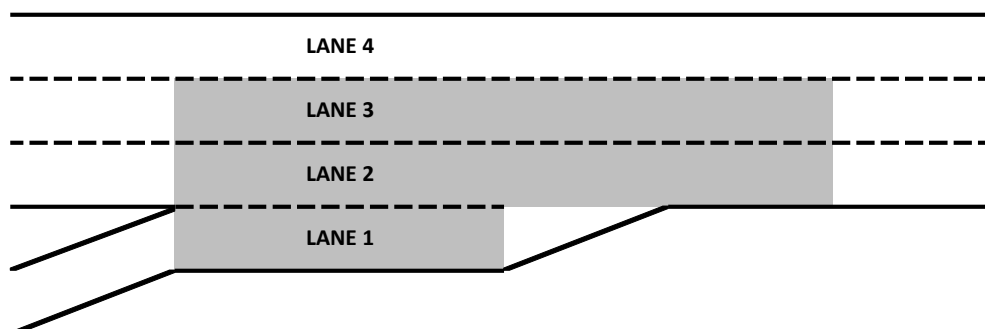
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	147	20
Total	147	20

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,650	4,565	73	98.2%	1,501
On-ramp	130	147	20	113.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 26 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,766	27	62.6	0.6	28.6	0.8	D
2	1,597	22	60.4	1.3	27.5	1.3	D
1	1,334	26	57.8	1.0	24.3	1.7	C
Area	4,698	75	60.4	0.9	26.8	1.1	D
Total	4,698	75	60.4	0.9	26.8	1.1	D

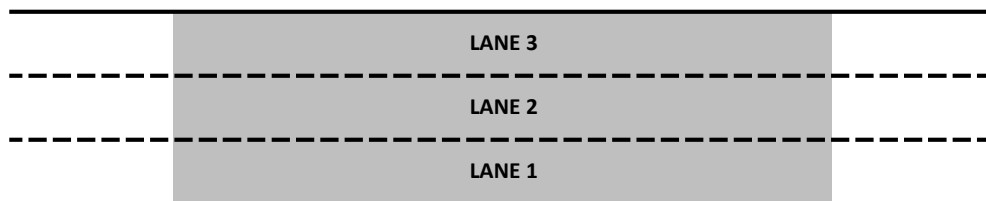
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,780	4,698	75	98.3%	7,458
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 27 - SB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,668	19	61.5	2.7	28.0	2.6	D
2	1,509	19	57.7	4.1	26.9	2.2	D
1	1,549	29	53.8	2.6	28.9	2.8	D
Area	3,058	48	55.7	3.3	27.9	2.4	D
Total	4,726	67	57.8	3.0	27.8	2.4	D

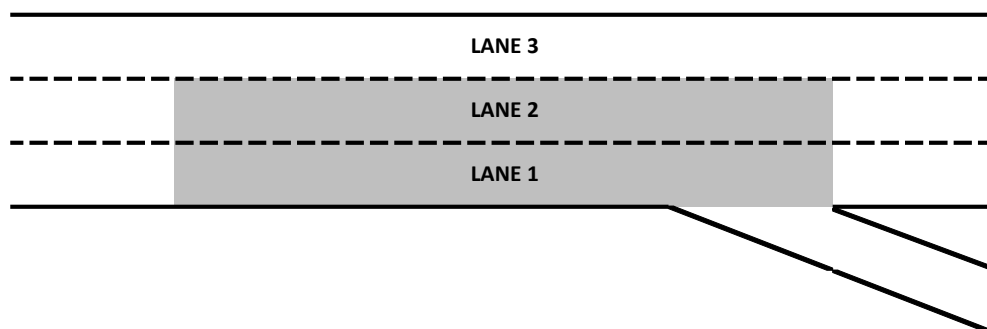
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	605	44
Total	605	44

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,780	4,726	67	98.9%	1,502
On-ramp					
Off-ramp	610	605	44	99.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 28 - SB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,593	15	63.9	1.0	26.0	1.4	C
2	1,396	20	62.2	1.2	23.7	0.6	C
1	1,124	25	59.8	0.6	19.2	1.7	C
Area	4,113	60	62.2	1.0	22.9	1.0	C
Total	4,113	60	62.2	1.0	22.9	1.0	C

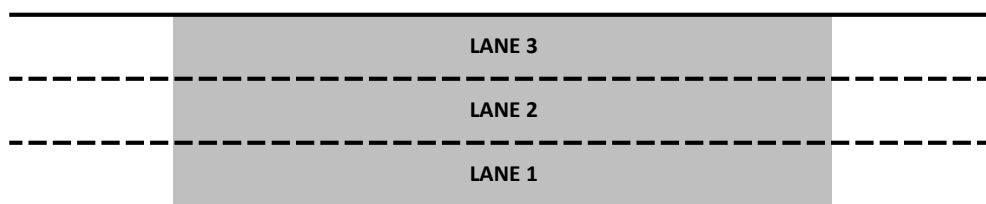
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,170	4,113	60	98.6%	2,526
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 29 - SB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,564	18	65.0	0.7	25.3	0.7	C
3	1,401	16	62.8	0.9	23.9	1.0	C
2	1,145	21	60.9	0.3	21.6	1.3	C
1	189	31	35.5	1.1	0.4	0.1	A
Area	2,735	68	62.0	0.5	17.5	0.8	B
Total	4,299	86	63.1	0.6	19.6	0.8	C

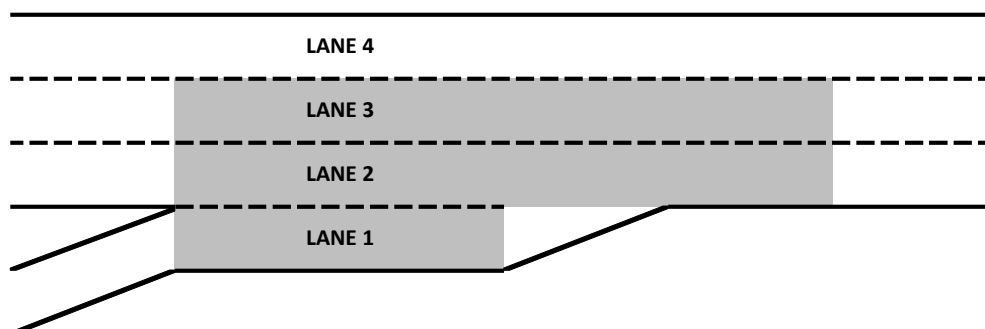
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	189	31
Total	189	31

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,170	4,109	55	98.5%	1,502
On-ramp	190	189	31	99.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 30 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,582	18	62.8	1.9	26.6	1.0	D
2	1,470	21	60.7	1.8	24.9	1.3	C
1	1,235	20	58.9	1.7	22.0	1.8	C
Area	4,287	60	61.0	1.8	24.5	1.3	C
Total	4,287	60	61.0	1.8	24.5	1.3	C

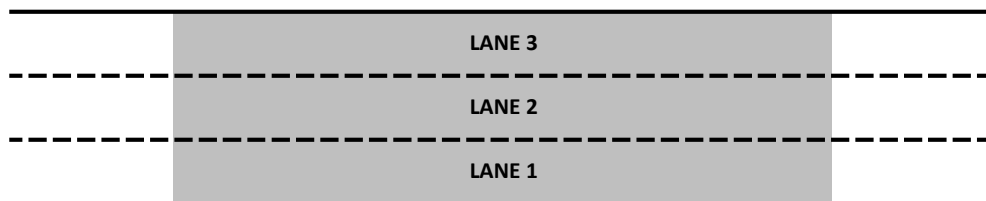
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,360	4,287	60	98.3%	4,808
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 52 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,594	24	47.3	0.3	1.3	0.1	A
4	1,467	16	46.0	0.4	1.8	0.2	A
3	1,220	28	63.3	1.4	26.7	1.3	D
2	195	24	60.7	1.6	24.9	1.4	C
1	122	17	58.9	1.2	21.9	1.3	C
Area	4,599	108	61.6	1.4	17.7	0.9	B
Total	4,599	108	61.6	1.4	17.7	0.9	B

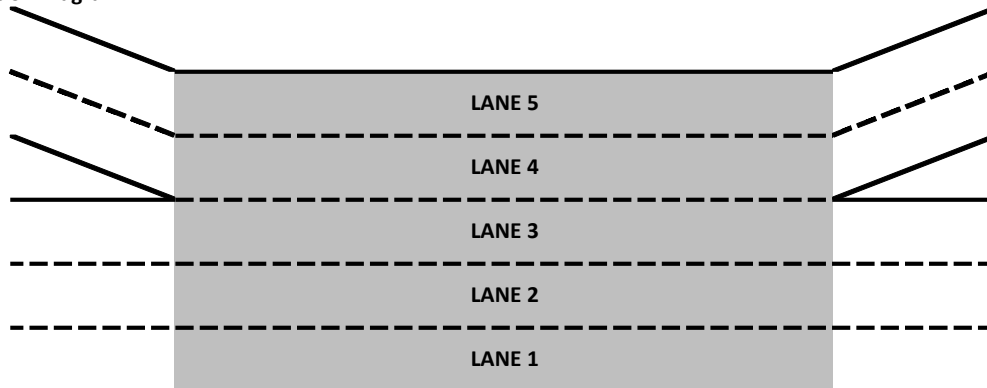
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	195	24
1	122	17
Total	317	33

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	175	21
1	125	18
Total	299	29

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,360	4,281	75	98.2%	3,000
On-ramp	330	317	33	96.2%	
Off-ramp	330	299	29	90.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 53 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,518	15	64.2	1.2	25.0	1.1	C
2	1,502	21	60.3	1.8	25.1	1.4	C
1	1,261	29	58.3	1.6	23.0	1.9	C
Area	4,281	66	61.1	1.6	24.3	1.3	C
Total	4,281	66	61.1	1.6	24.3	1.3	C

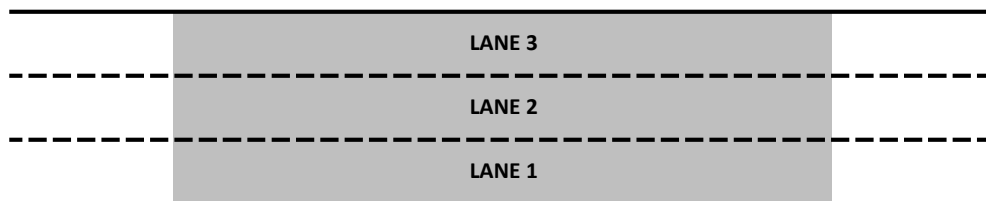
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,360	4,281	66	98.2%	1,096
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 31 - SB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,537	17	62.4	3.2	25.8	1.8	C
2	1,489	23	59.1	4.1	25.1	3.1	C
1	1,252	28	56.0	3.3	24.6	2.4	C
Area	2,741	51	57.6	3.7	24.8	2.7	C
Total	4,278	68	59.3	3.5	25.1	2.3	C

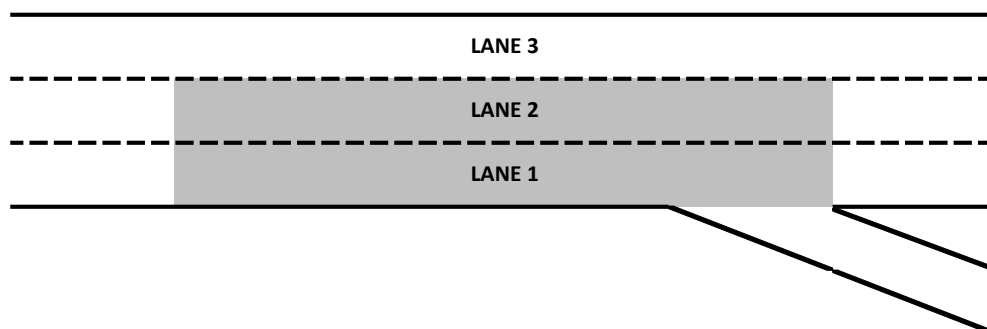
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	293	46
Total	293	46

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,360	4,278	68	98.1%	1,499
On-ramp					
Off-ramp	300	293	46	97.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 32 - SB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,487	21	63.4	0.8	24.7	1.1	C
2	1,361	26	62.1	0.5	23.4	1.6	C
1	1,110	30	60.2	0.4	19.3	1.4	C
Area	3,958	77	62.1	0.5	22.5	1.3	C
Total	3,958	77	62.1	0.5	22.5	1.3	C

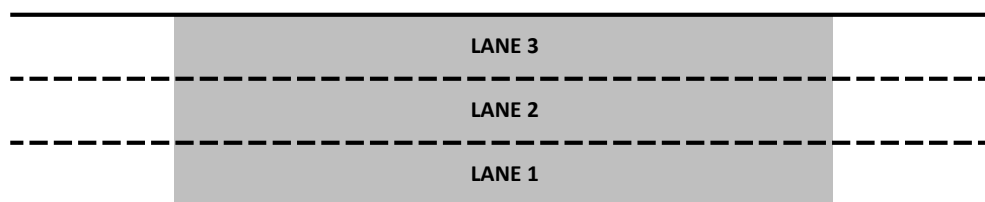
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,060	3,958	77	97.5%	3,127
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 33 - SB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,476	18	63.3	1.3	24.8	1.2	C
3	1,360	26	61.0	2.1	24.4	0.9	C
2	1,122	29	59.1	2.7	21.4	1.1	C
1	204	26	31.3	0.8	0.5	0.1	A
Area	2,686	81	60.4	2.2	18.1	0.7	C
Total	4,162	98	61.4	1.8	20.0	0.8	C

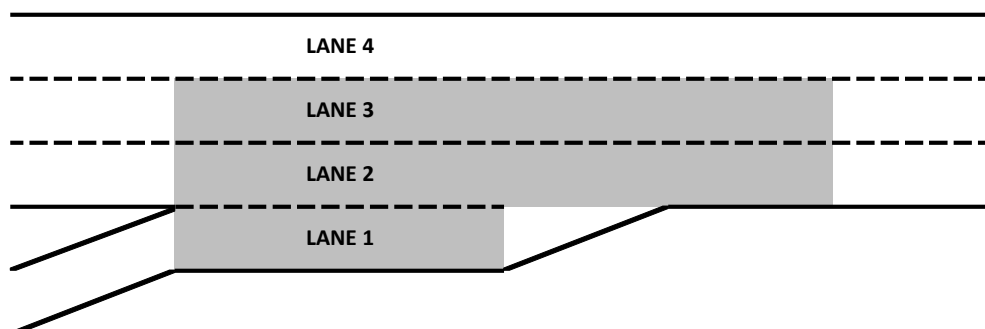
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	204	26
Total	204	26

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,060	3,958	72	97.5%	1,501
On-ramp	200	204	26	101.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 60 - SB I-15: Indian Truck Trail On-ramp to Horsethief Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,451	23	62.7	2.3	25.3	1.2	C
2	1,476	22	60.4	1.7	25.1	1.3	C
1	1,244	32	58.1	2.2	22.5	1.4	C
Area	4,171	76	60.6	2.0	24.3	1.1	C
Total	4,171	76	60.6	2.0	24.3	1.1	C

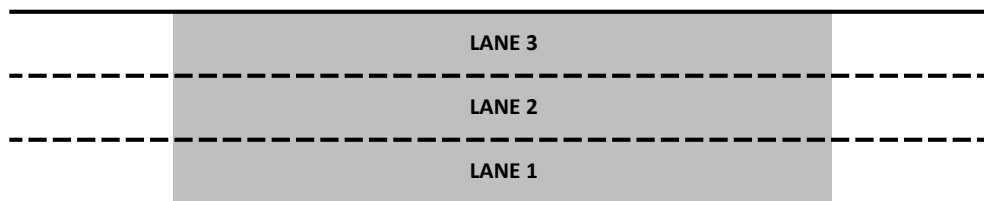
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,260	4,171	76	97.9%	2,578
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 61 - SB I-15: Horsethief Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,471	22	63.3	2.5	24.6	1.2	C
2	1,458	21	60.9	2.5	24.0	1.2	C
1	1,245	28	57.5	1.8	24.4	2.4	C
Area	2,703	50	59.2	2.2	24.2	1.6	C
Total	4,174	72	60.7	2.3	24.3	1.4	C

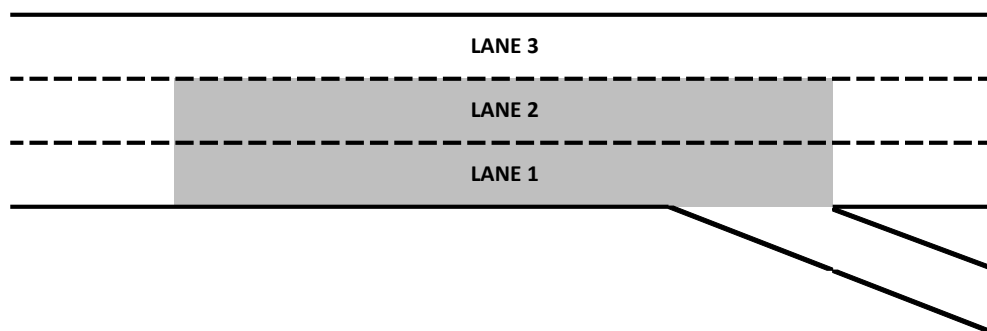
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	331	46
Total	331	46

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,260	4,174	72	98.0%	1,448
On-ramp					
Off-ramp	350	331	46	94.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 62 - SB I-15: Horsethief Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,448	19	64.1	1.0	24.0	0.7	C
2	1,312	16	62.3	1.0	22.8	0.2	C
1	1,071	19	60.3	0.7	18.8	1.3	C
Area	3,832	54	62.4	0.9	21.8	0.7	C
Total	3,832	54	62.4	0.9	21.8	0.7	C

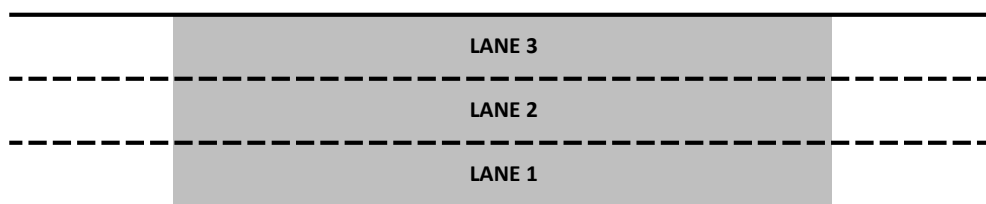
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,910	3,832	54	98.0%	2,793
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 63 - SB I-15: Horsethief Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,433	16	64.5	1.2	24.0	0.8	C
3	1,317	14	61.9	1.8	24.4	0.8	C
2	1,075	21	59.6	1.8	20.9	1.5	C
1	279	36	28.0	0.8	0.7	0.1	A
Area	2,672	70	61.0	1.6	18.1	0.9	C
Total	4,105	87	62.3	1.4	19.8	0.8	C

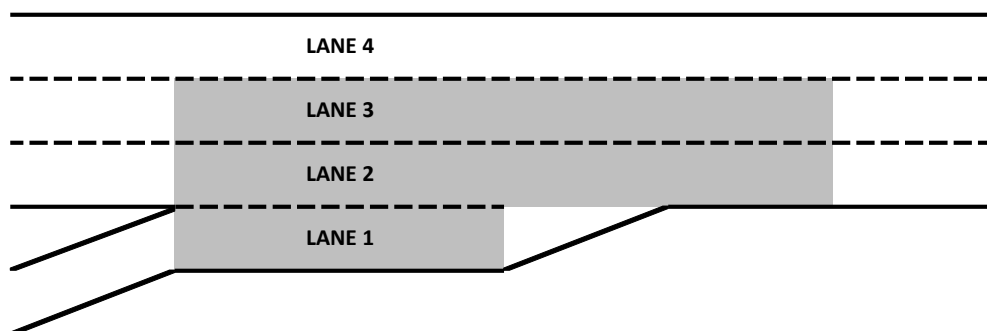
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	279	36
Total	279	36

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,910	3,826	51	97.8%	1,497
On-ramp	280	279	36	99.7%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 34 - SB I-15: Horsethief Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,505	18	62.7	0.8	24.9	0.6	C
2	1,402	20	60.9	1.2	24.4	1.2	C
1	1,189	22	59.1	1.3	21.2	1.3	C
Area	4,096	60	61.0	1.0	23.5	1.0	C
Total	4,096	60	61.0	1.0	23.5	1.0	C

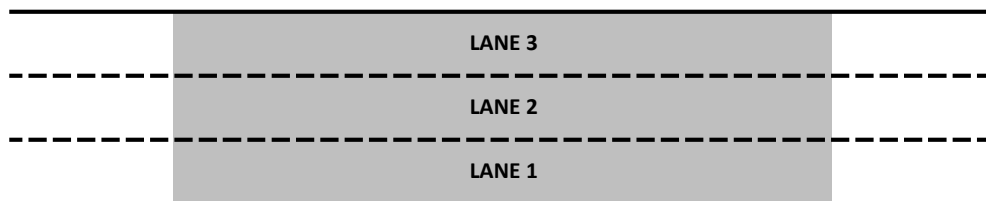
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,190	4,096	60	97.8%	2,230
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 54 - SB I-15: Horsethief Rd On-ramp to Lake St Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,514	17	47.9	0.4	1.2	0.3	A
4	1,394	20	46.6	0.2	1.6	0.2	A
3	1,179	24	63.7	0.4	23.8	1.0	C
2	129	24	61.7	0.8	24.1	1.1	C
1	162	28	60.0	0.8	20.7	1.2	C
Area	4,378	113	62.3	0.6	16.4	0.7	B
Total	4,378	113	62.3	0.6	16.4	0.7	B

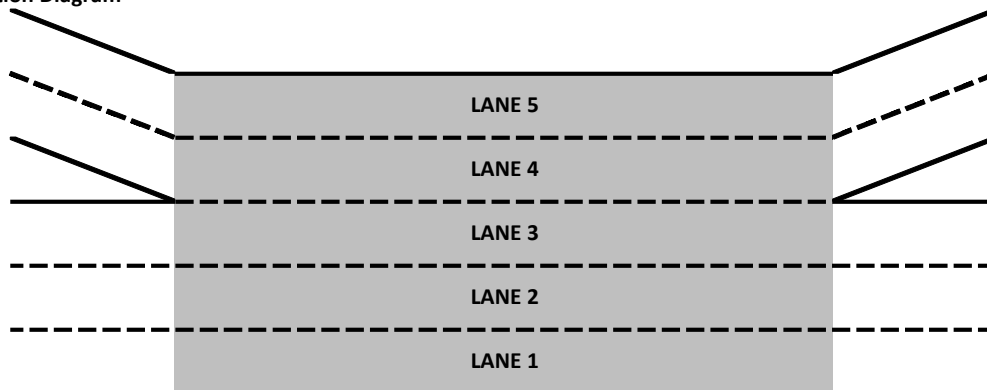
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	129	24
1	162	28
Total	291	42

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	132	24
1	155	24
Total	287	38

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,190	4,087	72	97.6%	2,955
On-ramp	330	291	42	88.2%	
Off-ramp	320	287	38	89.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 35 - SB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,469	20	62.4	1.9	23.9	1.6	C
2	1,395	21	60.0	3.0	23.8	1.9	C
1	1,220	17	58.4	2.3	22.4	1.2	C
Area	2,615	38	59.2	2.6	23.1	1.5	C
Total	4,084	58	60.3	2.3	23.3	1.5	C

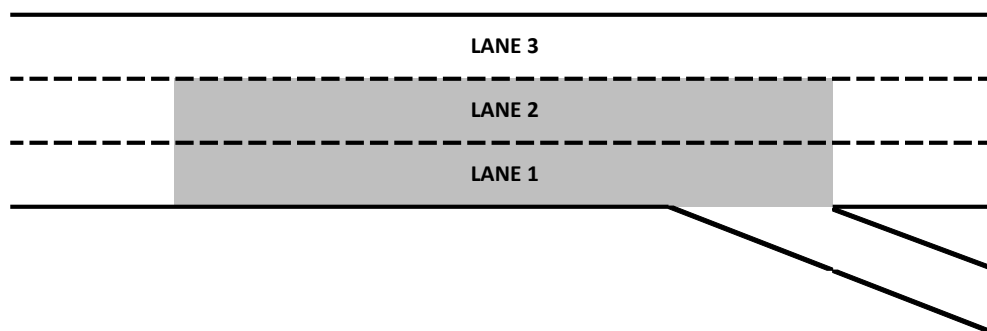
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	235	33
Total	235	33

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,200	4,084	58	97.2%	1,501
On-ramp					
Off-ramp	240	235	33	97.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 36 - SB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,443	26	64.1	0.8	22.9	1.2	C
2	1,315	19	62.4	1.3	22.1	1.4	C
1	1,074	30	60.5	1.3	18.8	1.3	C
Area	3,831	76	62.5	1.0	21.3	1.2	C
Total	3,831	76	62.5	1.0	21.3	1.2	C

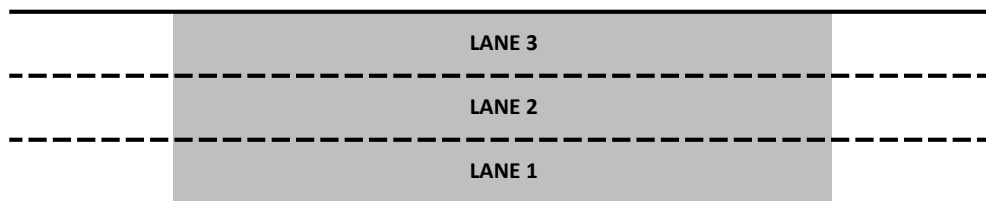
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,960	3,831	76	96.7%	3,287
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 37 - SB I-15: Lake St On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,435	23	64.6	1.6	23.2	0.9	C
3	1,316	21	62.6	0.9	23.1	1.3	C
2	1,068	26	60.4	1.2	21.6	1.9	C
1	346	66	38.0	1.0	0.8	0.1	A
Area	2,730	113	61.7	1.0	17.2	1.2	B
Total	4,164	136	62.8	1.1	18.8	0.9	C

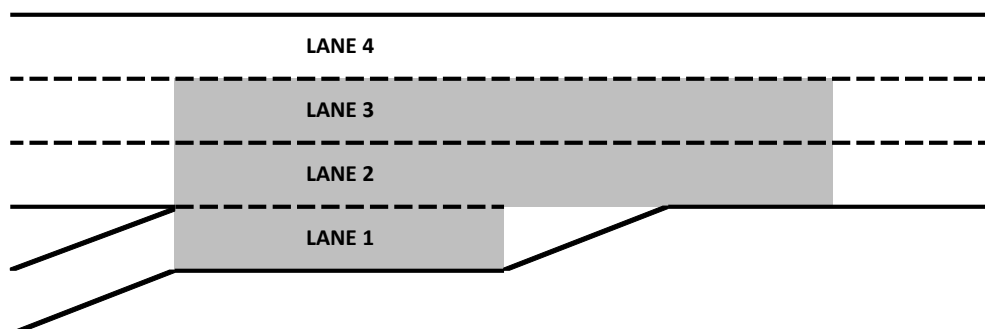
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	346	66
Total	346	66

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,960	3,818	70	96.4%	1,500
On-ramp	330	346	66	104.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 38 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,536	34	63.4	0.7	25.0	0.8	C
2	1,427	18	61.5	1.2	24.3	1.2	C
1	1,192	23	58.9	1.1	21.3	0.7	C
Area	4,155	76	61.5	0.9	23.5	0.8	C
Total	4,155	76	61.5	0.9	23.5	0.8	C

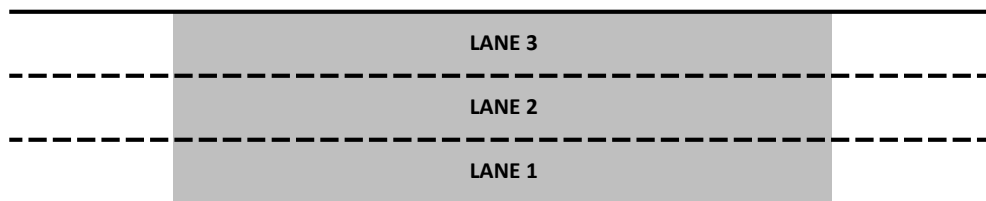
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,290	4,155	76	96.9%	5,941
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 55 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp (EL Egress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,532	26	69.0	0.4	7.3	0.8	A
3	1,431	13	66.2	0.6	20.4	0.6	C
2	1,179	23	63.2	0.7	21.6	0.8	C
1	62	15	60.4	0.5	19.5	0.6	C
Area	4,204	76	64.0	0.4	17.2	0.4	B
Total	4,204	76	64.0	0.4	17.2	0.4	B

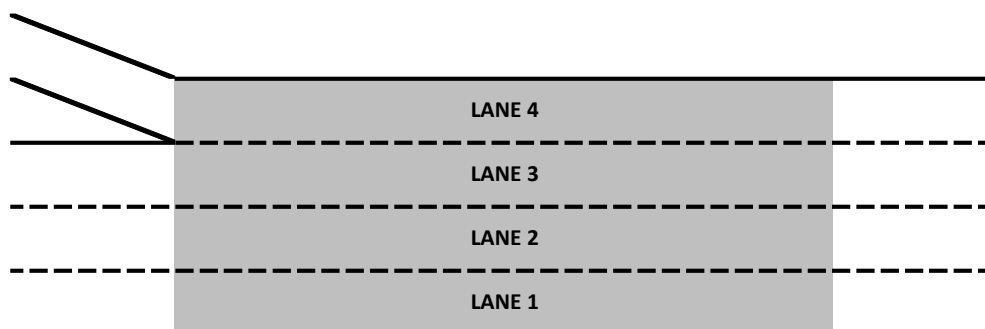
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	62	15
Total	62	15

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,290	4,141	61	96.5%	1,500
On-ramp	70	62	15	89.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 56 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	714	21	69.0	0.4	10.6	1.1	A
3	1,127	20	66.1	0.6	18.1	0.8	C
2	1,305	14	63.5	0.9	21.4	0.6	C
1	1,055	21	61.2	1.3	18.6	0.9	C
Area	4,201	76	64.6	0.7	17.1	0.6	B
Total	4,201	76	64.6	0.7	17.1	0.6	B

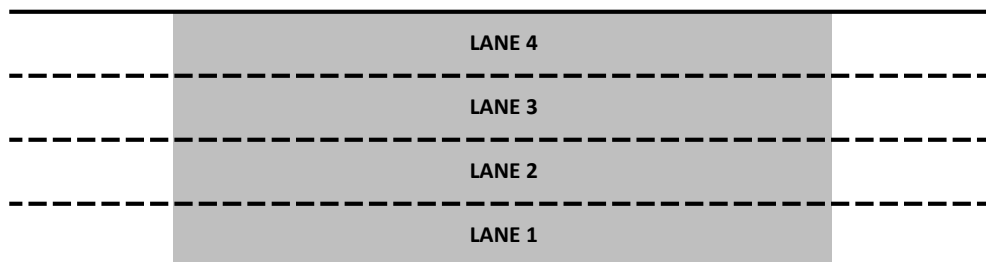
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,360	4,201	76	96.4%	1,308
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 39 - SB I-15: Nichols Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	772	19	67.3	1.9	14.1	1.1	B
3	1,139	21	63.7	2.0	20.5	1.0	C
2	1,257	16	58.4	2.4	19.4	0.6	C
1	1,028	17	52.2	5.1	19.9	1.9	C
Area	2,285	33	55.4	3.6	19.6	1.0	C
Total	4,196	73	60.4	2.5	18.3	0.9	C

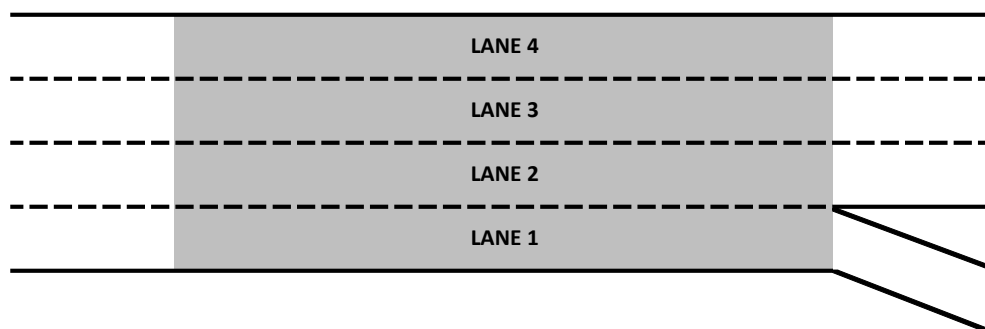
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	570	38
Total	570	38

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,360	4,196	73	96.2%	1,499
On-ramp					
Off-ramp	570	570	38	100.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 40 - SB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,270	24	65.8	1.3	20.7	1.6	C
2	1,318	25	62.3	1.7	22.2	1.0	C
1	1,027	18	57.8	1.3	19.0	0.8	C
Area	3,615	66	62.3	1.3	20.6	1.1	C
Total	3,615	66	62.3	1.3	20.6	1.1	C

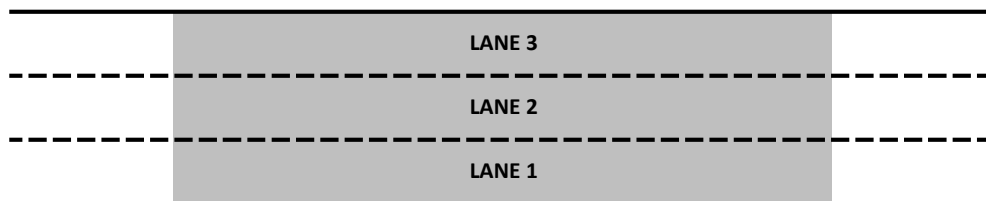
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,790	3,615	66	95.4%	3,058
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 41 - SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5			5.0	0.0	0.3	0.0	A
4	1,368	20	67.6	0.5	22.6	0.6	C
3	1,297	20	63.7	0.5	22.4	0.5	C
2	942	18	59.2	0.6	19.7	0.6	C
1	620	44	65.6	0.7	5.3	0.4	A
Area	4,226	102	64.0	0.4	17.5	0.2	B
Total	4,226	102	64.0	0.4	17.2	0.2	B

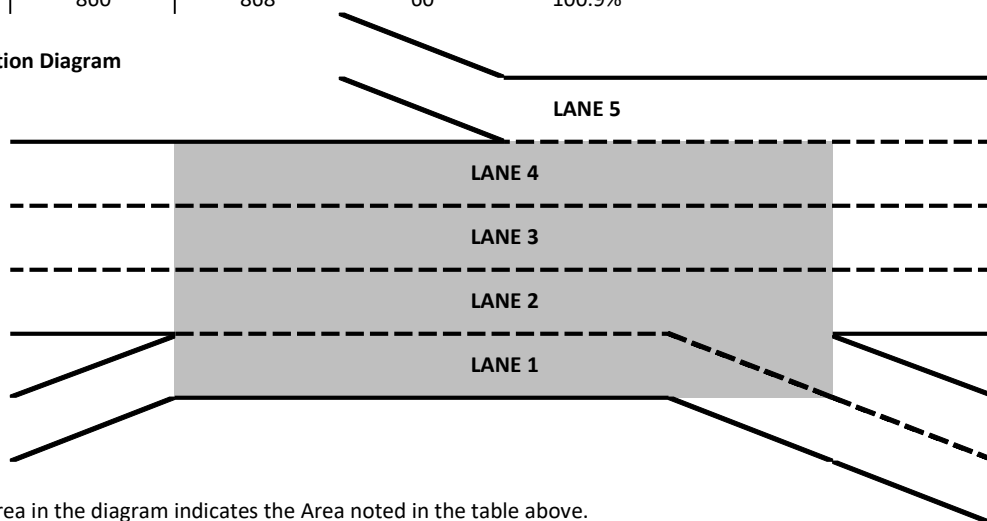
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	620	44
Total	620	44

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	298	31
1	569	49
Total	868	60

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,790	3,607	58	95.2%	5,329
On-ramp	620	620	44	99.9%	
Off-ramp	860	868	60	100.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 57 - SB I-15: Central Ave (SR-74) (EL Egress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,402	26	69.1	0.3	5.4	0.3	A
4	1,158	18	68.0	0.4	21.4	0.7	C
3	1,105	22	64.4	0.6	19.0	0.7	C
2	536	15	59.3	0.9	14.7	0.8	B
1	223	24	14.1	0.1	1.6	0.2	A
Area	4,423	104	65.1	0.3	14.7	0.2	B
Total	4,423	104	65.1	0.3	14.7	0.2	B

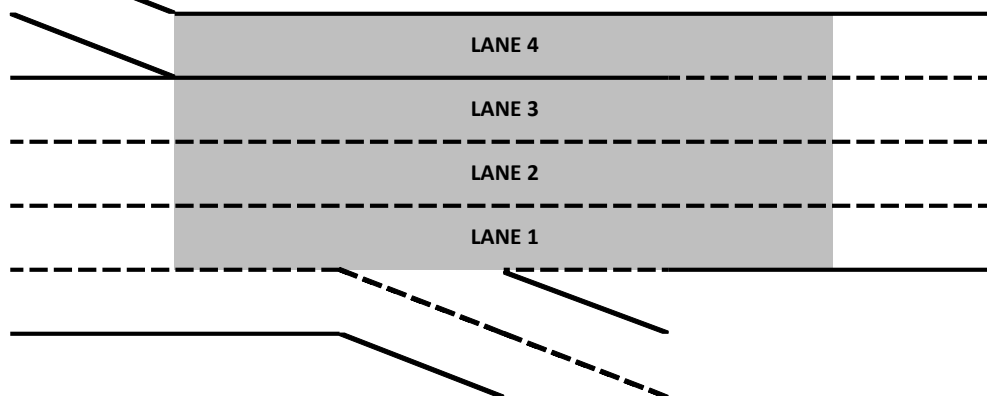
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	223	24
Total	223	24

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,410	4,201	80	95.3%	1,798
On-ramp	250	223	24	89.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 44 - SB I-15: Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	541	15	70.0	0.3	2.9	0.2	A
3	1,247	23	68.4	0.3	6.6	0.2	A
2	1,045	17	65.1	0.3	5.7	0.2	A
1	712	14	59.9	1.0	4.3	0.2	A
Area	3,005	54	65.3	0.2	5.5	0.1	A
Total	3,546	69	66.0	0.2	4.9	0.1	A

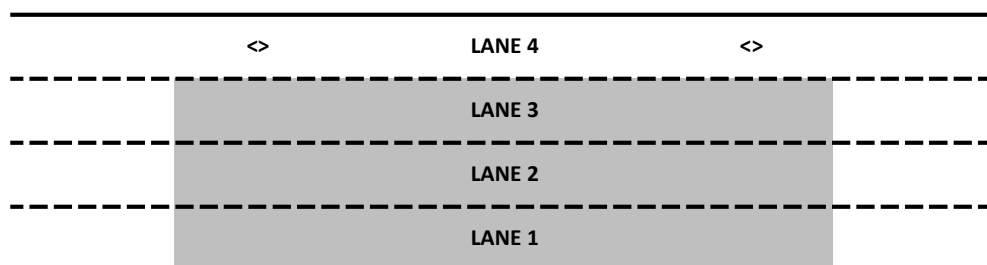
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,800	3,546	69	93.3%	1,117
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 45 - SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	545	15	67.5	0.8	1.8	0.2	A
4	1,247	23	65.8	0.5	27.9	0.7	D
3	1,042	18	62.4	0.6	25.5	0.7	C
2	711	15	58.4	0.4	21.9	0.8	C
1	1,336	63	50.0	0.1	3.3	0.3	A
Area	4,336	119	62.5	0.4	20.7	0.5	C
Total	4,881	133	62.6	0.4	16.7	0.4	B

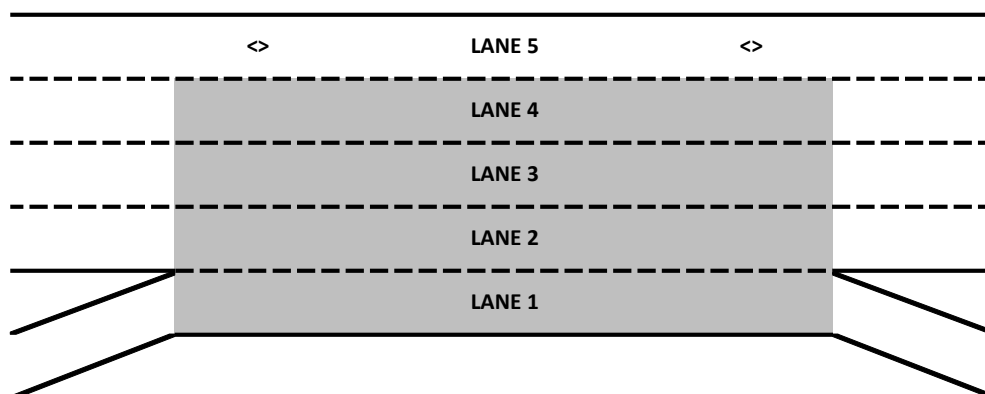
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,336	63
Total	1,336	63

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	241	32
Total	241	32

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,800	3,545	70	93.3%	4,888
On-ramp	1,330	1,336	63	100.5%	
Off-ramp	250	241	32	96.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 48 - SB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	79	4	66.7	1.0	1.4	0.2	A
3	1,853	26	66.0	0.5	29.9	1.0	D
2	1,481	17	62.2	0.7	26.0	1.0	C
1	1,193	17	58.8	0.6	21.9	0.9	C
Area	4,527	61	62.9	0.3	25.9	0.8	C
Total	4,606	65	62.9	0.3	19.7	0.6	C

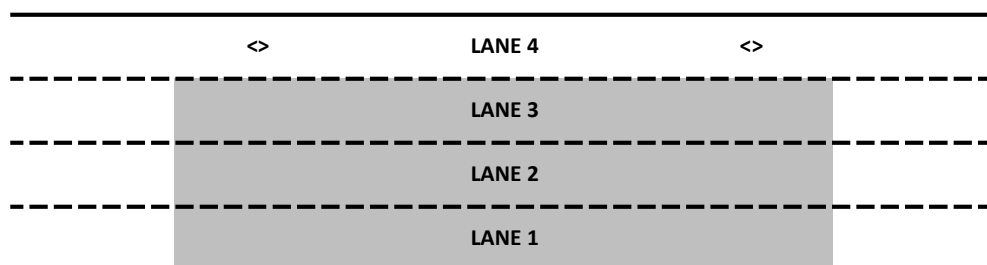
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,880	4,606	65	94.4%	3,010
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 49 - SB I-15: Main St On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	83	5	66.3	1.5	1.3	0.2	A
4	1,858	20	59.0	6.4	32.5	3.5	D
3	1,468	23	54.7	5.9	30.4	3.8	D
2	1,192	19	51.8	5.8	28.5	2.8	D
1	535	60	25.6	1.7	1.3	0.2	A
Area	3,195	101	53.6	5.8	24.2	2.7	C
Total	5,136	126	55.8	5.9	20.9	2.2	C

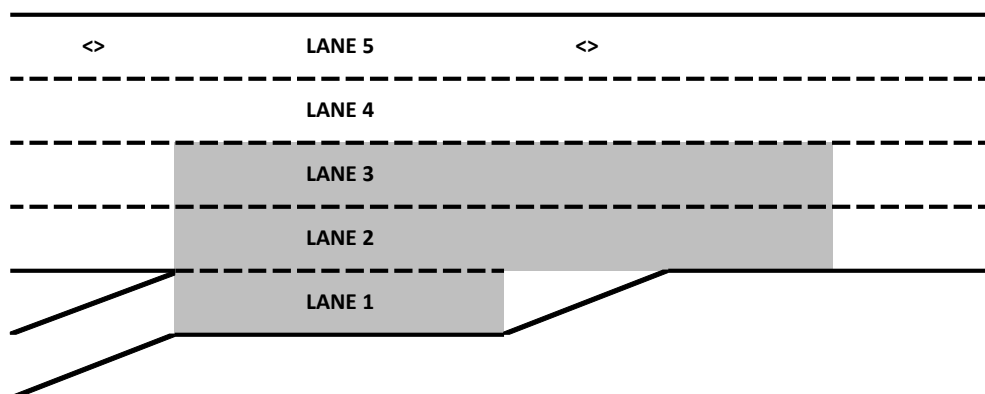
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	535	60
Total	535	60

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,880	4,601	67	94.3%	1,500
On-ramp	520	535	60	102.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 50 - SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	99	4	66.6	0.8	1.8	0.2	A
3	1,981	22	64.2	0.1	33.0	1.2	D
2	1,652	22	59.8	1.0	29.8	0.8	D
1	1,390	27	56.7	0.5	26.3	1.3	D
Area	5,023	71	60.7	0.4	29.6	1.1	D
Total	5,122	76	60.8	0.3	22.7	0.9	C

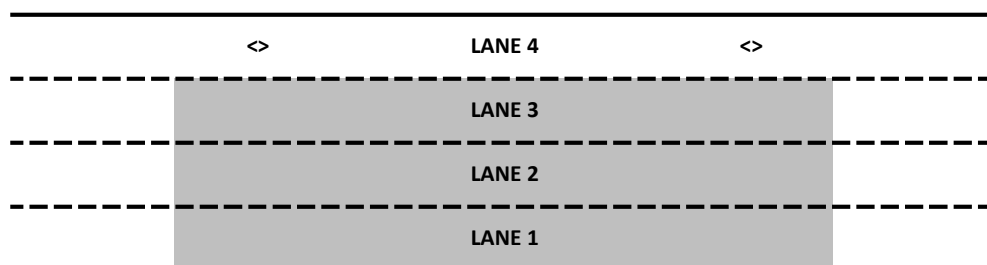
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,400	5,122	76	94.9%	3,090
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Design Year Plus Project
AM Peak Hour

Location	Facility Type	Mainline Volume (vph)				On-ramp Volume (vph)				Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
		Avg.	St. Dev.	%		Avg.	St. Dev.	%		Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
152 NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	5,178	77	90.2%						997	82	105.0%	66.2	0.2	15.8	0.3	B
151 NB I-15: Hidden Valley Pkwy Off-ramp	Diverge	5,849	83	90.3%						665	27	89.9%	63.7	0.5	20.4	0.5	C
150 NB I-15: EB SR-91 On-ramp	Merge	4,809	79	87.8%	1,036	45	103.6%						64.7	0.5	19.2	0.4	C
149 NB I-15: WB SR-91 On-ramp	Merge	3,481	60	83.7%	1,333	87	101.0%						63.4	0.9	21.8	0.7	C
148 NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp	Basic	3,478	55	83.6%									65.2	0.4	18.0	0.5	B
147 NB I-15: EB & WB SR-91 Off-ramp	Diverge	6,458	61	90.1%						2,975	107	98.8%	51.0	3.3	31.1	3.0	D
146 NB I-15: Magnolia Ave On-ramp	Merge	6,061	77	89.4%	395	37	101.4%						24.4	0.3	67.4	1.3	F
145 NB I-15: Magnolia Ave Loop On-ramp	Basic	5,102	74	87.8%	956	65	98.6%						19.8	0.8	76.9	2.7	F
144 NB I-15: Magnolia Ave Off-ramp to Loop On-ramp	Basic	5,104	82	87.8%									20.0	1.4	83.9	3.1	F
143 NB I-15: Magnolia Ave Off-ramp	Diverge	6,135	89	87.0%						1,030	70	83.0%	23.1	1.5	58.3	2.5	F
141 NB I-15: Ontario Ave to Magnolia Ave (EL Access)	Weave	6,324	97	86.0%	2,723	141	90.2%			2,907	100	87.6%	32.3	1.0	47.8	0.8	F
140 NB I-15: Ontario Ave On-ramp	Merge	4,822	84	82.6%	1,503	88	99.5%						14.6	0.6	83.6	3.6	F
138 NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)	Basic	4,819	88	82.5%									10.4	0.4	111.9	1.8	F
137 NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)	Basic	4,824	74	82.6%									18.0	1.9	86.6	7.0	F
136 NB I-15: Ontario Ave Off-ramp	Diverge	5,680	64	81.0%						855	73	73.1%	22.5	3.0	76.3	7.6	F
135 NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp	Merge	4,668	70	78.2%	1,009	32	97.0%						16.3	1.4	86.5	3.7	F
133 NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp (EL Access)	Weave	5,113	92	78.8%	2,283	156	91.3%			2,721	149	90.1%	31.9	1.6	47.1	1.1	F
132 NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp	Weave	4,546	86	87.1%	1,407	104	60.4%			808	68	76.2%	14.1	1.4	103.3	3.8	F
131 NB I-15: Cajalco Rd Loop On-ramp	Merge	3,640	123	85.0%	939	64	99.9%						12.0	1.0	108.8	4.4	F
170 NB I-15: Cajalco Rd Off-ramp to Loop On-ramp	Basic	3,661	115	85.5%									10.8	0.6	105.5	3.6	F
130 NB I-15: Cajalco Rd Off-ramp to Loop On-ramp (EL Ingress)	Basic	3,931	102	87.0%						219	33	91.3%	12.8	1.1	72.5	1.8	F
129 NB I-15: Cajalco Rd Off-ramp	Diverge	4,907	125	84.6%						965	90	75.4%	14.2	1.0	76.9	4.4	F
128 NB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	3,926	136	85.3%	1,001	122	83.4%						12.8	0.9	101.0	3.0	F
127 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	3,922	142	85.3%									11.1	0.5	104.2	2.2	F
126 NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	4,015	147	85.8%						76	17	95.0%	10.6	0.4	123.0	2.2	F
125 NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	4,041	137	86.4%									10.5	0.4	114.6	0.8	F
124 NB I-15: Temescal Canyon Rd On-ramp	Merge	3,794	131	86.2%	277	17	99.0%						10.4	0.7	102.9	3.4	F
123 NB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	3,813	131	86.7%									9.9	0.7	118.5	3.0	F
122 NB I-15: Temescal Canyon Rd Off-ramp	Diverge	4,307	157	85.3%						476	62	73.2%	11.4	1.0	116.3	4.7	F
121 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	4,294	151	85.0%									11.5	0.6	112.0	2.5	F
160 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp (EL Access)	Weave	3,828	175	87.0%	2,598	184	89.3%			2,047	159	90.6%	21.4	0.8	65.1	2.6	F
159 NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	3,837	143	87.2%									8.6	0.7	127.1	3.0	F
120 NB I-15: Indian Truck Trail On-ramp	Merge	3,325	139	85.7%	546	63	105.1%						7.4	0.7	118.4	6.9	F
119 NB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	3,353	140	86.4%									6.7	0.8	137.6	4.4	F
118 NB I-15: Indian Truck Trail Off-ramp	Diverge	3,737	169	85.7%						327	73	68.2%	7.8	1.0	129.3	5.8	F
168 NB I-15: Horsethief Rd On-ramp to Indian Truck Trail Off-ramp	Basic	3,747	165	85.9%									8.1	1.1	127.7	6.4	F
167 NB I-15: Horsethief Rd On-ramp	Merge	3,047	153	86.6%	732	92	87.1%						7.0	1.0	133.9	2.7	F
166 NB I-15: Horsethief Rd Off-ramp to On-ramp	Basic	3,060	156	86.9%									6.6	0.9	125.3	9.6	F
165 NB I-15: Horsethief Rd Off-ramp	Diverge	3,514	193	84.1%						404	83	61.2%	7.5	0.7	138.7	3.5	F
117 NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp	Basic	3,535	203	84.6%									8.4	0.7	119.6	4.7	F
158 NB I-15: Lake St On-ramp to Horsethief Rd Off-ramp (EL Access)	Weave	3,790	244	86.3%	2,378	209	88.1%			2,567	226	88.2%	26.4	1.4	57.2	1.6	F
116 NB I-15: Lake St On-ramp	Merge	2,661	152	84.5%	1,148	261	92.6%						6.8	0.8	182.2	8.1	F
115 NB I-15: Lake St Off-ramp to On-ramp	Basic	2,679	139	85.0%									6.1	0.7	132.5	1.0	F
114 NB I-15: Lake St Off-ramp	Diverge	2,893	141	84.6%						194	36	72.0%	6.5	1.0	145.8	9.3	F
113 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	2,928	129	85.6%									6.9	1.3	131.6	5.7	F
157 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp (EL Ingress)	Basic	3,867	169	86.9%						907	89	88.1%	15.9	1.1	65.6	1.9	F
156 NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	3,868	171	86.9%									11.9	1.0	108.0	3.4	F
112 NB I-15: Nichols Rd On-ramp	Merge	2,867	201	84.6%	1,048	62	98.9%						8.5	2.7	128.0	18.6	F
111 NB I-15: Nichols Rd Off-ramp to On-ramp	Basic	2,913	193	85.9%									7.3	1.9	130.9	10.3	F
110 NB I-15: Nichols Rd Off-ramp	Diverge	3,452	191	89.4%						401	60	85.3%	8.4	1.9	121.3	7.6	F
109 NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp	Merge	2,854	181	92.1%	718	78	94.4%						7.6	2.7	133.1	17.1	F
108 NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp	Basic	2,952	166	95.2%									7.8	3.8	127.4	26.8	F
155 NB I-15: Dexter Ave Off-ramp to On-ramp (EL Ingress)	Basic	4,727	216	95.5%						1,457	150	87.3%	20.4	17.6	75.1	34.1	F
153 NB I-15: Dexter Ave Off-ramp	Diverge	4,727	216	95.5%						163	34	90.8%	23.0	23.0	90.1	55.5	F
107 NB I-15: WB Central Ave (SR-74) Off-ramp	Basic	5,608	248	97.4%						764	85	94.3%	34.1	27.6	69.8	63.2	F
106 NB I-15: EB Central Ave (SR-74) Off-ramp	Diverge	6,179	233	97.9%						529	66	96.1%	44.0	27.7	57.6	50.6	F
105 NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp	Basic	6,193	228	98.1%									43.4	22.1	61.7	40.9	F
104 NB I-15: Main St On-ramp	Merge	5,391	174	98.7%	844	42	99.3%						44.6	23.1	54.0	38.2	F
103 NB I-15: Main St Off-ramp to On-ramp	Basic	5,413	120	99.1%									48.2	21.1	44.0	26.0	E
102 NB I-15: Main St Off-ramp	Diverge	6,037	79	99.8%						584	63	98.9%	53.0	6.8	37.5	5.1	E
101 NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp	Basic	6,026	75	99.6%									63.3	2.0	29.7	1.1	D

Notes: Average density reported for the analysis area only; for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 152 - NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,878	25	67.7	0.2	13.5	1.3	B
4	1,297	23	65.9	0.3	16.5	0.3	B
3	1,179	18	65.8	0.4	18.3	0.9	C
2	824	11	65.9	0.5	16.8	0.6	B
1			65.9	0.7	14.1	0.5	B
Area	5,178	77	66.2	0.2	15.8	0.3	B
Total	5,178	77	66.2	0.2	15.8	0.3	B

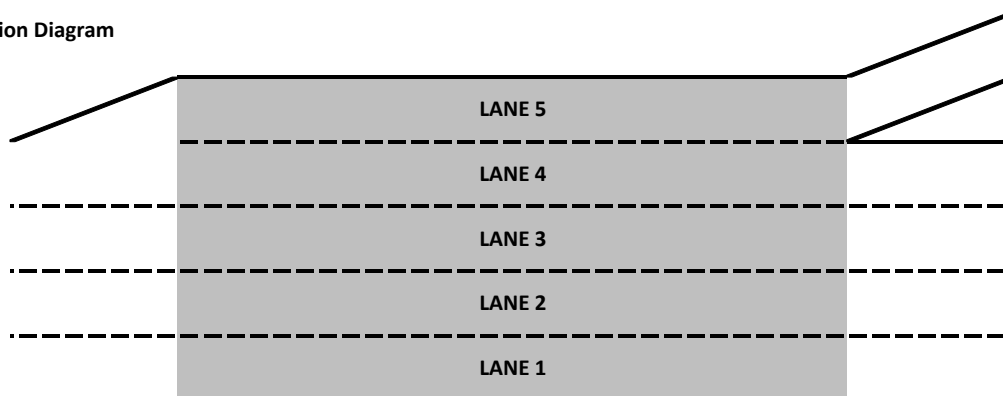
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	997	82
Total	997	82

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,740	5,178	77	90.2%	1,446
On-ramp					
Off-ramp	950	997	82	105.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 151 - NB I-15: Hidden Valley Pkwy Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,637	26	63.0	0.7	31.0	1.4	D
3	1,632	20	64.7	0.5	20.1	0.6	C
2	1,329	21	64.9	0.5	17.7	0.4	B
1	1,251	17	63.0	1.0	23.2	0.9	C
Area	2,580	38	63.8	0.7	20.4	0.5	C
Total	5,849	83	63.7	0.5	23.0	0.5	C

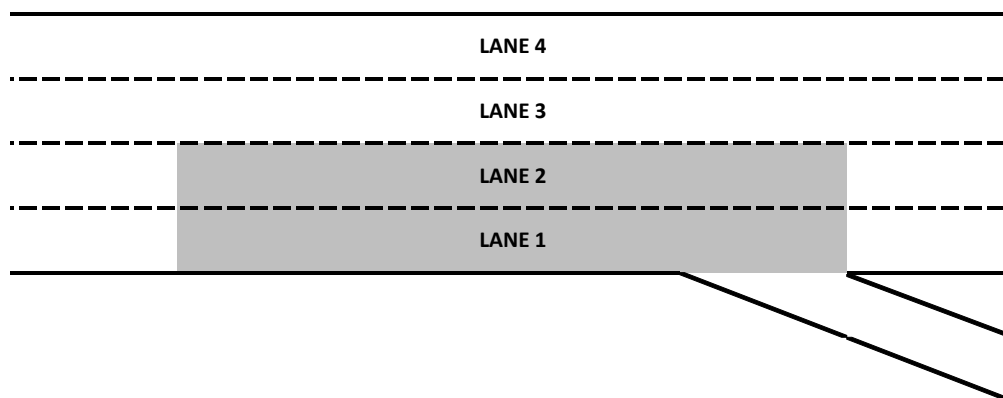
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	665	27
Total	665	27

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,480	5,849	83	90.3%	1,517
On-ramp					
Off-ramp	740	665	27	89.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 150 - NB I-15: EB SR-91 On-ramp

Segment Type - Merge

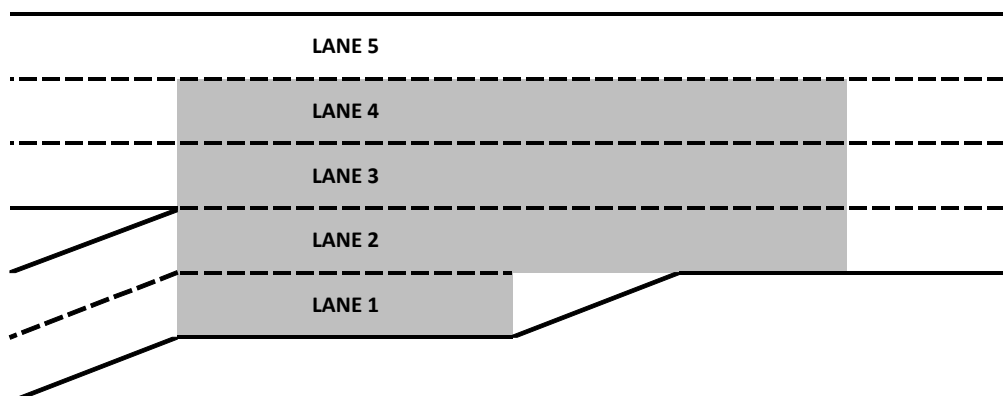
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,502	21	65.5	0.4	25.6	1.0	C
4	1,700	21	64.6	0.4	25.4	0.8	C
3	1,607	23	64.3	1.1	21.7	0.5	C
2	518	34	64.5	0.7	17.9	0.8	B
1	517	24	29.1	0.5	1.2	0.2	A
Area	4,342	103	64.4	0.6	19.2	0.4	C
Total	5,845	124	64.7	0.5	20.6	0.5	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2	518	34	2		
1	517	24	1		
Total	1,036	45	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,480	4,809	79	87.8%	1,509
On-ramp	1,000	1,036	45	103.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 149 - NB I-15: WB SR-91 On-ramp

