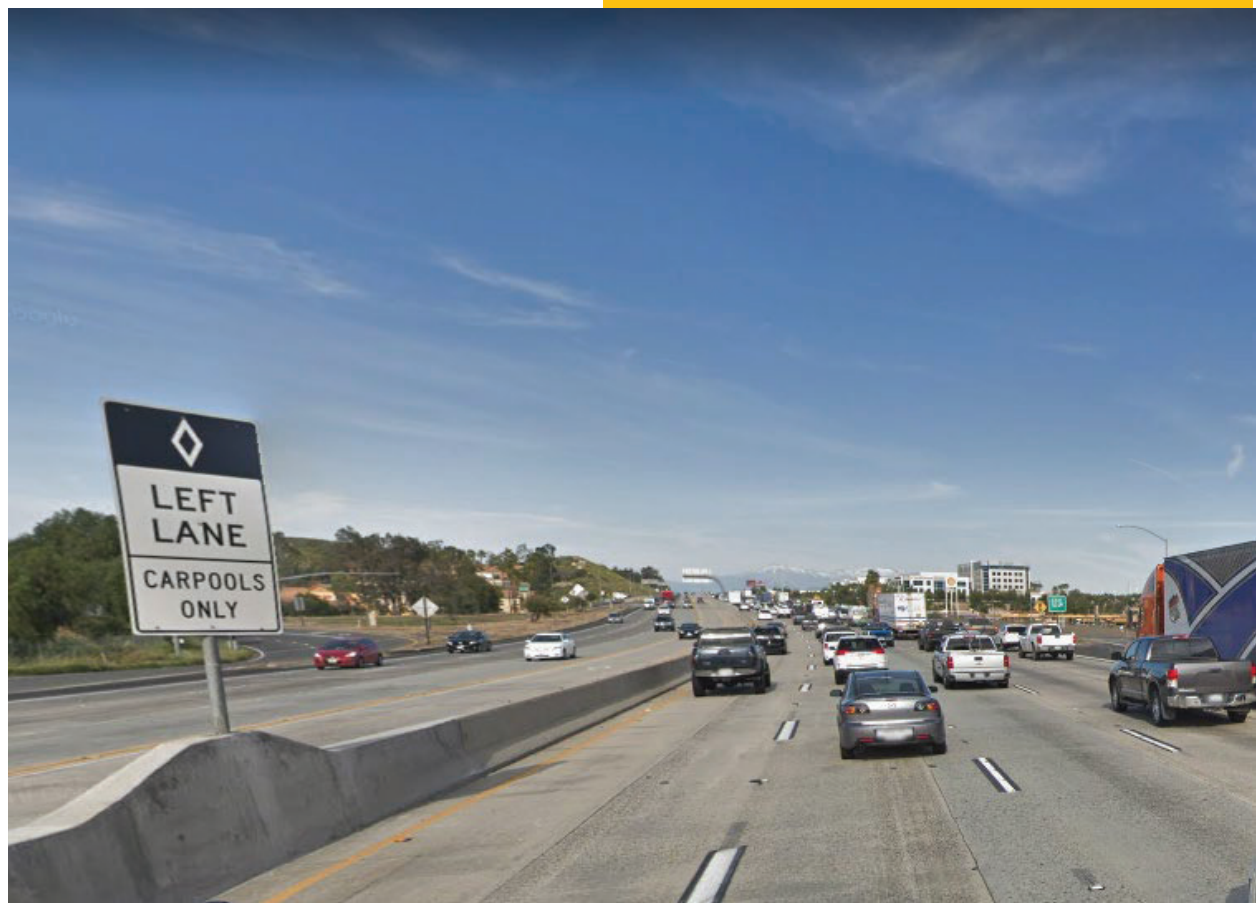


Traffic Operational Analysis Report for Converting Existing Full-Time to Part-Time HOV Lane on State Route 60, State Route 91, and Interstate 215 in Riverside County



District 08
Traffic Operations
2024

Prepared for:
California Department of Transportation District 08
464 West Fourth St.
San Bernardino, CA 92401

Prepared By:
Rithy Sar
Tri Le
Jiao Zhou
District 08 Office of Traffic Operations, Capital Outlay Support

Concurred By:
Haissam Yahya
Office Chief
District 08 Office of Traffic Operations, Capital Outlay Support

2024

Table of Contents

1.0	Introduction	8
1.1	Background	8
1.2	Study Area	8
2.1	Level of Service Criteria	10
2.2	Highway Segments Operational Analysis	11
3.0	Existing Traffic Volumes	12
3.1	State Route 60 (SR-60)	12
3.2	State Route 91 (SR-91)	12
3.3	Interstate 215 (I-215)	13
4.0	Traffic Operational Analysis	23
4.1	Travel Time	23
4.1.1	State Route 60 (SR-60)	23
4.1.2	State Route 91 (SR-91)	24
4.1.3	Interstate 215 (I-215)	24
4.2	Travel Speed	32
4.2.1	State Route 60 (SR-60)	32
4.2.2	State Route (SR-91)	32
4.2.3	Interstate 215 (I-215)	33
4.3	Level of Service	42
4.3.1	State Route 60 (SR-60)	42
4.3.2	State Route 91 (SR-91)	42
4.3.3	Interstate 215 (I-215)	42
5.0	Part-Time HOV lane Operational Analysis	51
5.1	State Route 60 Part-Time HOV Lane Operational Analysis for 2019	51
5.2	State Route 91 Part-Time HOV Lane Operational Analysis for 2019	52
5.3	Interstate 215 Part-Time HOV Lane Operational Analysis for 2019	55
5.4	Existing Part-Time HOV Lane Operational Analysis	56
6.0	Environmental Sustainability Analysis	58
6.1	Greenhouse Gas (GHG) Emission Analysis	61
6.2	Part-time HOV Lane Operation Efficiency Analysis	63
6.3	Traffic Impact Analysis	63
6.4	Enforcement Impact Analysis	63
6.5	Fiscal Impact Analysis	63
7.0	Conclusions and Recommendations	64
8.0	References	65
Appendix A:	Traffic Volume	66

List of Figures

Figure 1: The Study Area and Proposed Conversion from Full-time to Part-time HOV Lanes	9
Figure 2: SR-60 Eastbound and Westbound Graphical Traffic Volumes Data on Tuesday	15
Figure 3: SR-60 Eastbound and Westbound Graphical Traffic Volumes Data on Wednesday	16
Figure 4: SR-60 Eastbound and Westbound Graphical Traffic Volumes Data on Thursday.....	17
Figure 5: SR-91 Eastbound and Westbound Graphical Traffic Volumes Data on Tuesday	18
Figure 6: SR-91 Eastbound and Westbound Graphical Traffic Volumes Data on Wednesday.....	19
Figure 7: SR-91 Eastbound and Westbound Graphical Traffic Volumes Data on Thursday.....	20
Figure 8: I-215 Northbound and Southbound Graphical Traffic Volumes Data on Tuesday	21
Figure 9: I-215 Northbound and Southbound Graphical Traffic Volumes Data on Wednesday.....	22
Figure 10: I-215 Northbound and Southbound Graphical Traffic Volumes Data on Thursday.....	22
Figure 11: Comparisons of GP Lanes and HOV lane Travel Time on SR-60 Eastbound from 5:00 to 21:00.....	26
Figure 12: Comparisons of GP Lanes and HOV lane Travel Time on SR-60 Westbound from 5:00 to 21:00	27
Figure 13: Comparisons of GP Lanes and HOV lane Travel Time on SR-91 Eastbound from 5:00 to 21:00.....	28
Figure 14: Comparisons of GP Lanes and HOV lane Travel Time on SR-91 Westbound from 5:00 to 21:00	29
Figure 15: Comparisons of GP Lanes and HOV lane Travel Time on I-215 Northbound from 5:00 to 21:00	30
Figure 16: Comparisons of GP Lanes and HOV lane Travel Time on I-215 Southbound from 5:00 to 21:00	31
Figure 17: The Relationship between CO ₂ Emissions and Average Speed	60

List of Tables

Table 1: Level of Service Criteria for Basic Freeway Segments	11
Table 2: SR-60 EB GP Lane Speed Heat Map Summary	34
Table 3: SR-60 EB HOV Lane Speed Heat Map Summary	34
Table 4: SR-60 WB GP Lane Speed Heat Map Summary	35
Table 5: SR-60 WB HOV Lane Speed Heat Map Summary.....	35
Table 6: SR-91 EB GP Lane Speed Heat Map Summary	36
Table 7: SR-91 EB HOV Lane Speed Heat Map Summary	37
Table 8: SR-91 WB GP Lane Speed Heat Map Summary	38
Table 9: SR-91 WB HOV Lane Speed Heat Map Summary.....	39
Table 10: I-215 NB GP Lane Speed Heat Map Summary	40
Table 11: I-215 NB HOV Lane Speed Heat Map Summary.....	40
Table 12: I-215 SB GP Lane Speed Heat Map Summary	41
Table 13: I-215 SB HOV Lane Speed Heat Map Summary	41
Table 14: SR-60 EB GP Lane LOS Heat Map Summary.....	43
Table 15: SR-60 EB HOV Lane LOS Heat Map Summary	43
Table 16: SR-60 WB GP Lane LOS Heat Map Summary	44
Table 17: SR-60 WB HOV Lane LOS Heat Map Summary	44
Table 18: SR-91 EB GP Lane LOS Heat Map Summary.....	45
Table 19: SR-91 EB HOV Lane LOS Heat Map Summary	46
Table 20: SR-91 WB GP Lane LOS Heat Map Summary	47
Table 21: SR-91 WB HOV Lane LOS Heat Map Summary	48
Table 22: I-215 NB GP Lane LOS Heat Map Summary	49
Table 23: I-215 NB HOV Lane LOS Heat Map Summary	49
Table 24: I-215 SB GP Lane LOS Heat Map Summary	50
Table 25: I-215 SB HOV Lane LOS Heat Map Summary	50
Table 26: RIV SR-60 EB LOS for Conversion to Part-Time HOV Lane (GP + HOV Lanes).....	51
Table 27: RIV SR-60 WB LOS for Conversion to Part-Time HOV Lane (GP + HOV Lanes).....	52
Table 28: RIV SR-91 EB LOS for Conversion to Part-Time HOV Lane (GP + HOV Lanes).....	53
Table 29: RIV SR-91 WB LOS for Conversion to Part-Time HOV Lane (GP + HOV Lanes).....	54
Table 30: RIV I-215 NB LOS for Conversion to Part-Time HOV Lane (GP + HOV Lanes)	55
Table 31: RIV I-215 SB LOS for Conversion to Part-Time HOV Lane (GP + HOV Lanes)	55

Table 32: Operational LOS of SR-60 EB GP Serving as the Existing Part-Time HOV Lane	56
Table 33: Operation LOS of SR-60 EB HOV Lane Serving as the Existing Part-Time HOV Lane	56
Table 34: Operation LOS of SR-60 WB GP Serving as the Existing Part-Time HOV Lane	57
Table 35: Operational LOS of SR-60 WB HOV Lane Serving as the Existing Part-Time HOV Lane	57
Table 36: State Route 60 Eastbound GP Lane Traffic Volume on February 5, 2019.....	67
Table 37: State Route 60 Eastbound HOV Lane Traffic Volume on February 5, 2019.....	67
Table 38: State Route 60 Westbound GP Lane Traffic Volume on February 5, 2019.....	68
Table 39: State Route 60 Westbound HOV Lane Traffic Volume on February 5, 2019.....	68
Table 40: State Route 60 Eastbound GP Lane Traffic Volume on February 6, 2019.....	69
Table 41: State Route 60 Eastbound HOV Lane Traffic Volume on February 6, 2019.....	69
Table 42: State Route 60 Westbound GP Lane Traffic Volume on February 6, 2019.....	70
Table 43: State Route 60 Westbound HOV Lane Traffic Volume on February 6, 2019.....	70
Table 44: State Route 60 Eastbound GP Lane Traffic Volume on February 7, 2019.....	71
Table 45: State Route 60 Eastbound HOV Lane Traffic Volume on February 7, 2019.....	71
Table 46: State Route 60 Westbound GP Lane Traffic Volume on February 7, 2019.....	72
Table 47: State Route 60 Westbound HOV Lane Traffic Volume on February 7, 2019.....	72
Table 48: State Route 91 Eastbound GP Lane Traffic Volume on February 5, 2019.....	73
Table 49: State Route 91 Eastbound HOV Lane Traffic Volume on February 5, 2019.....	74
Table 50: State Route 91 Westbound GP Lane Traffic Volume on February 5, 2019.....	75
Table 51: State Route 91 Westbound HOV Lane Traffic Volume on February 5, 2019.....	76

Table 52: State Route 91 Eastbound GP Lane Traffic Volume on February 6, 2019.....	77
Table 53: State Route 91 Eastbound HOV Lane Traffic Volume on February 6, 2019.....	78
Table 54: State Route 91 Westbound GP Lane Traffic Volume on February 6, 2019.....	79
Table 55: State Route 91 Westbound HOV Lane Traffic Volume on February 6, 2019.....	80
Table 56: State Route 91 Eastbound GP Lane Traffic Volume on February 7, 2019.....	81
Table 57: State Route 91 Eastbound HOV Lane Traffic Volume on February 7, 2019.....	82
Table 58: State Route 91 Westbound GP Lane Traffic Volume on February 7, 2019.....	83
Table 59: State Route 91 Westbound GP Lane Traffic Volume on February 7, 2019.....	84
Table 60: Interstate 215 Northbound GP Lane Traffic Volume on February 5, 2019.....	85
Table 61: Interstate 215 Northbound HOV Lane Traffic Volume on February 5, 2019.....	85
Table 62: Interstate 215 Southbound GP Lane Traffic Volume on February 5, 2019.....	86
Table 63: Interstate 215 Southbound HOV Lane Traffic Volume on February 5, 2019.....	86
Table 64: Interstate 215 Northbound GP Lane Traffic Volume on February 6, 2019.....	87
Table 65: Interstate 215 Northbound HOV Lane Traffic Volume on February 6, 2019.....	87
Table 66: Interstate 215 Southbound GP Lane Traffic Volume on February 6, 2019.....	88
Table 67: Interstate 215 Southbound HOV Lane Traffic Volume on February 6, 2019.....	88
Table 68: Interstate 215 Northbound GP Lane Traffic Volume on February 7, 2019.....	89
Table 69: Interstate 215 Northbound HOV Lane Traffic Volume on February 7, 2019.....	89
Table 70: Interstate 215 Southbound GP Lane Traffic Volume on February 7, 2019.....	90
Table 71: Interstate 215 Southbound HOV Lane Traffic Volume on February 7, 2019.....	90

1.0 Introduction

The purpose of this report is to study the feasibility and appropriateness of operating high-occupancy vehicle (HOV) lanes only during peak hours on State Route 60 (SR-60), State Route 91 (SR-91), and Interstate 215 (I-215) in the County of Riverside. The report includes travel time, travel speed, level of service (LOS), and environmental sustainability for full-time versus part-time HOV lanes with conclusions and recommendations based on the detailed analyses provided.

1.1 Background

Existing law authorizes the California Department of Transportation (Caltrans) to designate certain lanes for the exclusive or preferential use of high-occupancy vehicles in congested freeway corridors. The objective is to restrict certain highway lanes to exclusive use by multi-occupant vehicles and eligible vehicles, thereby encouraging carpooling, vanpooling, and transit bus riding.

The current law prohibits single-occupancy vehicles (SOV), except eligible vehicles, from using the high-occupancy vehicle lanes on the freeway. In response to Assembly Bill 91, this report intends to explore the potential benefits of converting the operation of HOV lanes on SR-60, SR-91, and I-215 in Riverside County from a full-time basis to a part-time basis, such as improving vehicle-moving capability and enhancing LOS during non-peak hours.

1.2 Study Area

The study area contained 9.62 miles of SR-60, 12.83 miles of SR-91, and 3.62 miles of I-215. The 3.62 miles of I-215 segment stays between the SR-60/SR-91/I-215 Junction and west of Moreno Valley Freeway (Moreno Valley Freeway has operated with part-time HOV since November 2011). This segment is composed of both SR-60 and SR-215. For a more comprehensive analysis of the feasibility of HOV lanes on SR-60 in Riverside County, this segment was included in the analysis, even though it follows with I-215 as well. Furthermore, to distinguish it from the study area of SR-60 between I-15 and SR-91/SR-60/I215 Junction, this report designates it with I-215 to avoid name confusion.

- State Route 60 (SR-60) in both directions (east and west)
 - Between Interstate 15 and SR-91/SR-60/I-215 junction, from east of the Etiwanda Avenue undercrossing (post mile (PM) R2.2) to east of Main Street overcrossing (PM 11.815).

- State Route 91 (SR-91) in both directions (east and west)
 - Between I-15 and SR-91/SR-60/I215 Junction, from west of the Promenade Avenue overcrossing (PM 8.027) to east of the Third Street undercrossing (PM 20.86)
- Interstate 215 (I-215) in both directions (north and south)
 - Between the SR-60/SR-91/I-215 junction and Moreno Valley Freeway, from the Fair Isle Drive/Box Spring Road overcrossing (PM R38.627) to north of the Blaine Street overcrossing (PM 42.245)

Figure 1 shows the study area and proposed conversion from full-time to part-time HOV lanes.

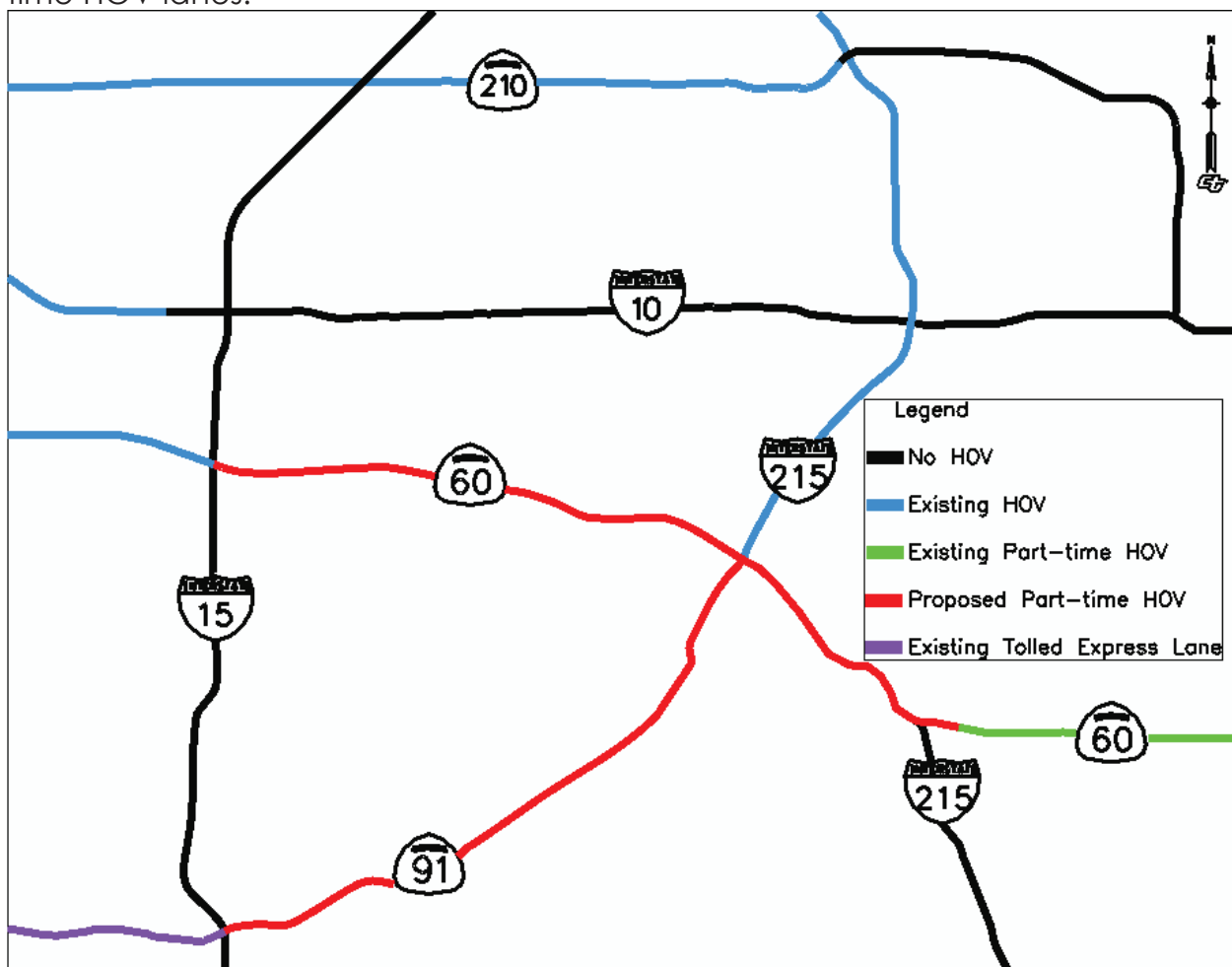


Figure 1: The Study Area and Proposed Conversion from Full-time to Part-time HOV Lanes

2.0 Analysis Methodology

There are several methodologies that could be used to analyze a project's transportation impacts which include Vehicle Miles Traveled (VMT) and induced travel or Level of Service (LOS). VMT measures the amount of travel for all vehicles in the distance over a given period. Induced travel determines how much of the increase in VMT is attributable to the project. Level of service measures the traffic congestion levels on the roadways.

To analyze the potential operational improvements of converting full-time HOV lanes to part-time HOV lanes, level of service standards will be part of the methodology. Additionally, to determine whether this conversion will induce demand and subsequently increase VMT, the methodology will also conduct an induced travel analysis.

2.1 Level of Service Criteria

Level of Service 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 level of service was calculated for each study facility based on density in the number of vehicles per hour per lane. Table 1 shows the criteria used to determine the level of service for basic freeway segments.

Table 1: Level of Service Criteria for Basic Freeway Segments

Level of Service	Density (pc/mi/ln)	Description
A	≤ 11	Free flow operations. Vehicles are almost completely unimpeded in their ability to maneuver within the traffic stream.
B	> 11 - 18	Reasonably free-flow operations. The ability to maneuver within the traffic stream is only slightly restricted, and the general level of physical and psychological comfort provided to drivers is still high.
C	> 18 - 26	Flow with speeds near the 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.
D	> 26 - 35	Speeds begin to decline with increasing flows, with density increasing more quickly. Freedom to maneuver within the traffic stream is seriously limited, and drivers experience reduced physical and psychological comfort levels.
E	> 35 - 45	Operation at or near capacity. There are virtually no usable gaps within the traffic stream, leaving little room to maneuver within the traffic stream. Any disruption can be expected to produce a serious breakdown and substantial queuing.
F	Density > 45	Unstable flow. Operations within a queue are the result of a breakdown or bottleneck at a downstream point.

Source: Highway Capacity Manual, HCM 6th Edition

2.2 Highway Segments Operational Analysis

Highway segments were analyzed using Equations 12-11 in the Highway Capacity Manual (HCM) 6th Edition to estimate the density of the traffic stream, which serves as the basis for Level of Service analysis.

The traffic operational analysis uses 16 hours from 05:00 to 21:00 (21:00 represents 20:00 to 20:59) for the year 2019.

The evaluation criteria, described in the paragraph below, were used to determine acceptable traffic operating conditions, based on the level of service policies identified by Caltrans, the jurisdiction for freeway segments.

The Caltrans Guide for the Preparation of Traffic Impact Studies (December 2002) states Caltrans endeavors to maintain a target level of service at the transition between level of service C and level of service D (see Appendix “C-3”) on State highway facilities; however, Caltrans acknowledges that this may not always be feasible. For this study, level of service D is assumed to be the criteria for Interstate 215 and State Routes 60 and 91 corridors.

3.0 Existing Traffic Volumes

The traffic data related to high occupancy vehicle and general purpose (GP) lanes for this analysis report are collected from Caltrans Performance Measurement System (PeMS). A 17-hour period was studied (by directions and lanes) during the weekdays from 05:00 to 21:00. Based on Caltrans' guidance for the preparation of traffic impact studies, the vehicle counts (volumes) should be conducted on Tuesday, Wednesday, or Thursday; during weekdays not containing a holiday; and during favorable weather conditions.

The traffic data from February 5 through 7 (Tuesday to Thursday under good weather conditions) was collected from PeMS for this study because there are no national holidays during this period and volumes on these three days appear to be relatively higher than on other weekdays in the same month, representing the worst-case scenario.

The graphical traffic volume for February 5, 6 and 7 (Tuesday, Wednesday, and Thursday) are shown in Figures 2 through 10. Comparing the traffic volume data between Tuesday, Wednesday and Thursday, the determination was that traffic volumes on Wednesday (a middle value) were more representative than those on Tuesday and Thursday for normal driving conditions. Therefore, the traffic data on Wednesday, February 6, 2019, would be used to conduct the analyses in this report. Traffic volume worksheets are included in Appendix A.

3.1 State Route 60 (SR-60)

Figure 3 shows the graphical traffic volume of the eastbound and westbound lanes along the SR-60 mainline from east of Etiwanda Avenue undercrossing (PM R2.2) to the east of Main Street Overcrossing (post mile 11.815) during the time between 05:00 and 21:00. The traffic volumes along the SR-60 on the GP lanes are compared with the HOV lane during the data collection period on February 6, 2019. Average eastbound traffic on a general-purpose lane was found to be 35% higher than the HOV lane and westbound traffic was 21% higher than the HOV lane between 10:00 and 15:00.

3.2 State Route 91 (SR-91)

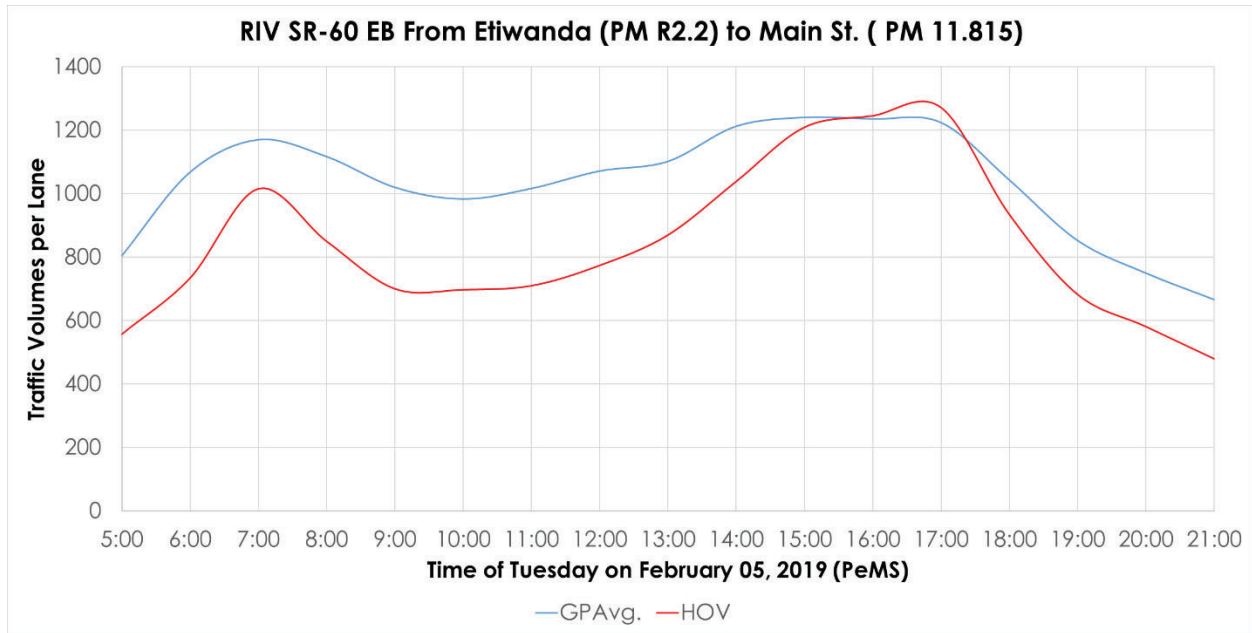
Figure 6 shows the graphical traffic volume of the eastbound and westbound lanes along the SR-91 mainline from west of Promenade Avenue overcrossing (PM 8.027) east of the Third Street undercrossing (PM 20.86) during the time

between 05:00 and 21:00. The traffic volumes along the SR-91 on the general-purpose lanes are compared with the HOV lane during the data collection period on February 6, 2019. Average eastbound traffic on a general-purpose lane was found to be 64% higher than the HOV lane and westbound traffic was 59% higher than the HOV lane between 10:00 and 15:00.

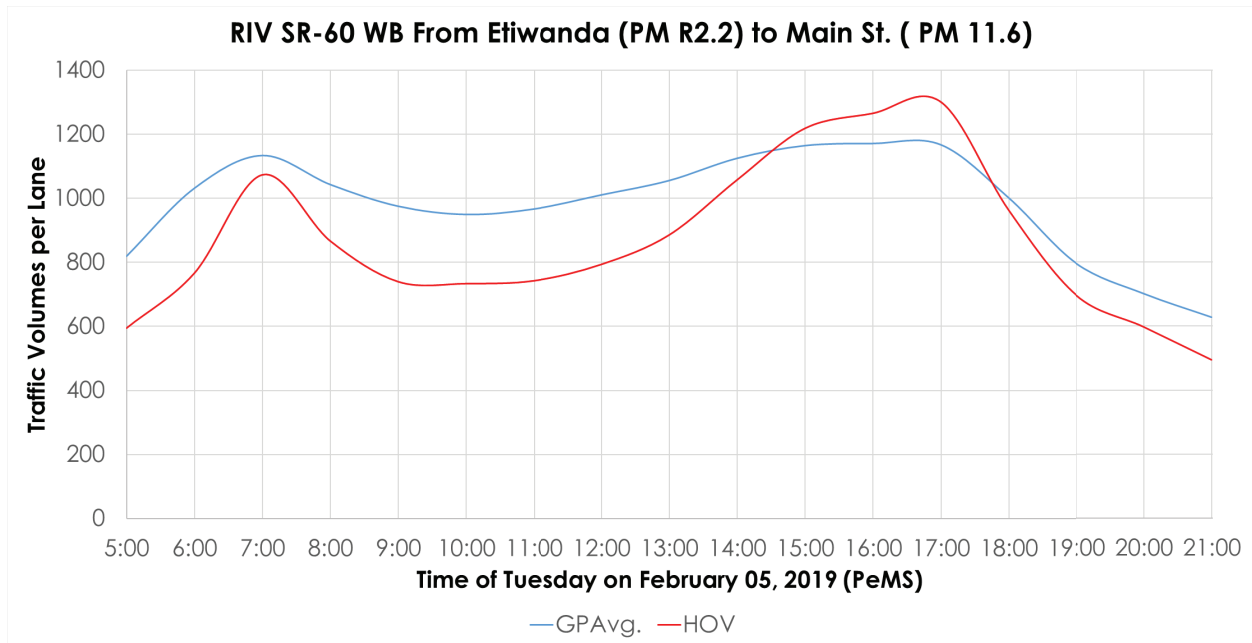
3.3 Interstate 215 (I-215)

Figure 9 shows the graphical traffic volume of the northbound and southbound directions along the I-215 mainline from south of the Box Spring Road/Fair Isle Drive overcrossing (PM R38.627) to north of the Blaine Street overcrossing (PM 42.245) during the time between 05:00 and 21:00. The traffic volumes along I-215 on the general-purpose lanes are compared with the high occupancy vehicle lane during the data collection period on February 6, 2019. Average northbound traffic on a general-purpose lane was found to be 6% higher than the high-occupancy vehicle lane and southbound traffic was 3% lower than the high-occupancy vehicle lane between 10:00 and 15:00.

