

## **Appendix M-1: Traffic Analysis**

**This Page Intentionally Left Blank**

# GREEN RIVER RANCH SPECIFIC PLAN AMENDMENT (SP00-001 AMENDMENT NO. 1) TRAFFIC ANALYSIS

PREPARED BY: Charlene So, PE | cso@urbanxroads.com  
Aric Evatt | aevatt@urbanxroads.com



## TABLE OF CONTENTS

Table of Contents .....	ii
Appendices.....	iv
List of Exhibits.....	vi
List of Tables .....	viii
List of Abbreviated Terms .....	ix
<b>1 Introduction.....</b>	<b>1</b>
1.1 Summary of Findings .....	1
1.2 Project Overview .....	3
1.3 Analysis Scenarios.....	4
1.4 Study Area .....	6
1.5 Deficiencies .....	7
1.6 Recommendations.....	10
<b>2 Methodologies .....</b>	<b>13</b>
2.1 Level of Service.....	13
2.2 Intersection Capacity Analysis.....	13
2.3 Traffic Signal Warrant Analysis Methodology .....	15
2.4 Roadway Segment Capacity Analysis .....	16
2.5 Freeway Off-Ramp Queuing Analysis .....	17
2.6 Minimum Acceptable Levels of Service (LOS).....	17
2.7 Deficiency Criteria.....	18
<b>3 Area Conditions .....</b>	<b>19</b>
3.1 Existing Circulation Network .....	19
3.2 City of Corona General Plan Circulation Elements .....	19
3.3 Bicycle & Pedestrian Facilities.....	24
3.4 Transit Service.....	24
3.5 Existing (2023) Traffic Counts.....	24
3.6 Existing (2023) Intersection Operations Analysis .....	30
3.7 Existing (2023) Traffic Signal Warrants Analysis .....	31
3.8 Existing (2023) Roadway Segment Capacity Analysis.....	31
3.9 Existing (2023) Off-Ramp Queuing Analysis .....	31
3.10 Deficiencies and Improvements.....	32
<b>4 Projected Future Traffic.....</b>	<b>33</b>
4.1 Project Trip Generation .....	33
4.2 Project Trip Distribution .....	36
4.3 Modal Split.....	41
4.4 Project Trip Assignment.....	41
4.5 Background Traffic.....	41
4.6 Cumulative Development Traffic.....	45
4.7 Near-Term Traffic Conditions.....	48
4.8 Horizon Year Traffic Forecasts .....	48



5 E+P Traffic Conditions..... 51

5.1 Roadway Improvements ..... 51

5.2 E+P Growth Traffic Volume Forecasts ..... 51

5.3 Intersection Operations Analysis ..... 51

5.4 Traffic Signal Warrants Analysis ..... 56

5.5 Roadway Segment Capacity Analysis ..... 56

5.6 Off-Ramp Queuing Analysis ..... 56

5.7 Deficiencies and Improvements..... 58

6 Opening Year Cumulative (2026) Traffic Conditions..... 59

6.1 Roadway Improvements ..... 59

6.2 Opening Year Cumulative (2026) Without Project Growth Traffic Volume Forecasts ..... 59

6.3 Opening Year Cumulative (2026) With Project Growth Traffic Volume Forecasts..... 59

6.4 Intersection Operations Analysis ..... 64

6.5 Traffic Signal Warrants Analysis ..... 64

6.6 Roadway Segment Capacity Analysis ..... 64

6.7 Off-Ramp Queuing Analysis ..... 66

6.8 Deficiencies and Improvements..... 66

7 Horizon Year (2045) Traffic Conditions..... 69

7.1 Roadway Improvements ..... 69

7.2 Horizon Year (2045) Traffic Volume Forecasts ..... 69

7.3 Intersection Operations Analysis ..... 69

7.4 Traffic Signal Warrants Analysis ..... 72

7.5 Roadway Segment Capacity Analysis ..... 73

7.6 Off-Ramp Queuing Analysis ..... 73

7.7 Project Deficiencies and Recommended Improvements..... 73

8 Local and Regional Funding Mechanisms ..... 75

8.1 City of Corona Development Impact Fee (DIF) Program ..... 75

8.2 Transportation Uniform Mitigation Fee (TUMF) Program ..... 75

9 References..... 77

## **APPENDICES**

Appendix 1.1: Approved Traffic Study Scoping Agreement

Appendix 1.2: Site Adjacent Queues

Appendix 3.1: Traffic Counts

Appendix 3.2: Existing (2023) Conditions Intersection Operations Analysis Worksheets

Appendix 3.3: Existing (2023) Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 4.1: Post Processing Worksheets

Appendix 5.1: E+P (Phase 1) Conditions Intersection Operations Analysis Worksheets

Appendix 5.2: E+P (Phase 2) Conditions Intersection Operations Analysis Worksheets

Appendix 5.3: E+P (Project Buildout) Conditions Intersection Operations Analysis Worksheets

Appendix 5.4: E+P (Project Buildout) Conditions Traffic Signal Warrant Analysis Worksheets

Appendix 5.5: E+P (Phase 1) Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 5.6: E+P (Phase 2) Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 5.7: E+P (Project Buildout) Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 6.1: Opening Year Cumulative (2026) Without Project Conditions Intersection Operations Analysis Worksheets

Appendix 6.2: Opening Year Cumulative (2026) With Project (Phase 1) Conditions Intersection Operations Analysis Worksheets

Appendix 6.3: Opening Year Cumulative (2026) With Project (Phase 2) Conditions Intersection Operations Analysis Worksheets

Appendix 6.4: Opening Year Cumulative (2026) With Project (Project Buildout) Conditions Intersection Operations Analysis Worksheets

Appendix 6.5: Opening Year Cumulative (2026) Without Project Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 6.6: Opening Year Cumulative (2026) With Project (Phase 1) Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 6.7: Opening Year Cumulative (2026) With Project (Phase 2) Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 6.8: Opening Year Cumulative (2026) With Project (Project Buildout) Conditions Off-Ramp Queuing Analysis Worksheets

Appendix 7.1: Horizon Year (2045) Without Project Conditions Intersection Operations Analysis  
Worksheets

Appendix 7.2: Horizon Year (2045) With Project Conditions Intersection Operations Analysis  
Worksheets

Appendix 7.3: Horizon Year (2045) Without Project Conditions Off-Ramp Queuing Analysis  
Worksheets With Improvements

Appendix 7.4: Horizon Year (2045) With Project Conditions Intersection Off-Ramp Queuing Analysis  
Worksheets With Improvements

## LIST OF EXHIBITS

Exhibit 1-1: Preliminary Land Use Plan.....	2
Exhibit 1-2: Study Area.....	5
Exhibit 1-3: Site Access Recommendations .....	11
Exhibit 3-1: Existing Number of Through Lanes and Intersection Controls .....	20
Exhibit 3-2: City of Corona General Plan Circulation Element.....	21
Exhibit 3-3: City of Corona General Plan Roadway Cross-Sections (Page 1 of 2).....	22
Exhibit 3-3: City of Corona General Plan Roadway Cross-Sections (Page 2 of 2).....	23
Exhibit 3-4: City of Corona General Plan Existing and Proposed Bike Trails .....	25
Exhibit 3-5: Existing Pedestrian Facilities .....	26
Exhibit 3-6: Existing Transit Routes.....	27
Exhibit 3-7: Existing (2023) Traffic Volumes (Actual Vehicles).....	28
Exhibit 4-1: Project (Truck) Trip Distribution.....	37
Exhibit 4-2: Project (Business Park Industrial Passenger Car) Trip Distribution .....	38
Exhibit 4-3: Project (Retail) Trip Distribution.....	39
Exhibit 4-4: Project (Residential) Trip Distribution .....	40
Exhibit 4-5: Project Only (Phase 1) Traffic Volumes (Actual Vehicles) .....	42
Exhibit 4-6: Project Only (Phase 2) Traffic volumes (Actual Vehicles).....	43
Exhibit 4-7: Project Only (Project Buildout) Traffic volumes (Actual Vehicles) .....	44
Exhibit 4-8: Cumulative Development Location Map .....	46
Exhibit 4-9: Cumulative Only Traffic Volumes (Actual Vehicles).....	47
Exhibit 5-1: E+P (Phase 1) Traffic Volumes (Actual VehicleS) .....	52
Exhibit 5-2: E+P (Phase 2) Traffic Volumes (Actual Vehicles) .....	53
Exhibit 5-3: E+P (Project Buildout) Traffic Volumes (Actual Vehicles).....	54
Exhibit 6-1: Opening Year Cumulative (2026) Without Project Traffic Volumes (Actual Vehicles).....	60
Exhibit 6-2: Opening Year Cumulative (2026) With Project (Phase 1) Traffic Volumes (Actual Vehicles) 61	
Exhibit 6-3: Opening Year Cumulative (2026) With Project (Phase 2) Traffic Volumes (Actual Vehicles) 62	
Exhibit 6-4: Opening Year Cumulative (2026) With Project (Project Buildout) Traffic Volumes (Actual Vehicles).....	63

Exhibit 7-1: Horizon Year (2045) Without Project Traffic Volumes (Actual Vehicles)..... 70  
Exhibit 7-2: Horizon Year (2045) With Project Traffic Volumes (Actual Vehicles)..... 71

## LIST OF TABLES

Table 1-1: Intersection Analysis Locations .....	6
Table 1-2: Roadway Segment Analysis Locations.....	7
Table 1-3: Summary of Intersection LOS.....	8
Table 1-4: Summary of Roadway Segment LOS .....	8
Table 2-1: Signalized Intersection LOS Thresholds .....	14
Table 2-2: Unsignalized Intersection LOS Thresholds .....	15
Table 2-3: Traffic Signal Warrant Analysis Locations .....	16
Table 2-4: Roadway Segment Capacities.....	16
Table 3-1: Intersection Analysis for Existing (2023) Conditions .....	30
Table 3-2: Roadway Segment Capacity Analysis for Existing (2023) Conditions .....	31
Table 3-3: Peak Hour Freeway Off-Ramp Queuing Summary for Existing (2023) Conditions.....	32
Table 4-1: Project Trip Generation Rates .....	34
Table 4-2: Project Trip Generation summary .....	35
Table 4-3: Trip Generation Comparison for Commercial Component.....	36
Table 4-4: Cumulative Development Land Use Summary .....	45
Table 5-1: Intersection Analysis for E+P Conditions .....	55
Table 5-2: Roadway Segment Capacity Analysis for E+P Conditions .....	57
Table 5-3: Peak Hour Freeway Off-Ramp Queuing Summary for E+P Conditions .....	57
Table 6-1: Intersection Analysis for Opening Year Cumulative (2026) Conditions .....	65
Table 6-2: Roadway Segment Capacity Analysis for Opening Year Cumulative (2026) Conditions.....	65
Table 6-3: Peak Hour Freeway Off-Ramp Queuing Summary for Opening Year Cumulative (2026) Conditions .....	67
Table 7-1: Intersection Analysis for Horizon Year (2045) Conditions .....	72
Table 7-2: Roadway Segment Capacity Analysis for Horizon Year (2045) Conditions.....	74
Table 7-3: Peak Hour Freeway Off-Ramp Queuing Summary for Horizon Year (2045) Conditions .....	74

## LIST OF ABBREVIATED TERMS

(1)	Reference
ADT	Average Daily Traffic
CA MUTCD	California Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CMP	Congestion Management Program
DIF	Development Impact Fee
E+P	Existing plus Project
HCM	Highway Capacity Manual
ITE	Institute of Transportation Engineers
LOS	Level of Service
MSHCP	Multiple Species Habitat Conservation Plan
NCHRP	National Cooperative Highway Research Program
OPR	Office of Planning and Research
PA	Planning Area
PHF	Peak Hour Factor
Project	Green River Ranch Specific Plan Amendment
RCTC	Riverside County Transportation Commission
RIVCOM	Riverside County Transportation Model
RTA	Riverside Transit Agency
RTP	Regional Transportation Plan
SB 743	Senate Bill 743
SCAG	Southern California Association of Governments
SCS	Sustainable Communities Strategy
TA	Traffic Analysis
TUMF	Transportation Uniform Mitigation Fee
v/c	Volume-to-Capacity
VMT	Vehicle Miles Traveled
vphgpl	Vehicles per Hour Green per Lane
WRCOG	Western Riverside Council of Governments

This page intentionally left blank



# 1 INTRODUCTION

This report presents the results of the Traffic Analysis (TA) for Green River Ranch Specific Plan Amendment (Project), which is located at the southwest corner of Green River Road and Dominguez Ranch Road in the City of Corona, as shown on Exhibit 1-1. The purpose of this TA is to evaluate the potential circulation system deficiencies that may result from the development of the proposed Project, and where necessary recommend improvements to achieve acceptable operations consistent with General Plan level of service goals and policies. This traffic study has been prepared in accordance with the City of Corona's Traffic Impact Study Guidelines and consultation with City staff during the traffic study scoping process. (1) The City approved Project Traffic Study Scoping agreement is provided in Appendix 1.1 of this TA.

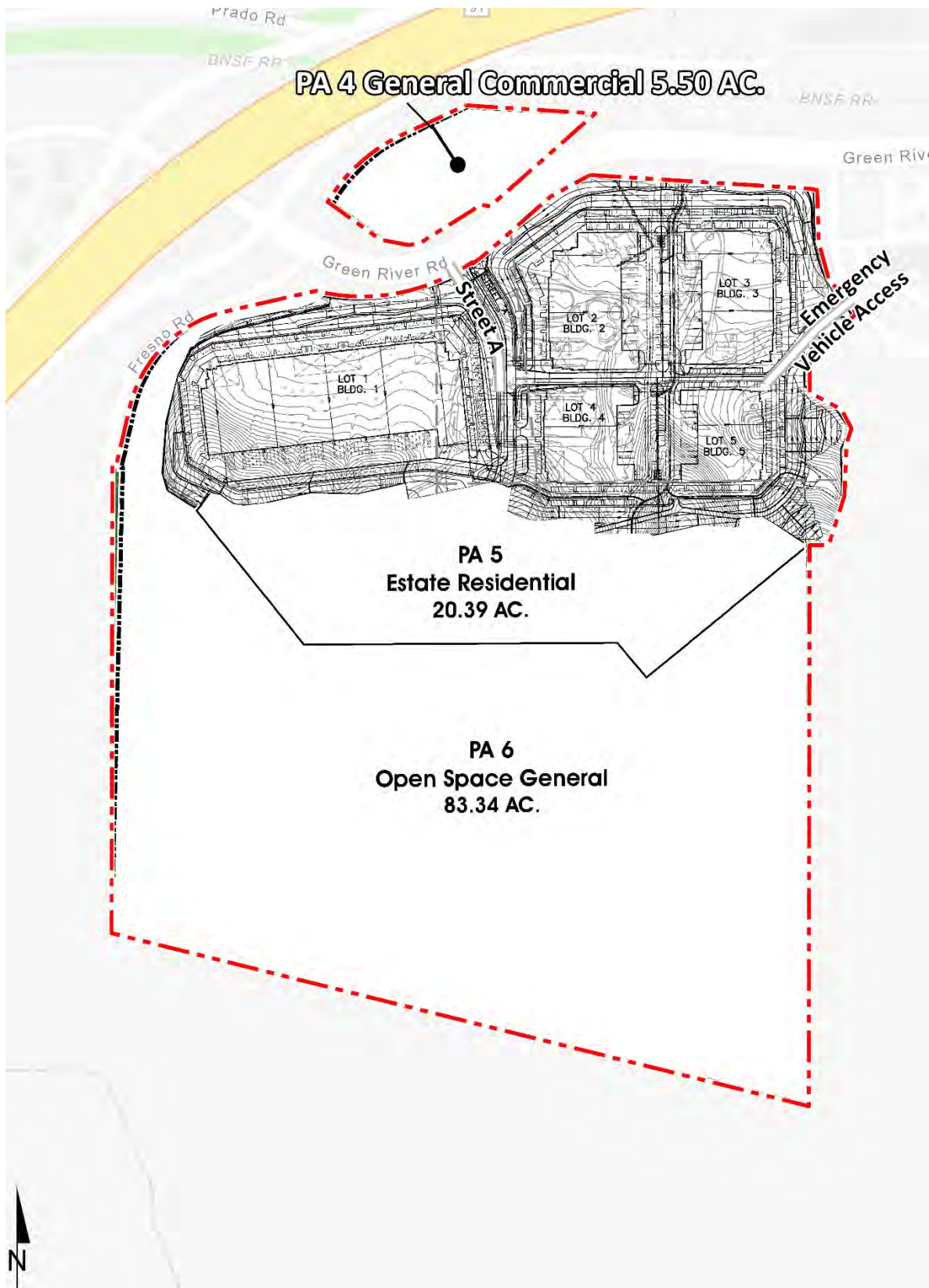
## 1.1 SUMMARY OF FINDINGS

The Project is to construct the following improvements as design features in conjunction with development of the site:

- Prior to issuance of first occupancy permits in Planning Areas (PAs) 1, 2, and 3, the Developer of PAs 1, 2, and 3 to install a traffic signal at Street A & Green River Road and construct an eastbound right turn lane on Green River Road with a minimum of 100-feet of storage, a westbound left turn lane with 175-feet of storage, and a northbound left turn lane with 150-feet of storage. For Phase 2 traffic conditions, the Developer of PA 4 will modify the signal to accommodate a northern leg with an eastbound left turn lane with a minimum of 150-feet of storage.
- Construct Green River Road to its ultimate General Plan roadway cross-section as a Major Arterial along the Project frontage (right-of-way varies from 118-feet to as wide as 200-feet, ultimate width to be determined at the time of Precise Plan Implementation for the adjacent Planning Areas). However, the ultimate Green River Road improvement width is constrained in the area where a wildlife crossing occurs near Fresno Road and pursuant to Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) Figure 7-1, Green River Road widening in this area has a MSCHP coverage limitation to a width of 118-feet. Roadway, curb and gutter, sidewalk, and landscaping improvements on the south side of Green River Road during Phase 1 (to be installed by the developer of PAs 1, 2, and 3) and on the north side of Green River Road during Phase 2 (to be installed by the developer of PA 4) shall be made as required by the final Conditions of Approval for the Project and applicable Specific plan and City of Corona standards.
- Project to also improve Street A as a private collector (89-foot right-of-way and 65-foot curb-to-curb width) consistent with the applicable Specific Plan and City of Corona standards or as required by the final Conditions of Approval for the Project. However, Street A will narrow to have a minimum 64-foot right-of-way with a 44-foot curb-to-curb width (will not include a raised median) and a 10-foot parkway. The 10-foot parkway will include a 5-foot-wide (minimum) sidewalk on either side of the street.

Additional details and intersection lane geometrics are provided in Section 1.6 *Recommendations* of this report.

EXHIBIT 1-1: PRELIMINARY LAND USE PLAN



## 1.2 PROJECT OVERVIEW

A preliminary site plan for the proposed Project is shown on Exhibit 1-1. The Project is proposing an amendment to the previously approved Green River Ranch Specific Plan, a Precise Plan for the Business Park Industrial component of the Project, and a tentative tract map. The Precise Plan includes the development of 746,167 square feet of building space and for the purposes of the Traffic Study assumes 634,242 square feet of industrial park use (85% of the overall Business Park Industrial square footage) and 111,925 square feet of high-cube cold storage warehouse use (15% of the overall Business Park Industrial square footage).

The Project is proposed to be developed in phases as follows:

- **Phase 1:** 634,242 square feet of Business Park Industrial use and 111,925 square feet of High-Cube Cold Storage Warehouse use ((Planning Areas) or PAs 1, 2, and 3)
- **Phase 2:** Development in Phase 1 plus up to 19,600 square feet of general commercial uses which for the purposes of the traffic study will be evaluated as a Gas Station with Convenience Market with 12 vehicle fueling positions, 2,500 square feet of Fast-Food Restaurant with Drive-Through Window use, 4,200 square feet of Fine Dining Restaurant use, and 9,500 square feet of High Turnover (Sit-Down) Restaurant use (buildout of PAs 1, 2, and 3 and the addition of PA 4). The land uses and intensities proposed for the retail component were selected in order to conduct a conservative analysis (i.e., evaluate a higher trip generation than 19,600 square feet of general commercial use)
- **Project Buildout:** Development in Phases 1 and 2 plus the addition of 32 Residential Estate Lots (buildout of PAs 1, 2, 3, and 4 and the addition of PA 5)

Specific development plans are not proposed for Planning Areas 4 and 5. Access to the Project site will be provided to Green River Road via Street A and emergency vehicle access will be provided via Dominguez Ranch Road. Project traffic will not use Fresno Road for site access. The Project is anticipated to have an Opening Year of 2026. Regional access to the Project site is available from the SR-91 Freeway via Green River Road. Exhibit 1-2 depicts the location of the proposed Project in relation to the existing roadway network and the study area intersections.

In order to develop the traffic characteristics of the proposed project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation Manual (11<sup>th</sup> Edition, 2021) for the following land uses has been utilized: (2)

- Industrial Park (ITE Land Use Code 130)
- High-Cube Cold Storage Warehouse (ITE Land Use Code 157)
- Single Family Detached Residential (ITE Land Use Code 210)
- Fine Dining Restaurant (ITE Land Use Code 931)
- High Turnover (Sit-Down) Restaurant (ITE Land Use Code 932)
- Fast-Food Restaurant with Drive-Thru Window (ITE Land Use Code 934)
- Gas Station/Convenience Market (ITE Land Use Code 945)

In an effort to evaluate the most conservative trip generation for the Project (worst-case condition), the gas station and fast-food restaurant uses are assumed for the commercial component as opposed to 19,600 square feet of general commercial. The Project is anticipated to generate a total of 3,790 two-way trip-ends per day with 340 AM peak hour trips and 341 PM peak hour trips. Consistent with

the City's guidelines and other traffic studies prepared in the City of Corona, for the purposes of the traffic study, the PCE trip generation has been utilized.

The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in greater detail in Section 4.1 *Project Trip Generation* of this report.

### 1.3 ANALYSIS SCENARIOS

For the purposes of this traffic study, potential deficiencies to traffic and circulation have been assessed for each of the following conditions:

- Existing (2023) Conditions
- Existing plus Project (E+P) – Phase 1
- E+P – Phase 2
- E+P – Project Buildout
- Opening Year Cumulative (2026) Without Project
- Opening Year Cumulative (2026) With Project – Phase 1
- Opening Year Cumulative (2026) With Project – Phase 2
- Opening Year Cumulative (2026) With Project – Project Buildout
- Horizon Year (2045) Without Project
- Horizon Year (2045) With Project – Project Buildout Only

#### 1.3.1 EXISTING (2023) CONDITIONS

Information for Existing (2023) conditions is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared.

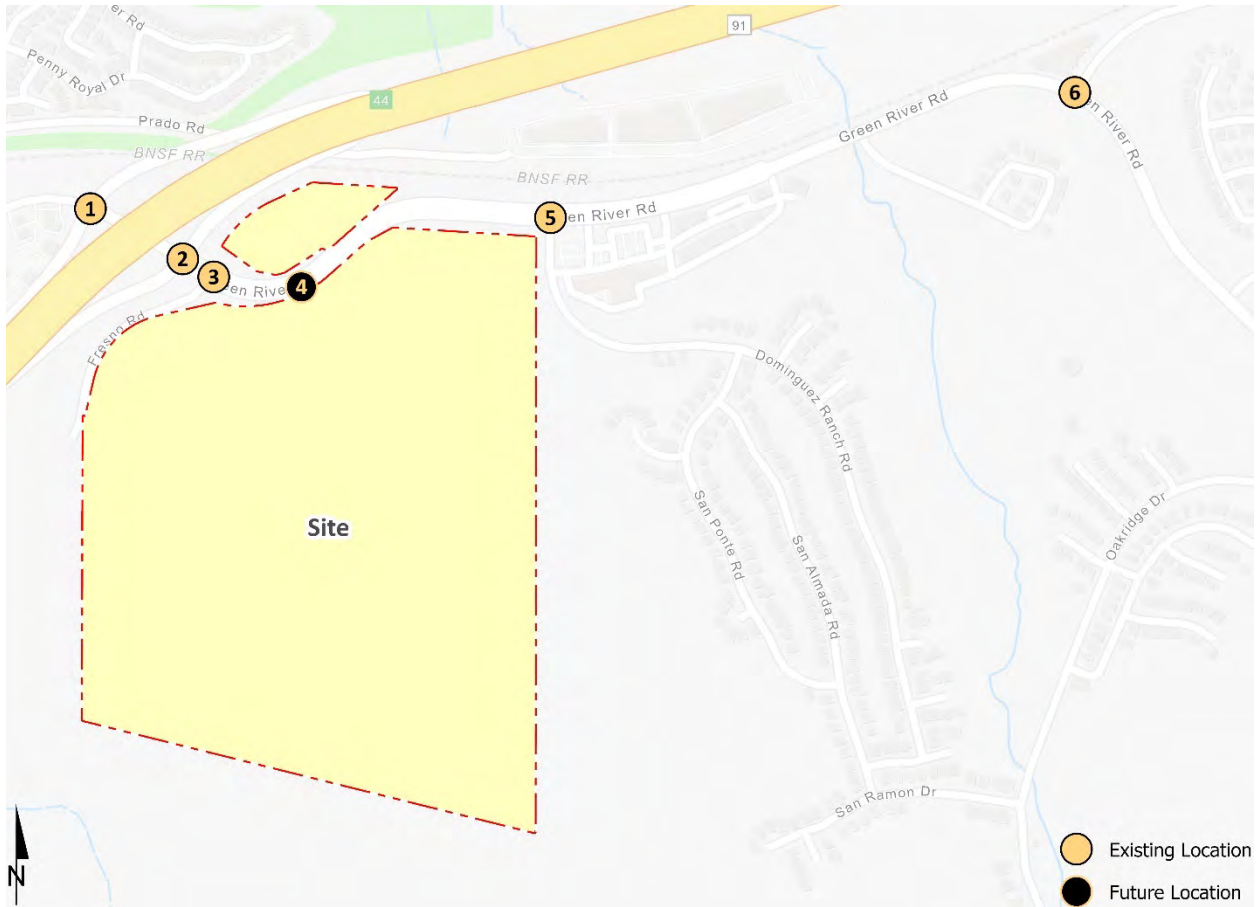
#### 1.3.2 E+P CONDITIONS

The E+P analysis determines any potential circulation system deficiencies that would occur on the existing roadway system in the scenario of the Project (Phase 1, Phase 2, and Project Buildout) being placed upon Existing conditions.

#### 1.3.2 OPENING YEAR CUMULATIVE (2026) CONDITIONS

The Opening Year Cumulative (2026) conditions analysis determines the potential near-term cumulative circulation system deficiencies. To account for background traffic growth, traffic associated with other known cumulative development projects in conjunction with an ambient growth from Existing (2023) conditions of 6.12% is included for Opening Year Cumulative (2026) traffic conditions. This comprehensive list was compiled from information provided by both the City of Corona and County of Riverside and is consistent with other recent studies in the study area. Opening Year Cumulative (2026) traffic conditions have been evaluated for Phases 1, 2, and Project Buildout.

**EXHIBIT 1-2: STUDY AREA**





**1.3.3 HORIZON YEAR (2045) CONDITIONS**

Traffic projections for Horizon Year Without Project conditions were derived from the Riverside County Transportation Model (RIVCOM). The Horizon Year conditions analysis will be utilized to determine if improvements funded through regional transportation mitigation fee programs, such as the Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF), City of Corona Development Impact Fee (DIF) programs can accommodate the long-range cumulative traffic at the target Level of Service (LOS) identified in the City of Corona (lead agency) General Plan. (4) Other improvements needed beyond the “funded” improvements (such as localized improvements to non-TUMF or non-DIF) are identified as such. Each of these regional transportation fee programs are discussed in more detail in Section 8 Local and Regional Funding Mechanisms.

**1.4 STUDY AREA**

To ensure that this TA satisfies the City of Corona’s traffic study requirements, Urban Crossroads, Inc. prepared a Project traffic study scoping package for review by City of Corona staff prior to the preparation of this report. This agreement provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology. The agreement approved by the County is included in Appendix 1.1 of this TA.

**1.4.1 INTERSECTIONS**

The 6 study area intersections shown on Exhibit 1-3 and listed in Table 1-1 were selected for evaluation in this TA based on consultation with City of Corona staff. At a minimum, the study area includes intersections where the Project is anticipated to contribute 50 or more peak hour trips per the City’s traffic study guidelines. (1) The “50 peak hour trip” criteria represent a minimum number of trips at which a typical intersection would have the potential to be substantively affected by a given development proposal. The 50 peak hour trip criterion is a traffic engineering rule of thumb that is accepted and widely used within the City of Corona and throughout Riverside County for estimating a potential area of influence (i.e., study area).

**TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS**

#	Intersection Location	Jurisdiction	CMP?
1	Green River Rd. & SR-91 Westbound Ramps	Caltrans, Corona	No
2	Green River Rd. & SR-91 Eastbound Ramps	Caltrans, Corona	No
3	Fresno Rd. & Green River Rd.	Corona	No
4	Street A & Green River Rd. - Future Intersection	Corona	No
5	Dominguez Ranch Rd. & Green River Rd.	Corona	No
6	Green River Rd. & Palisades Dr.	Corona	No

The intent of a Congestion Management Program (CMP) is to more directly link land use, transportation, and air quality, thereby prompting reasonable growth management programs that will effectively utilize new transportation funds, alleviate traffic congestion and related deficiencies, and improve air quality. The County of Riverside CMP became effective with the passage of Proposition 111 in 1990 and updated most recently updated in 2019 as part of the Riverside County Long Range Transportation Study. The Riverside County Transportation Commission (RCTC) adopted the 2019 CMP for the County of Riverside in December 2019. (3) CMP intersections are identified in Table 1-1. There are no study area intersections identified as a Riverside County CMP facility.

**1.4.2 ROADWAY SEGMENTS**

At the request of City staff, daily roadway volume-to-capacity (v/c) has been evaluated for the following roadway segments list in Table 1-2:

**TABLE 1-2: ROADWAY SEGMENT ANALYSIS LOCATIONS**

#	Roadway Segments
1	Green River Rd. - SR-91 Eastbound Ramps to Fresno Rd.
2	Green River Rd. - Fresno Rd. to Street A
3	Green River Rd. - Street A to Dominguez Ranch Rd.
4	Green River Rd. - Dominguez Ranch Rd. to Palisades Dr.

**1.5 DEFICIENCIES**

This section provides a summary of deficiencies by analysis scenario. Section 2 *Methodologies* provides information on the methodologies used in the analysis and Section 3 *Area Conditions*, Section 5 *E+P Traffic Conditions*, Section 6 *Opening Year Cumulative (2026) Conditions*, and Section 7 *Horizon Year (2045) Traffic Conditions* includes the detailed analysis. A summary of LOS results for all analysis scenarios is presented in Table 1-3 for intersections and Table 1-4 for roadway segments.

**1.5.1 EXISTING (2023) CONDITIONS**

The study area intersections are currently operating at an acceptable LOS during the peak hours with the exception of the following intersections:

- Green River Rd. & SR-91 Westbound Ramps (#1) – AM peak hour only
- Green River Rd. & SR-91 Eastbound Ramps (#2) – AM peak hour only
- Fresno Rd. & Green River Rd. (#3) – AM peak hour only

The AM peak hour deficiency is due to the congestion on the SR-91 Freeway during the morning commute period. As a result, there is an existing queue starting with the northbound left turn movement at the SR-91 Westbound Ramps extending southeast to just east of Dominguez Ranch Road. Additional discussion is provided in Section 3.6 *Existing (2023) Intersection Operations Analysis* of this report.

**TABLE 1-3: SUMMARY OF INTERSECTION LOS**

# Intersection	Existing (2023)		E+P (Phase 1)		E+P (Phase 2)		E+P (Buildout)		2026 Without Project		2026 With Project (Phase 1)		2026 With Project (Phase 2)		2026 With Project (Buildout)		2045 Without Project		2045 With Project	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1 Green River Rd. & SR-91 Westbound Ramps	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
2 Green River Rd. & SR-91 Eastbound Ramps	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
3 Fresno Rd. & Green River Rd.	●	●	N/A	N/A	N/A	N/A	N/A	N/A	●	●	N/A	N/A	N/A	N/A	N/A	N/A	●	●	N/A	N/A
4 Street A & Green River Rd.	N/A	N/A	●	●	●	●	●	●	N/A	N/A	●	●	●	●	●	●	N/A	N/A	●	●
5 Dominguez Ranch Rd. & Green River Rd.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
6 Green River Rd. & Palisades Dr.	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●

● = A - D   ● = E   ● = F

**TABLE 1-4: SUMMARY OF ROADWAY SEGMENT LOS**

# Roadway Segment	Existing (2023)	E+P (Phase 1)	E+P (Phase 2)	E+P (Buildout)	2026 Without Project	2026 With Project (Phase 1)	2026 With Project (Phase 2)	2026 With Project (Buildout)	2045 Without Project	2045 With Project
	AM	AM	AM	AM	AM	AM	AM	AM	AM	AM
1 Green River Rd., SR-91 Eastbound Ramps to Fresno Rd.	●	●	●	●	●	●	●	●	●	●
2 Green River Rd., Fresno Rd. to Street A	●	●	●	●	●	●	●	●	●	●
3 Green River Rd., Street A to Dominguez Ranch Rd.	●	●	●	●	●	●	●	●	●	●
4 Green River Rd., Dominguez Ranch Rd. to Palisades Dr.	●	●	●	●	●	●	●	●	●	●

● = A - D   ● = E   ● = F



### **1.5.2 E+P CONDITIONS**

The same study area intersections are anticipated to continue to operate at an unacceptable LOS during the peak hours under E+P (Phase 1), E+P (Phase 2), and E+P (Project Buildout) traffic conditions, consistent with Existing (2023) traffic conditions. As noted, the queuing issues are associated with SR-91 Freeway Westbound traffic that is unable to access the freeway due to insufficient capacity on the freeway mainline. As such, additional capacity enhancements to a built out Green River Road would not improve existing freeway congestion and would therefore not reduce the number of queued vehicles waiting to access the SR-91 Freeway Westbound. Adding lanes along Green River Road was considered, however, any improvements to Green River Road would also require additional receiving lanes on the bridge deck over the SR-91 Freeway and onto the SR-91 Westbound on-ramp in order to adequately serve queued vehicles.

Congestion along Green River Road is not anticipated to improve until such time when capacity enhancements are made to the SR-91 Westbound Freeway to support the morning commute traffic and allow for unimpeded SR-91 Westbound on-ramp traffic at Green River Road to enter the SR-91 Freeway.

### **1.5.3 OPENING YEAR CUMULATIVE (2026) CONDITIONS**

The same study area intersections are anticipated to continue to operate at an unacceptable LOS during the peak hours under Opening Year Cumulative (2026) Without Project consistent with the locations identified under Existing traffic conditions. There are no additional study area intersections anticipated to operate at an unacceptable LOS with the addition of Project (Phase 1), Project (Phase 2), and Project (Project Buildout) traffic.

### **1.5.4 HORIZON YEAR (2045) CONDITIONS**

The same study area intersections are anticipated to continue to operate at an unacceptable LOS during the peak hours under Horizon Year (2045) Without Project traffic conditions consistent with the locations identified under Existing traffic conditions. There are no additional study area intersections anticipated to operate at an unacceptable LOS with the addition of Project Buildout traffic.

## 1.6 RECOMMENDATIONS

The following recommendations are based on the minimum improvements needed to accommodate site access and maintain acceptable peak hour operations for the proposed Project. The site adjacent recommendations are shown on Exhibit 1-3 for both Phase 1 and Phase 2.

### *Phase 1*

The following recommendations are based on the minimum improvements needed to accommodate site access for Phase 1.

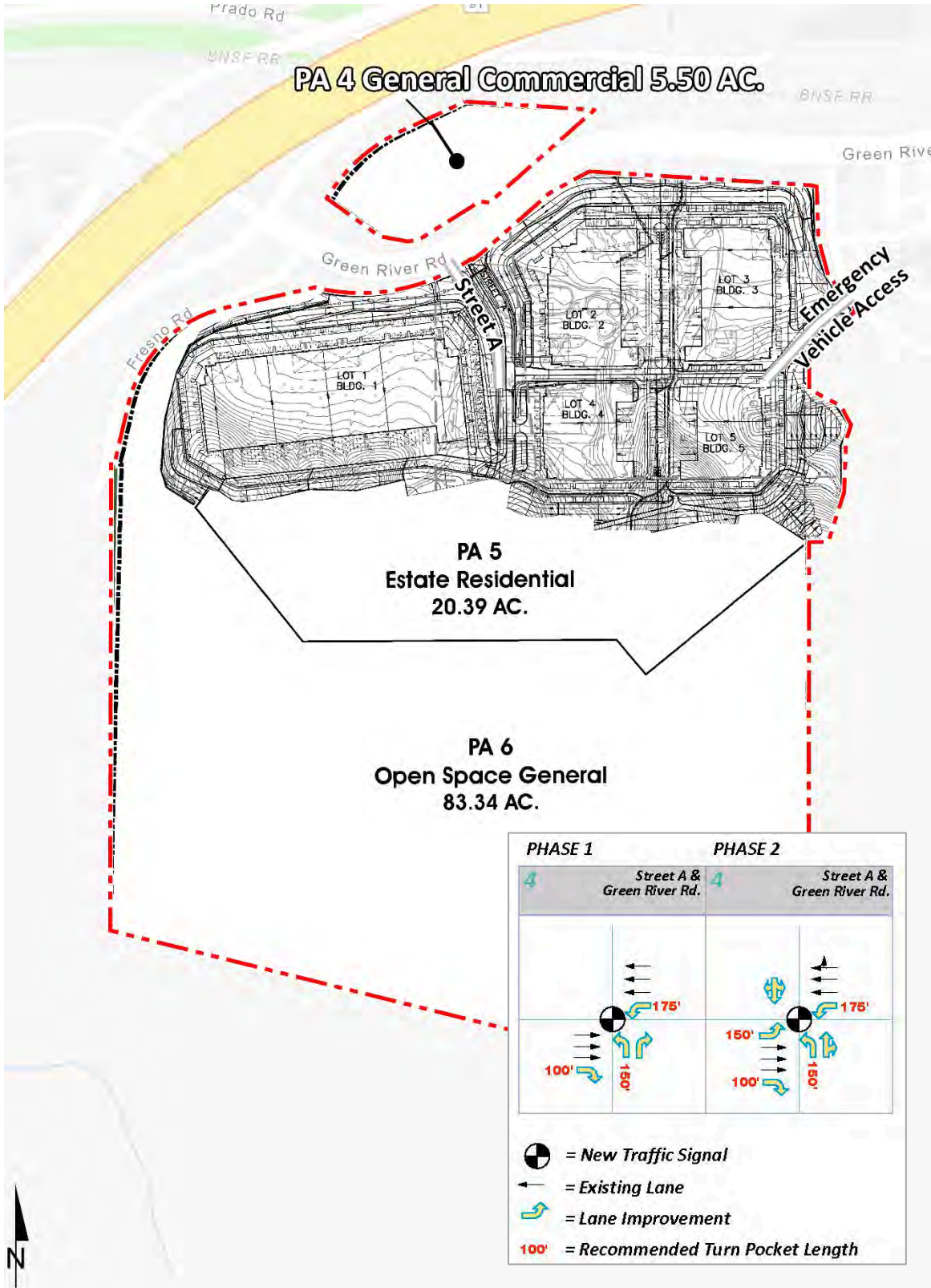
**Recommendation 1 – Street A & Green River Road (#4)** – The following improvements are necessary to accommodate site access:

- Prior to issuance of first occupancy permits in PAs 1, 2, and 3, the Developer of PAs 1, 2, and 3 to install a traffic signal.
- Prior to issuance of first occupancy permits in PAs 1, 2, and 3, the Developer of PAs 1, 2, and 3 to construct a northbound left turn lane with a minimum of 150-feet of storage and right turn lane. It should be noted, the right turn lane will be striped to a shared through-right turn lane when the north leg of the intersection is developed (Phase 2).
- Prior to issuance of first occupancy permits in PAs 1, 2, and 3, the Developer of PAs 1, 2, and 3 to construct an eastbound right turn with a minimum of 100-feet of storage.
- Prior to issuance of first occupancy permits in PAs 1, 2, and 3, the Developer of PAs 1, 2, and 3 to modify the existing median along Green River Road to provide a westbound left turn lane with a minimum of 175-feet of storage.

**Recommendation 2 – Green River Road** is an east-west oriented roadway that bisects the Project. Construct Green River Road to its ultimate General Plan roadway half-section as a Major Arterial (right-of-way varies from 118-feet to as wide as 200-feet, ultimate width to be determined at the time of Precise Plan Implementation for the adjacent Planning Areas). However, the ultimate Green River Road improvement width is constrained in the area where a wildlife crossing occurs near Fresno Road and pursuant to Western Riverside County MSHCP Figure 7-1, Green River Road widening in this area has an MSCHP coverage limitation to a width of 118-feet. Roadway, curb and gutter, sidewalk, and landscaping improvements on the south side of Green River Road shall be made by the Developer of PAs 1, 2, and 3 as required by the final Conditions of Approval for the Project and applicable Specific Plan and City of Corona standards.

Improvements to Green River Road will include 6 lanes of travel (3 lanes in each direction), and applicable acceleration and deceleration lanes, Class II (on-street, striped) bike lanes, 10-foot parkway on either side which will consist of a 5-foot sidewalk and 5-foot landscaped area, and a raised median, that is partially landscaped and partially hardscaped, that could accommodate a left turn pocket.

**EXHIBIT 1-3: SITE ACCESS RECOMMENDATIONS**



**Recommendation 3 – Street A** is a north-south oriented roadway that bisects the Business Park industrial component of the Project. Construct Street A to its ultimate section as a Private Collector (89-foot right-of-way, 65-foot curb-to-curb). Improvements to Street A will include a 12-foot parkway at the entry to Green River Road, which will accommodate a 5-foot (minimum) sidewalk on either side of the street. An 8-foot raised median curb will be accommodated at Green River Road on Street A. However, Street A will narrow to have a minimum 64-foot right-of-way with a 44-foot curb-to-curb width (will not include a raised median) and a 10-foot parkway. The 10-foot parkway will include a 5-foot-wide (minimum) sidewalk on either side of the street. Roadway, curb and gutter, sidewalk, and landscaping improvements shall be made as required by the final Conditions of Approval for the Project and applicable Specific Plan and City of Corona standards.

On-site traffic signing and striping should be implemented agreeable with the provisions of the California Manual on Uniform Traffic Control Devices (CA MUTCD) and in conjunction with detailed construction plans for the Project site.

Sight distance at each project access point should be reviewed with respect to standard California Department of Transportation (Caltrans) and City of Corona sight distance standards at the time of preparation of final grading, landscape, and street improvement plans.

#### *Phase 2*

The following recommendations are based on the minimum improvements needed to accommodate site access for Phase 2.

**Recommendation 4 – Street A & Green River Road (#4)** – The following improvements are necessary to accommodate site access:

- Prior to issuance of first occupancy permits in PA 4, the Developer of PA 4 to construct a southbound shared left-through-right turn lane.
- Prior to issuance of first occupancy permits in PA 4, the Developer of PA 4 to modify the existing median along Green River Road to provide an eastbound left turn lane with a minimum of 150-feet of storage.

**Recommendation 5 – Green River Road** is an east-west oriented roadway that bisects the Project. Green River Road is constructed to its ultimate General Plan roadway cross-section. However, curb and gutter improvements on the north side of Green River Road shall be made by the Developer of PA 4 in order to accommodate site access. Other curb and gutter, sidewalk, and landscaping improvements adjacent to the Project shall be made as required by the final Conditions of Approval for the Project and applicable City of Corona standards.

#### *Project Buildout*

All Project site adjacent and site access recommendations will be in place by Phase 2. As such, there are no additional on-site recommendations for Project Buildout.

## 2 METHODOLOGIES

This section of the report presents the methodologies used to perform the traffic analyses summarized in this report. The methodologies described are consistent with City of Corona's Traffic Study Guidelines.

### 2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors, such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

### 2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The 6<sup>th</sup> Edition [Highway Capacity Manual](#) (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. (4) The HCM uses different procedures depending on the type of intersection control.

#### 2.2.1 SIGNALIZED INTERSECTIONS

The City of Corona and Caltrans require signalized intersection operations analysis based on the methodology described in the HCM. (4) Intersection LOS operations are based on an intersection's average control delay. Control delays include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 2-1.

**TABLE 2-1: SIGNALIZED INTERSECTION LOS THRESHOLDS**

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0 <sup>1</sup>
Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00	A
Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00	B
Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00	C
Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00	D
Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00	E
Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up	F

Source: HCM, 6th Edition

<sup>1</sup> If V/C is greater than 1.0 then LOS is F per HCM.

Consistent with the Riverside County CMP and City of Corona traffic study guidelines, a saturation flow rate of 1,900 vehicles per hour green per lane (vphgpl) has been utilized for all intersections for all scenarios.

The traffic modeling and signal timing optimization software package Synchro (Version 11) has been utilized to analyze signalized intersections. Synchro is a macroscopic traffic software program that is based on the signalized intersection capacity analysis as specified in the HCM. Macroscopic level models represent traffic in terms of aggregate measures for each movement at the study intersections. Equations are used to determine measures of effectiveness such as delay and queue length. The level of service and capacity analysis performed by Synchro takes into consideration optimization and coordination of signalized intersections within a network.

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15-minute volumes. Customary practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g.,  $PHF = \frac{[Hourly Volume]}{[4 \times Peak\ 15\text{-minute\ Flow\ Rate}]}$ ). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for all analysis scenarios. Per the HCM,



PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. (4)

**2.2.2 UNSIGNALIZED INTERSECTIONS**

The City of Corona requires the operations of unsignalized intersections be evaluated using the methodology described in the HCM. (4) The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2). At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. Delay for the intersection is reported for the worst individual movement at a two-way stop-controlled intersection. For all-way stop controlled intersections, LOS is computed for the intersection as a whole (average delay).

**TABLE 2-2: UNSIGNALIZED INTERSECTION LOS THRESHOLDS**

Description	Average Control Delay (Seconds), V/C ≤ 1.0	Level of Service, V/C ≤ 1.0 <sup>1</sup>
Little or no delays.	0 to 10.00	A
Short traffic delays.	10.01 to 15.00	B
Average traffic delays.	15.01 to 25.00	C
Long traffic delays.	25.01 to 35.00	D
Very long traffic delays.	35.01 to 50.00	E
Extreme traffic delays with intersection capacity exceeded.	> 50.00	F

Source: HCM, 6th Edition

<sup>1</sup> If V/C is greater than 1.0 then LOS is F per HCM.

**2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY**

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or determine the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TA uses the signal warrant criteria presented in the latest edition of the Caltrans California Manual on Uniform Traffic Control Devices (CA MUTCD). (5)

The signal warrant criteria for Existing study area intersections are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. (5) Specifically, this TA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for existing traffic conditions and for all future analysis scenarios for existing unsignalized intersections. Warrant 3 is appropriate to use for this TA because it provides specialized warrant criteria for intersections with rural characteristics. For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection. Urban warrants have been used

as posted speed limits on the major roadways with unsignalized intersections are 40 miles per hour or below and rural warrants have been used where speeds exceed 40 miles per hour.

Future intersections that do not currently exist have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets. Similarly, the speed limit has been used as the basis for determining the use of Urban and Rural warrants. Traffic signal warrant analyses were performed for the following study area intersection shown in Table 2-3:

**TABLE 2-3: TRAFFIC SIGNAL WARRANT ANALYSIS LOCATIONS**

#	Intersection Location	Jurisdiction
4	Street A & Green River Rd. - Future Intersection	Corona

Although unsignalized, the study area intersection of Fresno Road & Green River Road (#3) is restricted access. As such, traffic signal warrants have not been evaluated for this location.

The Existing conditions traffic signal warrant analysis is presented in the subsequent section, Section 3 *Area Conditions* of this report. The traffic signal warrant analyses for future conditions are presented in Section 5 *E+P Conditions*, Section 6 *Opening Year Cumulative (2026) Traffic Conditions*, and Section 7 *Horizon Year (2045) Traffic Conditions* of this report. It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with LOS. An intersection may satisfy a signal warrant condition and operate at or above acceptable LOS or operate below acceptable LOS and not meet a signal warrant.

## 2.4 ROADWAY SEGMENT CAPACITY ANALYSIS

Roadway segment operations have been evaluated using the daily roadway segment capacities for an Urban Arterial (which is the classification of Green River Road) as summarized in Table 2-4.

**TABLE 2-4: ROADWAY SEGMENT CAPACITIES**

Roadway Classification/Lanes	City of Corona Capacity <sup>1</sup>
Urban Arterial, 6-lanes	53,900

<sup>1</sup> Based on LOS E maximum two-way traffic volume (ADT) thresholds from the City of Corona for an Urban Arterial.

These roadway capacities are “rule of thumb” estimates for planning purposes and are affected by such factors as intersections (spacing, configuration and control features), degree of access control, roadway grades, design geometrics (horizontal and vertical alignment standards), sight distance, vehicle mix (truck and bus traffic) and pedestrian bicycle traffic. As such, where the ADT based roadway segment analysis indicates a deficiency (unacceptable LOS), a review of the more detailed peak hour intersection analysis and progression analysis are undertaken.



The more detailed peak hour intersection analysis explicitly accounts for factors that affect roadway capacity. Therefore, for the purposes of this analysis, roadway segment widening is typically only recommended if the peak hour intersection analysis indicates the need for additional through lanes.

## 2.5 FREEWAY OFF-RAMP QUEUING ANALYSIS

This TA 95<sup>th</sup> percentile queuing of vehicles has been assessed at the off-ramps to determine potential queuing deficiencies at the freeway ramp intersections at the SR-91 Freeway at Green River Road interchange. Specifically, the queuing analysis is utilized to identify any potential queuing and “spill back” onto the SR-91 Freeway mainline from the off-ramps.

The traffic progression analysis tool and HCM intersection analysis program, Synchro, has been used to assess the potential deficiencies/needs of the intersections with traffic added from the proposed Project. Storage (turn-pocket) length recommendations at the ramps have been based upon the 95<sup>th</sup> percentile queue resulting from the Synchro progression analysis. The footnote from the Synchro output sheets indicates if the 95<sup>th</sup> percentile cycle exceeds capacity. Traffic is simulated for two complete cycles of the 95<sup>th</sup> percentile traffic in Synchro in order to account for the effects of spillover between cycles. In practice, the 95<sup>th</sup> percentile queue shown will rarely be exceeded and the queues shown with the footnote are acceptable for the design of storage bays. The 95<sup>th</sup> percentile queue is derived from the average queue plus 1.65 standard deviations. The 95<sup>th</sup> percentile queue is not necessarily ever observed, it is simply based on statistical calculations.

## 2.6 MINIMUM ACCEPTABLE LEVELS OF SERVICE (LOS)

Minimum Acceptable LOS and associated definitions of intersection deficiencies have been obtained from each of the applicable surrounding jurisdictions.

### 2.6.1 CITY OF CORONA

Per the City of Corona General Plan, intersections should maintain Level of Service D or better on arterial streets in the City. Develop and maintain a list of locations where LOS E or LOS F are considered acceptable and would be exempt from this level of service policy. (6) Considerations for LOS exemption includes lack of available right-of-way, environmental constraints, or other modes of travel (such as bicycle or pedestrians).

Key locations identified for LOS exemption are:

- Green River Road at SR-91
- Lincoln Avenue at SR-91
- Main Street at SR-91
- Sixth Street, between East Grand Boulevard and West Grand Boulevard
- McKinley Avenue at SR-91
- Hidden Valley Parkway at I-15
- Magnolia Avenue at I-15
- Ontario Avenue at I-15
- El Cerrito Road at I-15

- Cajalco Road at I-15
- Weirick Road at I-15
- Other locations as approved by the City

For the purposes of this traffic analysis, LOS D has been utilized as the acceptable LOS standard for study area intersections, including the SR-91 Freeway/Green River Road interchange in order to conduct a conservative analysis. However, the City's General Plan identifies an LOS exemption at Green River Road at the SR-91 Freeway.

## **2.6.2 CALTRANS**

Senate Bill 743 (SB 743), approved in 2013, endeavors to change the way transportation impacts will be determined according to the California Environmental Quality Act (CEQA). The Office of Planning and Research (OPR) has recommended the use of vehicle miles traveled (VMT) as the replacement for automobile delay-based LOS. Caltrans acknowledges automobile delay will no longer be considered a CEQA impact for development projects and will use VMT as the metric for determining impacts on the state highway system. However, LOS D has been utilized as the target LOS for Caltrans facilities, consistent with the County of Riverside and City of Corona.

## **2.7 DEFICIENCY CRITERIA**

### **2.7.1 CITY OF CORONA**

This section outlines the methodology used in this analysis related to identifying circulation system deficiencies. The following deficiency criteria have been utilized. To determine whether the addition of project-related traffic at a study intersection would result in a deficiency, the following will be utilized:

- A deficiency occurs at study area intersections if the pre-Project condition is at or better than LOS D (i.e., acceptable LOS), and the addition of project trips causes the peak hour LOS of the study area intersection to operate at unacceptable LOS (i.e., LOS E or F). For intersections currently operating at unacceptable LOS (LOS E or F), a deficiency will occur if the Project contributes peak hour trips to pre-project traffic conditions.

### 3 AREA CONDITIONS

This section provides a summary of the existing circulation network, the City of Corona General Plan Circulation Network, and a review of existing peak hour intersection operations, traffic signal warrant, roadway segment, and off-ramp queuing analyses.

#### 3.1 EXISTING CIRCULATION NETWORK

Pursuant to the scoping agreement with City of Corona staff (Appendix 1.1), the study area includes a total of 6 existing and future intersections as shown previously on Exhibit 1-2, where the Project is anticipated to contribute 50 or more peak hour trips. Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

#### 3.2 CITY OF CORONA GENERAL PLAN CIRCULATION ELEMENTS

As noted previously, the Project site is located within the City of Corona. The roadway classifications and planned (ultimate) roadway cross-sections of the major roadways within the study area, as identified on City of Corona General Plan Circulation Element, are described subsequently. Exhibit 3-2 shows the City of Corona General Plan Circulation Element and Exhibit 3-3 illustrates the City of Corona General Plan roadway cross-sections.

**Major Arterials (6 Lane)** are six-lane divided roadways (divided by a 14-foot raised median) with a 130-foot right-of-way and 106-foot curb-to-curb measurement. The following study area roadway is classified as a Major Arterial (6 Lane):

- Green River Road, from SR-91 Freeway to Palisades Drive

**Major Arterials (4 Lane)** are four-lane divided roadways (divided by a 14-foot raised median) with a 106-foot right-of-way and 82-foot curb-to-curb measurement. The following study area roadways are classified as a Major Arterial (4 Lane):

- Green River Road, east of Palisades Drive

**Collector Streets** are two-lane undivided roadways with a 68-foot right-of-way and 44-foot curb-to-curb measurement. The following study area roadway within the City of Corona are classified as Collector Streets:

- Dominguez Ranch Road
- Palisades Drive

**EXHIBIT 3-1: EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS**

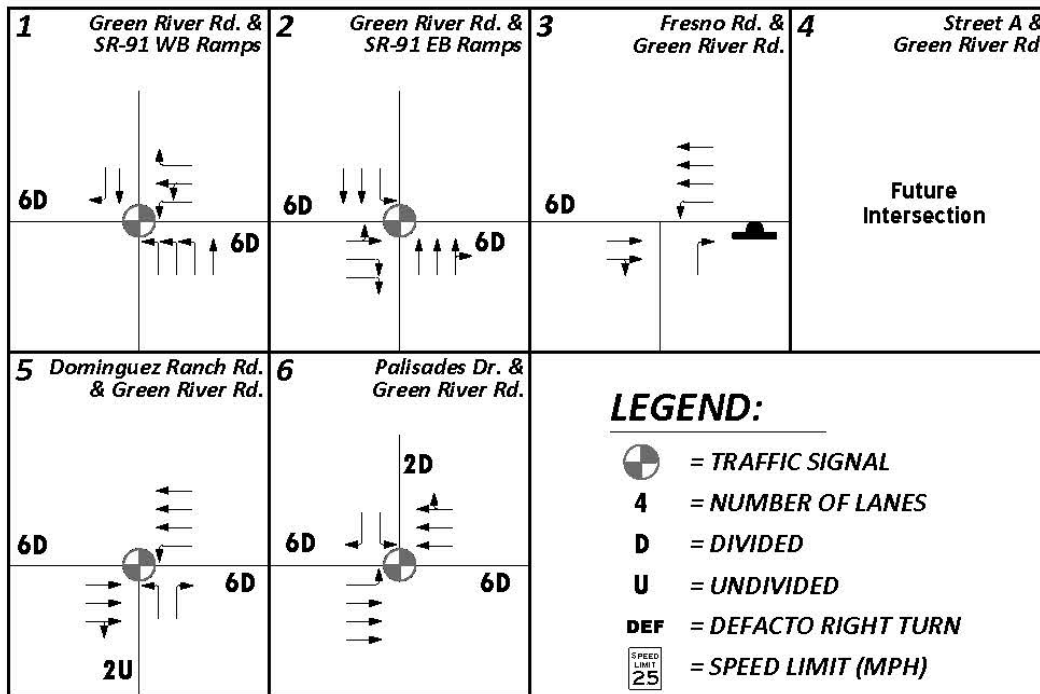
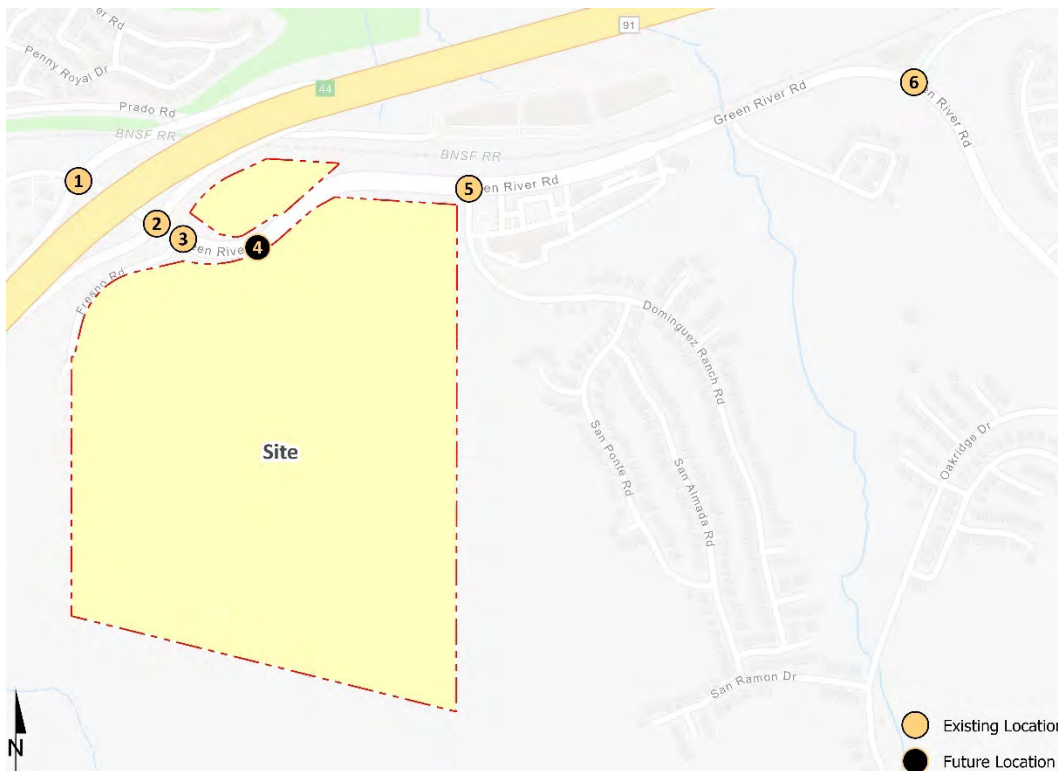
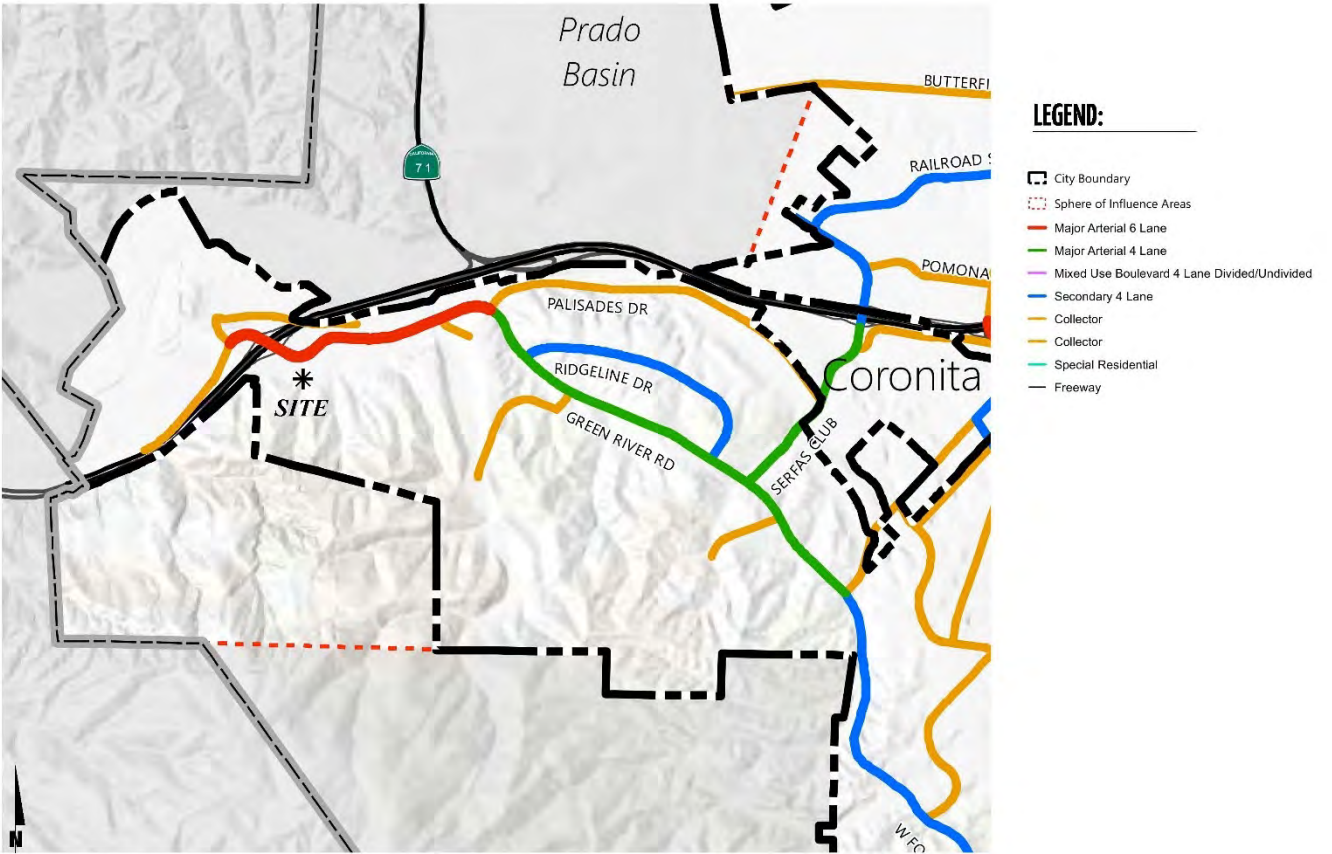
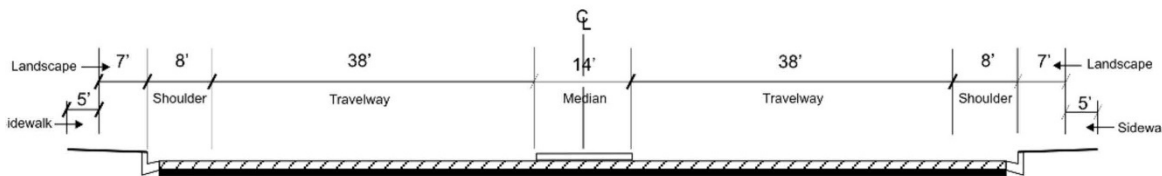


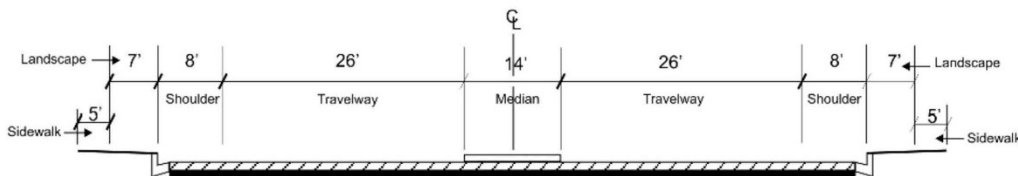
EXHIBIT 3-2: CITY OF CORONA GENERAL PLAN CIRCULATION ELEMENT



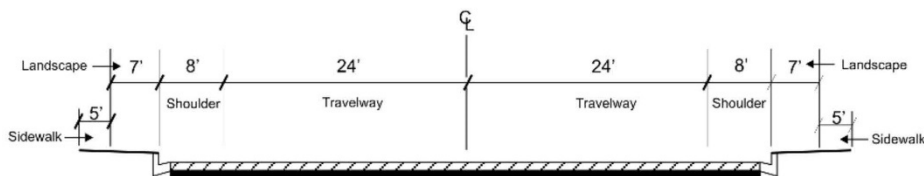
**EXHIBIT 3-3: CITY OF CORONA GENERAL PLAN ROADWAY CROSS-SECTIONS (PAGE 1 OF 2)**



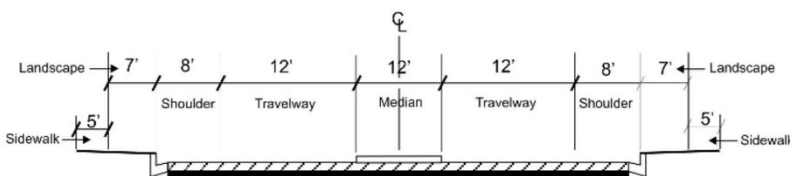
**Major Arterial (6 lanes)  
R.W. 130  
Roadway 106**



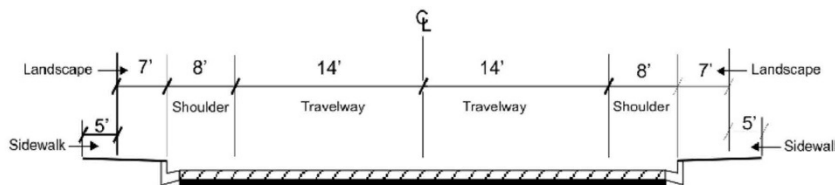
**Major Arterial (4 lanes)  
R.W. 106  
Roadway 82**



**Secondary (4 lanes)  
R.W. 88  
Roadway 64**

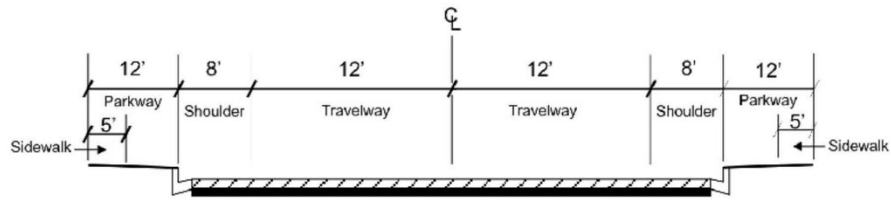


**Divided Collector (2 lanes)  
R.W. 76  
Roadway 52**



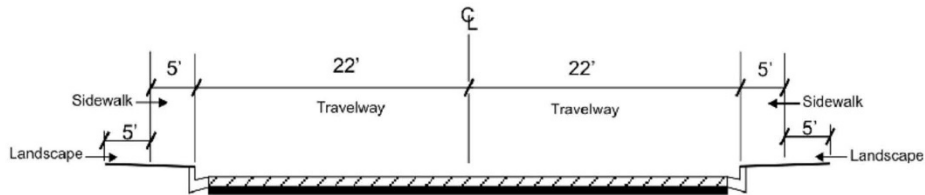
**Collector (2 lanes)  
R.W. 68  
Roadway 44**

**EXHIBIT 3-3: CITY OF CORONA GENERAL PLAN ROADWAY CROSS-SECTIONS (PAGE 2 OF 2)**

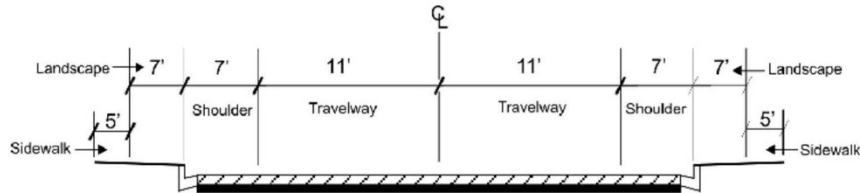


**Local Street  
R.W. 64  
Roadway 40**

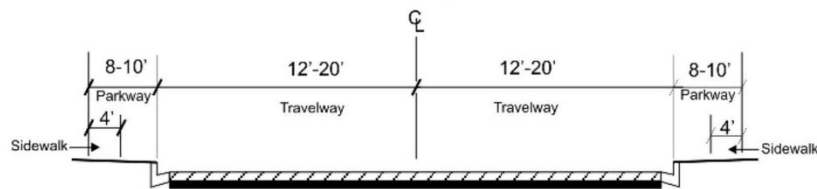
Note: See local residential street Planning Policy 6.1.10



**Local Industrial  
R.W. 64  
Roadway 44**

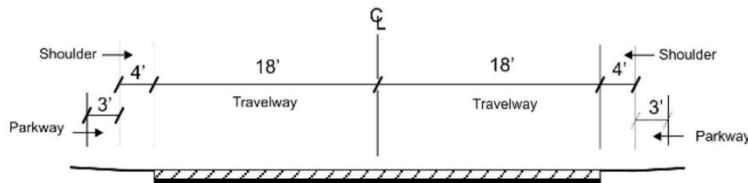


**Cul-De-Sac  
R.W. 60  
Roadway 36**



**Private Residential Street  
R.W. 40-60  
Roadway 24-40**

Note: See local residential street Planning Policy 6.1.10



**Rural Road (Traffic Volume)  
R.W. 50  
Roadway 36**

Note: See local residential street Planning Policy 6.1.10



### 3.3 BICYCLE & PEDESTRIAN FACILITIES

The City of Corona existing and proposed bike trails are shown on Exhibit 3-4. There are existing Class II bike lanes along Green River Road from the SR-91 Freeway to east of Palisades Drive. Class II bike lanes are striped and signed, on-street bike lanes. Class II bike lanes are also striped along Palisades Drive. The Class II bike lanes provide connections to the Santa Ana River Trail which is a Class I bike path. Class I facilities are off-road bicycle paths. Exhibit 3-5 illustrates the existing pedestrian facilities, including sidewalks and crosswalks. As shown on Exhibit 3-5, there are pedestrian and bicycle facilities within the vicinity of the Project site. Field observations conducted in 2023 indicate nominal pedestrian and bicycle activity within the study area.

### 3.4 TRANSIT SERVICE

The study area is currently served by Riverside Transit Agency (RTA). RTA Route 200 runs along the SR-91 Freeway but does not provide bus service/stops within the study area. Specifically, RTA Route 200 is the commuter link express connecting Anaheim (Disneyland/Village at Orange) with the La Sierra Metrolink Station, Riverside-Downtown Metrolink Station, and San Bernardino Downtown Transit Center. The transit services are illustrated on Exhibit 3-6. The City also operates the Corona Cruiser, but there are no routes within the study area. There do not appear to be existing transit routes that could potentially serve the Project. Transit service is reviewed and updated by RTA and the City of Corona periodically to address ridership, budget, and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

### 3.5 EXISTING (2023) TRAFFIC COUNTS

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in May 2023. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

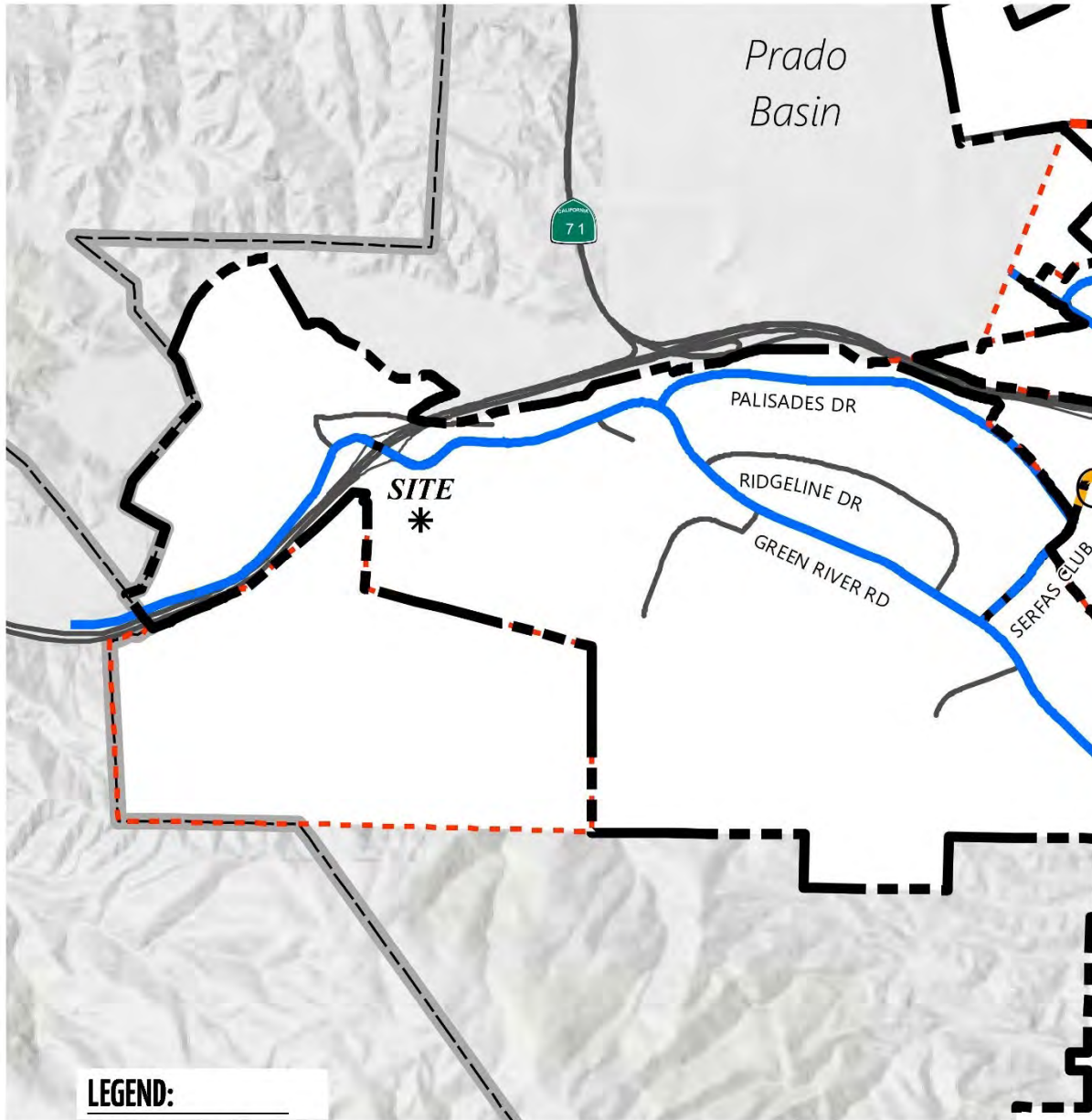
The 2023 weekday AM and weekday PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes and near-by schools were in session and operating on normal schedules. As such, no additional adjustments were made to the traffic counts to establish the baseline condition. The raw manual peak hour turning movement traffic count data sheets are included in Appendix 3.1.

Existing weekday ADT volumes, in actual vehicles, are shown on Exhibit 3-7. Where actual 24-hour tube count data was not available, Existing ADT volumes were based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

$$\text{Weekday PM Peak Hour (Approach Volume + Exit Volume)} \times 12.98 = \text{Leg Volume}$$

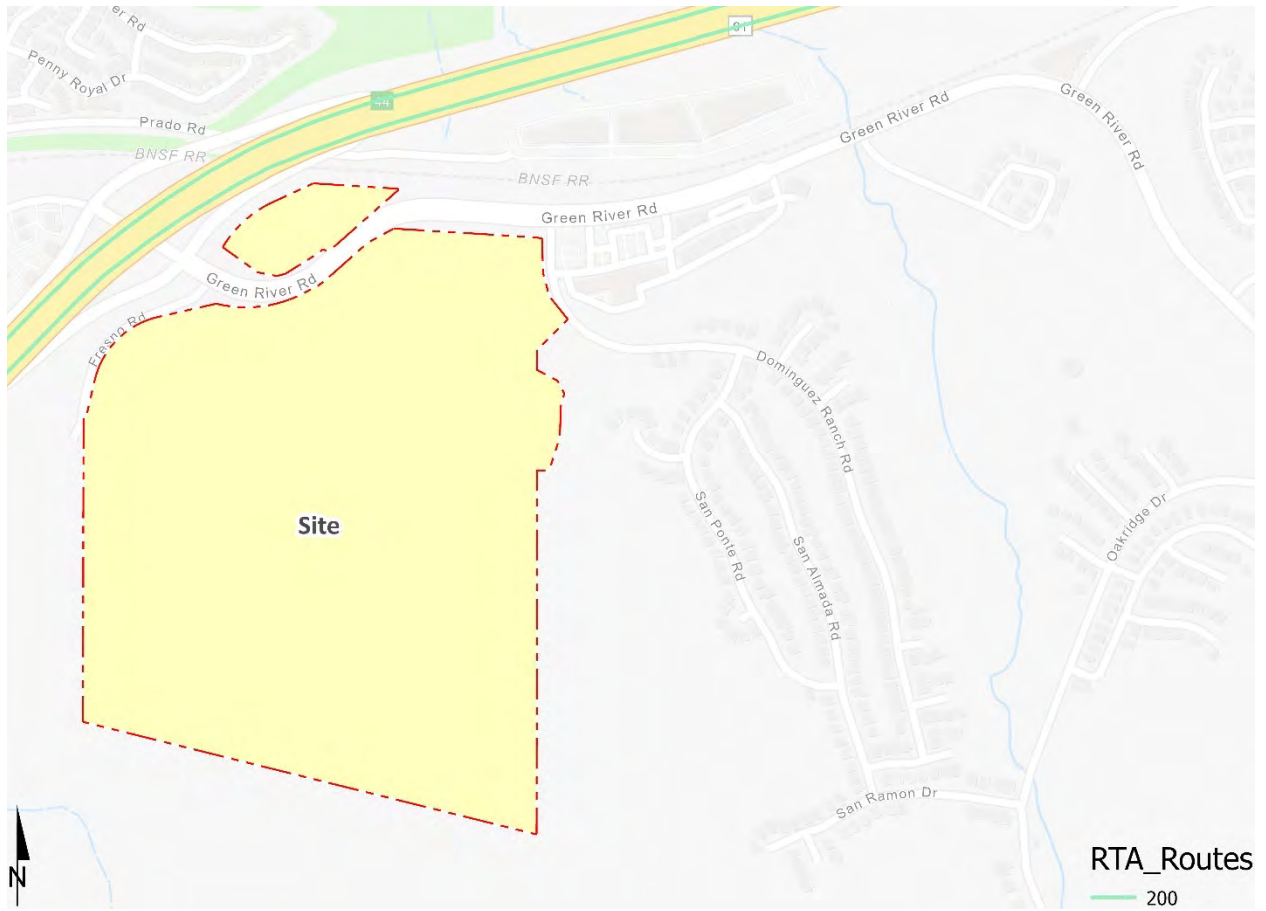


EXHIBIT 3-4: CITY OF CORONA GENERAL PLAN EXISTING AND PROPOSED BIKE TRAILS





**EXHIBIT 3-6: EXISTING TRANSIT ROUTES**



**EXHIBIT 3-7: EXISTING (2023) TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
13,200	5,650	13,400	2,800		28,250		28,250		26,850
256(126) ←	↑ 107(188) ← 3(19) ↑ 19(230)	65(332) ←	176(157) ←		← 1742(434) ↑ 1(1)		← 1743(435)		← 1621(353) ↑ 13(52)
	↓ 1534(295) 185(247) →	79(162) → 1(3) → 179(1411) ↓	1640(380) → 102(54) →	242(1738) → 2(5) ↓	4(3) ↑	246(1741) →		228(1622) → 18(119) ↓	122(82) ↓ 42(43) ↑
5,700	13,400	20,450	25,400	28,250	100	28,250	28,250	28,250	3,750
6	Green River Rd. & Palisades Dr.								
3,350	25,450								
266(63) ↓	↑ 32(17) ← 1406(401)								
77(148) ↓ 198(1529) →									
24,850									

##(##) AM(PM) Peak Hour Intersection Volumes  
## Average Daily Trips

A comparison of the PM peak hour and daily traffic volumes of various roadway segments within the study area indicated that the peak-to-daily relationship is approximately 7.71 percent. As such, the above equation utilizing a factor of 12.98 estimates the ADT volumes on the study area roadway segments assuming a peak-to-daily relationship of approximately 7.71 percent (i.e.,  $1/0.0771 = 12.98$ ) and was assumed to sufficiently estimate ADT volumes for planning-level analyses. Existing weekday peak hour intersection volumes, in actual vehicles, are also shown on Exhibit 3-7.

Volumes reported on the exhibits within this report are expressed in actual vehicles. However, consistent with the City's guidelines, the peak hour intersection operations analysis utilizes passenger car equivalent (PCE) volumes. PCEs allow the typical "real-world" mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in the City's Guidelines. PCE volumes, as used for the peak hour operations analyses for all analysis scenarios, can be found in Appendix 3.1.

At the time traffic counts were collected in 2023, field observations indicated queuing in the westbound direction on Green River Road during the AM peak hour. Specifically, the peak of the queues occurred at approximately 6:30 AM. By 7:00 AM, there was still a queue of vehicles backed up on Westbound Green River Road with the peak queue observed extending approximately 400-feet west of Dominguez Ranch Road. The queuing of vehicles was consistent across all three lanes along Green River Road east of the SR-91 Freeway, however, there was no congestion for through traffic on the Green River Road bridge and west of the SR-91 Freeway. Between 7:00 AM and 7:30 AM, the queue would nearly fully dissipate during each cycle, but would queue up again to just west of Dominguez Ranch Road. However, after 7:30 AM, the queues began to dissipate, and roadway conditions were at free-flow conditions by 9:00 AM. There were no queues observed in either the eastbound or westbound directions along Green River Road during the PM peak period.

The morning peak hour queues along Green River Road are due to congestion along the adjacent SR-91 Freeway Westbound during the morning commute hours. As a result, the intersections along Green River Road experience constrained (congested) flow conditions. These constraints in the form of vehicle queues significantly limit the number of vehicles that cross the stop bar to be physically "counted" during the peak hour conditions. While the traffic counts identify all the vehicles using an intersection during peak hours, they may not fully account for the unconstrained demand at a particular location (during non-congested hours). As such, based on the constrained traffic count data the intersections operate at acceptable LOS or at an LOS better than field observations would suggest. However, based on observations the SR-91 Westbound Ramps, SR-91 Eastbound Ramps, and Green River Road experience heavy queues and congestion during the AM peak hour for the westbound through movements which is a result of northbound left turn traffic at the SR-91 Westbound Ramps who are unable to get onto the SR-91 Freeway (Westbound). The congestion is a result of a number of reasons including, but not limited to, regional and local traffic accessing the SR-91 Freeway in the westbound direction during the peak morning commute period, in conjunction with the lack of receiving lanes and existing congestion on the SR-91 Freeway which cannot accommodate the Westbound on-ramp traffic.



### 3.6 EXISTING (2023) INTERSECTION OPERATIONS ANALYSIS

Existing (2023) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 3-1, which indicates that all of the study area intersections are currently operating at an acceptable LOS during the peak hours, with the exception of the following intersections:

- Green River Rd. & SR-91 Westbound Ramps (#1) – AM peak hour only
- Green River Rd. & SR-91 Eastbound Ramps (#2) – AM peak hour only
- Fresno Rd. & Green River Rd. (#3) – AM peak hour only

Based on the constrained traffic count data described in Section 3.5 of this report used in the analysis software, the intersections operate at acceptable LOS or at an LOS better than field observations would suggest (see Table 3-1). However, based on observations the SR-91 Ramps and Green River Road experience heavy queues and congestion during the AM peak hour for the westbound direction which is a result of vehicles unable to get onto the SR-91 Freeway (Westbound). The congestion is a result of a number of reasons including, but not limited to, regional and local traffic accessing the SR-91 Freeway in the westbound direction during the peak morning commute period, in conjunction with the lack of receiving lanes and existing congestion on the SR-91 Freeway which cannot accommodate the Westbound on-ramp traffic. Table 3-1 reflects the observed congestion based on field observations and acknowledges in the table that operations during the morning peak hour through the SR-91 Freeway interchange and along Green River Road are operating at LOS F. The intersection operations analysis worksheets are included in Appendix 3.2 of this TA.

**TABLE 3-1: INTERSECTION ANALYSIS FOR EXISTING (2023) CONDITIONS**

# Intersection	Traffic Control <sup>2</sup>	Existing (2023)					
		Delay <sup>1</sup> (secs.)			Level of Service		
		AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM
1 Green River Rd. & SR-91 Westbound Ramps	TS	-- <sup>4</sup>	39.5	31.7	<b>F</b>	D	C
2 Green River Rd. & SR-91 Eastbound Ramps	TS	-- <sup>4</sup>	19.2	35.2	<b>F</b>	B	D
3 Fresno Rd. & Green River Rd.	CSS	-- <sup>4,5</sup>	9.1	17.9	<b>F</b>	A	C
4 Street A & Green River Rd.		Future Intersection					
5 Dominguez Ranch Rd. & Green River Rd.	TS	N/A	7.2	9.7	N/A	A	A
6 Green River Rd. & Palisades Dr.	TS	N/A	10.4	5.6	N/A	B	A

**BOLD** = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

<sup>1</sup> Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or

<sup>2</sup> TS = Traffic Signal; CSS = Cross-street Stop

<sup>3</sup> Observed peak hour operations due to regional congestion as a result of capacity limitations to accommodate SR-91 Freeway westbound traffic. Other AM and PM peak hour results are based on peak hour operations analysis using the actual count data collected and applicable analysis software.

<sup>4</sup> SR-91 Westbound Ramps northbound left turn movement, northbound through movement at SR-91 Eastbound Ramps, and westbound through movement deficiencies at Dominguez Ranch Road that occur during the morning peak commute hours is due to the regional congestion along Green River Road.

<sup>5</sup> The congestion along Green River Road prevents vehicles from turning left onto Fresno Road, which results in an unacceptable LOS during the AM peak hour.

### 3.7 EXISTING (2023) TRAFFIC SIGNAL WARRANTS ANALYSIS

All existing unsignalized study area intersections currently have restricted access, which are not suitable locations for signalization. As such, traffic signal warrants have not been evaluated for Existing (2023) Conditions.

### 3.8 EXISTING (2023) ROADWAY SEGMENT CAPACITY ANALYSIS

Table 3-2 provides a summary of the Existing (2023) conditions roadway segment capacity analysis based on the City of Corona General Plan Roadway Segment Capacity Thresholds identified previously in Table 2-4. As shown in Table 3-2, the study area roadway segments are currently operating at an acceptable LOS based on the City's planning level daily roadway capacity thresholds.

**TABLE 3-2: ROADWAY SEGMENT CAPACITY ANALYSIS FOR EXISTING (2023) CONDITIONS**

#	Roadway	Segment Limits	Roadway Section	LOS Capacity <sup>1</sup>	Existing (2023)		
					Vol	V/C <sup>2</sup>	LOS <sup>3</sup>
1	Green River Rd.	SR-91 Eastbound Ramps to Fresno Rd.	5D	44,917	28,247	0.629	B
2	Green River Rd.	Fresno Rd. to Street A	6D	53,900	28,234	0.524	A
3	Green River Rd.	Street A to Dominguez Ranch Rd.	6D	53,900	28,234	0.524	A
4	Green River Rd.	Dominguez Ranch Rd. to Palisades Dr.	6D	53,900	24,868	0.461	A

<sup>1</sup> These maximum roadway capacities are based on the City's traffic study guidelines and have been interpolated where necessary.

<sup>2</sup> V/C = Volume to Capacity Ratio

<sup>3</sup> LOS = Level of Service

### 3.9 EXISTING (2023) OFF-RAMP QUEUING ANALYSIS

As shown in Table 3-3, there are no movements that are currently experiencing queuing issues during the weekday AM or weekday PM peak 95<sup>th</sup> percentile traffic flows. The only ramp experience queuing issues is the SR-91 Westbound On-Ramp during the AM peak hour only. Worksheets for Existing (2023) traffic conditions off-ramp queuing analysis are provided in Appendix 3.3.

**TABLE 3-3: PEAK HOUR FREEWAY OFF-RAMP QUEUING SUMMARY FOR EXISTING (2023) CONDITIONS**

Intersection	Movement	Available Stacking Distance (Feet)	Existing (2023)			
			95th Percentile Queue (Feet)		Acceptable? <sup>1</sup>	
			AM Peak	PM Peak	AM	PM
Green River Rd. & SR-91 WB Ramps (#1)	WBL	1,555	36	163	Yes	Yes
	WBL/T	1,555	34	164	Yes	Yes
	WBR	500	49	62	Yes	Yes
Green River Rd. & SR-91 EB Ramps (#2)	EBL/T	500	123	98	Yes	Yes
	EBR	1,090	37	416	Yes	Yes

<sup>1</sup> Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

### 3.10 DEFICIENCIES AND IMPROVEMENTS

#### 3.10.1 IMPROVEMENTS TO ADDRESS INTERSECTION DEFICIENCIES

As noted previously, additional capacity enhancements to existing intersections along Green River Road are unlikely to resolve the regional congestion observed during the morning peak commute hours as the queues are due to the inability of vehicles to get onto the SR-91 Freeway Westbound during the morning peak hour. These queuing issues currently occur approximately between 6:30 AM and 8:30 AM and intersections along the Green River Road corridor operate at acceptable LOS during other times of the day. As such, no intersection improvements have been identified.

#### 3.10.2 IMPROVEMENTS TO ADDRESS ROADWAY SEGMENT DEFICIENCIES

All existing study area roadway segments currently operate at an acceptable LOS. Therefore, no improvements have been identified for Existing (2023) traffic conditions.

#### 3.10.3 IMPROVEMENTS TO ADDRESS OFF-RAMP QUEUING DEFICIENCIES

There are no study area off-ramps that currently experience queuing issues. Therefore, no improvements have been identified for Existing (2023) traffic conditions.



## 4 PROJECTED FUTURE TRAFFIC

The Project is proposing an amendment to the previously approved Green River Ranch Specific Plan, a Precise Plan for the Business Park Industrial component of the Project, and a tentative tract map. The Precise Plan includes the development of 746,167 square feet of building space and for the purposes of the TA assumes 634,242 square feet of industrial park use (85% of the overall Business Park Industrial square footage) and 111,925 square feet of high-cube cold storage warehouse use (15% of the overall Business Park Industrial square footage). The Project is proposed to be developed in phases as follows:

- **Phase 1:** 634,242 square feet of Business Park Industrial use and 111,925 square feet of High-Cube Cold Storage Warehouse use (Planning Areas or PAs 1, 2, and 3)
- **Phase 2:** Development in Phase 1 plus up to 19,600 square feet of general commercial uses which for the purposes of the traffic study will be evaluated as a Gas Station with Convenience Market with 12 vehicle fueling positions, 2,500 square feet of Fast-Food Restaurant with Drive-Through Window use, 4,200 square feet of Fine Dining Restaurant use, and 9,500 square feet of High Turnover (Sit-Down) Restaurant use (buildout of PAs 1, 2, and 3 and the addition of PA 4). The land uses and intensities proposed for the retail component were selected in order to conduct a conservative analysis (i.e., evaluate a higher trip generation than 19,600 square feet of general commercial use)
- **Project Buildout:** Development in Phases 1 and 2 plus the addition of 32 Residential Estate Lots (buildout of PAs 1, 2, 3, and 4 and the addition of PA 5)

Specific development plans are not proposed for Planning Areas 4 and 5. Access to the Project site will be provided to Green River Road via Street A and emergency vehicle access will be provided via Dominguez Ranch Road. Project traffic will not use Fresno Road for site access. The Project is anticipated to have an Opening Year of 2026.

### 4.1 PROJECT TRIP GENERATION

#### 4.1.1 PROPOSED PROJECT

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. Trips generated by the Project's proposed land uses have been calculated based on trip generation rates collected by the ITE Trip Generation Manual, 11<sup>th</sup> Edition, 2021 for the following land use codes: (2)

- Industrial Park (ITE Land Use Code 130)
- High-Cube Cold Storage Warehouse (ITE Land Use Code 157)
- Single Family Detached Residential (ITE Land Use Code 210)
- Fine Dining Restaurant (ITE Land Use Code 931)
- High Turnover (Sit-Down) Restaurant (ITE Land Use Code 932)
- Fast-Food Restaurant with Drive-Thru Window (ITE Land Use Code 934)
- Gas Station with Convenience Market (2-4 TSF Market) (ITE Land Use Code 945)

The Project trip generation rates are shown in Table 4-1. The Project is anticipated to generate a total of 4,370 trip-ends per day with 429 AM peak hour trips and 386 PM peak hour trips (actual vehicles), as shown in Table 4-2. Consistent with the City’s guidelines and other traffic studies prepared in the City of Corona, for the purposes of the traffic study, the PCE trip generation has been utilized.

**TABLE 4-1: PROJECT TRIP GENERATION RATES**

Land Use <sup>1</sup>	Units <sup>2</sup>	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
<b>Actual Vehicles:</b>									
Industrial Park <sup>3</sup>	TSF	130	0.275	0.065	0.340	0.075	0.265	0.340	3.370
Passenger Cars (AM=88.2%, PM=88.2%, Daily=83.1%)			0.257	0.043	0.300	0.060	0.240	0.300	2.800
2-Axle Trucks (AM=2.0%, PM=2.0%, Daily=2.8%)			0.003	0.004	0.007	0.003	0.004	0.007	0.095
3-Axle Trucks (AM=2.4%, PM=2.4%, Daily=3.5%)			0.004	0.005	0.008	0.003	0.005	0.008	0.118
4+-Axle Trucks (AM=7.4%, PM=7.4%, Daily=10.6%)			0.011	0.014	0.025	0.010	0.016	0.025	0.357
High-Cube Cold Storage Warehouse <sup>3</sup>	TSF	157	0.085	0.025	0.110	0.034	0.086	0.120	2.120
Passenger Cars (AM-72.7%, PM-75.0%, Daily-64.6%)			0.076	0.004	0.080	0.019	0.071	0.090	1.370
2-Axle Trucks (AM-9.5%, PM-8.7%, Daily-12.3%)			0.003	0.007	0.010	0.005	0.005	0.010	0.260
3-Axle Trucks (AM-3.0%, PM-2.8%, Daily-3.9%)			0.001	0.002	0.003	0.002	0.001	0.003	0.083
4+-Axle Trucks (AM-14.8%, PM-13.6%, Daily-19.2%)			0.005	0.011	0.016	0.008	0.008	0.016	0.407
Single Family Detached Residential	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Fast-Food Restaurant With Drive-Thru	TSF	934	22.75	21.86	44.61	17.18	15.85	33.03	467.48
Gas Station with Convenience Market (2-4 TSF Market)	VFP	945	8.03	8.03	16.06	9.21	9.21	18.42	265.12

<sup>1</sup> Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

<sup>2</sup> TSF = thousand square feet; VFP = Vehicle Fueling Position; DU = Dwelling Units

<sup>3</sup> Truck Mix: South Coast Air Quality Management District’s (SCAQMD) recommended truck mix, by axle type.

Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle truck

**TABLE 4-2: PROJECT TRIP GENERATION SUMMARY**

Land Use	Quantity Units <sup>1</sup>	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
<b>Actual Vehicles:</b>								
Industrial Park (PA 1, 2, and 3) (85%)	634.242 TSF							
Passenger Cars:		163	27	190	38	152	190	1,776
2-axle Trucks:		2	2	4	2	3	5	60
3-axle Trucks:		2	3	5	2	3	5	76
4+-axle Trucks:		7	9	16	6	10	16	226
Total Truck Trips (Actual Vehicles):		11	14	25	10	16	26	362
High-Cube Cold Storage Warehouse (PA 1, 2, 3) (15%)	111.925 TSF							
Passenger Cars:		9	0	9	2	8	10	154
2-axle Trucks:		0	1	1	1	1	2	30
3-axle Trucks:		0	0	0	0	0	0	10
4+-axle Trucks:		1	1	2	1	1	2	46
Total Truck Trips (Actual Vehicles):		1	2	3	2	2	4	86
Industrial Passenger Car Trips		172	27	199	40	160	200	1,930
Industrial Truck Trips (Actual Vehicles)		12	16	28	12	18	30	448
<b>Industrial Total Trips (Actual Vehicles)<sup>2</sup></b>		<b>184</b>	<b>43</b>	<b>227</b>	<b>52</b>	<b>178</b>	<b>230</b>	<b>2,378</b>
Gas Station with Market (PA 4)	12 VFP	96	96	192	111	111	222	3,182
Internal Capture: <sup>4</sup>		-8	-12	-20	-35	-32	-67	-270
Pass-By (76% AM; 75% PM/Daily): <sup>3</sup>		-64	-64	-128	-57	-57	-114	-2,184
Fast-Food Restaurant with Drive-Thru (PA 4)	2.500 TSF	57	55	112	43	40	83	1,170
Internal Capture: <sup>4</sup>		-6	-4	-10	-15	-16	-31	-270
Pass-By (50% AM; 55% PM/Daily): <sup>3</sup>		-26	-26	-52	-13	-13	-26	-496
Fine Dining Restaurant	4.200 TSF	2	2	4	22	11	33	352
Internal Capture: <sup>4</sup>		-2	-1	-3	-4	-5	-9	-188
Pass-By (44% PM/Daily): <sup>3</sup>		0	0	0	-3	-3	-6	-72
High Turnover (Sit-Down) Restaurant	9.500 TSF	50	41	91	52	34	86	1,018
Internal Capture: <sup>4</sup>		-4	-3	-7	-13	-14	-27	-200
Pass-By (43% PM/Daily): <sup>3</sup>		0	0	0	-9	-9	-18	-352
<b>General Commercial Total Trips</b>		<b>95</b>	<b>84</b>	<b>179</b>	<b>79</b>	<b>47</b>	<b>126</b>	<b>1,690</b>
Single Family Detached Residential (PA 5)	32 DU	6	17	23	19	11	30	302
<b>Proposed Project Total (Actual Vehicles)</b>		<b>285</b>	<b>144</b>	<b>429</b>	<b>150</b>	<b>236</b>	<b>386</b>	<b>4,370</b>
<b>Passenger Car Equivalent (PCE):</b>								
Industrial Park (PA 1, 2, and 3) (85%)	634.242 TSF							
Passenger Cars:		163	27	190	38	152	190	1,776
2-axle Trucks (PCE = 1.5):		3	4	7	3	4	7	92
3-axle Trucks (PCE = 2.0):		4	6	10	4	6	10	150
4+-axle Trucks (PCE = 3.0):		22	26	48	18	30	48	680
Total Truck Trips (PCE):		29	36	65	25	40	65	922
High-Cube Cold Storage Warehouse (PA 1, 2, 3) (15%)	111.925 TSF							
Passenger Cars:		9	0	9	2	8	10	154
2-axle Trucks (PCE = 1.5):		1	1	2	1	1	2	44
3-axle Trucks (PCE = 2.0):		0	1	1	0	0	0	18
4+-axle Trucks (PCE = 3.0):		2	4	6	3	3	6	138
Total Truck Trips (PCE):		3	6	9	4	4	8	200
Industrial Passenger Car Trips		172	27	199	40	160	200	1,930
Industrial Truck Trips (PCE)		32	42	74	29	44	73	1,122
<b>Proposed Project Total (PCE)</b>		<b>305</b>	<b>170</b>	<b>475</b>	<b>167</b>	<b>262</b>	<b>429</b>	<b>5,044</b>

<sup>1</sup> TSF = Thousand Square Feet; VFP = Vehicle Fueling Position; DU = Dwelling Units

<sup>2</sup> Total Trips = Passenger Cars + Truck Trips.