Segment Type - Merge

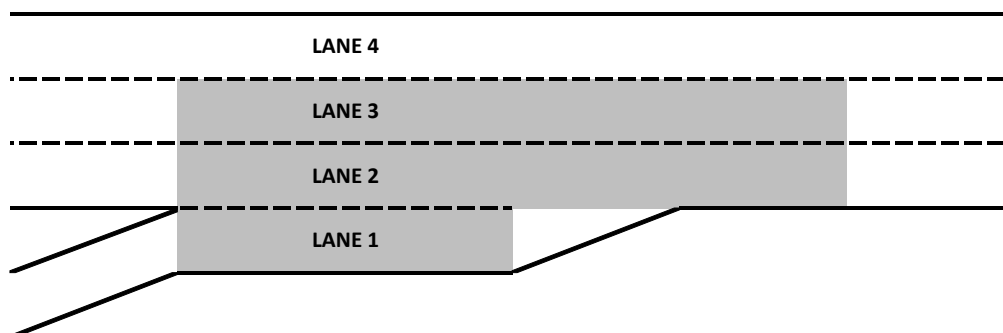
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,294	27	65.6	0.8	20.6	0.7	C
3	1,180	16	64.2	0.8	27.6	0.9	D
2	1,007	17	61.8	1.4	25.8	0.8	C
1	1,333	87	30.7	0.4	2.9	0.2	A
Area	3,520	120	62.6	1.0	21.8	0.7	C
Total	4,814	147	63.4	0.9	21.5	0.6	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,333	87	1		
Total	1,333	87	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,160	3,481	60	83.7%	1,564
On-ramp	1,320	1,333	87	101.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 148 - NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp

Segment Type - Basic

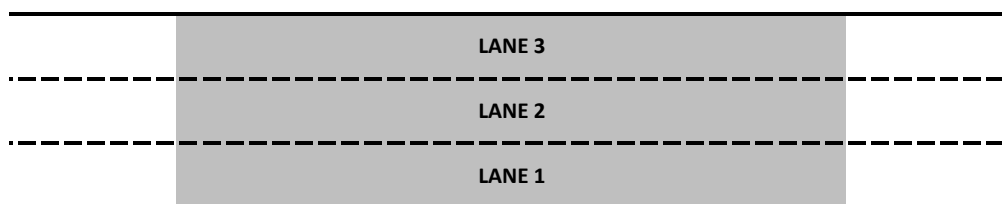
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,379	23	65.6	0.2	21.0	0.7	C
2	1,191	14	64.8	0.6	18.7	0.4	C
1	908	17	65.1	0.8	14.2	0.8	B
Area	3,478	55	65.2	0.4	18.0	0.5	B
Total	3,478	55	65.2	0.4	18.0	0.5	B

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,160	3,478	55	83.6%	3,525
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 147 - NB I-15: EB & WB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,612	19	55.9	1.1	27.8	1.9	D
3	1,421	22	53.5	2.0	26.6	1.9	D
2	1,743	9	46.6	4.8	33.4	3.5	D
1	1,682	12	48.2	5.9	33.8	5.0	D
Area	4,846	42	49.3	4.2	31.1	3.0	D
Total	6,458	61	51.0	3.3	30.1	2.5	D

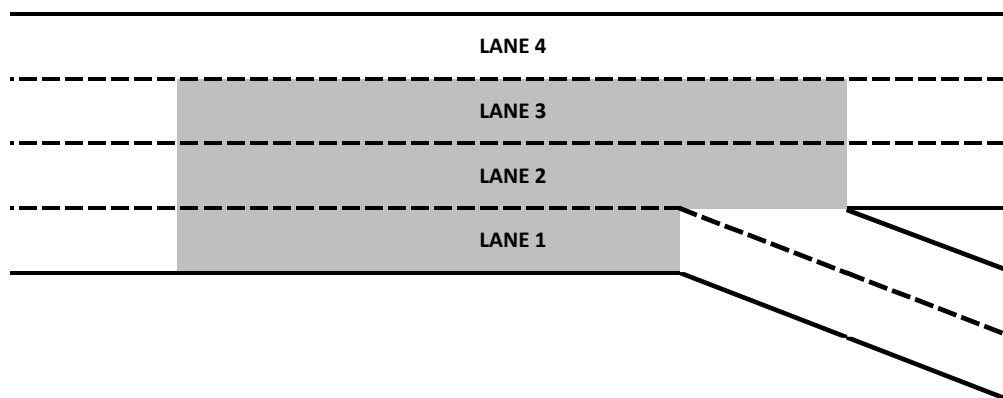
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,044	79
1	1,931	41
Total	2,975	107

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,170	6,458	61	90.1%	1,324
On-ramp					
Off-ramp	3,010	2,975	107	98.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 146 - NB I-15: Magnolia Ave On-ramp

Segment Type - Merge

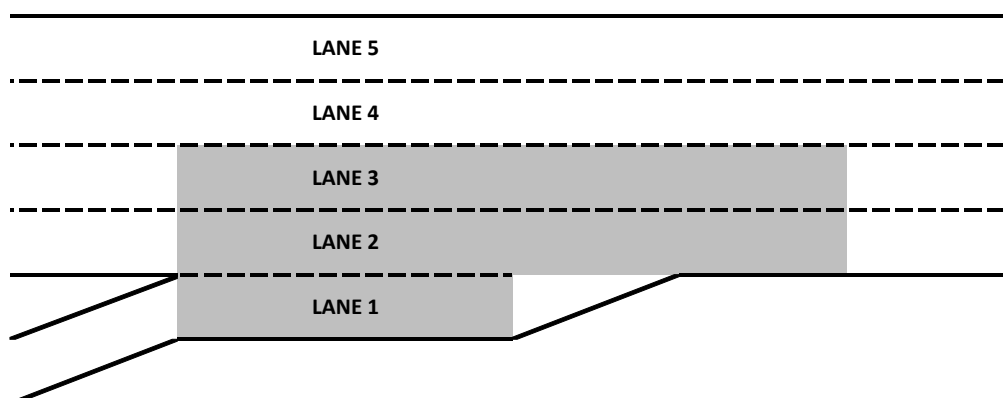
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,766	28	37.1	1.7	48.3	4.3	F
4	1,700	16	21.6	0.6	74.0	1.0	F
3	915	19	16.1	0.5	102.2	2.5	F
2	1,680	13	19.5	0.5	90.3	2.6	F
1	395	37	20.9	0.5	5.4	0.7	A
Area	2,990	69	18.4	0.4	67.4	1.3	F
Total	6,456	114	24.4	0.3	57.2	1.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	395	37	1		
Total	395	37	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,780	6,061	77	89.4%	1,292
On-ramp	390	395	37	101.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 145 - NB I-15: Magnolia Ave Loop On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,675	21	34.0	2.6	51.8	4.8	F
3	1,726	21	15.6	0.8	106.0	3.6	F
2	1,701	33	9.7	1.1	116.4	6.1	F
1	956	65	15.4	1.0	100.8	5.6	F
Area	6,058	139	19.8	0.8	76.9	2.7	F
Total	6,058	139	19.8	0.8	76.9	2.7	F

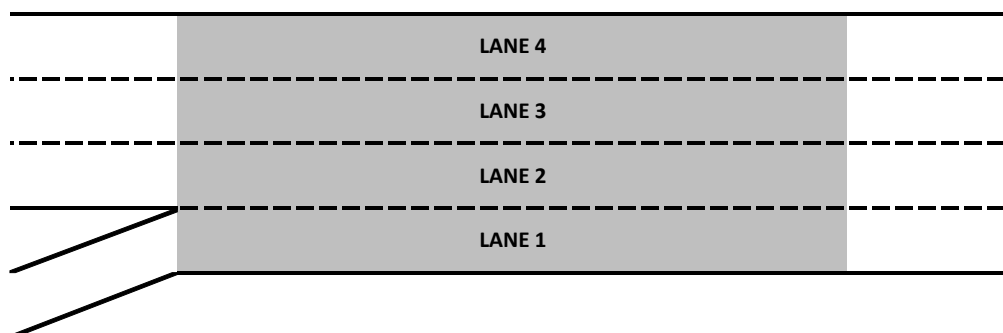
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	956	65
Total	956	65

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,810	5,102	74	87.8%	852
On-ramp	970	956	65	98.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 144 - NB I-15: Magnolia Ave Off-ramp to Loop On-ramp

Segment Type - Basic

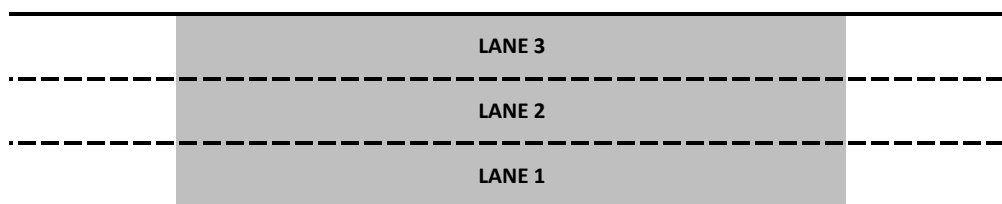
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,719	27	26.5	1.5	68.2	3.3	F
2	1,766	21	16.8	1.6	100.3	4.6	F
1	1,619	35	15.7	1.5	97.8	4.9	F
Area	5,104	82	20.0	1.4	83.9	3.1	F
Total	5,104	82	20.0	1.4	83.9	3.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,810	5,104	82	87.8%	1,562
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 143 - NB I-15: Magnolia Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	2,008	13	23.3	2.0	85.3	4.6	F
3	1,827	25	18.6	2.1	90.5	5.8	F
2	1,751	33	16.5	1.6	92.9	4.7	F
1	549	18	44.3	4.4	18.6	2.7	C
Area	4,127	76	23.0	1.3	58.3	2.5	F
Total	6,135	89	23.1	1.5	65.1	2.6	F

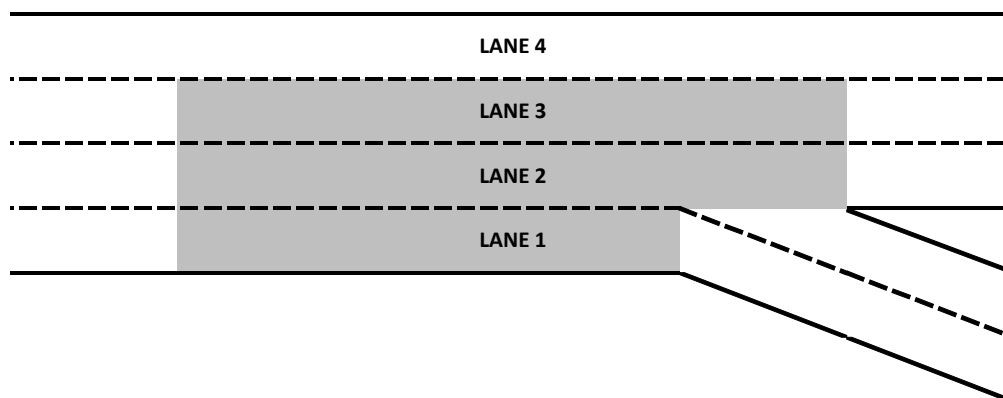
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	167	32
1	863	57
Total	1,030	70

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,050	6,135	89	87.0%	1,496
On-ramp					
Off-ramp	1,240	1,030	70	83.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 141 - NB I-15: Ontario Ave to Magnolia Ave (EL Access)

Segment Type - Weave

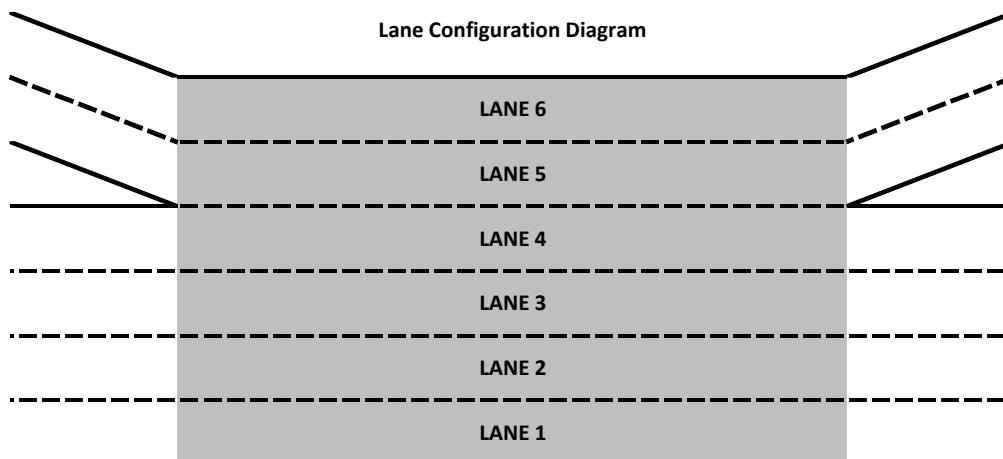
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	1,857	25	44.4	0.9	18.9	0.7	C
5	1,806	20	38.1	1.4	19.1	1.0	C
4	1,926	24	22.8	1.2	87.7	2.9	F
3	735	20	20.9	1.2	88.5	3.0	F
2	1,219	66	20.1	1.7	86.1	4.4	F
1	1,504	84	50.9	3.4	11.1	1.8	B
Area	9,047	238	32.3	1.0	47.8	0.8	F
Total	9,047	238	32.3	1.0	47.8	0.8	F

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,219	66
1	1,504	84
Total	2,723	141

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,618	74
1	1,289	45
Total	2,907	100

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,350	6,324	97	86.0%	2,965
On-ramp	3,020	2,723	141	90.2%	
Off-ramp	3,320	2,907	100	87.6%	



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 140 - NB I-15: Ontario Ave On-ramp

Segment Type - Merge

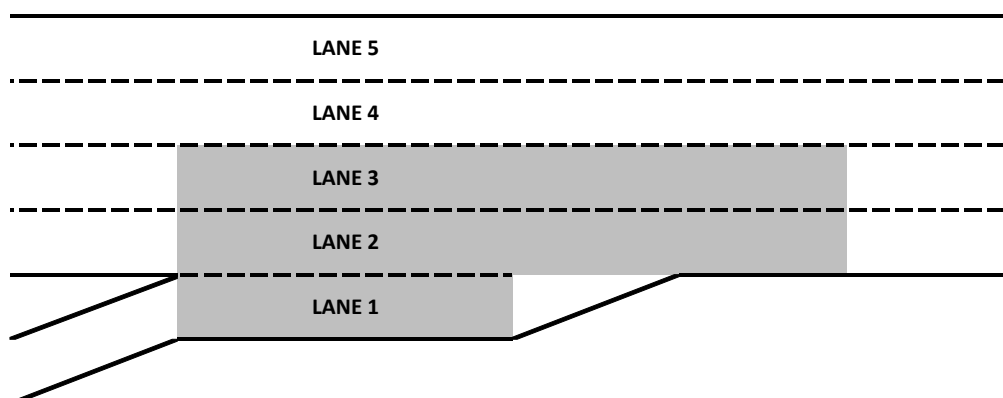
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,595	19	16.2	0.9	106.7	3.4	F
4	1,125	23	13.0	0.6	118.7	3.0	F
3	785	18	12.1	0.9	120.1	4.5	F
2	1,318	23	16.9	0.9	86.2	3.8	F
1	1,503	88	10.4	1.1	27.8	3.1	D
Area	3,606	129	14.4	0.8	83.6	3.6	F
Total	6,326	171	14.6	0.6	94.7	2.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,503	88	1		
Total	1,503	88	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,840	4,822	84	82.6%	1,496
On-ramp	1,510	1,503	88	99.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 138 - NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)

Segment Type - Basic

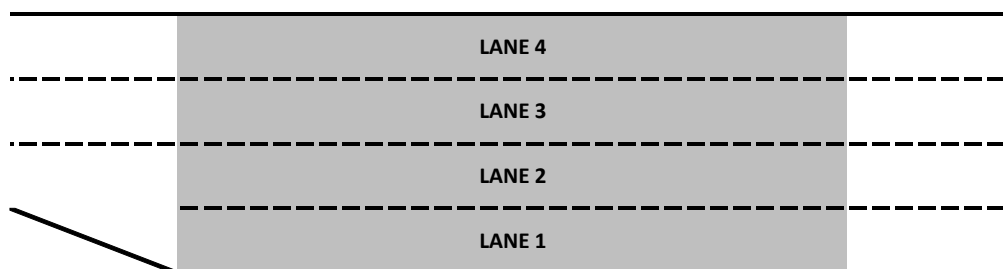
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,512	22	13.8	0.5	109.8	1.8	F
3	1,153	19	9.5	0.4	121.2	1.9	F
2	865	24	6.6	0.9	130.2	5.7	F
1	1,289	23	9.7	1.3	120.7	8.1	F
Area	4,819	88	10.4	0.4	111.9	1.8	F
Total	4,819	88	10.4	0.4	111.9	1.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,840	4,819	88	82.5%	3,004
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 137 - NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)

Segment Type - Basic

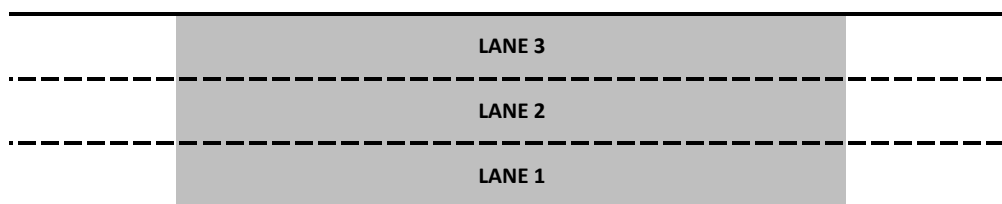
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,579	24	15.0	1.3	102.2	6.4	F
2	1,512	33	15.5	2.1	95.1	9.2	F
1	1,732	16	23.0	2.6	73.1	7.3	F
Area	4,824	74	18.0	1.9	86.6	7.0	F
Total	4,824	74	18.0	1.9	86.6	7.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,840	4,824	74	82.6%	197
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 136 - NB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

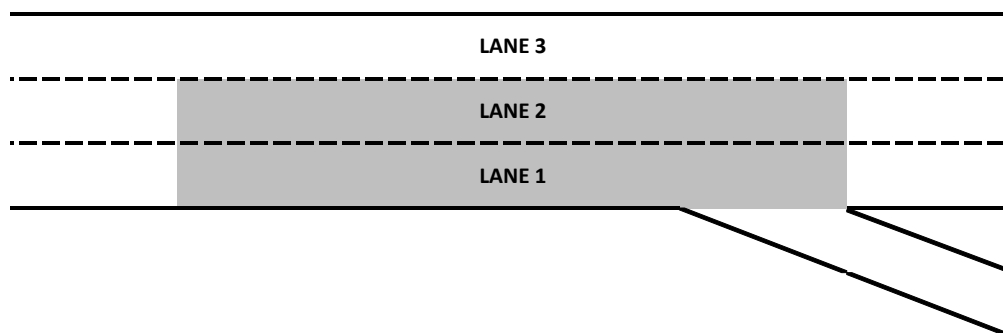
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,907	27	18.5	2.8	95.2	9.3	F
2	1,844	21	22.1	3.3	82.9	8.9	F
1	1,928	17	26.6	3.0	71.1	6.9	F
Area	3,772	38	24.4	3.1	76.3	7.6	F
Total	5,680	64	22.5	3.0	81.2	7.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	855	73
Total			Total	855	73

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,010	5,680	64	81.0%	763
On-ramp					
Off-ramp	1,170	855	73	73.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 135 - NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Merge

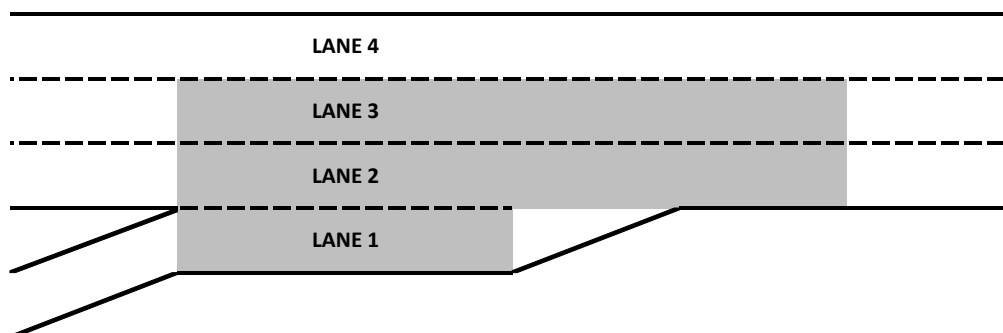
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,915	24	20.1	2.3	96.2	6.3	F
3	1,634	21	16.5	1.4	102.8	5.1	F
2	1,119	25	11.3	0.8	122.6	2.2	F
1	1,009	32	15.0	1.3	41.0	5.4	E
Area	3,762	78	14.4	1.0	86.5	3.7	F
Total	5,677	102	16.3	1.4	86.6	4.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,009	32	1		
Total	1,009	32	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,970	4,668	70	78.2%	873
On-ramp	1,040	1,009	32	97.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 133 - NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	2,099	19	58.6	1.0	21.7	1.0	C
4	1,681	29	53.0	2.3	20.3	1.1	C
3	1,333	34	22.0	1.7	86.6	3.7	F
2	1,107	91	16.9	1.1	96.2	3.8	F
1	1,177	75	12.1	1.3	105.2	4.4	F
Area	7,396	248	31.9	1.6	47.1	1.1	F
Total	7,396	248	31.9	1.6	47.1	1.1	F

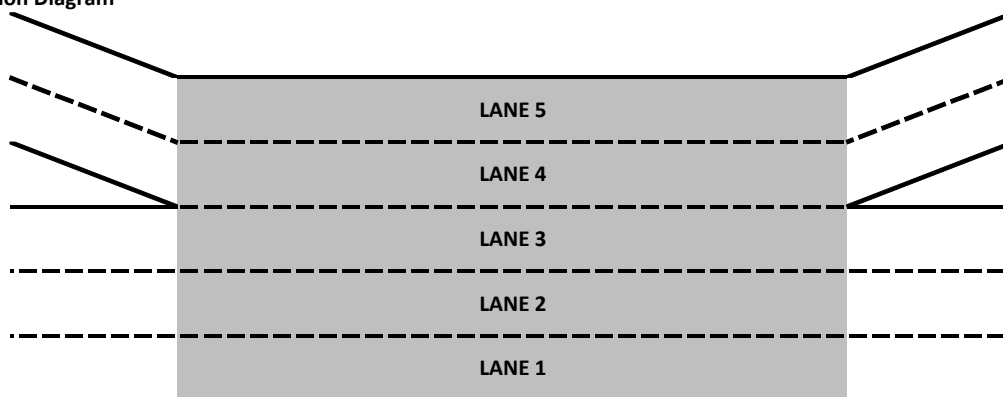
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,107	91
1	1,177	75
Total	2,283	156

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,472	79
1	1,248	77
Total	2,721	149

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,490	5,113	92	78.8%	2,115
On-ramp	2,500	2,283	156	91.3%	
Off-ramp	3,020	2,721	149	90.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 132 - NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,695	19	16.9	1.1	102.5	3.6	F
3	1,483	27	13.8	1.4	105.7	4.7	F
2	1,367	40	11.6	2.0	109.3	7.5	F
1	1,407	104	10.2	1.5	88.8	6.2	F
Area	5,953	190	14.1	1.4	103.3	3.8	F
Total	5,953	190	14.1	1.4	103.3	3.8	F

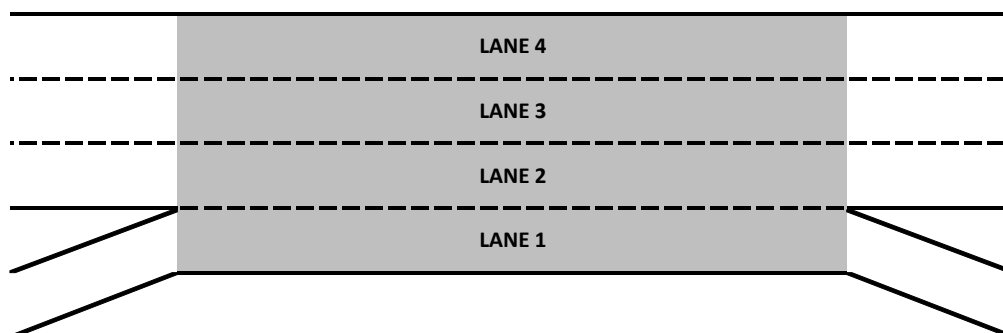
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,407	104
Total	1,407	104

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	808	68
Total	808	68

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,220	4,546	86	87.1%	2,708
On-ramp	2,330	1,407	104	60.4%	
Off-ramp	1,060	808	68	76.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 131 - NB I-15: Cajalco Rd Loop On-ramp

Segment Type - Merge

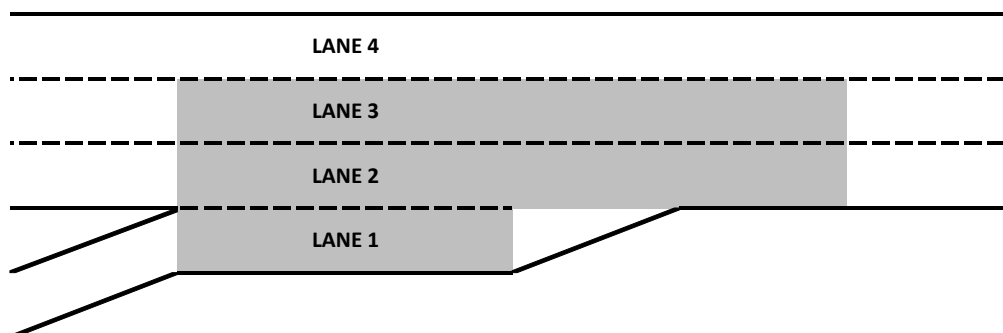
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,600	21	15.3	0.8	109.1	2.4	F
3	1,203	40	12.6	1.4	116.8	5.4	F
2	837	61	8.2	1.4	125.3	6.2	F
1	939	64	2.7	0.9	61.3	11.6	F
Area	2,978	165	10.0	1.3	108.8	4.4	F
Total	4,578	186	12.0	1.0	103.7	1.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	939	64	1		
Total	939	64	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,280	3,640	123	85.0%	1,305
On-ramp	940	939	64	99.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 170 - NB I-15: Cajalco Rd Off-ramp to Loop On-ramp

Segment Type - Basic

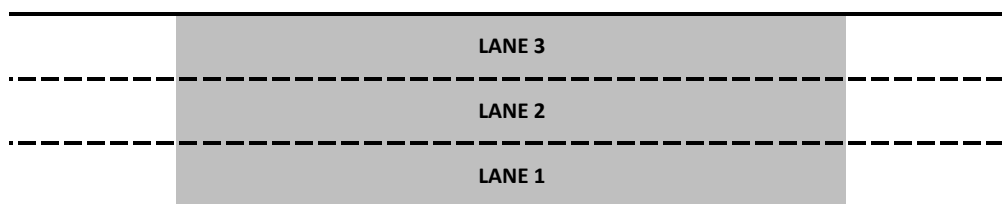
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,635	21	14.5	1.0	107.3	3.9	F
2	1,156	43	9.0	0.8	123.2	7.0	F
1	870	50	5.6	0.6	133.9	6.2	F
Area	3,661	115	10.8	0.6	105.5	3.6	F
Total	3,661	115	10.8	0.6	105.5	3.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,280	3,661	115	85.5%	1,693
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 130 - NB I-15: Cajalco Rd Off-ramp to Loop On-ramp (EL Ingress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,758	44	48.3	0.8	3.4	0.4	A
3	1,480	40	14.5	1.3	106.7	5.5	F
2	693	18	9.5	1.4	120.8	8.1	F
1			7.0	1.4	121.8	7.0	F
Area	3,931	102	12.8	1.1	72.5	1.8	F
Total	3,931	102	12.8	1.1	72.5	1.8	F

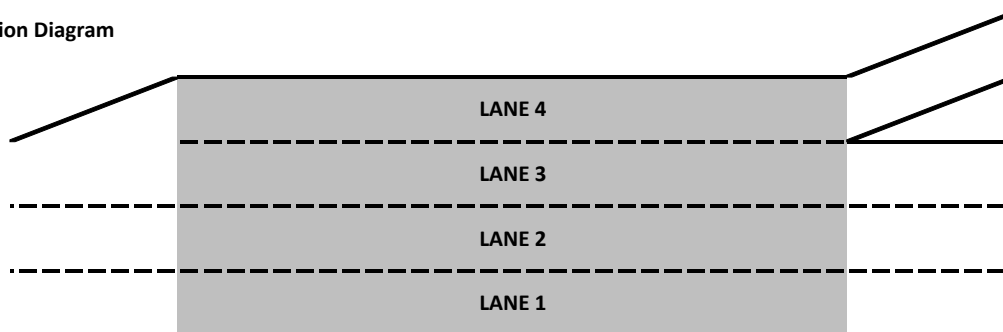
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	219	33
Total	219	33

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,520	3,931	102	87.0%	1,000
On-ramp					
Off-ramp	240	219	33	91.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 129 - NB I-15: Cajalco Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,792	41	14.9	0.9	106.1	2.5	F
2	1,577	25	13.8	1.6	102.4	7.8	F
1	1,538	59	13.6	0.9	103.7	4.0	F
Area	3,115	84	13.8	1.2	76.9	4.4	F
Total	4,907	125	14.2	1.0	103.3	4.2	F

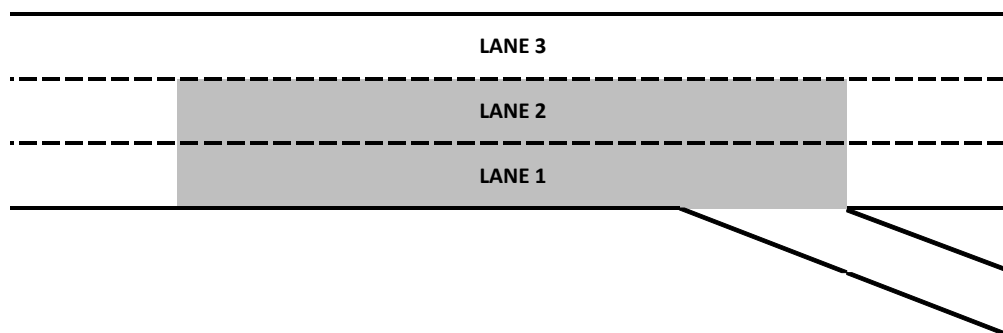
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	965	90
Total	965	90

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,800	4,907	125	84.6%	1,046
On-ramp					
Off-ramp	1,280	965	90	75.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 128 - NB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

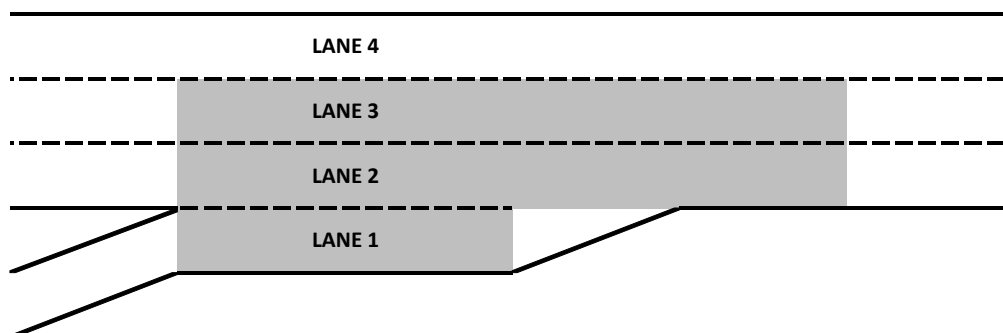
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,732	37	16.5	1.5	99.4	4.8	F
3	1,365	55	13.2	0.9	108.3	4.7	F
2	829	44	8.4	0.8	117.5	4.2	F
1	1,001	122	2.4	0.5	76.6	7.8	F
Area	3,195	222	10.3	0.8	101.0	3.0	F
Total	4,927	259	12.8	0.9	94.1	3.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,001	122	1		
Total	1,001	122	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,600	3,926	136	85.3%	1,487
On-ramp	1,200	1,001	122	83.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 127 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

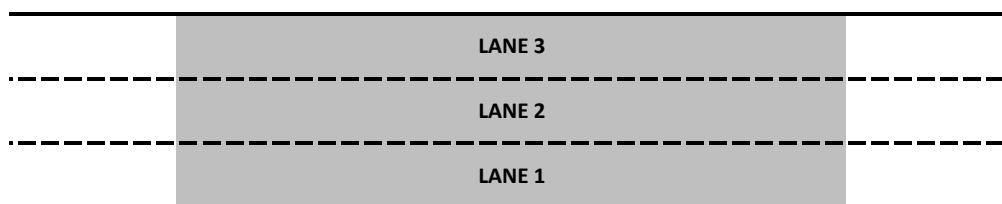
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,717	36	15.1	0.6	106.5	1.6	F
2	1,312	63	8.9	0.6	125.6	5.8	F
1	893	43	5.6	0.7	131.9	4.2	F
Area	3,922	142	11.1	0.5	104.2	2.2	F
Total	3,922	142	11.1	0.5	104.2	2.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,600	3,922	142	85.3%	2,537
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 126 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

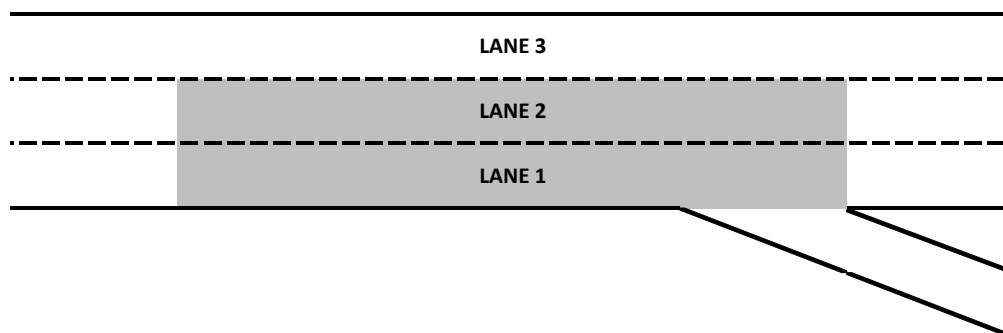
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,628	35	13.9	0.7	110.3	2.2	F
2	1,326	60	9.1	0.2	122.7	3.9	F
1	1,060	52	6.9	0.7	128.5	3.4	F
Area	2,387	112	8.2	0.3	123.0	2.2	F
Total	4,015	147	10.6	0.4	110.9	2.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	76	17
Total			Total	76	17

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,680	4,015	147	85.8%	1,499
On-ramp					
Off-ramp	80	76	17	95.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 125 - NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

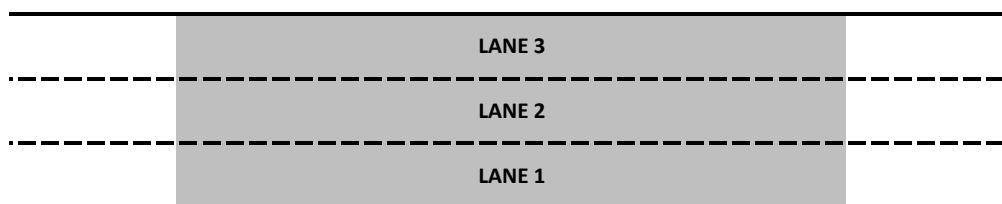
Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,552	38	12.7	0.5	114.2	1.8	F
2	1,378	51	10.1	0.4	119.7	1.4	F
1	1,111	48	7.5	0.5	125.6	3.6	F
Area	4,041	137	10.5	0.4	114.6	0.8	F
Total	4,041	137	10.5	0.4	114.6	0.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,680	4,041	137	86.4%	6,786
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 124 - NB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

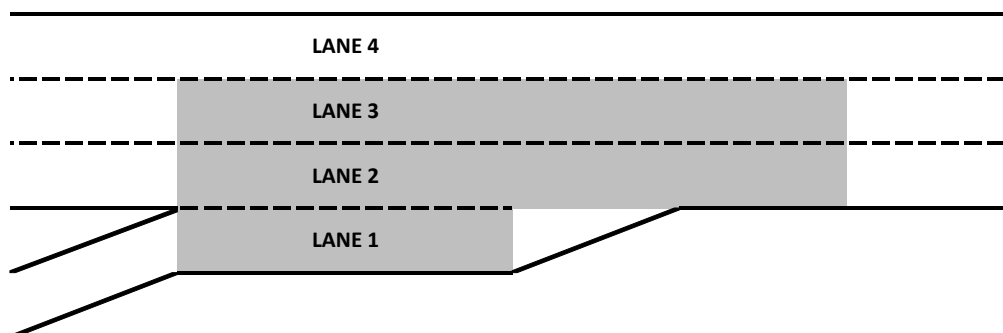
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,471	28	12.2	0.9	120.6	3.6	F
3	1,275	42	10.4	0.7	123.9	5.4	F
2	1,047	61	7.6	1.0	131.7	5.7	F
1	277	17	6.3	1.1	6.9	1.5	A
Area	2,600	120	9.3	0.6	102.9	3.4	F
Total	4,071	148	10.4	0.7	106.2	3.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	277	17	1		
Total	277	17	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,400	3,794	131	86.2%	1,498
On-ramp	280	277	17	99.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 123 - NB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

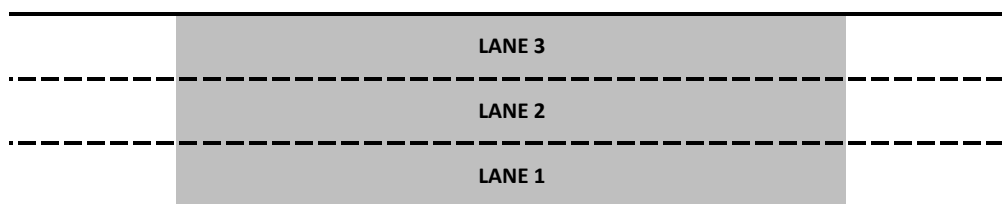
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,460	34	11.9	0.8	117.3	2.8	F
2	1,286	44	9.7	0.6	122.5	4.5	F
1	1,067	53	7.1	1.0	132.0	6.0	F
Area	3,813	131	9.9	0.7	118.5	3.0	F
Total	3,813	131	9.9	0.7	118.5	3.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,400	3,813	131	86.7%	2,725
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 122 - NB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

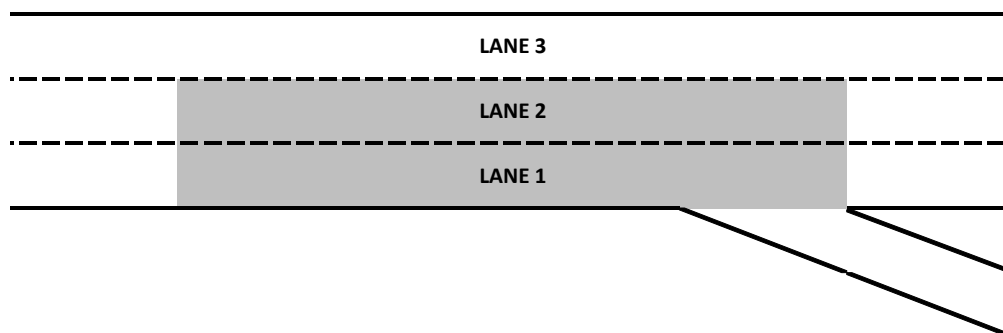
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,593	46	12.4	1.0	115.5	3.9	F
2	1,491	56	11.2	0.8	116.4	4.2	F
1	1,223	54	10.4	1.4	116.9	6.6	F
Area	2,714	111	10.8	1.1	116.3	4.7	F
Total	4,307	157	11.4	1.0	115.5	4.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	476	62
Total			Total	476	62

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,050	4,307	157	85.3%	1,498
On-ramp					
Off-ramp	650	476	62	73.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 121 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

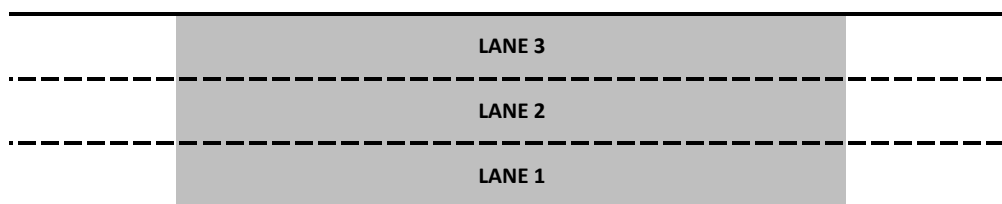
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,671	39	14.1	0.6	109.3	1.7	F
2	1,416	48	10.9	0.8	119.5	4.3	F
1	1,206	64	8.1	1.1	125.0	6.8	F
Area	4,294	151	11.5	0.6	112.0	2.5	F
Total	4,294	151	11.5	0.6	112.0	2.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,050	4,294	151	85.0%	5,648
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 160 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,252	43	36.4	2.1	17.7	2.1	B
4	1,295	43	22.7	2.8	21.4	3.1	C
3	1,281	54	9.4	0.8	131.7	4.4	F
2	1,120	107	10.5	1.1	119.2	5.2	F
1	1,478	112	10.4	1.8	115.5	8.1	F
Area	6,426	360	21.4	0.8	65.1	2.6	F
Total	6,426	360	21.4	0.8	65.1	2.6	F

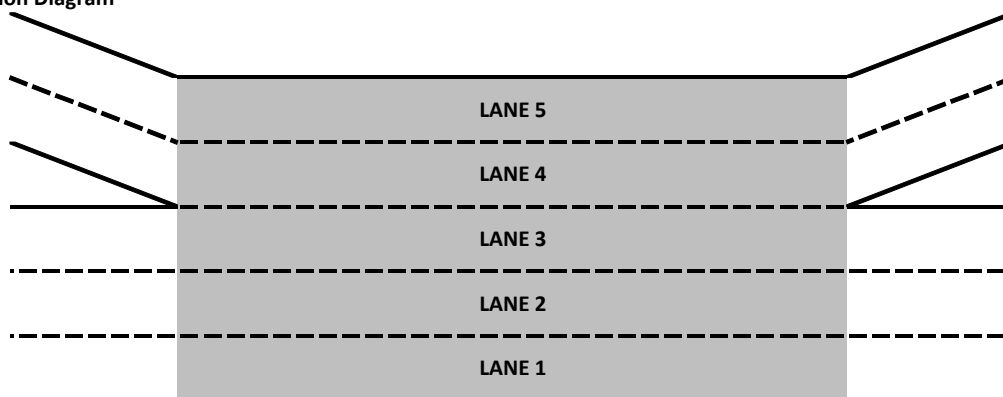
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,120	107
1	1,478	112
Total	2,598	184

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,216	70
1	831	98
Total	2,047	159

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,400	3,828	175	87.0%	2,991
On-ramp	2,910	2,598	184	89.3%	
Off-ramp	2,260	2,047	159	90.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 159 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

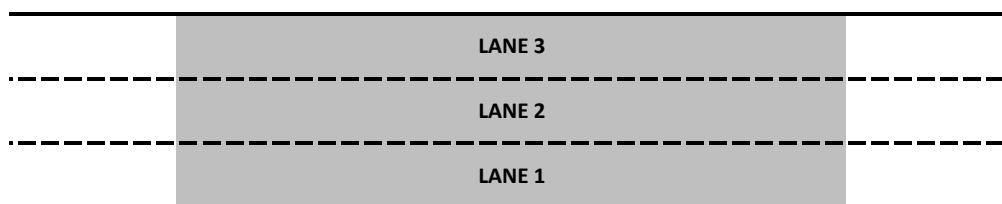
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,222	46	7.5	1.1	141.6	7.6	F
2	1,325	46	9.5	0.9	124.4	4.4	F
1	1,290	51	8.6	0.7	121.1	4.6	F
Area	3,837	143	8.6	0.7	127.1	3.0	F
Total	3,837	143	8.6	0.7	127.1	3.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,400	3,837	143	87.2%	697
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 120 - NB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

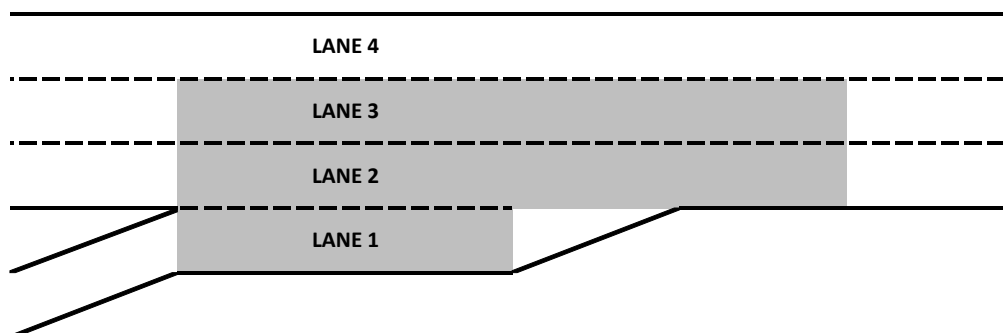
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,211	44	7.2	1.0	147.3	6.6	F
3	1,116	49	8.2	0.8	136.1	4.0	F
2	997	46	7.1	0.6	130.6	5.5	F
1	546	63	3.5	1.2	36.0	11.0	E
Area	2,660	158	7.5	0.8	118.4	6.9	F
Total	3,871	202	7.4	0.7	125.7	5.2	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	546	63	1		
Total	546	63	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,880	3,325	139	85.7%	1,499
On-ramp	520	546	63	105.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 119 - NB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

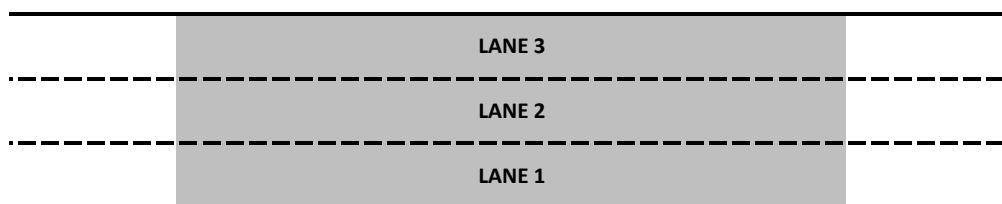
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,221	44	7.5	1.0	140.6	6.8	F
2	1,114	49	6.2	0.8	142.0	6.0	F
1	1,018	46	6.0	0.9	135.4	5.6	F
Area	3,353	140	6.7	0.8	137.6	4.4	F
Total	3,353	140	6.7	0.8	137.6	4.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,880	3,353	140	86.4%	2,922
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 118 - NB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

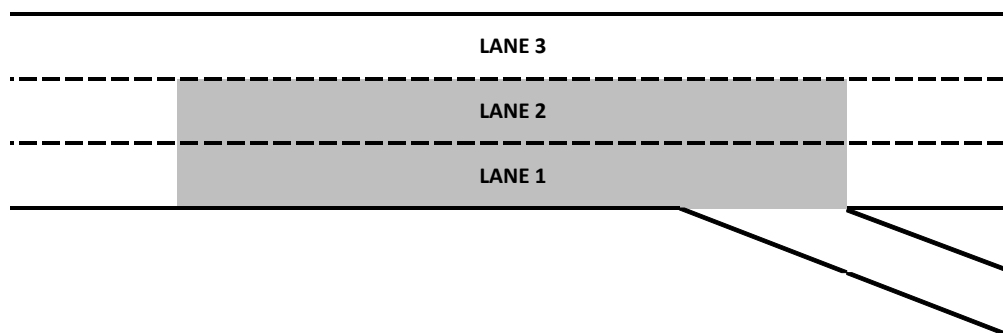
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,329	62	7.9	1.2	136.9	7.1	F
2	1,282	55	7.2	0.9	136.6	7.1	F
1	1,126	52	8.3	1.1	123.4	4.8	F
Area	2,408	107	7.8	1.0	129.3	5.8	F
Total	3,737	169	7.8	1.0	131.5	5.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	327	73
Total			Total	327	73

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,360	3,737	169	85.7%	1,499
On-ramp					
Off-ramp	480	327	73	68.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 168 - NB I-15: Horsethief Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

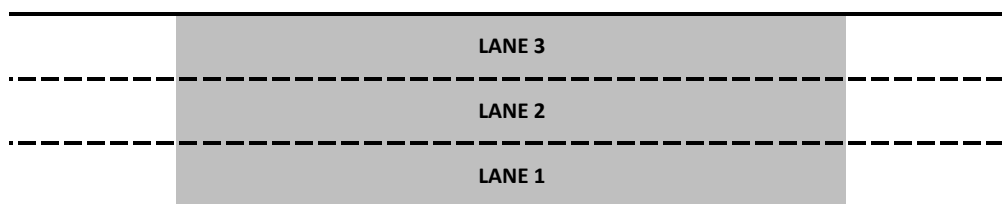
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,375	56	9.5	1.6	127.6	8.3	F
2	1,287	57	7.8	0.8	134.1	6.2	F
1	1,086	52	6.3	0.9	132.2	4.3	F
Area	3,747	165	8.1	1.1	127.7	6.4	F
Total	3,747	165	8.1	1.1	127.7	6.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,360	3,747	165	85.9%	2,255
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 167 - NB I-15: Horsethief Rd On-ramp

Segment Type - Merge

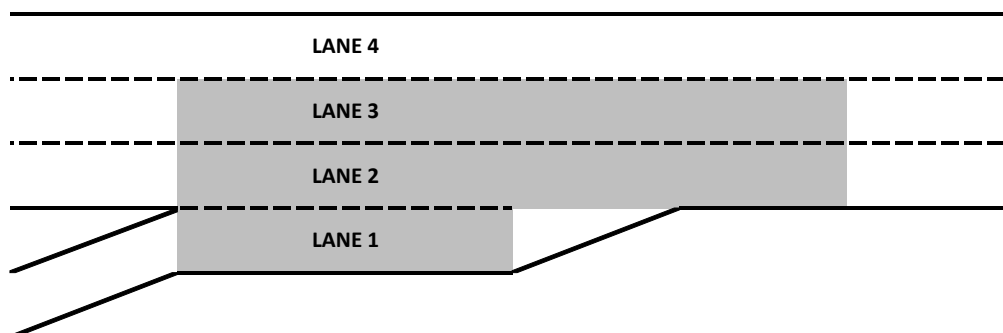
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,367	42	9.4	1.6	132.4	8.0	F
3	956	60	6.3	0.6	149.5	6.1	F
2	724	50	4.9	0.7	138.0	4.3	F
1	732	92	1.3	0.3	78.6	3.1	F
Area	2,412	202	5.3	0.6	133.9	2.7	F
Total	3,779	245	7.0	1.0	123.2	6.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	732	92	1		
Total	732	92	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,520	3,047	153	86.6%	1,498
On-ramp	840	732	92	87.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 166 - NB I-15: Horsethief Rd Off-ramp to On-ramp

Segment Type - Basic

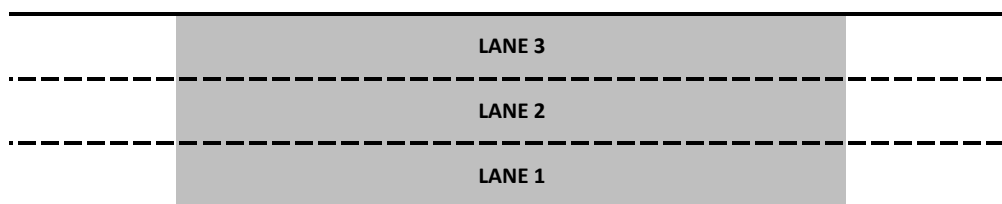
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,332	37	9.0	1.4	131.0	8.4	F
2	974	61	4.9	0.5	155.2	7.7	F
1	753	58	3.6	0.2	146.9	5.5	F
Area	3,060	156	6.6	0.9	125.3	9.6	F
Total	3,060	156	6.6	0.9	125.3	9.6	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,520	3,060	156	86.9%	2,762
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 165 - NB I-15: Horsethief Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,435	54	9.3	1.2	129.5	6.8	F
2	1,221	68	6.4	0.5	141.7	3.6	F
1	858	71	5.8	0.5	136.7	5.5	F
Area	2,079	139	6.1	0.4	138.7	3.5	F
Total	3,514	193	7.5	0.7	130.0	6.1	F

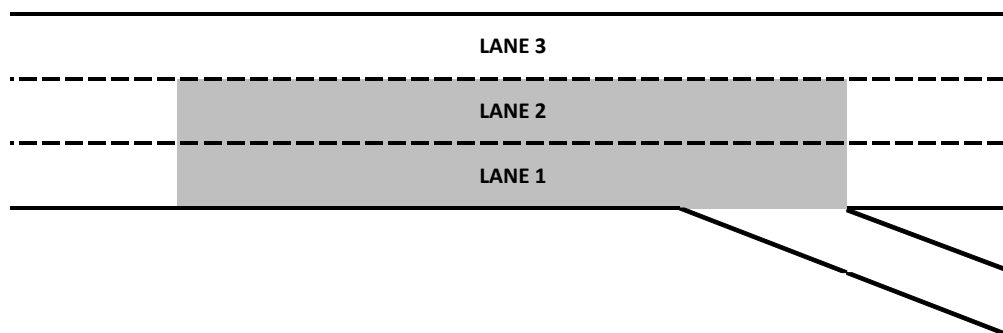
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	404	83
Total	404	83

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,180	3,514	193	84.1%	1,499
On-ramp					
Off-ramp	660	404	83	61.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 117 - NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

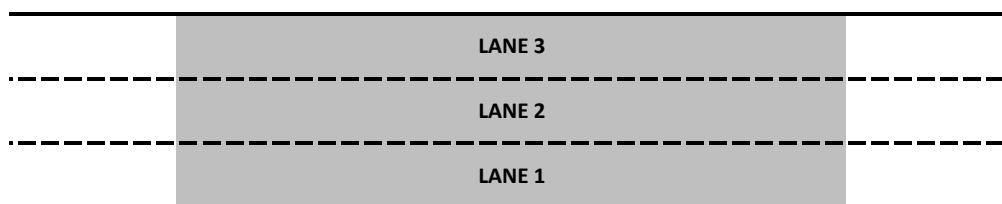
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,452	53	11.0	1.1	120.6	5.3	F
2	1,193	70	7.3	0.4	138.0	1.6	F
1	890	80	4.6	0.4	144.4	2.4	F
Area	3,535	203	8.4	0.7	119.6	4.7	F
Total	3,535	203	8.4	0.7	119.6	4.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,180	3,535	203	84.6%	2,314
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 158 - NB I-15: Lake St On-ramp to Horsethief Rd Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,486	55	40.5	1.0	16.8	1.7	B
4	1,274	82	36.1	1.6	16.3	1.7	B
3	1,030	94	13.1	2.5	114.1	9.5	F
2	1,164	112	11.2	2.8	116.2	11.7	F
1	1,215	110	9.5	3.2	114.6	14.4	F
Area	6,168	452	26.4	1.4	57.2	1.6	F
Total	6,168	452	26.4	1.4	57.2	1.6	F

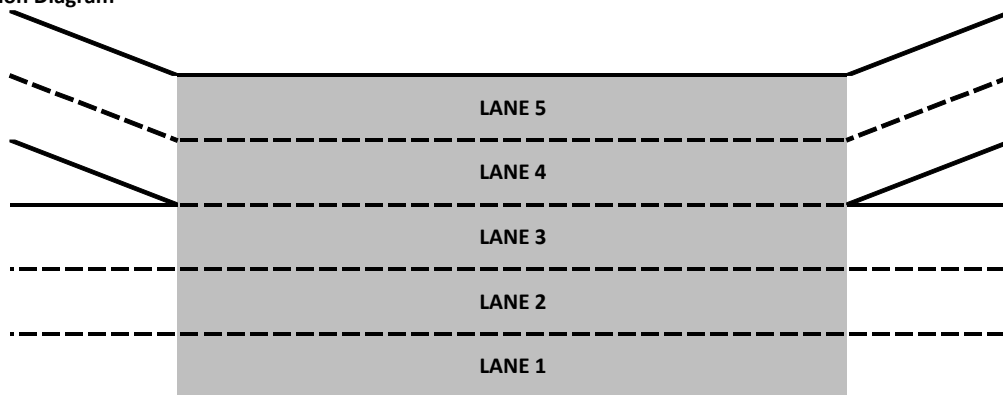
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,164	112
1	1,215	110
Total	2,378	209

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,363	121
1	1,205	111
Total	2,567	226

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,390	3,790	244	86.3%	3,029
On-ramp	2,700	2,378	209	88.1%	
Off-ramp	2,910	2,567	226	88.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 116 - NB I-15: Lake St On-ramp

Segment Type - Merge

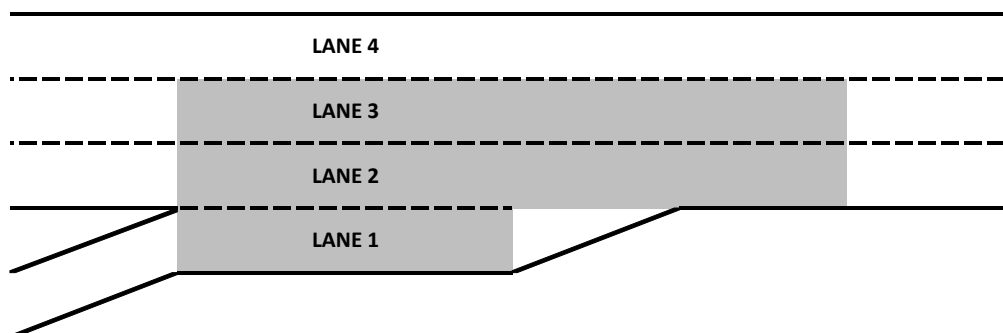
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,208	45	8.8	0.6	138.8	2.9	F
3	729	61	6.9	1.1	145.8	6.3	F
2	725	46	5.1	1.3	144.2	9.1	F
1	1,148	261	2.0	0.7	91.8	9.4	F
Area	2,601	368	6.0	1.2	182.2	8.1	F
Total	3,809	413	6.8	0.8	133.2	4.1	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,148	261	1		
Total	1,148	261	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,150	2,661	152	84.5%	1,499
On-ramp	1,240	1,148	261	92.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 115 - NB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

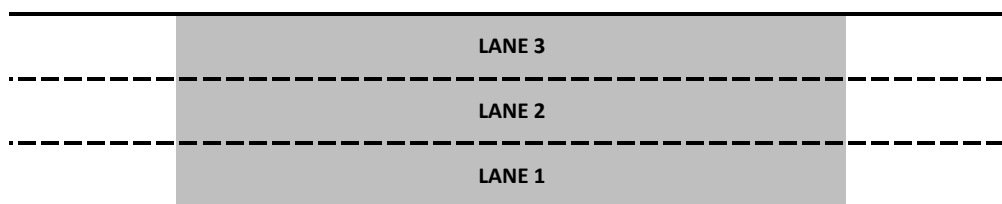
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,173	34	8.2	0.6	135.3	4.4	F
2	773	62	4.3	0.8	159.6	7.6	F
1	733	43	4.3	1.2	149.5	12.5	F
Area	2,679	139	6.1	0.7	132.5	1.0	F
Total	2,679	139	6.1	0.7	132.5	1.0	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,150	2,679	139	85.0%	3,216
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 114 - NB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,179	39	8.1	0.8	135.2	6.3	F
2	904	60	4.9	1.2	154.9	11.5	F
1	809	41	5.8	1.4	139.0	7.8	F
Area	1,713	101	5.4	1.3	145.8	9.3	F
Total	2,893	141	6.5	1.0	135.4	3.7	F

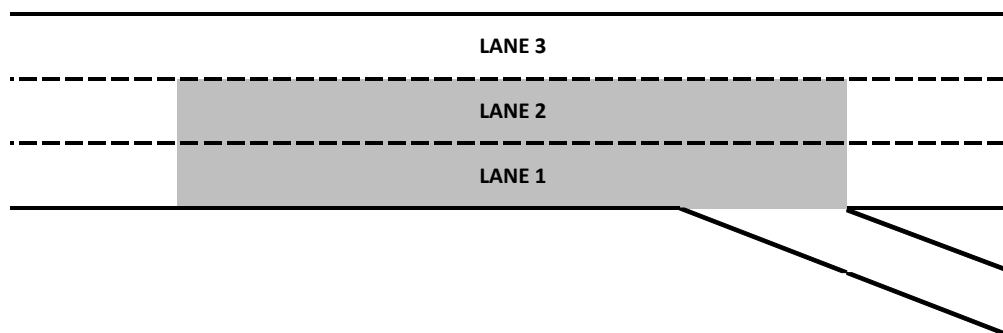
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	194	36
Total	194	36