Figure 2: SR-60 Eastbound and Westbound Graphical Traffic Volumes Data on Tuesday

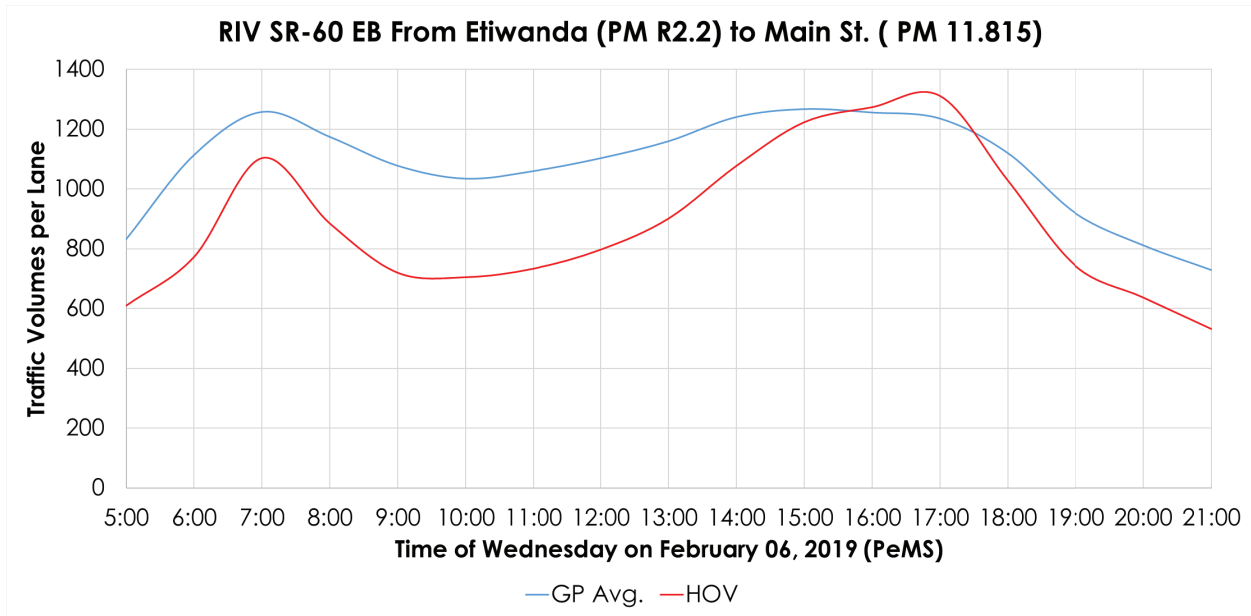


Source: Caltrans Performance Measurement System (PeMS)

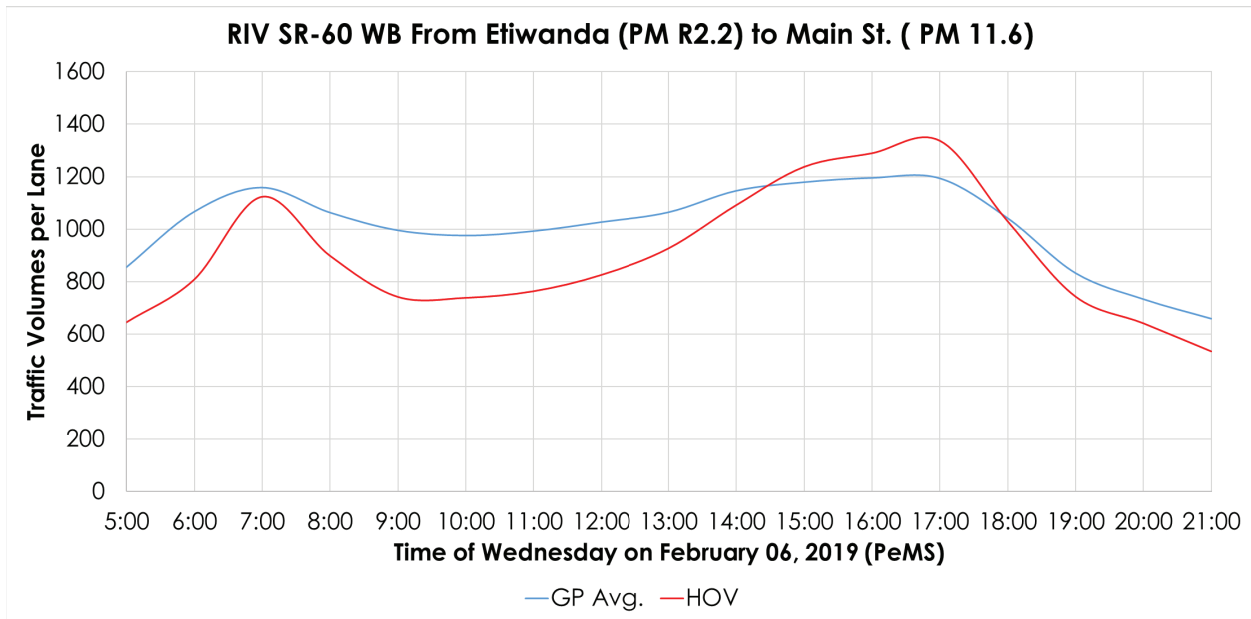


Source: Caltrans Performance Measurement System (PeMS)

Figure 3: SR-60 Eastbound and Westbound Graphical Traffic Volumes Data on Wednesday

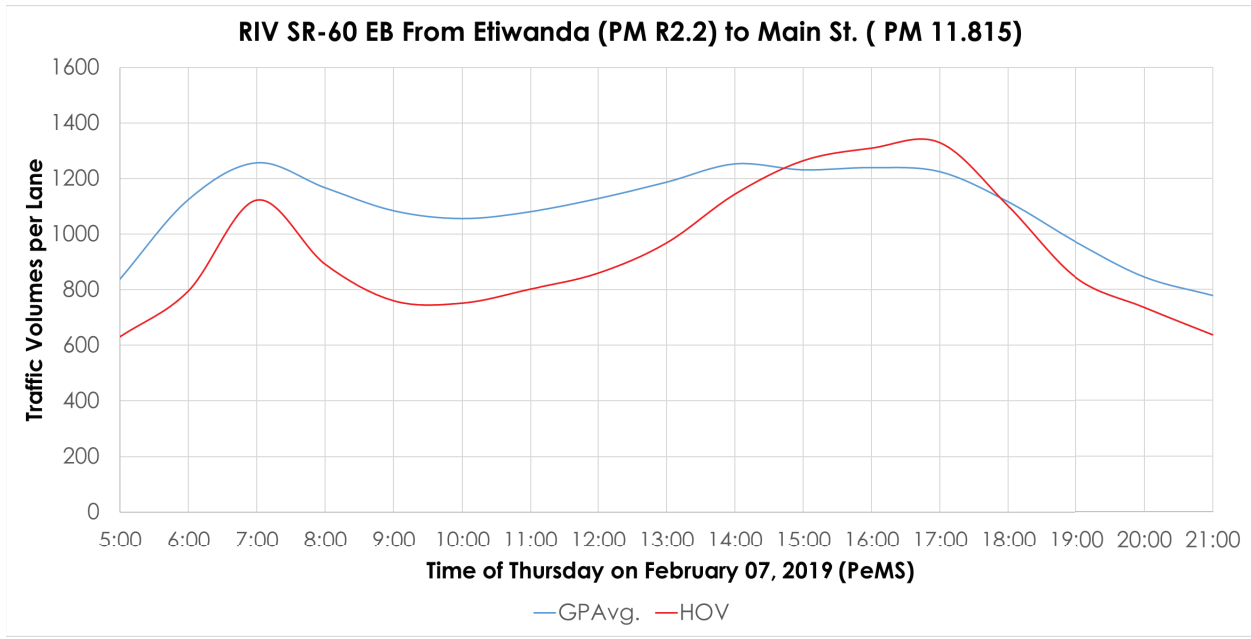


Source: Caltrans Performance Measurement System (PeMS)

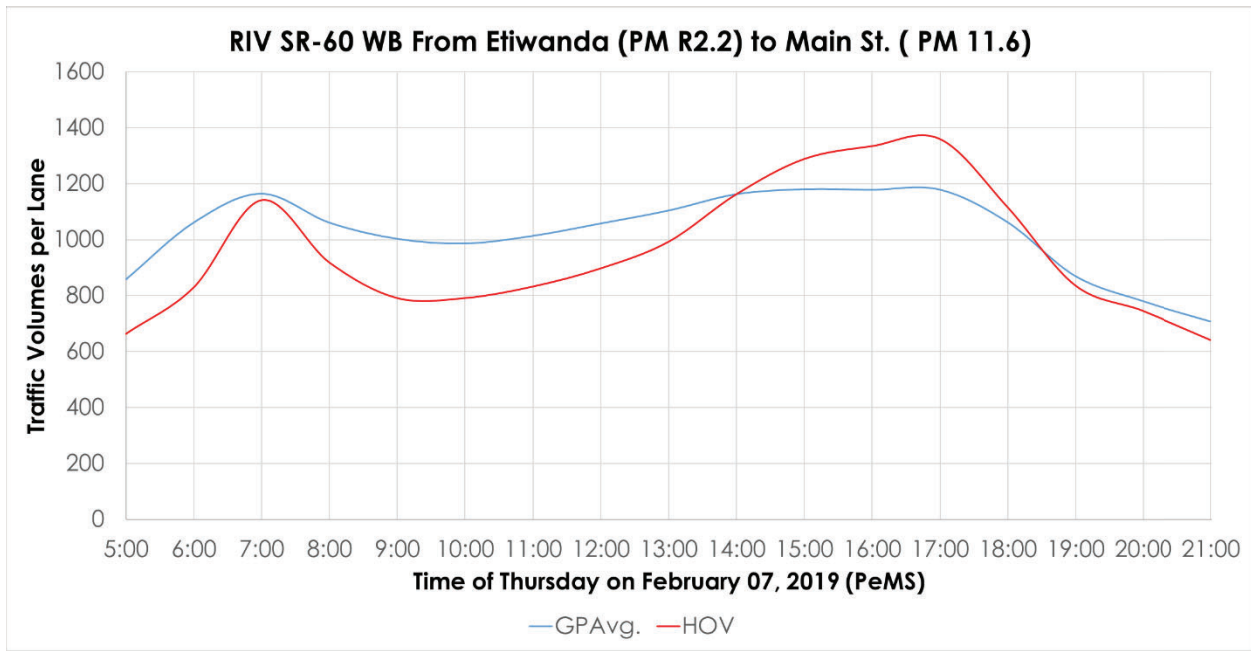


Source: Caltrans Performance Measurement System (PeMS)

Figure 4: SR-60 Eastbound and Westbound Graphical Traffic Volumes Data on Thursday

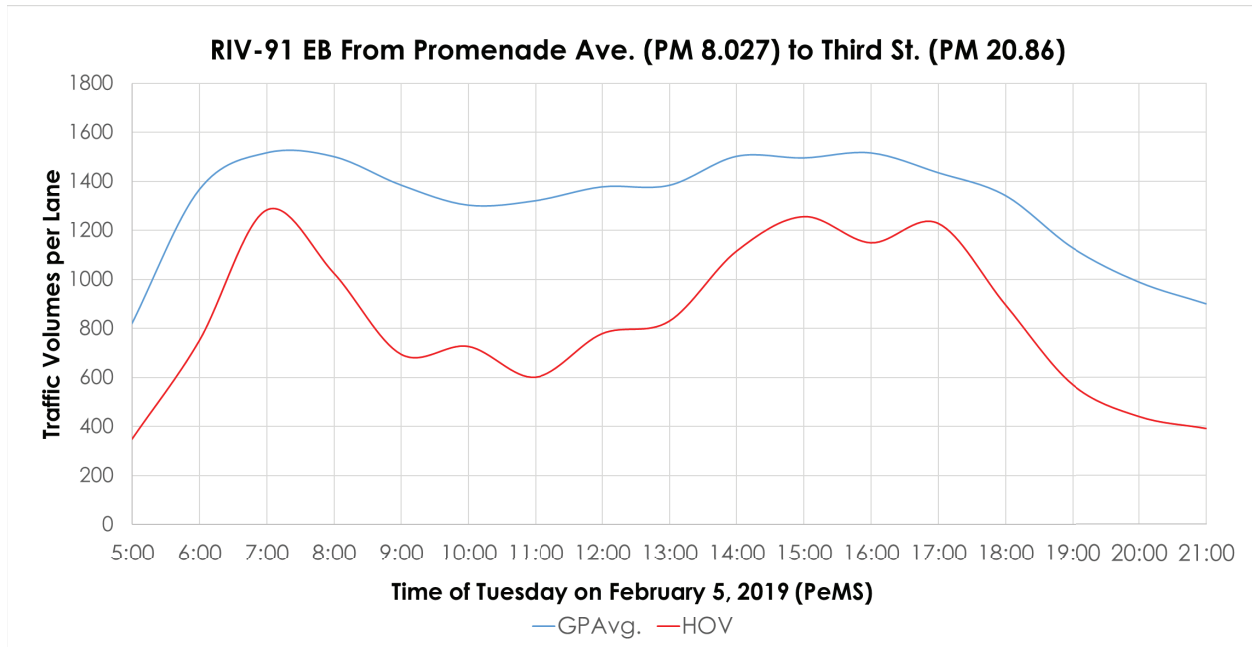


Source: Caltrans Performance Measurement System (PeMS)

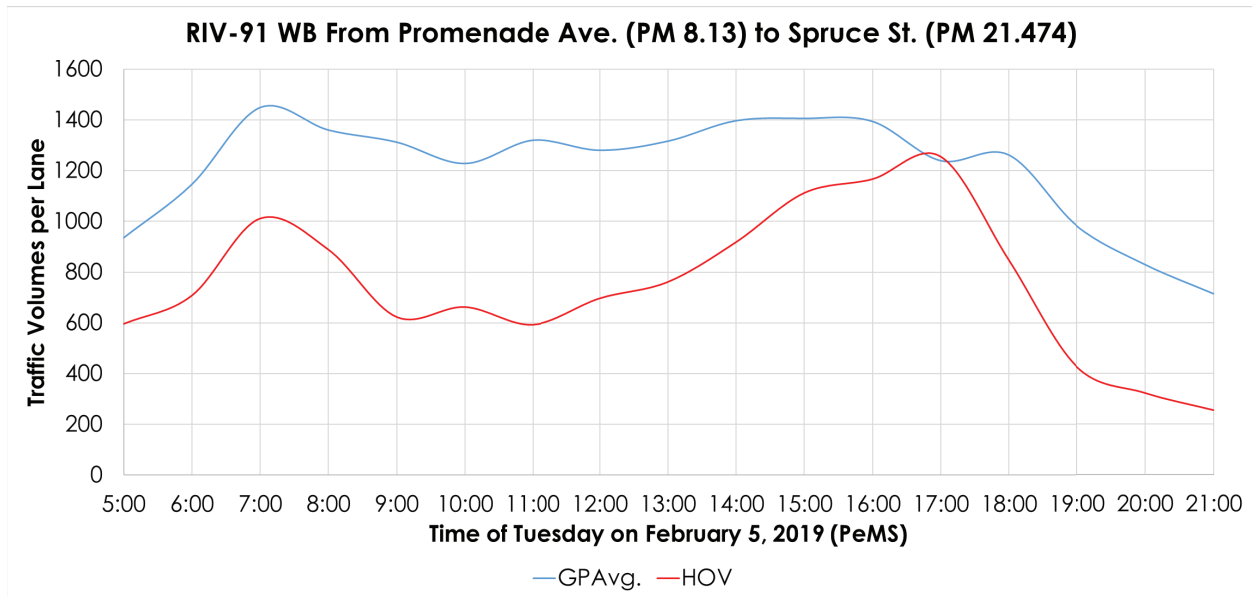


Source: Caltrans Performance Measurement System (PeMS)

Figure 5: SR-91 Eastbound and Westbound Graphical Traffic Volumes Data on Tuesday

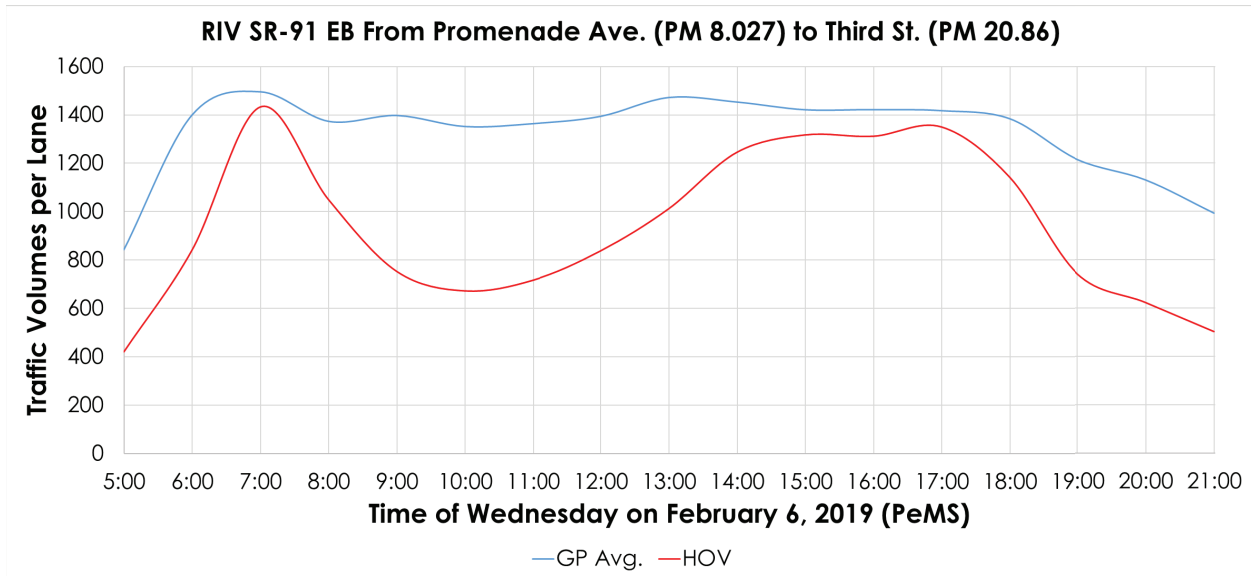


Source: Caltrans Performance Measurement System (PeMS)

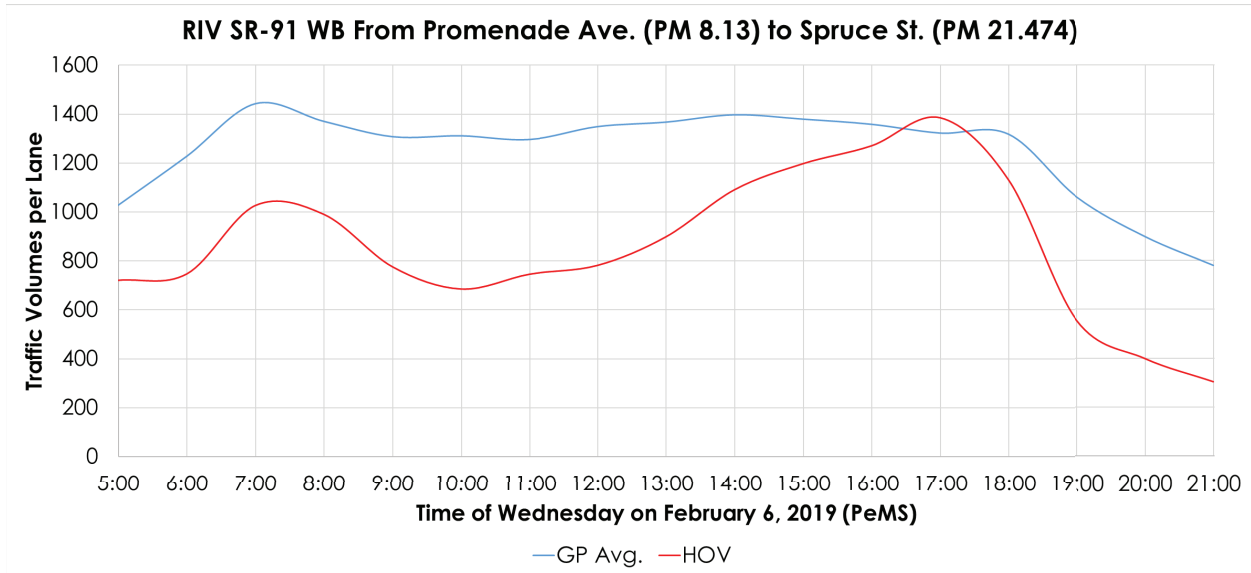


Source: Caltrans Performance Measurement System (PeMS)

Figure 6: SR-91 Eastbound and Westbound Graphical Traffic Volumes Data on Wednesday

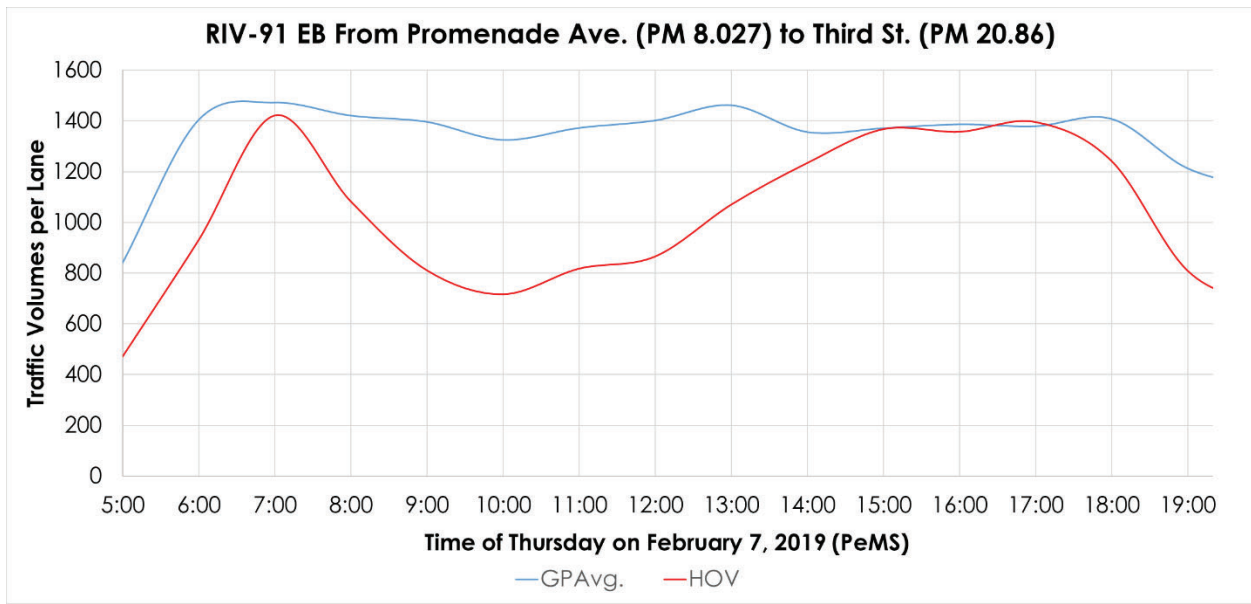


Source: Caltrans Performance Measurement System (PeMS)

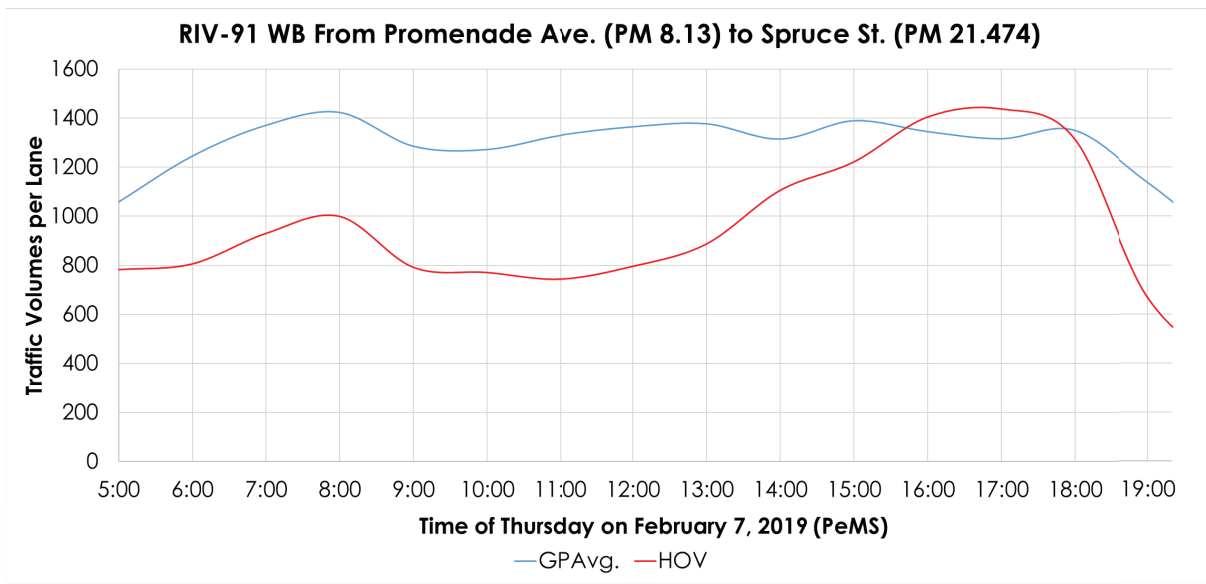


Source: Caltrans Performance Measurement System (PeMS)

Figure 7: SR-91 Eastbound and Westbound Graphical Traffic Volumes Data on Thursday

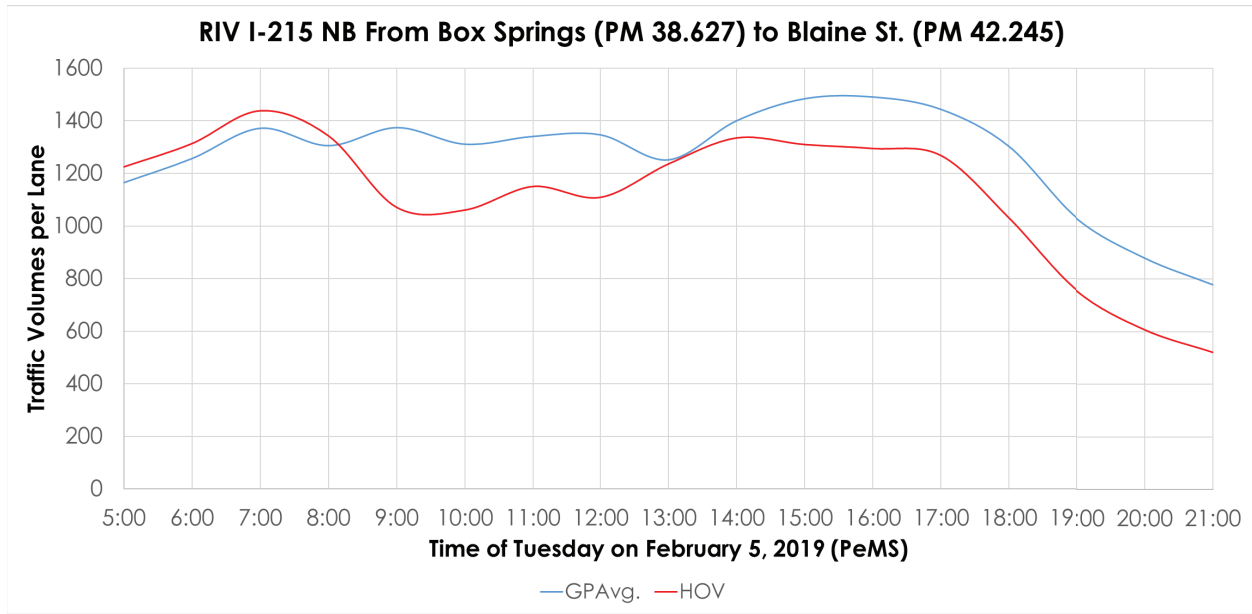


Source: Caltrans Performance Measurement System (PeMS)

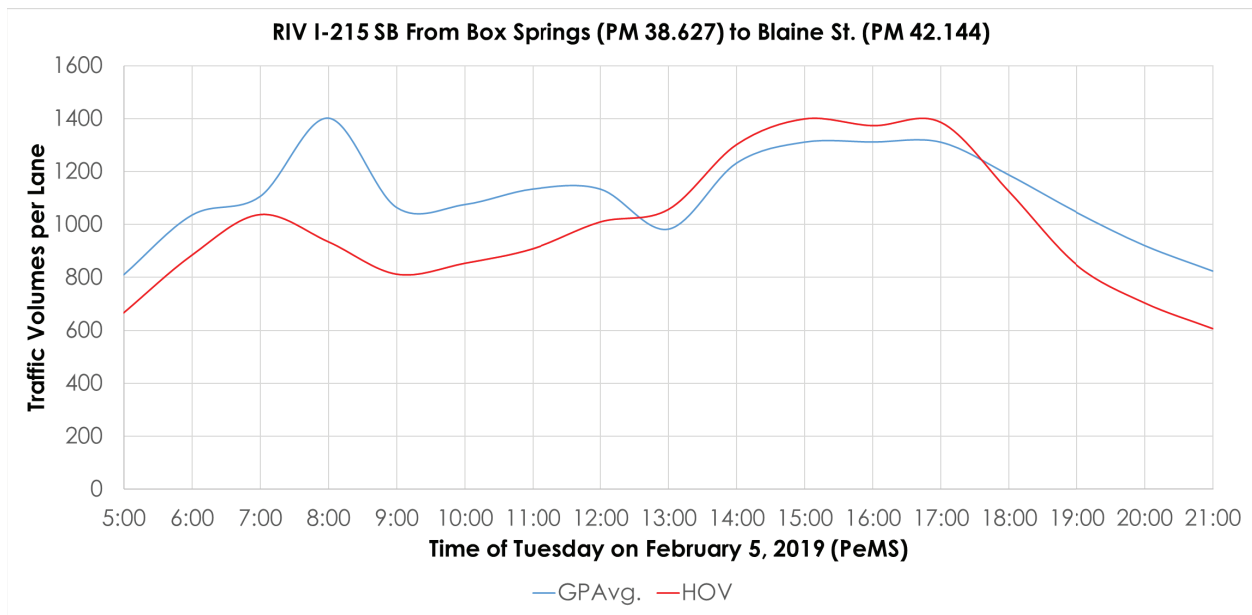


Source: Caltrans Performance Measurement System (PeMS)

Figure 8: SR-91 Eastbound and Westbound Graphical Traffic Volumes Data on Tuesday

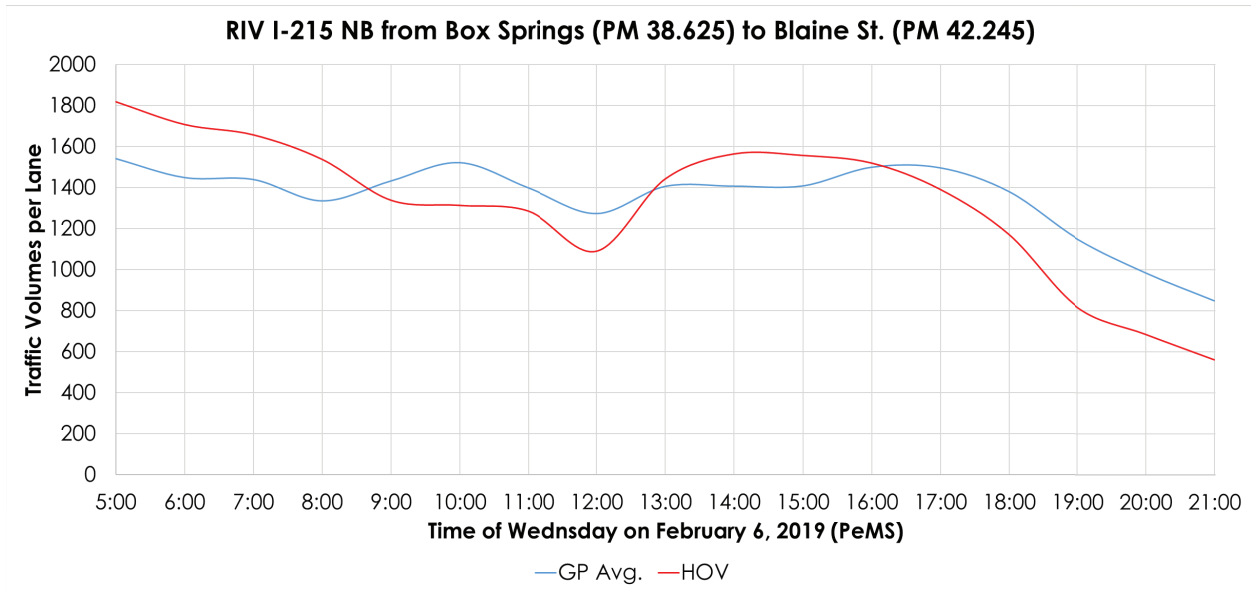


Source: Caltrans Performance Measurement System (PeMS)

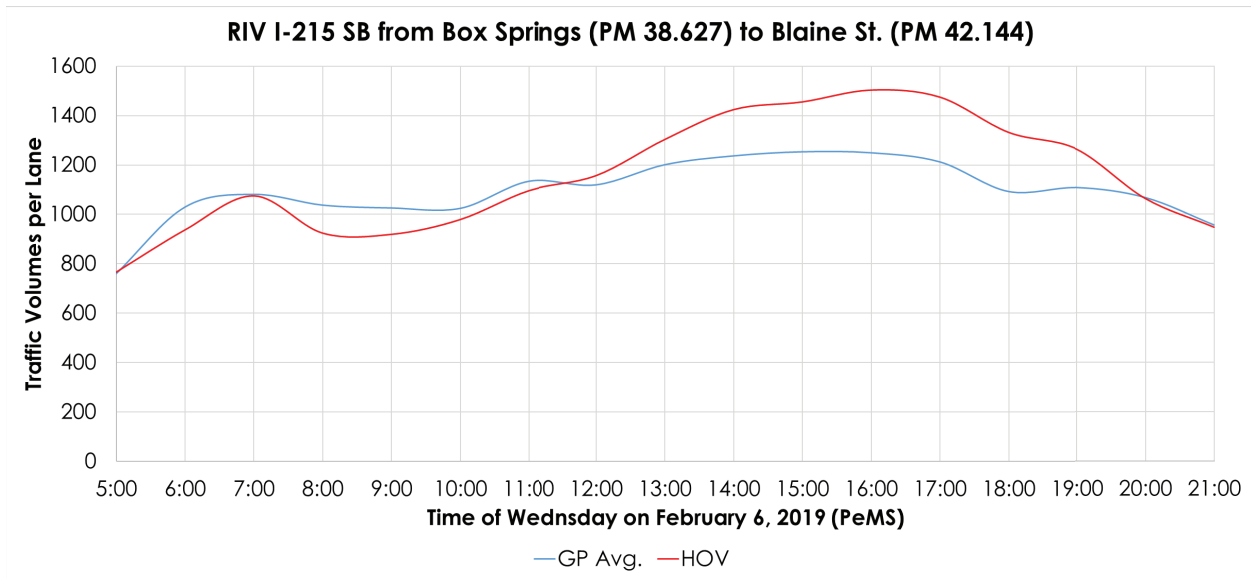


Source: Caltrans Performance Measurement System (PeMS)

Figure 9: I-215 Northbound and Southbound Graphical Traffic Volumes Data on Wednesday

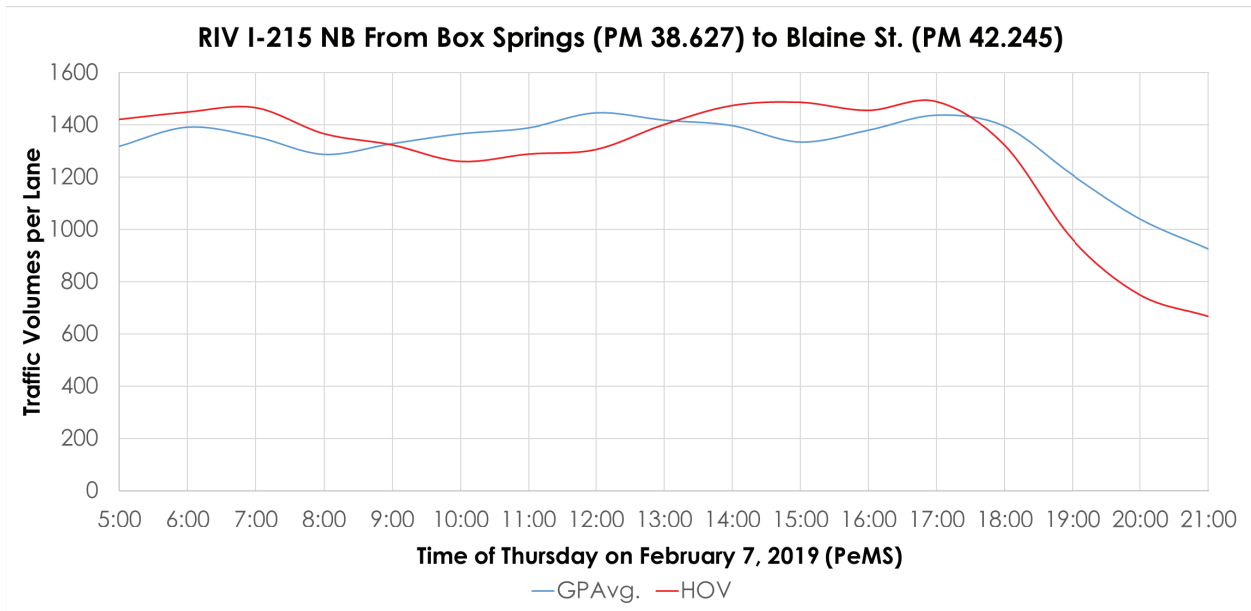


Source: Caltrans Performance Measurement System (PeMS)

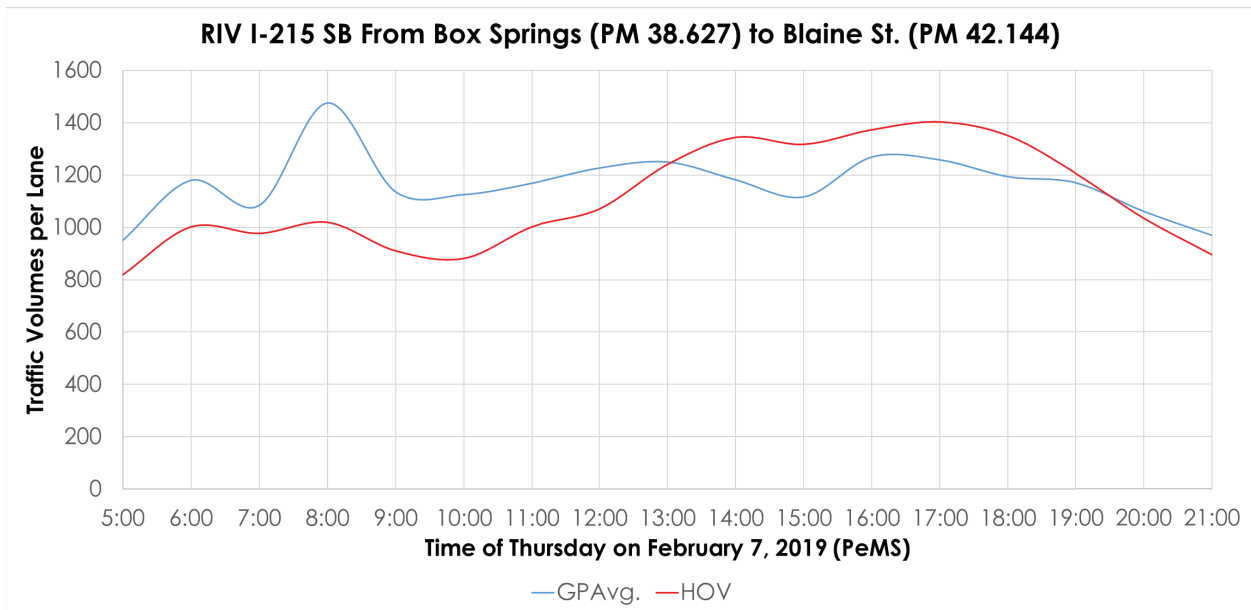


Source: Caltrans Performance Measurement System (PeMS)

Figure 10: I-215 Northbound and Southbound Graphical Traffic Volumes Data on Thursday



Source: Caltrans Performance Measurement System (PeMS)



Source: Caltrans Performance Measurement System (PeMS)

4.0 Traffic Operational Analysis

4.1 Travel Time

The existing loop detector sensors placed in each lane collect traffic data such as speed and volume (locations listed in Tables 2 through 13 in Section 4.2 and Tables 32 through 67 in Appendix A). The average value of adjacent upstream and downstream speeds was calculated as the average speed for each segment. The distance between each location was calculated through the associated post miles in the study area. Travel time was generated by dividing the distance by the average speed for each segment.