<sup>3</sup> Pass-by reduction source: ITE [Trip Generation Manual](#) (11th Edition, 2021).

<sup>4</sup> Internal capture calculated from NCHRP 684 Internal Trip Capture Estimation Tool.

**4.1.2 TRIP GENERATION COMPARISON**

The land uses and intensities for the retail component were selected in order to conduct the most conservative analysis. The land uses and intensities identified in the Green River Road Specific Plan (Table 1: Land Use Summary Table) include 19,600 square feet of shopping center use and a 150-room hotel. The trip generation for these uses is summarized in Table 4-3 and is provided for informational purposes.

As shown in Table 4-3, the resulting trip generation for the commercial retail component is 1,688 trip-ends per day with 87 AM peak hour trips and 140 PM peak hour trips, which is fewer trips than those evaluated in this TA (as shown in Table 4-2). The proposed Project as evaluated in the TA is more conservative (i.e., generates more trips) than the 19,600 square feet of shopping center use evaluated in the Specific Plan. As shown in Table 4-3, since the commercial component no longer proposes a hotel, the commercial uses evaluated in the TA is anticipated to generate 2 more trip-ends per day with 92 more AM peak hour trips and 14 fewer PM peak hour trips as compared to the shopping center and hotel uses evaluated in the Specific Plan.

**TABLE 4-3: TRIP GENERATION COMPARISON FOR COMMERCIAL COMPONENT**

Land Use	Quantity Units <sup>1</sup>	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
Specific Plan Land Use (Per SP Table 1):								
Shopping Center	19,600 TSF	11	7	18	36	39	75	740
Pass-By (34% PM/Daily): <sup>2</sup>		0	0	0	-12	-12	-24	-252
Hotel (PA 4)	150 Rooms	39	30	69	45	43	89	1,200
General Commercial Total Trips per SP		50	37	87	69	70	140	1,688
General Commercial Total Trips (from Table 4-2)		95	84	179	79	47	126	1,690
<b>Variance</b>		<b>45</b>	<b>47</b>	<b>92</b>	<b>10</b>	<b>-23</b>	<b>-14</b>	<b>2</b>

<sup>1</sup> TSF = Thousand Square Feet

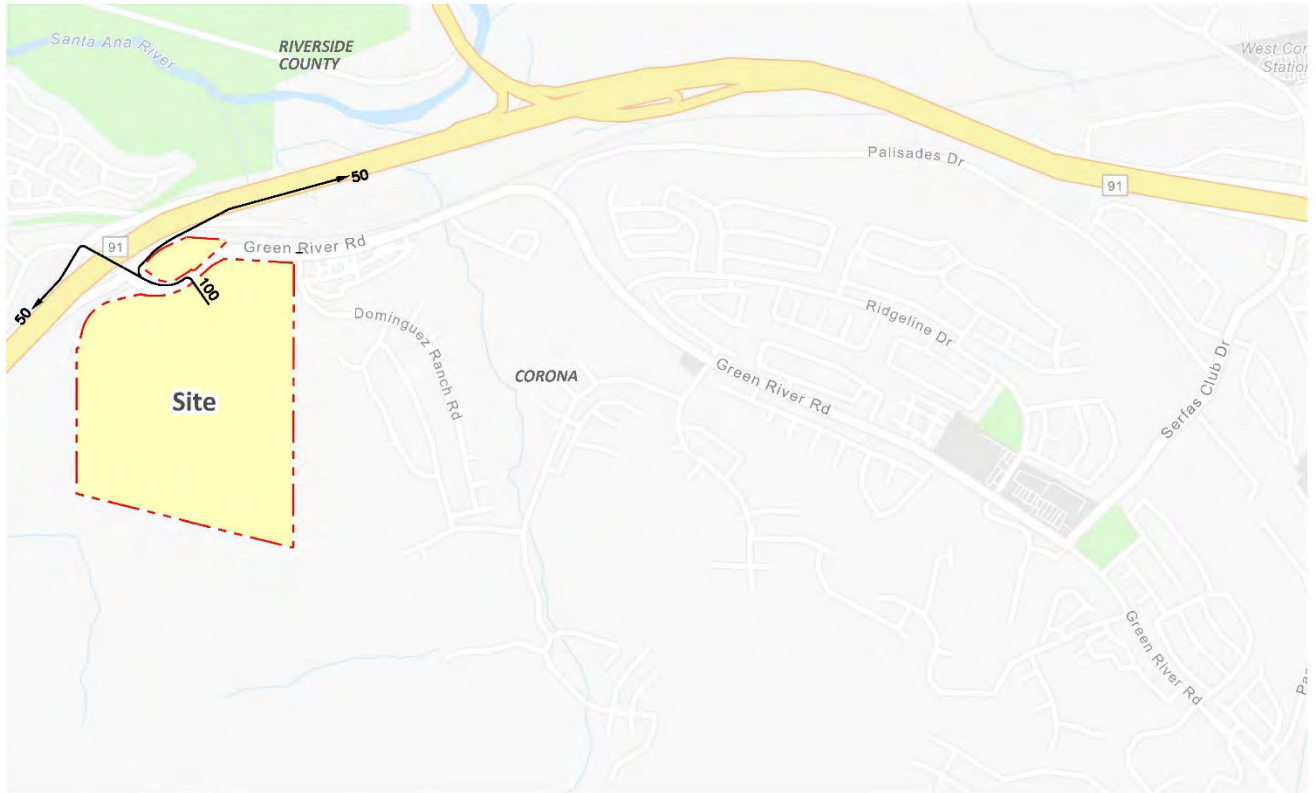
<sup>2</sup> Pass-by reduction percentages have been provided by the City of Corona.

**4.2 PROJECT TRIP DISTRIBUTION**

The Project trip distribution and assignment process represents the directional orientation of traffic to and from the Project site. The trip distribution pattern is heavily influenced by the geographical location of the site, the location of surrounding uses, and the proximity to the regional freeway system. The Project trip distribution patterns were developed based on recent studies in the area and through consultation with City of Corona staff. The Project trip distribution exhibits are provided on the following exhibits:

- Exhibit 4-1: Project (Truck) Trip Distribution
- Exhibit 4-2: Project (Business Park Industrial Passenger Car) Trip Distribution
- Exhibit 4-3: Project (Retail) Trip Distribution
- Exhibit 4-4: Project (Residential) Trip Distribution

**EXHIBIT 4-1: PROJECT (TRUCK) TRIP DISTRIBUTION**

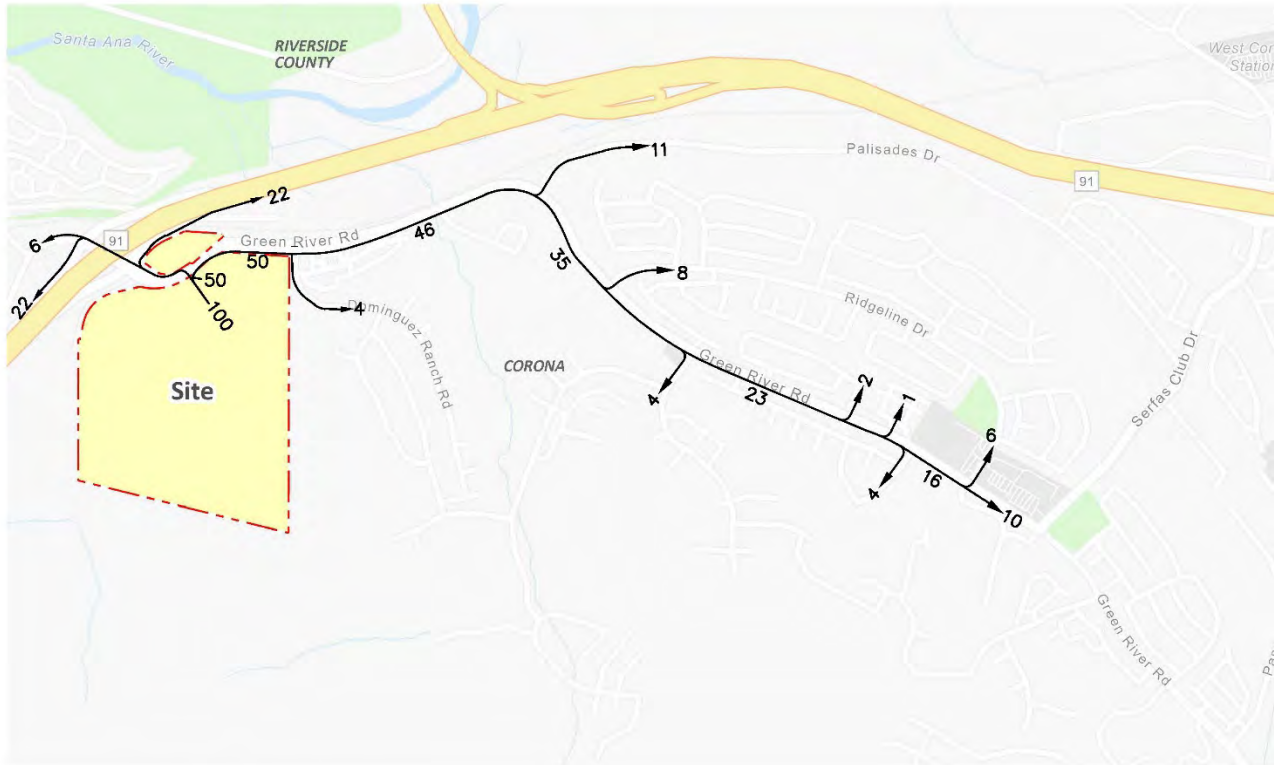


**LEGEND:**

10 = PERCENT TO/FROM PROJECT



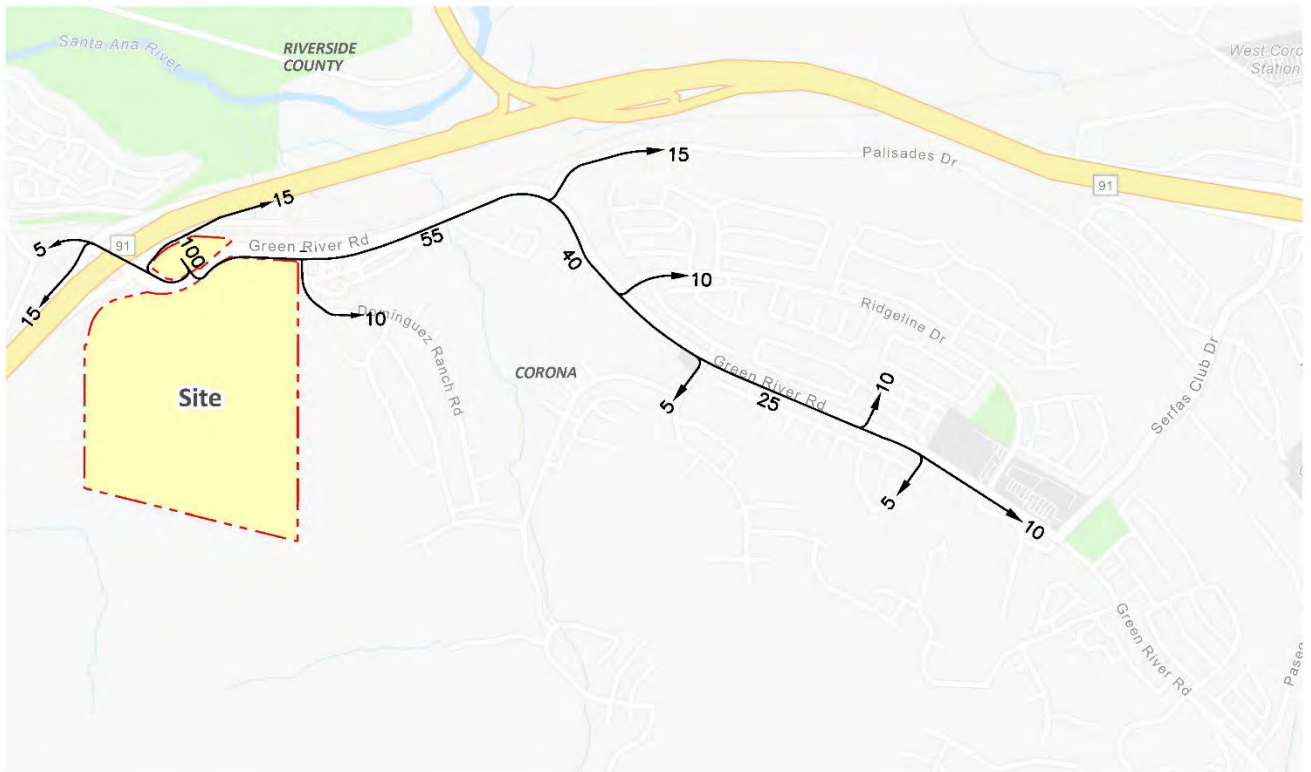
**EXHIBIT 4-2: PROJECT (BUSINESS PARK INDUSTRIAL PASSENGER CAR) TRIP DISTRIBUTION**



**LEGEND:**

10 = PERCENT TO/FROM PROJECT

**EXHIBIT 4-3: PROJECT (RETAIL) TRIP DISTRIBUTION**

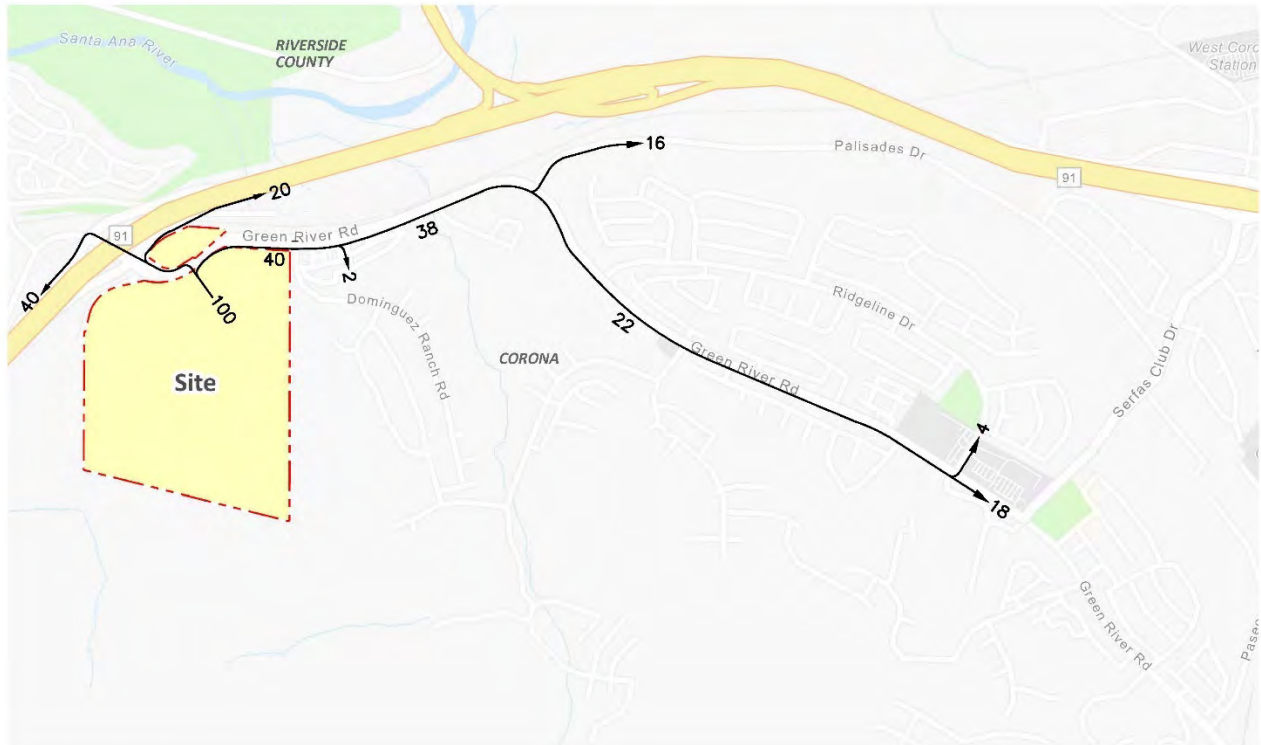


**LEGEND:**

10 = PERCENT TO/FROM PROJECT



**EXHIBIT 4-4: PROJECT (RESIDENTIAL) TRIP DISTRIBUTION**



**LEGEND:**

10 = PERCENT TO/FROM PROJECT



### 4.3 MODAL SPLIT

The potential for Project trips to be reduced by the use of public transit, walking or bicycling have not been included as part of the Project's estimated trip generation. Essentially, the Project's traffic projections are "conservative" in that these alternative travel modes would reduce the forecasted traffic volumes.

### 4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project Only traffic volumes, in actual vehicles, are provided on the following exhibits:

- Exhibit 4-5: Project Only (Phase 1) Traffic Volumes
- Exhibit 4-6: Project Only (Phase 2) Traffic Volumes
- Exhibit 4-7: Project Only (Project Buildout) Traffic Volumes

### 4.5 BACKGROUND TRAFFIC

Future year traffic forecasts have been based upon background (ambient) growth at 2% per year, compounded annually, for 2026 traffic conditions. The total ambient growth is 6.12% for 2026 traffic conditions. The ambient growth factor is intended to approximate regional traffic growth. This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in conjunction with traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies. 2026 traffic volumes are provided in Section 6 of this report. The traffic generated by the proposed Project was then manually added to the base volume to determine With Project forecasts.

The adopted Southern California Association of Governments (SCAG) 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) growth forecasts for the City of Corona identifies projected growth in population of 165,800 in 2016 to 185,100 in 2045, or a 11.64% increase over the 29-year period. (7) The change in population equates to roughly a 0.38% growth rate, compounded annually. Similarly, growth over the same 29-year period in households is projected to increase by 11.73% or a 0.38% annual growth rate. Finally, growth in employment over the same 29-year period is projected to increase by 17.17%, or a 0.54% annual growth rate.

**EXHIBIT 4-5: PROJECT ONLY (PHASE 1) TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
100		750							
	← 10(2)		← 54(17)		← 30(98)		↑ 86(20)		← 79(18)
	↑ 44(15)		↑ 16(54)		98(32) →		→ 30(98)		12(74) →
	↓ 2(10)		↓ 14(44)				↓ 14(80)		1(6) ↓
300		300		1,400	1,400	1,400	2,400	950	100
6	Green River Rd. & Palisades Dr.								
200		700							
	← 19(4)		← 60(14)						
	3(18) →								
	9(56) →								
900									

##(##) AM(PM) Peak Hour Intersection Volumes  
 ## Average Daily Trips

**EXHIBIT 4-6: PROJECT ONLY (PHASE 2) TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
200		1,100				7,900			
450		450			2,000	2,050		1,800	
← 15(6)	↑ 58(27)	← 73(33)	→ 32(63)	→ 131(60)	← 59(114)	↓ 105(33)	↑ 138(68)	← 131(62)	
↑ 27(51)	↓ 6(12)	→ 58(27)	← 27(51)			↓ 47(93)	← -76(-17)		
						↓ 98(32)	↑ 86(20)	→ 59(99)	↑ 16(10)
450		1,100		2,000		2,000	2,400	2,050	250
		450		2,000		2,000	2,050	2,050	
6	Green River Rd. & Palisades Dr.								
450									
↓ 33(16)	← 98(46)								
↑ 16(25)									
→ 43(75)									
1,800	1,350								

##(##) AM(PM) Peak Hour Intersection Volumes  
 ## Average Daily Trips

**EXHIBIT 4-7: PROJECT ONLY (PROJECT BUILDOUT) TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
200	500	1,200	500		2,200	7,900	2,200		1,950
← 15(6)	↗ 59(30)	← 74(37)	↖ 60(34)	← 69(121)	↘ 105(33)	↖ 138(68)	← -76(-17)	← 134(69)	
	↘ 33(56)	↖ 39(68)	↗ 30(53)	→ 135(71)	↖ 69(96)	↘ 88(28)	↖ 40(105)	↖ 16(10)	
	↘ 6(12)	↖ 30(53)	↗ 47(93)		↖ 47(93)	↘ 20(84)	↖ 20(84)	↖ 9(11)	
	↘ 33(56)	↖ 39(68)	↘ -14(-65)		↖ 47(93)	↘ 20(84)	↖ 20(84)	↖ 9(11)	
	↘ 6(12)	↖ 30(53)	↘ 102(43)		↖ 40(105)	↘ 20(84)	↖ 20(84)	↖ 9(11)	
500	1,200	500	2,200	2,200	2,200	2,700	2,200	250	
6	Green River Rd. & Palsades Dr.								
500	1,400								
↓ 34(19)	← 100(50)								
↘ 18(26)									
↘ 47(77)									
1,950									

###(##) AM(PM) Peak Hour Intersection Volumes  
 ## Average Daily Trips

## 4.6 CUMULATIVE DEVELOPMENT TRAFFIC

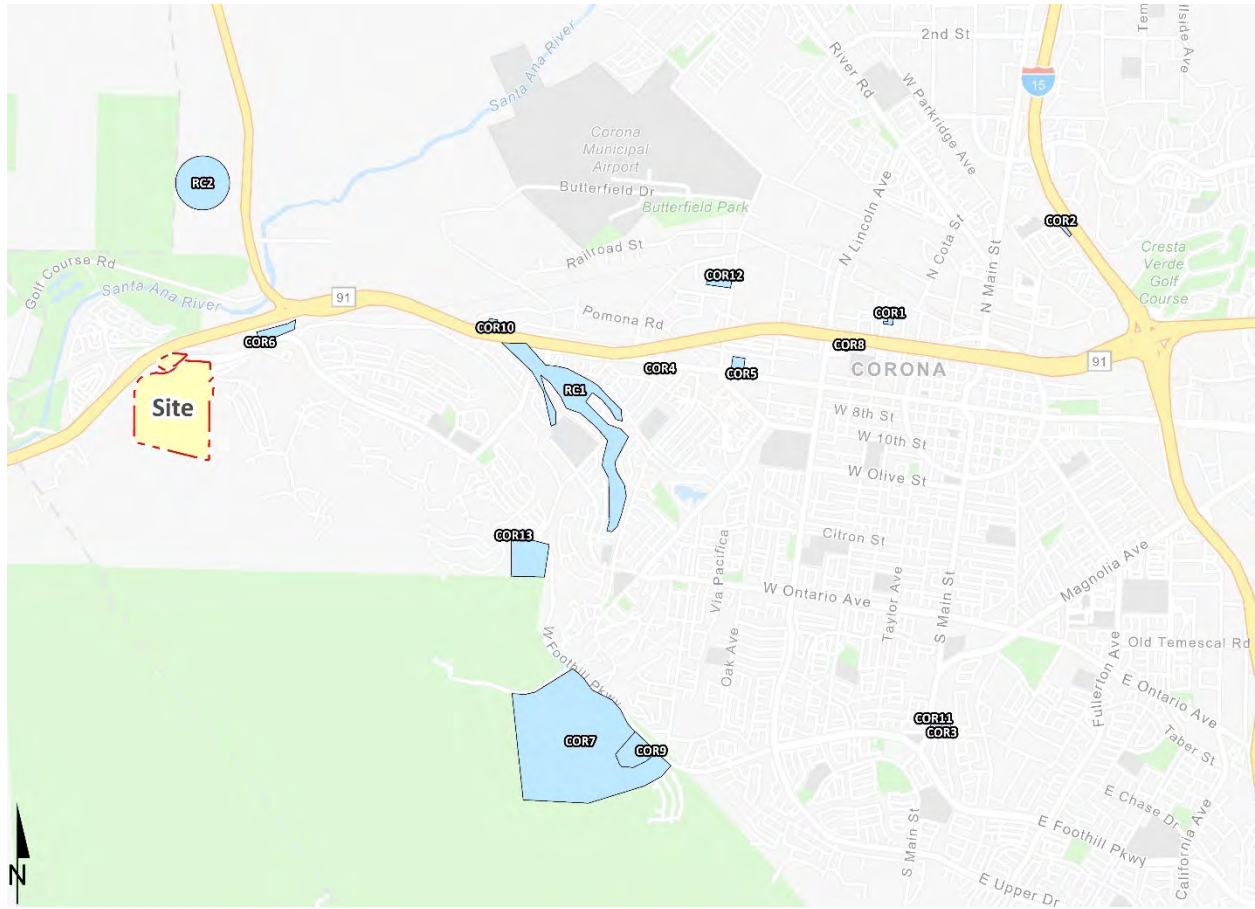
A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the City of Corona and the County of Riverside. The cumulative projects listed are those that would generate traffic and would contribute traffic to study area intersections. Exhibit 4-8 illustrates the cumulative development location map. A summary of cumulative development projects and their proposed land uses are shown in Table 4-4. If applicable, the traffic generated by individual cumulative projects was manually added to the Without Project forecasts to ensure that traffic generated by the listed cumulative development projects in Table 4-4 are reflected as part of the background traffic. In an effort to conduct a conservative analysis, the cumulative projects are added in conjunction with the ambient growth identified in Section 4.5 *Background Traffic*. Although it is unlikely that all of these cumulative projects would be fully built and occupied by the Year 2026, they have been included in an effort to conduct a conservative analysis and overstate as opposed to understate potential traffic deficiencies. Any other cumulative projects located beyond the cumulative study area that are not expected to contribute measurable traffic to study area intersections have not been included since the traffic would dissipate due to the distance from the Project site and study area intersections. Cumulative Only ADT and weekday peak hour intersection turning movement volumes, in actual vehicles, are shown on Exhibit 4-9.

**TABLE 4-4: CUMULATIVE DEVELOPMENT LAND USE SUMMARY**

#	Project/Location	Land Use	Quantity Units <sup>1</sup>
County of Riverside:			
RC1	Trails at Corona	Shopping Center	8.500 TSF
		Single Family Detached	123 DU
		Senior Adult Housing - Detached	189 DU
		Senior Adult Housing - Attached	114 DU
RC2	Prado Raceway	Raceway	67.0 AC
City of Corona:			
COR1	Buena Vista Senior Apartments	Senior Apartments	62 DU
COR2	45 Townhomes	Residential Condo/Townhouse	45 DU
COR3	Affordable Senior Housing	Senior Housing	72 DU
COR4	Gas Station w/ 7-11	Gas Station w/ Convenience Store	2.959 TSF
COR5	LA Fitness	Gym	37.000 TSF
COR6	2 Industrial Buildings	General Light Industrial	143.510 TSF
COR7	Skyline Heights	Single Family Detached	95 DU
		Condominium	230 DU
COR8	Gas Station & Restaurant	Restaurant with Drive Thru	1.500 TSF
		Gas Station w/ Convenience Store	3.750 TSF
COR9	Skyline Village Plaza	Food Hall	25.715 TSF
		Condominium	78 DU
COR10	Genesis Car Dealership	Car Dealership	24.077 TSF
COR11	Health Club/Gym	Health Club/Gym	52.317 TSF
COR12	Industrial Building	Industrial	162.480 TSF
COR13	TTM36701	Single Family Detached	12 DU

<sup>1</sup> TSF = Thousand Square Feet; DU = Dwelling Unit; AC = Acres

EXHIBIT 4-8: CUMULATIVE DEVELOPMENT LOCATION MAP





**EXHIBIT 4-9: CUMULATIVE ONLY TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	2	3	4	5																				
<b>Green River Rd. &amp; SR-91 WB Ramps</b>	<b>Green River Rd. &amp; SR-91 EB Ramps</b>	<b>Fresno Rd. &amp; Green River Rd.</b>	<b>Street A &amp; Green River Rd.</b>	<b>Dominguez Ranch Rd. &amp; Green River Rd.</b>																				
200	700	650	650	650																				
<table border="1"> <tr> <td>↓ 1(5)</td> <td>↑ 5(2)</td> </tr> <tr> <td>← 2(7)</td> <td>↑ 13(24)</td> </tr> <tr> <td>→ 27(18)</td> <td>↑ 7(3)</td> </tr> </table>	↓ 1(5)	↑ 5(2)	← 2(7)	↑ 13(24)	→ 27(18)	↑ 7(3)	<table border="1"> <tr> <td>↓ 14(27)</td> <td>↑ 1(5)</td> </tr> <tr> <td>← 5(2)</td> <td>↑ 30(19)</td> </tr> <tr> <td>→ 12(28)</td> <td>↑ 25(15)</td> </tr> </table>	↓ 14(27)	↑ 1(5)	← 5(2)	↑ 30(19)	→ 12(28)	↑ 25(15)	<table border="1"> <tr> <td>← 30(19)</td> </tr> <tr> <td>→ 13(31)</td> </tr> </table>	← 30(19)	→ 13(31)	<table border="1"> <tr> <td>← 30(19)</td> </tr> <tr> <td>→ 13(31)</td> </tr> </table>	← 30(19)	→ 13(31)	<table border="1"> <tr> <td>← 29(19)</td> </tr> <tr> <td>↑ 1(0)</td> </tr> <tr> <td>→ 12(30)</td> </tr> <tr> <td>→ 0(1)</td> </tr> </table>	← 29(19)	↑ 1(0)	→ 12(30)	→ 0(1)
↓ 1(5)	↑ 5(2)																							
← 2(7)	↑ 13(24)																							
→ 27(18)	↑ 7(3)																							
↓ 14(27)	↑ 1(5)																							
← 5(2)	↑ 30(19)																							
→ 12(28)	↑ 25(15)																							
← 30(19)																								
→ 13(31)																								
← 30(19)																								
→ 13(31)																								
← 29(19)																								
↑ 1(0)																								
→ 12(30)																								
→ 0(1)																								
300	350	950	950	950																				
<b>6</b>	<b>Green River Rd. &amp; Palisades Dr.</b>																							
750	550																							
<table border="1"> <tr> <td>↓ 13(45)</td> <td>↑ 37(23)</td> </tr> <tr> <td>← 19(0)</td> <td>↑ 4(2)</td> </tr> <tr> <td>→ 1(6)</td> <td></td> </tr> <tr> <td>→ 5(12)</td> <td></td> </tr> </table>	↓ 13(45)	↑ 37(23)	← 19(0)	↑ 4(2)	→ 1(6)		→ 5(12)																	
↓ 13(45)	↑ 37(23)																							
← 19(0)	↑ 4(2)																							
→ 1(6)																								
→ 5(12)																								
300																								

##(##) AM(PM) Peak Hour Intersection Volumes  
## Average Daily Trips

## 4.7 NEAR-TERM TRAFFIC CONDITIONS

The “buildup” approach combines existing traffic counts with a background ambient growth factor to forecast Opening Year (2026) traffic conditions. An ambient growth factor accounts for background (area-wide) traffic increases that occur over time up to the year 2026 from the year 2023. Traffic volumes generated by the Project are then added to assess the near-term traffic conditions. The 2026 roadway network is similar to the Existing conditions roadway network, with the exception of future driveways proposed to be developed by the Project.

The near-term traffic analysis includes the following traffic conditions, with the various traffic components:

- Opening Year Cumulative (2026) Without Project
  - Existing 2023 counts
  - Ambient growth traffic (6.12%)
  - Cumulative Development Traffic
  
- Opening Year Cumulative (2026) With Project (Phase 1)
  - Existing 2023 counts
  - Ambient growth traffic (6.12%)
  - Cumulative Development Traffic
  - Project (Phase 1) Traffic
  
- Opening Year Cumulative (2026) With Project (Phase 2)
  - Existing 2023 counts
  - Ambient growth traffic (6.12%)
  - Cumulative Development Traffic
  - Project (Phase 2) Traffic
  
- Opening Year Cumulative (2026) With Project (Project Buildout)
  - Existing 2023 counts
  - Ambient growth traffic (6.12%)
  - Cumulative Development Traffic
  - Project (Project Buildout) Traffic

## 4.8 HORIZON YEAR TRAFFIC FORECASTS

Traffic projections for Horizon Year conditions were derived from the RIVCOM regional model using accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between Existing and Horizon Year traffic conditions. The base model year for the RIVCOM regional model is Year 2018 and the future year model is Year 2045.

In most instances the traffic model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Horizon Year peak hour forecasts were refined using the model derived long-range



forecasts, base (validation) year model forecasts, along with existing peak hour traffic count data collected at each analysis location.

The refined future peak hour approach and departure volumes obtained from these calculations are then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program (NCHRP Report 765), along with initial estimates of turning movement proportions. A linear programming algorithm is used to calculate individual turning movements which match the known directional roadway segment forecast volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

Typically, the model growth is prorated and is subsequently added to the existing (base validation) traffic volumes to represent Horizon Year traffic conditions. However, review of the resulting model growth indicates negative growth for some of the study area intersections. In an effort to conduct a conservative analysis, reductions to traffic forecasts from either Existing or Opening Year Cumulative (2026) traffic conditions were not assumed as part of this analysis. As such, in conjunction with the addition of cumulative projects that are not consistent with the General Plan, additional growth has also been applied on a movement-by-movement basis, where applicable, to estimate reasonable Horizon Year forecasts. Horizon Year turning volumes were compared to Opening Year Cumulative (2026) volumes in order to ensure a minimum growth as a part of the refinement process. The minimum growth includes any additional growth between Opening Year Cumulative (2026) and Horizon Year traffic conditions that is not accounted for by the traffic generated by cumulative development projects and ambient growth rates assumed between Existing (2023) and Horizon Year traffic conditions. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the Horizon Year peak hour forecasts. The only instance when the Opening Year Cumulative (2026) forecasts would not be used to manually adjust the Horizon Year forecasts is if there are new proposed roadway connections/facilities that would explain the change in travel patterns within the study area.

The future Horizon Year Without Project peak hour turning movements were then reviewed by Urban Crossroads for reasonableness, and in some cases, were adjusted to achieve flow conservation, reasonable growth, and reasonable diversion between parallel routes. Flow conservation checks ensure that traffic flow between two closely spaced intersections, such as two freeway ramp locations, is verified in order to make certain that vehicles leaving one intersection are entering the adjacent intersection and that there is no unexplained loss of vehicles. The result of this traffic forecasting procedure is a series of traffic volumes which are suitable for traffic operations analysis.

This Page Intentionally Left Blank

## 5 E+P TRAFFIC CONDITIONS

This section discusses the traffic forecasts for E+P conditions and the resulting intersection operations, traffic signal warrant, roadway segment, and off-ramp queuing analyses.

### 5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for E+P traffic conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for E+P conditions (e.g., intersection and roadway improvements at the Project's frontage and driveways).

### 5.2 E+P GROWTH TRAFFIC VOLUME FORECASTS

This scenario includes Existing (2023) traffic volumes plus the addition of Project (Phase 1, Phase 2, and Project Buildout) traffic. This analysis scenario does not include the addition of any ambient background growth or traffic associated with cumulative development projects. The weekday ADT volumes and peak hour volumes, in actual vehicles, which can be expected for E+P traffic conditions are shown on the following exhibits:

- Exhibit 5-1: E+P (Phase 1)
- Exhibit 5-2: E+P (Phase 2)
- Exhibit 5-3: E+P (Project Buildout)

### 5.3 INTERSECTION OPERATIONS ANALYSIS

E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection analysis results are summarized in Table 5-1, which indicate that with the addition of Project (Phase 1), Project (Phase 2), and Project (Project Buildout) traffic, the same study area intersections are anticipated to continue to operate at an unacceptable LOS during the peak hours under E+P (Phase 1), E+P (Phase 2), and E+P (Project Buildout) traffic conditions, consistent with Existing traffic conditions. The intersection operations analysis worksheets for E+P (Phase 1), E+P (Phase 2), and E+P (Project Buildout) traffic conditions are included in Appendices 5.1, 5.2, and 5.3, respectively.

**EXHIBIT 5-1: E+P (PHASE 1) TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
13,300	6,000	14,150	3,100		29,650		29,200		27,750
↓ 256(126) ← 232(261) ↑ 107(188) ← 3(19) ↑ 63(245) ↓ 1548(339) ↑ 187(257)	↑ 107(188) ← 3(19) ↑ 63(245) ↓ 1548(339) ↑ 187(257)	↓ 119(349) ↑ 176(157) ↓ 79(162) ↑ 1(3) ↓ 223(1426)	↑ 1656(434) ↓ 116(98)	→ 340(1770)	← 1772(532)	← 1743(435) ↑ 86(20) ↓ 30(98) ↑ 14(80)	← 1700(371) ↑ 13(52) ↓ 129(84) ↑ 42(43)	↓ 80(166) → 207(1585)	↓ 246(1741) → 98(32)
6,050	14,150	20,750	26,850	29,650	29,650	29,650	2,400	29,200	3,800
6	Green River Rd. & Palisades Dr.								
3,550	26,100								
↓ 285(67) ← 5(14) ↑ 32(17) ← 1466(415)	↑ 32(17) ← 1466(415)								
25,750									

##(##) AM(PM) Peak Hour Intersection Volumes  
 ## Average Daily Trips

**EXHIBIT 5-2: E+P (PHASE 2) TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
13,400	6,100	14,500	3,250		30,250	7,900	30,300		28,700
↓ 256(126)	↑ 107(188)	↓ 138(365)			← 1801(548)	↓ 105(33)	↑ 138(68)		↑ 1752(415)
← 237(265)	↑ 3(19)	↓ 176(157)				← 69(96)	↑ 1667(418)		↑ 13(52)
	↑ 77(257)	79(162) ↓				↓ 47(93)	↑ 86(20)		
	↑ 1561(346)	1(3) →			373(1798) →	232(1676) →	↑ 30(98)		287(1721) →
	↑ 191(259)	237(1438) ↓				98(32) ↓	↑ 14(80)		27(130) ↓
6,150	14,500	20,900	27,450	30,250	30,250	30,250	2,400	30,300	4,000
6	Green River Rd. & Palisades Dr.								
3,800	26,800								
↓ 299(79)	↑ 32(17)								
← 5(14)	↑ 1504(447)								
↓ 93(173)									
241(1604) →									
26,700									

###(##) AM(PM) Peak Hour Intersection Volumes

## Average Daily Trips

**EXHIBIT 5-3: E+P (PROJECT BUILDOUT) TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
13,400	6,150	14,550	3,250		30,400	7,900	30,400		28,800
↓ 256(126) ← 237(265) ↑ 107(188) → 3(19) ↓ 78(260) ↑ 1567(851) → 191(259)	↓ 79(162) ← 139(369) → 176(157) ↓ 1(3) → 239(1445)	↓ 1679(448) → 132(107)	← 1811(555) → 377(1809)	↓ 105(33) → 69(96) ↓ 47(93) → 232(1676) ↓ 102(43)	↑ 138(68) ← 1667(418) ↓ 88(28) → 40(105) ↓ 20(84)	↓ 1755(422) → 13(52) ↓ 293(1726) → 27(130)	↓ 138(92) → 42(43)	6,200	14,550
20,950	27,600	30,450	30,400	2,700	30,400	4,000			
6	Green River Rd. & Palisades Dr.								
3,850	26,850								
↓ 300(82) ← 5(14) ↑ 32(17) → 1506(451) ↓ 95(174) → 245(1606)									
26,800									

##(##) AM(PM) Peak Hour Intersection Volumes  
 ## Average Daily Trips

**TABLE 5-1: INTERSECTION ANALYSIS FOR E+P CONDITIONS**

# Intersection	Traffic Control <sup>2</sup>	Existing (2023)						E+P (Phase 1)						E+P (Phase 2)						E+P (Project Buildout)					
		Delay <sup>1</sup> (secs.)			Level of Service			Delay <sup>1</sup> (secs.)			Level of Service			Delay <sup>1</sup> (secs.)			Level of Service			Delay <sup>1</sup> (secs.)			Level of Service		
		AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM
1 Green River Rd. & SR-91 Westbound Ramps	TS	-- <sup>4</sup>	39.5	31.7	<b>F</b>	D	C	-- <sup>4</sup>	40.3	32.6	<b>F</b>	D	C	-- <sup>4</sup>	40.4	32.9	<b>F</b>	D	C	-- <sup>4</sup>	40.5	32.2	<b>F</b>	D	C
2 Green River Rd. & SR-91 Eastbound Ramps	TS	-- <sup>4</sup>	19.2	35.2	<b>F</b>	B	D	-- <sup>4</sup>	19.7	35.6	<b>F</b>	B	D	-- <sup>4</sup>	19.9	35.7	<b>F</b>	B	D	-- <sup>4</sup>	20.0	35.9	<b>F</b>	B	D
3 Fresno Rd. & Green River Rd.	CSS	-- <sup>4,5</sup>	9.1	17.9	<b>F</b>	A	C	Not Evaluated <sup>6</sup>						Not Evaluated <sup>6</sup>						Not Evaluated <sup>6</sup>					
4 Street A & Green River Rd.	<b>IS</b>	Future Intersection						-- <sup>4</sup>	5.6	9.3	<b>F</b>	A	A	-- <sup>4</sup>	12.8	12.9	<b>F</b>	B	B	-- <sup>4</sup>	13.0	13.3	<b>F</b>	B	B
5 Dominguez Ranch Rd. & Green River Rd.	TS	N/A	7.2	9.7	N/A	A	A	N/A	7.2	9.7	N/A	A	A	N/A	7.3	9.8	N/A	A	A	N/A	7.3	9.8	N/A	A	A
6 Green River Rd. & Palisades Dr.	TS	N/A	10.4	5.6	N/A	B	A	N/A	11.0	5.9	N/A	B	A	N/A	11.5	6.5	N/A	B	A	N/A	11.6	6.6	N/A	B	A

\* **BOLD** = Level of Service (LOS) does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

<sup>1</sup> Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

<sup>2</sup> TS = Traffic Signal; CSS = Cross-street Stop; **IS** = Improvement

<sup>3</sup> Observed peak hour operations due to regional congestion as a result of capacity limitations to accommodate SR-91 Freeway westbound traffic. Other AM and PM peak hour results are based on peak hour operations analysis using the actual count data collected and applicable analysis software.

<sup>4</sup> SR-91 Westbound Ramps northbound left turn movement, northbound through movement at SR-91 Eastbound Ramps, and westbound through movement deficiencies at Dominguez Ranch Road that occur during the morning peak commute hours is due to the regional congestion along Green River Road.

<sup>5</sup> The congestion along Green River Road prevents vehicles from turning left onto Fresno Road, which results in an unacceptable LOS during the AM peak hour.

<sup>6</sup> The left turn along Green River Road will be eliminated as part of the Project design features. As such, this intersection is not evaluated under this scenario.

As previously discussed in Section 3.6 *Existing (2023) Intersection Operations Analysis*, at the time traffic counts were collected in 2023, field observations indicated queuing in the westbound direction on Green River Road during the AM peak hour. These queues are due to congestion along the adjacent SR-91 Freeway Westbound during the morning commute hours. As a result, the intersections along Green River Road experience constrained (congested) flow conditions. These constraints in the form of vehicle queues significantly limit the number of vehicles that cross the stop bar and are physically “counted” during the peak hour conditions. While the traffic counts identify all the vehicles using an intersection during peak hours, they may not fully account for the unconstrained demand at a particular location (during non-congested hours). As such, based on the constrained traffic count data the intersections operate at acceptable LOS or at an LOS better than field observations would suggest. Table 5-1 identifies the LOS results based on the observed congestion.

## 5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants have been performed (based on CA MUTCD) for E+P traffic conditions based on ADT volumes. The following unsignalized study area intersection is anticipated to meet a traffic signal warrant under E+P (Phase 1) (see Appendix 5.4):

- Street A & Green River Road (#4)

Since the only unsignalized study area intersection without restricted access meets a traffic signal warrant under E+P (Phase 1) traffic conditions, no additional traffic signal warrants have been evaluated for E+P (Phase 2) and E+P (Project Buildout) traffic conditions.

## 5.5 ROADWAY SEGMENT CAPACITY ANALYSIS

Table 5-2 provides a summary of the E+P conditions roadway segment capacity analysis based on the City of Corona General Plan Roadway Segment Capacity Thresholds identified previously in Table 2-4. As shown in Table 5-2, the study area roadway segments are anticipated to continue to operate at an acceptable LOS based on the City's planning level daily roadway capacity thresholds for E+P (Phase 1), E+P (Phase 2), and E+P (Project Buildout) traffic conditions.

## 5.6 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for E+P conditions are presented in Table 5-3. As shown in Table 5-3, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95<sup>th</sup> percentile traffic flows under E+P (Phase 1), E+P (Phase 2), and E+P (Project Buildout) traffic conditions, consistent with Existing (2023) traffic conditions. Worksheets for E+P (Phase 1), E+P (Phase 2), and E+P (Project Buildout) traffic conditions off-ramp queuing analyses are provided Appendices 5.5, 5.6, and 5.7, respectively.



**TABLE 5-2: ROADWAY SEGMENT CAPACITY ANALYSIS FOR E+P CONDITIONS**

#	Roadway	Segment Limits	Roadway		Existing (2023)			E+P (Phase 1)			E+P (Phase 2)			E+P (Buildout)		
			Section	Capacity <sup>1</sup>	Vol	V/C <sup>2</sup>	LOS <sup>3</sup>	Vol	V/C <sup>2</sup>	LOS <sup>3</sup>	Vol	V/C <sup>2</sup>	LOS <sup>3</sup>	Vol	V/C <sup>2</sup>	LOS <sup>3</sup>
1	Green River Rd.	SR-91 Eastbound Ramps to Fresno Rd.	5D	44,917	28,247	0.629	B	29,661	0.660	B	30,251	0.673	B	30,433	0.678	B
2	Green River Rd.	Fresno Rd. to Street A	6D	53,900	28,234	0.524	A	29,648	0.550	A	30,238	0.561	A	30,420	0.564	A
3	Green River Rd.	Street A to Dominguez Ranch Rd.	6D	53,900	28,234	0.524	A	29,200	0.542	A	30,298	0.562	A	30,418	0.564	A
4	Green River Rd.	Dominguez Ranch Rd. to Palisades Dr.	6D	53,900	24,868	0.461	A	25,756	0.478	A	26,686	0.495	A	26,806	0.497	A

<sup>1</sup> These maximum roadway capacities are based on the City's traffic study guidelines and have been interpolated where necessary.

<sup>2</sup> V/C = Volume to Capacity Ratio

<sup>3</sup> LOS = Level of Service

**TABLE 5-3: PEAK HOUR FREEWAY OFF-RAMP QUEUING SUMMARY FOR E+P CONDITIONS**

Intersection	Movement	Available Stacking Distance (Feet)	Existing (2023)				E+P (Phase 1)				E+P (Phase 2)				E+P (Buildout)			
			95th Percentile Queue (Feet)		Acceptable? <sup>1</sup>		95th Percentile Queue (Feet)		Acceptable? <sup>1</sup>		95th Percentile Queue (Feet)		Acceptable? <sup>1</sup>		95th Percentile Queue (Feet)		Acceptable? <sup>1</sup>	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
Green River Rd. & SR-91 WB Ramps (#1)	WBL	1,555	36	163	Yes	Yes	69	176	Yes	Yes	77	185	Yes	Yes	78	167	Yes	Yes
	WBL/T	1,555	34	164	Yes	Yes	70	177	Yes	Yes	78	184	Yes	Yes	78	168	Yes	Yes
	WBR	500	49	62	Yes	Yes	49	62	Yes	Yes	49	62	Yes	Yes	49	62	Yes	Yes
Green River Rd. & SR-91 EB Ramps (#2)	EBL/T	500	123	98	Yes	Yes	123	98	Yes	Yes	123	98	Yes	Yes	123	98	Yes	Yes
	EBR	1,090	37	416	Yes	Yes	41	461	Yes	Yes	43	486	Yes	Yes	42	494	Yes	Yes

<sup>1</sup> Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

## 5.7 DEFICIENCIES AND IMPROVEMENTS

### 5.7.1 IMPROVEMENTS TO ADDRESS INTERSECTION DEFICIENCIES

The congestion along Green River Road is a result of a number of reasons including, but not limited to, regional and local traffic accessing the SR-91 Freeway in the westbound direction during the peak morning commute period, in conjunction with the lack of receiving lanes and existing congestion on the SR-91 Freeway which cannot accommodate the Westbound on-ramp traffic. These queuing issues currently occur approximately between 6:30 AM and 8:30 AM and intersections along the Green River Road corridor operate at acceptable LOS during other times of the day. As such, additional capacity enhancements to a built out Green River Road are unlikely to improve existing freeway congestion and would therefore not reduce the number of queued vehicles waiting to access the SR-91 Freeway Westbound. Congestion along Green River Road is not anticipated to improve until such time when capacity enhancements are made to the SR-91 Westbound Freeway to support the morning commute traffic and allow for unimpeded SR-91 Westbound on-ramp traffic at Green River Road to enter the SR-91 Freeway. As such, no improvements have been identified for E+P traffic conditions.

Future improvements to the SR-91 Freeway include the Orange County Transportation Authority (OCTA), RCTC, and Caltrans SR-241 to SR-91 Express Lanes Connector Project which proposes to construct a direct tolled junction linking the SR-241 Toll Road to the SR-91 Express Lanes in the north to east and west to south directions. The project will also add a lane and shoulder in each direction on the SR-241 Freeway between the net connector and Windy Ridge Wildlife Undercrossing; widening of the SR-91 Eastbound to accommodate the new connector and its transition, advanced signage, and other necessary improvements. The direct median-to-median tolled connector is anticipated to be completed in the Summer of 2025. This is one downstream SR-91 Freeway improvement that could potentially alleviate existing queuing along Green River Road during the AM peak hour.

Although there is no congestion or spillback onto Green River Road in the eastbound direction, an improved SR-91 Freeway to SR-71 Freeway interchange is currently under construction. The RCTC and Caltrans improvement project will replace the single-lane loop connector from eastbound SR-91 to northbound SR-71 with a new two-lane direct connector ramp, build an eastbound SR-91 auxiliary lane in advance of the new direct connector, realign the eastbound SR-91 on-ramp from Green River Road to improve the access to the new interchange, and realign the southbound SR-71 Freeway to accommodate the new direct connector. The project is anticipated to be completed in 2025.

### 5.7.2 IMPROVEMENTS TO ADDRESS ROADWAY SEGMENT DEFICIENCIES

All study area roadway segments are anticipated to continue to operate at an acceptable LOS. Therefore, no improvements have been identified for E+P traffic conditions.

### 5.7.3 IMPROVEMENTS TO ADDRESS OFF-RAMP QUEUING DEFICIENCIES

There are no study area off-ramps that are anticipated to experience queuing issues. Therefore, no improvements have been identified for E+P traffic conditions.

## 6 OPENING YEAR CUMULATIVE (2026) TRAFFIC CONDITIONS

This section discusses the methods used to develop Opening Year Cumulative (2026) Without and With Project traffic forecasts, and the resulting intersection operations, traffic signal warrant, roadway segment, and off-ramp queuing analyses.

### 6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Opening Year Cumulative (2026) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Opening Year Cumulative (2026) With Project conditions (e.g., intersection and roadway improvements at the Project's frontage and driveways).
- Driveways and those facilities assumed to be constructed by cumulative developments to provide site access are also assumed to be in place for Opening Year Cumulative (2026) conditions only (e.g., intersection and roadway improvements along the cumulative development's frontages).

### 6.2 OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT GROWTH TRAFFIC VOLUME FORECASTS

This scenario includes Existing (2023) traffic volumes plus an ambient growth factor of 6.12% and the addition of traffic from cumulative development traffic. The weekday ADT volumes and peak hour volumes, in actual vehicles, which can be expected for Opening Year Cumulative (2026) Without Project traffic conditions are shown on Exhibit 6-1.

### 6.3 OPENING YEAR CUMULATIVE (2026) WITH PROJECT GROWTH TRAFFIC VOLUME FORECASTS

This scenario includes Existing (2023) traffic volumes plus an ambient growth factor of 6.12%, the addition of traffic from cumulative development traffic, and the addition of Project (Phase 1, Phase 2, or Project Buildout) traffic. The weekday ADT volumes and peak hour volumes, in actual vehicles, which can be expected for Opening Year Cumulative (2026) With Project traffic conditions are shown on the following exhibits:

- Exhibit 6-2: Opening Year Cumulative (2026) With Project (Phase 1)
- Exhibit 6-3: Opening Year Cumulative (2026) With Project (Phase 2)
- Exhibit 6-4: Opening Year Cumulative (2026) With Project (Project Buildout)

**EXHIBIT 6-1: OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT TRAFFIC VOLUMES  
(ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
14,150	6,500	14,900	3,200		30,600		30,600		29,150
← 273(139) ← 238(282)	↑ 119(202) ↑ 3(20) ↑ 33(268)	← 83(379) ← 188(172)			← 1879(480) ↑ 1(1)		← 1880(481)		← 1749(394) ↑ 14(55)
	↑ 1655(331) ↑ 203(265)	89(174) ↓ 1(3) → 202(1525) ↓	↑ 1770(422) ↑ 133(72)	270(1875) → 2(5) ↘	↑ 4(3)	274(1879) →		254(1751) → 19(127) ↘	↑ 130(87) ↑ 45(46)
6,350	14,550	22,100	27,650	30,950	100	30,950		30,950	3,950
6	Green River Rd. & Palsades Dr.								
4,300	27,550								
↓ 295(112) ↓ 25(15)	↑ 71(41) ↑ 1496(428)								
83(163) → 215(1635) →									
26,700									

##(##) AM(PM) Peak Hour Intersection Volumes  
## Average Daily Trips

**EXHIBIT 6-2: OPENING YEAR CUMULATIVE (2026) WITH PROJECT (PHASE 1) TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
14,300	6,800	15,650	3,500		32,050		31,600		30,050
← 273(139) ← 248(284)	↑ 119(202) ↑ 3(20) ↑ 77(283)	← 137(396) ← 188(172)			← 1909(578)		← 1880(481) ↑ 86(20)		← 1828(412) ↑ 14(55)
	↑ 1669(375) ↑ 205(275)	← 89(174) ↑ 1(3) ↓ 246(1540)	→ 1786(476) → 147(116)	→ 368(1907)		→ 274(1879) → 98(32)	→ 30(98) ↑ 14(80)	→ 266(1825) ↓ 20(133)	↑ 137(89) ↑ 45(46)
6,700	15,350	22,450	29,050	32,350		32,350	2,400	31,900	4,050
<b>6</b>	<b>Green River Rd. &amp; Palisades Dr.</b>								
4,500	28,250								
↓ 314(116) ↓ 86(181)	↑ 71(41) ← 1556(442)								
→ 224(1691)									
25(15)									
27,600									

##(##) AM(PM) Peak Hour Intersection Volumes  
## Average Daily Trips

**EXHIBIT 6-3: OPENING YEAR CUMULATIVE (2026) WITH PROJECT (PHASE 2) TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
14,350	6,950	16,000	3,650		32,600	7,900	32,700		30,950
↑ 273(139) ↓ 253(288)	↑ 119(202) ↑ 3(20) ↓ 91(295)	↓ 156(412) ↓ 188(172)			← 1938(594)	↓ 105(33) ↓ 47(93) 260(1814) 98(32)	↑ 138(68) ↑ 1804(464) ↓ 86(20)		↑ 1880(456) ↑ 14(55)
	↓ 1682(382) ↑ 209(277)	89(174) 1(3) 260(1552)	↑ 1802(485) ↓ 160(123)	401(1935) →		↑ 30(98) 14(80)		313(1850) 28(138)	↓ 146(97) 45(46)
6,800	15,650	22,550	29,650	32,950	32,950	2,400	33,000	4,200	
<b>6</b> Green River Rd. & Palisades Dr.									
4,750	28,900								
↓ 328(128) 99(188) 258(1710)	↑ 71(41) ↑ 1594(474)								
	↓ 25(15)								
28,550									

##(##) AM(PM) Peak Hour Intersection Volumes  
## Average Daily Trips

**EXHIBIT 6-4: OPENING YEAR CUMULATIVE (2026) WITH PROJECT (PROJECT BUILDOUT) TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
14,350	6,950	16,050	3,700		32,800	7,900	32,800		31,100
↓ 273(139)	↑ 119(202)	↓ 157(416)	↓ 188(172)		← 1948(601)	↓ 105(33)	↑ 138(68)		← 1883(463)
← 253(288)	← 3(20)	← 89(174)	↓ 1(3)			← 69(96)	← 1804(464)		↑ 14(55)
	↑ 92(298)	↓ 262(1559)	↓ 1809(490)	→ 405(1946)		↓ 47(93)	↑ 88(28)		↑ 319(1855)
	↑ 1688(387)	↓ 163(125)	↓ 163(125)			↓ 260(1814)	↑ 40(105)	→ 28(138)	↑ 146(97)
	↑ 209(277)	↓ 1809(490)	↓ 163(125)			↓ 102(43)	↑ 20(84)	↓ 45(46)	↑ 45(46)
6,850	15,750	22,600	29,800	33,150	33,100	2,700	33,100	4,200	
<b>6 Green River Rd. &amp; Palisades Dr.</b>									
4,800	29,000								
↓ 329(131)	↑ 71(41)								
← 25(15)	← 1596(478)								
↓ 101(189)									
↓ 262(1712)									
28,650									

###(##) AM(PM) Peak Hour Intersection Volumes  
 ## Average Daily Trips



## 6.4 INTERSECTION OPERATIONS ANALYSIS

### 6.4.1 OPENING YEAR CUMULATIVE (2026) WITHOUT PROJECT TRAFFIC CONDITIONS

Opening Year Cumulative (2026) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection analysis results are summarized in Table 6-1, which indicate that the study area intersections are anticipated to continue to operate at an acceptable LOS during the peak hours under Opening Year Cumulative (2026) Without Project. The intersection operations analysis worksheets for Opening Year Cumulative (2026) Without Project traffic conditions are included in Appendix 6.1 of this TA.

### 6.4.2 OPENING YEAR CUMULATIVE (2026) WITH PROJECT TRAFFIC CONDITIONS

As shown in Table 6-1, the study area intersections are anticipated to continue to operate at an acceptable LOS with the addition of Project (Phase 1), Project (Phase 2), and Project (Project Buildout) traffic. The intersection operations analysis worksheets for Opening Year Cumulative (2026) With Project (Phase 1), (Phase 2), and (Project Buildout) traffic conditions are included in Appendices 6.2, 6.3, and 6.4 of this TA.

As previously discussed in Section 3.6 *Existing (2023) Intersection Operations Analysis*, at the time traffic counts were collected in 2023, field observations indicated queuing in the westbound direction on Green River Road during the AM peak hour. These queues are due to congestion along the adjacent SR-91 Freeway Westbound during the morning commute hours. As a result, the intersections along Green River Road experience constrained (congested) flow conditions. These constraints in the form of vehicle queues significantly limit the number of vehicles that cross the stop bar and are physically “counted” during the peak hour conditions. While the traffic counts identify all the vehicles using an intersection during peak hours, they may not fully account for the unconstrained demand at a particular location (during non-congested hours). As such, based on the constrained traffic count data the intersections operate at acceptable LOS or at an LOS better than field observations would suggest. Table 5-1 identifies the LOS results based on the observed congestion.

## 6.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

The only unsignalized study area intersection with unrestricted access is anticipated to meet a traffic signal warrant under E+P (Phase 1) conditions. As such, traffic signal warrants have not been evaluated for Opening Year Cumulative (2026) traffic conditions.

## 6.6 ROADWAY SEGMENT CAPACITY ANALYSIS

Table 6-2 provides a summary of the Opening Year Cumulative (2026) conditions roadway segment capacity analysis based on the City of Corona General Plan Roadway Segment Capacity Thresholds identified previously in Table 2-4. As shown in Table 6-2, the study area roadway segments are anticipated to continue to operate at an acceptable LOS based on the City's planning level daily roadway capacity thresholds.



**TABLE 6-1: INTERSECTION ANALYSIS FOR OPENING YEAR CUMULATIVE (2026) CONDITIONS**

# Intersection	Traffic Control <sup>2</sup>	2026 Without Project						2026 With Project (Phase 1)						2026 With Project (Phase 2)						2026 With Project (Project Buildout)					
		Delay <sup>1</sup> (secs.)			Level of Service			Delay <sup>1</sup> (secs.)			Level of Service			Delay <sup>1</sup> (secs.)			Level of Service			Delay <sup>1</sup> (secs.)			Level of Service		
		AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM
1 Green River Rd. & SR-91 Westbound Ramps	TS	-- <sup>4</sup>	40.5	31.9	F	D	C	-- <sup>4</sup>	41.2	32.7	F	D	C	-- <sup>4</sup>	41.5	32.8	F	D	C	-- <sup>4</sup>	41.6	32.4	F	D	C
2 Green River Rd. & SR-91 Eastbound Ramps	TS	-- <sup>4</sup>	21.2	36.8	F	C	D	-- <sup>4</sup>	21.7	37.8	F	C	D	-- <sup>4</sup>	21.9	38.1	F	C	D	-- <sup>4</sup>	22.0	38.3	F	C	D
3 Fresno Rd. & Green River Rd.	CSS	-- <sup>4,5</sup>	9.2	19.3	F	A	C	Not Evaluated <sup>6</sup>						Not Evaluated <sup>6</sup>											
4 Street A & Green River Rd.	IS	Future Intersection						-- <sup>4</sup>	6.2	9.3	F	A	A	-- <sup>4</sup>	13.2	13.5	F	B	B	-- <sup>4</sup>	13.4	14.1	F	B	B
5 Dominguez Ranch Rd. & Green River Rd.	TS	N/A	7.3	9.9	N/A	A	A	N/A	7.4	10.0	N/A	A	A	N/A	7.5	10.0	N/A	A	B	N/A	7.5	10.0	N/A	A	B
6 Green River Rd. & Palisades Dr.	TS	N/A	11.7	7.6	N/A	B	A	N/A	12.0	7.8	N/A	B	A	N/A	12.5	8.2	N/A	B	A	N/A	12.6	8.3	N/A	B	A

<sup>1</sup> Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

<sup>2</sup> TS = Traffic Signal; CSS = Cross-street Stop; IS = Improvement

<sup>3</sup> Peak hour operations due to regional congestion as a result of capacity limitations to accommodate SR-91 Freeway westbound traffic. Other AM and PM peak hour results are based on peak hour operations analysis using the actual count data collected and applicable analysis software.

<sup>4</sup> SR-91 Westbound Ramps northbound left turn movement, northbound through movement at SR-91 Eastbound Ramps, and westbound through movement deficiencies at Dominguez Ranch Road that occur during the morning peak commute hours is due to the regional congestion along Green River Road.

<sup>5</sup> The congestion along Green River Road prevents vehicles from turning left onto Fresno Road, which results in an unacceptable LOS during the AM peak hour.

<sup>6</sup> The left turn along Green River Road will be eliminated as part of the Project design features. As such, this intersection is not evaluated under this scenario.

**TABLE 6-2: ROADWAY SEGMENT CAPACITY ANALYSIS FOR OPENING YEAR CUMULATIVE (2026) CONDITIONS**

#	Roadway	Segment Limits	Roadway		2026 Without Project			2026 With Project (Phase 1)			2026 With Project (Phase 2)			2026 With Project (Buildout)		
			Section	Capacity <sup>1</sup>	Vol	V/C <sup>2</sup>	LOS <sup>3</sup>	Vol	V/C <sup>2</sup>	LOS <sup>3</sup>	Vol	V/C <sup>2</sup>	LOS <sup>3</sup>	Vol	V/C <sup>2</sup>	LOS <sup>3</sup>
1	Green River Rd.	SR-91 Eastbound Ramps to Fresno Rd.	5D	44,917	30,939	0.689	B	32,353	0.720	C	32,943	0.733	C	33,125	0.737	C
2	Green River Rd.	Fresno Rd. to Street A	6D	53,900	30,615	0.568	A	32,029	0.594	A	32,619	0.605	B	32,801	0.609	B
3	Green River Rd.	Street A to Dominguez Ranch Rd.	6D	53,900	30,925	0.574	A	31,891	0.592	A	32,989	0.612	B	33,109	0.614	B
4	Green River Rd.	Dominguez Ranch Rd. to Palisades Dr.	6D	53,900	26,710	0.496	A	27,598	0.512	A	28,528	0.529	A	28,648	0.532	A

<sup>1</sup> These maximum roadway capacities are based on the City's traffic study guidelines and have been interpolated where necessary.

<sup>2</sup> V/C = Volume to Capacity Ratio

<sup>3</sup> LOS = Level of Service

## 6.7 OFF-RAMP QUEUING ANALYSIS

Queuing analysis findings for Opening Year Cumulative (2026) conditions are presented in Table 6-3. As shown in Table 6-3, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95<sup>th</sup> percentile traffic flows under Opening Year Cumulative (2026) Without Project and With Project (Phase 1), (Phase 2), and (Project Buildout) traffic conditions, consistent with Existing (2023) traffic conditions. Worksheets for Opening Year Cumulative (2026) Without Project and With Project (Phase 1), (Phase 2), and (Project Buildout) traffic conditions off-ramp queuing analyses are provided Appendices 6.5, 6.6, 6.7, and 6.8, respectively.

## 6.8 DEFICIENCIES AND IMPROVEMENTS

### 6.8.1 IMPROVEMENTS TO ADDRESS INTERSECTION DEFICIENCIES

All study area intersections are anticipated to continue to operate at an acceptable LOS; therefore, no improvements have been identified for Opening Year Cumulative (2026) traffic conditions. As noted previously, additional capacity enhancements to existing intersections along Green River Road are unlikely to resolve the regional congestion observed during the morning peak commute hours as the queues are due to the inability of vehicles to get onto the SR-91 Freeway Westbound during the morning peak hour. These queuing issues currently occur approximately between 6:30 AM and 8:30 AM and intersections along the Green River Road corridor operate at acceptable LOS during other times of the day. As such, intersection improvements have not been identified.

### 6.8.2 IMPROVEMENTS TO ADDRESS ROADWAY SEGMENT DEFICIENCIES

All study area roadway segments are anticipated to continue to operate at an acceptable LOS. Therefore, no improvements have been identified for Opening Year Cumulative (2026) traffic conditions.

### 6.8.3 IMPROVEMENTS TO ADDRESS OFF-RAMP QUEUING DEFICIENCIES

There are no study area off-ramps that are anticipated to experience queuing issues. Therefore, no improvements have been identified for Opening Year Cumulative (2026) traffic conditions.

**TABLE 6-3: PEAK HOUR FREEWAY OFF-RAMP QUEUING SUMMARY FOR OPENING YEAR CUMULATIVE (2026) CONDITIONS**

Intersection	Movement	Available Stacking Distance (Feet)	2026 Without Project				2026 With Project (Phase 1)				2026 With Project (Phase 2)				2026 With Project (Project Buildout)			
			95th Percentile Queue (Feet)		Acceptable? <sup>1</sup>		95th Percentile Queue (Feet)		Acceptable? <sup>1</sup>		95th Percentile Queue (Feet)		Acceptable? <sup>1</sup>		95th Percentile Queue (Feet)		Acceptable? <sup>1</sup>	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
Green River Rd. & SR-91 WB Ramps (#1)	WBL	1,555	46	186	Yes	Yes	78	202	Yes	Yes	86	206	Yes	Yes	88	190	Yes	Yes
	WBL/T	1,555	46	187	Yes	Yes	78	200	Yes	Yes	86	209	Yes	Yes	86	188	Yes	Yes
	WBR	500	50	65	Yes	Yes	50	65	Yes	Yes	50	65	Yes	Yes	50	65	Yes	Yes
Green River Rd. & SR-91 EB Ramps (#2)	EBL/T	500	136	106	Yes	Yes	136	106	Yes	Yes	136	106	Yes	Yes	136	106	Yes	Yes
	EBR	1,090	39	561	Yes	Yes	42	609	Yes	Yes	43	634	Yes	Yes	44	645	Yes	Yes

<sup>1</sup> Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in

This page intentionally left blank

## 7 HORIZON YEAR (2045) TRAFFIC CONDITIONS

This section discusses the methods used to develop Horizon Year (2045) Without and With Project traffic forecasts, and the resulting intersection operations, traffic signal warrant, roadway segment, and off-ramp queuing analyses.

### 7.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Horizon Year (2045) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Horizon Year (2045) conditions (e.g., intersection and roadway improvements at the Project's frontage and driveways).
- Other parallel facilities, that although not evaluated for the purposes of this analysis, are anticipated to be in place for Horizon Year traffic conditions and would affect the travel patterns within the study area.

### 7.2 HORIZON YEAR (2045) TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-process volumes obtained from the RIVCOM, plus the traffic generated by the proposed Project (Project Buildout) for With Project conditions only. The weekday ADT and weekday AM and PM peak hour volumes, in actual vehicles, which can be expected for Horizon Year (2045) Without and With Project traffic conditions are shown on Exhibits 7-1 and 7-2, respectively.

### 7.3 INTERSECTION OPERATIONS ANALYSIS

#### 7.3.1 HORIZON YEAR (2045) WITHOUT PROJECT TRAFFIC CONDITIONS

Horizon Year (2045) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection analysis results are summarized in Table 7-1, which indicates that the study area intersections are anticipated to continue to operate at an acceptable LOS during the peak hours under Horizon Year (2045) Without Project traffic conditions. The intersection operations analysis worksheets for Horizon Year (2045) Without Project traffic conditions are included in Appendix 7.1 of this TA.

#### 7.3.2 HORIZON YEAR (2045) WITH PROJECT TRAFFIC CONDITIONS

As shown in Table 7-1, the study area intersections are anticipated to continue to operate at an acceptable LOS with the addition of Project (Project Buildout) traffic. The intersection operations analysis worksheets for Horizon Year (2045) With Project traffic conditions are included in Appendix 7.2 of this TA.

**EXHIBIT 7-1: HORIZON YEAR (2045) WITHOUT PROJECT TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
14,150	9,600	14,900	7,950		33,700		33,700		32,050
300(153) ← 261(402) ↓	↑ 130(222) ← 4(23) ↑ 36(387)	91(600) ↓ 207(189) ↓	135(191) ↓ 1(4) ↓ 222(1678) ↓	2510(624) ↑ 147(80) ↑	313(2272) → 2(6) ↓	← 2657(704) ↑ 1(1) 5(4) ↑	← 2658(529)	← 2514(609) ↑ 15(61)	297(2135) → 21(140) ↓ 144(96) ↓ 49(50) ↑
12,850	23,850	24,300	31,700	34,050	150	34,000		34,000	4,350
6	Green River Rd. & Palisades Dr.								
4,300	30,300								
325(123) ↓ 27(16) ↓	↑ 78(45) ← 2149(470) ↑ 8(51)								
91(179) → 239(1798) → 22(127) →	↑ 161(90) ↑ 21(40)								
29,400									

##(##) AM(PM) Peak Hour Intersection Volumes  
## Average Daily Trips

**EXHIBIT 7-2: HORIZON YEAR (2045) WITH PROJECT TRAFFIC VOLUMES (ACTUAL VEHICLES)**



1	Green River Rd. & SR-91 WB Ramps	2	Green River Rd. & SR-91 EB Ramps	3	Fresno Rd. & Green River Rd.	4	Street A & Green River Rd.	5	Dominguez Ranch Rd. & Green River Rd.
14,350	10,100	16,050	8,400		35,850	7,900	35,850		34,000
300(153) ← 276(408)	↑ 130(222) ← 4(23) ↑ 95(417)	165(637) ← 207(189)			← 2726(825)	105(33) ↓ 69(96)	↑ 138(68) ← 2582(512) ↑ 88(28)		← 2648(678) ↑ 15(61)
	↓ 2454(545) ↑ 230(339)	135(191) → 1(4) ↓ 282(1712) ↓	↑ 2549(692) ↑ 177(133)	448(2343) →		47(93) ↓ 304(2001) → 102(43) ↓	40(105) ↓ 20(84) ↓	362(2239) → 30(151) ↓	160(106) ↓ 49(50) ↓
13,400	25,050	24,800	33,850	36,200	36,200	2,700	36,200		4,600
6	Green River Rd. & Palisades Dr.								
4,800	31,750								
359(142) ↓ 27(16)	↑ 78(45) ← 2249(520) ↑ 8(51)								
109(205) ↓ 286(1875) → 22(127) ↓	↑ 161(90) ↑ 21(40)								
31,300									

##(##) AM(PM) Peak Hour Intersection Volumes  
## Average Daily Trips

**TABLE 7-1: INTERSECTION ANALYSIS FOR HORIZON YEAR (2045) CONDITIONS**

# Intersection	Traffic Control <sup>2</sup>	2045 Without Project						2045 With Project (Project Buildout)					
		Delay <sup>1</sup> (secs.)			Level of Service			Delay <sup>1</sup> (secs.)			Level of Service		
		AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM	AM <sup>3</sup>	AM	PM
1 Green River Rd. & SR-91 Westbound Ramps	TS	-- <sup>4</sup>	48.2	32.5	F	D	C	-- <sup>4</sup>	54.4	32.3	F	D	C
2 Green River Rd. & SR-91 Eastbound Ramps	TS	-- <sup>4</sup>	30.8	42.4	F	C	D	-- <sup>4</sup>	33.2	48.3	F	C	D
3 Fresno Rd. & Green River Rd.	CSS	-- <sup>4,5</sup>	9.3	24.8	F	A	C	Not Evaluated <sup>6</sup>					
4 Street A & Green River Rd.	IS	Future Intersection						-- <sup>4</sup>	18.7	15.4	F	B	B
5 Dominguez Ranch Rd. & Green River Rd.	TS	N/A	8.0	10.6	N/A	A	B	N/A	8.8	11.0	N/A	A	B
6 Green River Rd. & Palisades Dr.	TS	N/A	14.2	8.0	N/A	B	A	N/A	16.4	8.7	N/A	B	A

<sup>1</sup> Per the Highway Capacity Manual (6th Edition), overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. HCM delay reported in seconds.

<sup>2</sup> TS = Traffic Signal; CSS = Cross-street Stop; IS = Improvement

<sup>3</sup> Peak hour operations due to regional congestion as a result of capacity limitations to accommodate SR-91 Freeway westbound traffic. Other AM and PM peak hour results are based on peak hour operations analysis using the actual count data collected and applicable analysis software.

<sup>4</sup> SR-91 Westbound Ramps northbound left turn movement, northbound through movement at SR-91 Eastbound Ramps, and westbound through movement deficiencies at Dominguez Ranch Road that occur during the morning peak commute hours is due to the regional congestion along Green River Road.

<sup>5</sup> The congestion along Green River Road prevents vehicles from turning left onto Fresno Road, which results in an unacceptable LOS during the AM peak hour.

<sup>6</sup> The left turn along Green River Road will be eliminated as part of the Project design features. As such, this intersection is not evaluated under this scenario.

As previously discussed in Section 3.6 *Existing (2023) Intersection Operations Analysis*, at the time traffic counts were collected in 2023, field observations indicated queuing in the westbound direction on Green River Road during the AM peak hour. These queues are due to congestion along the adjacent SR-91 Freeway Westbound during the morning commute hours. As a result, the intersections along Green River Road experience constrained (congested) flow conditions. These constraints in the form of vehicle queues significantly limit the number of vehicles that cross the stop bar and are physically “counted” during the peak hour conditions. While the traffic counts identify all the vehicles using an intersection during peak hours, they may not fully account for the unconstrained demand at a particular location (during non-congested hours). As such, based on the constrained traffic count data the intersections operate at acceptable LOS or at an LOS better than field observations would suggest. Table 5-1 identifies the LOS results based on the observed congestion.

## 7.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

The only unsignalized study area intersection with unrestricted access is anticipated to meet a traffic signal warrant under E+P (Phase 1) conditions. As such, traffic signal warrants have not been evaluated for Horizon Year (2045) traffic conditions.



## **7.5 ROADWAY SEGMENT CAPACITY ANALYSIS**

Table 7-2 provides a summary of Horizon Year (2045) conditions roadway segment capacity analysis based on the City of Corona General Plan Roadway Segment Capacity Thresholds identified previously in Table 2-4. As shown in Table 7-2, the study area roadway segments are anticipated to continue to operate at an acceptable LOS based on the City's planning level daily roadway capacity thresholds.

## **7.6 OFF-RAMP QUEUING ANALYSIS**

Queuing analysis findings for Horizon Year (2045) conditions are presented in Table 7-3. As shown in Table 7-3, there are no movements that are anticipated to experience queuing issues during the weekday AM or weekday PM peak 95<sup>th</sup> percentile traffic flows under Horizon Year (2045) Without Project and With Project (Project Buildout) traffic conditions, consistent with Existing (2023) traffic conditions. Worksheets for Horizon Year (2045) Without Project and With Project (Project Buildout) traffic conditions off-ramp queuing analyses are provided Appendices 7.3 and 7.4, respectively.

## **7.7 PROJECT DEFICIENCIES AND RECOMMENDED IMPROVEMENTS**

### **7.7.1 IMPROVEMENTS TO ADDRESS INTERSECTION DEFICIENCIES**

All study area intersections are anticipated to continue to operate at an acceptable LOS; therefore, no improvements have been identified for Horizon Year (2045) traffic conditions. As noted previously, additional capacity enhancements to existing intersections along Green River Road are unlikely to resolve the regional congestion observed during the morning peak commute hours as the queues are due to the inability of vehicles to get onto the SR-91 Freeway Westbound during the morning peak hour. These queuing issues currently occur approximately between 6:30 AM and 8:30 AM and intersections along the Green River Road corridor operate at acceptable LOS during other times of the day. As such, intersection improvements have not been identified.

### **7.7.2 IMPROVEMENTS TO ADDRESS ROADWAY SEGMENT DEFICIENCIES**

All study area roadway segments are anticipated to continue to operate at an acceptable LOS. Therefore, no improvements have been identified for Horizon Year (2045) traffic conditions.

### **7.7.3 IMPROVEMENTS TO ADDRESS OFF-RAMP QUEUING DEFICIENCIES**

There are no study area off-ramps that are anticipated to experience queuing issues. Therefore, no improvements have been identified for Horizon Year (2045) traffic conditions.

**TABLE 7-2: ROADWAY SEGMENT CAPACITY ANALYSIS FOR HORIZON YEAR (2045) CONDITIONS**

#	Roadway	Segment Limits	Roadway	LOS	2045 Without Project			2045 With Project (Buildout)		
			Section	Capacity <sup>1</sup>	Vol	V/C <sup>2</sup>	LOS <sup>3</sup>	Vol	V/C <sup>2</sup>	LOS <sup>3</sup>
1	Green River Rd.	SR-91 Eastbound Ramps to Fresno Rd.	5D	44,917	34,033	0.758	C	36,219	0.806	D
2	Green River Rd.	Fresno Rd. to Street A	6D	53,900	33,676	0.625	B	35,862	0.665	B
3	Green River Rd.	Street A to Dominguez Ranch Rd.	6D	53,900	34,018	0.631	B	36,202	0.672	B
4	Green River Rd.	Dominguez Ranch Rd. to Palisades Dr.	6D	53,900	29,381	0.545	A	31,319	0.581	A

<sup>1</sup> These maximum roadway capacities are based on the City's traffic study guidelines and have been interpolated where necessary.

<sup>2</sup> V/C = Volume to Capacity Ratio

<sup>3</sup> LOS = Level of Service

**TABLE 7-3: PEAK HOUR FREEWAY OFF-RAMP QUEUING SUMMARY FOR HORIZON YEAR (2045) CONDITIONS**

Intersection	Movement	Available Stacking Distance (Feet)	2045 Without Project				2045 With Project (Project Buildout)			
			95th Percentile Queue (Feet)		Acceptable? <sup>1</sup>		95th Percentile Queue (Feet)		Acceptable? <sup>1</sup>	
			AM Peak	PM Peak	AM	PM	AM Peak	PM Peak	AM	PM
Green River Rd. & SR-91 WB Ramps (#1)	WBL	1,555	47	242	Yes	Yes	88	176	Yes	Yes
	WBL/T	1,555	49	243	Yes	Yes	90	176	Yes	Yes
	WBR	500	55	63	Yes	Yes	55	0	Yes	Yes
Green River Rd. & SR-91 EB Ramps (#2)	EBL/T	500	177	16	Yes	Yes	177	116	Yes	Yes
	EBR	1,090	40	908 <sup>2</sup>	Yes	Yes	44	962 <sup>2</sup>	Yes	Yes

<sup>1</sup> Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

<sup>2</sup> 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

## 8 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements within the City of Corona are funded through a combination of improvements constructed by the Project, development impact fee programs or fair share contributions. Fee programs applicable to the Project are described below.

### 8.1 CITY OF CORONA DEVELOPMENT IMPACT FEE (DIF) PROGRAM

The Project will also be subject to City of Corona's DIF program which includes a component for streets and signals. A City-wide impact fee is necessary to finance the projects necessary to support local new development and not supported by the TUMF schedule. The latest City of Corona DIF fee schedule is effective May 16, 2022.

### 8.2 TRANSPORTATION UNIFORM MITIGATION FEE (TUMF) PROGRAM

The TUMF program is administered by the WRCOG based upon a regional Nexus Study most recently updated in 2016 to address major changes in right of way acquisition and improvement cost factors. (8) This regional program was put into place to ensure that development pays its fair share, and that funding is in place for construction of facilities needed to maintain the requisite level of service and critical to mobility in the region. TUMF is a truly regional fee program and is imposed and implemented in every jurisdiction in Western Riverside County. TUMF guidelines empower a local zone committee to prioritize and arbitrate certain projects. The Project is located in the Northwest Zone. The zone has developed a 5-year capital improvement program to prioritize public construction of certain roads. TUMF is focused on improvements necessitated by regional growth.

The construction of 2 additional lanes for a 6-lane Green River Road is included in the TUMF Northwest Zone along a 1.08-mile segment from the SR-91 Freeway to Palisades Drive. These improvements have been completed as Green River Road currently accommodates 6-lanes between the SR-91 Freeway and Palisades Drive.

This Page Intentionally Left Blank

## 9 REFERENCES

1. **City of Corona.** *Traffic Impact Study Guidelines*. City of Corona : s.n., July 2006.
2. **Institute of Transportation Engineers.** *Trip Generation Manual*. 11th Edition. 2021.
3. **VRPA Technologies, Inc. for Riverside County Transportation Commission.** *Riverside County Long Range Transportation Study*. County of Riverside : VRPA Technologies, Inc., December 2019.
4. **Transportation Research Board.** *Highway Capacity Manual (HCM)*. 6th Edition. s.l. : National Academy of Sciences, 2016.
5. **California Department of Transportation.** California Manual on Uniform Traffic Control Devices (CA MUTCD). [book auth.] California Department of Transportation. *California Manual on Uniform Traffic Control Devices (CA MUTCD)*. 2014, Updated March 30, 2021 (Revision 6).
6. **City of Corona.** *2020-2040 General Plan*. Corona : s.n., 2020.
7. **Southern California Association of Governments.** *2020 Regional Transportation Plan/Sustainable Communities Strategy*. September 2020.
8. **Western Riverside Council of Governments.** *Transportation Uniform Mitigation Fee Nexus Study*. County of Riverside : s.n., 2016 Update.

This Page Intentionally Left Blank

## **APPENDIX 1.1: APPROVED TRAFFIC STUDY SCOPING AGREEMENT**



This Page Intentionally Left Blank

**Exhibit F**

**Traffic Impact Study Scope – City of Corona**

Project Name:	Green River Ranch Specific Plan Amendment		
Project Address:	Southwest corner of Green River Road and Dominguez Ranch Road		
Project Description:	634,242 sf of Industrial Park, 111,925 sf of High-Cube Cold Storage Warehouse, 2,500 sf of Fast-Food Restaurant with Drive-Thru window, 12 VFP super gas station with convenience market, and 32 single family detached DUs		
Case Number:	DPR2019-0029, 30, 31		
	Consultant	Developer	
Name:	Urban Crossroads, Inc.	PSIP WR Green River LLC	
Address:	1133 Camelback St., #8329 Newport Beach, CA 92658	500 Newport Center Drive, Suite 630 Newport Beach, CA 92660	
Telephone:	949-861-0177		
E-mail:	cso@urbanxroads.com		

**A. Trip Generation** Mixed Use, Commercial, Estate

Proposed Land Use	Residential	Previous Land Use	Vacant, Equestrian
Existing Zoning	MU, CG, RE	Proposed Zoning	MU, CG, RE

(In Actual Vehicles)	In	Out	Total
AM Peak Hour	236	104	340
PM Peak Hour	113	228	341

\*Note: PCE trip generation will be utilized for the purposes of the traffic analysis

**B. Trip Distribution**

See Attached graphical representation

**C. Background Traffic**

Project Opening year:	2026	Growth Rate:	2.0%
-----------------------	------	--------------	------

**D. Study Intersections**

See attached list	

**E. Roadway Segments**

1. Green River Rd., SR-91 EB Ramps to Fresno Rd.
2. Green River Rd., Fresno Rd. to Street A
3. Green River Rd., Street A to Dominguez Ranch Rd.
4. Green River Rd., Dominguez Ranch Rd. to Palisades Dr.

**F. Specific Issues to be addressed in the Study**

See special issues section of the scoping agreement

**Approved By:**

City of Corona Traffic Engineering:
Date:

**APPROVED**  
By Rosalva Ureno at 3:55 pm, Apr 12, 2023

**DATE:** March 22, 2023  
**TO:** Rosie Ureno, City of Corona  
**FROM:** Charlene So, Urban Crossroads  
**JOB NO:** 12630-08 Scope

**GREEN RIVER RANCH SPECIFIC PLAN AMENDMENT (SP00-001 AMENDMENT NO. 1) SCOPING AGREEMENT (REVISED)**

The firm of Urban Crossroads, Inc. is pleased to submit this scoping letter regarding the traffic analysis for Green River Ranch Specific Plan Amendment development (**Project**), which is located at the southwest corner of Green River Road and Dominguez Ranch Road in the City of Corona. This letter describes the proposed Project trip generation, trip distribution, and analysis methodology, which have been used to establish the draft proposed Project study area and analysis locations. The following scoping agreement has been prepared in accordance with the City’s [Traffic Impact Study Guidelines](#) (dated July 2006).

**PROJECT DESCRIPTION**

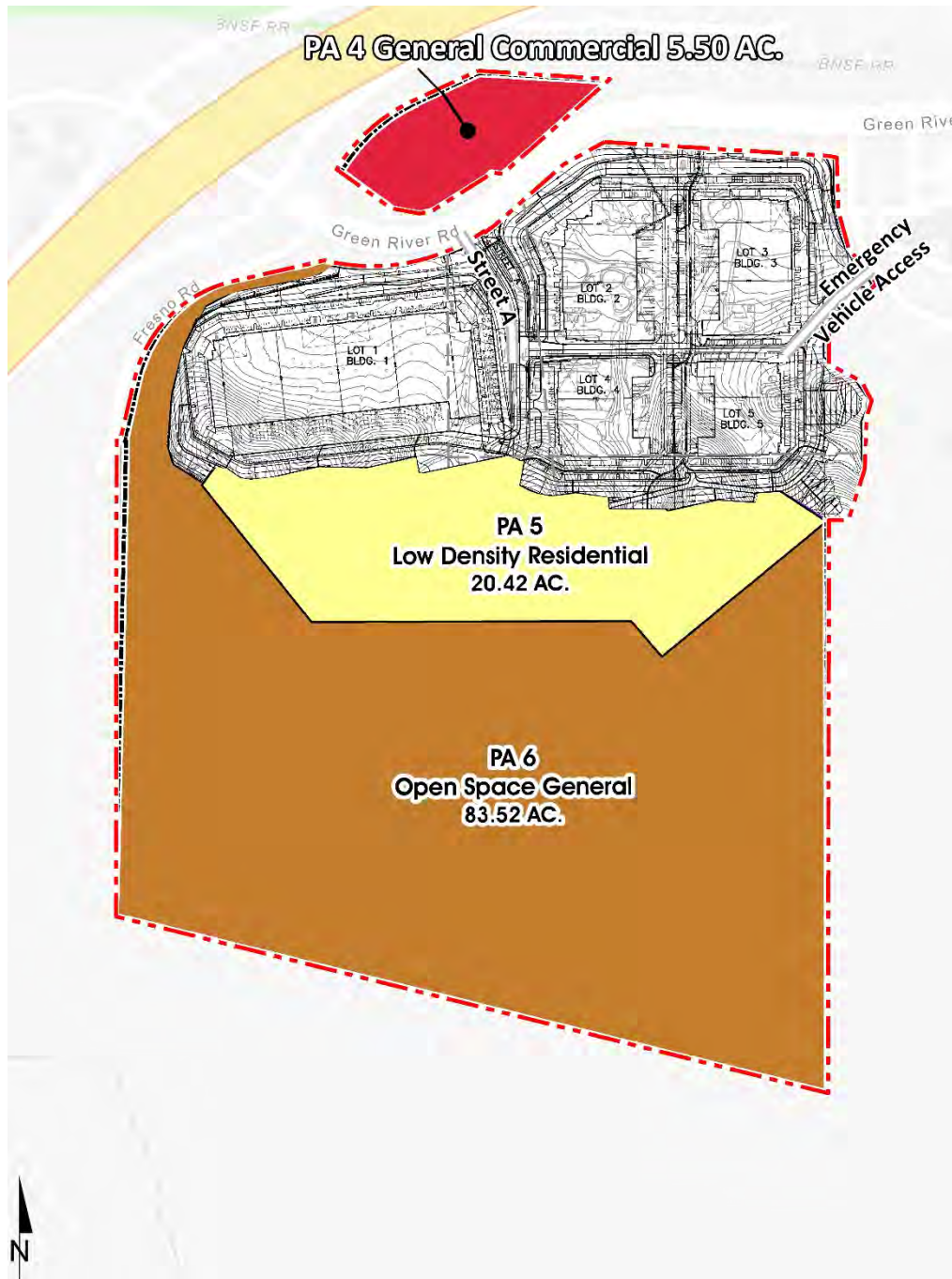
The Project is proposing an amendment to the previously approved Green River Ranch Specific Plan, a Precise Plan for the Business Park Industrial component of the Project, and a tentative tract map. The Precise Plan includes the development of 746,167 square feet of building space and for the purposes of the Traffic Study assumes 634,242 square feet of industrial park use (85% of the overall Business Park Industrial square footage) and 111,925 square feet of high-cube cold storage warehouse use (15% of the overall Business Park Industrial square footage). The Project is proposed to be developed in phases as follows:

- **Phase 1:** 634,242 square feet of Business Park Industrial use and 111,925 square feet of High-Cube Cold Storage Warehouse use (Planning Areas or PAs 1, 2, and 3)
- **Phase 2:** Development in Phase 1 plus up to 19,600 square feet of general commercial uses which for the purposes of the traffic study will be evaluated as a Gas Station with Convenience Market with 12 vehicle fueling positions and 2,500 square feet of Fast-Food Restaurant with Drive-Through Window use (buildout of PAs 1, 2, and 3 and the addition of PA 4). The land uses and intensities proposed for the retail component were selected in order to conduct a conservative analysis (i.e., evaluate a higher trip generation than 19,600 square feet of general commercial use)
- **Project Buildout:** Development in Phases 1 and 2 plus the addition of 32 Residential Estate Lots (buildout of PAs 1, 2, 3, and 4 and the addition of PA 5)



Specific development plans are not proposed for Planning Areas 4 and 5. A preliminary land use plan for the proposed Project is shown on Exhibit 1. Access to the Project site will be provided to Green River Road via Street A and emergency vehicle access will be provided via Dominguez Ranch Road. Project traffic will not use Fresno Road for site access. The Project is anticipated to have an Opening Year of 2026.

**EXHIBIT 1: PRELIMINARY LAND USE PLAN**



## TRIP GENERATION

Trip generation represents the amount of traffic that is attracted and produced by a development and is based upon the specific land uses planned for a given project. Trips generated by the Project's proposed land uses have been calculated based on trip generation rates collected by the ITE Trip Generation Manual, 11<sup>th</sup> Edition, 2021 for the following land use codes:

- Industrial Park (ITE Land Use Code 130)
- High-Cube Cold Storage Warehouse (ITE Land Use Code 157)
- Single Family Detached Residential (ITE Land Use Code 210)
- Fast-Food Restaurant with Drive-Thru Window (ITE Land Use Code 934)
- Gas Station/Convenience Market (ITE Land Use Code 960)

The Project trip generation rates are shown in Table 1. In an effort to evaluate the most conservative trip generation for the Project (worst-case condition), the gas station and fast-food restaurant uses are assumed for the commercial component as opposed to 19,600 square feet of general commercial.

**TABLE 1: TRIP GENERATION RATES**

Land Use <sup>1</sup>	Units <sup>2</sup>	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
<b>Actual Vehicles:</b>									
Industrial Park <sup>3</sup>	TSF	130	0.275	0.065	0.340	0.075	0.265	0.340	3.370
Passenger Cars (AM=88.2%, PM=88.2%, Daily=83.1%)			0.257	0.043	0.300	0.060	0.240	0.300	2.800
2-Axle Trucks (AM=2.0%, PM=2.0%, Daily=2.8%)			0.003	0.004	0.007	0.003	0.004	0.007	0.095
3-Axle Trucks (AM=2.4%, PM=2.4%, Daily=3.5%)			0.004	0.005	0.008	0.003	0.005	0.008	0.118
4+-Axle Trucks (AM=7.4%, PM=7.4%, Daily=10.6%)			0.011	0.014	0.025	0.010	0.016	0.025	0.357
High-Cube Cold Storage Warehouse <sup>3</sup>	TSF	157	0.085	0.025	0.110	0.034	0.086	0.120	2.120
Passenger Cars (AM=72.7%, PM=75.0%, Daily=64.6%)			0.076	0.004	0.080	0.019	0.071	0.090	1.370
2-Axle Trucks (AM=9.5%, PM=8.7%, Daily=12.3%)			0.003	0.007	0.010	0.005	0.005	0.010	0.260
3-Axle Trucks (AM=3.0%, PM=2.8%, Daily=3.9%)			0.001	0.002	0.003	0.002	0.001	0.003	0.083
4+-Axle Trucks (AM=14.8%, PM=13.6%, Daily=19.2%)			0.005	0.011	0.016	0.008	0.008	0.016	0.407
Single Family Detached Residential	DU	210	0.18	0.52	0.70	0.59	0.35	0.94	9.43
Fast-Food Restaurant With Drive-Thru	TSF	934	22.75	21.86	44.61	17.18	15.85	33.03	467.48
Gas Station with Convenience Market (2-4TSF Market)	VFP	945	8.03	8.03	16.06	9.21	9.21	18.42	265.12

<sup>1</sup> Trip Generation & Vehicle Mix Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eleventh Edition (2021).

<sup>2</sup> TSF = thousand square feet; VFP = Vehicle Fueling Position; DU = Dwelling Units

<sup>3</sup> Truck Mix: South Coast Air Quality Management District's (SCAQMD) recommended truck mix, by axle type.

Normalized % - Without Cold Storage: 16.7% 2-Axle trucks, 20.7% 3-Axle trucks, 62.6% 4-Axle trucks.

Normalized % - With Cold Storage: 34.7% 2-Axle trucks, 11.0% 3-Axle trucks, 54.3% 4-Axle trucks.

Passenger car equivalent (PCE) factors were applied to the trip generation rates for heavy trucks (large 2-axles, 3-axles, 4+-axles). PCEs allow the typical “real-world” mix of vehicle types to be represented as a single, standardized unit, such as the passenger car, to be used for the purposes of capacity and level of service analyses. The PCE factors are consistent with the recommended PCE factors in the City’s Guidelines.

Internal capture is a percentage reduction that can be applied to the trip generation estimates for individual land uses to account for trips internal to the site (trips that travel between uses without leaving the site). In other words, trips may be made between the gas station and food/restaurant uses proposed which can be made either by walking or using internal roadways without using external streets. The internal capture is based on the National Cooperative Highway Research Program’s (NCHRP Report 684) internal capture trip capture estimation tool. These internal capture worksheets are attached to this scoping agreement (see Attachment A).

Pass-by percentages have been obtained from the latest ITE Trip Generation Manual (see Attachment B). Pass-by trips account for trips that are currently on the existing roadway network that would stop by uses within the proposed Project on their way to their ultimate destination. The pass-by reduction has been considered for the fast-food restaurant and gas station uses only.

As shown on Table 2, the Project is anticipated to generate a total of 3,790 two-way trip-ends per day with 340 AM peak hour trips and 341 PM peak hour trips. Consistent with the City’s guidelines and other traffic studies prepared in the City of Corona, for the purposes of the traffic study, the PCE trip generation has been utilized. The Project is anticipated to generate a total of 4,464 two-way PCE trip-ends per day with 386 PCE AM peak hour trips and 384 PCE PM peak hour trips

The Traffic Study will also include a trip generation comparison of the proposed Project to the trip generation evaluated in the adopted Specific Plan for informational purposes.

**TABLE 2: PROJECT TRIP GENERATION SUMMARY**

Land Use	Quantity Units <sup>1</sup>	AM Peak Hour			PM Peak Hour			Daily
		In	Out	Total	In	Out	Total	
<b>Actual Vehicles:</b>								
Industrial Park (PA 1, 2, and 3) (85%)	634.242 TSF							
Passenger Cars:		163	27	190	38	152	190	1,776
2-axle Trucks:		2	2	4	2	3	5	60
3-axle Trucks:		2	3	5	2	3	5	76
4+-axle Trucks:		7	9	16	6	10	16	226
Total Truck Trips (Actual Vehicles):		11	14	25	10	16	26	362
High-Cube Cold Storage Warehouse (PA 1, 2, 3) (15%)	111.925 TSF							
Passenger Cars:		9	0	9	2	8	10	154
2-axle Trucks:		0	1	1	1	1	2	30
3-axle Trucks:		0	0	0	0	0	0	10
4+-axle Trucks:		1	1	2	1	1	2	46
Total Truck Trips (Actual Vehicles):		1	2	3	2	2	4	86
Industrial Passenger Car Trips		172	27	199	40	160	200	1,930
Industrial Truck Trips (Actual Vehicles)		12	16	28	12	18	30	448
<b>Industrial Total Trips (Actual Vehicles)<sup>2</sup></b>		<b>184</b>	<b>43</b>	<b>227</b>	<b>52</b>	<b>178</b>	<b>230</b>	<b>2,378</b>
Gas Station with Market (PA 4)	12 VFP							
Internal Capture: <sup>4</sup>		96	96	192	111	111	222	3,182
Pass-By (76% AM; 75% PM/Daily): <sup>3</sup>		-8	-12	-20	-16	-12	-28	-302
Pass-By (76% AM; 75% PM/Daily): <sup>3</sup>		-64	-64	-128	-71	-71	-142	-2,160
Fast-Food Restaurant with Drive-Thru (PA 4)	2.500 TSF							
Internal Capture: <sup>4</sup>		57	55	112	43	40	83	1,170
Pass-By (50% AM; 55% PM/Daily): <sup>3</sup>		-12	-8	-20	-12	-16	-28	-302
Pass-By (50% AM; 55% PM/Daily): <sup>3</sup>		-23	-23	-46	-13	-13	-26	-478
<b>General Commercial Total Trips</b>		<b>46</b>	<b>44</b>	<b>90</b>	<b>42</b>	<b>39</b>	<b>81</b>	<b>1,110</b>
Single Family Detached Residential (PA 5)	32 DU							
Internal Capture: <sup>4</sup>		6	17	23	19	11	30	302
<b>Proposed Project Total (Actual Vehicles)</b>		<b>236</b>	<b>104</b>	<b>340</b>	<b>113</b>	<b>228</b>	<b>341</b>	<b>3,790</b>
<b>Passenger Car Equivalent (PCE):</b>								
Industrial Park (PA 1, 2, and 3) (85%)	634.242 TSF							
Passenger Cars:		163	27	190	38	152	190	1,776
2-axle Trucks (PCE = 1.5):		3	4	7	3	4	7	92
3-axle Trucks (PCE = 2.0):		4	6	10	4	6	10	150
4+-axle Trucks (PCE = 3.0):		22	26	48	18	30	48	680
Total Truck Trips (PCE):		29	36	65	25	40	65	922
High-Cube Cold Storage Warehouse (PA 1, 2, 3) (15%)	111.925 TSF							
Passenger Cars:		9	0	9	2	8	10	154
2-axle Trucks (PCE = 1.5):		1	1	2	1	1	2	44
3-axle Trucks (PCE = 2.0):		0	1	1	0	0	0	18
4+-axle Trucks (PCE = 3.0):		2	4	6	3	3	6	138
Total Truck Trips (PCE):		3	6	9	4	4	8	200
Industrial Passenger Car Trips		172	27	199	40	160	200	1,930
Industrial Truck Trips (PCE)		32	42	74	29	44	73	1,122
<b>Proposed Project Total (PCE)</b>		<b>256</b>	<b>130</b>	<b>386</b>	<b>130</b>	<b>254</b>	<b>384</b>	<b>4,464</b>

<sup>1</sup> TSF = Thousand Square Feet; VFP = Vehicle Fueling Position; DU = Dwelling Units<sup>2</sup> Total Trips = Passenger Cars + Truck Trips.<sup>3</sup> Pass-by reduction source: ITE [Trip Generation Manual](#) (11th Edition, 2021).<sup>4</sup> Internal capture calculated from NCHRP 684 Internal Trip Capture Estimation Tool.