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,420	2,893	141	84.6%	1,498
On-ramp					
Off-ramp	270	194	36	72.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 113 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

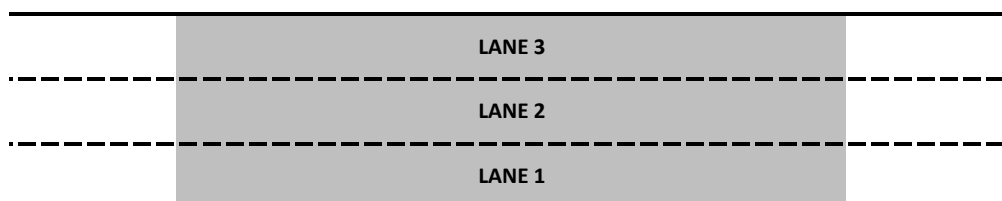
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,202	35	8.7	1.1	131.9	7.1	F
2	929	49	5.9	1.7	147.7	11.0	F
1	796	46	5.3	1.6	140.3	8.6	F
Area	2,928	129	6.9	1.3	131.6	5.7	F
Total	2,928	129	6.9	1.3	131.6	5.7	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,420	2,928	129	85.6%	6,270
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 157 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp (EL Ingress)

Segment Type - Basic

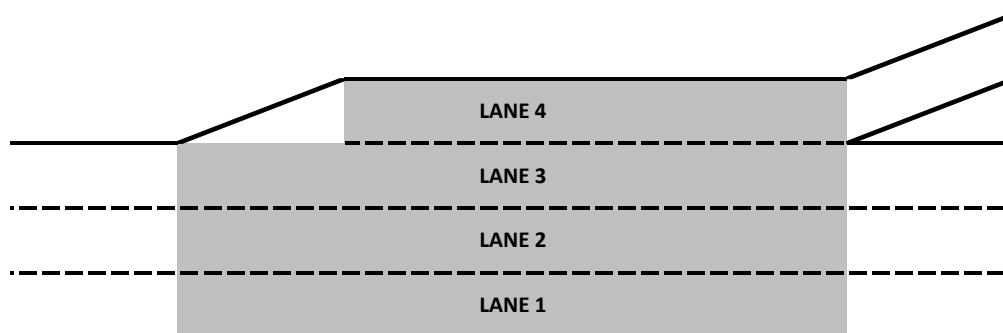
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	866	57	37.8	0.6	12.8	1.1	B
3	1,215	71	11.6	1.2	117.3	4.8	F
2	1,785	41	7.5	1.2	137.7	8.9	F
1			6.7	1.1	130.8	7.9	F
Area	3,867	169	15.9	1.1	65.6	1.9	F
Total	3,867	169	15.9	1.1	65.6	1.9	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	907	89
Total			Total	907	89

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,450	3,867	169	86.9%	1,501
On-ramp					
Off-ramp	1,030	907	89	88.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 156 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

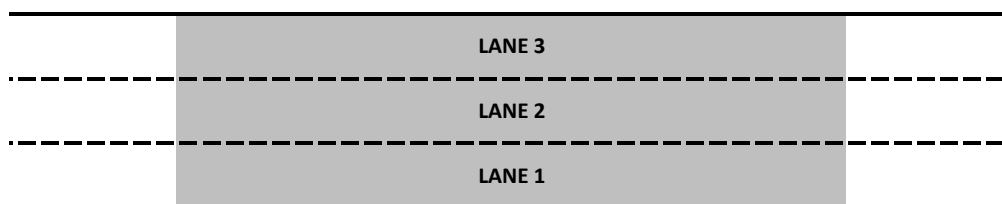
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	908	66	15.6	0.8	106.4	2.3	F
2	1,256	69	10.4	1.8	122.6	10.3	F
1	1,705	36	7.4	1.2	128.0	6.4	F
Area	3,868	171	11.9	1.0	108.0	3.4	F
Total	3,868	171	11.9	1.0	108.0	3.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,450	3,868	171	86.9%	703
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 112 - NB I-15: Nichols Rd On-ramp

Segment Type - Merge

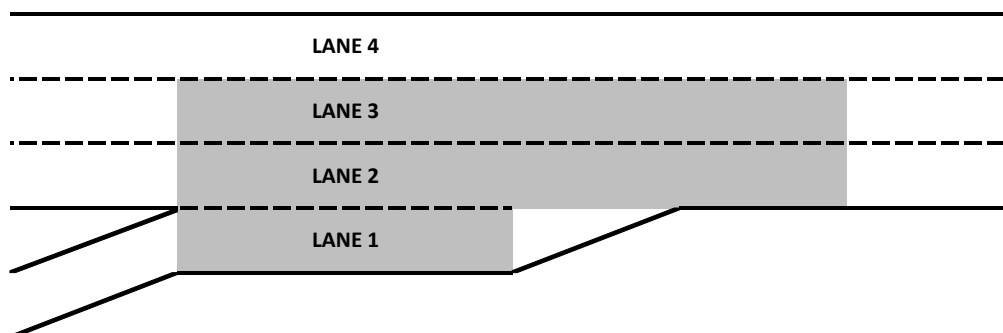
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,032	55	9.0	2.2	141.0	11.9	F
3	730	67	8.9	2.9	136.2	13.0	F
2	1,105	79	7.6	2.7	134.6	13.9	F
1	1,048	62	4.9	2.4	65.9	20.8	F
Area	2,883	208	8.3	3.0	128.0	18.6	F
Total	3,916	263	8.5	2.7	131.2	16.4	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	1,048	62	1		
Total	1,048	62	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,390	2,867	201	84.6%	1,499
On-ramp	1,060	1,048	62	98.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 111 - NB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

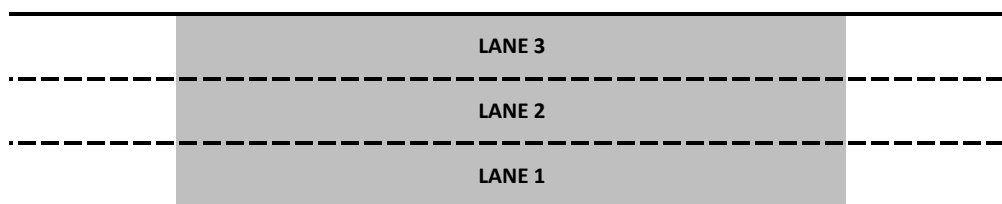
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	984	52	6.4	1.0	146.0	8.2	F
2	782	71	4.9	1.9	154.5	15.1	F
1	1,146	70	9.5	2.6	124.5	11.9	F
Area	2,913	193	7.3	1.9	130.9	10.3	F
Total	2,913	193	7.3	1.9	130.9	10.3	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,390	2,913	193	85.9%	3,521
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 110 - NB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,142	75	6.7	0.8	142.3	4.4	F
2	1,136	73	6.7	2.3	141.6	12.3	F
1	1,174	43	10.9	2.5	117.9	8.7	F
Area	2,310	116	9.2	2.4	121.3	7.6	F
Total	3,452	191	8.4	1.9	125.8	8.4	F

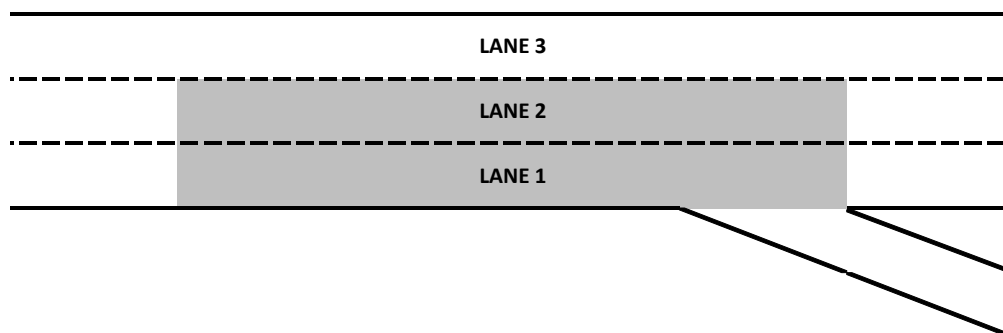
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	401	60
Total	401	60

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,860	3,452	191	89.4%	1,488
On-ramp					
Off-ramp	470	401	60	85.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 109 - NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp

Segment Type - Merge

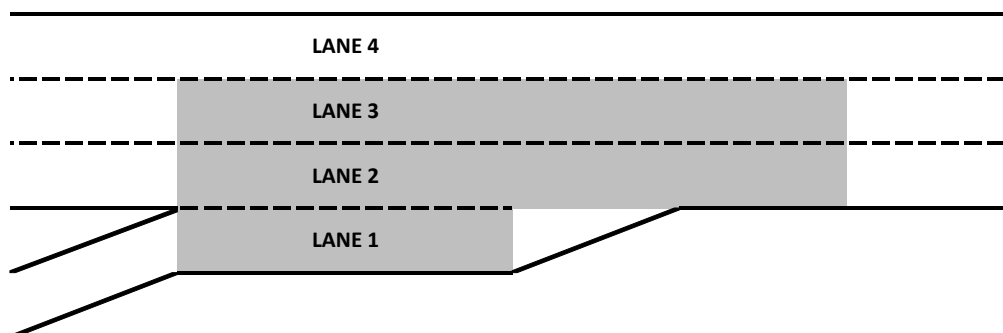
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,115	65	9.2	3.4	135.7	19.5	F
3	915	74	7.6	3.0	144.1	18.2	F
2	823	41	6.6	1.5	140.8	10.0	F
1	718	78	2.3	0.9	62.8	15.6	F
Area	2,456	193	6.7	2.3	133.1	17.1	F
Total	3,571	258	7.6	2.7	130.0	17.5	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	718	78	1		
Total	718	78	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,100	2,854	181	92.1%	1,486
On-ramp	760	718	78	94.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 108 - NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

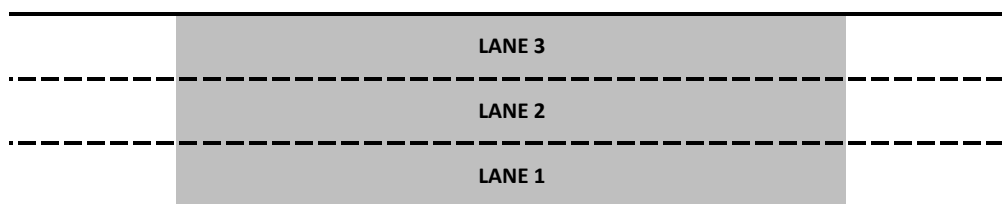
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,127	52	9.9	4.8	126.4	28.9	F
2	961	70	6.5	4.2	141.3	34.6	F
1	865	44	6.0	2.2	140.2	24.2	F
Area	2,952	166	7.8	3.8	127.4	26.8	F
Total	2,952	166	7.8	3.8	127.4	26.8	F

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,100	2,952	166	95.2%	1,949
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 155 - NB I-15: Dexter Ave Off-ramp to On-ramp (EL Ingress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,280	29	28.3	17.6	63.8	28.9	F
3	1,521	100	17.5	18.1	103.1	45.7	F
2	934	40	15.7	18.3	106.8	50.6	F
1	992	47	15.5	16.8	102.5	48.9	F
Area	4,727	216	20.4	17.6	75.1	34.1	F
Total	4,727	216	20.4	17.6			

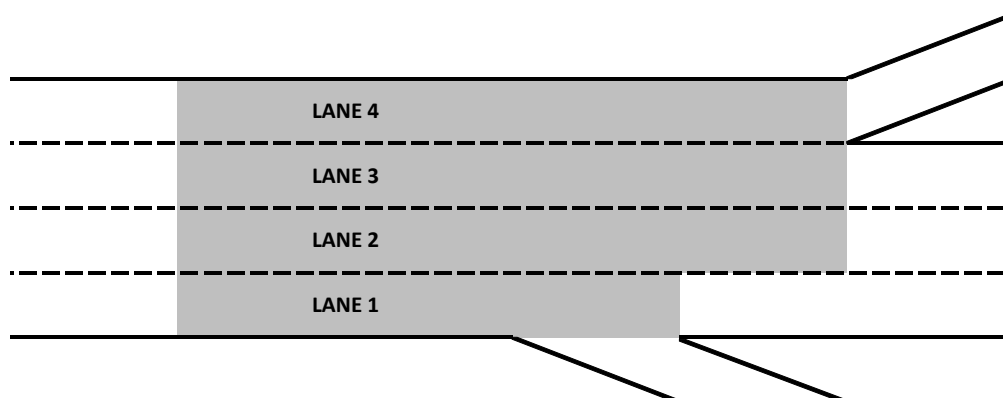
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,457	150
Total	1,457	150

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,950	4,727	216	95.5%	1,585
On-ramp					
Off-ramp	1,670	1,457	150	87.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 153 - NB I-15: Dexter Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,280	29	27.3	20.1	70.2	38.4	F
3	1,521	100	21.7	24.4	91.7	50.6	F
2	934	40	20.2	25.0	92.1	56.0	F
1	992	47	20.4	24.2	88.5	55.4	F
Area	1,926	87	20.3	24.6	90.1	55.5	F
Total	4,727	216	23.0	23.0	77.2	43.2	F

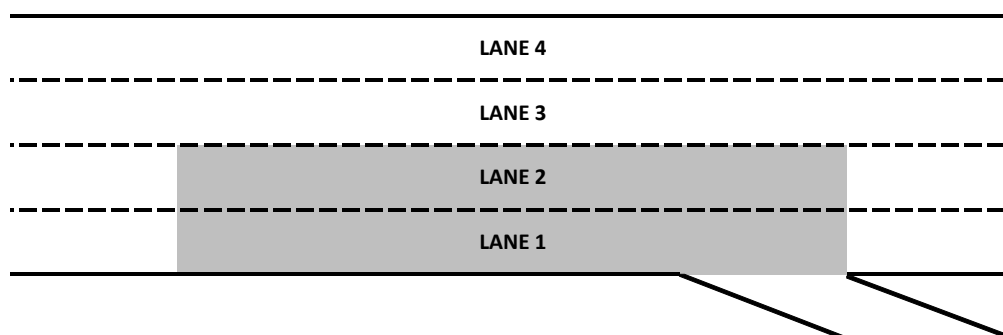
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	163	34
Total	163	34

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,950	4,727	216	95.5%	940
On-ramp					
Off-ramp	180	163	34	90.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 107 - NB I-15: WB Central Ave (SR-74) Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	542	21	34.0	26.7	68.2	61.1	F
4	1,662	100	34.0	28.0	81.9	65.4	F
3	1,616	61	34.5	27.2	65.9	60.5	F
2	1,159	37	32.1	28.3	70.3	70.2	F
1	629	29	34.9	28.8	68.9	67.3	F
Area	5,066	227	34.0	28.0	69.8	63.2	F
Total	5,608	248	34.1	27.6	68.4	61.2	F

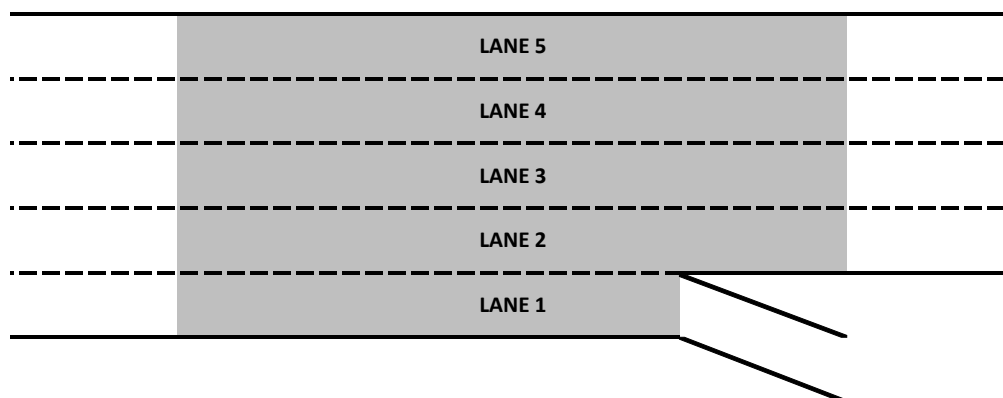
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	764	85
Total	764	85

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,760	5,608	248	97.4%	1,362
On-ramp					
Off-ramp	810	764	85	94.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 106 - NB I-15: EB Central Ave (SR-74) Off-ramp

Segment Type - Diverge

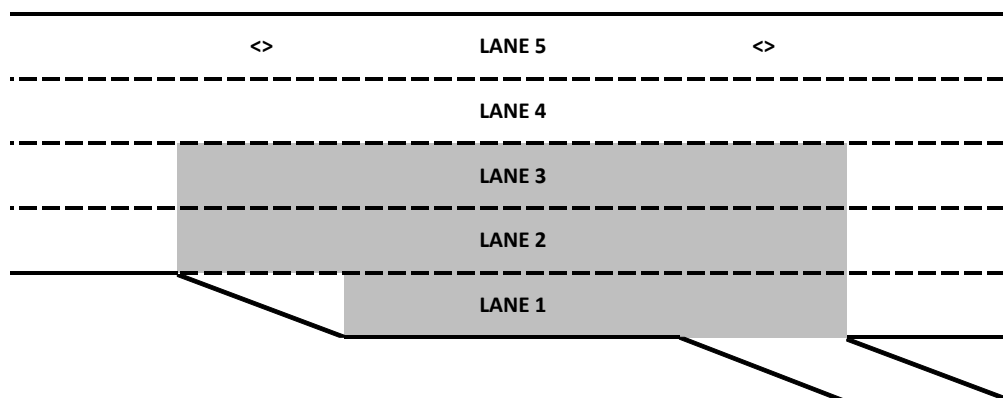
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	535	22	53.4	16.1	13.0	8.7	B
4	1,806	85	42.0	30.6	71.8	60.8	F
3	1,831	80	43.1	28.7	62.3	49.9	F
2	2,007	46	42.8	28.3	56.6	47.5	F
1			34.2	25.3	45.3	48.5	F
Area	3,838	127	42.9	29.2	57.6	50.6	F
Total	6,179	233	44.0	27.7	44.5	34.1	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1	529	66
Total			Total	529	66

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,310	6,179	233	97.9%	1,498
On-ramp					
Off-ramp	550	529	66	96.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 105 - NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

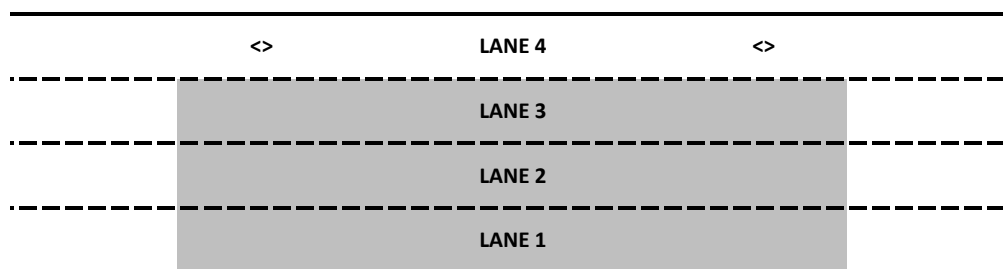
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	540	22	60.2	7.5	9.5	3.1	A
3	1,749	68	42.0	28.0	64.4	50.6	F
2	1,913	76	41.4	24.9	62.2	40.6	F
1	1,992	61	40.0	21.9	61.8	36.2	F
Area	5,653	205	41.1	24.7	61.7	40.9	F
Total	6,193	228	43.4	22.1	42.0	21.9	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,310	6,193	228	98.1%	1,245
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 104 - NB I-15: Main St On-ramp

Segment Type - Merge

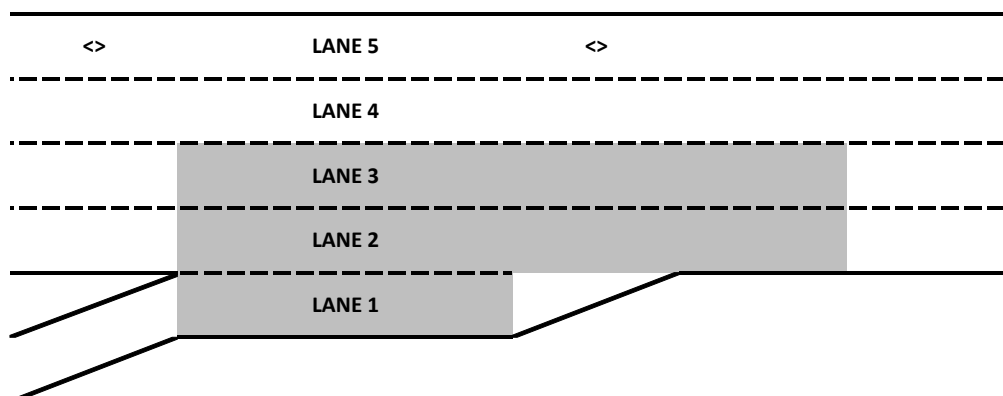
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	590	21	61.6	4.2	9.3	2.5	A
4	1,612	28	43.8	27.0	57.5	42.2	F
3	1,682	71	42.8	25.9	63.0	40.2	F
2	1,507	53	39.9	25.3	63.2	44.4	F
1	844	42	18.7	12.4	12.4	14.7	B
Area	4,033	166	41.4	26.0	54.0	38.2	F
Total	6,234	216	44.6	23.1	37.3	20.4	E

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1	844	42	1		
Total	844	42	Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,460	5,391	174	98.7%	1,500
On-ramp	850	844	42	99.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 103 - NB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

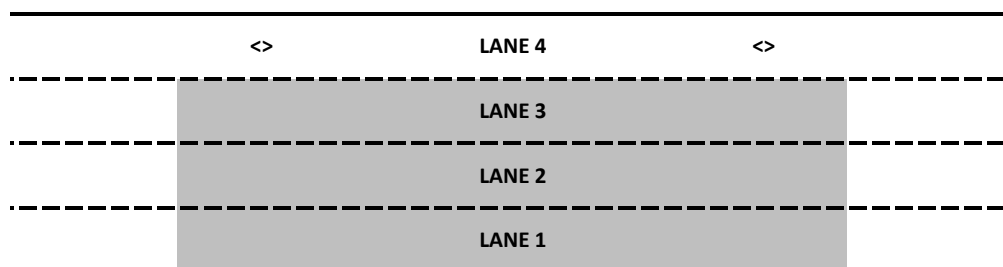
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	600	17	63.5	1.3	9.8	1.1	A
3	1,720	25	46.9	23.2	43.5	23.9	E
2	1,641	44	45.3	25.1	46.4	27.9	F
1	1,452	34	44.8	25.0	43.2	28.1	E
Area	4,813	103	45.7	24.3	44.0	26.0	E
Total	5,413	120	48.2	21.1	31.7	14.6	D

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,460	5,413	120	99.1%	2,900
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 102 - NB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	687	13	63.4	0.9	10.6	1.3	A
3	1,817	27	53.8	10.1	35.3	7.1	E
2	1,810	17	50.1	8.2	36.8	6.1	E
1	1,722	23	51.0	5.2	38.4	4.3	E
Area	3,533	40	50.6	6.6	37.5	5.1	E
Total	6,037	79	53.0	6.8	29.9	4.1	D

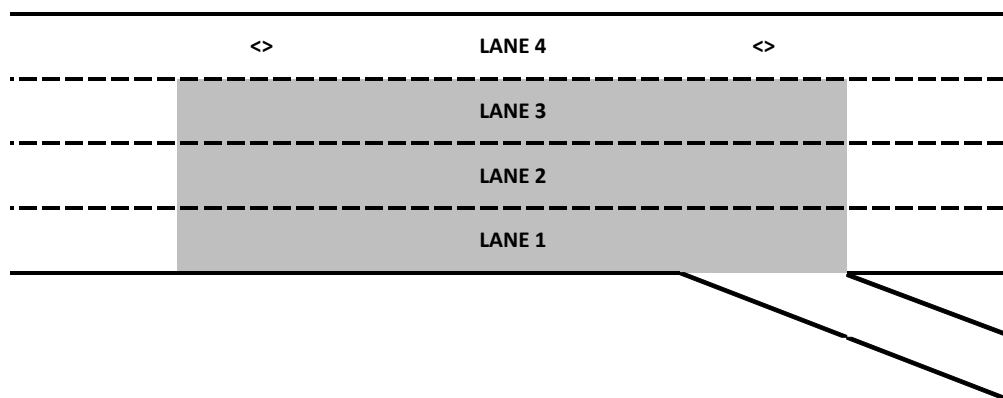
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	584	63
Total	584	63

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,050	6,037	79	99.8%	1,499
On-ramp					
Off-ramp	590	584	63	98.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 101 - NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp

Segment Type - Basic

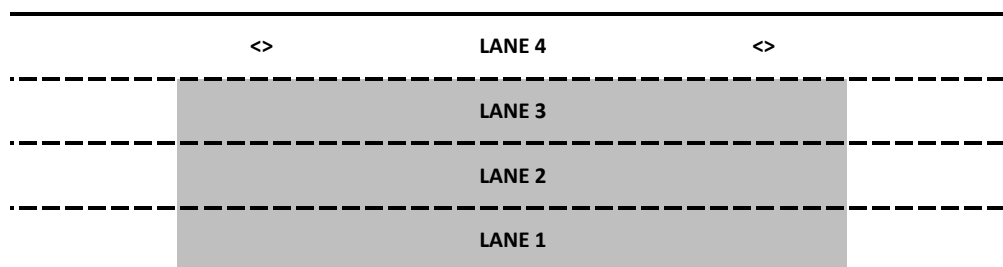
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	693	12	64.2	0.1	11.2	0.7	B
3	1,828	19	63.6	2.4	30.4	1.0	D
2	1,806	20	63.3	2.1	30.2	1.0	D
1	1,700	23	62.5	2.7	28.5	1.7	D
Area	5,334	62	63.2	2.3	29.7	1.1	D
Total	6,026	75	63.3	2.0	25.1	0.8	C

Lane	On-ramp Volume (vph)		Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.		Average	Std. Dev.
4			4		
3			3		
2			2		
1			1		
Total			Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,050	6,026	75	99.6%	3,905
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Design Year Plus Project
AM Peak Hour

Location		Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
200	SB I-15 EL: WB SR-91 Off-ramp	Basic	283	12	97.5%	208	28	94.5%	62	12	88.0%	69.9	0.4	2.2	0.2	A
201	SB I-15 EL: EB SR-91 On-ramp	Basic	221	10	100.4%							69.9	0.4	3.2	0.3	A
202	SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia	Basic	428	18	97.2%							69.9	0.5	3.3	0.3	A
203	SB I-15 EL: EL Access S of Magnolia to EL Access at El Cerrito	Basic	423	16	100.6%							69.4	0.4	3.0	0.2	A
204	SB I-15 EL: EL Access at El Cerrito Rd to EL Access S of Cajalco	Basic	381	17	103.0%							69.7	0.5	2.7	0.2	A
205	SB I-15 EL: EL Access S of Cajalco to EL Access S of Temescal Canyon	Basic	321	14	97.3%	900	73	87.4%	62	15	89.1%	69.5	0.6	2.2	0.2	A
206	SB I-15 EL: EL Access S of Temescal Canyon to EL Access S of Indian Truck	Basic	295	16	89.3%							69.9	0.3	2.3	0.2	A
207	SB I-15 EL: EL Access S of Indian Truck to EL Egress S of Lake	Basic	286	15	89.4%							69.8	0.3	2.3	0.1	A
208	SB I-15 EL: EL Egress S of Lake	Basic	286	14	89.3%							69.5	0.4	2.3	0.2	A
308	NB I-15 EL: EL Ingress N of Nichols	Basic	1,464	42	87.7%							67.9	0.1	18.0	0.8	B
309	NB I-15 EL: EL Ingress N of Nichols to EL Access N of Lake	Basic	2,372	62	87.9%	206	33	86.0%	62	15	89.1%	67.2	0.2	18.1	1.1	C
310	NB I-15 EL: EL Access N of Lake to EL Access N of Indian Truck	Basic	2,573	63	88.4%							67.1	0.4	20.0	1.2	C
311	NB I-15 EL: EL Access N of Indian Truck to EL Ingress at Cajalco	Basic	2,052	71	90.8%							62.0	2.0	14.0	0.6	B
314	NB I-15 EL: EL Ingress at Cajalco	Merge	2,058	67	91.1%							67.0	0.4	13.1	1.0	B
312	NB I-15 EL: EL Ingress at Cajalco to EL Access at El Cerrito	Basic	2,266	63	90.7%							66.9	0.3	17.9	1.3	B
302	NB I-15 EL: EL Access at El Cerrito to EL Access N of Ontario	Basic	2,680	38	88.8%	838	49	91.1%	1,185	59	76.0%	65.2	1.3	20.2	0.3	C
303	NB I-15 EL: EL Access N of Ontario to WB SR-91 Off-ramp	Basic	2,873	29	86.5%							63.7	1.2	22.8	0.6	C
304	NB I-15 EL: WB SR-91 Off-ramp	Basic	2,872	41	86.5%							65.9	0.3	22.6	0.6	C
306	NB I-15 EL: EB SR-91 On-ramp	Basic	1,694	26	96.2%							68.2	0.2	19.3	0.8	C

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 200 - SB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	116	6	69.8	0.5	1.9	0.3	A
1	167	6	69.9	0.6	2.5	0.2	A
Area	283	12	69.9	0.4	2.2	0.2	A
Total	283	12	69.9	0.4	2.2	0.2	A

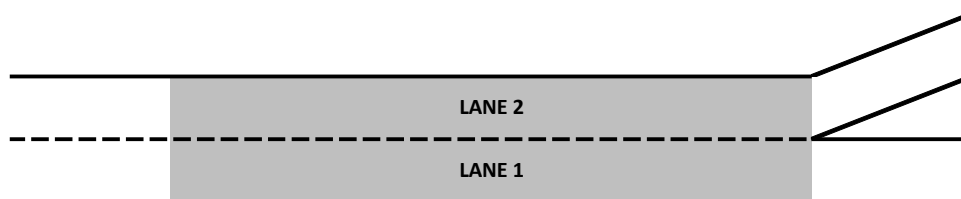
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	62	12
Total	62	12

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	290	283	12	97.5%	1,496
On-ramp					
Off-ramp	70	62	12	88.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 201 - SB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	221	10	69.6	0.5	2.9	0.4	A
1	208	28	70.1	0.6	3.5	0.3	A
Area	429	38	69.9	0.4	3.2	0.3	A
Total	429	38	69.9	0.4	3.2	0.3	A

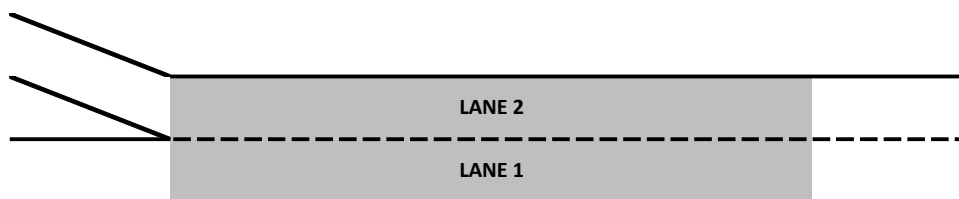
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	208	28
Total	208	28

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	220	221	10	100.4%	1,500
On-ramp	220	208	28	94.5%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 202 - SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	198	11	69.6	0.6	2.9	0.3	A
1	230	8	70.1	0.6	3.6	0.3	A
Area	428	18	69.9	0.5	3.3	0.3	A
Total	428	18	69.9	0.5	3.3	0.3	A

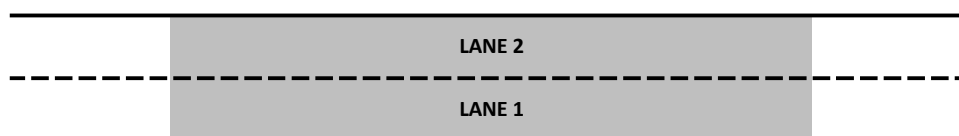
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	440	428	18	97.2%	2,496
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 203 - SB I-15 EL: EL Access S of Magnolia to EL Access at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	166	9	69.7	0.9	2.2	0.3	A
1	257	8	69.3	0.2	3.9	0.2	A
Area	423	16	69.4	0.4	3.0	0.2	A
Total	423	16	69.4	0.4	3.0	0.2	A

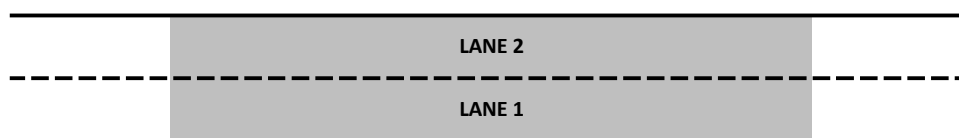
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	420	423	16	100.6%	7,133
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 204 - SB I-15 EL: EL Access at El Cerrito Rd to EL Access S of Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	155	8	70.2	0.6	2.0	0.4	A
1	226	9	69.5	0.5	3.5	0.3	A
Area	381	17	69.7	0.5	2.7	0.2	A
Total	381	17	69.7	0.5	2.7	0.2	A

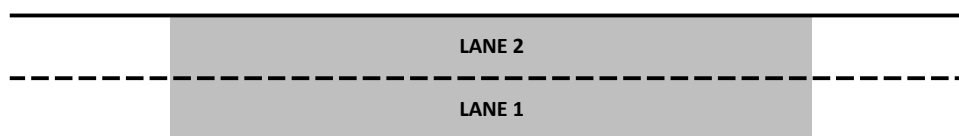
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	370	381	17	103.0%	5,784
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 205 - SB I-15 EL: EL Access S of Cajalco to EL Access S of Temescal Canyon

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	131	7	70.4	0.6	1.6	0.4	A
1	190	7	69.0	0.7	2.8	0.2	A
Area	321	14	69.5	0.6	2.2	0.2	A
Total	321	14	69.5	0.6	2.2	0.2	A

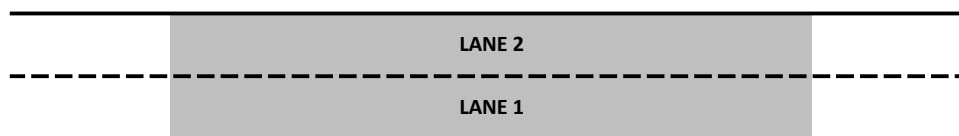
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	330	321	14	97.3%	23,650
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 206 - SB I-15 EL: EL Access S of Temescal Canyon to EL Access S of Indian Truck

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	130	8	70.9	0.3	2.1	0.1	A
1	165	8	69.0	0.5	2.6	0.3	A
Area	295	16	69.9	0.3	2.3	0.2	A
Total	295	16	69.9	0.3	2.3	0.2	A

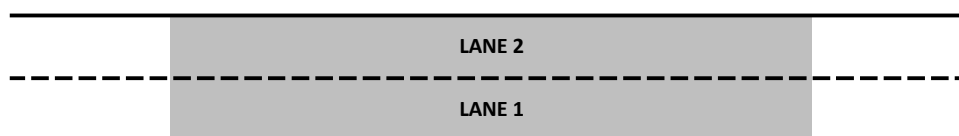
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	330	295	16	89.3%	18,779
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 207 - SB I-15 EL: EL Access S of Indian Truck to EL Egress S of Lake

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	132	7	70.6	0.3	2.3	0.1	A
1	154	8	69.0	0.3	2.3	0.2	A
Area	286	15	69.8	0.3	2.3	0.1	A
Total	286	15	69.8	0.3	2.3	0.1	A

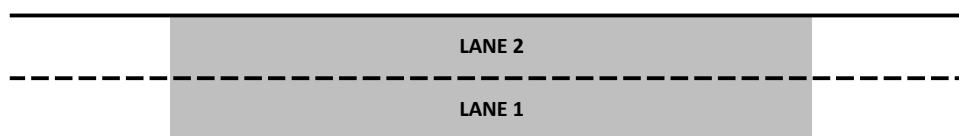
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	320	286	15	89.4%	10,977
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 208 - SB I-15 EL: EL Egress S of Lake

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	223	9	69.5	0.4	3.7	0.3	A
1	63	5	69.7	0.6	0.9	0.2	A
Area	286	14	69.5	0.4	2.3	0.2	A
Total	286	14	69.5	0.4	2.3	0.2	A

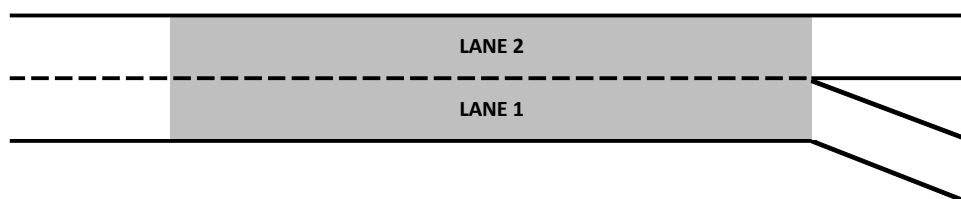
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	62	15
Total	62	15

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	320	286	14	89.3%	1,500
On-ramp					
Off-ramp	70	62	15	89.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 308 - NB I-15 EL: EL Ingress N of Nichols

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,464	42	67.1	0.1	18.5	0.9	C
1	900	73	68.8	0.2	17.5	0.7	B
Area	2,364	114	67.9	0.1	18.0	0.8	B
Total	2,364	114	67.9	0.1	18.0	0.8	B

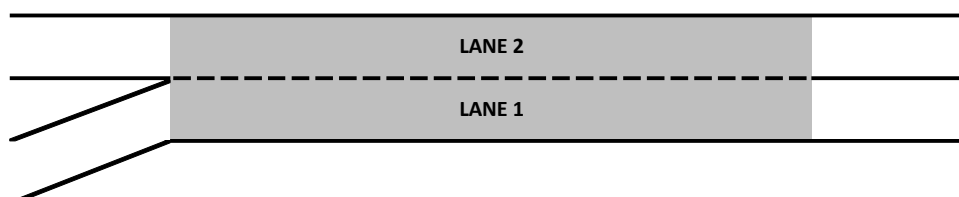
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	900	73
Total	900	73

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,670	1,464	42	87.7%	1,498
On-ramp	1,030	900	73	87.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 309 - NB I-15 EL: EL Ingress N of Nichols to EL Access N of Lake

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,270	29	66.5	0.3	17.3	1.2	B
1	1,102	33	67.8	0.3	18.9	1.2	C
Area	2,372	62	67.2	0.2	18.1	1.1	C
Total	2,372	62	67.2	0.2	18.1	1.1	C

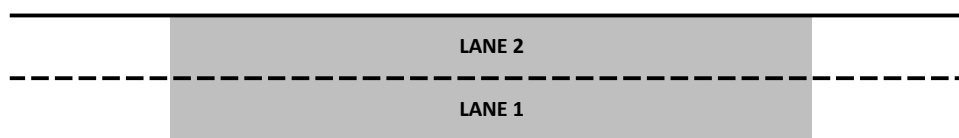
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,700	2,372	62	87.9%	11,215
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 310 - NB I-15 EL: EL Access N of Lake to EL Access N of Indian Truck

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,313	27	66.7	0.5	19.6	1.4	C
1	1,260	36	67.5	0.4	20.3	1.2	C
Area	2,573	63	67.1	0.4	20.0	1.2	C
Total	2,573	63	67.1	0.4	20.0	1.2	C

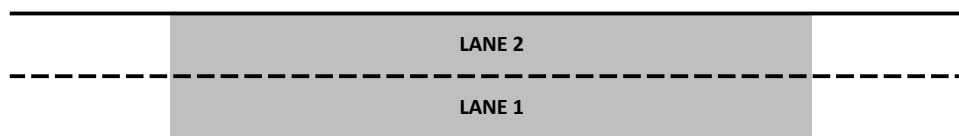
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,910	2,573	63	88.4%	18,145
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 311 - NB I-15 EL: EL Access N of Indian Truck to EL Ingress at Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	1,031	34					
5	1,021	37					
4							
3							
2			62.9	1.7	17.7	0.9	B
1			60.8	2.5	13.8	0.6	B
Area	0	0	62.6	1.8	14.0	0.6	B
Total	2,052	71	62.0	2.0	15.8	0.7	B

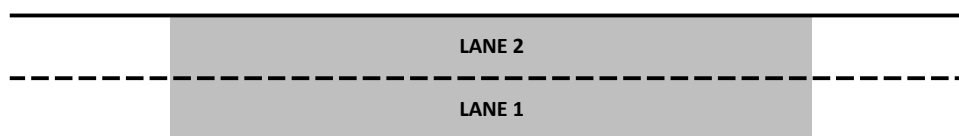
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,260	2,052	71	90.8%	26,270
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 314 - NB I-15 EL: EL Ingress at Cajalco

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,015	29	66.7	0.4	14.4	1.5	B
2	1,043	38	67.4	0.5	15.3	0.8	B
1	206	33	22.7	0.5	1.1	0.2	A
Area	2,265	100	67.0	0.4	13.1	1.0	B
Total	2,265	100	67.0	0.4	13.1	1.0	B

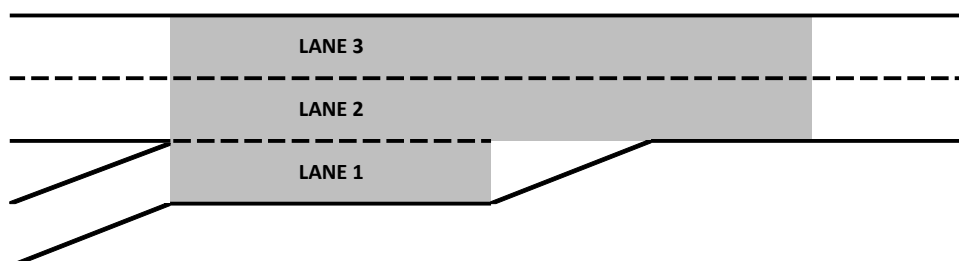
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	206	33
Total	206	33

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,260	2,058	67	91.1%	1,594
On-ramp	240	206	33	86.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 312 - NB I-15 EL: EL Ingress at Cajalco to EL Access at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,096	33	66.4	0.3	17.3	1.8	B
1	1,170	30	67.4	0.5	18.4	0.9	C
Area	2,266	63	66.9	0.3	17.9	1.3	B
Total	2,266	63	66.9	0.3	17.9	1.3	B

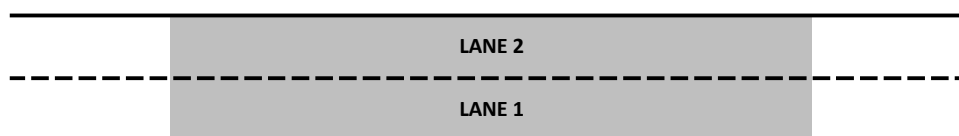
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,500	2,266	63	90.7%	4,125
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 302 - NB I-15 EL: EL Access at El Cerrito to EL Access N of Ontario

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,350	20	65.4	0.9	21.6	0.8	C
1	1,331	18	64.9	1.7	18.8	0.7	C
Area	2,680	38	65.2	1.3	20.2	0.3	C
Total	2,680	38	65.2	1.3	20.2	0.3	C

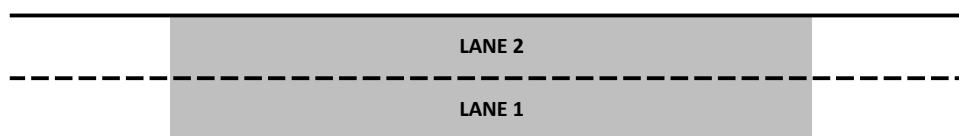
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,020	2,680	38	88.8%	6,919
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 303 - NB I-15 EL: EL Access N of Ontario to WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,487	11	63.8	1.2	24.6	0.8	C
1	1,386	18	63.6	1.1	21.0	0.8	C
Area	2,873	29	63.7	1.2	22.8	0.6	C
Total	2,873	29	63.7	1.2	22.8	0.6	C

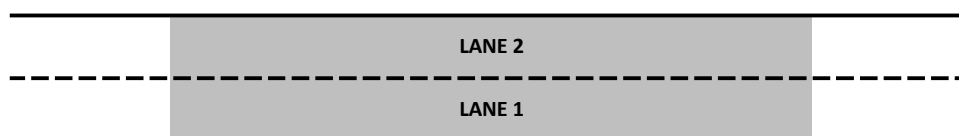
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,320	2,873	29	86.5%	3,113
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 304 - NB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,200	20	66.7	0.4	18.3	0.5	C
1	1,672	21	65.3	0.4	26.9	1.3	D
Area	2,872	41	65.9	0.3	22.6	0.6	C
Total	2,872	41	65.9	0.3	22.6	0.6	C

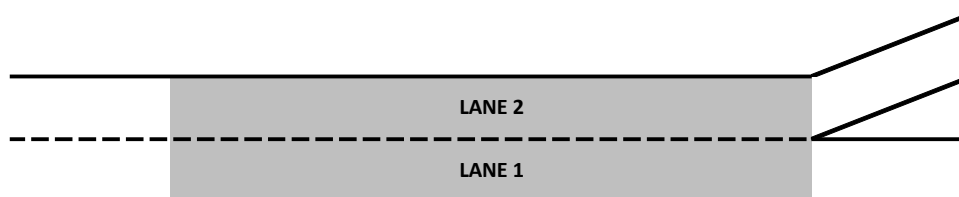
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,185	59
Total	1,185	59

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,320	2,872	41	86.5%	1,501
On-ramp					
Off-ramp	1,560	1,185	59	76.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 306 - NB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,694	26	69.1	0.2	17.5	0.7	B
1	838	49	67.4	0.3	21.0	1.0	C
Area	2,531	75	68.2	0.2	19.3	0.8	C
Total	2,531	75	68.2	0.2	19.3	0.8	C

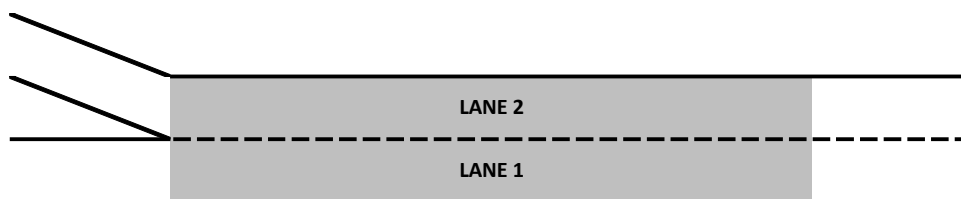
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	838	49
Total	838	49

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,760	1,694	26	96.2%	1,498
On-ramp	920	838	49	91.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Vissim Post-Processor
Average Results from 5 Runs
Network Statistics

I-15 Express Lanes Southern Extension
Design Year Plus Project
PM Peak Hour

Performance Measure	Vehicle Types	Average	Std. Dev.	Minimum	Maximum
Average Delay (seconds)	All	980.0	28.80	955.8	1,026.5
Total Delay (hours)	All	71,393	2,098	69,642	74,866
Average Stopped Delay (seconds)	All	54.7	0.80	53.7	55.3
Total Stopped Delay (hours)	All	3981	55	3913	4032
Total Distance Traveled (miles)	All	2,273,999	7,806	2,265,394	2,284,640
Average Speed (mph)	All	21.6	0.46	20.9	22.0
Average Number of Stops	All	80.1	1.47	78.6	82.1
Total Number of Stops	All	21,015,652	360,579	20,640,728	21,455,860
Total Travel Time (hours)	All	105,106.3	2,020.6	103,403.8	108,485.2
Vehicles Active	All	14,075	643	13,468	15,039
Vehicles Arrived	All	248,183	838	247,064	248,949

VISSIM Post-Processor
Average Results from 5 Runs
Average Travel Time

I-15 Express Lanes Southern Extension
Design Year Plus Project
PM Peak Hour

Corridor Travel Time by Time Interval Summary					
Time interval		Measured from Simulation (min)			
		Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
1	1:00 - 1:15 PM	20.97	139.37	19.44	23.62
2	1:15 - 1:30 PM	20.82	153.52	19.48	26.85
3	1:30 - 1:45 PM	21.01	158.11	19.57	28.05
4	1:45 - 2:00 PM	22.03	158.82	19.70	28.81
5	2:00 - 2:15 PM	24.95	155.05	19.81	29.46
6	2:15 - 2:30 PM	26.66	149.82	19.77	28.95
7	2:30 - 2:45 PM	28.74	146.68	19.94	28.56
8	2:45 - 3:00 PM	30.95	148.14	20.82	28.39
9	3:00 - 3:15 PM	32.86	147.25	21.42	28.73
10	3:15 - 3:30 PM	36.57	144.72	21.85	27.73
11	3:30 - 3:45 PM	39.57	145.93	22.08	28.21
12	3:45 - 4:00 PM	41.83	143.76	22.37	28.18
13	4:00 - 4:15 PM	43.34	138.10	22.39	27.81
14	4:15 - 4:30 PM	44.28	132.05	22.15	27.37
15	4:30 - 4:45 PM	45.24	131.09	22.12	27.22
16	4:45 - 5:00 PM	49.82	132.05	22.33	26.31
17	5:00 - 5:15 PM	53.90	135.03	22.22	27.01
18	5:15 - 5:30 PM	58.22	145.78	22.23	27.99
19	5:30 - 5:45 PM	60.14	142.55	21.99	28.48
20	5:45 - 6:00 PM	60.75	142.23	22.06	28.55
21	6:00 - 6:15 PM	63.76	145.18	22.48	28.79
22	6:15 - 6:30 PM	68.27	145.57	22.54	30.53
23	6:30 - 6:45 PM	67.93	143.78	22.20	29.60
24	6:45 - 7:00 PM	62.79	137.92	21.98	28.82
25	7:00 - 7:15 PM	59.16	133.70	21.86	29.72
26	7:15 - 7:30 PM	55.98	128.76	21.90	28.99
27	7:30 - 7:45 PM	51.93	113.43	21.52	27.78
28	7:45 - 8:00 PM	43.53	105.67	21.54	27.18
Average		44.1	140.9	21.4	28.1

Corridor Performance Measurements				
Stats Summary	Southbound I-15 General Purpose Lanes	Northbound I-15 General Purpose Lanes	Southbound I-15 Express Lanes	Northbound I-15 Express Lanes
Average Travel Time (min)	44.1	140.9	21.4	30.7
Average Travel Speed (mph)	29.7	9.3	67.5	55.6
Average Delay per Vehicle (min)	25.4	122.1	2.7	12.0
Max Individual Vehicle Delay (min)	49.5	140.1	3.8	11.8

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Design Year Plus Project
PM Peak Hour

Location		Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vpl/m)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
152	NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	5,394	99	73.8%				898	77	89.8%	63.5	0.1	17.3	0.6	B
151	NB I-15: Hidden Valley Pkwy Off-ramp	Diverge	5,845	94	73.9%				447	29	74.6%	59.9	0.5	22.0	1.0	C
150	NB I-15: EB SR-91 On-ramp	Merge	4,656	71	69.1%	1,187	112	101.4%				61.2	0.7	20.1	0.8	C
149	NB I-15: WB SR-91 On-ramp	Merge	3,655	48	64.0%	1,001	71	97.2%				60.7	0.6	21.4	0.8	C
148	NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp	Basic	3,651	57	63.9%							62.5	0.5	19.7	0.7	C
147	NB I-15: EB & WB SR-91 Off-ramp	Diverge	6,003	56	65.2%				2,346	100	67.0%	44.3	4.4	33.0	2.8	D
146	NB I-15: Magnolia Ave On-ramp	Merge	4,916	71	60.5%	1,093	79	101.2%				22.5	0.9	72.5	2.8	F
145	NB I-15: Magnolia Ave Loop On-ramp	Basic	4,068	71	56.0%	843	41	98.1%				16.3	0.5	75.2	2.6	F
144	NB I-15: Magnolia Ave Off-ramp to Loop On-ramp	Basic	4,069	67	56.0%							16.0	0.5	83.4	1.2	F
143	NB I-15: Magnolia Ave Off-ramp	Diverge	4,741	86	56.4%				682	60	60.4%	15.9	1.1	67.9	6.3	F
141	NB I-15: Ontario Ave to Magnolia Ave (EL Access)	Weave	5,106	144	59.0%	1,663	101	54.9%	2,057	110	62.5%	26.5	1.2	46.4	0.8	F
140	NB I-15: Ontario Ave On-ramp	Merge	3,823	97	51.9%	1,285	62	98.9%				13.5	0.8	57.0	2.2	F
138	NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)	Basic	3,812	99	51.8%							14.9	1.4	64.4	1.7	F
137	NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)	Basic	3,809	99	51.8%							11.9	1.8	104.2	7.7	F
136	NB I-15: Ontario Ave Off-ramp	Diverge	4,378	117	52.2%				578	65	56.1%	14.1	2.4	93.0	10.2	F
135	NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp	Merge	3,308	82	45.3%	1,069	126	98.1%				10.4	1.7	105.1	7.0	F
133	NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp (EL Access)	Weave	3,457	96	43.8%	1,505	112	61.9%	1,664	108	54.9%	28.1	0.4	37.3	1.0	E
132	NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp	Weave	3,144	71	53.0%	724	75	25.5%	416	57	47.8%	8.9	0.8	107.2	3.4	F
131	NB I-15: Cajalco Rd Loop On-ramp	Merge	2,731	75	52.3%	407	51	57.3%				8.5	0.9	105.6	5.8	F
170	NB I-15: Cajalco Rd Off-ramp to Loop On-ramp	Basic	2,727	71	52.2%							8.7	1.1	102.5	5.5	F
130	NB I-15: Cajalco Rd Off-ramp to Loop On-ramp (EL Ingress)	Basic	2,902	59	51.3%				174	36	39.6%	11.0	0.9	65.2	3.1	F
129	NB I-15: Cajalco Rd Off-ramp	Diverge	3,694	84	52.5%				789	80	57.6%	11.5	1.8	81.3	4.9	F
128	NB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	3,199	86	63.8%	508	104	25.2%				11.1	0.7	95.1	4.6	F
127	NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	3,202	82	63.9%							10.7	0.5	97.7	2.9	F
126	NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp	Diverge	3,428	91	63.4%				221	26	55.3%	10.7	1.1	112.1	4.4	F
125	NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Basic	3,409	82	63.0%							10.1	0.9	107.7	3.0	F
124	NB I-15: Temescal Canyon Rd On-ramp	Merge	2,901	67	61.2%	505	83	75.4%				9.1	0.8	106.0	1.7	F
123	NB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	2,902	75	61.2%							9.1	0.9	104.3	6.3	F
122	NB I-15: Temescal Canyon Rd Off-ramp	Diverge	3,062	67	61.5%				155	25	64.5%	9.2	0.6	113.3	4.2	F
121	NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	3,071	55	61.7%							9.4	0.4	107.3	2.0	F
160	NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp (EL Access)	Weave	3,043	96	62.4%	1,346	90	64.4%	1,312	86	65.9%	21.2	0.3	54.2	1.5	F
159	NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp	Basic	3,046	70	62.4%							8.2	0.7	117.0	2.9	F
120	NB I-15: Indian Truck Trail On-ramp	Merge	2,606	68	58.8%	452	46	100.4%				7.0	0.7	112.1	4.8	F
119	NB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	2,610	71	58.9%							6.6	0.6	122.9	2.9	F
118	NB I-15: Indian Truck Trail Off-ramp	Diverge	2,878	81	60.3%				267	46	78.5%	7.3	0.7	125.8	5.1	F
168	NB I-15: Horsethief Rd On-ramp to Indian Truck Trail Off-ramp	Basic	2,874	77	60.2%							7.7	0.7	118.2	2.3	F
167	NB I-15: Horsethief Rd On-ramp	Merge	2,429	62	59.7%	450	66	64.3%				7.1	0.4	116.2	3.1	F
166	NB I-15: Horsethief Rd Off-ramp to On-ramp	Basic	2,429	66	59.7%							7.7	0.2	108.2	3.8	F
165	NB I-15: Horsethief Rd Off-ramp	Diverge	2,719	59	60.4%				300	37	69.9%	8.0	0.2	120.2	2.9	F
117	NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp	Basic	2,717	59	60.4%							8.5	0.3	109.3	4.1	F
158	NB I-15: Lake St On-ramp to Horsethief Rd Off-ramp (EL Access)	Weave	2,801	83	61.4%	1,259	106	62.0%	1,355	106	64.8%	21.8	1.1	48.9	2.0	F
116	NB I-15: Lake St On-ramp	Merge	2,267	51	56.0%	526	95	103.2%				6.9	0.3	151.8	2.3	F
115	NB I-15: Lake St Off-ramp to On-ramp	Basic	2,255	63	55.7%							6.4	0.3	112.2	4.9	F
114	NB I-15: Lake St Off-ramp	Diverge	2,387	54	56.0%				136	32	65.0%	6.8	0.2	125.7	3.1	F
113	NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	2,363	58	55.5%							6.7	0.1	114.0	2.7	F
157	NB I-15: Nichols Rd On-ramp to Lake St Off-ramp (EL Ingress)	Basic	2,598	58	56.6%				257	48	77.8%	9.9	0.4	70.5	2.6	F
156	NB I-15: Nichols Rd On-ramp to Lake St Off-ramp	Basic	2,604	59	56.7%							8.1	0.4	106.4	2.0	F
112	NB I-15: Nichols Rd On-ramp	Merge	2,148	61	51.8%	453	85	103.0%				6.2	0.4	115.8	4.8	F
111	NB I-15: Nichols Rd Off-ramp to On-ramp	Basic	2,144	64	51.7%							5.4	0.4	129.2	2.7	F
110	NB I-15: Nichols Rd Off-ramp	Diverge	2,395	71	52.1%				245	33	54.4%	5.9	0.6	136.8	4.6	F
109	NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp	Merge	2,063	63	55.9%	339	43	37.2%				6.0	0.6	123.6	9.4	F
108	NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp	Basic	2,066	57	56.0%							6.0	0.4	113.8	6.0	F
155	NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp (EL Ingress)	Basic	3,204	83	57.3%				1,005	109	59.1%	7.8	1.3	98.5	12.0	F
153	NB I-15: Dexter Ave Off-ramp	Diverge	3,204	83	57.3%				119	25	59.6%	7.3	1.0	133.0	6.9	F
107	NB I-15: WB Central Ave (SR-74) Off-ramp	Basic	3,668	99	57.9%				448	68	59.7%	6.1	0.6	134.3	5.3	F
106	NB I-15: EB Central Ave (SR-74) Off-ramp	Diverge	4,067	99	58.4%				397	56	63.0%	12.2	1.3	121.3	4.0	F
105	NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp	Basic	4,064	99	58.3%							14.2	1.3	111.3	5.2	F
104	NB I-15: Main St On-ramp	Merge	3,536	97	55.0%	533	45	98.8%				13.5	0.9	111.0	6.8	F
103	NB I-15: Main St Off-ramp to On-ramp	Basic	3,528	100	54.9%							14.1	1.2	108.5	3.1	F
102	NB I-15: Main St Off-ramp	Diverge	3,869	123	55.2%				313	39	53.9%	15.1	1.6	120.1	10.1	F
101	NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp	Basic	3,886	114	55.4%							15.5	1.7	109.5	6.7	F

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.
Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 152 - NB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,797	28	67.3	0.4	12.8	1.2	B
4	1,351	18	63.5	0.4	17.5	0.4	B
3	1,270	30	63.0	0.5	20.0	0.7	C
2	976	22	62.8	0.3	19.1	1.5	C
1			62.0	0.8	17.1	1.1	B
Area	5,394	99	63.5	0.1	17.3	0.6	B
Total	5,394	99	63.5	0.1	17.3	0.6	B