Figures 11 through 16 show the graphical representation of travel time on the GP lanes and HOV lanes on highway mainline segments in both directions from 05:00 to 21:00.

These figures graphically provide the analysis of travel time for GP lanes and HOV lanes along the SR-60, SR-91, and I-215 corridors. The estimated free flow travel time (the green dashed lines in the figures) was flat during the study time. This indicates that the traffic flow is smooth with a speed of 65 miles per hour (mph) and no congestion occurs along the 3 study corridors during the study periods. The two lines above the free flow line show that the travel time profiles for the GP lanes and the HOV lane are significantly higher than the smooth travel time. However, these plots also show gaps between the GP lanes and HOV lanes, which illustrate that the GP lanes have a longer delay than the HOV lane.

After 09:00, the travel time for the GP lanes and HOV lane declines to the proximity of the green dashed line (the travel time with free-flow speed), and they stay relatively flat before the afternoon peak hours. During the non-peak hours, the travel time for the GP lanes is significantly higher than the travel time for the HOV lane.

4.1.1 State Route 60 (SR-60)

Figures 11 and 12 show the comparison between the GP lanes and HOV lane from Etiwanda Avenue undercrossing to Main Street Bridge in the eastbound and westbound lanes respectively. The morning and afternoon-to-evening peak periods of travel time for the GP lanes and HOV lanes were identified as 06:00 to 10:00 and 15:00 to 19:00 in both directions. During the morning peak, the travel time in the GP lanes and HOV lanes approaches 11.26 minutes and 10.64

minutes for eastbound lanes, and 14.43 minutes and 11.49 minutes for westbound lanes, respectively. During the afternoon-to-evening peak, the travel time in the GP lanes and HOV lanes approaches 14.60 minutes and 13.90 minutes for eastbound direction, and 12.76 minutes and 11.50 minutes for westbound lanes, respectively. During non-peak hours, the travel time in the GP lanes and HOV lanes approaches 11.12 minutes and 10.42 minutes for eastbound lanes, and 13.44 minutes and 10.95 minutes for westbound lanes, respectively.

4.1.2 State Route 91 (SR-91)

Figures 13 and 14 show the comparison between the GP lanes and HOV lane from the Promenade Avenue undercrossing to the Third Street overcrossing in the eastbound and westbound lanes respectively. The ante meridiem (AM) and post meridiem (PM) peak periods for the travel time in the GP lanes and HOV lanes were identified as 06:00 to 10:00 and 15:00 to 19:00 in both directions. During the morning peak, the travel time in the GP lanes and HOV lanes approaches 17.22 minutes and 15.66 minutes for eastbound direction, and 16.04 minutes and 13.60 minutes for westbound lanes, respectively. During the afternoon peak, the travel time in the GP lanes and HOV lanes approaches 16.80 minutes and 16.58 minutes for eastbound direction, and 22.06 minutes and 17.54 minutes for westbound lanes, respectively. While during non-peak hours, the travel time in the GP lanes and HOV lanes approaches 13.15 minutes and 12.63 minutes for eastbound lanes, and 15.40 minutes and 13.76 minutes for westbound lanes, respectively.

4.1.3 Interstate 215 (I-215)

Figures 15 and 16 show the comparison between the GP lanes and HOV lane from Fair Isle Drive/Box Spring Road undercrossing to the existing part-time HOV lane in the eastbound and westbound lanes, respectively. The AM and PM peak periods for the travel time in the GP lanes and HOV lanes were identified as 06:00 to 10:00 and 15:00 to 19:00 in both directions. During the AM peak, the travel time in the GP lanes and HOV lanes approaches 7.80 minutes and 8.16 minutes for northbound lanes, and 7.79 minutes and 7.32 minutes for southbound lanes, respectively. During the PM peak, the travel time in the GP lanes and HOV lanes approaches 7.60 minutes and 7.54 minutes for northbound lanes, and 9.36 minutes and 11.10 minutes for southbound lanes, respectively. While during non-peak hours, the travel time in the GP lanes and HOV lanes

approaches 7.40 minutes and 7.07 minutes for northbound lanes, and 6.90 minutes and 6.21 minutes for southbound lanes, respectively.

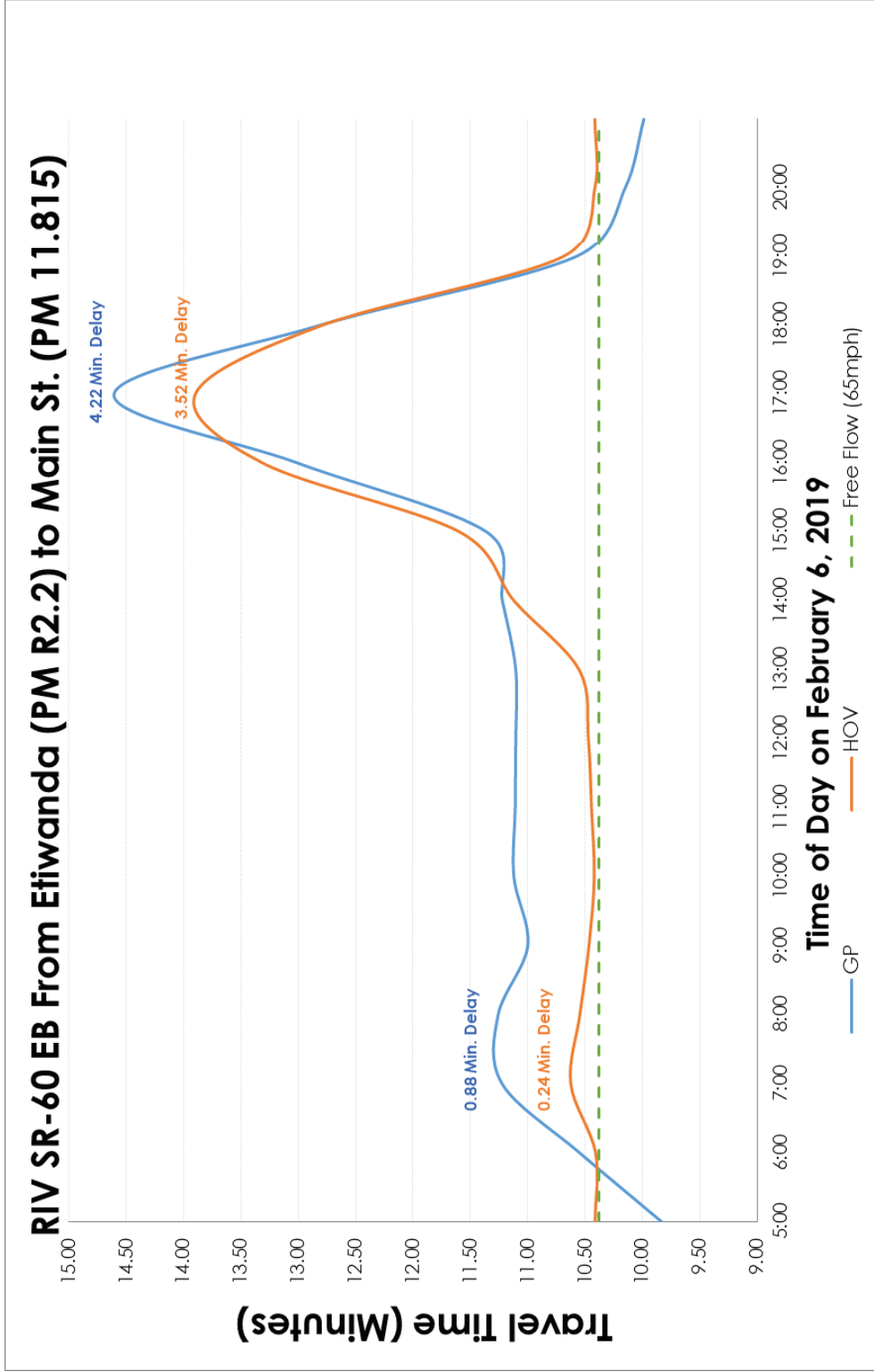


Figure 3: Comparisons of GP Lanes and HOV lane Travel Time on SR-60 Eastbound from 5:00 to 21:00

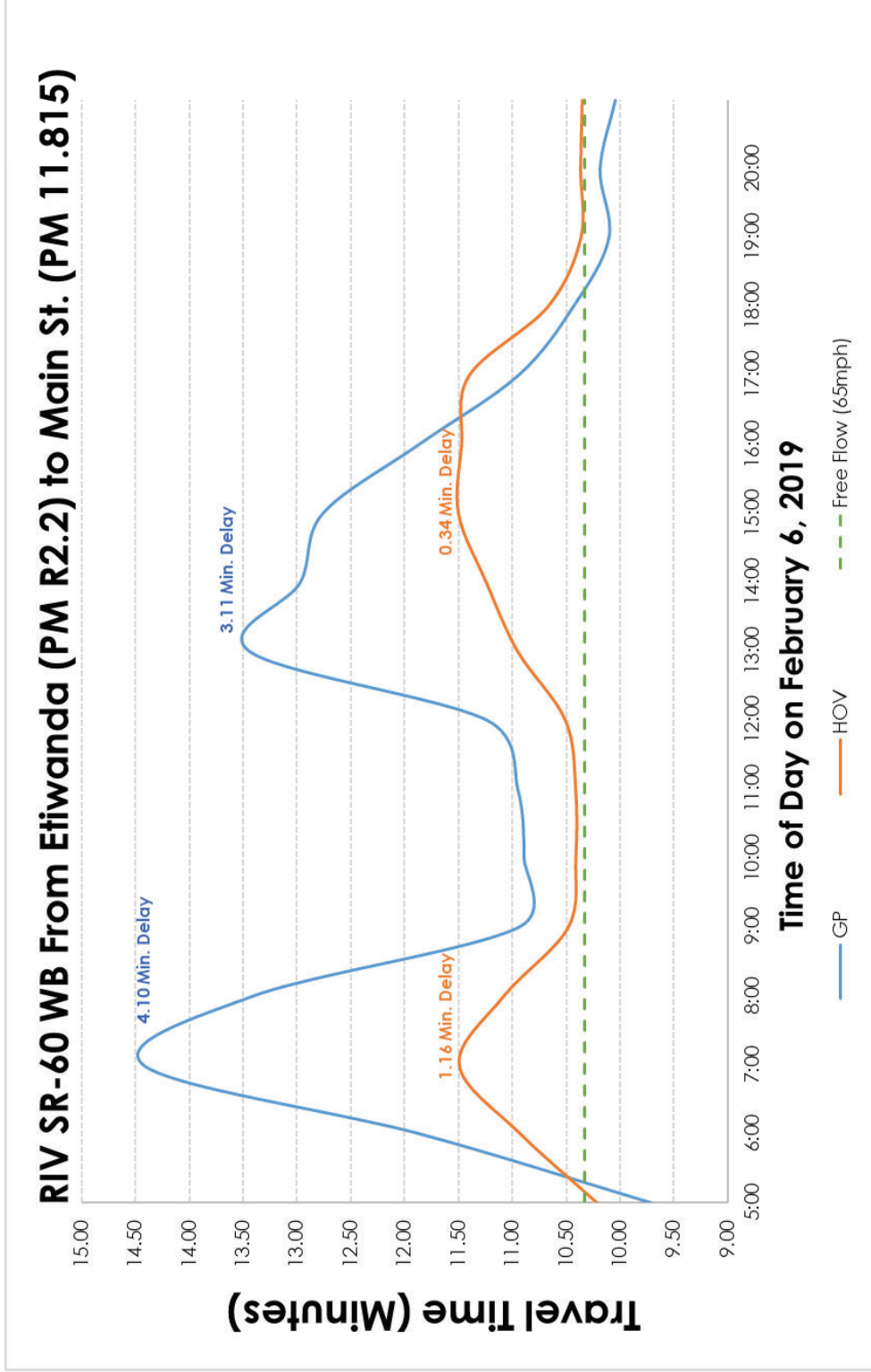


Figure 4: Comparisons of GP Lanes and HOV lane Travel Time on SR-60 Westbound from 5:00 to 21:00

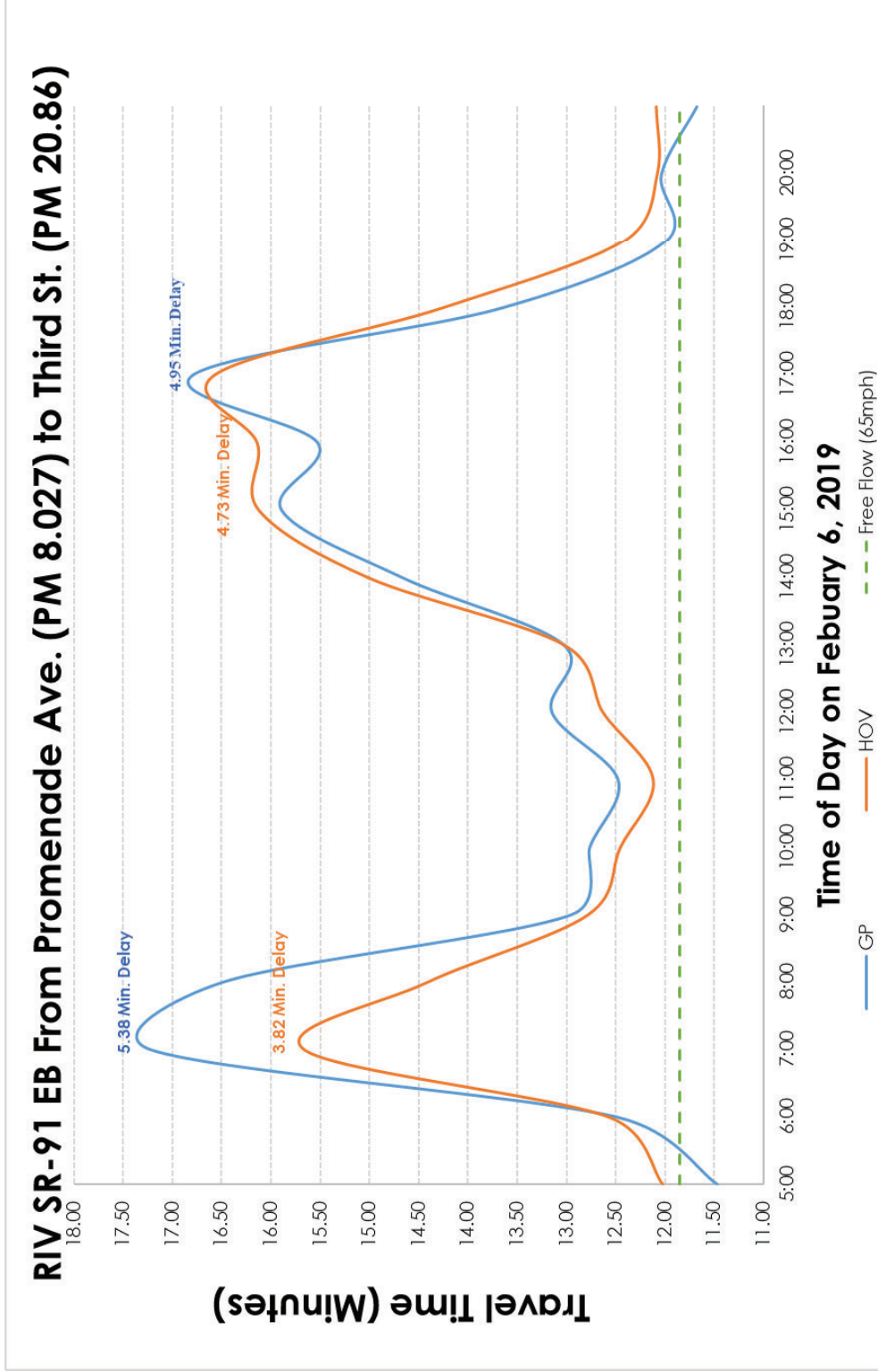


Figure 5: Comparisons of GP Lanes and HOV lane Travel Time on SR-91 Eastbound from 5:00 to 21:00

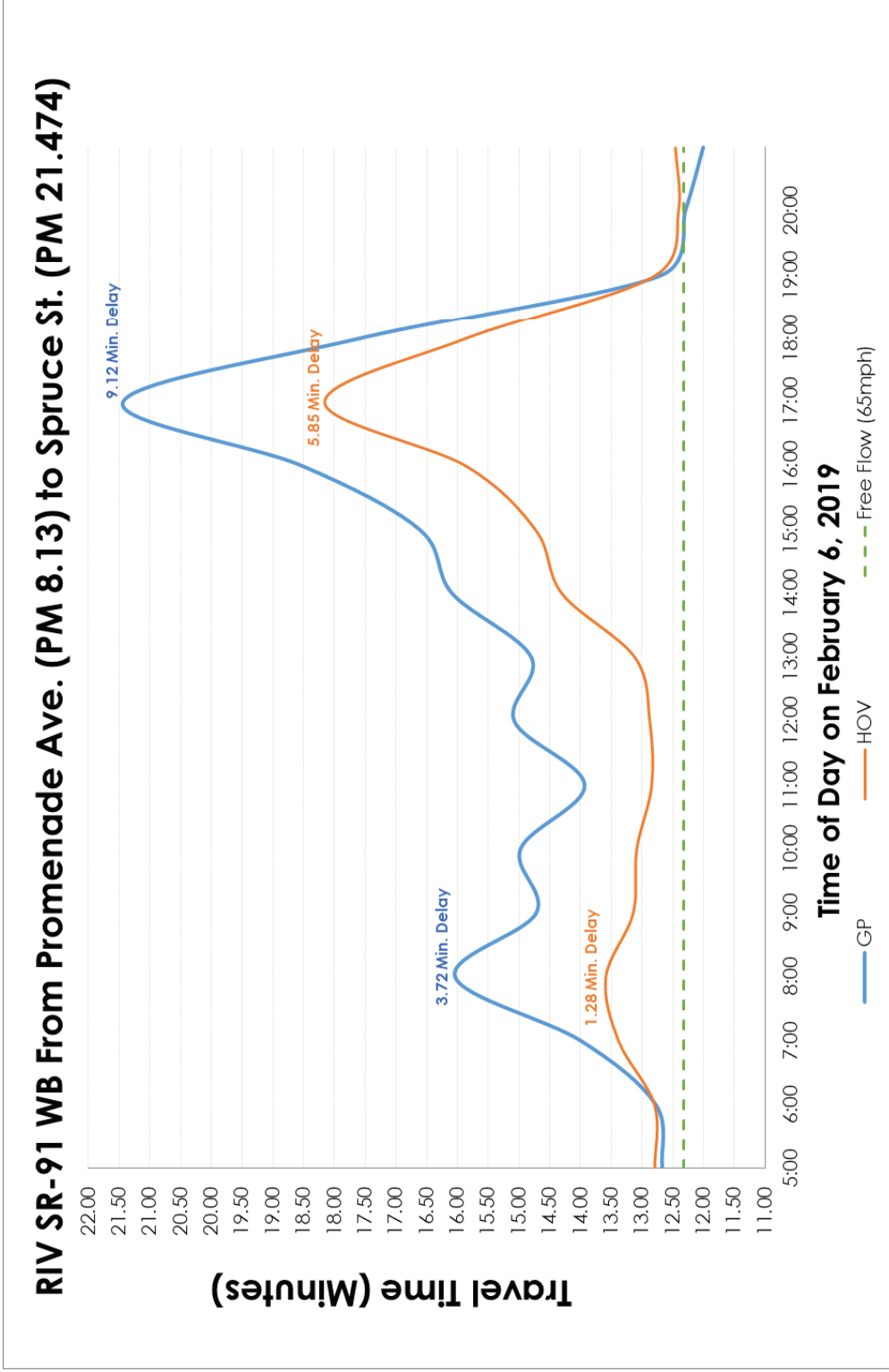


Figure 6: Comparisons of GP Lanes and HOV lane Travel Time on SR-91 Westbound from 5:00 to 21:00

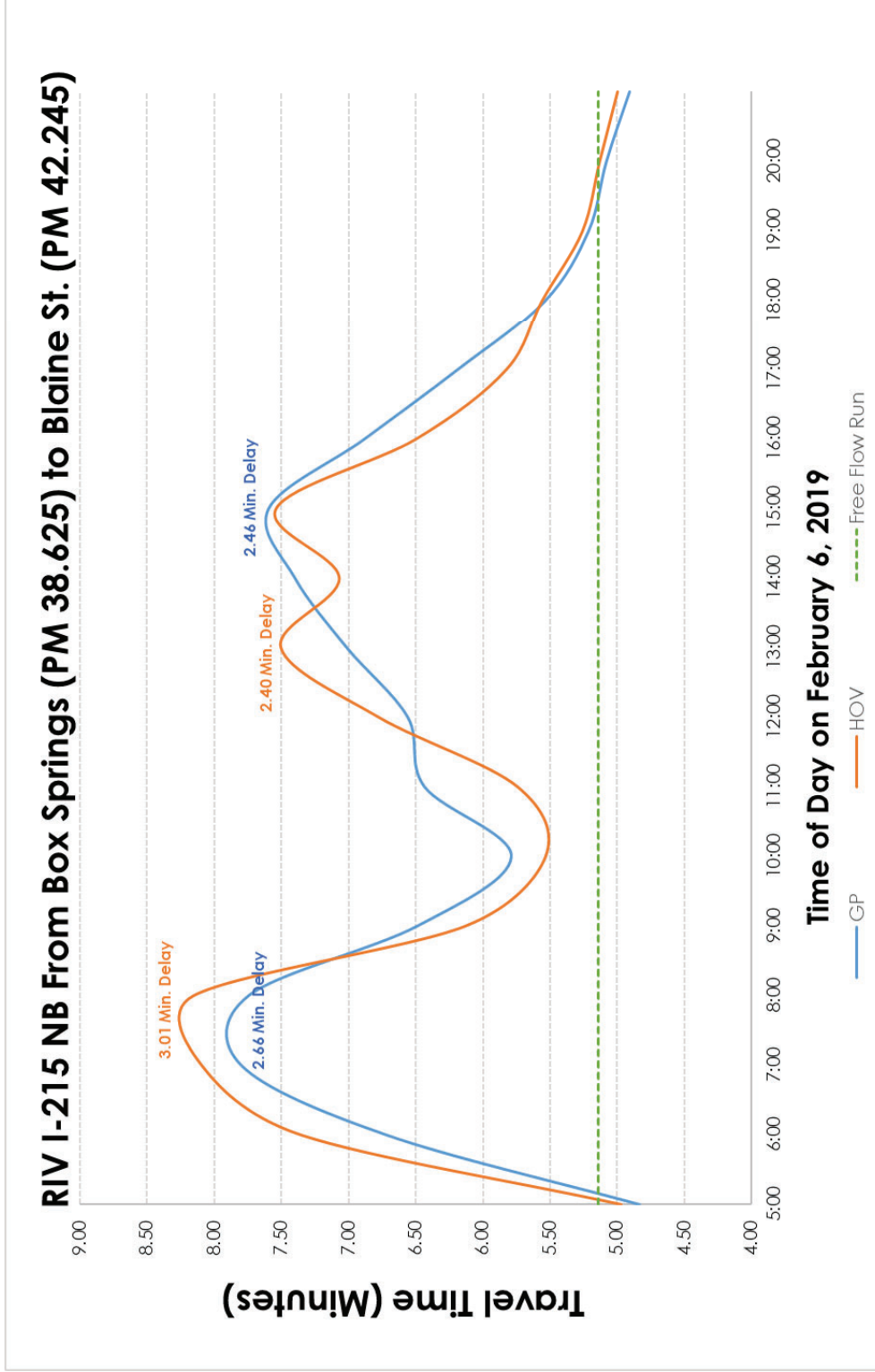


Figure 7: Comparisons of GP Lanes and HOV lane Travel Time on I-215 Northbound from 5:00 to 21:00

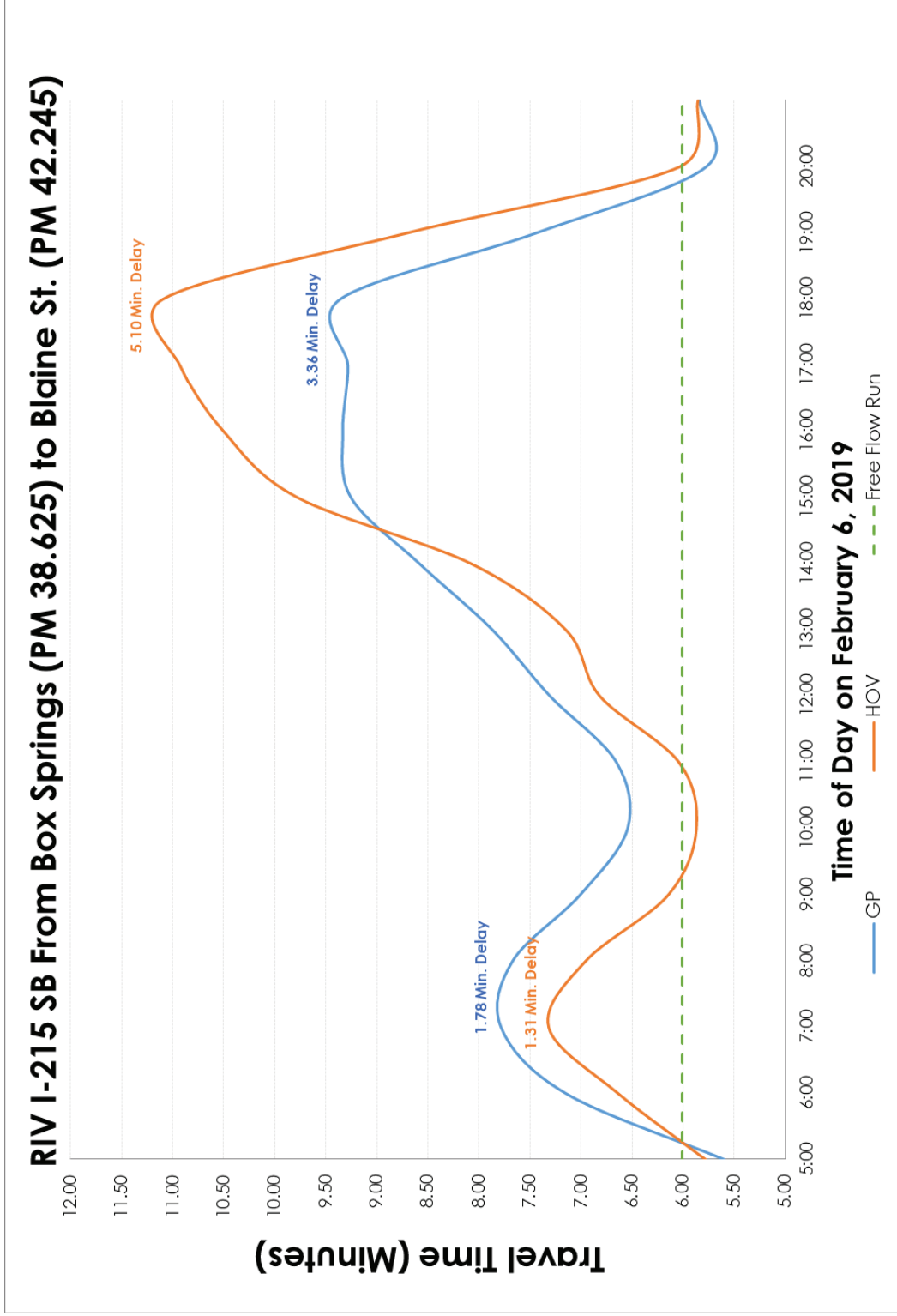


Figure 8: Comparisons of GP Lanes and HOV lane Travel Time on I-215 Southbound from 5:00 to 21:00

4.2 Travel Speed

According to the Highway Capacity Manual 6 Edition, Chapter 12 "Basic Freeway Segment," basic speed-flow curves have been developed for free-flow speed (FFS) values between 55 and 75 miles per hour for freeways. Lower speeds provide for higher travel time. The speed heat maps in Tables 2 through 13 indicate that the travel speeds along the GP lanes are lower than the HOV lane from 10:00 to 15:00 except in the I-215 corridor. Tables 2 through 13 also show the comparison of travel speeds between the GP lanes and HOV lanes using the Speed Color Code located at the bottom of the tables. These values are collected from the PeMS.

The color scheme ranges from a lower speed to a higher speed. The red colors represent the low speeds, and the green colors represent the higher speeds.

4.2.1 State Route 60 (SR-60)

The speeds from the Etiwanda Avenue undercrossing to Main Street Bridge in the GP lanes and the HOV lane in both directions on SR-60 are provided in Tables 2 through 5.

Tables 2 through 5 show the speed heat map along the GP lanes and HOV lane for SR-60. During morning peak hours, the speeds of GP lanes and HOV lanes range from 46 mph to 66 mph and 59 mph to 65 mph for eastbound lanes, and 30 mph to 66 mph and 64 mph to 65 mph for westbound lanes, respectively. During PM peak hours, the speeds of GP lanes and HOV lanes range from 22 mph to 67 mph and 18 mph to 63 mph for eastbound lanes, and 37 mph to 67 mph and 59 mph to 63 mph for westbound lanes, respectively. During non-peak hours, the speeds of GP lanes and HOV lanes range from 51 mph to 63 mph and 51 mph to 67 mph for eastbound lanes, and 34 mph to 64 mph and 62 mph to 65 mph for westbound lanes, respectively.

4.2.2 State Route (SR-91)

The speeds from the Promenade undercrossing to the Third Street overcrossing in the GP lanes and the HOV lane in both directions on SR-91 are provided in Tables 6 through 9.

Tables 6 through 9 show the speed heat map along the GP lanes and HOV lane for SR-91. During AM peak hour, the speeds of GP lanes and HOV lanes range from 22 mph to 70 mph and 28 mph to 70 mph for eastbound lanes, and 23 mph to 68 mph and 39 mph to 65 mph for westbound lanes, respectively. During PM

peak hours, the speeds of GP lanes and HOV lanes range from 16 mph to 68 mph and 26 mph to 64 mph for eastbound lanes, and 18 mph to 65 mph and 23 mph to 65 mph for westbound lanes, respectively. During non-peak hours, the speeds of GP lanes and HOV lanes range from 26 mph to 69 mph and 37 mph to 67 mph for eastbound lanes, and 25 mph to 64 mph and 45 mph to 65 mph for westbound lanes, respectively.

4.2.3 Interstate 215 (I-215)

The speeds from the Box Springs undercrossing to the Blaine Street undercrossing in the GP lanes and the HOV lane in both directions on I-215 are provided in Tables 10 through 13.

Tables 10 through 13 show the speed heat map along the GP lanes and HOV lane for I-215.

During AM peak hour, the speeds of GP lanes and HOV lanes range from 23 mph to 73 mph and 17 mph to 56 mph for northbound lanes, and 22 mph to 68 mph and 12 mph to 66 mph for southbound lanes, respectively. During PM peak hours, the speeds of GP lanes and HOV lanes range from 28 mph to 69 mph and 23 mph to 59 mph for northbound lanes, and 24 mph to 61 mph and 15 mph to 61 mph for southbound lanes, respectively. During non-peak hours, the speeds of GP lanes and HOV lanes range from 26 mph to 63 mph and 21 mph to 66 mph for the northbound direction, and 23 mph to 64 mph, and 13 mph to 66 mph for southbound lanes, respectively.