## TRIP DISTRIBUTION

The Project trip distribution represents the directional orientation of traffic to and from the Project site. Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. In addition, truck routes for neighboring agencies have been taken into consideration in the development of the trip distribution patterns for heavy trucks. Exhibits 2 and 3 show the Project truck and passenger car trip distribution patterns for the business park industrial use, respectively. Exhibit 4 shows the Project retail trip distribution patterns and Exhibit 5 shows the residential trip distribution patterns.

### EXHIBIT 2: PROJECT (BUSINESS PARK INDUSTRIAL TRUCK) TRIP DISTRIBUTION

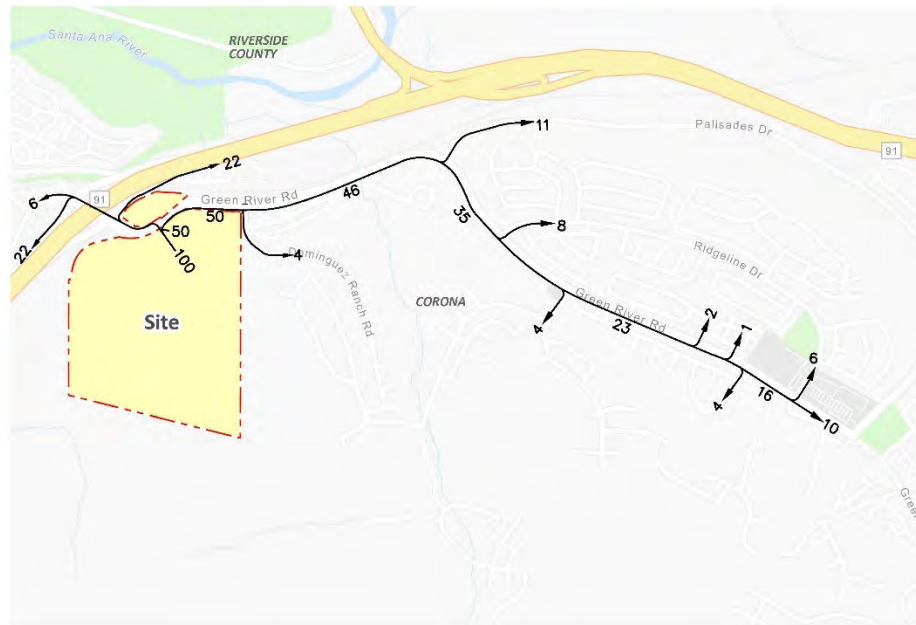


**LEGEND:**

10 = PERCENT TO/FROM PROJECT



### EXHIBIT 3: PROJECT (BUSINESS PARK INDUSTRIAL PASSENGER CAR) TRIP DISTRIBUTION

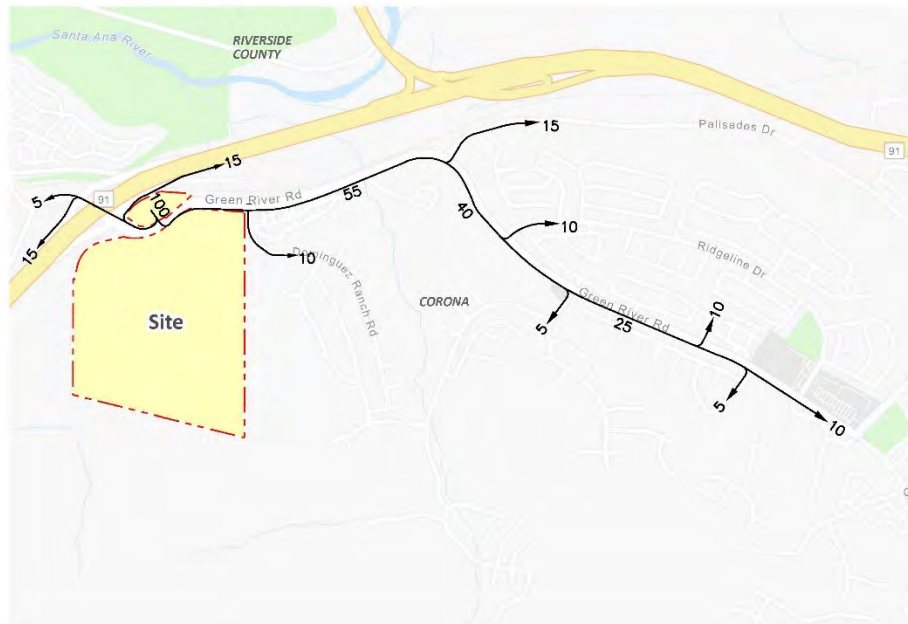


**LEGEND:**

10 = PERCENT TO/FROM PROJECT



### EXHIBIT 4: PROJECT (RETAIL) TRIP DISTRIBUTION

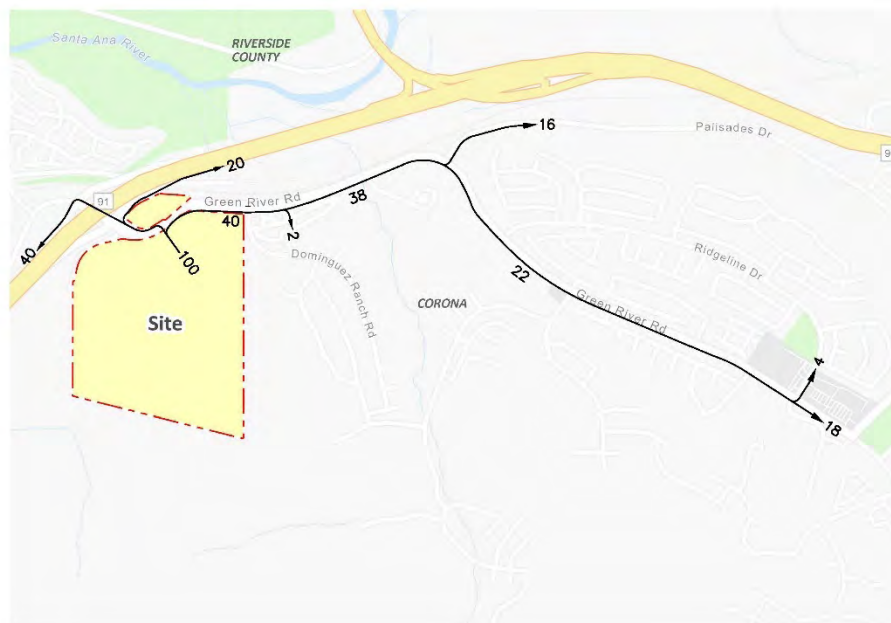


**LEGEND:**

10 = PERCENT TO/FROM PROJECT



### EXHIBIT 5: PROJECT (RESIDENTIAL) TRIP DISTRIBUTION



**LEGEND:**

10 = PERCENT TO/FROM PROJECT

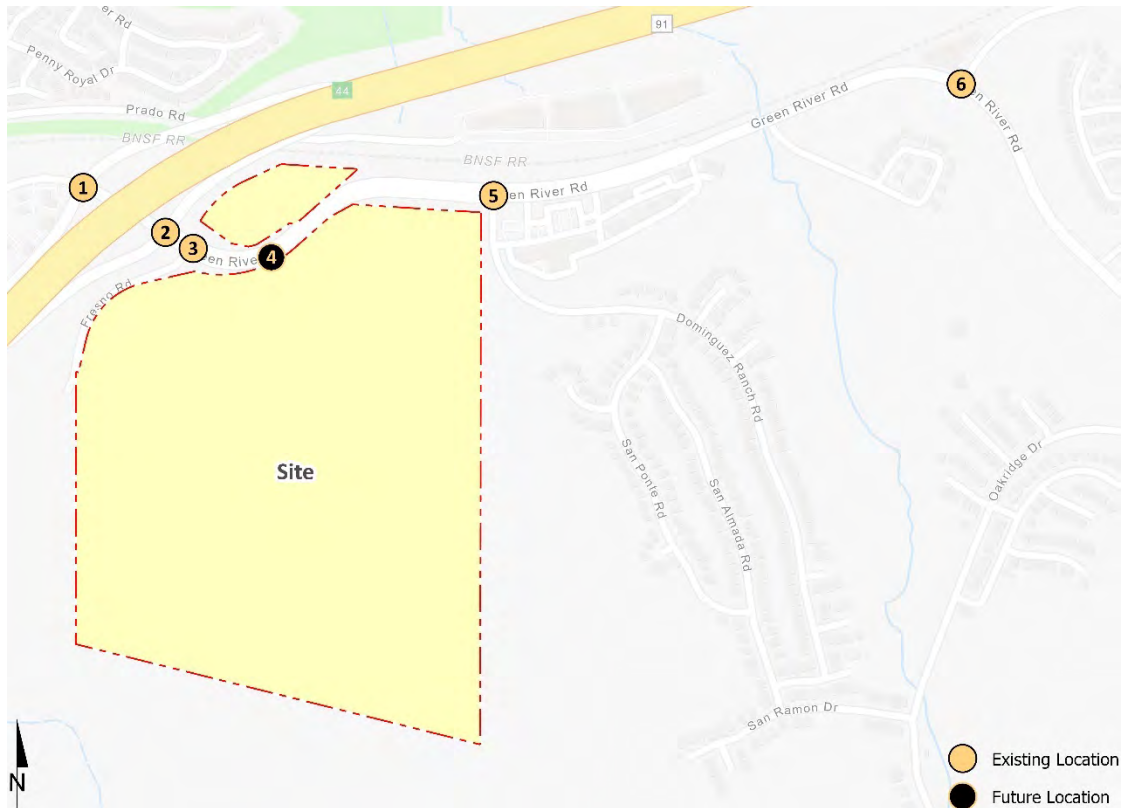
### ANALYSIS SCENARIOS

Consistent with the City's Guidelines, intersection analysis will be provided for the following analysis scenarios:

1. Existing (2023) Conditions
2. Existing plus Project (E+P) – Phase 1
3. E+P – Phase 2
4. E+P – Project Buildout
5. Opening Year Cumulative (2026) Without Project
6. Opening Year Cumulative (2026) With Project – Phase 1
7. Opening Year Cumulative (2026) With Project – Phase 2
8. Opening Year Cumulative (2026) With Project – Project Buildout
9. Horizon Year (2045) Without Project
10. Horizon Year (2045) With Project – Project Buildout Only

All study area intersections will be evaluated using the Highway Capacity Manual (HCM) 6<sup>th</sup> Edition analysis methodology. Unless otherwise specified, the Horizon Year (2045) forecasts will be developed from the latest Riverside County Model (RIVCOM). The study area that is proposed to be evaluated is shown on Exhibit 6.

**EXHIBIT 6: STUDY AREA**



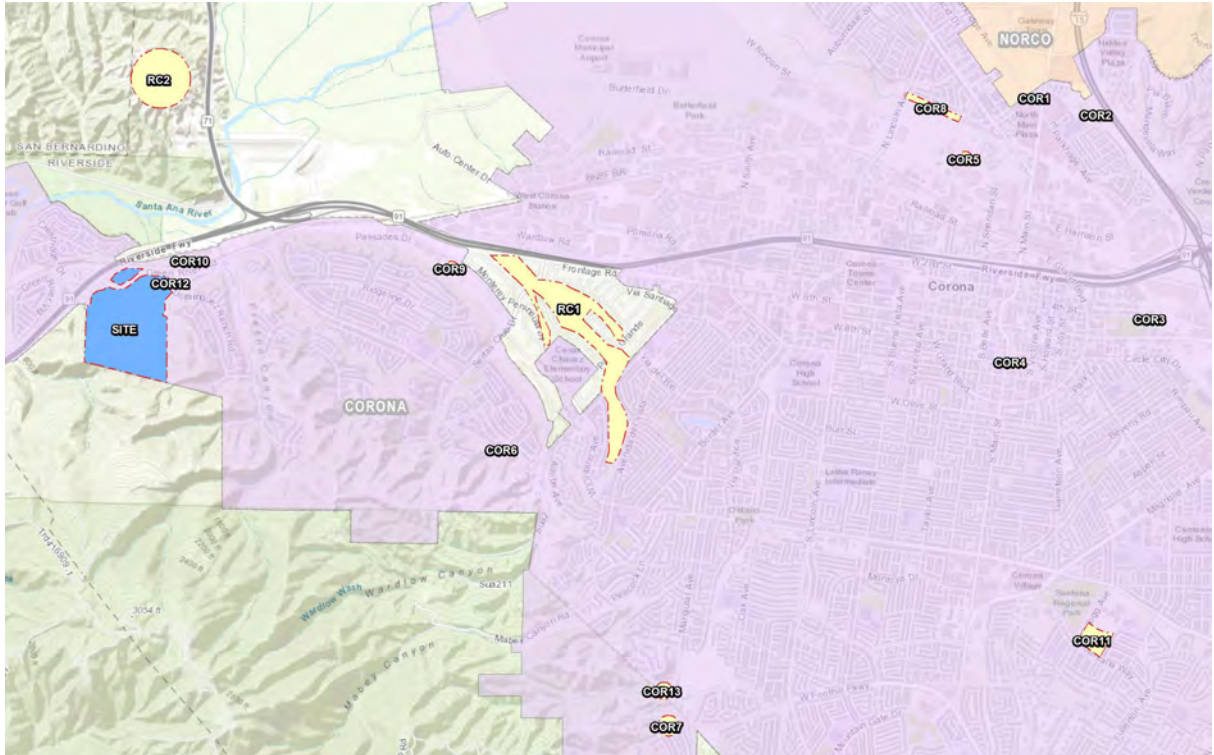
#	Intersection Location	Jurisdiction	CMP?
1	Green River Rd. & SR-91 Westbound Ramps	Caltrans, Corona	No
2	Green River Rd. & SR-91 Eastbound Ramps	Caltrans, Corona	No
3	Fresno Rd. & Green River Rd.	Corona	No
4	Street A & Green River Rd. - Future Intersection	Corona	No
5	Dominguez Ranch Rd. & Green River Rd.	Corona	No
6	Green River Rd. & Palisades Dr.	Corona	No

#	Roadway Segments
1	Green River Rd. - SR-91 Eastbound Ramps to Fresno Rd.
2	Green River Rd. - Fresno Rd. to Street A
3	Green River Rd. - Street A to Dominguez Ranch Rd.
4	Green River Rd. - Dominguez Ranch Rd. to Palisades Dr.

## CUMULATIVE PROJECTS

It is requested that the City provide current cumulative projects within the study area for inclusion in the Traffic Analysis. A preliminary map and summary table are provided on Exhibit 7 and Table 4. The County will also be contacted to obtain the latest list of cumulative projects within the unincorporated area of the County that might contribute traffic to the study area.

### EXHIBIT 7: CUMULATIVE DEVELOPMENT PROJECT LOCATION MAP





**TABLE 4: SUMMARY OF CUMULATIVE DEVELOPMENT PROJECTS**

#	Project/Location	Land Use	Quantity Units <sup>1</sup>
County of Riverside:			
RC1	Trails at Corona	Shopping Center	8.500 TSF
		Single Family Detached	123 DU
		Senior Adult Housing - Detached	189 DU
		Senior Adult Housing - Attached	114 DU
RC2	Prado Raceway	Raceway	67.0 AC
City of Corona:			
COR1	148 Multi-Family Units	Multi-Family Housing	148 DU
COR2	45 Townhomes	Residential Condo/Townhouse	45 DU
COR3	86 Affordable Units	Single Family Detached	86 DU
COR4	Corona Regional Medical Expansion	Hospital	212.000 TSF
COR5	4 Industrial Buildings	General Light Industrial	95.500 TSF
COR6	Sierra Bella	Single Family Detached	237 DU
COR7	Skyline Heights	Single Family Detached	292 DU
COR8	3 Industrial Buildings	General Light Industrial	731.000 TSF
COR9	4 Industrial Buildings	General Light Industrial	47.643 TSF
COR10	Taco Bell with Drive Thru	Fast Food with Drive Thru	2.080 TSF
COR11	Peppermint Ridge Expansion	Assisted Living	3.840 TSF
COR12	Drive-Thru Restaurant	Fast Food with Drive Thru	2.400 TSF
COR13	Skyline Village (DPR2020-0008)	Food Hall	20.000 TSF
		Fast Food with Drive Thru	2.800 TSF
		Multi-Family Housing	82 DU

<sup>1</sup> TSF = Thousand Square Feet; DU = Dwelling Unit; AC = Acres

## SPECIAL ISSUES

The following special issues will also be addressed:

- VMT analysis will be evaluated in a separate document.
- Conduct traffic signal warrant analysis for all existing and future unsignalized study area intersections, which also includes all applicable Project driveways/future intersections.
- Provide a queuing analysis for the Project driveway(s). Off-ramp queuing will also be assessed at the SR-91 Freeway Off-Ramps as required by Caltrans.
- The operations and queuing analyses at the SR-91 Freeway Ramps on Green River Road will also take into consideration the improvements that will be implemented as part of the SR-91/SR-71 Flyover Interchange Project (currently under construction).

If you have any questions or comments, I can be reached at [cs@urbanxroads.com](mailto:cs@urbanxroads.com).

## **ATTACHMENT A: INTERNAL CAPTURE WORKSHEETS**

NCHRP 8-51 Internal Trip Capture Estimation Tool			
<b>Project Name:</b>	Green River SPA	<b>Organization:</b>	Urban Crossroads, Inc.
<b>Project Location:</b>		<b>Performed By:</b>	CS
<b>Scenario Description:</b>		<b>Date:</b>	22-Mar
<b>Analysis Year:</b>		<b>Checked By:</b>	
<b>Analysis Period:</b>	AM Street Peak Hour	<b>Date:</b>	

Table 1-A: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs <sup>1</sup>	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				192	96	96
Restaurant				112	57	55
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses <sup>2</sup>				0		
<b>Total</b>				<b>304</b>	<b>153</b>	<b>151</b>

Table 2-A: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses <sup>2</sup>						

Table 3-A: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-A: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		12	0	0	0
Restaurant	0	8		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-A: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	304	153	151
Internal Capture Percentage	13%	13%	13%
External Vehicle-Trips <sup>3</sup>	264	133	131
External Transit-Trips <sup>4</sup>	0	0	0
External Non-Motorized Trips <sup>4</sup>	0	0	0

Table 6-A: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	8%	13%
Restaurant	21%	15%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

<sup>1</sup>Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

<sup>2</sup>Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

<sup>3</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-A

<sup>4</sup>Person-Trips

\*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*



NCHRP 8-51 Internal Trip Capture Estimation Tool			
Project Name:	Green River SPA	Organization:	Urban Crossroads, Inc.
Project Location:		Performed By:	CS
Scenario Description:		Date:	22-Mar
Analysis Year:		Checked By:	
Analysis Period:	PM Street Peak Hour	Date:	

Table 1-P: Base Vehicle-Trip Generation Estimates (Single-Use Site Estimate)						
Land Use	Development Data (For Information Only)			Estimated Vehicle-Trips		
	ITE LUCs <sup>1</sup>	Quantity	Units	Total	Entering	Exiting
Office				0		
Retail				222	111	111
Restaurant				83	43	40
Cinema/Entertainment				0		
Residential				0		
Hotel				0		
All Other Land Uses <sup>2</sup>				0		
<b>Total</b>				<b>305</b>	<b>154</b>	<b>151</b>

Table 2-P: Mode Split and Vehicle Occupancy Estimates						
Land Use	Entering Trips			Exiting Trips		
	Veh. Occ.	% Transit	% Non-Motorized	Veh. Occ.	% Transit	% Non-Motorized
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						
All Other Land Uses <sup>2</sup>						

Table 3-P: Average Land Use Interchange Distances (Feet Walking Distance)						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office						
Retail						
Restaurant						
Cinema/Entertainment						
Residential						
Hotel						

Table 4-P: Internal Person-Trip Origin-Destination Matrix*						
Origin (From)	Destination (To)					
	Office	Retail	Restaurant	Cinema/Entertainment	Residential	Hotel
Office		0	0	0	0	0
Retail	0		12	0	0	0
Restaurant	0	16		0	0	0
Cinema/Entertainment	0	0	0		0	0
Residential	0	0	0	0		0
Hotel	0	0	0	0	0	

Table 5-P: Computations Summary			
	Total	Entering	Exiting
All Person-Trips	305	154	151
Internal Capture Percentage	18%	18%	19%
External Vehicle-Trips <sup>3</sup>	249	126	123
External Transit-Trips <sup>4</sup>	0	0	0
External Non-Motorized Trips <sup>4</sup>	0	0	0

Table 6-P: Internal Trip Capture Percentages by Land Use		
Land Use	Entering Trips	Exiting Trips
Office	N/A	N/A
Retail	14%	11%
Restaurant	28%	40%
Cinema/Entertainment	N/A	N/A
Residential	N/A	N/A
Hotel	N/A	N/A

<sup>1</sup>Land Use Codes (LUCs) from *Trip Generation Informational Report*, published by the Institute of Transportation Engineers.

<sup>2</sup>Total estimate for all other land uses at mixed-use development site-not subject to internal trip capture computations in this estimator

<sup>3</sup>Vehicle-trips computed using the mode split and vehicle occupancy values provided in Table 2-P

<sup>4</sup>Person-Trips

\*Indicates computation that has been rounded to the nearest whole number.

*Estimation Tool Developed by the Texas Transportation Institute*

## ATTACHMENT B: ITE PASS-BY WORKSHEETS

### Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual*, 11th Edition

Land Use Code	934								
Land Use	Fast-Food Restaurant with Drive-Through Window								
Setting	General Urban/Suburban								
Time Period	Weekday AM Peak Period								
# Data Sites	5								
Average Pass-By Rate	50%								
	Pass-By Characteristics for Individual Sites								
	GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume
					Primary (%)	Diverted (%)	Total (%)		
1.4	Kentucky	1993	—	62	22	16	38	1407	2
3	Kentucky	1993	—	43	14	43	57	2903	2
3.3	--	1996	—	68	—	—	32	—	21
3.6	Kentucky	1993	—	32	47	21	68	437	2
4.2	Indiana	1993	—	46	23	31	54	1049	2

### Vehicle Pass-By Rates by Land Use

Source: ITE *Trip Generation Manual*, 11th Edition

Land Use Code	934								
Land Use	Fast-Food Restaurant with Drive-Through Window								
Setting	General Urban/Suburban								
Time Period	Weekday PM Peak Period								
# Data Sites	11								
Average Pass-By Rate	55%								
	Pass-By Characteristics for Individual Sites								
	GFA (000)	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume
					Primary (%)	Diverted (%)	Total (%)		
1.3	Kentucky	1993	—	68	22	10	32	2055	2
1.9	Kentucky	1993	33	67	24	9	33	2447	2
2.8	Florida	1995	47	66	—	—	34	—	30
2.9	Florida	1996	271	41	41	18	59	—	30
3	Kentucky	1993	—	31	31	38	69	4250	2
3.1	Florida	1995	28	71	—	—	29	—	30
3.1	Florida	1996	29	38	—	—	62	—	30
3.2	Florida	1996	202	40	39	21	60	—	30
3.3	—	1996	—	62	—	—	38	—	21
4.2	Indiana	1993	—	56	25	19	44	1632	2
4.3	Florida	1994	304	62	—	—	38	—	30

**Vehicle Pass-By Rates by Land Use**

Source: ITE Trip Generation Manual, 11th Edition

Land Use Code	945									
Land Use	Convenience Store/Gas Station									
Setting	General Urban/Suburban									
Time Period	Weekday AM Peak Period									
# Data Sites	16 Sites with between 2 and 8 VFP					28 Sites with between 9 and 20 VFP				
Average Pass-By Rate	60% for Sites with between 2 and 8 VFP					76% for Sites with between 9 and 20 VFP				
Pass-By Characteristics for Individual Sites										
GFA (000)	VFP	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Non-Pass-By Trips			Adj Street Peak Hour Volume	Source
						Primary (%)	Diverted (%)	Total (%)		
2	8	Maryland	1992	46	87	13	0	13	2235	25
2.1	6	Maryland	1992	26	58	23	19	42	2080	25
2.1	6	Maryland	1992	26	58	23	19	42	2080	25
2.2	8	Maryland	1992	31	47	34	19	53	1785	25
2.2	< 8	Indiana	1993	79	56	6	38	44	635	2
2.2	8	Maryland	1992	35	78	9	13	22	7080	25
2.3	6	Maryland	1992	37	32	41	27	68	2080	25
2.3	< 8	Kentucky	1993	58	64	5	31	36	1255	2
2.3	6	Maryland	1992	37	32	41	27	68	2080	25
2.4	< 8	Kentucky	1993	—	48	17	35	52	1210	2
2.6	< 8	Kentucky	1993	—	72	15	13	28	940	2
2.8	< 8	Kentucky	1993	—	54	11	35	46	1240	2
3	< 8	Indiana	1993	62	74	10	16	26	790	2
3.6	< 8	Kentucky	1993	49	67	4	29	33	1985	2
3.7	< 8	Kentucky	1993	49	66	16	18	34	990	2
4.694	12	Maryland	2000	—	72	—	—	28	2440	30
4.694	12	Maryland	2000	—	78	—	—	22	1561	30
4.694	12	Maryland	2000	—	79	—	—	21	2764	30
4.848	12	Virginia	2000	—	55	—	—	45	1398	30
5.06	12	Pennsylvania	2000	—	84	—	—	16	3219	30
5.242	12	Virginia	2000	—	74	—	—	26	1160	30
5.242	12	Virginia	2000	—	71	—	—	29	548	30
5.488	12	Delaware	2000	—	80	—	—	20	—	30
5.5	12	Pennsylvania	2000	—	85	—	—	15	2975	30
4.2	< 8	Kentucky	1993	47	62	19	19	38	1705	2
4.694	16	Maryland	2000	—	90	—	—	10	2278	30
4.694	16	Delaware	2000	—	74	—	—	26	2185	30
4.694	16	Delaware	2000	—	58	—	—	42	962	30
4.694	16	Delaware	2000	—	84	—	—	16	2956	30
4.694	16	New Jersey	2000	—	79	—	—	21	1859	30
4.694	20	Delaware	2000	—	84	—	—	16	3864	30
4.848	16	Virginia	2000	—	68	—	—	32	2106	30
4.848	16	Virginia	2000	—	85	—	—	15	2676	30
4.848	16	Virginia	2000	—	75	—	—	25	3244	30
4.848	16	Virginia	2000	—	71	—	—	29	1663	30
4.993	16	Pennsylvania	2000	—	75	—	—	25	1991	30
5.094	16	New Jersey	2000	—	86	—	—	14	1260	30
5.5	16	Pennsylvania	2000	—	82	—	—	18	1570	30
5.543	16	Pennsylvania	2000	—	84	—	—	16	1933	30
5.565	16	Pennsylvania	2000	—	77	—	—	23	2262	30
5.565	16	Pennsylvania	2000	—	68	—	—	32	2854	30
5.565	16	New Jersey	2000	—	58	—	—	42	1253	30
5.565	16	New Jersey	2000	—	79	—	—	21	1928	30
5.565	16	New Jersey	2000	---	84	---	---	16	1953	30

**Vehicle Pass-By Rates by Land Use**

Source: ITE *Trip Generation Manual*, 11th Edition

Land Use Code	945									
Land Use	Convenience Store/Gas Station									
Setting	General Urban/Suburban									
Time Period	Weekday PM Peak Period									
# Data Sites	12 Sites with between 2 and 8 VFP					28 Sites with between 9 and 20 VFP				
Average Pass-By Rate	56% for Sites with between 2 and 8 VFP					75% for Sites with between 9 and 20 VFP				
Pass-By Characteristics for Individual Sites										
						Non-Pass-By Trips			Adj Street Peak	
GFA (000)	VFP	State or Province	Survey Year	# Interviews	Pass-By Trip (%)	Primary (%)	Diverted (%)	Total (%)	Hour Volume	Source
2.1	8	Maryland	1992	31	52	13	35	48	1785	25
2.1	6	Maryland	1992	30	53	20	27	47	1060	25
2.2	< 8	Indiana	1993	115	48	16	36	52	820	2
2.3	< 8	Kentucky	1993	67	57	16	27	43	1954	2
2.3	6	Maryland	1992	55	40	11	49	60	2760	25
2.4	< 8	Kentucky	1993	—	58	13	29	42	2655	2
2.6	< 8	Kentucky	1993	68	67	15	18	33	950	2
2.8	< 8	Kentucky	1993	—	62	11	27	38	2875	2
3	< 8	Indiana	1993	80	65	15	20	35	1165	2
3.6	< 8	Kentucky	1993	60	56	17	27	44	2505	2
3.7	< 8	Kentucky	1993	70	61	16	23	39	2175	2
4.2	< 8	Kentucky	1993	61	58	26	16	42	2300	2
4.694	12	Maryland	2000	—	78	—	—	22	3549	30
4.694	12	Maryland	2000	—	67	—	—	33	2272	30
4.694	12	Maryland	2000	—	66	—	—	34	3514	30
4.848	12	Virginia	2000	—	71	—	—	29	2350	30
5.06	12	Pennsylvania	2000	—	91	—	—	9	4181	30
5.242	12	Virginia	2000	—	70	—	—	30	2445	30
5.242	12	Virginia	2000	—	56	—	—	44	950	30
5.488	12	Delaware	2000	—	73	—	—	27	—	30
5.5	12	Pennsylvania	2000	—	84	—	—	16	4025	30
4.694	16	Maryland	2000	—	89	—	—	11	2755	30
4.694	16	Delaware	2000	—	73	—	—	27	1858	30
4.694	16	Delaware	2000	—	59	—	—	41	1344	30
4.694	16	Delaware	2000	—	72	—	—	28	3434	30
4.694	16	New Jersey	2000	—	81	—	—	19	1734	30
4.694	20	Delaware	2000	—	76	—	—	24	1616	30
4.848	16	Virginia	2000	—	67	—	—	33	2,954	30
4.848	16	Virginia	2000	—	78	—	—	22	3086	30
4.848	16	Virginia	2000	—	83	—	—	17	4143	30
4.848	16	Virginia	2000	—	73	—	—	27	2534	30
4.993	16	Pennsylvania	2000	—	72	—	—	28	2917	30
5.094	16	New Jersey	2000	—	86	—	—	14	1730	30
5.5	16	Pennsylvania	2000	—	90	—	—	10	2616	30
5.543	16	Pennsylvania	2000	—	87	—	—	13	2363	30
5.565	16	Pennsylvania	2000	—	81	—	—	19	2770	30
5.565	16	Pennsylvania	2000	—	76	—	—	24	3362	30
5.565	16	New Jersey	2000	—	61	—	—	39	1713	30
5.565	16	New Jersey	2000	—	86	—	—	14	1721	30
5.565	16	New Jersey	2000	---	81	---	---	19	2227	30

## **APPENDIX 1.2: SITE ADJACENT QUEUES**

This Page Intentionally Left Blank



Queuing and Blocking Report  
 Horizon Year (2045) WP Conditions - PM Peak Hour

06/05/2024

Intersection: 4: Street A & Green River Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	TR	L	TR	LTR
Maximum Queue (ft)	167	281	278	260	44	52	119	209	257	454	200	162
Average Queue (ft)	78	159	168	142	12	15	30	69	116	201	86	78
95th Queue (ft)	150	254	256	229	37	41	87	169	238	514	377	156
Link Distance (ft)		443	443	443			1289	1289	1289	610	610	163
Upstream Blk Time (%)										10	9	5
Queuing Penalty (veh)										0	0	0
Storage Bay Dist (ft)	125				200	125						
Storage Blk Time (%)	4	10		1			0					
Queuing Penalty (veh)	29	8		1			0					

Queuing and Blocking Report  
 Horizon Year (2045) WP Conditions - AM Peak Hour

06/05/2024

Intersection: 4: Street A & Green River Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	T	R	L	T	T	TR	L	TR	LTR
Maximum Queue (ft)	103	101	80	58	67	175	1328	1345	1343	282	33	178
Average Queue (ft)	40	40	34	16	24	92	1289	1297	1295	94	7	98
95th Queue (ft)	83	80	72	46	52	208	1370	1370	1371	268	23	186
Link Distance (ft)		443	443	443			1289	1289	1289	610	610	163
Upstream Blk Time (%)							13	20	15			12
Queuing Penalty (veh)							121	185	138			0
Storage Bay Dist (ft)	125				200	125						
Storage Blk Time (%)	0	0				1	54					
Queuing Penalty (veh)	0	0				10	48					

## **APPENDIX 3.1: TRAFFIC COUNTS**

This Page Intentionally Left Blank

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

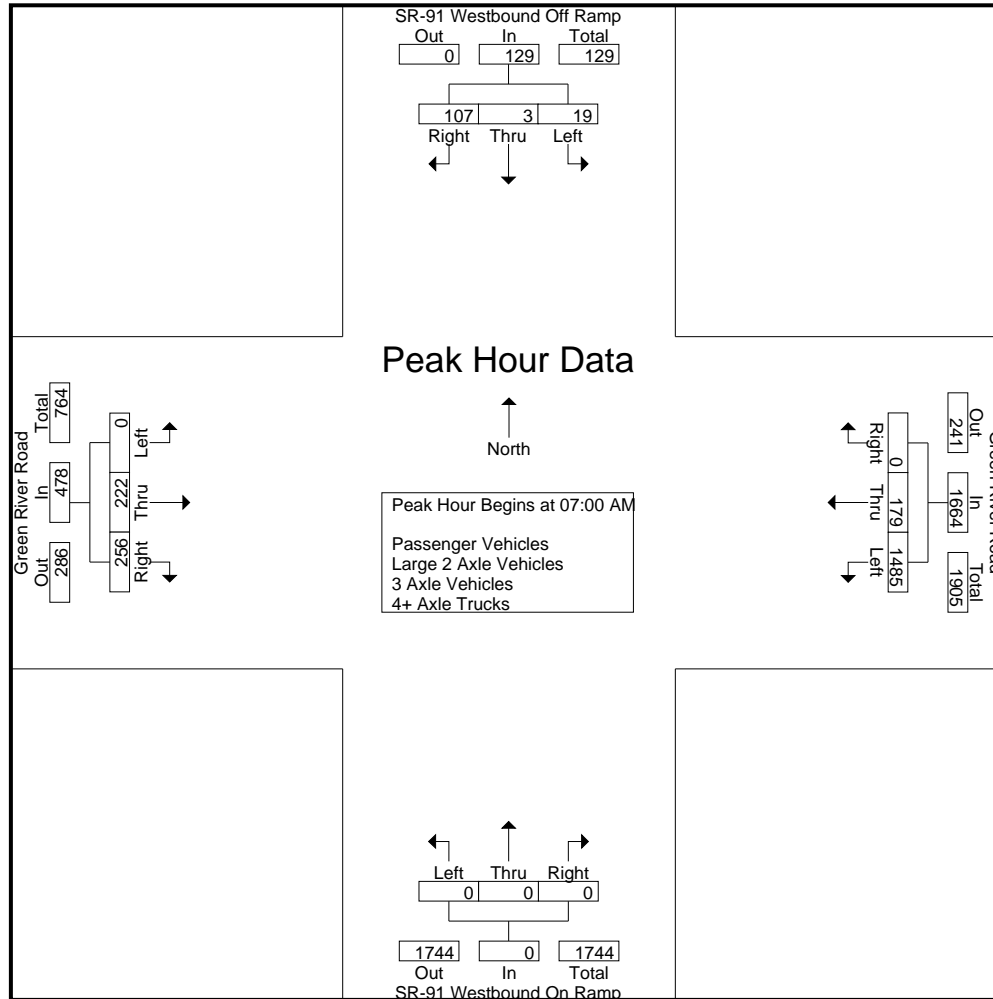
Start Time	SR-91 Westbound Off Ramp Southbound					Green River Road Westbound					SR-91 Westbound On Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	4	1	18	13	23	435	39	0	0	474	0	0	0	0	0	0	26	68	19	94	32	591	623
07:15 AM	2	1	26	17	29	291	33	0	0	324	0	0	0	0	0	0	58	73	31	131	48	484	532
07:30 AM	4	1	24	21	29	432	53	0	0	485	0	0	0	0	0	0	73	60	23	133	44	647	691
07:45 AM	9	0	39	28	48	327	54	0	0	381	0	0	0	0	0	0	65	55	19	120	47	549	596
Total	19	3	107	79	129	1485	179	0	0	1664	0	0	0	0	0	0	222	256	92	478	171	2271	2442
08:00 AM	14	2	51	33	67	286	63	0	0	349	0	0	0	0	0	0	49	76	40	125	73	541	614
08:15 AM	12	1	36	26	49	291	59	0	0	350	0	0	0	0	0	0	59	54	25	113	51	512	563
08:30 AM	13	0	35	28	48	292	59	0	0	351	0	0	0	0	0	0	41	51	20	92	48	491	539
08:45 AM	9	6	40	27	55	270	55	0	0	325	0	0	0	0	0	0	30	48	22	78	49	458	507
Total	48	9	162	114	219	1139	236	0	0	1375	0	0	0	0	0	0	179	229	107	408	221	2002	2223
Grand Total	67	12	269	193	348	2624	415	0	0	3039	0	0	0	0	0	0	401	485	199	886	392	4273	4665
Apprch %	19.3	3.4	77.3			86.3	13.7	0			0	0	0			0	45.3	54.7					
Total %	1.6	0.3	6.3		8.1	61.4	9.7	0		71.1	0	0	0		0	0	9.4	11.4		20.7	8.4	91.6	
Passenger Vehicles	52	10	251		497	2595	394	0		2989	0	0	0		0	0	382	466		1041	0	0	4527
% Passenger Vehicles	77.6	83.3	93.3	95.3	91.9	98.9	94.9	0	0	98.4	0	0	0	0	0	0	95.3	96.1	97	95.9	0	0	97
Large 2 Axle Vehicles	5	2	15		30	24	19	0		43	0	0	0		0	0	16	16		38	0	0	111
% Large 2 Axle Vehicles	7.5	16.7	5.6	4.1	5.5	0.9	4.6	0	0	1.4	0	0	0	0	0	0	4	3.3	3	3.5	0	0	2.4
3 Axle Vehicles	1	0	1		2	4	0	0		4	0	0	0		0	0	1	1		2	0	0	8
% 3 Axle Vehicles	1.5	0	0.4	0	0.4	0.2	0	0	0	0.1	0	0	0	0	0	0	0.2	0.2	0	0.2	0	0	0.2
4+ Axle Trucks	9	0	2		12	1	2	0		3	0	0	0		0	0	2	2		4	0	0	19
% 4+ Axle Trucks	13.4	0	0.7	0.5	2.2	0	0.5	0	0	0.1	0	0	0	0	0	0	0.5	0.4	0	0.4	0	0	0.4

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	4	1	18	23	435	39	0	474	0	0	0	0	0	26	68	94	591
07:15 AM	2	1	26	29	291	33	0	324	0	0	0	0	0	58	73	131	484
07:30 AM	4	1	24	29	432	53	0	485	0	0	0	0	0	73	60	133	647
07:45 AM	9	0	39	48	327	54	0	381	0	0	0	0	0	65	55	120	549
Total Volume	19	3	107	129	1485	179	0	1664	0	0	0	0	0	222	256	478	2271
% App. Total	14.7	2.3	82.9		89.2	10.8	0		0	0	0		0	46.4	53.6		
PHF	.528	.750	.686	.672	.853	.829	.000	.858	.000	.000	.000	.000	.000	.760	.877	.898	.878

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:00 AM

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	08:00 AM				07:00 AM				07:00 AM				07:15 AM				
+0 mins.	14	2	51	67	435	39	0	474	0	0	0	0	0	58	73	131	
+15 mins.	12	1	36	49	291	33	0	324	0	0	0	0	0	73	60	133	
+30 mins.	13	0	35	48	432	53	0	485	0	0	0	0	0	65	55	120	
+45 mins.	9	6	40	55	327	54	0	381	0	0	0	0	0	49	76	125	
Total Volume	48	9	162	219	1485	179	0	1664	0	0	0	0	0	245	264	509	
% App. Total	21.9	4.1	74		89.2	10.8	0		0	0	0		0	48.1	51.9		
PHF	.857	.375	.794	.817	.853	.829	.000	.858	.000	.000	.000	.000	.000	.839	.868	.957	

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- Passenger Vehicles

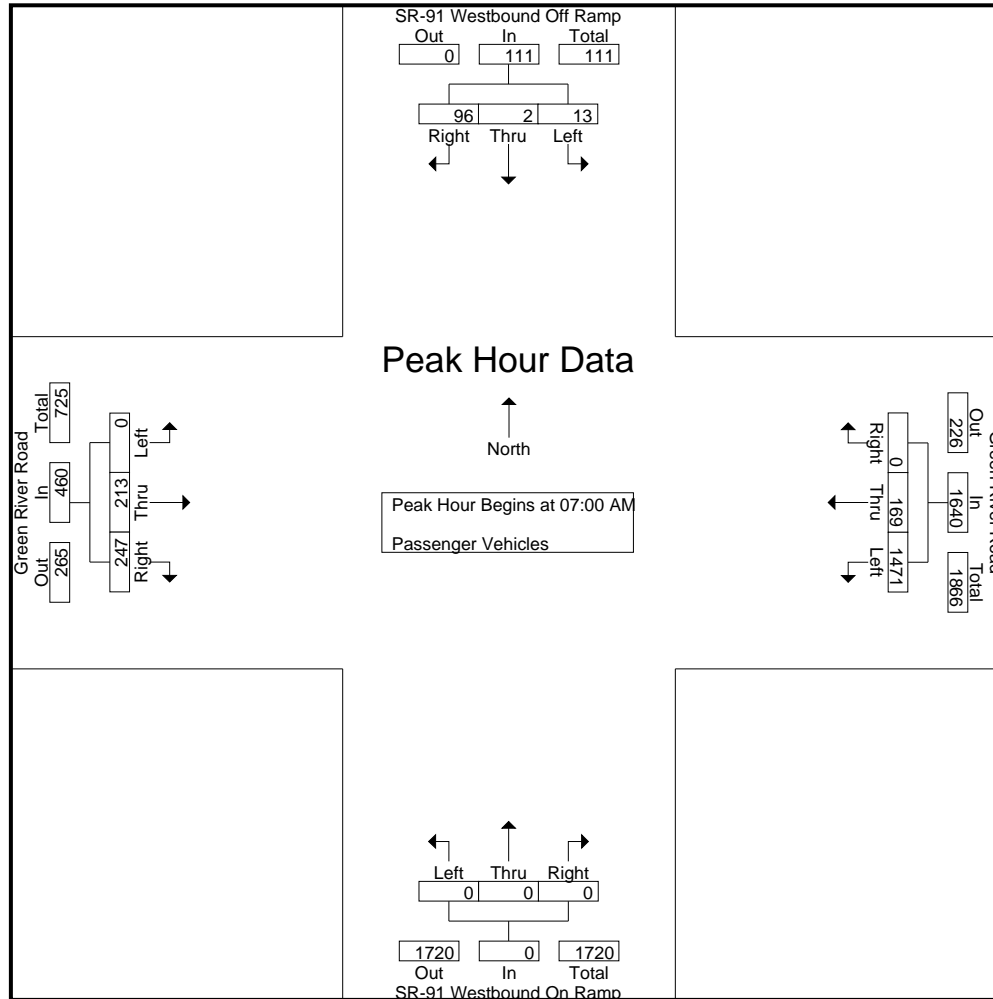
Start Time	SR-91 Westbound Off Ramp Southbound					Green River Road Westbound					SR-91 Westbound On Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	3	0	18	13	21	433	37	0	0	470	0	0	0	0	0	0	24	66	19	90	32	581	613
07:15 AM	1	1	23	16	25	287	30	0	0	317	0	0	0	0	0	0	55	73	31	128	47	470	517
07:30 AM	2	1	22	20	25	428	52	0	0	480	0	0	0	0	0	0	72	58	22	130	42	635	677
07:45 AM	7	0	33	25	40	323	50	0	0	373	0	0	0	0	0	0	62	50	16	112	41	525	566
Total	13	2	96	74	111	1471	169	0	0	1640	0	0	0	0	0	0	213	247	88	460	162	2211	2373
08:00 AM	13	1	48	31	62	284	61	0	0	345	0	0	0	0	0	0	44	72	39	116	70	523	593
08:15 AM	8	1	34	24	43	285	54	0	0	339	0	0	0	0	0	0	57	50	24	107	48	489	537
08:30 AM	12	0	34	28	46	288	58	0	0	346	0	0	0	0	0	0	38	50	20	88	48	480	528
08:45 AM	6	6	39	27	51	267	52	0	0	319	0	0	0	0	0	0	30	47	22	77	49	447	496
Total	39	8	155	110	202	1124	225	0	0	1349	0	0	0	0	0	0	169	219	105	388	215	1939	2154
Grand Total	52	10	251	184	313	2595	394	0	0	2989	0	0	0	0	0	0	382	466	193	848	377	4150	4527
Apprch %	16.6	3.2	80.2			86.8	13.2	0			0	0	0			0	45	55					
Total %	1.3	0.2	6		7.5	62.5	9.5	0		72	0	0	0		0	0	9.2	11.2		20.4	8.3	91.7	

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	3	0	18	21	433	37	0	470	0	0	0	0	0	24	66	90	581
07:15 AM	1	1	23	25	287	30	0	317	0	0	0	0	0	55	73	128	470
07:30 AM	2	1	22	25	428	52	0	480	0	0	0	0	0	72	58	130	635
07:45 AM	7	0	33	40	323	50	0	373	0	0	0	0	0	62	50	112	525
Total Volume	13	2	96	111	1471	169	0	1640	0	0	0	0	0	213	247	460	2211
% App. Total	11.7	1.8	86.5		89.7	10.3	0		0	0	0		0	46.3	53.7		
PHF	.464	.500	.727	.694	.849	.813	.000	.854	.000	.000	.000	.000	.000	.740	.846	.885	.870



City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	3	0	18	21	<b>433</b>	37	0	470	0	0	0	0	0	24	66	90	
+15 mins.	1	<b>1</b>	23	25	287	30	0	317	0	0	0	0	0	55	<b>73</b>	128	
+30 mins.	2	1	22	25	428	<b>52</b>	0	<b>480</b>	0	0	0	0	0	<b>72</b>	58	<b>130</b>	
+45 mins.	<b>7</b>	0	<b>33</b>	<b>40</b>	323	50	0	373	0	0	0	0	0	62	50	112	
Total Volume	13	2	96	111	1471	169	0	1640	0	0	0	0	0	213	247	460	
% App. Total	11.7	1.8	86.5		89.7	10.3	0		0	0	0		0	46.3	53.7		
PHF	.464	.500	.727	.694	.849	.813	.000	.854	.000	.000	.000	.000	.000	.740	.846	.885	

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

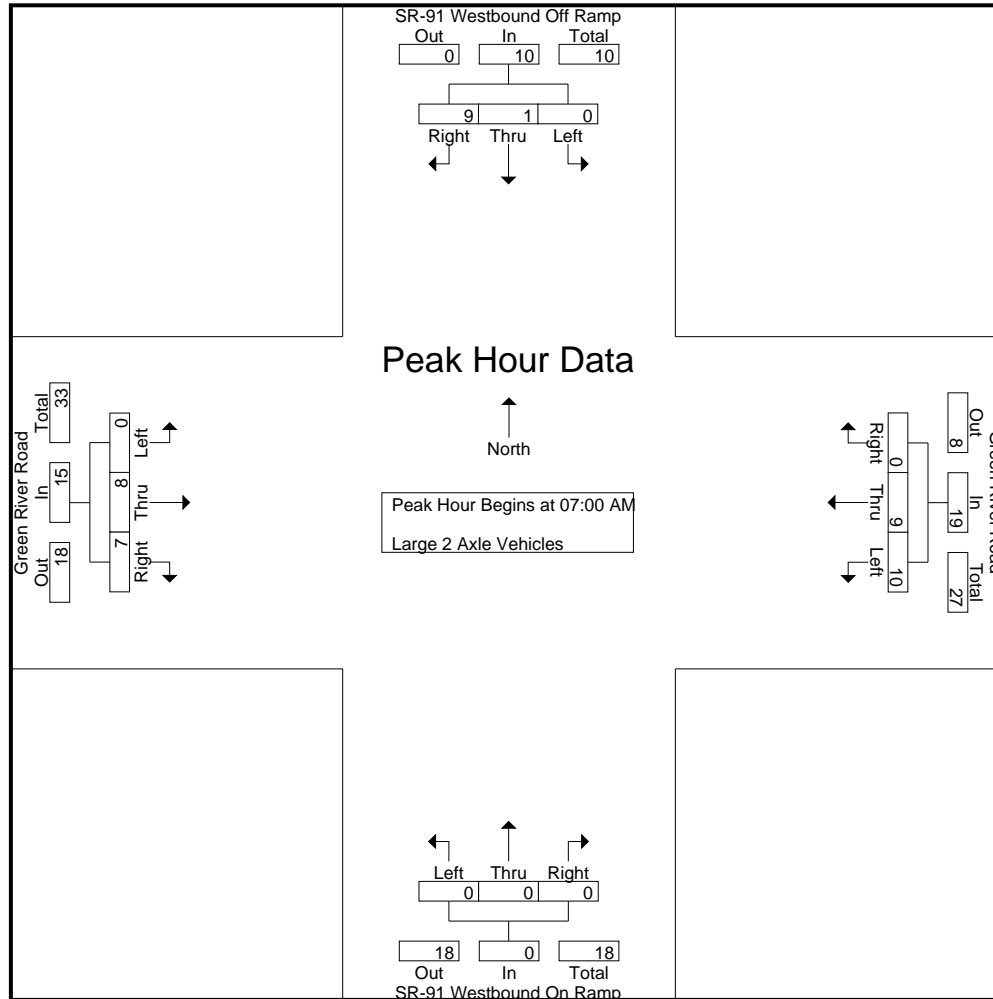
Groups Printed- Large 2 Axle Vehicles

Start Time	SR-91 Westbound Off Ramp Southbound					Green River Road Westbound					SR-91 Westbound On Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	1	0	0	1	0	2	0	0	2	0	0	0	0	0	0	1	1	0	2	0	5	5
07:15 AM	0	0	2	0	2	4	3	0	0	7	0	0	0	0	0	0	3	0	0	3	0	12	12
07:30 AM	0	0	2	1	2	3	1	0	0	4	0	0	0	0	0	0	1	1	1	2	2	8	10
07:45 AM	0	0	5	3	5	3	3	0	0	6	0	0	0	0	0	0	3	5	3	8	6	19	25
Total	0	1	9	4	10	10	9	0	0	19	0	0	0	0	0	0	8	7	4	15	8	44	52
08:00 AM	1	1	3	2	5	2	2	0	0	4	0	0	0	0	0	0	3	4	1	7	3	16	19
08:15 AM	1	0	2	2	3	6	5	0	0	11	0	0	0	0	0	0	2	4	1	6	3	20	23
08:30 AM	1	0	0	0	1	3	1	0	0	4	0	0	0	0	0	0	3	1	0	4	0	9	9
08:45 AM	2	0	1	0	3	3	2	0	0	5	0	0	0	0	0	0	0	0	0	0	0	8	8
Total	5	1	6	4	12	14	10	0	0	24	0	0	0	0	0	0	8	9	2	17	6	53	59
Grand Total	5	2	15	8	22	24	19	0	0	43	0	0	0	0	0	0	16	16	6	32	14	97	111
Apprch %	22.7	9.1	68.2			55.8	44.2	0			0	0	0			0	50	50					
Total %	5.2	2.1	15.5		22.7	24.7	19.6	0		44.3	0	0	0		0	0	16.5	16.5		33	12.6	87.4	

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	1	0	1	0	2	0	2	0	0	0	0	0	1	1	2	5
07:15 AM	0	0	2	2	4	3	0	7	0	0	0	0	0	3	0	3	12
07:30 AM	0	0	2	2	3	1	0	4	0	0	0	0	0	1	1	2	8
07:45 AM	0	0	5	5	3	3	0	6	0	0	0	0	0	3	5	8	19
Total Volume	0	1	9	10	10	9	0	19	0	0	0	0	0	8	7	15	44
% App. Total	0	10	90		52.6	47.4	0		0	0	0		0	53.3	46.7		
PHF	.000	.250	.450	.500	.625	.750	.000	.679	.000	.000	.000	.000	.000	.667	.350	.469	.579

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	1	0	1	0	2	0	2	0	0	0	0	0	1	1	2	
+15 mins.	0	0	2	2	4	3	0	7	0	0	0	0	0	3	0	3	
+30 mins.	0	0	2	2	3	1	0	4	0	0	0	0	0	1	1	2	
+45 mins.	0	0	5	5	3	3	0	6	0	0	0	0	0	3	5	8	
Total Volume	0	1	9	10	10	9	0	19	0	0	0	0	0	8	7	15	
% App. Total	0	10	90		52.6	47.4	0		0	0	0		0	53.3	46.7		
PHF	.000	.250	.450	.500	.625	.750	.000	.679	.000	.000	.000	.000	.000	.667	.350	.469	

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

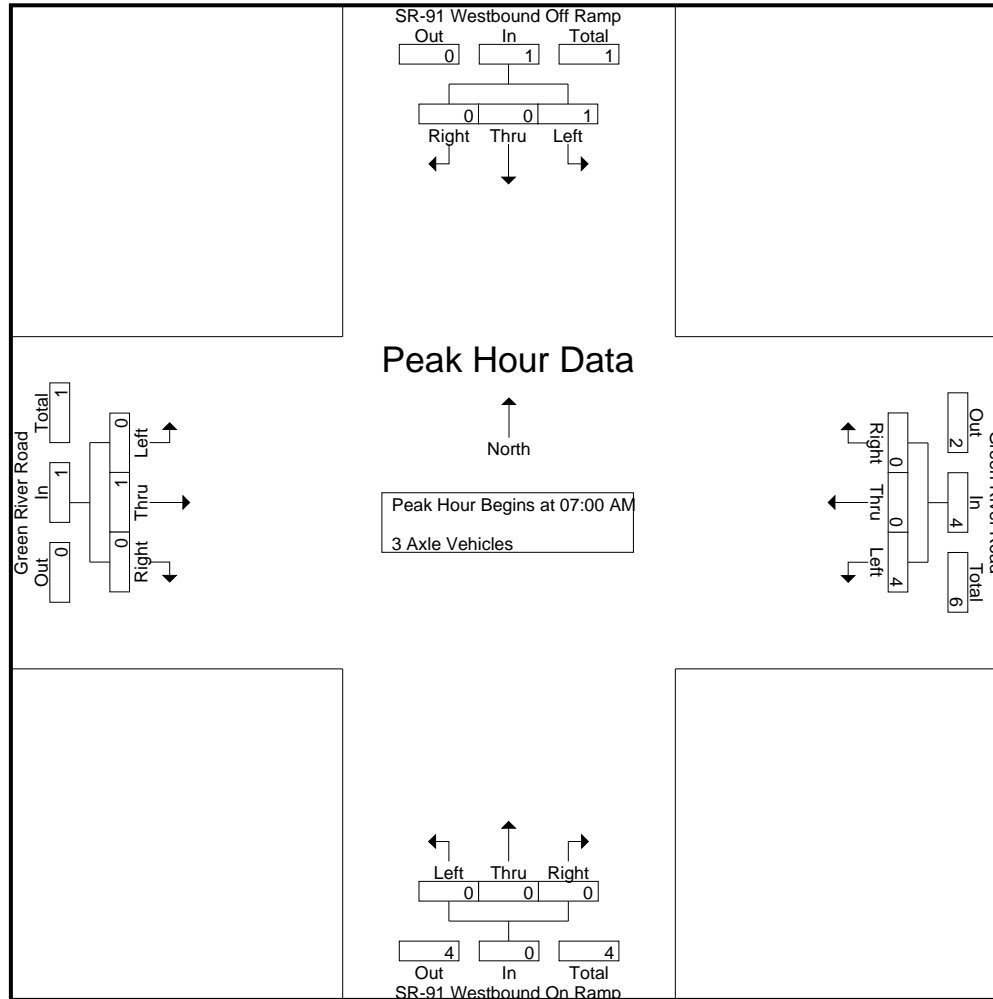
Groups Printed- 3 Axle Vehicles

Start Time	SR-91 Westbound Off Ramp Southbound					Green River Road Westbound					SR-91 Westbound On Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	3	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2	2
07:45 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	1	0	0	0	1	4	0	0	0	4	0	0	0	0	0	0	1	0	0	1	0	6	6	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1	1
Total	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2	2	2
Grand Total	1	0	1	0	2	4	0	0	0	4	0	0	0	0	0	0	1	1	0	2	0	8	8	8
Apprch %	50	0	50			100	0	0			0	0	0			0	50	50			0			
Total %	12.5	0	12.5		25	50	0	0		50	0	0	0		0	0	12.5	12.5		25	0	100		100

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	2	0	0	2	0	0	0	0	0	1	0	1	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Total Volume	1	0	0	1	4	0	0	4	0	0	0	0	0	1	0	1	6
% App. Total	100	0	0		100	0	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.500	.000	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.500

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	2	0	0	2	0	0	0	0	0	1	0	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	1	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	
+45 mins.	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	
Total Volume	1	0	0	1	4	0	0	4	0	0	0	0	0	1	0	1	
% App. Total	100	0	0		100	0	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.500	.000	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	



City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

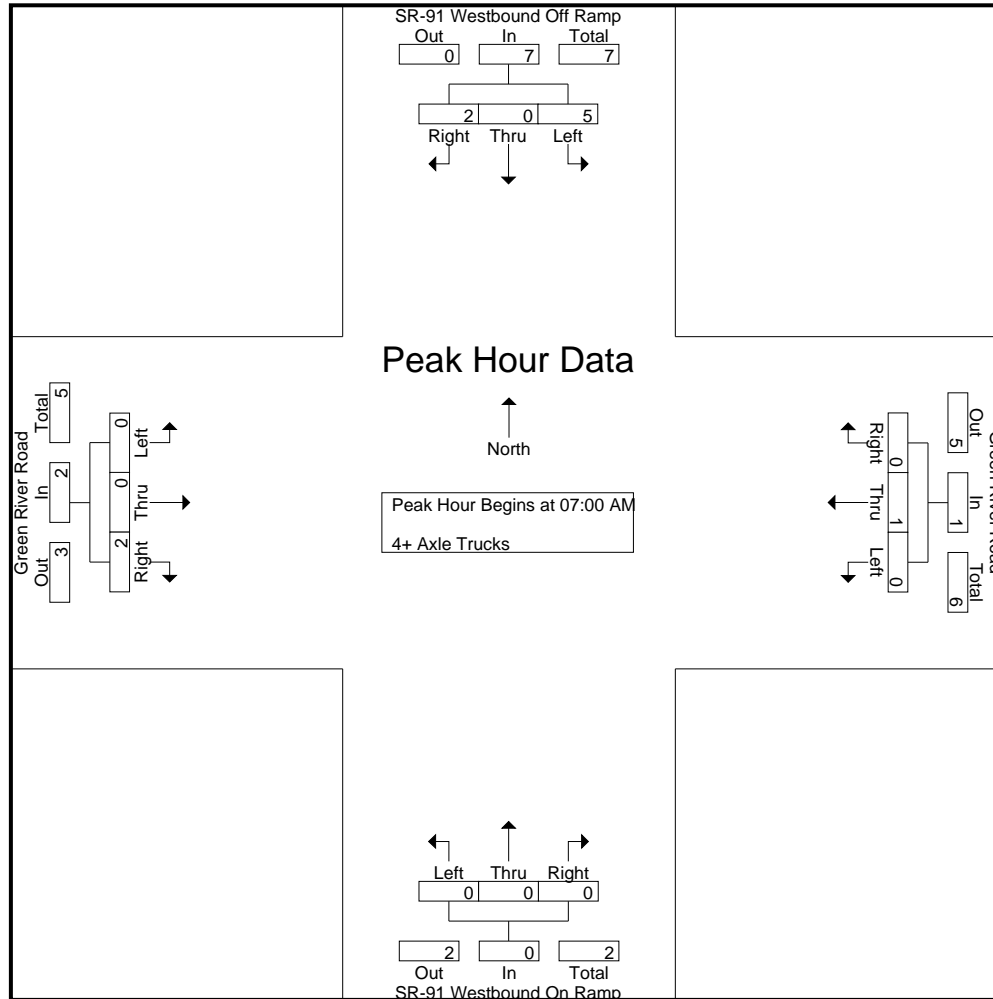
Groups Printed- 4+ Axle Trucks

Start Time	SR-91 Westbound Off Ramp Southbound					Green River Road Westbound					SR-91 Westbound On Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2
07:15 AM	1	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	2	3
07:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2	2
07:45 AM	2	0	1	0	3	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	4
Total	5	0	2	1	7	0	1	0	0	1	0	0	0	0	0	0	0	2	0	2	1	10	11	
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	0	2	2
08:15 AM	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	
08:30 AM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	
08:45 AM	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	2	
Total	4	0	0	0	4	1	1	0	0	2	0	0	0	0	0	0	2	0	0	2	0	8	8	
Grand Total	9	0	2	1	11	1	2	0	0	3	0	0	0	0	0	0	2	2	0	4	1	18	19	
Apprch %	81.8	0	18.2			33.3	66.7	0			0	0	0			0	50	50						
Total %	50	0	11.1		61.1	5.6	11.1	0		16.7	0	0	0		0	0	11.1	11.1		22.2	5.3	94.7		

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
07:15 AM	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
07:30 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
07:45 AM	2	0	1	3	0	1	0	1	0	0	0	0	0	0	0	0	4
Total Volume	5	0	2	7	0	1	0	1	0	0	0	0	0	0	2	2	10
% App. Total	71.4	0	28.6		0	100	0		0	0	0		0	0	100		
PHF	.625	.000	.500	.583	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.500	.500	.625

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
+15 mins.	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	
+45 mins.	2	0	1	3	0	1	0	1	0	0	0	0	0	0	0	0	
Total Volume	5	0	2	7	0	1	0	1	0	0	0	0	0	0	2	2	
% App. Total	71.4	0	28.6		0	100	0		0	0	0		0	0	100		
PHF	.625	.000	.500	.583	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.500	.500	

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

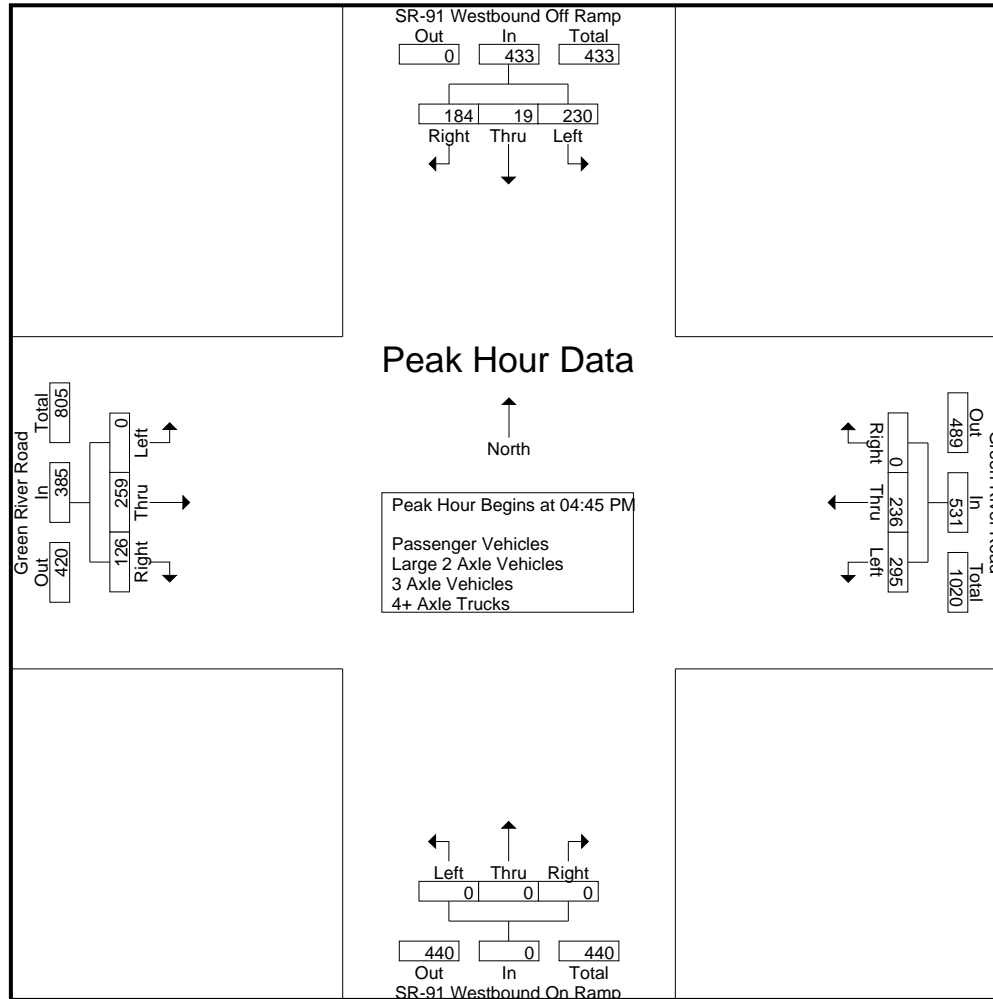
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	SR-91 Westbound Off Ramp Southbound					Green River Road Westbound					SR-91 Westbound On Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	43	0	57	34	100	98	63	0	0	161	0	0	0	0	0	0	82	29	13	111	47	372	419
04:15 PM	39	0	52	28	91	58	58	0	0	116	0	0	0	0	0	0	61	50	18	111	46	318	364
04:30 PM	27	0	56	34	83	69	48	0	0	117	0	0	0	0	0	0	70	40	19	110	53	310	363
04:45 PM	57	2	46	31	105	66	58	0	0	124	0	0	0	0	0	0	58	30	13	88	44	317	361
Total	166	2	211	127	379	291	227	0	0	518	0	0	0	0	0	0	271	149	63	420	190	1317	1507
05:00 PM	71	0	46	23	117	72	54	0	0	126	0	0	0	0	0	0	65	31	15	96	38	339	377
05:15 PM	53	1	38	19	92	84	64	0	0	148	0	0	0	0	0	0	56	27	14	83	33	323	356
05:30 PM	49	16	54	22	119	73	60	0	0	133	0	0	0	0	0	0	80	38	22	118	44	370	414
05:45 PM	28	0	44	27	72	64	78	0	0	142	0	0	0	0	0	0	60	30	17	90	44	304	348
Total	201	17	182	91	400	293	256	0	0	549	0	0	0	0	0	0	261	126	68	387	159	1336	1495
Grand Total	367	19	393	218	779	584	483	0	0	1067	0	0	0	0	0	0	532	275	131	807	349	2653	3002
Apprch %	47.1	2.4	50.4			54.7	45.3	0	0		0	0	0	0	0	0	65.9	34.1					
Total %	13.8	0.7	14.8		29.4	22	18.2	0	0	40.2	0	0	0	0	0	0	20.1	10.4		30.4	11.6	88.4	
Passenger Vehicles	363	17	386		980	571	475	0	0	1046	0	0	0	0	0	0	518	269		916	0	0	2942
% Passenger Vehicles	98.9	89.5	98.2	98.2	98.3	97.8	98.3	0	0	98	0	0	0	0	0	0	97.4	97.8	98.5	97.7	0	0	98
Large 2 Axle Vehicles	3	1	6		14	13	8	0	0	21	0	0	0	0	0	0	12	6		20	0	0	55
% Large 2 Axle Vehicles	0.8	5.3	1.5	1.8	1.4	2.2	1.7	0	0	2	0	0	0	0	0	0	2.3	2.2	1.5	2.1	0	0	1.8
3 Axle Vehicles	0	1	0		1	0	0	0	0	0	0	0	0	0	0	0	1	0		1	0	0	2
% 3 Axle Vehicles	0	5.3	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0.1	0	0	0.1
4+ Axle Trucks	1	0	1		2	0	0	0	0	0	0	0	0	0	0	0	1	0		1	0	0	3
% 4+ Axle Trucks	0.3	0	0.3	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0.2	0	0	0.1	0	0	0.1

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	57	2	46	105	66	58	0	124	0	0	0	0	0	58	30	88	317
05:00 PM	71	0	46	117	72	54	0	126	0	0	0	0	0	65	31	96	339
05:15 PM	53	1	38	92	84	64	0	148	0	0	0	0	0	56	27	83	323
05:30 PM	49	16	54	119	73	60	0	133	0	0	0	0	0	80	38	118	370
Total Volume	230	19	184	433	295	236	0	531	0	0	0	0	0	259	126	385	1349
% App. Total	53.1	4.4	42.5		55.6	44.4	0		0	0	0	0	0	67.3	32.7		
PHF	.810	.297	.852	.910	.878	.922	.000	.897	.000	.000	.000	.000	.000	.809	.829	.816	.911

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				05:00 PM				04:00 PM				04:00 PM				
+0 mins.	57	2	46	105	72	54	0	126	0	0	0	0	0	82	29	111	
+15 mins.	71	0	46	117	84	64	0	148	0	0	0	0	0	61	50	111	
+30 mins.	53	1	38	92	73	60	0	133	0	0	0	0	0	70	40	110	
+45 mins.	49	16	54	119	64	78	0	142	0	0	0	0	0	58	30	88	
Total Volume	230	19	184	433	293	256	0	549	0	0	0	0	0	271	149	420	
% App. Total	53.1	4.4	42.5		53.4	46.6	0		0	0	0		0	64.5	35.5		
PHF	.810	.297	.852	.910	.872	.821	.000	.927	.000	.000	.000	.000	.000	.826	.745	.946	

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

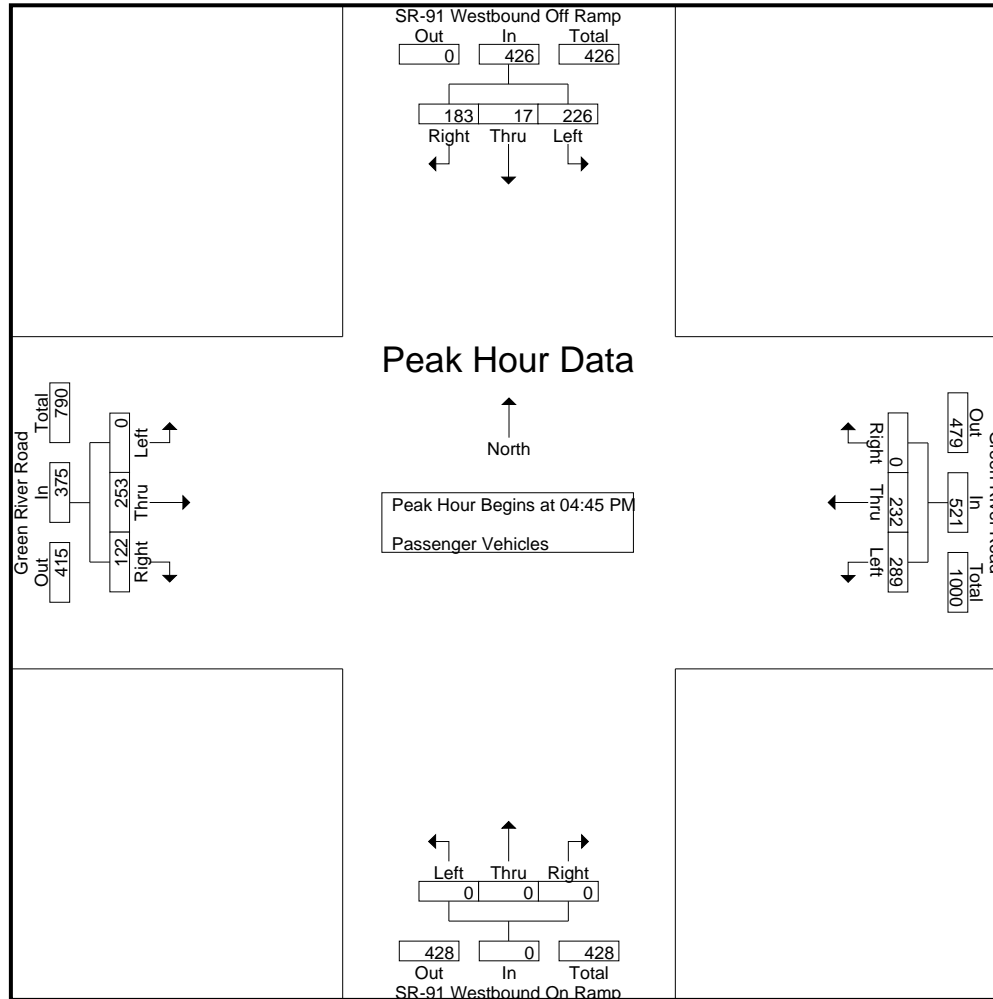
Groups Printed- Passenger Vehicles

Start Time	SR-91 Westbound Off Ramp Southbound					Green River Road Westbound					SR-91 Westbound On Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	43	0	55	32	98	94	62	0	0	156	0	0	0	0	0	0	79	29	13	108	45	362	407
04:15 PM	39	0	49	27	88	57	56	0	0	113	0	0	0	0	0	0	59	48	17	107	44	308	352
04:30 PM	27	0	55	34	82	69	47	0	0	116	0	0	0	0	0	0	69	40	19	109	53	307	360
04:45 PM	57	2	46	31	105	66	56	0	0	122	0	0	0	0	0	0	54	30	13	84	44	311	355
Total	166	2	205	124	373	286	221	0	0	507	0	0	0	0	0	0	261	147	62	408	186	1288	1474
05:00 PM	70	0	46	23	116	71	53	0	0	124	0	0	0	0	0	0	64	29	15	93	38	333	371
05:15 PM	52	1	38	19	91	80	63	0	0	143	0	0	0	0	0	0	56	26	13	82	32	316	348
05:30 PM	47	14	53	21	114	72	60	0	0	132	0	0	0	0	0	0	79	37	22	116	43	362	405
05:45 PM	28	0	44	27	72	62	78	0	0	140	0	0	0	0	0	0	58	30	17	88	44	300	344
Total	197	15	181	90	393	285	254	0	0	539	0	0	0	0	0	0	257	122	67	379	157	1311	1468
Grand Total	363	17	386	214	766	571	475	0	0	1046	0	0	0	0	0	0	518	269	129	787	343	2599	2942
Apprch %	47.4	2.2	50.4			54.6	45.4	0			0	0	0			0	65.8	34.2					
Total %	14	0.7	14.9		29.5	22	18.3	0		40.2	0	0	0		0	0	19.9	10.4		30.3	11.7	88.3	

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	57	2	46	105	66	56	0	122	0	0	0	0	0	54	30	84	311
05:00 PM	<b>70</b>	0	46	<b>116</b>	71	53	0	124	0	0	0	0	0	64	29	93	333
05:15 PM	52	1	38	91	<b>80</b>	<b>63</b>	0	<b>143</b>	0	0	0	0	0	56	26	82	316
05:30 PM	47	<b>14</b>	<b>53</b>	114	72	60	0	132	0	0	0	0	0	<b>79</b>	<b>37</b>	<b>116</b>	<b>362</b>
Total Volume	226	17	183	426	289	232	0	521	0	0	0	0	0	253	122	375	1322
% App. Total	53.1	4	43		55.5	44.5	0		0	0	0		0	67.5	32.5		
PHF	.807	.304	.863	.918	.903	.921	.000	.911	.000	.000	.000	.000	.000	.801	.824	.808	.913

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2





City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	57	2	46	105	66	56	0	122	0	0	0	0	0	54	30	84	
+15 mins.	<b>70</b>	0	46	<b>116</b>	71	53	0	124	0	0	0	0	0	64	29	93	
+30 mins.	52	1	38	91	<b>80</b>	<b>63</b>	0	<b>143</b>	0	0	0	0	0	56	26	82	
+45 mins.	47	<b>14</b>	<b>53</b>	114	72	60	0	132	0	0	0	0	0	<b>79</b>	<b>37</b>	<b>116</b>	
Total Volume	226	17	183	426	289	232	0	521	0	0	0	0	0	253	122	375	
% App. Total	53.1	4	43		55.5	44.5	0		0	0	0	0	0	67.5	32.5		
PHF	.807	.304	.863	.918	.903	.921	.000	.911	.000	.000	.000	.000	.000	.801	.824	.808	

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

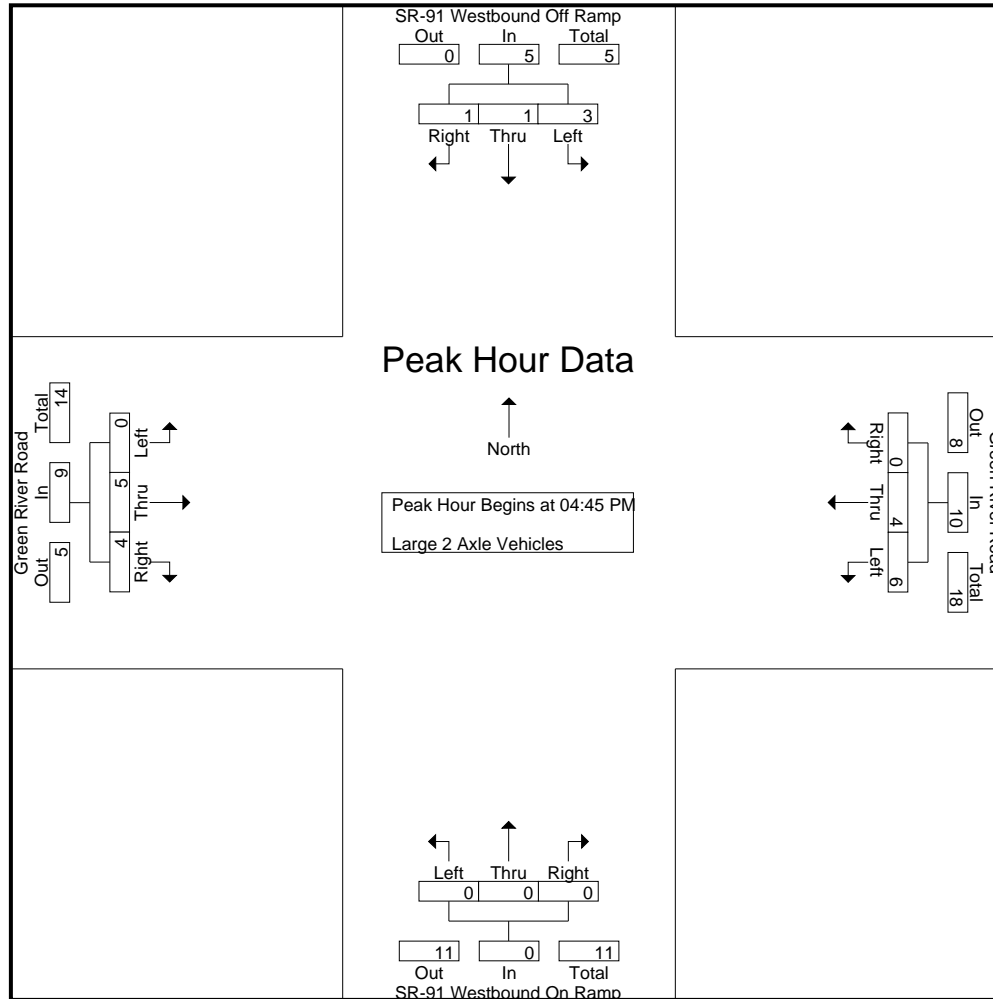
Groups Printed- Large 2 Axle Vehicles

Start Time	SR-91 Westbound Off Ramp Southbound					Green River Road Westbound					SR-91 Westbound On Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	2	2	2	4	1	0	0	5	0	0	0	0	0	0	3	0	0	3	2	10	12
04:15 PM	0	0	3	1	3	1	2	0	0	3	0	0	0	0	0	0	1	2	1	3	2	9	11
04:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	2	2
04:45 PM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	4	0	0	4	0	6	6
Total	0	0	5	3	5	5	6	0	0	11	0	0	0	0	0	0	9	2	1	11	4	27	31
05:00 PM	1	0	0	0	1	1	1	0	0	2	0	0	0	0	0	0	0	2	0	2	0	5	5
05:15 PM	1	0	0	0	1	4	1	0	0	5	0	0	0	0	0	0	0	1	1	1	1	7	8
05:30 PM	1	1	1	1	3	1	0	0	0	1	0	0	0	0	0	0	1	1	0	2	1	6	7
05:45 PM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	0	0	2	0	0	2	0	4	4
Total	3	1	1	1	5	8	2	0	0	10	0	0	0	0	0	0	3	4	1	7	2	22	24
Grand Total	3	1	6	4	10	13	8	0	0	21	0	0	0	0	0	0	12	6	2	18	6	49	55
Apprch %	30	10	60			61.9	38.1	0			0	0	0			0	66.7	33.3					
Total %	6.1	2	12.2		20.4	26.5	16.3	0		42.9	0	0	0		0	0	24.5	12.2		36.7	10.9	89.1	

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	6
05:00 PM	1	0	0	1	1	1	0	2	0	0	0	0	0	0	2	2	5
05:15 PM	1	0	0	1	4	1	0	5	0	0	0	0	0	0	1	1	7
05:30 PM	1	1	1	3	1	0	0	1	0	0	0	0	0	1	1	2	6
Total Volume	3	1	1	5	6	4	0	10	0	0	0	0	0	5	4	9	24
% App. Total	60	20	20		60	40	0		0	0	0		0	55.6	44.4		
PHF	.750	.250	.250	.417	.375	.500	.000	.500	.000	.000	.000	.000	.000	.313	.500	.563	.857

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	4	0	4	
+15 mins.	1	0	0	1	1	1	0	2	0	0	0	0	0	0	2	2	
+30 mins.	1	0	0	1	4	1	0	5	0	0	0	0	0	0	1	1	
+45 mins.	1	1	1	3	1	0	0	1	0	0	0	0	0	1	1	2	
Total Volume	3	1	1	5	6	4	0	10	0	0	0	0	0	5	4	9	
% App. Total	60	20	20		60	40	0		0	0	0		0	55.6	44.4		
PHF	.750	.250	.250	.417	.375	.500	.000	.500	.000	.000	.000	.000	.000	.313	.500	.563	

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

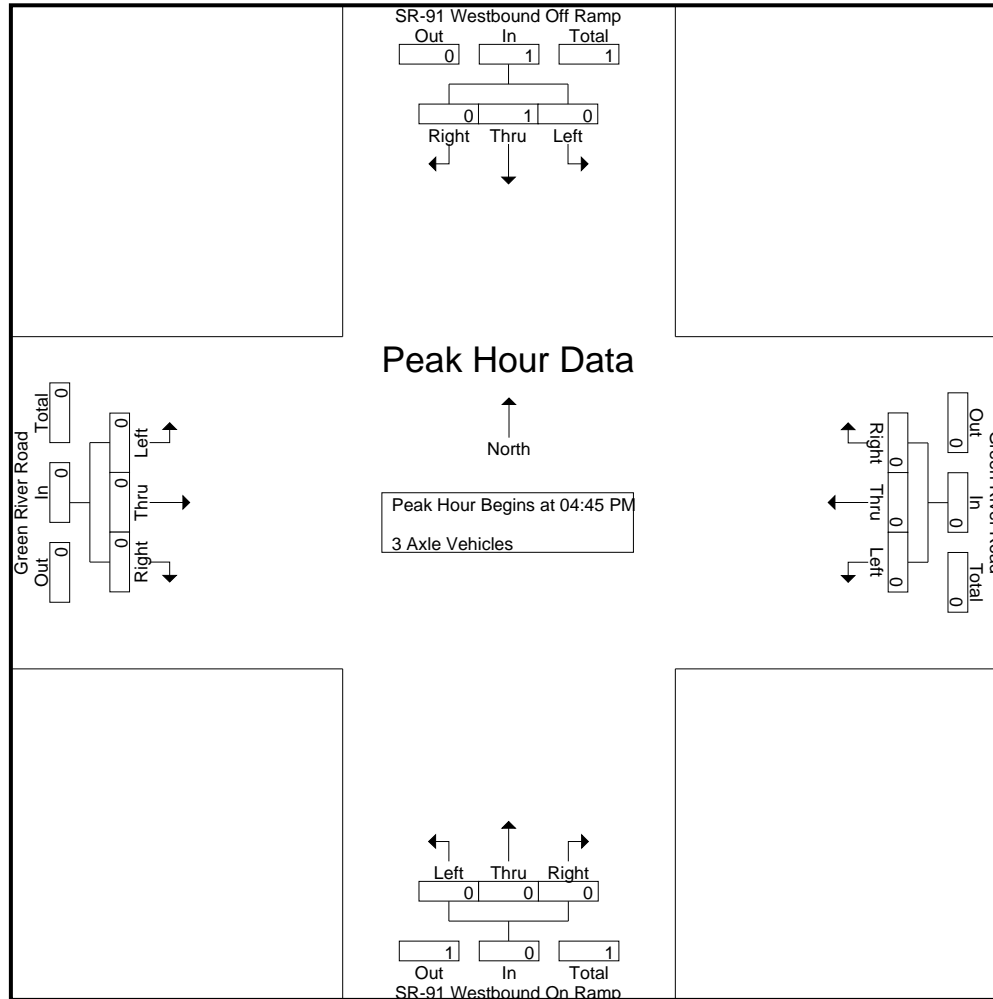
Groups Printed- 3 Axle Vehicles

Start Time	SR-91 Westbound Off Ramp Southbound					Green River Road Westbound					SR-91 Westbound On Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total			
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total						
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Grand Total	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	2	2	0	2	2
Apprch %	0	100	0			0	0	0			0	0	0			0	100	0			0			0		
Total %	0	50	0		50	0	0	0		0	0	0	0		0	0	50	0		50	0	100		0	100	

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
% App. Total	0	100	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	

City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- 4+ Axle Trucks

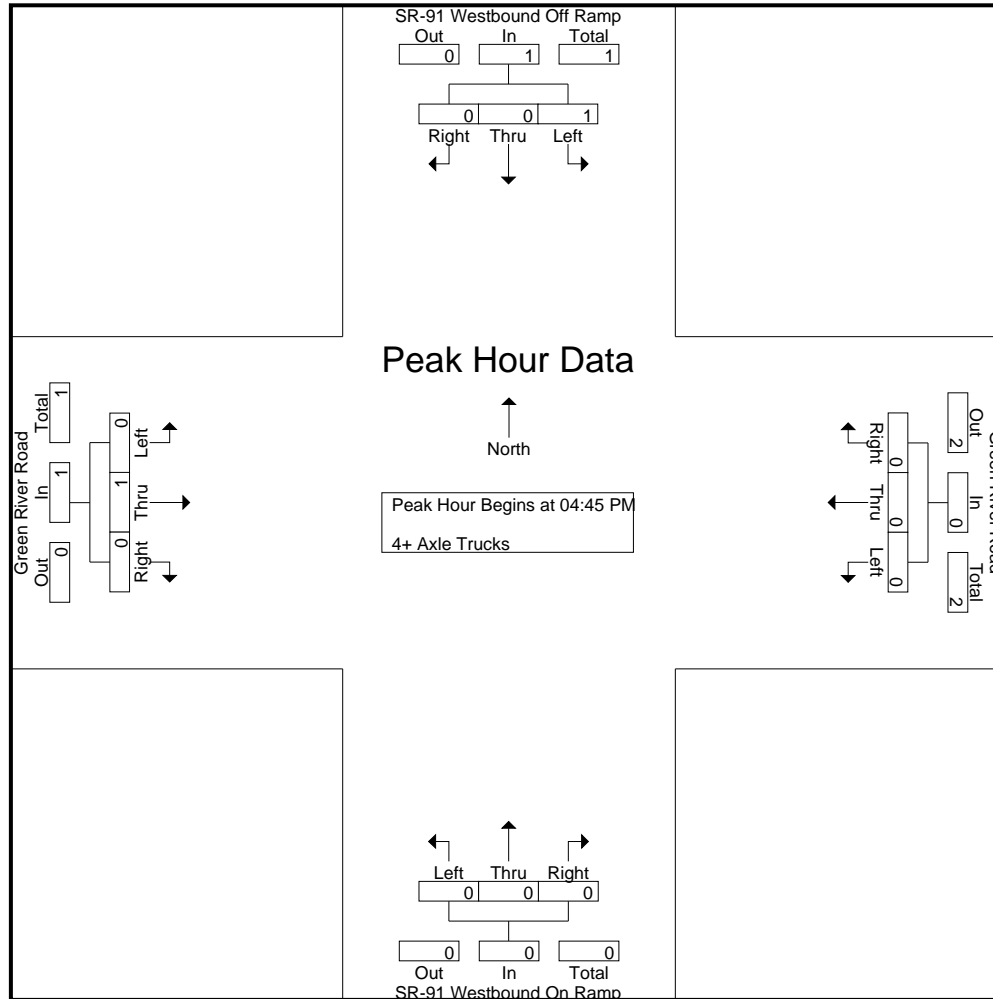
Start Time	SR-91 Westbound Off Ramp Southbound					Green River Road Westbound					SR-91 Westbound On Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total			
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total						
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	2
Grand Total	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	3	3
Apprch %	50	0	50			0	0	0			0	0	0			0	100	0			0	0	0	0	0	0
Total %	33.3	0	33.3		66.7	0	0	0		0	0	0	0		0	0	33.3	0		33.3	0	0	0	0	100	

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
% App. Total	100	0	0		0	0	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.500



City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Westbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 01\_COR\_91W\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Westbound Off Ramp Southbound				Green River Road Westbound				SR-91 Westbound On Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+45 mins.	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	
Total Volume	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	1	
% App. Total	100	0	0		0	0	0		0	0	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	

Location: Corona  
 N/S: SR-91 WB Ramps  
 E/W: Green River Road



Date: 3/28/2023  
 Day: Tuesday

PEDESTRIANS

	North Leg SR-91 WB Ramps	East Leg Green River Road	South Leg SR-91 WB Ramps	West Leg Green River Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	2	0	2
TOTAL VOLUMES:	0	0	3	0	3

	North Leg SR-91 WB Ramps	East Leg Green River Road	South Leg SR-91 WB Ramps	West Leg Green River Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	1

Location: Corona  
 N/S: SR-91 WB Ramps  
 E/W: Green River Road



Date: 3/28/2023  
 Day: Tuesday

BICYCLES

	Southbound SR-91 WB Ramps			Westbound Green River Road			Northbound SR-91 WB Ramps			Eastbound Green River Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	4	0	0	0	0	0	1	0	5

	Southbound SR-91 WB Ramps			Westbound Green River Road			Northbound SR-91 WB Ramps			Eastbound Green River Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	1	0	1	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	3	0	0	0	0	0	5	0	9

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

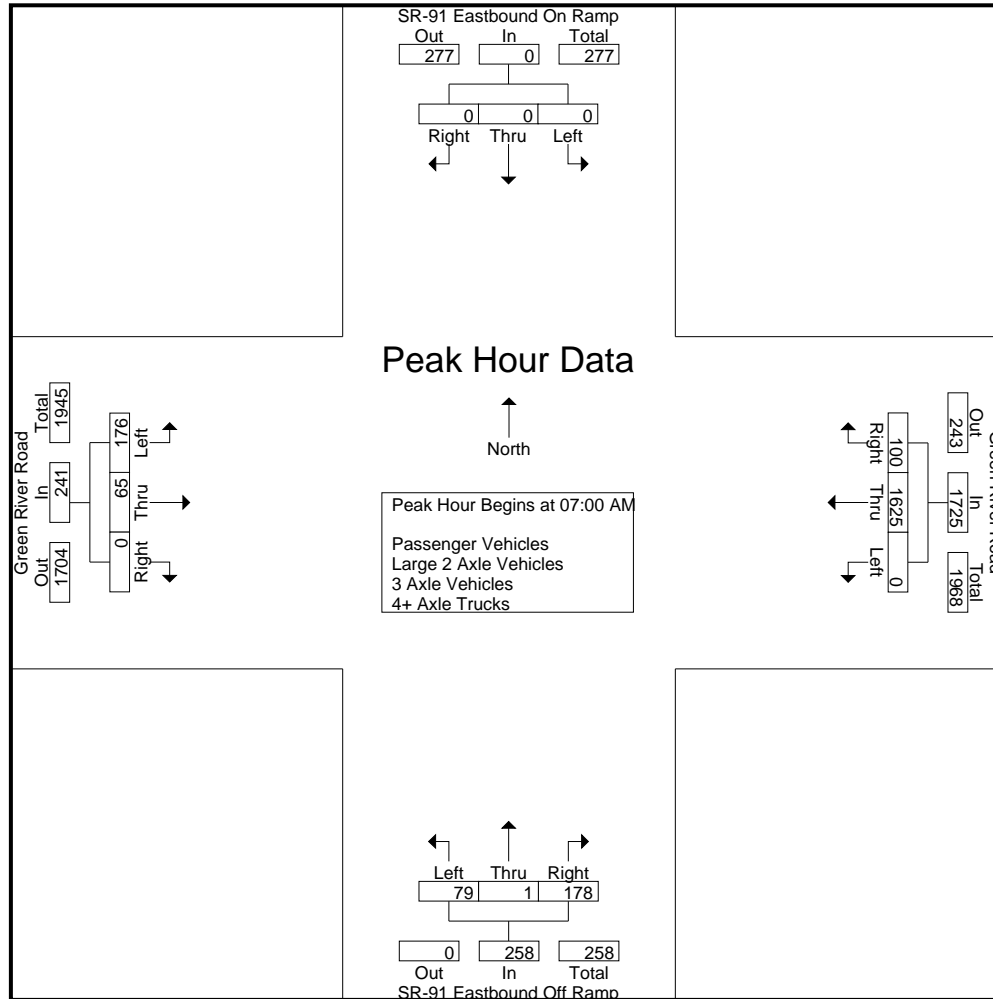
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	SR-91 Eastbound On Ramp Southbound					Green River Road Westbound					SR-91 Eastbound Off Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	493	21	0	514	10	0	35	30	45	23	8	0	0	31	30	590	620
07:15 AM	0	0	0	0	0	0	346	21	1	367	22	1	49	36	72	45	14	0	0	59	37	498	535
07:30 AM	0	0	0	0	0	0	442	26	1	468	24	0	51	39	75	52	23	0	0	75	40	618	658
07:45 AM	0	0	0	0	0	0	344	32	6	376	23	0	43	37	66	56	20	0	0	76	43	518	561
Total	0	0	0	0	0	0	1625	100	8	1725	79	1	178	142	258	176	65	0	0	241	150	2224	2374
08:00 AM	0	0	0	0	0	0	319	21	4	340	34	0	50	32	84	49	16	0	0	65	36	489	525
08:15 AM	0	0	0	0	0	0	333	27	3	360	38	1	54	38	93	48	25	0	0	73	41	526	567
08:30 AM	0	0	0	0	0	0	320	24	2	344	41	0	64	51	105	30	24	0	0	54	53	503	556
08:45 AM	0	0	0	0	0	0	282	23	1	305	37	0	58	48	95	27	14	0	0	41	49	441	490
Total	0	0	0	0	0	0	1254	95	10	1349	150	1	226	169	377	154	79	0	0	233	179	1959	2138
Grand Total	0	0	0	0	0	0	2879	195	18	3074	229	2	404	311	635	330	144	0	0	474	329	4183	4512
Apprch %	0	0	0			0	93.7	6.3			36.1	0.3	63.6			69.6	30.4	0					
Total %	0	0	0			0	68.8	4.7		73.5	5.5	0	9.7		15.2	7.9	3.4	0		11.3	7.3	92.7	
Passenger Vehicles	0	0	0			0	2841	192		3051	207	2	393		908	304	135	0		439	0	0	4398
% Passenger Vehicles	0	0	0			0	98.7	98.5	100	98.7	90.4	100	97.3	98.4	96	92.1	93.8	0		92.6	0	0	97.5
Large 2 Axle Vehicles	0	0	0			0	32	2		34	20	0	9		34	14	8	0		22	0	0	90
% Large 2 Axle Vehicles	0	0	0			0	1.1	1	0	1.1	8.7	0	2.2	1.6	3.6	4.2	5.6	0		4.6	0	0	2
3 Axle Vehicles	0	0	0			0	3	0		3	1	0	0		1	2	0	0		2	0	0	6
% 3 Axle Vehicles	0	0	0			0	0.1	0	0	0.1	0.4	0	0	0	0.1	0.6	0	0		0.4	0	0	0.1
4+ Axle Trucks	0	0	0			0	3	1		4	1	0	2		3	10	1	0		11	0	0	18
% 4+ Axle Trucks	0	0	0			0	0.1	0.5	0	0.1	0.4	0	0.5	0	0.3	3	0.7	0		2.3	0	0	0.4

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	493	21	514	10	0	35	45	23	8	0	31	590
07:15 AM	0	0	0	0	0	346	21	367	22	1	49	72	45	14	0	59	498
07:30 AM	0	0	0	0	0	442	26	468	24	0	51	75	52	23	0	75	618
07:45 AM	0	0	0	0	0	344	32	376	23	0	43	66	56	20	0	76	518
Total Volume	0	0	0	0	0	1625	100	1725	79	1	178	258	176	65	0	241	2224
% App. Total	0	0	0		0	94.2	5.8		30.6	0.4	69		73	27	0		
PHF	.000	.000	.000	.000	.000	.824	.781	.839	.823	.250	.873	.860	.786	.707	.000	.793	.900

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				08:00 AM				07:30 AM				
+0 mins.	0	0	0	0	0	<b>493</b>	21	<b>514</b>	34	0	50	84	52	23	0	75	
+15 mins.	0	0	0	0	0	346	21	367	38	<b>1</b>	54	93	<b>56</b>	20	0	<b>76</b>	
+30 mins.	0	0	0	0	0	442	26	468	<b>41</b>	0	<b>64</b>	<b>105</b>	49	16	0	65	
+45 mins.	0	0	0	0	0	344	<b>32</b>	376	37	0	58	95	48	<b>25</b>	0	73	
Total Volume	0	0	0	0	0	1625	100	1725	150	1	226	377	205	84	0	289	
% App. Total	0	0	0	0	0	94.2	5.8		39.8	0.3	59.9		70.9	29.1	0		
PHF	.000	.000	.000	.000	.000	.824	.781	.839	.915	.250	.883	.898	.915	.840	.000	.951	