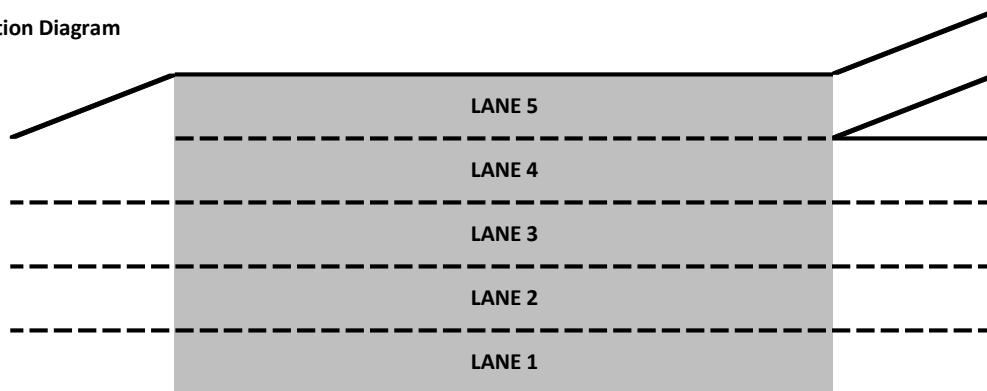
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	898	77
Total	898	77

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,310	5,394	99	73.8%	1,446
On-ramp					
Off-ramp	1,000	898	77	89.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 151 - NB I-15: Hidden Valley Pkwy Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,655	30	58.4	1.4	31.6	1.7	D
3	1,599	18	60.3	0.7	22.7	1.0	C
2	1,189	23	61.9	0.7	20.8	1.6	C
1	1,401	24	59.7	0.8	23.2	0.5	C
Area	2,590	47	60.8	0.3	22.0	1.0	C
Total	5,845	94	59.9	0.5	24.6	1.1	C

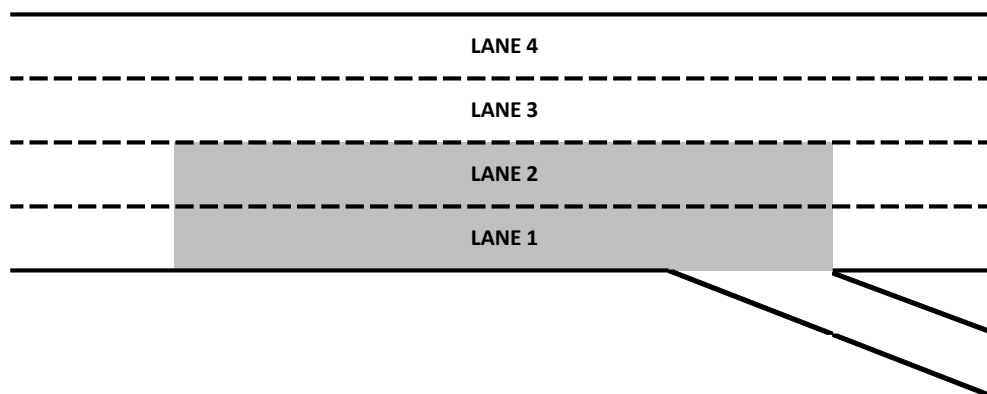
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	447	29
Total	447	29

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,910	5,845	94	73.9%	1,517
On-ramp					
Off-ramp	600	447	29	74.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 150 - NB I-15: EB SR-91 On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,549	25	61.7	0.9	27.3	1.6	D
4	1,520	15	60.9	0.5	26.5	1.0	D
3	1,587	20	61.0	1.2	20.9	1.1	C
2	588	62	61.1	1.1	20.6	1.0	C
1	598	60	27.6	1.7	1.5	0.2	A
Area	4,294	158	61.0	0.7	20.1	0.8	C
Total	5,843	183	61.2	0.7	21.7	0.9	C

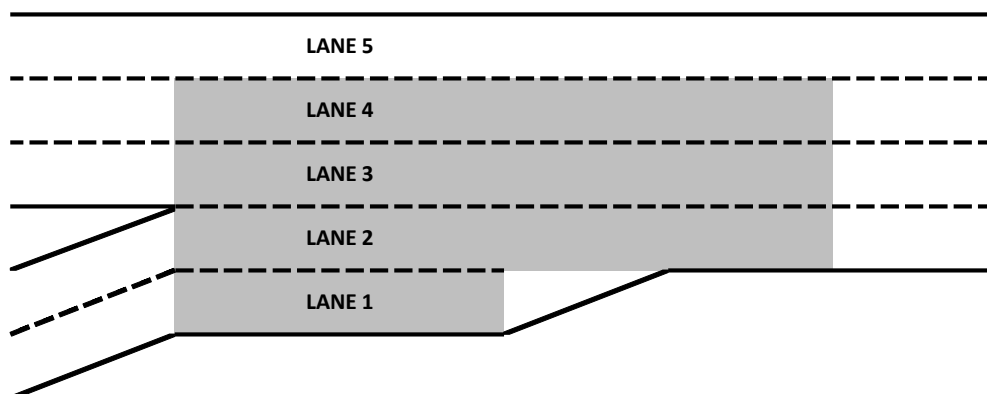
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	588	62
1	598	60
Total	1,187	112

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,740	4,656	71	69.1%	1,509
On-ramp	1,170	1,187	112	101.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 149 - NB I-15: WB SR-91 On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,217	17	63.1	0.5	22.2	1.0	C
3	1,266	14	60.9	0.7	26.2	1.1	D
2	1,171	18	58.9	1.1	26.6	1.0	D
1	1,001	71	30.1	0.3	2.4	0.2	A
Area	3,438	103	59.7	0.7	21.4	0.8	C
Total	4,655	120	60.7	0.6	21.6	0.8	C

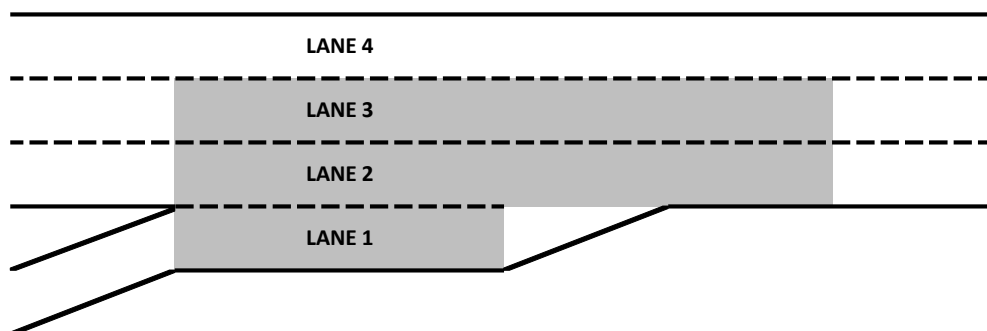
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,001	71
Total	1,001	71

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,710	3,655	48	64.0%	1,564
On-ramp	1,030	1,001	71	97.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 148 - NB I-15: EB & WB SR-91 Off-ramp to WB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,359	18	63.2	1.0	21.4	0.8	C
2	1,215	14	62.1	0.6	20.3	0.9	C
1	1,077	25	62.1	0.4	17.5	0.8	B
Area	3,651	57	62.5	0.5	19.7	0.7	C
Total	3,651	57	62.5	0.5	19.7	0.7	C

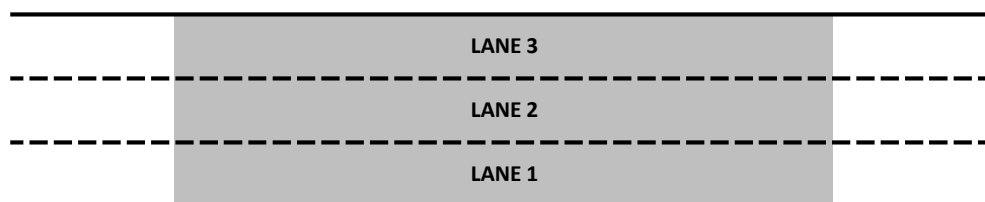
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,710	3,651	57	63.9%	3,525
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 147 - NB I-15: EB & WB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,590	17	49.0	3.7	32.3	2.5	D
3	1,393	17	44.1	5.3	31.4	3.0	D
2	1,601	10	40.9	4.6	35.9	3.1	E
1	1,419	13	42.8	6.0	32.0	3.6	D
Area	4,413	39	42.6	4.8	33.0	2.8	D
Total	6,003	56	44.3	4.4	32.7	2.6	D

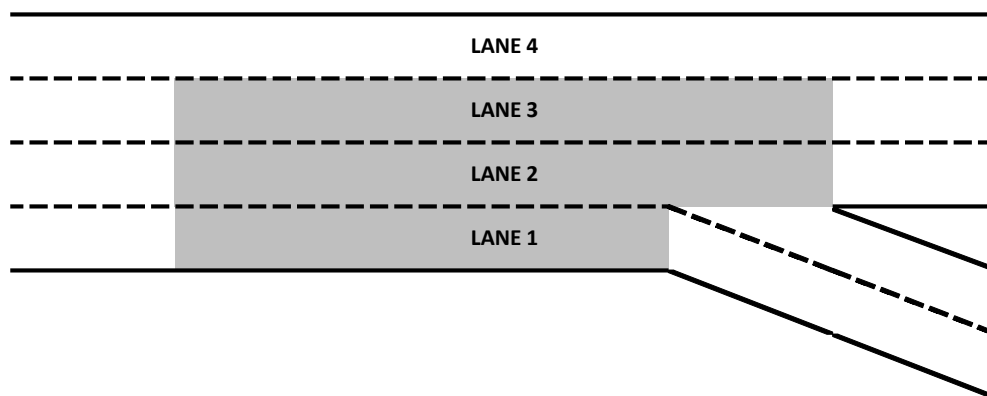
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	842	49
1	1,504	62
Total	2,346	100

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	9,210	6,003	56	65.2%	1,324
On-ramp					
Off-ramp	3,500	2,346	100	67.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 146 - NB I-15: Magnolia Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,655	23	34.6	2.3	49.5	4.6	F
4	1,469	15	20.4	0.7	74.9	2.4	F
3	567	16	15.0	0.6	92.3	2.8	F
2	1,225	18	16.9	0.5	91.4	2.4	F
1	1,093	79	10.0	1.5	27.5	3.3	D
Area	2,885	112	16.2	0.5	72.5	2.8	F
Total	6,009	149	22.5	0.9	58.4	3.0	F

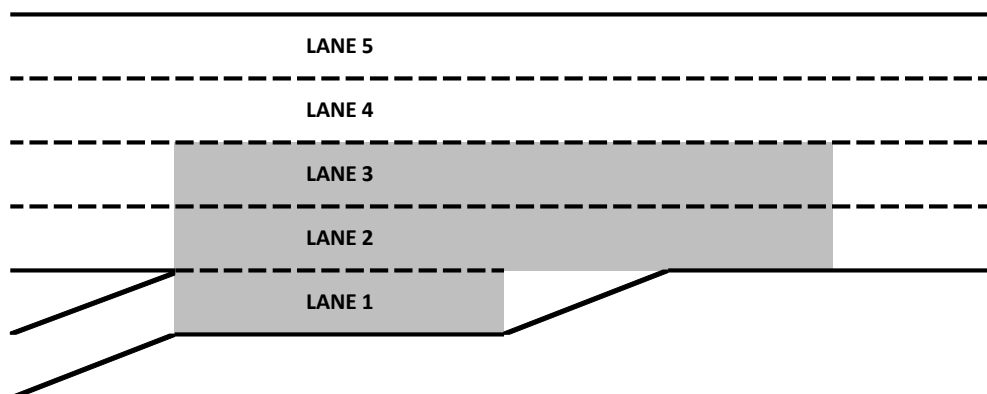
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,093	79
Total	1,093	79

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	8,130	4,916	71	60.5%	1,292
On-ramp	1,080	1,093	79	101.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 145 - NB I-15: Magnolia Ave Loop On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,620	21	27.9	1.3	57.8	3.7	F
3	1,419	22	12.9	0.2	108.5	1.5	F
2	1,028	28	6.2	0.7	110.7	3.1	F
1	843	41	10.2	0.9	117.3	4.2	F
Area	4,911	112	16.3	0.5	75.2	2.6	F
Total	4,911	112	16.3	0.5	75.2	2.6	F

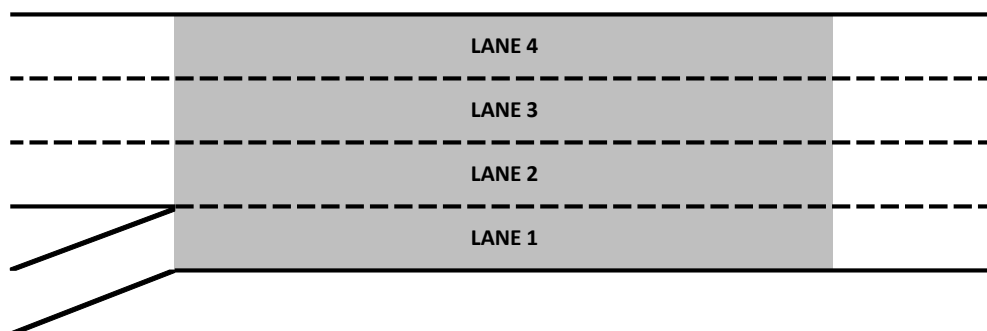
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	843	41
Total	843	41

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,270	4,068	71	56.0%	852
On-ramp	860	843	41	98.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 144 - NB I-15: Magnolia Ave Off-ramp to Loop On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,608	19	22.2	0.7	74.8	1.3	F
2	1,454	22	13.2	0.6	102.6	2.3	F
1	1,007	26	9.4	0.4	105.1	2.2	F
Area	4,069	67	16.0	0.5	83.4	1.2	F
Total	4,069	67	16.0	0.5	83.4	1.2	F

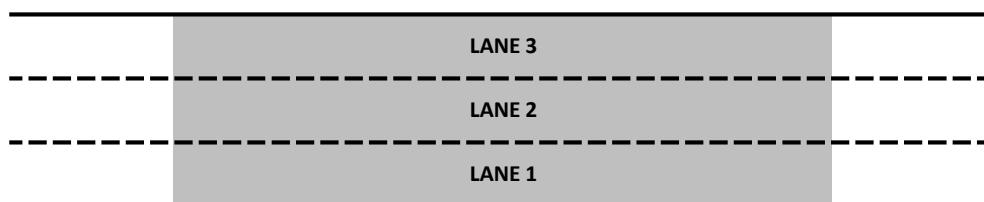
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,270	4,069	67	56.0%	1,562
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 143 - NB I-15: Magnolia Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,795	19	18.9	0.8	94.8	2.1	F
3	1,400	20	12.8	0.8	100.3	2.6	F
2	1,115	30	9.6	0.6	103.3	3.9	F
1	431	16	24.7	6.9	23.9	6.3	C
Area	2,946	66	14.0	1.6	67.9	6.3	F
Total	4,741	86	15.9	1.1	72.8	3.7	F

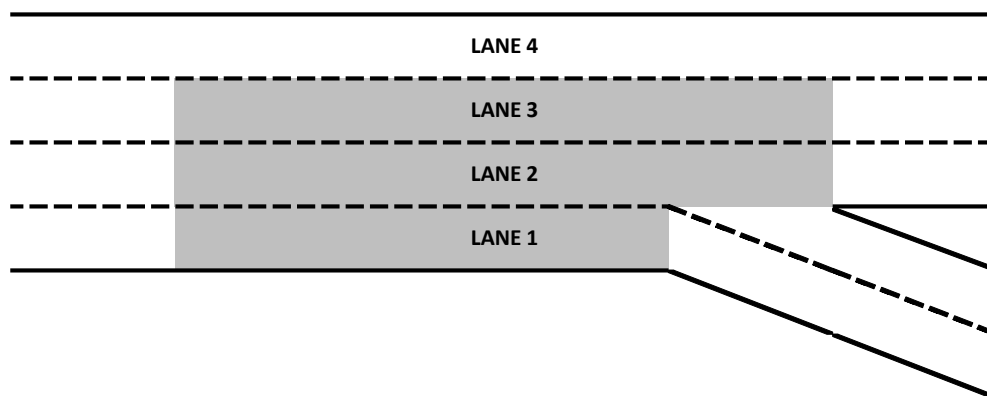
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	197	34
1	485	59
Total	682	60

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	8,400	4,741	86	56.4%	1,496
On-ramp					
Off-ramp	1,130	682	60	60.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 141 - NB I-15: Ontario Ave to Magnolia Ave (EL Access)

Segment Type - Weave

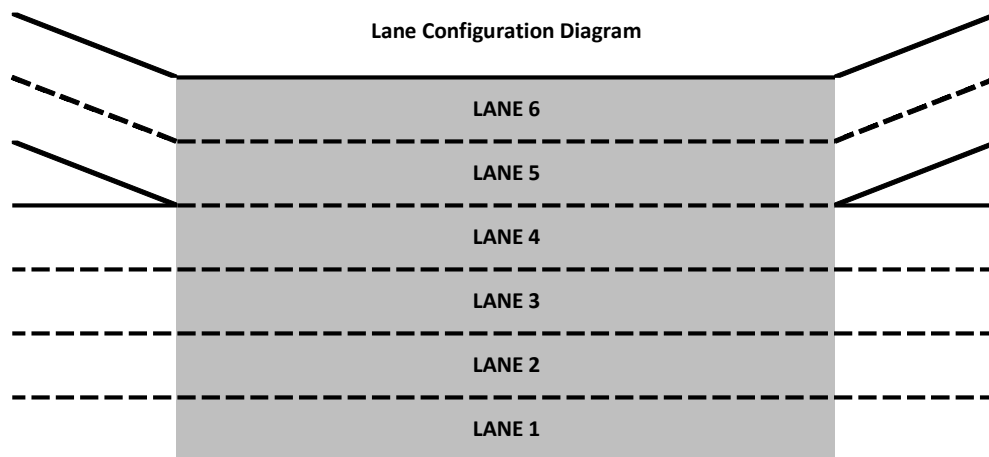
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	1,583	28	45.5	0.6	13.2	1.3	B
5	1,322	29	39.9	0.3	13.1	1.1	B
4	1,442	38	17.1	1.2	100.4	3.4	F
3	759	23	14.2	0.9	99.9	3.6	F
2	757	53	12.0	1.5	99.4	7.4	F
1	906	73	30.6	4.3	17.2	4.3	B
Area	6,769	245	26.5	1.2	46.4	0.8	F
Total	6,769	245	26.5	1.2	46.4	0.8	F

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	757	53
1	906	73
Total	1,663	101

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,158	69
1	898	71
Total	2,057	110

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	8,660	5,106	144	59.0%	2,965
On-ramp	3,030	1,663	101	54.9%	
Off-ramp	3,290	2,057	110	62.5%	



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 140 - NB I-15: Ontario Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,421	21	12.5	1.1	117.9	3.4	F
4	1,018	28	9.5	0.7	119.5	3.1	F
3	1,012	31	9.5	1.4	115.7	6.0	F
2	372	18	19.6	1.6	58.3	4.8	F
1	1,285	62	20.5	1.8	4.5	0.6	A
Area	2,670	111	16.0	1.1	57.0	2.2	F
Total	5,109	160	13.5	0.8	79.8	1.9	F

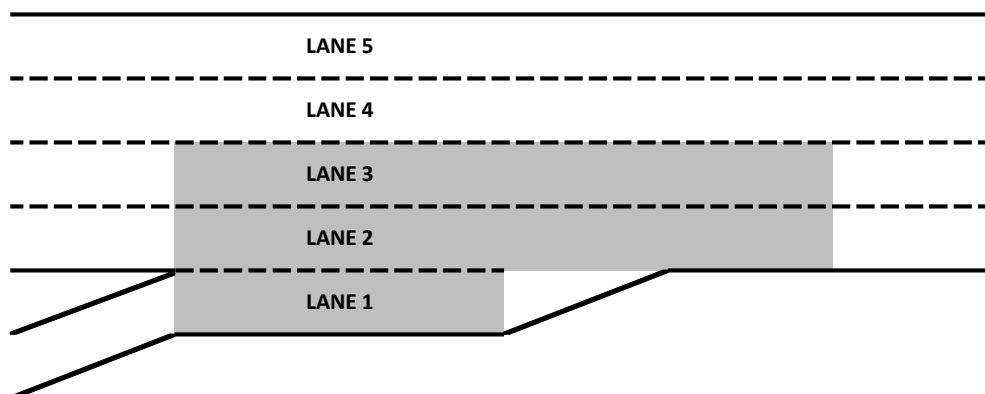
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,285	62
Total	1,285	62

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,360	3,823	97	51.9%	1,496
On-ramp	1,300	1,285	62	98.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 138 - NB I-15: Ontario Ave Off-ramp to On-ramp (4 Lanes)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,389	20	12.2	0.9	113.4	3.1	F
3	1,036	29	9.4	0.9	111.5	5.8	F
2	1,018	32	10.0	1.7	106.8	7.8	F
1	369	18	56.9	1.6	6.2	1.2	A
Area	3,812	99	14.9	1.4	64.4	1.7	F
Total	3,812	99	14.9	1.4	64.4	1.7	F

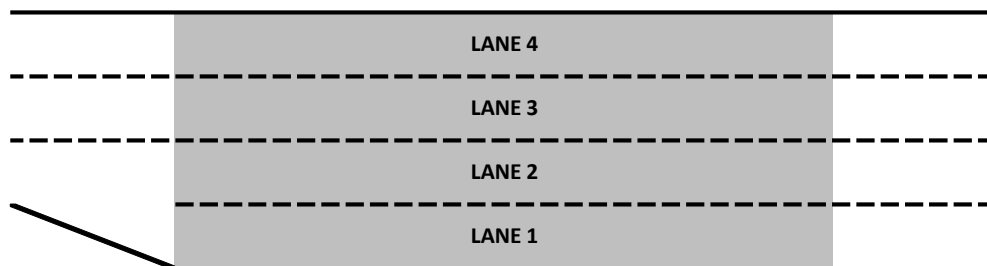
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,360	3,812	99	51.8%	3,004
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 137 - NB I-15: Ontario Ave Off-ramp to On-ramp (3 Lanes)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,388	25	11.8	1.2	114.2	5.9	F
2	1,142	37	10.3	1.6	108.1	6.7	F
1	1,278	38	13.3	2.7	94.5	10.9	F
Area	3,809	99	11.9	1.8	104.2	7.7	F
Total	3,809	99	11.9	1.8	104.2	7.7	F

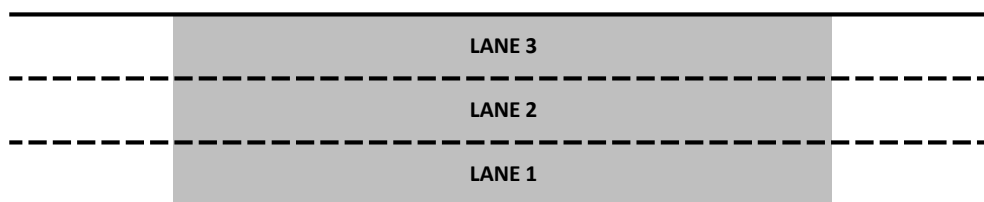
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,360	3,809	99	51.8%	197
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 136 - NB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,532	38	12.8	1.8	112.9	7.9	F
2	1,419	46	12.7	2.3	102.8	8.3	F
1	1,427	33	16.8	3.3	86.9	11.6	F
Area	2,846	79	14.9	2.8	93.0	10.2	F
Total	4,378	117	14.1	2.4	99.1	9.7	F

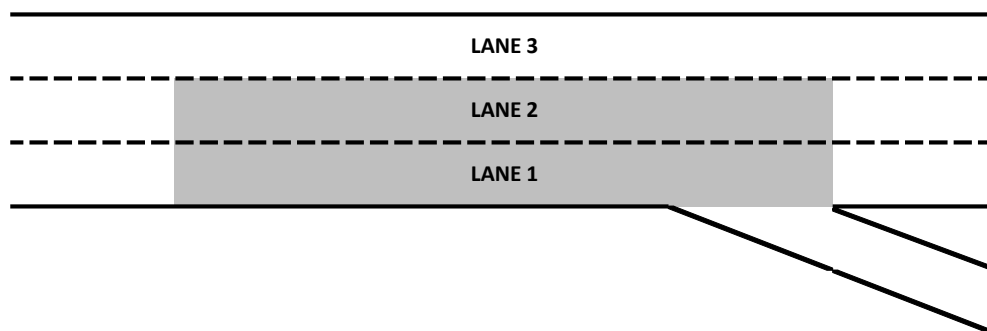
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	578	65
Total	578	65

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	8,390	4,378	117	52.2%	763
On-ramp					
Off-ramp	1,030	578	65	56.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 135 - NB I-15: Foothill Pkwy/El Cerrito Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,569	33	13.1	2.2	116.8	10.1	F
3	1,188	34	11.1	1.7	115.3	5.1	F
2	551	14	7.0	1.1	121.3	7.5	F
1	1,069	126	6.1	1.2	99.5	14.1	F
Area	2,808	175	8.8	1.4	105.1	7.0	F
Total	4,377	208	10.4	1.7	104.0	8.0	F

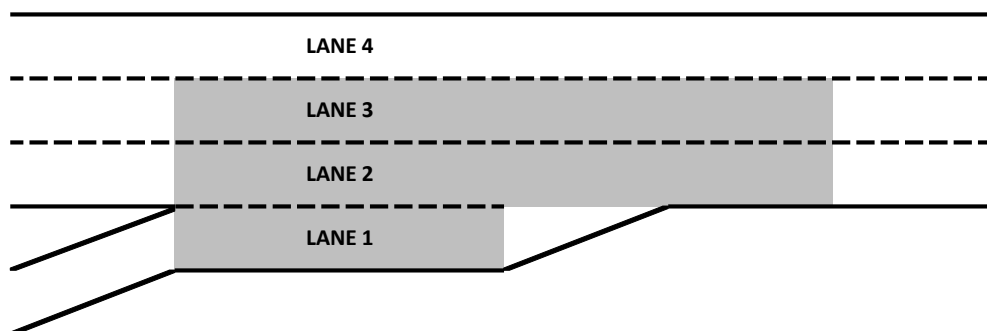
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,069	126
Total	1,069	126

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,300	3,308	82	45.3%	873
On-ramp	1,090	1,069	126	98.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 133 - NB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to On-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,617	29	60.6	0.7	13.2	1.3	B
4	1,179	25	56.7	1.9	13.0	0.6	B
3	661	27	14.4	1.3	106.1	4.2	F
2	720	56	10.8	1.3	109.7	4.6	F
1	785	71	5.5	0.5	116.3	5.6	F
Area	4,962	208	28.1	0.4	37.3	1.0	E
Total	4,962	208	28.1	0.4	37.3	1.0	E

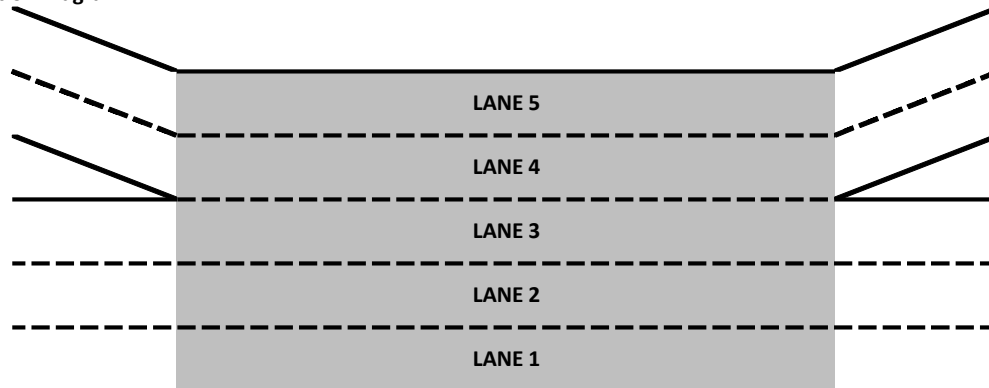
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	720	56
1	785	71
Total	1,505	112

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	903	73
1	761	55
Total	1,664	108

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,900	3,457	96	43.8%	2,115
On-ramp	2,430	1,505	112	61.9%	
Off-ramp	3,030	1,664	108	54.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 132 - NB I-15: Cajalco Rd On-ramp to Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,413	23	11.9	1.2	116.3	3.8	F
3	1,037	21	9.4	0.7	115.2	3.6	F
2	693	27	5.0	0.8	121.4	7.0	F
1	724	75	3.9	0.7	120.9	3.7	F
Area	3,868	146	8.9	0.8	107.2	3.4	F
Total	3,868	146	8.9	0.8	107.2	3.4	F

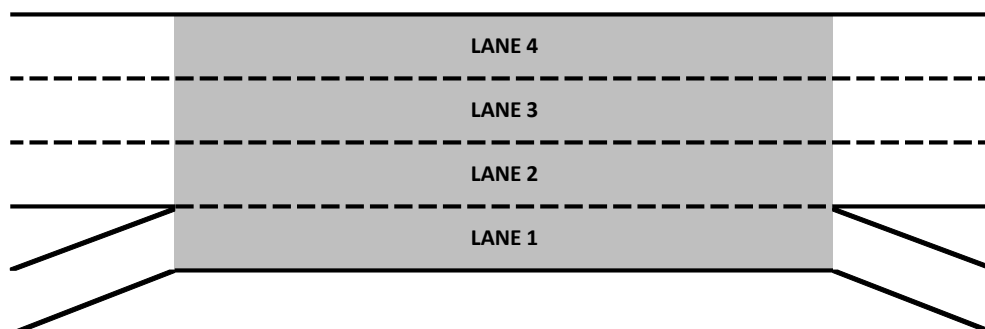
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	724	75
Total	724	75

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	416	57
Total	416	57

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,930	3,144	71	53.0%	2,708
On-ramp	2,840	724	75	25.5%	
Off-ramp	870	416	57	47.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 131 - NB I-15: Cajalco Rd Loop On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,371	22	11.0	1.0	122.9	4.5	F
3	926	34	8.3	1.1	125.7	5.3	F
2	434	18	4.5	0.6	122.3	3.6	F
1	407	51	1.0	0.1	77.1	3.5	F
Area	1,767	103	6.5	0.9	105.6	5.8	F
Total	3,138	125	8.5	0.9	102.9	4.3	F

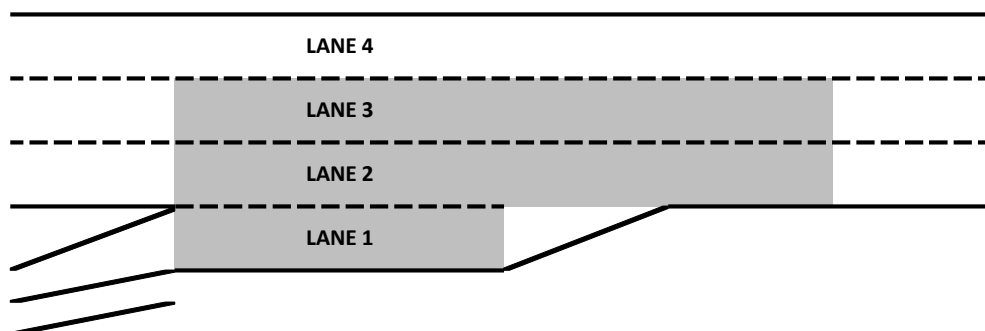
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	407	51
Total	407	51

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,220	2,731	75	52.3%	1,305
On-ramp	710	407	51	57.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 170 - NB I-15: Cajalco Rd Off-ramp to Loop On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,385	26	11.6	1.3	115.5	5.0	F
2	883	30	6.9	1.2	126.3	6.6	F
1	459	15	3.9	0.5	122.8	7.4	F
Area	2,727	71	8.7	1.1	102.5	5.5	F
Total	2,727	71	8.7	1.1	102.5	5.5	F

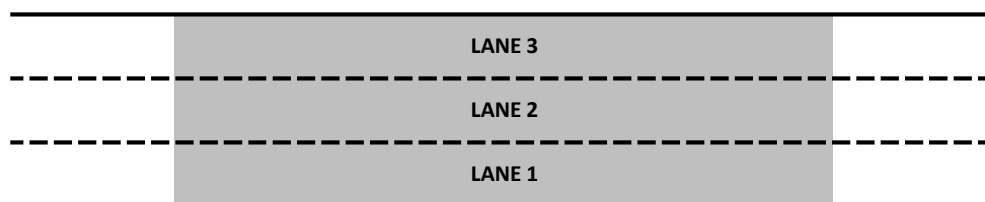
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,220	2,727	71	52.2%	1,693
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 130 - NB I-15: Cajalco Rd Off-ramp to Loop On-ramp (EL Ingress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,470	19	46.3	1.0	3.8	0.6	A
3	1,056	31	11.3	0.9	116.5	4.4	F
2	377	9	7.3	1.1	122.4	5.3	F
1			4.1	0.5	119.6	8.9	F
Area	2,902	59	11.0	0.9	65.2	3.1	F
Total	2,902	59	11.0	0.9	65.2	3.1	F

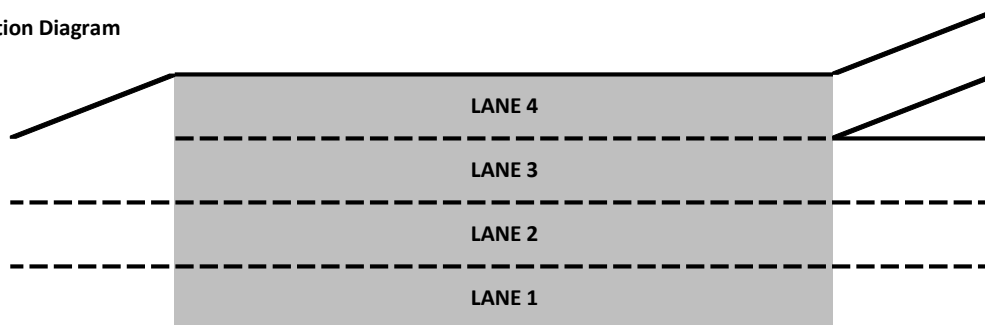
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	174	36
Total	174	36

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,660	2,902	59	51.3%	1,000
On-ramp					
Off-ramp	440	174	36	39.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 129 - NB I-15: Cajalco Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,568	32	13.9	2.5	109.3	9.9	F
2	1,192	25	9.7	0.9	108.4	6.6	F
1	934	27	9.5	1.7	110.7	7.2	F
Area	2,126	52	9.6	1.2	81.3	4.9	F
Total	3,694	84	11.5	1.8	105.2	8.3	F

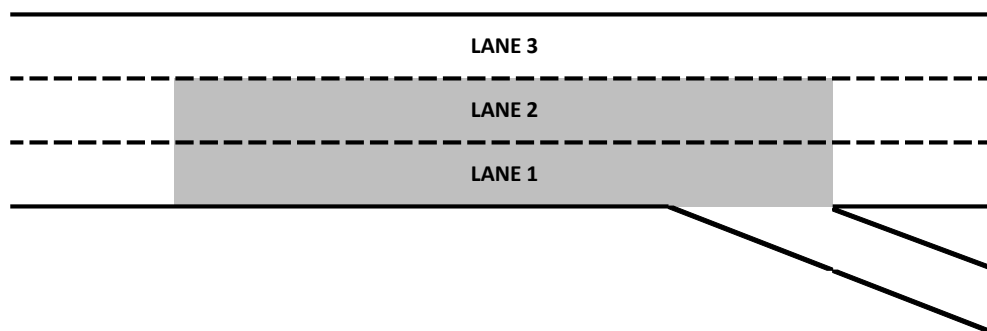
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	789	80
Total	789	80

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,030	3,694	84	52.5%	1,046
On-ramp					
Off-ramp	1,370	789	80	57.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 128 - NB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,546	29	14.7	0.9	103.9	3.2	F
3	1,102	33	10.8	0.7	111.6	4.3	F
2	550	23	6.1	0.9	113.7	7.3	F
1	508	104	1.3	0.3	86.0	6.4	F
Area	2,161	160	8.4	0.7	95.1	4.6	F
Total	3,707	189	11.1	0.7	89.9	3.6	F

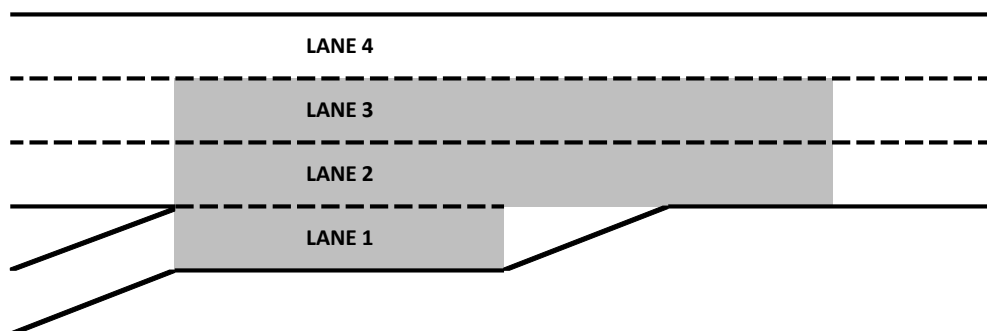
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	508	104
Total	508	104

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,010	3,199	86	63.8%	1,487
On-ramp	2,020	508	104	25.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 127 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,551	26	14.1	0.7	107.9	2.0	F
2	1,069	32	8.8	0.4	117.4	3.9	F
1	582	24	5.0	0.9	115.7	4.2	F
Area	3,202	82	10.7	0.5	97.7	2.9	F
Total	3,202	82	10.7	0.5	97.7	2.9	F

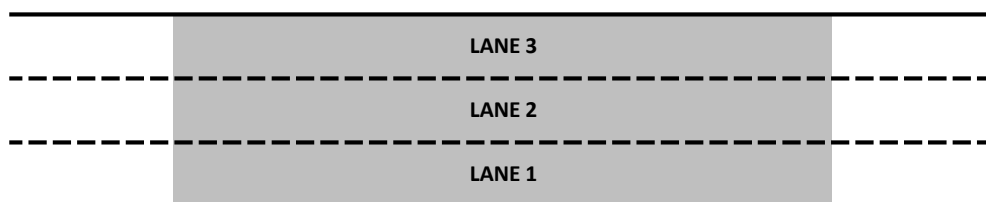
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,010	3,202	82	63.9%	2,537
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 126 - NB I-15: Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,525	27	13.6	1.5	110.6	5.3	F
2	1,138	36	9.5	1.1	114.6	5.6	F
1	764	27	6.6	0.7	116.5	3.3	F
Area	1,902	63	8.3	0.9	112.1	4.4	F
Total	3,428	91	10.7	1.1	105.0	3.9	F

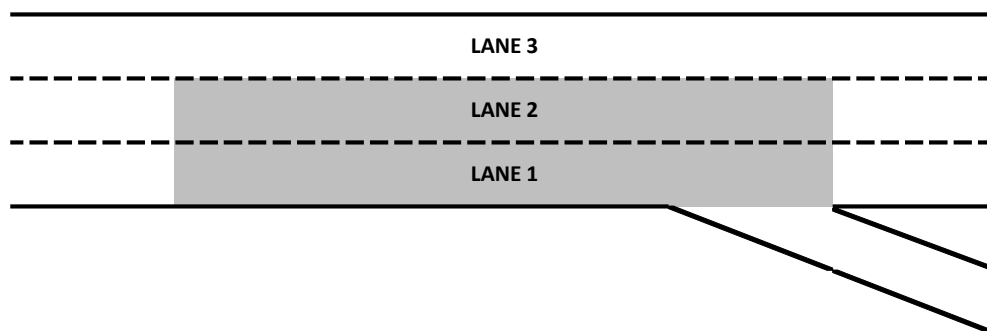
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	221	26
Total	221	26

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,410	3,428	91	63.4%	1,499
On-ramp					
Off-ramp	400	221	26	55.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 125 - NB I-15: Temescal Canyon Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,454	22	12.3	1.0	114.3	4.5	F
2	1,157	29	9.6	1.2	116.6	4.6	F
1	797	31	6.4	1.2	115.0	6.0	F
Area	3,409	82	10.1	0.9	107.7	3.0	F
Total	3,409	82	10.1	0.9	107.7	3.0	F

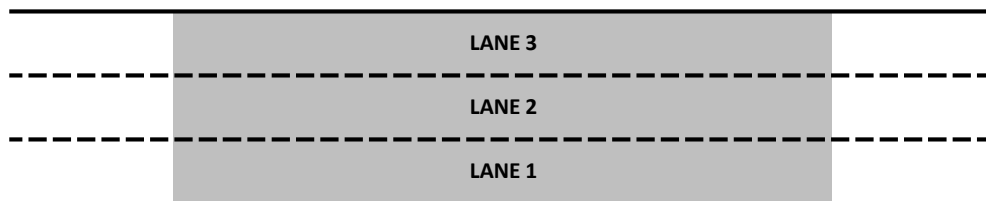
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,410	3,409	82	63.0%	6,786
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 124 - NB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,377	22	11.4	1.2	123.4	5.3	F
3	1,054	26	9.1	0.8	122.5	3.3	F
2	470	19	5.9	1.0	117.6	4.5	F
1	505	83	1.0	0.2	62.2	3.9	F
Area	2,029	128	7.4	0.7	106.0	1.7	F
Total	3,406	150	9.1	0.8	106.1	2.6	F

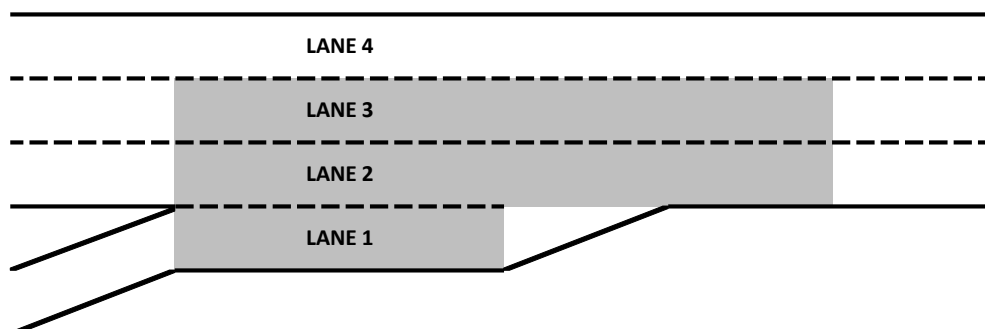
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	505	83
Total	505	83

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,740	2,901	67	61.2%	1,498
On-ramp	670	505	83	75.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 123 - NB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,361	19	11.4	1.1	118.0	4.7	F
2	1,044	31	8.3	0.8	122.8	4.1	F
1	496	25	4.1	0.5	115.8	7.2	F
Area	2,902	75	9.1	0.9	104.3	6.3	F
Total	2,902	75	9.1	0.9	104.3	6.3	F

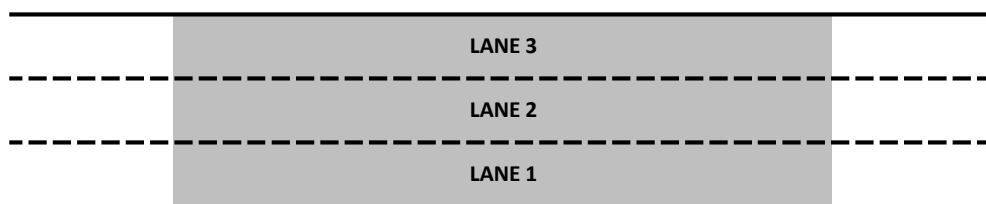
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,740	2,902	75	61.2%	2,725
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 122 - NB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,393	13	11.6	0.7	116.8	3.0	F
2	1,044	23	8.5	0.7	117.1	1.5	F
1	625	30	5.3	0.9	123.0	7.1	F
Area	1,669	54	7.2	0.7	113.3	4.2	F
Total	3,062	67	9.2	0.6	108.3	2.9	F

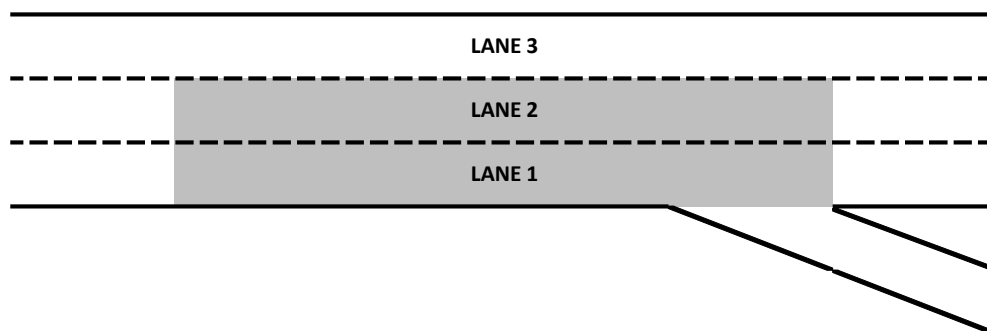
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	155	25
Total	155	25

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,980	3,062	67	61.5%	1,498
On-ramp					
Off-ramp	240	155	25	64.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 121 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,385	11	11.9	0.5	114.8	2.6	F
2	1,039	24	8.4	0.4	122.9	3.0	F
1	646	21	5.5	0.5	114.1	2.9	F
Area	3,071	55	9.4	0.4	107.3	2.0	F
Total	3,071	55	9.4	0.4	107.3	2.0	F

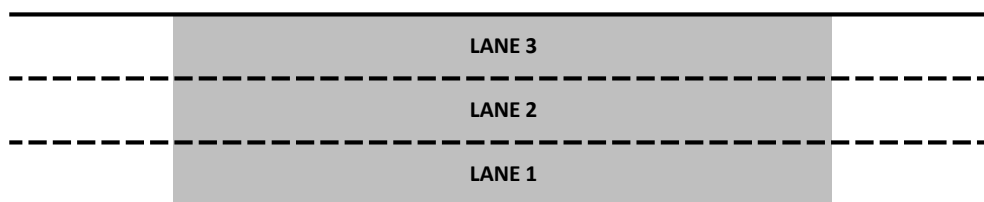
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,980	3,071	55	61.7%	5,648
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 160 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,258	25	41.5	0.4	9.0	0.7	A
4	1,062	17	33.1	0.8	8.8	0.4	A
3	723	27	10.8	0.2	121.7	1.2	F
2	602	52	9.6	0.7	115.8	2.5	F
1	744	64	6.6	0.9	114.4	2.2	F
Area	4,389	186	21.2	0.3	54.2	1.5	F
Total	4,389	186	21.2	0.3	54.2	1.5	F

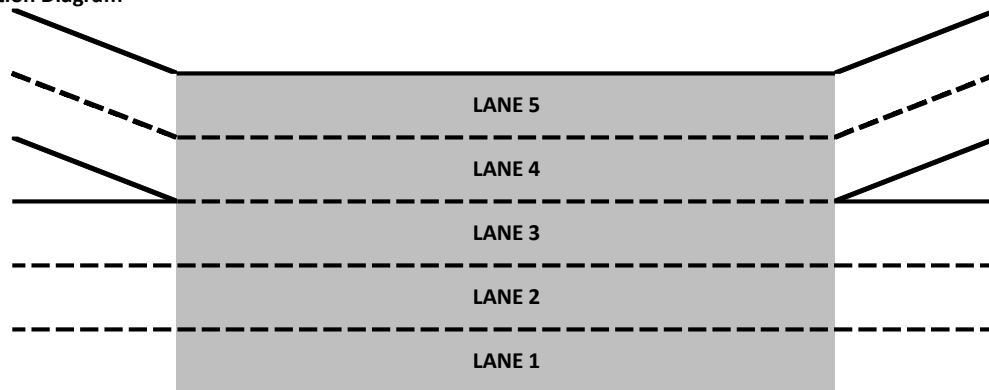
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	602	52
1	744	64
Total	1,346	90

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	814	46
1	498	63
Total	1,312	86

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,880	3,043	96	62.4%	2,991
On-ramp	2,090	1,346	90	64.4%	
Off-ramp	1,990	1,312	86	65.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 159 - NB I-15: Indian Truck Trail On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,162	22	8.6	1.0	130.6	5.4	F
2	1,135	20	9.1	0.7	114.7	2.4	F
1	749	28	6.2	0.8	116.0	5.8	F
Area	3,046	70	8.2	0.7	117.0	2.9	F
Total	3,046	70	8.2	0.7	117.0	2.9	F

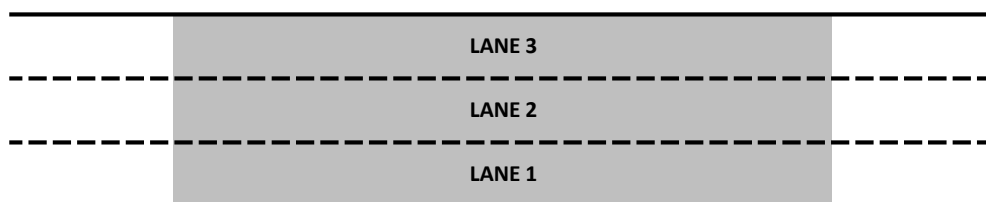
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,880	3,046	70	62.4%	697
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 120 - NB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,153	16	8.1	0.7	137.9	3.7	F
3	796	25	7.6	0.9	127.9	3.6	F
2	657	27	5.3	0.8	122.1	4.0	F
1	452	46	2.3	0.7	44.8	12.4	E
Area	1,905	99	6.3	0.8	112.1	4.8	F
Total	3,058	115	7.0	0.7	116.6	3.4	F

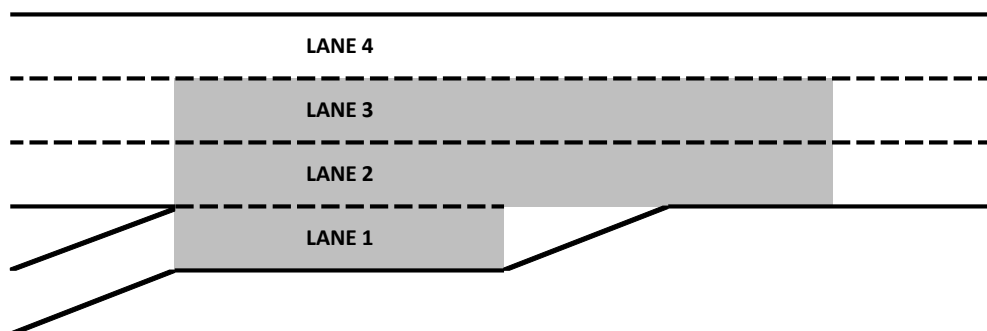
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	452	46
Total	452	46

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,430	2,606	68	58.8%	1,499
On-ramp	450	452	46	100.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 119 - NB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,152	14	8.3	0.7	132.9	4.2	F
2	794	27	5.7	0.7	132.8	3.8	F
1	664	30	4.3	1.0	133.3	6.0	F
Area	2,610	71	6.6	0.6	122.9	2.9	F
Total	2,610	71	6.6	0.6	122.9	2.9	F

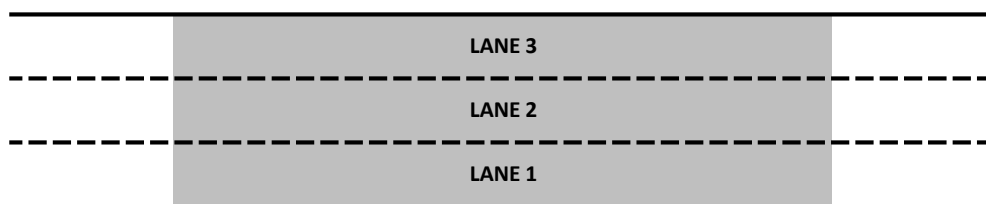
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,430	2,610	71	58.9%	2,922
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 118 - NB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,218	15	8.8	0.7	130.2	3.9	F
2	924	27	6.4	0.7	127.0	1.6	F
1	736	39	5.9	1.4	126.7	9.8	F
Area	1,660	66	6.1	1.0	125.8	5.1	F
Total	2,878	81	7.3	0.7	122.8	2.0	F

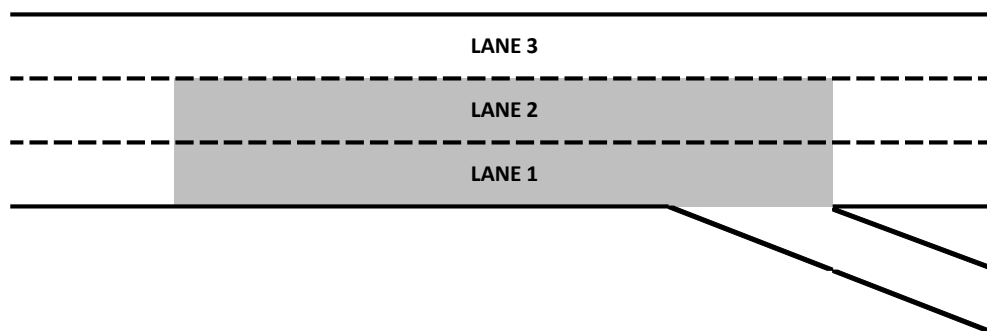
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	267	46
Total	267	46

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,770	2,878	81	60.3%	1,499
On-ramp					
Off-ramp	340	267	46	78.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 168 - NB I-15: Horsethief Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,236	18	9.7	0.7	125.5	3.7	F
2	933	24	6.8	0.9	129.1	3.2	F
1	705	35	5.0	1.0	128.5	9.8	F
Area	2,874	77	7.7	0.7	118.2	2.3	F
Total	2,874	77	7.7	0.7	118.2	2.3	F

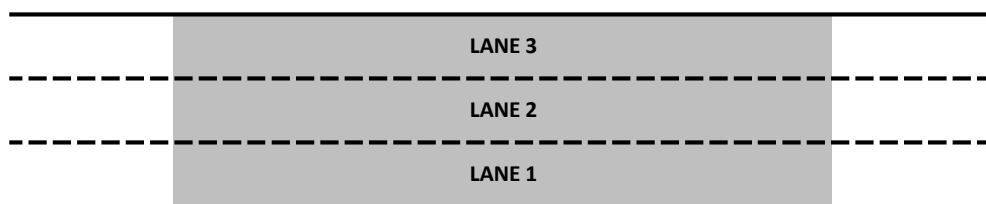
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,770	2,874	77	60.2%	2,255
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 167 - NB I-15: Horsethief Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,251	22	9.6	0.6	130.6	3.0	F
3	767	22	6.3	0.3	135.3	4.7	F
2	411	19	4.2	0.7	123.6	6.5	F
1	450	66	1.0	0.2	80.8	4.2	F
Area	1,628	107	5.1	0.4	116.2	3.1	F
Total	2,879	129	7.1	0.4	109.0	4.1	F

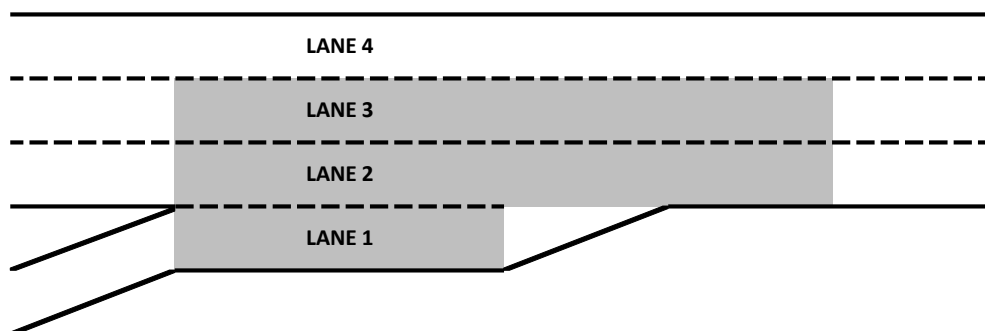
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	450	66
Total	450	66

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,070	2,429	62	59.7%	1,498
On-ramp	700	450	66	64.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 166 - NB I-15: Horsethief Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,230	19	10.0	0.2	123.0	1.6	F
2	781	22	6.5	0.4	125.7	4.2	F
1	418	25	3.7	0.7	124.0	4.6	F
Area	2,429	66	7.7	0.2	108.2	3.8	F
Total	2,429	66	7.7	0.2	108.2	3.8	F

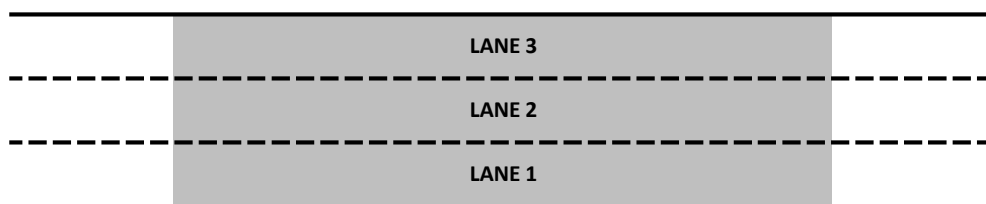
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,070	2,429	66	59.7%	2,762
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 165 - NB I-15: Horsethief Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,306	14	10.5	0.3	121.9	1.6	F
2	904	22	6.5	0.6	123.8	4.6	F
1	508	23	4.7	0.6	123.5	5.6	F
Area	1,413	45	5.8	0.4	120.2	2.9	F
Total	2,719	59	8.0	0.2	110.5	2.3	F

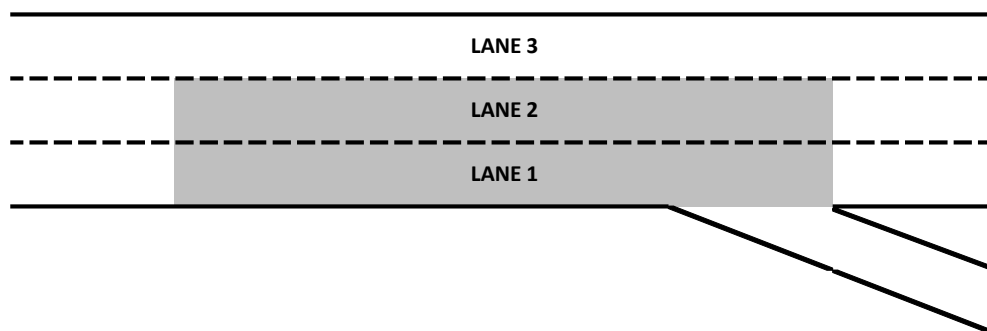
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	300	37
Total	300	37

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,500	2,719	59	60.4%	1,499
On-ramp					
Off-ramp	430	300	37	69.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 117 - NB I-15: Lake St On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,308	17	10.7	0.4	120.5	2.8	F
2	895	23	7.6	0.5	123.4	2.5	F
1	514	20	4.7	0.7	118.1	4.1	F
Area	2,717	59	8.5	0.3	109.3	4.1	F
Total	2,717	59	8.5	0.3	109.3	4.1	F

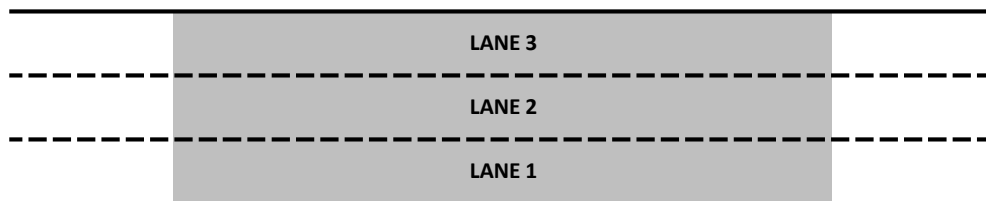
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,500	2,717	59	60.4%	2,314
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 158 - NB I-15: Lake St On-ramp to Horsethief Rd Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,319	25	43.4	1.0	7.4	0.7	A
4	926	23	40.1	1.4	7.3	0.5	A
3	556	20	10.4	0.4	122.3	2.9	F
2	604	58	7.3	0.3	124.3	5.1	F
1	655	64	4.8	0.7	120.4	5.6	F
Area	4,060	190	21.8	1.1	48.9	2.0	F
Total	4,060	190	21.8	1.1	48.9	2.0	F

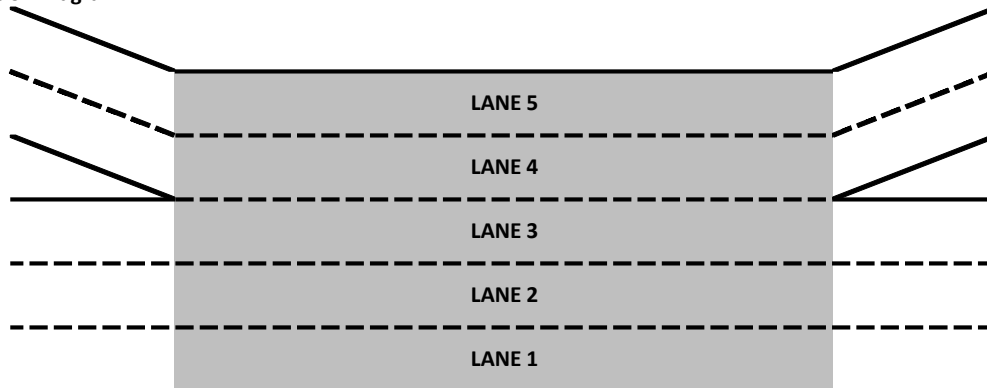
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	604	58
1	655	64
Total	1,259	106