Table 2: SR-60 EB GP Lane Speed Heat Map Summary

Name	CA PM	Speed (mph) for SR-60 EB GP Lane From ETIWANDA AVE (PM R 2.2) to MAIN ST (PM 11.815)																
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
E-O ETIWANDA AVE R2.2	65	62	63	58	58	51	52	52	55	57	61	62	63	63	63	64	64	63
COUNTRY VILLAGE RD R3.1	68	66	65	64	63	63	62	62	62	63	63	64	64	64	66	67	66	68
W-O PYRITE ST R4.4	68	66	65	64	63	63	62	62	62	63	63	64	64	64	66	67	66	68
PYRITE AVE R5.5	68	66	65	64	63	63	62	62	62	63	63	64	64	64	66	67	66	68
E-O PEDLEY RD R6.3	68	64	60	60	61	61	61	61	61	61	61	60	59	59	65	67	66	68
W-O VALLEY WAY 7.3	68	64	60	60	61	61	61	61	61	61	61	60	59	59	65	67	66	68
W-O RUBIDOUX 8.7	69	64	60	61	61	61	61	61	61	61	61	60	60	60	65	67	66	68
W-O RUBIDOUX BLVD 9.3	69	64	60	61	61	61	61	61	61	61	61	60	60	60	65	67	66	68
SANTA ANA RIVER 10.7	70	65	62	62	63	63	63	63	63	63	62	62	61	67	68	68	70	70
W-O MAIN STREET 11.6	67	59	48	48	57	55	55	57	56	51	49	42	38	40	53	66	64	64
MAIN ST 11.815	72	62	45	46	57	58	58	60	58	50	43	28	22	25	46	70	69	69

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)



Table 3: SR-60 EB HOV Lane Speed Heat Map Summary

Name	CA PM	Speed (mph) for SR-60 EB HOV Lane From ETIWANDA AVE (PM R 2.2) to MAIN ST (PM 11.815)																
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
E-O ETIWANDA AVE R2.2	65	65	64	64	64	65	65	65	64	62	60	59	59	59	63	65	65	65
COUNTRY VILLAGE RD R3.1	65	65	64	64	64	65	65	65	64	62	60	59	59	59	63	65	65	65
W-O PYRITE ST R4.4	65	65	64	64	64	65	65	65	64	62	60	59	59	59	63	65	65	65
PYRITE AVE R5.5	65	65	64	64	64	65	65	65	64	62	60	59	59	59	63	65	65	65
E-O PEDLEY RD R6.3	65	65	64	64	64	65	65	65	64	62	60	59	59	59	63	65	65	65
W-O VALLEY WAY 7.3	65	65	64	64	64	65	65	65	64	62	60	59	59	59	63	65	65	65
W-O RUBIDOUX 8.7	65	65	64	64	64	65	65	65	64	62	60	59	59	59	63	65	65	65
W-O RUBIDOUX BLVD 9.3	65	65	64	64	64	65	65	65	64	62	60	59	59	59	63	65	65	65
SANTA ANA RIVER 10.7	65	65	64	64	64	65	65	65	64	62	60	59	59	59	63	65	65	65
W-O MAIN STREET 11.6	65	65	64	64	64	65	65	65	64	62	60	59	59	59	63	65	65	65
MAIN ST 11.815	65	65	59	62	64	65	65	65	65	51	41	20	21	18	48	65	65	64

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)



Note: 21:00 PM represents 21:00 to 21:59

Table 4: SR-60 WB GP Lane Speed Heat Map Summary

Name	Speed (mph) for SR-60WB GP Lane From ETIWANDA AVE (PM R 2.2) to MAIN ST (PM 11.6)																
	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
E-O ETIWANDA AVE R2.2	64	58	47	55	59	58	57	57	59	59	61	62	63	62	64	65	65
COUNTRY VILLAGE RD R3.1	68	64	60	60	61	61	61	61	61	61	61	60	59	65	67	66	68
W-O PYRITE ST R4.4	68	64	60	60	61	61	61	61	61	61	61	60	59	65	67	66	68
PYRITE AVE R5.5	68	64	60	60	61	61	61	61	61	61	61	60	59	65	67	66	68
E-O PEDLEY RD R6.3	68	64	60	60	61	61	61	61	61	61	61	60	59	65	67	66	68
W-O VALLEY WAY 7.3	68	66	65	64	63	63	62	62	62	63	63	64	64	66	67	66	68
W-O RUBIDOUX 8.7	68	66	65	65	64	63	63	62	63	63	63	64	64	66	67	66	68
W-O RUBIDOUX BLVD 9.3	68	66	65	65	64	63	63	62	63	63	63	64	64	66	67	66	68
SANTA ANA RIVER 10.7	70	68	67	66	65	64	64	64	64	64	65	65	66	67	69	68	69
W-O Main Street 11.6	69	41	30	34	60	58	58	54	34	36	37	45	57	60	63	62	61

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)



Table 5: SR-60 WB HOV Lane Speed Heat Map Summary

Name	Speed (mph) for SR-60 WB HOV Lane From ETIWANDA AVE (PM R 2.2) to MAIN ST (PM 11.6)																
	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
E-O ETIWANDA AVE R2.2	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65
COUNTRY VILLAGE RD R3.1	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65
W-O PYRITE ST R4.4	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65
PYRITE AVE R5.5	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65
E-O PEDLEY RD R6.3	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65
W-O VALLEY WAY 7.3	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65
W-O RUBIDOUX 8.7	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65
W-O RUBIDOUX BLVD 9.3	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65
SANTA ANA RIVER 10.7	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65
W-O Main Street 11.6	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)



Note: 21:00 PM represents 21:00 to 21:59

Table 6: SR-91 EB GP Lane Speed Heat Map Summary

Name	CA PM	Speed (mph) for SR-91 EB GP Lane From .1 W-O PROMENADE (PM 8.027) to E-O THIRD ST (PM 20.86)																
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
.1 W-O PROMENADE	8.027	70	68	66	68	59	62	60	61	59	52	45	46	45	51	64	64	69
.2 E-O PROMENADE	8.13	64	63	61	62	58	59	58	59	57	53	48	49	48	52	61	62	63
MCKINLEY	9.09	68	66	60	67	66	64	64	64	62	37	21	21	17	53	66	64	68
MCKINLEY LOOP ON	9.15	68	66	53	62	63	59	61	60	54	36	24	22	20	50	62	59	67
MCKINLEY	9.23	65	62	42	62	61	61	60	60	51	32	20	20	19	40	61	53	69
E-O MCKINLEY	9.337	68	67	58	65	67	67	67	66	62	56	53	53	52	58	65	66	68
PIERCE	10.724	68	65	40	59	65	64	63	62	59	49	44	39	38	46	62	62	66
MAGNOLIA	11.219	68	62	37	58	62	62	61	61	57	51	48	43	43	56	63	62	66
LA SIERRA	11.927	60	56	31	52	58	58	59	56	57	51	42	32	37	56	62	55	56
LA SIERRA	12.192	69	56	30	57	61	65	64	62	63	56	44	36	37	58	64	62	65
TYLER	12.907	67	61	47	49	63	65	64	63	63	57	48	34	35	53	62	62	66
TYLER	13.196	70	61	37	38	60	60	62	59	57	44	38	34	35	53	62	62	68
VAN BUREN LOOP EB ON	14.058	70	64	38	34	61	63	63	60	61	45	34	36	37	58	65	62	67
VAN BUREN	14.096	69	66	65	37	43	62	61	61	63	41	36	30	28	33	64	66	68
.11 E-O JACKSON	14.714	71	70	54	51	66	69	69	68	67	55	53	51	52	63	69	68	70
ADAMS	15.556	68	65	35	31	57	64	64	61	55	34	33	33	35	53	66	62	65
ADAMS	15.713	71	64	25	22	49	65	65	62	46	26	25	26	27	48	65	63	67
.09 E-O JEFFERSON	16.247	65	60	44	38	58	62	63	59	56	48	48	49	49	57	63	60	63
MADISON	16.59	70	60	42	29	59	65	66	58	62	59	59	60	59	65	65	63	66
MADISON	16.751	71	61	42	29	58	62	65	56	61	60	60	61	61	61	66	63	66
3000 W-O ARLINGTON	17.278	65	58	41	31	56	60	61	52	60	59	60	60	59	60	63	61	63
ARLINGTON	17.724	73	61	36	25	47	64	65	48	65	64	66	67	65	66	70	66	69
JANE ST	17.75	72	51	34	24	39	52	53	42	59	62	62	64	59	55	58	51	62
ARLINGTON	17.943	69	60	37	27	42	59	59	42	59	59	60	61	61	61	64	62	69
CENTRAL	18.347	73	61	29	24	38	65	65	34	65	66	67	68	67	65	69	66	70
CENTRAL EB ON	18.522	70	58	36	31	39	63	63	36	62	63	64	66	64	62	66	63	66
100 E-O IVY	18.995	70	62	51	44	51	56	60	40	54	53	57	58	62	61	66	64	66
14TH	19.882	71	66	66	64	63	64	64	61	64	64	65	67	65	66	69	66	69
14TH EB ON	20.076	68	67	67	66	66	66	48	62	63	63	64	54	16	47	69	70	66
TENTH ST	20.225	72	68	69	66	63	65	65	62	66	65	67	68	67	68	70	67	69
7TH-MISSION INN	20.603	71	65	65	63	63	63	63	61	63	63	65	65	56	65	67	64	66
E-O THIRD ST	20.86	65	61	63	61	61	60	60	59	61	61	62	63	60	62	63	61	62

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)



Note: 21:00 PM represents 21:00 to 21:59

Table 7: SR-91 EB HOV Lane Speed Heat Map Summary

Name	Speed (mph) for SR-91 EB HOV Lane From .1 W-O PROMENADE (PM 8.027) to E-O THIRD ST (PM 20.86)																
	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
.1 W-O PROMENADE	68	63	64	68	51	56	54	55	53	45	36	37	39	46	60	56	64
.2 E-O PROMENADE	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65
MCKINLEY	65	64	62	65	64	65	65	65	64	59	38	38	33	60	65	65	65
MCKINLEY LOOP ON	65	65	60	65	65	65	65	65	64	55	35	32	34	58	66	64	65
MCKINLEY	65	65	57	65	64	66	65	65	62	48	34	33	31	54	65	64	65
E-O MCKINLEY	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65
PERCE	65	63	53	61	64	64	65	65	59	52	51	48	52	56	63	63	65
MAGNOLIA	65	62	50	61	64	64	65	64	62	62	47	44	43	49	63	65	64
LA SIERRA	66	70	55	60	54	53	69	68	47	39	32	26	28	43	66	63	65
LA SIERRA	65	61	46	58	64	67	64	65	64	55	49	43	41	52	63	64	64
TYLER	65	61	45	53	64	66	64	64	63	51	41	42	41	47	64	65	64
TYLER	65	62	37	54	64	64	66	65	64	49	42	40	41	58	64	64	64
VAN BUREN LOOP EB ON	65	64	42	52	63	66	65	64	64	45	37	37	36	58	64	65	64
VAN BUREN	65	64	59	52	60	65	64	64	64	52	47	45	42	46	63	64	65
600' E-O JACKSON	65	66	28	37	65	66	65	64	62	41	29	30	32	48	64	65	64
ADAMS	64	56	33	36	53	59	59	58	49	37	33	31	36	45	57	63	64
ADAMS	64	58	32	36	52	66	65	65	53	37	33	32	35	45	61	63	62
MADISON	65	58	41	41	55	64	64	60	56	53	51	51	51	51	64	65	65
MADISON	39	40	35	36	46	46	45	46	50	54	51	48	47	44	50	47	44
3000' W-O ARLINGTON	65	65	64	64	65	65	65	65	64	62	60	59	59	63	65	65	65
ARLINGTON WB ON	64	57	39	39	51	65	65	51	63	56	55	55	54	55	64	64	64
JANE ST	61	46	36	39	45	44	45	38	50	47	51	43	39	38	41	41	60
ARLINGTON AVE	64	56	42	41	50	59	57	45	55	53	52	51	50	52	66	65	65
CENTRAL WB ON	65	58	43	41	55	65	65	42	63	58	57	58	57	56	65	64	64
CENTRAL EB ON	65	58	43	44	56	65	65	40	63	58	58	57	56	56	65	64	64
IVY OC 100' E-O	65	58	50	48	51	65	65	45	58	55	56	56	54	55	64	64	65
FOURTEENTH ST	64	59	56	56	64	65	65	62	65	57	56	57	55	62	65	64	63
FOURTEENTH ST	20.076	64	64	66	63	64	65	67	64	64	62	58	33	53	64	65	64
TENTH ST	20.225	65	65	64	63	64	65	62	64	62	62	62	62	63	64	65	65
THIRD ST	20.86	65	65	64	64	65	65	65	64	62	60	59	59	63	65	65	65

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)



Note: 21:00 PM represents 21:00 to 21:59

Table 8: SR-91 WB GP Lane Speed Heat Map Summary

Name	Speed (mph) for SR-91 WB GP Lane From PROMENADE .2 E-O (PM 8.13) to SPRUCE ST WB ON (PM 21.474)																			
	CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM		
PROMENADE .2 E-O	8.13	65	62	63	61	61	60	62	61	62	63	63	64	64	62	66	67	64		
MCKINLEY	9.09	64	64	66	63	61	60	61	60	60	62	62	65	65	61	64	65	66		
E-O MCKINLEY	9.337	61	61	58	54	55	54	57	54	54	54	55	56	58	53	62	66	67		
PIERCE	10.724	47	48	29	23	29	29	42	27	26	25	22	24	31	29	59	69	69		
MAGNOLIA	11.052	55	57	36	36	39	31	43	29	34	25	20	21	28	30	62	68	69		
MAGNOLIA	11.219	61	63	42	30	45	35	44	34	38	30	26	28	32	35	63	68	69		
LA SIERRA	11.88	62	65	51	36	51	42	46	43	44	36	34	32	39	50	63	65	68		
LA SIERRA	12.165	68	69	64	54	61	59	60	58	59	54	53	52	55	60	65	67	69		
TYLER	12.907	67	65	61	40	41	54	61	50	55	46	39	27	18	26	59	67	69		
TYLER	13.196	63	62	60	45	46	57	61	56	57	51	48	38	31	38	61	62	63		
VAN BUREN	13.977	68	66	65	43	39	57	62	58	58	54	54	38	23	36	65	66	69		
VAN BUREN	14.096	69	62	36	40	62	60	62	60	60	44	38	40	41	57	66	64	67		
JACKSON ST.	14.714	70	68	68	62	62	53	64	63	64	63	62	50	36	45	67	68	71		
ADAMS	15.556	66	64	65	61	61	53	61	60	61	59	62	56	41	51	64	66	69		
ADAMS	15.713	65	64	63	60	62	55	62	60	61	59	62	56	42	51	63	64	67		
500' E-O JEFFERSON	16.247	60	60	62	59	58	58	57	58	57	56	59	58	51	55	60	59	63		
MADISON	16.59	68	66	66	62	63	63	62	59	60	54	60	58	46	54	65	67	69		
MADISON	16.751	66	65	65	62	63	63	62	60	61	55	58	56	47	55	64	65	66		
ARLINGTON WB ON	17.724	52	52	52	52	64	63	61	60	61	50	47	37	29	39	54	50	51		
JANE ST	17.75	66	65	62	58	62	62	59	58	60	49	47	36	28	41	64	67	68		
ARLINGTON	17.943	70	69	67	63	65	64	62	61	62	51	48	36	28	41	67	70	72		
CENTRAL	18.347	67	67	66	65	65	63	61	62	61	58	56	44	37	47	64	66	67		
CENTRAL	18.539	70	69	69	67	66	65	62	63	63	54	54	37	25	39	67	70	72		
100' E-O IVY	18.995	68	67	65	65	65	63	61	62	61	56	56	37	27	43	65	68	68		
14TH WB ON	19.899	66	65	66	66	66	64	61	64	63	63	64	51	36	50	65	65	67		
14TH	20.084	68	64	59	58	62	60	61	60	61	63	63	65	65	64	66	64	66		
TENTH ST	20.225	66	65	67	64	64	62	59	61	61	63	63	50	24	45	64	64	68		
THIRD ST	20.86	60	60	61	59	60	58	56	56	57	59	59	53	39	51	60	59	62		
SPRUCE ST WB ON	21.474	69	67	66	65	64	63	63	63	63	63	64	64	65	66	67	67	68		



Note: 21:00 PM represents 21:00 to 21:59

Table 9: SR-91 WB HOV Lane Speed Heat Map Summary

Name	CA PM	Speed (mph) for SR-91 WB HOV Lane From PROMENADE 2 E-O (PM 8.13) to THIRD ST (PM 20.86)																	
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
PROMENADE 2 E-O	8.13	61	61	62	61	62	63	64	63	63	64	63	64	63	64	63	64	65	64
MCKINLEY	9.09	62	59	60	61	63	62	63	60	63	60	58	58	57	57	57	63	65	65
E-O MCKINLEY	9.337	65	65	64	64	64	65	64	64	64	62	60	59	63	59	63	65	65	65
PIERCE	10.724	58	56	52	49	51	56	61	53	53	48	45	44	45	45	60	65	65	65
MAGNOLIA	11.052	58	57	51	46	52	50	55	50	50	47	44	44	43	44	61	65	65	65
MAGNOLIA	11.219	65	63	55	62	64	63	65	63	59	50	46	47	43	50	63	65	65	64
LA SIERRA	11.927	62	59	55	49	56	56	59	56	57	48	44	42	43	50	63	65	65	65
LA SIERRA	12.165	64	59	55	50	58	58	61	59	60	50	47	44	42	50	62	65	65	65
TYLER	13.011	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65	65
TYLER	13.064	65	65	64	64	64	65	65	64	64	62	60	59	59	63	65	65	65	65
VAN BUREN	14.067	64	65	60	55	58	59	64	63	62	57	54	48	40	45	64	65	65	65
VAN BUREN	14.096	65	64	40	53	63	63	65	64	61	45	40	41	40	58	65	64	64	64
JACKSON ST.	14.714	64	64	65	62	64	58	64	63	63	63	63	49	37	44	64	65	65	65
ADAMS	15.565	65	65	64	64	64	65	65	64	64	62	60	59	59	63	65	65	65	65
ADAMS	15.706	64	64	58	56	65	62	64	64	60	52	53	49	38	46	62	64	64	64
MADISON	16.588	62	65	62	60	64	63	63	63	62	53	56	53	43	52	63	64	64	61
MADISON	16.751	65	64	61	59	65	64	63	64	61	50	55	51	42	51	63	65	65	65
ARLINGTON WB ON	17.724	64	64	62	61	64	64	62	63	62	52	51	44	36	42	62	64	64	65
JANE ST	17.75	64	64	63	61	64	64	62	63	64	54	51	44	36	45	63	65	65	65
ARLINGTON AVE	17.929	64	64	62	61	64	64	62	63	61	51	50	43	32	39	63	65	65	65
CENTRAL WB ON	18.342	63	64	63	63	64	64	62	64	64	54	52	44	37	44	62	63	63	64
CENTRAL EB ON	18.522	64	64	64	64	64	64	62	64	64	56	54	44	37	46	63	65	65	65
IVY OC 100' E-O	18.995	64	64	64	64	65	65	63	64	65	59	57	46	38	50	64	64	65	65
FOURTEENTH ST	19.899	47	58	53	53	39	45	52	64	53	58	57	45	25	23	46	61	57	57
FOURTEENTH ST	20.076	64	65	58	57	63	63	64	63	62	58	58	58	57	63	65	64	64	64
TENTH ST	20.225	64	64	65	64	64	64	60	64	63	64	64	56	38	52	64	65	65	65
THIRD ST	20.86	65	65	64	64	64	65	65	64	64	62	60	59	59	63	65	65	65	65

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)



Note: 21:00 PM represents 21:00 to 21:59

Table 10: I-215 NB GP Lane Speed Heat Map Summary

Name	Speed (mph) for I-215 NB GP From FAIR ISLE/ BOX SPRINGS (PM 38.627) to BLAINE (PM 42.245)																	
	CA PM 38.627	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
FAIR ISLE/ BOX SPRINGS	68	41	40	44	44	48	57	50	50	44	45	43	42	58	62	61	64	68
CENTRAL AVE SB ON	69	31	27	29	45	57	49	30	28	28	31	30	42	55	59	62	64	63
CENTRAL -WATKINS	70	36	30	29	41	52	42	30	27	29	29	34	44	57	61	63	64	67
MLK SB ON	64	30	27	23	33	49	34	48	44	44	26	28	44	54	62	62	63	67
MARTIN LUTHER KING	63	32	27	25	36	44	34	47	44	28	28	28	41	40	61	62	63	67
UNIVERSITY	67	58	56	53	55	57	52	58	56	50	50	51	54	56	62	64	65	67
BLAINE	73	73	53	54	63	63	61	63	61	61	61	63	66	69	69	68	69	72

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)



Table 11: I-215 NB HOV Lane Speed Heat Map Summary

Name	Speed (mph) for I-215 NB HOV From FAIR ISLE/ BOX SPRINGS (PM 38.627) to BLAINE (PM 42.245)																	
	CA PM 38.627	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
BOX SPRINGS	64	21	17	21	21	46	61	57	31	24	35	29	44	58	60	64	65	65
CENTRAL AVE SB ON	66	32	26	25	33	47	36	27	20	21	21	23	34	55	60	61	60	64
CENTRAL-WATKINS	68	31	24	31	48	59	54	21	25	25	36	37	46	53	58	63	65	64
MLK SB ON	64	31	36	35	50	57	51	55	52	52	41	40	51	54	58	62	64	65
MARTIN LUTHER KING	61	33	32	34	49	52	49	54	49	49	39	36	48	48	57	61	64	64
UNIVERSITY	64	52	53	52	55	58	55	59	56	56	51	48	52	54	58	62	64	64
BLAINE	63	54	49	35	56	56	62	66	62	62	62	55	54	59	55	57	58	63

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)



Note: 21:00 PM represents 21:00 to 21:59

Table 12: I-215 SB GP Lane Speed Heat Map Summary

Name	Speed (mph) for I-215 SB GP From FAIR ISLE/ BOX SPRINGS (PM 38.627) to BLAINE (PM 42.144)																	
	CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
FAIR ISLE/ BOX SPRINGS	38.627	67	47	47	47	54	57	56	53	47	49	51	54	61	58	59	60	62
CENTRAL AVE SB ON	39.426	71	63	67	63	63	62	64	62	62	61	58	54	59	58	61	67	68
CENTRAL-WATKINS	39.652	72	62	65	63	60	60	59	53	55	55	56	52	55	55	58	70	66
N-O BOX SPRINGS RD	40.382	70	28	23	22	32	32	42	32	23	23	24	31	55	61	65	67	68
MLK SB ON	40.76	71	64	49	65	65	64	64	63	61	49	38	36	34	27	37	69	67
MARTIN LUTHER KING	40.929	72	64	61	65	61	61	64	63	61	55	43	36	34	24	34	73	68
UNIVERSITY AVE SB ON	41.451	70	64	64	65	63	62	63	62	61	50	43	39	35	29	37	69	68
BLAINE ST SB ON	42.144	72	65	68	66	63	64	64	62	58	50	43	38	36	35	43	67	67

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)



Table 13: I-215 SB HOV Lane Speed Heat Map Summary

Name	Speed (mph) for I-215 SB HOV From FAIR ISLE/ BOX SPRINGS (PM 38.627) to BLAINE (PM 42.144)																	
	CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
FAIR ISLE/ BOX SPRINGS	38.627	63	19	14	12	27	61	48	31	13	15	15	26	61	60	61	63	63
CENTRAL AVE SB ON	39.426	66	66	64	65	65	66	64	62	61	59	56	53	53	53	55	60	64
CENTRAL-WATKINS	39.652	66	65	62	65	66	64	62	57	57	55	53	51	50	51	53	60	64
N-O BOX SPRINGS RD	40.382	66	27	22	23	42	60	54	24	26	34	30	39	53	61	62	64	65
MLK SB ON	40.76	65	66	57	65	65	66	62	59	57	47	39	35	35	29	37	58	64
MARTIN LUTHER KING	40.929	66	62	48	62	63	62	61	62	57	42	30	28	25	21	29	60	64
UNIVERSITY AVE SB ON	41.451	66	66	61	65	64	64	62	59	56	47	36	30	25	22	27	58	63
BLAINE ST SB ON	42.144	65	66	65	64	66	66	65	60	53	43	25	19	18	16	23	63	65

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)



Note: 21:00 PM represents 21:00 to 21:59

4.3 Level of Service

Based on the level of service analysis of the study corridors, the HOV lane, in both directions, operates with a level of service better than the GP lanes during the time periods from 10:00 to 15:00 except for the I-215 corridor which does not meet Caltrans level of service criteria.

4.3.1 State Route 60 (SR-60)

The level of service results along the State Route 60 corridor for the current year 2019 from 5:00 to 21:00 for the GP lanes and HOV lane for both directions are summarized in Tables 14 through 17.

4.3.2 State Route 91 (SR-91)

The level of service results along the SR-91 corridor for the current year 2019 from 5:00 to 21:00 for the GP lanes and HOV lane for both directions are summarized in Tables 18 through 21.

4.3.3 Interstate 215 (I-215)

The level of service results along the I-215 corridor for the current year 2019 from 5:00 to 21:00 for the GP lanes and HOV lane for both directions are summarized in Tables 22 through 25.

Table 14: SR-60 EB GP Lane LOS Heat Map Summary

Name	CA PM	Level of Service for SR-60 EB GP Lane From ETIWANDA AVE (PM R 2.2) to MAIN ST (PM 11.815)																	
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
E-O ETIWANDA AVE	R2.2	A	A	A	A	A	B	B	B	B	B	B	B	B	B	A	A	A	A
COUNTRY VILLAGE RD	R3.1	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A	A
W-O PYRITE ST	R4.4	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A	A
PYRITE AVE	R5.5	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A	A
E-O PEDLEY RD	R6.3	B	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B	A	A
W-O VALLEY WAY	7.3	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B	A	A
W-O RUBIDOUX	8.7	C	D	D	D	D	D	D	D	D	D	D	D	D	D	C	C	B	B
W-O RUBIDOUX BLVD	9.3	C	D	D	D	D	D	D	D	D	D	D	D	D	D	C	C	B	B
SANTA ANA RIVER	10.7	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A	A
W-O MAIN STREET	11.6	B	C	D	D	D	C	C	C	C	C	C	D	D	E	D	C	B	B
MAIN ST	11.815	A	C	D	D	D	C	C	C	C	C	C	D	D	E	F	F	C	B

LOS Color Code A B C D E F

Table 15: SR-60 EB HOV Lane LOS Heat Map Summary

Name	CA PM	Level of Service for SR-60 EB HOV Lane From ETIWANDA AVE (PM R 2.2) to MAIN ST (PM 11.815)																	
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
E-O ETIWANDA AVE	R2.2	A	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	B	A
COUNTRY VILLAGE RD	R3.1	A	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	B	A
W-O PYRITE ST	R4.4	A	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	B	A
PYRITE AVE	R5.5	A	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	B	A
E-O PEDLEY RD	R6.3	A	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	B	A
W-O VALLEY WAY	7.3	A	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	B	A
W-O RUBIDOUX	8.7	A	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	B	A
W-O RUBIDOUX BLVD	9.3	A	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	B	A
SANTA ANA RIVER	10.7	A	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	B	A
W-O MAIN STREET	11.6	A	B	B	B	B	B	B	B	B	B	B	B	B	B	C	C	B	A
MAIN ST	11.815	A	A	B	B	B	A	A	A	A	A	A	A	A	C	D	F	F	A

LOS Color Code A B C D E F

Note: 21:00 PM represents 21:00 to 21:59

Table 16: SR-60 WB GP Lane LOS Heat Map Summary

Name	CA PM	Level of Service for SR-60 WB GP Lane From ETIWANDA AVE (PM R 2.2) to MAIN ST (PM 11.6)																	
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
E-O ETIWANDA AVE	R2.2	B	B	C	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A
COUNTRY VILLAGE RD	R3.1	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B
W-O PYRITE ST	R4.4	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B
PYRITE AVE	R5.5	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B
E-O PEDLEY RD	R6.3	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B
W-O VALLEY WAY	7.3	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A
W-O RUBIDOUX	8.7	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B
W-O RUBIDOUX BLVD	9.3	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B
SANTA ANA RIVER	10.7	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
W-O MAIN STREET	11.6	B	D	D	C	C	C	B	B	B	C	C	C	C	B	B	B	B	A



Table 17: SR-60 WB HOV Lane LOS Heat Map Summary

Name	CA PM	Level of Service for SR-60 WB HOV Lane From ETIWANDA AVE (PM R 2.2) to MAIN ST (PM 11.6)																	
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
E-O ETIWANDA AVE	R2.2	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
COUNTRY VILLAGE RD	R3.1	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
W-O PYRITE ST	R4.4	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
PYRITE AVE	R5.5	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
E-O PEDLEY RD	R6.3	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
W-O VALLEY WAY	7.3	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
W-O RUBIDOUX	8.7	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
W-O RUBIDOUX BLVD	9.3	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
SANTA ANA RIVER	10.7	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
W-O MAIN STREET	11.6	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A



Note: 21:00 PM represents 21:00 to 21:59

Table 18: SR-91 EB GP Lane LOS Heat Map Summary

Name	CA PM	Level of Service for SR-91 EB GP Lane From .1 W-O PROMENADE (PM 8.027) to E-O THIRD ST (PM 20.86)																					
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM					
.1 W-O PROMENADE	8.027	A	B	B	B	B	B	B	B	B	B	C	C	C	D	D	D	D	C	B	B	B	A
.2 E-O PROMENADE	8.113	A	B	B	B	B	B	B	B	B	B	C	C	C	D	D	D	D	C	B	B	B	A
MCKINLEY	9.09	A	B	C	B	C	B	C	B	C	C	E	F	F	F	F	F	F	C	C	C	B	B
MCKINLEY LOOP ON	9.15	A	B	C	C	C	C	C	C	C	C	E	F	F	F	F	F	F	C	C	C	B	B
MCKINLEY	9.23	A	C	D	C	C	C	C	C	C	C	D	E	F	F	F	F	F	C	C	C	B	B
E-O MCKINLEY	9.337	B	C	D	C	C	C	C	C	C	C	D	D	D	D	D	D	D	C	C	C	B	B
PIERCE	10.724	B	C	E	C	C	C	C	C	C	C	D	D	D	D	D	D	D	C	C	C	B	B
MAGNOLIA	11.219	B	C	E	C	C	C	C	C	C	C	D	D	D	D	D	D	D	C	C	C	B	B
LA SIERRA	11.927	D	E	E	E	E	E	E	E	E	E	F	F	F	F	F	F	F	E	E	E	D	D
LA SIERRA	12.192	B	D	F	D	D	D	D	D	D	D	E	E	E	E	E	E	E	D	C	C	B	B
TYLER	12.907	C	D	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	D	C	C	B	B
TYLER	13.196	B	C	E	E	D	C	C	C	C	C	D	D	D	D	D	D	D	C	C	C	B	B
VAN BUREN LOOP EB ON	14.058	B	C	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	C	C	C	B	B
VAN BUREN	14.096	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	E	B	B	B	B
.11 E-O JACKSON	14.714	A	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B
ADAMS	15.556	A	C	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	C	C	C	B	B
ADAMS	15.713	B	C	D	D	C	C	C	C	C	C	D	F	F	F	F	F	F	C	C	C	B	B
.09 E-O JEFFERSON	16.247	A	C	D	D	C	C	C	C	C	C	D	F	F	F	F	F	F	C	C	C	B	B
MADISON	16.59	B	C	E	F	D	C	C	C	C	C	D	C	C	C	C	C	C	C	C	C	B	B
MADISON	16.751	B	C	E	F	D	C	C	C	C	C	D	C	C	C	C	C	C	C	C	C	B	B
MADISON	17.278	B	C	E	F	D	C	C	C	C	C	D	C	C	C	C	C	C	C	C	C	B	B
3000 W-O ARLINGTON	17.278	B	C	E	F	D	C	C	C	C	C	D	C	C	C	C	C	C	C	C	C	B	B
ARLINGTON	17.724	A	C	D	E	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B
JANE ST	17.75	B	D	F	F	E	E	E	E	E	E	D	D	D	D	D	D	D	C	C	C	B	B
ARLINGTON	17.943	B	D	F	F	E	E	E	E	E	E	D	D	D	D	D	D	D	C	C	C	B	B
CENTRAL	18.347	A	C	E	E	D	B	B	B	B	B	C	B	B	B	B	B	B	B	B	B	B	A
CENTRAL EB ON	18.522	B	D	F	F	E	E	E	E	E	E	D	D	D	D	D	D	D	C	C	C	B	B
100 E-O IVY	18.995	B	D	F	F	E	E	E	E	E	E	D	D	D	D	D	D	D	C	C	C	B	B
14TH	19.882	A	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B
14TH EB ON	20.076	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B
TENTH ST	20.225	A	B	C	B	C	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
7TH-MISSION INN	20.603	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B
E-O THIRD ST	20.86	A	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B	B



Note: 21:00 PM represents 21:00 to 21:59

Table 19: SR-91 EB HOV Lane LOS Heat Map Summary

Name	CA PM	Level of Service for SR-91 EB HOV Lane From East of McKinley Street (PM 9.337) to East of Third Street (PM 20.86)																
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
.1 W-O PROMENADE	8.027	B	C	C	B	C	D	D	B	D	D	E	E	E	D	C	C	B
.2 E-O PROMENADE	8.13	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
MCKINLEY	9.09	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
MCKINLEY LOOP ON	9.15	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
MCKINLEY	9.23	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
E-O MCKINLEY	9.337	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
PIERCE	10.724	A	A	C	A	A	A	A	A	A	A	A	A	A	A	A	A	A
MAGNOLIA	11.219	A	A	C	A	A	A	A	A	A	A	A	A	A	A	A	A	A
LA SIERRA	11.927	E	E	E	B	D	D	D	F	F	F	F	F	F	F	F	F	F
LA SIERRA	12.165	A	A	D	B	A	A	A	A	A	A	A	A	A	A	A	A	A
TYLER	13.011	A	B	D	B	A	A	A	A	A	A	A	A	A	A	A	A	A
TYLER	13.064	A	B	E	B	A	A	A	A	A	A	A	A	A	A	A	A	A
VAN BUREN LOOP EB ON	14.058	A	A	E	B	A	A	A	A	A	A	A	A	A	A	A	A	A
VAN BUREN	14.096	B	B	E	B	A	A	A	A	A	A	A	A	A	A	A	A	A
600' E-O JACKSON	14.714	A	B	F	D	A	A	A	A	A	A	A	A	A	A	A	A	A
ADAMS	15.565	A	B	F	D	B	A	A	A	A	A	A	A	A	A	A	A	A
ADAMS	15.706	A	B	F	D	B	A	A	A	A	A	A	A	A	A	A	A	A
MADISON	16.588	A	B	E	D	B	A	A	A	A	A	A	A	A	A	A	A	A
MADISON	16.751	A	C	F	E	C	C	C	C	C	C	C	C	C	C	C	C	C
3000' W-O ARLINGTON	17.278	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
ARLINGTON WB ON	17.724	A	B	E	D	B	A	A	A	A	A	A	A	A	A	A	A	A
JANE ST	17.75	B	E	F	D	D	D	D	E	E	E	E	E	E	E	E	E	E
ARLINGTON AVE	17.929	A	C	F	E	D	C	B	D	D	D	D	D	D	D	D	D	D
CENTRAL WB ON	18.342	A	B	E	D	B	A	A	A	A	A	A	A	A	A	A	A	A
CENTRAL EB ON	18.522	A	B	E	D	B	A	A	A	A	A	A	A	A	A	A	A	A
IVY OC 100' E-O	18.995	A	B	D	D	B	A	A	A	A	A	A	A	A	A	A	A	A
FOURTEENTH ST	19.899	A	B	C	B	B	A	A	A	A	A	A	A	A	A	A	A	A
FOURTEENTH ST	20.076	A	B	C	B	B	A	A	A	A	A	A	A	A	A	A	A	A
TENTH ST	20.225	A	B	B	B	B	A	A	A	A	A	A	A	A	A	A	A	A
THIRD ST	20.86	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B