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- Passenger Vehicles

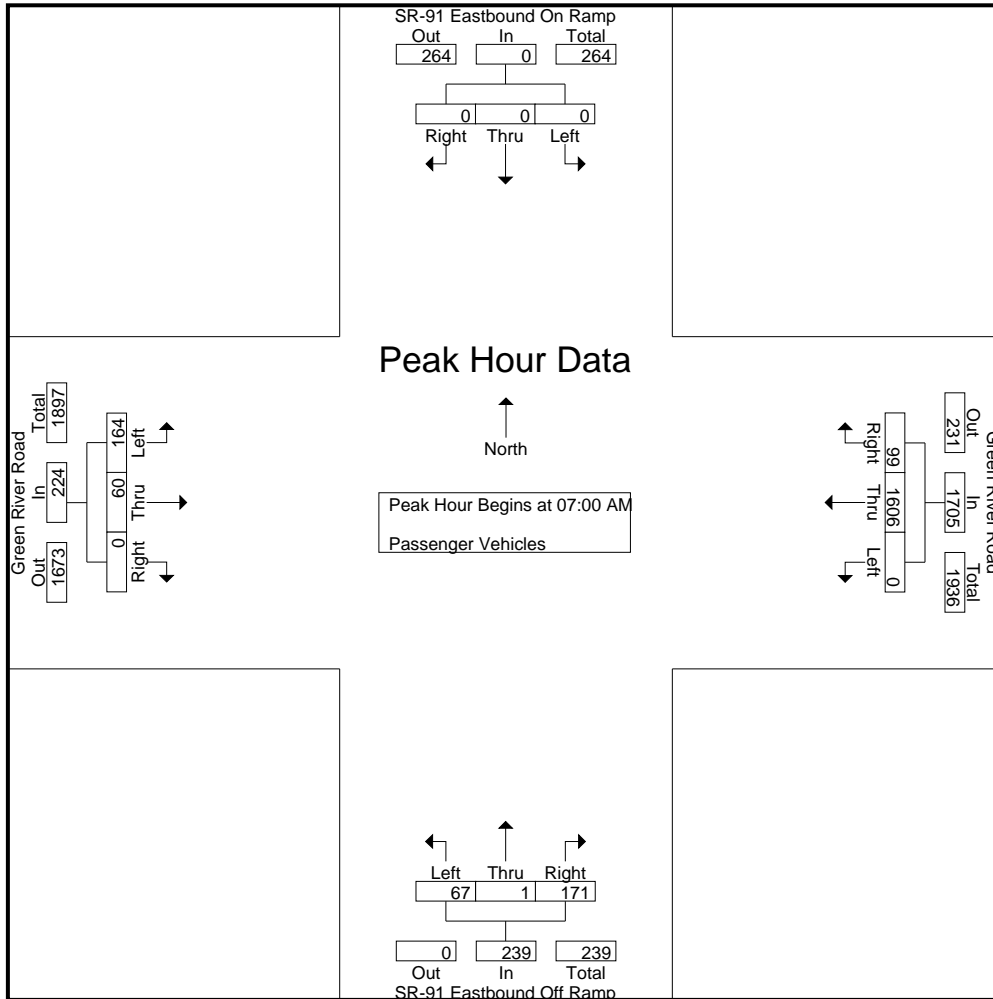
Start Time	SR-91 Eastbound On Ramp Southbound					Green River Road Westbound					SR-91 Eastbound Off Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	486	21	0	507	10	0	35	30	45	21	6	0	0	27	30	579	609
07:15 AM	0	0	0	0	0	0	343	21	1	364	16	1	47	36	64	43	11	0	0	54	37	482	519
07:30 AM	0	0	0	0	0	0	439	25	1	464	22	0	49	38	71	49	23	0	0	72	39	607	646
07:45 AM	0	0	0	0	0	0	338	32	6	370	19	0	40	35	59	51	20	0	0	71	41	500	541
Total	0	0	0	0	0	0	1606	99	8	1705	67	1	171	139	239	164	60	0	0	224	147	2168	2315
08:00 AM	0	0	0	0	0	0	315	21	4	336	34	0	49	32	83	43	15	0	0	58	36	477	513
08:15 AM	0	0	0	0	0	0	326	26	3	352	32	1	52	37	85	44	23	0	0	67	40	504	544
08:30 AM	0	0	0	0	0	0	316	24	2	340	39	0	64	51	103	27	23	0	0	50	53	493	546
08:45 AM	0	0	0	0	0	0	278	22	1	300	35	0	57	47	92	26	14	0	0	40	48	432	480
Total	0	0	0	0	0	0	1235	93	10	1328	140	1	222	167	363	140	75	0	0	215	177	1906	2083
Grand Total	0	0	0	0	0	0	2841	192	18	3033	207	2	393	306	602	304	135	0	0	439	324	4074	4398
Apprch %	0	0	0			0	93.7	6.3			34.4	0.3	65.3			69.2	30.8	0					
Total %	0	0	0			0	69.7	4.7		74.4	5.1	0	9.6		14.8	7.5	3.3	0		10.8	7.4	92.6	

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	<b>486</b>	21	<b>507</b>	10	0	35	45	21	6	0	27	579
07:15 AM	0	0	0	0	0	343	21	364	16	1	47	64	43	11	0	54	482
07:30 AM	0	0	0	0	0	439	25	464	<b>22</b>	0	<b>49</b>	<b>71</b>	49	<b>23</b>	0	<b>72</b>	<b>607</b>
07:45 AM	0	0	0	0	0	338	<b>32</b>	370	19	0	40	59	<b>51</b>	20	0	71	500
Total Volume	0	0	0	0	0	1606	99	1705	67	1	171	239	164	60	0	224	2168
% App. Total	0	0	0		0	94.2	5.8		28	0.4	71.5		73.2	26.8	0		
PHF	.000	.000	.000	.000	.000	.826	.773	.841	.761	.250	.872	.842	.804	.652	.000	.778	.893



City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	<b>486</b>	21	<b>507</b>	10	0	35	45	21	6	0	27	
+15 mins.	0	0	0	0	0	343	21	364	16	<b>1</b>	47	64	43	11	0	54	
+30 mins.	0	0	0	0	0	439	25	464	<b>22</b>	0	<b>49</b>	<b>71</b>	49	<b>23</b>	0	<b>72</b>	
+45 mins.	0	0	0	0	0	338	<b>32</b>	370	19	0	40	59	<b>51</b>	20	0	71	
Total Volume	0	0	0	0	0	1606	99	1705	67	1	171	239	164	60	0	224	
% App. Total	0	0	0	0	0	94.2	5.8		28	0.4	71.5		73.2	26.8	0		
PHF	.000	.000	.000	.000	.000	.826	.773	.841	.761	.250	.872	.842	.804	.652	.000	.778	

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

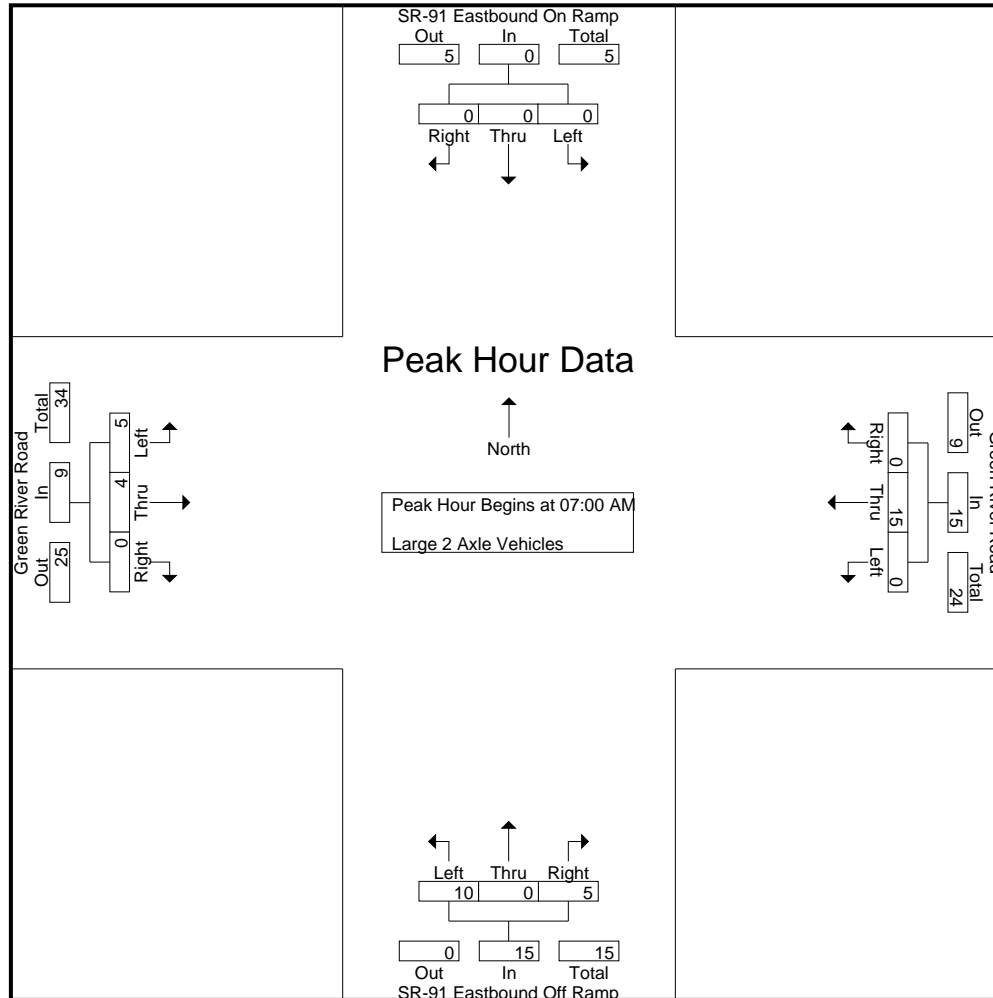
Groups Printed- Large 2 Axle Vehicles

Start Time	SR-91 Eastbound On Ramp Southbound					Green River Road Westbound					SR-91 Eastbound Off Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	0	1	0	0	1	0	6	6
07:15 AM	0	0	0	0	0	0	3	0	0	3	6	0	0	0	6	1	3	0	0	4	0	13	13
07:30 AM	0	0	0	0	0	0	3	0	0	3	1	0	2	1	3	1	0	0	0	1	1	7	8
07:45 AM	0	0	0	0	0	0	4	0	0	4	3	0	3	2	6	3	0	0	0	3	2	13	15
Total	0	0	0	0	0	0	15	0	0	15	10	0	5	3	15	5	4	0	0	9	3	39	42
08:00 AM	0	0	0	0	0	0	4	0	0	4	0	0	1	0	1	4	1	0	0	5	0	10	10
08:15 AM	0	0	0	0	0	0	7	1	0	8	6	0	2	1	8	1	2	0	0	3	1	19	20
08:30 AM	0	0	0	0	0	0	3	0	0	3	2	0	0	0	2	3	1	0	0	4	0	9	9
08:45 AM	0	0	0	0	0	0	3	1	0	4	2	0	1	1	3	1	0	0	0	1	1	8	9
Total	0	0	0	0	0	0	17	2	0	19	10	0	4	2	14	9	4	0	0	13	2	46	48
Grand Total	0	0	0	0	0	0	32	2	0	34	20	0	9	5	29	14	8	0	0	22	5	85	90
Apprch %	0	0	0			0	94.1	5.9			69	0	31			63.6	36.4	0					
Total %	0	0	0			0	37.6	2.4		40	23.5	0	10.6		34.1	16.5	9.4	0		25.9	5.6	94.4	

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1	6
07:15 AM	0	0	0	0	0	3	0	3	6	0	0	6	1	3	0	4	13
07:30 AM	0	0	0	0	0	3	0	3	1	0	2	3	1	0	0	1	7
07:45 AM	0	0	0	0	0	4	0	4	3	0	3	6	3	0	0	3	13
Total Volume	0	0	0	0	0	15	0	15	10	0	5	15	5	4	0	9	39
% App. Total	0	0	0		0	100	0		66.7	0	33.3		55.6	44.4	0		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.417	.000	.417	.625	.417	.333	.000	.563	.750

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1	
+15 mins.	0	0	0	0	0	3	0	3	6	0	0	6	1	3	0	4	
+30 mins.	0	0	0	0	0	3	0	3	1	0	2	3	1	0	0	1	
+45 mins.	0	0	0	0	0	4	0	4	3	0	3	6	3	0	0	3	
Total Volume	0	0	0	0	0	15	0	15	10	0	5	15	5	4	0	9	
% App. Total	0	0	0	0	0	100	0	66.7	66.7	0	33.3	55.6	55.6	44.4	0	56.3	
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.417	.000	.417	.625	.417	.333	.000	.563	

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

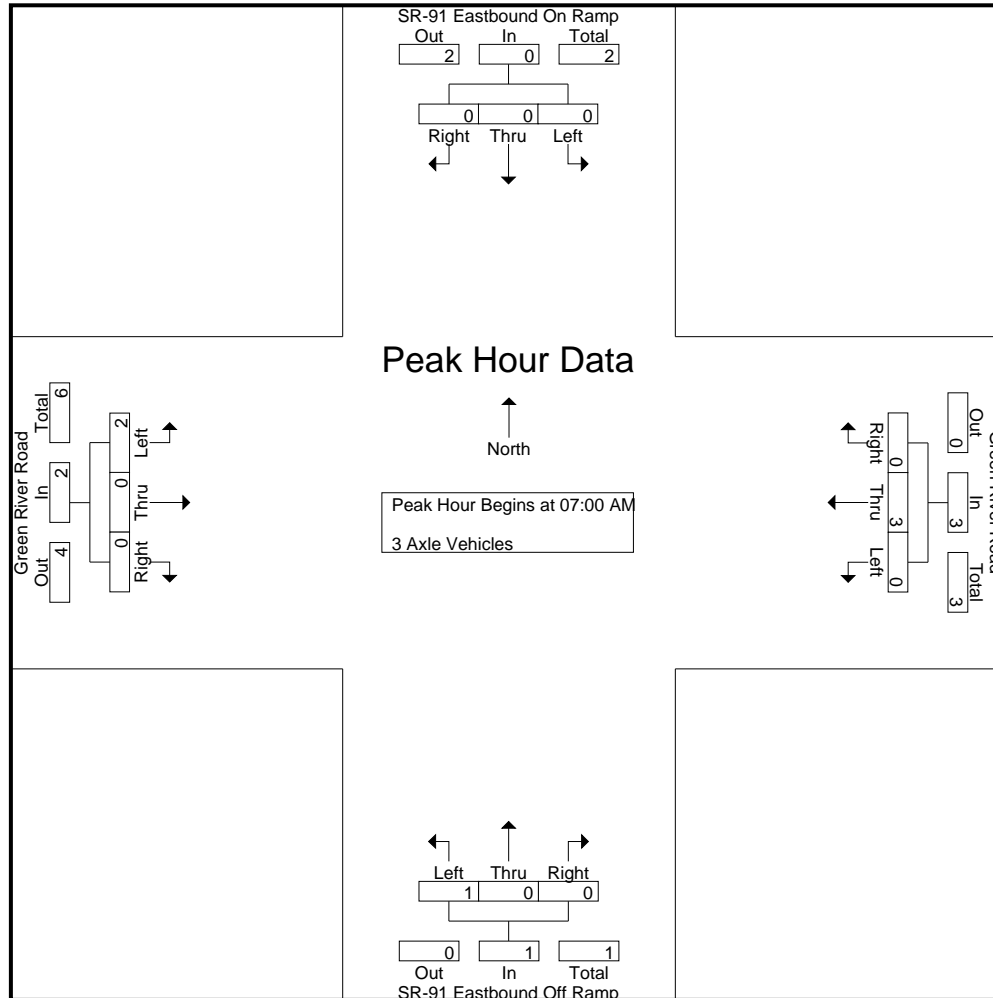
Groups Printed- 3 Axle Vehicles

Start Time	SR-91 Eastbound On Ramp Southbound					Green River Road Westbound					SR-91 Eastbound Off Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	1	0	0	0	1	0	0	3	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	1	0	2	2	2
07:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	2	0	0	0	2	0	6	6	6
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	3	0	0	3	1	0	0	0	1	2	0	0	0	2	0	6	6	6
Apprch %	0	0	0			0	100	0			100	0	0			100	0	0			0			
Total %	0	0	0			0	50	0		50	16.7	0	0		16.7	33.3	0	0		33.3	0	100		100

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	1	0	0	1	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	2
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	3	0	3	1	0	0	1	2	0	0	2	6
% App. Total	0	0	0		0	100	0		100	0	0		100	0	0		
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.250	.000	.000	.250	.500	.000	.000	.500	.500

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	1	0	0	1	
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
+30 mins.	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	
Total Volume	0	0	0	0	0	3	0	3	1	0	0	1	2	0	0	2	
% App. Total	0	0	0	0	0	100	0	100	100	0	0	100	100	0	0	100	
PHF	.000	.000	.000	.000	.000	.375	.000	.375	.250	.000	.000	.250	.500	.000	.000	.500	



City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- 4+ Axle Trucks

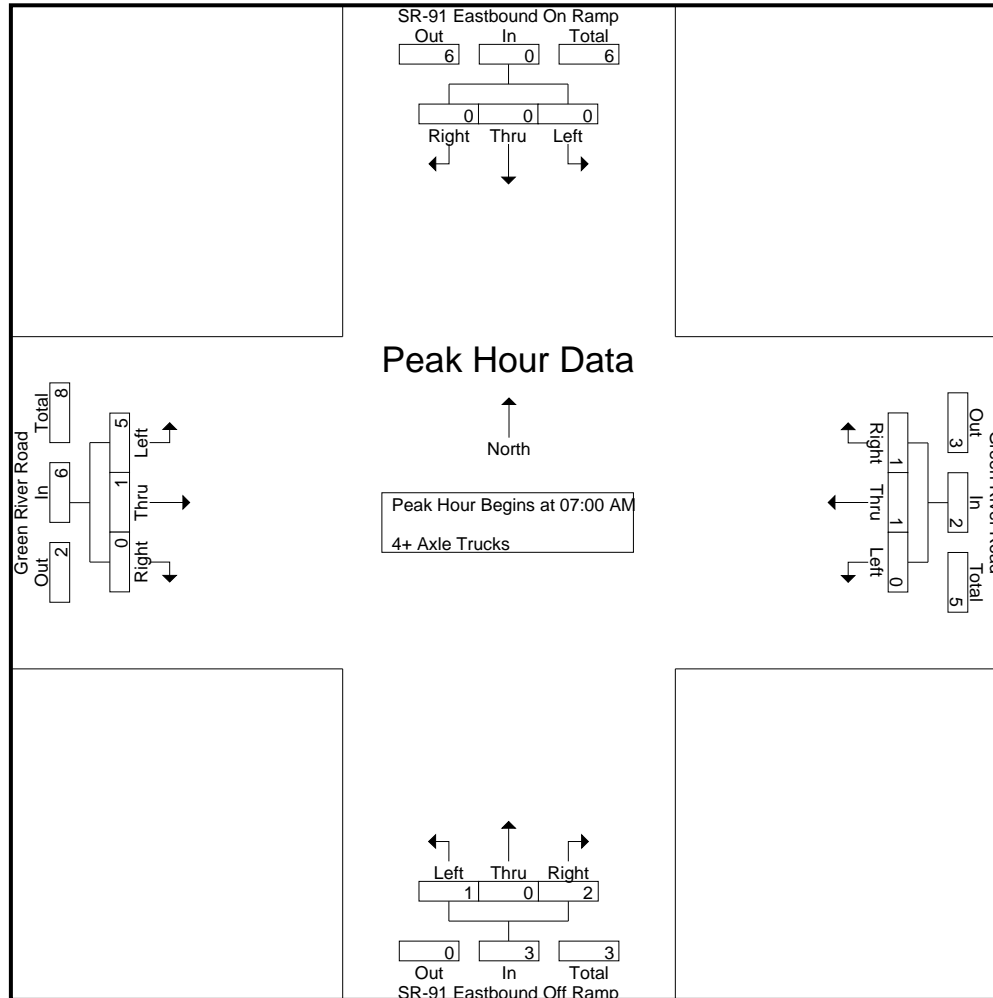
Start Time	SR-91 Eastbound On Ramp Southbound					Green River Road Westbound					SR-91 Eastbound Off Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	2	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	1	0	0	0	1	0	3	3
07:30 AM	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	2	2
07:45 AM	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	2	0	0	0	2	0	4	4
Total	0	0	0	0	0	0	1	1	0	2	1	0	2	0	3	5	1	0	0	6	0	11	11
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	2	0	2	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	0	3	3
08:30 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
08:45 AM	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	5	0	0	0	5	0	7	7
Grand Total	0	0	0	0	0	0	3	1	0	4	1	0	2	0	3	10	1	0	0	11	0	18	18
Apprch %	0	0	0			0	75	25			33.3	0	66.7			90.9	9.1	0			0		
Total %	0	0	0			0	16.7	5.6		22.2	5.6	0	11.1		16.7	55.6	5.6	0		61.1	0	100	

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	1	3
07:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	1	2
07:45 AM	0	0	0	0	0	1	0	1	1	0	0	1	2	0	0	2	4
Total Volume	0	0	0	0	0	1	1	2	1	0	2	3	5	1	0	6	11
% App. Total	0	0	0		0	50	50		33.3	0	66.7		83.3	16.7	0		
PHF	.000	.000	.000	.000	.000	.250	.250	.500	.250	.000	.250	.375	.625	.250	.000	.750	.688

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:00 AM

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	07:00 AM				07:00 AM				07:00 AM				07:00 AM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	
+15 mins.	0	0	0	0	0	0	0	0	0	0	2	2	1	0	0	1	
+30 mins.	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	1	
+45 mins.	0	0	0	0	0	1	0	1	1	0	0	1	2	0	0	2	
Total Volume	0	0	0	0	0	1	1	2	1	0	2	3	5	1	0	6	
% App. Total	0	0	0	0	0	50	50		33.3	0	66.7		83.3	16.7	0		
PHF	.000	.000	.000	.000	.000	.250	.250	.500	.250	.000	.250	.375	.625	.250	.000	.750	

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

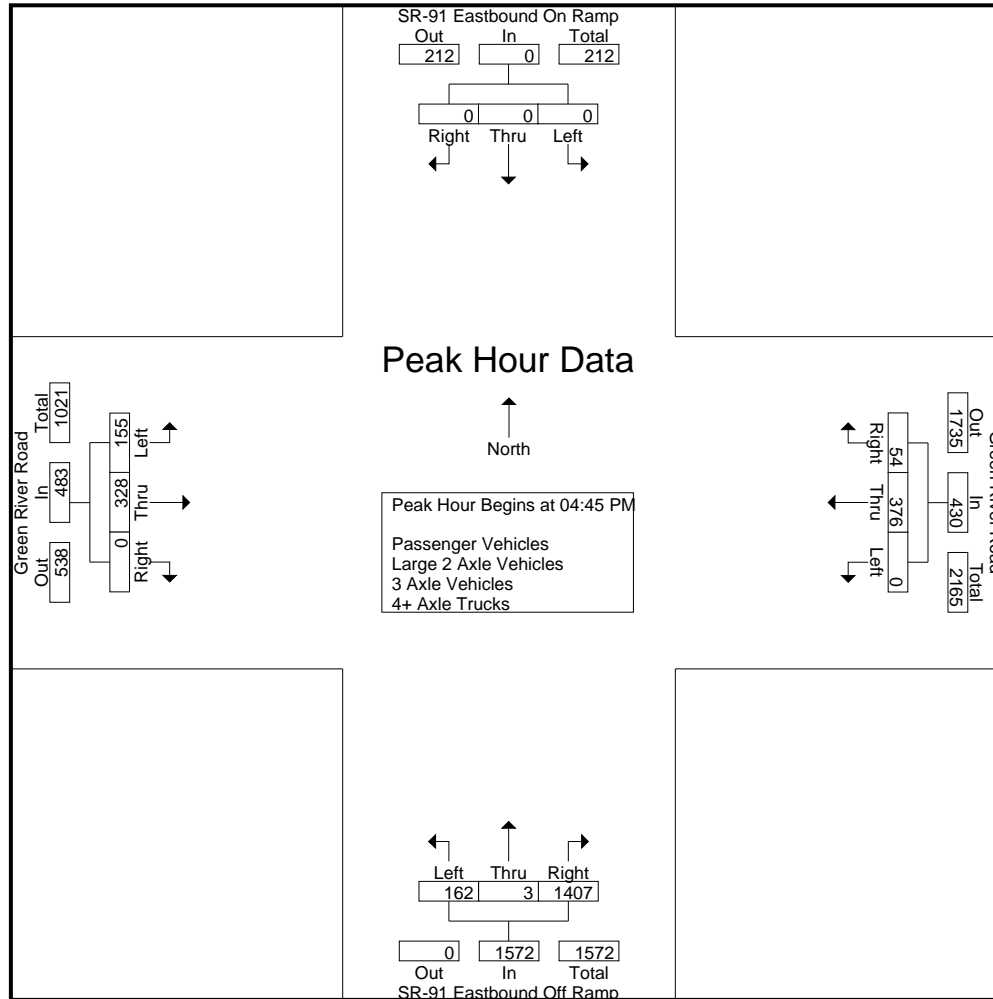
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	SR-91 Eastbound On Ramp Southbound					Green River Road Westbound					SR-91 Eastbound Off Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	124	22	10	146	46	0	305	170	351	60	69	0	0	129	180	626	806
04:15 PM	0	0	0	0	0	0	82	17	11	99	33	1	329	128	363	37	64	0	0	101	139	563	702
04:30 PM	0	0	0	0	0	0	85	13	9	98	33	0	338	126	371	48	48	0	0	96	135	565	700
04:45 PM	0	0	0	0	0	0	99	10	3	109	34	0	351	124	385	36	85	0	0	121	127	615	742
Total	0	0	0	0	0	0	390	62	33	452	146	1	1323	548	1470	181	266	0	0	447	581	2369	2950
05:00 PM	0	0	0	0	0	0	87	16	9	103	40	0	350	94	390	29	107	0	0	136	103	629	732
05:15 PM	0	0	0	0	0	0	93	12	7	105	51	0	361	127	412	42	57	0	0	99	134	616	750
05:30 PM	0	0	0	0	0	0	97	16	8	113	37	3	345	110	385	48	79	0	0	127	118	625	743
05:45 PM	0	0	0	0	0	0	82	14	9	96	51	0	318	120	369	43	50	0	0	93	129	558	687
Total	0	0	0	0	0	0	359	58	33	417	179	3	1374	451	1556	162	293	0	0	455	484	2428	2912
Grand Total	0	0	0	0	0	0	749	120	66	869	325	4	2697	999	3026	343	559	0	0	902	1065	4797	5862
Apprch %	0	0	0			0	86.2	13.8			10.7	0.1	89.1			38	62	0					
Total %	0	0	0			0	15.6	2.5		18.1	6.8	0.1	56.2		63.1	7.2	11.7	0		18.8	18.2	81.8	
Passenger Vehicles	0	0	0			0	741	115		921	312	3	2667		3969	330	556	0		886	0	0	5776
% Passenger Vehicles	0	0	0			0	98.9	95.8	98.5	98.5	96	75	98.9	98.8	98.6	96.2	99.5	0		98.2	0	0	98.5
Large 2 Axle Vehicles	0	0	0			0	8	4		13	13	1	27		53	11	2	0		13	0	0	79
% Large 2 Axle Vehicles	0	0	0			0	1.1	3.3	1.5	1.4	4	25	1	1.2	1.3	3.2	0.4	0		1.4	0	0	1.3
3 Axle Vehicles	0	0	0			0	0	0		0	0	0	1		1	1	0	0		1	0	0	2
% 3 Axle Vehicles	0	0	0			0	0	0		0	0	0	0		0	0.3	0	0		0.1	0	0	0
4+ Axle Trucks	0	0	0			0	0	1		1	0	0	2		2	1	1	0		2	0	0	5
% 4+ Axle Trucks	0	0	0			0	0	0.8		0.1	0	0	0.1		0	0.3	0.2	0		0.2	0	0	0.1

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	99	10	109	34	0	351	385	36	85	0	121	615
05:00 PM	0	0	0	0	0	87	16	103	40	0	350	390	29	107	0	136	629
05:15 PM	0	0	0	0	0	93	12	105	51	0	361	412	42	57	0	99	616
05:30 PM	0	0	0	0	0	97	16	113	37	3	345	385	48	79	0	127	625
Total Volume	0	0	0	0	0	376	54	430	162	3	1407	1572	155	328	0	483	2485
% App. Total	0	0	0		0	87.4	12.6		10.3	0.2	89.5		32.1	67.9	0		
PHF	.000	.000	.000	.000	.000	.949	.844	.951	.794	.250	.974	.954	.807	.766	.000	.888	.988

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:00 PM				04:00 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	<b>124</b>	<b>22</b>	<b>146</b>	34	0	351	385	36	85	0	121	
+15 mins.	0	0	0	0	0	82	17	99	40	0	350	390	29	<b>107</b>	0	<b>136</b>	
+30 mins.	0	0	0	0	0	85	13	98	<b>51</b>	0	<b>361</b>	<b>412</b>	42	57	0	99	
+45 mins.	0	0	0	0	0	99	10	109	37	<b>3</b>	345	385	<b>48</b>	79	0	127	
Total Volume	0	0	0	0	0	390	62	452	162	3	1407	1572	155	328	0	483	
% App. Total	0	0	0	0	0	86.3	13.7		10.3	0.2	89.5		32.1	67.9	0		
PHF	.000	.000	.000	.000	.000	.786	.705	.774	.794	.250	.974	.954	.807	.766	.000	.888	

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

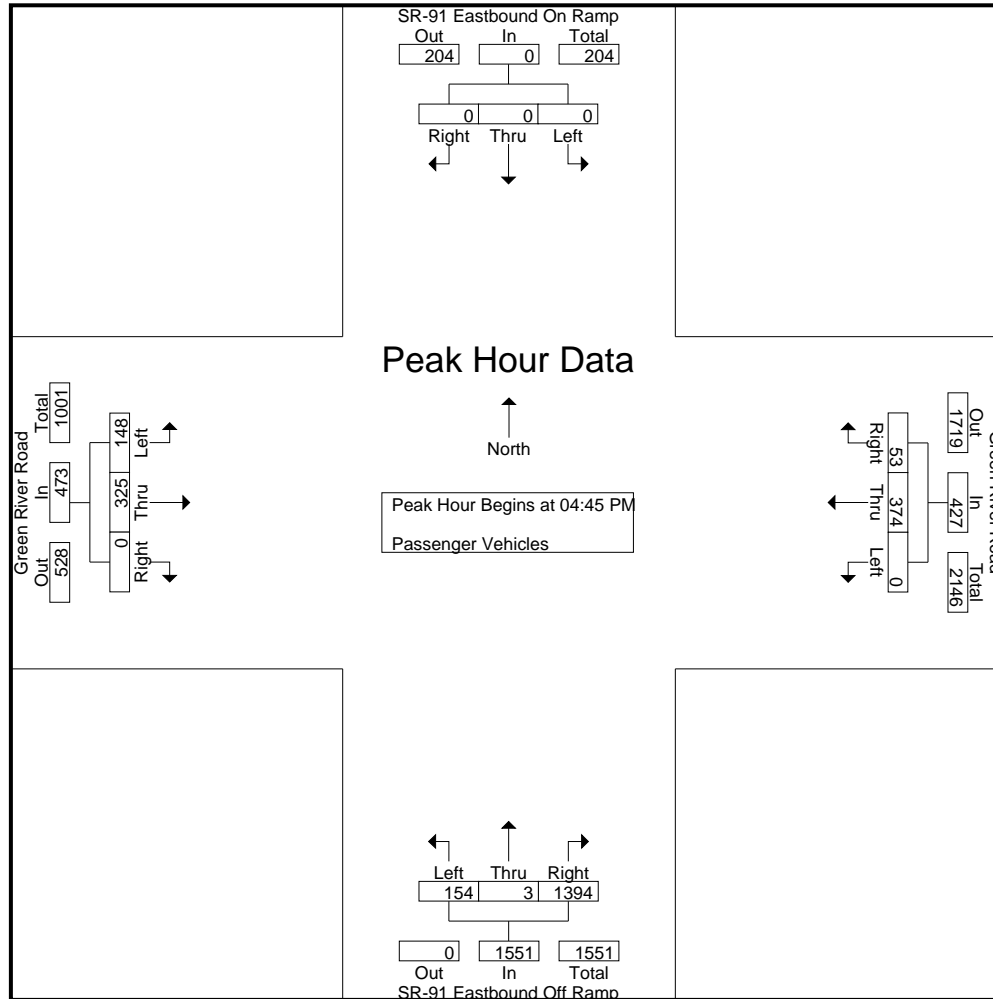
Groups Printed- Passenger Vehicles

Start Time	SR-91 Eastbound On Ramp Southbound					Green River Road Westbound					SR-91 Eastbound Off Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	121	20	10	141	44	0	295	167	339	57	69	0	0	126	177	606	783
04:15 PM	0	0	0	0	0	0	80	17	11	97	32	0	328	128	360	36	64	0	0	100	139	557	696
04:30 PM	0	0	0	0	0	0	85	11	8	96	32	0	334	123	366	47	48	0	0	95	131	557	688
04:45 PM	0	0	0	0	0	0	99	10	3	109	32	0	349	124	381	33	84	0	0	117	127	607	734
Total	0	0	0	0	0	0	385	58	32	443	140	0	1306	542	1446	173	265	0	0	438	574	2327	2901
05:00 PM	0	0	0	0	0	0	87	15	9	102	38	0	345	90	383	27	106	0	0	133	99	618	717
05:15 PM	0	0	0	0	0	0	92	12	7	104	47	0	356	126	403	42	57	0	0	99	133	606	739
05:30 PM	0	0	0	0	0	0	96	16	8	112	37	3	344	109	384	46	78	0	0	124	117	620	737
05:45 PM	0	0	0	0	0	0	81	14	9	95	50	0	316	120	366	42	50	0	0	92	129	553	682
Total	0	0	0	0	0	0	356	57	33	413	172	3	1361	445	1536	157	291	0	0	448	478	2397	2875
Grand Total	0	0	0	0	0	0	741	115	65	856	312	3	2667	987	2982	330	556	0	0	886	1052	4724	5776
Apprch %	0	0	0			0	86.6	13.4			10.5	0.1	89.4			37.2	62.8	0					
Total %	0	0	0			0	15.7	2.4		18.1	6.6	0.1	56.5		63.1	7	11.8	0		18.8	18.2	81.8	

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	<b>99</b>	10	109	32	0	349	381	33	84	0	117	607
05:00 PM	0	0	0	0	0	87	15	102	38	0	345	383	27	<b>106</b>	0	<b>133</b>	618
05:15 PM	0	0	0	0	0	92	12	104	<b>47</b>	0	<b>356</b>	<b>403</b>	42	57	0	99	606
05:30 PM	0	0	0	0	0	96	<b>16</b>	<b>112</b>	37	<b>3</b>	344	384	<b>46</b>	78	0	124	<b>620</b>
Total Volume	0	0	0	0	0	374	53	427	154	3	1394	1551	148	325	0	473	2451
% App. Total	0	0	0		0	87.6	12.4		9.9	0.2	89.9		31.3	68.7	0		
PHF	.000	.000	.000	.000	.000	.944	.828	.953	.819	.250	.979	.962	.804	.767	.000	.889	.988

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2





City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	<b>99</b>	10	109	32	0	349	381	33	84	0	117	
+15 mins.	0	0	0	0	0	87	15	102	38	0	345	383	27	<b>106</b>	0	<b>133</b>	
+30 mins.	0	0	0	0	0	92	12	104	<b>47</b>	0	<b>356</b>	<b>403</b>	42	57	0	99	
+45 mins.	0	0	0	0	0	96	<b>16</b>	<b>112</b>	37	<b>3</b>	344	384	<b>46</b>	78	0	124	
Total Volume	0	0	0	0	0	374	53	427	154	3	1394	1551	148	325	0	473	
% App. Total	0	0	0	0	0	87.6	12.4		9.9	0.2	89.9		31.3	68.7	0		
PHF	.000	.000	.000	.000	.000	.944	.828	.953	.819	.250	.979	.962	.804	.767	.000	.889	

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

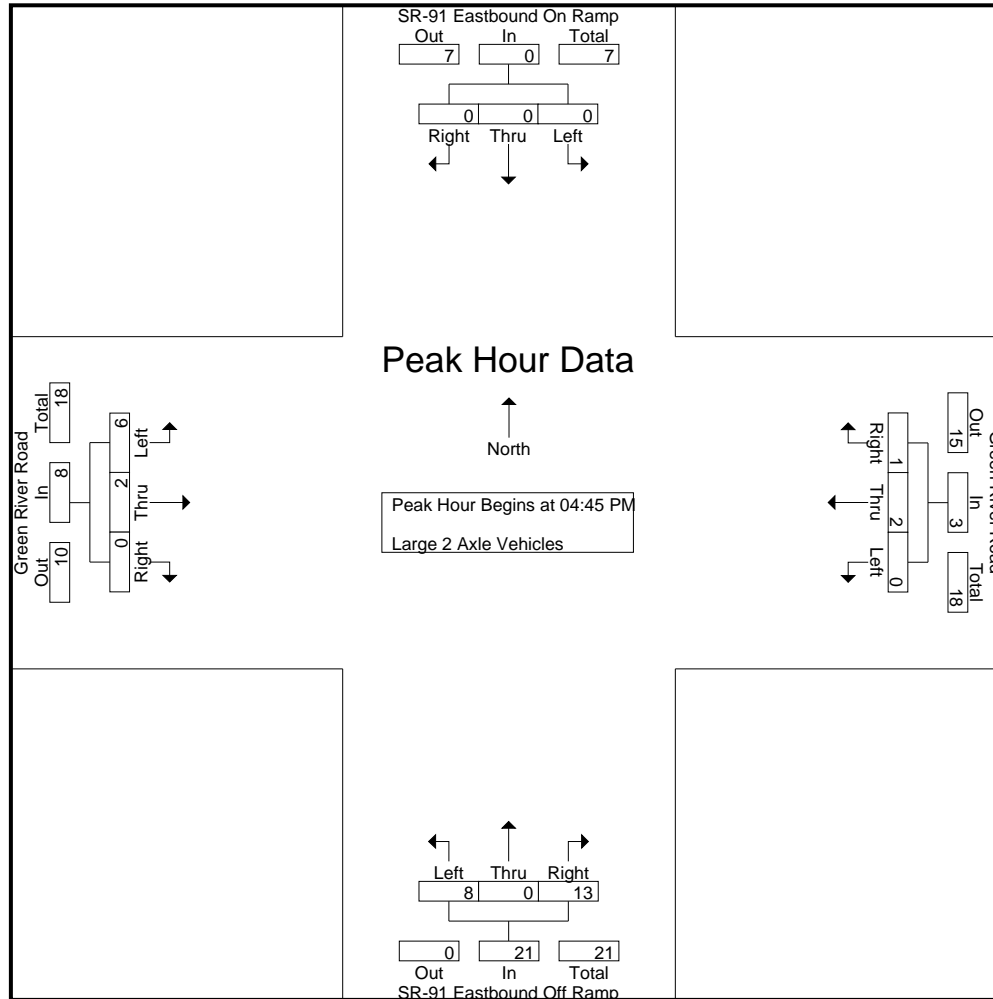
Groups Printed- Large 2 Axle Vehicles

Start Time	SR-91 Eastbound On Ramp Southbound					Green River Road Westbound					SR-91 Eastbound Off Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	3	1	0	4	2	0	8	3	10	3	0	0	0	3	3	17	20
04:15 PM	0	0	0	0	0	0	2	0	0	2	1	1	1	0	3	0	0	0	0	0	0	5	5
04:30 PM	0	0	0	0	0	0	0	2	1	2	1	0	3	3	4	1	0	0	0	1	4	7	11
04:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0	4	3	1	0	0	4	0	8	8
Total	0	0	0	0	0	0	5	3	1	8	6	1	14	6	21	7	1	0	0	8	7	37	44
05:00 PM	0	0	0	0	0	0	0	1	0	1	2	0	5	4	7	1	1	0	0	2	4	10	14
05:15 PM	0	0	0	0	0	0	1	0	0	1	4	0	5	1	9	0	0	0	0	0	1	10	11
05:30 PM	0	0	0	0	0	0	1	0	0	1	0	0	1	1	1	2	0	0	0	2	1	4	5
05:45 PM	0	0	0	0	0	0	1	0	0	1	1	0	2	0	3	1	0	0	0	1	0	5	5
Total	0	0	0	0	0	0	3	1	0	4	7	0	13	6	20	4	1	0	0	5	6	29	35
Grand Total	0	0	0	0	0	0	8	4	1	12	13	1	27	12	41	11	2	0	0	13	13	66	79
Apprch %	0	0	0			0	66.7	33.3			31.7	2.4	65.9			84.6	15.4	0					
Total %	0	0	0			0	12.1	6.1		18.2	19.7	1.5	40.9		62.1	16.7	3	0		19.7	16.5	83.5	

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	2	0	2	4	3	1	0	4	8
05:00 PM	0	0	0	0	0	0	1	1	2	0	5	7	1	1	0	2	10
05:15 PM	0	0	0	0	0	1	0	1	4	0	5	9	0	0	0	0	10
05:30 PM	0	0	0	0	0	1	0	1	0	0	1	1	2	0	0	2	4
Total Volume	0	0	0	0	0	2	1	3	8	0	13	21	6	2	0	8	32
% App. Total	0	0	0		0	66.7	33.3		38.1	0	61.9		75	25	0		
PHF	.000	.000	.000	.000	.000	.500	.250	.750	.500	.000	.650	.583	.500	.500	.000	.500	.800

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	2	0	2	4	3	1	0	4	
+15 mins.	0	0	0	0	0	0	1	1	2	0	5	7	1	1	0	2	
+30 mins.	0	0	0	0	0	1	0	1	4	0	5	9	0	0	0	0	
+45 mins.	0	0	0	0	0	1	0	1	0	0	1	1	2	0	0	2	
Total Volume	0	0	0	0	0	2	1	3	8	0	13	21	6	2	0	8	
% App. Total	0	0	0	0	0	66.7	33.3		38.1	0	61.9		75	25	0		
PHF	.000	.000	.000	.000	.000	.500	.250	.750	.500	.000	.650	.583	.500	.500	.000	.500	

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

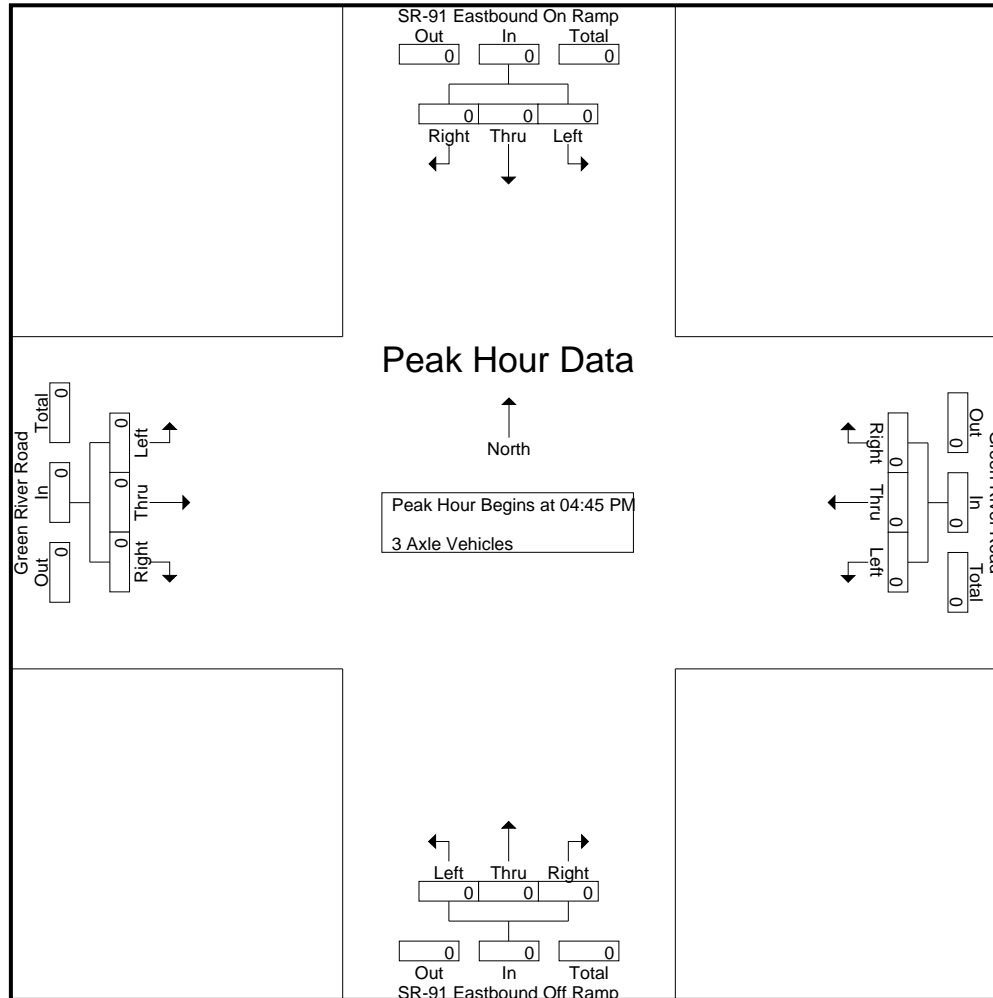
Groups Printed- 3 Axle Vehicles

Start Time	SR-91 Eastbound On Ramp Southbound					Green River Road Westbound					SR-91 Eastbound Off Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	2	2	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	0	2	2	2
Apprch %	0	0	0			0	0	0			0	0	100			100	0	0			0			
Total %	0	0	0			0	0	0			0	0	50		50	50	0	0		50	0	100		

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0		0	0	0		0	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- 4+ Axle Trucks

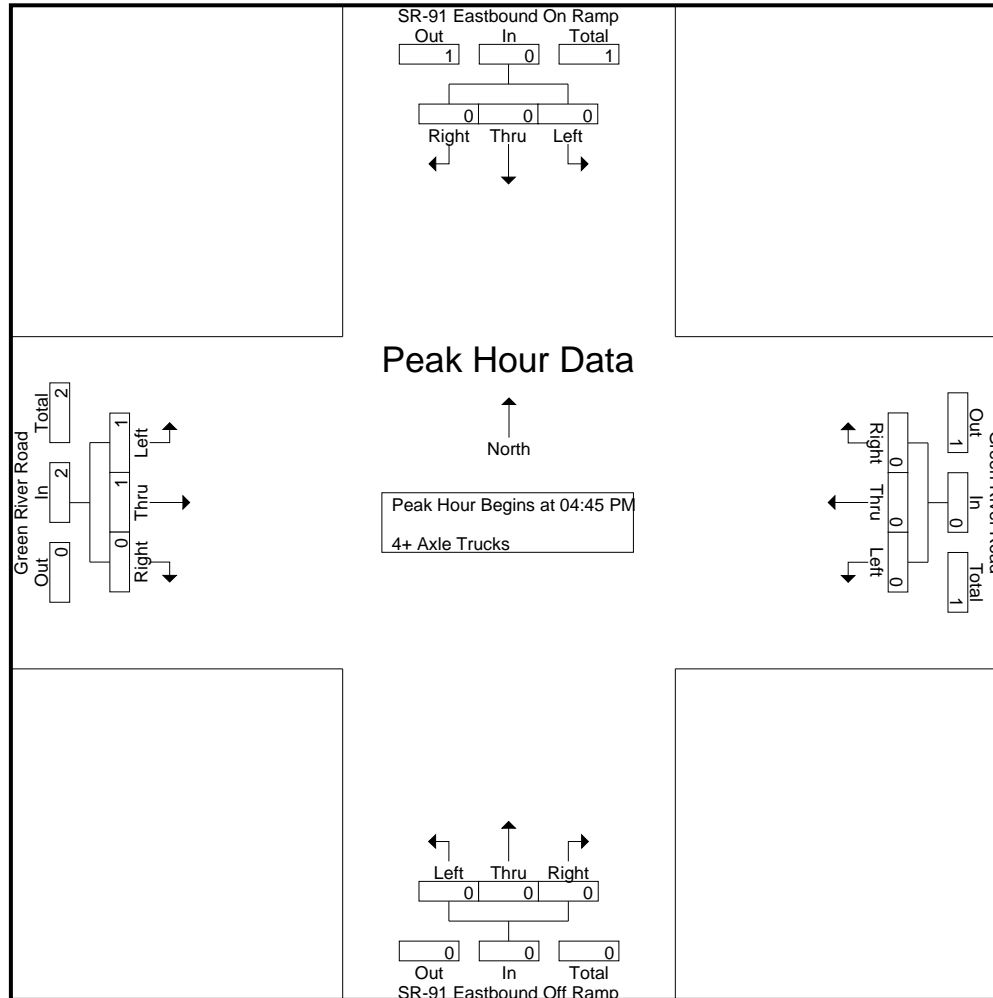
Start Time	SR-91 Eastbound On Ramp Southbound					Green River Road Westbound					SR-91 Eastbound Off Ramp Northbound					Green River Road Eastbound					Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total	Left	Thru	Right	RTOR	App. Total				
04:00 PM	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	2	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	1	0	0	2	0	2	0	0	0	0	0	0	3	3	3
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	0	2	2	2
Grand Total	0	0	0	0	0	0	0	1	0	1	0	0	2	0	2	1	1	0	0	2	0	5	5	5
Apprch %	0	0	0			0	0	100			0	0	100			50	50	0						
Total %	0	0	0		0	0	0	20		20	0	0	40		40	20	20	0		40	0	100		100

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	2	2
% App. Total	0	0	0		0	0	0		0	0	0		50	50	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.000	.500	.500



City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



City of Corona  
 N/S: SR-91 Eastbound Ramps  
 E/W: Green River Road  
 Weather: Clear

File Name : 02\_COR\_91E\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 3

Start Time	SR-91 Eastbound On Ramp Southbound				Green River Road Westbound				SR-91 Eastbound Off Ramp Northbound				Green River Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1																	
Peak Hour for Each Approach Begins at:																	
	04:45 PM				04:45 PM				04:45 PM				04:45 PM				
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	50	50	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.000	.500	

Location: Corona  
 N/S: SR-91 EB Ramps  
 E/W: Green River Road



Date: 3/28/2023  
 Day: Tuesday

PEDESTRIANS

	North Leg SR-91 EB Ramps	East Leg Green River Road	South Leg SR-91 EB Ramps	West Leg Green River Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	2	0	2
TOTAL VOLUMES:	0	0	3	0	3

	North Leg SR-91 EB Ramps	East Leg Green River Road	South Leg SR-91 EB Ramps	West Leg Green River Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	1	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	1

Location: Corona  
 N/S: SR-91 EB Ramps  
 E/W: Green River Road



Date: 3/28/2023  
 Day: Tuesday

BICYCLES

	Southbound SR-91 EB Ramps			Westbound Green River Road			Northbound SR-91 EB Ramps			Eastbound Green River Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	4	0	0	0	0	0	1	0	5

	Southbound SR-91 EB Ramps			Westbound Green River Road			Northbound SR-91 EB Ramps			Eastbound Green River Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	4	0	0	0	0	0	5	0	9

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

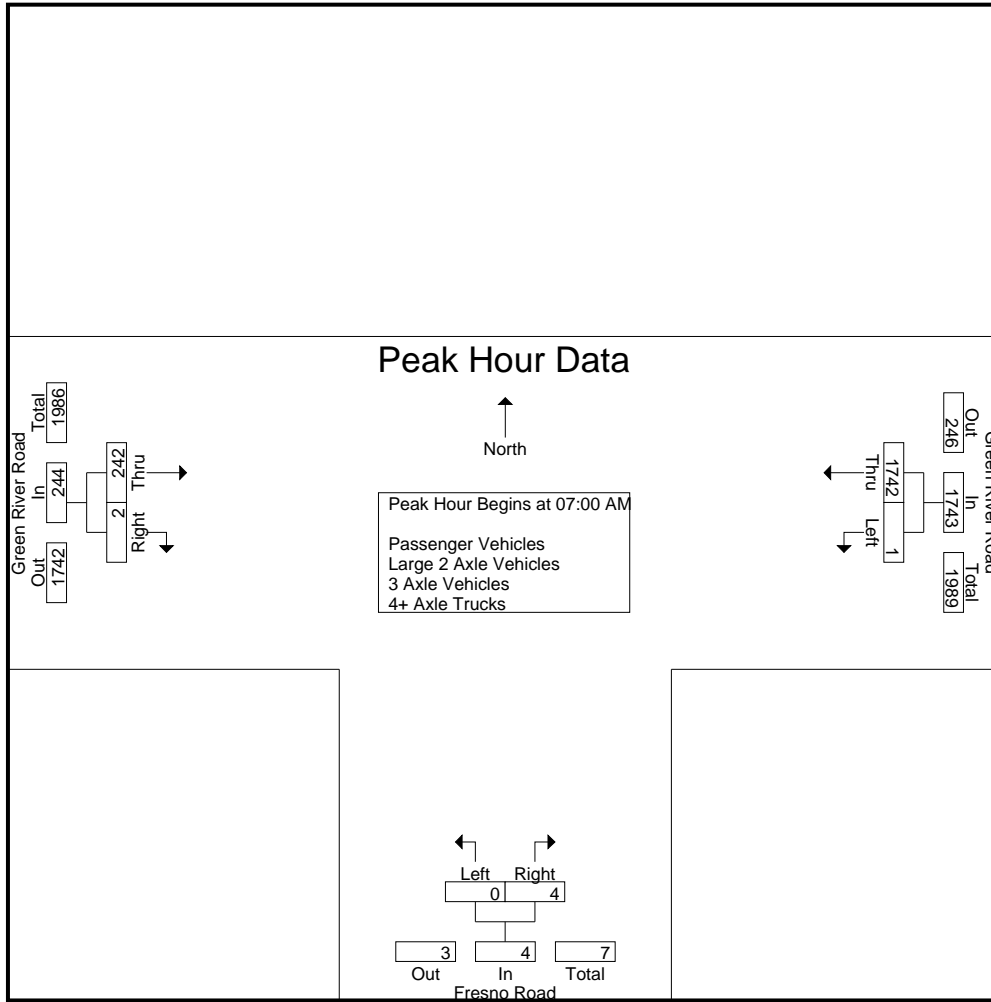
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Green River Road Westbound			Fresno Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
07:00 AM	0	506	506	0	1	0	1	45	0	0	45	0	552	552
07:15 AM	0	393	393	0	1	0	1	61	0	0	61	0	455	455
07:30 AM	1	458	459	0	2	0	2	75	1	0	76	0	537	537
07:45 AM	0	385	385	0	0	0	0	61	1	0	62	0	447	447
<b>Total</b>	<b>1</b>	<b>1742</b>	<b>1743</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>242</b>	<b>2</b>	<b>0</b>	<b>244</b>	<b>0</b>	<b>1991</b>	<b>1991</b>
08:00 AM	1	351	352	0	2	0	2	66	0	0	66	0	420	420
08:15 AM	0	366	366	1	1	0	2	79	1	0	80	0	448	448
08:30 AM	0	355	355	0	1	0	1	83	1	0	84	0	440	440
08:45 AM	0	313	313	0	0	0	0	74	1	0	75	0	388	388
<b>Total</b>	<b>1</b>	<b>1385</b>	<b>1386</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>5</b>	<b>302</b>	<b>3</b>	<b>0</b>	<b>305</b>	<b>0</b>	<b>1696</b>	<b>1696</b>
<b>Grand Total</b>	<b>2</b>	<b>3127</b>	<b>3129</b>	<b>1</b>	<b>8</b>	<b>0</b>	<b>9</b>	<b>544</b>	<b>5</b>	<b>0</b>	<b>549</b>	<b>0</b>	<b>3687</b>	<b>3687</b>
Apprch %	0.1	99.9		11.1	88.9			99.1	0.9					
Total %	0.1	84.8	84.9	0	0.2		0.2	14.8	0.1		14.9	0	100	
Passenger Vehicles	2	3076	3078	1	7		8	517	3		520	0	0	3606
% Passenger Vehicles	100	98.4	98.4	100	87.5	0	88.9	95	60	0	94.7	0	0	97.8
Large 2 Axle Vehicles	0	45	45	0	1		1	26	1		27	0	0	73
% Large 2 Axle Vehicles	0	1.4	1.4	0	12.5	0	11.1	4.8	20	0	4.9	0	0	2
3 Axle Vehicles	0	4	4	0	0		0	0	1		1	0	0	5
% 3 Axle Vehicles	0	0.1	0.1	0	0	0	0	0	20	0	0.2	0	0	0.1
4+ Axle Trucks	0	2	2	0	0		0	1	0		1	0	0	3
% 4+ Axle Trucks	0	0.1	0.1	0	0	0	0	0.2	0	0	0.2	0	0	0.1

Start Time	Green River Road Westbound			Fresno Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	0	<b>506</b>	<b>506</b>	0	1	1	45	0	45	<b>552</b>
07:15 AM	0	393	393	0	1	1	61	0	61	455
07:30 AM	1	458	459	0	2	2	75	1	76	537
07:45 AM	0	385	385	0	0	0	61	1	62	447
Total Volume	1	1742	1743	0	4	4	242	2	244	1991
% App. Total	0.1	99.9		0	100		99.2	0.8		
PHF	.250	.861	.861	.000	.500	.500	.807	.500	.803	.902

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:30 AM			08:00 AM		
+0 mins.	0	<b>506</b>	<b>506</b>	0	<b>2</b>	<b>2</b>	66	0	66
+15 mins.	0	393	393	0	0	0	79	1	80
+30 mins.	1	458	459	0	2	2	<b>83</b>	1	<b>84</b>
+45 mins.	0	385	385	1	1	2	74	1	75
Total Volume	1	1742	1743	1	5	6	302	3	305
% App. Total	0.1	99.9		16.7	83.3		99	1	
PHF	.250	.861	.861	.250	.625	.750	.910	.750	.908

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- Passenger Vehicles

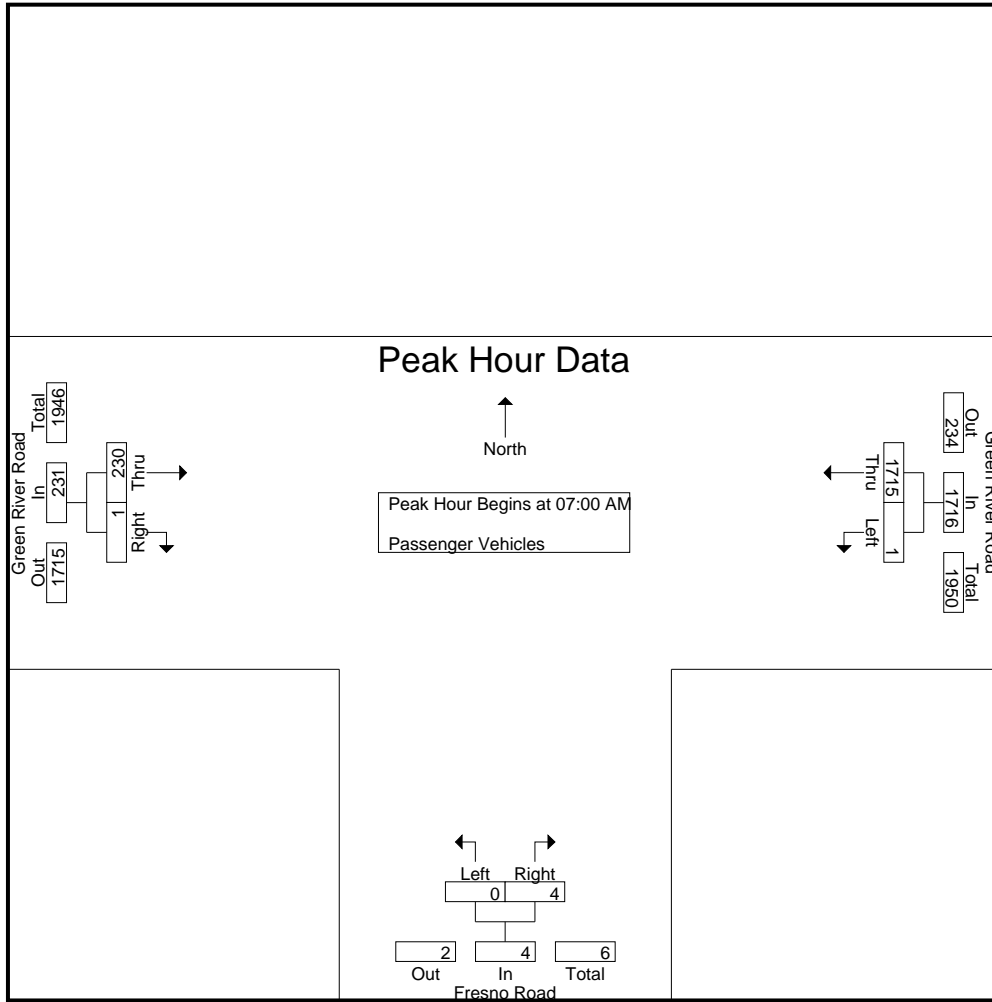
Start Time	Green River Road Westbound			Fresno Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
07:00 AM	0	496	496	0	1	0	1	43	0	0	43	0	540	540
07:15 AM	0	392	392	0	1	0	1	56	0	0	56	0	449	449
07:30 AM	1	452	453	0	2	0	2	72	1	0	73	0	528	528
07:45 AM	0	375	375	0	0	0	0	59	0	0	59	0	434	434
Total	1	1715	1716	0	4	0	4	230	1	0	231	0	1951	1951
08:00 AM	1	343	344	0	1	0	1	63	0	0	63	0	408	408
08:15 AM	0	358	358	1	1	0	2	70	1	0	71	0	431	431
08:30 AM	0	351	351	0	1	0	1	81	1	0	82	0	434	434
08:45 AM	0	309	309	0	0	0	0	73	0	0	73	0	382	382
Total	1	1361	1362	1	3	0	4	287	2	0	289	0	1655	1655
Grand Total	2	3076	3078	1	7	0	8	517	3	0	520	0	3606	3606
Apprch %	0.1	99.9		12.5	87.5			99.4	0.6					
Total %	0.1	85.3	85.4	0	0.2		0.2	14.3	0.1		14.4	0	100	

Start Time	Green River Road Westbound			Fresno Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	<b>496</b>	<b>496</b>	0	1	1	43	0	43	<b>540</b>
07:15 AM	0	392	392	0	1	1	56	0	56	449
07:30 AM	1	452	453	0	2	2	72	1	73	528
07:45 AM	0	375	375	0	0	0	59	0	59	434
Total Volume	1	1715	1716	0	4	4	230	1	231	1951
% App. Total	0.1	99.9		0	100		99.6	0.4		
PHF	.250	.864	.865	.000	.500	.500	.799	.250	.791	.903

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:00 AM

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	<b>496</b>	<b>496</b>	0	1	1	43	0	43
+15 mins.	0	392	392	0	1	1	56	0	56
+30 mins.	<b>1</b>	452	453	0	<b>2</b>	<b>2</b>	<b>72</b>	<b>1</b>	<b>73</b>
+45 mins.	0	375	375	0	0	0	59	0	59
Total Volume	1	1715	1716	0	4	4	230	1	231
% App. Total	0.1	99.9		0	100		99.6	0.4	
PHF	.250	.864	.865	.000	.500	.500	.799	.250	.791



City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

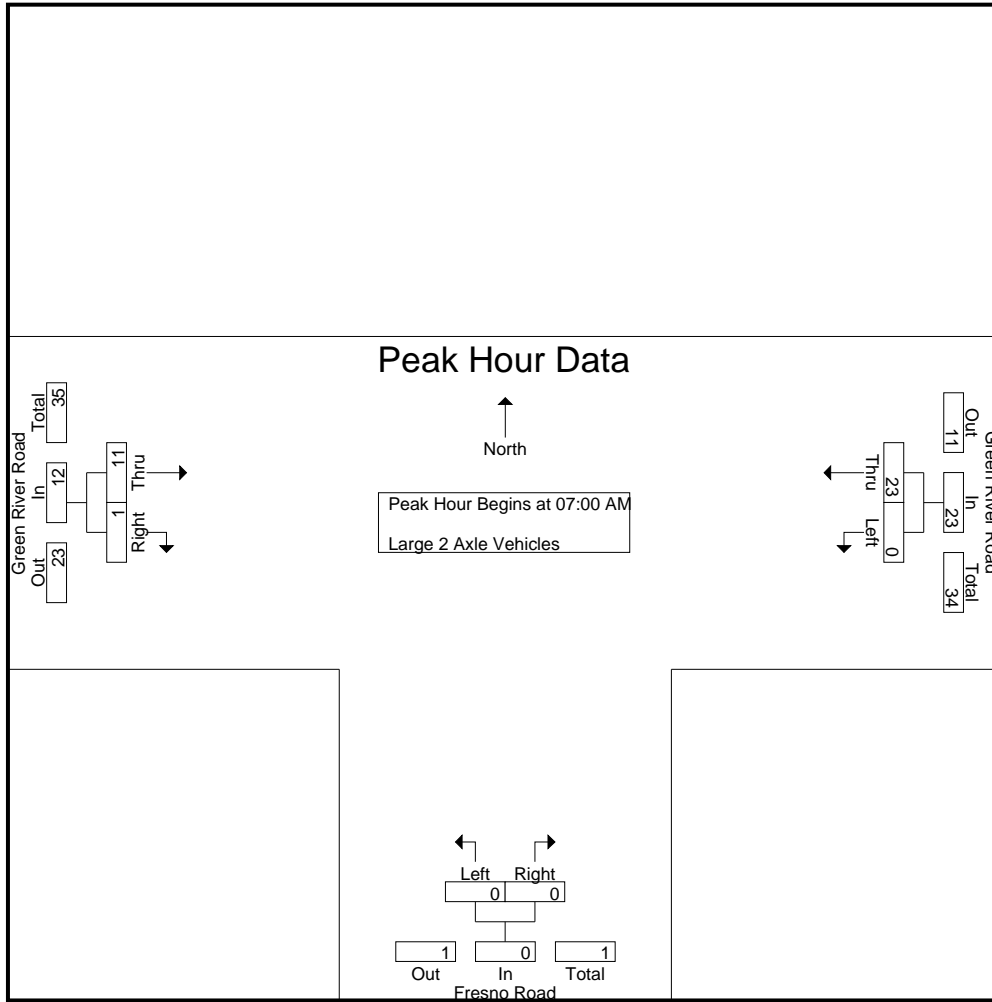
Start Time	Green River Road Westbound			Fresno Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
07:00 AM	0	8	8	0	0	0	0	2	0	0	2	0	10	10
07:15 AM	0	1	1	0	0	0	0	5	0	0	5	0	6	6
07:30 AM	0	5	5	0	0	0	0	2	0	0	2	0	7	7
07:45 AM	0	9	9	0	0	0	0	2	1	0	3	0	12	12
Total	0	23	23	0	0	0	0	11	1	0	12	0	35	35
08:00 AM	0	8	8	0	1	0	1	3	0	0	3	0	12	12
08:15 AM	0	8	8	0	0	0	0	9	0	0	9	0	17	17
08:30 AM	0	3	3	0	0	0	0	2	0	0	2	0	5	5
08:45 AM	0	3	3	0	0	0	0	1	0	0	1	0	4	4
Total	0	22	22	0	1	0	1	15	0	0	15	0	38	38
Grand Total	0	45	45	0	1	0	1	26	1	0	27	0	73	73
Apprch %	0	100		0	100			96.3	3.7					
Total %	0	61.6	61.6	0	1.4		1.4	35.6	1.4		37	0	100	

Start Time	Green River Road Westbound			Fresno Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	8	8	0	0	0	2	0	2	10
07:15 AM	0	1	1	0	0	0	5	0	5	6
07:30 AM	0	5	5	0	0	0	2	0	2	7
07:45 AM	0	9	9	0	0	0	2	1	3	12
Total Volume	0	23	23	0	0	0	11	1	12	35
% App. Total	0	100		0	0		91.7	8.3		
PHF	.000	.639	.639	.000	.000	.000	.550	.250	.600	.729

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:00 AM

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	8	8	0	0	0	2	0	2
+15 mins.	0	1	1	0	0	0	5	0	5
+30 mins.	0	5	5	0	0	0	2	0	2
+45 mins.	0	9	9	0	0	0	2	1	3
Total Volume	0	23	23	0	0	0	11	1	12
% App. Total	0	100		0	0		91.7	8.3	
PHF	.000	.639	.639	.000	.000	.000	.550	.250	.600

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- 3 Axle Vehicles

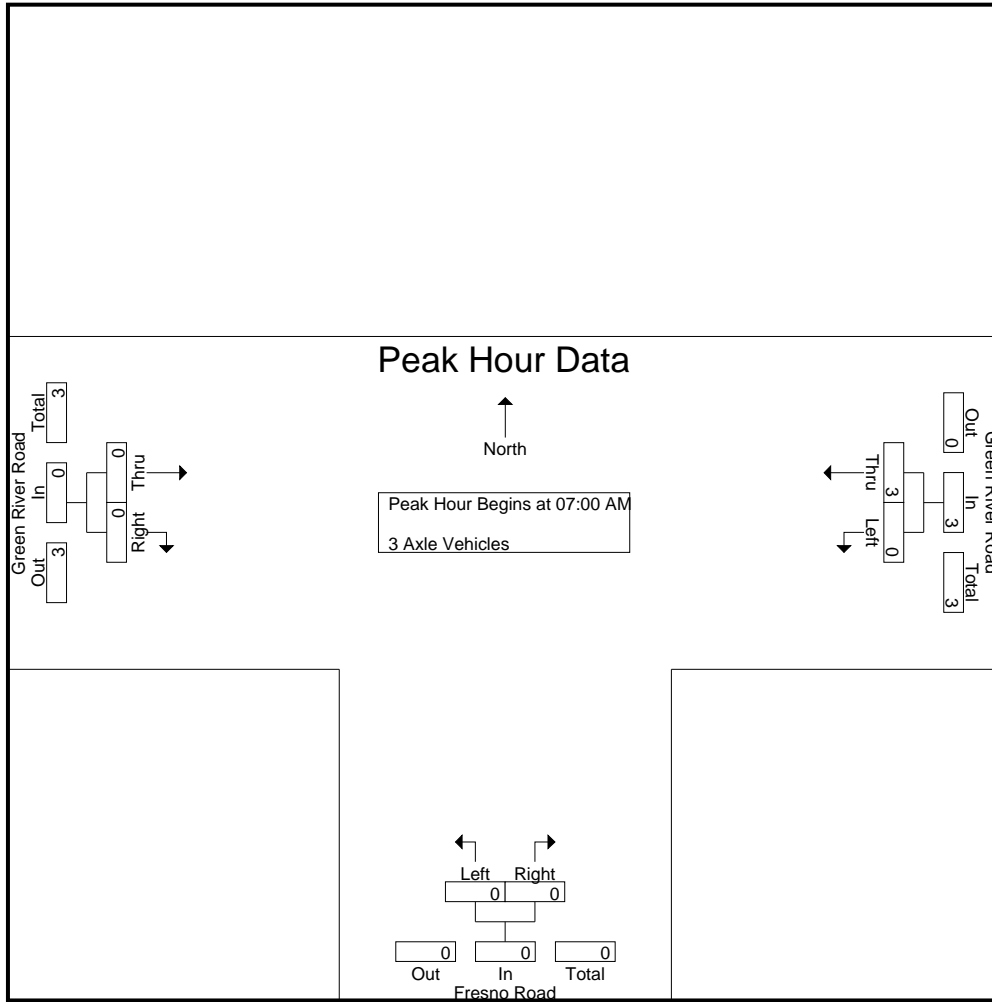
Start Time	Green River Road Westbound			Fresno Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total				
07:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	2	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	3	3	0	0	0	0	0	0	0	0	0	0	3	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	1	1
Total	0	1	1	0	0	0	0	0	0	1	0	1	0	2	2
Grand Total	0	4	4	0	0	0	0	0	0	1	0	1	0	5	5
Apprch %	0	100		0	0			0	100						
Total %	0	80	80	0	0		0	0	20		20	0	100		

Start Time	Green River Road Westbound			Fresno Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	2	2	0	0	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	1	1	0	0	0	0	0	0	1
Total Volume	0	3	3	0	0	0	0	0	0	3
% App. Total	0	100		0	0		0	0		
PHF	.000	.375	.375	.000	.000	.000	.000	.000	.000	.375

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:00 AM

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	2	2	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	1	0	0	0	0	0	0
Total Volume	0	3	3	0	0	0	0	0	0
% App. Total	0	100		0	0		0	0	
PHF	.000	.375	.375	.000	.000	.000	.000	.000	.000

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- 4+ Axle Trucks

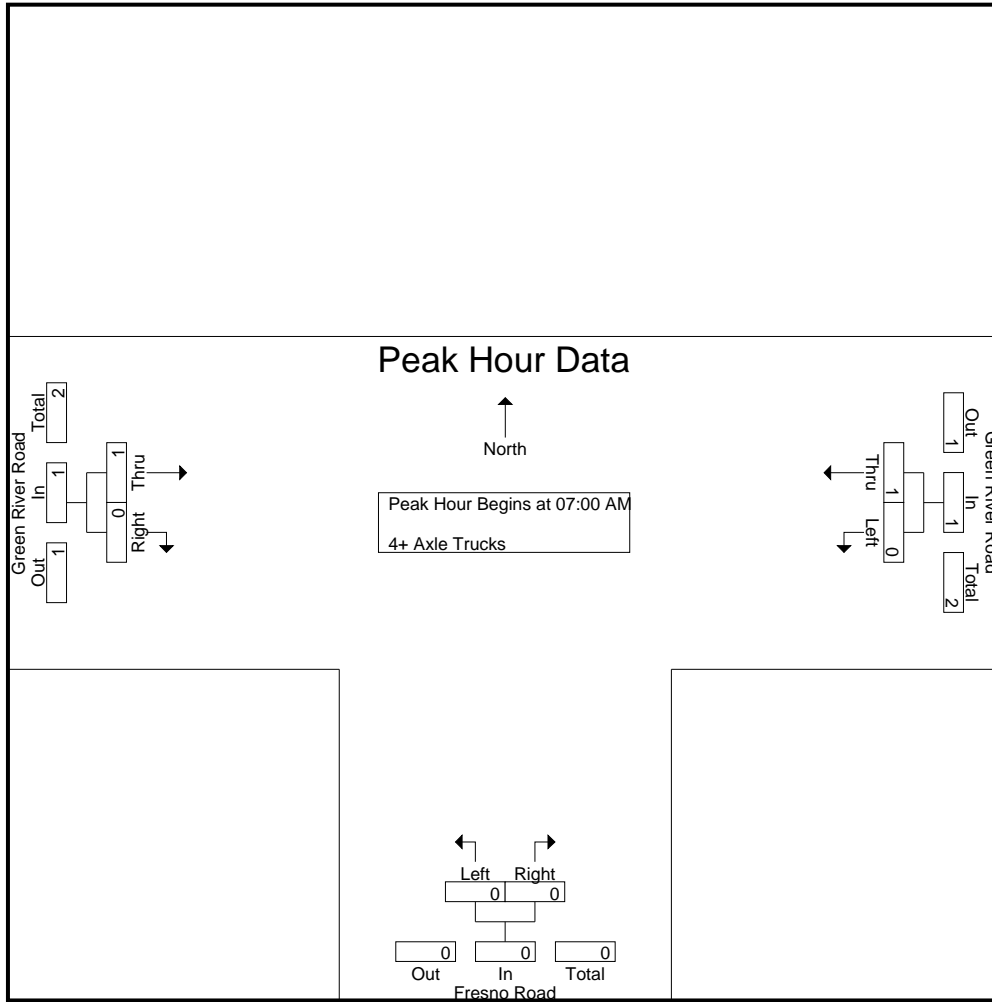
Start Time	Green River Road Westbound			Fresno Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	1	0	0	0	0	1	0	0	1	0	2	2	2
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	1	0	0	1	0	2	2	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	1	1	1
Total	0	1	1	0	0	0	0	0	0	0	0	0	1	1	1
Grand Total	0	2	2	0	0	0	0	1	0	0	1	0	3	3	3
Apprch %	0	100		0	0			100	0						
Total %	0	66.7	66.7	0	0			33.3	0		33.3	0	100		

Start Time	Green River Road Westbound			Fresno Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	1	0	0	0	1	0	1	2
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	1	0	1	2
% App. Total	0	100		0	0		100	0		
PHF	.000	.250	.250	.000	.000	.000	.250	.000	.250	.250

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:00 AM

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	1	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	0	0	0	1	0	1
% App. Total	0	100		0	0		100	0	
PHF	.000	.250	.250	.000	.000	.000	.250	.000	.250

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

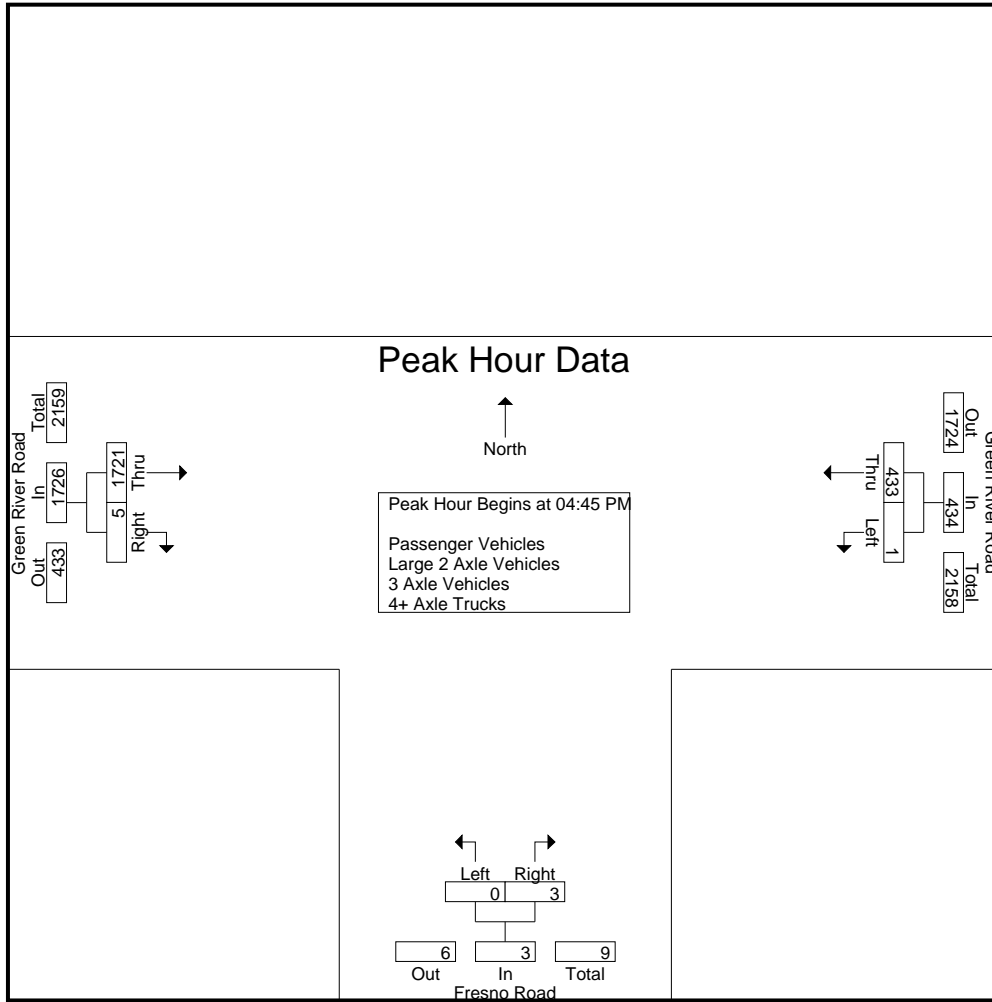
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Green River Road Westbound			Fresno Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
04:00 PM	1	147	148	0	2	0	2	374	1	0	375	0	525	525
04:15 PM	0	100	100	0	0	0	0	402	1	0	403	0	503	503
04:30 PM	0	105	105	0	2	0	2	393	1	0	394	0	501	501
04:45 PM	0	108	108	0	0	0	0	427	0	0	427	0	535	535
<b>Total</b>	<b>1</b>	<b>460</b>	<b>461</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>4</b>	<b>1596</b>	<b>3</b>	<b>0</b>	<b>1599</b>	<b>0</b>	<b>2064</b>	<b>2064</b>
05:00 PM	1	105	106	0	0	0	0	452	1	0	453	0	559	559
05:15 PM	0	100	100	0	2	0	2	417	2	0	419	0	521	521
05:30 PM	0	120	120	0	1	0	1	425	2	0	427	0	548	548
05:45 PM	0	91	91	0	2	0	2	373	0	0	373	0	466	466
<b>Total</b>	<b>1</b>	<b>416</b>	<b>417</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>5</b>	<b>1667</b>	<b>5</b>	<b>0</b>	<b>1672</b>	<b>0</b>	<b>2094</b>	<b>2094</b>
<b>Grand Total</b>	<b>2</b>	<b>876</b>	<b>878</b>	<b>0</b>	<b>9</b>	<b>0</b>	<b>9</b>	<b>3263</b>	<b>8</b>	<b>0</b>	<b>3271</b>	<b>0</b>	<b>4158</b>	<b>4158</b>
Apprch %	0.2	99.8		0	100			99.8	0.2					
Total %	0	21.1	21.1	0	0.2		0.2	78.5	0.2		78.7	0	100	
Passenger Vehicles	1	862	863	0	7		7	3240	7		3247	0	0	4117
% Passenger Vehicles	50	98.4	98.3	0	77.8	0	77.8	99.3	87.5	0	99.3	0	0	99
Large 2 Axle Vehicles	1	13	14	0	2		2	20	1		21	0	0	37
% Large 2 Axle Vehicles	50	1.5	1.6	0	22.2	0	22.2	0.6	12.5	0	0.6	0	0	0.9
3 Axle Vehicles	0	0	0	0	0		0	2	0		2	0	0	2
% 3 Axle Vehicles	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0
4+ Axle Trucks	0	1	1	0	0		0	1	0		1	0	0	2
% 4+ Axle Trucks	0	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0

Start Time	Green River Road Westbound			Fresno Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	0	108	108	0	0	0	427	0	427	535
05:00 PM	1	105	106	0	0	0	452	1	453	559
05:15 PM	0	100	100	0	2	2	417	2	419	521
05:30 PM	0	120	120	0	1	1	425	2	427	548
Total Volume	1	433	434	0	3	3	1721	5	1726	2163
% App. Total	0.2	99.8		0	100		99.7	0.3		
PHF	.250	.902	.904	.000	.375	.375	.952	.625	.953	.967

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:00 PM			05:00 PM			04:45 PM		
+0 mins.	1	147	148	0	0	0	427	0	427
+15 mins.	0	100	100	0	2	2	452	1	453
+30 mins.	0	105	105	0	1	1	417	2	419
+45 mins.	0	108	108	0	2	2	425	2	427
Total Volume	1	460	461	0	5	5	1721	5	1726
% App. Total	0.2	99.8		0	100		99.7	0.3	
PHF	.250	.782	.779	.000	.625	.625	.952	.625	.953



City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- Passenger Vehicles

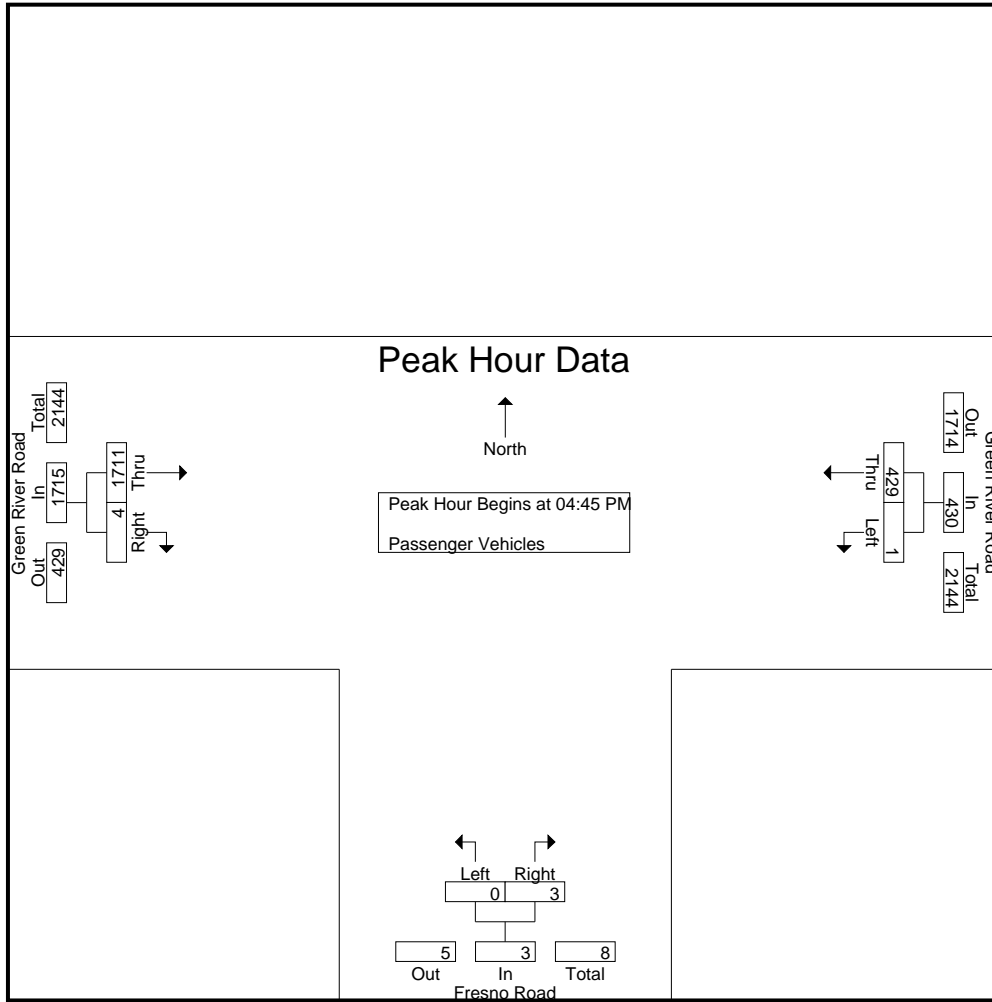
Start Time	Green River Road Westbound			Fresno Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
04:00 PM	0	142	142	0	1	0	1	366	1	0	367	0	510	510
04:15 PM	0	98	98	0	0	0	0	400	1	0	401	0	499	499
04:30 PM	0	103	103	0	2	0	2	391	1	0	392	0	497	497
04:45 PM	0	108	108	0	0	0	0	426	0	0	426	0	534	534
Total	0	451	451	0	3	0	3	1583	3	0	1586	0	2040	2040
05:00 PM	1	104	105	0	0	0	0	449	1	0	450	0	555	555
05:15 PM	0	98	98	0	2	0	2	412	1	0	413	0	513	513
05:30 PM	0	119	119	0	1	0	1	424	2	0	426	0	546	546
05:45 PM	0	90	90	0	1	0	1	372	0	0	372	0	463	463
Total	1	411	412	0	4	0	4	1657	4	0	1661	0	2077	2077
Grand Total	1	862	863	0	7	0	7	3240	7	0	3247	0	4117	4117
Apprch %	0.1	99.9		0	100			99.8	0.2					
Total %	0	20.9	21	0	0.2		0.2	78.7	0.2		78.9	0	100	

Start Time	Green River Road Westbound			Fresno Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:45 PM	0	108	108	0	0	0	426	0	426	534
05:00 PM	1	104	105	0	0	0	449	1	450	555
05:15 PM	0	98	98	0	2	2	412	1	413	513
05:30 PM	0	119	119	0	1	1	424	2	426	546
Total Volume	1	429	430	0	3	3	1711	4	1715	2148
% App. Total	0.2	99.8		0	100		99.8	0.2		
PHF	.250	.901	.903	.000	.375	.375	.953	.500	.953	.968

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:45 PM

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	108	108	0	0	0	426	0	426
+15 mins.	1	104	105	0	0	0	<b>449</b>	1	<b>450</b>
+30 mins.	0	98	98	0	2	2	412	1	413
+45 mins.	0	<b>119</b>	<b>119</b>	0	1	1	424	2	426
Total Volume	1	429	430	0	3	3	1711	4	1715
% App. Total	0.2	99.8		0	100		99.8	0.2	
PHF	.250	.901	.903	.000	.375	.375	.953	.500	.953

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

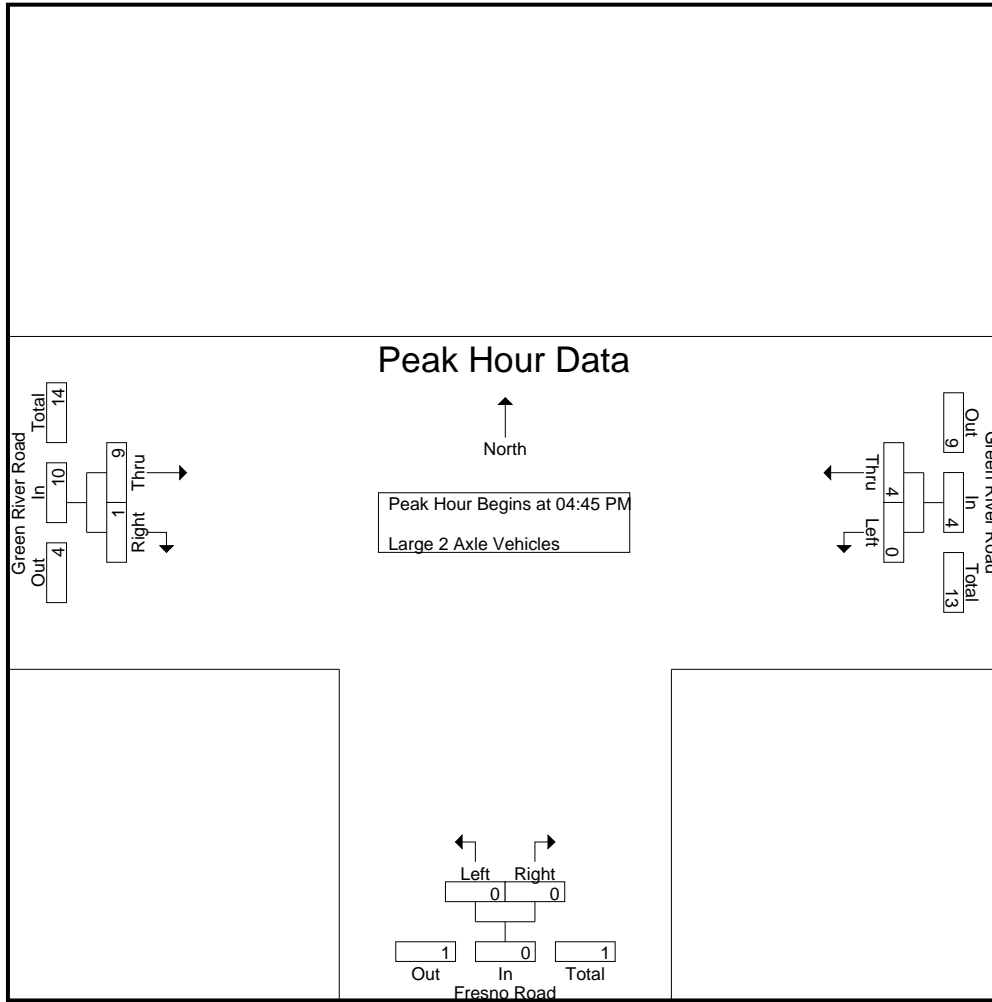
Start Time	Green River Road Westbound			Fresno Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
04:00 PM	1	4	5	0	1	0	1	6	0	0	6	0	12	12
04:15 PM	0	2	2	0	0	0	0	2	0	0	2	0	4	4
04:30 PM	0	2	2	0	0	0	0	2	0	0	2	0	4	4
04:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	1	1
Total	1	8	9	0	1	0	1	11	0	0	11	0	21	21
05:00 PM	0	1	1	0	0	0	0	3	0	0	3	0	4	4
05:15 PM	0	2	2	0	0	0	0	5	1	0	6	0	8	8
05:30 PM	0	1	1	0	0	0	0	0	0	0	0	0	1	1
05:45 PM	0	1	1	0	1	0	1	1	0	0	1	0	3	3
Total	0	5	5	0	1	0	1	9	1	0	10	0	16	16
Grand Total	1	13	14	0	2	0	2	20	1	0	21	0	37	37
Apprch %	7.1	92.9		0	100			95.2	4.8					
Total %	2.7	35.1	37.8	0	5.4		5.4	54.1	2.7		56.8	0	100	

Start Time	Green River Road Westbound			Fresno Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:45 PM	0	0	0	0	0	0	1	0	1	1
05:00 PM	0	1	1	0	0	0	3	0	3	4
05:15 PM	0	2	2	0	0	0	5	1	6	8
05:30 PM	0	1	1	0	0	0	0	0	0	1
Total Volume	0	4	4	0	0	0	9	1	10	14
% App. Total	0	100		0	0		90	10		
PHF	.000	.500	.500	.000	.000	.000	.450	.250	.417	.438

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:45 PM

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	0	0	0	0	0	1	0	1
+15 mins.	0	1	1	0	0	0	3	0	3
+30 mins.	0	2	2	0	0	0	5	1	6
+45 mins.	0	1	1	0	0	0	0	0	0
Total Volume	0	4	4	0	0	0	9	1	10
% App. Total	0	100		0	0		90	10	
PHF	.000	.500	.500	.000	.000	.000	.450	.250	.417

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- 3 Axle Vehicles

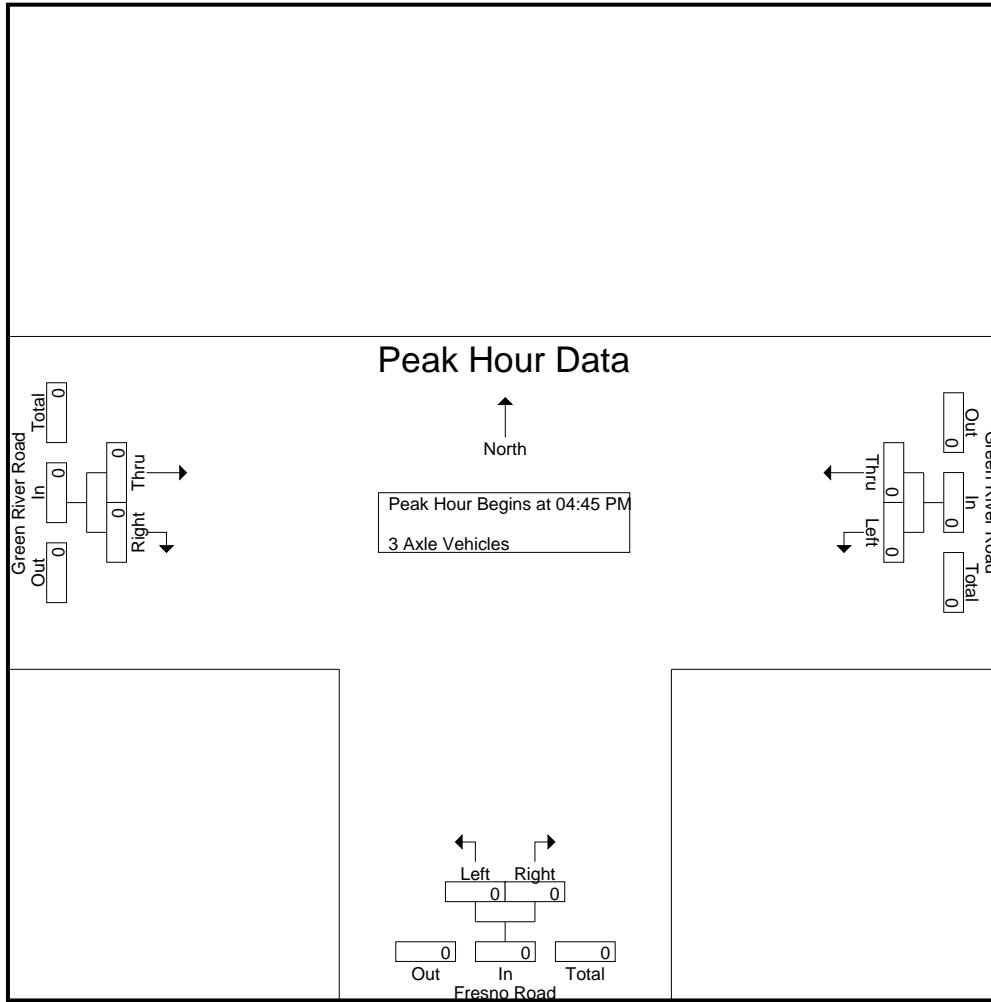
Start Time	Green River Road Westbound			Fresno Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	0	2	0	0	2	0	2	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	2	0	0	2	0	2	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	2	0	0	2	0	2	2
Apprch %	0	0		0	0			100	0					
Total %	0	0	0	0	0		0	100	0		100	0	100	

Start Time	Green River Road Westbound			Fresno Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0			0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:45 PM

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- 4+ Axle Trucks

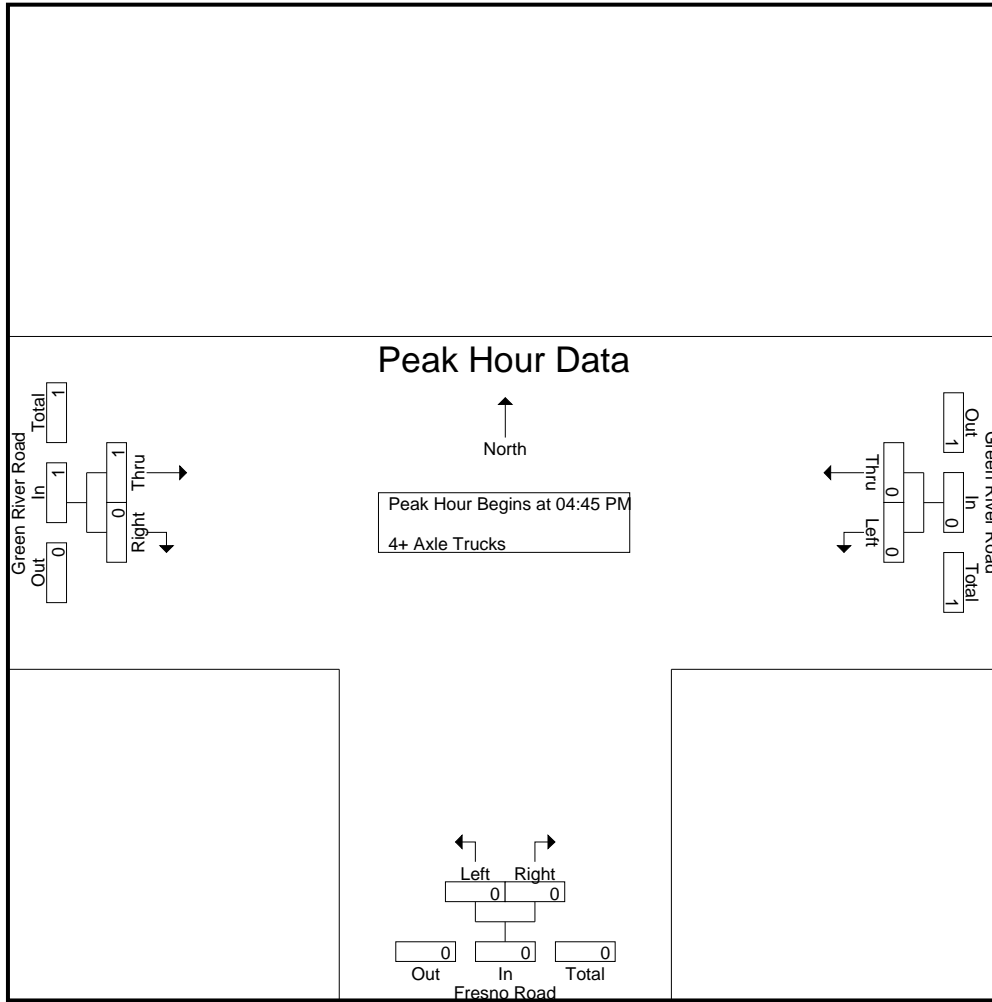
Start Time	Green River Road Westbound			Fresno Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total				
04:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	1	1	
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	0	1	0	1	1	
Grand Total	0	1	1	0	0	0	0	1	0	0	1	0	2	2	
Apprch %	0	100		0	0			100	0						
Total %	0	50	50	0	0		0	50	0		50	0	100		