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	749	63
1	606	53
Total	1,355	106

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,560	2,801	83	61.4%	3,029
On-ramp	2,030	1,259	106	62.0%	
Off-ramp	2,090	1,355	106	64.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 116 - NB I-15: Lake St On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,169	13	9.1	0.6	134.1	3.3	F
3	657	15	6.9	0.4	129.9	3.0	F
2	440	23	4.2	0.5	124.9	6.0	F
1	526	95	1.3	0.2	91.2	4.8	F
Area	1,624	133	5.5	0.3	151.8	2.3	F
Total	2,793	146	6.9	0.3	114.1	4.6	F

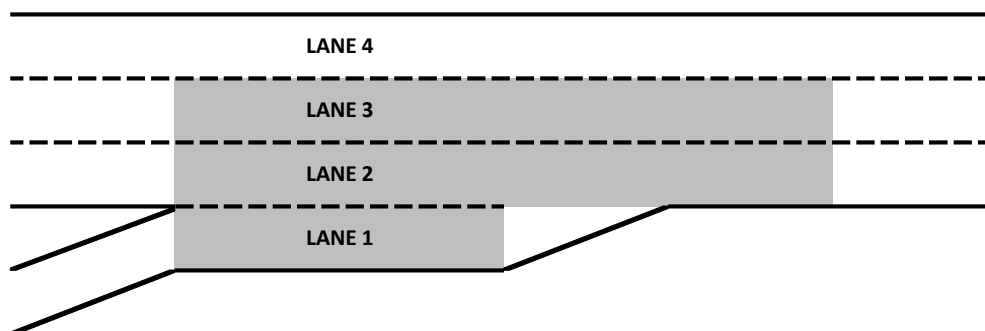
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	526	95
Total	526	95

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,050	2,267	51	56.0%	1,499
On-ramp	510	526	95	103.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 115 - NB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,151	21	8.3	0.5	132.2	3.3	F
2	663	14	5.2	0.4	129.1	4.6	F
1	441	27	3.1	0.7	126.1	12.1	F
Area	2,255	63	6.4	0.3	112.2	4.9	F
Total	2,255	63	6.4	0.3	112.2	4.9	F

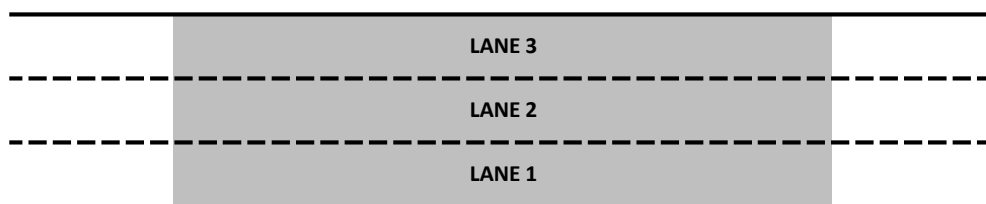
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,050	2,255	63	55.7%	3,216
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 114 - NB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,175	11	8.9	0.4	129.7	2.8	F
2	703	23	4.9	0.5	126.2	9.4	F
1	509	20	4.2	0.6	129.5	7.3	F
Area	1,211	42	4.6	0.2	125.7	3.1	F
Total	2,387	54	6.8	0.2	114.3	2.6	F

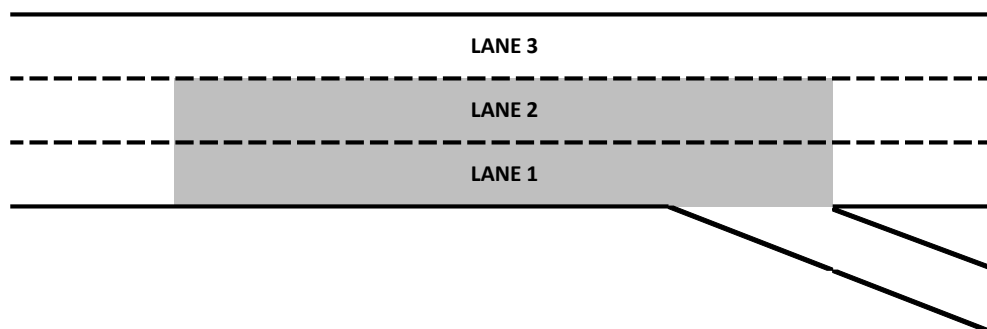
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	136	32
Total	136	32

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,260	2,387	54	56.0%	1,498
On-ramp					
Off-ramp	210	136	32	65.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 113 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,161	14	8.8	0.3	129.8	1.9	F
2	707	20	5.1	0.5	130.1	5.1	F
1	495	23	3.8	0.2	128.1	5.2	F
Area	2,363	58	6.7	0.1	114.0	2.7	F
Total	2,363	58	6.7	0.1	114.0	2.7	F

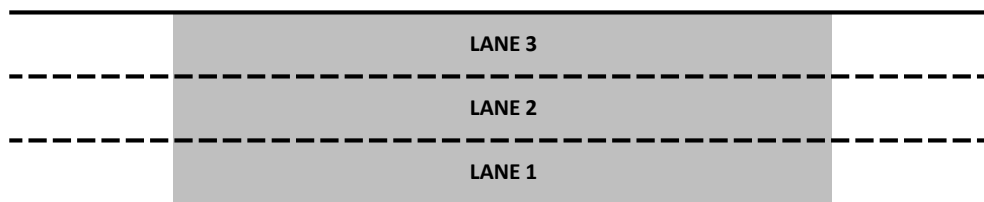
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,260	2,363	58	55.5%	6,270
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 157 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp (EL Ingress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	489	22	36.5	0.7	3.5	0.3	A
3	769	15	9.4	0.5	126.9	2.8	F
2	1,341	21	5.6	0.7	133.0	7.0	F
1			3.9	0.6	122.5	4.2	F
Area	2,598	58	9.9	0.4	70.5	2.6	F
Total	2,598	58	9.9	0.4	70.5	2.6	F

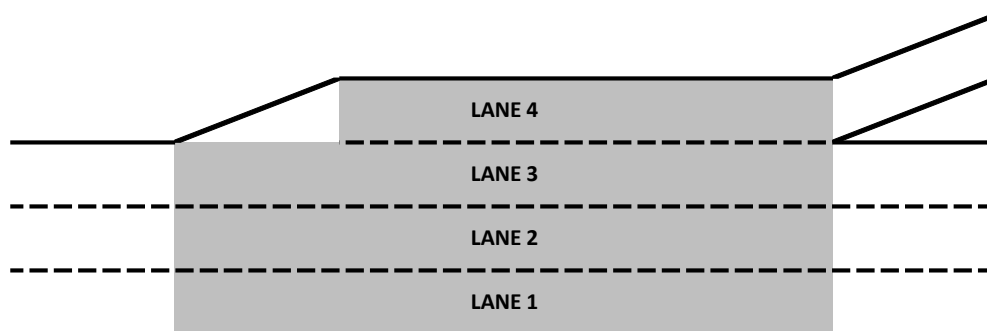
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	257	48
Total	257	48

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,590	2,598	58	56.6%	1,501
On-ramp					
Off-ramp	330	257	48	77.8%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 156 - NB I-15: Nichols Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	493	21	10.9	0.5	120.1	2.4	F
2	781	18	5.9	0.7	132.2	6.1	F
1	1,330	20	4.0	0.6	124.9	5.4	F
Area	2,604	59	8.1	0.4	106.4	2.0	F
Total	2,604	59	8.1	0.4	106.4	2.0	F

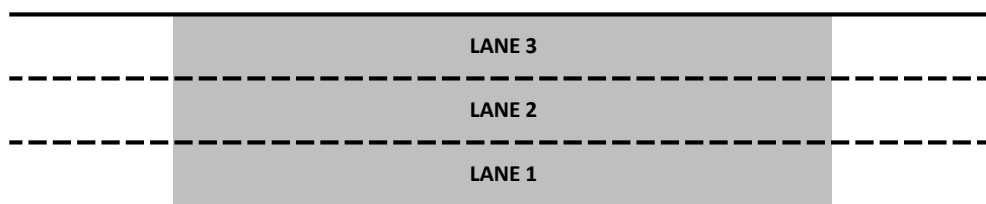
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,590	2,604	59	56.7%	703
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 112 - NB I-15: Nichols Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,044	21	8.2	0.5	138.1	3.9	F
3	698	21	6.2	0.5	136.6	4.1	F
2	406	20	3.4	0.5	125.9	2.1	F
1	453	85	1.1	0.2	97.2	10.0	F
Area	1,557	126	4.8	0.4	115.8	4.8	F
Total	2,601	147	6.2	0.4	114.5	1.9	F

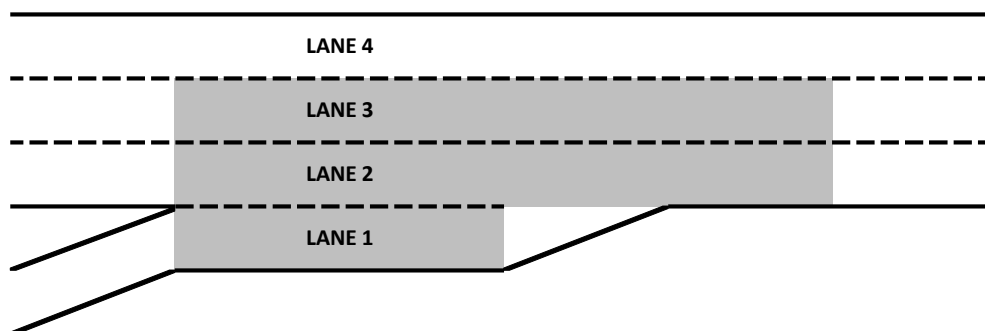
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	453	85
Total	453	85

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,150	2,148	61	51.8%	1,499
On-ramp	440	453	85	103.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 111 - NB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,022	20	7.0	0.6	140.5	5.1	F
2	620	20	4.4	0.5	144.5	4.9	F
1	501	23	3.5	0.4	138.8	4.5	F
Area	2,144	64	5.4	0.4	129.2	2.7	F
Total	2,144	64	5.4	0.4	129.2	2.7	F

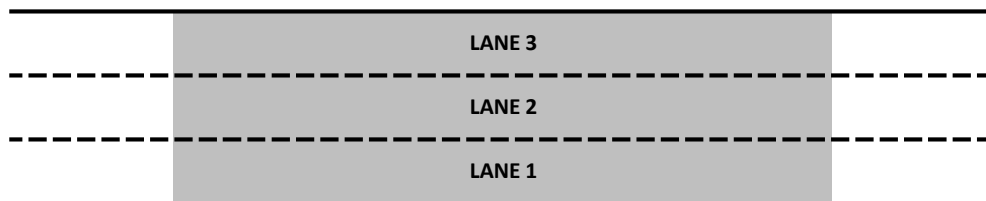
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,150	2,144	64	51.7%	3,521
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 110 - NB I-15: Nichols Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,093	24	7.4	0.9	137.7	6.9	F
2	732	26	4.8	0.6	139.3	5.6	F
1	570	20	4.6	0.8	135.0	6.3	F
Area	1,302	46	4.7	0.7	136.8	4.6	F
Total	2,395	71	5.9	0.6	129.5	5.6	F

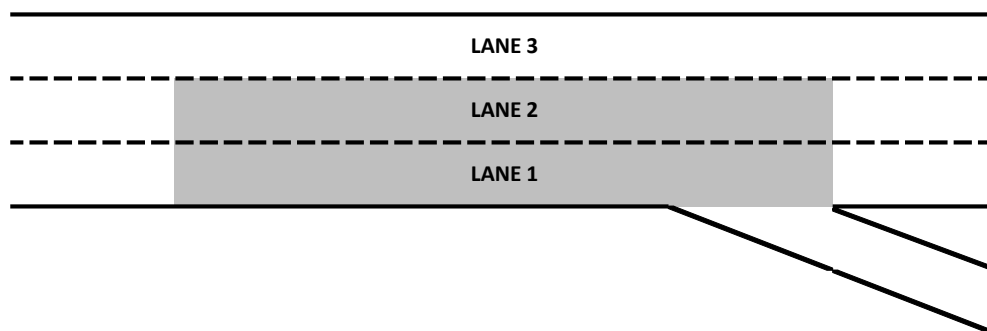
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	245	33
Total	245	33

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,600	2,395	71	52.1%	1,488
On-ramp					
Off-ramp	450	245	33	54.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 109 - NB I-15: Dexter Ave/Central Ave (SR-74) On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,091	27	8.1	0.9	137.8	6.2	F
3	611	17	4.8	0.5	140.3	7.6	F
2	362	19	3.3	0.6	134.1	8.4	F
1	339	43	0.8	0.2	81.0	3.6	F
Area	1,311	80	3.9	0.4	123.6	9.4	F
Total	2,402	107	6.0	0.6	111.7	10.1	F

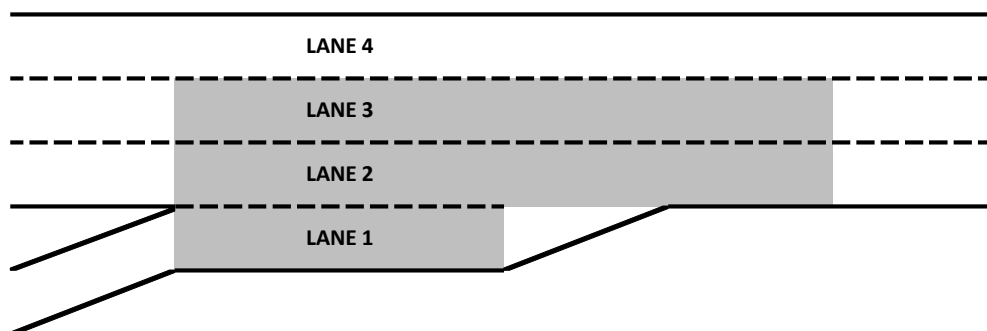
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	339	43
Total	339	43

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,690	2,063	63	55.9%	1,486
On-ramp	910	339	43	37.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 108 - NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,079	20	7.8	0.6	134.5	3.8	F
2	621	17	4.8	0.2	133.4	1.6	F
1	366	20	2.6	0.3	134.1	7.7	F
Area	2,066	57	6.0	0.4	113.8	6.0	F
Total	2,066	57	6.0	0.4	113.8	6.0	F

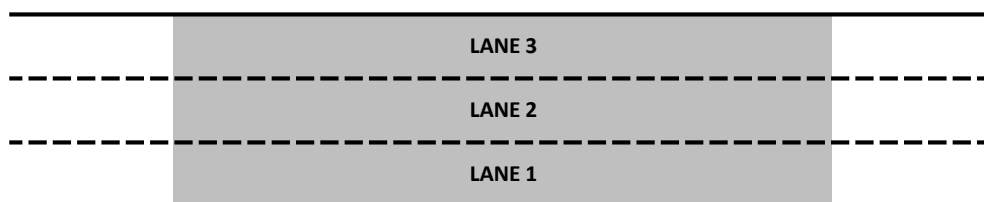
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,690	2,066	57	56.0%	1,949
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 155 - NB I-15: Dexter Ave/Central Ave (SR-74) Off-ramp to On-ramp (EL Ingress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,282	26	12.9	2.6	91.9	12.6	F
3	870	19	5.7	0.8	153.9	5.3	F
2	604	19	4.4	0.5	134.2	5.8	F
1	448	19	3.0	0.5	139.1	7.2	F
Area	3,204	83	7.8	1.3	98.5	12.0	F
Total	3,204	83	7.8	1.3			

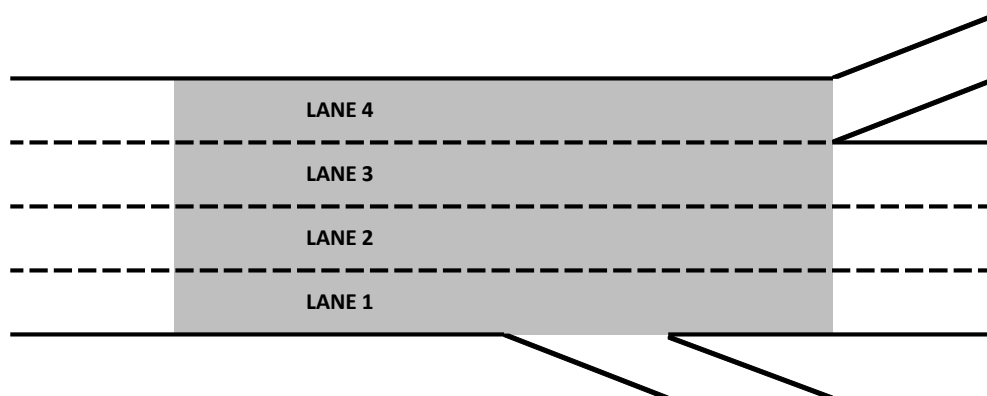
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,005	109
Total	1,005	109

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,590	3,204	83	57.3%	1,585
On-ramp					
Off-ramp	1,700	1,005	109	59.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 153 - NB I-15: Dexter Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,282	26	11.6	1.9	105.6	11.3	F
3	870	19	5.2	0.7	158.3	5.7	F
2	604	19	4.4	0.5	134.2	4.4	F
1	448	19	3.2	0.5	139.8	9.0	F
Area	1,052	38	3.9	0.4	133.0	6.9	F
Total	3,204	83	7.3	1.0	105.7	9.9	F

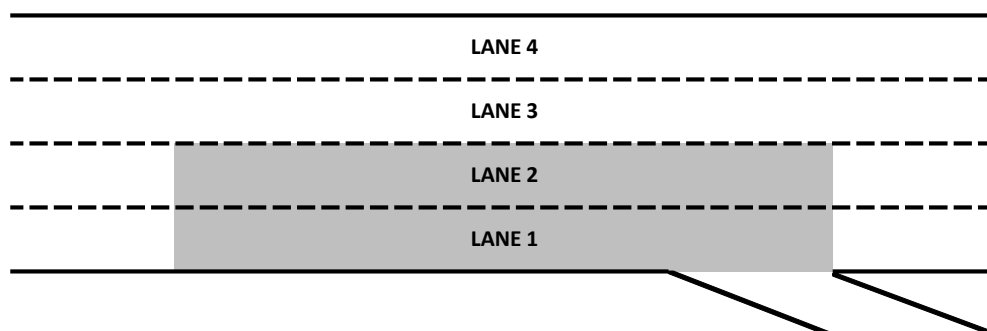
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	119	25
Total	119	25

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,590	3,204	83	57.3%	940
On-ramp					
Off-ramp	200	119	25	59.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 107 - NB I-15: WB Central Ave (SR-74) Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	268	12	9.4	1.3	125.7	7.3	F
4	1,522	32	5.3	0.6	156.2	5.1	F
3	958	20	4.8	0.4	130.8	3.5	F
2	515	16	2.6	0.2	132.1	2.7	F
1	405	19	3.6	0.2	157.5	6.1	F
Area	3,400	87	4.4	0.2	134.3	5.3	F
Total	3,668	99	6.1	0.6	116.9	8.6	F

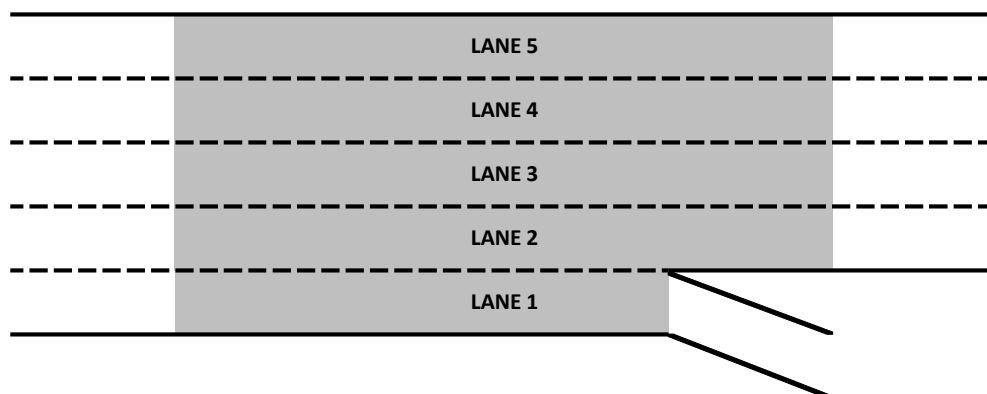
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	448	68
Total	448	68

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,340	3,668	99	57.9%	1,362
On-ramp					
Off-ramp	750	448	68	59.7%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 106 - NB I-15: EB Central Ave (SR-74) Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	275	10	55.4	3.9	4.3	0.5	A
4	1,500	25	13.3	1.6	111.4	6.0	F
3	1,142	21	8.1	0.5	120.6	2.6	F
2	1,150	43	5.4	0.5	129.3	7.5	F
1			3.5	0.4	117.5	3.6	F
Area	2,292	64	6.4	0.3	121.3	4.0	F
Total	4,067	99	12.2	1.3	66.9	5.7	F

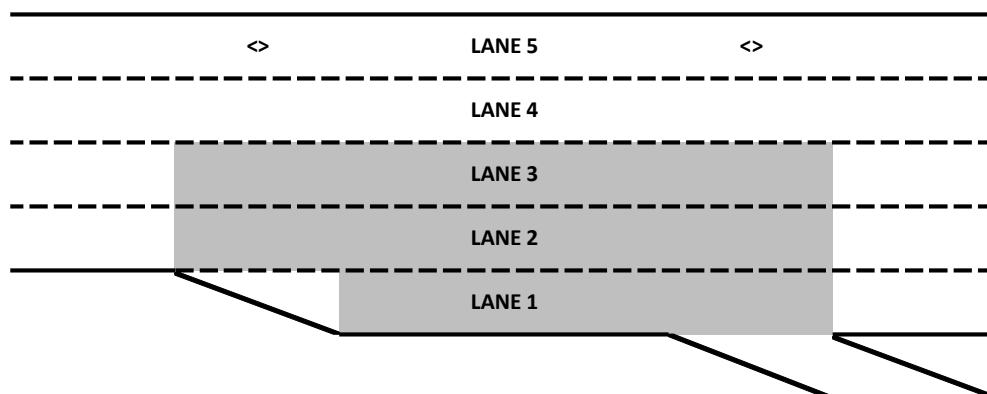
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	397	56
Total	397	56

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,970	4,067	99	58.4%	1,498
On-ramp					
Off-ramp	630	397	56	63.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 105 - NB I-15: Main St On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	279	9	54.3	3.0	5.4	0.5	A
3	1,488	26	12.7	1.5	113.1	6.0	F
2	1,213	22	10.6	1.2	112.7	6.0	F
1	1,084	43	8.8	2.0	117.7	8.6	F
Area	3,785	90	11.0	1.3	111.3	5.2	F
Total	4,064	99	14.2	1.3	69.4	3.1	F

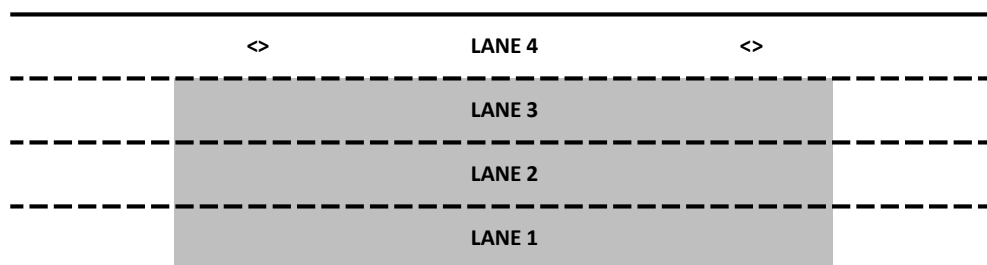
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,970	4,064	99	58.3%	1,245
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 104 - NB I-15: Main St On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	307	11	58.8	2.1	4.9	0.7	A
4	1,512	19	13.4	0.9	115.2	3.2	F
3	1,042	44	8.9	0.8	122.6	4.5	F
2	676	23	6.3	0.3	130.1	5.9	F
1	533	45	2.3	0.5	49.0	14.4	F
Area	2,251	112	7.4	0.6	111.0	6.8	F
Total	4,070	142	13.5	0.9	63.6	2.7	F

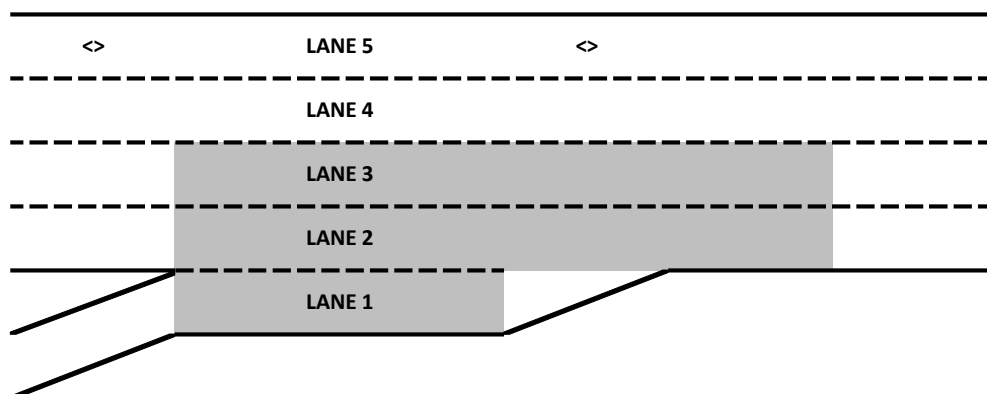
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	533	45
Total	533	45

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,430	3,536	97	55.0%	1,500
On-ramp	540	533	45	98.8%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 103 - NB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	311	10	56.5	5.3	5.8	1.0	A
3	1,461	26	12.9	1.2	112.4	3.7	F
2	1,037	40	8.4	1.9	120.7	8.4	F
1	719	23	5.3	1.1	138.2	12.0	F
Area	3,217	89	9.8	1.3	108.5	3.1	F
Total	3,528	100	14.1	1.2	62.0	2.9	F

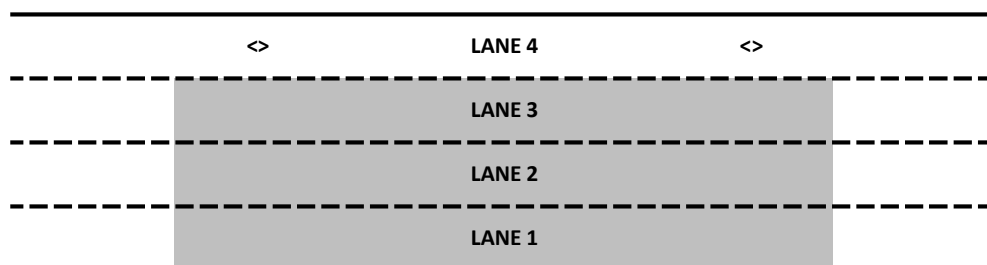
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,430	3,528	100	54.9%	2,900
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 102 - NB I-15: Main St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	337	13	62.2	1.1	5.7	0.8	A
3	1,457	34	12.6	1.7	113.2	6.0	F
2	1,111	37	9.1	2.0	116.6	8.8	F
1	963	39	8.4	2.2	124.3	11.6	F
Area	2,074	76	8.8	2.1	120.1	10.1	F
Total	3,869	123	15.1	1.6	63.7	1.8	F

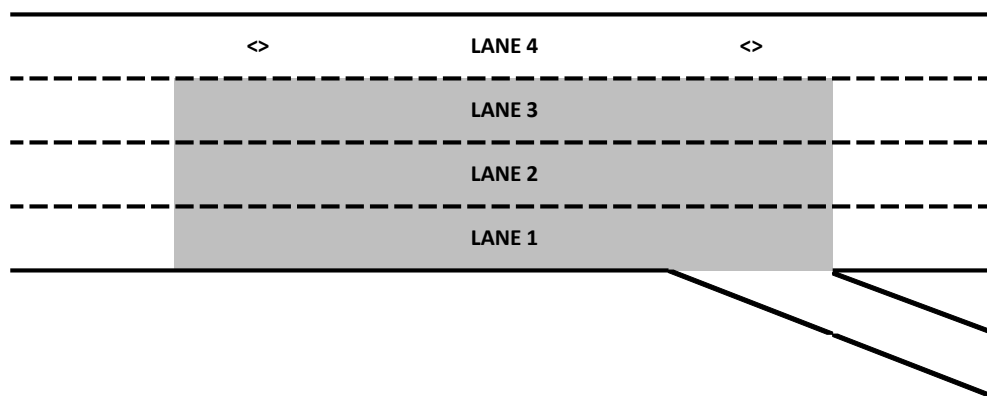
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	313	39
Total	313	39

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,010	3,869	123	55.2%	1,499
On-ramp					
Off-ramp	580	313	39	53.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 101 - NB I-15: Diamond Dr/Railroad Canyon Rd On-ramp to Main St Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	341	12	60.5	2.3	5.8	0.6	A
3	1,476	32	13.7	2.1	110.0	6.3	F
2	1,174	37	10.6	2.1	110.8	7.8	F
1	894	33	7.5	1.7	128.3	10.5	F
Area	3,545	102	11.1	1.9	109.5	6.7	F
Total	3,886	114	15.5	1.7	63.9	1.5	F

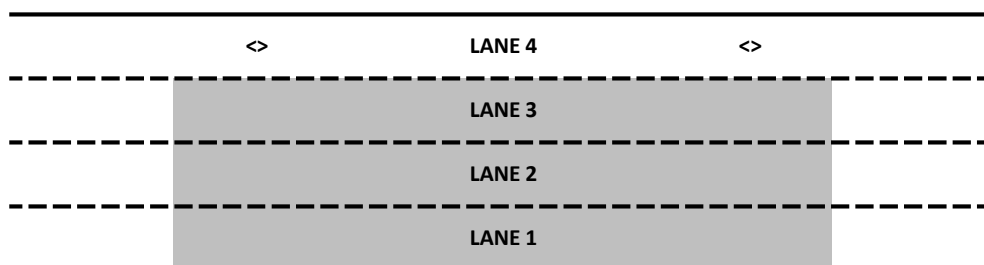
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,010	3,886	114	55.4%	3,905
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Design Year Plus Project
PM Peak Hour

	Location	Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
1	SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp	Basic	5,716	155	96.9%							35.5	26.6	58.1	34.1	F
2	SB I-15: Hidden Valley Pkwy On-ramp	Merge	5,665	239	96.0%	713	32	104.9%				33.2	27.2	67.3	40.0	F
3	SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp	Basic	6,310	272	95.9%							35.1	22.0	45.0	21.4	F
4	SB I-15: WB SR-91 Off-ramp	Basic	6,284	241	95.5%				1,154	94	95.4%	30.7	12.9	43.1	11.5	E
5	SB I-15: EB SR-91 Off-ramp	Diverge	5,073	146	94.5%				1,055	80	94.2%	21.0	3.7	86.3	11.9	F
6	SB I-15: EB SR-91 Off-ramp to On-ramp	Basic	3,939	99	92.7%							14.6	0.6	87.9	1.3	F
7	SB I-15: EB SR-91 On-ramp	Merge	3,909	146	92.0%	1,659	192	73.1%				11.6	0.8	104.3	2.3	F
8	SB I-15: WB SR-91 On-ramp to Magnolia Ave Off-ramp	Weave	5,544	102	85.0%	582	50	97.0%	728	52	89.9%	14.9	0.4	78.6	1.1	F
9	SB I-15: Magnolia Ave Off-ramp to On-ramp	Basic	5,382	78	85.3%							12.9	0.2	102.8	1.0	F
10	SB I-15: Magnolia Ave On-ramp	Merge	5,396	74	85.5%	1,170	46	100.9%				22.9	0.3	95.1	2.6	F
11	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)	Weave	6,564	117	87.9%	2,948	96	101.3%	3,061	110	103.1%	25.9	0.4	63.4	0.4	F
12	SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp	Basic	6,441	85	86.9%							16.5	1.0	96.2	3.8	F
13	SB I-15: Ontario Ave Off-ramp	Diverge	6,440	81	86.9%				947	70	92.9%	16.5	0.6	91.0	2.7	F
14	SB I-15: Ontario Ave Off-ramp to On-ramp	Basic	5,481	61	85.8%							16.1	0.4	84.0	1.3	F
15	SB I-15: Ontario Ave On-ramp	Merge	5,481	66	85.8%	904	6	57.9%				20.6	0.8	46.4	0.9	F
16	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp	Basic	6,388	61	80.3%				598	47	95.0%	24.7	1.0	64.8	1.5	F
17	SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp (EL Access)	Weave	5,788	59	79.1%	3,075	119	103.5%	2,837	120	100.3%	46.3	4.5	39.6	3.4	E
19	SB I-15: Foothill Pkwy/El Cerrito Rd On-ramp to Cajalco Rd Off-ramp	Weave	6,041	43	81.0%	903	8	75.3%	1,705	66	85.3%	56.6	1.2	31.0	0.7	D
20	SB I-15: Cajalco Rd Off-ramp to On-ramp	Basic	5,246	56	78.8%							62.1	0.3	28.7	0.6	D
21	SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp	Weave	5,242	63	78.7%	796	82	100.8%	889	60	83.9%	59.8	1.0	26.5	0.4	D
22	SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp (EL Access)	Weave	6,034	78	81.0%	2,843	96	100.4%	2,809	115	94.0%	60.3	2.3	24.6	1.2	C
24	SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp	Basic	5,166	62	82.9%							61.3	0.7	28.8	0.7	D
25	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp	Merge	5,167	65	82.9%	387	24	99.3%				61.1	1.4	23.9	1.0	C
26	SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp	Basic	5,530	66	83.5%							59.5	0.9	31.6	0.9	D
27	SB I-15: Temescal Canyon Rd Off-ramp	Diverge	5,523	65	83.4%				554	54	85.2%	55.8	5.5	33.8	4.4	D
28	SB I-15: Temescal Canyon Rd Off-ramp to On-ramp	Basic	4,967	68	83.2%							61.5	0.6	27.7	0.7	D
29	SB I-15: Temescal Canyon Rd On-ramp	Merge	4,961	60	83.1%	527	31	99.4%				58.1	5.7	24.5	3.0	C
30	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	5,488	64	84.4%							59.3	1.5	31.8	1.3	D
52	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp (EL Access)	Weave	5,491	93	84.5%	2,825	116	94.5%	2,789	119	91.1%	61.6	0.8	28.4	0.6	D
53	SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp	Basic	5,515	61	85.8%							57.3	4.4	33.5	2.8	D
31	SB I-15: Indian Truck Trail Off-ramp	Diverge	5,518	59	85.8%				569	49	88.9%	54.6	5.6	35.5	3.8	E
32	SB I-15: Indian Truck Trail Off-ramp to On-ramp	Basic	4,938	70	85.3%							61.2	0.6	27.7	0.5	D
33	SB I-15: Indian Truck Trail On-ramp	Merge	4,925	80	85.1%	187	17	98.4%				59.7	4.7	22.5	2.0	C
60	SB I-15: Indian Truck Trail On-ramp to Horsethief Rd Off-ramp	Basic	5,099	94	85.3%							57.0	2.3	30.5	1.1	D
61	SB I-15: Horsethief Rd Off-ramp	Diverge	5,094	97	85.2%				354	39	95.6%	57.4	5.4	30.3	3.2	D
62	SB I-15: Horsethief Rd Off-ramp to On-ramp	Basic	4,716	83	84.1%							60.6	1.3	27.3	2.3	D
63	SB I-15: Horsethief Rd On-ramp	Merge	4,708	89	83.9%	705	71	99.3%				51.8	9.6	29.9	6.8	D
34	SB I-15: Horsethief Rd On-ramp to Lake St Off-ramp	Basic	5,409	95	85.6%							55.7	3.2	34.0	3.2	D
54	SB I-15: Horsethief Rd On-ramp to Lake St Off-ramp (EL Access)	Weave	5,409	114	85.6%	2,799	114	91.5%	2,649	119	92.0%	61.1	0.8	28.7	1.3	D
35	SB I-15: Lake St Off-ramp	Diverge	5,528	99	85.1%				656	48	87.5%	55.5	5.8	35.4	4.3	E
36	SB I-15: Lake St Off-ramp to On-ramp	Basic	4,849	98	84.3%							61.3	0.8	27.7	0.9	D
37	SB I-15: Lake St On-ramp	Merge	4,839	96	84.2%	285	38	98.4%				58.4	5.4	23.5	2.9	C
38	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp	Basic	5,094	70	84.3%							54.1	12.2	34.4	12.0	D
55	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp (EL Egress)	Basic	5,080	81	84.1%	1,227	80	91.6%				49.3	18.7	40.0	26.2	E
56	SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp	Basic	6,222	124	84.3%							28.4	9.8	61.1	21.1	F
39	SB I-15: Nichols Rd Off-ramp	Basic	6,189	107	83.9%				447	40	87.6%	18.6	2.2	94.4	12.8	F
40	SB I-15: Nichols Rd Off-ramp to On-ramp	Basic	5,595	110	81.4%							21.6	1.0	84.4	3.2	F
41	SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp	Weave	5,543	129	80.7%	339	50	99.7%	1,184	85	83.9%	22.4	1.2	66.1	1.2	F
57	SB I-15: Central Ave (SR-74) (EL Egress)	Basic	5,696	147	79.0%	1,433	80	93.1%				20.0	1.1	79.5	2.3	F
44	SB I-15: Central Ave (SR-74) Off-ramp to On-ramp	Basic	5,835	115	79.5%							14.5	0.8	36.5	0.9	E
45	SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp	Weave	5,834	118	79.5%	1,479	55	103.4%	598	54	85.5%	25.6	0.8	73.7	1.8	F
48	SB I-15: Main St Off-ramp to On-ramp	Basic	6,673	68	82.7%							29.5	1.7	75.1	3.7	F
49	SB I-15: Main St On-ramp	Merge	6,666	81	82.6%	425	32	101.2%				33.4	1.7	56.6	2.4	F
50	SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp	Basic	7,096	62	83.6%							58.5	2.4	38.7	2.5	E

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 1 - SB I-15: Hidden Valley Pkwy Off-ramp to On-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,560	33	40.0	24.5	57.0	33.7	F
3	1,519	20	36.2	26.0	57.8	35.4	F
2	1,401	66	31.4	29.8	74.3	49.1	F
1	1,237	37	31.7	28.6	69.6	46.3	F
Area	5,716	155	35.5	26.6	58.1	34.1	F
Total	5,716	155	35.5	26.6	58.1	34.1	F

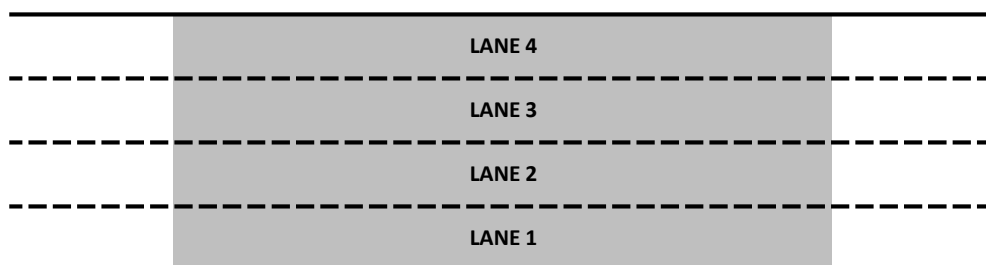
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,900	5,716	155	96.9%	1,784
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 2 - SB I-15: Hidden Valley Pkwy On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,562	50	37.0	26.8	70.7	44.1	F
4	1,281	28	33.6	29.1	73.7	48.0	F
3	1,445	106	29.4	28.8	89.3	53.9	F
2	1,377	55	31.8	25.9	75.4	45.0	F
1	713	32	13.6	9.7	10.6	8.6	A
Area	3,536	193	31.0	27.1	67.3	40.0	F
Total	6,378	270	33.2	27.2	67.0	40.4	F

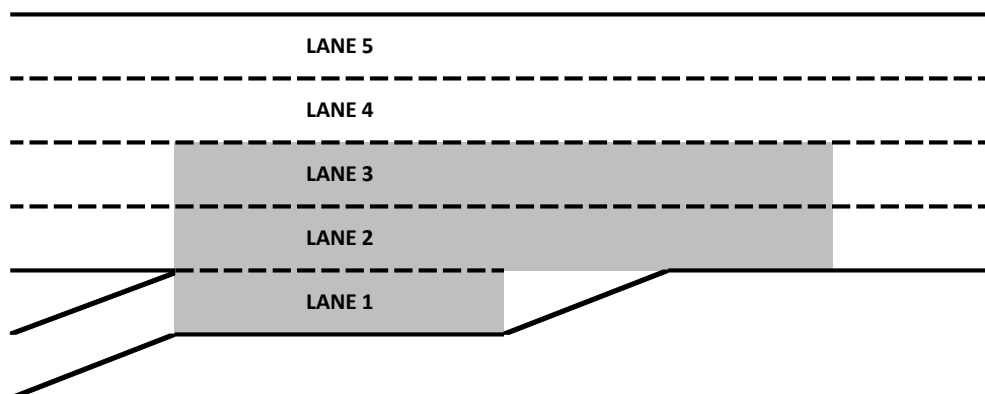
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	713	32
Total	713	32

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,900	5,665	239	96.0%	1,702
On-ramp	680	713	32	104.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 3 - SB I-15: Hidden Valley Pkwy On-ramp to WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,819	39	37.2	22.1	66.4	35.1	F
4	1,674	62	31.3	25.4	76.8	42.2	F
3	1,432	86	26.8	25.4	86.7	51.4	F
2	855	19	36.2	22.7	28.1	13.7	D
1	530	65	51.1	13.2	12.5	6.2	B
Area	6,310	272	35.1	22.0	45.0	21.4	F
Total	6,310	272	35.1	22.0	45.0	21.4	F

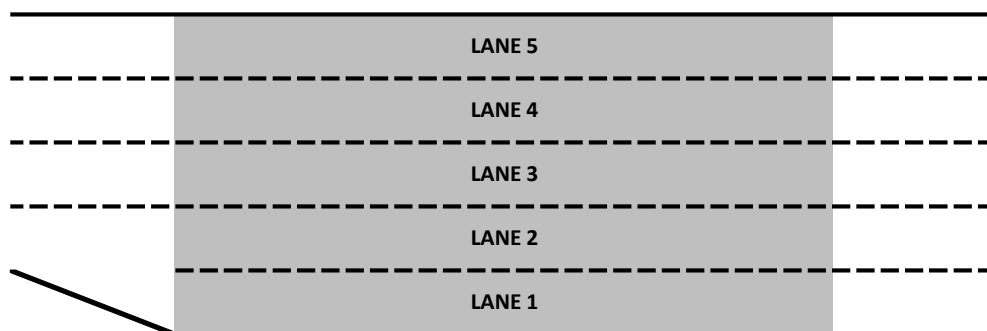
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,580	6,310	272	95.9%	1,019
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 4 - SB I-15: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,927	34	31.3	14.2	68.1	22.6	F
4	1,658	51	24.2	15.5	84.1	27.1	F
3	1,404	68	17.5	13.8	93.9	33.9	F
2	651	28	39.4	20.2	13.2	3.8	B
1	645	60	60.7	6.7	11.8	2.7	B
Area	6,284	241	30.7	12.9	43.1	11.5	E
Total	6,284	241	30.7	12.9	43.1	11.5	E

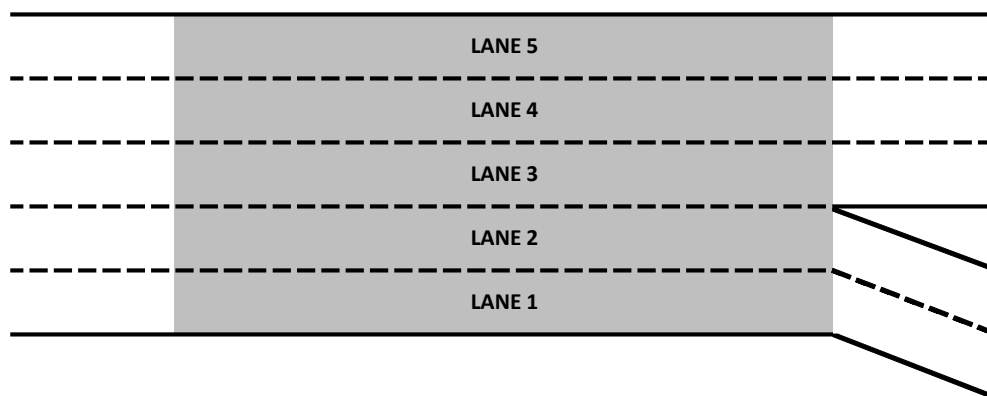
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	520	106
1	635	70
Total	1,154	94

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,580	6,284	241	95.5%	1,499
On-ramp					
Off-ramp	1,210	1,154	94	95.4%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 5 - SB I-15: EB SR-91 Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,887	48	26.3	3.9	73.7	11.8	F
2	1,790	36	19.1	4.0	80.8	12.1	F
1	1,396	62	16.0	3.7	93.3	12.4	F
Area	3,186	97	17.6	3.8	86.3	11.9	F
Total	5,073	146	21.0	3.7	78.7	10.7	F

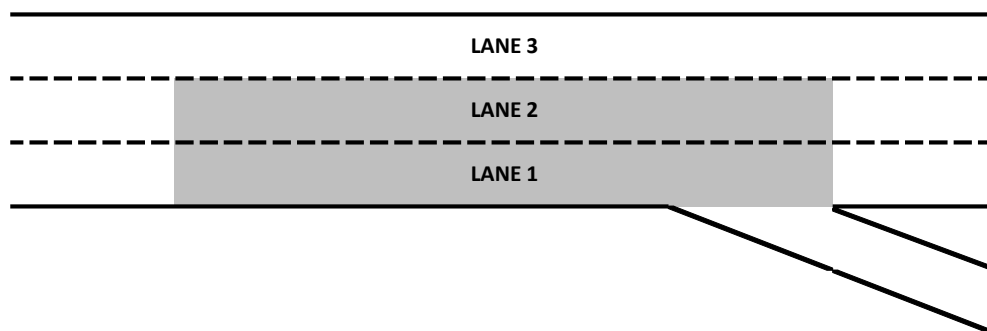
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,055	80
Total	1,055	80

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,370	5,073	146	94.5%	1,545
On-ramp					
Off-ramp	1,120	1,055	80	94.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 6 - SB I-15: EB SR-91 Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,738	27	19.2	0.8	93.6	2.4	F
2	1,295	28	13.3	0.9	98.7	4.8	F
1	907	45	6.1	0.7	123.7	1.6	F
Area	3,939	99	14.6	0.6	87.9	1.3	F
Total	3,939	99	14.6	0.6	87.9	1.3	F

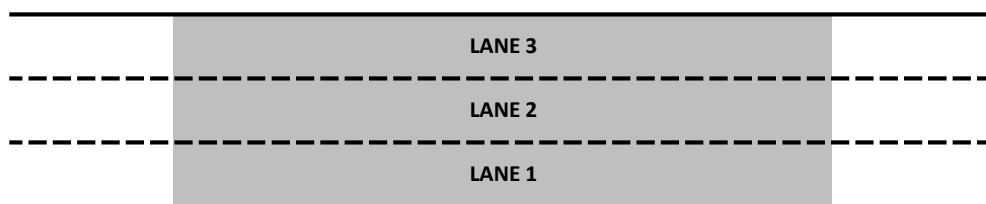
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,250	3,939	99	92.7%	1,549
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 7 - SB I-15: EB SR-91 On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,727	26	14.9	0.8	110.5	2.4	F
4	1,348	23	13.2	1.0	105.9	4.2	F
3	834	50	9.5	1.3	120.9	3.7	F
2	791	81	7.9	1.0	131.5	5.5	F
1	868	158	2.5	0.5	68.8	5.4	F
Area	3,842	312	10.0	0.9	104.3	2.3	F
Total	5,569	338	11.6	0.8	101.6	2.2	F

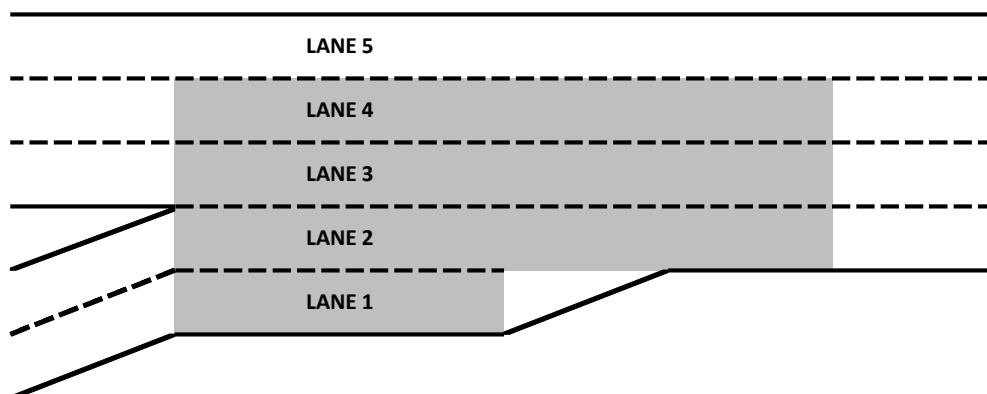
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	791	81
1	868	158
Total	1,659	192

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	4,250	3,909	146	92.0%	1,370
On-ramp	2,270	1,659	192	73.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 8 - SB I-15: WB SR-91 On-ramp to Magnolia Ave Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6			14.6	0.7	110.2	2.7	F
5	1,586	19	13.7	0.3	105.2	2.9	F
4	1,394	21	10.5	0.5	121.3	3.2	F
3	1,187	35	8.6	0.3	118.9	1.3	F
2	1,377	27	19.7	1.8	23.5	0.8	C
1	582	50	24.0	0.5	5.1	0.4	A
Area	6,126	152	14.9	0.4	78.6	1.1	F
Total	6,126	152	14.9	0.4	78.6	1.1	F

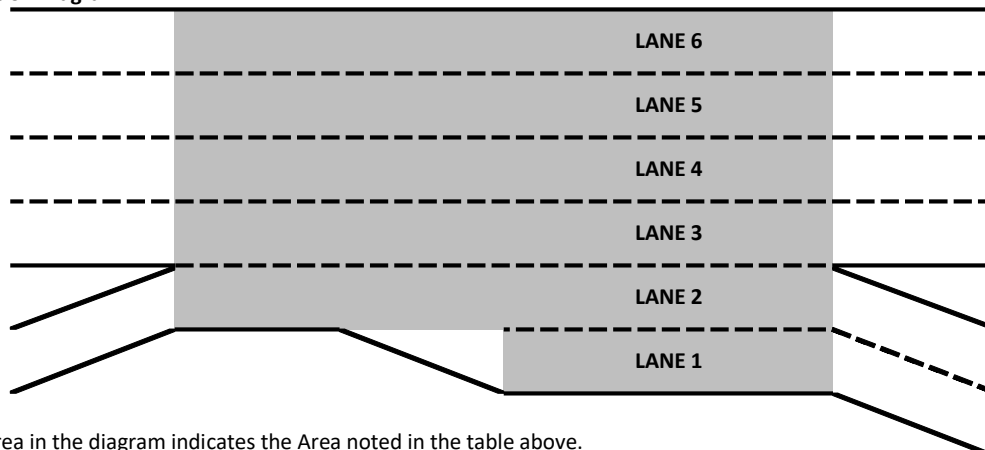
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	582	50
Total	582	50

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	325	41
1	403	34
Total	728	52

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,520	5,544	102	85.0%	2,539
On-ramp	600	582	50	97.0%	
Off-ramp	810	728	52	89.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 9 - SB I-15: Magnolia Ave Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,700	20	17.1	0.5	100.6	1.2	F
3	1,413	15	13.2	0.7	104.9	3.1	F
2	1,158	25	9.6	0.4	118.2	3.2	F
1	1,110	18	9.3	0.9	115.9	6.0	F
Area	5,382	78	12.9	0.2	102.8	1.0	F
Total	5,382	78	12.9	0.2	102.8	1.0	F

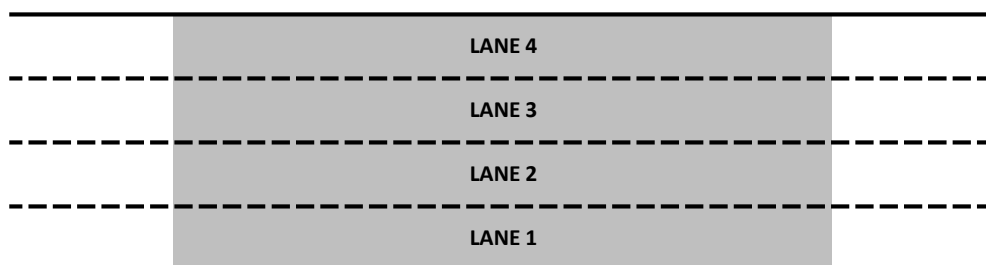
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,310	5,382	78	85.3%	2,362
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 10 - SB I-15: Magnolia Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7			32.6	0.8	10.6	0.8	A
6			29.8	0.7	13.0	0.5	B
5	1,753	20	17.7	1.0	101.9	3.3	F
4	1,473	14	14.6	0.5	106.2	1.4	F
3	1,079	17	12.4	0.6	116.3	3.8	F
2	1,091	23	11.5	0.2	105.8	3.0	F
1	1,170	46	6.7	0.8	38.7	2.4	E
Area	3,341	85	12.5	0.3	95.1	2.6	F
Total	6,567	119	22.9	0.3	70.5	1.2	F

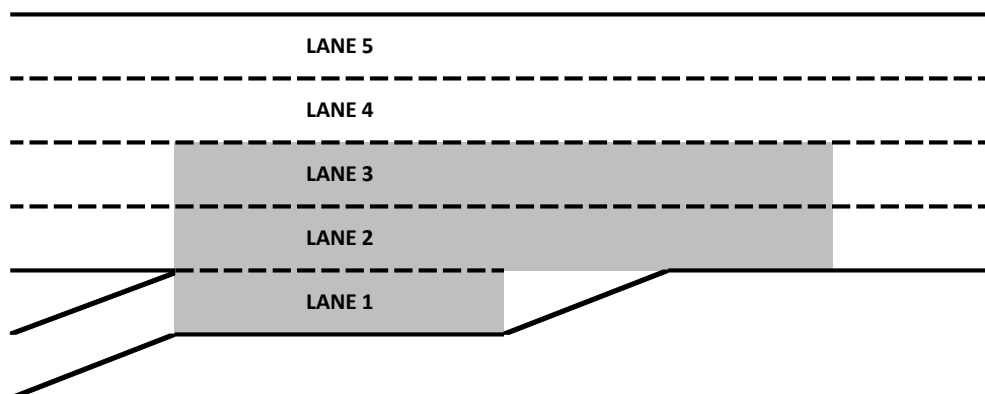
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,170	46
Total	1,170	46

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,310	5,396	74	85.5%	1,504
On-ramp	1,160	1,170	46	100.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 11 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7	1,773	23	43.1	0.6	18.3	0.8	C
6	1,519	14	36.6	0.6	18.4	0.5	C
5	1,148	19	19.0	0.7	97.6	2.0	F
4	1,071	31	17.0	0.5	96.1	1.5	F
3	1,054	18	13.9	0.6	108.2	2.5	F
2	1,318	59	12.7	0.1	101.4	2.1	F
1	1,630	49	1.3	0.1	13.9	0.9	B
Area	9,512	213	25.9	0.4	63.4	0.4	F
Total	9,512	213	25.9	0.4	63.4	0.4	F

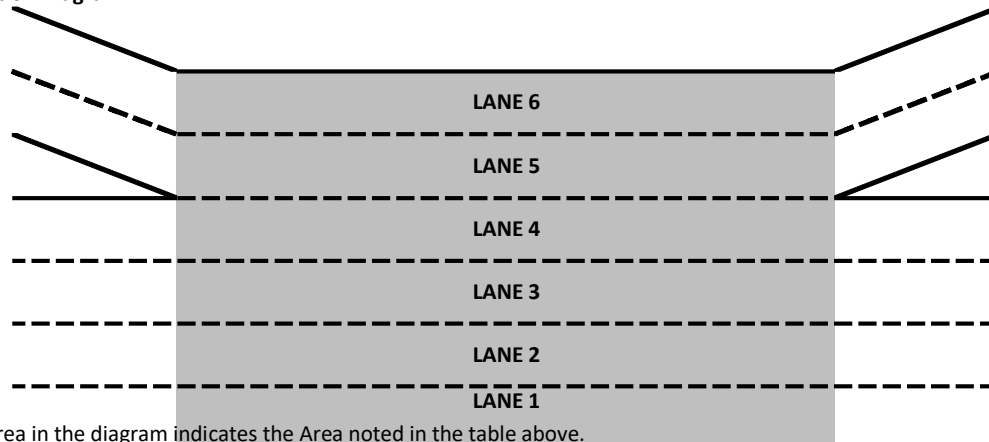
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,318	59
1	1,630	49
Total	2,948	96

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,694	73
1	1,368	52
Total	3,061	110

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,470	6,564	117	87.9%	3,337
On-ramp	2,910	2,948	96	101.3%	
Off-ramp	2,970	3,061	110	103.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 12 - SB I-15: Magnolia Ave On-ramp to Ontario Ave Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,774	27	17.3	1.2	99.6	5.0	F
3	1,643	27	17.4	1.5	92.7	4.1	F
2	1,703	22	17.8	1.4	95.7	4.9	F
1	1,320	10	12.9	0.4	103.1	1.7	F
Area	6,441	85	16.5	1.0	96.2	3.8	F
Total	6,441	85	16.5	1.0	96.2	3.8	F

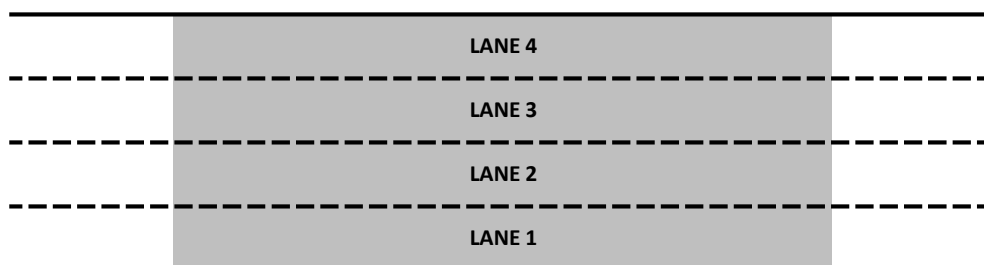
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,410	6,441	85	86.9%	394
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 13 - SB I-15: Ontario Ave Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,760	25	16.7	1.0	101.0	3.1	F
3	1,655	31	13.7	0.8	102.6	2.6	F
2	1,717	16	15.5	1.2	95.9	4.1	F
1	1,308	9	19.4	1.0	88.5	2.3	F
Area	3,025	25	17.6	1.1	91.0	2.7	F
Total	6,440	81	16.5	0.6	95.3	1.5	F

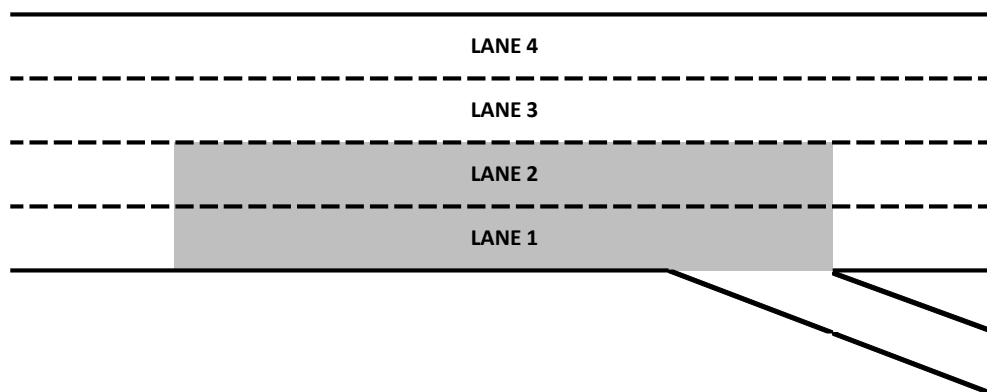
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	947	70
Total	947	70