Note: 21:00 PM represents 21:00 to 21:59

Table 20: SR-91 WB GP Lane LOS Heat Map Summary

Name	Level of Service for SR-91 WB GP Lane From PROMENADE .2 E-O (PM 8.13) to SPRUCE ST WB ON (PM 21.474)																	
	CA PM 5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
PROMENADE .2 E-O	8.13	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B
MCKINLEY	9.09	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B
E-O MCKINLEY	9.337	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B
PIERCE	10.724	D	C	F	F	F	F	F	F	F	F	F	F	F	F	F	F	C
MAGNOLIA	11.052	C	E	F	D	E	F	F	F	F	F	F	F	F	F	F	F	B
MAGNOLIA	11.219	D	D	F	F	F	F	F	F	F	F	F	F	F	F	F	F	C
LA SIERRA	11.88	B	C	C	D	C	D	C	D	D	D	D	D	D	D	D	D	B
LA SIERRA	12.165	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B
TYLER	12.907	C	C	D	E	D	C	D	D	D	D	D	D	D	D	D	D	B
TYLER	13.196	B	B	B	D	D	C	C	C	C	C	C	C	C	C	C	C	B
VAN BUREN	13.977	B	C	C	C	D	C	C	C	C	C	C	C	C	C	C	C	B
VAN BUREN	14.096	B	C	E	D	C	C	C	C	C	C	C	C	C	C	C	C	B
JACKSON ST.	14.714	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B
ADAMS	15.556	B	C	C	C	C	D	C	C	C	C	C	C	C	C	C	C	B
ADAMS	15.713	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B
500' E-O JEFFERSON	16.247	A	B	C	C	B	C	C	C	C	C	C	C	C	C	C	C	B
MADISON	16.59	B	C	C	D	C	C	C	C	C	C	C	C	C	C	C	C	B
MADISON	16.751	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B
ARLINGTON WB ON	17.724	C	C	D	D	C	C	C	C	C	C	C	C	C	C	C	C	B
JANE ST	17.75	B	C	C	D	C	C	C	C	C	C	C	C	C	C	C	C	B
ARLINGTON	17.943	A	B	C	C	B	B	C	C	C	C	C	C	C	C	C	C	B
CENTRAL	18.347	B	C	D	C	C	C	D	D	D	D	D	D	D	D	D	D	B
CENTRAL	18.539	A	B	C	C	B	B	C	C	C	C	C	C	C	C	C	C	B
100' E-O IVY	18.995	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B
14TH WB ON	19.899	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B
14TH	20.084	B	D	D	D	C	C	C	C	C	C	C	C	C	C	C	C	B
TENTH ST	20.225	B	B	C	C	C	C	C	C	C	C	C	C	C	C	C	C	B
THIRD ST	20.86	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B
SPRUCE ST WB ON	21.474	A	A	A	B	A	A	A	A	A	A	A	A	A	A	A	A	A



Note: 21:00 PM represents 21:00 to 21:59

Table 21: SR-91 WB HOV Lane LOS Heat Map Summary

Name	CA PM	Level of Service for SR-91 WB HOV Lane From PROMENADE .2 E-O (PM 8.13) to THIRD ST (PM 20.86)																	
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
PROMENADE .2 E-O	8.13	C	B	B	C	B	B	A	B	B	B	B	B	B	B	B	B	B	A
MCKINLEY	9.09	C	C	C	C	C	B	B	B	B	B	C	C	C	C	C	C	C	A
E-O MCKINLEY	9.337	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A
PIERCE	10.724	C	C	C	D	C	C	C	C	C	D	D	D	D	D	D	D	D	A
MAGNOLIA	11.052	C	B	C	D	C	B	B	B	B	C	D	D	D	D	D	D	D	A
MAGNOLIA	11.219	A	A	C	A	A	A	A	A	A	B	C	D	D	C	C	B	A	A
LA SIERRA	11.927	B	B	C	D	C	B	B	B	B	B	D	D	D	D	D	C	A	A
LA SIERRA	12.165	B	B	C	C	C	B	B	B	B	B	D	D	D	D	C	A	A	A
TYLER	13.011	B	B	B	C	B	A	A	A	A	B	C	C	C	B	B	B	A	A
TYLER	13.064	A	B	B	B	B	B	B	B	B	B	C	C	C	B	B	B	A	A
VAN BUREN	14.067	B	B	B	C	B	B	A	B	B	B	C	C	C	C	C	C	A	A
VAN BUREN	14.096	A	A	E	B	A	A	A	A	A	B	D	D	D	B	B	B	A	A
JACKSON ST.	14.714	B	B	B	B	A	A	A	B	B	B	C	C	D	D	D	D	A	A
ADAMS	15.565	A	B	B	B	B	B	B	B	B	B	C	C	C	B	B	B	A	A
ADAMS	15.706	A	A	B	B	A	A	A	B	B	B	C	D	E	D	A	A	A	A
MADISON	16.588	B	B	B	B	B	A	A	B	B	B	C	C	C	C	A	A	A	A
MADISON	16.751	A	A	B	B	B	A	A	A	B	B	C	C	D	D	C	A	A	A
ARLINGTON WB ON	17.724	A	A	B	A	A	A	A	B	B	B	C	C	D	E	D	A	A	A
JANE ST	17.75	A	A	B	B	A	A	A	B	B	B	C	C	D	E	D	A	A	A
ARLINGTON AVE	17.929	A	A	B	B	A	A	A	B	B	B	C	D	F	D	A	A	A	A
CENTRAL WB ON	18.342	A	A	B	B	A	A	A	B	B	B	C	D	E	D	A	A	A	A
CENTRAL EB ON	18.522	A	A	B	B	A	A	A	B	B	B	C	D	E	C	A	A	A	A
IVY OC 100' E-O	18.995	A	A	B	B	A	A	A	B	B	B	C	D	E	C	A	A	A	A
FOURTEENTH ST	19.899	B	A	C	C	D	B	C	B	B	B	B	D	F	F	B	B	A	A
FOURTEENTH ST	20.076	A	B	C	B	B	A	A	A	B	B	B	B	B	B	B	B	A	A
TENTH ST	20.225	A	A	B	A	A	A	A	A	A	A	B	B	E	B	A	A	A	A
THIRD ST	20.86	A	B	B	B	B	B	B	B	B	B	C	C	C	B	B	B	A	A



Note: 21:00 PM represents 21:00 to 21:59

Table 22: I-215 NB GP Lane LOS Heat Map Summary

Name	Level of Service for I-215 NB GP From Fair Isle/ Box Springs (PM 38.627) to Blaine (PM 42.245)																		
	CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
FAIR ISLE/ BOX SPRINGS	38.627	C	D	D	D	D	C	D	D	D	E	E	E	D	C	C	C	B	B
CENTRAL AVE SB ON	39.426	D	F	F	F	F	D	D	F	F	F	F	F	E	D	C	C	B	B
CENTRAL -WATKINS	39.643	C	E	E	E	E	D	E	F	F	F	E	E	D	C	C	C	B	B
MLK SB ON	40.76	D	F	F	F	F	D	E	F	F	F	F	F	E	D	C	C	B	B
MARTIN LUTHER KING	40.929	D	F	F	F	F	E	F	F	F	F	F	F	E	E	C	C	B	B
UNIVERSITY	41.575	C	C	D	D	C	C	C	C	C	D	D	C	C	C	C	C	B	B
BLAINE	42.245	A	B	B	B	B	B	B	B	B	B	B	B	B	B	B	B	A	A

LOS Color Code

Table 23: I-215 NB HOV Lane LOS Heat Map Summary

Name	Level of Service for I-215 NB HOV From Fair Isle/ Box Springs (PM 38.627) to Blaine (PM 42.245)																		
	CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
BOX SPRINGS	38.627	C	F	F	F	F	D	B	D	F	F	E	F	D	C	B	A	A	A
CENTRAL AVE SB ON	39.426	C	F	F	F	F	E	D	F	F	F	F	F	E	D	C	C	B	B
CENTRAL-WATKINS	39.652	D	F	F	F	F	D	C	F	F	F	E	D	C	C	C	B	A	A
MLK SB ON	40.76	D	F	F	F	F	D	C	D	C	D	E	D	C	C	C	B	A	A
MARTIN LUTHER KING	40.929	D	F	F	F	F	C	D	D	C	D	E	F	D	C	C	B	A	A
UNIVERSITY	41.564	D	D	D	D	C	C	C	B	C	D	D	D	C	C	B	A	A	A
BLAINE	42.245	D	D	D	E	F	D	C	C	C	C	D	D	D	C	C	C	B	B

LOS Color Code

Note: 21:00 PM represents 21:00 to 21:59

Table 24: I-215 SB GP Lane LOS Heat Map Summary

Name	Level of Service for I-215 SB GP From Fair Isle/ Box Springs (PM 38.627) to Blaine (PM 42.144)																		
	CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
FAIR ISLE/ BOX SPRINGS 38.627		B	C	C	D	C	C	C	C	D	D	D	D	C	C	C	C	C	B
CENTRAL AVE SB ON 39.426		B	C	C	D	C	C	C	C	C	D	D	D	D	C	C	C	C	C
CENTRAL-WATKINS 39.652		A	B	B	D	B	C	C	C	C	C	C	C	C	C	C	C	C	B
N-O BOX SPRINGS RD 40.382		C	F	F	F	E	D	D	E	F	F	F	F	D	C	C	B	B	B
MLK SB ON 40.76		B	C	C	D	C	C	C	C	C	D	E	E	E	E	E	E	C	B
MARTIN LUTHER KING 40.929		A	B	B	B	B	B	B	B	C	B	C	D	D	E	D	D	B	B
UNIVERSITY AVE SB ON 41.451		B	C	C	D	C	C	C	C	C	D	E	E	E	F	E	E	C	C
BLAINE ST SB ON 42.144		B	C	C	D	C	C	C	C	C	D	D	D	D	D	D	D	C	B



Table 25: I-215 SB HOV Lane LOS Heat Map Summary

Name	Level of Service for I-215 SB HOV From Fair Isle/ Box Springs (PM 38.627) to Blaine (PM 42.144)																		
	CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
FAIR ISLE/ BOX SPRINGS 38.627		C	F	F	F	E	E	C	D	E	F	F	F	C	C	B	B	B	B
CENTRAL AVE SB ON 39.426		A	A	B	B	A	B	B	B	C	C	D	D	D	D	C	B	B	B
CENTRAL-WATKINS 39.652		A	B	B	B	B	B	B	B	C	C	D	D	D	D	C	C	C	B
N-O BOX SPRINGS RD 40.382		D	F	F	F	D	C	C	F	F	F	F	F	E	C	B	B	A	A
MLK SB ON 40.76		A	B	C	C	B	B	B	C	C	D	E	E	F	F	E	C	B	B
MARTIN LUTHER KING 40.929		C	D	E	D	D	D	D	D	D	E	F	F	F	F	F	D	C	C
UNIVERSITY AVE SB ON 41.451		A	B	B	B	B	B	B	B	C	D	E	E	F	F	F	B	B	B
BLAINE ST SB ON 42.144		A	A	B	B	A	A	A	B	B	C	D	E	F	F	E	E	B	B



Note: 21:00 PM represents 21:00 to 21:59

5.0 Part-Time HOV lane Operational Analysis

The level of service for the freeway segments is based on the traffic density divided by the speed. Tables 26 through 31 show the results of level of service for part-time HOV lane operation during non-peak hours for each route and direction. Comparing the level of service for full-time HOV lane operation (Table 14-21) during the same period (10:00 to 14:00) on February 6, 2019, the level of service for part-time HOV lane operation is slightly better than that of the full-time.

5.1 State Route 60 Part-Time HOV Lane Operational Analysis for 2019

The freeway corridor part-time analysis results on SR-60 are summarized in Tables 26 and 27. During the period from 10:00 to 14:00, the SR-60 corridor operates at level of service D or better.

Table 26: RIV SR-60 EB LOS for Conversion to Part-Time HOV Lane (GP + HOV Lanes)

RIV SR-60 EB LOS for Conversion to Part-Time HOV Lane						
Name	CA PM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM*
E-O ETIWANDA AVE	R2.2	A	A	A	B	B
COUNTRY VILLAGE RD	R3.1	B	B	B	B	B
W-O PYRITE ST	R4.4	B	B	B	B	B
PYRITE AVE	R5.5	B	B	B	B	B
E-O PEDLEY RD	R6.3	B	C	C	C	C
W-O VALLEY WAY	7.3	B	C	C	C	C
W-O RUBIDOUX	8.7	C	C	C	D	D
W-O RUBIDOUX BLVD	9.3	C	C	C	D	D
SANTA ANA RIVER	10.7	B	B	B	B	B
W-O MAIN ST	11.6	C	C	C	C	C
MAIN ST	11.815	B	C	C	C	C

LOS Color Code A B C D E F

Note: 14:00 PM* represents 14:00 to 14:59.

Table 27: RIV SR-60 WB LOS for Conversion to Part-Time HOV Lane (GP + HOV Lanes)

RIV SR-60 WB LOS for Conversion to Part-Time HOV Lane						
Name	CA PM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM*
E-O ETIWANDA AVE	R2.2	B	B	B	B	B
COUNTRY VILLAGE RD	R3.1	B	C	C	C	C
W-O PYRITE ST	R4.4	B	C	C	C	C
PYRITE AVE	R5.5	B	C	C	C	C
E-O PEDLEY RD	R6.3	B	C	C	C	C
W-O VALLEY WAY	7.3	B	B	B	B	B
W-O RUBIDOUX	8.7	B	B	C	C	C
W-O RUBIDOUX BLVD	9.3	B	B	C	C	C
SANTA ANA RIVER	10.7	B	B	B	B	B
W-O MAIN ST	11.6	B	B	B	B	B

LOS Color Code 

Note: 14:00 PM* represents 14:00 to 14:59.

5.2 State Route 91 Part-Time HOV Lane Operational Analysis for 2019

The freeway part-time corridor analysis results on SR-91 are summarized in Tables 28 and 29. During the periods from 10:00 to 13:00, the SR -91 corridor operates at LOS D or better, except for the location of Tyler and Central EB on-ramp at 12:00 and Adams at 14:00 which operate at LOS E. In addition, based on PeMS data, the current traffic for GP lanes at these three locations is relatively heavy and operates at LOS E & F (refer to Table 18 on page 41).

Table 28: RIV SR-91 EB LOS for Conversion to Part-Time HOV Lane (GP + HOV Lanes)

RIV SR-91 EB LOS for Conversion to Part-Time HOV Lane						
Name	CA PM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM*
.1 W-O PROMENADE	8.027	C	C	C	C	C
.2 E-O PROMENADE	8.13	B	B	B	C	C
MCKINLEY	9.09	B	B	C	C	C
MCKINLEY LOOP ON	9.15	B	B	C	C	C
MCKINLEY	9.23	B	C	C	C	C
E-O MCKINLEY	9.337	C	C	C	D	D
PIERCE	10.724	C	C	C	C	D
MAGNOLIA	11.219	C	C	C	D	D
LA SIERRA	11.927	C	D	D	D	D
LA SIERRA	12.192	C	C	C	D	D
TYLER	12.907	D	D	E	D	D
TYLER	13.196	C	C	C	D	D
VAN BUREN LOOP EB ON	14.058	C	C	C	D	D
VAN BUREN	14.096	C	C	C	C	C
.11 E-O JACKSON	14.714	C	C	C	C	C
ADAMS	15.556	C	C	C	C	C
ADAMS	15.713	C	C	C	D	E
.09 E-O JEFFERSON	16.247	C	C	C	C	C
MADISON	16.59	C	C	C	D	D
MADISON	16.751	C	C	D	D	D
3000 W-O ARLINGTON	17.278	C	C	C	C	C
ARLINGTON	17.724	C	B	C	C	C
JANE ST	17.75	D	D	D	D	D
ARLINGTON	17.943	D	D	D	D	D
CENTRAL	18.347	C	B	B	C	C
CENTRAL EB ON	18.522	D	D	E	D	D
100 E-O IVY	18.995	D	D	D	D	D
14TH	19.882	C	C	C	C	C
14TH EB ON	20.076	B	C	C	C	C
TENTH ST	20.225	B	B	B	C	C
7TH-MISSION INN	20.603	C	C	C	D	D
E-O THIRD ST	20.86	B	B	B	C	C

LOS Color Code A B C D E F

Note: 14:00 PM* represents 14:00 to 14:59.

Table 29: RIV SR-91 WB LOS for Conversion to Part-Time HOV Lane (GP + HOV Lanes)

RIV SR-91 WB LOS for Conversion to Part-Time HOV Lane						
Name	CA PM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM*
PROMENADE .2 E-O	8.13	C	C	C	C	C
MCKINLEY	9.09	C	C	C	C	C
E-O MCKINLEY	9.337	C	C	C	C	C
PIERCE	10.724	C	C	C	C	C
MAGNOLIA	11.052	C	C	C	C	C
MAGNOLIA	11.219	C	D	D	D	D
LA SIERRA	11.88	C	B	C	C	C
LA SIERRA	12.165	C	C	C	C	C
TYLER	12.907	C	C	C	C	C
TYLER	13.196	C	C	C	C	C
VAN BUREN	13.977	C	C	C	C	C
VAN BUREN	14.096	C	C	C	C	D
JACKSON ST.	14.714	C	C	C	C	C
ADAMS	15.556	C	C	C	C	D
ADAMS	15.713	C	C	C	C	D
500' E-O JEFFERSON	16.247	C	C	C	C	C
MADISON	16.59	C	C	C	D	D
MADISON	16.751	D	C	D	D	D
ARLINGTON WB ON	17.724	C	C	C	D	D
JANE ST	17.75	C	C	C	D	D
ARLINGTON	17.943	B	B	C	C	C
CENTRAL	18.347	C	C	D	D	D
CENTRAL	18.539	B	B	C	C	C
100' E-O IVY	18.995	C	C	C	C	C
14TH WB ON	19.899	C	C	C	C	D
14TH	20.084	C	C	C	D	D
TENTH ST	20.225	C	B	C	C	C
THIRD ST	20.86	B	B	B	B	C
SPRUCE ST WB ON	21.474	A	A	A	B	B

LOS Color Code A B C D E F

Note: 14:00 PM* represents 14:00 to 14:59.

5.3 Interstate 215 Part-Time HOV Lane Operational Analysis for 2019

The freeway part-time corridor analysis results on I-215 are summarized in Tables 30 and 31. From 10:00 to 14:00, the I-215 corridor operates at LOS D or better.

Table 30: RIV I-215 NB LOS for Conversion to Part-Time HOV Lane (GP + HOV Lanes)

RIV I-215 NB LOS for Conversion to Part-Time HOV Lane						
Name	CA PM	10:00 AM	11:00 AM	12:00:00 PM*	13:00 PM*	14:00 PM*
FAIR ISLE/ BOX SPRINGS	38.627	C	D	D	D	D
CENTRAL AVE SB ON	39.426	D	D	D	D	D
CENTRAL -WATKINS	39.652	D	D	D	D	D
MLK SB ON	40.382	D	D	D	D	D
MARTIN LUTHER KING	40.76	D	D	D	D	D
UNIVERSITY	40.929	C	D	C	C	D
BLAINE	41.564	B	B	B	B	B

LOS Color Code 

- Note: 1. 14:00 PM* represents 14:00 to 14:59.
2. The significantly enhanced LOS for some situations might be due to the limited capacity of the developed model (that is, volume vs. speed) in capturing some data outliers where the roadway sections are constantly congested throughout the day, or, where there are no obvious peak hours.

Table 31: RIV I-215 SB LOS for Conversion to Part-Time HOV Lane (GP + HOV Lanes)

RIV I-215 SB LOS for Conversion to Part-Time HOV Lane						
Name	CA PM	10:00 AM	11:00 AM	12:00:00 PM*	13:00 PM*	14:00 PM*
FAIR ISLE/ BOX SPRINGS	38.627	C	C	C	C	D
CENTRAL AVE SB ON	39.426	C	D	D	D	D
CENTRAL-WATKINS	39.652	C	C	C	C	D
N-O BOX SPRINGS RD	40.382	D	D	C	C	D
MLK SB ON	40.76	C	D	D	D	D
MARTIN LUTHER KING	40.929	C	C	C	C	C
UNIVERSITY AVE SB ON	41.451	C	D	D	D	D
BLAINE ST SB ON	42.144	C	D	D	D	D

LOS Color Code 

- Note: 1. 14:00 PM* represents 14:00 to 14:59.
2. The significantly enhanced LOS for some situations might be due to the limited capacity of the developed model (that is, volume vs. speed) in capturing some data outliers where the roadway sections are constantly congested throughout the day, or, where there are no obvious peak hours.

5.4 Existing Part-Time HOV Lane Operational Analysis

Moreno Valley Freeway (SR-60 eastbound from PM 13.447 to PM 19.119 and westbound from PM 13.392 to PM 18.42) has operated with part-time HOV in Riverside since November 2011. These existing part-time HOV corridor analysis results are summarized in Tables 32 to 35. During the period from 10:00 to 14:00, the existing part-time HOV lane operates at level of service D or better.

Table 32: Operational LOS of SR-60 EB GP Serving as the Existing Part-Time HOV Lane

RIV SR-60 EB GP Lane LOS for Existing Part-Time HOV						
Name	CA PM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM*
DAY ST E-B ON	13.447	B	B	B	C	C
PIGEON PASS	14.168	B	B	B	B	C
PIGEON PASS	14.509	C	C	C	C	D
HEACOCK	15.495	C	C	C	C	C
PERRIS	16.195	B	B	C	C	B
PERRIS EB ONR	16.602	B	B	C	C	B
W-O NASON ST	18.1	B	B	B	B	B
NASON ST	18.49	B	B	B	B	B
MORENO BEACH DR	19.118	B	B	B	B	B

LOS Color Code 

Table 33: Operation LOS of SR-60 EB HOV Lane Serving as the Existing Part-Time HOV Lane

RIV SR-60 EB HOV Lane LOS for Existing Part-Time HOV						
Name	CA PM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM*
DAY ST E-B ON	13.447	B	B	B	B	C
PIGEON PASS	14.168	C	C	C	C	C
PIGEON PASS	14.509	A	A	B	B	B
HEACOCK	15.495	A	B	B	B	B
PERRIS	16.195	B	B	B	B	B
PERRIS EB ONR	16.602	B	B	B	B	B
W-O NASON ST	18.1	B	B	B	B	B
NASON ST	18.49	A	B	A	B	B
MORENO BEACH DR	19.118	A	A	A	B	B

LOS Color Code 

Table 34: Operation LOS of SR-60 WB GP Serving as the Existing Part-Time HOV Lane

RIV SR-60 WB GP Lane LOS for Existing Part-Time HOV						
Name	CA PM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM*
DAY ST E-B ON	13.447	C	C	C	F	F
PIGEON PASS	14.168	C	C	D	F	E
PIGEON PASS	14.509	C	C	C	C	C
HEACOCK	15.495	C	C	C	C	C
PERRIS	16.195	C	C	C	C	C
PERRIS EB ONR	16.602	B	B	B	B	C
W-O NASON ST	18.1	B	B	B	B	B
NASON ST	18.49	B	B	B	B	B
MORENO BEACH DR	19.118	B	B	B	B	B

LOS Color Code 

Table 35: Operational LOS of SR-60 WB HOV Lane Serving as the Existing Part-Time HOV Lane

RIV SR-60 WB HOV Lane LOS for Existing Part-Time HOV						
Name	CA PM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM*
DAY ST E-B ON	13.447	B	B	B	D	D
PIGEON PASS	14.168	B	B	B	C	C
PIGEON PASS	14.509	B	B	B	C	C
HEACOCK	15.495	B	B	B	B	B
PERRIS	16.195	B	B	B	B	B
PERRIS EB ONR	16.602	B	A	A	B	B
W-O NASON ST	18.1	B	A	B	B	B
NASON ST	18.49	B	B	B	B	B
MORENO BEACH DR	19.118	A	A	A	A	B

LOS Color Code 

According to Table 32 to Table 35, we could summarize the performance of the existing part-time HOV lane as follows:

1. The HOV lanes remain in an acceptable level of service D or better during non-peak hours.
2. The level of service of HOV lanes is better than the level of service of GP lanes, meaning the opening of HOV lanes alleviated the congestion in GP lanes.

6.0 Environmental Sustainability Analysis

Caltrans' goal is to foster more sustainable approaches to transportation in order to avoid present negative impacts and to ensure that future generations will be able to enjoy the same or better standards of living and mobility as the current ones. Sustainable transportation focuses on environmental impacts such as reducing greenhouse gas (GHG) emissions, improving system efficiency, reducing dependence on oil, and respecting the natural environment.

The existing full-time HOV hours of operation on SR-91 and SR-60 are identified as Transportation Control Measures (TCM) in the State Implementation Plan (SIP). The SIP is the EPA and FHWA approved state air quality plan for meeting National Ambient Air Quality Standards (NAAQS). State Route 91 HOV lane hours of operation between Adams Street to the SR-60/I-215 interchange are considered a TCM project in the SIP as listed in SCAGs 2012 Air Quality Management Plan (AQMP)/SIP for the South Coast Air Basin. The SR-60 HOV lane hours of operation, (1) from the SR-60/91/215 junction to the SR-60/I-215 split and (2) from I-215 to Redlands Boulevard in Moreno Valley are identified as TCM projects as listed in SCAG's 2003 AQMD. A TCM is a special category of transportation projects defined broadly as a strategy that reduces transportation-related air pollution to improve air quality, among other socioeconomic benefits. Any changes to HOV lanes, such as hours of operation, vehicle occupancy, and conversions will require a TCM substitution project for air quality conformity purposes. A TCM substitution project and associated studies would entail coordination with EPA, FHWA, California Air Resources Board (CARB) and Southern California Association of Governments (SCAG). This would include detailed air quality studies to demonstrate and/or quantify potential air quality benefits. Additionally, impact and mitigation will be required as the TCM substitution project must provide equivalent or greater emissions reductions while meeting all TCM substitution requirements.

An example of a previous TCM substitution project can be drawn from a 2007 proposal to convert HOV lane hours of operation from full-time to part-time on an 8-mile segment on SR-60 in Riverside County from the east junction of SR-60/I-215 to Redlands Boulevard. The original Riverside County SR-60 HOV project was identified as a TCM and listed in SCAG's 2002 Regional Transportation Improvement Program (RTIP). Therefore, Riverside County Transportation Commission (RCTC), in conjunction with Caltrans, requested an amendment to the RTIP and presented a TCM substitution project proposal to SCAG's Regional Council for adoption.

Two projects were proposed in combination with part-time hours of operation as a TCM substitution package. The package underwent the substitution protocol specified in the Clean Air Act's section 176(c) along with specific procedures identified in the AQMP/SIP for replacing projects.

The TCM substitution proposal associated with the SR-60 8-mile HOV hours of operation conversion included two projects in combination with part-time hours of operation as a TCM substitution package. These projects included (1) expanded service of Freeway Service Patrol (FSP) on SR-60 and (2) the implementation of a new FSP beat, or FSP designated routes along a freeway, on Interstate 215 (I-215). FSP is an incident management program designed to assist disabled vehicles along congested freeways and reduce non-recurring congestion through quick detection, response, and removal of accidents and other incidents.

Several analyses, reports, studies, interagency consultations, and public involvement were required to confirm that the substitution projects could substantially mitigate the increase in projected emissions as a result of modifying HOV lane access on the SR-60 while meeting all state and federal requirements before adoption.

It should be noted that although the mitigation for the conversion of HOV lane hours of operation for SR-60 and SR-91 could be similar, this example does not demonstrate the current roadmap for implementing a change in HOV lane hours of operation or the approval process for a TCM substitution project. Several environmental laws, such as California Senate Bill (SB) 743 (Steinberg, 2013), pertaining to air quality and climate change have changed the way agencies measure transportation impacts on the environment and since altered mitigation for such projects.

Additionally, in compliance with SB 743, consistent with the language of Section 15064.3 of the CEQA Guidelines, Caltrans concurred that VMT is the most appropriate measure of transportation impacts under CEQA. Moreover, Caltrans policy states that the determination of the significance of a VMT impact requires a supporting induced travel analysis for capacity-increasing transportation projects on the State Highway System when Caltrans is the lead agency or when another entity acts as the lead agency.

CEQA analysis of transportation impacts of proposed projects on the State Highway System focuses on the amount of driving attributable to the proposed project, measured as a change in VMT. CEQA requires identifying, assessing and disclosing potentially adverse environmental impacts resulting from a project,

i.e., impacts that would not occur but for the project. Generally stated, the transportation impact of a roadway project is the overall increase in VMT that is attributable to the project, distinct from any background changes in VMT due to other factors such as population or economic growth. The transportation impact is the difference in VMT with the project and without the project. The difference in VMT may be negative for some projects that reduce VMT, zero for projects that do not affect VMT or positive for those projects which are associated with an increase in VMT. Generally, the project types associated with an increase in the total amount of driving are projects that add passenger vehicle and light-duty truck capacity to the State Highway System.

During the environmental analysis, the question, "Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3 subdivision (b)?" would be posed and evaluated by practitioners based on the project's potential to increase VMT. Per Caltrans policy and guidance, proposing to convert the operation of HOV lanes on SR-60, SR-91, and I-215 in Riverside County from a full-time to a part-time basis, would be identified as a project type likely to lead to a measurable and substantial increase in vehicle travel meaning, the project would require an induced travel analysis, and with the potential for a VMT CEQA significance determination and mitigation.

The induced demand analysis would likely show an increase in VMT. Significant impacts require "applied" mitigation to the project. The level of induced travel projected generally represents the level of VMT to be mitigated to reduce transportation impacts to a level that is less than significant. The remaining impact is then evaluated again to determine if it remains significant or if the mitigation has reduced the impact to a less-than-significant level. If the impact remains significant after all feasible mitigation has been incorporated, and there are no additional, feasible alternatives that would avoid or lessen the adverse impact, a statement of overriding considerations may be appropriate to approve the project. It should be noted that not all projects will qualify for a statement of overriding consideration; the no-build alternative can be selected as the preferred alternative.

6.1 Greenhouse Gas (GHG) Emission Analysis

The Federal Highway Administration (FHWA) policies to reduce GHG emissions associated with freight movements are divided into seven categories. One of the categories is congestion mitigation. Congestion can affect vehicles' fuel consumption to the extent that it requires vehicles to accelerate and decelerate more often to adapt to network traffic levels. Because fuel consumption is significantly higher in acceleration mode than traveling at a constant speed, fuel consumption typically is higher in congested scenarios. As a result, more GHG was generated under congested traffic conditions where vehicles generally travel at much smaller speeds (Façanha & Ang-Olson, 2019). The general relationship between GHG (CO₂) emission and vehicle speed is exhibited in Figure 17. Based on former speed and level of service analyses, converting the full-time HOV lane to part-time could mitigate slight traffic congestion to some degree on general-purpose lanes during non-peak hours. The speed on general purpose lanes during non-peak hours remains within the 30 to 65 mph range whether it is part-time or full-time HOV operations. Figure 17 shows no change in GHG (CO₂) emission within the 30 to 65 mph speed range. Also, a low percentage of drivers will drive beyond 65 mph after conversion to part-time HOV operations during non-peak hours while discharging more GHG on both SR-60 and SR-91.

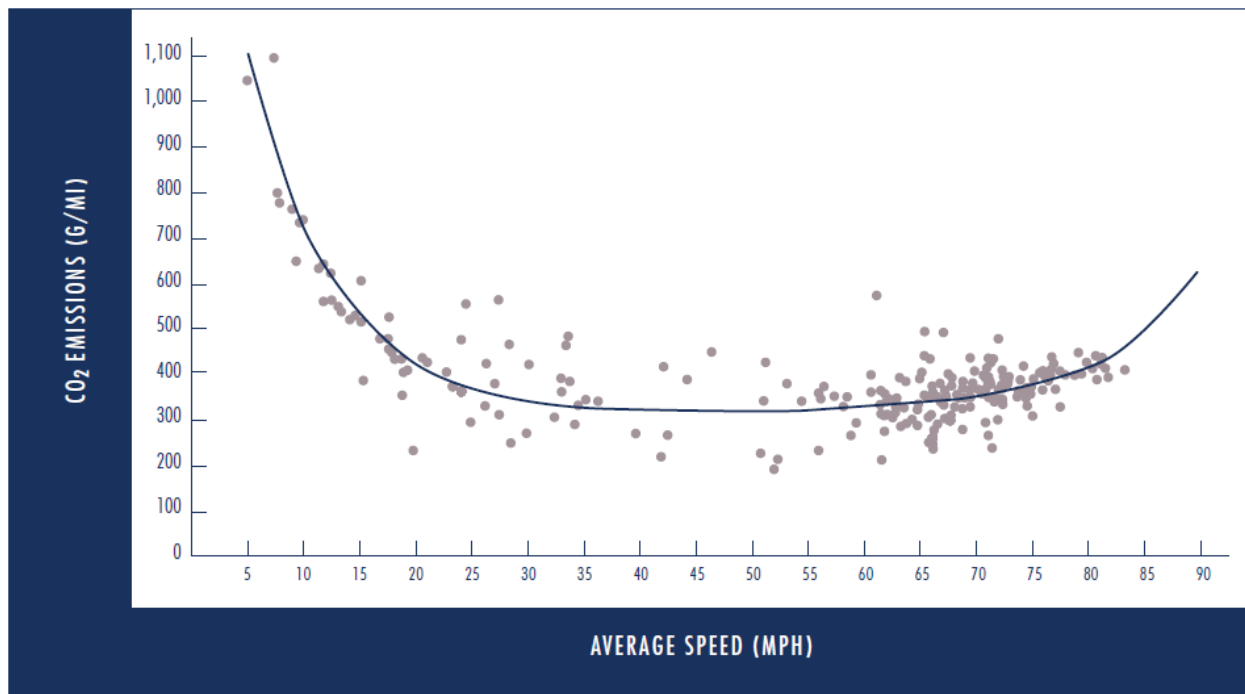


Figure 9: The Relationship between CO₂ Emissions and Average Speed

(Source: ACCESS, Traffic Congestion, and Greenhouse Gases, 2009)

Since the original environmental documentation for HOV lanes discussed in this report, several new GHG regulatory actions have been enacted including, but not limited to Senate Bill 32 (Pavley, 2016), Senate Bill 375 (Steinberg, 2008), Assembly Bill 617 (C. Garcia, 2017), and the California Air Resource Board (CARB) Scoping Plan of 2017 which impact the way transportation projects are analyzed.