Start Time	Green River Road Westbound			Fresno Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	1	0	1	1
% App. Total	0	0		0	0		100	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:45 PM

City of Corona  
 N/S: Fresno Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 03\_COR\_Fres\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	0	1	0	1
% App. Total	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.250



Location: Corona  
 N/S: Fresno Road  
 E/W: Green River Road



Date: 3/28/2023  
 Day: Tuesday

PEDESTRIANS

	North Leg Dead End	East Leg Green River Road	South Leg Fresno Road	West Leg Green River Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	2	0	2
TOTAL VOLUMES:	0	0	3	0	3

	North Leg Dead End	East Leg Green River Road	South Leg Fresno Road	West Leg Green River Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	1	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	1

Location: Corona  
 N/S: Fresno Road  
 E/W: Green River Road



Date: 3/28/2023  
 Day: Tuesday

BICYCLES

	Southbound Dead End			Westbound Green River Road			Northbound Fresno Road			Eastbound Green River Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	1	0	3

	Southbound Dead End			Westbound Green River Road			Northbound Fresno Road			Eastbound Green River Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	4	0	0	0	0	0	5	0	9

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

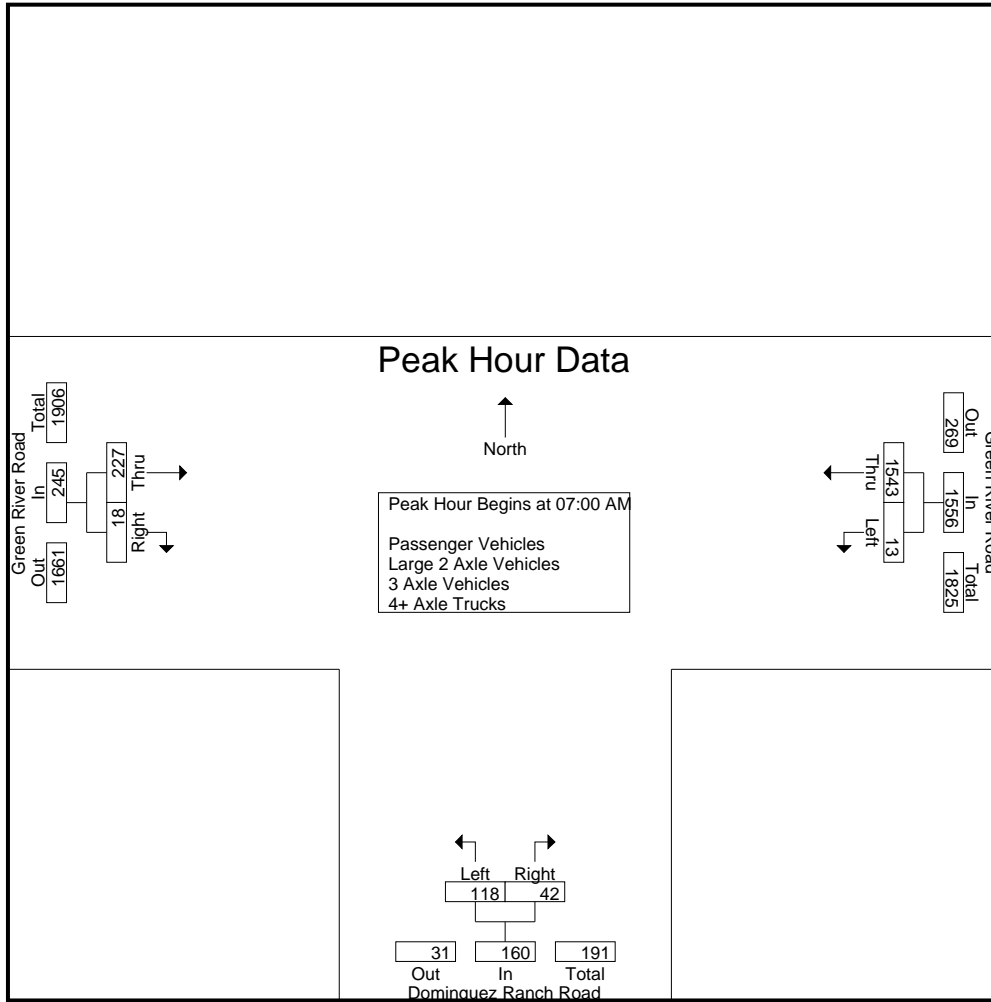
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
07:00 AM	3	411	414	28	5	4	33	44	2	1	46	5	493	498
07:15 AM	1	432	433	33	12	8	45	58	5	1	63	9	541	550
07:30 AM	5	347	352	22	15	12	37	68	4	2	72	14	461	475
07:45 AM	4	353	357	35	10	7	45	57	7	2	64	9	466	475
Total	13	1543	1556	118	42	31	160	227	18	6	245	37	1961	1998
08:00 AM	8	341	349	26	12	9	38	68	4	1	72	10	459	469
08:15 AM	13	301	314	31	6	3	37	69	8	2	77	5	428	433
08:30 AM	15	322	337	31	5	4	36	70	18	4	88	8	461	469
08:45 AM	7	270	277	31	4	4	35	66	8	2	74	6	386	392
Total	43	1234	1277	119	27	20	146	273	38	9	311	29	1734	1763
Grand Total	56	2777	2833	237	69	51	306	500	56	15	556	66	3695	3761
Apprch %	2	98		77.5	22.5			89.9	10.1					
Total %	1.5	75.2	76.7	6.4	1.9		8.3	13.5	1.5		15	1.8	98.2	
Passenger Vehicles	53	2741	2794	230	63		341	480	52		546	0	0	3681
% Passenger Vehicles	94.6	98.7	98.6	97	91.3	94.1	95.5	96	92.9	93.3	95.6	0	0	97.9
Large 2 Axle Vehicles	3	31	34	7	6		16	20	4		25	0	0	75
% Large 2 Axle Vehicles	5.4	1.1	1.2	3	8.7	5.9	4.5	4	7.1	6.7	4.4	0	0	2
3 Axle Vehicles	0	4	4	0	0		0	0	0		0	0	0	4
% 3 Axle Vehicles	0	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0.1
4+ Axle Trucks	0	1	1	0	0		0	0	0		0	0	0	1
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	3	411	414	28	5	33	44	2	46	493
07:15 AM	1	<b>432</b>	<b>433</b>	33	12	<b>45</b>	58	5	63	<b>541</b>
07:30 AM	<b>5</b>	347	352	22	<b>15</b>	37	<b>68</b>	4	<b>72</b>	461
07:45 AM	4	353	357	<b>35</b>	10	45	57	<b>7</b>	64	466
Total Volume	13	1543	1556	118	42	160	227	18	245	1961
% App. Total	0.8	99.2		73.8	26.2		92.7	7.3		
PHF	.650	.893	.898	.843	.700	.889	.835	.643	.851	.906

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:15 AM			08:00 AM		
+0 mins.	3	411	414	33	12	45	68	4	72
+15 mins.	1	<b>432</b>	<b>433</b>	22	<b>15</b>	37	69	8	77
+30 mins.	<b>5</b>	347	352	<b>35</b>	10	45	<b>70</b>	<b>18</b>	<b>88</b>
+45 mins.	4	353	357	26	12	38	66	8	74
Total Volume	13	1543	1556	116	49	165	273	38	311
% App. Total	0.8	99.2		70.3	29.7		87.8	12.2	
PHF	.650	.893	.898	.829	.817	.917	.975	.528	.884

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

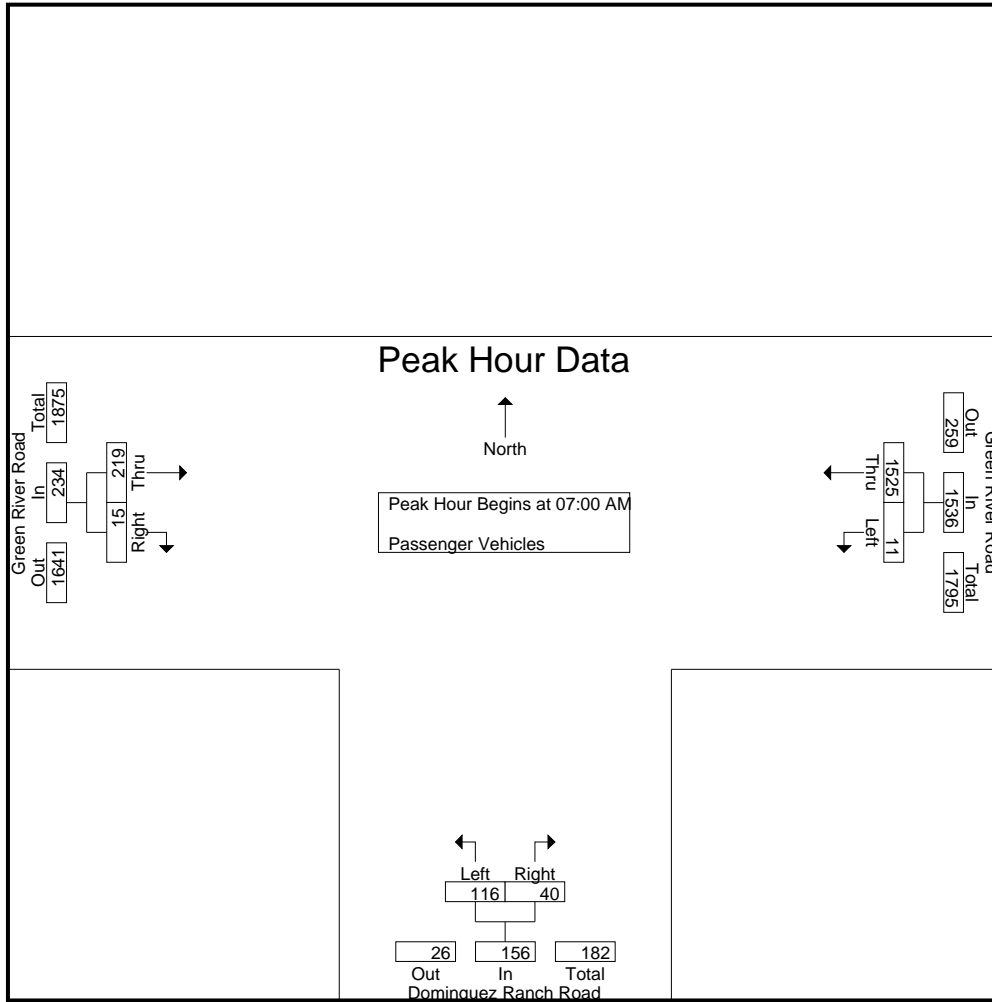
Groups Printed- Passenger Vehicles

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
07:00 AM	3	407	410	27	4	4	31	43	1	1	44	5	485	490
07:15 AM	1	429	430	33	11	7	44	55	4	0	59	7	533	540
07:30 AM	5	342	347	21	15	12	36	65	4	2	69	14	452	466
07:45 AM	2	347	349	35	10	7	45	56	6	2	62	9	456	465
Total	11	1525	1536	116	40	30	156	219	15	5	234	35	1926	1961
08:00 AM	8	336	344	24	10	8	34	65	4	1	69	9	447	456
08:15 AM	12	295	307	30	5	3	35	62	8	2	70	5	412	417
08:30 AM	15	317	332	31	4	3	35	69	17	4	86	7	453	460
08:45 AM	7	268	275	29	4	4	33	65	8	2	73	6	381	387
Total	42	1216	1258	114	23	18	137	261	37	9	298	27	1693	1720
Grand Total	53	2741	2794	230	63	48	293	480	52	14	532	62	3619	3681
Apprch %	1.9	98.1		78.5	21.5			90.2	9.8					
Total %	1.5	75.7	77.2	6.4	1.7		8.1	13.3	1.4		14.7	1.7	98.3	

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	3	407	410	27	4	31	43	1	44	485
07:15 AM	1	<b>429</b>	<b>430</b>	33	11	44	55	4	59	<b>533</b>
07:30 AM	<b>5</b>	342	347	21	<b>15</b>	36	<b>65</b>	4	<b>69</b>	452
07:45 AM	2	347	349	<b>35</b>	10	<b>45</b>	56	<b>6</b>	62	456
Total Volume	11	1525	1536	116	40	156	219	15	234	1926
% App. Total	0.7	99.3		74.4	25.6		93.6	6.4		
PHF	.550	.889	.893	.829	.667	.867	.842	.625	.848	.903

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	3	407	410	27	4	31	43	1	44
+15 mins.	1	<b>429</b>	<b>430</b>	33	11	44	55	4	59
+30 mins.	5	342	347	21	<b>15</b>	36	<b>65</b>	4	<b>69</b>
+45 mins.	2	347	349	<b>35</b>	10	<b>45</b>	56	<b>6</b>	62
Total Volume	11	1525	1536	116	40	156	219	15	234
% App. Total	0.7	99.3		74.4	25.6		93.6	6.4	
PHF	.550	.889	.893	.829	.667	.867	.842	.625	.848

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

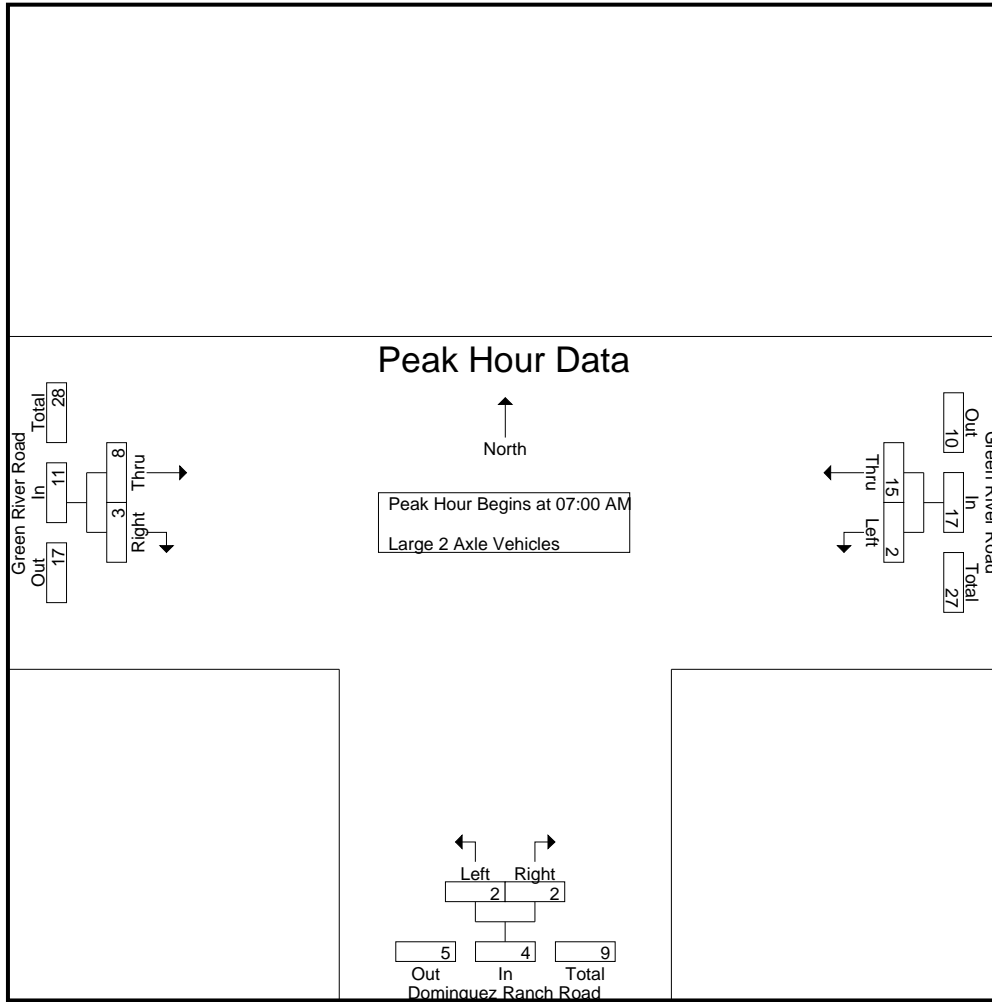
Groups Printed- Large 2 Axle Vehicles

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
07:00 AM	0	2	2	1	1	0	2	1	1	0	2	0	6	6
07:15 AM	0	3	3	0	1	1	1	3	1	1	4	2	8	10
07:30 AM	0	4	4	1	0	0	1	3	0	0	3	0	8	8
07:45 AM	2	6	8	0	0	0	0	1	1	0	2	0	10	10
Total	2	15	17	2	2	1	4	8	3	1	11	2	32	34
08:00 AM	0	5	5	2	2	1	4	3	0	0	3	1	12	13
08:15 AM	1	6	7	1	1	0	2	7	0	0	7	0	16	16
08:30 AM	0	4	4	0	1	1	1	1	1	0	2	1	7	8
08:45 AM	0	1	1	2	0	0	2	1	0	0	1	0	4	4
Total	1	16	17	5	4	2	9	12	1	0	13	2	39	41
Grand Total	3	31	34	7	6	3	13	20	4	1	24	4	71	75
Apprch %	8.8	91.2		53.8	46.2			83.3	16.7					
Total %	4.2	43.7	47.9	9.9	8.5		18.3	28.2	5.6		33.8	5.3	94.7	

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	2	2	1	1	2	1	1	2	6
07:15 AM	0	3	3	0	1	1	3	1	4	8
07:30 AM	0	4	4	1	0	1	3	0	3	8
07:45 AM	2	6	8	0	0	0	1	1	2	10
Total Volume	2	15	17	2	2	4	8	3	11	32
% App. Total	11.8	88.2		50	50		72.7	27.3		
PHF	.250	.625	.531	.500	.500	.500	.667	.750	.688	.800

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	2	2	1	1	2	1	1	2
+15 mins.	0	3	3	0	1	1	3	1	4
+30 mins.	0	4	4	1	0	1	3	0	3
+45 mins.	2	6	8	0	0	0	1	1	2
Total Volume	2	15	17	2	2	4	8	3	11
% App. Total	11.8	88.2		50	50		72.7	27.3	
PHF	.250	.625	.531	.500	.500	.500	.667	.750	.688



City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

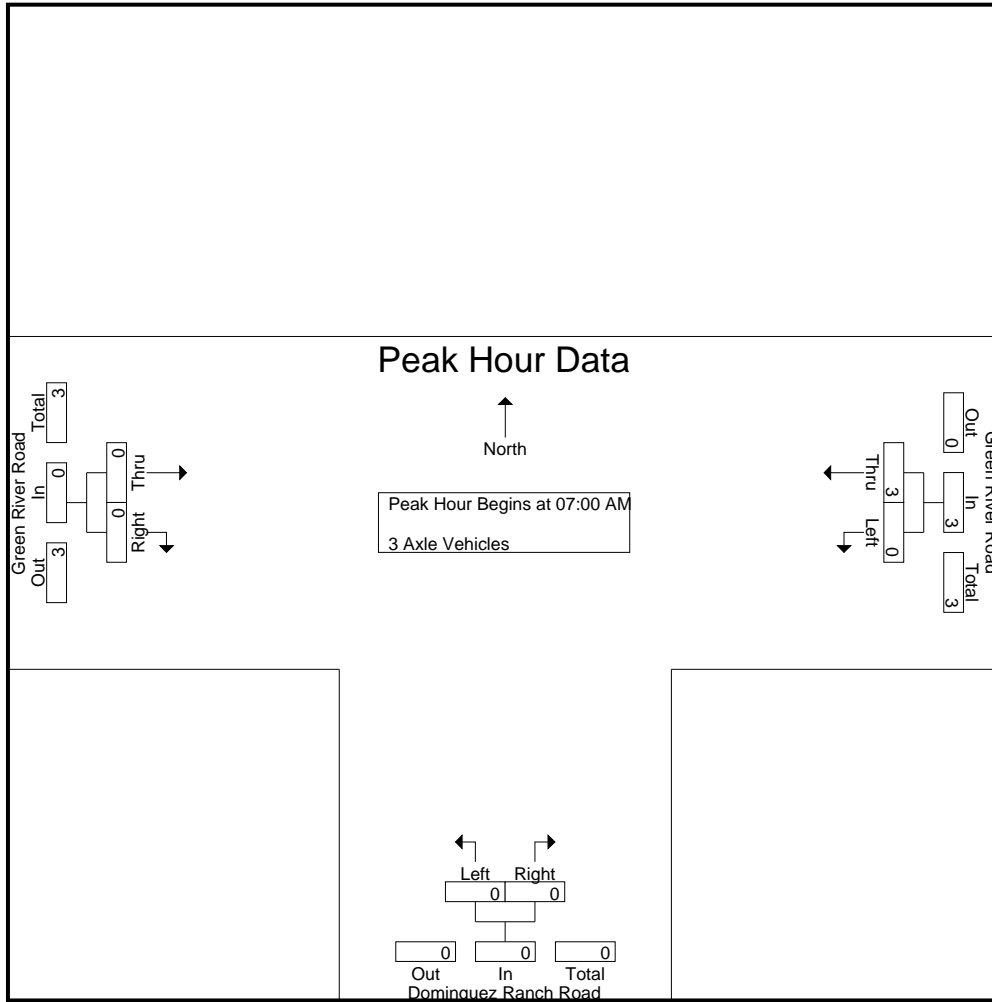
Groups Printed- 3 Axle Vehicles

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total				
07:00 AM	0	2	2	0	0	0	0	0	0	0	0	0	0	2	2
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	3	3	0	0	0	0	0	0	0	0	0	0	3	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Grand Total	0	4	4	0	0	0	0	0	0	0	0	0	0	4	4
Apprch %	0	100		0	0			0	0						
Total %	0	100	100	0	0			0	0			0	100		

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	2	2	0	0	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	1	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	3	3	0	0	0	0	0	0	3
% App. Total	0	100		0	0			0	0	
PHF	.000	.375	.375	.000	.000	.000	.000	.000	.000	.375

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	2	2	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	1	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	3	3	0	0	0	0	0	0
% App. Total	0	100		0	0		0	0	
PHF	.000	.375	.375	.000	.000	.000	.000	.000	.000

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

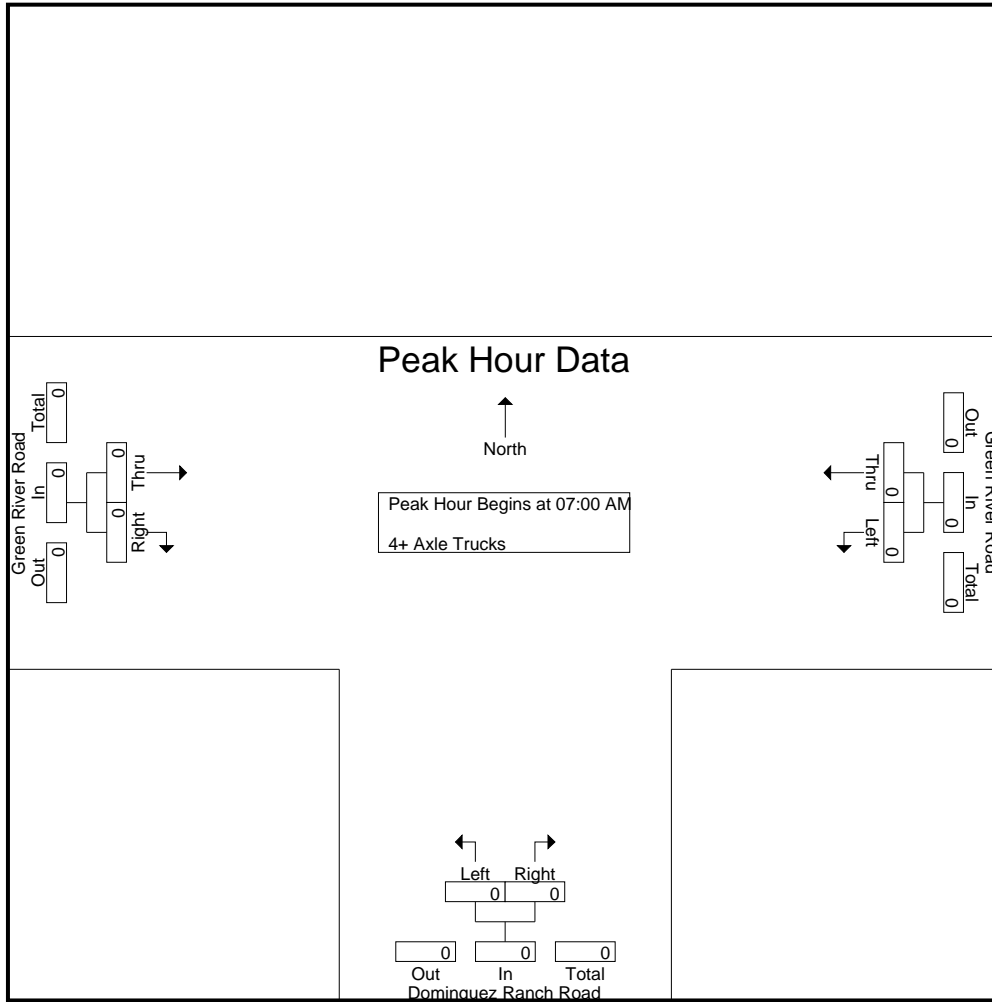
Groups Printed- 4+ Axle Trucks

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total				
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Total	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Grand Total	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Apprch %	0	100		0	0			0	0						
Total %	0	100	100	0	0			0	0			0	100		

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0			0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

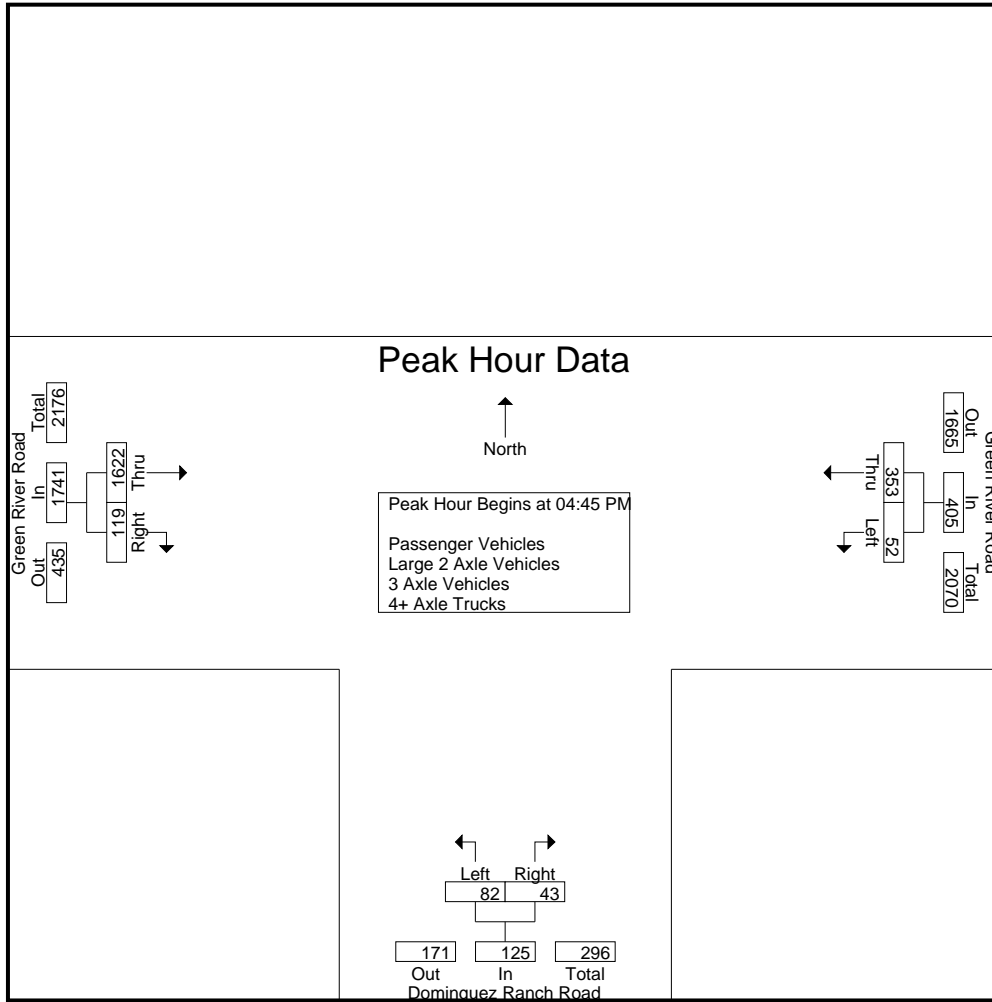
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
04:00 PM	12	108	120	35	9	3	44	362	15	4	377	7	541	548
04:15 PM	9	82	91	23	7	6	30	376	25	10	401	16	522	538
04:30 PM	13	83	96	15	10	6	25	360	26	7	386	13	507	520
04:45 PM	12	96	108	10	11	7	21	396	33	6	429	13	558	571
Total	46	369	415	83	37	22	120	1494	99	27	1593	49	2128	2177
05:00 PM	14	73	87	33	11	10	44	430	28	11	458	21	589	610
05:15 PM	18	84	102	17	9	4	26	375	24	2	399	6	527	533
05:30 PM	8	100	108	22	12	9	34	421	34	4	455	13	597	610
05:45 PM	10	75	85	21	10	7	31	351	27	8	378	15	494	509
Total	50	332	382	93	42	30	135	1577	113	25	1690	55	2207	2262
Grand Total	96	701	797	176	79	52	255	3071	212	52	3283	104	4335	4439
Apprch %	12	88		69	31			93.5	6.5					
Total %	2.2	16.2	18.4	4.1	1.8		5.9	70.8	4.9		75.7	2.3	97.7	
Passenger Vehicles	96	686	782	172	77		300	3026	206		3282	0	0	4364
% Passenger Vehicles	100	97.9	98.1	97.7	97.5	98.1	97.7	98.5	97.2	96.2	98.4	0	0	98.3
Large 2 Axle Vehicles	0	14	14	4	2		7	42	6		50	0	0	71
% Large 2 Axle Vehicles	0	2	1.8	2.3	2.5	1.9	2.3	1.4	2.8	3.8	1.5	0	0	1.6
3 Axle Vehicles	0	0	0	0	0		0	2	0		2	0	0	2
% 3 Axle Vehicles	0	0	0	0	0	0	0	0.1	0	0	0.1	0	0	0
4+ Axle Trucks	0	1	1	0	0		0	1	0		1	0	0	2
% 4+ Axle Trucks	0	0.1	0.1	0	0	0	0	0	0	0	0	0	0	0

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	12	96	<b>108</b>	10	11	21	396	33	429	558
05:00 PM	14	73	87	<b>33</b>	11	<b>44</b>	<b>430</b>	28	<b>458</b>	589
05:15 PM	<b>18</b>	84	102	17	9	26	375	24	399	527
05:30 PM	8	<b>100</b>	108	22	<b>12</b>	34	421	<b>34</b>	455	<b>597</b>
Total Volume	52	353	405	82	43	125	1622	119	1741	2271
% App. Total	12.8	87.2		65.6	34.4		93.2	6.8		
PHF	.722	.883	.938	.621	.896	.710	.943	.875	.950	.951

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:00 PM			05:00 PM			04:45 PM		
+0 mins.	12	<b>108</b>	<b>120</b>	<b>33</b>	11	<b>44</b>	396	33	429
+15 mins.	9	82	91	17	9	26	<b>430</b>	28	<b>458</b>
+30 mins.	<b>13</b>	83	96	22	<b>12</b>	34	375	24	399
+45 mins.	12	96	108	21	10	31	421	<b>34</b>	455
Total Volume	46	369	415	93	42	135	1622	119	1741
% App. Total	11.1	88.9		68.9	31.1		93.2	6.8	
PHF	.885	.854	.865	.705	.875	.767	.943	.875	.950

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

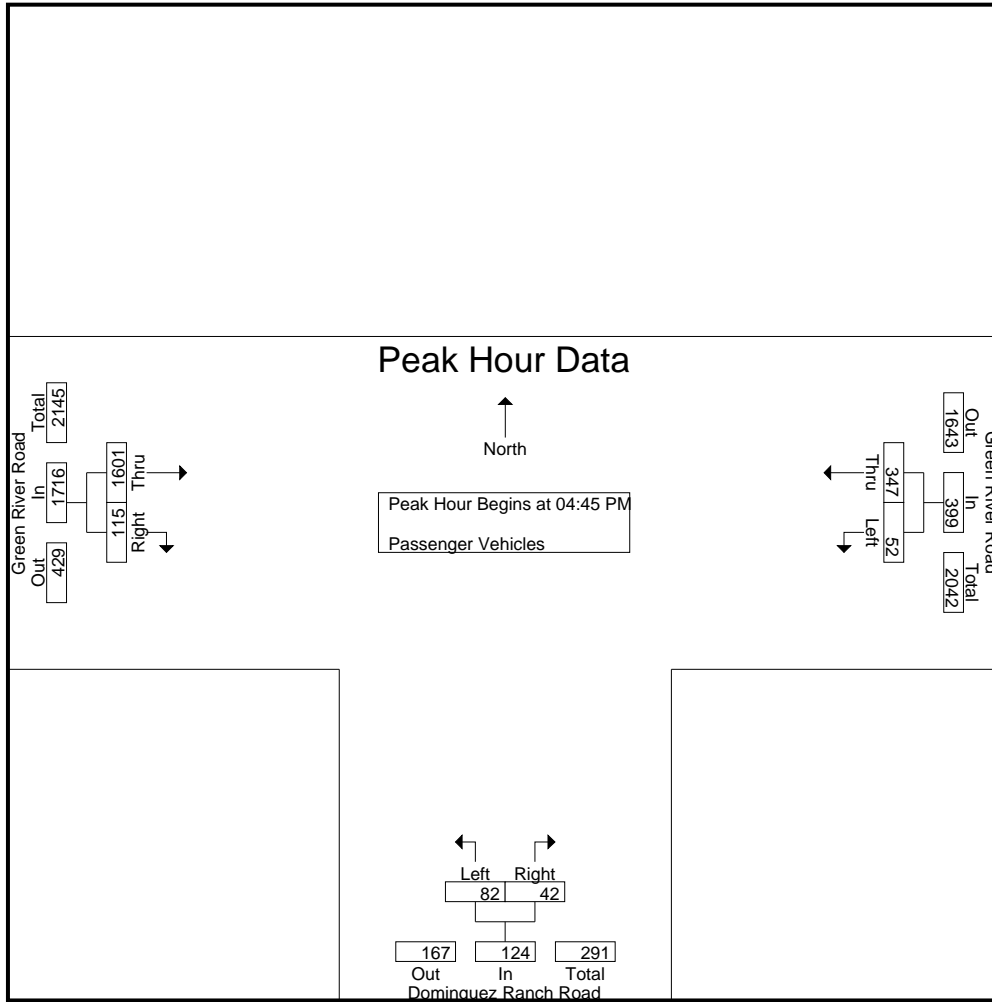
Groups Printed- Passenger Vehicles

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
04:00 PM	12	104	116	33	9	3	42	351	15	4	366	7	524	531
04:15 PM	9	80	89	23	7	6	30	372	25	10	397	16	516	532
04:30 PM	13	81	94	14	9	6	23	355	26	7	381	13	498	511
04:45 PM	12	96	108	10	11	7	21	393	32	5	425	12	554	566
Total	46	361	407	80	36	22	116	1471	98	26	1569	48	2092	2140
05:00 PM	14	71	85	33	11	10	44	422	27	10	449	20	578	598
05:15 PM	18	81	99	17	8	3	25	368	23	2	391	5	515	520
05:30 PM	8	99	107	22	12	9	34	418	33	4	451	13	592	605
05:45 PM	10	74	84	20	10	7	30	347	25	8	372	15	486	501
Total	50	325	375	92	41	29	133	1555	108	24	1663	53	2171	2224
Grand Total	96	686	782	172	77	51	249	3026	206	50	3232	101	4263	4364
Apprch %	12.3	87.7		69.1	30.9			93.6	6.4					
Total %	2.3	16.1	18.3	4	1.8		5.8	71	4.8		75.8	2.3	97.7	

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:45 PM	12	96	<b>108</b>	10	11	21	393	32	425	554
05:00 PM	14	71	85	<b>33</b>	11	<b>44</b>	<b>422</b>	27	449	578
05:15 PM	<b>18</b>	81	99	17	8	25	368	23	391	515
05:30 PM	8	<b>99</b>	107	22	<b>12</b>	34	418	<b>33</b>	<b>451</b>	<b>592</b>
Total Volume	52	347	399	82	42	124	1601	115	1716	2239
% App. Total	13	87		66.1	33.9		93.3	6.7		
PHF	.722	.876	.924	.621	.875	.705	.948	.871	.951	.946

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	12	96	<b>108</b>	10	11	21	393	32	425
+15 mins.	14	71	85	<b>33</b>	11	<b>44</b>	<b>422</b>	27	449
+30 mins.	<b>18</b>	81	99	17	8	25	368	23	391
+45 mins.	8	<b>99</b>	107	22	<b>12</b>	34	418	<b>33</b>	<b>451</b>
Total Volume	52	347	399	82	42	124	1601	115	1716
% App. Total	13	87		66.1	33.9		93.3	6.7	
PHF	.722	.876	.924	.621	.875	.705	.948	.871	.951



City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

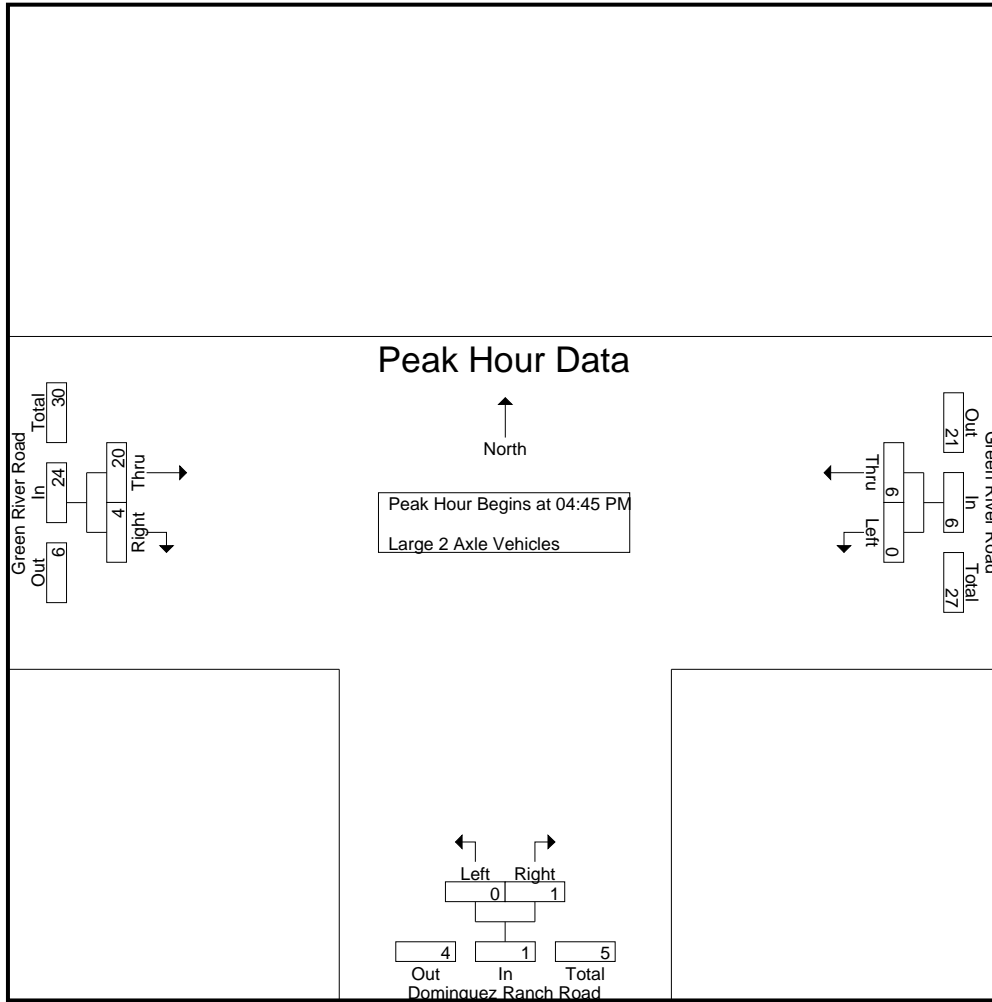
Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
04:00 PM	0	3	3	2	0	0	2	9	0	0	9	0	14	14
04:15 PM	0	2	2	0	0	0	0	4	0	0	4	0	6	6
04:30 PM	0	2	2	1	1	0	2	5	0	0	5	0	9	9
04:45 PM	0	0	0	0	0	0	0	3	1	1	4	1	4	5
Total	0	7	7	3	1	0	4	21	1	1	22	1	33	34
05:00 PM	0	2	2	0	0	0	0	8	1	1	9	1	11	12
05:15 PM	0	3	3	0	1	1	1	7	1	0	8	1	12	13
05:30 PM	0	1	1	0	0	0	0	2	1	0	3	0	4	4
05:45 PM	0	1	1	1	0	0	1	4	2	0	6	0	8	8
Total	0	7	7	1	1	1	2	21	5	1	26	2	35	37
Grand Total	0	14	14	4	2	1	6	42	6	2	48	3	68	71
Apprch %	0	100		66.7	33.3			87.5	12.5					
Total %	0	20.6	20.6	5.9	2.9		8.8	61.8	8.8		70.6	4.2	95.8	

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:45 PM	0	0	0	0	0	0	3	1	4	4
05:00 PM	0	2	2	0	0	0	8	1	9	11
05:15 PM	0	3	3	0	1	1	7	1	8	12
05:30 PM	0	1	1	0	0	0	2	1	3	4
Total Volume	0	6	6	0	1	1	20	4	24	31
% App. Total	0	100		0	100		83.3	16.7		
PHF	.000	.500	.500	.000	.250	.250	.625	1.00	.667	.646

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:45 PM

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	0	0	0	0	0	3	1	4
+15 mins.	0	2	2	0	0	0	8	1	9
+30 mins.	0	3	3	0	1	1	7	1	8
+45 mins.	0	1	1	0	0	0	2	1	3
Total Volume	0	6	6	0	1	1	20	4	24
% App. Total	0	100		0	100		83.3	16.7	
PHF	.000	.500	.500	.000	.250	.250	.625	1.000	.667

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

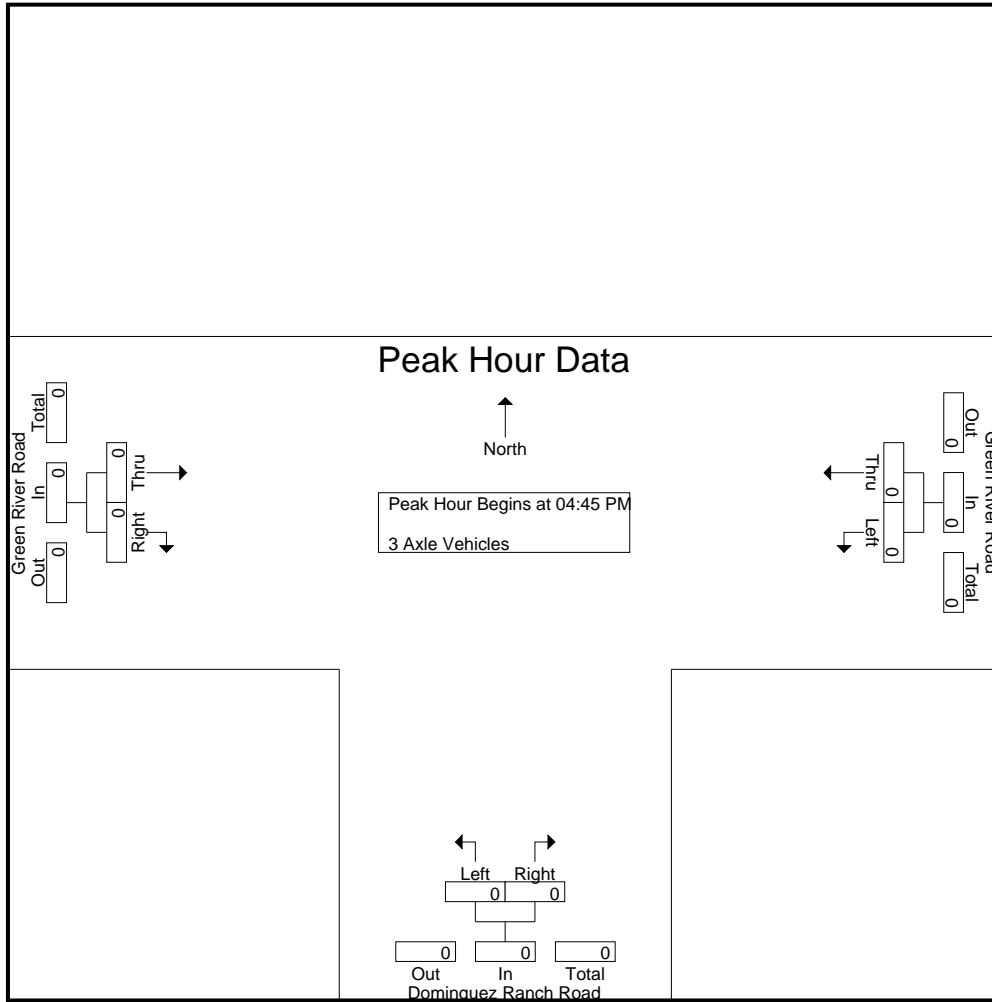
Groups Printed- 3 Axle Vehicles

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total			
04:00 PM	0	0	0	0	0	0	0	2	0	0	2	0	2	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	2	0	0	2	0	2	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	2	0	0	2	0	2	2
Apprch %	0	0		0	0			100	0					
Total %	0	0	0	0	0		0	100	0		100	0	100	

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0		0	0			0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

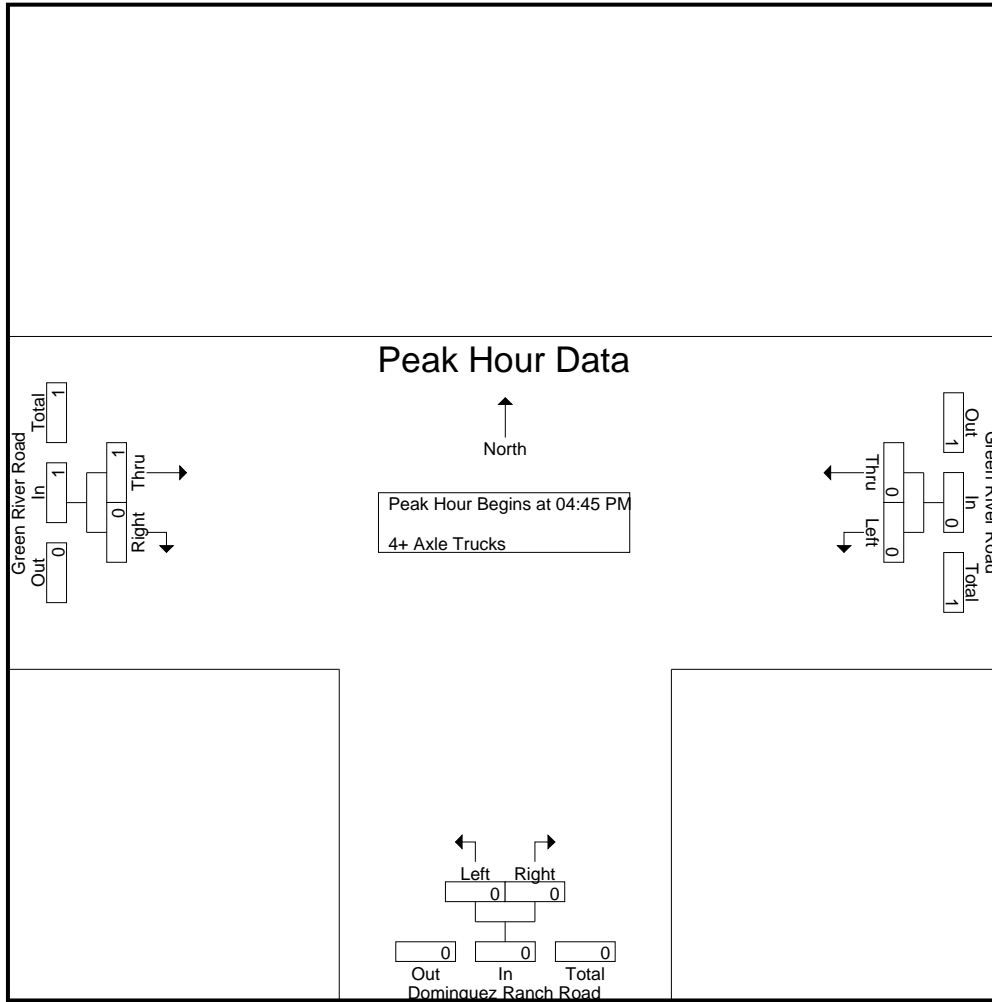
Groups Printed- 4+ Axle Trucks

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound				Green River Road Eastbound				Exclu. Total	Inclu. Total	Int. Total	
	Left	Thru	App. Total	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total				
04:00 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	0	0	0	0	0	0	0	0	0	0	1	1
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	1	1	
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	1	0	0	1	0	1	1	
Grand Total	0	1	1	0	0	0	0	1	0	0	1	0	2	2	
Apprch %	0	100		0	0			100	0						
Total %	0	50	50	0	0		0	50	0		50	0	100		

Start Time	Green River Road Westbound			Dominguez Ranch Road Northbound			Green River Road Eastbound			Int. Total
	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	1	0	1	1
Total Volume	0	0	0	0	0	0	1	0	1	1
% App. Total	0	0		0	0		100	0		
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

City of Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road  
 Weather: Clear

File Name : 05\_COR\_DR\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	0	1	0	1
% App. Total	0	0	0	0	0	0	100	0	100
PHF	.000	.000	.000	.000	.000	.000	.250	.000	.250

Location: Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road



Date: 3/28/2023  
 Day: Tuesday

PEDESTRIANS

	North Leg Dead End	East Leg Green River Road	South Leg Dominguez Ranch Road	West Leg Green River Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	1	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	1	0	1
TOTAL VOLUMES:	0	0	2	0	2

	North Leg Dead End	East Leg Green River Road	South Leg Dominguez Ranch Road	West Leg Green River Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	1	0	1
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	1

Location: Corona  
 N/S: Dominguez Ranch Road  
 E/W: Green River Road



Date: 3/28/2023  
 Day: Tuesday

BICYCLES

	Southbound Dead End			Westbound Green River Road			Northbound Dominguez Ranch Road			Eastbound Green River Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	2	0	0	0	0	0	1	0	3
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	3	0	0	0	0	0	1	0	4

	Southbound Dead End			Westbound Green River Road			Northbound Dominguez Ranch Road			Eastbound Green River Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	4	0	0	0	0	0	4	0	8



City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

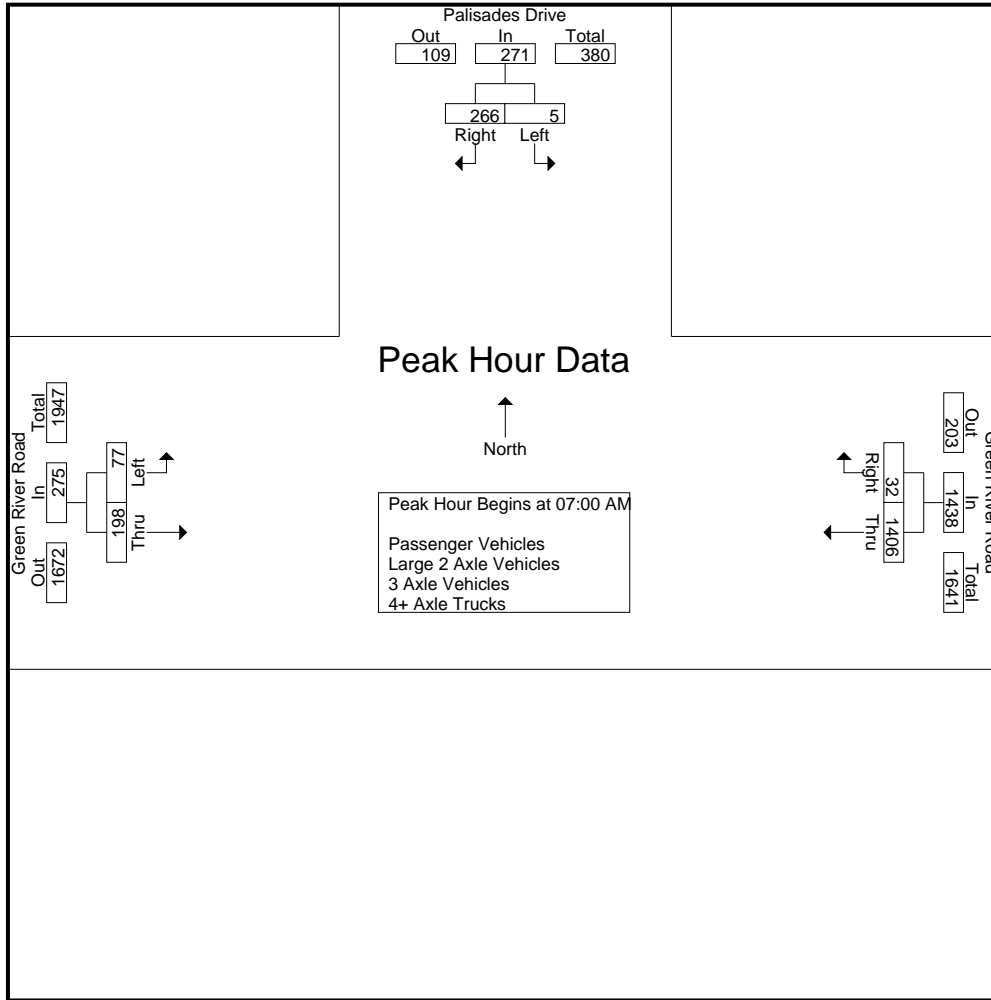
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Palisades Drive Southbound				Green River Road Westbound				Green River Road Eastbound			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	App. Total			
07:00 AM	1	68	55	69	364	4	0	368	11	41	52	55	489	544
07:15 AM	1	76	60	77	388	5	3	393	21	49	70	63	540	603
07:30 AM	1	53	41	54	305	11	2	316	33	51	84	43	454	497
07:45 AM	2	69	45	71	349	12	2	361	12	57	69	47	501	548
Total	5	266	201	271	1406	32	7	1438	77	198	275	208	1984	2192
08:00 AM	2	57	49	59	304	8	1	312	17	57	74	50	445	495
08:15 AM	2	50	37	52	287	10	2	297	10	61	71	39	420	459
08:30 AM	1	47	38	48	314	11	0	325	12	67	79	38	452	490
08:45 AM	3	35	32	38	254	13	0	267	11	48	59	32	364	396
Total	8	189	156	197	1159	42	3	1201	50	233	283	159	1681	1840
Grand Total	13	455	357	468	2565	74	10	2639	127	431	558	367	3665	4032
Apprch %	2.8	97.2			97.2	2.8			22.8	77.2				
Total %	0.4	12.4		12.8	70	2		72	3.5	11.8	15.2	9.1	90.9	
Passenger Vehicles	13	444		805	2544	74		2628	124	414	538	0	0	3971
% Passenger Vehicles	100	97.6	97.5	97.6	99.2	100	100	99.2	97.6	96.1	96.4	0	0	98.5
Large 2 Axle Vehicles	0	10		18	18	0		18	3	16	19	0	0	55
% Large 2 Axle Vehicles	0	2.2	2.2	2.2	0.7	0	0	0.7	2.4	3.7	3.4	0	0	1.4
3 Axle Vehicles	0	1		2	3	0		3	0	0	0	0	0	5
% 3 Axle Vehicles	0	0.2	0.3	0.2	0.1	0	0	0.1	0	0	0	0	0	0.1
4+ Axle Trucks	0	0		0	0	0		0	0	1	1	0	0	1
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0.2	0.2	0	0	0

Start Time	Palisades Drive Southbound			Green River Road Westbound			Green River Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:00 AM										
07:00 AM	1	68	69	364	4	368	11	41	52	489
07:15 AM	1	<b>76</b>	<b>77</b>	<b>388</b>	5	<b>393</b>	21	49	70	<b>540</b>
07:30 AM	1	53	54	305	11	316	<b>33</b>	<b>51</b>	<b>84</b>	454
07:45 AM	<b>2</b>	69	71	349	<b>12</b>	361	12	<b>57</b>	69	501
Total Volume	5	266	271	1406	32	1438	77	198	275	1984
% App. Total	1.8	98.2		97.8	2.2		28	72		
PHF	.625	.875	.880	.906	.667	.915	.583	.868	.818	.919

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:30 AM		
+0 mins.	1	68	69	364	4	368	33	51	84
+15 mins.	1	<b>76</b>	<b>77</b>	<b>388</b>	5	<b>393</b>	12	57	69
+30 mins.	1	53	54	305	11	316	17	57	74
+45 mins.	<b>2</b>	69	71	349	<b>12</b>	361	10	<b>61</b>	71
Total Volume	5	266	271	1406	32	1438	72	226	298
% App. Total	1.8	98.2		97.8	2.2		24.2	75.8	
PHF	.625	.875	.880	.906	.667	.915	.545	.926	.887

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

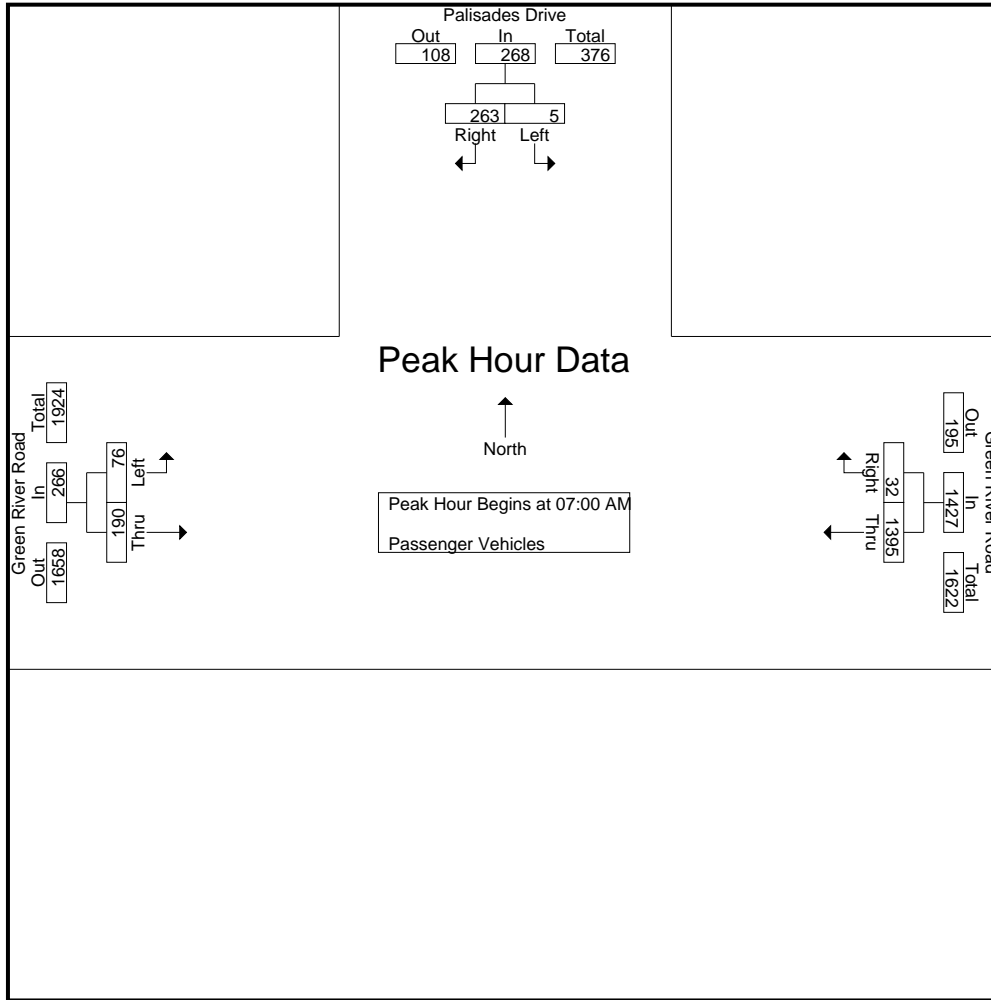
Groups Printed- Passenger Vehicles

Start Time	Palisades Drive Southbound				Green River Road Westbound				Green River Road Eastbound			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	App. Total			
07:00 AM	1	67	54	68	362	4	0	366	11	39	50	54	484	538
07:15 AM	1	76	60	77	387	5	3	392	21	46	67	63	536	599
07:30 AM	1	53	41	54	302	11	2	313	32	48	80	43	447	490
07:45 AM	2	67	44	69	344	12	2	356	12	57	69	46	494	540
Total	5	263	199	268	1395	32	7	1427	76	190	266	206	1961	2167
08:00 AM	2	53	45	55	302	8	1	310	17	53	70	46	435	481
08:15 AM	2	47	35	49	285	10	2	295	9	57	66	37	410	447
08:30 AM	1	46	37	47	310	11	0	321	12	66	78	37	446	483
08:45 AM	3	35	32	38	252	13	0	265	10	48	58	32	361	393
Total	8	181	149	189	1149	42	3	1191	48	224	272	152	1652	1804
Grand Total	13	444	348	457	2544	74	10	2618	124	414	538	358	3613	3971
Apprch %	2.8	97.2			97.2	2.8			23	77				
Total %	0.4	12.3		12.6	70.4	2		72.5	3.4	11.5	14.9	9	91	

Start Time	Palisades Drive Southbound			Green River Road Westbound			Green River Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	1	67	68	362	4	366	11	39	50	484
07:15 AM	1	<b>76</b>	<b>77</b>	<b>387</b>	5	<b>392</b>	21	46	67	<b>536</b>
07:30 AM	1	53	54	302	11	313	<b>32</b>	48	<b>80</b>	447
07:45 AM	<b>2</b>	67	69	344	<b>12</b>	356	12	<b>57</b>	69	494
Total Volume	5	263	268	1395	32	1427	76	190	266	1961
% App. Total	1.9	98.1		97.8	2.2		28.6	71.4		
PHF	.625	.865	.870	.901	.667	.910	.594	.833	.831	.915

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	1	67	68	362	4	366	11	39	50
+15 mins.	1	<b>76</b>	<b>77</b>	<b>387</b>	5	<b>392</b>	21	46	67
+30 mins.	1	53	54	302	11	313	<b>32</b>	48	<b>80</b>
+45 mins.	<b>2</b>	67	69	344	<b>12</b>	356	12	<b>57</b>	69
Total Volume	5	263	268	1395	32	1427	76	190	266
% App. Total	1.9	98.1		97.8	2.2		28.6	71.4	
PHF	.625	.865	.870	.901	.667	.910	.594	.833	.831

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

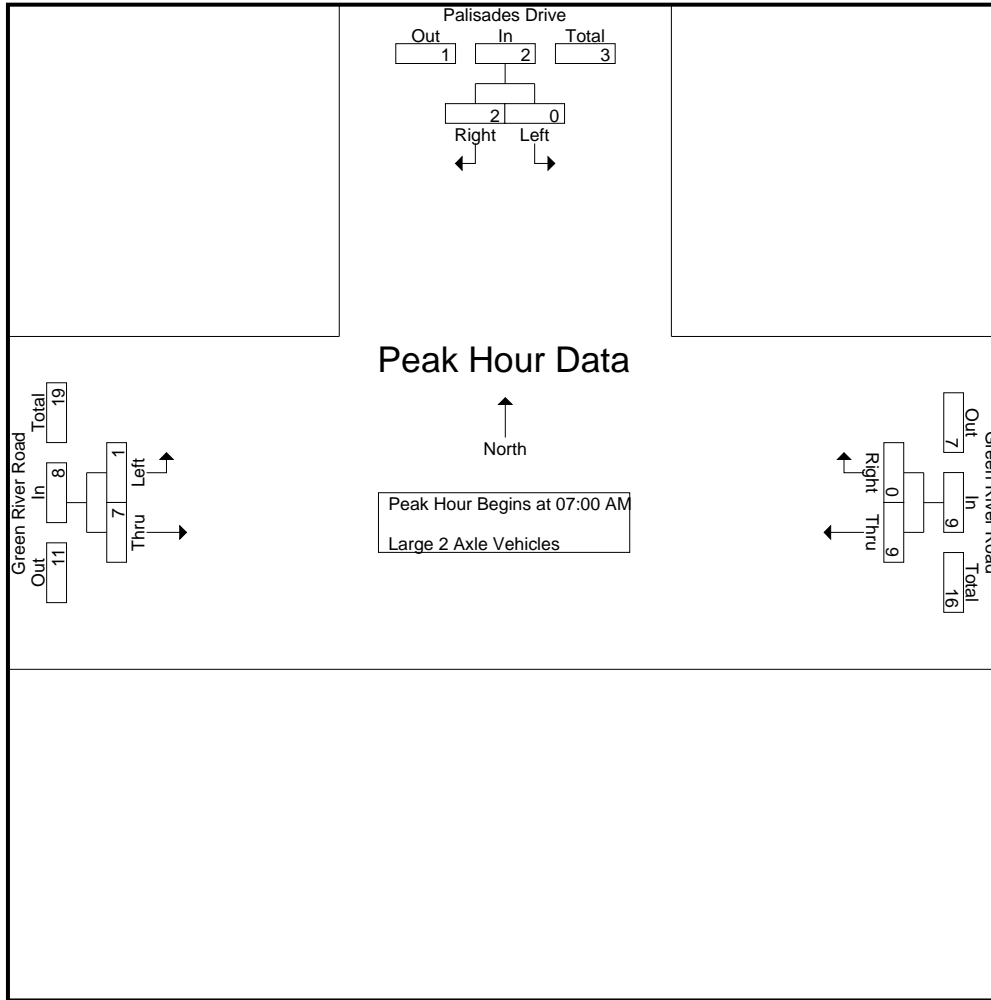
Start Time	Palisades Drive Southbound				Green River Road Westbound				Green River Road Eastbound			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	App. Total			
07:00 AM	0	0	0	0	1	0	0	1	0	1	1	0	2	2
07:15 AM	0	0	0	0	1	0	0	1	0	3	3	0	4	4
07:30 AM	0	0	0	0	2	0	0	2	1	3	4	0	6	6
07:45 AM	0	2	1	2	5	0	0	5	0	0	0	1	7	8
Total	0	2	1	2	9	0	0	9	1	7	8	1	19	20
08:00 AM	0	4	4	4	2	0	0	2	0	4	4	4	10	14
08:15 AM	0	3	2	3	2	0	0	2	1	4	5	2	10	12
08:30 AM	0	1	1	1	3	0	0	3	0	1	1	1	5	6
08:45 AM	0	0	0	0	2	0	0	2	1	0	1	0	3	3
Total	0	8	7	8	9	0	0	9	2	9	11	7	28	35
Grand Total	0	10	8	10	18	0	0	18	3	16	19	8	47	55
Apprch %	0	100			100	0			15.8	84.2				
Total %	0	21.3		21.3	38.3	0		38.3	6.4	34	40.4	14.5	85.5	

Start Time	Palisades Drive Southbound			Green River Road Westbound			Green River Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	0	0	1	0	1	0	1	1	2
07:15 AM	0	0	0	1	0	1	0	3	3	4
07:30 AM	0	0	0	2	0	2	1	3	4	6
07:45 AM	0	2	2	5	0	5	0	0	0	7
Total Volume	0	2	2	9	0	9	1	7	8	19
% App. Total	0	100		100	0		12.5	87.5		
PHF	.000	.250	.250	.450	.000	.450	.250	.583	.500	.679

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:00 AM

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	1	0	1	0	1	1
+15 mins.	0	0	0	1	0	1	0	3	3
+30 mins.	0	0	0	2	0	2	1	3	4
+45 mins.	0	2	2	5	0	5	0	0	0
Total Volume	0	2	2	9	0	9	1	7	8
% App. Total	0	100		100	0		12.5	87.5	
PHF	.000	.250	.250	.450	.000	.450	.250	.583	.500

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- 3 Axle Vehicles

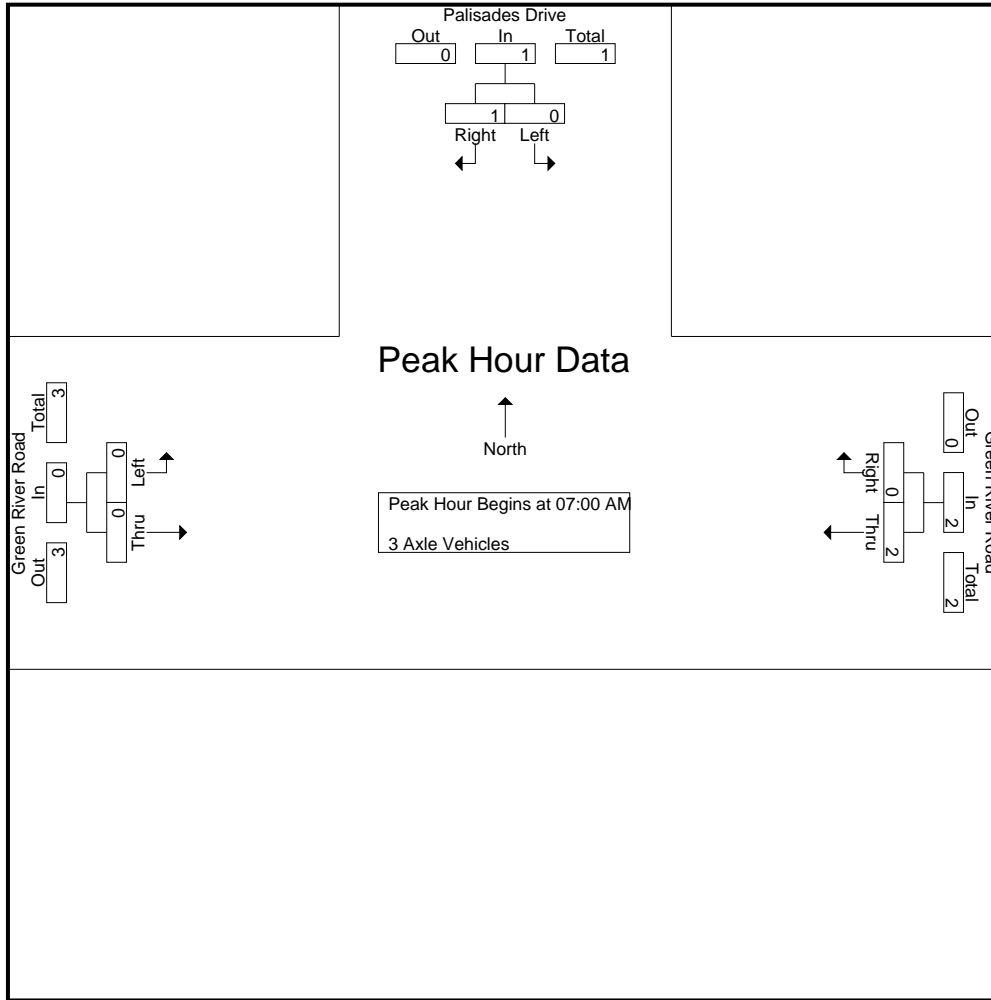
Start Time	Palisades Drive Southbound				Green River Road Westbound				Green River Road Eastbound			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	App. Total			
07:00 AM	0	1	1	1	1	0	0	1	0	0	0	1	2	3
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	1	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	1	1	2	0	0	2	0	0	0	1	3	4
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	1	0	0	1	0	0	0	0	1	1
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	0	0	0	1	1
Grand Total	0	1	1	1	3	0	0	3	0	0	0	1	4	5
Apprch %	0	100			100	0			0	0				
Total %	0	25		25	75	0		75	0	0		20	80	

Start Time	Palisades Drive Southbound			Green River Road Westbound			Green River Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	1	1	1	0	1	0	0	0	2
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	1	0	1	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	2	0	2	0	0	0	3
% App. Total	0	100		100	0		0	0		
PHF	.000	.250	.250	.500	.000	.500	.000	.000	.000	.375

Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 07:00 AM

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	1	1	1	0	1	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	1	0	1	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	1	1	2	0	2	0	0	0
% App. Total	0	100		100	0		0	0	
PHF	.000	.250	.250	.500	.000	.500	.000	.000	.000



City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

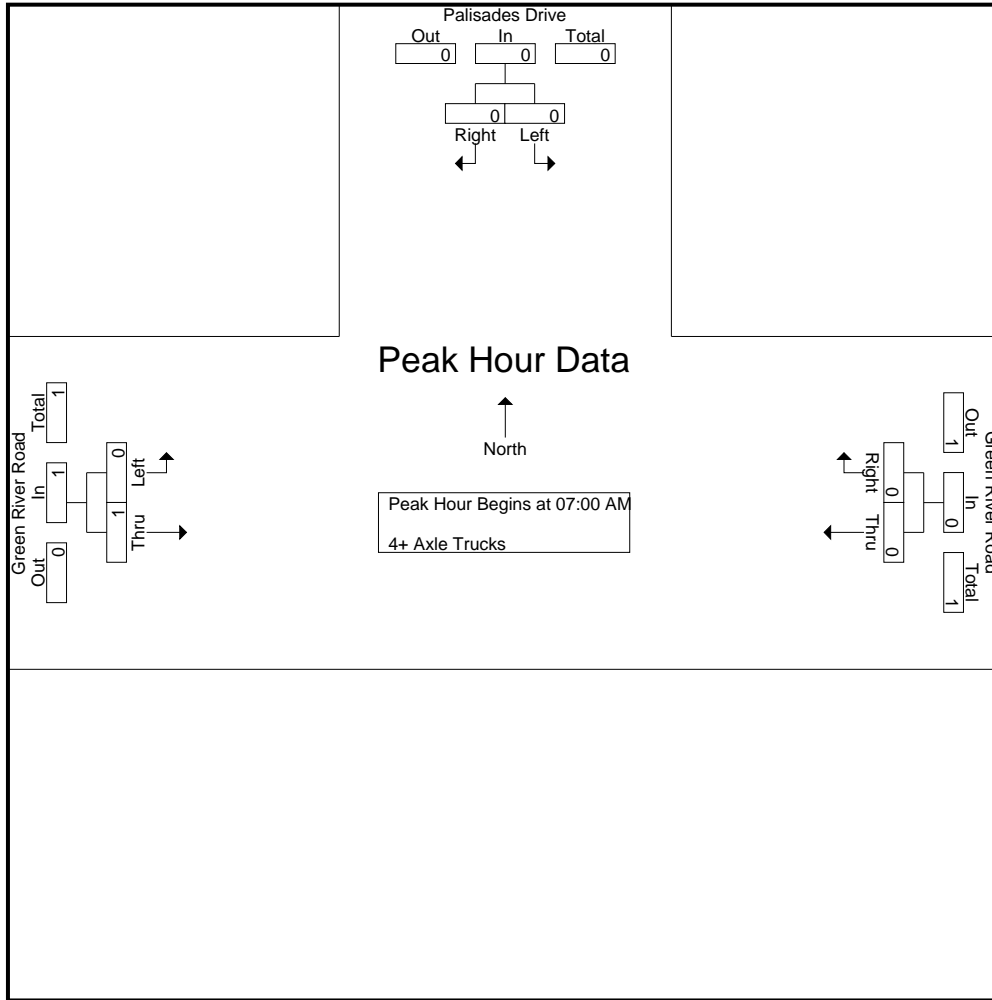
Groups Printed- 4+ Axle Trucks

Start Time	Palisades Drive Southbound				Green River Road Westbound				Green River Road Eastbound			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	App. Total			
07:00 AM	0	0	0	0	0	0	0	0	0	1	1	0	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	1	0	1	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	1	1	0	1	1
Apprch %	0	0			0	0			0	100				
Total %	0	0			0	0			0	100	100	0	100	

Start Time	Palisades Drive Southbound			Green River Road Westbound			Green River Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	0	0	0	0	0	0	1	1	1
07:15 AM	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0		0	0		0	100		
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR AM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	07:00 AM			07:00 AM			07:00 AM		
+0 mins.	0	0	0	0	0	0	0	1	1
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	1	1
% App. Total	0	0	0	0	0	0	0	100	100
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.250

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

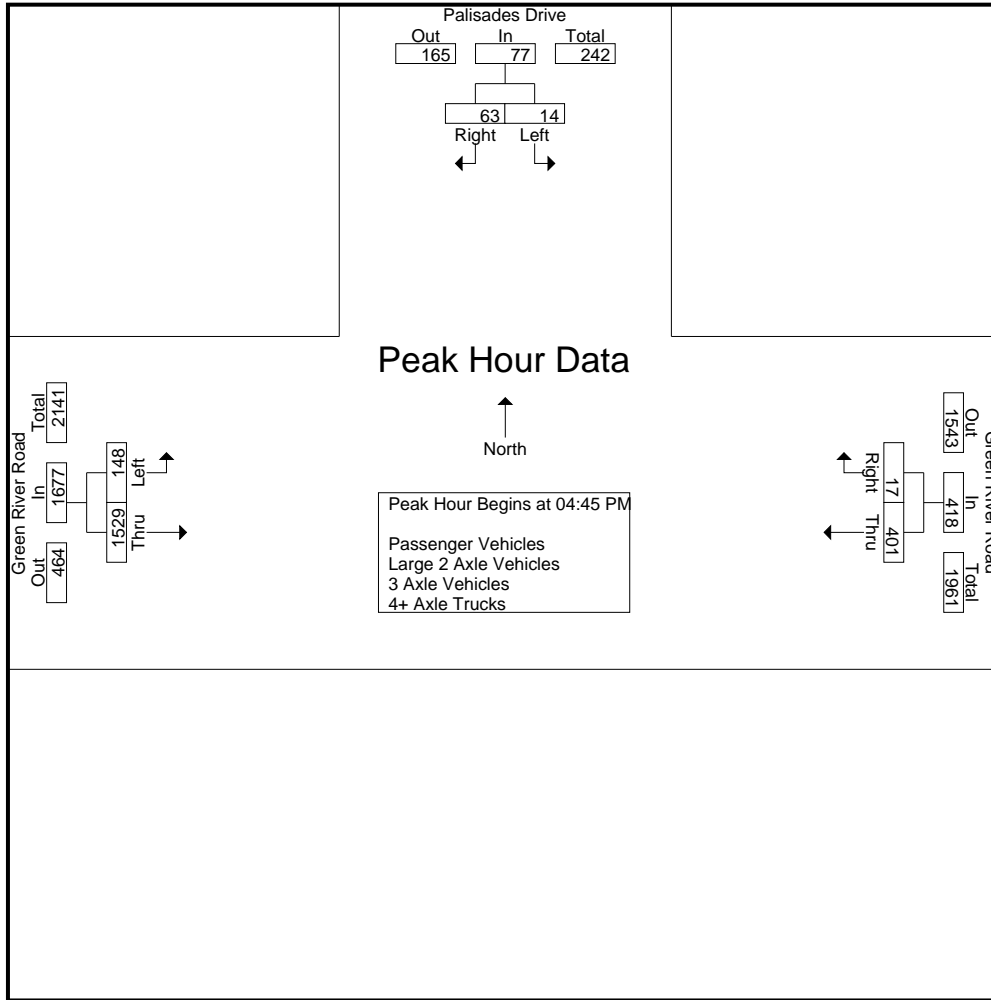
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Palisades Drive Southbound				Green River Road Westbound				Green River Road Eastbound			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	App. Total			
04:00 PM	5	21	18	26	121	4	1	125	31	343	374	19	525	544
04:15 PM	4	7	7	11	95	4	1	99	36	379	415	8	525	533
04:30 PM	2	12	12	14	87	6	0	93	22	341	363	12	470	482
04:45 PM	4	12	10	16	123	2	0	125	38	366	404	10	545	555
Total	15	52	47	67	426	16	2	442	127	1429	1556	49	2065	2114
05:00 PM	4	20	20	24	80	3	0	83	48	398	446	20	553	573
05:15 PM	3	22	18	25	93	10	3	103	29	405	434	21	562	583
05:30 PM	3	9	9	12	105	2	1	107	33	360	393	10	512	522
05:45 PM	7	14	12	21	82	6	1	88	27	359	386	13	495	508
Total	17	65	59	82	360	21	5	381	137	1522	1659	64	2122	2186
Grand Total	32	117	106	149	786	37	7	823	264	2951	3215	113	4187	4300
Apprch %	21.5	78.5			95.5	4.5			8.2	91.8				
Total %	0.8	2.8		3.6	18.8	0.9		19.7	6.3	70.5	76.8	2.6	97.4	
Passenger Vehicles	32	116		253	777	36		820	262	2931	3193	0	0	4266
% Passenger Vehicles	100	99.1	99.1	99.2	98.9	97.3	100	98.8	99.2	99.3	99.3	0	0	99.2
Large 2 Axle Vehicles	0	1		2	8	1		9	2	16	18	0	0	29
% Large 2 Axle Vehicles	0	0.9	0.9	0.8	1	2.7	0	1.1	0.8	0.5	0.6	0	0	0.7
3 Axle Vehicles	0	0		0	0	0		0	0	3	3	0	0	3
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0.1	0.1	0	0	0.1
4+ Axle Trucks	0	0		0	1	0		1	0	1	1	0	0	2
% 4+ Axle Trucks	0	0	0	0	0.1	0	0	0.1	0	0	0	0	0	0

Start Time	Palisades Drive Southbound			Green River Road Westbound			Green River Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:45 PM										
04:45 PM	4	12	16	123	2	125	38	366	404	545
05:00 PM	4	20	24	80	3	83	48	398	446	553
05:15 PM	3	22	25	93	10	103	29	405	434	562
05:30 PM	3	9	12	105	2	107	33	360	393	512
Total Volume	14	63	77	401	17	418	148	1529	1677	2172
% App. Total	18.2	81.8		95.9	4.1		8.8	91.2		
PHF	.875	.716	.770	.815	.425	.836	.771	.944	.940	.966

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	05:00 PM			04:00 PM			04:45 PM		
+0 mins.	4	20	24	121	4	<b>125</b>	38	366	404
+15 mins.	3	<b>22</b>	<b>25</b>	95	4	99	<b>48</b>	398	<b>446</b>
+30 mins.	3	9	12	87	<b>6</b>	93	29	<b>405</b>	434
+45 mins.	<b>7</b>	14	21	<b>123</b>	2	125	33	360	393
Total Volume	17	65	82	426	16	442	148	1529	1677
% App. Total	20.7	79.3		96.4	3.6		8.8	91.2	
PHF	.607	.739	.820	.866	.667	.884	.771	.944	.940

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

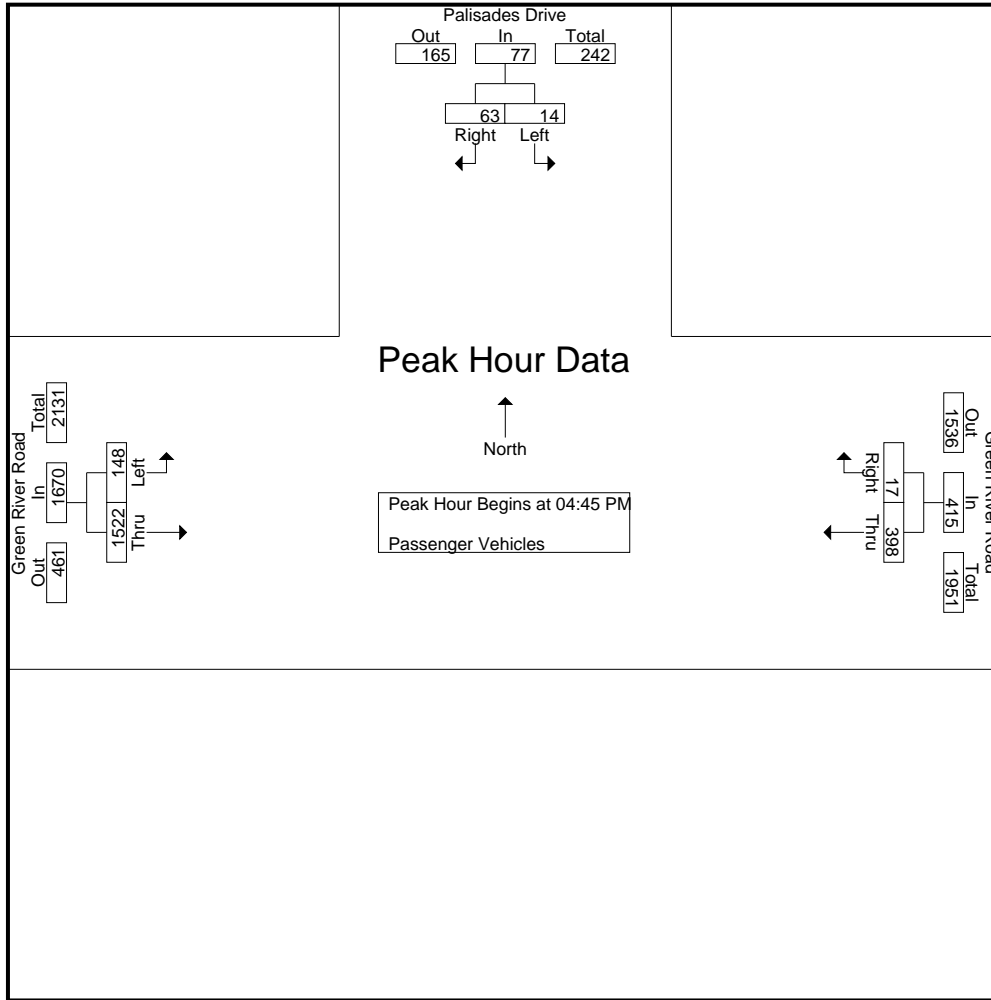
Groups Printed- Passenger Vehicles

Start Time	Palisades Drive Southbound				Green River Road Westbound				Green River Road Eastbound			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	App. Total			
04:00 PM	5	20	17	25	118	4	1	122	29	336	365	18	512	530
04:15 PM	4	7	7	11	93	4	1	97	36	377	413	8	521	529
04:30 PM	2	12	12	14	86	5	0	91	22	338	360	12	465	477
04:45 PM	4	12	10	16	123	2	0	125	38	364	402	10	543	553
Total	15	51	46	66	420	15	2	435	125	1415	1540	48	2041	2089
05:00 PM	4	20	20	24	78	3	0	81	48	396	444	20	549	569
05:15 PM	3	22	18	25	92	10	3	102	29	402	431	21	558	579
05:30 PM	3	9	9	12	105	2	1	107	33	360	393	10	512	522
05:45 PM	7	14	12	21	82	6	1	88	27	358	385	13	494	507
Total	17	65	59	82	357	21	5	378	137	1516	1653	64	2113	2177
Grand Total	32	116	105	148	777	36	7	813	262	2931	3193	112	4154	4266
Apprch %	21.6	78.4			95.6	4.4			8.2	91.8				
Total %	0.8	2.8		3.6	18.7	0.9		19.6	6.3	70.6	76.9	2.6	97.4	

Start Time	Palisades Drive Southbound			Green River Road Westbound			Green River Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:45 PM	4	12	16	123	2	125	38	364	402	543
05:00 PM	4	20	24	78	3	81	48	396	444	549
05:15 PM	3	22	25	92	10	102	29	402	431	558
05:30 PM	3	9	12	105	2	107	33	360	393	512
Total Volume	14	63	77	398	17	415	148	1522	1670	2162
% App. Total	18.2	81.8		95.9	4.1		8.9	91.1		
PHF	.875	.716	.770	.809	.425	.830	.771	.947	.940	.969

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	4	12	16	123	2	125	38	364	402
+15 mins.	4	20	24	78	3	81	48	396	444
+30 mins.	3	22	25	92	10	102	29	402	431
+45 mins.	3	9	12	105	2	107	33	360	393
Total Volume	14	63	77	398	17	415	148	1522	1670
% App. Total	18.2	81.8		95.9	4.1		8.9	91.1	
PHF	.875	.716	.770	.809	.425	.830	.771	.947	.940

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

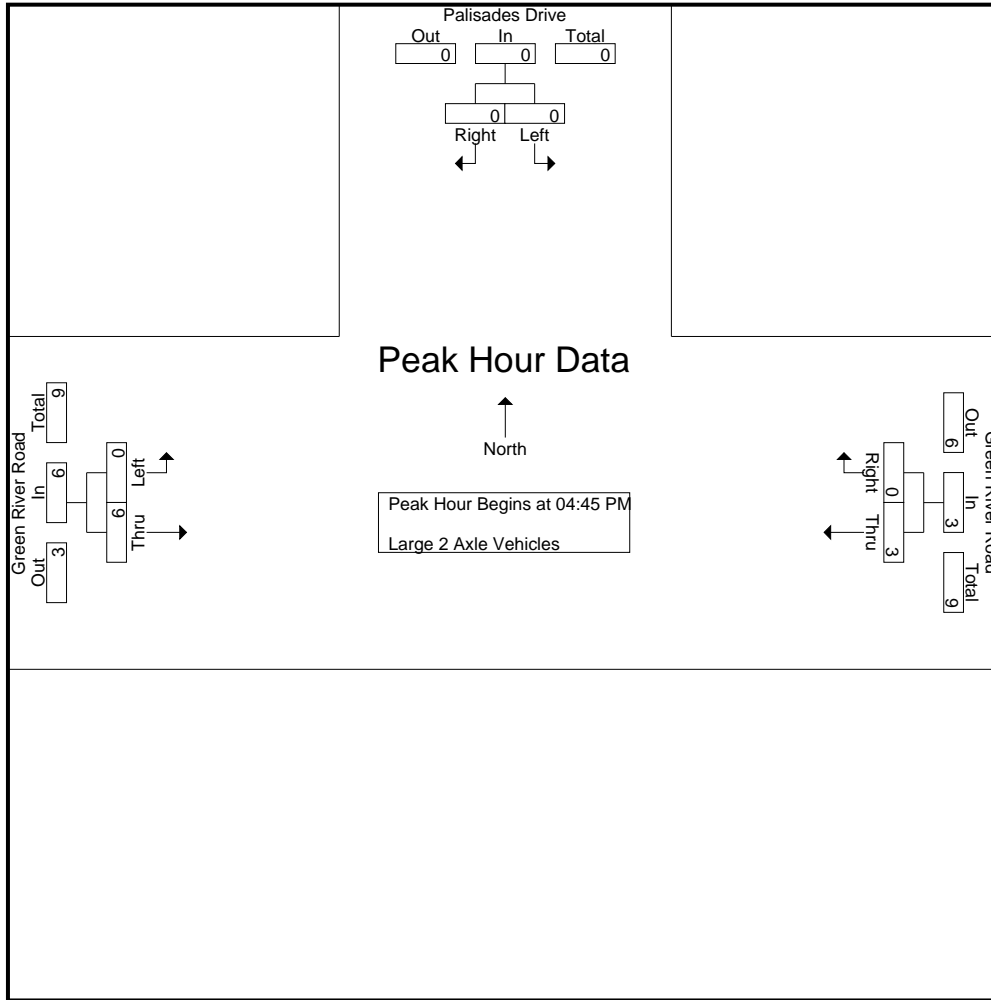
Groups Printed- Large 2 Axle Vehicles

Start Time	Palisades Drive Southbound				Green River Road Westbound				Green River Road Eastbound			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	App. Total			
04:00 PM	0	1	1	1	2	0	0	2	2	4	6	1	9	10
04:15 PM	0	0	0	0	2	0	0	2	0	2	2	0	4	4
04:30 PM	0	0	0	0	1	1	0	2	0	3	3	0	5	5
04:45 PM	0	0	0	0	0	0	0	0	0	2	2	0	2	2
Total	0	1	1	1	5	1	0	6	2	11	13	1	20	21
05:00 PM	0	0	0	0	2	0	0	2	0	2	2	0	4	4
05:15 PM	0	0	0	0	1	0	0	1	0	2	2	0	3	3
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	1	1	0	1	1
Total	0	0	0	0	3	0	0	3	0	5	5	0	8	8
Grand Total	0	1	1	1	8	1	0	9	2	16	18	1	28	29
Apprch %	0	100			88.9	11.1			11.1	88.9				
Total %	0	3.6		3.6	28.6	3.6		32.1	7.1	57.1	64.3	3.4	96.6	

Start Time	Palisades Drive Southbound			Green River Road Westbound			Green River Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:45 PM	0	0	0	0	0	0	0	2	2	2
05:00 PM	0	0	0	2	0	2	0	2	2	4
05:15 PM	0	0	0	1	0	1	0	2	2	3
05:30 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	3	0	3	0	6	6	9
% App. Total	0	0		100	0		0	100		
PHF	.000	.000	.000	.375	.000	.375	.000	.750	.750	.563

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	0	0	0	0	0	0	<b>2</b>	<b>2</b>
+15 mins.	0	0	0	<b>2</b>	0	<b>2</b>	0	2	2
+30 mins.	0	0	0	1	0	1	0	2	2
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	3	0	3	0	6	6
% App. Total	0	0	0	100	0	100	0	100	
PHF	.000	.000	.000	.375	.000	.375	.000	.750	.750



City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- 3 Axle Vehicles

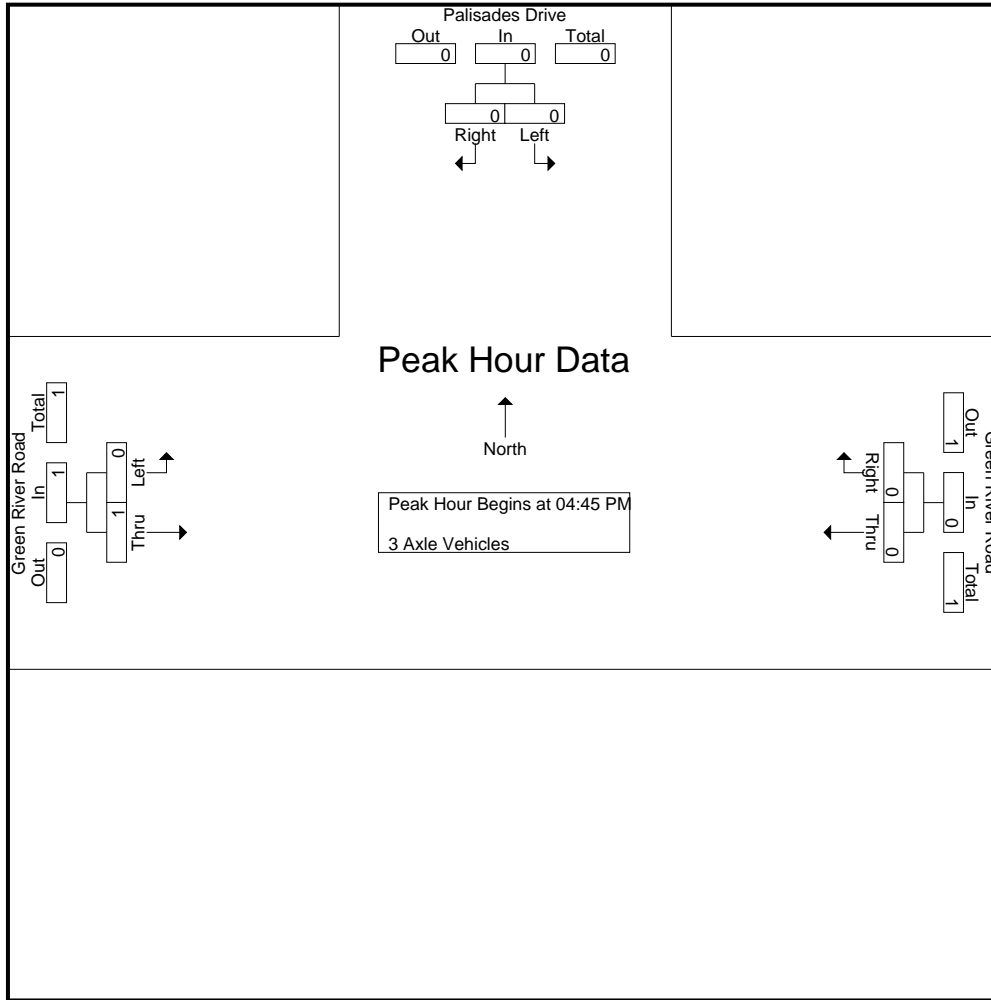
Start Time	Palisades Drive Southbound				Green River Road Westbound				Green River Road Eastbound			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	App. Total			
04:00 PM	0	0	0	0	0	0	0	0	0	2	2	0	2	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	2	2	0	2	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	1	1	0	1	1
Grand Total	0	0	0	0	0	0	0	0	0	3	3	0	3	3
Apprch %	0	0			0	0			0	100				
Total %	0	0			0	0			0	100	100	0	100	

Start Time	Palisades Drive Southbound			Green River Road Westbound			Green River Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	1	1	1
05:30 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	1	1	1
% App. Total	0	0			0	0		100		
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.250	.250

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:45 PM

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	1	1
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	1	1
% App. Total	0	0	0	0	0	0	0	100	100
PHF	.000	.000	.000	.000	.000	.000	.000	.250	.250

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 1

Groups Printed- 4+ Axle Trucks

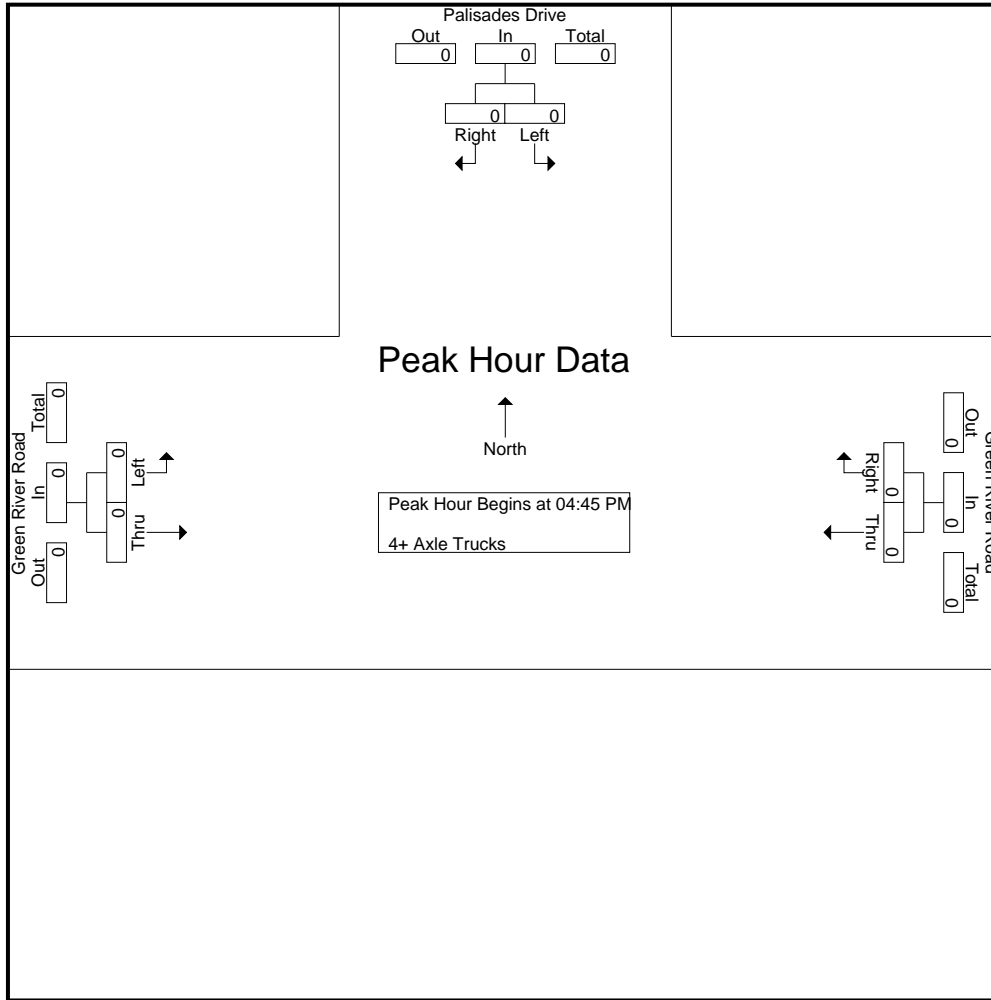
Start Time	Palisades Drive Southbound				Green River Road Westbound				Green River Road Eastbound			Exclu. Total	Inclu. Total	Int. Total
	Left	Right	RTOR	App. Total	Thru	Right	RTOR	App. Total	Left	Thru	App. Total			
04:00 PM	0	0	0	0	1	0	0	1	0	1	1	0	2	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	1	0	0	1	0	1	1	0	2	2
05:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	1	0	0	1	0	1	1	0	2	2
Apprch %	0	0			100	0			0	100				
Total %	0	0			50	0		50	0	50	50	0	100	

Start Time	Palisades Drive Southbound			Green River Road Westbound			Green River Road Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:45 PM	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0
% App. Total	0	0			0	0		0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000

Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Entire Intersection Begins at 04:45 PM

City of Corona  
 N/S: Palisades Drive  
 E/W: Green River Road  
 Weather: Clear

File Name : 06\_COR\_Pali\_GR PM  
 Site Code : 05123282  
 Start Date : 3/28/2023  
 Page No : 2



Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:45 PM			04:45 PM			04:45 PM		
+0 mins.	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000

Location: Corona  
 N/S: Palisades Drive  
 E/W: Green River Road



Date: 3/28/2023  
 Day: Tuesday

PEDESTRIANS

	North Leg Palisades Drive	East Leg Green River Road	South Leg Dead End	West Leg Green River Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Palisades Drive	East Leg Green River Road	South Leg Dead End	West Leg Green River Road	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Corona  
 N/S: Palisades Drive  
 E/W: Green River Road



Date: 3/28/2023  
 Day: Tuesday

BICYCLES

	Southbound Palisades Drive			Westbound Green River Road			Northbound Dead End			Eastbound Green River Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	1	0	1	0	0	0	0	0	0	0	1	0	3
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	2	0	2	0	1	0	0	0	0	0	1	0	6

	Southbound Palisades Drive			Westbound Green River Road			Northbound Dead End			Eastbound Green River Road			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	1	0	0	0	0	0	0	0	0	2	1	0	4
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:15 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	0	2	0	2	0	0	0	0	2	4	0	11

# Counts Unlimited, Inc.

City of Corona  
 Dominguez Ranch Road  
 S/ Green River Road  
 24 Hour Directional Classification Count

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

COR003  
 Site Code: 051-23282

**Northbound**

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	17	1	0	0	0	0	0	<b>1</b>	0	0	0	0	19
01:00	1	8	0	0	0	0	0	0	0	0	0	0	0	9
02:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	7	1	0	0	0	0	<b>1</b>	0	0	0	0	0	9
04:00	1	28	9	0	2	0	0	0	0	0	0	0	0	40
05:00	0	41	19	0	2	0	0	0	0	0	0	0	0	62
06:00	0	55	25	0	2	0	0	1	0	0	0	0	0	83
07:00	<b>2</b>	<b>127</b>	28	<b>2</b>	1	0	0	0	0	0	0	0	0	<b>160</b>
08:00	0	116	24	2	<b>6</b>	0	0	0	0	0	0	0	0	148
09:00	0	87	20	0	3	0	0	0	0	0	0	0	0	110
10:00	1	85	<b>29</b>	0	3	0	0	0	0	0	0	0	0	118
11:00	2	94	19	0	1	0	0	0	0	0	0	0	0	116
12 PM	0	91	21	0	2	0	0	0	0	0	0	0	0	114
13:00	0	105	22	0	2	0	0	0	0	0	0	0	0	129
14:00	<b>2</b>	<b>125</b>	21	<b>4</b>	2	0	0	<b>2</b>	0	0	0	0	0	<b>156</b>
15:00	1	114	<b>33</b>	2	<b>4</b>	0	0	0	0	0	0	0	0	154
16:00	0	91	24	1	3	0	0	1	0	0	0	0	0	120
17:00	0	117	17	0	1	0	0	0	0	0	0	0	0	135
18:00	0	93	22	0	0	0	0	1	0	0	0	0	0	116
19:00	0	81	13	0	1	<b>2</b>	0	1	0	0	0	0	0	98
20:00	0	57	7	0	1	0	0	0	0	0	0	0	0	65
21:00	0	35	6	0	0	0	0	0	0	0	0	0	0	41
22:00	2	17	2	0	0	0	0	0	0	0	0	0	0	21
23:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
<b>Total</b>	12	1606	364	11	36	2	0	7	1	0	0	0	0	2039
<b>Percent</b>	0.6%	78.8%	17.9%	0.5%	1.8%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
<b>AM Peak</b>	07:00	07:00	10:00	07:00	08:00			03:00	00:00					07:00
<b>Vol.</b>	2	127	29	2	6			1	1					160
<b>PM Peak</b>	14:00	14:00	15:00	14:00	15:00	19:00		14:00						14:00
<b>Vol.</b>	2	125	33	4	4	2		2						156
<b>Grand Total</b>	12	1606	364	11	36	2	0	7	1	0	0	0	0	2039
<b>Percent</b>	0.6%	78.8%	17.9%	0.5%	1.8%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	

### Counts Unlimited, Inc.

City of Corona  
 Dominguez Ranch Road  
 S/ Green River Road  
 24 Hour Directional Classification Count  
 Southbound

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

COR003  
 Site Code: 051-23282

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	15	3	0	0	0	0	0	0	0	0	0	0	18
01:00	1	7	0	0	0	0	0	0	0	0	0	0	0	8
02:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
03:00	0	6	0	0	0	0	0	1	0	0	0	0	0	7
04:00	0	14	3	0	0	0	0	0	0	0	0	0	0	17
05:00	0	12	7	0	1	0	0	0	0	0	0	0	0	20
06:00	0	18	8	0	0	0	0	2	0	0	0	0	0	28
07:00	0	17	5	3	2	0	0	0	0	0	0	0	0	27
08:00	0	58	19	1	1	0	0	0	0	0	0	0	0	79
09:00	0	46	11	0	2	0	1	1	0	0	0	0	0	61
10:00	1	58	12	0	0	0	0	0	0	0	0	0	0	71
11:00	1	64	23	0	2	0	0	0	0	0	0	0	0	90
12 PM	1	65	21	0	3	0	0	0	0	0	0	0	0	90
13:00	2	87	25	0	2	1	0	0	0	0	0	0	0	117
14:00	1	85	26	5	2	1	0	0	0	0	0	0	0	120
15:00	1	130	39	2	3	0	0	0	0	0	0	0	0	175
16:00	0	110	26	0	2	0	0	1	0	0	0	0	0	139
17:00	0	138	22	0	2	0	0	0	0	0	0	0	0	162
18:00	0	105	26	0	1	0	0	0	0	0	0	0	0	132
19:00	1	111	20	0	0	1	0	0	0	0	0	0	0	133
20:00	0	65	5	0	1	0	0	0	0	0	0	0	0	71
21:00	0	43	13	0	2	0	0	0	0	0	0	0	0	58
22:00	1	36	6	0	0	0	0	0	0	0	0	0	0	43
23:00	0	25	3	0	1	0	0	0	0	0	0	0	0	29
<b>Total</b>	10	1319	324	11	27	3	1	5	0	0	0	0	0	1700
<b>Percent</b>	0.6%	77.6%	19.1%	0.6%	1.6%	0.2%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
<b>AM Peak</b>	01:00	11:00	11:00	07:00	07:00			09:00	06:00					11:00
<b>Vol.</b>	1	64	23	3	2			1	2					90
<b>PM Peak</b>	13:00	17:00	15:00	14:00	12:00	13:00		16:00						15:00
<b>Vol.</b>	2	138	39	5	3	1		1						175
<b>Grand Total</b>	10	1319	324	11	27	3	1	5	0	0	0	0	0	1700
<b>Percent</b>	0.6%	77.6%	19.1%	0.6%	1.6%	0.2%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	



Counts Unlimited, Inc.