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,410	6,440	81	86.9%	1,504
On-ramp					
Off-ramp	1,020	947	70	92.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 14 - SB I-15: Ontario Ave Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,785	13	17.9	0.8	98.4	2.0	F
3	1,576	15	14.1	0.6	105.7	1.2	F
2	1,446	21	12.7	0.4	108.7	2.4	F
1	675	13	21.8	0.4	35.3	1.5	E
Area	5,481	61	16.1	0.4	84.0	1.3	F
Total	5,481	61	16.1	0.4	84.0	1.3	F

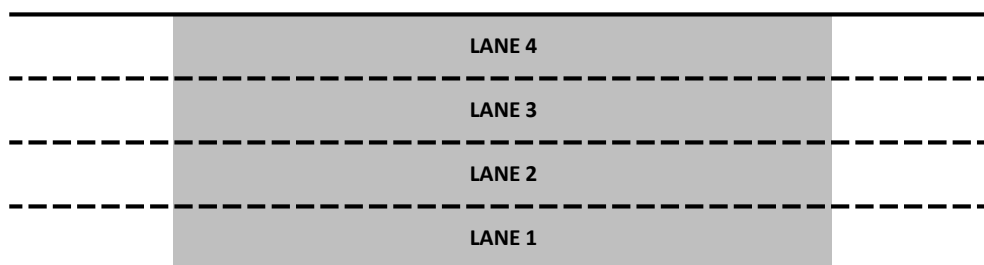
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,390	5,481	61	85.8%	2,820
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 15 - SB I-15: Ontario Ave On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,778	12	19.6	1.0	97.3	2.9	F
4	1,535	19	17.4	1.0	101.5	3.7	F
3	1,597	17	17.9	0.8	93.5	2.6	F
2	571	17	30.7	0.9	36.7	1.9	E
1	904	6	25.5	0.3	2.3	0.2	A
Area	3,072	40	23.4	0.7	46.4	0.9	F
Total	6,385	72	20.6	0.8	67.9	1.6	F

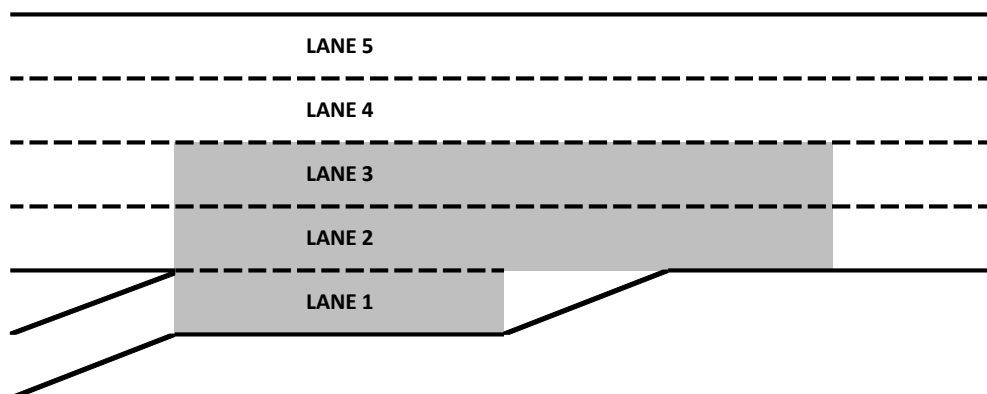
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	904	6
Total	904	6

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,390	5,481	66	85.8%	1,494
On-ramp	1,560	904	6	57.9%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 16 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,981	13	22.3	1.3	90.4	3.7	F
3	1,877	9	21.9	1.0	89.5	2.8	F
2	1,860	12	22.5	0.5	81.2	1.8	F
1	670	26	48.4	1.8	12.3	1.8	B
Area	6,388	61	24.7	1.0	64.8	1.5	F
Total	6,388	61	24.7	1.0	64.8	1.5	F

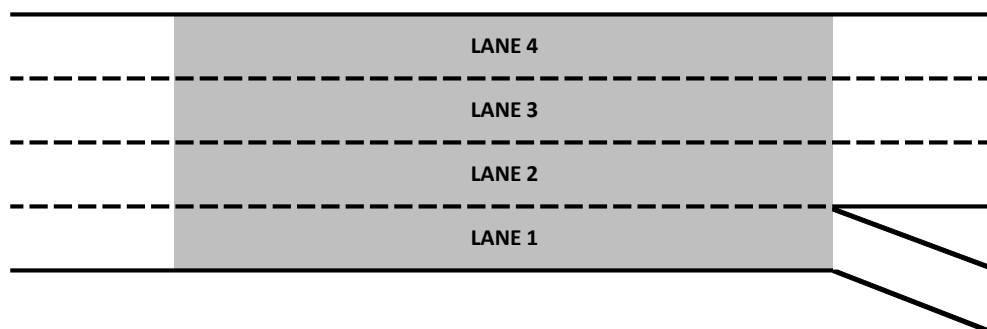
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	598	47
Total	598	47

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,950	6,388	61	80.3%	738
On-ramp					
Off-ramp	630	598	47	95.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 17 - SB I-15: Foothill Pkwy/El Cerrito Rd Off-ramp to EL On-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	2,014	15	55.4	2.7	22.2	1.1	C
4	1,946	10	50.7	4.6	22.4	2.0	C
3	1,828	16	40.6	5.1	51.9	5.9	F
2	1,668	80	39.3	5.3	51.3	6.1	F
1	1,407	58	39.1	4.2	48.4	5.0	F
Area	8,862	179	46.3	4.5	39.6	3.4	E
Total	8,862	179	46.3	4.5	39.6	3.4	E

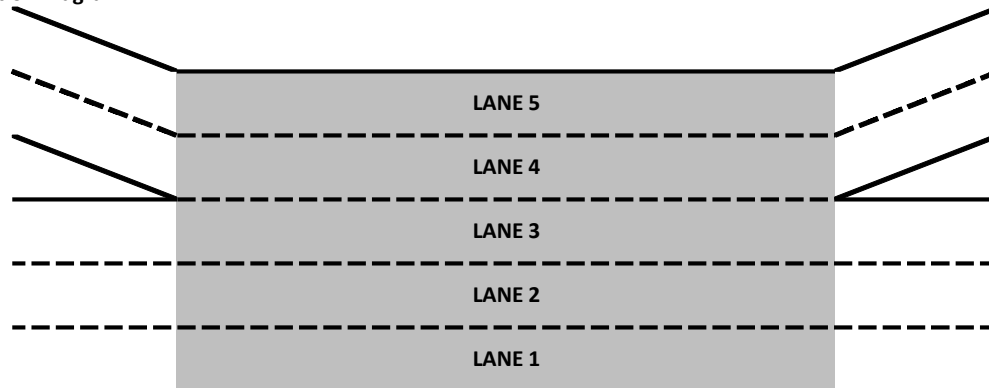
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,668	80
1	1,407	58
Total	3,075	119

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,586	69
1	1,251	90
Total	2,837	120

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,320	5,788	59	79.1%	2,213
On-ramp	2,970	3,075	119	103.5%	
Off-ramp	2,830	2,837	120	100.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 19 - SB I-15: Foothill Pkwy/El Cerrito Rd On- Ramp to Cajalco Rd Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,895	16	60.7	1.1	32.8	0.6	D
3	2,108	18	55.1	1.5	36.3	0.6	E
2	2,038	9	52.8	1.2	37.0	1.2	E
1	903	8	47.4	1.0	12.5	0.9	B
Area	6,944	51	56.6	1.2	31.0	0.7	D
Total	6,944	51	56.6	1.2	31.0	0.7	D

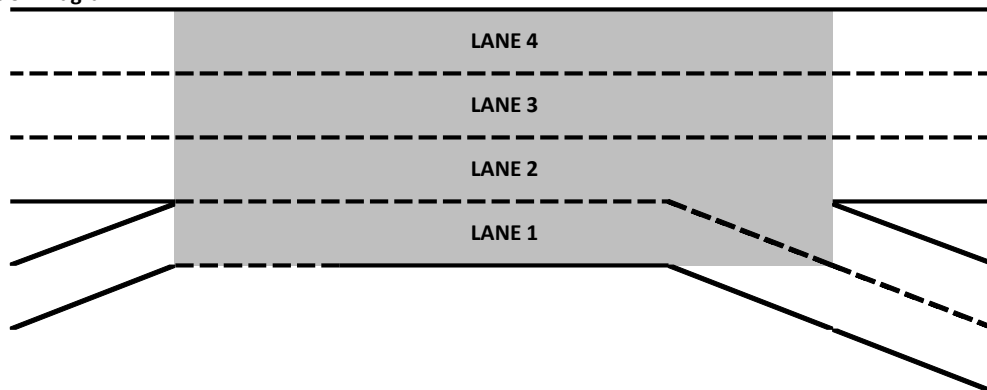
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	903	8
Total	903	8

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	404	43
1	1,301	48
Total	1,705	66

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,460	6,041	43	81.0%	2,813
On-ramp	1,200	903	8	75.3%	
Off-ramp	2,000	1,705	66	85.3%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 20 - SB I-15: Cajalco Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,039	17	63.9	0.5	32.1	0.9	D
2	1,770	20	61.9	0.7	29.3	0.9	D
1	1,437	19	59.7	1.1	24.8	0.7	C
Area	5,246	56	62.1	0.3	28.7	0.6	D
Total	5,246	56	62.1	0.3	28.7	0.6	D

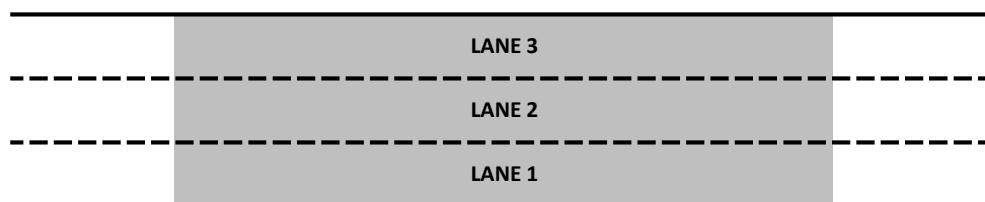
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,660	5,246	56	78.8%	1,294
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 21 - SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp

Segment Type - Weave

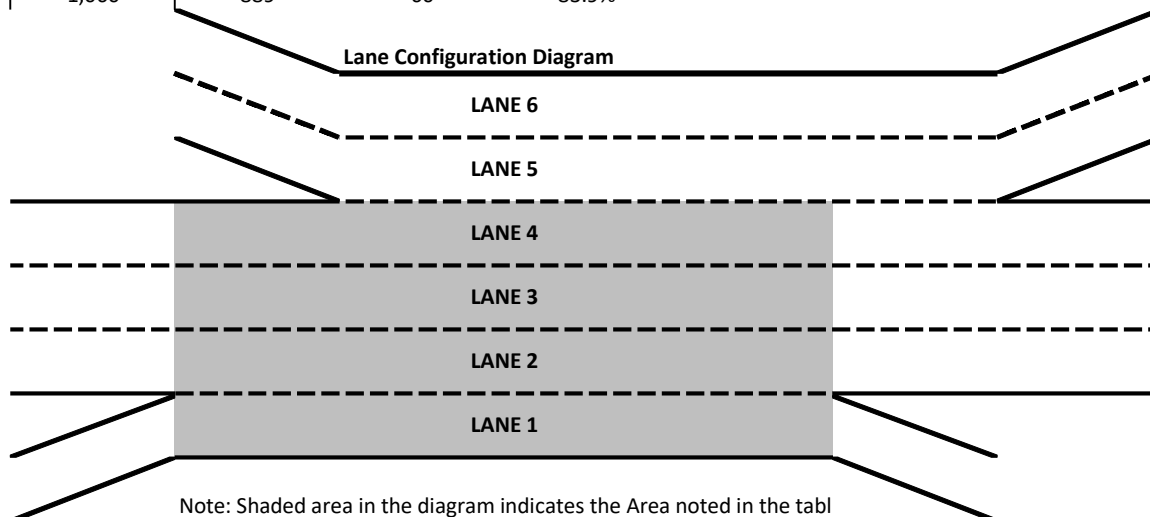
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,974	24	61.3	0.8	33.8	0.5	D
3	1,767	18	59.3	1.3	32.7	0.8	D
2	1,501	21	57.7	1.6	29.5	0.6	D
1	796	82	52.6	0.5	4.9	0.3	A
Area	6,039	145	59.8	1.0	26.5	0.4	D
Total	6,039	145	59.8	1.0	26.5	0.4	D

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	796	82
Total	796	82

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	187	21
1	702	63
Total	889	60

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,660	5,242	63	78.7%	5,047
On-ramp	790	796	82	100.8%	
Off-ramp	1,060	889	60	83.9%	



Location 22 - SB I-15: Cajalco Rd On-ramp to Weirick Rd/Dos Lagos Dr Off-ramp (EL Access)

Segment Type - Weave

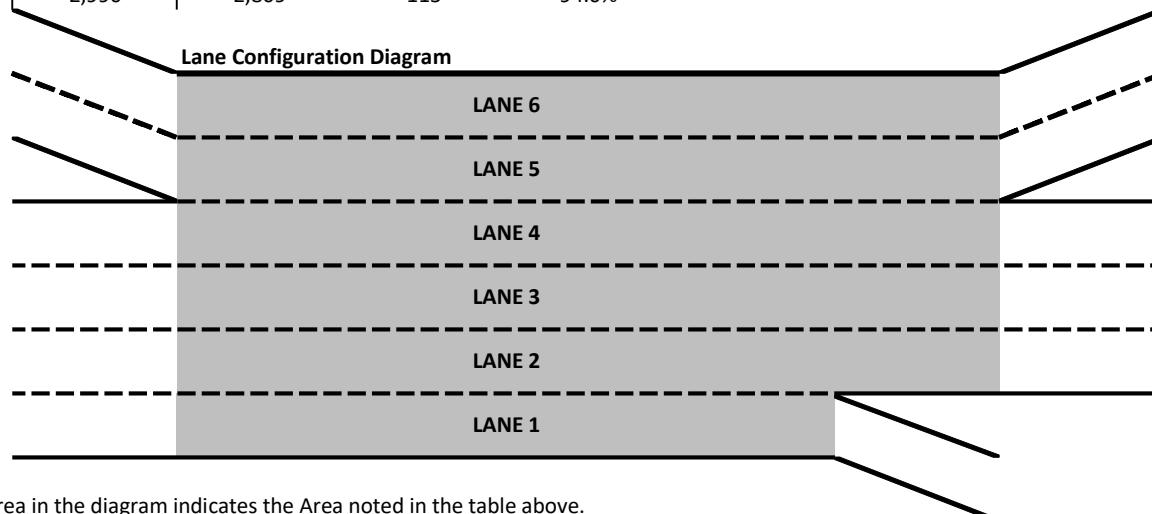
Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	2,122	16	45.1	0.3	13.1	0.4	B
5	1,962	22	44.6	0.7	13.1	0.7	B
4	1,675	16	58.8	3.3	35.6	2.7	E
3	275	14	57.9	2.9	34.2	1.7	D
2	1,302	43	56.7	2.6	31.0	1.9	D
1	1,541	62	66.4	0.9	4.6	0.7	A
Area	8,876	174	60.3	2.3	24.6	1.2	C
Total	8,876	174	60.3	2.3	24.6	1.2	C

Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,302	43
1	1,541	62
Total	2,843	96

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,444	71
1	1,365	70
Total	2,809	115

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,450	6,034	78	81.0%	3,004
On-ramp	2,830	2,843	96	100.4%	
Off-ramp	2,990	2,809	115	94.0%	



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 24 - SB I-15: Weirick Rd/Dos Lagos Dr Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,942	11	62.8	0.8	31.3	0.6	D
2	1,743	24	61.6	1.1	29.3	1.0	D
1	1,481	27	58.9	0.7	25.9	1.1	C
Area	5,166	62	61.3	0.7	28.8	0.7	D
Total	5,166	62	61.3	0.7	28.8	0.7	D

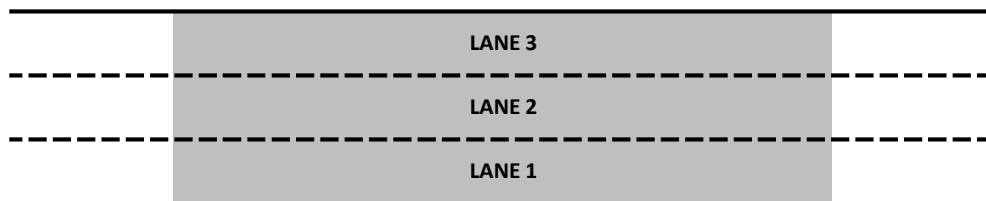
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,230	5,166	62	82.9%	1,755
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 25 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,925	12	63.1	1.4	31.5	1.1	D
3	1,747	22	61.3	2.0	32.2	1.5	D
2	1,495	31	57.9	2.1	28.1	1.2	D
1	387	24	30.8	0.6	1.2	0.1	A
Area	3,629	77	60.0	1.5	23.9	1.0	C
Total	5,554	89	61.1	1.4	26.0	1.0	D

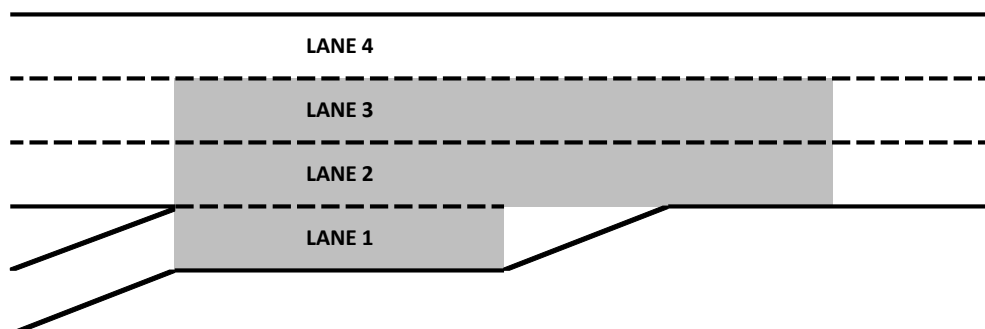
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	387	24
Total	387	24

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,230	5,167	65	82.9%	1,502
On-ramp	390	387	24	99.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 26 - SB I-15: Weirick Rd/Dos Lagos Dr On-ramp to Temescal Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,035	22	61.3	0.8	32.9	0.9	D
2	1,862	23	59.7	1.2	32.1	1.2	D
1	1,633	21	57.1	0.9	29.9	1.0	D
Area	5,530	66	59.5	0.9	31.6	0.9	D
Total	5,530	66	59.5	0.9	31.6	0.9	D

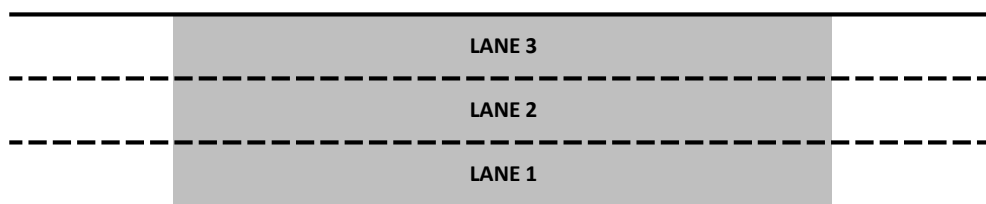
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,620	5,530	66	83.5%	7,458
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 27 - SB I-15: Temescal Canyon Rd Off-ramp

Segment Type - Diverge

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,953	24	60.0	4.5	33.5	3.8	D
2	1,756	21	54.7	7.5	32.9	4.8	D
1	1,814	19	52.1	4.9	34.7	4.0	D
Area	3,570	40	53.4	6.2	33.8	4.4	D
Total	5,523	65	55.8	5.5	33.5	4.1	D

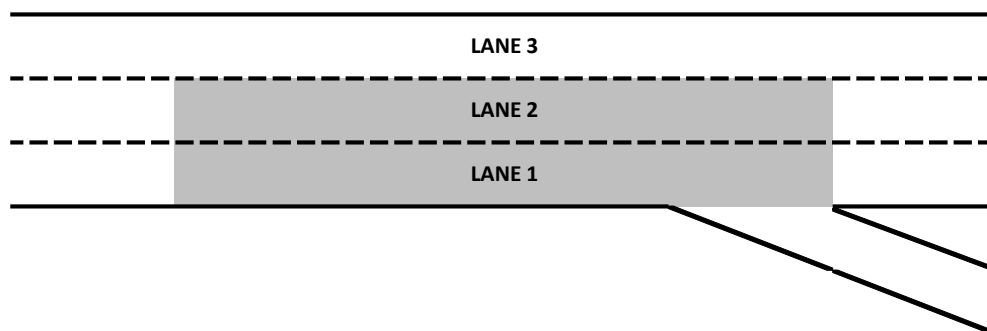
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	554	54
Total	554	54

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,620	5,523	65	83.4%	1,502
On-ramp					
Off-ramp	650	554	54	85.2%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 28 - SB I-15: Temescal Canyon Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,878	24	63.4	0.8	31.1	1.0	D
2	1,643	17	60.9	0.7	27.8	0.9	D
1	1,446	27	59.6	1.0	24.2	0.6	C
Area	4,967	68	61.5	0.6	27.7	0.7	D
Total	4,967	68	61.5	0.6	27.7	0.7	D

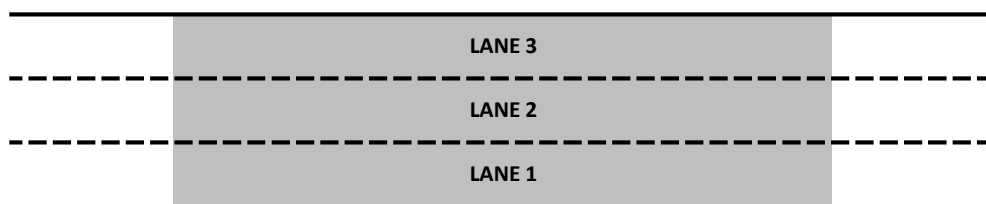
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,970	4,967	68	83.2%	2,526
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 29 - SB I-15: Temescal Canyon Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,858	29	60.3	6.0	32.4	3.1	D
3	1,652	16	58.0	5.6	33.1	4.0	D
2	1,451	15	55.1	6.2	29.9	3.9	D
1	527	31	32.5	1.9	1.4	0.1	A
Area	3,630	62	56.9	5.5	24.5	3.0	C
Total	5,488	91	58.1	5.7	26.6	3.0	D

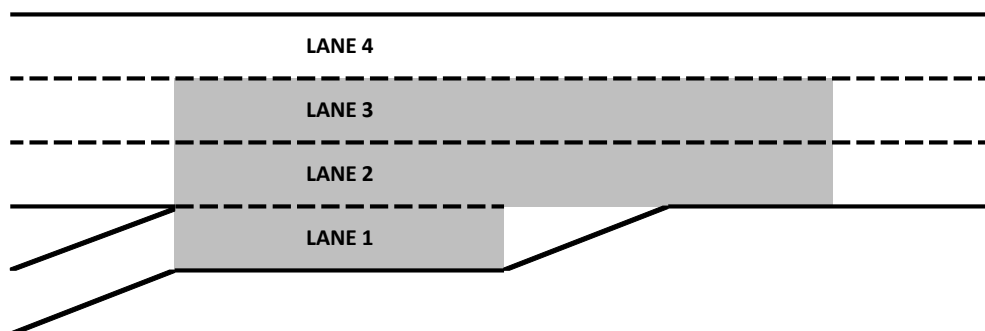
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	527	31
Total	527	31

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,970	4,961	60	83.1%	1,502
On-ramp	530	527	31	99.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 30 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,006	26	61.2	1.6	33.6	1.2	D
2	1,815	17	58.7	1.3	31.9	1.4	D
1	1,667	21	57.5	2.0	30.0	1.6	D
Area	5,488	64	59.3	1.5	31.8	1.3	D
Total	5,488	64	59.3	1.5	31.8	1.3	D

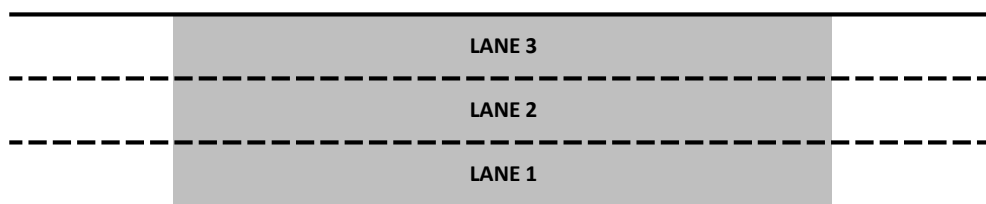
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,500	5,488	64	84.4%	4,808
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 52 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	2,089	41	45.0	0.4	13.8	0.8	B
4	1,785	16	44.8	0.2	13.9	0.8	B
3	1,616	23	61.0	0.9	34.0	0.7	D
2	1,488	64	59.5	1.1	32.2	0.6	D
1	1,337	64	58.4	1.8	29.7	1.1	D
Area	8,316	209	61.6	0.8	28.4	0.6	D
Total	8,316	209	61.6	0.8	28.4	0.6	D

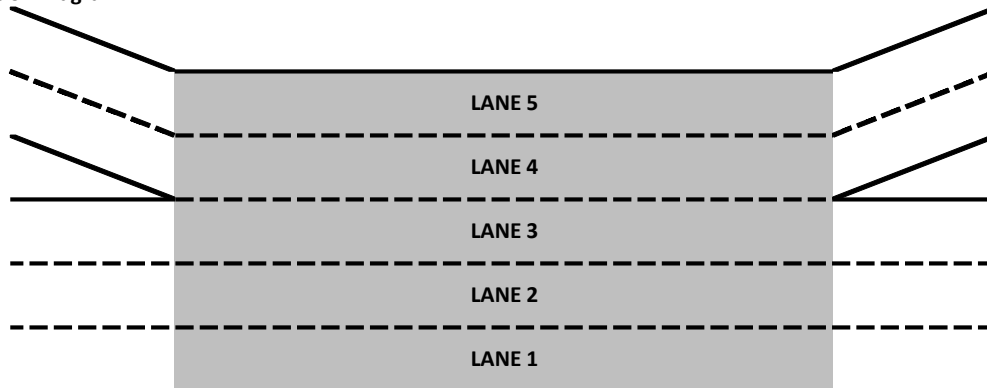
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,488	64
1	1,337	64
Total	2,825	116

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,392	74
1	1,397	58
Total	2,789	119

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,500	5,491	93	84.5%	3,000
On-ramp	2,990	2,825	116	94.5%	
Off-ramp	3,060	2,789	119	91.1%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 53 - SB I-15: Temescal Canyon Rd On-ramp to Indian Truck Trail Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,886	23	61.0	3.9	31.8	2.3	D
2	1,897	13	56.2	4.4	35.3	2.9	E
1	1,732	25	54.4	5.1	33.7	3.6	D
Area	5,515	61	57.3	4.4	33.5	2.8	D
Total	5,515	61	57.3	4.4	33.5	2.8	D

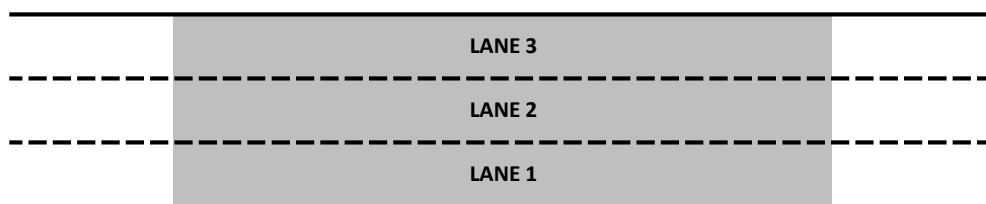
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,430	5,515	61	85.8%	1,096
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 31 - SB I-15: Indian Truck Trail Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,919	20	58.6	5.6	34.1	3.3	D
2	1,883	17	53.9	6.4	33.7	4.2	D
1	1,716	22	51.1	5.2	37.4	3.5	E
Area	3,599	39	52.4	5.7	35.5	3.8	E
Total	5,518	59	54.6	5.6	34.9	3.6	D

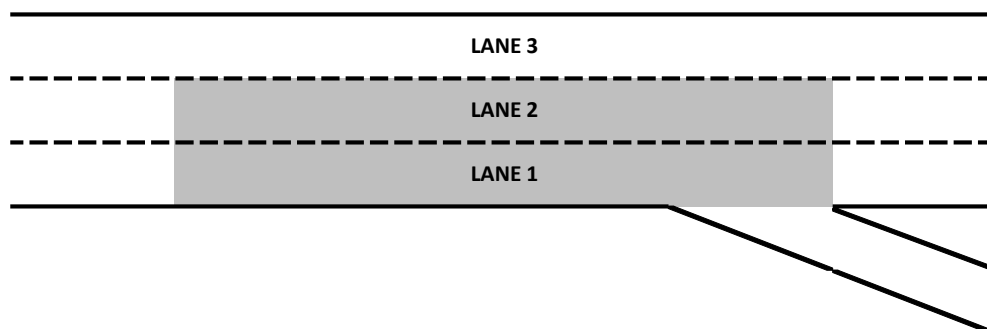
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	569	49
Total	569	49

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,430	5,518	59	85.8%	1,499
On-ramp					
Off-ramp	640	569	49	88.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 32 - SB I-15: Indian Truck Trail Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,827	21	63.0	0.4	30.1	0.6	D
2	1,650	21	60.6	0.9	28.0	0.8	D
1	1,461	28	59.6	1.1	25.1	1.0	C
Area	4,938	70	61.2	0.6	27.7	0.5	D
Total	4,938	70	61.2	0.6	27.7	0.5	D

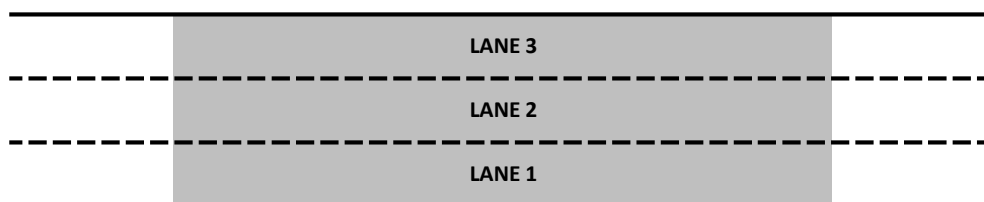
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,790	4,938	70	85.3%	3,127
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 33 - SB I-15: Indian Truck Trail On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,808	26	61.5	5.5	30.3	2.1	D
3	1,646	18	58.5	4.5	29.6	2.5	D
2	1,471	36	58.3	4.0	27.5	2.7	D
1	187	17	29.7	0.6	0.5	0.0	A
Area	3,304	71	58.6	4.3	22.5	2.0	C
Total	5,112	97	59.7	4.7	24.7	2.0	C

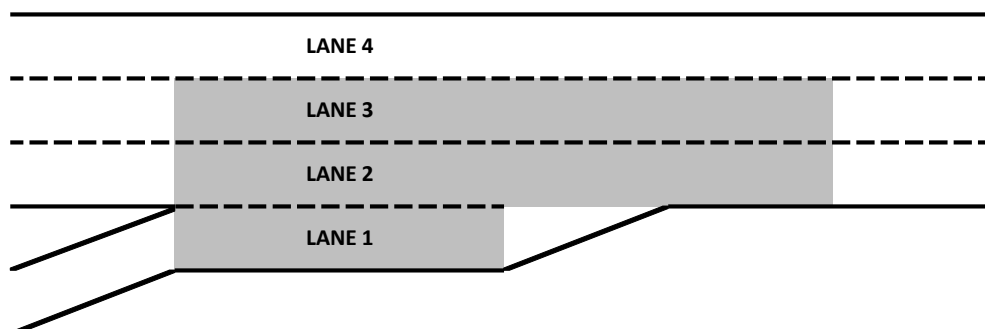
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	187	17
Total	187	17

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,790	4,925	80	85.1%	1,501
On-ramp	190	187	17	98.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 60 - SB I-15: Indian Truck Trail On-ramp to Horsethief Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,767	30	59.3	2.0	31.1	1.5	D
2	1,737	27	55.8	2.5	31.1	1.0	D
1	1,595	37	55.7	2.7	29.3	1.3	D
Area	5,099	94	57.0	2.3	30.5	1.1	D
Total	5,099	94	57.0	2.3	30.5	1.1	D

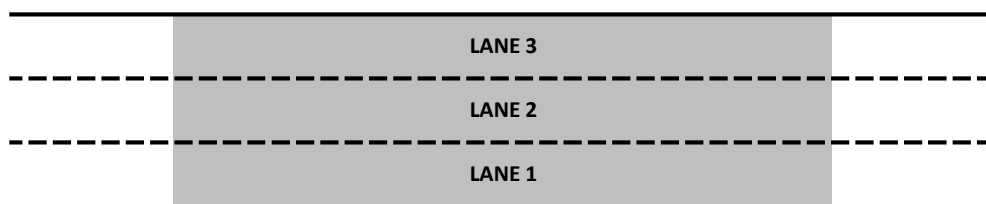
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,980	5,099	94	85.3%	2,578
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 61 - SB I-15: Horsethief Rd Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,791	30	60.9	4.3	30.2	3.2	D
2	1,732	36	56.3	6.6	29.3	3.5	D
1	1,571	31	54.7	5.7	31.4	3.0	D
Area	3,303	67	55.5	6.1	30.3	3.2	D
Total	5,094	97	57.4	5.4	30.2	3.1	D

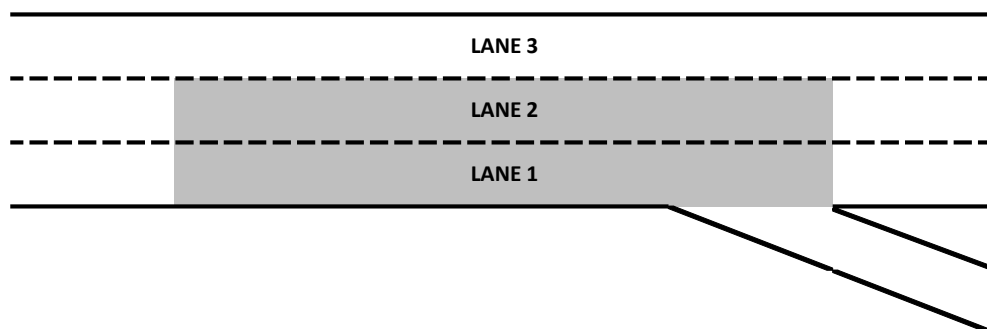
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	354	39
Total	354	39

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,980	5,094	97	85.2%	1,448
On-ramp					
Off-ramp	370	354	39	95.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 62 - SB I-15: Horsethief Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,732	33	62.6	1.3	29.4	2.6	D
2	1,597	30	60.1	1.4	27.9	2.4	D
1	1,386	21	58.7	1.4	24.8	2.0	C
Area	4,716	83	60.6	1.3	27.3	2.3	D
Total	4,716	83	60.6	1.3	27.3	2.3	D

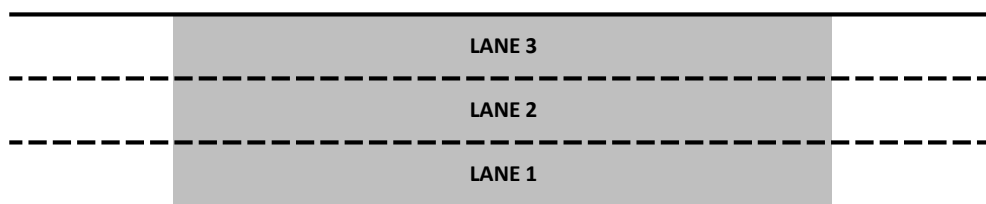
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,610	4,716	83	84.1%	2,793
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 63 - SB I-15: Horsethief Rd On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,710	35	53.8	10.1	36.3	8.1	E
3	1,589	27	52.0	9.0	37.8	7.9	E
2	1,409	26	49.4	9.3	35.9	8.8	E
1	705	71	25.9	3.1	2.0	0.7	A
Area	3,703	124	50.8	9.4	29.9	6.8	D
Total	5,413	160	51.8	9.6	31.7	7.2	D

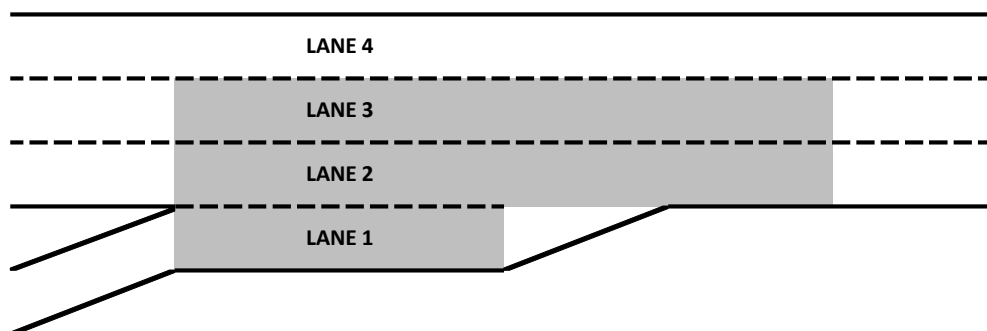
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	705	71
Total	705	71

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,610	4,708	89	83.9%	1,497
On-ramp	710	705	71	99.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 34 - SB I-15: Horsethief Rd On-ramp to Lake St Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,912	26	57.3	3.3	35.3	2.9	E
2	1,820	30	55.3	3.2	34.9	3.0	D
1	1,677	39	54.4	3.2	31.9	3.8	D
Area	5,409	95	55.7	3.2	34.0	3.2	D
Total	5,409	95	55.7	3.2	34.0	3.2	D

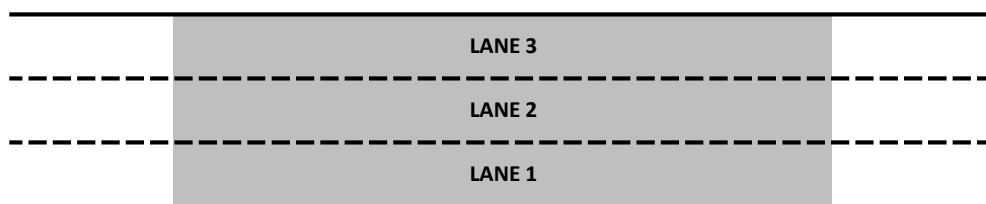
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,320	5,409	95	85.6%	2,230
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 54 - SB I-15: Horsethief Rd On-ramp to Lake St Off-ramp (EL Access)

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,948	31	45.5	0.1	13.6	0.5	B
4	1,791	29	45.6	0.1	13.2	0.4	B
3	1,670	33	61.7	1.1	33.2	1.3	D
2	1,347	67	58.4	0.9	33.4	1.6	D
1	1,452	69	57.0	1.1	32.0	2.2	D
Area	8,208	229	61.1	0.8	28.7	1.3	D
Total	8,208	229	61.1	0.8	28.7	1.3	D

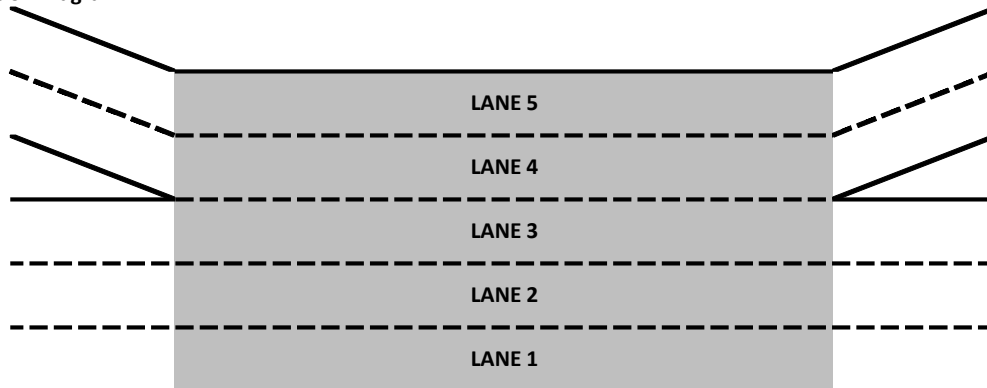
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,347	67
1	1,452	69
Total	2,799	114

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	1,344	65
1	1,306	62
Total	2,649	119

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,320	5,409	114	85.6%	2,955
On-ramp	3,060	2,799	114	91.5%	
Off-ramp	2,880	2,649	119	92.0%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 35 - SB I-15: Lake St Off-ramp

Segment Type - Diverge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,872	34	59.4	5.2	34.1	3.6	D
2	1,811	30	54.1	7.7	33.5	5.1	D
1	1,845	35	52.7	4.9	37.3	3.7	E
Area	3,656	65	53.4	6.2	35.4	4.3	E
Total	5,528	99	55.5	5.8	34.8	4.0	D

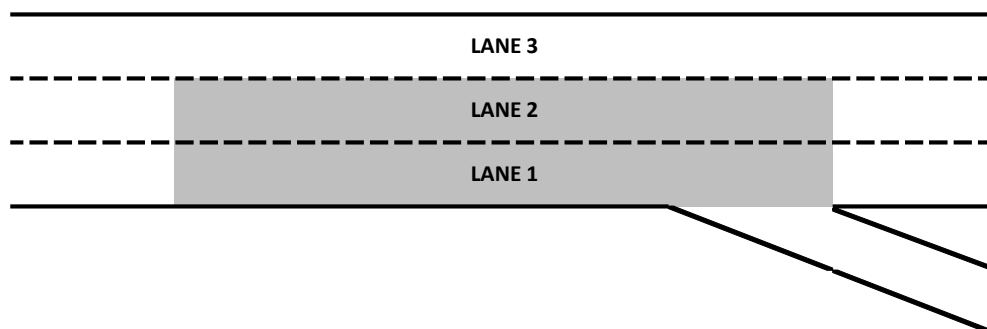
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	656	48
Total	656	48

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,500	5,528	99	85.1%	1,501
On-ramp					
Off-ramp	750	656	48	87.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 36 - SB I-15: Lake St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,794	40	62.7	1.0	30.3	0.6	D
2	1,616	35	60.7	1.1	27.5	0.9	D
1	1,439	22	60.2	1.0	25.3	1.3	C
Area	4,849	98	61.3	0.8	27.7	0.9	D
Total	4,849	98	61.3	0.8	27.7	0.9	D

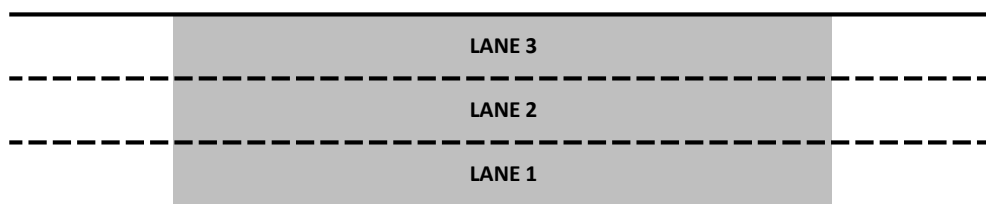
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,750	4,849	98	84.3%	3,287
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 37 - SB I-15: Lake St On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,762	38	59.9	6.1	31.5	3.7	D
3	1,622	28	57.4	5.6	31.3	3.3	D
2	1,455	30	56.4	5.2	30.2	4.3	D
1	285	38	38.5	1.6	0.6	0.1	A
Area	3,362	97	57.5	5.1	23.5	2.9	C
Total	5,124	135	58.4	5.4	25.7	3.1	C

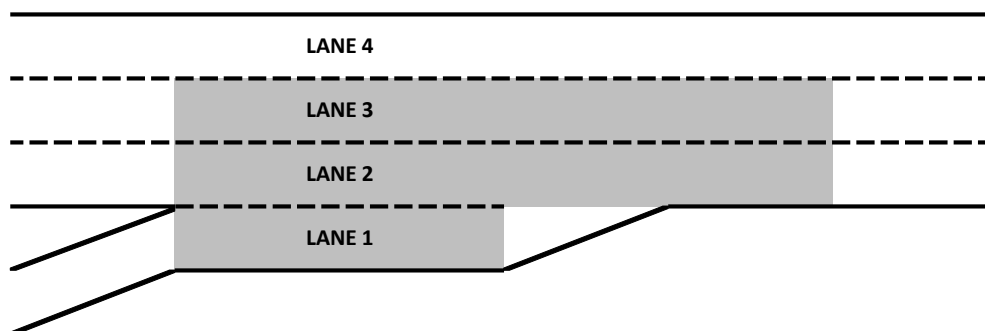
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	285	38
Total	285	38

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	5,750	4,839	96	84.2%	1,500
On-ramp	290	285	38	98.4%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 38 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	1,834	24	56.2	12.2	36.0	11.8	E
2	1,713	22	53.9	11.4	34.4	11.0	D
1	1,547	24	51.8	12.8	33.1	13.6	D
Area	5,094	70	54.1	12.2	34.4	12.0	D
Total	5,094	70	54.1	12.2	34.4	12.0	D

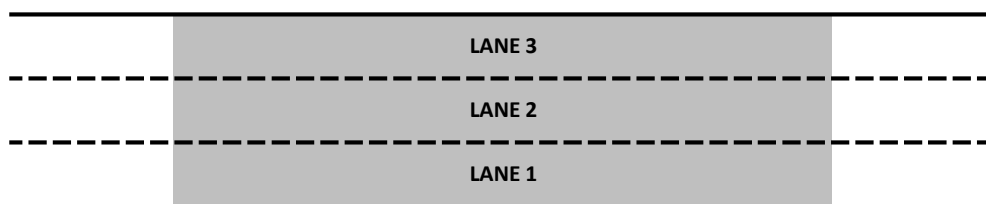
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,040	5,094	70	84.3%	5,941
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 55 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp (EL Egress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,853	27	54.4	18.1	35.9	25.7	E
3	1,690	27	51.4	19.2	43.3	27.6	E
2	1,537	28	46.3	19.2	43.2	29.8	E
1	1,227	80	44.0	19.8	44.2	35.3	E
Area	6,307	161	49.3	18.7	40.0	26.2	E
Total	6,307	161	49.3	18.7	40.0	26.2	E

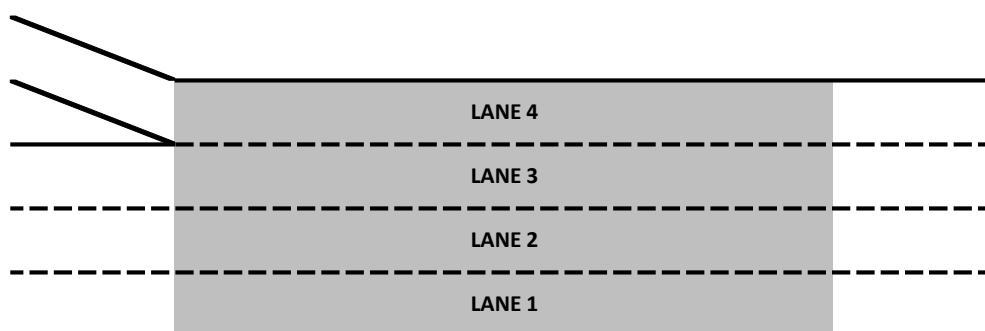
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,227	80
Total	1,227	80

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,040	5,080	81	84.1%	1,500
On-ramp	1,340	1,227	80	91.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 56 - SB I-15: Lake Street On-ramp to Nichols Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,638	26	34.3	10.9	58.4	22.8	F
3	1,620	21	30.3	10.4	62.0	22.9	F
2	1,570	39	24.9	10.1	67.1	25.0	F
1	1,395	39	21.4	9.2	71.3	28.2	F
Area	6,222	124	28.4	9.8	61.1	21.1	F
Total	6,222	124	28.4	9.8	61.1	21.1	F

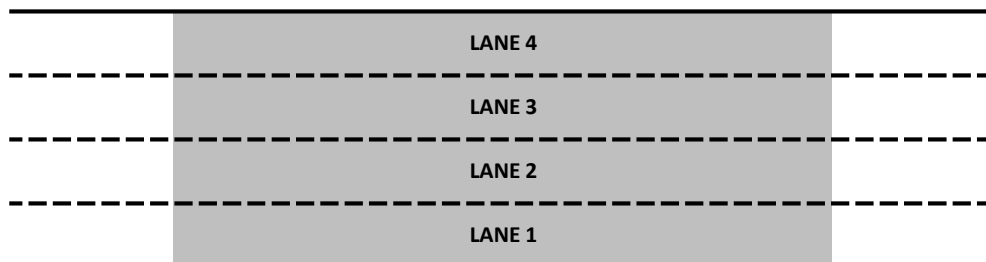
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,380	6,222	124	84.3%	1,308
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 39 - SB I-15: Nichols Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,692	28	24.0	3.1	81.6	10.9	F
3	1,647	22	20.8	1.8	86.2	9.0	F
2	1,505	26	13.0	2.9	93.7	14.0	F
1	1,345	30	12.0	2.2	95.6	12.0	F
Area	2,850	57	12.5	2.5	94.4	12.8	F
Total	6,189	107	18.6	2.2	81.6	9.1	F

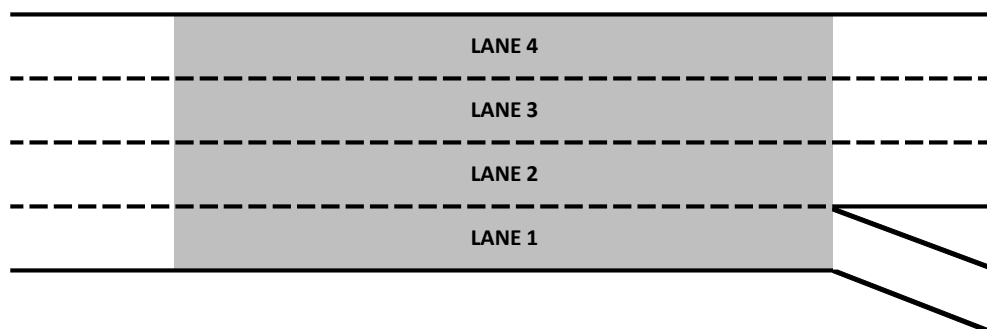
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	447	40
Total	447	40

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,380	6,189	107	83.9%	1,499
On-ramp					
Off-ramp	510	447	40	87.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 40 - SB I-15: Nichols Rd Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	2,071	34	22.1	1.1	88.6	4.0	F
2	1,883	34	20.9	1.0	87.8	2.8	F
1	1,641	43	21.7	1.9	77.3	3.6	F
Area	5,595	110	21.6	1.0	84.4	3.2	F
Total	5,595	110	21.6	1.0	84.4	3.2	F

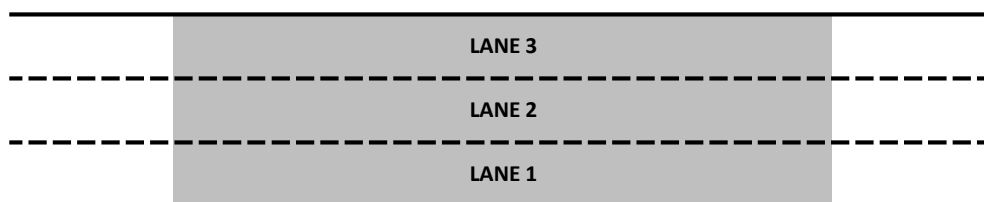
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,870	5,595	110	81.4%	3,058
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 41 - SB I-15: Nichols Rd On-ramp to Central Ave (SR-74) Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5			4.4	0.5	1.6	0.3	A
4	2,086	38	21.4	1.4	90.6	3.2	F
3	1,857	41	17.6	1.6	97.0	3.8	F
2	1,600	50	16.3	1.5	92.9	4.3	F
1	339	50	47.7	2.0	13.1	1.2	B
Area	5,882	179	21.7	1.2	66.1	1.2	F
Total	5,882	179	22.4	1.2	64.6	1.2	F

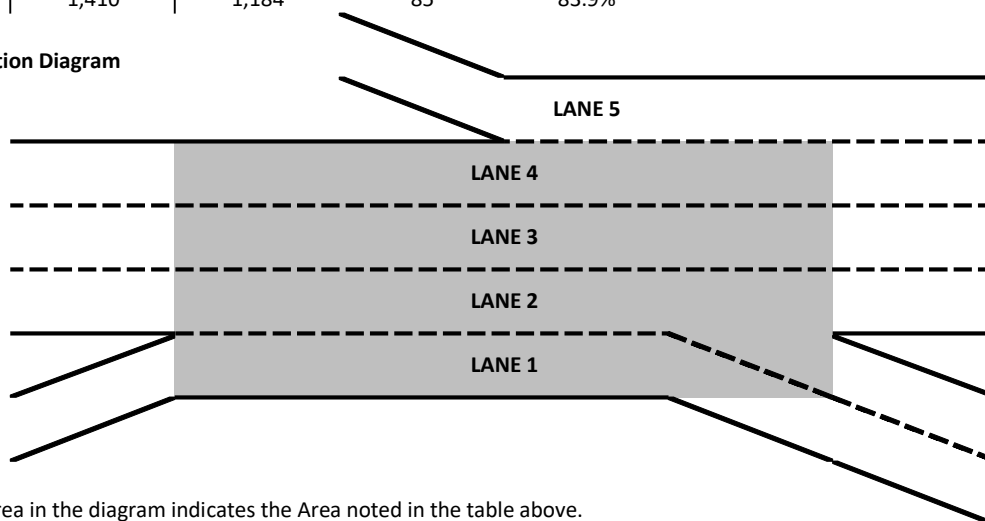
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	339	50
Total	339	50

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2	122	53
1	1,061	77
Total	1,184	85

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	6,870	5,543	129	80.7%	5,329
On-ramp	340	339	50	99.7%	
Off-ramp	1,410	1,184	85	83.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 57 - SB I-15: Central Ave (SR-74) (EL Egress)

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,822	35	33.3	2.8	62.3	4.2	F
4	1,453	50	16.1	1.5	104.6	4.5	F
3	1,399	31	12.2	1.1	112.1	4.0	F
2	1,021	31	13.2	1.0	98.8	3.9	F
1	1,433	80	10.9	0.5	4.3	0.2	A
Area	7,129	227	20.0	1.1	79.5	2.3	F
Total	7,129	227	20.0	1.1	79.5	2.3	F

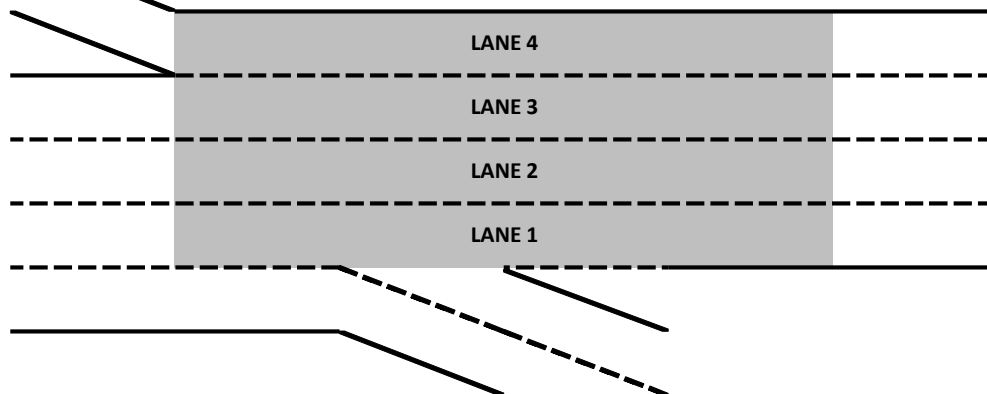
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,433	80
Total	1,433	80

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,210	5,696	147	79.0%	1,798
On-ramp	1,540	1,433	80	93.1%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 44 - SB I-15: Central Ave (SR-74) Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	1,819	19	19.4	1.1	31.8	1.0	D
3	1,538	45	13.2	1.2	37.9	1.5	E
2	1,242	29	10.6	0.7	39.2	1.3	E
1	1,237	22	12.8	0.7	33.4	1.4	D
Area	4,016	96	12.3	0.8	36.5	0.9	E
Total	5,835	115	14.5	0.8	33.7	0.8	D

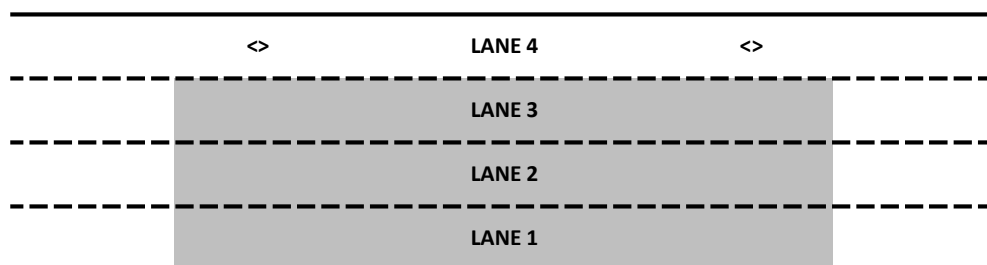
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,340	5,835	115	79.5%	1,117
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 45 - SB I-15: Central Ave (SR-74) On-ramp to Main St Off-ramp

Segment Type - Weave

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	1,825	19	49.2	2.1	19.5	1.8	C
4	1,534	47	23.3	1.0	91.0	2.2	F
3	1,235	29	22.2	0.9	89.0	2.2	F
2	1,239	22	20.9	0.6	87.2	1.8	F
1	1,479	55	31.8	1.8	20.4	0.9	C
Area	5,487	154	23.9	0.9	73.7	1.8	F
Total	7,313	173	25.6	0.8	60.4	1.3	F

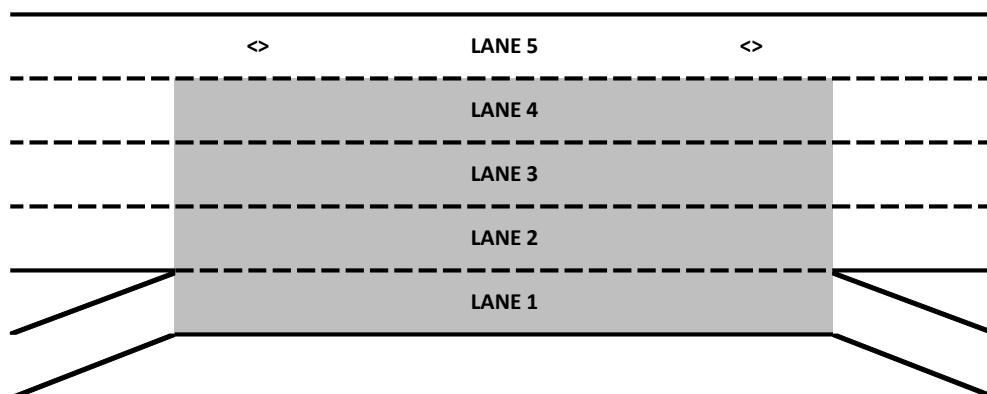
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,479	55
Total	1,479	55

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	598	54
Total	598	54

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	7,340	5,834	118	79.5%	4,888
On-ramp	1,430	1,479	55	103.4%	
Off-ramp	700	598	54	85.5%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 48 - SB I-15: Main St Off-ramp to On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	417	16	68.6	0.3	4.3	0.1	A
3	2,197	22	28.3	1.7	77.5	3.3	F
2	2,087	12	27.5	2.2	74.8	4.5	F
1	1,972	18	26.8	1.8	73.2	3.7	F
Area	6,256	52	27.6	1.8	75.1	3.7	F
Total	6,673	68	29.5	1.7	55.2	2.3	F

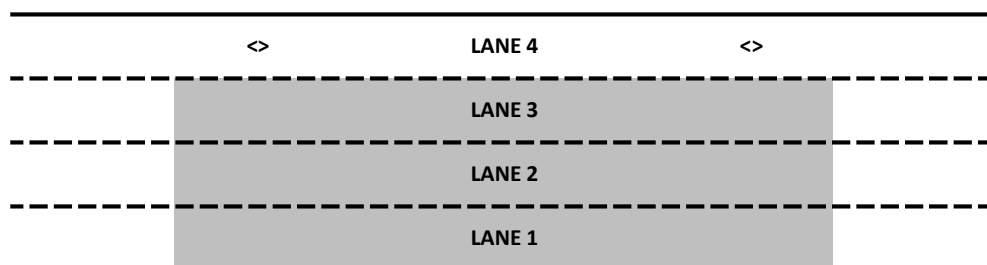
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	8,070	6,673	68	82.7%	3,010
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 49 - SB I-15: Main St On-ramp

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5	432	15	68.1	0.6	4.5	0.2	A
4	2,193	28	33.9	1.9	67.7	3.1	F
3	2,053	20	31.9	1.8	70.3	3.0	F
2	1,987	18	30.4	1.6	68.2	2.9	F
1	425	32	18.7	1.2	3.1	0.5	A
Area	4,466	70	30.5	1.8	56.6	2.4	F
Total	7,091	113	33.4	1.7	46.1	1.7	F

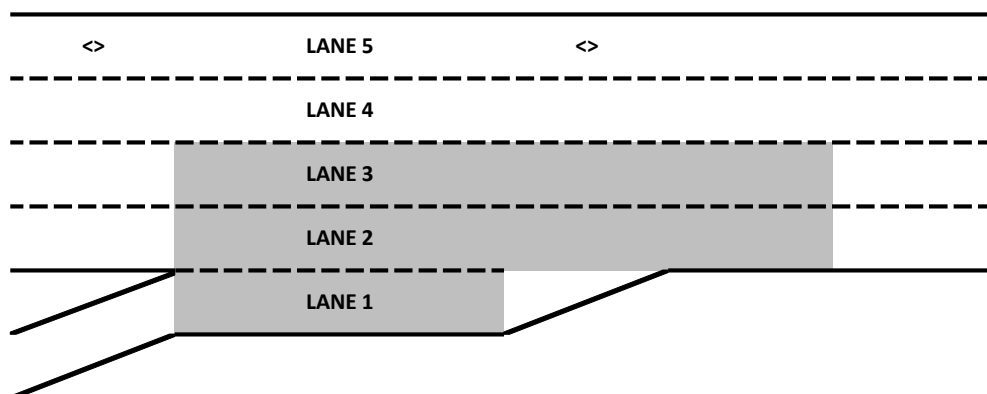
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	425	32
Total	425	32

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	8,070	6,666	81	82.6%	1,500
On-ramp	420	425	32	101.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 50 - SB I-15: Main St On-ramp to Diamond Dr/Railroad Canyon Rd Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4	475	15	68.7	0.5	6.5	0.9	A
3	2,372	12	60.2	2.9	39.8	2.3	E
2	2,189	17	57.2	2.5	38.9	2.6	E
1	2,060	18	55.7	2.7	37.7	2.6	E
Area	6,622	47	57.8	2.7	38.7	2.5	E
Total	7,096	62	58.5	2.4	30.6	1.9	D

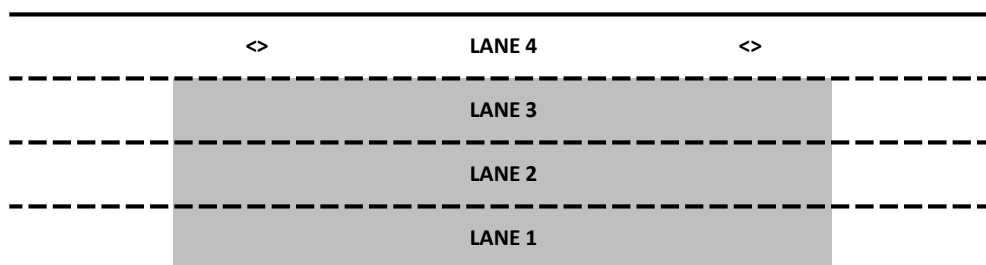
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	8,490	7,096	62	83.6%	3,090
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

VISSIM Post-Processor
Average Results from 5 Runs
Freeway Operations Summary

I-15 Express Lanes Southern Extension
Design Year Plus Project
PM Peak Hour

Location		Facility Type	Mainline Volume (vph)			On-ramp Volume (vph)			Off-ramp Volume (vph)			Speed (mph)		Density (vplpm)		LOS
			Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	%	Avg.	St. Dev.	Avg.	St. Dev.	
200	SB I-15 EL: WB SR-91 Off-ramp	Basic	2,341	46	101.4%				620	54	101.6%	64.5	4.9	19.0	1.2	C
201	SB I-15 EL: EB SR-91 On-ramp	Basic	1,729	26	101.7%	1,217	52	100.6%				68.0	0.1	22.2	0.5	C
202	SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia	Basic	2,946	34	101.3%							67.7	0.1	22.4	0.5	C
203	SB I-15 EL: EL Access S of Magnolia to EL Access at El Cerrito	Basic	3,067	42	103.3%							63.5	1.2	23.1	0.9	C
204	SB I-15 EL: EL Access at El Cerrito Rd to EL Access S of Cajalco	Basic	2,835	37	100.2%							61.0	2.8	23.1	0.6	C
205	SB I-15 EL: EL Access S of Cajalco to EL Access S of Temescal Canyon	Basic	2,812	45	94.1%							66.4	1.2	19.5	0.6	C
206	SB I-15 EL: EL Access S of Temescal Canyon to EL Access S of Indian Truck	Basic	2,809	41	91.8%							67.1	0.2	21.7	0.6	C
207	SB I-15 EL: EL Access S of Indian Truck to EL Egress S of Lake	Basic	2,651	42	92.1%							67.1	0.2	20.4	0.8	C
208	SB I-15 EL: EL Egress S of Lake	Basic	2,648	52	91.9%				1,227	79	91.6%	62.9	0.6	21.3	0.7	C
308	NB I-15 EL: EL Ingress N of Nichols	Basic	1,000	26	58.8%	247	59	75.0%				67.9	0.9	9.8	0.6	A
309	NB I-15 EL: EL Ingress N of Nichols to EL Access N of Lake	Basic	1,247	37	61.4%							67.9	0.4	9.7	0.6	A
310	NB I-15 EL: EL Access N of Lake to EL Access N of Indian Truck	Basic	1,360	40	65.1%							67.8	0.3	10.5	0.8	A
311	NB I-15 EL: EL Access N of Indian Truck to EL Ingress at Cajalco	Basic	1,323	34	66.5%							65.5	1.1	8.4	0.3	A
314	NB I-15 EL: EL Ingress at Cajalco	Merge	1,321	40	66.4%	186	26	42.3%				67.9	0.3	8.7	0.8	A
312	NB I-15 EL: EL Ingress at Cajalco to EL Access at El Cerrito	Basic	1,497	47	61.6%							68.1	0.3	11.7	1.0	B
302	NB I-15 EL: EL Access at El Cerrito to EL Access N of Ontario	Basic	1,653	44	54.5%							67.6	0.5	12.5	0.7	B
303	NB I-15 EL: EL Access N of Ontario to WB SR-91 Off-ramp	Basic	2,046	52	62.2%							65.2	1.6	16.0	0.9	B
304	NB I-15 EL: WB SR-91 Off-ramp	Basic	2,048	61	62.3%				792	54	48.9%	66.8	0.9	15.9	0.9	B
306	NB I-15 EL: EB SR-91 On-ramp	Basic	1,254	36	75.1%	568	33	93.2%				68.5	0.7	13.7	0.8	B

Notes: Average density reported for the analysis area only: for example, within the ramp influence area.