When assessing project-level operational GHG emissions analysis needs, analysts should consider congestion relief and other capacity-increasing projects, such as adding general purpose lanes and peak-time high-occupancy lanes, construction of new interchange and freeway ramps, and construction of mixed-use toll roads. Projects that add capacity will, in general, increase both traffic volumes and average vehicle speeds. Quantitative analysis will likely be needed to evaluate whether project-level GHG emissions may increase or decrease overall. The discussion of feasible mitigation options, if applicable, considered to address the operational impacts may focus on project design elements that govern travel speeds, fleet mix, and/or traffic volumes.

It's also important to note that as required by Section 15125(d) of the CEQA Guidelines, during the environmental analysis, any inconsistencies between the proposed project and applicable general plans, specific plans, and regional plans must be discussed. Moreover, Section 15125(d) states, "Such regional plans include, but are not limited to, the applicable air quality attainment or maintenance plan or State Implementation Plan, area-wide waste treatment and water quality control plans, regional transportation plans, regional housing allocation plans, regional blueprint plans, plans for the reduction of GHG emissions, habitat conservation plans, natural community conservation plans and regional land use plans"

Therefore, when evaluating projects, consistency with CARB's 2017 Scoping Plan as it pertains to both GHG emissions and any increase in VMT attributable to the project occurs. Capacity-increasing projects with the potential to lead to a measurable and substantial increase in GHG and/or VMT are likely to be inconsistent with State climate goals. Modeling completed by CARB for the Mobile Source Strategy shows capacity for statewide light-duty VMT growth is only five percent by 2030, as compared to the current growth rate of approximately eleven percent.

6.2 Part-time HOV Lane Operation Efficiency Analysis

One of the performance measures for assessing the sustainability of the transportation system is improving system efficiency. Congestion is the primary indicator of system inefficiency (USDOT, 2010). Converting the full-time HOV lanes to part-time, an operational strategy with the intent to maximize the capacity of the existing infrastructure, is anticipated to reduce the roadway congestion slightly on the GP lane during non-peak hours.

6.3 Traffic Impact Analysis

Converting only Route 91 and a segment of Route 60 within Riverside County will create inconsistencies in HOV lane operations countywide. These inconsistencies will create connectivity issues between HOV lanes of various corridors and could lead to driver confusion. Ultimately, it could lead to drivers' safety and violations.

6.4 Enforcement Impact Analysis

Enforcing traffic laws related to HOV lane operations could be more difficult due to different HOV lane operations on various routes in southern California as well as different hours of operations due to conversion from full-time to part-time operations.

6.5 Fiscal Impact Analysis

Caltrans District 8 would need to install 12 Overhead Signs in both directions of State Routes 91 and 60. Caltrans would also need to replace other median concrete barrier-mounted signs within the entire corridor. The tentative cost of installation of these overhead signs and replacement of median concrete barrier-mounted signs is about \$7 million. Finally, the support cost for programming to implement such a change, including sign installation, could cost approximately \$10.5 million, not including the cost of mitigation.

7.0 Conclusions and Recommendations

Based on the travel demand model for the GP lanes and a part-time HOV lane, the estimated densities are lower than those of existing conditions. In comparison with the full-time HOV lane, the part-time HOV lane leads to smaller volumes per lane during non-peak hours. This occurs due to the traffic demand being divided more evenly among both GP lanes and HOV lanes. Throughout the report, the speed difference between GP lanes versus HOV lanes during non-peak hours is very insignificant. Thus, the benefit of the conversion is very minimal. Also, an environmental analysis needs to be conducted to evaluate and compare the impacts of the part-time HOV lane alternatives and to obtain the FHWA and EPA approvals. The level of environmental document likely to be required by CEQA is an Environmental Impact Report and for NEPA an Environmental Impact Statement. A conversion from full-time HOV lanes to part-time HOV lanes could create confusion for drivers and enforcement challenges for the California Highway Patrol. Furthermore, a conversion would require a funding arrangement of approximately \$10.3 million not including the cost of mitigation.

Based on the analysis of negative impacts and benefits, it is recommended not to open the HOV lane in each direction to all traffic during the non-peak hours at this time. Consistent with existing practices, Caltrans will continue to monitor the performance of the corridor, and if operational conditions change, conduct engineering investigations to identify mobility and safety improvement opportunities.

8.0 References

1. TRB (Transportation Research Board), 2016. Highway capacity manual 6th edition. A guide for multimodal mobility analysis.
2. Façanha, C., and J. Ang-Olson, Policies to Reduce Greenhouse Gas Emissions Associated with Freight Movements, <https://www.fhwa.dot.gov/policy/otps/innovation/issue1/policies.cfm>, accessed in Dec. 2019
3. US Department of Transportation, 2010. 2010 status of the nation's highways, bridges, and Transit: Conditions and performance.
4. Barth, M. and Boriboonsomsin, K., 2009. Traffic congestion and greenhouse gases.
5. South Coast Air Quality Management District, 2013. Final 2012 Air Quality Management State Implementation Plan.
6. South Coast Air Quality Management District, 2003. 2003 AQMP Regional Transportation Strategy and Control Measures.
7. California Department of Transportation, 2020. Transportation Analysis Framework First Edition: Evaluating Transportation Impacts of State Highway System Projects.
8. California Department of Transportation, 2020. Transportation Analysis under CEQA First Edition: Evaluating Transportation Impacts of State Highway System Projects.
9. California Air Resources Board, 2017. California's 2017 Climate Change Scoping Plan.

Appendix A: Traffic Volume

Table 36: State Route 60 Eastbound GP Lane Traffic Volume on February 5, 2019

		Average Flow per lane for SR-60 EB GP Lane From ETIWANDA Ave. (PM R2.2) to Mian St. (PM 11.815)																	
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
E-O ETIWANDA AVE	GP	1,732	2,603	3,104	2,529	2,284	2,130	2,477	2,711	2,768	3,691	3,846	3,815	3,554	2,979	2,447	2,149	1,769	
COUNTRY VILLAGE RD	GP	1,756	2,133	2,416	2,271	2,253	2,076	2,253	2,437	2,315	2,726	2,809	2,806	2,670	2,298	2,037	1,932	1,727	
W-O PYRITE ST	GP	2,187	3,118	3,830	3,469	3,160	3,080	3,186	3,312	3,523	3,824	4,027	4,126	4,146	3,533	2,775	2,409	2,103	
PYRITE AVE	GP	2,187	3,118	3,830	3,469	3,160	3,080	3,186	3,312	3,523	3,824	4,027	4,126	4,146	3,533	2,775	2,409	2,103	
E-O PEDLEY RD	GP	2,187	3,118	3,830	3,469	3,160	3,080	3,186	3,312	3,523	3,824	4,027	4,126	4,146	3,533	2,775	2,409	2,103	
W-O VALLEY WAY	GP	3,827	4,921	5,374	4,907	4,505	4,349	4,442	4,659	4,870	5,184	5,225	5,194	5,235	4,484	3,595	3,162	2,831	
W-O RUBIDOUX	GP	3,827	4,921	5,374	4,907	4,505	4,349	4,442	4,659	4,870	5,184	5,225	5,194	5,235	4,484	3,595	3,162	2,831	
W-O RUBIDOUX BLVD	GP	3,827	4,918	5,379	4,903	4,501	4,352	4,444	4,661	4,874	5,184	5,226	5,195	5,237	4,486	3,598	3,162	2,832	
SANTA ANA RIVER	GP	3,827	4,918	5,379	4,903	4,501	4,352	4,444	4,661	4,874	5,184	5,226	5,195	5,237	4,486	3,598	3,162	2,832	
W-O MAIN STREET	GP	2,987	3,843	4,195	3,828	3,516	3,394	3,467	3,638	3,802	4,046	4,077	4,052	4,086	3,500	2,807	2,467	2,211	
MAIN ST	GP	2,650	3,639	2,877	4,493	4,009	3,774	3,840	4,130	3,798	4,437	4,546	4,321	4,032	3,377	3,176	2,770	2,551	

Resource: Collected on February 05, 2019 from Performance Measurement System (PeMS)

Table 37: State Route 60 Eastbound HOV Lane Traffic Volume on February 5, 2019

		Average Flow per lane for SR-60 EB HOV Lane From ETIWANDA Ave. (PM R2.2) to Mian St. (PM 11.815)																	
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
E-O ETIWANDA AVE	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495	
COUNTRY VILLAGE RD	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495	
W-O PYRITE ST	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495	
PYRITE AVE	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495	
E-O PEDLEY RD	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495	
W-O VALLEY WAY	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495	
W-O RUBIDOUX	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495	
W-O RUBIDOUX BLVD	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495	
SANTA ANA RIVER	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495	
W-O MAIN STREET	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495	
MAIN ST	HOV	183	410	436	689	310	337	384	578	710	848	1,118	1,048	979	658	540	422	335	

Resource: Collected on February 05, 2019 from Performance Measurement System (PeMS)

Table 38: State Route 60 Westbound GP Lane Traffic Volume on February 5, 2019

		Average Flow per lane for SR-60 WB GP Lane From ETIWANDA Ave. (PM R2.2) to MAIN St. (PM 11.6)																
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 AM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
E-O ETIWANDA AVE	GP	3,633	3,881	3,922	3,601	3,167	3,069	3,042	3,183	3,264	3,358	3,448	3,609	3,474	2,835	2,218	2,045	1,944
COUNTRY VILLAGE RD	GP	3,827	4,921	5,374	4,907	4,505	4,349	4,442	4,659	4,870	5,184	5,225	5,194	5,235	4,484	3,595	3,162	2,831
W-O PYRITE ST	GP	3,827	4,921	5,374	4,907	4,505	4,349	4,442	4,659	4,870	5,184	5,225	5,194	5,235	4,484	3,595	3,162	2,831
PYRITE AVE	GP	3,827	4,921	5,374	4,907	4,505	4,349	4,442	4,659	4,870	5,184	5,225	5,194	5,235	4,484	3,595	3,162	2,831
E-O PEDLEY RD	GP	3,827	4,921	5,374	4,907	4,505	4,349	4,442	4,659	4,870	5,184	5,225	5,194	5,235	4,484	3,595	3,162	2,831
W-O VALLEY WAY	GP	2,187	3,118	3,830	3,469	3,160	3,080	3,186	3,312	3,523	3,824	4,027	4,126	4,146	3,533	2,775	2,409	2,103
W-O RUBIDOUX	GP	2,182	3,118	3,831	3,469	3,159	3,082	3,185	3,313	3,521	3,825	4,026	4,125	4,145	3,538	2,773	2,409	2,103
W-O RUBIDOUX BLVD	GP	2,182	3,118	3,831	3,469	3,159	3,082	3,185	3,313	3,521	3,825	4,026	4,125	4,145	3,538	2,773	2,409	2,103
SANTA ANA RIVER	GP	1,706	2,432	2,988	2,708	2,466	2,403	2,486	2,585	2,751	2,984	3,143	3,219	3,235	2,759	2,166	1,881	1,642
W-O MAIN STREET	GP	3,083	2,894	2,197	2,314	2,843	2,874	2,782	2,919	2,878	2,947	3,275	3,116	2,915	2,698	2,204	1,987	1,855

Resource: Collected on February 05, 2019 from Performance Measurement System (PeMS)

Table 39: State Route 60 Westbound HOV Lane Traffic Volume on February 5, 2019

		Average Flow per lane for SR-60 WB HOV Lane From ETIWANDA Ave. (PM R2.2) to MAIN St. (PM 11.6)																
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 AM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
E-O ETIWANDA AVE	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
COUNTRY VILLAGE RD	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
W-O PYRITE ST	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
PYRITE AVE	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
E-O PEDLEY RD	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
W-O VALLEY WAY	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
W-O RUBIDOUX	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
W-O RUBIDOUX BLVD	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
SANTA ANA RIVER	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
W-O MAIN STREET	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495

Resource: Collected on February 05, 2019 from Performance Measurement System (PeMS)

Table 40: State Route 60 Eastbound GP Lane Traffic Volume on February 6, 2019

		Average Flow per lane for SR-60 EB GP Lane From ETIWANDA AVE. (PM R2.2) to Mian St. (PM 11.815)																	
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
E-O ETIWANDA AVE	GP	1,829	2,195	2,359	2,307	2,399	2,373	2,331	2,351	2,440	2,650	2,990	2,992	2,932	2,559	2,406	2,139	1,941	
COUNTRY VILLAGE RD	GP	2,256	3,179	3,894	3,534	3,185	3,150	3,242	3,399	3,592	3,909	4,110	4,222	4,284	3,676	2,899	2,514	2,214	
W-O PYRITE ST	GP	2,256	3,179	3,894	3,534	3,185	3,150	3,242	3,399	3,592	3,909	4,110	4,222	4,284	3,676	2,899	2,514	2,214	
PYRITE AVE	GP	2,256	3,179	3,894	3,534	3,185	3,150	3,242	3,399	3,592	3,909	4,110	4,222	4,284	3,676	2,899	2,514	2,214	
E-O PEDLEY RD	GP	3,902	5,007	5,499	5,032	4,537	4,422	4,500	4,748	4,977	5,308	5,319	5,303	5,306	4,662	3,726	3,304	2,967	
W-O VALLEY WAY	GP	3,902	5,007	5,499	5,032	4,537	4,422	4,500	4,748	4,977	5,308	5,319	5,303	5,306	4,662	3,726	3,304	2,967	
W-O RUBIDOUX	GP	3,902	5,007	5,497	5,034	4,538	4,421	4,498	4,752	4,977	5,308	5,320	5,305	5,309	4,661	3,722	3,306	2,967	
W-O RUBIDOUX BLVD	GP	3,902	5,007	5,497	5,034	4,538	4,421	4,498	4,752	4,977	5,308	5,320	5,305	5,309	4,661	3,722	3,306	2,967	
SANTA ANA RIVER	GP	3,046	3,908	4,292	3,928	3,541	3,451	3,511	3,706	3,885	4,143	4,152	4,139	4,140	3,638	2,908	2,581	2,317	
W-O MAIN STREET	GP	2,846	4,082	4,529	4,573	4,395	4,021	4,145	4,152	4,327	4,524	4,571	4,296	4,004	4,131	3,668	3,252	2,964	
MAIN ST	GP	2,991	4,566	5,305	5,233	4,884	4,255	4,554	4,574	4,930	5,261	5,354	4,968	4,327	4,798	4,188	3,721	3,405	

Resource: Collected on February 06, 2019 from Performance Measurement System (PeMS)

Table 41: State Route 60 Eastbound HOV Lane Traffic Volume on February 6, 2019

		Average Flow per lane for SR-60 EB HOV Lane From ETIWANDA AVE. (PM R2.2) to Mian St. (PM 11.815)																	
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
E-O ETIWANDA AVE	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534	
COUNTRY VILLAGE RD	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534	
W-O PYRITE ST	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534	
PYRITE AVE	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534	
E-O PEDLEY RD	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534	
W-O VALLEY WAY	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534	
W-O RUBIDOUX	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534	
W-O RUBIDOUX BLVD	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534	
SANTA ANA RIVER	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534	
W-O MAIN STREET	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534	
MAIN ST	HOV	261	428	909	736	491	368	433	514	650	941	1,091	1,124	1,062	1,013	744	591	500	

Resource: Collected on February 06, 2019 from Performance Measurement System (PeMS)

Table 42: State Route 60 Westbound GP Lane Traffic Volume on February 6, 2019

		Average Flow per lane for SR-60 WB GP Lane From ETIWANDA Ave. (PM R2.2) to MAIN St. (PM 11.6)																
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 AM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
E-O ETIWANDA AVE	GP	4,035	4,092	3,879	3,641	3,579	3,401	3,304	3,082	3,359	3,468	3,648	3,623	3,491	3,013	2,377	2,140	2,022
COUNTRY VILLAGE RD	GP	3,902	5,007	5,499	5,032	4,537	4,422	4,500	4,748	4,977	5,308	5,319	5,303	5,306	4,662	3,726	3,304	2,967
W-O PYRITE ST	GP	3,902	5,007	5,499	5,032	4,537	4,422	4,500	4,748	4,977	5,308	5,319	5,303	5,306	4,662	3,726	3,304	2,967
PYRITE AVE	GP	3,902	5,007	5,499	5,032	4,537	4,422	4,500	4,748	4,977	5,308	5,319	5,303	5,306	4,662	3,726	3,304	2,967
E-O PEDLEY RD	GP	3,902	5,007	5,499	5,032	4,537	4,422	4,500	4,748	4,977	5,308	5,319	5,303	5,306	4,662	3,726	3,304	2,967
W-O VALLEY WAY	GP	2,256	3,179	3,894	3,534	3,185	3,150	3,242	3,399	3,592	3,909	4,110	4,222	4,284	3,676	2,899	2,514	2,214
W-O RUBIDOUX	GP	2,254	3,185	3,892	3,537	3,182	3,150	3,242	3,401	3,594	3,910	4,111	4,223	4,283	3,677	2,903	2,514	2,215
W-O RUBIDOUX BLVD	GP	2,254	3,185	3,892	3,537	3,182	3,150	3,242	3,401	3,594	3,910	4,111	4,223	4,283	3,677	2,903	2,514	2,215
SANTA ANA RIVER	GP	1,760	2,481	3,040	2,759	2,486	2,459	2,531	2,653	2,805	3,051	3,208	3,296	3,343	2,868	2,262	1,962	1,728
W-O MAIN STREET	GP	3,355	3,256	2,341	2,269	2,943	2,929	2,967	2,894	2,470	2,796	2,945	3,126	2,968	2,736	2,330	2,085	1,954

Resource: Collected on February 06, 2019 from Performance Measurement System (PeMS)

Table 43: State Route 60 Westbound HOV Lane Traffic Volume on February 6, 2019

		Average Flow per lane for SR-60 WB HOV Lane From ETIWANDA Ave. (PM R2.2) to MAIN St. (PM 11.6)																
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 AM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
E-O ETIWANDA AVE	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
COUNTRY VILLAGE RD	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
W-O PYRITE ST	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
PYRITE AVE	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
E-O PEDLEY RD	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
W-O VALLEY WAY	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
W-O RUBIDOUX	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
W-O RUBIDOUX BLVD	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
SANTA ANA RIVER	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
W-O MAIN STREET	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534

Resource: Collected on February 06, 2019 from Performance Measurement System (PeMS)

Table 44: State Route 60 Eastbound GP Lane Traffic Volume on February 7, 2019

		Average Flow per lane for SR-60 EB GP Lane From ETIWANDA AVE. (PM R2.2) to Mian St. (PM 11.815)																	
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
E-O ETIWANDA AVE	GP	1,887	2,260	2,246	2,332	2,379	2,272	2,354	2,383	2,547	2,788	2,950	3,110	3,069	2,738	2,493	2,129	2,065	
COUNTRY VILLAGE RD	GP	2,292	3,210	3,944	3,557	3,275	3,238	3,365	3,520	3,727	4,011	4,140	4,265	4,258	3,726	3,066	2,716	2,427	
W-O PYRITE ST	GP	2,292	3,210	3,944	3,557	3,275	3,238	3,365	3,520	3,727	4,011	4,140	4,265	4,258	3,726	3,066	2,716	2,427	
PYRITE AVE	GP	2,292	3,210	3,944	3,557	3,275	3,238	3,365	3,520	3,727	4,011	4,140	4,265	4,258	3,726	3,066	2,716	2,427	
E-O PEDLEY RD	GP	3,897	4,999	5,493	4,969	4,613	4,520	4,627	4,850	5,057	5,323	5,312	5,274	5,289	4,701	3,852	3,479	3,156	
W-O VALLEY WAY	GP	3,897	4,999	5,493	4,969	4,613	4,520	4,627	4,850	5,057	5,323	5,312	5,274	5,289	4,701	3,852	3,479	3,156	
W-O RUBIDOUX	GP	3,900	5,000	5,495	4,974	4,613	4,521	4,624	4,846	5,053	5,326	5,313	5,278	5,289	4,699	3,851	3,475	3,158	
W-O RUBIDOUX BLVD	GP	3,900	5,000	5,495	4,974	4,613	4,521	4,624	4,846	5,053	5,326	5,313	5,278	5,289	4,699	3,851	3,475	3,158	
SANTA ANA RIVER	GP	3,041	3,903	4,287	3,879	3,600	3,528	3,611	3,786	3,947	4,156	4,146	4,118	4,127	3,670	3,007	2,716	2,463	
W-O MAIN STREET	GP	2,877	4,227	4,519	4,570	4,266	4,135	4,110	4,260	4,425	4,516	4,042	4,076	3,794	3,886	4,027	3,190	3,089	
MAIN ST	GP	3,037	4,724	5,214	5,214	4,728	4,384	4,464	4,641	5,097	5,316	4,522	4,495	4,219	4,453	4,713	3,741	3,611	

Resource: Collected on February 07, 2019 from Performance Measurement System (PeMS)

Table 45: State Route 60 Eastbound HOV Lane Traffic Volume on February 7, 2019

		Average Flow per lane for SR-60 EB HOV Lane From ETIWANDA AVE. (PM R2.2) to Mian St. (PM 11.815)																	
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
E-O ETIWANDA AVE	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642	
COUNTRY VILLAGE RD	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642	
W-O PYRITE ST	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642	
PYRITE AVE	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642	
E-O PEDLEY RD	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642	
W-O VALLEY WAY	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642	
W-O RUBIDOUX	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642	
W-O RUBIDOUX BLVD	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642	
SANTA ANA RIVER	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642	
W-O MAIN STREET	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642	
MAIN ST	HOV	291	444	934	626	446	349	496	477	720	955	1,025	1,063	1,022	949	901	629	582	

Resource: Collected on February 07, 2019 from Performance Measurement System (PeMS)

Table 46: State Route 60 Westbound GP Lane Traffic Volume on February 7, 2019

		Average Flow per lane for SR-60 WB GP Lane From ETIWANDA Ave. (PM R2.2) to MAIN St. (PM 11.6)																
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 AM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
E-O ETIWANDA AVE	GP	4,053	4,006	3,962	3,668	3,600	3,433	3,354	3,286	3,296	3,440	3,605	3,762	3,543	3,274	2,486	2,240	2,134
COUNTRY VILLAGE RD	GP	3,897	4,999	5,493	4,969	4,613	4,520	4,627	4,850	5,057	5,323	5,312	5,274	5,289	4,701	3,852	3,479	3,156
W-O PYRITE ST	GP	3,897	4,999	5,493	4,969	4,613	4,520	4,627	4,850	5,057	5,323	5,312	5,274	5,289	4,701	3,852	3,479	3,156
PYRITE AVE	GP	3,897	4,999	5,493	4,969	4,613	4,520	4,627	4,850	5,057	5,323	5,312	5,274	5,289	4,701	3,852	3,479	3,156
E-O PEDLEY RD	GP	3,897	4,999	5,493	4,969	4,613	4,520	4,627	4,850	5,057	5,323	5,312	5,274	5,289	4,701	3,852	3,479	3,156
W-O VALLEY WAY	GP	2,292	3,210	3,944	3,557	3,275	3,238	3,365	3,520	3,727	4,011	4,140	4,265	4,258	3,726	3,066	2,716	2,427
W-O RUBIDOUX	GP	2,294	3,210	3,944	3,558	3,278	3,236	3,365	3,517	3,727	4,009	4,143	4,264	4,257	3,730	3,064	2,722	2,432
W-O RUBIDOUX BLVD	GP	2,294	3,210	3,944	3,558	3,278	3,236	3,365	3,517	3,727	4,009	4,143	4,264	4,257	3,730	3,064	2,722	2,432
SANTA ANA RIVER	GP	1,789	2,505	3,079	2,777	2,558	2,527	2,627	2,746	2,908	3,130	3,230	3,330	3,323	2,907	2,393	2,119	1,894
W-O MAIN STREET	GP	3,349	3,142	2,355	2,318	2,635	2,673	2,799	3,005	3,069	2,979	2,985	2,508	2,675	2,904	2,454	2,205	2,033

Resource: Collected on February 07, 2019 from Performance Measurement System (PeMS)

Table 47: State Route 60 Westbound HOV Lane Traffic Volume on February 7, 2019

		Average Flow per lane for SR-60 WB HOV Lane From ETIWANDA Ave. (PM R2.2) to MAIN St. (PM 11.6)																
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
E-O ETIWANDA AVE	HOV	664	830	1,142	919	792	792	833	898	993	993	1,163	1,289	1,361	1,117	837	746	642
COUNTRY VILLAGE RD	HOV	664	830	1,142	919	792	792	833	898	993	993	1,163	1,289	1,361	1,117	837	746	642
W-O PYRITE ST	HOV	664	830	1,142	919	792	792	833	898	993	993	1,163	1,289	1,361	1,117	837	746	642
PYRITE AVE	HOV	664	830	1,142	919	792	792	833	898	993	993	1,163	1,289	1,361	1,117	837	746	642
E-O PEDLEY RD	HOV	664	830	1,142	919	792	792	833	898	993	993	1,163	1,289	1,361	1,117	837	746	642
W-O VALLEY WAY	HOV	664	830	1,142	919	792	792	833	898	993	993	1,163	1,289	1,361	1,117	837	746	642
W-O RUBIDOUX	HOV	664	830	1,142	919	792	792	833	898	993	993	1,163	1,289	1,361	1,117	837	746	642
W-O RUBIDOUX BLVD	HOV	664	830	1,142	919	792	792	833	898	993	993	1,163	1,289	1,361	1,117	837	746	642
SANTA ANA RIVER	HOV	664	830	1,142	919	792	792	833	898	993	993	1,163	1,289	1,361	1,117	837	746	642
W-O MAIN STREET	HOV	664	830	1,142	919	792	792	833	898	993	993	1,163	1,289	1,361	1,117	837	746	642

Resource: Collected on February 07, 2019 from Performance Measurement System (PeMS)

Table 48: State Route 91 Eastbound GP Lane Traffic Volume on February 5, 2019

Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
Average flow per lane for SR-91 EB GP Lane From .1 W-O PROMENADE (PM 8.027) to E-O THIRD ST (PM 20.86)																			
W-O PROMENADE	GP	495	859	1,112	1,142	978	881	949	1,011	1,006	1,168	1,226	1,276	1,169	1,057	861	675	540	540
E-O PROMENADE	GP	547	870	1,135	1,164	979	863	953	1,011	1,004	1,211	1,276	1,377	1,256	1,060	864	676	522	522
MCKINLEY	GP	599	1,105	1,335	1,328	1,150	1,131	1,100	1,206	1,292	1,450	1,410	1,446	1,265	1,253	1,040	908	811	811
MCKINLEY LOOP ON	GP	605	1,106	1,315	1,337	1,148	1,128	1,093	1,202	1,290	1,432	1,401	1,446	1,262	1,252	1,037	908	813	813
MCKINLEY	GP	597	1,102	1,309	1,336	1,152	1,131	1,104	1,210	1,293	1,424	1,401	1,442	1,256	1,247	1,041	909	815	815
E-O MCKINLEY	GP	700	1,323	1,521	1,553	1,313	1,269	1,245	1,364	1,461	1,665	1,667	1,691	1,552	1,428	1,191	1,053	911	911
PIERCE	GP	772	1,375	1,533	1,559	1,377	1,347	1,308	1,424	1,479	1,666	1,671	1,697	1,527	1,452	1,229	1,105	951	951
MAGNOLIA	GP	779	1,400	1,581	1,635	1,468	1,458	1,418	1,538	1,611	1,759	1,784	1,811	1,560	1,544	1,320	1,163	1,005	1,005
LA SIERRA	GP	2,048	2,534	2,601	2,532	1,571	1,514	2,059	2,146	2,239	2,095	1,664	1,717	1,766	2,669	2,583	2,493	2,527	2,527
LA SIERRA	GP	759	1,427	1,595	1,624	1,477	1,470	1,427	1,512	1,556	1,714	1,766	1,742	1,535	1,464	1,174	1,030	933	933
TYLER	GP	1,845	2,433	2,363	2,584	2,563	2,424	2,313	2,352	2,424	2,301	2,211	2,435	2,450	2,325	1,922	1,700	1,552	1,552
TYLER	GP	853	1,599	1,676	1,708	1,604	1,511	1,459	1,534	1,577	1,729	1,739	1,728	1,624	1,503	1,199	1,070	987	987
Van Buren Loop EB on	GP	780	1,469	1,580	1,553	1,480	1,415	1,388	1,434	1,455	1,589	1,551	1,521	1,514	1,364	1,107	993	907	907
VAN BUREN	GP	935	1,098	1,489	1,406	1,306	1,267	1,382	1,357	1,357	1,482	1,492	1,406	1,096	1,358	1,009	825	692	692
E-O JACKSON	GP	640	1,204	1,257	1,295	1,249	1,165	1,159	1,198	1,223	1,350	1,294	1,303	1,305	1,166	943	815	751	751
ADAMS	GP	721	1,221	1,273	1,317	1,318	1,231	1,246	1,296	1,295	1,412	1,332	1,350	1,369	1,256	1,063	911	861	861
ADAMS	GP	802	1,446	1,430	1,490	1,527	1,388	1,410	1,444	1,466	1,585	1,505	1,556	1,564	1,393	1,153	1,002	909	909
E-O JEFFERSON	GP	667	1,117	1,252	1,227	1,186	1,109	1,135	1,161	1,172	1,282	1,244	1,268	1,277	1,135	983	848	787	787
MADISON	GP	808	1,474	1,539	1,517	1,531	1,396	1,412	1,471	1,452	1,577	1,600	1,638	1,618	1,407	1,173	1,016	939	939
MADISON	GP	818	1,507	1,621	1,574	1,554	1,432	1,439	1,501	1,486	1,627	1,644	1,693	1,675	1,442	1,207	1,035	960	960
3000 W-O ARLINGTON	GP	793	1,352	1,375	1,358	1,393	1,270	1,283	1,325	1,316	1,413	1,415	1,452	1,452	1,253	1,063	925	873	873
ARLINGTON	GP	634	1,109	1,171	1,137	1,156	1,046	1,070	1,106	1,088	1,184	1,191	1,218	1,206	1,042	871	743	698	698
JANE ST	GP	801	1,326	1,531	1,485	1,450	1,332	1,346	1,407	1,375	1,506	1,550	1,593	1,569	1,358	1,104	970	866	866
ARLINGTON	GP	896	1,564	1,633	1,586	1,611	1,459	1,465	1,524	1,474	1,627	1,622	1,645	1,616	1,405	1,177	1,019	943	943
CENTRAL	GP	664	1,142	1,104	1,117	1,169	1,058	1,073	1,083	1,037	1,158	1,175	1,167	1,124	976	814	719	669	669
CENTRAL EB ON	GP	973	1,742	2,088	1,984	1,742	1,615	1,601	1,672	1,573	1,772	1,787	1,769	1,722	1,511	1,255	1,087	1,007	1,007
100 E-O IVY	GP	1,129	2,062	2,284	2,149	1,984	1,791	1,822	1,870	1,827	1,983	2,070	2,043	1,965	1,719	1,438	1,248	1,126	1,126
14TH	GP	718	1,269	1,432	1,322	1,225	1,139	1,148	1,169	1,089	1,192	1,242	1,234	1,181	1,045	911	816	751	751
14TH EB ON	GP	768	981	1,397	1,287	1,253	1,179	1,223	1,152	1,301	1,396	1,463	1,515	1,263	966	760	557	424	424
TENTH ST	GP	668	1,172	1,283	1,203	1,124	1,055	1,043	1,076	983	1,059	1,106	1,081	1,048	927	835	741	702	702
7TH-MISSION INN	GP	764	1,330	1,562	1,437	1,298	1,232	1,228	1,300	1,171	1,271	1,337	1,295	1,228	1,107	984	889	818	818
E-O THIRD ST	GP	663	1,007	1,169	1,106	999	1,007	990	1,052	931	1,006	1,044	979	942	895	856	796	757	757

Resourcer: Collected on February 5, 2019 from Performance Measurement System (PeMS)

Table 49: State Route 91 Eastbound HOV Lane Traffic Volume on February 5, 2019

Name	Type	Average flow per lane for SR-91 EB HOV Lane From .1 W-O PROMENADE (PM 8.027) to E-O THIRD ST (PM 20.86)																
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
W-O PROMENADE	HOV	704	1,260	1,575	1,625	1,456	1,379	1,417	1,498	1,502	1,588	1,646	1,587	1,481	1,551	1,290	1,051	932
E-O PROMENADE	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
MCKINLEY	HOV	83	343	603	479	343	359	320	450	545	856	1,159	921	1,138	702	375	247	218
MCKINLEY LOOP ON	HOV	84	343	604	465	339	368	321	453	548	874	1,171	920	1,148	701	368	250	220
MCKINLEY	HOV	91	350	625	487	356	381	331	460	566	923	1,252	961	1,193	722	384	258	232
E-O MCKINLEY	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
PIERCE	HOV	147	496	933	618	449	398	447	493	805	1,161	1,321	1,378	1,393	1,135	457	294	137
MAGNOLIA	HOV	117	452	800	640	432	485	392	557	673	1,086	1,323	1,063	1,249	816	432	310	283
LA SIERRA	HOV	2,195	2,266	2,369	3,163	2,407	2,544	1,629	1,744	2,099	2,283	2,549	2,305	2,600	2,329	1,285	927	934
LA SIERRA	HOV	115	486	866	634	438	486	396	546	654	1,106	1,294	1,056	1,256	802	437	299	275
TYLER	HOV	113	584	1,179	714	460	531	403	571	652	1,127	1,141	981	1,111	737	435	293	280
TYLER	HOV	113	581	1,173	720	464	529	401	568	652	1,110	1,145	983	1,095	736	430	291	280
Van Buren Loop EB on	HOV	108	577	1,209	729	485	535	408	575	660	1,103	1,123	971	1,097	756	434	299	285
VAN BUREN	HOV	591	634	886	862	582	652	569	717	736	844	1,020	1,148	1,245	802	382	250	197
600' E-O JACKSON	HOV	128	633	1,376	844	524	569	465	644	713	1,108	1,202	1,037	1,119	793	482	344	308
ADAMS	HOV	163	678	1,437	982	574	657	493	716	735	1,135	1,271	1,143	1,146	828	520	364	337
ADAMS	HOV	167	694	1,437	1,018	594	673	491	720	747	1,175	1,268	1,149	1,148	825	517	376	337
MADISON	HOV	190	723	1,471	1,096	658	723	506	774	763	1,164	1,250	1,109	1,111	828	539	414	366
MADISON	HOV	263	894	1,902	1,405	833	896	680	999	952	1,460	1,576	1,316	1,368	1,037	655	497	463
3000' W-O ARLINGTON	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
ARLINGTON WB ON	HOV	205	750	1,523	1,150	662	699	529	808	756	1,037	1,138	1,020	1,010	761	526	416	395
JANE ST	HOV	613	1,406	2,335	1,968	1,293	1,283	1,151	1,447	1,334	1,633	1,690	1,598	1,601	1,241	920	783	720
ARLINGTON AVE	HOV	380	1,085	2,022	1,616	990	989	843	1,153	1,061	1,324	1,399	1,304	1,318	1,026	764	618	602
CENTRAL WB ON	HOV	218	758	1,619	1,227	636	685	489	794	731	951	1,062	940	944	692	514	431	364
CENTRAL EB ON	HOV	222	765	1,621	1,234	616	674	487	805	713	946	1,046	922	931	692	511	419	366
IVY OC 100' E-O	HOV	246	801	1,561	1,206	628	685	530	834	779	925	1,054	944	939	697	510	425	390
FOURTEENTH ST	HOV	237	736	1,223	1,003	619	653	508	730	705	856	1,003	920	887	660	472	397	349
FOURTEENTH ST	HOV	372	463	825	597	517	478	426	497	637	682	847	929	1,302	623	318	197	175
TENTH ST	HOV	212	661	1,010	840	538	566	440	632	628	758	859	816	827	586	423	358	305
THIRD ST	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495