City of Corona  
 Dominguez Ranch Road  
 S/ Green River Road  
 24 Hour Directional Classification Count  
 Northbound, Southbound

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

COR003  
 Site Code: 051-23282

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	32	4	0	0	0	0	0	1	0	0	0	0	37
01:00	2	15	0	0	0	0	0	0	0	0	0	0	0	17
02:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
03:00	0	13	1	0	0	0	0	2	0	0	0	0	0	16
04:00	1	42	12	0	2	0	0	0	0	0	0	0	0	57
05:00	0	53	26	0	3	0	0	0	0	0	0	0	0	82
06:00	0	73	33	0	2	0	0	3	0	0	0	0	0	111
07:00	2	144	33	5	3	0	0	0	0	0	0	0	0	187
08:00	0	174	43	3	7	0	0	0	0	0	0	0	0	227
09:00	0	133	31	0	5	0	1	1	0	0	0	0	0	171
10:00	2	143	41	0	3	0	0	0	0	0	0	0	0	189
11:00	3	158	42	0	3	0	0	0	0	0	0	0	0	206
12 PM	1	156	42	0	5	0	0	0	0	0	0	0	0	204
13:00	2	192	47	0	4	1	0	0	0	0	0	0	0	246
14:00	3	210	47	9	4	1	0	2	0	0	0	0	0	276
15:00	2	244	72	4	7	0	0	0	0	0	0	0	0	329
16:00	0	201	50	1	5	0	0	2	0	0	0	0	0	259
17:00	0	255	39	0	3	0	0	0	0	0	0	0	0	297
18:00	0	198	48	0	1	0	0	1	0	0	0	0	0	248
19:00	1	192	33	0	1	3	0	1	0	0	0	0	0	231
20:00	0	122	12	0	2	0	0	0	0	0	0	0	0	136
21:00	0	78	19	0	2	0	0	0	0	0	0	0	0	99
22:00	3	53	8	0	0	0	0	0	0	0	0	0	0	64
23:00	0	36	4	0	1	0	0	0	0	0	0	0	0	41
Total	22	2925	688	22	63	5	1	12	1	0	0	0	0	3739
Percent	0.6%	78.2%	18.4%	0.6%	1.7%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	08:00	08:00	07:00	08:00			09:00	06:00	00:00				08:00
Vol.	3	174	43	5	7			1	3	1				227
PM Peak	14:00	17:00	15:00	14:00	15:00	19:00		14:00						15:00
Vol.	3	255	72	9	7	3		2						329
Grand Total	22	2925	688	22	63	5	1	12	1	0	0	0	0	3739
Percent	0.6%	78.2%	18.4%	0.6%	1.7%	0.1%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	

### Counts Unlimited, Inc.

City of Corona  
 Green River Road  
 B/ State Route 91 Eastbound Ramps - Fresno Road  
 24 Hour Directional Classification Count

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

COR002  
 Site Code: 051-23282

**Eastbound**

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	114	11	0	1	0	0	0	0	1	0	0	0	127
01:00	1	70	6	0	0	1	0	0	0	1	0	0	0	79
02:00	0	43	7	0	2	0	0	0	0	2	0	0	0	54
03:00	0	39	10	0	1	0	0	0	0	0	0	0	0	50
04:00	0	72	12	0	0	0	0	0	0	0	0	0	0	84
05:00	0	97	17	0	1	0	0	0	0	0	0	0	0	115
06:00	1	98	28	1	2	0	0	2	0	0	0	0	0	132
07:00	1	190	47	1	2	0	0	0	1	0	0	0	0	242
08:00	0	232	66	3	3	0	0	1	0	0	0	0	0	305
09:00	0	312	73	1	14	0	0	0	0	0	0	0	0	400
10:00	3	252	52	1	4	0	0	2	1	0	0	0	0	315
11:00	2	355	68	1	5	0	0	0	0	0	0	0	0	431
12 PM	3	475	80	0	10	0	0	0	0	1	0	0	0	569
13:00	4	599	101	0	6	0	1	2	1	0	0	0	0	714
14:00	3	741	160	3	6	0	1	1	0	0	0	0	0	915
15:00	7	808	184	4	8	0	0	3	0	0	0	0	0	1014
16:00	6	1284	283	2	13	2	1	0	1	0	0	0	0	1592
17:00	12	1412	252	0	9	0	0	0	0	0	0	0	0	1685
18:00	3	1163	166	0	5	0	0	0	0	0	0	0	0	1337
19:00	2	809	105	0	4	1	0	0	1	0	0	0	0	922
20:00	3	593	69	0	3	0	0	1	0	0	0	0	0	669
21:00	0	535	59	0	3	0	0	1	0	0	0	0	0	598
22:00	4	364	18	0	1	0	0	0	1	0	0	0	0	388
23:00	1	226	19	0	3	0	0	0	1	0	0	0	0	250
Total	56	10883	1893	17	106	4	3	13	7	5	0	0	0	12987
Percent	0.4%	83.8%	14.6%	0.1%	0.8%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	10:00	11:00	09:00	08:00	09:00	01:00		06:00	07:00	02:00				11:00
Vol.	3	355	73	3	14	1		2	1	2				431
PM Peak	17:00	17:00	16:00	15:00	16:00	16:00	13:00	15:00	13:00	12:00				17:00
Vol.	12	1412	283	4	13	2	1	3	1	1				1685
Grand Total	56	10883	1893	17	106	4	3	13	7	5	0	0	0	12987
Percent	0.4%	83.8%	14.6%	0.1%	0.8%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

PO Box 1178  
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

COR002

Site Code: 051-23282

City of Corona  
Green River Road  
B/ State Route 91 Eastbound Ramps - Fresno Road  
24 Hour Directional Classification Count

Westbound

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	25	2	0	0	0	0	1	0	0	0	0	0	28
01:00	0	17	3	0	1	0	0	0	0	0	0	0	0	21
02:00	0	27	5	0	0	0	0	0	0	0	0	0	0	32
03:00	1	72	10	0	0	0	0	1	0	0	0	0	0	84
04:00	3	334	82	0	4	0	0	3	0	0	0	0	0	426
05:00	3	826	181	0	8	0	0	2	0	0	0	0	0	1020
06:00	5	1392	<b>271</b>	3	14	0	0	2	<b>1</b>	0	0	0	0	1688
07:00	5	<b>1477</b>	232	<b>4</b>	13	0	<b>1</b>	<b>5</b>	1	0	0	0	0	<b>1738</b>
08:00	3	1189	172	0	<b>18</b>	0	0	1	1	0	0	0	0	1384
09:00	5	865	149	0	7	0	0	2	1	0	0	0	0	1029
10:00	0	543	91	0	7	<b>1</b>	1	0	0	0	0	0	0	643
11:00	<b>6</b>	409	78	0	8	0	0	0	1	0	0	0	0	502
12 PM	<b>3</b>	356	57	1	6	0	0	1	<b>2</b>	0	0	0	0	426
13:00	3	397	48	1	3	0	0	1	2	0	0	0	0	455
14:00	3	<b>411</b>	<b>64</b>	<b>6</b>	<b>7</b>	<b>1</b>	<b>1</b>	<b>3</b>	1	0	0	0	0	<b>497</b>
15:00	0	349	62	3	4	0	1	1	1	0	0	0	0	421
16:00	1	377	61	2	5	0	0	2	1	0	0	0	0	449
17:00	1	358	53	0	4	0	0	0	0	0	0	0	0	416
18:00	1	319	55	0	3	0	0	0	1	0	0	0	0	379
19:00	0	229	38	0	4	0	0	0	0	0	0	0	0	271
20:00	0	171	49	0	3	1	0	0	0	0	0	0	0	224
21:00	1	136	32	0	0	0	0	1	0	0	0	0	0	170
22:00	1	66	13	0	1	0	0	0	1	0	0	0	0	82
23:00	0	46	4	0	1	0	0	0	0	0	0	0	0	51
Total	45	10391	1812	20	121	3	4	26	14	0	0	0	0	12436
Percent	0.4%	83.6%	14.6%	0.2%	1.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	07:00	06:00	07:00	08:00	10:00	07:00	07:00	06:00					07:00
Vol.	6	1477	271	4	18	1	1	5	1					1738
PM Peak	12:00	14:00	14:00	14:00	14:00	14:00	14:00	14:00	12:00					14:00
Vol.	3	411	64	6	7	1	1	3	2					497
Grand Total	45	10391	1812	20	121	3	4	26	14	0	0	0	0	12436
Percent	0.4%	83.6%	14.6%	0.2%	1.0%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	

### Counts Unlimited, Inc.

PO Box 1178  
Corona, CA 92878

Phone: (951) 268-6268

email: counts@countsunlimited.com

City of Corona  
Green River Road  
B/ State Route 91 Eastbound Ramps - Fresno Road  
24 Hour Directional Classification Count  
Eastbound, Westbound

COR002  
Site Code: 051-23282

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	139	13	0	1	0	0	1	0	1	0	0	0	155
01:00	1	87	9	0	1	1	0	0	0	1	0	0	0	100
02:00	0	70	12	0	2	0	0	0	0	2	0	0	0	86
03:00	1	111	20	0	1	0	0	1	0	0	0	0	0	134
04:00	3	406	94	0	4	0	0	3	0	0	0	0	0	510
05:00	3	923	198	0	9	0	0	2	0	0	0	0	0	1135
06:00	6	1490	<b>299</b>	4	16	0	0	4	1	0	0	0	0	1820
07:00	6	<b>1667</b>	279	<b>5</b>	15	0	<b>1</b>	<b>5</b>	<b>2</b>	0	0	0	0	<b>1980</b>
08:00	3	1421	238	3	<b>21</b>	0	0	2	1	0	0	0	0	1689
09:00	5	1177	222	1	21	0	0	2	1	0	0	0	0	1429
10:00	3	795	143	1	11	1	1	2	1	0	0	0	0	958
11:00	<b>8</b>	764	146	1	13	0	0	0	1	0	0	0	0	933
12 PM	6	831	137	1	16	0	0	1	2	<b>1</b>	0	0	0	995
13:00	7	996	149	1	9	0	1	3	<b>3</b>	0	0	0	0	1169
14:00	6	1152	224	<b>9</b>	13	1	<b>2</b>	<b>4</b>	1	0	0	0	0	1412
15:00	7	1157	246	7	12	0	1	4	1	0	0	0	0	1435
16:00	7	1661	<b>344</b>	4	<b>18</b>	<b>2</b>	1	2	2	0	0	0	0	2041
17:00	<b>13</b>	<b>1770</b>	305	0	13	0	0	0	0	0	0	0	0	<b>2101</b>
18:00	4	1482	221	0	8	0	0	0	1	0	0	0	0	1716
19:00	2	1038	143	0	8	1	0	0	1	0	0	0	0	1193
20:00	3	764	118	0	6	1	0	1	0	0	0	0	0	893
21:00	1	671	91	0	3	0	0	2	0	0	0	0	0	768
22:00	5	430	31	0	2	0	0	0	2	0	0	0	0	470
23:00	1	272	23	0	4	0	0	0	1	0	0	0	0	301
Total	101	21274	3705	37	227	7	7	39	21	5	0	0	0	25423
Percent	0.4%	83.7%	14.6%	0.1%	0.9%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	
AM Peak	11:00	07:00	06:00	07:00	08:00	01:00	07:00	07:00	07:00	02:00				07:00
Vol.	8	1667	299	5	21	1	1	5	2	2				1980
PM Peak	17:00	17:00	16:00	14:00	16:00	16:00	14:00	14:00	13:00	12:00				17:00
Vol.	13	1770	344	9	18	2	2	4	3	1				2101
Grand Total	101	21274	3705	37	227	7	7	39	21	5	0	0	0	25423
Percent	0.4%	83.7%	14.6%	0.1%	0.9%	0.0%	0.0%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	

### Counts Unlimited, Inc.

City of Corona  
 Green River Road  
 W/ Palisades Drive  
 24 Hour Directional Classification Count

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

COR004  
 Site Code: 051-23282

**Eastbound**

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	135	8	0	1	0	0	0	1	0	0	0	0	145
01:00	1	67	8	0	1	0	0	0	1	0	0	0	0	78
02:00	0	38	8	0	0	1	0	0	1	0	0	0	0	48
03:00	0	42	10	0	1	0	0	0	2	0	0	0	0	55
04:00	0	75	5	0	0	0	0	0	0	0	0	0	0	80
05:00	1	81	26	0	1	0	0	0	0	0	0	0	0	109
06:00	0	91	28	1	0	0	0	1	0	0	0	0	0	121
07:00	1	208	58	5	1	0	0	2	0	0	0	0	0	275
08:00	0	217	56	5	3	0	0	1	0	0	0	0	0	282
09:00	0	269	77	0	9	0	0	4	0	0	0	0	0	359
10:00	3	211	46	1	5	0	0	1	1	0	0	0	0	268
11:00	1	323	63	0	5	0	1	1	0	0	0	0	0	394
12 PM	3	461	68	0	6	0	0	0	0	0	0	0	0	538
13:00	2	583	72	0	6	1	1	1	0	0	0	0	0	666
14:00	3	734	151	2	10	0	1	1	0	0	0	0	0	902
15:00	7	787	171	4	14	0	0	0	0	0	0	0	0	983
16:00	6	1254	297	2	11	2	0	2	0	0	0	0	0	1574
17:00	11	1431	270	0	4	0	0	0	0	0	0	0	0	1716
18:00	3	1093	163	0	1	0	0	0	0	0	0	0	0	1260
19:00	2	821	91	0	0	0	0	0	0	0	0	0	0	914
20:00	6	590	65	0	0	0	0	0	0	0	0	0	0	661
21:00	1	529	57	0	0	0	0	0	0	0	0	0	0	587
22:00	5	341	36	0	0	0	0	0	1	0	0	0	0	383
23:00	1	236	14	0	2	0	0	0	0	0	0	0	0	253
<b>Total</b>	57	10617	1848	20	81	4	3	14	7	0	0	0	0	12651
<b>Percent</b>	0.5%	83.9%	14.6%	0.2%	0.6%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	
<b>AM Peak</b>	10:00	11:00	09:00	07:00	09:00	02:00	11:00	09:00	03:00					11:00
<b>Vol.</b>	3	323	77	5	9	1	1	4	2					394
<b>PM Peak</b>	17:00	17:00	16:00	15:00	15:00	16:00	13:00	16:00	22:00					17:00
<b>Vol.</b>	11	1431	297	4	14	2	1	2	1					1716
<b>Grand Total</b>	57	10617	1848	20	81	4	3	14	7	0	0	0	0	12651
<b>Percent</b>	0.5%	83.9%	14.6%	0.2%	0.6%	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	

### Counts Unlimited, Inc.

City of Corona  
 Green River Road  
 W/ Palisades Drive  
 24 Hour Directional Classification Count  
 Westbound

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

COR004  
 Site Code: 051-23282

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	32	2	0	1	0	0	0	0	0	0	0	0	35
01:00	0	18	2	0	0	0	0	0	0	0	0	0	0	20
02:00	0	26	4	0	0	0	0	0	0	0	0	0	0	30
03:00	2	73	11	0	0	0	0	1	0	0	0	0	0	87
04:00	4	315	97	0	2	0	0	0	0	0	0	0	0	418
05:00	6	784	231	0	1	0	0	1	0	0	0	0	0	1023
06:00	<b>12</b>	<b>1434</b>	<b>314</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1770</b>
07:00	7	1423	227	<b>5</b>	<b>8</b>	<b>1</b>	<b>1</b>	<b>3</b>	0	0	0	0	0	1675
08:00	3	1159	160	2	<b>16</b>	0	0	2	1	0	0	0	0	1343
09:00	4	832	146	0	3	0	<b>2</b>	2	1	0	0	0	0	990
10:00	0	518	69	1	5	1	0	0	0	0	0	0	0	594
11:00	4	363	74	1	7	0	0	0	1	0	0	0	0	450
12 PM	2	345	56	1	<b>4</b>	0	0	0	<b>1</b>	0	0	0	0	409
13:00	<b>6</b>	362	47	1	3	0	0	0	0	<b>1</b>	0	0	0	420
14:00	1	377	72	<b>6</b>	2	0	<b>2</b>	0	0	0	0	0	0	460
15:00	1	339	61	5	2	0	1	0	0	0	0	0	0	409
16:00	2	<b>400</b>	<b>73</b>	1	0	0	0	<b>2</b>	0	0	0	0	0	<b>478</b>
17:00	2	352	66	0	1	0	0	0	0	0	0	0	0	421
18:00	1	324	50	0	2	0	0	0	0	0	0	0	0	377
19:00	1	240	26	0	0	0	0	0	0	0	0	0	0	267
20:00	1	184	29	0	0	0	0	0	0	0	0	0	0	214
21:00	1	153	16	0	0	0	0	0	0	0	0	0	0	170
22:00	2	87	13	0	0	0	0	0	0	0	0	0	0	102
23:00	0	46	7	0	2	0	0	0	0	0	0	0	0	55
Total	62	10186	1853	27	63	2	6	12	5	1	0	0	0	12217
Percent	0.5%	83.4%	15.2%	0.2%	0.5%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	06:00	06:00	07:00	08:00	07:00	09:00	07:00	06:00					06:00
Vol.	12	1434	314	5	16	1	2	3	1					1770
PM Peak	13:00	16:00	16:00	14:00	12:00		14:00	16:00	12:00	13:00				16:00
Vol.	6	400	73	6	4		2	2	1	1				478
Grand Total	62	10186	1853	27	63	2	6	12	5	1	0	0	0	12217
Percent	0.5%	83.4%	15.2%	0.2%	0.5%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

### Counts Unlimited, Inc.

City of Corona  
 Green River Road  
 W/ Palisades Drive  
 24 Hour Directional Classification Count  
 Eastbound, Westbound

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

COR004  
 Site Code: 051-23282

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	167	10	0	2	0	0	0	1	0	0	0	0	180
01:00	1	85	10	0	1	0	0	0	1	0	0	0	0	98
02:00	0	64	12	0	0	1	0	0	1	0	0	0	0	78
03:00	2	115	21	0	1	0	0	1	2	0	0	0	0	142
04:00	4	390	102	0	2	0	0	0	0	0	0	0	0	498
05:00	7	865	257	0	2	0	0	1	0	0	0	0	0	1132
06:00	12	1525	342	5	4	0	0	2	1	0	0	0	0	1891
07:00	8	1631	285	10	9	1	1	5	0	0	0	0	0	1950
08:00	3	1376	216	7	19	0	0	3	1	0	0	0	0	1625
09:00	4	1101	223	0	12	0	2	6	1	0	0	0	0	1349
10:00	3	729	115	2	10	1	0	1	1	0	0	0	0	862
11:00	5	686	137	1	12	0	1	1	1	0	0	0	0	844
12 PM	5	806	124	1	10	0	0	0	1	0	0	0	0	947
13:00	8	945	119	1	9	1	1	1	0	1	0	0	0	1086
14:00	4	1111	223	8	12	0	3	1	0	0	0	0	0	1362
15:00	8	1126	232	9	16	0	1	0	0	0	0	0	0	1392
16:00	8	1654	370	3	11	2	0	4	0	0	0	0	0	2052
17:00	13	1783	336	0	5	0	0	0	0	0	0	0	0	2137
18:00	4	1417	213	0	3	0	0	0	0	0	0	0	0	1637
19:00	3	1061	117	0	0	0	0	0	0	0	0	0	0	1181
20:00	7	774	94	0	0	0	0	0	0	0	0	0	0	875
21:00	2	682	73	0	0	0	0	0	0	0	0	0	0	757
22:00	7	428	49	0	0	0	0	0	1	0	0	0	0	485
23:00	1	282	21	0	4	0	0	0	0	0	0	0	0	308
Total	119	20803	3701	47	144	6	9	26	12	1	0	0	0	24868
Percent	0.5%	83.7%	14.9%	0.2%	0.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	
AM Peak	06:00	07:00	06:00	07:00	08:00	02:00	09:00	09:00	03:00					07:00
Vol.	12	1631	342	10	19	1	2	6	2					1950
PM Peak	17:00	17:00	16:00	15:00	15:00	16:00	14:00	16:00	12:00	13:00				17:00
Vol.	13	1783	370	9	16	2	3	4	1	1				2137
Grand Total	119	20803	3701	47	144	6	9	26	12	1	0	0	0	24868
Percent	0.5%	83.7%	14.9%	0.2%	0.6%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	

### Counts Unlimited, Inc.

City of Corona  
 Green River Road  
 W/ State Route 91 Westbound Ramps  
 24 Hour Directional Classification Count  
**Eastbound**

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

COR001  
 Site Code: 051-23282

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	41	7	0	1	0	0	0	1	0	1	0	0	51
01:00	0	38	2	0	1	0	0	0	1	0	0	0	0	42
02:00	0	25	1	0	0	0	0	0	0	0	0	0	0	26
03:00	0	65	2	0	1	0	0	0	0	0	0	1	0	69
04:00	0	124	16	0	0	0	0	0	0	0	0	2	0	142
05:00	1	178	27	0	2	0	0	0	0	0	<b>3</b>	<b>5</b>	0	216
06:00	1	245	37	2	5	<b>1</b>	0	2	0	0	0	0	0	293
07:00	2	<b>392</b>	<b>71</b>	<b>6</b>	10	0	0	<b>3</b>	0	0	1	0	0	<b>485</b>
08:00	<b>3</b>	340	61	5	<b>11</b>	0	<b>1</b>	1	1	0	0	0	0	423
09:00	2	287	65	1	9	0	0	1	1	0	0	0	0	366
10:00	3	245	64	0	3	0	0	2	0	0	0	0	0	317
11:00	0	274	60	2	8	1	0	1	<b>2</b>	0	0	0	0	348
12 PM	2	309	53	1	9	<b>1</b>	<b>1</b>	1	<b>2</b>	0	0	0	0	379
13:00	<b>4</b>	295	57	0	5	0	0	<b>3</b>	1	0	0	0	0	365
14:00	2	304	91	<b>6</b>	<b>12</b>	1	1	0	1	0	0	0	0	418
15:00	3	325	<b>98</b>	5	5	0	0	3	1	0	0	0	0	<b>440</b>
16:00	0	<b>352</b>	76	4	5	1	0	0	0	0	0	0	0	438
17:00	2	312	73	0	5	0	0	0	1	0	0	0	0	393
18:00	0	305	72	0	0	1	0	0	0	0	0	0	0	378
19:00	0	236	46	0	2	1	0	1	0	0	0	0	0	286
20:00	0	240	31	0	3	0	0	2	1	0	0	0	0	277
21:00	0	181	17	0	4	0	0	0	1	0	0	0	0	203
22:00	0	124	27	0	1	0	0	0	0	0	0	0	0	152
23:00	0	89	11	0	1	0	0	0	1	0	0	0	0	102
<b>Total</b>	25	5326	1065	32	103	7	3	20	15	0	5	8	0	6609
<b>Percent</b>	0.4%	80.6%	16.1%	0.5%	1.6%	0.1%	0.0%	0.3%	0.2%	0.0%	0.1%	0.1%	0.0%	
<b>AM Peak</b>	08:00	07:00	07:00	07:00	08:00	06:00	08:00	07:00	11:00		05:00	05:00		07:00
<b>Vol.</b>	3	392	71	6	11	1	1	3	2		3	5		485
<b>PM Peak</b>	13:00	16:00	15:00	14:00	14:00	12:00	12:00	13:00	12:00					15:00
<b>Vol.</b>	4	352	98	6	12	1	1	3	2					440
<b>Grand Total</b>	25	5326	1065	32	103	7	3	20	15	0	5	8	0	6609
<b>Percent</b>	0.4%	80.6%	16.1%	0.5%	1.6%	0.1%	0.0%	0.3%	0.2%	0.0%	0.1%	0.1%	0.0%	



Counts Unlimited, Inc.

City of Corona  
 Green River Road  
 W/ State Route 91 Westbound Ramps  
 24 Hour Directional Classification Count  
 Westbound

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

COR001  
 Site Code: 051-23282

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	49	5	0	0	0	0	0	2	0	1	0	0	57
01:00	0	44	2	0	0	0	0	0	0	0	0	0	0	46
02:00	0	32	3	0	0	0	0	0	0	0	0	0	0	35
03:00	0	44	7	0	1	0	0	0	0	0	0	0	0	52
04:00	0	93	20	0	0	0	0	0	0	0	0	0	0	113
05:00	1	146	38	0	3	1	0	2	0	0	0	0	0	191
06:00	1	187	29	4	16	0	0	3	0	1	0	0	0	241
07:00	2	217	41	3	16	0	0	2	3	0	0	0	0	284
08:00	3	312	73	1	12	0	1	3	0	0	0	0	0	405
09:00	0	280	59	0	7	0	0	1	0	0	0	0	0	347
10:00	1	230	71	0	3	0	1	1	1	0	0	0	0	308
11:00	1	255	53	2	8	0	1	1	0	0	0	0	0	321
12 PM	3	268	65	1	10	2	0	4	1	0	0	0	0	354
13:00	3	287	75	1	7	0	0	1	2	0	0	0	0	376
14:00	2	332	78	6	14	1	1	3	0	0	0	0	0	437
15:00	1	346	94	6	6	1	0	2	1	0	0	0	0	457
16:00	2	357	81	2	3	0	0	0	0	0	1	0	0	446
17:00	1	356	84	0	2	0	0	0	0	0	0	0	0	443
18:00	0	378	81	0	0	1	0	0	0	0	0	0	0	460
19:00	1	321	52	0	1	0	0	0	1	0	0	0	0	376
20:00	0	269	32	0	3	0	0	0	2	0	0	0	0	306
21:00	0	237	24	0	1	0	0	0	0	0	0	0	0	262
22:00	1	130	15	0	0	0	0	0	1	0	0	0	0	147
23:00	0	101	9	0	0	0	0	0	0	0	0	0	0	110
Total	23	5271	1091	26	113	6	4	23	14	1	2	0	0	6574
Percent	0.3%	80.2%	16.6%	0.4%	1.7%	0.1%	0.1%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak	08:00	08:00	08:00	06:00	06:00	05:00	08:00	06:00	07:00	06:00	00:00			08:00
Vol.	3	312	73	4	16	1	1	3	3	1	1			405
PM Peak	12:00	18:00	15:00	14:00	14:00	12:00	14:00	12:00	13:00		16:00			18:00
Vol.	3	378	94	6	14	2	1	4	2		1			460
Grand Total	23	5271	1091	26	113	6	4	23	14	1	2	0	0	6574
Percent	0.3%	80.2%	16.6%	0.4%	1.7%	0.1%	0.1%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	

### Counts Unlimited, Inc.

City of Corona  
 Green River Road  
 W/ State Route 91 Westbound Ramps  
 24 Hour Directional Classification Count  
 Eastbound, Westbound

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

COR001  
 Site Code: 051-23282

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	90	12	0	1	0	0	0	3	0	2	0	0	108
01:00	0	82	4	0	1	0	0	0	1	0	0	0	0	88
02:00	0	57	4	0	0	0	0	0	0	0	0	0	0	61
03:00	0	109	9	0	2	0	0	0	0	0	0	1	0	121
04:00	0	217	36	0	0	0	0	0	0	0	0	2	0	255
05:00	2	324	65	0	5	1	0	2	0	0	3	5	0	407
06:00	2	432	66	6	21	1	0	5	0	1	0	0	0	534
07:00	4	609	112	9	26	0	0	5	3	0	1	0	0	769
08:00	6	652	134	6	23	0	2	4	1	0	0	0	0	828
09:00	2	567	124	1	16	0	0	2	1	0	0	0	0	713
10:00	4	475	135	0	6	0	1	3	1	0	0	0	0	625
11:00	1	529	113	4	16	1	1	2	2	0	0	0	0	669
12 PM	5	577	118	2	19	3	1	5	3	0	0	0	0	733
13:00	7	582	132	1	12	0	0	4	3	0	0	0	0	741
14:00	4	636	169	12	26	2	2	3	1	0	0	0	0	855
15:00	4	671	192	11	11	1	0	5	2	0	0	0	0	897
16:00	2	709	157	6	8	1	0	0	0	0	1	0	0	884
17:00	3	668	157	0	7	0	0	0	1	0	0	0	0	836
18:00	0	683	153	0	0	2	0	0	0	0	0	0	0	838
19:00	1	557	98	0	3	1	0	1	1	0	0	0	0	662
20:00	0	509	63	0	6	0	0	2	3	0	0	0	0	583
21:00	0	418	41	0	5	0	0	0	1	0	0	0	0	465
22:00	1	254	42	0	1	0	0	0	1	0	0	0	0	299
23:00	0	190	20	0	1	0	0	0	1	0	0	0	0	212
<b>Total</b>	<b>48</b>	<b>10597</b>	<b>2156</b>	<b>58</b>	<b>216</b>	<b>13</b>	<b>7</b>	<b>43</b>	<b>29</b>	<b>1</b>	<b>7</b>	<b>8</b>	<b>0</b>	<b>13183</b>
<b>Percent</b>	<b>0.4%</b>	<b>80.4%</b>	<b>16.4%</b>	<b>0.4%</b>	<b>1.6%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.0%</b>	
<b>AM Peak</b>	<b>08:00</b>	<b>08:00</b>	<b>10:00</b>	<b>07:00</b>	<b>07:00</b>	<b>05:00</b>	<b>08:00</b>	<b>06:00</b>	<b>00:00</b>	<b>06:00</b>	<b>05:00</b>	<b>05:00</b>		<b>08:00</b>
<b>Vol.</b>	<b>6</b>	<b>652</b>	<b>135</b>	<b>9</b>	<b>26</b>	<b>1</b>	<b>2</b>	<b>5</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>5</b>		<b>828</b>
<b>PM Peak</b>	<b>13:00</b>	<b>16:00</b>	<b>15:00</b>	<b>14:00</b>	<b>14:00</b>	<b>12:00</b>	<b>14:00</b>	<b>12:00</b>	<b>12:00</b>		<b>16:00</b>			<b>15:00</b>
<b>Vol.</b>	<b>7</b>	<b>709</b>	<b>192</b>	<b>12</b>	<b>26</b>	<b>3</b>	<b>2</b>	<b>5</b>	<b>3</b>		<b>1</b>			<b>897</b>
<b>Grand Total</b>	<b>48</b>	<b>10597</b>	<b>2156</b>	<b>58</b>	<b>216</b>	<b>13</b>	<b>7</b>	<b>43</b>	<b>29</b>	<b>1</b>	<b>7</b>	<b>8</b>	<b>0</b>	<b>13183</b>
<b>Percent</b>	<b>0.4%</b>	<b>80.4%</b>	<b>16.4%</b>	<b>0.4%</b>	<b>1.6%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.3%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.1%</b>	<b>0.0%</b>	

### Counts Unlimited, Inc.

City of Corona  
 Palisades Drive  
 N/ Green River Road  
 24 Hour Directional Classification Count

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

COR005  
 Site Code: 051-23282

**Northbound**

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	33	5	0	0	0	0	0	0	0	0	0	0	38
01:00	0	14	1	0	1	0	0	0	0	0	0	0	0	16
02:00	0	7	0	0	0	1	0	0	1	0	0	0	0	9
03:00	0	18	7	0	0	0	0	0	2	0	0	0	0	27
04:00	0	44	6	0	0	0	0	0	0	0	0	0	0	50
05:00	0	48	21	0	1	0	0	0	0	0	0	0	0	70
06:00	0	32	10	0	1	0	0	0	0	0	0	0	0	43
07:00	0	85	21	0	1	0	0	0	0	0	0	0	0	107
08:00	0	71	19	1	1	0	0	0	0	0	0	0	0	92
09:00	0	40	10	0	3	0	0	3	0	0	0	0	0	56
10:00	0	53	21	0	4	1	0	0	0	0	0	0	0	79
11:00	0	42	12	0	2	1	0	1	0	0	0	0	0	58
12 PM	1	61	15	0	3	0	0	0	0	0	0	0	0	80
13:00	0	78	12	0	4	1	0	1	0	0	0	0	0	96
14:00	0	81	19	1	4	0	0	0	0	0	0	0	0	105
15:00	0	75	15	0	2	0	0	0	0	0	0	0	0	92
16:00	0	111	28	0	4	0	0	0	0	0	0	0	0	143
17:00	0	144	19	0	0	0	0	0	0	0	0	0	0	163
18:00	0	103	17	0	1	0	0	0	0	0	0	0	0	121
19:00	0	73	6	0	0	0	0	0	0	0	0	0	0	79
20:00	2	40	5	0	0	0	0	0	0	0	0	0	0	47
21:00	0	36	5	0	0	0	0	0	0	0	0	0	0	41
22:00	1	52	7	0	0	0	0	0	1	0	0	0	0	61
23:00	0	49	5	0	1	0	0	0	0	0	0	0	0	55
<b>Total</b>	4	1390	286	2	33	4	0	5	4	0	0	0	0	1728
<b>Percent</b>	0.2%	80.4%	16.6%	0.1%	1.9%	0.2%	0.0%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	
<b>AM Peak</b>		07:00	05:00	08:00	10:00	02:00		09:00	03:00					07:00
<b>Vol.</b>		85	21	1	4	1		3	2					107
<b>PM Peak</b>	20:00	17:00	16:00	14:00	13:00	13:00		13:00	22:00					17:00
<b>Vol.</b>	2	144	28	1	4	1		1	1					163
<b>Grand Total</b>	4	1390	286	2	33	4	0	5	4	0	0	0	0	1728
<b>Percent</b>	0.2%	80.4%	16.6%	0.1%	1.9%	0.2%	0.0%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%	

Counts Unlimited, Inc.

City of Corona  
 Palisades Drive  
 N/ Green River Road  
 24 Hour Directional Classification Count  
 Southbound

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

COR005  
 Site Code: 051-23282

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	16	1	0	0	0	0	0	0	0	0	0	0	17
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	4	0	0	0	0	0	1	0	0	0	0	0	5
04:00	2	18	3	0	0	0	0	0	0	0	0	0	0	23
05:00	2	54	21	0	0	0	0	0	0	0	0	0	0	77
06:00	0	204	53	1	2	0	0	0	0	0	0	0	0	260
07:00	0	229	44	2	1	1	0	0	0	0	0	0	0	277
08:00	0	164	28	1	6	0	0	0	0	0	0	0	0	199
09:00	0	79	14	0	2	0	1	1	1	0	0	0	0	98
10:00	1	29	6	1	1	1	0	0	0	0	0	0	0	39
11:00	0	31	12	0	4	0	0	0	0	0	0	0	0	47
12 PM	0	39	12	0	1	0	0	0	1	0	0	0	0	53
13:00	1	47	13	0	3	0	0	0	0	1	0	0	0	65
14:00	0	57	15	0	2	0	2	0	0	0	0	0	0	76
15:00	1	54	10	3	2	0	0	0	0	0	0	0	0	70
16:00	1	63	6	0	0	0	0	0	0	0	0	0	0	70
17:00	1	73	11	0	0	0	0	0	0	0	0	0	0	85
18:00	0	50	3	0	0	0	0	0	0	0	0	0	0	53
19:00	0	36	4	0	0	0	0	0	0	0	0	0	0	40
20:00	1	18	2	0	0	0	0	0	0	0	0	0	0	21
21:00	0	18	4	0	0	0	0	0	0	0	0	0	0	22
22:00	0	12	1	0	0	0	0	0	0	0	0	0	0	13
23:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
Total	10	1305	264	8	24	2	3	2	2	1	0	0	0	1621
Percent	0.6%	80.5%	16.3%	0.5%	1.5%	0.1%	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	
AM Peak	04:00	07:00	06:00	07:00	08:00	07:00	09:00	03:00	09:00					07:00
Vol.	2	229	53	2	6	1	1	1	1					277
PM Peak	13:00	17:00	14:00	15:00	13:00		14:00		12:00	13:00				17:00
Vol.	1	73	15	3	3		2		1	1				85
Grand Total	10	1305	264	8	24	2	3	2	2	1	0	0	0	1621
Percent	0.6%	80.5%	16.3%	0.5%	1.5%	0.1%	0.2%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	

### Counts Unlimited, Inc.

City of Corona  
 Palisades Drive  
 N/ Green River Road  
 24 Hour Directional Classification Count  
 Northbound, Southbound

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

COR005  
 Site Code: 051-23282

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
03/28/23	0	49	6	0	0	0	0	0	0	0	0	0	0	55
01:00	0	15	1	0	1	0	0	0	0	0	0	0	0	17
02:00	0	8	0	0	0	1	0	0	1	0	0	0	0	10
03:00	0	22	7	0	0	0	0	1	<b>2</b>	0	0	0	0	32
04:00	<b>2</b>	62	9	0	0	0	0	0	0	0	0	0	0	73
05:00	2	102	42	0	1	0	0	0	0	0	0	0	0	147
06:00	0	236	63	1	3	0	0	0	0	0	0	0	0	303
07:00	0	<b>314</b>	<b>65</b>	<b>2</b>	<b>2</b>	1	0	0	0	0	0	0	0	<b>384</b>
08:00	0	235	47	2	<b>7</b>	0	0	0	0	0	0	0	0	291
09:00	0	119	24	0	5	0	<b>1</b>	<b>4</b>	1	0	0	0	0	154
10:00	1	82	27	1	5	<b>2</b>	0	0	0	0	0	0	0	118
11:00	0	73	24	0	6	1	0	1	0	0	0	0	0	105
12 PM	1	100	27	0	4	0	0	0	<b>1</b>	0	0	0	0	133
13:00	1	125	25	0	<b>7</b>	<b>1</b>	0	<b>1</b>	0	<b>1</b>	0	0	0	161
14:00	0	138	<b>34</b>	1	6	0	<b>2</b>	0	0	0	0	0	0	181
15:00	1	129	25	<b>3</b>	4	0	0	0	0	0	0	0	0	162
16:00	1	174	34	0	4	0	0	0	0	0	0	0	0	213
17:00	1	<b>217</b>	30	0	0	0	0	0	0	0	0	0	0	<b>248</b>
18:00	0	153	20	0	1	0	0	0	0	0	0	0	0	174
19:00	0	109	10	0	0	0	0	0	0	0	0	0	0	119
20:00	<b>3</b>	58	7	0	0	0	0	0	0	0	0	0	0	68
21:00	0	54	9	0	0	0	0	0	0	0	0	0	0	63
22:00	1	64	8	0	0	0	0	0	1	0	0	0	0	74
23:00	0	57	6	0	1	0	0	0	0	0	0	0	0	64
<b>Total</b>	14	2695	550	10	57	6	3	7	6	1	0	0	0	3349
<b>Percent</b>	0.4%	80.5%	16.4%	0.3%	1.7%	0.2%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	
AM Peak	04:00	07:00	07:00	07:00	08:00	10:00	09:00	09:00	03:00					07:00
Vol.	2	314	65	2	7	2	1	4	2					384
PM Peak	20:00	17:00	14:00	15:00	13:00	13:00	14:00	13:00	12:00	13:00				17:00
Vol.	3	217	34	3	7	1	2	1	1	1				248
<b>Grand Total</b>	14	2695	550	10	57	6	3	7	6	1	0	0	0	3349
<b>Percent</b>	0.4%	80.5%	16.4%	0.3%	1.7%	0.2%	0.1%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	

This Page Intentionally Left Blank

**APPENDIX 3.2: EXISTING (2023) CONDITIONS INTERSECTION  
OPERATIONS ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank



**Volume Development  
AM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing PCE:	1,547	197	0	0	228	264	0	0	0	32	4	116	2,386
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing PCE:	0	1,657	104	191	70	0	87	1	187	0	0	0	2,295
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing PCE:	0	0	4	0	0	0	0	254	3	1	1,761	0	2,022
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing PCE:	0	0	0	0	0	0	0	258	0	0	1,762	0	2,019
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing PCE:	123	0	43	0	0	0	0	238	20	14	1,639	0	2,076
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
Existing PCE:	0	0	0	5	0	268	78	204	0	0	1,413	32	1,999

Volume Development  
PM Peak Hour

		<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>														
Existing PCE:		298	251	0	0	264	128	0	0	0	234	21	189	1,383
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>														
Existing PCE:		0	383	55	162	336	0	166	3	1,422	0	0	0	2,526
<b>3: Fresno Rd. &amp; Green River Rd.</b>														
Existing PCE:		0	0	3	0	0	0	0	1,752	6	1	437	0	2,199
<b>4: Street A &amp; Green River Rd.</b>														
Existing PCE:		0	0	0	0	0	0	0	1,755	0	0	438	0	2,193
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>														
Existing PCE:		82	0	44	0	0	0	0	1,634	121	52	356	0	2,289
<b>6: Green River Rd. &amp; Palisades Dr.</b>														
Existing PCE:		0	0	0	14	0	63	148	1,533	0	0	403	17	2,178

Timings  
1: Green River Rd. & SR-91 WB Ramps

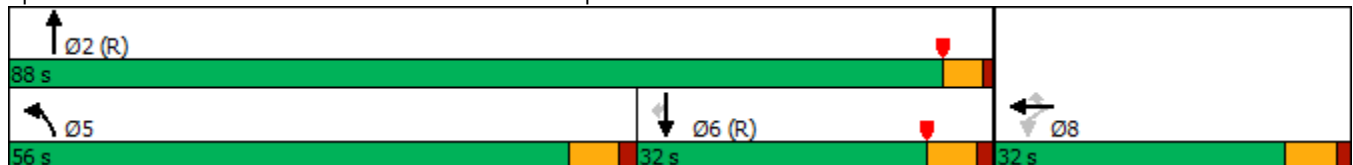


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↶	↶↶↶	↑	↑	↷
Traffic Volume (vph)	32	4	116	1547	197	228	264
Future Volume (vph)	32	4	116	1547	197	228	264
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	56.0	88.0	32.0	32.0
Total Split (%)	26.7%	26.7%	26.7%	46.7%	73.3%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	10.5	10.5	10.5	46.6	98.9	44.9	44.9
Actuated g/C Ratio	0.09	0.09	0.09	0.39	0.82	0.37	0.37
v/c Ratio	0.14	0.13	0.51	0.89	0.14	0.36	0.38
Control Delay	48.4	48.2	14.3	49.0	1.8	32.1	5.5
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	48.4	48.2	14.3	49.1	1.8	32.1	5.5
LOS	D	D	B	D	A	C	A
Approach Delay		22.3			43.8	17.9	
Approach LOS		C			D	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.89  
 Intersection Signal Delay: 37.1  
 Intersection LOS: D  
 Intersection Capacity Utilization 64.9%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/24/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↖	↖	↖↖↖	↑			↑	↗
Traffic Volume (veh/h)	0	0	0	32	4	116	1547	197	0	0	228	264
Future Volume (veh/h)	0	0	0	32	4	116	1547	197	0	0	228	264
Initial Q (Qb), veh				0	0	0	92	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				40	0	27	1758	224	0	0	259	210
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				135	0	60	2126	1639	0	0	753	630
Arrive On Green				0.04	0.00	0.04	0.25	0.58	0.00	0.00	0.44	0.44
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				40	0	27	1758	224	0	0	259	210
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				1.3	0.0	2.0	40.2	6.5	0.0	0.0	10.7	10.3
Cycle Q Clear(g_c), s				1.3	0.0	2.0	40.2	6.5	0.0	0.0	10.7	10.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				135	0	60	2126	1639	0	0	753	630
V/C Ratio(X)				0.30	0.00	0.45	0.83	0.14	0.00	0.00	0.34	0.33
Avail Cap(c_a), veh/h				784	0	349	2126	1639	0	0	829	694
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.74	0.74	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				56.2	0.0	56.6	43.2	4.8	0.0	0.0	25.3	25.2
Incr Delay (d2), s/veh				1.2	0.0	5.2	2.0	0.1	0.0	0.0	1.2	1.4
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	77.9	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.6	0.0	0.9	37.0	1.2	0.0	0.0	5.2	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				57.5	0.0	61.8	123.1	5.0	0.0	0.0	26.6	26.6
LnGrp LOS				E	A	E	F	A	A	A	C	C
Approach Vol, veh/h					67			1982			469	
Approach Delay, s/veh					59.2			109.8			26.6	
Approach LOS					E			F			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		109.5			51.2	58.4		10.5				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			50.0	26.0		26.0				
Max Q Clear Time (g_c+I1), s		8.5			42.2	12.7		4.0				
Green Ext Time (p_c), s		1.2			3.0	1.7		0.1				

Intersection Summary

HCM 6th Ctrl Delay	92.9
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/24/2023

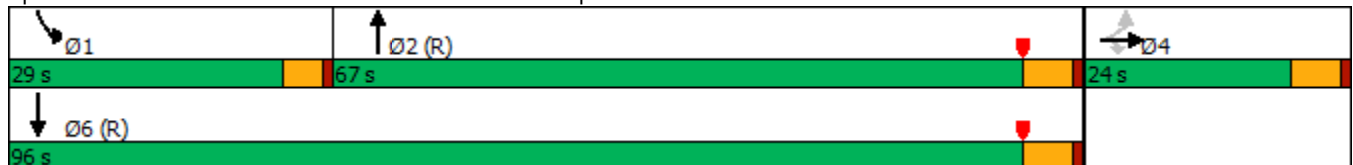


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↔↔↔	↔	↔↔
Traffic Volume (vph)	1	187	1657	191	70
Future Volume (vph)	1	187	1657	191	70
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.1	12.1	73.3	19.1	96.9
Actuated g/C Ratio	0.10	0.10	0.61	0.16	0.81
v/c Ratio	0.54	0.44	0.62	0.74	0.03
Control Delay	61.1	9.2	17.0	63.4	4.2
Queue Delay	0.0	0.0	0.2	0.0	0.0
Total Delay	61.1	9.2	17.2	63.4	4.2
LOS	E	A	B	E	A
Approach Delay	25.8		17.2		47.5
Approach LOS	C		B		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.74  
 Intersection Signal Delay: 21.7  
 Intersection LOS: C  
 Intersection Capacity Utilization 64.9%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/24/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↑↑↑		↘	↑↑	
Traffic Volume (veh/h)	87	1	187	0	0	0	0	1657	104	191	70	0
Future Volume (veh/h)	87	1	187	0	0	0	0	1657	104	191	70	0
Initial Q (Qb), veh	0	0	0				0	92	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	97	1	50				0	1841	107	212	78	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	130	1	205				0	3361	166	243	3017	0
Arrive On Green	0.07	0.07	0.07				0.00	0.66	0.66	0.13	0.84	0.00
Sat Flow, veh/h	1792	18	2834				0	5179	290	1810	3705	0
Grp Volume(v), veh/h	98	0	50				0	1270	678	212	78	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1840	1810	1805	0
Q Serve(g_s), s	6.4	0.0	2.0				0.0	23.4	23.5	13.8	0.4	0.0
Cycle Q Clear(g_c), s	6.4	0.0	2.0				0.0	23.4	23.5	13.8	0.4	0.0
Prop In Lane	0.99		1.00				0.00		0.16	1.00		0.00
Lane Grp Cap(c), veh/h	131	0	205				0	2296	1227	243	3017	0
V/C Ratio(X)	0.75	0.00	0.24				0.00	0.55	0.55	0.87	0.03	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2296	1222	369	3017	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.95	0.95	0.00
Uniform Delay (d), s/veh	54.6	0.0	52.5				0.0	13.0	12.8	50.9	1.7	0.0
Incr Delay (d2), s/veh	8.2	0.0	0.6				0.0	1.0	1.8	13.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	11.5	10.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.7				0.0	16.1	16.6	6.9	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.7	0.0	53.2				0.0	25.4	24.6	63.9	1.7	0.0
LnGrp LOS	E	A	D				A	C	C	E	A	A
Approach Vol, veh/h		148						1948			290	
Approach Delay, s/veh		59.5						25.1			47.1	
Approach LOS		E						C			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	20.6	85.2	14.2	105.8								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	24.5	61.5	18.5	90.5								
Max Q Clear Time (g_c+I1), s	15.8	25.5	8.4	2.4								
Green Ext Time (p_c), s	0.4	18.3	0.4	0.5								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			29.9									
HCM 6th LOS			C									

Timings  
1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/18/2023

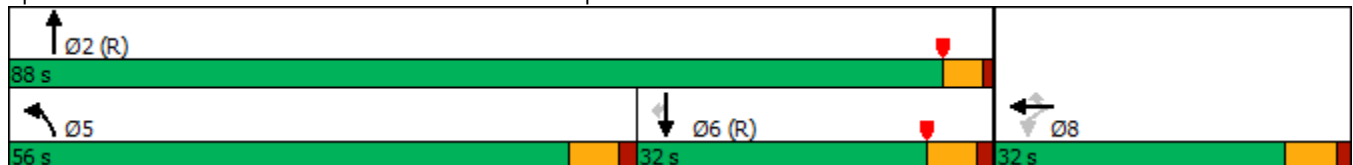


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↶	↶↶↶	↑	↓	↷
Traffic Volume (vph)	32	4	116	1547	197	228	264
Future Volume (vph)	32	4	116	1547	197	228	264
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	56.0	88.0	32.0	32.0
Total Split (%)	26.7%	26.7%	26.7%	46.7%	73.3%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	10.5	10.5	10.5	46.6	98.9	44.9	44.9
Actuated g/C Ratio	0.09	0.09	0.09	0.39	0.82	0.37	0.37
v/c Ratio	0.14	0.13	0.51	0.89	0.14	0.36	0.38
Control Delay	48.4	48.2	14.3	49.0	1.8	32.1	5.5
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	48.4	48.2	14.3	49.1	1.8	32.1	5.5
LOS	D	D	B	D	A	C	A
Approach Delay		22.3			43.8	17.9	
Approach LOS		C			D	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.89  
 Intersection Signal Delay: 37.1  
 Intersection LOS: D  
 Intersection Capacity Utilization 64.9%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↖	↖	↖↖↖	↑			↑	↗
Traffic Volume (veh/h)	0	0	0	32	4	116	1547	197	0	0	228	264
Future Volume (veh/h)	0	0	0	32	4	116	1547	197	0	0	228	264
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				40	0	27	1758	224	0	0	259	210
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				135	0	60	1921	1639	0	0	829	694
Arrive On Green				0.04	0.00	0.04	0.25	0.58	0.00	0.00	0.44	0.44
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				40	0	27	1758	224	0	0	259	210
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				1.3	0.0	2.0	40.2	6.5	0.0	0.0	10.7	10.3
Cycle Q Clear(g_c), s				1.3	0.0	2.0	40.2	6.5	0.0	0.0	10.7	10.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				135	0	60	1921	1639	0	0	829	694
V/C Ratio(X)				0.30	0.00	0.45	0.92	0.14	0.00	0.00	0.31	0.30
Avail Cap(c_a), veh/h				784	0	349	2126	1639	0	0	829	694
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.74	0.74	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				56.2	0.0	56.6	43.0	4.8	0.0	0.0	22.1	22.0
Incr Delay (d2), s/veh				1.2	0.0	5.2	4.5	0.1	0.0	0.0	1.0	1.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.6	0.0	0.9	18.0	1.2	0.0	0.0	4.8	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				57.5	0.0	61.8	47.5	5.0	0.0	0.0	23.1	23.1
LnGrp LOS				E	A	E	D	A	A	A	C	C
Approach Vol, veh/h					67			1982			469	
Approach Delay, s/veh					59.2			42.7			23.1	
Approach LOS					E			D			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		109.5			51.2	58.4		10.5				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			50.0	26.0		26.0				
Max Q Clear Time (g_c+I1), s		8.5			42.2	12.7		4.0				
Green Ext Time (p_c), s		1.2			3.0	1.7		0.1				

Intersection Summary

HCM 6th Ctrl Delay	39.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Timings  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023

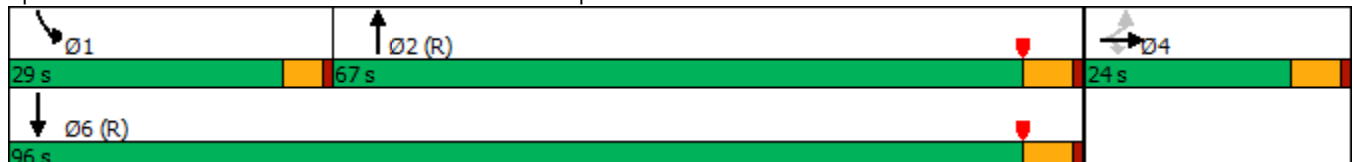


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↔↔↔	↔	↔↔
Traffic Volume (vph)	1	187	1657	191	70
Future Volume (vph)	1	187	1657	191	70
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.1	12.1	73.3	19.1	96.9
Actuated g/C Ratio	0.10	0.10	0.61	0.16	0.81
v/c Ratio	0.54	0.44	0.62	0.74	0.03
Control Delay	61.1	9.2	17.0	63.4	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	61.1	9.2	17.0	63.4	4.2
LOS	E	A	B	E	A
Approach Delay	25.8		17.0		47.5
Approach LOS	C		B		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.74  
 Intersection Signal Delay: 21.5  
 Intersection LOS: C  
 Intersection Capacity Utilization 64.9%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↑↑↑		↘	↑↑	
Traffic Volume (veh/h)	87	1	187	0	0	0	0	1657	104	191	70	0
Future Volume (veh/h)	87	1	187	0	0	0	0	1657	104	191	70	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	97	1	50				0	1841	107	212	78	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	130	1	205				0	3325	193	243	3017	0
Arrive On Green	0.07	0.07	0.07				0.00	0.66	0.66	0.13	0.84	0.00
Sat Flow, veh/h	1792	18	2834				0	5179	290	1810	3705	0
Grp Volume(v), veh/h	98	0	50				0	1270	678	212	78	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1840	1810	1805	0
Q Serve(g_s), s	6.4	0.0	2.0				0.0	23.4	23.5	13.8	0.4	0.0
Cycle Q Clear(g_c), s	6.4	0.0	2.0				0.0	23.4	23.5	13.8	0.4	0.0
Prop In Lane	0.99		1.00				0.00		0.16	1.00		0.00
Lane Grp Cap(c), veh/h	131	0	205				0	2296	1222	243	3017	0
V/C Ratio(X)	0.75	0.00	0.24				0.00	0.55	0.56	0.87	0.03	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2296	1222	369	3017	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.95	0.95	0.00
Uniform Delay (d), s/veh	54.6	0.0	52.5				0.0	10.7	10.7	50.9	1.7	0.0
Incr Delay (d2), s/veh	8.2	0.0	0.6				0.0	1.0	1.8	13.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.7				0.0	8.0	8.8	6.9	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.7	0.0	53.2				0.0	11.7	12.5	63.9	1.7	0.0
LnGrp LOS	E	A	D				A	B	B	E	A	A
Approach Vol, veh/h		148						1948			290	
Approach Delay, s/veh		59.5						12.0			47.1	
Approach LOS		E						B			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	20.6	85.2	14.2	105.8								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	24.5	61.5	18.5	90.5								
Max Q Clear Time (g_c+I1), s	15.8	25.5	8.4	2.4								
Green Ext Time (p_c), s	0.4	18.3	0.4	0.5								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			19.2									
HCM 6th LOS			B									

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	254	3	1	1761	0	4
Future Vol, veh/h	254	3	1	1761	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	282	3	1	1957	0	4

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	285	0	143
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	-	-	1289	-	885
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1289	-	885
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	885	-	-	1289	-
HCM Lane V/C Ratio	0.005	-	-	0.001	-
HCM Control Delay (s)	9.1	-	-	7.8	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

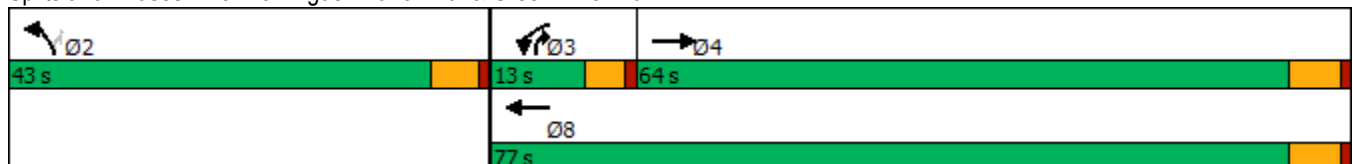
Timings  
5: Dominguez Ranch Rd. & Green River Rd.

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↙	↑↑↑	↘	↗
Traffic Volume (vph)	238	14	1639	123	43
Future Volume (vph)	238	14	1639	123	43
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	64.0	13.0	77.0	43.0	13.0
Total Split (%)	53.3%	10.8%	64.2%	35.8%	10.8%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	32.6	5.6	38.6	13.7	24.9
Actuated g/C Ratio	0.51	0.09	0.60	0.21	0.39
v/c Ratio	0.11	0.10	0.58	0.35	0.07
Control Delay	9.8	34.4	9.3	24.3	5.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.8	34.4	9.3	24.3	5.0
LOS	A	C	A	C	A
Approach Delay	9.8		9.5	19.3	
Approach LOS	A		A	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 64  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.58  
 Intersection Signal Delay: 10.3  
 Intersection LOS: B  
 Intersection Capacity Utilization 49.3%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

05/18/2023

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	238	20	14	1639	123	43
Future Volume (veh/h)	238	20	14	1639	123	43
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	262	15	15	1801	135	13
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2609	148	34	3237	301	298
Arrive On Green	0.52	0.52	0.02	0.62	0.17	0.17
Sat Flow, veh/h	5194	284	1810	5358	1810	1610
Grp Volume(v), veh/h	179	98	15	1801	135	13
Grp Sat Flow(s),veh/h/ln	1729	1849	1810	1729	1810	1610
Q Serve(g_s), s	1.4	1.4	0.4	10.7	3.6	0.4
Cycle Q Clear(g_c), s	1.4	1.4	0.4	10.7	3.6	0.4
Prop In Lane		0.15	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1796	960	34	3237	301	298
V/C Ratio(X)	0.10	0.10	0.44	0.56	0.45	0.04
Avail Cap(c_a), veh/h	3765	2013	284	6910	1273	1163
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.5	6.5	26.0	5.8	20.1	17.9
Incr Delay (d2), s/veh	0.0	0.0	3.4	0.2	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.4	0.2	1.9	1.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.5	6.6	29.3	5.9	21.1	18.0
LnGrp LOS	A	A	C	A	C	B
Approach Vol, veh/h	277			1816	148	
Approach Delay, s/veh	6.5			6.1	20.8	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.3	5.6	33.6		39.2
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		37.6	8.4	58.2		71.2
Max Q Clear Time (g_c+I1), s		5.6	2.4	3.4		12.7
Green Ext Time (p_c), s		0.4	0.0	1.6		20.7
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			7.2			
HCM 6th LOS			A			

Timings  
6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑	↖	↗
Traffic Volume (vph)	78	204	1413	5	268
Future Volume (vph)	78	204	1413	5	268
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	26.0	87.8	61.8	32.2	26.0
Total Split (%)	21.7%	73.2%	51.5%	26.8%	21.7%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	16.0	55.0	27.7	13.2	19.6
Actuated g/C Ratio	0.27	0.93	0.47	0.22	0.33
v/c Ratio	0.17	0.05	0.65	0.01	0.54
Control Delay	25.5	2.3	14.3	25.6	20.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	25.5	2.3	14.3	25.6	20.0
LOS	C	A	B	C	C
Approach Delay		8.8	14.3	20.1	
Approach LOS		A	B	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 59.2  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.65  
 Intersection Signal Delay: 14.3  
 Intersection LOS: B  
 Intersection Capacity Utilization 54.5%  
 ICU Level of Service A  
 Analysis Period (min) 15

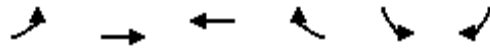
Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑↗		↘	↙
Traffic Volume (veh/h)	78	204	1413	32	5	268
Future Volume (veh/h)	78	204	1413	32	5	268
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	85	222	1536	27	5	73
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	121	3373	2617	46	231	313
Arrive On Green	0.07	0.65	0.50	0.50	0.13	0.13
Sat Flow, veh/h	1810	5358	5420	92	1810	1610
Grp Volume(v), veh/h	85	222	1012	551	5	73
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1883	1810	1610
Q Serve(g_s), s	2.5	0.8	11.2	11.2	0.1	2.1
Cycle Q Clear(g_c), s	2.5	0.8	11.2	11.2	0.1	2.1
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	121	3373	1724	939	231	313
V/C Ratio(X)	0.70	0.07	0.59	0.59	0.02	0.23
Avail Cap(c_a), veh/h	716	7868	3582	1951	870	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	3.5	9.6	9.6	20.6	18.4
Incr Delay (d2), s/veh	2.8	0.0	0.3	0.6	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.1	2.9	3.2	0.0	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.5	3.5	9.9	10.2	20.7	18.8
LnGrp LOS	C	A	A	B	C	B
Approach Vol, veh/h		307	1563		78	
Approach Delay, s/veh		10.1	10.0		18.9	
Approach LOS		B	B		B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.2	32.8			41.0	13.1
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	21.4	56.0			82.0	26.0
Max Q Clear Time (g_c+11), s	4.5	13.2			2.8	4.1
Green Ext Time (p_c), s	0.1	13.7			1.4	0.2

Intersection Summary

HCM 6th Ctrl Delay	10.4
HCM 6th LOS	B

Timings  
1: Green River Rd. & SR-91 WB Ramps

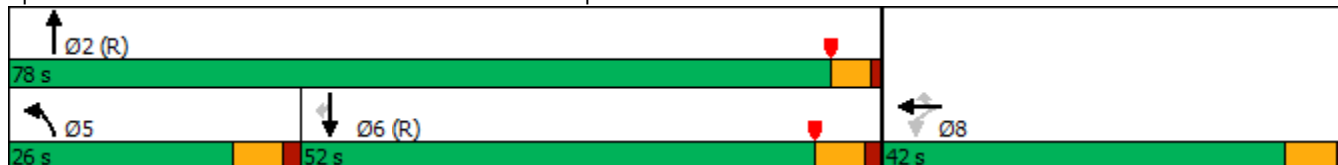


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↖	↖	↖↖↖	↑	↑	↖
Traffic Volume (vph)	234	21	189	298	251	264	128
Future Volume (vph)	234	21	189	298	251	264	128
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	42.0	42.0	42.0	26.0	78.0	52.0	52.0
Total Split (%)	35.0%	35.0%	35.0%	21.7%	65.0%	43.3%	43.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	16.3	16.3	16.3	12.1	93.1	73.6	73.6
Actuated g/C Ratio	0.14	0.14	0.14	0.10	0.78	0.61	0.61
v/c Ratio	0.60	0.60	0.52	0.64	0.19	0.25	0.14
Control Delay	58.1	58.1	10.4	48.7	6.9	12.8	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.1	58.1	10.4	48.7	6.9	12.8	2.6
LOS	E	E	B	D	A	B	A
Approach Delay		37.8			29.6	9.4	
Approach LOS		D			C	A	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.64  
 Intersection Signal Delay: 26.5  
 Intersection LOS: C  
 Intersection Capacity Utilization 68.2%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps





HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↖	↖	↖↖↖	↖			↖	↖
Traffic Volume (veh/h)	0	0	0	234	21	189	298	251	0	0	264	128
Future Volume (veh/h)	0	0	0	234	21	189	298	251	0	0	264	128
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				273	0	138	327	276	0	0	290	37
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				402	0	179	421	1499	0	0	1247	1043
Arrive On Green				0.11	0.00	0.11	0.14	1.00	0.00	0.00	0.66	0.66
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				273	0	138	327	276	0	0	290	37
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				8.7	0.0	10.0	7.4	0.0	0.0	0.0	7.4	1.0
Cycle Q Clear(g_c), s				8.7	0.0	10.0	7.4	0.0	0.0	0.0	7.4	1.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				402	0	179	421	1499	0	0	1247	1043
V/C Ratio(X)				0.68	0.00	0.77	0.78	0.18	0.00	0.00	0.23	0.04
Avail Cap(c_a), veh/h				1086	0	483	850	1499	0	0	1247	1043
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.95	0.95	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				51.3	0.0	51.9	50.7	0.0	0.0	0.0	8.4	7.3
Incr Delay (d2), s/veh				2.0	0.0	6.9	1.1	0.3	0.0	0.0	0.4	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.0	0.0	4.3	3.0	0.1	0.0	0.0	2.9	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				53.3	0.0	58.7	51.8	0.3	0.0	0.0	8.8	7.3
LnGrp LOS				D	A	E	D	A	A	A	A	A
Approach Vol, veh/h					411			603			327	
Approach Delay, s/veh					55.1			28.2			8.6	
Approach LOS					E			C			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		100.7			15.9	84.8		19.3				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 73			20.0	46.0		36.0				
Max Q Clear Time (g_c+I1), s		2.0			9.4	9.4		12.0				
Green Ext Time (p_c), s		1.6			0.5	1.7		1.3				

Intersection Summary

HCM 6th Ctrl Delay	31.7
HCM 6th LOS	C

Notes

- User approved volume balancing among the lanes for turning movement.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings  
2: Green River Rd. & SR-91 EB Ramps

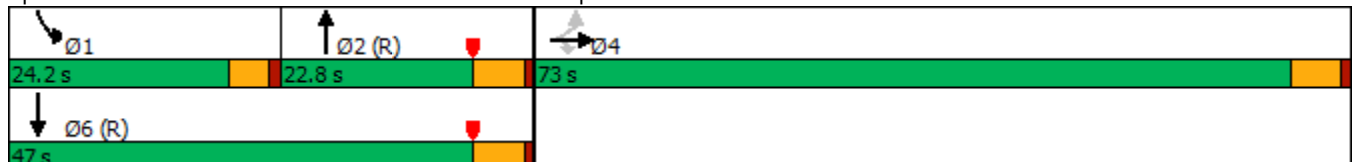


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↕	↗↘	↕↗↘	↖	↕↕
Traffic Volume (vph)	3	1422	383	162	336
Future Volume (vph)	3	1422	383	162	336
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	73.0	73.0	22.8	24.2	47.0
Total Split (%)	60.8%	60.8%	19.0%	20.2%	39.2%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effect Green (s)	58.8	58.8	30.0	15.7	50.2
Actuated g/C Ratio	0.49	0.49	0.25	0.13	0.42
v/c Ratio	0.19	0.86	0.34	0.70	0.22
Control Delay	16.4	21.7	38.9	62.5	33.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.4	21.7	38.9	62.5	33.6
LOS	B	C	D	E	C
Approach Delay	21.2		38.9		43.0
Approach LOS	C		D		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.86  
 Intersection Signal Delay: 28.6  
 Intersection LOS: C  
 Intersection Capacity Utilization 68.2%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗↘					↕↗↘		↗	↕↗	
Traffic Volume (veh/h)	166	3	1422	0	0	0	0	383	55	162	336	0
Future Volume (veh/h)	166	3	1422	0	0	0	0	383	55	162	336	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	168	3	1269				0	387	29	164	339	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	864	15	1376				0	1371	101	194	1526	0
Arrive On Green	0.49	0.49	0.49				0.00	0.28	0.28	0.11	0.42	0.00
Sat Flow, veh/h	1779	32	2834				0	5099	365	1810	3705	0
Grp Volume(v), veh/h	171	0	1269				0	270	146	164	339	0
Grp Sat Flow(s),veh/h/ln	1811	0	1417				0	1729	1834	1810	1805	0
Q Serve(g_s), s	6.4	0.0	50.1				0.0	7.3	7.5	10.7	7.2	0.0
Cycle Q Clear(g_c), s	6.4	0.0	50.1				0.0	7.3	7.5	10.7	7.2	0.0
Prop In Lane	0.98		1.00				0.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	879	0	1376				0	962	510	194	1526	0
V/C Ratio(X)	0.19	0.00	0.92				0.00	0.28	0.29	0.85	0.22	0.00
Avail Cap(c_a), veh/h	1019	0	1594				0	962	510	297	1526	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.94	0.94	0.00
Uniform Delay (d), s/veh	17.5	0.0	28.7				0.0	33.9	34.0	52.6	22.1	0.0
Incr Delay (d2), s/veh	0.1	0.0	8.5				0.0	0.7	1.4	12.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	17.3				0.0	3.1	3.4	5.4	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	0.0	37.2				0.0	34.6	35.4	64.8	22.4	0.0
LnGrp LOS	B	A	D				A	C	D	E	C	A
Approach Vol, veh/h		1440						416			503	
Approach Delay, s/veh		34.9						34.9			36.2	
Approach LOS		C						C			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	17.3	38.9	63.8	56.2								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	19.7	17.3	67.5	41.5								
Max Q Clear Time (g_c+I1), s	12.7	9.5	52.1	9.2								
Green Ext Time (p_c), s	0.2	1.4	6.2	2.1								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			35.2									
HCM 6th LOS			D									

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	1752	6	1	437	0	3
Future Vol, veh/h	1752	6	1	437	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1806	6	1	451	0	3

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1812	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	-
Pot Cap-1 Maneuver	-	-	344	-	0
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	344	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.9
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	283	-	-	344	-
HCM Lane V/C Ratio	0.011	-	-	0.003	-
HCM Control Delay (s)	17.9	-	-	15.5	-
HCM Lane LOS	C	-	-	C	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Timings  
5: Dominguez Ranch Rd. & Green River Rd.

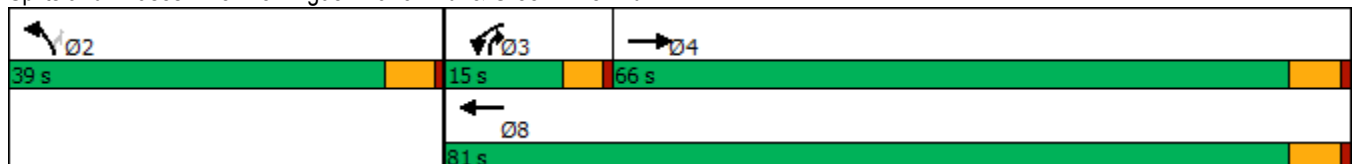


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↵	↑↑↑	↵	↵
Traffic Volume (vph)	1634	52	356	82	44
Future Volume (vph)	1634	52	356	82	44
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	66.0	15.0	81.0	39.0	15.0
Total Split (%)	55.0%	12.5%	67.5%	32.5%	12.5%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	46.8	7.6	56.0	14.2	21.9
Actuated g/C Ratio	0.63	0.10	0.75	0.19	0.29
v/c Ratio	0.57	0.30	0.10	0.25	0.10
Control Delay	13.5	43.7	4.6	33.1	17.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.5	43.7	4.6	33.1	17.2
LOS	B	D	A	C	B
Approach Delay	13.5		9.6	27.5	
Approach LOS	B		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 74.6  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.57  
 Intersection Signal Delay: 13.6  
 Intersection LOS: B  
 Intersection Capacity Utilization 59.9%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)  
05/18/2023



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↙	↗
Traffic Volume (veh/h)	1634	121	52	356	82	44
Future Volume (veh/h)	1634	121	52	356	82	44
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1720	103	55	375	86	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2794	167	90	3543	242	295
Arrive On Green	0.56	0.56	0.05	0.68	0.13	0.13
Sat Flow, veh/h	5176	299	1810	5358	1810	1610
Grp Volume(v), veh/h	1188	635	55	375	86	14
Grp Sat Flow(s),veh/h/ln	1729	1846	1810	1729	1810	1610
Q Serve(g_s), s	14.1	14.2	1.8	1.5	2.6	0.4
Cycle Q Clear(g_c), s	14.1	14.2	1.8	1.5	2.6	0.4
Prop In Lane		0.16	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1930	1030	90	3543	242	295
V/C Ratio(X)	0.62	0.62	0.61	0.11	0.36	0.05
Avail Cap(c_a), veh/h	3406	1818	308	6382	995	965
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.1	9.1	28.5	3.3	24.1	20.6
Incr Delay (d2), s/veh	0.3	0.6	2.5	0.0	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	4.0	0.8	0.2	1.1	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.4	9.7	31.0	3.3	25.0	20.6
LnGrp LOS	A	A	C	A	C	C
Approach Vol, veh/h	1823			430	100	
Approach Delay, s/veh	9.5			6.9	24.4	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		13.6	7.6	39.9		47.5
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		33.6	10.4	60.2		75.2
Max Q Clear Time (g_c+I1), s		4.6	3.8	16.2		3.5
Green Ext Time (p_c), s		0.2	0.0	17.9		2.5
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			9.7			
HCM 6th LOS			A			

Timings  
6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑	↖	↗
Traffic Volume (vph)	148	1533	403	14	63
Future Volume (vph)	148	1533	403	14	63
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	37.0	87.0	50.0	33.0	37.0
Total Split (%)	30.8%	72.5%	41.7%	27.5%	30.8%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	9.4	38.4	17.3	13.5	12.7
Actuated g/C Ratio	0.22	0.91	0.41	0.32	0.30
v/c Ratio	0.38	0.34	0.21	0.02	0.12
Control Delay	19.9	3.6	10.9	13.7	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	19.9	3.6	10.9	13.7	3.1
LOS	B	A	B	B	A
Approach Delay		5.0	10.9	5.0	
Approach LOS		A	B	A	

Intersection Summary

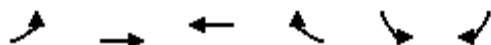
Cycle Length: 120  
 Actuated Cycle Length: 42.3  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.38  
 Intersection Signal Delay: 6.2  
 Intersection LOS: A  
 Intersection Capacity Utilization 48.0%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
05/18/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑		↖	↗
Traffic Volume (veh/h)	148	1533	403	17	14	63
Future Volume (veh/h)	148	1533	403	17	14	63
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	153	1580	415	15	14	6
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	202	3326	2113	76	90	260
Arrive On Green	0.11	0.64	0.41	0.41	0.05	0.05
Sat Flow, veh/h	1810	5358	5311	185	1810	1610
Grp Volume(v), veh/h	153	1580	278	152	14	6
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1867	1810	1610
Q Serve(g_s), s	3.2	6.1	2.0	2.0	0.3	0.1
Cycle Q Clear(g_c), s	3.2	6.1	2.0	2.0	0.3	0.1
Prop In Lane	1.00			0.10	1.00	1.00
Lane Grp Cap(c), veh/h	202	3326	1421	767	90	260
V/C Ratio(X)	0.76	0.48	0.20	0.20	0.15	0.02
Avail Cap(c_a), veh/h	1509	10841	3934	2124	1248	1291
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	3.6	7.3	7.3	17.7	13.7
Incr Delay (d2), s/veh	2.2	0.1	0.1	0.1	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.3	0.4	0.5	0.1	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.9	3.7	7.4	7.5	18.5	13.7
LnGrp LOS	B	A	A	A	B	B
Approach Vol, veh/h		1733	430		20	
Approach Delay, s/veh		5.0	7.4		17.0	
Approach LOS		A	A		B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.9	21.8			30.7	8.1
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	32.4	44.2			81.2	26.8
Max Q Clear Time (g_c+11), s	5.2	4.0			8.1	2.3
Green Ext Time (p_c), s	0.2	2.6			16.8	0.0
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			5.6			
HCM 6th LOS			A			



**APPENDIX 3.3: EXISTING (2023) CONDITIONS OFF-RAMP QUEUING  
ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	21	20	132	1758	224	259	300
v/c Ratio	0.14	0.13	0.51	0.89	0.14	0.36	0.38
Control Delay	48.4	48.2	14.3	49.0	1.8	32.1	5.5
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	48.4	48.2	14.3	49.1	1.8	32.1	5.5
Queue Length 50th (ft)	16	15	0	403	11	138	0
Queue Length 95th (ft)	36	34	49	353	30	268	66
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	371	377	453	2120	1565	710	783
Starvation Cap Reductn	0	0	0	37	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.05	0.29	0.84	0.14	0.36	0.38

Intersection Summary



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	98	208	1957	212	78
v/c Ratio	0.54	0.44	0.62	0.74	0.03
Control Delay	61.1	9.2	17.0	63.4	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	61.1	9.2	17.0	63.4	4.2
Queue Length 50th (ft)	74	0	324	178	6
Queue Length 95th (ft)	123	37	479	258	21
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	279	614	3139	370	2913
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.34	0.62	0.57	0.03
Intersection Summary					

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	139	141	208	327	276	290	141
v/c Ratio	0.60	0.60	0.52	0.64	0.19	0.25	0.14
Control Delay	58.1	58.1	10.4	48.7	6.9	12.8	2.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.1	58.1	10.4	48.7	6.9	12.8	2.6
Queue Length 50th (ft)	109	110	0	93	51	93	0
Queue Length 95th (ft)	163	164	62	125	144	186	32
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	514	519	630	848	1473	1165	1032
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.27	0.33	0.39	0.19	0.25	0.14

Intersection Summary



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	171	1436	443	164	339
v/c Ratio	0.19	0.86	0.34	0.70	0.22
Control Delay	16.4	21.7	38.9	62.5	33.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.4	21.7	38.9	62.5	33.6
Queue Length 50th (ft)	69	354	102	130	119
Queue Length 95th (ft)	98	416	152	200	169
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	1018	1833	1287	296	1509
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.17	0.78	0.34	0.55	0.22
<b>Intersection Summary</b>					

## **APPENDIX 4.1: POST PROCESSING WORKSHEETS**

This Page Intentionally Left Blank



Project: Green River Specific Plan  
 Scenario: Horizon Year (2045) Without Project

Job #: 12630  
 Analyst: CP  
 Date: 5/16/23

LOCATION: Green River Rd. & SR-91 WB Ramps  
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFF-ERENCE	% CHANGE
NORTH BOUND	Left	1,534	2,421	887	58%	295	422	127	43%
	Through	185	189	4	2%	247	268	21	9%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	<b>NB Total</b>	<b>1,719</b>	<b>2,610</b>	<b>891</b>	<b>52%</b>	<b>542</b>	<b>690</b>	<b>148</b>	<b>27%</b>
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	222	219	-3	-1%	259	253	-6	-2%
	Right	256	251	-5	-2%	126	137	11	9%
	<b>SB Total</b>	<b>478</b>	<b>470</b>	<b>-8</b>	<b>-2%</b>	<b>385</b>	<b>390</b>	<b>5</b>	<b>1%</b>
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	<b>EB Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>#DIV/0!</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>#DIV/0!</b>
WEST BOUND	Left	19	27	8	42%	230	247	17	7%
	Through	3	4	1	33%	19	23	4	21%
	Right	107	99	-8	-7%	188	170	-18	-10%
	<b>WB Total</b>	<b>129</b>	<b>130</b>	<b>1</b>	<b>1%</b>	<b>437</b>	<b>440</b>	<b>3</b>	<b>1%</b>
<b>TOTAL ENTERING VOLUME</b>		<b>2,326</b>	<b>3,210</b>	<b>884</b>	<b>38%</b>	<b>1,364</b>	<b>1,520</b>	<b>156</b>	<b>11%</b>

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	470	390			
North Leg	Outbound	288	438			
<b>North Leg</b>	<b>TOTAL</b>	<b>758</b>	<b>828</b>	<b>8%</b>	<b>9%</b>	<b>9,216</b>
South Leg	Inbound	2,610	690			
South Leg	Outbound	246	500			
<b>South Leg</b>	<b>TOTAL</b>	<b>2,856</b>	<b>1,190</b>	<b>12%</b>	<b>5%</b>	<b>23,858</b>
East Leg	Inbound	130	440			
East Leg	Outbound	0	0			
<b>East Leg</b>	<b>TOTAL</b>	<b>130</b>	<b>440</b>	<b>1%</b>	<b>5%</b>	<b>9,618</b>
West Leg	Inbound	0	0			
West Leg	Outbound	2,676	582			
<b>West Leg</b>	<b>TOTAL</b>	<b>2,676</b>	<b>582</b>	<b>21%</b>	<b>5%</b>	<b>12,872</b>
<b>OVERALL TOTAL</b>		<b>6,420</b>	<b>3,040</b>	<b>12%</b>	<b>5%</b>	<b>55,564</b>

Z:\Shared\UcJobs\12600-13000\12600\12630\02\_LOS\Post Processing\12630-10\01\_Green River & SR-91 WB Ramps.xls]Output (3)

Project: Green River Specific Plan  
 Scenario: Horizon Year (2045) Without Project

Job #: 12630  
 Analyst: CP  
 Date: 5/16/23

LOCATION: Green River Rd. & SR-91 EB Ramps  
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE
NORTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	1,640	2,475	835	51%	380	624	244	64%
	Right	102	92	-10	-10%	54	80	26	48%
	<b>NB Total</b>	<b>1,742</b>	<b>2,567</b>	<b>825</b>	<b>47%</b>	<b>434</b>	<b>704</b>	<b>270</b>	<b>62%</b>
SOUTH BOUND	Left	176	187	11	6%	157	129	-28	-18%
	Through	65	71	6	9%	332	600	268	81%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	<b>SB Total</b>	<b>241</b>	<b>258</b>	<b>17</b>	<b>7%</b>	<b>489</b>	<b>729</b>	<b>240</b>	<b>49%</b>
EAST BOUND	Left	79	135	56	71%	162	66	-96	-59%
	Through	1	1	0	0%	3	1	-2	-67%
	Right	179	189	10	6%	1,411	1,140	-271	-19%
	<b>EB Total</b>	<b>259</b>	<b>325</b>	<b>66</b>	<b>25%</b>	<b>1,576</b>	<b>1,207</b>	<b>-369</b>	<b>-23%</b>
WEST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	<b>WB Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>#DIV/0!</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>#DIV/0!</b>
<b>TOTAL ENTERING VOLUME</b>		<b>2,242</b>	<b>3,150</b>	<b>908</b>	<b>40%</b>	<b>2,499</b>	<b>2,640</b>	<b>141</b>	<b>6%</b>

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	258	729			
North Leg	Outbound	2,610	690			
<b>North Leg</b>	<b>TOTAL</b>	<b>2,868</b>	<b>1,419</b>	<b>12%</b>	<b>6%</b>	<b>23,858</b>
South Leg	Inbound	2,567	704			
South Leg	Outbound	260	1,740			
<b>South Leg</b>	<b>TOTAL</b>	<b>2,827</b>	<b>2,444</b>	<b>9%</b>	<b>8%</b>	<b>31,685</b>
East Leg	Inbound	0	0			
East Leg	Outbound	280	210			
<b>East Leg</b>	<b>TOTAL</b>	<b>280</b>	<b>210</b>	<b>4%</b>	<b>3%</b>	<b>7,938</b>
West Leg	Inbound	325	1,207			
West Leg	Outbound	0	0			
<b>West Leg</b>	<b>TOTAL</b>	<b>325</b>	<b>1,207</b>	<b>4%</b>	<b>15%</b>	<b>8,254</b>
<b>OVERALL TOTAL</b>		<b>6,300</b>	<b>5,280</b>	<b>9%</b>	<b>7%</b>	<b>71,735</b>

Z:\Shared\UcJobs\12600-13000\12600\12630\02\_LOS\Post Processing\12630-10\02\_Green River & SR-91 EB Ramps.xls\Output (3)

Project: Green River Specific Plan  
 Scenario: Horizon Year (2045) Without Project

Job #: 12630  
 Analyst: CP  
 Date: 5/16/23

LOCATION: Dominguez Ranch Rd. & Green River Rd.  
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE
NORTH BOUND	Left	122	125	3	2%	82	84	2	2%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	42	37	-5	-12%	43	46	3	7%
	<b>NB Total</b>	<b>164</b>	<b>162</b>	<b>-2</b>	<b>-1%</b>	<b>125</b>	<b>130</b>	<b>5</b>	<b>4%</b>
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	<b>SB Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>#DIV/0!</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>#DIV/0!</b>
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	228	233	5	2%	1,622	1,624	2	0%
	Right	18	16	-2	-11%	119	117	-2	-2%
	<b>EB Total</b>	<b>246</b>	<b>249</b>	<b>3</b>	<b>1%</b>	<b>1,741</b>	<b>1,741</b>	<b>0</b>	<b>0%</b>
WEST BOUND	Left	13	14	1	8%	52	53	1	2%
	Through	1,621	2,205	584	36%	353	356	3	1%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	<b>WB Total</b>	<b>1,634</b>	<b>2,219</b>	<b>585</b>	<b>36%</b>	<b>405</b>	<b>409</b>	<b>4</b>	<b>1%</b>
<b>TOTAL ENTERING VOLUME</b>		<b>2,044</b>	<b>2,630</b>	<b>586</b>	<b>29%</b>	<b>2,271</b>	<b>2,280</b>	<b>9</b>	<b>0%</b>

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	0	0			
North Leg	Outbound	0	0			
<b>North Leg</b>	<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>-</b>
South Leg	Inbound	162	130			
South Leg	Outbound	30	170			
<b>South Leg</b>	<b>TOTAL</b>	<b>192</b>	<b>300</b>	<b>204%</b>	<b>319%</b>	<b>94</b>
East Leg	Inbound	2,219	409			
East Leg	Outbound	270	1,670			
<b>East Leg</b>	<b>TOTAL</b>	<b>2,489</b>	<b>2,079</b>	<b>9%</b>	<b>7%</b>	<b>28,452</b>
West Leg	Inbound	249	1,741			
West Leg	Outbound	2,330	440			
<b>West Leg</b>	<b>TOTAL</b>	<b>2,579</b>	<b>2,181</b>	<b>9%</b>	<b>8%</b>	<b>28,546</b>
<b>OVERALL TOTAL</b>		<b>5,260</b>	<b>4,560</b>	<b>9%</b>	<b>8%</b>	<b>57,092</b>

Z:\Shared\UcJobs\12600-13000\12600\12630\02\_LOS\Post Processing\12630-10\05\_Dominguez Ranch & Green River.xls]Output (3)

Project: Green River Specific Plan  
 Scenario: Horizon Year (2045) Without Project

Job #: 12630  
 Analyst: CP  
 Date: 5/16/23

LOCATION: Palisades Dr. & Green River Rd.  
 FORECAST YEAR: 2045

INDIVIDUAL TURN VOLUME GROWTH REVIEW									
APPROACH	TURNING MOVEMENT	AM PEAK HOUR INPUT DATA				PM PEAK HOUR INPUT DATA			
		EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE	EXISTING COUNT	FUTURE VOLUME	DIFFERENCE	% CHANGE
NORTH BOUND	Left	122	161	39	32%	82	90	8	10%
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	42	21	-21	-50%	43	40	-3	-7%
	<b>NB Total</b>	<b>164</b>	<b>182</b>	<b>18</b>	<b>11%</b>	<b>125</b>	<b>130</b>	<b>5</b>	<b>4%</b>
SOUTH BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	<b>SB Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>#DIV/0!</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>#DIV/0!</b>
EAST BOUND	Left	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	Through	228	239	11	5%	1,622	1,588	-34	-2%
	Right	18	22	4	22%	119	127	8	7%
	<b>EB Total</b>	<b>246</b>	<b>261</b>	<b>15</b>	<b>6%</b>	<b>1,741</b>	<b>1,715</b>	<b>-26</b>	<b>-1%</b>
WEST BOUND	Left	13	8	-5	-38%	52	51	-1	-2%
	Through	1,621	2,149	528	33%	353	372	19	5%
	Right	0	0	0	#DIV/0!	0	0	0	#DIV/0!
	<b>WB Total</b>	<b>1,634</b>	<b>2,157</b>	<b>523</b>	<b>32%</b>	<b>405</b>	<b>423</b>	<b>18</b>	<b>4%</b>
<b>TOTAL ENTERING VOLUME</b>		<b>2,044</b>	<b>2,600</b>	<b>556</b>	<b>27%</b>	<b>2,271</b>	<b>2,268</b>	<b>-3</b>	<b>0%</b>

FORECAST PEAK HOUR TO ADT COMPARISON						
		VOLUMES		PERCENT OF ADT		ADT
		AM	PM	AM	PM	
North Leg	Inbound	0	0			
North Leg	Outbound	0	0			
<b>North Leg</b>	<b>TOTAL</b>	<b>0</b>	<b>0</b>	<b>0%</b>	<b>0%</b>	<b>2,943</b>
South Leg	Inbound	182	130			
South Leg	Outbound	30	178			
<b>South Leg</b>	<b>TOTAL</b>	<b>212</b>	<b>308</b>	<b>#DIV/0!</b>	<b>#DIV/0!</b>	<b>-</b>
East Leg	Inbound	2,157	423			
East Leg	Outbound	260	1,628			
<b>East Leg</b>	<b>TOTAL</b>	<b>2,417</b>	<b>2,051</b>	<b>10%</b>	<b>8%</b>	<b>25,106</b>
West Leg	Inbound	261	1,715			
West Leg	Outbound	2,310	462			
<b>West Leg</b>	<b>TOTAL</b>	<b>2,571</b>	<b>2,177</b>	<b>9%</b>	<b>8%</b>	<b>28,002</b>
<b>OVERALL TOTAL</b>		<b>5,200</b>	<b>4,536</b>	<b>9%</b>	<b>8%</b>	<b>56,051</b>

Z:\Shared\UcJobs\12600-13000\12600\12630\02\_LOS\Post Processing\12630-10\06\_Palisades & Green River.xls]Output (3)

**APPENDIX 5.1: E+P (PHASE 1) CONDITIONS INTERSECTION  
OPERATIONS ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

**Volume Development  
AM Peak Hour**

	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
E+P (Phase 1) PCE:	1,574	199	0	0	238	264	0	0	0	86	4	116	2,479
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
E+P (Phase 1) PCE:	0	1,686	131	191	134	0	87	1	241	0	0	0	2,469
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
E+P (Phase 1) PCE:	0	0	0	0	0	0	0	372	0	0	1,816	0	2,187
<b>4: Street A &amp; Green River Rd.</b>													
E+P (Phase 1) PCE:	55	0	14	0	0	0	0	258	118	86	1,762	0	2,292
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
E+P (Phase 1) PCE:	130	0	43	0	0	0	0	250	21	14	1,718	0	2,175
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
E+P (Phase 1) PCE:	0	0	0	5	0	287	81	213	0	0	1,473	32	2,090

**Volume Development  
PM Peak Hour**

	<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>												
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 1) PCE:	355	261	0	0	266	128	0	0	0	257	21	189	1,475
	<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>												
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 1) PCE:	0	450	112	162	362	0	166	3	1,445	0	0	0	2,699
	<b>3: Fresno Rd. &amp; Green River Rd.</b>												
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 1) PCE:	0	0	0	0	0	0	0	1,801	0	0	561	0	2,362
	<b>4: Street A &amp; Green River Rd.</b>												
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 1) PCE:	124	0	80	0	0	0	0	1,755	49	20	438	0	2,466
	<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>												
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 1) PCE:	84	0	44	0	0	0	0	1,708	127	52	374	0	2,389
	<b>6: Green River Rd. &amp; Palisades Dr.</b>												
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 1) PCE:	0	0	0	14	0	67	166	1,589	0	0	417	17	2,270



Timings

1: Green River Rd. & SR-91 WB Ramps

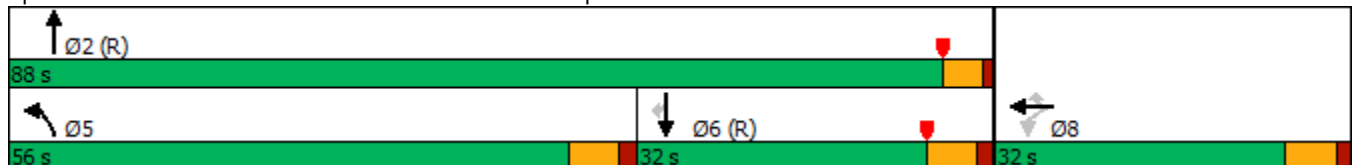


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↶	↶↶↶	↑	↓	↷
Traffic Volume (vph)	86	4	116	1574	199	238	264
Future Volume (vph)	86	4	116	1574	199	238	264
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	56.0	88.0	32.0	32.0
Total Split (%)	26.7%	26.7%	26.7%	46.7%	73.3%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	11.7	11.7	11.7	47.1	97.7	43.2	43.2
Actuated g/C Ratio	0.10	0.10	0.10	0.39	0.81	0.36	0.36
v/c Ratio	0.31	0.31	0.48	0.90	0.15	0.39	0.39
Control Delay	52.0	52.1	13.2	47.5	1.9	33.7	5.7
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	52.0	52.1	13.2	47.7	1.9	33.7	5.7
LOS	D	D	B	D	A	C	A
Approach Delay		30.2			42.6	19.0	
Approach LOS		C			D	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.90  
 Intersection Signal Delay: 36.8  
 Intersection LOS: D  
 Intersection Capacity Utilization 65.4%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/24/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↶	↷	↶	↶↶↶	↶			↶	↶
Traffic Volume (veh/h)	0	0	0	86	4	116	1574	199	0	0	238	264
Future Volume (veh/h)	0	0	0	86	4	116	1574	199	0	0	238	264
Initial Q (Qb), veh				0	0	0	92	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				102	0	27	1789	226	0	0	270	210
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				168	0	75	2126	1622	0	0	735	615
Arrive On Green				0.05	0.00	0.05	0.26	0.57	0.00	0.00	0.42	0.42
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				102	0	27	1789	226	0	0	270	210
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				3.3	0.0	2.0	40.9	6.6	0.0	0.0	11.5	10.6
Cycle Q Clear(g_c), s				3.3	0.0	2.0	40.9	6.6	0.0	0.0	11.5	10.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				168	0	75	2126	1622	0	0	735	615
V/C Ratio(X)				0.61	0.00	0.36	0.84	0.14	0.00	0.00	0.37	0.34
Avail Cap(c_a), veh/h				784	0	349	2126	1622	0	0	801	671
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.72	0.72	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				56.1	0.0	55.5	43.3	5.2	0.0	0.0	26.3	26.0
Incr Delay (d2), s/veh				3.5	0.0	2.9	2.2	0.1	0.0	0.0	1.4	1.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	84.4	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.6	0.0	0.8	38.3	1.4	0.0	0.0	5.6	4.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				59.6	0.0	58.4	129.9	5.3	0.0	0.0	27.7	27.5
LnGrp LOS				E	A	E	F	A	A	A	C	C
Approach Vol, veh/h					129			2015			480	
Approach Delay, s/veh					59.4			115.9			27.6	
Approach LOS					E			F			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		108.4			51.8	56.6		11.6				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			50.0	26.0		26.0				
Max Q Clear Time (g_c+I1), s		8.6			42.9	13.5		5.3				
Green Ext Time (p_c), s		1.2			2.9	1.7		0.3				

Intersection Summary

HCM 6th Ctrl Delay	97.0
HCM 6th LOS	F

Notes

- User approved volume balancing among the lanes for turning movement.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/24/2023



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↔↔↔	↔	↔↔
Traffic Volume (vph)	1	241	1686	191	134
Future Volume (vph)	1	241	1686	191	134
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.1	12.1	73.3	19.1	96.9
Actuated g/C Ratio	0.10	0.10	0.61	0.16	0.81
v/c Ratio	0.54	0.51	0.64	0.74	0.05
Control Delay	61.1	9.0	17.4	57.5	4.7
Queue Delay	0.0	0.0	0.2	0.0	0.0
Total Delay	61.1	9.0	17.6	57.5	4.7
LOS	E	A	B	E	A
Approach Delay	23.0		17.6		35.7
Approach LOS	C		B		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.74  
 Intersection Signal Delay: 20.7  
 Intersection LOS: C  
 Intersection Capacity Utilization 65.4%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

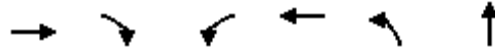
Green River TA (JN:12630)

05/24/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↑↑↑		↘	↑↑	
Traffic Volume (veh/h)	87	1	241	0	0	0	0	1686	131	191	134	0
Future Volume (veh/h)	87	1	241	0	0	0	0	1686	131	191	134	0
Initial Q (Qb), veh	0	0	0				0	92	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	97	1	110				0	1873	137	212	149	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	133	1	211				0	3307	203	243	3011	0
Arrive On Green	0.07	0.07	0.07				0.00	0.66	0.66	0.13	0.83	0.00
Sat Flow, veh/h	1792	18	2834				0	5096	359	1810	3705	0
Grp Volume(v), veh/h	98	0	110				0	1313	697	212	149	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1826	1810	1805	0
Q Serve(g_s), s	6.4	0.0	4.5				0.0	24.8	25.0	13.8	0.9	0.0
Cycle Q Clear(g_c), s	6.4	0.0	4.5				0.0	24.8	25.0	13.8	0.9	0.0
Prop In Lane	0.99		1.00				0.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	135	0	211				0	2289	1216	243	3011	0
V/C Ratio(X)	0.73	0.00	0.52				0.00	0.57	0.57	0.87	0.05	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2289	1209	369	3011	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.93	0.93	0.00
Uniform Delay (d), s/veh	54.4	0.0	53.5				0.0	13.4	13.2	50.9	1.7	0.0
Incr Delay (d2), s/veh	7.3	0.0	2.0				0.0	1.1	2.0	12.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	12.1	10.7	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.6				0.0	16.8	17.4	6.9	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	0.0	55.5				0.0	26.5	25.9	63.6	1.8	0.0
LnGrp LOS	E	A	E				A	C	C	E	A	A
Approach Vol, veh/h		208						2010			361	
Approach Delay, s/veh		58.4						26.3			38.1	
Approach LOS		E						C			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	20.6	84.9	14.4	105.6								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	24.5	61.5	18.5	90.5								
Max Q Clear Time (g_c+I1), s	15.8	27.0	8.4	2.9								
Green Ext Time (p_c), s	0.4	18.8	0.6	0.9								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			30.5									
HCM 6th LOS			C									

Timings  
4: Street A & Green River Rd.