Mainline volume is the upstream served volume for all lanes. The percentage represents the proportion of the demand served; vehicles in queue would therefore not be served.

Location 200 - SB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Mainline Volume (vph)		Speed (mph)		Density (veh/In-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,178	25	64.4	3.3	18.3	0.9	C
1	1,163	20	64.6	6.5	19.6	1.6	C
Area	2,341	46	64.5	4.9	19.0	1.2	C
Total	2,341	46	64.5	4.9	19.0	1.2	C

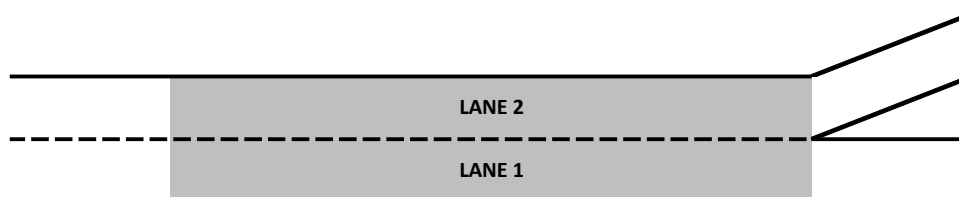
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	620	54
Total	620	54

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,310	2,341	46	101.4%	1,496
On-ramp					
Off-ramp	610	620	54	101.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 201 - SB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,729	26	68.2	0.1	20.5	0.6	C
1	1,217	52	67.9	0.2	23.9	1.0	C
Area	2,946	78	68.0	0.1	22.2	0.5	C
Total	2,946	78	68.0	0.1	22.2	0.5	C

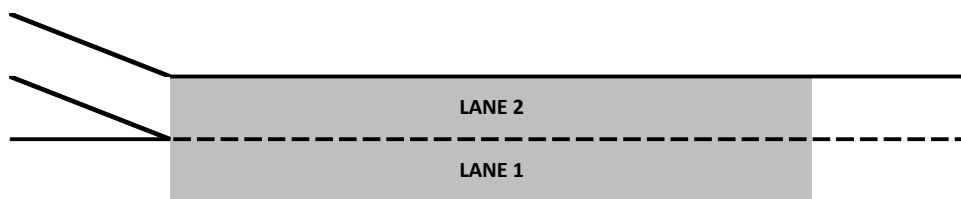
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,217	52
Total	1,217	52

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,700	1,729	26	101.7%	1,500
On-ramp	1,210	1,217	52	100.6%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 202 - SB I-15 EL: EB SR-91 On-ramp to EL Access S of Magnolia

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,412	18	68.0	0.1	21.6	0.5	C
1	1,534	16	67.5	0.1	23.2	0.8	C
Area	2,946	34	67.7	0.1	22.4	0.5	C
Total	2,946	34	67.7	0.1	22.4	0.5	C

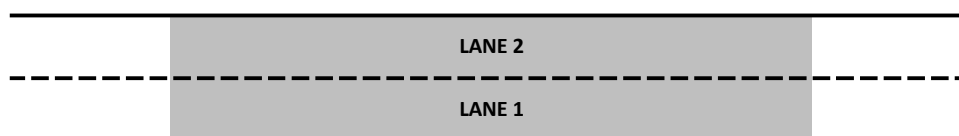
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,910	2,946	34	101.3%	2,496
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 203 - SB I-15 EL: EL Access S of Magnolia to EL Access at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,576	17	64.2	1.4	25.1	0.7	C
1	1,491	24	62.8	1.0	21.1	1.4	C
Area	3,067	42	63.5	1.2	23.1	0.9	C
Total	3,067	42	63.5	1.2	23.1	0.9	C

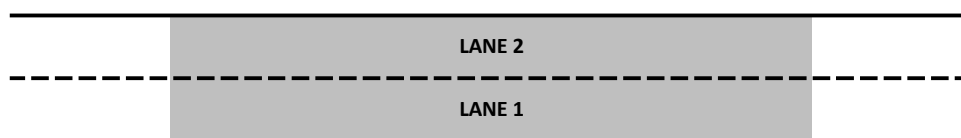
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,970	3,067	42	103.3%	7,133
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 204 - SB I-15 EL: EL Access at El Cerrito Rd to EL Access S of Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,461	18	60.8	2.8	25.8	1.3	C
1	1,374	19	61.3	2.8	20.4	0.3	C
Area	2,835	37	61.0	2.8	23.1	0.6	C
Total	2,835	37	61.0	2.8	23.1	0.6	C

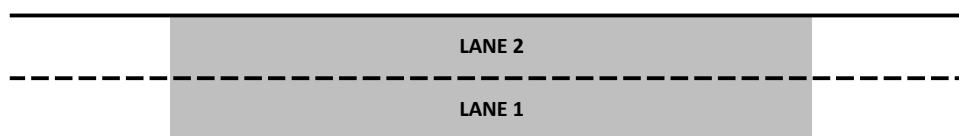
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,830	2,835	37	100.2%	5,784
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 205 - SB I-15 EL: EL Access S of Cajalco to EL Access S of Temescal Canyon

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,411	26	66.6	1.1	19.8	0.8	C
1	1,401	19	66.2	1.2	19.1	1.2	C
Area	2,812	45	66.4	1.2	19.5	0.6	C
Total	2,812	45	66.4	1.2	19.5	0.6	C

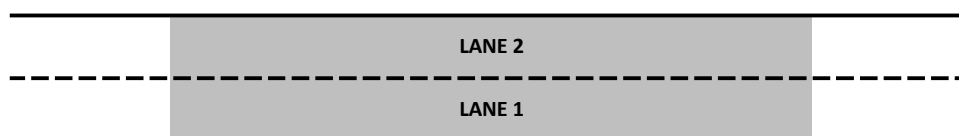
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,990	2,812	45	94.1%	23,650
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 206 - SB I-15 EL: EL Access S of Temescal Canyon to EL Access S of Indian Truck

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,420	22	67.0	0.2	21.9	0.4	C
1	1,389	19	67.1	0.2	21.6	0.8	C
Area	2,809	41	67.1	0.2	21.7	0.6	C
Total	2,809	41	67.1	0.2	21.7	0.6	C

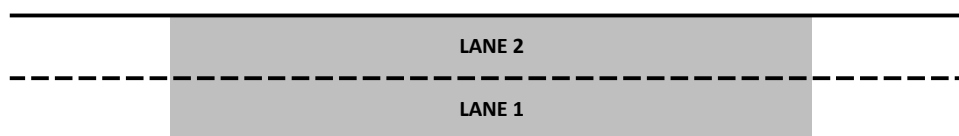
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,060	2,809	41	91.8%	18,779
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 207 - SB I-15 EL: EL Access S of Indian Truck to EL Egress S of Lake

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,333	22	66.9	0.2	20.5	0.8	C
1	1,318	20	67.2	0.2	20.3	1.0	C
Area	2,651	42	67.1	0.2	20.4	0.8	C
Total	2,651	42	67.1	0.2	20.4	0.8	C

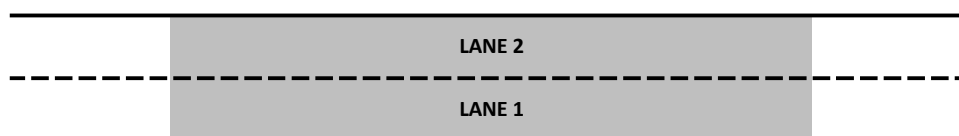
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,880	2,651	42	92.1%	10,977
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 208 - SB I-15 EL: EL Egress S of Lake

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,413	27	60.7	0.9	26.4	1.4	D
1	1,235	25	66.2	1.1	16.4	1.3	B
Area	2,648	52	62.9	0.6	21.3	0.7	C
Total	2,648	52	62.9	0.6	21.3	0.7	C

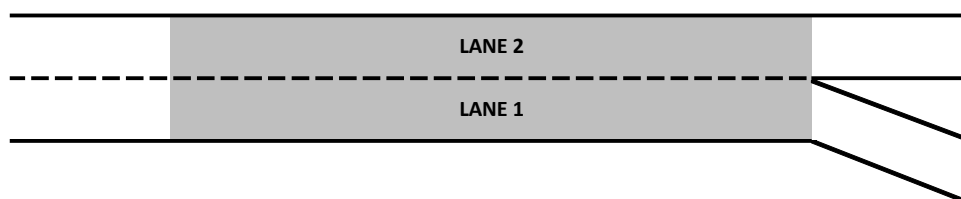
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	1,227	79
Total	1,227	79

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,880	2,648	52	91.9%	1,500
On-ramp					
Off-ramp	1,340	1,227	79	91.6%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 308 - NB I-15 EL: EL Ingress N of Nichols

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,000	26	66.7	1.1	11.1	0.8	B
1	247	59	69.5	0.9	8.5	0.9	A
Area	1,247	85	67.9	0.9	9.8	0.6	A
Total	1,247	85	67.9	0.9	9.8	0.6	A

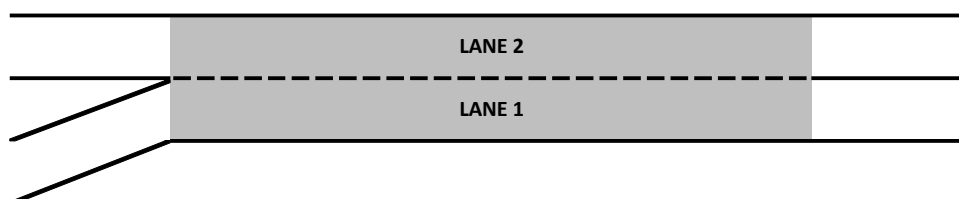
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	247	59
Total	247	59

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,700	1,000	26	58.8%	1,498
On-ramp	330	247	59	75.0%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 309 - NB I-15 EL: EL Ingress N of Nichols to EL Access N of Lake

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	664	22	66.6	0.6	9.4	0.7	A
1	583	15	69.0	0.4	10.0	0.7	A
Area	1,247	37	67.9	0.4	9.7	0.6	A
Total	1,247	37	67.9	0.4	9.7	0.6	A

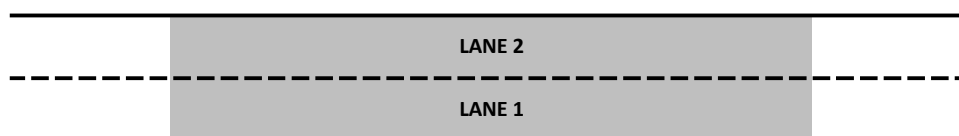
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,030	1,247	37	61.4%	11,215
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 310 - NB I-15 EL: EL Access N of Lake to EL Access N of Indian Truck

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	690	22	67.2	0.4	10.4	0.9	A
1	669	18	68.4	0.3	10.5	0.8	A
Area	1,360	40	67.8	0.3	10.5	0.8	A
Total	1,360	40	67.8	0.3	10.5	0.8	A

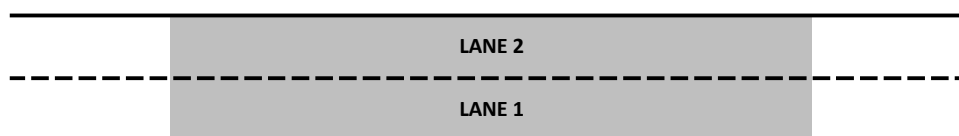
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,090	1,360	40	65.1%	18,145
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 311 - NB I-15 EL: EL Access N of Indian Truck to EL Ingress at Cajalco

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6	680	19					
5	643	14					
4							
3							
2			65.6	0.9	11.2	0.3	B
1			65.2	1.5	7.7	0.5	A
Area	0	0	65.8	1.0	8.4	0.3	A
Total	1,323	34	65.5	1.1	9.4	0.3	A

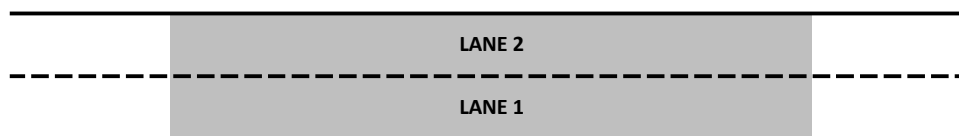
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,990	1,323	34	66.5%	26,270
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 314 - NB I-15 EL: EL Ingress at Cajalco

Segment Type - Merge

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3	648	20	67.5	0.4	9.5	1.0	A
2	673	20	68.5	0.3	9.9	0.8	A
1	186	26	22.2	0.2	0.9	0.1	A
Area	1,507	65	67.9	0.3	8.7	0.8	A
Total	1,507	65	67.9	0.3	8.7	0.8	A

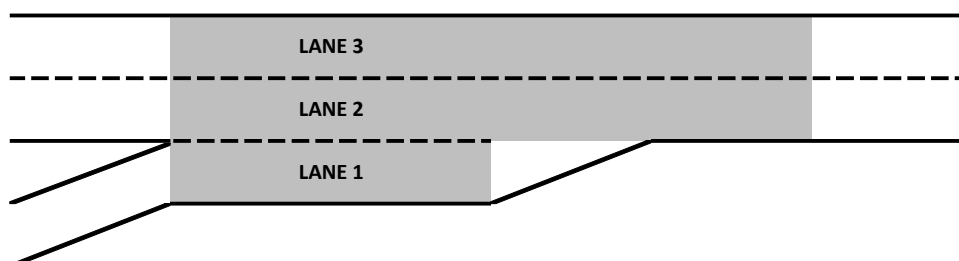
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	186	26
Total	186	26

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,990	1,321	40	66.4%	1,594
On-ramp	440	186	26	42.3%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 312 - NB I-15 EL: EL Ingress at Cajalco to EL Access at El Cerrito

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	707	22	67.7	0.5	11.2	1.1	B
1	789	25	68.5	0.2	12.2	0.9	B
Area	1,497	47	68.1	0.3	11.7	1.0	B
Total	1,497	47	68.1	0.3	11.7	1.0	B

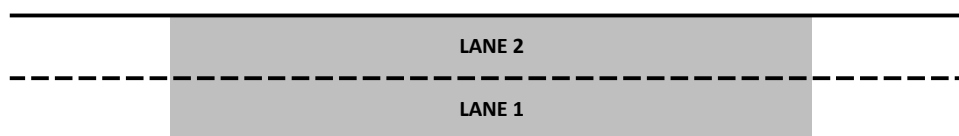
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	2,430	1,497	47	61.6%	4,125
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 302 - NB I-15 EL: EL Access at El Cerrito to EL Access N of Ontario

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	855	22	67.4	0.6	13.2	0.8	B
1	798	23	67.8	0.4	11.8	1.2	B
Area	1,653	44	67.6	0.5	12.5	0.7	B
Total	1,653	44	67.6	0.5	12.5	0.7	B

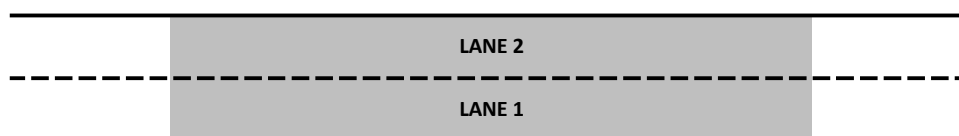
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,030	1,653	44	54.5%	6,919
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 303 - NB I-15 EL: EL Access N of Ontario to WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,093	26	65.4	1.4	17.6	1.1	B
1	952	26	64.9	2.0	14.3	0.7	B
Area	2,046	52	65.2	1.6	16.0	0.9	B
Total	2,046	52	65.2	1.6	16.0	0.9	B

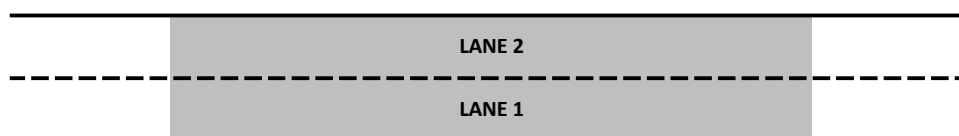
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,290	2,046	52	62.2%	3,113
On-ramp					
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 304 - NB I-15 EL: WB SR-91 Off-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	805	22	67.3	0.9	12.1	0.6	B
1	1,243	39	66.4	0.9	19.8	1.5	C
Area	2,048	61	66.8	0.9	15.9	0.9	B
Total	2,048	61	66.8	0.9	15.9	0.9	B

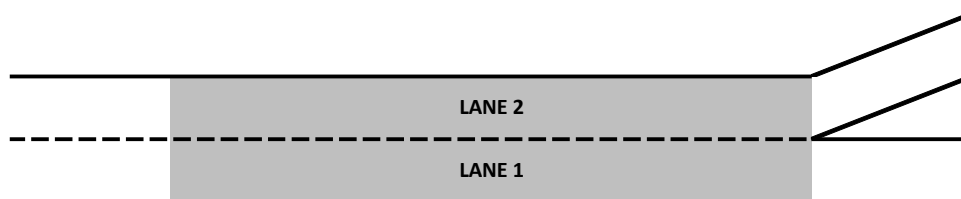
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	792	54
Total	792	54

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	3,290	2,048	61	62.3%	1,501
On-ramp					
Off-ramp	1,620	792	54	48.9%	

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Location 306 - NB I-15 EL: EB SR-91 On-ramp

Segment Type - Basic

Lane	Volume (vph)		Speed (mph)		Density (veh/ln-mi)		LOS
	Average	Std. Dev.	Average	Std. Dev.	Average	Std. Dev.	
12							
11							
10							
9							
8							
7							
6							
5							
4							
3							
2	1,254	36	69.5	0.6	12.1	0.9	B
1	568	33	67.8	0.8	15.3	0.9	B
Area	1,822	69	68.5	0.7	13.7	0.8	B
Total	1,822	69	68.5	0.7	13.7	0.8	B

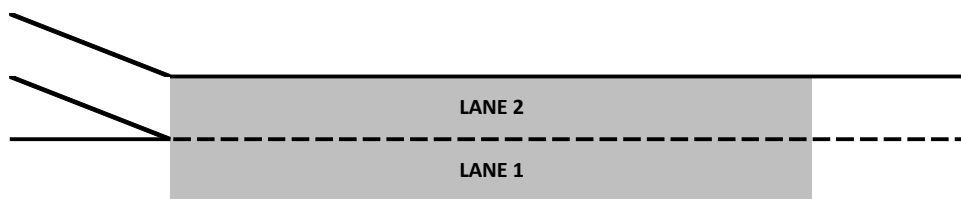
Lane	On-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1	568	33
Total	568	33

Lane	Off-ramp Volume (vph)	
	Average	Std. Dev.
4		
3		
2		
1		
Total		

Volume Summary

	Demand (vph)	Served (vph)			Segment Length (ft)
		Average	Std. Dev.	% Served	
Mainline	1,670	1,254	36	75.1%	1,498
On-ramp	610	568	33	93.2%	
Off-ramp					

Lane Configuration Diagram



Note: Shaded area in the diagram indicates the Area noted in the table above.

Appendix D

Caltrans VMT Analysis Screening Form

VMT Analysis Screening Form

Dist./Co./RTE.	08/RIV/15
PM/PM	22.3/36.8
E.A.	08-0J082
Project Sponsor	Riverside County Transportation Commission
Project Title	Interstate 15 Express Lanes Project Southern Extension (I-15 ELPSE)
Project Description	Extend the Interstate 15 Express Lanes from State Route 74 to Cajalco Road

Project Milestones

- ☒ Project was initiated on or after December 28, 2018. Project Initiation Date: October 11, 2019
- ☒ Project has/will achieve Caltrans Milestone 020 "Begin Environmental" before September 15, 2020.
Milestone 020 Date: July 3, 2019

Project Description

Extend the Interstate 15 Express Lanes an additional 14.5 miles south by adding two tolled express lanes in both directions within the median. The proposed new segment would extend from State Route 74 (Central Avenue) in Lake Elsinore to Cajalco Road in Corona.

Purpose & Need

- Improve traffic operations and travel times for the corridor
- Expand travel choice through carpooling and transit with the addition of managed lanes
- Increase travel time reliability and mobility options
- Accommodate long-term congestion management of the corridor
- Provide a cost-effective mobility solution for the corridor
- Maintain continuity with the regional express lanes network

Technical Studies and Environmental Impact Report

Traffic studies for the project are almost complete and includes a Traffic Demand Management (TDM) based approach. Currently, the methodology to assess induced travel is a work in progress by Caltrans. Technical discussions are ongoing with guidance not yet finalized on how to reconcile the various potential approaches for modeling VMT. For induced travel analysis, Caltrans is considering the use of the National Center Sustainable Transportation (NCST) calculator and TDM with the use of elasticities. The factors used in the NCST and elasticities are not available for high occupancy toll or express lanes.

Milestone 020 for the project was achieved prior to September 15, 2020. Per the timing memo, projects that achieve Milestone 020 on or after this date require VMT analysis. Caltrans implementation of SB 743 for projects on the State Highway System is a work in progress; specifically, guidance documents have not been published. In the interim, the project sponsor and Caltrans agree that the current VMT analysis methodology used in the technical studies and Environmental Impact Report to assess GHG emissions, air quality emissions, energy impacts and noise impacts will be implemented. The technical studies and Environmental Impact Report will not analyze transportation impacts or significance on vehicle delay or level of service. Transportation impacts, including a significance determination, will be assessed using VMT. The VMT significance determination will be based on substantial evidence, consistent with established Caltrans practice and CEQA.

Shawn Oriaz

Environmental Branch Chief

August 11, 2020

Date

Appendix E

Design Variation Matrices & Speed Contour Plots

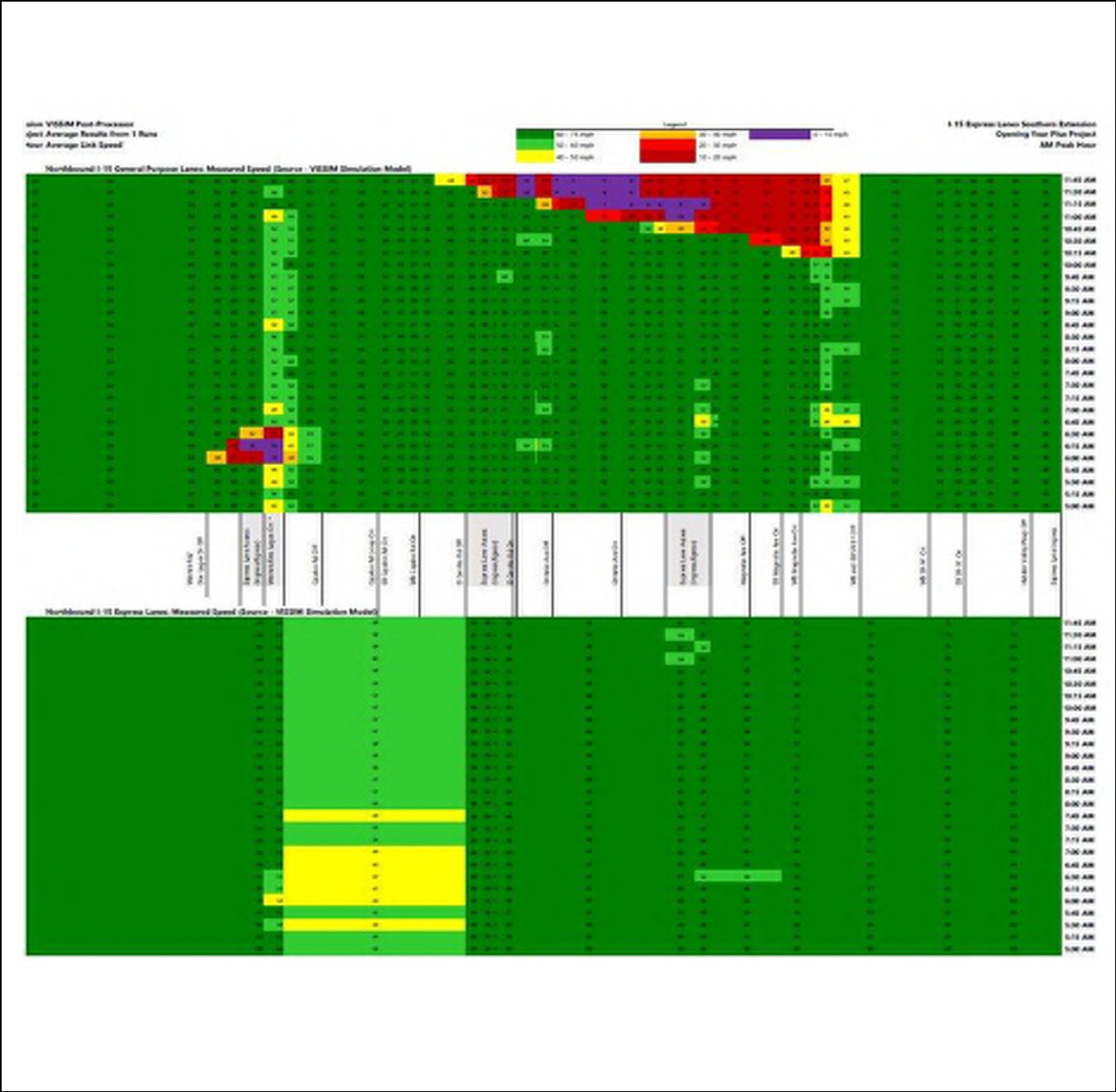
Build Alternative Design Variations

Build Alternative Design Variations			Speed Contour Opening Year 2030: Plus Project
Alternative Description	Speed Contour Plot Notes		
1 Express Lanes terminate at Central Avenue (Alt 1C)	<p>The bottleneck at Cajalco Road Interchange (previously had metered vehicles upstream) has moved to the Central Avenue interchange where the SB Central Avenue On-ramp and express lanes terminate.</p> <p>The bottleneck is active from 2:30 PM - Beyond 8:00 PM.</p> <p>The queue spills back from Central Avenue to the SB Indian Truck Trail Off-ramp.</p>		
2 Express lanes terminate after the Main Street Interchange (approximately 1,500 south of the SB On-Ramp)	<p>The bottleneck at Cajalco Road Interchange (previously had metered vehicles upstream) has moved to south of the Main Street interchange where the express lanes terminate and beyond the southern portion of the study area.</p> <p>The bottleneck is active from 3:30 PM - Beyond 8:00 PM.</p> <p>The queue spills back from south of the Main Street Interchange to the Lake Street interchange.</p>		

3	Express lanes terminate after the Main Street Off-Ramp (between Main Street on- and off-ramps)	<p>The bottleneck at Cajalco Road Interchange (previously had metered vehicles upstream) has moved to the Main Street Off-ramp where the express lanes terminate.</p> <p>The bottleneck is active from 2:30 PM - 7:45 PM</p> <p>The queue spills back from the Main Street Interchange to the Lake Street EL Access.</p>	
4	Auxiliary lane between SB Central Avenue On-ramp & SB Main Street Off-ramp	<p>The bottleneck at Cajalco Road Interchange (previously had metered vehicles upstream) has moved to the Central Avenue interchange where the SB Central Avenue On-ramp and Express Lanes terminate.</p> <p>The bottleneck is active from 3:30 PM - 7:45PM.</p>	
5	Auxiliary lane between SB Nichols Road On-ramp & SB Central Avenue Street Off-ramp	<p>The queue spills back from Central Avenue to between the Nichols EL egress and Nichols Off-ramp.</p>	

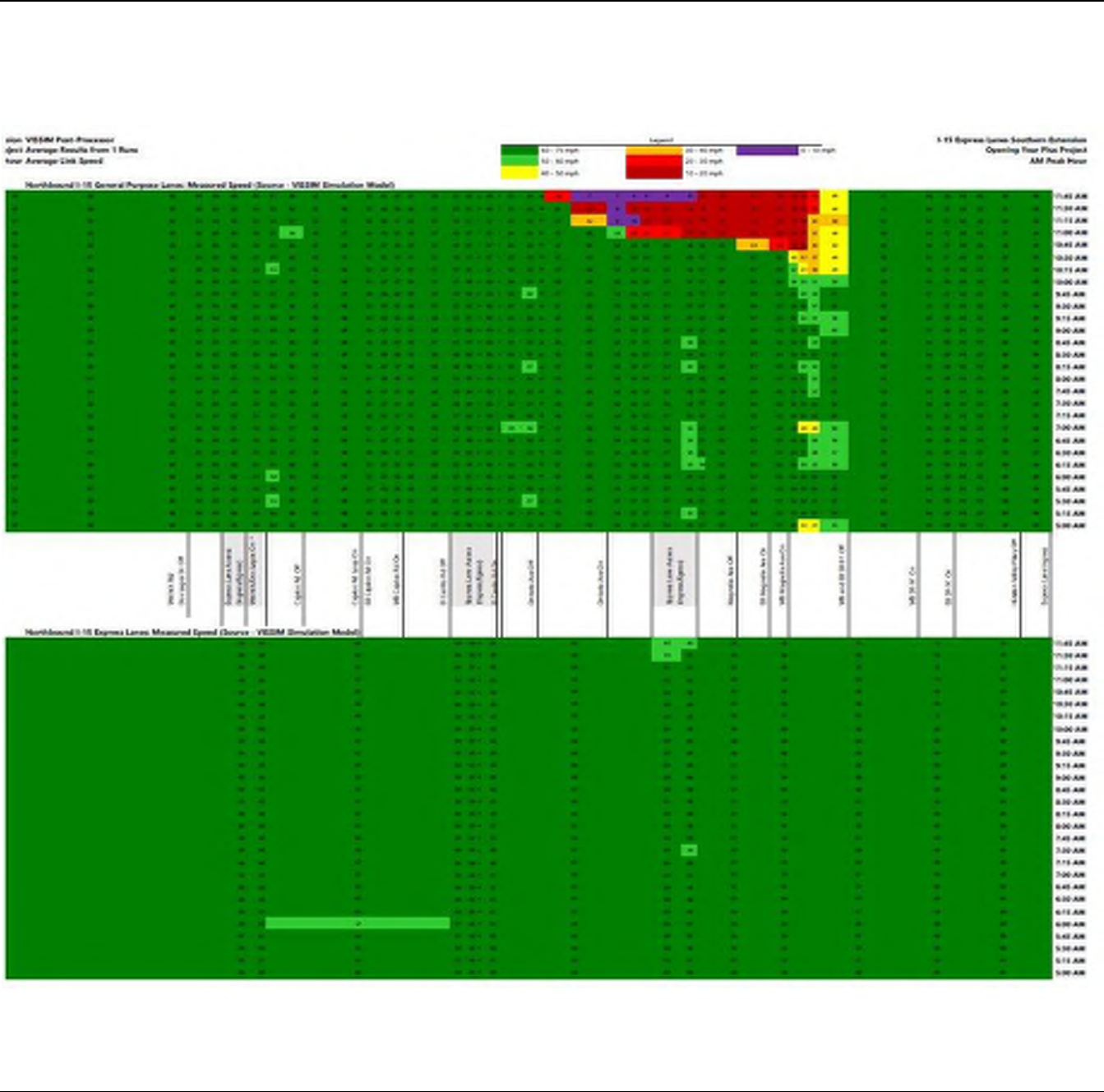
↖	Dos Lagos Access with 900' weave segment (Alt 1C)

The 900' weave segment causes a bottleneck from 6:00 AM-6:45 AM at the Dos Lagos Access.



Move Dos Lagos Access North (extend weave segment to be 1500' after Dos Lagos On-ramp)

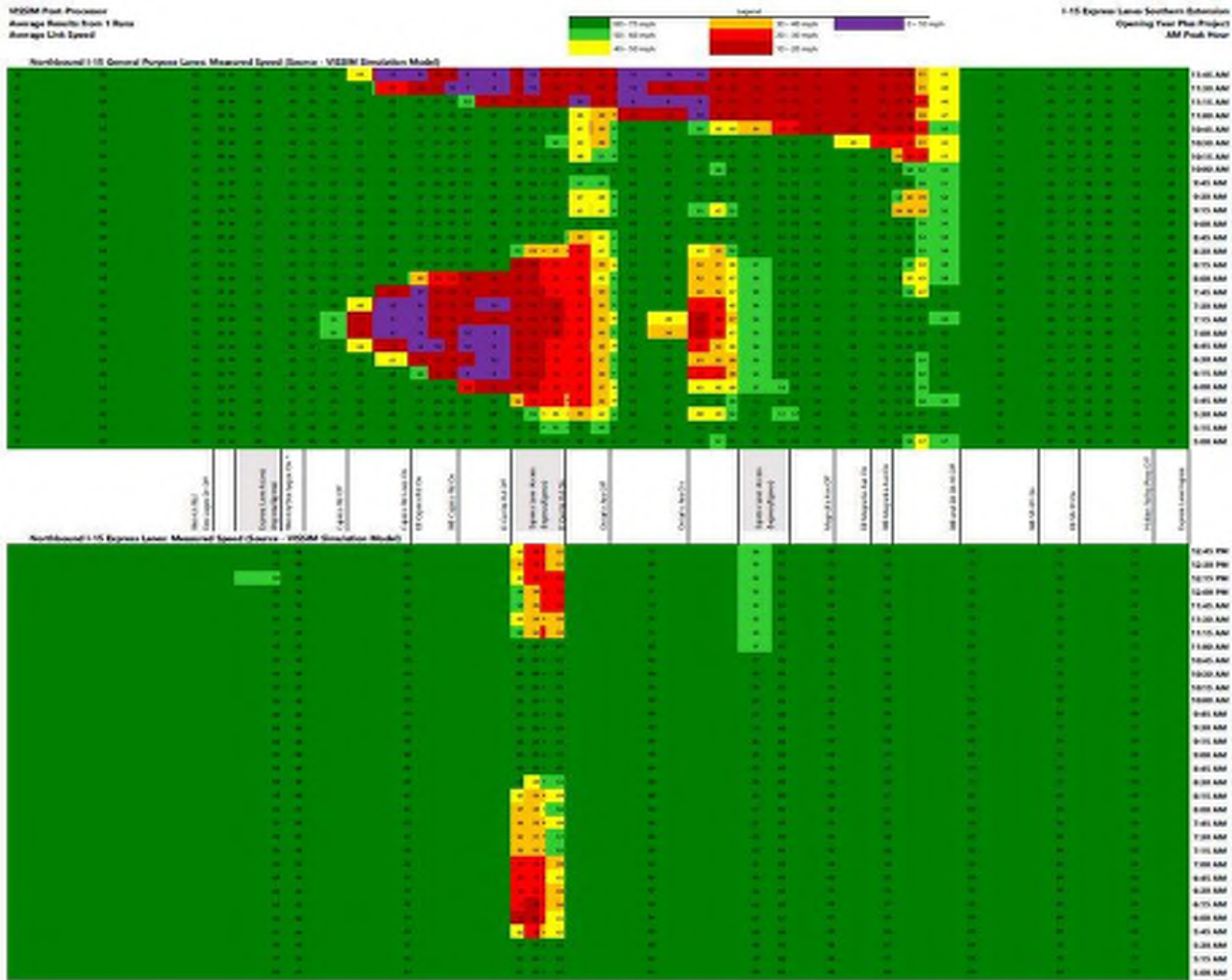
With the weave segment extended to 1500', the bottleneck at the Dos Lagos EL access does not occur. Express lane users have sufficient weaving length for switching lanes from the Dos Lagos On-ramp to the EL access.



3

Move Dos Lagos Access South (between the Dos Lagos on- and off-ramps)

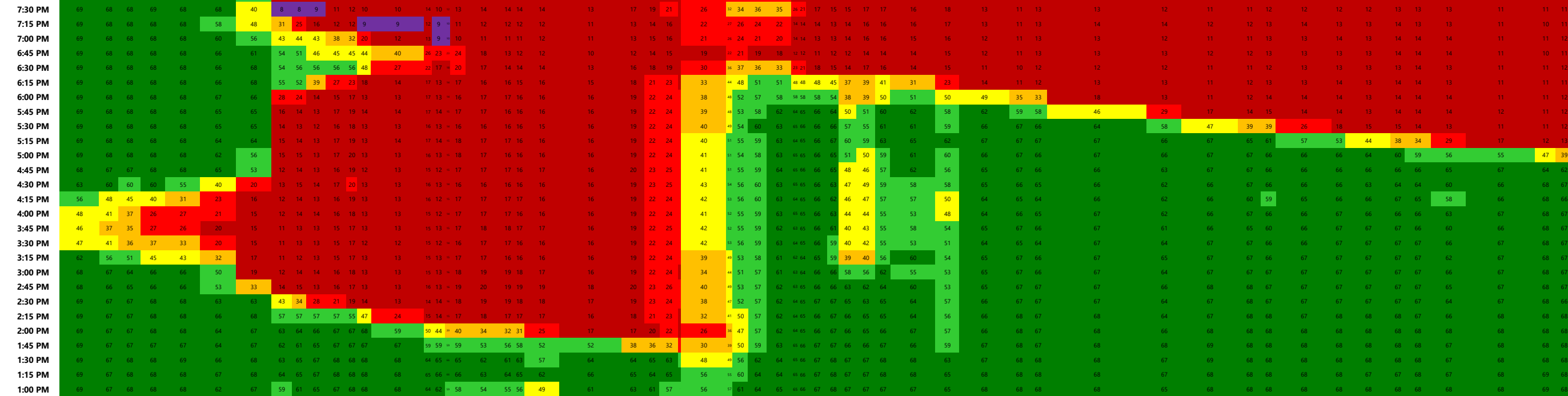
The express lane users from Dos Lagos must enter the express lanes from the El Cerrito access. While the congestion at the Dos Lagos Access, has been alleviated, the increase of users at El Cerrito has created a new bottleneck at the Ontario Off-Ramp.



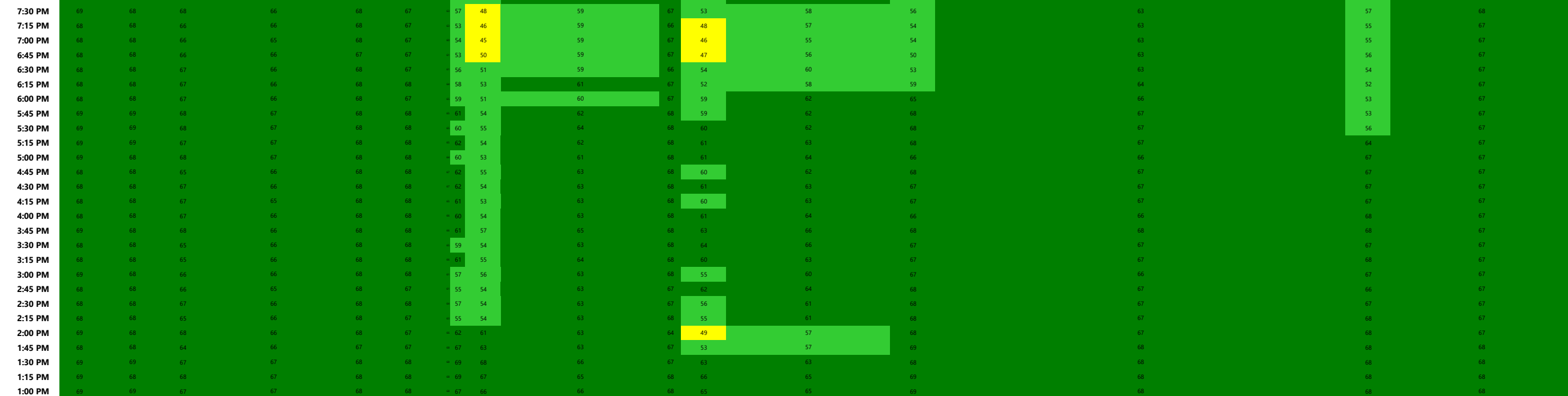
Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



7:45 PM	69	68	69	69	69	68	57	13	12	13	14	15	13	13
---------	----	----	----	----	----	----	----	----	----	----	----	----	----	----



Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



VISSIM Post-Processor

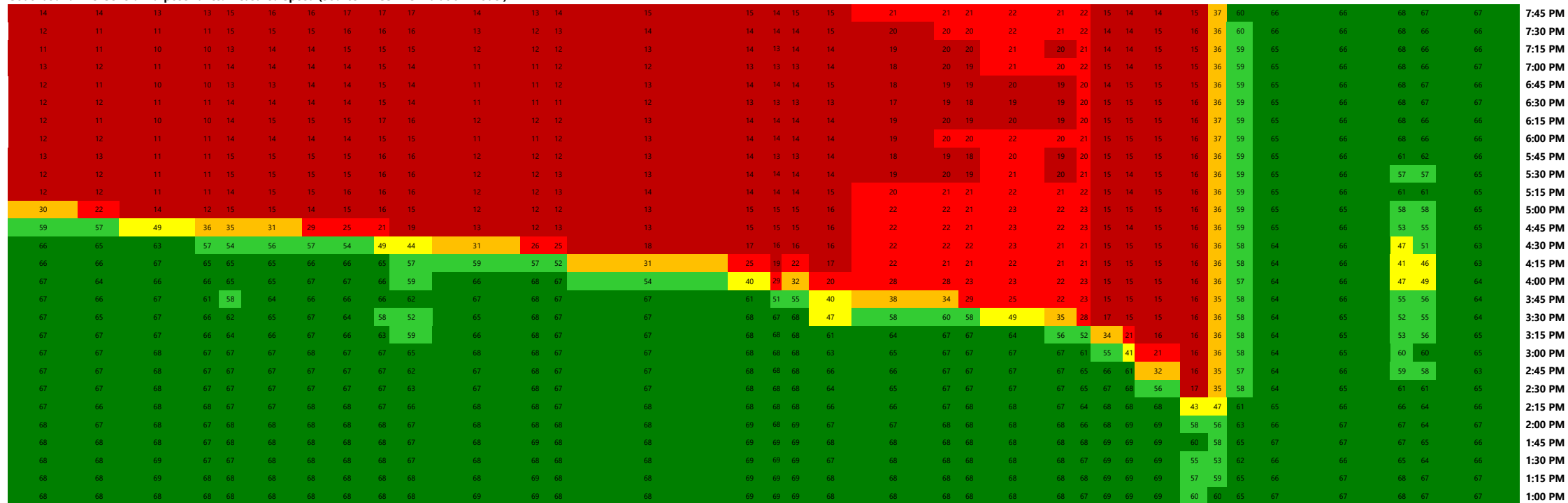
Average Results from 5 Runs

Average Link Speed

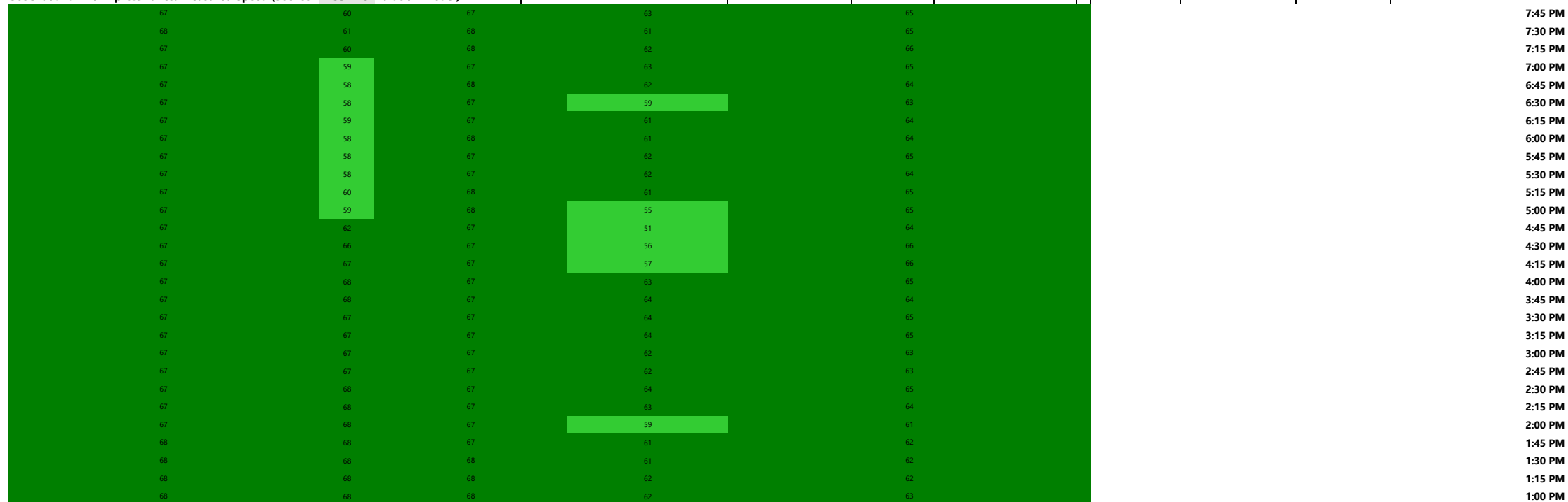


**I-15 Express Lanes Southern Extension
Design Year Plus Project Lane Drop South of Cajalco IC
PM Peak Hour**

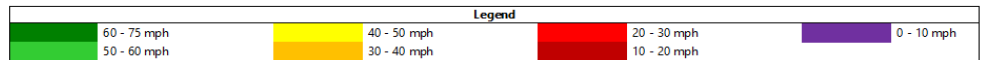
Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



VISSIM Post-Processor
Average Results from 1 Runs
Average Link Speed



**I-15 Express Lanes Southern Extension
Opening Year Plus Project - El Cerrito EL Access Closed
PM Peak Hour**

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

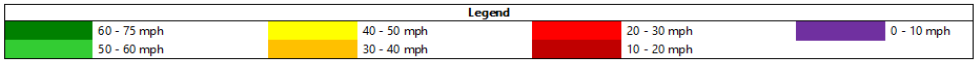
[illegible]

Length (miles)	Main St Off			EB Central Ave Off	WB Central Ave Off	Dexter Ave Off	Express Lane Ingress		Dexter Ave On		Nichols Rd Off		Nichols Rd On		Express In Ingress		Lake St Off		Lake St On		Express Lane Access (Ingress/Egress)		Indian Truck Trail Off		Indian Truck Trail On
	0.5		0.8	0.3	0.2		0.5	0.6		0.7					2.2	0.6			3.1				0.6		
	0.5		1.3	1.6	1.8	2.3		2.9		3.6				5.8	6.4			9.5		10.1					

Northbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

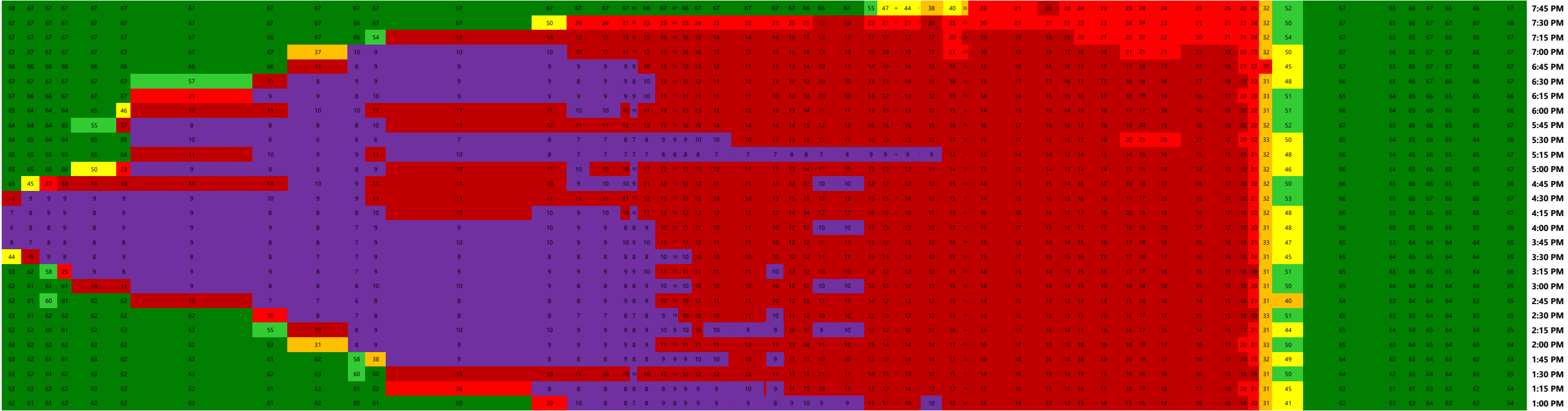
7:45 PM	69	70	70	70
7:30 PM	69	69	69	69
7:15 PM	67	69	69	69
7:00 PM	68	69	69	69
6:45 PM	68	70	70	69
6:30 PM	69	69	69	69
6:15 PM	68	69	69	69
6:00 PM	68	69	69	69
5:45 PM	69	69	69	69
5:30 PM	68	69	69	69
5:15 PM	68	70	70	70
5:00 PM	68	69	69	69
4:45 PM	69	70	70	69
4:30 PM	68	69	69	69
4:15 PM	68	69	69	69
4:00 PM	68	69	69	69
3:45 PM	68	69	69	69
3:30 PM	68	69	69	69
3:15 PM	67	69	69	69
3:00 PM	67	69	69	69
2:45 PM	69	69	69	69
2:30 PM	68	69	69	69
2:15 PM	68	69	70	70
2:00 PM	69	69	69	69
1:45 PM	69	69	69	69
1:30 PM	68	69	69	69
1:15 PM	69	69	69	69
1:00 PM	69	69	70	69

VISSIM Post-Processor
Average Results from 1 Runs
Average Link Speed



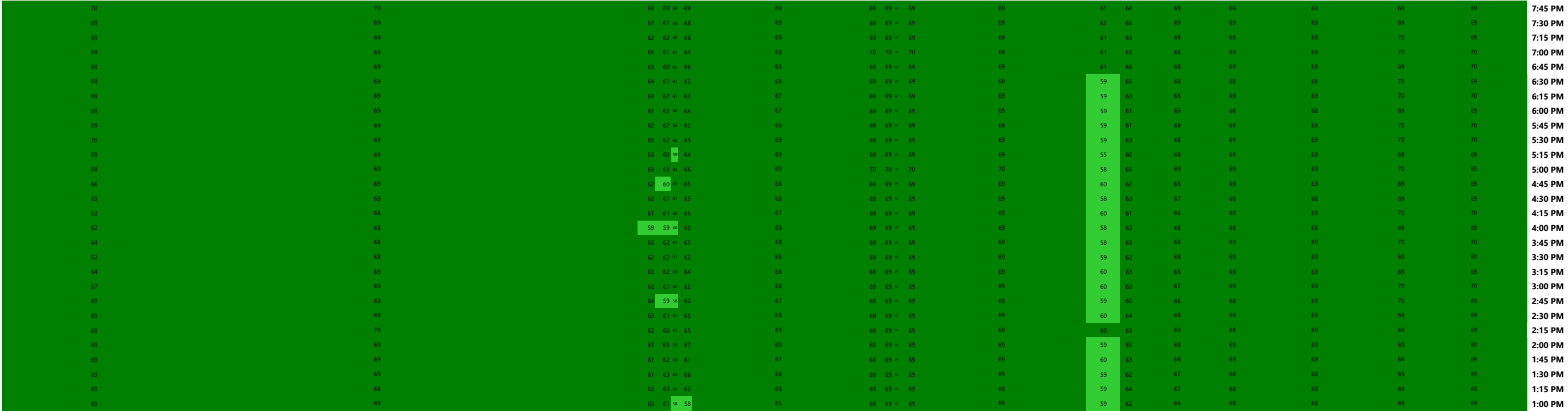
I-15 Express Lanes Southern Extension
Opening Year Plus Project - El Cerrito EL Access Closed
PM Peak Hour

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

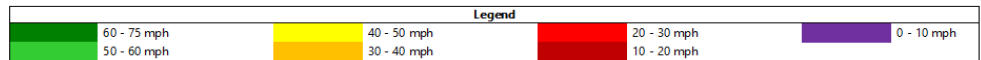


	Express Lane Access (Ingress/Egress)		Temescal Canyon Rd Off		Temescal Canyon Rd On		Weirick Rd/ Dos Lagos Dr Off		Weirick/Dos Lagos On		Express Lane Access (Ingress/Egress)		Cajalco Rd Off		Cajalco Rd Loop On		EB Cajalco Rd On		WB Cajalco Rd On		El Cerrito Rd Off	Express Lane Access (Closed) El Cerrito Rd On		Ontario Ave Off		Ontario Ave On		Express Lane Access (Ingress/Egress)		Magnolia Ave Off		EB Magnolia Ave On		WB Magnolia Ave On		WB and EB SR-91 Off				WB SR-91 On		EB SR-91 On		Hidden Valley Pkwy Off		Express Lane Ingress
	2.3		0.5		1.9		0.5		0.5		0.5		0.5		0.3		0.3		0.4		0.4		0.3		0.6		1.1		0.3		0.2		0.5		0.7		0.3		0.6							
	12.4		12.9		14.8		15.3		15.8		16.3		16.6		17		17.4		17.7		18.3		19.4		19.7		19.9		20.4		21.1		21.4		22											

Northbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



VISSIM Post-Processor
Average Results from 1 Runs
Average Link Speed



I-15 Express Lanes Southern Extension
Opening Year Plus Project - Dos Lagos Closed, El Cerrito Open Access
PM Peak Hour