Resource: Collected on February 5, 2019 from Performance Measurement System (PeMS)

Table 50: State Route 91 Westbound GP Lane Traffic Volume on February 5, 2019

		Average Flow per lane for SR-91 WB HOV Lane From PROMENADE .2 E-O (PM 8.13) to Third Street (PM 20.86)																							
Name	Type	CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM						
PROMENADE .2 E-O	HOV	8.13	1,258	964	977	1,148	998	847	681	753	892	889	971	943	929	882	443	278	241						
MCKINLEY	HOV	9.09	1,242	1,077	1,170	1,268	1,133	911	826	948	1,106	1,173	1,228	1,159	1,181	1,073	523	313	243						
E-O MCKINLEY	HOV	9.337	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534						
PIERCE	HOV	10.724	1,173	1,041	1,230	1,376	1,119	910	836	999	1,134	1,273	1,335	1,269	1,168	517	313	231							
MAGNOLIA	HOV	11.032	1,131	1,009	1,191	1,350	1,091	882	819	962	1,110	1,251	1,314	1,241	1,162	517	303	230							
MAGNOLIA	HOV	11.219	141	551	1,275	609	475	492	488	568	901	1,289	1,409	1,364	1,185	737	600	405							
LA SIERRA	HOV	11.927	1,098	978	1,090	1,287	1,082	730	718	850	981	1,242	1,284	1,186	1,210	1,142	516	302	233						
LA SIERRA	HOV	12.165	1,099	966	1,093	1,248	1,108	707	712	844	965	1,228	1,280	1,188	1,203	1,150	520	300	233						
TYLER	HOV	13.011	811	754	951	1,170	856	619	688	733	817	1,113	1,232	1,191	1,231	1,159	502	310	229						
TYLER	HOV	13.064	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534						
VAN BUREN	HOV	14.067	781	743	904	1,020	689	622	711	740	824	1,056	1,190	1,178	1,233	1,147	506	318	244						
VAN BUREN	HOV	14.096	168	695	1,487	930	544	523	511	608	848	1,209	1,324	1,319	1,284	1,025	659	546	424						
JACKSON ST.	HOV	14.714	733	708	899	1,005	627	635	742	745	840	1,049	1,197	1,217	1,259	1,185	503	315	233						
ADAMS	HOV	15.565	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534						
ADAMS	HOV	15.706	694	650	912	989	659	657	806	782	884	1,123	1,233	1,291	1,396	1,272	514	346	248						
MADISON	HOV	16.588	699	666	933	1,023	729	676	824	803	915	1,162	1,274	1,317	1,426	1,284	527	353	245						
MADISON	HOV	16.751	701	675	930	1,020	716	677	829	806	919	1,170	1,281	1,329	1,454	1,288	525	352	251						
ARLINGTON WB ON	HOV	17.724	642	628	929	924	613	683	839	812	877	1,150	1,302	1,468	1,534	1,305	518	385	272						
JANE ST	HOV	17.75	645	631	928	925	618	686	835	810	880	1,149	1,308	1,466	1,532	1,301	520	384	272						
ARLINGTON AVE	HOV	17.929	632	611	902	830	639	665	842	788	871	1,100	1,268	1,467	1,546	1,269	506	380	258						
CENTRAL WB ON	HOV	18.342	628	592	868	820	596	639	788	728	845	1,008	1,152	1,437	1,551	1,196	515	360	255						
CENTRAL EB ON	HOV	18.522	619	587	858	834	605	615	768	718	821	968	1,105	1,443	1,538	1,189	512	346	243						
IVY OC 100' E-O	HOV	18.995	582	568	824	782	588	579	732	666	775	889	1,026	1,393	1,546	1,136	477	317	243						
FOURTEENTH ST	HOV	19.899	640	562	998	966	1,306	757	938	817	874	922	929	1,448	2,805	1,246	567	325	236						
FOURTEENTH ST	HOV	20.076	299	781	1,161	921	700	591	608	777	823	979	944	934	1,018	788	529	508	418						
TENTH ST	HOV	20.225	492	528	738	701	497	463	568	570	677	719	815	915	1,327	860	398	264	196						
THIRD ST	HOV	20.86	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534						

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)

Table 51: State Route 91 Westbound HOV Lane Traffic Volume on February 5, 2019

Average flow per lane for SR-91 WB HOV Lane From PROMENADE .2 E-O (PM 8.13) to SPRUCE ST WB ON (PM 21.474)		6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
PROMENADE .2 E-O	HOV	1,030	812	947	1,054	857	794	623	752	719	813	870	860	803	765	310	237	186
MC KINLEY	HOV	973	925	1,141	1,147	840	896	695	864	852	1,051	1,077	1,031	963	975	346	261	211
E-O MCKINLEY	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
PIERCE	HOV	894	872	1,210	1,191	734	843	624	850	827	1,097	1,198	1,169	1,075	979	341	229	190
MAGNOLIA	HOV	863	849	1,187	1,166	690	812	624	803	764	1,056	1,148	1,149	1,073	942	344	232	183
MAGNOLIA	HOV	117	456	800	640	433	490	395	552	672	1,087	1,324	1,065	1,249	816	432	310	283
LA SIERRA	HOV	831	862	1,087	1,116	626	697	607	740	738	977	1,106	1,103	1,077	883	347	238	179
LA SIERRA	HOV	830	855	1,081	1,118	626	685	603	744	734	952	1,088	1,095	1,090	876	345	237	180
TYLER	HOV	616	651	893	959	567	640	551	687	703	838	988	1,133	1,229	836	349	239	188
TYLER	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
VAN BUREN	HOV	585	644	871	849	577	634	560	701	717	823	998	1,117	1,212	780	368	247	193
VAN BUREN	HOV	108	596	1,206	732	485	530	411	576	658	1,101	1,122	975	1,093	758	437	304	285
JACKSON ST.	HOV	561	606	886	831	585	659	569	716	739	845	1,062	1,190	1,254	805	373	240	208
ADAMS	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495
ADAMS	HOV	523	559	913	843	591	670	597	732	805	878	1,201	1,289	1,301	830	398	252	215
MADISON	HOV	530	560	930	820	600	664	626	733	809	893	1,235	1,338	1,334	841	403	266	223
MADISON	HOV	533	573	927	824	598	667	629	740	812	891	1,240	1,349	1,353	833	404	266	220
ARLINGTON WB ON	HOV	488	527	896	762	598	652	615	687	797	896	1,225	1,400	1,430	821	391	275	239
JANE ST	HOV	491	531	894	772	597	661	615	695	798	903	1,231	1,399	1,432	823	390	275	236
ARLINGTON AVE	HOV	469	523	854	715	588	616	600	656	762	869	1,173	1,368	1,439	809	386	266	222
CENTRAL WB ON	HOV	454	499	856	687	576	587	582	625	744	826	1,097	1,281	1,411	781	379	249	210
CENTRAL EB ON	HOV	450	494	889	684	559	570	567	610	745	817	1,072	1,260	1,410	772	374	261	213
IVY OC 100' E-O	HOV	432	480	831	646	540	543	511	560	710	765	1,002	1,146	1,398	722	361	238	187
FOURTEENTH ST	HOV	1,384	2,061	1,941	1,538	568	628	584	503	692	758	1,015	1,026	2,202	1,264	556	644	183
FOURTEENTH ST	HOV	224	680	1,065	889	571	598	463	663	651	802	899	854	847	608	445	372	328
TENTH ST	HOV	344	440	747	556	475	434	398	456	572	625	760	840	1,021	541	292	189	163
THIRD ST	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495

Resource: Collected on February 5, 2019 from Performance Measurement System (PeMS)

Table 52: State Route 91 Eastbound GP Lane Traffic Volume on February 6, 2019

		Average Flow per lane for SR-91 EB GP Lane From .1 W-O PROMENADE (PM 8.027) to E-O THIRD ST (PM 20.86)																
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
W-O PROMENADE	GP	530	861	1,076	1,072	994	936	982	1,056	1,114	1,216	1,253	1,227	1,235	1,123	961	822	652
E-O PROMENADE	GP	570	869	1,096	1,102	1,031	902	976	1,050	1,110	1,289	1,396	1,355	1,385	1,179	961	811	625
MCKINLEY	GP	626	1,166	1,350	1,171	1,166	1,174	1,195	1,275	1,384	1,390	1,245	1,221	1,225	1,301	1,242	1,114	929
MCKINLEY LOOP ON	GP	630	1,159	1,330	1,172	1,159	1,172	1,196	1,268	1,363	1,384	1,253	1,225	1,227	1,303	1,237	1,110	928
MCKINLEY	GP	630	1,160	1,311	1,177	1,203	1,177	1,198	1,282	1,364	1,371	1,242	1,223	1,221	1,301	1,241	1,105	935
E-O MCKINLEY	GP	759	1,409	1,540	1,335	1,415	1,328	1,365	1,450	1,582	1,607	1,539	1,528	1,536	1,549	1,424	1,277	1,045
PIERCE	GP	834	1,486	1,486	1,412	1,529	1,408	1,450	1,530	1,593	1,566	1,547	1,514	1,518	1,566	1,440	1,310	1,102
MAGNOLIA	GP	819	1,454	1,467	1,447	1,559	1,504	1,558	1,636	1,698	1,657	1,654	1,599	1,579	1,626	1,530	1,374	1,169
LA SIERRA	GP	1,796	2,478	2,343	2,312	1,728	1,464	1,795	1,598	1,605	1,552	1,539	1,542	1,543	1,982	2,588	2,314	1,836
LA SIERRA	GP	795	1,461	1,543	1,499	1,666	1,547	1,578	1,595	1,673	1,700	1,658	1,681	1,646	1,558	1,368	1,259	1,069
TYLER	GP	1,229	1,953	1,963	1,945	2,110	2,124	2,219	2,528	2,179	2,078	2,047	2,220	2,307	2,138	1,805	1,663	1,436
TYLER	GP	904	1,581	1,599	1,518	1,681	1,570	1,522	1,625	1,694	1,633	1,585	1,619	1,633	1,601	1,381	1,317	1,150
VAN BUREN LOOP EB ON	GP	811	1,474	1,541	1,334	1,528	1,492	1,452	1,522	1,570	1,515	1,431	1,465	1,503	1,435	1,218	1,167	1,049
VAN BUREN	GP	1,021	1,198	1,467	1,366	1,283	1,364	1,467	1,436	1,443	1,436	1,436	1,378	1,385	1,382	1,083	906	776
E-O JACKSON	GP	669	1,232	1,239	1,123	1,282	1,224	1,210	1,272	1,319	1,232	1,202	1,211	1,242	1,236	1,036	969	857
ADAMS	GP	741	1,245	1,250	1,125	1,334	1,290	1,285	1,325	1,364	1,281	1,213	1,232	1,271	1,318	1,156	1,060	984
ADAMS	GP	844	1,511	1,395	1,283	1,504	1,492	1,448	1,518	1,517	1,386	1,374	1,416	1,448	1,474	1,259	1,189	1,060
E-O JEFFERSON	GP	695	1,149	1,245	1,134	1,144	1,171	1,158	1,179	1,225	1,163	1,171	1,231	1,228	1,219	1,061	981	899
MADISON	GP	871	1,524	1,551	1,352	1,529	1,486	1,458	1,498	1,566	1,506	1,525	1,557	1,559	1,517	1,250	1,184	1,084
MADISON	GP	882	1,550	1,622	1,447	1,562	1,519	1,487	1,528	1,602	1,552	1,575	1,620	1,629	1,570	1,296	1,217	1,110
3000 W-O ARLINGTON	GP	856	1,419	1,396	1,221	1,390	1,377	1,334	1,337	1,428	1,385	1,384	1,398	1,430	1,358	1,123	1,072	982
ARLINGTON	GP	683	1,158	1,171	1,057	1,140	1,134	1,112	1,084	1,192	1,167	1,170	1,188	1,190	1,136	932	875	800
JANE ST	GP	882	1,352	1,542	1,409	1,480	1,452	1,441	1,427	1,575	1,552	1,556	1,575	1,570	1,472	1,178	1,116	966
ARLINGTON	GP	1,099	1,846	1,996	1,590	1,596	1,562	1,524	1,473	1,646	1,606	1,572	1,561	1,573	1,490	1,244	1,188	1,152
CENTRAL	GP	711	1,210	1,138	1,019	1,106	1,135	1,100	1,004	1,198	1,169	1,137	1,137	1,127	1,038	849	829	758
CENTRAL EB ON	GP	1,040	1,827	2,087	1,867	1,788	1,707	1,647	1,616	1,814	1,778	1,772	1,749	1,729	1,639	1,329	1,262	1,140
100 E-O IVY	GP	1,191	2,114	2,276	2,106	2,007	1,870	1,829	1,761	2,025	1,999	2,002	1,934	1,972	1,819	1,480	1,444	1,296
14TH	GP	771	1,310	1,425	1,299	1,249	1,221	1,174	1,135	1,298	1,284	1,224	1,192	1,193	1,087	919	946	850
14TH EB ON	GP	838	1,059	1,442	1,374	1,053	1,023	1,167	1,284	1,321	1,440	1,430	1,400	962	919	672	546	619
TENTH ST	GP	718	1,214	1,284	1,189	1,174	1,115	1,085	1,049	1,178	1,163	1,076	1,055	1,063	957	823	863	802
7TH-MISSION IN	GP	828	1,384	1,554	1,418	1,327	1,307	1,305	1,289	1,390	1,399	1,299	1,277	1,238	1,127	989	1,011	920
E-O THIRD ST	GP	713	1,015	1,149	1,093	1,020	1,030	1,049	1,037	1,090	1,114	995	989	994	896	831	893	812

Resource: Collected on February 6, 2019 from Performance Measurement System (PEMS)

Table 53: State Route 91 Eastbound HOV Lane Traffic Volume on February 6, 2019

		Average Flow per lane for SR-91 EB HOV Lane From .1 W-O PROMENADE (PM 8.027) to E-O THIRD ST (PM 20.86)																
Name	Type	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
W-O PROMENADE	HOV	768	1,279	1,532	1,498	1,446	1,491	1,473	1,574	1,653	1,574	1,432	1,430	1,398	1,500	1,429	1,284	1,098
E-O PROMENADE	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
MCKINLEY	HOV	96	433	795	425	371	378	385	433	693	1,062	1,460	1,426	1,492	982	648	504	368
MCKINLEY LOOP ON	HOV	92	440	844	435	357	381	385	442	717	1,089	1,472	1,424	1,483	990	651	503	367
MCKINLEY	HOV	107	464	933	463	393	402	404	454	780	1,146	1,506	1,452	1,500	1,028	662	522	384
E-O MCKINLEY	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
PERCE	HOV	99	409	1,015	522	417	334	317	469	598	1,033	1,159	1,281	940	749	439	291	224
MAGNOLIA	HOV	141	549	1,276	610	475	494	487	569	901	1,289	1,409	1,364	1,339	1,186	737	600	405
LA SIERRA	HOV	2,610	2,498	2,954	977	561	712	2,164	1,781	2,297	2,362	1,839	1,383	1,770	3,205	1,728	1,034	907
LA SIERRA	HOV	142	589	1,333	654	494	506	486	561	889	1,290	1,394	1,365	1,359	1,178	732	591	407
TYLER	HOV	168	707	1,487	880	555	522	511	599	854	1,175	1,350	1,295	1,280	1,031	662	549	422
VAN BUREN LOOP EB ON	HOV	169	697	1,489	903	552	518	511	608	857	1,203	1,320	1,313	1,290	1,026	660	546	426
VAN BUREN	HOV	795	742	927	1,056	669	635	723	756	835	1,072	1,207	1,218	1,281	1,183	517	321	241
600' E-O JACKSON	HOV	205	727	1,547	1,190	662	575	564	674	925	1,336	1,407	1,415	1,374	1,081	690	574	461
ADAMS	HOV	241	785	1,584	1,243	800	627	612	730	1,054	1,410	1,479	1,459	1,407	1,161	720	601	493
ADAMS	HOV	243	779	1,594	1,234	842	640	623	743	1,085	1,412	1,479	1,450	1,421	1,154	720	605	499
MADISON	HOV	254	811	1,566	1,231	815	714	671	823	1,092	1,322	1,331	1,336	1,308	1,094	719	649	533
MADISON	HOV	316	994	1,957	1,563	1,055	861	822	1,036	1,350	1,686	1,634	1,642	1,613	1,385	877	790	628
3000' W-O ARLINGTON	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
ARLINGTON WB ON	HOV	280	855	1,561	1,338	897	713	684	902	1,024	1,169	1,171	1,187	1,194	1,003	662	638	517
JANE ST	HOV	704	1,638	2,341	2,259	1,575	1,355	1,281	1,542	1,650	1,767	1,761	1,758	1,748	1,556	1,095	1,057	906
ARLINGTON AVE	HOV	448	1,170	2,020	1,842	1,361	1,064	984	1,351	1,378	1,551	1,497	1,513	1,513	1,320	922	883	745
CENTRAL WB ON	HOV	284	863	1,695	1,369	886	693	662	956	940	1,094	1,073	1,098	1,132	919	618	585	490
CENTRAL EB ON	HOV	288	861	1,697	1,366	903	683	664	982	922	1,069	1,056	1,080	1,101	909	612	576	476
IVY OC 100' E-O	HOV	317	887	1,634	1,346	892	690	651	1,037	910	1,059	1,033	1,081	1,119	913	630	567	473
FOURTEENTH ST	HOV	299	831	1,328	1,027	793	640	628	858	885	1,023	995	1,017	1,073	850	565	545	437
FOURTEENTH ST	HOV	520	567	815	731	570	499	639	754	784	896	896	1,053	1,793	986	445	292	223
TENTH ST	HOV	283	753	1,092	867	673	571	572	731	782	917	904	899	979	759	506	484	386
THIRD ST	HOV	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534

Resource: Collected on February 6, 2019 from Performance Measurement System (PMS)

Table 54: State Route 91 Westbound GP Lane Traffic Volume on February 6, 2019

		Average Flow per lane for SR-91 WB GP Lane From PROMENADE .2 E-O (PM 8.13) to SPRUCE ST WB ON (PM 21.474)																	
Name	Type	CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
PROMENADE .2 E-O	GP	8.13	1,333	1,418	1,488	1,439	1,409	1,353	1,330	1,392	1,350	1,383	1,366	1,320	1,339	1,305	1,103	886	785
MCKINLEY	GP	9.09	1,545	1,603	1,562	1,532	1,506	1,388	1,394	1,442	1,393	1,411	1,389	1,359	1,358	1,376	1,152	998	925
E-O MCKINLEY	GP	9.337	1,328	1,416	1,423	1,369	1,336	1,273	1,302	1,315	1,300	1,303	1,292	1,298	1,303	1,317	1,114	952	838
PIERCE	GP	10.724	1,424	1,522	1,488	1,409	1,417	1,369	1,438	1,436	1,391	1,372	1,349	1,343	1,363	1,400	1,186	1,000	873
MAGNOLIA	GP	11.032	1,343	1,438	1,387	1,293	1,356	1,283	1,371	1,336	1,312	1,279	1,241	1,256	1,233	1,278	1,110	946	821
MAGNOLIA	GP	11.219	2,058	2,177	2,063	1,533	1,631	1,622	1,733	1,682	1,643	1,614	1,592	1,586	1,535	1,659	1,423	1,244	1,133
LA SIERRA	GP	11.88	1,016	1,098	1,271	1,175	1,078	1,140	1,117	1,188	1,180	1,172	1,152	1,150	1,139	1,015	878	772	642
LA SIERRA	GP	12.165	1,231	1,333	1,437	1,264	1,244	1,313	1,299	1,356	1,337	1,245	1,232	1,215	1,207	1,216	1,047	909	781
TYLER	GP	12.907	1,334	1,459	1,613	1,478	1,378	1,459	1,415	1,472	1,500	1,431	1,420	1,383	1,356	1,389	1,118	960	842
TYLER	GP	13.196	943	866	857	2,97	1,303	1,303	1,275	1,339	1,149	1,227	1,278	1,242	1,225	1,244	1,027	767	580
VAN BUREN	GP	13.977	1,020	1,198	1,470	1,314	1,296	1,371	1,363	1,439	1,443	1,419	1,440	1,377	1,379	1,394	1,089	908	782
VAN BUREN	GP	14.096	800	1,469	1,424	1,260	1,535	1,459	1,436	1,503	1,550	1,458	1,351	1,389	1,436	1,425	1,206	1,153	1,039
JACKSON ST.	GP	14.714	828	1,019	1,296	1,266	1,151	1,187	1,180	1,251	1,268	1,307	1,294	1,302	1,286	1,232	953	791	675
ADAMS	GP	15.556	1,035	1,263	1,550	1,472	1,380	1,430	1,400	1,479	1,508	1,541	1,529	1,525	1,502	1,431	1,164	948	799
ADAMS	GP	15.713	996	1,206	1,481	1,436	1,386	1,373	1,360	1,430	1,460	1,488	1,487	1,468	1,466	1,399	1,127	906	779
500' E-O JEFFERSON	GP	16.247	654	829	1,170	1,199	1,043	1,069	1,059	1,125	1,123	1,191	1,184	1,248	1,259	1,179	882	770	663
MADISON	GP	16.59	1,029	1,283	1,655	1,648	1,483	1,481	1,439	1,515	1,578	1,612	1,607	1,579	1,542	1,493	1,177	980	826
MADISON	GP	16.751	963	1,210	1,572	1,576	1,407	1,394	1,375	1,428	1,491	1,544	1,545	1,537	1,519	1,454	1,107	924	796
ARLINGTON WB ON	GP	17.724	992	1,228	1,647	1,596	1,379	1,440	1,427	1,480	1,583	1,619	1,565	1,524	1,480	1,465	1,140	926	803
JANE ST	GP	17.75	967	1,214	1,620	1,566	1,383	1,455	1,423	1,477	1,584	1,617	1,556	1,510	1,455	1,465	1,176	965	844
ARLINGTON	GP	17.943	753	936	1,237	1,179	1,085	1,107	1,083	1,137	1,198	1,245	1,209	1,152	1,120	1,123	886	729	640
CENTRAL	GP	18.347	974	1,249	1,770	1,634	1,584	1,583	1,546	1,616	1,664	1,815	1,801	1,750	1,661	1,639	1,212	1,020	882
CENTRAL	GP	18.539	715	909	1,297	1,211	1,156	1,141	1,101	1,157	1,210	1,292	1,283	1,180	1,095	1,146	894	750	645
100' E-O IVY	GP	18.995	767	1,017	1,491	1,448	1,295	1,303	1,290	1,405	1,438	1,534	1,551	1,505	1,416	1,422	1,049	847	697
14TH WB ON	GP	19.899	865	1,123	1,553	1,460	1,336	1,381	1,284	1,402	1,426	1,566	1,554	1,470	1,286	1,402	1,060	865	722
14TH	GP	20.084	987	1,671	1,788	1,620	1,590	1,534	1,482	1,428	1,608	1,598	1,483	1,468	1,463	1,324	1,126	1,179	1,092
TENTH ST	GP	20.225	835	1,067	1,442	1,374	1,263	1,242	1,161	1,280	1,306	1,430	1,417	1,405	1,183	1,314	987	793	679
THIRD ST	GP	20.86	665	789	1,058	1,009	908	951	889	940	970	1,054	1,039	1,034	917	998	816	689	622
SPRUCE ST WB ON	GP	21.474	451	637	778	707	637	630	649	679	719	781	823	845	857	735	580	503	443

(Resource: Collected on February 6, 2019 from Performance Measurement System (PMS))

Table 55: State Route 91 Westbound HOV Lane Traffic Volume on February 6, 2019

		Average Flow per lane for SR-91 WB HOV Lane From PROMENADE .2 E-O (PM 8.13) to Third Street (PM 20.86)																	
Name	Type	CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
PROMENADE .2 E-O	HOV	8.13	1,258	964	977	1,148	998	847	681	753	892	889	971	943	929	882	443	278	241
MCKINLEY	HOV	9.09	1,242	1,077	1,170	1,288	1,133	911	826	948	1,106	1,173	1,228	1,159	1,181	1,073	523	313	243
E-O MCKINLEY	HOV	9.337	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
PIERCE	HOV	10.724	1,173	1,041	1,230	1,376	1,119	910	836	999	1,134	1,273	1,335	1,269	1,168	517	313	231	
MAGNOLIA	HOV	11.052	1,131	1,009	1,191	1,350	1,091	882	819	962	1,110	1,251	1,314	1,241	1,258	1,162	517	303	230
MAGNOLIA	HOV	11.219	141	551	1,275	609	475	492	488	568	901	1,289	1,409	1,364	1,343	1,185	737	600	405
LA SIERRA	HOV	11.927	1,098	978	1,090	1,287	1,082	730	718	850	981	1,242	1,284	1,186	1,210	1,142	516	302	233
LA SIERRA	HOV	12.165	1,099	966	1,093	1,248	1,108	707	712	844	965	1,228	1,280	1,188	1,203	1,150	520	300	233
TYLER	HOV	13.011	811	754	951	1,170	856	619	688	733	817	1,113	1,232	1,191	1,231	1,159	502	310	229
TYLER	HOV	13.064	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
VAN BUREN	HOV	14.067	781	743	904	1,020	689	622	711	740	824	1,056	1,190	1,178	1,233	1,147	506	318	244
VAN BUREN	HOV	14.096	168	695	1,487	930	544	523	511	608	848	1,209	1,324	1,319	1,284	1,025	659	546	424
JACKSON ST.	HOV	14.714	733	708	899	1,005	627	635	742	745	840	1,049	1,197	1,217	1,259	1,185	503	315	233
ADAMS	HOV	15.565	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
ADAMS	HOV	15.706	694	650	912	989	659	657	806	782	884	1,123	1,233	1,291	1,396	1,272	514	346	248
MADISON	HOV	16.588	699	666	933	1,023	729	676	824	803	915	1,162	1,274	1,317	1,426	1,284	527	353	245
MADISON	HOV	16.751	701	675	930	1,020	716	677	829	806	919	1,170	1,281	1,329	1,454	1,288	525	352	251
ARLINGTON WB ON	HOV	17.724	642	628	929	924	613	683	839	812	877	1,150	1,302	1,468	1,534	1,305	518	385	272
JANE ST	HOV	17.75	645	631	928	925	618	686	835	810	880	1,149	1,308	1,466	1,532	1,301	520	384	272
ARLINGTON AVE	HOV	17.929	632	611	902	830	639	665	842	788	871	1,100	1,268	1,467	1,546	1,269	506	380	258
CENTRAL WB ON	HOV	18.342	628	592	868	820	596	639	788	728	845	1,008	1,152	1,437	1,551	1,196	515	360	255
CENTRAL EB ON	HOV	18.522	619	587	858	834	605	615	768	718	821	968	1,105	1,443	1,538	1,189	512	346	243
IVY DC 100' E-O	HOV	18.995	582	568	824	782	588	579	732	666	775	889	1,026	1,393	1,546	1,136	477	317	243
FOURTEENTH ST	HOV	19.899	640	562	998	966	1,306	757	938	817	874	922	929	1,448	2,805	1,246	567	325	236
FOURTEENTH ST	HOV	20.076	299	781	1,161	921	700	591	608	777	823	979	944	934	1,018	788	529	508	418
TENTH ST	HOV	20.225	492	528	738	701	497	463	568	570	677	719	815	915	1,327	860	398	264	196
THIRD ST	HOV	20.86	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534

Resource: Collected on February 6, 2019 from Performance Measurement System (PeMS)

Table 56: State Route 91 Eastbound GP Lane Traffic Volume on February 7, 2019

Name	Type	Average flow per lane for SR-91 EB GP Lane From .1 W-O PROMENADE (PM 8.027) to E-O THIRD ST (PM 20.86)																
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
W-O PROMENADE	GP	539	858	1,092	1,133	976	905	985	1,012	1,076	1,147	1,179	1,204	1,228	1,107	1,057	836	757
E-O PROMENADE	GP	575	861	1,131	1,165	970	874	973	999	1,086	1,234	1,320	1,359	1,378	1,183	1,071	816	738
MCKINLEY	GP	655	1,219	1,302	1,321	1,252	1,188	1,209	1,275	1,350	1,347	1,146	1,155	1,169	1,275	1,117	1,118	1,038
MCKINLEY LOOP ON	GP	653	1,209	1,294	1,318	1,245	1,186	1,212	1,279	1,359	1,343	1,158	1,167	1,172	1,280	1,265	1,118	1,038
MCKINLEY	GP	656	1,214	1,282	1,320	1,255	1,179	1,217	1,279	1,357	1,326	1,161	1,165	1,172	1,285	1,262	1,117	1,045
E-O MCKINLEY	GP	770	1,477	1,490	1,509	1,436	1,369	1,402	1,470	1,602	1,565	1,456	1,477	1,483	1,528	1,444	1,276	1,165
PIERCE	GP	858	1,552	1,441	1,541	1,527	1,451	1,501	1,537	1,618	1,528	1,456	1,491	1,473	1,564	1,315	1,224	
MAGNOLIA	GP	850	1,532	1,445	1,615	1,609	1,530	1,601	1,644	1,737	1,577	1,516	1,566	1,513	1,625	1,570	1,392	1,276
LA SIERRA	GP	1,301	1,975	2,398	2,079	1,448	1,324	1,452	1,577	1,631	1,455	1,428	1,523	1,617	2,581	2,438	2,103	2,077
LA SIERRA	GP	837	1,525	1,517	1,548	1,464	1,374	1,489	1,630	1,703	1,567	1,544	1,637	1,576	1,583	1,413	1,262	1,184
TYLER	GP	1,264	2,028	1,924	1,946	2,067	1,899	1,966	1,954	2,053	1,835	1,821	1,965	1,895	1,952	1,742	1,639	1,546
TYLER	GP	931	1,671	1,614	1,613	1,670	1,552	1,166	1,618	1,696	1,507	1,482	1,580	1,568	1,601	1,408	1,294	1,223
Van Buren Loop EB on	GP	836	1,506	1,516	1,447	1,525	1,488	1,522	1,514	1,587	1,378	1,383	1,448	1,428	1,433	1,250	1,169	1,116
VAN BUREN	GP	1,060	1,190	1,368	1,425	1,173	1,181	1,394	1,475	1,430	1,352	1,493	1,465	1,388	1,427	1,193	906	821
E-O JACKSON	GP	693	1,229	1,234	1,169	1,265	1,247	1,295	1,284	1,315	1,134	1,169	1,212	1,223	1,236	1,073	964	914
ADAMS	GP	757	1,256	1,259	1,184	1,321	1,310	1,320	1,304	1,284	1,137	1,190	1,215	1,240	1,307	1,162	1,077	1,015
ADAMS	GP	856	1,468	1,417	1,353	1,528	1,501	1,527	1,480	1,446	1,267	1,337	1,379	1,421	1,478	1,295	1,184	1,125
E-O JEFFERSON	GP	706	1,124	1,247	1,171	1,194	1,165	1,186	1,177	1,187	1,069	1,152	1,188	1,217	1,236	1,072	982	945
MADISON	GP	875	1,510	1,545	1,403	1,527	1,489	1,551	1,505	1,524	1,399	1,495	1,535	1,560	1,538	1,305	1,193	1,167
MADISON	GP	883	1,536	1,612	1,478	1,561	1,529	1,583	1,541	1,569	1,443	1,541	1,592	1,613	1,602	1,346	1,219	1,195
3000 W-O ARLINGTON	GP	847	1,436	1,378	1,257	1,369	1,343	1,401	1,371	1,403	1,286	1,352	1,386	1,412	1,389	1,121	1,077	1,050
ARLINGTON	GP	680	1,163	1,156	1,047	1,140	1,112	1,166	1,144	1,192	1,086	1,136	1,165	1,192	1,160	887	886	857
JANE ST	GP	810	1,384	1,525	1,386	1,467	1,463	1,553	1,525	1,587	1,445	1,519	1,551	1,588	1,535	1,170	1,143	1,111
ARLINGTON	GP	1,024	1,794	1,884	1,693	1,587	1,542	1,618	1,592	1,646	1,434	1,572	1,566	1,574	1,534	1,181	1,187	1,147
CENTRAL	GP	720	1,205	1,115	1,005	1,155	1,134	1,177	1,144	1,191	1,092	1,143	1,138	1,133	1,069	733	847	802
CENTRAL EB ON	GP	1,040	1,815	2,091	1,889	1,827	1,699	1,760	1,728	1,822	1,692	1,787	1,743	1,758	1,696	1,185	1,285	1,210
100 E-O IVY	GP	1,196	2,120	2,278	2,076	2,005	1,877	1,930	1,919	2,004	1,905	1,982	1,899	1,938	1,880	1,380	1,462	1,363
14TH	GP	782	1,314	1,416	1,280	1,272	1,202	1,248	1,252	1,297	1,161	1,188	1,178	1,186	1,115	854	951	912
14TH EB ON	GP	878	1,078	1,262	1,463	1,235	899	860	1,067	1,303	1,335	1,487	1,244	820	884	732	736	693
TENTH ST	GP	739	1,224	1,218	1,163	1,178	1,098	1,155	1,144	1,187	1,062	1,040	1,013	1,037	957	763	869	853
7TH-MISSION IN	GP	846	1,417	1,497	1,406	1,379	1,292	1,392	1,368	1,439	1,286	1,268	1,225	1,227	1,142	932	1,030	968
E-O THIRD ST	GP	724	1,047	1,185	1,084	1,070	1,018	1,099	1,069	1,122	1,001	994	957	976	897	785	891	846

Resource: Collected on February 7, 2019 from Performance Measurement System (PeMS)

Table 57: State Route 91 Eastbound HOV Lane Traffic Volume on February 7, 2019

Name	Type	Average flow per lane for SR-91 EB HOV Lane From .1 W-O PROMENADE (PM 8.027) to E-O THIRD ST (PM 20.86)																
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
W-O PROMENADE	HOV	780	1,290	1,505	1,574	1,470	1,433	1,499	1,534	1,556	1,441	1,340	1,345	1,376	1,419	1,518	1,323	1,217
E-O PROMENADE	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642
MCKINLEY	HOV	128	474	715	494	456	404	457	518	695	1,030	1,485	1,406	1,452	1,198	754	549	421
MCKINLEY LOOP ON	HOV	128	476	728	498	453	409	460	513	700	1,031	1,480	1,405	1,445	1,204	747	547	422
MCKINLEY	HOV	131	498	809	512	462	436	473	537	733	1,067	1,492	1,431	1,458	1,251	770	562	431
E-O MCKINLEY	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642
PIERCE	HOV	135	457	1,031	556	500	504	464	579	758	1,188	1,421	1,413	1,433	1,138	656	494	321
MAGNOLIA	HOV	179	664	1,222	667	585	547	575	658	920	1,328	1,411	1,329	1,398	1,366	836	635	501
LA SIERRA	HOV	3,406	3,322	3,446	1,003	598	571	1,817	1,248	1,577	1,913	1,842	1,970	1,976	1,742	946	786	784
LA SIERRA	HOV	172	686	1,293	682	570	552	570	651	928	1,318	1,422	1,347	1,405	1,337	815	623	496
TYLER	HOV	205	769	1,455	887	597	576	588	668	883	1,273	1,387	1,320	1,335	1,214	727	590	465
TYLER	HOV	204	751	1,432	904	594	571	586	670	878	1,269	1,371	1,302	1,322	1,203	722	575	445
Van Buren Loop EB on	HOV	203	750	1,424	963	617	569	600	693	902	1,266	1,370	1,318	1,333	1,214	736	576	476
VAN BUREN	HOV	862	802	795	1,093	921	972	689	708	848	1,037	1,144	1,314	1,387	1,304	642	329	267
600' E-O JACKSON	HOV	226	829	1,490	1,144	706	624	678	772	1,050	1,320	1,439	1,386	1,415	1,246	743	628	532
ADAMS	HOV	265	895	1,551	1,240	796	690	804	897	1,278	1,334	1,455	1,442	1,446	1,309	756	658	553
ADAMS	HOV	267	903	1,560	1,256	796	696	836	964	1,310	1,342	1,459	1,450	1,463	1,315	754	664	556
MADISON	HOV	291	922	1,531	1,288	872	740	891	997	1,270	1,264	1,358	1,326	1,341	1,284	746	726	601
MADISON	HOV	348	1,080	1,846	1,618	1,066	880	1,101	1,233	1,550	1,584	1,710	1,708	1,645	1,563	910	870	711
3000' W-O ARLINGTON	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642
ARLINGTON WB ON	HOV	301	928	1,563	1,353	958	724	879	943	1,139	1,149	1,217	1,158	1,208	1,156	779	726	596
JANE ST	HOV	705	1,608	2,389	2,227	1,655	1,425	1,539	1,592	1,844	1,730	1,841	1,770	1,822	1,665	1,285	1,118	1,018
ARLINGTON AVE	HOV	471	1,269	2,050	1,895	1,408	1,127	1,298	1,321	1,545	1,510	1,592	1,479	1,501	1,431	1,047	956	860
CENTRAL WB ON	HOV	287	937	1,676	1,427	960	694	815	880	1,070	1,094	1,153	1,064	1,106	1,032	747	671	561
CENTRAL EB ON	HOV	297	944	1,680	1,428	973	687	793	868	1,065	1,091	1,143	1,043	1,100	1,010	751	649	551
IVY OC 100' E-O	HOV	327	982	1,644	1,339	973	684	801	848	1,070	1,101	1,231	1,074	1,103	1,017	740	652	553
FOURTEENTH ST	HOV	320	908	1,350	1,055	875	686	755	803	1,005	1,030	1,126	1,034	1,053	951	676	583	495
FOURTEENTH ST	HOV	533	625	670	809	542	531	551	564	670	731	958	1,597	1,920	1,365	532	253	220
TENTH ST	HOV	288	804	1,212	901	769	604	678	714	877	924	1,018	938	976	862	602	519	430
THIRD ST	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642

Resource: Collected on February 7, 2019 from Performance Measurement System (PeMS)

Table 58: State Route 91 Westbound GP Lane Traffic Volume on February 7, 2019

Name	Type	Average flow per lane for SR-91 WB GP Lane From PROMENADE .2 E-O (PM 8.13) to SPRUCE ST WB ON (PM 21.474)																
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
PROMENADE .2 E-O	GP	1,344	1,381	1,477	1,463	1,370	1,347	1,371	1,389	1,446	1,406	1,368	1,337	1,348	1,334	1,184	927	809
MCKINLEY	GP	1,567	1,595	1,547	1,523	1,454	1,397	1,409	1,444	1,478	1,444	1,421	1,354	1,378	1,366	1,252	976	876
E-O MCKINLEY	GP	1,350	1,419	1,410	1,360	1,297	1,300	1,317	1,326	1,346	1,314	1,312	1,266	1,322	1,316	1,208	986	860
PIERCE	GP	1,433	1,501	1,473	1,420	1,407	1,382	1,426	1,446	1,462	1,431	1,398	1,331	1,364	1,421	1,305	1,032	928
MAGNOLIA	GP	1,372	1,421	1,368	1,331	1,335	1,309	1,343	1,348	1,363	1,340	1,306	1,236	1,243	1,324	1,219	980	879
MAGNOLIA	GP	2123	2313	2165	1714	1802	1688	1699	1580	1541	1531	1465	1376	1504	1722	1659	1301	1190
LA SIERRA	GP	1,028	1,099	1,242	1,184	1,037	1,116	1,171	1,158	1,199	1,181	1,172	1,145	1,132	1,074	949	776	712
LA SIERRA	GP	1,260	1,335	1,400	1,316	1,204	1,249	1,336	1,287	1,365	1,334	1,296	1,235	1,181	1,276	1,151	923	856
TYLER	GP	1,372	1,456	1,567	1,468	1,233	1,361	1,437	1,456	1,527	1,422	1,533	1,426	1,335	1,440	1,228	957	868
TYLER	GP	944	1,039	1,188	1,222	1,019	1,092	1,176	1,203	1,222	1,145	1,269	1,233	1,168	1,233	1,042	823	759
VAN BUREN	GP	1,063	1,190	1,378	1,425	1,135	1,186	1,397	1,469	1,425	1,357	1,504	1,455	1,363	1,432	1,194	911	829
VAN BUREN	GP	823	1,483	1,389	1,355	1,504	1,460	1,506	1,499	1,569	1,282	1,291	1,352	1,353	1,416	1,238	1,158	1,104
JACKSON ST.	GP	876	1,016	1,206	1,324	1,142	1,071	1,232	1,288	1,255	1,184	1,327	1,347	1,272	1,292	1,041	800	701
ADAMS	GP	1,079	1,261	1,427	1,598	1,409	1,329	1,477	1,546	1,503	1,367	1,529	1,566	1,520	1,508	1,255	968	812
ADAMS	GP	1,037	1,208	1,369	1,536	1,352	1,293	1,423	1,488	1,464	1,345	1,483	1,528	1,486	1,472	1,211	940	778
500' E-O JEFFERSON	GP	686	852	1,038	1,237	1,060	1,086	1,097	1,107	1,108	1,098	1,199	1,282	1,288	1,226	957	759	640
MADISON	GP	1,044	1,300	1,490	1,700	1,478	1,452	1,494	1,582	1,557	1,415	1,608	1,613	1,601	1,591	1,269	974	838
MADISON	GP	991	1,228	1,410	1,624	1,388	1,377	1,415	1,466	1,480	1,382	1,529	1,568	1,558	1,553	1,195	924	796
ARLINGTON WB ON	GP	1,012	1,255	1,499	1,650	1,441	1,412	1,478	1,552	1,562	1,421	1,561	1,514	1,467	1,539	1,236	964	837
JANE ST	GP	997	1,239	1,480	1,651	1,440	1,410	1,479	1,559	1,561	1,407	1,554	1,506	1,461	1,519	1,247	984	873
ARLINGTON	GP	777	951	1,133	1,253	1,096	1,073	1,128	1,179	1,197	1,080	1,198	1,155	1,135	1,170	943	742	661
CENTRAL	GP	1,014	1,247	1,559	1,783	1,558	1,519	1,575	1,654	1,658	1,651	1,796	1,714	1,638	1,708	1,302	1,027	916
CENTRAL	GP	741	924	1,150	1,295	1,136	1,108	1,146	1,202	1,210	1,139	1,250	1,147	1,083	1,154	945	759	676
100' E-O IVY	GP	813	1,034	1,344	1,496	1,283	1,294	1,341	1,411	1,424	1,414	1,552	1,446	1,389	1,443	1,115	831	723
14TH WB ON	GP	902	1,126	1,340	1,548	1,300	1,287	1,343	1,397	1,414	1,438	1,576	1,387	1,281	1,343	1,132	867	764
14TH	GP	1,010	1,679	1,727	1,599	1,613	1,506	1,569	1,580	1,633	1,472	1,451	1,419	1,444	1,322	1,042	1,187	1,173
TENTH ST	GP	869	1,080	1,254	1,457	1,228	1,213	1,207	1,300	1,289	1,341	1,477	1,283	1,135	1,272	1,052	791	682
THIRD ST	GP	677	811	948	1,073	940	947	923	987	964	1,010	1,072	988	893	968	888	680	611
SPRUCE ST WB ON	GP	458	642	789	712	656	648	672	703	745	803	828	853	852	746	613	545	486

Resource: Collected on February 7, 2019 from Performance Measurement System (PeMS)

Table 59: State Route 91 Westbound GP Lane Traffic Volume on February 7, 2019

Average flow per lane for SR-91 WB HOV Lane From PROMENADE .2 E-O (PM 8.13) to SPRUCE ST WB ON (PM 21.474)		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
PROMENADE .2 E-O	HOV	1,406	1,069	898	1,149	1,061	876	797	830	857	921	1,014	1,103	1,074	1,000	597	294	265
MCKINLEY	HOV	1,484	1,198	1,097	1,248	1,084	959	961	1,027	1,064	1,116	1,192	1,322	1,307	1,240	741	346	283
E-O MCKINLEY	HOV	664	830	1,142	919	792	929	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642
PIERCE	HOV	1,401	1,165	1,126	1,316	1,019	1,008	961	1,077	1,111	1,160	1,284	1,373	1,420	1,346	708	325	255
MAGNOLIA	HOV	1,326	1,083	1,078	1,282	950	971	929	1,056	1,096	1,130	1,282	1,353	1,401	1,321	691	320	255
MAGNOLIA	HOV	1,79	664	1,221	667	585	547	575	658	920	1,327	1,412	1,329	1,398	1,366	836	635	500
LA SIERRA	HOV	1,187	998	963	1,177	937	952	813	1,009	997	1,060	1,220	1,318	1,357	1,286	695	314	263
LA SIERRA	HOV	1,171	1,005	954	1,183	933	954	776	996	970	1,056	1,210	1,314	1,348	1,286	693	315	250
TYLER	HOV	873	796	807	1,117	1,014	922	658	776	837	999	1,128	1,283	1,360	1,279	633	323	257
TYLER	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642
VAN BUREN	HOV	855	795	784	1,068	913	921	673	702	836	1,002	1,117	1,278	1,342	1,285	626	326	263
VAN BUREN	HOV	205	750	1,411	988	617	571	602	701	894	1,268	1,371	1,320	1,334	1,212	731	578	483
JACKSON ST.	HOV	808	764	781	1,035	765	914	670	712	828	1,055	1,145	1,301	1,367	1,279	615	332	258
ADAMS	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642
ADAMS	HOV	761	709	787	1,028	713	733	673	726	824	1,130	1,248	1,400	1,439	1,396	627	352	283
MADISON	HOV	762	727	803	1,040	717	676	674	748	832	1,178	1,293	1,443	1,461	1,441	618	352	291
MADISON	HOV	767	726	811	1,037	723	679	679	748	835	1,208	1,301	1,465	1,467	1,450	618	354	287
ARLINGTON WB ON	HOV	673	672	789	945	691	644	679	733	824	1,209	1,321	1,555	1,526	1,527	612	349	288
JANE ST	HOV	675	677	789	933	686	648	673	729	825	1,206	1,324	1,554	1,526	1,521	616	353	286
ARLINGTON AVE	HOV	654	671	760	921	664	610	668	729	792	1,195	1,294	1,568	1,541	1,522	604	335	288
CENTRAL WB ON	HOV	647	658	725	867	630	595	621	700	781	1,110	1,234	1,551	1,537	1,506	591	331	289
CENTRAL EB ON	HOV	640	645	722	865	610	592	606	689	760	1,092	1,228	1,562	1,546	1,488	580	313	279
IVY OC 100' E-O	HOV	592	640	689	810	581	554	581	639	718	1,019	1,151	1,594	1,517	1,436	545	299	245
FOURTEENTH ST	HOV	589	591	663	914	1,003	1,205	1,246	630	802	1,092	1,105	2,347	2,751	1,872	605	318	293
FOURTEENTH ST	HOV	302	840	1,253	950	816	632	713	736	928	972	1,058	972	997	892	645	536	438
TENTH ST	HOV	501	571	609	751	501	471	503	527	624	676	886	1,275	1,357	1,077	483	233	199
THIRD ST	HOV	664	830	1,142	919	792	792	833	898	993	1,163	1,289	1,335	1,361	1,117	837	746	642

Resource: Collected on February 7, 2019 from Performance Measurement System (PeMS)

Table 60: Interstate 215 Northbound GP Lane Traffic Volume on February 5, 2019

Name	Type	Average Flow per lane for I-215 NB GP Lane From FAIR ISLE/ BOX SPRINGS (PM 38.627) to BLAINE (PM 42.245)																				
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 PM	
FAIR ISLE/ BOX SPRINGS	GP	1,159	1,269	1,323	1,304	1,249	1,320	1,373	1,397	1,271	1,508	1,571	1,589	1,589	1,589	1,367	1,127	965	826			
CENTRAL AVE SB ON	GP	1,675	1,570	1,647	1,574	1,644	1,600	1,622	1,613	1,596	1,648	1,639	1,664	1,567	1,409	1,056	878	778				
CENTRAL -WATKINS	GP	1,528	1,393	1,452	1,351	1,702	1,632	1,604	1,448	1,539	1,724	1,725	1,637	1,487	1,152	994	884					
MLK SB ON	GP	1,543	1,420	1,554	1,459	1,674	1,545	1,533	1,389	1,536	1,689	1,664	1,598	1,461	1,147	992	884					
MARTIN LUTHER KING	GP	1,545	1,417	1,556	1,459	1,706	1,559	1,545	1,399	1,547	1,687	1,694	1,608	1,472	1,156	997	886					
UNIVERSITY	GP	1,257	1,325	1,484	1,391	1,408	1,263	1,288	1,272	1,234	1,341	1,396	1,382	1,322	1,217	941	790	706				
BLAINE	GP	687	756	880	832	878	813	868	836	772	846	869	842	796	789	613	515	456				

Resource: Collected on February 5, 2019 from Performance Measurement System (PeMS)

Table 61: Interstate 215 Northbound HOV Lane Traffic Volume on February 5, 2019

Name	Type	Average Flow per lane for I-215 NB HOV Lane From FAIR ISLE/ BOX SPRINGS (PM 38.627) to BLAINE (PM 42.245)																				
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 PM	
FAIR ISLE/ BOX SPRINGS	HOV	1,440	1,389	1,457	1,425	971	991	1,036	1,264	1,173	1,010	1,062	951	813	586	447	355					
CENTRAL AVE SB ON	HOV	1,385	1,200	1,243	1,139	1,451	1,395	1,394	1,183	1,308	1,513	1,546	1,464	1,331	1,078	924	847					
CENTRAL -WATKINS	HOV	1,630	1,555	1,654	1,621	1,169	1,184	1,315	1,208	1,499	1,498	1,211	1,247	1,150	959	722	512	445				
MLK SB ON	HOV	1,598	1,688	1,818	1,720	1,192	1,191	1,400	1,520	1,510	1,278	1,234	1,131	968	673	489	423					
MARTIN LUTHER KING	HOV	1,566	1,699	1,809	1,705	1,162	1,165	1,410	1,481	1,495	1,315	1,206	1,124	965	660	510	423					
UNIVERSITY	HOV	1,502	1,651	1,572	1,512	1,015	1,024	1,237	1,252	1,350	1,254	1,084	1,092	871	605	460	401					
BLAINE	HOV	1,633	1,697	1,804	1,753	1,477	1,289	1,325	1,414	1,535	1,619	1,646	1,671	1,279	975	829	725					

Resource: Collected on February 5, 2019 from Performance Measurement System (PeMS)

Table 62: Interstate 215 Southbound GP Lane Traffic Volume on February 5, 2019

Average Flow per lane for I-215 SB GP Lane From FAIR ISLE/BOX SPRINGS (PM 38.627) to BLAINE ST SB ON (PM 42.144)		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
Name	Type	782	1,003	1,082	1,466	989	1,046	1,101	1,151	1,021	1,335	1,448	1,465	1,469	1,341	1,085	963	838	
FAIR ISLE/BOX SPRINGS	GP	871	1,154	1,164	1,829	1,235	1,262	1,397	1,438	1,090	1,549	1,680	1,673	1,674	1,530	1,368	1,227	1,099	
CENTRAL AVE SB ON	GP	655	885	898	1,727	938	957	1,061	1,085	829	1,165	1,281	1,268	1,260	1,160	1,046	933	832	
CENTRAL-WATKINS	GP	1,254	1,201	1,259	1,576	1,394	1,345	1,350	1,361	1,236	1,312	1,431	1,455	1,386	1,239	963	827	739	
N-O BOX SPRINGS RD	GP	828	1,133	1,152	1,715	1,171	1,206	1,318	1,312	971	1,339	1,421	1,376	1,371	1,275	1,259	1,133	1,046	
MLK SB ON	GP	548	732	779	1,135	790	823	893	897	695	983	1,072	1,034	1,040	934	896	805	731	
MARTIN LUTHER KING	GP	875	1,190	1,246	1,872	1,308	1,294	1,387	1,355	1,079	1,439	1,517	1,478	1,465	1,342	1,288	1,167	1,069	
UNIVERSITY AVE SB ON	GP	869	1,175	1,270	1,867	1,286	1,266	1,331	1,288	1,004	1,273	1,337	1,237	1,226	1,196	1,217	1,107	1,019	
BLAINE ST SB ON	GP	[Resource: Collected on February 5, 2019 from Performance Measurement System (PeMS)]																	

Table 63: Interstate 215 Southbound HOV Lane Traffic Volume on February 5, 2019

Average Flow per lane for I-215 SB HOV Lane From FAIR ISLE/BOX SPRINGS (PM 38.627) to BLAINE ST SB ON (PM 42.144)		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
Name	Type	1,163	905	952	868	1,367	1,349	1,380	1,338	1,149	1,244	1,424	1,432	1,382	1,261	1,016	916	808	
BOX SPRINGS	HOV	595	767	1,074	867	740	734	743	794	886	1,058	1,219	1,266	1,302	964	698	598	495	
BOX SPRINGS SB ON	HOV	398	593	656	703	593	724	864	994	1,005	1,480	1,548	1,486	1,586	1,299	937	797	656	
CENTRAL AVE SB ON	HOV	416	672	730	718	609	743	898	1,019	1,072	1,574	1,662	1,568	1,620	1,368	963	816	687	
CENTRAL-WATKINS	HOV	1,546	1,496	1,591	1,541	1,063	1,095	1,169	1,122	1,404	1,372	1,115	1,139	1,046	886	640	457	385	
N-O BOX SPRINGS RD	HOV	433	700	768	784	605	753	827	992	1,084	1,518	1,653	1,604	1,576	1,359	983	785	686	
MLK SB ON	HOV	1,193	1,644	1,586	1,800	1,561	1,597	1,746	1,693	1,191	1,587	1,564	1,502	1,527	1,516	1,622	1,453	1,376	
MARTIN LUTHER KING	HOV	427	700	748	792	588	733	758	1,000	1,101	1,452	1,538	1,484	1,442	1,217	945	754	653	
UNIVERSITY AVE SB ON	HOV	347	606	643	697	508	631	667	905	1,109	1,367	1,483	1,375	1,322	1,089	827	671	561	
BLAINE ST SB ON	HOV	[Resource: Collected on February 5, 2019 from Performance Measurement System (PeMS)]																	

Table 64: Interstate 215 Northbound GP Lane Traffic Volume on February 6, 2019

Name	Type	Average Flow per lane for I-215 NB GP Lane From FAIR ISLE/ BOX SPRINGS (PM 38.627) to BLAINE (PM 42.245)																	
		CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
FAIR ISLE/ BOX SPRINGS	GP	R38.627	1,239	1,288	1,329	1,312	1,347	1,426	1,410	1,399	1,513	1,598	1,629	1,636	1,593	1,473	1,282	1,122	962
CENTRAL AVE SB ON	GP	39,426	1,932	1,751	1,699	1,597	1,630	1,746	1,602	1,398	1,630	1,660	1,630	1,765	1,675	1,502	1,185	1,002	843
CENTRAL -WATKINS	GP	39,643	1,778	1,597	1,519	1,424	1,638	1,787	1,570	1,370	1,448	1,440	1,452	1,652	1,708	1,565	1,281	1,108	962
MLK SB ON	GP	40,76	1,790	1,620	1,587	1,399	1,567	1,700	1,524	1,400	1,550	1,478	1,471	1,623	1,649	1,524	1,286	1,096	962
MARTIN LUTHER KING	GP	40,929	1,802	1,614	1,579	1,433	1,627	1,702	1,543	1,411	1,552	1,479	1,497	1,629	1,663	1,542	1,301	1,110	962
UNIVERSITY	GP	41,575	1,465	1,456	1,489	1,375	1,372	1,391	1,303	1,182	1,334	1,332	1,335	1,368	1,361	1,255	1,036	885	764
BLAINE	GP	42,245	790	824	881	812	852	906	843	760	820	868	848	827	832	809	687	577	490

Resource: Collected on February 6, 2019 from Performance Measurement System (PMS)

Table 65: Interstate 215 Northbound HOV Lane Traffic Volume on February 6, 2019

Name	Type	Average Flow per lane for I-215 NB HOV Lane From FAIR ISLE/ BOX SPRINGS (PM 38.627) to BLAINE (PM 42.245)																	
		CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
FAIR ISLE/ BOX SPRINGS	HOV	R38.627	1,670	1,485	1,442	1,400	1,185	1,011	1,002	1,051	1,423	1,574	1,504	1,339	1,100	981	611	495	420
CENTRAL AVE SB ON	HOV	39,426	1,593	1,442	1,333	1,224	1,350	1,518	1,331	1,217	1,182	1,222	1,242	1,386	1,540	1,456	1,161	1,033	888
CENTRAL -WATKINS	HOV	39,652	1,933	1,725	1,656	1,596	1,383	1,288	1,322	1,091	1,624	1,752	1,641	1,606	1,368	1,170	769	625	490
MLK SB ON	HOV	40,76	1,890	1,811	1,837	1,681	1,358	1,392	1,348	1,042	1,500	1,678	1,657	1,581	1,379	1,140	723	589	470
MARTIN LUTHER KING	HOV	40,929	1,911	1,822	1,859	1,716	1,260	1,375	1,353	1,031	1,475	1,659	1,685	1,548	1,407	1,102	715	583	485
UNIVERSITY	HOV	41,564	1,803	1,794	1,675	1,501	1,256	1,163	1,230	951	1,322	1,497	1,488	1,434	1,327	1,001	673	531	419
BLAINE	HOV	42,245	1,934	1,878	1,800	1,648	1,579	1,447	1,412	1,247	1,571	1,570	1,683	1,747	1,620	1,352	1,076	944	760

Resource: Collected on February 6, 2019 from Performance Measurement System (PMS)

Table 66: Interstate 215 Southbound GP Lane Traffic Volume on February 6, 2019

Name	Type	Average Flow per lane for I-215 SB GP Lane From FAIR ISLE/BOX SPRINGS (PM 38.627) to BLAINE ST SB ON (PM 42.144)																	
		CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
FAIR ISLE/BOX SPRINGS	GP	R38.627	902	1,130	1,193	1,460	1,062	1,055	1,170	1,196	1,306	1,394	1,484	1,528	1,501	1,328	1,242	1,105	964
CENTRAL AVE SB ON	GP	39.426	961	1,306	1,337	1,730	1,308	1,354	1,479	1,458	1,576	1,656	1,687	1,696	1,658	1,496	1,446	1,398	1,275
CENTRAL-WATKINS	GP	39.652	746	1,000	1,009	1,647	962	1,028	1,129	1,105	1,202	1,245	1,275	1,288	1,251	1,126	1,153	1,069	952
N-O BOX SPRINGS RD	GP	40.382	1,451	1,347	1,301	1,609	1,315	1,478	1,324	1,195	1,212	1,230	1,233	1,405	1,449	1,304	1,053	925	791
MLK SB ON	GP	40.76	939	1,270	1,260	1,696	1,222	1,275	1,414	1,378	1,480	1,472	1,430	1,417	1,357	1,198	1,308	1,321	1,195
MARTIN LUTHER KING	GP	40.929	605	822	858	1,080	848	849	947	928	1,001	1,048	1,079	1,084	1,038	892	963	952	838
UNIVERSITY AVE SB ON	GP	41.451	969	1,338	1,423	1,849	1,367	1,351	1,501	1,457	1,555	1,534	1,522	1,469	1,431	1,334	1,379	1,363	1,241
BLAINE ST SB ON	GP	42.144	963	1,307	1,438	1,852	1,390	1,300	1,423	1,388	1,428	1,408	1,327	1,261	1,192	1,139	1,213	1,261	1,161

(Resource: Collected on February 6, 2019 from Performance Measurement System (PEMS))

Table 67: Interstate 215 Southbound HOV Lane Traffic Volume on February 6, 2019

Name	Type	Average Flow per lane for I-215 SB HOV Lane From FAIR ISLE/BOX SPRINGS (PM 38.627) to BLAINE ST SB ON (PM 42.144)																	
		CA PM	5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
BOX SPRINGS	HOV	R38.627	1,384	1,062	959	842	1,235	1,497	1,369	1,126	906	998	988	1,312	1,390	1,289	1,068	951	900
BOX SPRINGS SB ON	HOV	R38.774	644	807	1,123	899	742	738	763	825	926	1,091	1,237	1,289	1,337	1,030	743	641	534
CENTRAL AVE SB ON	HOV	39.426	505	717	888	718	707	776	970	1,128	1,318	1,465	1,601	1,657	1,607	1,390	1,346	1,062	928
CENTRAL-WATKINS	HOV	39.652	553	785	982	748	772	793	1,002	1,171	1,390	1,542	1,670	1,707	1,646	1,458	1,417	1,092	961
N-O BOX SPRINGS RD	HOV	40.382	1,803	1,634	1,589	1,544	1,342	1,138	1,164	1,101	1,553	1,675	1,592	1,515	1,247	1,064	699	546	449
MLK SB ON	HOV	40.76	589	808	1,064	839	693	797	969	1,088	1,348	1,575	1,628	1,658	1,592	1,490	1,442	1,116	967
MARTIN LUTHER KING	HOV	40.929	1,424	1,862	1,755	1,838	1,753	1,744	1,972	1,864	1,961	1,748	1,551	1,560	1,483	1,404	1,556	1,706	1,577
UNIVERSITY AVE SB ON	HOV	41.451	550	764	951	770	795	790	914	1,064	1,327	1,519	1,522	1,468	1,447	1,354	1,317	1,023	922
BLAINE ST SB ON	HOV	42.144	478	692	878	737	655	699	811	991	1,254	1,460	1,451	1,381	1,302	1,245	1,224	921	791

(Resource: Collected on February 6, 2019 from Performance Measurement System (PEMS))

Table 68: Interstate 215 Northbound GP Lane Traffic Volume on February 7, 2019

Name	Type	Average Flow per lane for I-215 NB GP Lane From FAIR ISLE/ BOX SPRINGS (PM 38.627) to BLAINE (PM 42.245)																
		6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM	
FAIR ISLE/ BOX SPRINGS	GP	1,263	1,298	1,341	1,334	1,298	1,364	1,419	1,482	1,570	1,556	1,569	1,655	1,621	1,531	1,382	1,198	1,064
CENTRAL AVE SB ON	GP	1,901	1,723	1,693	1,555	1,638	1,731	1,712	1,767	1,765	1,748	1,686	1,657	1,713	1,580	1,262	1,007	915
CENTRAL -WATKINS	GP	1,762	1,556	1,514	1,325	1,435	1,557	1,587	1,674	1,572	1,576	1,485	1,549	1,639	1,559	1,336	1,145	1,028
MLK SB ON	GP	1,758	1,620	1,572	1,408	1,488	1,536	1,571	1,615	1,575	1,565	1,439	1,474	1,554	1,494	1,321	1,135	1,016
MARTIN LUTHER KING	GP	1,766	1,611	1,553	1,420	1,493	1,536	1,589	1,638	1,578	1,574	1,441	1,477	1,556	1,514	1,335	1,143	1,029
UNIVERSITY	GP	1,468	1,486	1,494	1,385	1,343	1,331	1,328	1,360	1,214	1,239	1,345	1,097	1,186	1,288	1,079	923	815
BLAINE	GP	775	837	844	807	859	875	865	895	871	847	775	802	831	848	704	606	524

Resource: Collected on February 7, 2019 from Performance Measurement System (PeMS)

Table 69: Interstate 215 Northbound HOV Lane Traffic Volume on February 7, 2019

Name	Type	Average Flow per lane for I-215 NB HOV Lane From FAIR ISLE/ BOX SPRINGS (PM 38.627) to BLAINE (PM 42.245)																
		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
FAIR ISLE/ BOX SPRINGS	HOV	1,581	1,480	1,439	1,409	1,407	1,341	1,342	1,251	1,480	1,487	1,518	1,318	1,187	1,106	780	478	466
CENTRAL AVE SB ON	HOV	1,598	1,413	1,305	1,091	1,164	1,273	1,311	1,404	1,290	1,329	1,260	1,364	1,499	1,421	1,251	1,115	983
CENTRAL -WATKINS	HOV	1,841	1,727	1,658	1,637	1,660	1,638	1,602	1,569	1,725	1,754	1,701	1,578	1,580	1,401	945	619	564
MLK SB ON	HOV	1,875	1,830	1,825	1,731	1,702	1,566	1,560	1,565	1,672	1,681	1,694	1,649	1,614	1,451	909	605	565
MARTIN LUTHER KING	HOV	1,848	1,870	1,863	1,749	1,710	1,581	1,537	1,534	1,668	1,690	1,686	1,675	1,624	1,443	892	598	563
UNIVERSITY	HOV	1,800	1,788	1,692	1,541	1,518	1,367	1,383	1,330	1,480	1,522	1,555	1,524	1,515	1,356	830	555	505
BLAINE	HOV	1,897	1,886	1,720	1,624	1,572	1,424	1,444	1,467	1,502	1,658	1,570	1,441	1,721	1,460	1,093	919	853

Resource: Collected on February 7, 2019 from Performance Measurement System (PeMS)

Table 70: Interstate 215 Southbound GP Lane Traffic Volume on February 7, 2019

Average Flow per lane for I-215 SB GP Lane From FAIR ISLE/BOX SPRINGS (PM 38.627) to BLAINE ST SB ON (PM 42.144)		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
Name	Type	958	1,214	1,190	1,477	1,101	1,111	1,149	1,215	1,275	1,231	1,235	1,478	1,394	1,211	1,227	1,069	994
FAIR ISLE/BOX SPRINGS	GP																	
CENTRAL AVE SB ON	GP	1,050	1,356	1,298	1,894	1,369	1,350	1,460	1,524	1,575	1,504	1,376	1,638	1,625	1,529	1,570	1,394	1,286
CENTRAL-WATKINS	GP	781	1,025	982	1,799	1,034	1,020	1,112	1,155	1,192	1,155	1,035	1,253	1,223	1,157	1,189	1,093	1,001
N-O BOX SPRINGS RD	GP	1,422	1,317	1,288	1,511	1,205	1,306	1,314	1,401	1,343	1,326	1,309	1,327	1,436	1,321	1,103	957	849
MLK SB ON	GP	978	1,292	1,208	1,779	1,283	1,282	1,364	1,426	1,475	1,375	1,105	1,329	1,311	1,211	1,346	1,323	1,257
MARTIN LUTHER KING	GP	633	836	833	1,177	845	872	914	968	1,022	1,002	833	1,016	1,001	900	988	936	880
UNIVERSITY AVE SB ON	GP	1,027	1,367	1,348	1,953	1,430	1,363	1,432	1,511	1,553	1,528	1,268	1,421	1,385	1,317	1,437	1,378	1,298
BLAINE ST SB ON	GP	1,026	1,329	1,319	1,936	1,400	1,324	1,371	1,448	1,474	1,339	1,051	1,168	1,140	1,093	1,224	1,288	1,207

Resource: Collected on February 7, 2019 from Performance Measurement System (PeMS)

Table 71: Interstate 215 Southbound HOV Lane Traffic Volume on February 7, 2019

Average Flow per lane for I-215 SB HOV Lane From FAIR ISLE/BOX SPRINGS (PM 38.627) to BLAINE ST SB ON (PM 42.144)		5:00 AM	6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	13:00 PM	14:00 PM	15:00 PM	16:00 PM	17:00 PM	18:00 PM	19:00 PM	20:00 PM	21:00 PM
BOX SPRINGS	HOV	1,359	1,055	937	791	966	1,215	1,255	1,384	1,239	1,221	1,111	1,065	1,291	1,273	1,141	998	885
BOX SPRINGS SB ON	HOV	183	311	468	417	410	476	644	685	755	835	1,013	1,094	1,086	980	619	576	514
CENTRAL AVE SB ON	HOV	587	793	904	773	778	756	929	1,057	1,311	1,519	1,524	1,587	1,567	1,456	1,247	1,063	1,077
CENTRAL-WATKINS	HOV	632	868	993	806	833	782	971	1,095	1,369	1,593	1,588	1,651	1,616	1,524	1,294	1,294	1,077
N-O BOX SPRINGS RD	HOV	1,747	1,646	1,577	1,557	1,544	1,525	1,539	1,464	1,656	1,631	1,607	1,470	1,447	1,264	856	550	503
MLK SB ON	HOV	666	930	1,071	828	816	792	937	1,020	1,357	1,561	1,434	1,578	1,593	1,530	1,545	1,228	1,056
MARTIN LUTHER KING	HOV	1,470	1,922	1,655	1,945	1,828	1,714	1,848	1,911	1,918	1,628	1,175	1,461	1,453	1,414	1,578	1,738	1,667
UNIVERSITY AVE SB ON	HOV	634	877	962	822	774	757	909	939	1,268	1,515	1,261	1,356	1,405	1,346	1,457	1,180	1,005
BLAINE ST SB ON	HOV	529	745	884	759	686	667	798	845	1,153	1,468	1,206	1,270	1,266	1,212	1,353	1,039	919

Resource: Collected on February 7, 2019 from Performance Measurement System (PeMS)