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

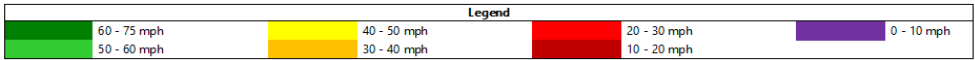
7:45 PM	68	67	68	68	67	67	67	68	68	67	66	66	68	67	67	67	68	68	67	67	67	67	67	67	67	67	67	67	67			
7:30 PM	67	66	67	66	66	66	66	67	67	66	67	68	68	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67			
7:15 PM	67	66	67	67	66	66	66	67	67	66	67	68	67	66	67	67	67	67	67	67	67	67	67	67	67	67	67	67	68			
7:00 PM	67	67	67	67	66	66	66	67	67	67	68	68	68	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67			
6:45 PM	67	67	66	66	66	66	66	67	67	66	67	67	67	65	66	66	67	67	67	66	67	67	67	67	67	67	67	66	67			
6:30 PM	66	66	67	66	65	65	66	67	67	66	67	68	67	66	67	67	67	67	68	67	67	67	67	67	67	67	67	67	67			
6:15 PM	67	66	66	66	66	66	66	67	67	66	67	68	67	66	66	66	66	67	66	66	66	67	66	66	66	66	67	67	67			
6:00 PM	66	66	67	66	66	65	65	66	67	65	66	67	67	66	67	67	67	66	66	66	67	66	66	66	65	64	66	65	65			
5:45 PM	63	62	62	63	61	58	61	64	64	63	65	66	64	63	64	66	64	64	64	64	64	64	64	64	64	64	64	64	64			
5:30 PM	64	63	64	63	62	62	63	65	65	65	66	66	66	64	64	66	64	65	65	65	66	65	64	65	64	63	64	64	65			
5:15 PM	65	64	65	65	64	64	65	66	67	66	67	67	66	65	66	66	65	66	66	66	66	66	65	66	66	66	66	65	65			
5:00 PM	63	62	63	63	61	59	60	64	64	62	64	66	65	63	64	66	62	66	65	65	65	65	65	65	65	65	66	66	66			
4:45 PM	65	64	65	65	63	64	64	66	66	66	67	68	67	66	67	66	66	65	65	66	65	65	65	65	65	64	65	65	65			
4:30 PM	66	65	66	65	64	63	64	66	66	64	66	67	66	64	66	66	66	67	66	66	66	67	66	66	66	66	66	66	66			
4:15 PM	65	64	65	65	63	63	63	65	65	65	66	66	66	64	65	66	65	66	65	65	66	66	66	66	66	66	66	66	66			
4:00 PM	64	63	64	64	61	61	61	65	65	65	66	66	65	65	65	65	65	65	65	65	65	65	65	65	65	65	64	63	65			
3:45 PM	63	62	63	63	62	60	62	65	65	63	65	66	65	63	64	66	64	65	64	63	64	65	64	64	65	65	65	65	64	64		
3:30 PM	63	62	63	62	60	59	61	64	64	63	65	66	65	63	64	66	64	65	64	64	64	64	64	64	64	64	64	64	64			
3:15 PM	61	60	61	62	58	57	59	63	63	61	63	65	63	62	63	66	63	64	62	61	61	62	61	61	60	54	59	63	62	61		
3:00 PM	62	61	62	63	61	59	60	63	63	60	64	65	64	63	63	66	63	64	62	62	62	64	62	63	63	63	62	63	63			
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2:15 PM	63	62	63	63	61	60	61	64	64	61	64	65	65	63	64	66	63	65	66	65	64	65	65	64	64	64	64	64	63	62	61	
2:00 PM	63	62	63	63	62	61	61	63	64	61	64	65	64	62	63	66	61	63	63	63	62	62	63	62	62	62	62	62	62	62	62	
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1:30 PM	63	62	63	64	62	61	62	63	64	62	64	66	64	63	64	66	63	64	64	64	63	63	64	64	63	62	62	61	62	63	62	63
1:15 PM	62	59	62	60	56	59	61	63	63	63	64	65	64	62	61	66	63	63	63	62	63	63	63	63	63	63	63	64	63	63	63	64
1:00 PM	63	55	61	62	60	60	61	63	63	61	64	65	63	62	62	66	62	63	63	62	62	63	63	63	62	62	60	61	62	62	62	

Length (miles) Cumulative Distance (miles)	Main St Off			EB Central Ave Off	WB Central Ave Off	Dexter Ave Off	Express Lane Ingress		Dexter Ave On		Nichols Rd Off		Nichols Rd On		Express In Ingress		Lake St Off		Lake St On			Express Lane Access (Ingress/Egress)		Indian Truck Trail Off		Indian Truck Trail On
	0.5		0.8	0.3	0.2		0.5		0.6		0.7				2.2		0.6				3.1			0.6		
	0.5		1.3	1.6	1.8	2.3			2.9		3.6				5.8		6.4				9.5			10.1		

Northbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

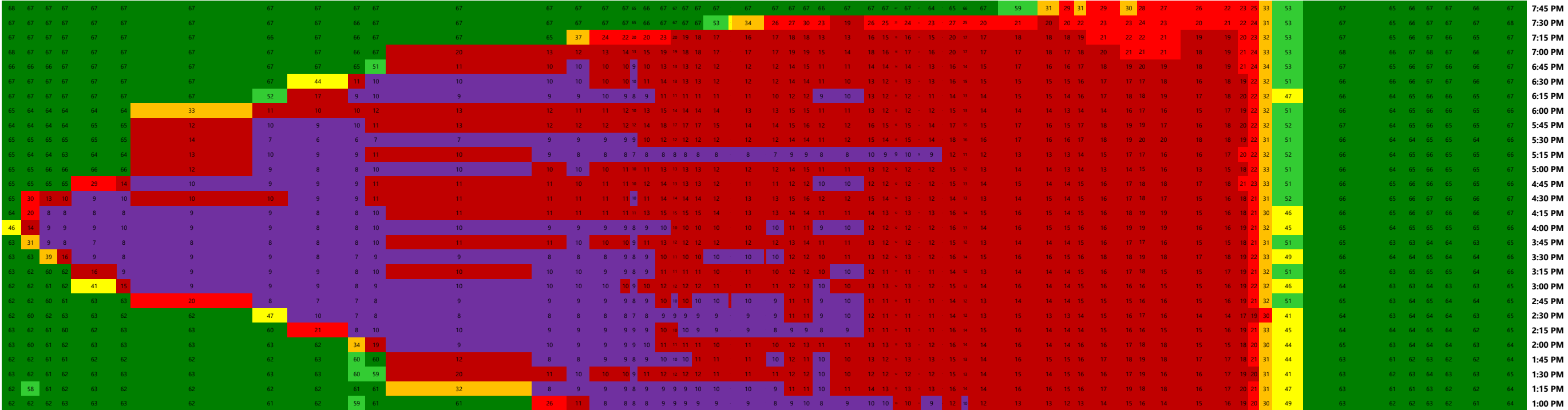
7:45 PM	68	69	70	70	70
7:30 PM	68	69	69	69	69
7:15 PM	69	69	69	69	69
7:00 PM	68	69	69	69	69
6:45 PM	69	70	70	70	69
6:30 PM	69	69	69	69	69
6:15 PM	68	69	69	69	69
6:00 PM	68	69	69	69	69
5:45 PM	68	69	69	69	69
5:30 PM	68	69	69	69	69
5:15 PM	69	70	70	70	70
5:00 PM	68	69	69	69	69
4:45 PM	68	70	70	69	69
4:30 PM	68	69	69	69	69
4:15 PM	68	69	69	69	69
4:00 PM	68	69	69	69	69
3:45 PM	68	69	69	69	69
3:30 PM	68	69	69	69	69
3:15 PM	68	69	69	69	69
3:00 PM	68	69	69	69	69
2:45 PM	69	69	69	69	69
2:30 PM	69	69	69	69	69
2:15 PM	68	69	69	69	70
2:00 PM	68	70	70	69	69
1:45 PM	69	69	69	69	69
1:30 PM	69	69	69	69	69
1:15 PM	69	69	69	69	69
1:00 PM	68	69	69	69	69

VISSIM Post-Processor
Average Results from 1 Runs
Average Link Speed



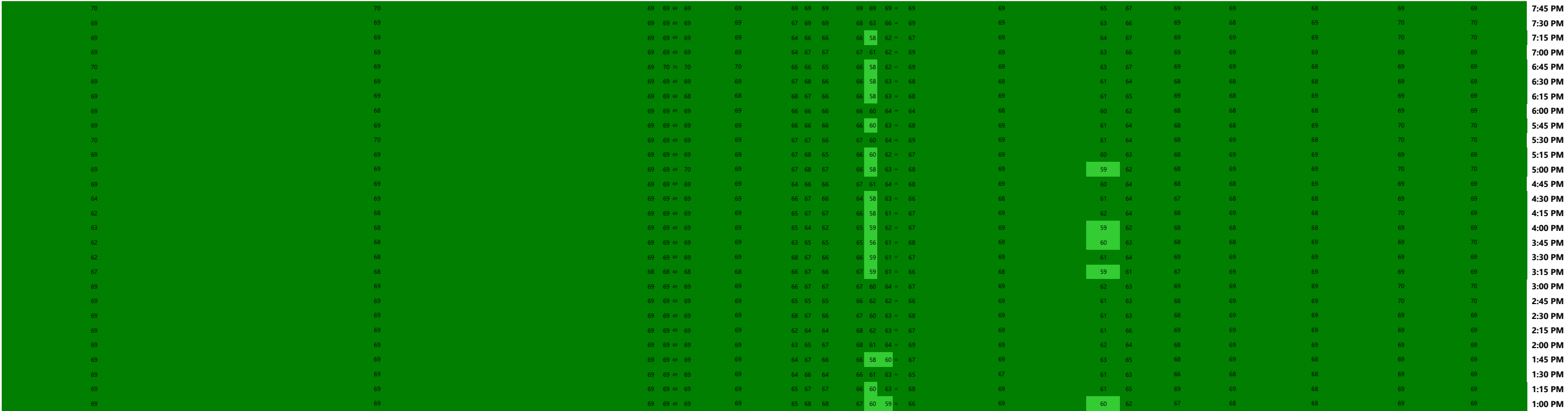
I-15 Express Lanes Southern Extension
Opening Year Plus Project - Dos Lagos Closed, El Cerrito Open Access
PM Peak Hour

Northbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

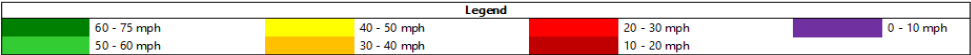


	Express Lane Access (Ingress/Egress)		Temescal Canyon Rd Off	Temescal Canyon Rd On		Weirick Rd/ Dos Lagos Dr Off	Weirick/Dos Lagos On	Express Lane Access - Closed (Ingress/Egress)	Cajalco Rd Off	Cajalco Rd Loop On	EB Cajalco Rd On	WB Cajalco Rd On		El Cerrito Rd Off	Express Lane Access - From Cajalco Loop On to El Cerrito (Ingress/Egress)	El Cerrito Rd On		Ontario Ave Off		Ontario Ave On		Express Lane Access (Ingress/Egress)		Magnolia Ave Off	EB Magnolia Ave On	WB Magnolia Ave On		WB and EB SR-91 Off		WB SR-91 On		EB SR-91 On		Hidden Valley Pkwy Off	Express Lane Ingress
	2.3		0.5		1.9		0.5	0.5		0.5	0.3	WB		0.4	0.4		0.3		0.6			1.1			0.3	0.2	0.5		0.7		0.3		0.6		
	12.4		12.9		14.8		15.3	15.8		16.3	16.6		17	17.4		17.7		18.3			19.4			19.7	19.9	20.4		21.1		21.4		22			

Northbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

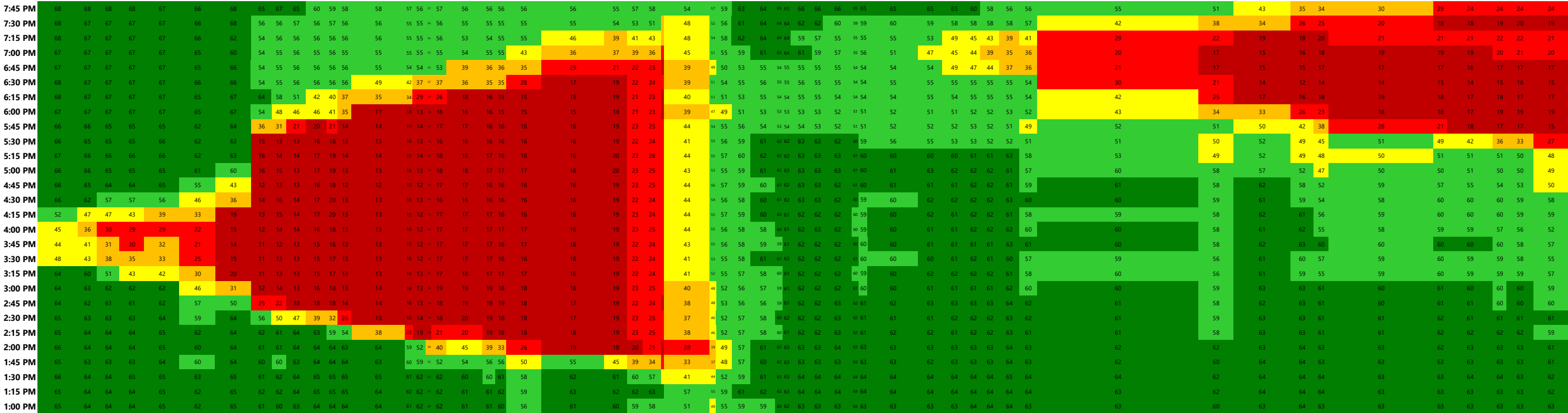


VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



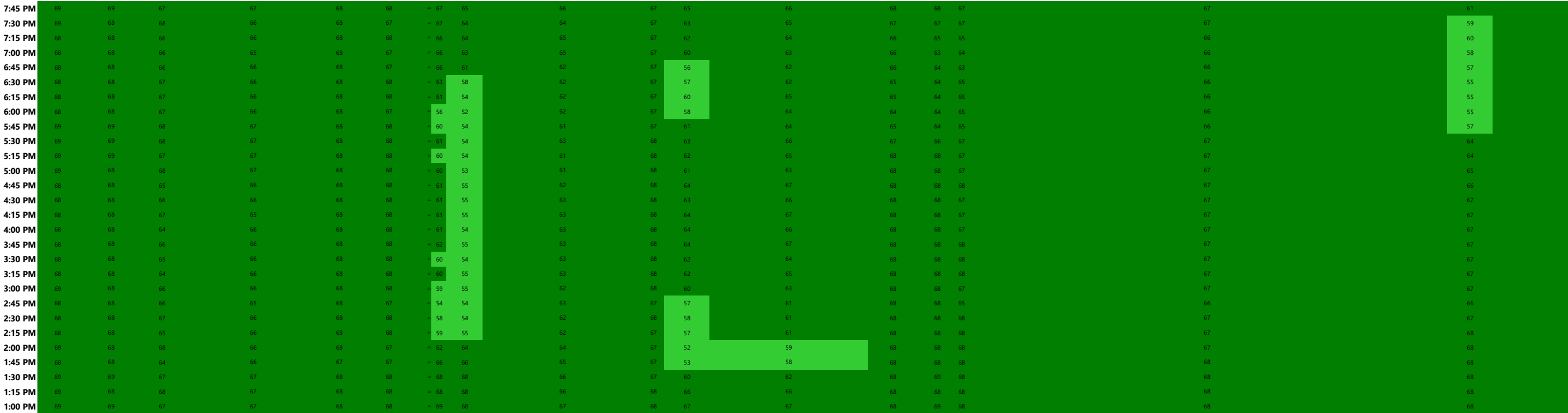
I-15 Express Lanes Southern Extension
Design Year Plus Project- Elongated Weave & Dual Lane Off-Ramp at Weirick
PM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



Cumulative Distance (miles)	Length (miles)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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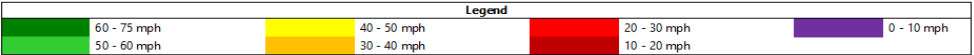
Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



VISSIM Post-Processor

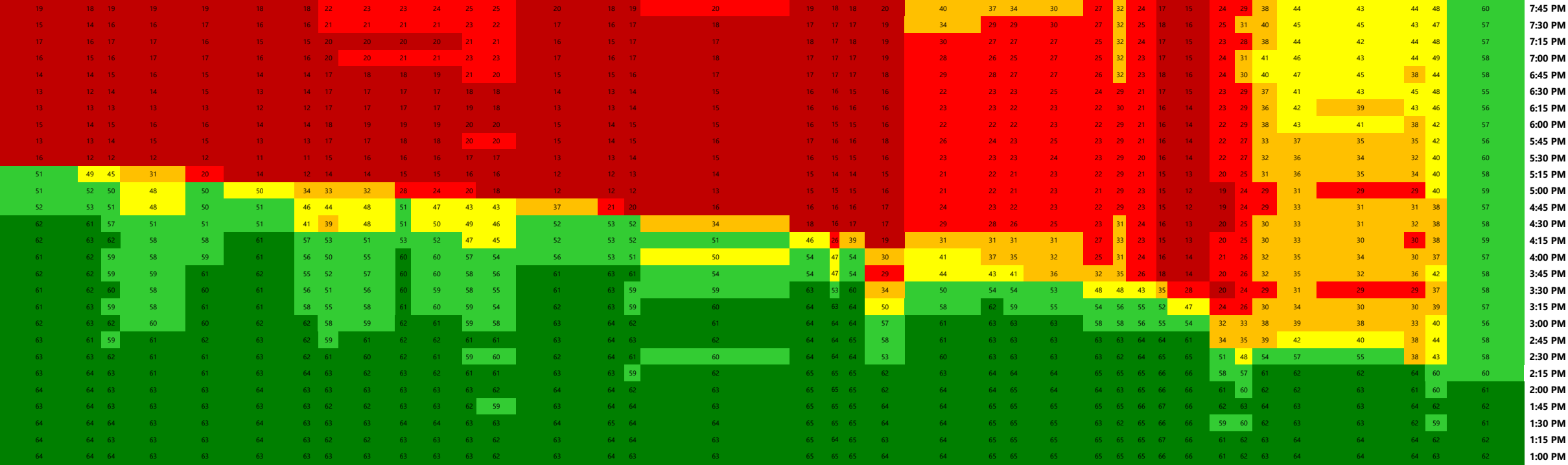
Average Results from 5 Runs

Average Link Speed



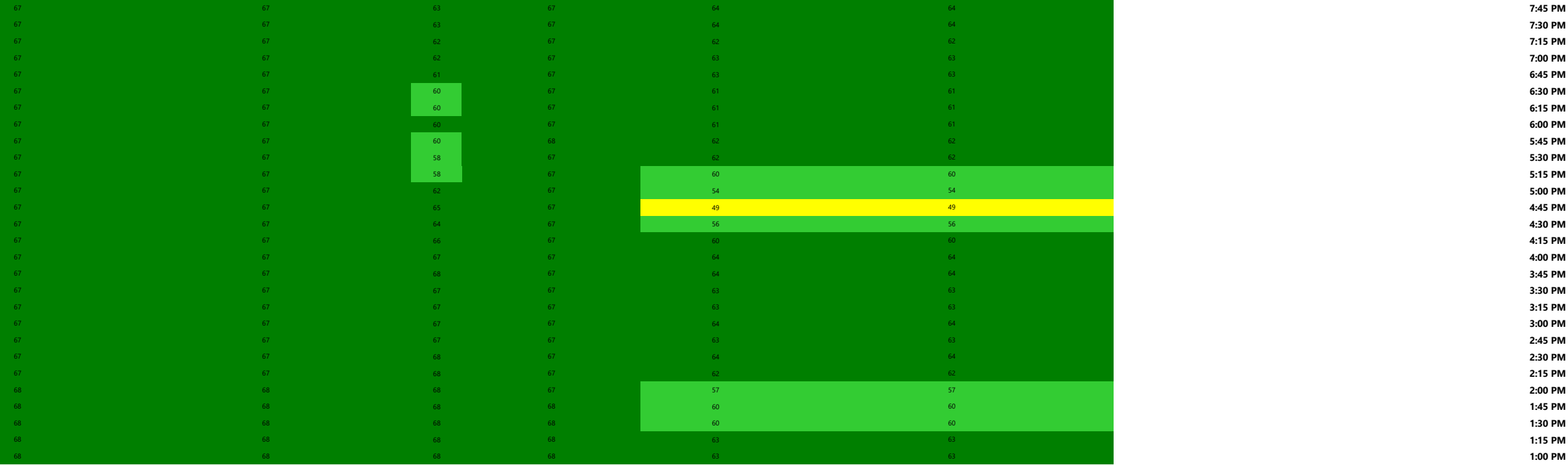
I-15 Express Lanes Southern Extension
Design Year Plus Project- Elongated Weave & Dual Lane Off-Ramp at Weirick
PM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



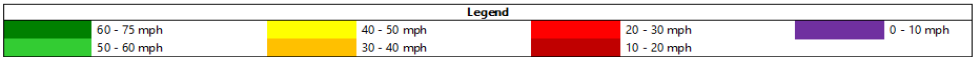
	Indian Truck Trail On	Horsethief Road Off	Horsethief Road On		Express Lane Access (Ingress/Egress)		Lake St Off		Lake St On		Express Lane Egress		Nichols Rd Off		Nichols Rd On		Express Lane Egress Central Ave Off		Central Ave On		Main St Off		Main St On
	0.6	1	0.5	1.5		0.6	2.2		0.6	1	0.6	1	0.6	0.7	0.7								
	12.6	13.6	14.1	15.6	16.2	18.4	19	20	20.6	21.3	22												

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

I-15 Express Lanes Southern Extension
Design Year Plus Project - Dual Lane Exit at Dos Lagos/Weirick Off-Ramp
PM Peak Hour

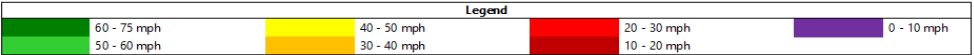
[illegible][illegible]

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)															
7:45 PM	69	69	67	67	68	68	~ 68	68	66	67	64	65	67	66	61
7:30 PM	69	68	68	66	68	67	~ 67	65	65	67	63	65	66	67	58
7:15 PM	68	68	66	66	68	68	~ 67	64	65	67	55	60	62	64	60
7:00 PM	68	68	66	65	68	67	~ 66	64	65	67	60	63	62	64	57
6:45 PM	68	68	66	66	68	67	~ 66	60	62	67	60	64	59	63	55
6:30 PM	68	68	67	66	68	67	~ 63	59	62	67	59	63	65	66	55
6:15 PM	68	68	67	66	68	68	~ 61	58	61	67	60	63	63	62	56
6:00 PM	68	68	67	66	68	67	~ 56	53	61	67	61	64	62	64	58
5:45 PM	69	69	68	67	68	68	~ 60	54	62	68	62	65	67	66	58
5:30 PM	69	69	68	67	68	68	~ 60	54	62	68	64	67	65	64	61
5:15 PM	69	69	67	67	68	68	~ 61	54	61	68	64	67	67	66	63
5:00 PM	69	68	68	67	68	68	~ 59	54	62	68	64	68	67	66	64
4:45 PM	68	68	65	66	68	68	~ 61	52	61	68	61	65	67	65	67
4:30 PM	68	68	66	66	68	68	~ 60	54	63	68	64	67	66	65	67
4:15 PM	68	68	67	65	68	68	~ 61	55	63	68	64	67	67	66	65
4:00 PM	68	68	64	66	68	68	~ 59	56	64	68	63	66	66	65	67
3:45 PM	68	68	66	66	68	68	~ 62	56	64	68	63	66	67	67	67
3:30 PM	68	68	65	66	68	68	~ 59	54	62	68	63	67	68	67	66
3:15 PM	68	68	64	66	68	68	~ 60	56	64	68	59	62	67	66	67
3:00 PM	69	68	66	66	68	68	~ 57	56	64	68	60	63	67	66	67
2:45 PM	68	68	66	65	68	67	~ 58	54	63	67	60	64	68	67	67
2:30 PM	68	68	67	66	68	68	~ 57	54	62	68	60	63	67	66	68
2:15 PM	68	68	65	66	68	68	~ 60	55	62	68	59	64	68	67	67
2:00 PM	69	68	68	66	68	67	~ 62	65	65	67	50	59	68	68	67
1:45 PM	68	68	64	66	67	67	~ 66	66	65	67	51	56	68	68	68
1:30 PM	69	69	67	67	68	68	~ 68	68	66	67	62	63	68	68	68
1:15 PM	69	68	68	67	67	68	~ 68	68	66	68	67	67	69	68	68
1:00 PM	69	69	67	67	68	68	~ 69	68	67	68	66	67	69	68	68

VISSIM Post-Processor

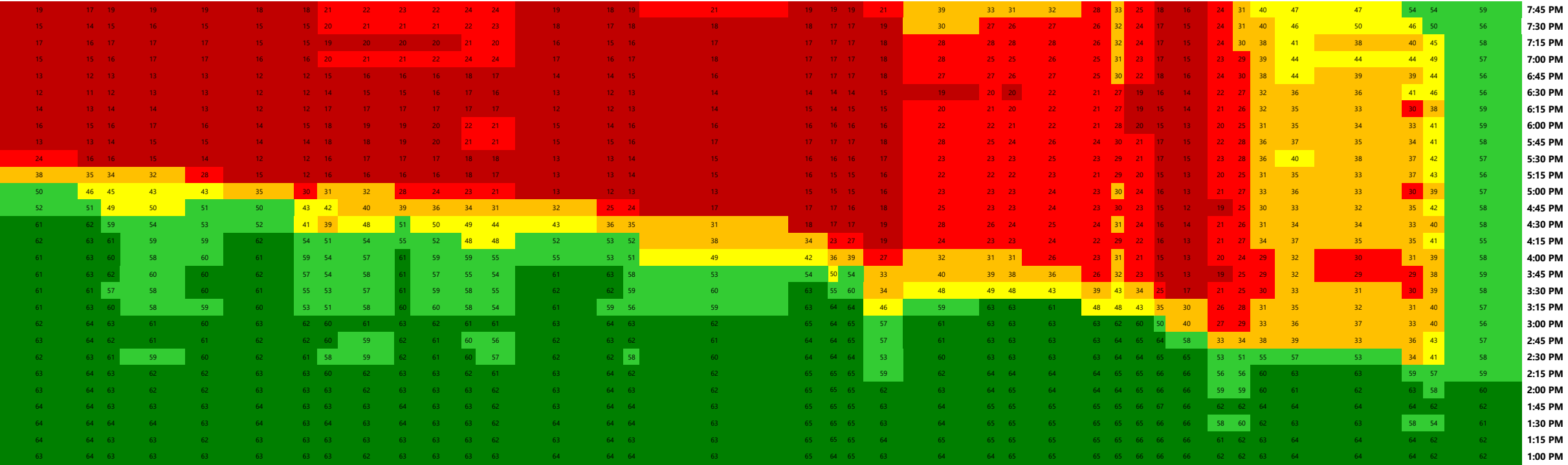
Average Results from 5 Runs

Average Link Speed



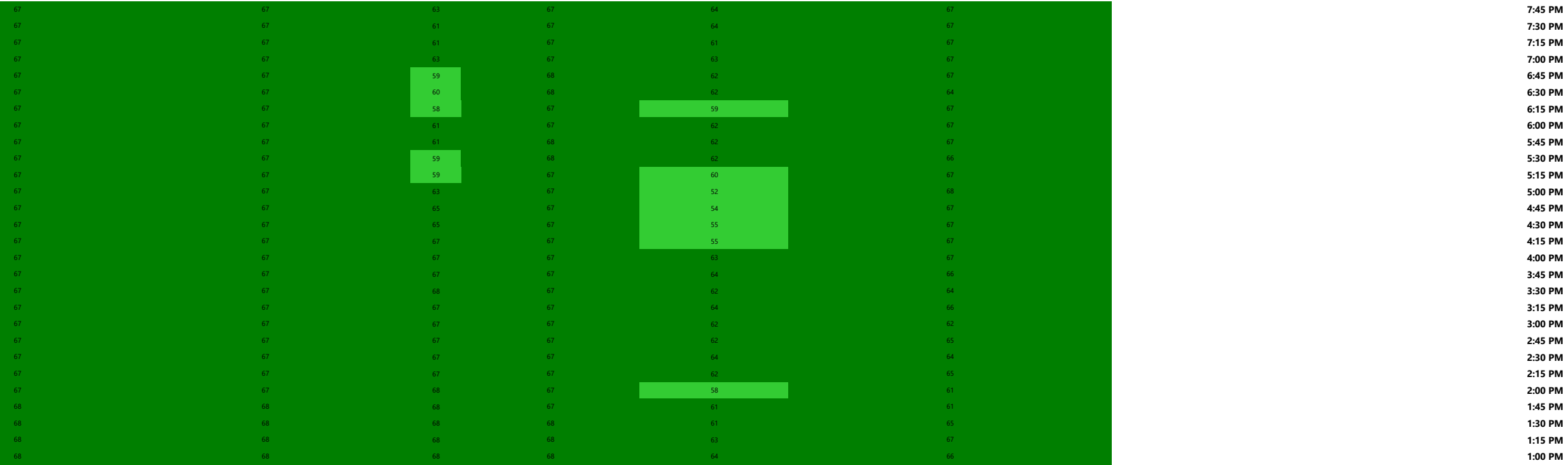
I-15 Express Lanes Southern Extension
Design Year Plus Project - Dual Lane Exit at Dos Lagos/Weirick Off-Ramp
PM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



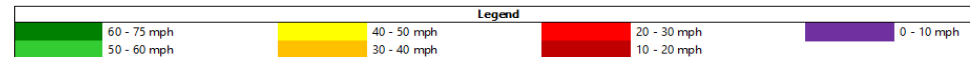
	Indian Truck Trail On	Horseshief Road Off	Horseshief Road On		Express Lane Access (Ingress/Egress)	Lake St Off	Lake St On	Express Lane Egress	Nichols Rd Off	Nichols Rd On	Express Lane Egress Central Ave Off	Central Ave On	Main St Off	Main St On
	0.6	1	0.5	1.5		0.6	2.2		0.6	1	0.6	0.7	0.7	
	12.6	13.6	14.1	15.6		16.2	18.4		19	20	20.6	21.3	22	

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

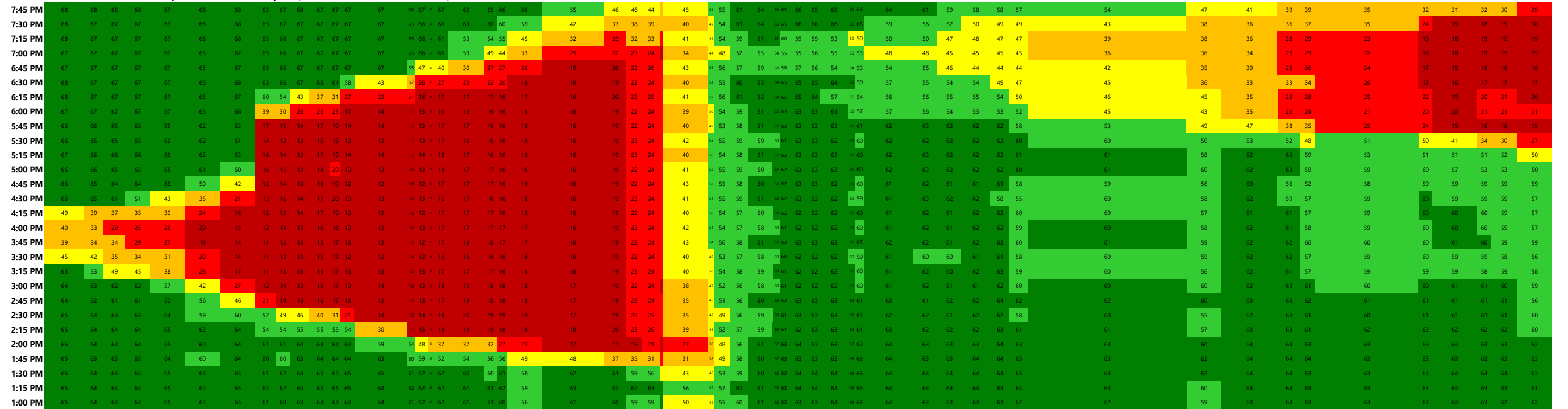


VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

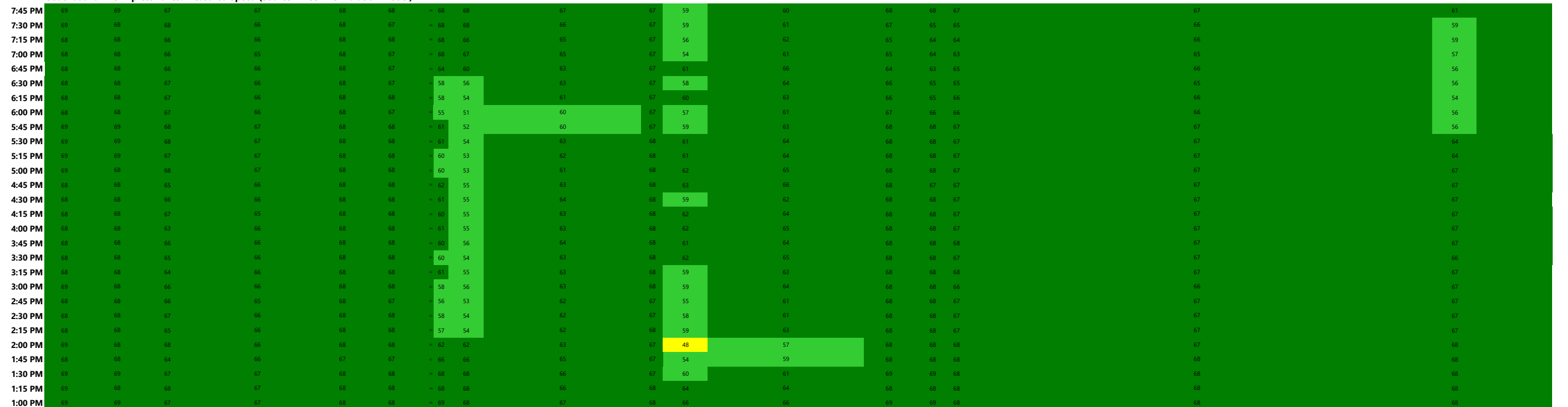
**I-15 Express Lanes Southern Extension
Design Year Plus Project -Elongated Access 4,215'
PM Peak Hour**



Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

[illegible]

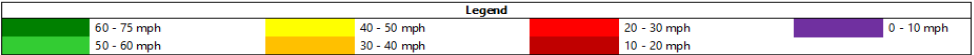
Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



VISSIM Post-Processor

Average Results from 5 Runs

Average Link Speed

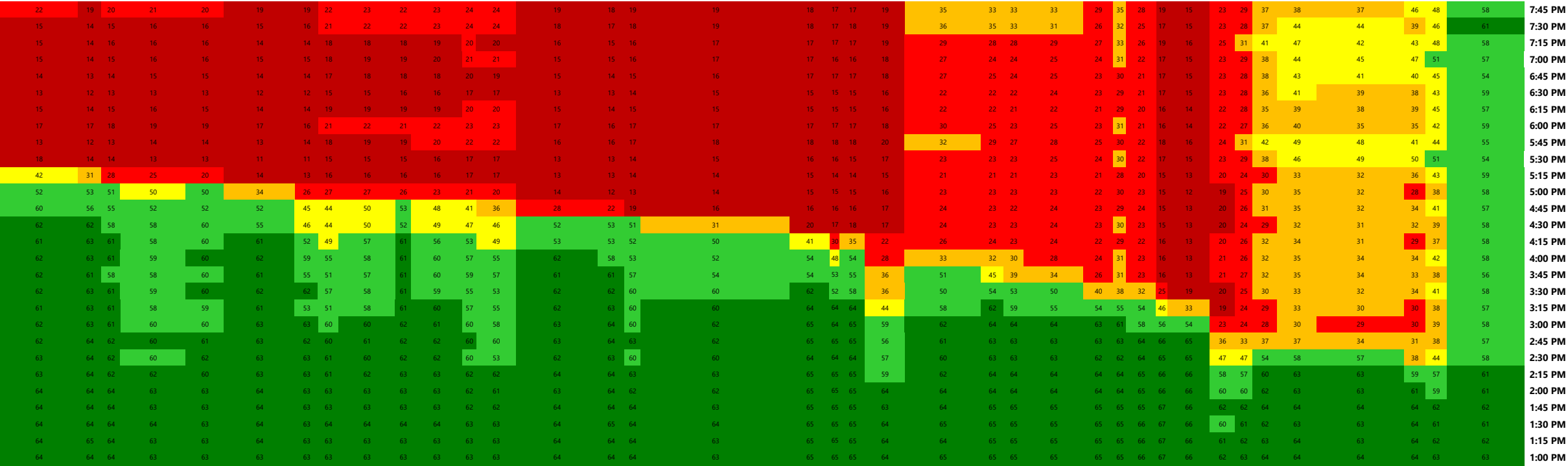


I-15 Express Lanes Southern Extension

Design Year Plus Project- Elongated Access

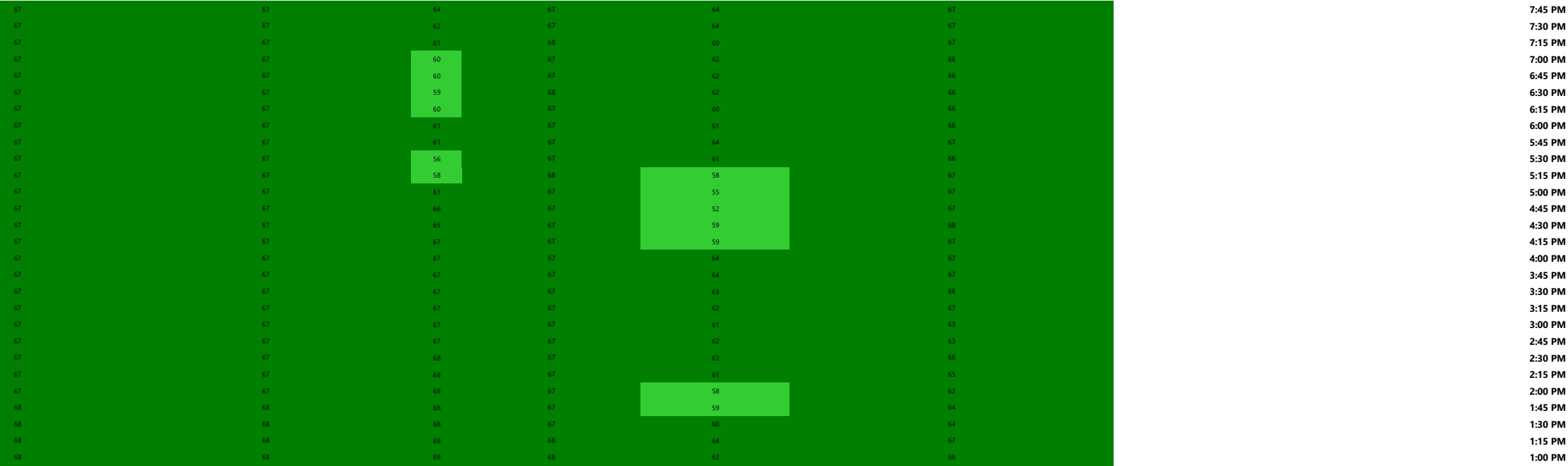
PM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



	Indian Truck Trail On		Horseshief Road Off		Horseshief Road On			Express Lane Access (Ingress/Egress)		Lake St Off		Lake St On			Express Lane Egress		Nichols Rd Off		Nichols Rd On			Express Lane Egress Central Ave Off		Central Ave On			Main St Off		Main St On
	0.6		1		0.5		1.5					0.6		2.2			0.6		1			0.6		0.7		0.7			
	12.6		13.6		14.1		15.6					16.2		18.4			19		20			20.6		21.3		22			

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

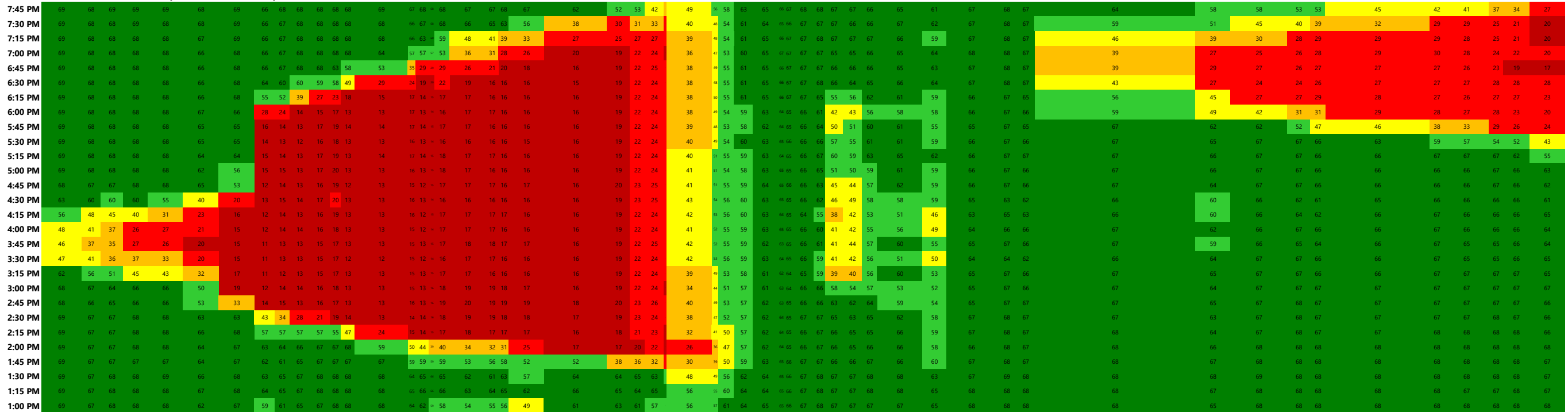


VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

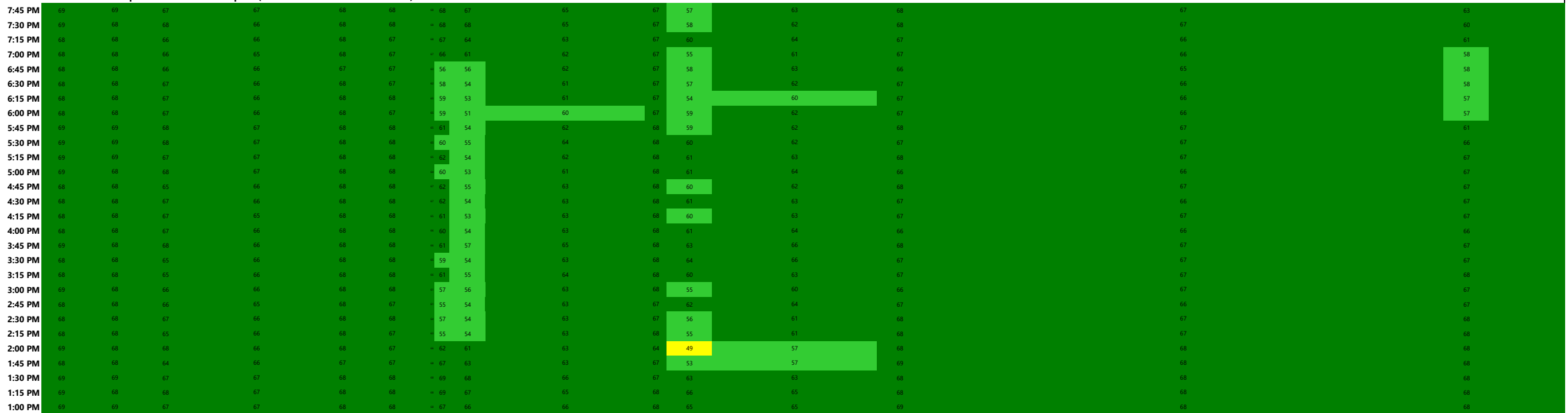
I-15 Express Lanes Southern Extension
Design Year Plus Project- TOAR No Aux Lane
PM Peak Hour



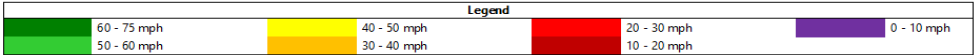
Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

[illegible]

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

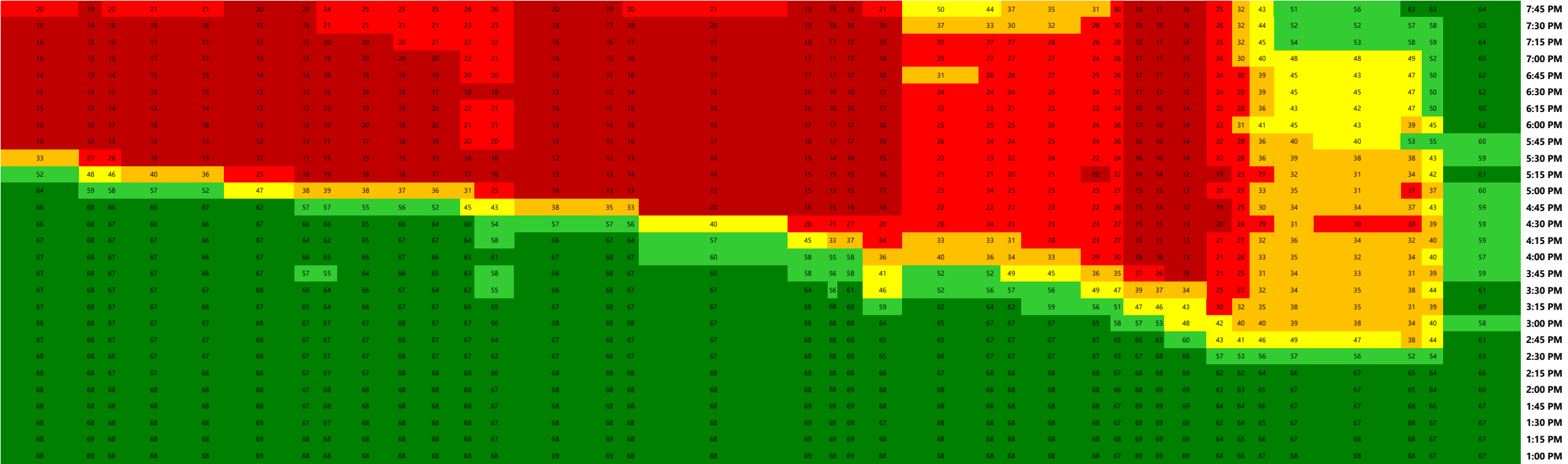


VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



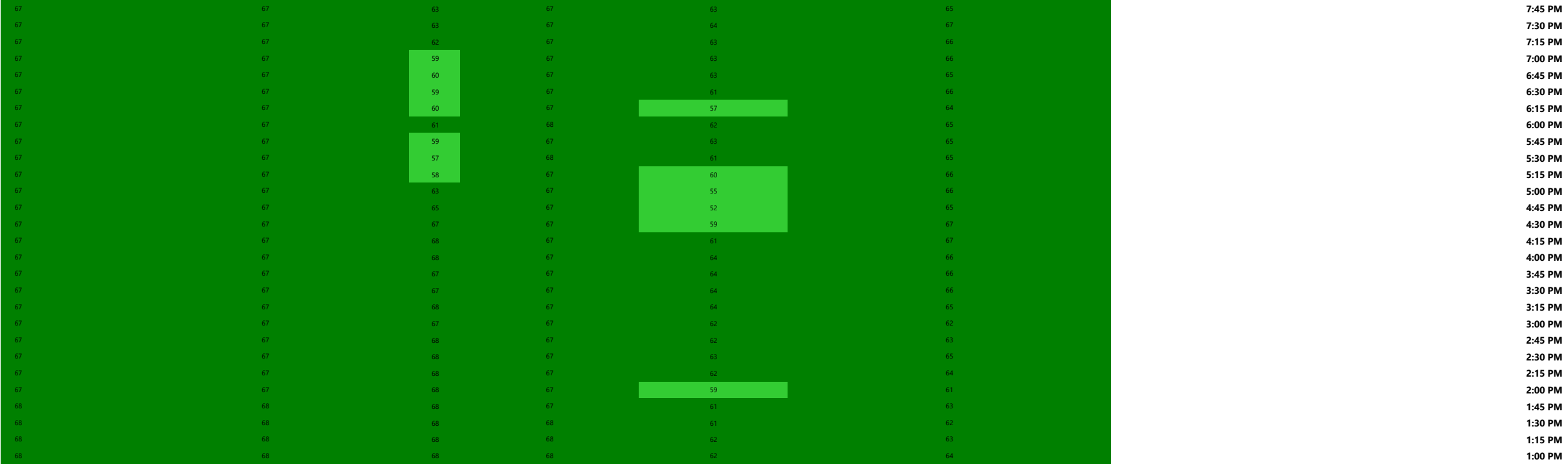
I-15 Express Lanes Southern Extension
Design Year Plus Project-TOAR No Aux Lane
PM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



Indian Truck Trail On	Horsethief Road Off	Horsethief Road On	Express Lane Access (Ingress/Egress)	Lake St. Off	Lake St. On	Express Lane Egress	Nichols Rd Off	Nichols Rd On	Express Lane Egress Central Ave Off	Central Ave On	Main St. Off	Main St. On
0.6	1	0.5	1.5		0.6	2.2	0.6	1	0.6	0.7	0.7	
12.6	13.6	14.1	15.6		16.2	18.4	19	20	20.6	21.3	22	

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed

I-15 Express Lanes Southern Extension
Design Year Plus Project-Access btw Weirick/Temescal Canyon
PM Peak Hour

Legend					
60 - 75 mph	40 - 50 mph	20 - 30 mph	0 - 10 mph		
50 - 60 mph	30 - 40 mph	10 - 20 mph			

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)

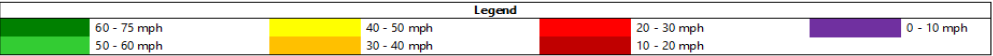
7:45 PM	68	68	68	68	67	66	67	55	56	50	46	46	46	38	16	17	17	16	15	16	15	18	21	22	29	50	60	64	64	66	65	65	64	65	66	66	65	66	66	66	66	65	61	59	60	60	57	51	48	47	46	37	37	37	38	37	33	
7:30 PM	68	67	67	67	67	66	67	49	48	46	45	46	45	21	16	12	15	16	16	16	16	14	17	20	22	27	49	60	64	64	66	66	66	66	65	66	66	66	66	66	66	66	65	61	59	60	60	57	51	48	47	46	37	37	37	38	37	33
7:15 PM	68	67	67	67	67	66	66	44	44	44	37	36	34	15	16	12	16	17	17	17	15	18	21	23	30	49	59	64	64	65	65	66	66	65	63	61	59	55	50	51	49	49	48	48	45	41	39	38	38	39	39	38	35	31	29			
7:00 PM	67	67	67	67	67	65	62	42	38	35	35	36	28	13	16	12	15	16	16	15	16	15	18	21	23	31	51	60	64	64	66	65	65	64	58	57	55	51	47	46	45	45	44	37	36	35	35	36	37	37	30	29	29	29				
6:45 PM	67	67	67	67	67	65	63	28	26	18	17	17	13	14	17	13	17	17	17	17	16	16	19	22	25	41	56	61	62	64	65	65	65	64	65	63	59	56	55	55	54	54	49	46	37	34	34	34	34	34	34	33	27	26	26	26		
6:30 PM	68	67	67	67	67	66	65	13	13	13	14	16	13	13	16	13	16	16	16	15	16	15	19	22	24	38	52	58	64	64	66	65	65	64	65	63	60	59	57	56	55	56	56	53	47	44	37	34	34	34	34	28	27	26	26	25		
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[illegible]

Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)

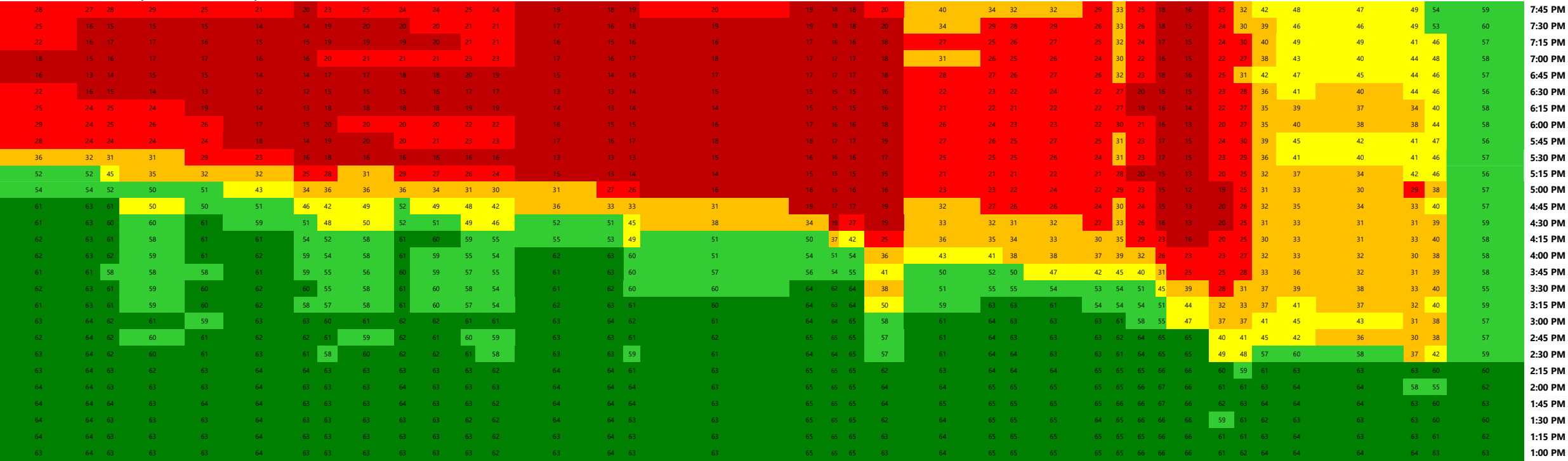
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VISSIM Post-Processor
Average Results from 5 Runs
Average Link Speed



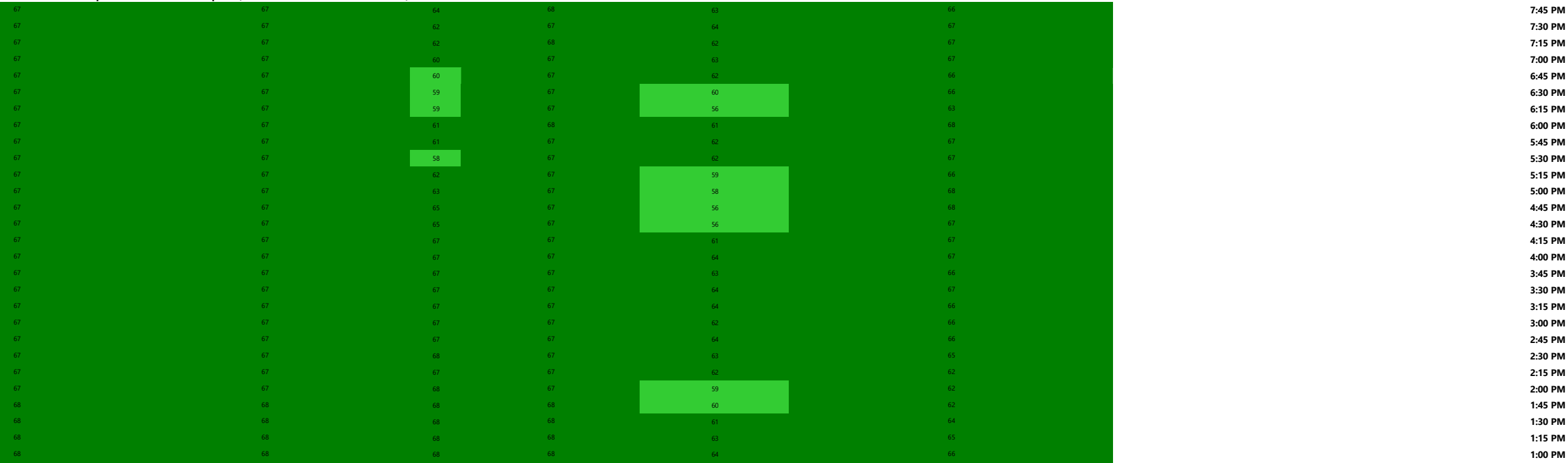
I-15 Express Lanes Southern Extension
Design Year Plus Project-Access btw Weirick/Temescal Canyon
PM Peak Hour

Southbound I-15 General Purpose Lanes: Measured Speed (Source - VISSIM Simulation Model)



Indian Truck Trail On		Horsethief Road Off		Horsethief Road On		Express Lane Access (Ingress/Egress)		Lake St Off		Lake St On		Express Lane Egress		Nichols Rd Off		Nichols Rd On		Express Lane Egress Central Ave Off		Central Ave On		Main St Off		Main St On
0.6	1	0.5	1.5		0.6	2.2		0.6	1	0.6	20.6	0.7	0.7											
12.6	13.6	14.1	15.6		16.2	18.4		19	20	20.6	21.3	22												

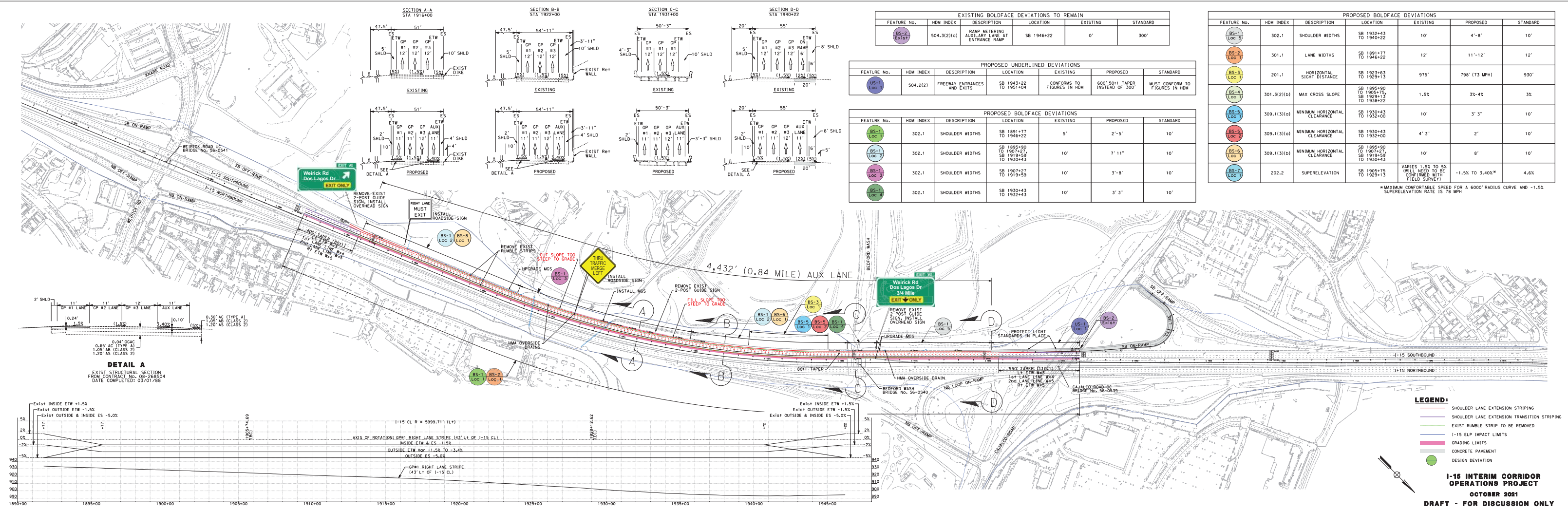
Southbound I-15 Express Lanes: Measured Speed (Source - VISSIM Simulation Model)



Appendix F

I-15 Interim Corridor Operations Project (ICOP) & I-15 Corridor Operations Project (COP) Geometrics

I-15 Interim Corridor Operations Project (ICOP) Geometrics



I-15 Corridor Operations Project (COP) Geometrics