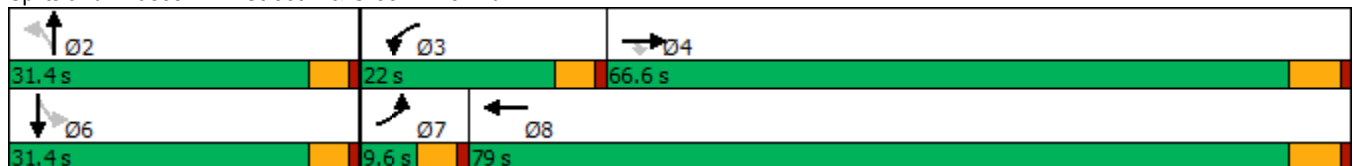


Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	Ø6	Ø7
Lane Configurations	↑↑↑	↑	↵	↑↑↑	↵	↶		
Traffic Volume (vph)	258	118	86	1762	55	0		
Future Volume (vph)	258	118	86	1762	55	0		
Turn Type	NA	Perm	Prot	NA	Perm	NA		
Protected Phases	4		3	8		2	6	7
Permitted Phases		4			2			
Detector Phase	4	4	3	8	2	2		
Switch Phase								
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.8	22.8	9.6	22.8	26.6	26.6	26.6	9.6
Total Split (s)	66.6	66.6	22.0	79.0	31.4	31.4	31.4	9.6
Total Split (%)	55.5%	55.5%	18.3%	65.8%	26.2%	26.2%	26%	8%
Yellow Time (s)	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.8	5.8	4.6	5.8	4.6	4.6		
Lead/Lag	Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	30.6	30.6	8.2	40.9	12.3	12.3		
Actuated g/C Ratio	0.53	0.53	0.14	0.70	0.21	0.21		
v/c Ratio	0.10	0.14	0.36	0.53	0.20	0.02		
Control Delay	11.6	3.5	30.5	6.8	23.9	0.1		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	11.6	3.5	30.5	6.8	23.9	0.1		
LOS	B	A	C	A	C	A		
Approach Delay	9.0			7.9		19.1		
Approach LOS	A			A		B		

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 58.2	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.53	
Intersection Signal Delay: 8.4	Intersection LOS: A
Intersection Capacity Utilization 59.0%	ICU Level of Service B
Analysis Period (min) 15	


























Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary  
4: Street A & Green River Rd.

Green River TA (JN:12630)

05/24/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	0	258	118	86	1762	0	55	0	14	0	0	0
Future Volume (veh/h)	0	258	118	86	1762	0	55	0	14	0	0	0
Initial Q (Qb), veh	0	0	0	0	92	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	0	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	280	128	93	1915	0	60	0	15	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	3	2822	876	127	3606	0	346	0	195	0	230	0
Arrive On Green	0.00	0.52	0.52	0.07	0.68	0.00	0.13	0.00	0.13	0.00	0.00	0.00
Sat Flow, veh/h	1810	5187	1610	1810	5358	0	1810	0	1610	0	1900	0
Grp Volume(v), veh/h	0	280	128	93	1915	0	60	0	15	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	0	1810	0	1610	0	1900	0
Q Serve(g_s), s	0.0	1.4	2.2	2.6	10.0	0.0	1.6	0.0	0.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.4	2.2	2.6	10.0	0.0	1.6	0.0	0.4	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	3	2822	876	127	3606	0	346	0	195	0	230	0
V/C Ratio(X)	0.00	0.10	0.15	0.73	0.53	0.00	0.17	0.00	0.08	0.00	0.00	0.00
Avail Cap(c_a), veh/h	172	6003	1864	599	7228	0	1060	0	821	0	969	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.2	6.4	27.0	5.2	0.0	23.8	0.0	23.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	3.1	0.1	0.0	0.2	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.5	1.3	6.3	0.0	0.8	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.2	6.5	30.1	15.3	0.0	24.0	0.0	23.4	0.0	0.0	0.0
LnGrp LOS	A	A	A	C	B	A	C	A	C	A	A	A
Approach Vol, veh/h		408			2008			75			0	
Approach Delay, s/veh		6.3			16.0			23.9			0.0	
Approach LOS		A			B			C				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.3	8.3	33.0		11.3	0.0	41.3				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		26.8	17.4	60.8		26.8	5.0	73.2				
Max Q Clear Time (g_c+I1), s		3.6	4.6	4.2		0.0	0.0	12.0				
Green Ext Time (p_c), s		0.2	0.1	2.2		0.0	0.0	23.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			14.7									
HCM 6th LOS			B									

Timings

1: Green River Rd. & SR-91 WB Ramps

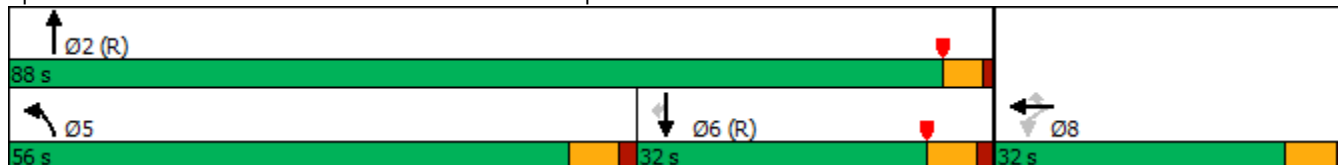


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↶	↶↶↶	↑	↓	↷
Traffic Volume (vph)	86	4	116	1574	199	238	264
Future Volume (vph)	86	4	116	1574	199	238	264
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	56.0	88.0	32.0	32.0
Total Split (%)	26.7%	26.7%	26.7%	46.7%	73.3%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	11.7	11.7	11.7	47.1	97.7	43.2	43.2
Actuated g/C Ratio	0.10	0.10	0.10	0.39	0.81	0.36	0.36
v/c Ratio	0.31	0.31	0.48	0.90	0.15	0.39	0.39
Control Delay	52.0	52.1	13.2	47.5	1.9	33.7	5.7
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	52.0	52.1	13.2	47.7	1.9	33.7	5.7
LOS	D	D	B	D	A	C	A
Approach Delay		30.2			42.6	19.0	
Approach LOS		C			D	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.90  
 Intersection Signal Delay: 36.8  
 Intersection LOS: D  
 Intersection Capacity Utilization 65.4%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)  
 05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↖	↖	↖↖↖	↖			↖	↖
Traffic Volume (veh/h)	0	0	0	86	4	116	1574	199	0	0	238	264
Future Volume (veh/h)	0	0	0	86	4	116	1574	199	0	0	238	264
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				102	0	27	1789	226	0	0	270	210
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				168	0	75	1948	1622	0	0	801	671
Arrive On Green				0.05	0.00	0.05	0.26	0.57	0.00	0.00	0.42	0.42
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				102	0	27	1789	226	0	0	270	210
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				3.3	0.0	2.0	40.9	6.6	0.0	0.0	11.5	10.6
Cycle Q Clear(g_c), s				3.3	0.0	2.0	40.9	6.6	0.0	0.0	11.5	10.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				168	0	75	1948	1622	0	0	801	671
V/C Ratio(X)				0.61	0.00	0.36	0.92	0.14	0.00	0.00	0.34	0.31
Avail Cap(c_a), veh/h				784	0	349	2126	1622	0	0	801	671
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.72	0.72	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				56.1	0.0	55.5	42.8	5.2	0.0	0.0	23.4	23.1
Incr Delay (d2), s/veh				3.5	0.0	2.9	4.7	0.1	0.0	0.0	1.1	1.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.6	0.0	0.8	18.3	1.4	0.0	0.0	5.2	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				59.6	0.0	58.4	47.5	5.3	0.0	0.0	24.5	24.3
LnGrp LOS				E	A	E	D	A	A	A	C	C
Approach Vol, veh/h					129			2015			480	
Approach Delay, s/veh					59.4			42.8			24.4	
Approach LOS					E			D			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		108.4			51.8	56.6		11.6				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			50.0	26.0		26.0				
Max Q Clear Time (g_c+I1), s		8.6			42.9	13.5		5.3				
Green Ext Time (p_c), s		1.2			2.9	1.7		0.3				

Intersection Summary

HCM 6th Ctrl Delay	40.3
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Timings  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023

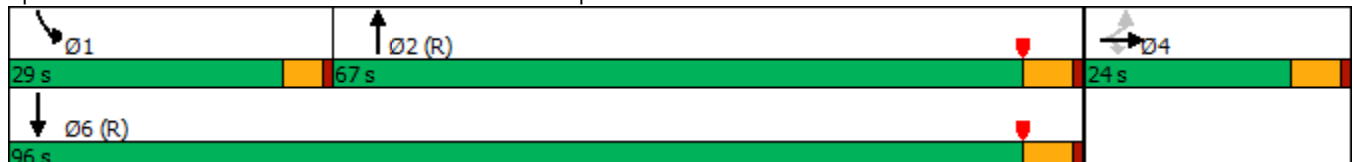


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↗↘	↕↔	↖	↕↕
Traffic Volume (vph)	1	241	1686	191	134
Future Volume (vph)	1	241	1686	191	134
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.1	12.1	73.3	19.1	96.9
Actuated g/C Ratio	0.10	0.10	0.61	0.16	0.81
v/c Ratio	0.54	0.51	0.64	0.74	0.05
Control Delay	61.1	9.0	17.4	57.5	4.7
Queue Delay	0.0	0.0	0.2	0.0	0.0
Total Delay	61.1	9.0	17.6	57.5	4.7
LOS	E	A	B	E	A
Approach Delay	23.0		17.6		35.7
Approach LOS	C		B		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.74  
 Intersection Signal Delay: 20.7  
 Intersection LOS: C  
 Intersection Capacity Utilization 65.4%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↑↑↑		↘	↑↑	
Traffic Volume (veh/h)	87	1	241	0	0	0	0	1686	131	191	134	0
Future Volume (veh/h)	87	1	241	0	0	0	0	1686	131	191	134	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	97	1	110				0	1873	137	212	149	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	133	1	211				0	3261	238	243	3011	0
Arrive On Green	0.07	0.07	0.07				0.00	0.66	0.66	0.13	0.83	0.00
Sat Flow, veh/h	1792	18	2834				0	5096	359	1810	3705	0
Grp Volume(v), veh/h	98	0	110				0	1313	697	212	149	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1826	1810	1805	0
Q Serve(g_s), s	6.4	0.0	4.5				0.0	24.8	25.0	13.8	0.9	0.0
Cycle Q Clear(g_c), s	6.4	0.0	4.5				0.0	24.8	25.0	13.8	0.9	0.0
Prop In Lane	0.99		1.00				0.00		0.20	1.00		0.00
Lane Grp Cap(c), veh/h	135	0	211				0	2289	1209	243	3011	0
V/C Ratio(X)	0.73	0.00	0.52				0.00	0.57	0.58	0.87	0.05	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2289	1209	369	3011	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.93	0.93	0.00
Uniform Delay (d), s/veh	54.4	0.0	53.5				0.0	11.0	11.1	50.9	1.7	0.0
Incr Delay (d2), s/veh	7.3	0.0	2.0				0.0	1.1	2.0	12.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.6				0.0	8.5	9.4	6.9	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.6	0.0	55.5				0.0	12.1	13.1	63.6	1.8	0.0
LnGrp LOS	E	A	E				A	B	B	E	A	A
Approach Vol, veh/h		208						2010			361	
Approach Delay, s/veh		58.4						12.4			38.1	
Approach LOS		E						B			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	20.6	84.9	14.4	105.6								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	24.5	61.5	18.5	90.5								
Max Q Clear Time (g_c+I1), s	15.8	27.0	8.4	2.9								
Green Ext Time (p_c), s	0.4	18.8	0.6	0.9								

Intersection Summary

HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

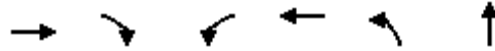
Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	372	0	0	1816	0	0
Future Vol, veh/h	372	0	0	1816	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	413	0	0	2018	0	0

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	413	0	- 207
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	- 6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	- 3.3
Pot Cap-1 Maneuver	-	-	1157	-	0 805
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1157	-	- 805
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	1157	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Timings  
4: Street A & Green River Rd.

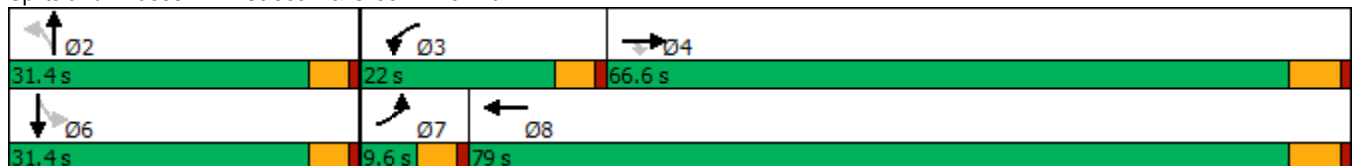


Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	Ø6	Ø7
Lane Configurations	↑↑↑	↑	↵	↑↑↑	↵	↑		
Traffic Volume (vph)	258	118	86	1762	55	0		
Future Volume (vph)	258	118	86	1762	55	0		
Turn Type	NA	Perm	Prot	NA	Perm	NA		
Protected Phases	4		3	8		2	6	7
Permitted Phases		4			2			
Detector Phase	4	4	3	8	2	2		
Switch Phase								
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.8	22.8	9.6	22.8	26.6	26.6	26.6	9.6
Total Split (s)	66.6	66.6	22.0	79.0	31.4	31.4	31.4	9.6
Total Split (%)	55.5%	55.5%	18.3%	65.8%	26.2%	26.2%	26%	8%
Yellow Time (s)	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.8	5.8	4.6	5.8	4.6	4.6		
Lead/Lag	Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	30.6	30.6	8.2	40.9	12.3	12.3		
Actuated g/C Ratio	0.53	0.53	0.14	0.70	0.21	0.21		
v/c Ratio	0.10	0.14	0.36	0.53	0.20	0.02		
Control Delay	11.6	3.5	30.5	6.8	23.9	0.1		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	11.6	3.5	30.5	6.8	23.9	0.1		
LOS	B	A	C	A	C	A		
Approach Delay	9.0			7.9		19.1		
Approach LOS	A			A		B		

Intersection Summary


























Cycle Length: 120  
 Actuated Cycle Length: 58.2  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.53  
 Intersection Signal Delay: 8.4  
 Intersection Capacity Utilization 59.0%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service B

Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary  
4: Street A & Green River Rd.

Green River TA (JN:12630)  
05/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	0	258	118	86	1762	0	55	0	14	0	0	0
Future Volume (veh/h)	0	258	118	86	1762	0	55	0	14	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	0	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	280	128	93	1915	0	60	0	15	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	3	2682	833	128	3503	0	366	0	204	0	241	0
Arrive On Green	0.00	0.52	0.52	0.07	0.68	0.00	0.13	0.00	0.13	0.00	0.00	0.00
Sat Flow, veh/h	1810	5187	1610	1810	5358	0	1810	0	1610	0	1900	0
Grp Volume(v), veh/h	0	280	128	93	1915	0	60	0	15	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	0	1810	0	1610	0	1900	0
Q Serve(g_s), s	0.0	1.4	2.2	2.6	10.0	0.0	1.6	0.0	0.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.4	2.2	2.6	10.0	0.0	1.6	0.0	0.4	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	3	2682	833	128	3503	0	366	0	204	0	241	0
V/C Ratio(X)	0.00	0.10	0.15	0.73	0.55	0.00	0.16	0.00	0.07	0.00	0.00	0.00
Avail Cap(c_a), veh/h	172	6003	1864	599	7228	0	1060	0	821	0	969	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.5	6.7	23.9	4.4	0.0	20.7	0.0	20.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	2.9	0.1	0.0	0.2	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	0.5	1.1	1.2	0.0	0.6	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.5	6.7	26.9	4.5	0.0	20.9	0.0	20.4	0.0	0.0	0.0
LnGrp LOS	A	A	A	C	A	A	C	A	C	A	A	A
Approach Vol, veh/h		408			2008			75				0
Approach Delay, s/veh		6.6			5.6			20.8				0.0
Approach LOS		A			A			C				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.3	8.3	33.0		11.3	0.0	41.3				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		26.8	17.4	60.8		26.8	5.0	73.2				
Max Q Clear Time (g_c+I1), s		3.6	4.6	4.2		0.0	0.0	12.0				
Green Ext Time (p_c), s		0.2	0.1	2.2		0.0	0.0	23.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			6.2									
HCM 6th LOS			A									

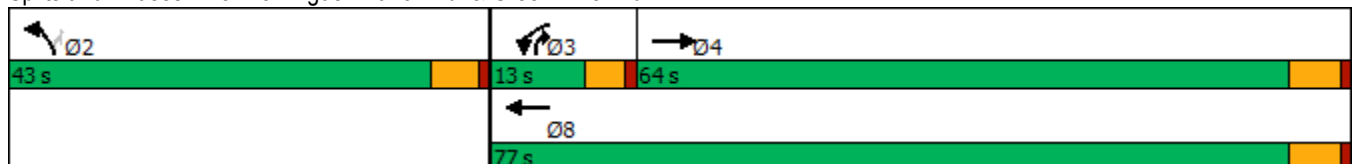
Timings  
5: Dominguez Ranch Rd. & Green River Rd.

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↙	↑↑↑	↘	↗
Traffic Volume (vph)	250	14	1718	130	43
Future Volume (vph)	250	14	1718	130	43
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	64.0	13.0	77.0	43.0	13.0
Total Split (%)	53.3%	10.8%	64.2%	35.8%	10.8%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	35.6	5.6	41.6	14.0	25.3
Actuated g/C Ratio	0.53	0.08	0.62	0.21	0.38
v/c Ratio	0.11	0.10	0.59	0.38	0.07
Control Delay	9.5	36.6	9.3	26.5	5.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.5	36.6	9.3	26.5	5.5
LOS	A	D	A	C	A
Approach Delay	9.5		9.5	21.3	
Approach LOS	A		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 67.3  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.59  
 Intersection Signal Delay: 10.4  
 Intersection LOS: B  
 Intersection Capacity Utilization 50.9%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)  
05/18/2023



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↙	↗
Traffic Volume (veh/h)	250	21	14	1718	130	43
Future Volume (veh/h)	250	21	14	1718	130	43
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	275	16	15	1888	143	13
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2707	156	34	3318	293	291
Arrive On Green	0.54	0.54	0.02	0.64	0.16	0.16
Sat Flow, veh/h	5189	288	1810	5358	1810	1610
Grp Volume(v), veh/h	188	103	15	1888	143	13
Grp Sat Flow(s),veh/h/ln	1729	1848	1810	1729	1810	1610
Q Serve(g_s), s	1.5	1.5	0.5	11.6	4.1	0.4
Cycle Q Clear(g_c), s	1.5	1.5	0.5	11.6	4.1	0.4
Prop In Lane		0.16	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1866	997	34	3318	293	291
V/C Ratio(X)	0.10	0.10	0.45	0.57	0.49	0.04
Avail Cap(c_a), veh/h	3567	1906	269	6545	1206	1103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.3	6.3	27.4	5.8	21.5	19.1
Incr Delay (d2), s/veh	0.0	0.0	3.4	0.2	1.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.2	2.1	1.6	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.3	6.4	30.8	5.9	22.8	19.2
LnGrp LOS	A	A	C	A	C	B
Approach Vol, veh/h	291			1903	156	
Approach Delay, s/veh	6.4			6.1	22.5	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.5	5.6	36.2		41.9
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		37.6	8.4	58.2		71.2
Max Q Clear Time (g_c+I1), s		6.1	2.5	3.5		13.6
Green Ext Time (p_c), s		0.4	0.0	1.7		22.5
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			7.2			
HCM 6th LOS			A			

Timings  
6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↵	↑↑↑	↑↑↑	↵	↵
Traffic Volume (vph)	81	213	1473	5	287
Future Volume (vph)	81	213	1473	5	287
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	26.0	87.8	61.8	32.2	26.0
Total Split (%)	21.7%	73.2%	51.5%	26.8%	21.7%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	17.3	58.2	29.7	13.2	20.9
Actuated g/C Ratio	0.28	0.93	0.48	0.21	0.33
v/c Ratio	0.18	0.05	0.66	0.01	0.57
Control Delay	26.4	2.2	14.8	27.2	21.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	26.4	2.2	14.8	27.2	21.9
LOS	C	A	B	C	C
Approach Delay		8.9	14.8	22.0	
Approach LOS		A	B	C	

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 62.5	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 14.9	Intersection LOS: B
Intersection Capacity Utilization 55.8%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: Green River Rd. & Palisades Dr.





HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
05/18/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑↗		↙	↘
Traffic Volume (veh/h)	81	213	1473	32	5	287
Future Volume (veh/h)	81	213	1473	32	5	287
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	88	232	1601	27	5	94
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	119	3382	2657	45	251	329
Arrive On Green	0.07	0.65	0.51	0.51	0.14	0.14
Sat Flow, veh/h	1810	5358	5424	89	1810	1610
Grp Volume(v), veh/h	88	232	1054	574	5	94
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1884	1810	1610
Q Serve(g_s), s	2.7	0.9	12.4	12.4	0.1	2.8
Cycle Q Clear(g_c), s	2.7	0.9	12.4	12.4	0.1	2.8
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	119	3382	1749	953	251	329
V/C Ratio(X)	0.74	0.07	0.60	0.60	0.02	0.29
Avail Cap(c_a), veh/h	676	7429	3382	1843	822	837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	3.6	10.1	10.1	21.3	19.2
Incr Delay (d2), s/veh	3.3	0.0	0.3	0.6	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.2	3.3	3.7	0.1	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	29.6	3.6	10.4	10.7	21.3	19.7
LnGrp LOS	C	A	B	B	C	B
Approach Vol, veh/h		320	1628		99	
Approach Delay, s/veh		10.8	10.5		19.8	
Approach LOS		B	B		B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.4	34.8			43.1	14.1
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	21.4	56.0			82.0	26.0
Max Q Clear Time (g_c+I1), s	4.7	14.4			2.9	4.8
Green Ext Time (p_c), s	0.1	14.6			1.5	0.2

Intersection Summary

HCM 6th Ctrl Delay			11.0			
HCM 6th LOS			B			

Timings  
1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/18/2023



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↖	↖	↖↖↖	↑	↑	↖
Traffic Volume (vph)	257	21	189	355	261	266	128
Future Volume (vph)	257	21	189	355	261	266	128
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	42.0	42.0	42.0	26.0	78.0	52.0	52.0
Total Split (%)	35.0%	35.0%	35.0%	21.7%	65.0%	43.3%	43.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	17.0	17.0	17.0	13.5	92.4	71.5	71.5
Actuated g/C Ratio	0.14	0.14	0.14	0.11	0.77	0.60	0.60
v/c Ratio	0.63	0.62	0.51	0.68	0.20	0.26	0.14
Control Delay	58.9	58.7	10.1	48.7	7.5	13.9	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.9	58.7	10.1	48.7	7.5	13.9	2.8
LOS	E	E	B	D	A	B	A
Approach Delay		39.1			31.2	10.3	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.68  
 Intersection Signal Delay: 28.1  
 Intersection LOS: C  
 Intersection Capacity Utilization 69.7%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↖	↖	↖↖↖	↑			↑	↗
Traffic Volume (veh/h)	0	0	0	257	21	189	355	261	0	0	266	128
Future Volume (veh/h)	0	0	0	257	21	189	355	261	0	0	266	128
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				298	0	138	390	287	0	0	292	37
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				404	0	180	485	1498	0	0	1222	1022
Arrive On Green				0.11	0.00	0.11	0.16	1.00	0.00	0.00	0.64	0.64
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				298	0	138	390	287	0	0	292	37
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				9.6	0.0	10.0	8.8	0.0	0.0	0.0	7.8	1.0
Cycle Q Clear(g_c), s				9.6	0.0	10.0	8.8	0.0	0.0	0.0	7.8	1.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				404	0	180	485	1498	0	0	1222	1022
V/C Ratio(X)				0.74	0.00	0.77	0.80	0.19	0.00	0.00	0.24	0.04
Avail Cap(c_a), veh/h				1086	0	483	850	1498	0	0	1222	1022
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.88	0.88	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				51.6	0.0	51.8	49.4	0.0	0.0	0.0	9.0	7.8
Incr Delay (d2), s/veh				2.6	0.0	6.7	1.1	0.3	0.0	0.0	0.5	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.4	0.0	4.3	3.5	0.1	0.0	0.0	3.0	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				54.2	0.0	58.5	50.5	0.3	0.0	0.0	9.5	7.9
LnGrp LOS				D	A	E	D	A	A	A	A	A
Approach Vol, veh/h					436			677			329	
Approach Delay, s/veh					55.6			29.2			9.3	
Approach LOS					E			C			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		100.6			17.4	83.2		19.4				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 73			20.0	46.0		36.0				
Max Q Clear Time (g_c+I1), s		2.0			10.8	9.8		12.0				
Green Ext Time (p_c), s		1.6			0.6	1.7		1.4				

Intersection Summary

HCM 6th Ctrl Delay	32.6
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings  
2: Green River Rd. & SR-91 EB Ramps

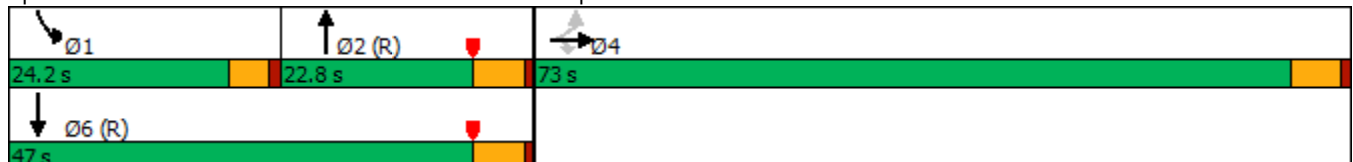


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↕	↗↗	↕↕↕	↖	↕↕
Traffic Volume (vph)	3	1445	450	162	362
Future Volume (vph)	3	1445	450	162	362
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	73.0	73.0	22.8	24.2	47.0
Total Split (%)	60.8%	60.8%	19.0%	20.2%	39.2%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	60.8	60.8	28.0	15.7	48.2
Actuated g/C Ratio	0.51	0.51	0.23	0.13	0.40
v/c Ratio	0.19	0.87	0.47	0.70	0.25
Control Delay	15.5	22.8	40.4	63.0	35.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	22.8	40.4	63.0	35.5
LOS	B	C	D	E	D
Approach Delay	22.1		40.4		44.0
Approach LOS	C		D		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.87  
 Intersection Signal Delay: 30.1  
 Intersection LOS: C  
 Intersection Capacity Utilization 69.7%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗↘					↕↗↘		↘	↕↗	
Traffic Volume (veh/h)	166	3	1445	0	0	0	0	450	112	162	362	0
Future Volume (veh/h)	166	3	1445	0	0	0	0	450	112	162	362	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	168	3	1293				0	455	86	164	366	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	877	16	1398				0	1191	220	194	1499	0
Arrive On Green	0.49	0.49	0.49				0.00	0.27	0.27	0.11	0.42	0.00
Sat Flow, veh/h	1779	32	2834				0	4571	812	1810	3705	0
Grp Volume(v), veh/h	171	0	1293				0	355	186	164	366	0
Grp Sat Flow(s),veh/h/ln	1811	0	1417				0	1729	1754	1810	1805	0
Q Serve(g_s), s	6.3	0.0	51.0				0.0	10.0	10.4	10.7	7.9	0.0
Cycle Q Clear(g_c), s	6.3	0.0	51.0				0.0	10.0	10.4	10.7	7.9	0.0
Prop In Lane	0.98		1.00				0.00		0.46	1.00		0.00
Lane Grp Cap(c), veh/h	893	0	1398				0	936	475	194	1499	0
V/C Ratio(X)	0.19	0.00	0.93				0.00	0.38	0.39	0.85	0.24	0.00
Avail Cap(c_a), veh/h	1019	0	1594				0	936	475	297	1499	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.93	0.93	0.00
Uniform Delay (d), s/veh	17.0	0.0	28.3				0.0	35.6	35.7	52.6	22.8	0.0
Incr Delay (d2), s/veh	0.1	0.0	8.9				0.0	1.2	2.4	12.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	17.6				0.0	4.3	4.6	5.4	3.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.1	0.0	37.2				0.0	36.7	38.1	64.7	23.2	0.0
LnGrp LOS	B	A	D				A	D	D	E	C	A
Approach Vol, veh/h		1464						541			530	
Approach Delay, s/veh		34.9						37.2			36.0	
Approach LOS		C						D			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	17.3	38.0	64.7	55.3								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	19.7	17.3	67.5	41.5								
Max Q Clear Time (g_c+I1), s	12.7	12.4	53.0	9.9								
Green Ext Time (p_c), s	0.2	1.4	6.1	2.2								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			35.6									
HCM 6th LOS			D									

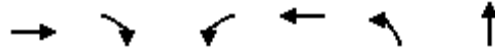
Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	1801	0	0	561	0	0
Future Vol, veh/h	1801	0	0	561	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1857	0	0	578	0	0

Major/Minor	Major1	Major2	Minor1		
Conflicting Flow All	0	0	1857	0	- 929
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	- 6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	- 3.3
Pot Cap-1 Maneuver	-	-	330	-	0 273
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	330	-	- 273
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	330	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	-	0	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Timings  
4: Street A & Green River Rd.

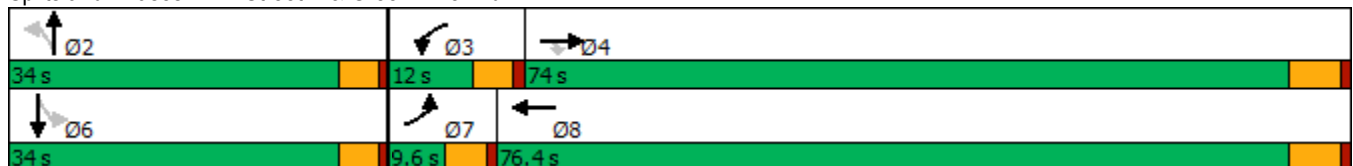


Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	Ø6	Ø7
Lane Configurations	↑↑↑	↑	↵	↑↑↑	↵	↑		
Traffic Volume (vph)	1755	49	20	438	124	0		
Future Volume (vph)	1755	49	20	438	124	0		
Turn Type	NA	Perm	Prot	NA	Perm	NA		
Protected Phases	4		3	8		2	6	7
Permitted Phases		4			2			
Detector Phase	4	4	3	8	2	2		
Switch Phase								
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.8	22.8	9.6	22.8	26.6	26.6	26.6	9.6
Total Split (s)	74.0	74.0	12.0	76.4	34.0	34.0	34.0	9.6
Total Split (%)	61.7%	61.7%	10.0%	63.7%	28.3%	28.3%	28%	8%
Yellow Time (s)	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.8	5.8	4.6	5.8	4.6	4.6		
Lead/Lag	Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	45.1	45.1	6.1	48.5	14.1	14.1		
Actuated g/C Ratio	0.61	0.61	0.08	0.66	0.19	0.19		
v/c Ratio	0.60	0.05	0.15	0.14	0.49	0.23		
Control Delay	10.7	2.6	43.3	4.8	37.3	10.3		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	10.7	2.6	43.3	4.8	37.3	10.3		
LOS	B	A	D	A	D	B		
Approach Delay	10.5			6.5		26.7		
Approach LOS	B			A		C		

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 73.9  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.60  
 Intersection Signal Delay: 11.1  
 Intersection LOS: B  
 Intersection Capacity Utilization 50.9%  
 ICU Level of Service A  
 Analysis Period (min) 15


























Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary  
4: Street A & Green River Rd.

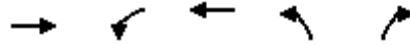
Green River TA (JN:12630)

05/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	0	1755	49	20	438	0	124	0	80	0	0	0
Future Volume (veh/h)	0	1755	49	20	438	0	124	0	80	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	0	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	1908	53	22	476	0	135	0	87	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	3	3113	966	45	3603	0	377	0	239	0	282	0
Arrive On Green	0.00	0.60	0.60	0.03	0.69	0.00	0.15	0.00	0.15	0.00	0.00	0.00
Sat Flow, veh/h	1810	5187	1610	1810	5358	0	1810	0	1610	0	1900	0
Grp Volume(v), veh/h	0	1908	53	22	476	0	135	0	87	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	0	1810	0	1610	0	1900	0
Q Serve(g_s), s	0.0	15.4	0.9	0.8	2.0	0.0	4.6	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.4	0.9	0.8	2.0	0.0	4.6	0.0	3.2	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	3	3113	966	45	3603	0	377	0	239	0	282	0
V/C Ratio(X)	0.00	0.61	0.05	0.48	0.13	0.00	0.36	0.00	0.36	0.00	0.00	0.00
Avail Cap(c_a), veh/h	137	5338	1657	202	5526	0	911	0	714	0	843	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.4	5.5	31.9	3.4	0.0	26.0	0.0	25.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	2.9	0.0	0.0	0.6	0.0	0.9	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.9	0.2	0.4	0.4	0.0	2.0	0.0	1.3	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.6	5.5	34.8	3.4	0.0	26.5	0.0	26.3	0.0	0.0	0.0
LnGrp LOS	A	A	A	C	A	A	C	A	C	A	A	A
Approach Vol, veh/h		1961			498			222				0
Approach Delay, s/veh		8.5			4.8			26.5				0.0
Approach LOS		A			A			C				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.4	6.3	45.6		14.4	0.0	51.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		29.4	7.4	68.2		29.4	5.0	70.6				
Max Q Clear Time (g_c+I1), s		6.6	2.8	17.4		0.0	0.0	4.0				
Green Ext Time (p_c), s		0.9	0.0	22.4		0.0	0.0	3.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			9.3									
HCM 6th LOS			A									



Timings  
5: Dominguez Ranch Rd. & Green River Rd.

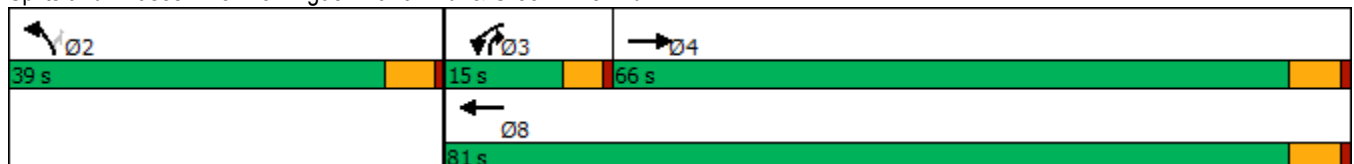


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↵	↑↑↑	↵	↵
Traffic Volume (vph)	1708	52	374	84	44
Future Volume (vph)	1708	52	374	84	44
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	66.0	15.0	81.0	39.0	15.0
Total Split (%)	55.0%	12.5%	67.5%	32.5%	12.5%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	49.0	7.7	58.2	14.2	22.0
Actuated g/C Ratio	0.64	0.10	0.76	0.18	0.29
v/c Ratio	0.59	0.31	0.10	0.26	0.10
Control Delay	13.7	44.9	4.5	34.4	18.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.7	44.9	4.5	34.4	18.7
LOS	B	D	A	C	B
Approach Delay	13.7		9.4	29.0	
Approach LOS	B		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 76.8  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.59  
 Intersection Signal Delay: 13.7  
 Intersection LOS: B  
 Intersection Capacity Utilization 60.9%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

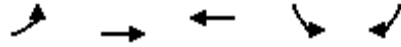
Green River TA (JN:12630)  
 05/18/2023



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	↵
Traffic Volume (veh/h)	1708	127	52	374	84	44
Future Volume (veh/h)	1708	127	52	374	84	44
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1798	110	55	394	88	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2861	175	88	3597	237	290
Arrive On Green	0.57	0.57	0.05	0.69	0.13	0.13
Sat Flow, veh/h	5169	305	1810	5358	1810	1610
Grp Volume(v), veh/h	1243	665	55	394	88	14
Grp Sat Flow(s),veh/h/ln	1729	1845	1810	1729	1810	1610
Q Serve(g_s), s	15.3	15.4	1.9	1.6	2.8	0.5
Cycle Q Clear(g_c), s	15.3	15.4	1.9	1.6	2.8	0.5
Prop In Lane		0.17	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1980	1056	88	3597	237	290
V/C Ratio(X)	0.63	0.63	0.62	0.11	0.37	0.05
Avail Cap(c_a), veh/h	3263	1741	295	6115	953	927
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.1	9.1	29.8	3.2	25.3	21.6
Incr Delay (d2), s/veh	0.3	0.6	2.7	0.0	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	4.4	0.8	0.3	1.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.4	9.7	32.4	3.3	26.3	21.7
LnGrp LOS	A	A	C	A	C	C
Approach Vol, veh/h	1908			449	102	
Approach Delay, s/veh	9.5			6.8	25.7	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		13.8	7.7	42.3		50.0
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		33.6	10.4	60.2		75.2
Max Q Clear Time (g_c+I1), s		4.8	3.9	17.4		3.6
Green Ext Time (p_c), s		0.2	0.0	19.1		2.6
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			9.7			
HCM 6th LOS			A			

Timings  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
05/18/2023



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑	↖	↗
Traffic Volume (vph)	166	1589	417	14	67
Future Volume (vph)	166	1589	417	14	67
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	37.0	87.0	50.0	33.0	37.0
Total Split (%)	30.8%	72.5%	41.7%	27.5%	30.8%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	10.0	38.7	17.1	13.5	13.2
Actuated g/C Ratio	0.23	0.91	0.40	0.32	0.31
v/c Ratio	0.41	0.35	0.22	0.02	0.13
Control Delay	20.0	3.6	11.2	14.2	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	20.0	3.6	11.2	14.2	3.1
LOS	B	A	B	B	A
Approach Delay		5.2	11.2	5.0	
Approach LOS		A	B	A	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 42.6  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.41  
 Intersection Signal Delay: 6.3  
 Intersection Capacity Utilization 49.0%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service A

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
05/18/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑		↖	↗
Traffic Volume (veh/h)	166	1589	417	17	14	67
Future Volume (veh/h)	166	1589	417	17	14	67
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	171	1638	430	15	14	10
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	225	3367	2123	74	106	294
Arrive On Green	0.12	0.65	0.41	0.41	0.06	0.06
Sat Flow, veh/h	1810	5358	5318	179	1810	1610
Grp Volume(v), veh/h	171	1638	288	157	14	10
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1868	1810	1610
Q Serve(g_s), s	3.7	6.6	2.2	2.2	0.3	0.2
Cycle Q Clear(g_c), s	3.7	6.6	2.2	2.2	0.3	0.2
Prop In Lane	1.00			0.10	1.00	1.00
Lane Grp Cap(c), veh/h	225	3367	1426	771	106	294
V/C Ratio(X)	0.76	0.49	0.20	0.20	0.13	0.03
Avail Cap(c_a), veh/h	1429	10269	3726	2013	1182	1252
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	3.7	7.7	7.7	18.3	13.8
Incr Delay (d2), s/veh	2.0	0.1	0.1	0.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.4	0.5	0.6	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.3	3.8	7.8	7.9	18.9	13.8
LnGrp LOS	B	A	A	A	B	B
Approach Vol, veh/h		1809	445		24	
Approach Delay, s/veh		5.3	7.8		16.8	
Approach LOS		A	A		B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.7	22.7			32.4	8.6
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	32.4	44.2			81.2	26.8
Max Q Clear Time (g_c+11), s	5.7	4.2			8.6	2.3
Green Ext Time (p_c), s	0.2	2.7			18.0	0.0
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			5.9			
HCM 6th LOS			A			

**APPENDIX 5.2: E+P (PHASE 2) CONDITIONS INTERSECTION  
OPERATIONS ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

**Volume Development**  
**AM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 2) PCE:	1,587	203	0	0	243	264	0	0	0	100	4	116	2,515
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 2) PCE:	0	1,702	144	191	153	0	87	1	255	0	0	0	2,531
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 2) PCE:	0	0	0	0	0	0	0	405	0	0	1,846	0	2,250
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 2) PCE:	55	0	14	69	0	102	47	244	118	86	1,689	135	2,558
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 2) PCE:	139	0	43	0	0	0	0	297	29	14	1,770	0	2,291
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 2) PCE:	0	0	0	5	0	301	94	247	0	0	1,511	32	2,189

**Volume Development  
PM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 2) PCE:	362	263	0	0	270	128	0	0	0	269	21	189	1,500
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 2) PCE:	0	459	119	162	378	0	166	3	1,457	0	0	0	2,743
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 2) PCE:	0	0	0	0	0	0	0	1,829	0	0	577	0	2,406
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 2) PCE:	124	0	80	96	0	33	93	1,690	49	20	421	68	2,674
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 2) PCE:	92	0	44	0	0	0	0	1,733	132	52	418	0	2,471
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Phase 2) PCE:	0	0	0	14	0	79	173	1,608	0	0	449	17	2,340



Timings

1: Green River Rd. & SR-91 WB Ramps

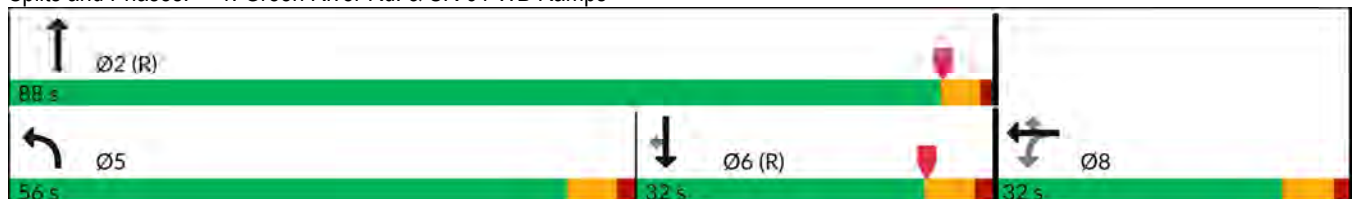


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↷	↶↷	↶	↷	↷
Traffic Volume (vph)	100	4	116	1587	203	243	264
Future Volume (vph)	100	4	116	1587	203	243	264
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	56.0	88.0	32.0	32.0
Total Split (%)	26.7%	26.7%	26.7%	46.7%	73.3%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	12.1	12.1	12.1	47.3	97.3	42.7	42.7
Actuated g/C Ratio	0.10	0.10	0.10	0.39	0.81	0.36	0.36
v/c Ratio	0.34	0.34	0.46	0.89	0.15	0.40	0.39
Control Delay (s/veh)	52.8	52.9	12.8	47.2	1.9	34.3	5.7
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay (s/veh)	52.8	52.9	12.8	47.4	1.9	34.3	5.7
LOS	D	D	B	D	A	C	A
Approach Delay (s/veh)		31.9			42.3	19.5	
Approach LOS		C			D	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.90  
 Intersection Signal Delay (s/veh): 36.8  
 Intersection LOS: D  
 Intersection Capacity Utilization 65.7%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

06/05/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↖	↗	↘↙↖↗	↑			↑	↗
Traffic Volume (veh/h)	0	0	0	100	4	116	1587	203	0	0	243	264
Future Volume (veh/h)	0	0	0	100	4	116	1587	203	0	0	243	264
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				118	0	27	1803	231	0	0	276	210
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				186	0	83	1960	1612	0	0	788	659
Arrive On Green				0.05	0.00	0.05	0.26	0.57	0.00	0.00	0.41	0.41
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				118	0	27	1803	231	0	0	276	210
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				3.8	0.0	1.9	41.3	6.9	0.0	0.0	11.9	10.7
Cycle Q Clear(g_c), s				3.8	0.0	1.9	41.3	6.9	0.0	0.0	11.9	10.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				186	0	83	1960	1612	0	0	788	659
V/C Ratio(X)				0.63	0.00	0.33	0.92	0.14	0.00	0.00	0.35	0.32
Avail Cap(c_a), veh/h				784	0	349	2126	1612	0	0	788	659
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.71	0.71	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.8	0.0	54.9	42.8	5.4	0.0	0.0	24.1	23.7
Incr Delay (d2), s/veh				3.5	0.0	2.3	4.8	0.1	0.0	0.0	1.2	1.3
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	0.0	0.8	18.5	1.6	0.0	0.0	5.4	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				59.3	0.0	57.2	47.5	5.5	0.0	0.0	25.3	25.0
LnGrp LOS				E		E	D	A			C	C
Approach Vol, veh/h					145			2034			486	
Approach Delay, s/veh					58.9			42.8			25.2	
Approach LOS					E			D			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		107.8			52.1	55.7		12.2				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			50.0	26.0		26.0				
Max Q Clear Time (g_c+I1), s		8.9			43.3	13.9		5.8				
Green Ext Time (p_c), s		1.3			2.8	1.7		0.4				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	40.4
HCM 6th LOS	D

Notes

- User approved volume balancing among the lanes for turning movement.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings  
2: Green River Rd. & SR-91 EB Ramps

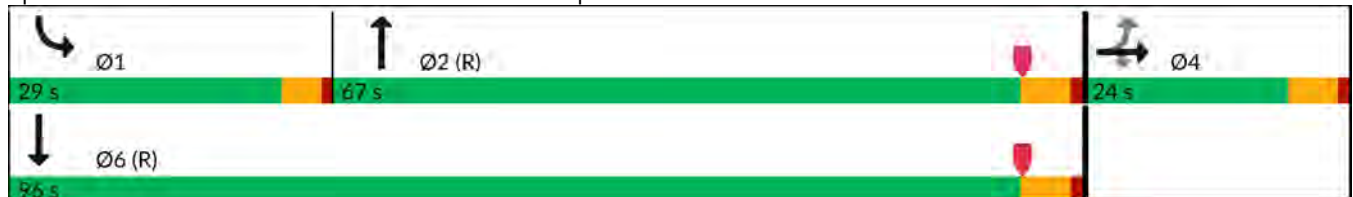


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↗↗	↕↕↕	↘	↕↕
Traffic Volume (vph)	1	255	1702	191	153
Future Volume (vph)	1	255	1702	191	153
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.1	12.1	73.3	19.1	96.9
Actuated g/C Ratio	0.10	0.10	0.61	0.16	0.81
v/c Ratio	0.53	0.52	0.65	0.73	0.05
Control Delay (s/veh)	61.0	9.0	17.6	54.7	4.9
Queue Delay	0.0	0.0	0.2	0.0	0.0
Total Delay (s/veh)	61.0	9.0	17.8	54.7	4.9
LOS	E	A	B	D	A
Approach Delay (s/veh)	22.4		17.9		32.6
Approach LOS	C		B		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.74  
 Intersection Signal Delay (s/veh): 20.5      Intersection LOS: C  
 Intersection Capacity Utilization 65.7%      ICU Level of Service C  
 Analysis Period (min) 15




















Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

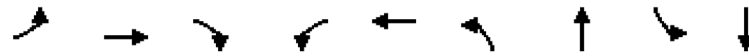
Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	1	255	0	0	0	0	1702	144	191	153	0
Future Volume (veh/h)	87	1	255	0	0	0	0	1702	144	191	153	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	97	1	125				0	1891	151	212	170	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	134	1	212				0	3235	257	243	3009	0
Arrive On Green	0.07	0.07	0.07				0.00	0.66	0.66	0.13	0.83	0.00
Sat Flow, veh/h	1792	18	2834				0	5060	389	1810	3705	0
Grp Volume(v), veh/h	98	0	125				0	1335	707	212	170	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1820	1810	1805	0
Q Serve(g_s), s	6.4	0.0	5.1				0.0	25.5	25.8	13.8	1.0	0.0
Cycle Q Clear(g_c), s	6.4	0.0	5.1				0.0	25.5	25.8	13.8	1.0	0.0
Prop In Lane	0.99		1.00				0.00		0.21	1.00		0.00
Lane Grp Cap(c), veh/h	135	0	212				0	2288	1204	243	3009	0
V/C Ratio(X)	0.72	0.00	0.59				0.00	0.58	0.59	0.87	0.06	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2288	1204	369	3009	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	54.3	0.0	53.7				0.0	11.2	11.2	50.9	1.7	0.0
Incr Delay (d2), s/veh	7.1	0.0	2.6				0.0	1.1	2.1	12.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.9				0.0	8.7	9.6	6.9	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.4	0.0	56.3				0.0	12.3	13.3	63.5	1.8	0.0
LnGrp LOS	E		E					B	B	E	A	
Approach Vol, veh/h		223						2042			382	
Approach Delay, s/veh		58.6						12.6			36.0	
Approach LOS		E						B			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	20.6	84.9	14.5	105.5								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	24.5	61.5	18.5	90.5								
Max Q Clear Time (g_c+I1), s	15.8	27.8	8.4	3.0								
Green Ext Time (p_c), s	0.4	19.0	0.6	1.0								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			19.9									
HCM 6th LOS			B									

Timings

4: Street A & Green River Rd.

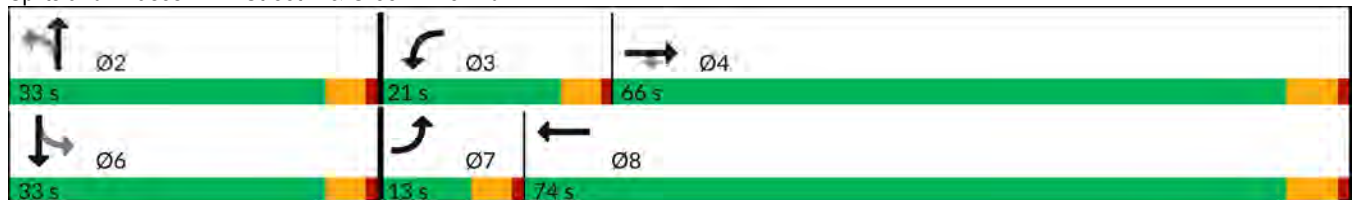


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↗	↖	↑↑↑	↖	↗		↕
Traffic Volume (vph)	47	244	118	86	1689	55	0	69	0
Future Volume (vph)	47	244	118	86	1689	55	0	69	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	26.6	26.6	26.6	26.6
Total Split (s)	13.0	66.0	66.0	21.0	74.0	33.0	33.0	33.0	33.0
Total Split (%)	10.8%	55.0%	55.0%	17.5%	61.7%	27.5%	27.5%	27.5%	27.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	7.0	41.9	41.9	9.2	46.8	13.1	13.1		13.1
Actuated g/C Ratio	0.09	0.54	0.54	0.12	0.60	0.17	0.17		0.17
v/c Ratio	0.31	0.09	0.13	0.43	0.63	0.34	0.01		0.54
Control Delay (s/veh)	46.2	9.6	2.5	44.2	11.7	40.4	0.0		22.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	46.2	9.6	2.5	44.2	11.7	40.4	0.0		22.5
LOS	D	A	A	D	B	D	A		C
Approach Delay (s/veh)		11.8			13.2		32.3		22.5
Approach LOS		B			B		C		C

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 77.5	
Natural Cycle: 70	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.64	
Intersection Signal Delay (s/veh): 14.1	Intersection LOS: B
Intersection Capacity Utilization 69.1%	ICU Level of Service C
Analysis Period (min) 15	


























Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary  
 4: Street A & Green River Rd.

Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	47	244	118	86	1689	135	55	0	14	69	0	102
Future Volume (veh/h)	47	244	118	86	1689	135	55	0	14	69	0	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	51	265	128	93	1836	147	60	0	15	75	0	111
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	81	2923	907	121	2867	229	285	0	251	153	16	145
Arrive On Green	0.04	0.56	0.56	0.07	0.59	0.59	0.16	0.00	0.16	0.16	0.00	0.16
Sat Flow, veh/h	1810	5187	1610	1810	4897	391	1302	0	1610	522	106	929
Grp Volume(v), veh/h	51	265	128	93	1295	688	60	0	15	186	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1830	1302	0	1610	1557	0	0
Q Serve(g_s), s	1.9	1.6	2.6	3.5	17.4	17.5	0.0	0.0	0.6	6.3	0.0	0.0
Cycle Q Clear(g_c), s	1.9	1.6	2.6	3.5	17.4	17.5	3.3	0.0	0.6	8.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	0.40		0.60
Lane Grp Cap(c), veh/h	81	2923	907	121	2025	1071	285	0	251	315	0	0
V/C Ratio(X)	0.63	0.09	0.14	0.77	0.64	0.64	0.21	0.00	0.06	0.59	0.00	0.00
Avail Cap(c_a), veh/h	217	4450	1382	423	3361	1778	610	0	652	695	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	32.9	7.0	7.3	32.2	9.6	9.7	26.4	0.0	25.2	28.3	0.0	0.0
Incr Delay (d2), s/veh	2.9	0.0	0.1	3.8	0.3	0.6	0.4	0.0	0.1	1.8	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.5	0.7	1.6	4.8	5.2	0.9	0.0	0.2	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	35.9	7.1	7.3	36.0	10.0	10.3	26.8	0.0	25.3	30.1	0.0	0.0
LnGrp LOS	D	A	A	D	A	B	C		C	C		
Approach Vol, veh/h		444			2076			75				186
Approach Delay, s/veh		10.4			11.3			26.5				30.1
Approach LOS		B			B			C				C
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.5	9.3	45.3		15.5	7.7	46.9				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		28.4	16.4	60.2		28.4	8.4	68.2				
Max Q Clear Time (g_c+I1), s		5.3	5.5	4.6		10.0	3.9	19.5				
Green Ext Time (p_c), s		0.2	0.1	2.1		1.0	0.0	21.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			12.8									
HCM 6th LOS			B									

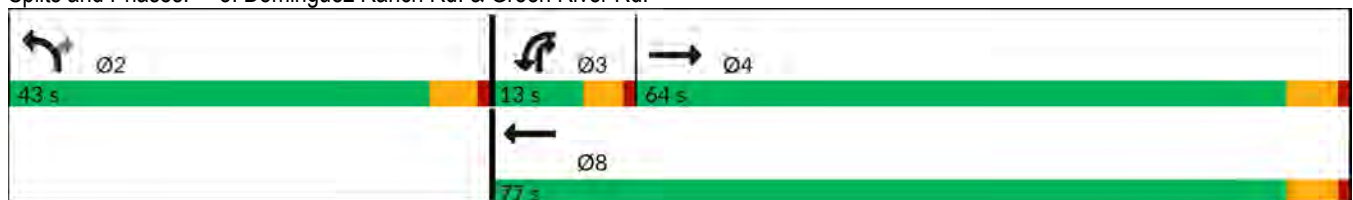
Timings  
5: Dominguez Ranch Rd. & Green River Rd.

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↙	↑↑↑	↘	↗
Traffic Volume (vph)	297	14	1770	139	43
Future Volume (vph)	297	14	1770	139	43
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	64.0	13.0	77.0	43.0	13.0
Total Split (%)	53.3%	10.8%	64.2%	35.8%	10.8%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	37.7	5.7	43.6	14.3	25.7
Actuated g/C Ratio	0.54	0.08	0.63	0.21	0.37
v/c Ratio	0.12	0.10	0.59	0.41	0.07
Control Delay (s/veh)	9.3	38.1	9.3	28.1	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.3	38.1	9.3	28.1	5.8
LOS	A	D	A	C	A
Approach Delay (s/veh)	9.3		9.6	22.9	
Approach LOS	A		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 69.7  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.60  
 Intersection Signal Delay (s/veh): 10.6  
 Intersection LOS: B  
 Intersection Capacity Utilization 51.9%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.











HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

06/05/2024

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↙	↗
Traffic Volume (veh/h)	297	29	14	1770	139	43
Future Volume (veh/h)	297	29	14	1770	139	43
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	326	25	15	1945	153	13
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2714	205	33	3366	289	287
Arrive On Green	0.55	0.55	0.02	0.65	0.16	0.16
Sat Flow, veh/h	5090	372	1810	5358	1810	1610
Grp Volume(v), veh/h	228	123	15	1945	153	13
Grp Sat Flow(s),veh/h/ln	1729	1833	1810	1729	1810	1610
Q Serve(g_s), s	1.8	1.9	0.5	12.3	4.5	0.4
Cycle Q Clear(g_c), s	1.8	1.9	0.5	12.3	4.5	0.4
Prop In Lane		0.20	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1908	1011	33	3366	289	287
V/C Ratio(X)	0.12	0.12	0.45	0.58	0.53	0.05
Avail Cap(c_a), veh/h	3442	1825	260	6316	1164	1065
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.3	6.3	28.4	5.8	22.6	19.9
Incr Delay (d2), s/veh	0.0	0.1	3.5	0.2	1.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.2	2.3	1.8	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.3	6.3	31.9	5.9	24.1	20.0
LnGrp LOS	A	A	C	A	C	B
Approach Vol, veh/h	351			1960	166	
Approach Delay, s/veh	6.3			6.1	23.7	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.7	5.7	38.1		43.7
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		37.6	8.4	58.2		71.2
Max Q Clear Time (g_c+I1), s		6.5	2.5	3.9		14.3
Green Ext Time (p_c), s		0.4	0.0	2.1		23.6
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			7.3			
HCM 6th LOS			A			



Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↶	↑↑↑	↑↑↑↶	↶	↷
Traffic Volume (vph)	94	247	1511	5	301
Future Volume (vph)	94	247	1511	5	301
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	26.0	87.8	61.8	32.2	26.0
Total Split (%)	21.7%	73.2%	51.5%	26.8%	21.7%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	18.1	60.0	30.7	13.1	21.8
Actuated g/C Ratio	0.28	0.93	0.48	0.20	0.34
v/c Ratio	0.20	0.05	0.67	0.01	0.59
Control Delay (s/veh)	26.8	2.1	15.2	28.2	22.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.8	2.1	15.2	28.2	22.9
LOS	C	A	B	C	C
Approach Delay (s/veh)		9.0	15.2	23.0	
Approach LOS		A	B	C	

Intersection Summary

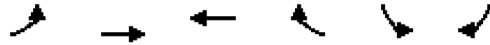
Cycle Length: 120	
Actuated Cycle Length: 64.3	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 15.3	Intersection LOS: B
Intersection Capacity Utilization 57.3%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
06/05/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↔	↑↑↑	↑↑↑↔		↔	↔
Traffic Volume (veh/h)	94	247	1511	32	5	301
Future Volume (veh/h)	94	247	1511	32	5	301
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	102	268	1642	27	5	109
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	133	3414	2668	44	257	347
Arrive On Green	0.07	0.66	0.51	0.51	0.14	0.14
Sat Flow, veh/h	1810	5358	5427	86	1810	1610
Grp Volume(v), veh/h	102	268	1080	589	5	109
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1884	1810	1610
Q Serve(g_s), s	3.3	1.1	13.4	13.4	0.1	3.4
Cycle Q Clear(g_c), s	3.3	1.1	13.4	13.4	0.1	3.4
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	133	3414	1756	957	257	347
V/C Ratio(X)	0.76	0.08	0.62	0.62	0.02	0.31
Avail Cap(c_a), veh/h	646	7092	3229	1760	784	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	3.7	10.6	10.6	22.1	19.8
Incr Delay (d2), s/veh	3.4	0.0	0.4	0.6	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.2	3.7	4.2	0.1	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	30.7	3.7	10.9	11.2	22.2	20.3
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h		370	1669		114	
Approach Delay, s/veh		11.1	11.0		20.4	
Approach LOS		B	B		C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.0	36.2			45.3	14.7
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	21.4	56.0			82.0	26.0
Max Q Clear Time (g_c+I1), s	5.3	15.4			3.1	5.4
Green Ext Time (p_c), s	0.1	15.0			1.8	0.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			11.5			
HCM 6th LOS			B			

Timings

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↷	↶↷	↑	↓	↷
Traffic Volume (vph)	269	21	189	362	263	270	128
Future Volume (vph)	269	21	189	362	263	270	128
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	42.0	42.0	42.0	26.0	78.0	52.0	52.0
Total Split (%)	35.0%	35.0%	35.0%	21.7%	65.0%	43.3%	43.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	17.4	17.4	17.4	13.7	92.0	70.9	70.9
Actuated g/C Ratio	0.15	0.15	0.15	0.11	0.77	0.59	0.59
v/c Ratio	0.64	0.63	0.50	0.68	0.19	0.26	0.14
Control Delay (s/veh)	59.4	58.8	9.9	48.5	7.8	14.2	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.4	58.8	9.9	48.5	7.8	14.2	2.8
LOS	E	E	A	D	A	B	A
Approach Delay (s/veh)		39.7			31.4	10.5	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.68  
 Intersection Signal Delay (s/veh): 28.5      Intersection LOS: C  
 Intersection Capacity Utilization 70.6%      ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

06/05/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↖	↗	↘↙↖↗	↑			↑	↗
Traffic Volume (veh/h)	0	0	0	269	21	189	362	263	0	0	270	128
Future Volume (veh/h)	0	0	0	269	21	189	362	263	0	0	270	128
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				312	0	138	398	289	0	0	297	37
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				408	0	181	493	1496	0	0	1217	1019
Arrive On Green				0.11	0.00	0.11	0.16	1.00	0.00	0.00	0.64	0.64
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				312	0	138	398	289	0	0	297	37
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				10.0	0.0	10.0	9.0	0.0	0.0	0.0	8.0	1.0
Cycle Q Clear(g_c), s				10.0	0.0	10.0	9.0	0.0	0.0	0.0	8.0	1.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				408	0	181	493	1496	0	0	1217	1019
V/C Ratio(X)				0.77	0.00	0.76	0.81	0.19	0.00	0.00	0.24	0.04
Avail Cap(c_a), veh/h				1086	0	483	850	1496	0	0	1217	1019
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.86	0.86	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				51.7	0.0	51.7	49.2	0.0	0.0	0.0	9.2	7.9
Incr Delay (d2), s/veh				3.0	0.0	6.4	1.0	0.2	0.0	0.0	0.5	0.1
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.6	0.0	4.2	3.6	0.1	0.0	0.0	3.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				54.7	0.0	58.1	50.3	0.2	0.0	0.0	9.7	8.0
LnGrp LOS				D		E	D	A			A	A
Approach Vol, veh/h					450			687			334	
Approach Delay, s/veh					55.8			29.2			9.5	
Approach LOS					E			C			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		100.5			17.6	82.9		19.5				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 73			20.0	46.0		36.0				
Max Q Clear Time (g_c+I1), s		2.0			11.0	10.0		12.0				
Green Ext Time (p_c), s		1.6			0.6	1.8		1.5				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	32.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

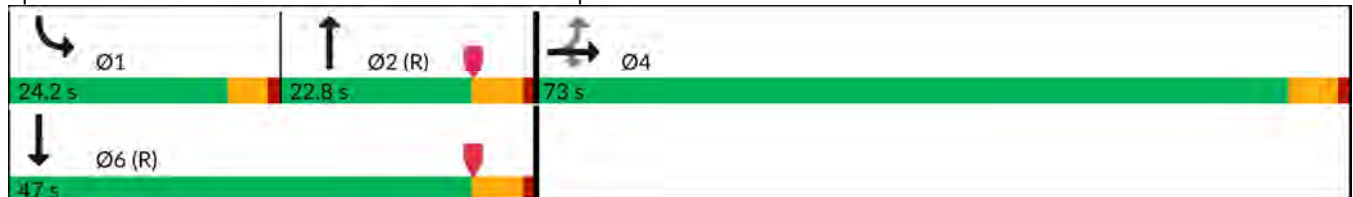
Timings  
2: Green River Rd. & SR-91 EB Ramps

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↕	↗↘	↕↕↕	↙	↕↕
Traffic Volume (vph)	3	1457	459	162	378
Future Volume (vph)	3	1457	459	162	378
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	73.0	73.0	22.8	24.2	47.0
Total Split (%)	60.8%	60.8%	19.0%	20.2%	39.2%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	61.8	61.8	27.0	15.7	47.2
Actuated g/C Ratio	0.52	0.52	0.23	0.13	0.39
v/c Ratio	0.18	0.87	0.50	0.69	0.26
Control Delay (s/veh)	15.0	23.4	41.2	63.0	36.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.0	23.4	41.2	63.0	36.5
LOS	B	C	D	E	D
Approach Delay (s/veh)	22.6		41.2		44.5
Approach LOS	C		D		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 65  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.87  
 Intersection Signal Delay (s/veh): 30.8  
 Intersection LOS: C  
 Intersection Capacity Utilization 70.6%  
 ICU Level of Service C  
 Analysis Period (min) 15




















Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

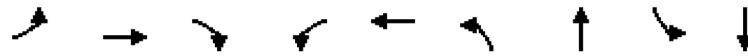
Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	166	3	1457	0	0	0	0	459	119	162	378	0
Future Volume (veh/h)	166	3	1457	0	0	0	0	459	119	162	378	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	168	3	1305				0	464	93	164	382	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	884	16	1408				0	1162	227	194	1485	0
Arrive On Green	0.50	0.50	0.50				0.00	0.27	0.27	0.11	0.41	0.00
Sat Flow, veh/h	1779	32	2834				0	4525	851	1810	3705	0
Grp Volume(v), veh/h	171	0	1305				0	366	191	164	382	0
Grp Sat Flow(s),veh/h/ln	1811	0	1417				0	1729	1747	1810	1805	0
Q Serve(g_s), s	6.3	0.0	51.5				0.0	10.4	10.8	10.7	8.4	0.0
Cycle Q Clear(g_c), s	6.3	0.0	51.5				0.0	10.4	10.8	10.7	8.4	0.0
Prop In Lane	0.98		1.00				0.00		0.49	1.00		0.00
Lane Grp Cap(c), veh/h	900	0	1408				0	923	466	194	1485	0
V/C Ratio(X)	0.19	0.00	0.93				0.00	0.40	0.41	0.85	0.26	0.00
Avail Cap(c_a), veh/h	1019	0	1594				0	923	466	297	1485	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	16.8	0.0	28.2				0.0	36.1	36.2	52.6	23.2	0.0
Incr Delay (d2), s/veh	0.1	0.0	9.1				0.0	1.3	2.6	12.0	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	17.8				0.0	4.4	4.8	5.4	3.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.9	0.0	37.2				0.0	37.3	38.8	64.6	23.6	0.0
LnGrp LOS	B		D					D	D	E	C	
Approach Vol, veh/h		1476						557			546	
Approach Delay, s/veh		34.9						37.9			35.9	
Approach LOS		C						D			D	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	17.3	37.5		65.1				54.9				
Change Period (Y+Rc), s	4.5	5.5		5.5				5.5				
Max Green Setting (Gmax), s	19.7	17.3		67.5				41.5				
Max Q Clear Time (g_c+I1), s	12.7	12.8		53.5				10.4				
Green Ext Time (p_c), s	0.2	1.3		6.1				2.4				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			35.7									
HCM 6th LOS			D									

Timings

4: Street A & Green River Rd.

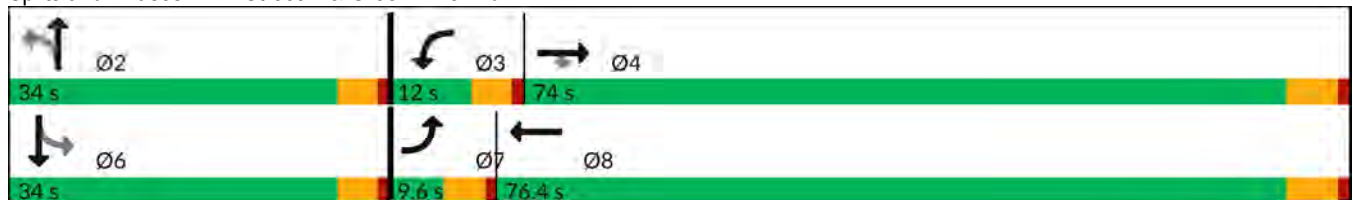


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↗	↖	↑↑↑	↖	↗		↕
Traffic Volume (vph)	93	1690	49	20	421	124	0	96	0
Future Volume (vph)	93	1690	49	20	421	124	0	96	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	26.6	26.6	26.6	26.6
Total Split (s)	9.6	74.0	74.0	12.0	76.4	34.0	34.0	34.0	34.0
Total Split (%)	8.0%	61.7%	61.7%	10.0%	63.7%	28.3%	28.3%	28.3%	28.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	5.6	39.8	39.8	6.2	32.3	14.8	14.8		14.8
Actuated g/C Ratio	0.08	0.57	0.57	0.09	0.46	0.21	0.21		0.21
v/c Ratio	0.69	0.61	0.05	0.13	0.22	0.47	0.21		0.41
Control Delay (s/veh)	66.2	11.5	2.8	42.3	9.1	35.8	9.2		21.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	66.2	11.5	2.8	42.3	9.1	35.8	9.2		21.5
LOS	E	B	A	D	A	D	A		C
Approach Delay (s/veh)		14.1			10.5		25.4		21.6
Approach LOS		B			B		C		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 69.5  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.70  
 Intersection Signal Delay (s/veh): 14.6  
 Intersection LOS: B  
 Intersection Capacity Utilization 63.3%  
 ICU Level of Service B  
 Analysis Period (min) 15


























Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary  
 4: Street A & Green River Rd.

Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	93	1690	49	20	421	68	124	0	80	96	0	33
Future Volume (veh/h)	93	1690	49	20	421	68	124	0	80	96	0	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	101	1837	53	22	458	74	135	0	87	104	0	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	130	2997	930	45	2398	379	357	0	275	223	14	49
Arrive On Green	0.07	0.58	0.58	0.03	0.53	0.53	0.17	0.00	0.17	0.17	0.00	0.17
Sat Flow, veh/h	1810	5187	1610	1810	4515	714	1394	0	1610	748	82	288
Grp Volume(v), veh/h	101	1837	53	22	348	184	135	0	87	140	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1771	1394	0	1610	1118	0	0
Q Serve(g_s), s	3.6	15.4	1.0	0.8	3.5	3.6	0.0	0.0	3.1	5.5	0.0	0.0
Cycle Q Clear(g_c), s	3.6	15.4	1.0	0.8	3.5	3.6	5.6	0.0	3.1	8.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.40	1.00		1.00	0.74		0.26
Lane Grp Cap(c), veh/h	130	2997	930	45	1836	941	357	0	275	286	0	0
V/C Ratio(X)	0.78	0.61	0.06	0.48	0.19	0.20	0.38	0.00	0.32	0.49	0.00	0.00
Avail Cap(c_a), veh/h	136	5333	1655	202	3680	1885	736	0	714	665	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	30.3	9.2	6.1	31.9	8.1	8.1	25.1	0.0	24.1	27.1	0.0	0.0
Incr Delay (d2), s/veh	20.9	0.2	0.0	2.9	0.0	0.1	0.7	0.0	0.7	1.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.1	0.2	0.4	1.0	1.1	1.9	0.0	1.2	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	51.2	9.4	6.1	34.9	8.2	8.2	25.8	0.0	24.7	28.4	0.0	0.0
LnGrp LOS	D	A	A	C	A	A	C		C	C		
Approach Vol, veh/h		1991			554			222				140
Approach Delay, s/veh		11.4			9.2			25.4				28.4
Approach LOS		B			A			C				C
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.9	6.3	44.1		15.9	9.4	41.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		29.4	7.4	68.2		29.4	5.0	70.6				
Max Q Clear Time (g_c+I1), s		7.6	2.8	17.4		10.6	5.6	5.6				
Green Ext Time (p_c), s		0.9	0.0	21.0		0.7	0.0	3.4				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh				12.9								
HCM 6th LOS				B								



Timings

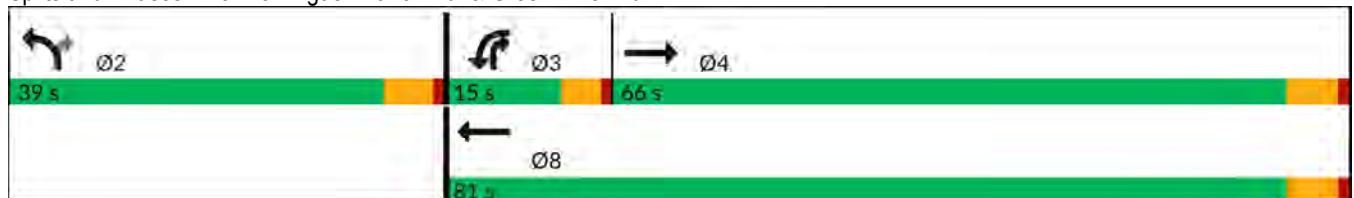
5: Dominguez Ranch Rd. & Green River Rd.

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↙	↑↑↑	↘	↗
Traffic Volume (vph)	1733	52	418	92	44
Future Volume (vph)	1733	52	418	92	44
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	66.0	15.0	81.0	39.0	15.0
Total Split (%)	55.0%	12.5%	67.5%	32.5%	12.5%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	50.2	7.6	59.4	14.4	22.2
Actuated g/C Ratio	0.64	0.10	0.76	0.18	0.28
v/c Ratio	0.59	0.31	0.11	0.29	0.09
Control Delay (s/veh)	13.7	45.7	4.4	35.2	19.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.7	45.7	4.4	35.2	19.4
LOS	B	D	A	D	B
Approach Delay (s/veh)	13.8		9.1	30.2	
Approach LOS	B		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 78.2  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.59  
 Intersection Signal Delay (s/veh): 13.8  
 Intersection LOS: B  
 Intersection Capacity Utilization 60.9%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

06/05/2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	1733	132	52	418	92	44
Future Volume (veh/h)	1733	132	52	418	92	44
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1824	115	55	440	97	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2873	181	88	3605	241	292
Arrive On Green	0.58	0.58	0.05	0.70	0.13	0.13
Sat Flow, veh/h	5159	314	1810	5358	1810	1610
Grp Volume(v), veh/h	1263	676	55	440	97	14
Grp Sat Flow(s),veh/h/ln	1729	1844	1810	1729	1810	1610
Q Serve(g_s), s	15.9	16.0	1.9	1.8	3.2	0.5
Cycle Q Clear(g_c), s	15.9	16.0	1.9	1.8	3.2	0.5
Prop In Lane		0.17	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1992	1062	88	3605	241	292
V/C Ratio(X)	0.63	0.64	0.63	0.12	0.40	0.05
Avail Cap(c_a), veh/h	3196	1704	289	5989	934	909
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.2	9.2	30.4	3.3	25.9	22.0
Incr Delay (d2), s/veh	0.3	0.6	2.7	0.0	1.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.6	0.8	0.3	1.3	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.6	9.9	33.2	3.3	27.0	22.1
LnGrp LOS	A	A	C	A	C	C
Approach Vol, veh/h	1939			495	111	
Approach Delay, s/veh	9.7			6.6	26.3	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.1	7.8	43.3		51.1
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		33.6	10.4	60.2		75.2
Max Q Clear Time (g_c+I1), s		5.2	3.9	18.0		3.8
Green Ext Time (p_c), s		0.3	0.0	19.5		3.0
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			9.8			
HCM 6th LOS			A			

Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↘	↑↑↑	↑↑↑	↘	↗
Traffic Volume (vph)	173	1608	449	14	79
Future Volume (vph)	173	1608	449	14	79
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	37.0	87.0	50.0	33.0	37.0
Total Split (%)	30.8%	72.5%	41.7%	27.5%	30.8%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	10.1	38.5	16.7	13.4	13.3
Actuated g/C Ratio	0.24	0.91	0.39	0.32	0.31
v/c Ratio	0.41	0.35	0.23	0.02	0.14
Control Delay (s/veh)	20.0	3.6	11.4	14.5	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.0	3.6	11.4	14.5	3.0
LOS	C	A	B	B	A
Approach Delay (s/veh)		5.2	11.5	4.7	
Approach LOS		A	B	A	

Intersection Summary

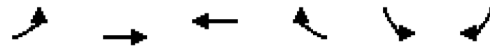
Cycle Length: 120  
 Actuated Cycle Length: 42.3  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.41  
 Intersection Signal Delay (s/veh): 6.4  
 Intersection LOS: A  
 Intersection Capacity Utilization 49.4%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
06/05/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑↑	↑↑↑		↘	↗
Traffic Volume (veh/h)	173	1608	449	17	14	79
Future Volume (veh/h)	173	1608	449	17	14	79
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	178	1658	463	15	14	22
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	233	3324	2092	67	147	338
Arrive On Green	0.13	0.64	0.41	0.41	0.08	0.08
Sat Flow, veh/h	1810	5358	5333	166	1810	1610
Grp Volume(v), veh/h	178	1658	309	169	14	22
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1870	1810	1610
Q Serve(g_s), s	4.1	7.3	2.5	2.5	0.3	0.5
Cycle Q Clear(g_c), s	4.1	7.3	2.5	2.5	0.3	0.5
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	233	3324	1402	758	147	338
V/C Ratio(X)	0.76	0.50	0.22	0.22	0.10	0.06
Avail Cap(c_a), veh/h	1358	9755	3540	1914	1123	1207
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	4.1	8.4	8.4	18.4	13.7
Incr Delay (d2), s/veh	2.0	0.1	0.1	0.1	0.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.7	0.6	0.7	0.1	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	20.1	4.2	8.5	8.5	18.6	13.7
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		1836	478		36	
Approach Delay, s/veh		5.8	8.5		15.6	
Approach LOS		A	A		B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.2	23.3			33.5	9.7
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	32.4	44.2			81.2	26.8
Max Q Clear Time (g_c+I1), s	6.1	4.5			9.3	2.5
Green Ext Time (p_c), s	0.2	2.9			18.4	0.1
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			6.5			
HCM 6th LOS			A			

**APPENDIX 5.3: E+P (PROJECT BUILDOUT) CONDITIONS INTERSECTION  
OPERATIONS ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

**Volume Development  
AM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Buildout) PCE:	1,593	203	0	0	243	264	0	0	0	101	4	116	2,522
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Buildout) PCE:	0	1,709	147	191	154	0	87	1	257	0	0	0	2,544
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Buildout) PCE:	0	0	0	0	0	0	0	409	0	0	1,856	0	2,264
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Buildout) PCE:	66	0	20	69	0	105	47	244	122	88	1,686	138	2,584
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Buildout) PCE:	139	0	43	0	0	0	0	303	29	14	1,773	0	2,300
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
E+P (Buildout) PCE:	0	0	0	5	0	302	96	251	0	0	1,513	32	2,198

**Volume Development  
PM Peak Hour**

	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
E+P (Buildout) PCE:	367	263	0	0	270	128	0	0	0	240	21	189	1,476
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
E+P (Buildout) PCE:	0	464	121	162	381	0	166	3	1,465	0	0	0	2,761
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
E+P (Buildout) PCE:	0	0	0	0	0	0	0	1,840	0	0	584	0	2,424
<b>4: Street A &amp; Green River Rd.</b>													
E+P (Buildout) PCE:	131	0	84	96	0	33	93	1,690	60	28	421	68	2,704
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
E+P (Buildout) PCE:	92	0	44	0	0	0	0	1,738	132	52	425	0	2,483
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
E+P (Buildout) PCE:	0	0	0	14	0	82	174	1,610	0	0	453	17	2,350



Timings

1: Green River Rd. & SR-91 WB Ramps

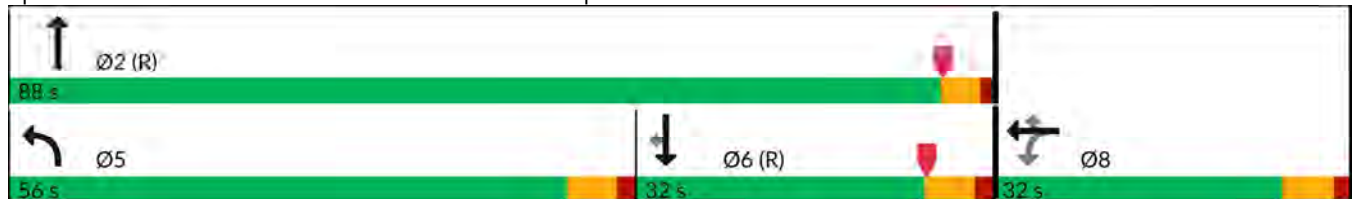


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↶	↶↶↶	↶	↶	↷
Traffic Volume (vph)	101	4	116	1593	203	243	264
Future Volume (vph)	101	4	116	1593	203	243	264
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	56.0	88.0	32.0	32.0
Total Split (%)	26.7%	26.7%	26.7%	46.7%	73.3%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	12.1	12.1	12.1	47.4	97.3	42.5	42.5
Actuated g/C Ratio	0.10	0.10	0.10	0.40	0.81	0.35	0.35
v/c Ratio	0.34	0.34	0.46	0.90	0.15	0.41	0.39
Control Delay (s/veh)	52.9	52.8	12.8	47.1	1.9	34.4	5.7
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay (s/veh)	52.9	52.8	12.8	47.4	1.9	34.4	5.7
LOS	D	D	B	D	A	C	A
Approach Delay (s/veh)		31.9			42.3	19.5	
Approach LOS		C			D	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.90  
 Intersection Signal Delay (s/veh): 36.8  
 Intersection LOS: D  
 Intersection Capacity Utilization 65.8%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)  
 06/05/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↖	↗	↗↖↙	↑			↑	↗
Traffic Volume (veh/h)	0	0	0	101	4	116	1593	203	0	0	243	264
Future Volume (veh/h)	0	0	0	101	4	116	1593	203	0	0	243	264
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				119	0	27	1810	231	0	0	276	210
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				187	0	83	1966	1612	0	0	785	657
Arrive On Green				0.05	0.00	0.05	0.26	0.57	0.00	0.00	0.41	0.41
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				119	0	27	1810	231	0	0	276	210
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				3.9	0.0	1.9	41.4	6.9	0.0	0.0	12.0	10.7
Cycle Q Clear(g_c), s				3.9	0.0	1.9	41.4	6.9	0.0	0.0	12.0	10.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				187	0	83	1966	1612	0	0	785	657
V/C Ratio(X)				0.64	0.00	0.32	0.92	0.14	0.00	0.00	0.35	0.32
Avail Cap(c_a), veh/h				784	0	349	2126	1612	0	0	785	657
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.70	0.70	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.8	0.0	54.9	42.7	5.4	0.0	0.0	24.2	23.8
Incr Delay (d2), s/veh				3.5	0.0	2.2	4.8	0.1	0.0	0.0	1.2	1.3
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	0.0	0.8	18.6	1.6	0.0	0.0	5.4	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				59.3	0.0	57.1	47.5	5.5	0.0	0.0	25.4	25.1
LnGrp LOS				E		E	D	A			C	C
Approach Vol, veh/h					146			2041			486	
Approach Delay, s/veh					58.9			42.8			25.3	
Approach LOS					E			D			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		107.8			52.2	55.6		12.2				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			50.0	26.0		26.0				
Max Q Clear Time (g_c+I1), s		8.9			43.4	14.0		5.9				
Green Ext Time (p_c), s		1.3			2.8	1.7		0.4				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	40.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings

Green River TA (JN:12630)

2: Green River Rd. & SR-91 EB Ramps

06/05/2024

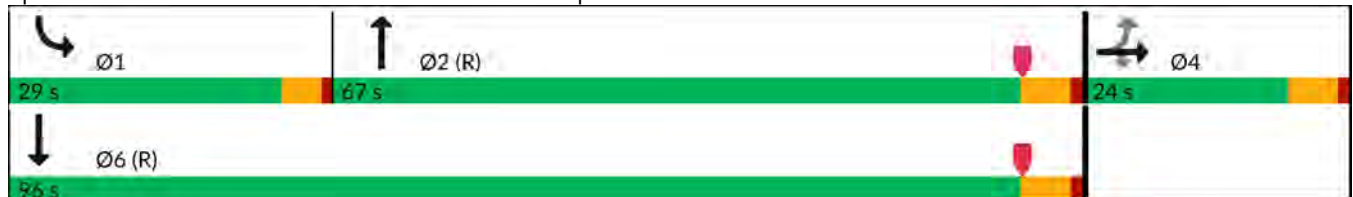


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↗↘	↕↔↗	↖	↕↕
Traffic Volume (vph)	1	257	1709	191	154
Future Volume (vph)	1	257	1709	191	154
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.1	12.1	73.3	19.1	96.9
Actuated g/C Ratio	0.10	0.10	0.61	0.16	0.81
v/c Ratio	0.53	0.52	0.65	0.73	0.05
Control Delay (s/veh)	61.0	9.0	17.7	54.5	4.8
Queue Delay	0.0	0.0	0.2	0.0	0.0
Total Delay (s/veh)	61.0	9.0	17.9	54.5	4.8
LOS	E	A	B	D	A
Approach Delay (s/veh)	22.3		17.9		32.4
Approach LOS	C		B		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.74  
 Intersection Signal Delay (s/veh): 20.5      Intersection LOS: C  
 Intersection Capacity Utilization 65.8%      ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

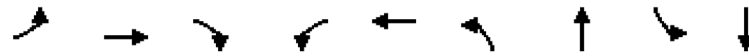
06/05/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↑↑↑		↘	↑↑	
Traffic Volume (veh/h)	87	1	257	0	0	0	0	1709	147	191	154	0
Future Volume (veh/h)	87	1	257	0	0	0	0	1709	147	191	154	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	97	1	128				0	1899	154	212	171	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	134	1	212				0	3230	261	243	3009	0
Arrive On Green	0.07	0.07	0.07				0.00	0.66	0.66	0.13	0.83	0.00
Sat Flow, veh/h	1792	18	2834				0	5054	394	1810	3705	0
Grp Volume(v), veh/h	98	0	128				0	1342	711	212	171	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1819	1810	1805	0
Q Serve(g_s), s	6.4	0.0	5.3				0.0	25.8	26.1	13.8	1.0	0.0
Cycle Q Clear(g_c), s	6.4	0.0	5.3				0.0	25.8	26.1	13.8	1.0	0.0
Prop In Lane	0.99		1.00				0.00		0.22	1.00		0.00
Lane Grp Cap(c), veh/h	135	0	212				0	2288	1203	243	3009	0
V/C Ratio(X)	0.72	0.00	0.60				0.00	0.59	0.59	0.87	0.06	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2288	1203	369	3009	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	54.3	0.0	53.8				0.0	11.2	11.3	50.9	1.7	0.0
Incr Delay (d2), s/veh	7.1	0.0	2.7				0.0	1.1	2.1	12.6	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.9				0.0	8.8	9.7	6.9	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.4	0.0	56.5				0.0	12.3	13.4	63.5	1.8	0.0
LnGrp LOS	E		E					B	B	E	A	
Approach Vol, veh/h		226						2053			383	
Approach Delay, s/veh		58.6						12.7			36.0	
Approach LOS		E						B			D	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	20.6	84.9		14.5				105.5				
Change Period (Y+Rc), s	4.5	5.5		5.5				5.5				
Max Green Setting (Gmax), s	24.5	61.5		18.5				90.5				
Max Q Clear Time (g_c+I1), s	15.8	28.1		8.4				3.0				
Green Ext Time (p_c), s	0.4	19.0		0.6				1.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			20.0									
HCM 6th LOS			B									

Timings

4: Street A & Green River Rd.

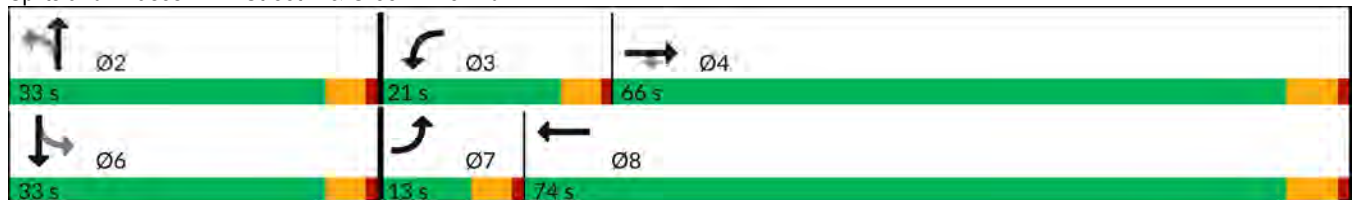


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↗	↖	↑↑↑	↖	↗		↕
Traffic Volume (vph)	47	244	122	88	1686	66	0	69	0
Future Volume (vph)	47	244	122	88	1686	66	0	69	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	26.6	26.6	26.6	26.6
Total Split (s)	13.0	66.0	66.0	21.0	74.0	33.0	33.0	33.0	33.0
Total Split (%)	10.8%	55.0%	55.0%	17.5%	61.7%	27.5%	27.5%	27.5%	27.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	7.1	41.6	41.6	9.4	46.6	13.4	13.4		13.4
Actuated g/C Ratio	0.09	0.54	0.54	0.12	0.60	0.17	0.17		0.17
v/c Ratio	0.31	0.09	0.14	0.44	0.64	0.40	0.02		0.54
Control Delay (s/veh)	46.4	9.8	2.5	44.3	11.9	42.2	0.0		22.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	46.4	9.8	2.5	44.3	11.9	42.2	0.0		22.8
LOS	D	A	A	D	B	D	A		C
Approach Delay (s/veh)		11.9			13.4		32.4		22.8
Approach LOS		B			B		C		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 77.6  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.64  
 Intersection Signal Delay (s/veh): 14.4  
 Intersection LOS: B  
 Intersection Capacity Utilization 69.3%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary

Green River TA (JN:12630)

4: Street A & Green River Rd.

06/05/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	244	122	88	1686	138	66	0	20	69	0	105
Future Volume (veh/h)	47	244	122	88	1686	138	66	0	20	69	0	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	51	265	133	96	1833	150	72	0	22	75	0	114
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	81	2905	902	125	2856	233	285	0	255	152	17	148
Arrive On Green	0.04	0.56	0.56	0.07	0.58	0.58	0.16	0.00	0.16	0.16	0.00	0.16
Sat Flow, veh/h	1810	5187	1610	1810	4888	399	1299	0	1610	511	105	938
Grp Volume(v), veh/h	51	265	133	96	1295	688	72	0	22	189	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1828	1299	0	1610	1554	0	0
Q Serve(g_s), s	2.0	1.7	2.8	3.7	17.6	17.7	0.0	0.0	0.8	6.4	0.0	0.0
Cycle Q Clear(g_c), s	2.0	1.7	2.8	3.7	17.6	17.7	4.1	0.0	0.8	8.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	0.40		0.60
Lane Grp Cap(c), veh/h	81	2905	902	125	2021	1068	285	0	255	317	0	0
V/C Ratio(X)	0.63	0.09	0.15	0.77	0.64	0.64	0.25	0.00	0.09	0.60	0.00	0.00
Avail Cap(c_a), veh/h	216	4428	1375	421	3344	1768	603	0	648	690	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.1	7.2	7.4	32.3	9.7	9.8	26.7	0.0	25.3	28.3	0.0	0.0
Incr Delay (d2), s/veh	3.0	0.0	0.1	3.7	0.3	0.7	0.5	0.0	0.1	1.8	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.5	0.8	1.6	4.8	5.3	1.1	0.0	0.3	3.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	36.1	7.2	7.5	36.0	10.1	10.4	27.2	0.0	25.5	30.1	0.0	0.0
LnGrp LOS	D	A	A	D	B	B	C		C	C		
Approach Vol, veh/h		449			2079			94				189
Approach Delay, s/veh		10.6			11.4			26.8				30.1
Approach LOS		B			B			C				C
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		15.8	9.5	45.3		15.8	7.8	47.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		28.4	16.4	60.2		28.4	8.4	68.2				
Max Q Clear Time (g_c+I1), s		6.1	5.7	4.8		10.2	4.0	19.7				
Green Ext Time (p_c), s		0.3	0.1	2.1		1.0	0.0	21.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			13.0									
HCM 6th LOS			B									

Timings  
5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

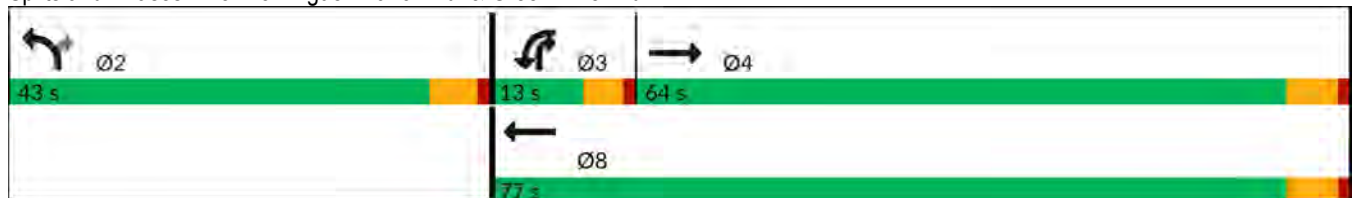
06/05/2024

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↙	↑↑↑	↘	↗
Traffic Volume (vph)	303	14	1773	139	43
Future Volume (vph)	303	14	1773	139	43
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	64.0	13.0	77.0	43.0	13.0
Total Split (%)	53.3%	10.8%	64.2%	35.8%	10.8%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	37.7	5.6	43.6	14.3	25.6
Actuated g/C Ratio	0.54	0.08	0.63	0.21	0.37
v/c Ratio	0.13	0.10	0.60	0.41	0.07
Control Delay (s/veh)	9.3	38.2	9.3	28.2	5.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	9.3	38.2	9.3	28.2	5.8
LOS	A	D	A	C	A
Approach Delay (s/veh)	9.4		9.6	23.0	
Approach LOS	A		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 69.7  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.60  
 Intersection Signal Delay (s/veh): 10.6  
 Intersection LOS: B  
 Intersection Capacity Utilization 51.9%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.





HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

06/05/2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	303	29	14	1773	139	43
Future Volume (veh/h)	303	29	14	1773	139	43
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	333	25	15	1948	153	13
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2722	202	33	3369	288	286
Arrive On Green	0.55	0.55	0.02	0.65	0.16	0.16
Sat Flow, veh/h	5099	365	1810	5358	1810	1610
Grp Volume(v), veh/h	232	126	15	1948	153	13
Grp Sat Flow(s),veh/h/ln	1729	1834	1810	1729	1810	1610
Q Serve(g_s), s	1.9	1.9	0.5	12.3	4.5	0.4
Cycle Q Clear(g_c), s	1.9	1.9	0.5	12.3	4.5	0.4
Prop In Lane		0.20	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1910	1013	33	3369	288	286
V/C Ratio(X)	0.12	0.12	0.45	0.58	0.53	0.05
Avail Cap(c_a), veh/h	3436	1823	260	6306	1162	1063
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.3	6.3	28.4	5.8	22.6	20.0
Incr Delay (d2), s/veh	0.0	0.1	3.5	0.2	1.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.2	2.3	1.8	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.3	6.4	31.9	5.9	24.1	20.0
LnGrp LOS	A	A	C	A	C	C
Approach Vol, veh/h	358			1963	166	
Approach Delay, s/veh	6.3			6.1	23.8	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.7	5.7	38.2		43.8
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		37.6	8.4	58.2		71.2
Max Q Clear Time (g_c+I1), s		6.5	2.5	3.9		14.3
Green Ext Time (p_c), s		0.4	0.0	2.2		23.7
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			7.3			
HCM 6th LOS			A			



Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↶	↑↑↑	↑↑↑↶	↶	↷
Traffic Volume (vph)	96	251	1513	5	302
Future Volume (vph)	96	251	1513	5	302
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	26.0	87.8	61.8	32.2	26.0
Total Split (%)	21.7%	73.2%	51.5%	26.8%	21.7%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	18.2	60.3	31.0	13.1	21.9
Actuated g/C Ratio	0.28	0.93	0.48	0.20	0.34
v/c Ratio	0.20	0.05	0.67	0.01	0.59
Control Delay (s/veh)	26.8	2.1	15.2	28.4	23.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.8	2.1	15.2	28.4	23.1
LOS	C	A	B	C	C
Approach Delay (s/veh)		8.9	15.3	23.2	
Approach LOS		A	B	C	

Intersection Summary

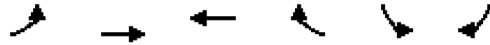
Cycle Length: 120	
Actuated Cycle Length: 64.6	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay (s/veh): 15.4	Intersection LOS: B
Intersection Capacity Utilization 57.4%	ICU Level of Service B
Analysis Period (min) 15	

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
 6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
 06/05/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑↑↑	↑↑↑		↙	↗
Traffic Volume (veh/h)	96	251	1513	32	5	302
Future Volume (veh/h)	96	251	1513	32	5	302
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	104	273	1645	27	5	110
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	136	3419	2668	44	257	349
Arrive On Green	0.08	0.66	0.51	0.51	0.14	0.14
Sat Flow, veh/h	1810	5358	5427	86	1810	1610
Grp Volume(v), veh/h	104	273	1082	590	5	110
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1884	1810	1610
Q Serve(g_s), s	3.4	1.1	13.5	13.5	0.1	3.5
Cycle Q Clear(g_c), s	3.4	1.1	13.5	13.5	0.1	3.5
Prop In Lane	1.00			0.05	1.00	1.00
Lane Grp Cap(c), veh/h	136	3419	1755	956	257	349
V/C Ratio(X)	0.76	0.08	0.62	0.62	0.02	0.31
Avail Cap(c_a), veh/h	643	7060	3214	1752	781	816
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	3.7	10.6	10.6	22.3	19.8
Incr Delay (d2), s/veh	3.3	0.0	0.4	0.7	0.0	0.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.2	3.8	4.2	0.1	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	30.7	3.7	11.0	11.3	22.3	20.3
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h		377	1672		115	
Approach Delay, s/veh		11.1	11.1		20.4	
Approach LOS		B	B		C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.1	36.4			45.5	14.7
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	21.4	56.0			82.0	26.0
Max Q Clear Time (g_c+I1), s	5.4	15.5			3.1	5.5
Green Ext Time (p_c), s	0.1	15.1			1.8	0.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			11.6			
HCM 6th LOS			B			

Timings

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↷	↷	↶↷↷	↷	↷	↷
Traffic Volume (vph)	240	21	189	367	263	270	128
Future Volume (vph)	240	21	189	367	263	270	128
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	42.0	42.0	42.0	26.0	78.0	52.0	52.0
Total Split (%)	35.0%	35.0%	35.0%	21.7%	65.0%	43.3%	43.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	16.5	16.5	16.5	13.8	92.9	71.6	71.6
Actuated g/C Ratio	0.14	0.14	0.14	0.12	0.77	0.60	0.60
v/c Ratio	0.60	0.60	0.51	0.68	0.19	0.26	0.13
Control Delay (s/veh)	58.4	58.1	10.3	47.9	7.7	13.8	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.4	58.1	10.3	47.9	7.7	13.8	2.7
LOS	E	E	B	D	A	B	A
Approach Delay (s/veh)		38.1			31.2	10.3	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.69  
 Intersection Signal Delay (s/veh): 27.7  
 Intersection LOS: C  
 Intersection Capacity Utilization 70.9%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

06/05/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↙	↖	↗	↘↙↖↗	↑			↑	↗
Traffic Volume (veh/h)	0	0	0	240	21	189	367	263	0	0	270	128
Future Volume (veh/h)	0	0	0	240	21	189	367	263	0	0	270	128
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No		No			
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				280	0	138	403	289	0	0	297	37
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				403	0	179	498	1499	0	0	1218	1019
Arrive On Green				0.11	0.00	0.11	0.16	1.00	0.00	0.00	0.64	0.64
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				280	0	138	403	289	0	0	297	37
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				8.9	0.0	10.0	9.1	0.0	0.0	0.0	8.0	1.0
Cycle Q Clear(g_c), s				8.9	0.0	10.0	9.1	0.0	0.0	0.0	8.0	1.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				403	0	179	498	1499	0	0	1218	1019
V/C Ratio(X)				0.70	0.00	0.77	0.81	0.19	0.00	0.00	0.24	0.04
Avail Cap(c_a), veh/h				1086	0	483	850	1499	0	0	1218	1019
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.85	0.85	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				51.4	0.0	51.8	49.1	0.0	0.0	0.0	9.2	7.9
Incr Delay (d2), s/veh				2.2	0.0	6.8	1.0	0.2	0.0	0.0	0.5	0.1
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.1	0.0	4.3	3.6	0.1	0.0	0.0	3.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				53.5	0.0	58.7	50.2	0.2	0.0	0.0	9.6	8.0
LnGrp LOS				D		E	D	A			A	A
Approach Vol, veh/h					418			692			334	
Approach Delay, s/veh					55.2			29.3			9.5	
Approach LOS					E			C			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		100.6			17.7	82.9		19.4				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 73			20.0	46.0		36.0				
Max Q Clear Time (g_c+I1), s		2.0			11.1	10.0		12.0				
Green Ext Time (p_c), s		1.6			0.6	1.8		1.4				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	32.2
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

2: Green River Rd. & SR-91 EB Ramps

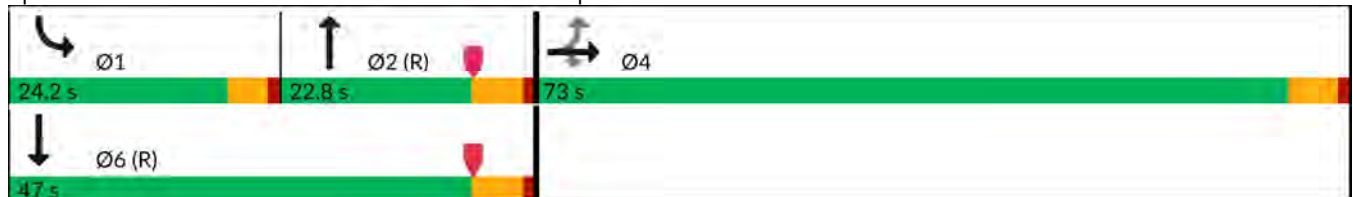


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↕	↕↕	↕↕↕	↕	↕↕
Traffic Volume (vph)	3	1465	464	162	381
Future Volume (vph)	3	1465	464	162	381
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	73.0	73.0	22.8	24.2	47.0
Total Split (%)	60.8%	60.8%	19.0%	20.2%	39.2%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	62.2	62.2	26.7	15.7	46.8
Actuated g/C Ratio	0.52	0.52	0.22	0.13	0.39
v/c Ratio	0.18	0.87	0.51	0.69	0.27
Control Delay (s/veh)	14.9	23.6	41.6	63.0	35.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.9	23.6	41.6	63.0	35.9
LOS	B	C	D	E	D
Approach Delay (s/veh)	22.8		41.6		44.0
Approach LOS	C		D		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.88  
 Intersection Signal Delay (s/veh): 30.9  
 Intersection LOS: C  
 Intersection Capacity Utilization 70.9%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

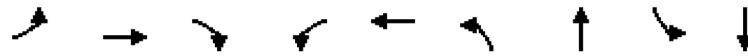
06/05/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗↘					↕↗↘		↗	↕↗	
Traffic Volume (veh/h)	166	3	1465	0	0	0	0	464	121	162	381	0
Future Volume (veh/h)	166	3	1465	0	0	0	0	464	121	162	381	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	168	3	1313				0	469	95	164	385	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	888	16	1415				0	1149	227	194	1477	0
Arrive On Green	0.50	0.50	0.50				0.00	0.26	0.26	0.11	0.41	0.00
Sat Flow, veh/h	1779	32	2834				0	4516	859	1810	3705	0
Grp Volume(v), veh/h	171	0	1313				0	371	193	164	385	0
Grp Sat Flow(s),veh/h/ln	1811	0	1417				0	1729	1745	1810	1805	0
Q Serve(g_s), s	6.3	0.0	51.9				0.0	10.6	11.0	10.7	8.5	0.0
Cycle Q Clear(g_c), s	6.3	0.0	51.9				0.0	10.6	11.0	10.7	8.5	0.0
Prop In Lane	0.98		1.00				0.00		0.49	1.00		0.00
Lane Grp Cap(c), veh/h	904	0	1415				0	915	462	194	1477	0
V/C Ratio(X)	0.19	0.00	0.93				0.00	0.41	0.42	0.85	0.26	0.00
Avail Cap(c_a), veh/h	1019	0	1594				0	915	462	297	1477	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.93	0.93	0.00
Uniform Delay (d), s/veh	16.6	0.0	28.0				0.0	36.4	36.5	52.6	23.5	0.0
Incr Delay (d2), s/veh	0.1	0.0	9.2				0.0	1.3	2.8	12.1	0.4	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	17.9				0.0	4.5	4.9	5.4	3.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.7	0.0	37.3				0.0	37.7	39.3	64.7	23.9	0.0
LnGrp LOS	B		D					D	D	E	C	
Approach Vol, veh/h		1484						564			549	
Approach Delay, s/veh		34.9						38.2			36.1	
Approach LOS		C						D			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	17.3	37.2	65.4	54.6								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	19.7	17.3	67.5	41.5								
Max Q Clear Time (g_c+I1), s	12.7	13.0	53.9	10.5								
Green Ext Time (p_c), s	0.2	1.3	6.0	2.4								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			35.9									
HCM 6th LOS			D									

Timings

4: Street A & Green River Rd.

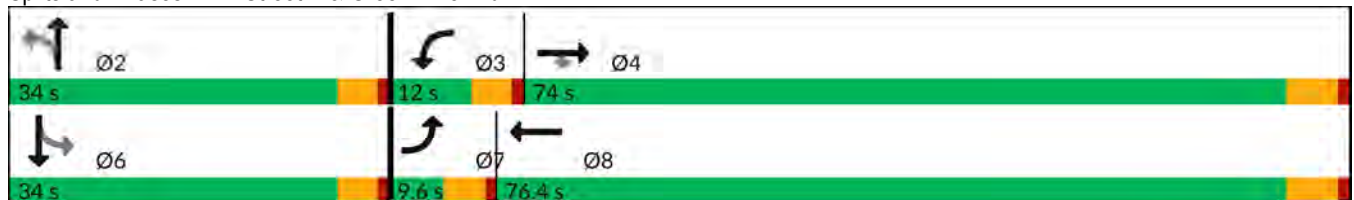


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↗	↖	↑↑↑	↖	↗		↕
Traffic Volume (vph)	93	1690	60	28	421	131	0	96	0
Future Volume (vph)	93	1690	60	28	421	131	0	96	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	26.6	26.6	26.6	26.6
Total Split (s)	9.6	74.0	74.0	12.0	76.4	34.0	34.0	34.0	34.0
Total Split (%)	8.0%	61.7%	61.7%	10.0%	63.7%	28.3%	28.3%	28.3%	28.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	5.6	41.4	41.4	6.4	34.0	15.5	15.5		15.5
Actuated g/C Ratio	0.08	0.58	0.58	0.09	0.47	0.22	0.22		0.22
v/c Ratio	0.72	0.61	0.06	0.18	0.21	0.49	0.21		0.41
Control Delay (s/veh)	70.9	11.8	3.3	43.6	9.2	37.1	10.0		21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	70.9	11.8	3.3	43.6	9.2	37.1	10.0		21.8
LOS	E	B	A	D	A	D	B		C
Approach Delay (s/veh)		14.5			11.0		26.5		21.9
Approach LOS		B			B		C		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 72  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.72  
 Intersection Signal Delay (s/veh): 15.2  
 Intersection LOS: B  
 Intersection Capacity Utilization 63.3%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 4: Street A & Green River Rd.




























HCM 6th Signalized Intersection Summary

Green River TA (JN:12630)

4: Street A & Green River Rd.

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	93	1690	60	28	421	68	131	0	84	96	0	33
Future Volume (veh/h)	93	1690	60	28	421	68	131	0	84	96	0	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	101	1837	65	30	458	74	142	0	91	104	0	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	130	2975	923	58	2409	381	356	0	279	220	14	49
Arrive On Green	0.07	0.57	0.57	0.03	0.53	0.53	0.17	0.00	0.17	0.17	0.00	0.17
Sat Flow, veh/h	1810	5187	1610	1810	4515	714	1394	0	1610	736	80	283
Grp Volume(v), veh/h	101	1837	65	30	348	184	142	0	91	140	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1771	1394	0	1610	1099	0	0
Q Serve(g_s), s	3.7	15.8	1.2	1.1	3.5	3.6	0.0	0.0	3.4	5.6	0.0	0.0
Cycle Q Clear(g_c), s	3.7	15.8	1.2	1.1	3.5	3.6	6.0	0.0	3.4	9.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.40	1.00		1.00	0.74		0.26
Lane Grp Cap(c), veh/h	130	2975	923	58	1845	945	356	0	279	283	0	0
V/C Ratio(X)	0.78	0.62	0.07	0.52	0.19	0.19	0.40	0.00	0.33	0.50	0.00	0.00
Avail Cap(c_a), veh/h	134	5227	1622	198	3607	1848	721	0	699	646	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	30.9	9.5	6.4	32.3	8.2	8.2	25.6	0.0	24.5	27.7	0.0	0.0
Incr Delay (d2), s/veh	21.9	0.2	0.0	2.7	0.0	0.1	0.7	0.0	0.7	1.3	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	4.3	0.3	0.5	1.0	1.1	2.1	0.0	1.3	2.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	52.8	9.7	6.4	34.9	8.2	8.3	26.4	0.0	25.2	29.0	0.0	0.0
LnGrp LOS	D	A	A	C	A	A	C		C	C		
Approach Vol, veh/h		2003			562			233				140
Approach Delay, s/veh		11.8			9.7			25.9				29.0
Approach LOS		B			A			C				C
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.3	6.8	44.6		16.3	9.5	41.9				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		29.4	7.4	68.2		29.4	5.0	70.6				
Max Q Clear Time (g_c+I1), s		8.0	3.1	17.8		11.0	5.7	5.6				
Green Ext Time (p_c), s		0.9	0.0	21.0		0.7	0.0	3.4				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh				13.3								
HCM 6th LOS				B								



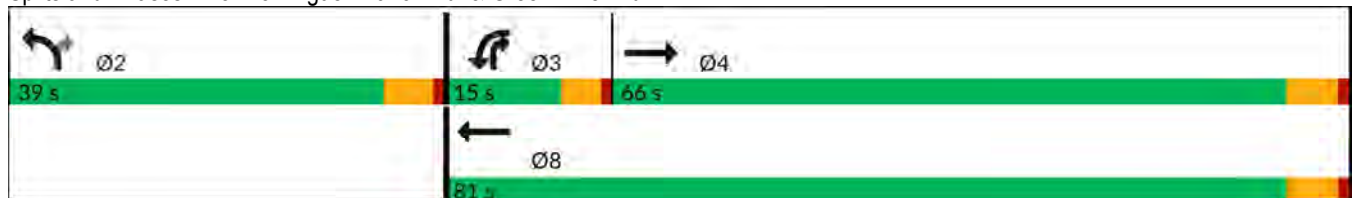
Timings  
5: Dominguez Ranch Rd. & Green River Rd.

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↙	↑↑↑	↘	↗
Traffic Volume (vph)	1738	52	425	92	44
Future Volume (vph)	1738	52	425	92	44
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	66.0	15.0	81.0	39.0	15.0
Total Split (%)	55.0%	12.5%	67.5%	32.5%	12.5%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	50.5	7.6	59.6	14.4	22.2
Actuated g/C Ratio	0.64	0.10	0.76	0.18	0.28
v/c Ratio	0.59	0.31	0.11	0.29	0.09
Control Delay (s/veh)	13.7	45.9	4.4	35.4	19.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.7	45.9	4.4	35.4	19.5
LOS	B	D	A	D	B
Approach Delay (s/veh)	13.8		9.0	30.3	
Approach LOS	B		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 78.4  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.60  
 Intersection Signal Delay (s/veh): 13.8  
 Intersection LOS: B  
 Intersection Capacity Utilization 60.9%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

06/05/2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	1738	132	52	425	92	44
Future Volume (veh/h)	1738	132	52	425	92	44
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1829	115	55	447	97	14
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2878	181	87	3609	240	292
Arrive On Green	0.58	0.58	0.05	0.70	0.13	0.13
Sat Flow, veh/h	5160	313	1810	5358	1810	1610
Grp Volume(v), veh/h	1267	677	55	447	97	14
Grp Sat Flow(s),veh/h/ln	1729	1844	1810	1729	1810	1610
Q Serve(g_s), s	16.0	16.0	1.9	1.9	3.2	0.5
Cycle Q Clear(g_c), s	16.0	16.0	1.9	1.9	3.2	0.5
Prop In Lane		0.17	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1995	1064	87	3609	240	292
V/C Ratio(X)	0.63	0.64	0.63	0.12	0.40	0.05
Avail Cap(c_a), veh/h	3189	1700	288	5976	931	907
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.2	9.2	30.5	3.3	25.9	22.1
Incr Delay (d2), s/veh	0.3	0.6	2.8	0.0	1.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.6	0.8	0.3	1.3	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.6	9.9	33.2	3.3	27.0	22.1
LnGrp LOS	A	A	C	A	C	C
Approach Vol, veh/h	1944			502	111	
Approach Delay, s/veh	9.7			6.6	26.4	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.1	7.8	43.5		51.2
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		33.6	10.4	60.2		75.2
Max Q Clear Time (g_c+I1), s		5.2	3.9	18.0		3.9
Green Ext Time (p_c), s		0.3	0.0	19.6		3.0
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			9.8			
HCM 6th LOS			A			

Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↘	↑↑↑	↑↑↑	↘	↗
Traffic Volume (vph)	174	1610	453	14	82
Future Volume (vph)	174	1610	453	14	82
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	37.0	87.0	50.0	33.0	37.0
Total Split (%)	30.8%	72.5%	41.7%	27.5%	30.8%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	10.1	38.4	16.6	13.5	13.3
Actuated g/C Ratio	0.24	0.91	0.39	0.32	0.32
v/c Ratio	0.41	0.35	0.23	0.02	0.14
Control Delay (s/veh)	20.0	3.6	11.4	14.5	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.0	3.6	11.4	14.5	3.0
LOS	C	A	B	B	A
Approach Delay (s/veh)		5.2	11.5	4.6	
Approach LOS		A	B	A	

Intersection Summary

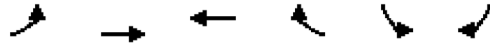
Cycle Length: 120  
 Actuated Cycle Length: 42.2  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.42  
 Intersection Signal Delay (s/veh): 6.4  
 Intersection LOS: A  
 Intersection Capacity Utilization 49.4%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
 6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
 06/05/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↑↑↑	↑↑↑		↘	↗
Traffic Volume (veh/h)	174	1610	453	17	14	82
Future Volume (veh/h)	174	1610	453	17	14	82
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	179	1660	467	15	14	26
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	234	3307	2080	66	159	350
Arrive On Green	0.13	0.64	0.40	0.40	0.09	0.09
Sat Flow, veh/h	1810	5358	5334	165	1810	1610
Grp Volume(v), veh/h	179	1660	312	170	14	26
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1870	1810	1610
Q Serve(g_s), s	4.2	7.5	2.6	2.6	0.3	0.6
Cycle Q Clear(g_c), s	4.2	7.5	2.6	2.6	0.3	0.6
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	234	3307	1393	753	159	350
V/C Ratio(X)	0.76	0.50	0.22	0.23	0.09	0.07
Avail Cap(c_a), veh/h	1341	9631	3495	1890	1109	1195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.4	4.2	8.6	8.6	18.3	13.6
Incr Delay (d2), s/veh	2.0	0.1	0.1	0.2	0.2	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.7	0.6	0.7	0.1	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	20.3	4.3	8.7	8.7	18.6	13.7
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		1839	482		40	
Approach Delay, s/veh		5.9	8.7		15.4	
Approach LOS		A	A		B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.3	23.4			33.7	10.0
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	32.4	44.2			81.2	26.8
Max Q Clear Time (g_c+I1), s	6.2	4.6			9.5	2.6
Green Ext Time (p_c), s	0.2	2.9			18.4	0.1
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			6.6			
HCM 6th LOS			A			

**APPENDIX 5.4: E+P (PROJECT BUILDOUT) CONDITIONS TRAFFIC  
SIGNAL WARRANT ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

### Figure 4C-103 (CA). Traffic Signal Warrants Worksheet (Average Traffic Estimate Form)

<u>DIST</u>	<u>CO</u>	<u>RTE</u>	<u>PM</u>	TRAFFIC CONDITIONS	<b>E+P (Phase 1)</b>
Jurisdiction: <u>Corona</u>				CALC <u>CP</u>	DATE <u>05/19/23</u>
Major Street: <u>Green River Road</u>				CHK <u>CP</u>	DATE <u>05/19/23</u>
Minor Street: <u>Street A</u>				Critical Approach Speed (Major)	<u>45</u> mph
				Critical Approach Speed (Minor)	<u>25</u> mph
Major Street Approach Lanes =		<u>3</u>	lane	Minor Street Approach Lanes:	<u>1</u> lane
Major Street Future ADT =		<u>29,424</u>	vpd	Minor Street Future ADT =	<u>1,190</u> vpd
Speed limit or critical speed on major street traffic > 64 km/h (40 mph); .....					<input checked="" type="checkbox"/>
					or
In built up area of isolated community of < 10,000 population .....					<input type="checkbox"/>

**RURAL (R)**

**(Based on Estimated Average Daily Traffic - See Note)**

<u>URBAN</u>	<u>RURAL</u>	Minimum Requirements EADT			
<b>CONDITION A - Minimum Vehicular Volume</b>		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>	<u>Not Satisfied</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
	<b>XX</b>				
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
<u>1</u>	<u>1</u>	8,000	5,600	2,400	1,680
<u>2 + 29,424</u>	<u>1 1,190</u>	9,600	6,720 *	2,400	1,680
<u>2 +</u>	<u>2 +</u>	9,600	6,720	3,200	2,240
<u>1</u>	<u>2 +</u>	8,000	5,600	3,200	2,240
<b>CONDITION B - Interruption of Continuous Traffic</b>		Vehicles Per Day on Major Street (Total of Both Approaches)		Vehicles Per Day on Higher-Volume Minor Street Approach (One Direction Only)	
<u>Satisfied</u>	<u>Not Satisfied</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>
	<b>XX</b>				
Number of lanes for moving traffic on each approach					
<u>Major Street</u>	<u>Minor Street</u>				
<u>1</u>	<u>1</u>	12,000	8,400	1,200	850
<u>2 + 29,424</u>	<u>1 1,190</u>	14,400	10,080 *	1,200	850 *
<u>2 +</u>	<u>2 +</u>	14,400	10,080	1,600	1,120
<u>1</u>	<u>2 +</u>	12,000	8,400	1,600	1,120
<b>Combination of CONDITIONS A + B</b>		2 CONDITIONS 80%		2 CONDITIONS 80%	
<u>Satisfied</u>	<u>Not Satisfied</u>				
	<b>XX</b>				
No one condition satisfied, but following conditions fulfilled 80% of more .....					
	<u>A</u>				
	<b>71%</b>				
	<u>B</u>				
	<b>100%</b>				

**Note: To be used only for NEW INTERSECTIONS or other locations where it is not reasonable to count actual traffic volumes.**

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

This Page Intentionally Left Blank



**APPENDIX 5.5: E+P (PHASE 1) CONDITIONS OFF-RAMP QUEUING  
ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	51	52	132	1789	226	270	300
v/c Ratio	0.31	0.31	0.48	0.90	0.15	0.39	0.39
Control Delay	52.0	52.1	13.2	47.5	1.9	33.7	5.7
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay	52.0	52.1	13.2	47.7	1.9	33.7	5.7
Queue Length 50th (ft)	40	41	0	385	14	151	0
Queue Length 95th (ft)	69	70	49	364	30	279	66
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	371	374	453	2120	1546	684	766
Starvation Cap Reductn	0	0	0	42	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.14	0.29	0.86	0.15	0.39	0.39

Intersection Summary



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	98	268	2019	212	149
v/c Ratio	0.54	0.51	0.64	0.74	0.05
Control Delay	61.1	9.0	17.4	57.5	4.7
Queue Delay	0.0	0.0	0.2	0.0	0.0
Total Delay	61.1	9.0	17.6	57.5	4.7
Queue Length 50th (ft)	74	0	341	178	20
Queue Length 95th (ft)	123	41	504	258	46
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	279	664	3132	370	2913
Starvation Cap Reductn	0	0	372	0	0
Spillback Cap Reductn	0	0	5	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.40	0.73	0.57	0.05
Intersection Summary					

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	152	153	208	390	287	292	141
v/c Ratio	0.63	0.62	0.51	0.68	0.20	0.26	0.14
Control Delay	58.9	58.7	10.1	48.7	7.5	13.9	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.9	58.7	10.1	48.7	7.5	13.9	2.8
Queue Length 50th (ft)	120	120	0	111	50	100	0
Queue Length 95th (ft)	176	177	62	146	157	193	33
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	514	519	630	848	1462	1131	1006
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.29	0.33	0.46	0.20	0.26	0.14

Intersection Summary



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	171	1460	568	164	366
v/c Ratio	0.19	0.87	0.47	0.70	0.25
Control Delay	15.5	22.8	40.4	63.0	35.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	22.8	40.4	63.0	35.5
Queue Length 50th (ft)	67	378	133	131	132
Queue Length 95th (ft)	98	461	189	201	180
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	1018	1810	1206	296	1449
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.17	0.81	0.47	0.55	0.25
Intersection Summary					

**APPENDIX 5.6: E+P (PHASE 2) CONDITIONS OFF-RAMP QUEUING  
ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank



Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	59	60	132	1803	231	276	300
v/c Ratio	0.34	0.34	0.46	0.89	0.15	0.40	0.39
Control Delay (s/veh)	52.8	52.9	12.8	47.2	1.9	34.3	5.7
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay (s/veh)	52.8	52.9	12.8	47.4	1.9	34.3	5.7
Queue Length 50th (ft)	46	47	0	384	15	157	0
Queue Length 95th (ft)	77	78	49	370	31	286	66
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	371	373	453	2122	1540	675	759
Starvation Cap Reductn	0	0	0	46	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.16	0.29	0.87	0.15	0.41	0.40

Intersection Summary

## 2: Green River Rd. &amp; SR-91 EB Ramps

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	98	283	2051	212	170
v/c Ratio	0.53	0.52	0.65	0.73	0.05
Control Delay (s/veh)	61.0	9.0	17.6	54.7	4.9
Queue Delay	0.0	0.0	0.2	0.0	0.0
Total Delay (s/veh)	61.0	9.0	17.8	54.7	4.9
Queue Length 50th (ft)	74	0	350	178	23
Queue Length 95th (ft)	123	43	516	259	54
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	279	677	3129	370	2913
Starvation Cap Reductn	0	0	365	0	0
Spillback Cap Reductn	0	0	12	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.42	0.74	0.57	0.06
<b>Intersection Summary</b>					

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	160	159	208	398	289	297	141
v/c Ratio	0.64	0.63	0.50	0.68	0.19	0.26	0.14
Control Delay (s/veh)	59.4	58.8	9.9	48.5	7.8	14.2	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.4	58.8	9.9	48.5	7.8	14.2	2.8
Queue Length 50th (ft)	125	124	0	113	49	103	0
Queue Length 95th (ft)	185	184	62	148	161	198	33
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	514	519	630	848	1457	1122	999
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.31	0.33	0.47	0.20	0.26	0.14

Intersection Summary

## 2: Green River Rd. &amp; SR-91 EB Ramps

06/05/2024

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	171	1472	584	164	382
v/c Ratio	0.18	0.87	0.50	0.69	0.26
Control Delay (s/veh)	15.0	23.4	41.2	63.0	36.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	15.0	23.4	41.2	63.0	36.5
Queue Length 50th (ft)	65	389	139	130	140
Queue Length 95th (ft)	98	486	193	202	187
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	1018	1797	1165	296	1418
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.17	0.82	0.50	0.55	0.27
<b>Intersection Summary</b>					

**APPENDIX 5.7: E+P (PROJECT BUILDOUT) CONDITIONS OFF-RAMP  
QUEUING ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	60	60	132	1810	231	276	300
v/c Ratio	0.34	0.34	0.46	0.90	0.15	0.41	0.39
Control Delay (s/veh)	52.9	52.8	12.8	47.1	1.9	34.4	5.7
Queue Delay	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Total Delay (s/veh)	52.9	52.8	12.8	47.4	1.9	34.4	5.7
Queue Length 50th (ft)	47	47	0	384	15	157	0
Queue Length 95th (ft)	78	78	49	372	31	286	66
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	371	373	453	2123	1539	672	758
Starvation Cap Reductn	0	0	0	47	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.16	0.29	0.87	0.15	0.41	0.40

Intersection Summary

## 2: Green River Rd. &amp; SR-91 EB Ramps

06/05/2024

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	98	286	2062	212	171
v/c Ratio	0.53	0.52	0.65	0.73	0.05
Control Delay (s/veh)	61.0	9.0	17.7	54.5	4.8
Queue Delay	0.0	0.0	0.2	0.0	0.0
Total Delay (s/veh)	61.0	9.0	17.9	54.5	4.8
Queue Length 50th (ft)	74	0	353	178	23
Queue Length 95th (ft)	123	42	520	257	55
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	279	680	3129	370	2913
Starvation Cap Reductn	0	0	364	0	0
Spillback Cap Reductn	0	0	15	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.35	0.42	0.75	0.57	0.06
<b>Intersection Summary</b>					



Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	143	144	208	403	289	297	141
v/c Ratio	0.60	0.60	0.51	0.68	0.19	0.26	0.13
Control Delay (s/veh)	58.4	58.1	10.3	47.9	7.7	13.8	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	58.4	58.1	10.3	47.9	7.7	13.8	2.7
Queue Length 50th (ft)	112	113	0	115	48	101	0
Queue Length 95th (ft)	167	168	62	150	162	198	33
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	514	519	630	848	1470	1134	1008
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.28	0.33	0.48	0.20	0.26	0.14

Intersection Summary

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	171	1480	591	164	385
v/c Ratio	0.18	0.87	0.51	0.69	0.27
Control Delay (s/veh)	14.9	23.6	41.6	63.0	35.9
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	14.9	23.6	41.6	63.0	35.9
Queue Length 50th (ft)	64	393	141	130	140
Queue Length 95th (ft)	98	494	195	200	187
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	1018	1795	1152	296	1409
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.17	0.82	0.51	0.55	0.27
<b>Intersection Summary</b>					

**APPENDIX 6.1: OPENING YEAR CUMULATIVE (2026) WITHOUT  
PROJECT CONDITIONS INTERSECTION OPERATIONS ANALYSIS  
WORKSHEETS**

This Page Intentionally Left Blank

**Volume Development  
AM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 NP PCE:	1,668	217	0	0	245	282	0	0	0	47	4	129	2,591
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 NP PCE:	0	1,788	135	204	88	0	98	1	210	0	0	0	2,524
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 NP PCE:	0	0	4	0	0	0	0	282	3	1	1,898	0	2,188
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 NP PCE:	0	0	0	0	0	0	0	286	0	0	1,899	0	2,186
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 NP PCE:	132	0	46	0	0	0	0	265	21	15	1,768	0	2,245
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 NP PCE:	0	0	0	25	0	297	83	221	0	0	1,503	71	2,200

**Volume Development  
PM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 NP PCE:	334	271	0	0	289	142	0	0	0	272	22	204	1,534
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 NP PCE:	0	425	73	178	383	0	180	3	1,537	0	0	0	2,779
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 NP PCE:	0	0	3	0	0	0	0	1,890	6	1	483	0	2,383
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 NP PCE:	0	0	0	0	0	0	0	1,893	0	0	484	0	2,377
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 NP PCE:	87	0	46	0	0	0	0	1,764	129	55	397	0	2,479
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 NP PCE:	0	0	0	15	0	112	163	1,639	0	0	429	41	2,399

Timings

1: Green River Rd. & SR-91 WB Ramps

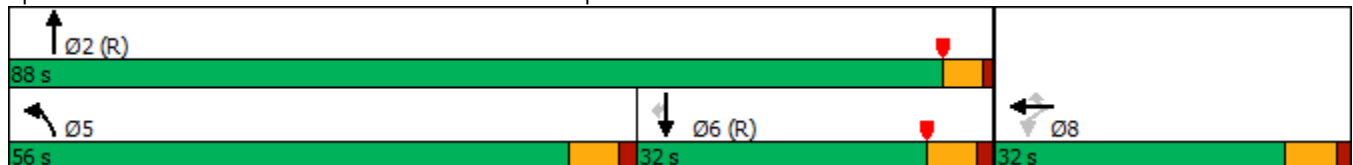


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↶	↶↶↶	↑	↓	↷
Traffic Volume (vph)	47	4	129	1668	217	245	282
Future Volume (vph)	47	4	129	1668	217	245	282
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	56.0	88.0	32.0	32.0
Total Split (%)	26.7%	26.7%	26.7%	46.7%	73.3%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	10.8	10.8	10.8	49.0	98.6	42.3	42.3
Actuated g/C Ratio	0.09	0.09	0.09	0.41	0.82	0.35	0.35
v/c Ratio	0.19	0.19	0.53	0.91	0.16	0.42	0.42
Control Delay	49.6	49.5	14.1	49.3	1.8	34.5	5.7
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Total Delay	49.6	49.5	14.1	49.8	1.8	34.5	5.7
LOS	D	D	B	D	A	C	A
Approach Delay		24.1			44.3	19.1	
Approach LOS		C			D	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.91  
 Intersection Signal Delay: 37.7  
 Intersection LOS: D  
 Intersection Capacity Utilization 68.4%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/24/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↶	↷	↶	↶↷↶	↶			↶	↶
Traffic Volume (veh/h)	0	0	0	47	4	129	1668	217	0	0	245	282
Future Volume (veh/h)	0	0	0	47	4	129	1668	217	0	0	245	282
Initial Q (Qb), veh				0	0	0	92	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				57	0	42	1895	247	0	0	278	230
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				154	0	69	2126	1629	0	0	742	621
Arrive On Green				0.04	0.00	0.04	0.27	0.57	0.00	0.00	0.41	0.41
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				57	0	42	1895	247	0	0	278	230
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				1.8	0.0	3.1	43.5	7.3	0.0	0.0	12.2	12.0
Cycle Q Clear(g_c), s				1.8	0.0	3.1	43.5	7.3	0.0	0.0	12.2	12.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				154	0	69	2126	1629	0	0	742	621
V/C Ratio(X)				0.37	0.00	0.61	0.89	0.15	0.00	0.00	0.37	0.37
Avail Cap(c_a), veh/h				784	0	349	2126	1629	0	0	777	651
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.66	0.66	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.9	0.0	56.5	43.3	5.2	0.0	0.0	26.1	26.0
Incr Delay (d2), s/veh				1.5	0.0	8.5	3.4	0.1	0.0	0.0	1.4	1.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	106.8	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.9	0.0	1.4	43.0	1.5	0.0	0.0	5.8	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				57.3	0.0	64.9	153.5	5.3	0.0	0.0	27.5	27.7
LnGrp LOS				E	A	E	F	A	A	A	C	C
Approach Vol, veh/h					99			2142			508	
Approach Delay, s/veh					60.6			136.4			27.6	
Approach LOS					E			F			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		108.9			53.8	55.1		11.1				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			50.0	26.0		26.0				
Max Q Clear Time (g_c+I1), s		9.3			45.5	14.2		5.1				
Green Ext Time (p_c), s		1.4			2.3	1.8		0.2				

Intersection Summary

HCM 6th Ctrl Delay	113.6
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Timings  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/24/2023

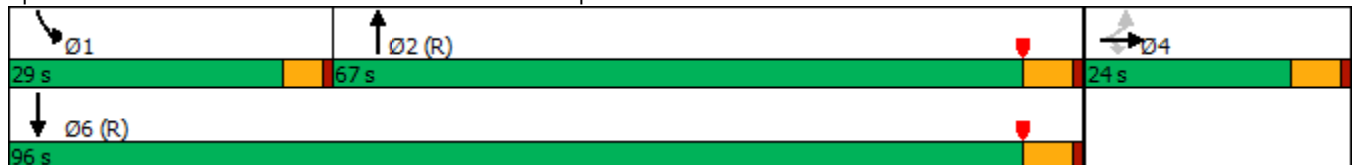


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↔↔↔	↔	↔↔
Traffic Volume (vph)	1	210	1788	204	88
Future Volume (vph)	1	210	1788	204	88
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effect Green (s)	12.7	12.7	72.0	19.8	96.3
Actuated g/C Ratio	0.11	0.11	0.60	0.16	0.80
v/c Ratio	0.58	0.46	0.69	0.76	0.03
Control Delay	62.3	8.9	19.2	62.3	4.7
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay	62.3	8.9	19.5	62.3	4.7
LOS	E	A	B	E	A
Approach Delay	26.0		19.5		44.9
Approach LOS	C		B		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.76  
 Intersection Signal Delay: 23.2  
 Intersection LOS: C  
 Intersection Capacity Utilization 68.4%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/24/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↑↑↑		↘	↑↑	
Traffic Volume (veh/h)	98	1	210	0	0	0	0	1788	135	204	88	0
Future Volume (veh/h)	98	1	210	0	0	0	0	1788	135	204	88	0
Initial Q (Qb), veh	0	0	0				0	92	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	109	1	75				0	1987	141	227	98	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	144	1	227				0	3249	190	258	2990	0
Arrive On Green	0.08	0.08	0.08				0.00	0.65	0.65	0.14	0.83	0.00
Sat Flow, veh/h	1794	16	2834				0	5109	348	1810	3705	0
Grp Volume(v), veh/h	110	0	75				0	1388	740	227	98	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1828	1810	1805	0
Q Serve(g_s), s	7.1	0.0	3.0				0.0	28.3	28.7	14.8	0.6	0.0
Cycle Q Clear(g_c), s	7.1	0.0	3.0				0.0	28.3	28.7	14.8	0.6	0.0
Prop In Lane	0.99		1.00				0.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	145	0	227				0	2241	1192	258	2990	0
V/C Ratio(X)	0.76	0.00	0.33				0.00	0.62	0.62	0.88	0.03	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2241	1185	369	2990	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	54.1	0.0	52.2				0.0	14.9	14.7	50.4	1.8	0.0
Incr Delay (d2), s/veh	7.9	0.0	0.8				0.0	1.3	2.4	14.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	14.2	12.5	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	1.1				0.0	19.1	19.8	7.5	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.9	0.0	53.0				0.0	30.4	29.7	65.0	1.8	0.0
LnGrp LOS	E	A	D				A	C	C	E	A	A
Approach Vol, veh/h		185						2128			325	
Approach Delay, s/veh		58.3						30.1			46.0	
Approach LOS		E						C			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	21.6	83.3	15.1	104.9								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	24.5	61.5	18.5	90.5								
Max Q Clear Time (g_c+I1), s	16.8	30.7	9.1	2.6								
Green Ext Time (p_c), s	0.4	19.0	0.5	0.6								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			34.1									
HCM 6th LOS			C									

Timings

1: Green River Rd. & SR-91 WB Ramps

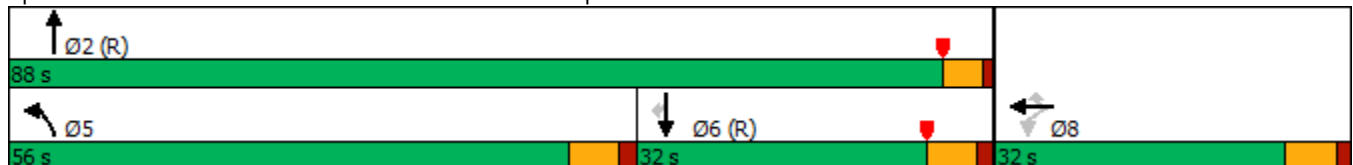


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↶	↶↶↶	↑	↓	↷
Traffic Volume (vph)	47	4	129	1668	217	245	282
Future Volume (vph)	47	4	129	1668	217	245	282
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	56.0	88.0	32.0	32.0
Total Split (%)	26.7%	26.7%	26.7%	46.7%	73.3%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	10.8	10.8	10.8	49.0	98.6	42.3	42.3
Actuated g/C Ratio	0.09	0.09	0.09	0.41	0.82	0.35	0.35
v/c Ratio	0.19	0.19	0.53	0.91	0.16	0.42	0.42
Control Delay	49.6	49.5	14.1	49.3	1.8	34.5	5.7
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Total Delay	49.6	49.5	14.1	49.8	1.8	34.5	5.7
LOS	D	D	B	D	A	C	A
Approach Delay		24.1			44.3	19.1	
Approach LOS		C			D	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.91  
 Intersection Signal Delay: 37.7  
 Intersection LOS: D  
 Intersection Capacity Utilization 68.4%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↖	↖	↖↖↖	↑			↑	↗
Traffic Volume (veh/h)	0	0	0	47	4	129	1668	217	0	0	245	282
Future Volume (veh/h)	0	0	0	47	4	129	1668	217	0	0	245	282
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				57	0	42	1895	247	0	0	278	230
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				154	0	69	2032	1629	0	0	777	651
Arrive On Green				0.04	0.00	0.04	0.27	0.57	0.00	0.00	0.41	0.41
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				57	0	42	1895	247	0	0	278	230
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				1.8	0.0	3.1	43.5	7.3	0.0	0.0	12.2	12.0
Cycle Q Clear(g_c), s				1.8	0.0	3.1	43.5	7.3	0.0	0.0	12.2	12.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				154	0	69	2032	1629	0	0	777	651
V/C Ratio(X)				0.37	0.00	0.61	0.93	0.15	0.00	0.00	0.36	0.35
Avail Cap(c_a), veh/h				784	0	349	2126	1629	0	0	777	651
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.66	0.66	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.9	0.0	56.5	42.4	5.2	0.0	0.0	24.5	24.5
Incr Delay (d2), s/veh				1.5	0.0	8.5	5.5	0.1	0.0	0.0	1.3	1.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.9	0.0	1.4	19.6	1.5	0.0	0.0	5.5	4.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				57.3	0.0	64.9	47.9	5.3	0.0	0.0	25.8	26.0
LnGrp LOS				E	A	E	D	A	A	A	C	C
Approach Vol, veh/h					99			2142			508	
Approach Delay, s/veh					60.6			43.0			25.9	
Approach LOS					E			D			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		108.9			53.8	55.1		11.1				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			50.0	26.0		26.0				
Max Q Clear Time (g_c+I1), s		9.3			45.5	14.2		5.1				
Green Ext Time (p_c), s		1.4			2.3	1.8		0.2				

Intersection Summary

HCM 6th Ctrl Delay	40.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings  
2: Green River Rd. & SR-91 EB Ramps

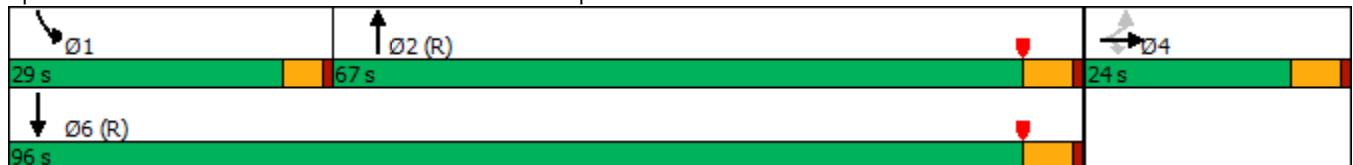


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↔↔↔	↔	↔↔
Traffic Volume (vph)	1	210	1788	204	88
Future Volume (vph)	1	210	1788	204	88
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.7	12.7	72.0	19.8	96.3
Actuated g/C Ratio	0.11	0.11	0.60	0.16	0.80
v/c Ratio	0.58	0.46	0.69	0.76	0.03
Control Delay	62.3	8.9	19.2	62.3	4.7
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay	62.3	8.9	19.5	62.3	4.7
LOS	E	A	B	E	A
Approach Delay	26.0		19.5		44.9
Approach LOS	C		B		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.76  
 Intersection Signal Delay: 23.2  
 Intersection LOS: C  
 Intersection Capacity Utilization 68.4%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↑↑↑		↘	↑↑	
Traffic Volume (veh/h)	98	1	210	0	0	0	0	1788	135	204	88	0
Future Volume (veh/h)	98	1	210	0	0	0	0	1788	135	204	88	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	109	1	75				0	1987	141	227	98	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	144	1	227				0	3200	226	258	2990	0
Arrive On Green	0.08	0.08	0.08				0.00	0.65	0.65	0.14	0.83	0.00
Sat Flow, veh/h	1794	16	2834				0	5109	348	1810	3705	0
Grp Volume(v), veh/h	110	0	75				0	1388	740	227	98	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1828	1810	1805	0
Q Serve(g_s), s	7.1	0.0	3.0				0.0	28.3	28.7	14.8	0.6	0.0
Cycle Q Clear(g_c), s	7.1	0.0	3.0				0.0	28.3	28.7	14.8	0.6	0.0
Prop In Lane	0.99		1.00				0.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	145	0	227				0	2241	1185	258	2990	0
V/C Ratio(X)	0.76	0.00	0.33				0.00	0.62	0.62	0.88	0.03	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2241	1185	369	2990	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	54.1	0.0	52.2				0.0	12.4	12.5	50.4	1.8	0.0
Incr Delay (d2), s/veh	7.9	0.0	0.8				0.0	1.3	2.5	14.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	1.1				0.0	9.9	11.0	7.5	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.9	0.0	53.0				0.0	13.7	15.0	65.0	1.8	0.0
LnGrp LOS	E	A	D				A	B	B	E	A	A
Approach Vol, veh/h		185						2128			325	
Approach Delay, s/veh		58.3						14.1			46.0	
Approach LOS		E						B			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	21.6	83.3	15.1	104.9								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	24.5	61.5	18.5	90.5								
Max Q Clear Time (g_c+I1), s	16.8	30.7	9.1	2.6								
Green Ext Time (p_c), s	0.4	19.0	0.5	0.6								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			21.2									
HCM 6th LOS			C									

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	282	3	1	1898	0	4
Future Vol, veh/h	282	3	1	1898	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	313	3	1	2109	0	4

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	316	0	- 158
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	- 6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	- 3.3
Pot Cap-1 Maneuver	-	-	1256	-	0 866
Stage 1	-	-	-	-	0 -
Stage 2	-	-	-	-	0 -
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1256	-	- 866
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.2
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	866	-	-	1256	-
HCM Lane V/C Ratio	0.005	-	-	0.001	-
HCM Control Delay (s)	9.2	-	-	7.9	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Timings  
5: Dominguez Ranch Rd. & Green River Rd.

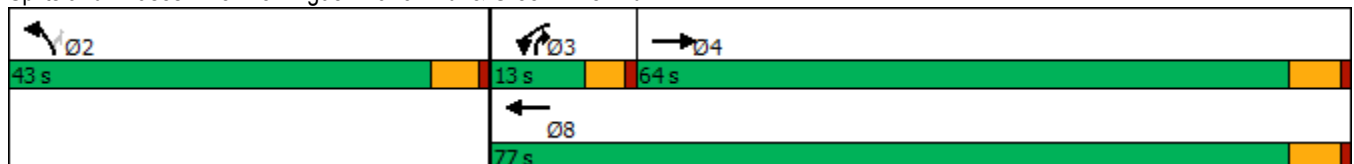


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↵	↑↑↑	↵	↵
Traffic Volume (vph)	265	15	1768	132	46
Future Volume (vph)	265	15	1768	132	46
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	64.0	13.0	77.0	43.0	13.0
Total Split (%)	53.3%	10.8%	64.2%	35.8%	10.8%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	37.5	5.7	43.5	14.1	25.5
Actuated g/C Ratio	0.54	0.08	0.63	0.20	0.37
v/c Ratio	0.11	0.11	0.60	0.40	0.08
Control Delay	9.4	37.9	9.2	27.9	5.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.4	37.9	9.2	27.9	5.7
LOS	A	D	A	C	A
Approach Delay	9.4		9.5	22.1	
Approach LOS	A		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 69.4  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.60  
 Intersection Signal Delay: 10.5  
 Intersection LOS: B  
 Intersection Capacity Utilization 51.8%  
 ICU Level of Service A  
 Analysis Period (min) 15

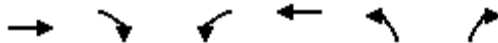
Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.





HCM 6th Signalized Intersection Summary  
5: Dominguez Ranch Rd. & Green River Rd.

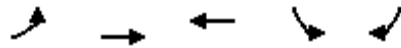
Green River TA (JN:12630)  
05/18/2023



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↙	↗
Traffic Volume (veh/h)	265	21	15	1768	132	46
Future Volume (veh/h)	265	21	15	1768	132	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	291	16	16	1943	145	17
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2772	151	35	3366	288	288
Arrive On Green	0.55	0.55	0.02	0.65	0.16	0.16
Sat Flow, veh/h	5206	274	1810	5358	1810	1610
Grp Volume(v), veh/h	199	108	16	1943	145	17
Grp Sat Flow(s),veh/h/ln	1729	1851	1810	1729	1810	1610
Q Serve(g_s), s	1.6	1.6	0.5	12.3	4.3	0.5
Cycle Q Clear(g_c), s	1.6	1.6	0.5	12.3	4.3	0.5
Prop In Lane		0.15	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1904	1019	35	3366	288	288
V/C Ratio(X)	0.10	0.11	0.45	0.58	0.50	0.06
Avail Cap(c_a), veh/h	3450	1847	261	6331	1166	1069
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.3	6.3	28.3	5.7	22.4	19.9
Incr Delay (d2), s/veh	0.0	0.0	3.3	0.2	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.4	0.2	2.2	1.7	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.3	6.3	31.6	5.9	23.8	20.0
LnGrp LOS	A	A	C	A	C	B
Approach Vol, veh/h	307			1959	162	
Approach Delay, s/veh	6.3			6.1	23.4	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.7	5.7	37.9		43.7
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		37.6	8.4	58.2		71.2
Max Q Clear Time (g_c+I1), s		6.3	2.5	3.6		14.3
Green Ext Time (p_c), s		0.4	0.0	1.8		23.6
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			7.3			
HCM 6th LOS			A			

Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑	↖	↗
Traffic Volume (vph)	83	221	1503	25	297
Future Volume (vph)	83	221	1503	25	297
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	26.0	87.8	61.8	32.2	26.0
Total Split (%)	21.7%	73.2%	51.5%	26.8%	21.7%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	14.2	59.7	35.3	13.3	20.8
Actuated g/C Ratio	0.21	0.88	0.52	0.20	0.31
v/c Ratio	0.24	0.05	0.64	0.08	0.65
Control Delay	33.8	3.0	14.2	30.7	28.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	33.8	3.0	14.2	30.7	28.3
LOS	C	A	B	C	C
Approach Delay		11.4	14.2	28.5	
Approach LOS		B	B	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 68  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.65  
 Intersection Signal Delay: 15.9  
 Intersection LOS: B  
 Intersection Capacity Utilization 57.7%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
 6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
 05/18/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↗	↑↑↑	↑↑↑		↖	↖
Traffic Volume (veh/h)	83	221	1503	71	25	297
Future Volume (veh/h)	83	221	1503	71	25	297
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	90	240	1634	69	27	105
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	118	3404	2633	111	265	341
Arrive On Green	0.06	0.66	0.52	0.52	0.15	0.15
Sat Flow, veh/h	1810	5358	5275	215	1810	1610
Grp Volume(v), veh/h	90	240	1107	596	27	105
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1861	1810	1610
Q Serve(g_s), s	3.0	1.0	13.9	13.9	0.8	3.3
Cycle Q Clear(g_c), s	3.0	1.0	13.9	13.9	0.8	3.3
Prop In Lane	1.00			0.12	1.00	1.00
Lane Grp Cap(c), veh/h	118	3404	1784	960	265	341
V/C Ratio(X)	0.77	0.07	0.62	0.62	0.10	0.31
Avail Cap(c_a), veh/h	636	6984	3180	1712	773	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	3.8	10.5	10.5	22.5	20.2
Incr Delay (d2), s/veh	3.9	0.0	0.4	0.7	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.2	3.9	4.2	0.3	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.9	3.8	10.9	11.2	22.7	20.8
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h		330	1703		132	
Approach Delay, s/veh		11.4	11.0		21.1	
Approach LOS		B	B		C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.6	37.2			45.8	15.1
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	21.4	56.0			82.0	26.0
Max Q Clear Time (g_c+11), s	5.0	15.9			3.0	5.3
Green Ext Time (p_c), s	0.1	15.5			1.6	0.3

Intersection Summary						
HCM 6th Ctrl Delay			11.7			
HCM 6th LOS			B			

Timings  
1: Green River Rd. & SR-91 WB Ramps

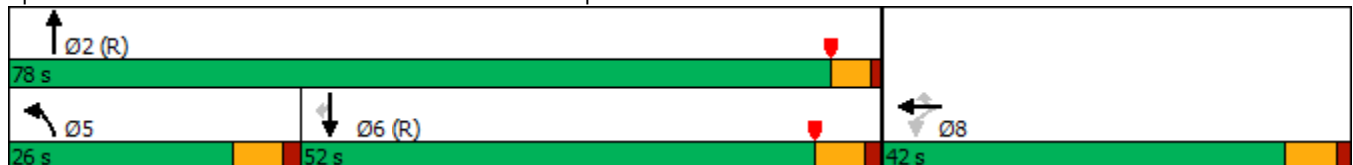


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↖	↖	↖↖↖	↑	↑	↖
Traffic Volume (vph)	272	22	204	334	271	289	142
Future Volume (vph)	272	22	204	334	271	289	142
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	42.0	42.0	42.0	26.0	78.0	52.0	52.0
Total Split (%)	35.0%	35.0%	35.0%	21.7%	65.0%	43.3%	43.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	17.4	17.4	17.4	13.0	92.0	71.6	71.6
Actuated g/C Ratio	0.14	0.14	0.14	0.11	0.77	0.60	0.60
v/c Ratio	0.65	0.65	0.53	0.67	0.20	0.28	0.15
Control Delay	59.5	59.3	10.0	47.4	8.4	14.0	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.5	59.3	10.0	47.4	8.4	14.0	2.7
LOS	E	E	A	D	A	B	A
Approach Delay		39.2			29.9	10.3	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.67  
 Intersection Signal Delay: 27.4  
 Intersection LOS: C  
 Intersection Capacity Utilization 73.5%  
 ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↖	↖	↖↖↖	↑			↑	↗
Traffic Volume (veh/h)	0	0	0	272	22	204	334	271	0	0	289	142
Future Volume (veh/h)	0	0	0	272	22	204	334	271	0	0	289	142
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No			No		
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				316	0	154	367	298	0	0	318	52
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				442	0	197	462	1478	0	0	1211	1013
Arrive On Green				0.12	0.00	0.12	0.15	1.00	0.00	0.00	0.64	0.64
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				316	0	154	367	298	0	0	318	52
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				10.1	0.0	11.1	8.3	0.0	0.0	0.0	8.8	1.5
Cycle Q Clear(g_c), s				10.1	0.0	11.1	8.3	0.0	0.0	0.0	8.8	1.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				442	0	197	462	1478	0	0	1211	1013
V/C Ratio(X)				0.71	0.00	0.78	0.79	0.20	0.00	0.00	0.26	0.05
Avail Cap(c_a), veh/h				1086	0	483	850	1478	0	0	1211	1013
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.87	0.87	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.6	0.0	51.1	49.9	0.0	0.0	0.0	9.5	8.2
Incr Delay (d2), s/veh				2.2	0.0	6.6	1.0	0.3	0.0	0.0	0.5	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.6	0.0	4.7	3.3	0.1	0.0	0.0	3.4	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.8	0.0	57.8	50.9	0.3	0.0	0.0	10.0	8.3
LnGrp LOS				D	A	E	D	A	A	A	B	A
Approach Vol, veh/h					470			665			370	
Approach Delay, s/veh					54.4			28.2			9.8	
Approach LOS					D			C			A	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		99.3			16.9	82.5		20.7				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 73			20.0	46.0		36.0				
Max Q Clear Time (g_c+I1), s		2.0			10.3	10.8		13.1				
Green Ext Time (p_c), s		1.7			0.5	1.9		1.5				

Intersection Summary

HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023

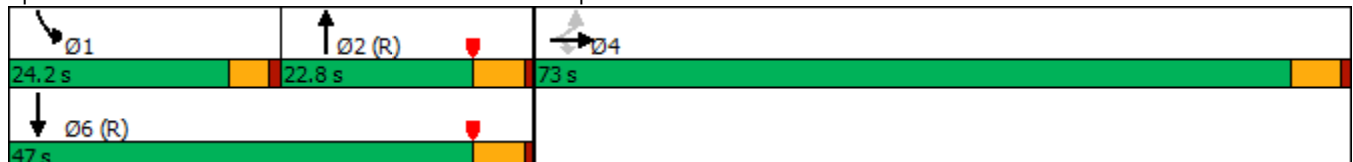


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↕	↕↕	↕↕↕	↕	↕↕
Traffic Volume (vph)	3	1537	425	178	383
Future Volume (vph)	3	1537	425	178	383
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	73.0	73.0	22.8	24.2	47.0
Total Split (%)	60.8%	60.8%	19.0%	20.2%	39.2%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	64.2	64.2	23.9	16.4	44.8
Actuated g/C Ratio	0.54	0.54	0.20	0.14	0.37
v/c Ratio	0.19	0.90	0.49	0.73	0.29
Control Delay	14.4	25.3	44.1	65.1	37.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.4	25.3	44.1	65.1	37.6
LOS	B	C	D	E	D
Approach Delay	24.1		44.1		46.3
Approach LOS	C		D		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.90  
 Intersection Signal Delay: 32.2  
 Intersection LOS: C  
 Intersection Capacity Utilization 73.5%  
 ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗↘					↕↗↘		↗	↕↗	
Traffic Volume (veh/h)	180	3	1537	0	0	0	0	425	73	178	383	0
Future Volume (veh/h)	180	3	1537	0	0	0	0	425	73	178	383	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	182	3	1386				0	429	47	180	387	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	928	15	1476				0	1112	120	210	1398	0
Arrive On Green	0.52	0.52	0.52				0.00	0.23	0.23	0.12	0.39	0.00
Sat Flow, veh/h	1782	29	2834				0	4924	512	1810	3705	0
Grp Volume(v), veh/h	185	0	1386				0	310	166	180	387	0
Grp Sat Flow(s),veh/h/ln	1811	0	1417				0	1729	1808	1810	1805	0
Q Serve(g_s), s	6.5	0.0	55.0				0.0	9.1	9.3	11.7	8.8	0.0
Cycle Q Clear(g_c), s	6.5	0.0	55.0				0.0	9.1	9.3	11.7	8.8	0.0
Prop In Lane	0.98		1.00				0.00		0.28	1.00		0.00
Lane Grp Cap(c), veh/h	943	0	1476				0	809	423	210	1398	0
V/C Ratio(X)	0.20	0.00	0.94				0.00	0.38	0.39	0.86	0.28	0.00
Avail Cap(c_a), veh/h	1019	0	1594				0	809	423	297	1398	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.92	0.92	0.00
Uniform Delay (d), s/veh	15.3	0.0	26.9				0.0	38.7	38.8	52.1	25.2	0.0
Incr Delay (d2), s/veh	0.1	0.0	10.7				0.0	1.4	2.7	14.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	19.0				0.0	3.9	4.3	6.0	3.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.4	0.0	37.6				0.0	40.1	41.5	66.9	25.7	0.0
LnGrp LOS	B	A	D				A	D	D	E	C	A
Approach Vol, veh/h		1571						476			567	
Approach Delay, s/veh		35.0						40.6			38.8	
Approach LOS		D						D			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	18.4	33.6	68.0	52.0								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	19.7	17.3	67.5	41.5								
Max Q Clear Time (g_c+I1), s	13.7	11.3	57.0	10.8								
Green Ext Time (p_c), s	0.2	1.4	5.5	2.4								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			36.8									
HCM 6th LOS			D									

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	1890	6	1	483	0	3
Future Vol, veh/h	1890	6	1	483	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	1948	6	1	498	0	3

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	1954	0	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	-
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	-
Pot Cap-1 Maneuver	-	-	303	-	0
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	303	-	-
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	19.3
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	254	-	-	303	-
HCM Lane V/C Ratio	0.012	-	-	0.003	-
HCM Control Delay (s)	19.3	-	-	16.9	-
HCM Lane LOS	C	-	-	C	-
HCM 95th %tile Q(veh)	0	-	-	0	-



Timings  
5: Dominguez Ranch Rd. & Green River Rd.

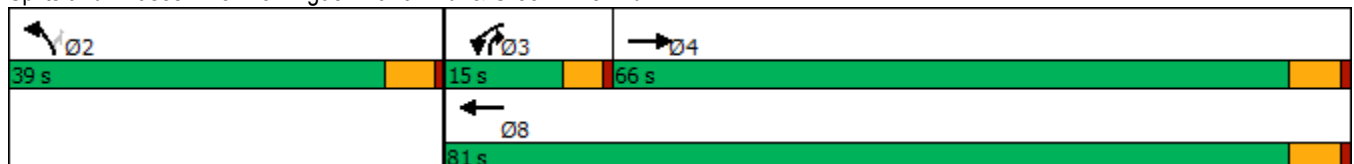


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↵	↑↑↑	↵	↵
Traffic Volume (vph)	1764	55	397	87	46
Future Volume (vph)	1764	55	397	87	46
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	66.0	15.0	81.0	39.0	15.0
Total Split (%)	55.0%	12.5%	67.5%	32.5%	12.5%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	50.8	7.7	60.0	14.3	22.2
Actuated g/C Ratio	0.65	0.10	0.76	0.18	0.28
v/c Ratio	0.60	0.33	0.11	0.28	0.10
Control Delay	13.8	46.2	4.4	35.5	19.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.8	46.2	4.4	35.5	19.7
LOS	B	D	A	D	B
Approach Delay	13.8		9.5	30.1	
Approach LOS	B		A	C	

Intersection Summary

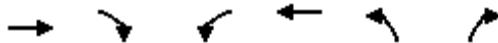
Cycle Length: 120  
 Actuated Cycle Length: 78.7  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.60  
 Intersection Signal Delay: 13.9  
 Intersection LOS: B  
 Intersection Capacity Utilization 62.6%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)  
05/18/2023



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	↵
Traffic Volume (veh/h)	1764	129	55	397	87	46
Future Volume (veh/h)	1764	129	55	397	87	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1857	112	58	418	92	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2905	175	90	3630	236	290
Arrive On Green	0.58	0.58	0.05	0.70	0.13	0.13
Sat Flow, veh/h	5174	301	1810	5358	1810	1610
Grp Volume(v), veh/h	1282	687	58	418	92	16
Grp Sat Flow(s),veh/h/ln	1729	1846	1810	1729	1810	1610
Q Serve(g_s), s	16.3	16.4	2.1	1.7	3.1	0.5
Cycle Q Clear(g_c), s	16.3	16.4	2.1	1.7	3.1	0.5
Prop In Lane		0.16	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2008	1072	90	3630	236	290
V/C Ratio(X)	0.64	0.64	0.65	0.12	0.39	0.06
Avail Cap(c_a), veh/h	3152	1683	285	5906	921	899
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.2	9.2	30.8	3.2	26.3	22.4
Incr Delay (d2), s/veh	0.3	0.6	2.9	0.0	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	4.7	0.9	0.3	1.3	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.6	9.9	33.7	3.2	27.3	22.5
LnGrp LOS	A	A	C	A	C	C
Approach Vol, veh/h	1969			476	108	
Approach Delay, s/veh	9.7			7.0	26.6	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.0	7.9	44.1		52.0
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		33.6	10.4	60.2		75.2
Max Q Clear Time (g_c+I1), s		5.1	4.1	18.4		3.7
Green Ext Time (p_c), s		0.3	0.0	19.9		2.8
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			9.9			
HCM 6th LOS			A			

Timings  
6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑	↖	↗
Traffic Volume (vph)	163	1639	429	15	112
Future Volume (vph)	163	1639	429	15	112
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	37.0	87.0	50.0	33.0	37.0
Total Split (%)	30.8%	72.5%	41.7%	27.5%	30.8%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	9.9	37.9	16.3	13.5	13.0
Actuated g/C Ratio	0.24	0.91	0.39	0.32	0.31
v/c Ratio	0.39	0.36	0.24	0.03	0.20
Control Delay	20.1	3.7	11.1	14.6	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	20.1	3.7	11.1	14.6	3.0
LOS	C	A	B	B	A
Approach Delay		5.2	11.1	4.3	
Approach LOS		A	B	A	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 41.7  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.39  
 Intersection Signal Delay: 6.3  
 Intersection Capacity Utilization 50.0%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service A

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
05/18/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑↗		↙	↘
Traffic Volume (veh/h)	163	1639	429	41	15	112
Future Volume (veh/h)	163	1639	429	41	15	112
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	168	1690	442	39	15	56
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	220	3225	1965	171	231	401
Arrive On Green	0.12	0.62	0.40	0.40	0.13	0.13
Sat Flow, veh/h	1810	5358	5030	423	1810	1610
Grp Volume(v), veh/h	168	1690	313	168	15	56
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1824	1810	1610
Q Serve(g_s), s	4.3	8.8	2.8	2.9	0.3	1.3
Cycle Q Clear(g_c), s	4.3	8.8	2.8	2.9	0.3	1.3
Prop In Lane	1.00			0.23	1.00	1.00
Lane Grp Cap(c), veh/h	220	3225	1398	738	231	401
V/C Ratio(X)	0.77	0.52	0.22	0.23	0.06	0.14
Avail Cap(c_a), veh/h	1224	8795	3192	1683	1013	1096
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	5.1	9.3	9.4	18.4	14.0
Incr Delay (d2), s/veh	2.1	0.1	0.1	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.3	0.8	0.8	0.1	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.5	5.2	9.4	9.5	18.5	14.2
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		1858	481		71	
Approach Delay, s/veh		6.8	9.5		15.1	
Approach LOS		A	A		B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.4	25.2			35.6	12.3
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	32.4	44.2			81.2	26.8
Max Q Clear Time (g_c+11), s	6.3	4.9			10.8	3.3
Green Ext Time (p_c), s	0.2	2.9			19.0	0.2
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			7.6			
HCM 6th LOS			A			

**APPENDIX 6.2: OPENING YEAR CUMULATIVE (2026) WITH PROJECT  
(PHASE 1) CONDITIONS INTERSECTION OPERATIONS ANALYSIS  
WORKSHEETS**

This Page Intentionally Left Blank

**Volume Development  
AM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 1) PCE:	1,695	219	0	0	255	282	0	0	0	101	4	129	2,684
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 1) PCE:	0	1,817	162	204	152	0	98	1	264	0	0	0	2,698
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 1) PCE:	0	0	0	0	0	0	0	400	0	0	1,953	0	2,353
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 1) PCE:	55	0	14	0	0	0	0	286	118	86	1,899	0	2,459
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 1) PCE:	139	0	46	0	0	0	0	277	22	15	1,847	0	2,344
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 1) PCE:	0	0	0	25	0	316	86	230	0	0	1,563	71	2,291

**Volume Development  
PM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 1) PCE:	391	281	0	0	291	142	0	0	0	295	22	204	1,626
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 1) PCE:	0	492	130	178	409	0	180	3	1,560	0	0	0	2,952
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 1) PCE:	0	0	0	0	0	0	0	1,939	0	0	607	0	2,546
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 1) PCE:	124	0	80	0	0	0	0	1,893	49	20	484	0	2,650
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 1) PCE:	89	0	46	0	0	0	0	1,838	135	55	415	0	2,579
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 1) PCE:	0	0	0	15	0	116	181	1,695	0	0	443	41	2,491



Timings  
1: Green River Rd. & SR-91 WB Ramps

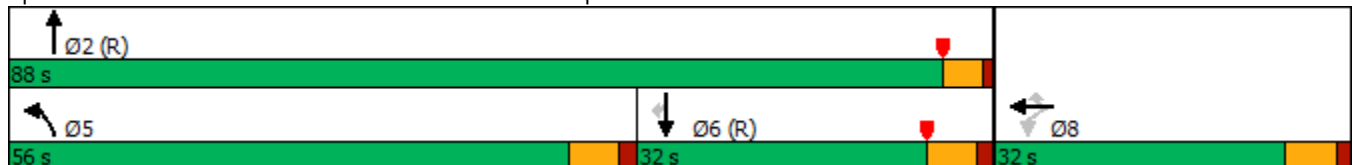


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↶	↶↶↶	↑	↑	↷
Traffic Volume (vph)	101	4	129	1695	219	255	282
Future Volume (vph)	101	4	129	1695	219	255	282
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	56.0	88.0	32.0	32.0
Total Split (%)	26.7%	26.7%	26.7%	46.7%	73.3%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	12.1	12.1	12.1	49.4	97.3	40.4	40.4
Actuated g/C Ratio	0.10	0.10	0.10	0.41	0.81	0.34	0.34
v/c Ratio	0.35	0.34	0.50	0.92	0.16	0.45	0.43
Control Delay	52.9	52.8	12.8	47.8	2.2	36.5	5.9
Queue Delay	0.0	0.0	0.0	0.7	0.0	0.0	0.0
Total Delay	52.9	52.8	12.8	48.5	2.2	36.5	5.9
LOS	D	D	B	D	A	D	A
Approach Delay		30.8			43.2	20.4	
Approach LOS		C			D	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.92  
 Intersection Signal Delay: 37.6  
 Intersection LOS: D  
 Intersection Capacity Utilization 68.9%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/24/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↖	↖	↖↖↖	↖			↖	↖
Traffic Volume (veh/h)	0	0	0	101	4	129	1695	219	0	0	255	282
Future Volume (veh/h)	0	0	0	101	4	129	1695	219	0	0	255	282
Initial Q (Qb), veh				0	0	0	92	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				119	0	42	1926	249	0	0	290	230
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				189	0	84	2126	1611	0	0	724	606
Arrive On Green				0.05	0.00	0.05	0.27	0.57	0.00	0.00	0.40	0.40
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				119	0	42	1926	249	0	0	290	230
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				3.9	0.0	3.0	44.3	7.4	0.0	0.0	13.1	12.3
Cycle Q Clear(g_c), s				3.9	0.0	3.0	44.3	7.4	0.0	0.0	13.1	12.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				189	0	84	2126	1611	0	0	724	606
V/C Ratio(X)				0.63	0.00	0.50	0.91	0.15	0.00	0.00	0.40	0.38
Avail Cap(c_a), veh/h				784	0	349	2126	1611	0	0	751	629
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.63	0.63	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.7	0.0	55.3	43.3	5.6	0.0	0.0	27.1	26.9
Incr Delay (d2), s/veh				3.4	0.0	4.5	3.9	0.1	0.0	0.0	1.7	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	113.4	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	0.0	1.3	44.3	1.8	0.0	0.0	6.2	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				59.1	0.0	59.8	160.5	5.7	0.0	0.0	28.8	28.7
LnGrp LOS				E	A	E	F	A	A	A	C	C
Approach Vol, veh/h					161			2175			520	
Approach Delay, s/veh					59.3			142.8			28.7	
Approach LOS					E			F			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		107.7			54.3	53.4		12.3				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			50.0	26.0		26.0				
Max Q Clear Time (g_c+I1), s		9.4			46.3	15.1		5.9				
Green Ext Time (p_c), s		1.4			2.0	1.8		0.4				

Intersection Summary

HCM 6th Ctrl Delay	117.3
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings  
2: Green River Rd. & SR-91 EB Ramps

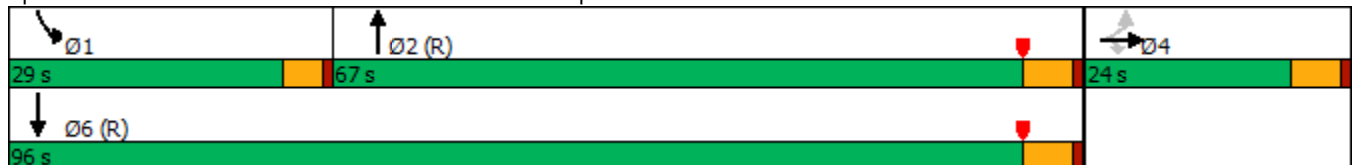


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↕↕↕	↔	↕↕
Traffic Volume (vph)	1	264	1817	204	152
Future Volume (vph)	1	264	1817	204	152
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effect Green (s)	12.7	12.7	72.0	19.8	96.3
Actuated g/C Ratio	0.11	0.11	0.60	0.16	0.80
v/c Ratio	0.57	0.52	0.72	0.76	0.06
Control Delay	62.1	8.7	19.7	55.8	5.2
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay	62.1	8.7	20.0	55.8	5.2
LOS	E	A	C	E	A
Approach Delay	23.3		20.0		34.2
Approach LOS	C		C		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.76  
 Intersection Signal Delay: 22.3  
 Intersection LOS: C  
 Intersection Capacity Utilization 68.9%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/24/2023

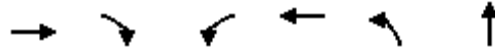


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↑↑↑		↘	↑↑	
Traffic Volume (veh/h)	98	1	264	0	0	0	0	1817	162	204	152	0
Future Volume (veh/h)	98	1	264	0	0	0	0	1817	162	204	152	0
Initial Q (Qb), veh	0	0	0				0	92	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	109	1	135				0	2019	171	227	169	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	146	1	231				0	3204	220	258	2984	0
Arrive On Green	0.08	0.08	0.08				0.00	0.65	0.65	0.14	0.83	0.00
Sat Flow, veh/h	1794	16	2834				0	5036	409	1810	3705	0
Grp Volume(v), veh/h	110	0	135				0	1430	760	227	169	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1816	1810	1805	0
Q Serve(g_s), s	7.1	0.0	5.5				0.0	29.9	30.5	14.8	1.0	0.0
Cycle Q Clear(g_c), s	7.1	0.0	5.5				0.0	29.9	30.5	14.8	1.0	0.0
Prop In Lane	0.99		1.00				0.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h	148	0	231				0	2236	1183	258	2984	0
V/C Ratio(X)	0.74	0.00	0.58				0.00	0.64	0.64	0.88	0.06	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2236	1174	369	2984	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.90	0.90	0.00
Uniform Delay (d), s/veh	53.9	0.0	53.1				0.0	15.3	15.2	50.4	1.9	0.0
Incr Delay (d2), s/veh	7.2	0.0	2.3				0.0	1.4	2.7	14.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	15.0	13.5	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	2.0				0.0	20.0	20.9	7.5	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.1	0.0	55.5				0.0	31.8	31.4	64.8	1.9	0.0
LnGrp LOS	E	A	E				A	C	C	E	A	A
Approach Vol, veh/h		245						2190			396	
Approach Delay, s/veh		58.0						31.7			38.0	
Approach LOS		E						C			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	21.6	83.1	15.3	104.7								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	24.5	61.5	18.5	90.5								
Max Q Clear Time (g_c+I1), s	16.8	32.5	9.1	3.0								
Green Ext Time (p_c), s	0.4	18.9	0.7	1.0								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			34.8									
HCM 6th LOS			C									

Timings  
4: Street A & Green River Rd.

Green River TA (JN:12630)

05/24/2023

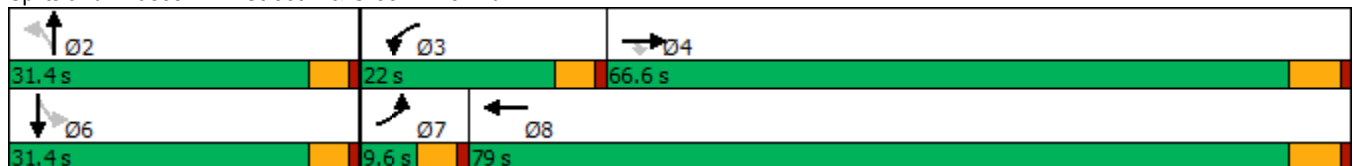


Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	Ø6	Ø7
Lane Configurations	↑↑↑	↑	↵	↑↑↑	↵	↑		
Traffic Volume (vph)	286	118	86	1899	55	0		
Future Volume (vph)	286	118	86	1899	55	0		
Turn Type	NA	Perm	Prot	NA	Perm	NA		
Protected Phases	4		3	8		2	6	7
Permitted Phases		4			2			
Detector Phase	4	4	3	8	2	2		
Switch Phase								
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.8	22.8	9.6	22.8	26.6	26.6	26.6	9.6
Total Split (s)	66.6	66.6	22.0	79.0	31.4	31.4	31.4	9.6
Total Split (%)	55.5%	55.5%	18.3%	65.8%	26.2%	26.2%	26%	8%
Yellow Time (s)	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.8	5.8	4.6	5.8	4.6	4.6		
Lead/Lag	Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	35.9	35.9	8.7	46.5	12.3	12.3		
Actuated g/C Ratio	0.56	0.56	0.14	0.73	0.19	0.19		
v/c Ratio	0.11	0.13	0.38	0.55	0.22	0.02		
Control Delay	10.7	3.1	34.0	6.5	27.8	0.1		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	10.7	3.1	34.0	6.5	27.8	0.1		
LOS	B	A	C	A	C	A		
Approach Delay	8.5			7.7		22.3		
Approach LOS	A			A		C		

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 63.8  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.55  
 Intersection Signal Delay: 8.2  
 Intersection Capacity Utilization 61.7%  
 Analysis Period (min) 15  
 Intersection LOS: A  
 ICU Level of Service B


























Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary  
4: Street A & Green River Rd.

Green River TA (JN:12630)

05/24/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	0	286	118	86	1899	0	55	0	14	0	0	0
Future Volume (veh/h)	0	286	118	86	1899	0	55	0	14	0	0	0
Initial Q (Qb), veh	0	0	0	0	92	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	0	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	311	128	93	2064	0	60	0	15	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	3	2980	925	121	3713	0	326	0	187	0	221	0
Arrive On Green	0.00	0.55	0.55	0.07	0.70	0.00	0.12	0.00	0.12	0.00	0.00	0.00
Sat Flow, veh/h	1810	5187	1610	1810	5358	0	1810	0	1610	0	1900	0
Grp Volume(v), veh/h	0	311	128	93	2064	0	60	0	15	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	0	1810	0	1610	0	1900	0
Q Serve(g_s), s	0.0	1.7	2.2	2.9	11.5	0.0	1.7	0.0	0.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.7	2.2	2.9	11.5	0.0	1.7	0.0	0.5	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	3	2980	925	121	3713	0	326	0	187	0	221	0
V/C Ratio(X)	0.00	0.10	0.14	0.77	0.56	0.00	0.18	0.00	0.08	0.00	0.00	0.00
Avail Cap(c_a), veh/h	157	5461	1695	545	6575	0	964	0	747	0	882	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.0	6.1	29.3	5.3	0.0	26.0	0.0	25.3	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	3.8	0.1	0.0	0.3	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.5	1.4	6.7	0.0	0.8	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.0	6.2	33.1	15.3	0.0	26.2	0.0	25.5	0.0	0.0	0.0
LnGrp LOS	A	A	A	C	B	A	C	A	C	A	A	A
Approach Vol, veh/h		439			2157			75				0
Approach Delay, s/veh		6.0			16.1			26.1				0.0
Approach LOS		A			B			C				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.6	8.5	37.7		11.6	0.0	46.2				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		26.8	17.4	60.8		26.8	5.0	73.2				
Max Q Clear Time (g_c+I1), s		3.7	4.9	4.2		0.0	0.0	13.5				
Green Ext Time (p_c), s		0.2	0.1	2.4		0.0	0.0	26.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay				14.7								
HCM 6th LOS				B								

Timings  
1: Green River Rd. & SR-91 WB Ramps

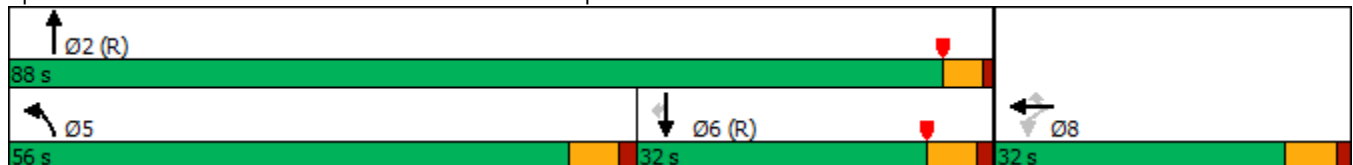


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↶	↶↶↶	↑	↓	↷
Traffic Volume (vph)	101	4	129	1695	219	255	282
Future Volume (vph)	101	4	129	1695	219	255	282
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	56.0	88.0	32.0	32.0
Total Split (%)	26.7%	26.7%	26.7%	46.7%	73.3%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	12.1	12.1	12.1	49.4	97.3	40.4	40.4
Actuated g/C Ratio	0.10	0.10	0.10	0.41	0.81	0.34	0.34
v/c Ratio	0.35	0.34	0.50	0.92	0.16	0.45	0.43
Control Delay	52.9	52.8	12.8	47.8	2.2	36.5	5.9
Queue Delay	0.0	0.0	0.0	0.7	0.0	0.0	0.0
Total Delay	52.9	52.8	12.8	48.5	2.2	36.5	5.9
LOS	D	D	B	D	A	D	A
Approach Delay		30.8			43.2	20.4	
Approach LOS		C			D	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.92  
 Intersection Signal Delay: 37.6  
 Intersection LOS: D  
 Intersection Capacity Utilization 68.9%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↖	↖	↖↖↖	↖			↖	↖
Traffic Volume (veh/h)	0	0	0	101	4	129	1695	219	0	0	255	282
Future Volume (veh/h)	0	0	0	101	4	129	1695	219	0	0	255	282
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				119	0	42	1926	249	0	0	290	230
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				189	0	84	2053	1611	0	0	751	629
Arrive On Green				0.05	0.00	0.05	0.27	0.57	0.00	0.00	0.40	0.40
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				119	0	42	1926	249	0	0	290	230
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				3.9	0.0	3.0	44.3	7.4	0.0	0.0	13.1	12.3
Cycle Q Clear(g_c), s				3.9	0.0	3.0	44.3	7.4	0.0	0.0	13.1	12.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				189	0	84	2053	1611	0	0	751	629
V/C Ratio(X)				0.63	0.00	0.50	0.94	0.15	0.00	0.00	0.39	0.37
Avail Cap(c_a), veh/h				784	0	349	2126	1611	0	0	751	629
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.63	0.63	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.7	0.0	55.3	42.4	5.6	0.0	0.0	25.9	25.6
Incr Delay (d2), s/veh				3.4	0.0	4.5	5.7	0.1	0.0	0.0	1.5	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				1.8	0.0	1.3	20.0	1.8	0.0	0.0	6.0	4.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				59.1	0.0	59.8	48.1	5.7	0.0	0.0	27.4	27.3
LnGrp LOS				E	A	E	D	A	A	A	C	C
Approach Vol, veh/h					161			2175			520	
Approach Delay, s/veh					59.3			43.2			27.3	
Approach LOS					E			D			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		107.7			54.3	53.4		12.3				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			50.0	26.0		26.0				
Max Q Clear Time (g_c+I1), s		9.4			46.3	15.1		5.9				
Green Ext Time (p_c), s		1.4			2.0	1.8		0.4				

Intersection Summary

HCM 6th Ctrl Delay	41.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Timings  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023

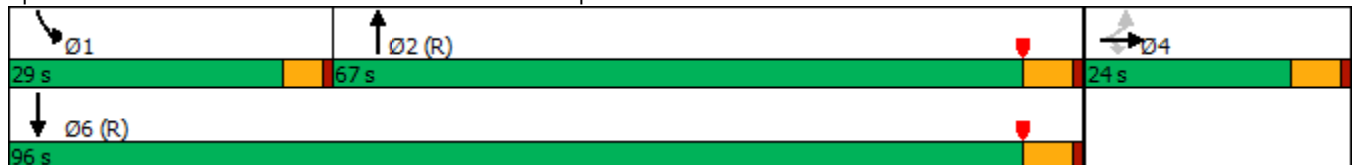


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↔↔↔	↔	↔↔
Traffic Volume (vph)	1	264	1817	204	152
Future Volume (vph)	1	264	1817	204	152
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.7	12.7	72.0	19.8	96.3
Actuated g/C Ratio	0.11	0.11	0.60	0.16	0.80
v/c Ratio	0.57	0.52	0.72	0.76	0.06
Control Delay	62.1	8.7	19.7	55.8	5.2
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay	62.1	8.7	20.0	55.8	5.2
LOS	E	A	C	E	A
Approach Delay	23.3		20.0		34.2
Approach LOS	C		C		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.76  
 Intersection Signal Delay: 22.3  
 Intersection LOS: C  
 Intersection Capacity Utilization 68.9%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



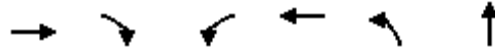
HCM 6th Signalized Intersection Summary  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)  
05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↑↑↑		↘	↑↑	
Traffic Volume (veh/h)	98	1	264	0	0	0	0	1817	162	204	152	0
Future Volume (veh/h)	98	1	264	0	0	0	0	1817	162	204	152	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	109	1	135				0	2019	171	227	169	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	146	1	231				0	3146	264	258	2984	0
Arrive On Green	0.08	0.08	0.08				0.00	0.65	0.65	0.14	0.83	0.00
Sat Flow, veh/h	1794	16	2834				0	5036	409	1810	3705	0
Grp Volume(v), veh/h	110	0	135				0	1430	760	227	169	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1816	1810	1805	0
Q Serve(g_s), s	7.1	0.0	5.5				0.0	29.9	30.5	14.8	1.0	0.0
Cycle Q Clear(g_c), s	7.1	0.0	5.5				0.0	29.9	30.5	14.8	1.0	0.0
Prop In Lane	0.99		1.00				0.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h	148	0	231				0	2236	1174	258	2984	0
V/C Ratio(X)	0.74	0.00	0.58				0.00	0.64	0.65	0.88	0.06	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2236	1174	369	2984	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.90	0.90	0.00
Uniform Delay (d), s/veh	53.9	0.0	53.1				0.0	12.8	12.9	50.4	1.9	0.0
Incr Delay (d2), s/veh	7.2	0.0	2.3				0.0	1.4	2.8	14.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	2.0				0.0	10.5	11.7	7.5	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	61.1	0.0	55.5				0.0	14.2	15.6	64.8	1.9	0.0
LnGrp LOS	E	A	E				A	B	B	E	A	A
Approach Vol, veh/h		245						2190			396	
Approach Delay, s/veh		58.0						14.7			38.0	
Approach LOS		E						B			D	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	21.6	83.1		15.3				104.7				
Change Period (Y+Rc), s	4.5	5.5		5.5				5.5				
Max Green Setting (Gmax), s	24.5	61.5		18.5				90.5				
Max Q Clear Time (g_c+I1), s	16.8	32.5		9.1				3.0				
Green Ext Time (p_c), s	0.4	18.9		0.7				1.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			21.7									
HCM 6th LOS			C									

Timings  
4: Street A & Green River Rd.

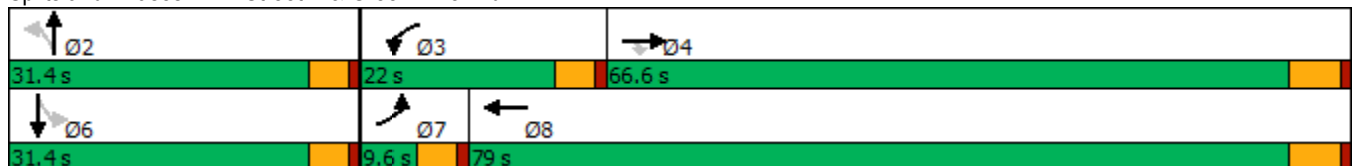


Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	Ø6	Ø7
Lane Configurations	↑↑↑	↑	↵	↑↑↑	↵	↑		
Traffic Volume (vph)	286	118	86	1899	55	0		
Future Volume (vph)	286	118	86	1899	55	0		
Turn Type	NA	Perm	Prot	NA	Perm	NA		
Protected Phases	4		3	8		2	6	7
Permitted Phases		4			2			
Detector Phase	4	4	3	8	2	2		
Switch Phase								
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.8	22.8	9.6	22.8	26.6	26.6	26.6	9.6
Total Split (s)	66.6	66.6	22.0	79.0	31.4	31.4	31.4	9.6
Total Split (%)	55.5%	55.5%	18.3%	65.8%	26.2%	26.2%	26%	8%
Yellow Time (s)	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.8	5.8	4.6	5.8	4.6	4.6		
Lead/Lag	Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	35.9	35.9	8.7	46.5	12.3	12.3		
Actuated g/C Ratio	0.56	0.56	0.14	0.73	0.19	0.19		
v/c Ratio	0.11	0.13	0.38	0.55	0.22	0.02		
Control Delay	10.7	3.1	34.0	6.5	27.8	0.1		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	10.7	3.1	34.0	6.5	27.8	0.1		
LOS	B	A	C	A	C	A		
Approach Delay	8.5			7.7		22.3		
Approach LOS	A			A		C		

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 63.8	
Natural Cycle: 75	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.55	
Intersection Signal Delay: 8.2	Intersection LOS: A
Intersection Capacity Utilization 61.7%	ICU Level of Service B
Analysis Period (min) 15	


























Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary  
4: Street A & Green River Rd.

Green River TA (JN:12630)

05/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	0	286	118	86	1899	0	55	0	14	0	0	0
Future Volume (veh/h)	0	286	118	86	1899	0	55	0	14	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	0	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	311	128	93	2064	0	60	0	15	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	3	2863	889	121	3624	0	344	0	195	0	230	0
Arrive On Green	0.00	0.55	0.55	0.07	0.70	0.00	0.12	0.00	0.12	0.00	0.00	0.00
Sat Flow, veh/h	1810	5187	1610	1810	5358	0	1810	0	1610	0	1900	0
Grp Volume(v), veh/h	0	311	128	93	2064	0	60	0	15	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	0	1810	0	1610	0	1900	0
Q Serve(g_s), s	0.0	1.7	2.2	2.9	11.5	0.0	1.7	0.0	0.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	1.7	2.2	2.9	11.5	0.0	1.7	0.0	0.5	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	3	2863	889	121	3624	0	344	0	195	0	230	0
V/C Ratio(X)	0.00	0.11	0.14	0.77	0.57	0.00	0.17	0.00	0.08	0.00	0.00	0.00
Avail Cap(c_a), veh/h	157	5461	1695	545	6575	0	964	0	747	0	882	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	6.2	6.3	26.5	4.4	0.0	23.1	0.0	22.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	3.8	0.1	0.0	0.2	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.4	0.5	1.2	1.5	0.0	0.7	0.0	0.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	6.2	6.4	30.2	4.5	0.0	23.3	0.0	22.7	0.0	0.0	0.0
LnGrp LOS	A	A	A	C	A	A	C	A	C	A	A	A
Approach Vol, veh/h		439			2157			75				0
Approach Delay, s/veh		6.2			5.6			23.2				0.0
Approach LOS		A			A			C				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		11.6	8.5	37.7		11.6	0.0	46.2				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		26.8	17.4	60.8		26.8	5.0	73.2				
Max Q Clear Time (g_c+I1), s		3.7	4.9	4.2		0.0	0.0	13.5				
Green Ext Time (p_c), s		0.2	0.1	2.4		0.0	0.0	26.9				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			6.2									
HCM 6th LOS			A									

Timings  
5: Dominguez Ranch Rd. & Green River Rd.

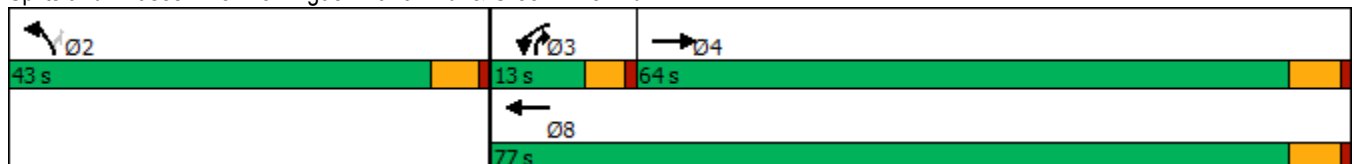


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↵	↑↑↑	↵	↵
Traffic Volume (vph)	277	15	1847	139	46
Future Volume (vph)	277	15	1847	139	46
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	64.0	13.0	77.0	43.0	13.0
Total Split (%)	53.3%	10.8%	64.2%	35.8%	10.8%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	40.7	5.7	46.6	14.5	25.9
Actuated g/C Ratio	0.56	0.08	0.64	0.20	0.36
v/c Ratio	0.11	0.11	0.61	0.43	0.08
Control Delay	9.1	40.5	9.3	30.4	6.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	9.1	40.5	9.3	30.4	6.2
LOS	A	D	A	C	A
Approach Delay	9.1		9.5	24.3	
Approach LOS	A		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 72.9  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.61  
 Intersection Signal Delay: 10.6  
 Intersection LOS: B  
 Intersection Capacity Utilization 53.4%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

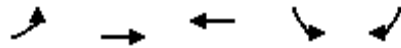
Green River TA (JN:12630)  
 05/18/2023



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↵	↑↑↑	↵	↵
Traffic Volume (veh/h)	277	22	15	1847	139	46
Future Volume (veh/h)	277	22	15	1847	139	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	304	17	16	2030	153	17
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2861	158	35	3440	279	279
Arrive On Green	0.57	0.57	0.02	0.66	0.15	0.15
Sat Flow, veh/h	5201	278	1810	5358	1810	1610
Grp Volume(v), veh/h	208	113	16	2030	153	17
Grp Sat Flow(s),veh/h/ln	1729	1850	1810	1729	1810	1610
Q Serve(g_s), s	1.7	1.7	0.5	13.3	4.8	0.5
Cycle Q Clear(g_c), s	1.7	1.7	0.5	13.3	4.8	0.5
Prop In Lane		0.15	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1967	1052	35	3440	279	279
V/C Ratio(X)	0.11	0.11	0.45	0.59	0.55	0.06
Avail Cap(c_a), veh/h	3282	1756	248	6023	1110	1019
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.1	6.1	29.7	5.7	24.0	21.2
Incr Delay (d2), s/veh	0.0	0.0	3.4	0.2	1.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.5	0.2	2.5	2.0	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.1	6.1	33.1	5.9	25.6	21.3
LnGrp LOS	A	A	C	A	C	C
Approach Vol, veh/h	321			2046	170	
Approach Delay, s/veh	6.1			6.1	25.2	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.8	5.8	40.7		46.5
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		37.6	8.4	58.2		71.2
Max Q Clear Time (g_c+I1), s		6.8	2.5	3.7		15.3
Green Ext Time (p_c), s		0.5	0.0	1.9		25.4
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			7.4			
HCM 6th LOS			A			

Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑	↖	↗
Traffic Volume (vph)	86	230	1563	25	316
Future Volume (vph)	86	230	1563	25	316
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	26.0	87.8	61.8	32.2	26.0
Total Split (%)	21.7%	73.2%	51.5%	26.8%	21.7%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	15.9	61.0	36.3	13.4	26.1
Actuated g/C Ratio	0.21	0.82	0.49	0.18	0.35
v/c Ratio	0.24	0.06	0.70	0.08	0.60
Control Delay	35.8	3.7	17.2	33.4	25.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	35.8	3.7	17.2	33.4	25.2
LOS	D	A	B	C	C
Approach Delay		12.4	17.2	25.8	
Approach LOS		B	B	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 74.1  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.70  
 Intersection Signal Delay: 17.8  
 Intersection LOS: B  
 Intersection Capacity Utilization 60.0%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
05/18/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑		↖	↗
Traffic Volume (veh/h)	86	230	1563	71	25	316
Future Volume (veh/h)	86	230	1563	71	25	316
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	93	250	1699	69	27	125
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	122	3446	2683	109	265	344
Arrive On Green	0.07	0.66	0.52	0.52	0.15	0.15
Sat Flow, veh/h	1810	5358	5284	208	1810	1610
Grp Volume(v), veh/h	93	250	1149	619	27	125
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1863	1810	1610
Q Serve(g_s), s	3.2	1.1	15.0	15.0	0.8	4.2
Cycle Q Clear(g_c), s	3.2	1.1	15.0	15.0	0.8	4.2
Prop In Lane	1.00			0.11	1.00	1.00
Lane Grp Cap(c), veh/h	122	3446	1815	977	265	344
V/C Ratio(X)	0.77	0.07	0.63	0.63	0.10	0.36
Avail Cap(c_a), veh/h	610	6697	3049	1642	741	767
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	3.8	10.7	10.7	23.5	21.3
Incr Delay (d2), s/veh	3.7	0.0	0.4	0.7	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.2	4.2	4.6	0.3	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	32.9	3.8	11.1	11.4	23.6	21.9
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h		343	1768		152	
Approach Delay, s/veh		11.7	11.2		22.2	
Approach LOS		B	B		C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	8.9	39.1			48.0	15.5
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	21.4	56.0			82.0	26.0
Max Q Clear Time (g_c+I1), s	5.2	17.0			3.1	6.2
Green Ext Time (p_c), s	0.1	16.3			1.6	0.4
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			12.0			
HCM 6th LOS			B			



Timings  
1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/18/2023

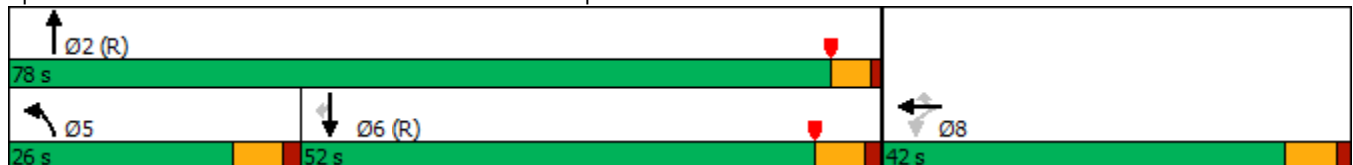


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↖	↖	↖↖↖	↑	↑	↖
Traffic Volume (vph)	295	22	204	391	281	291	142
Future Volume (vph)	295	22	204	391	281	291	142
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	42.0	42.0	42.0	26.0	78.0	52.0	52.0
Total Split (%)	35.0%	35.0%	35.0%	21.7%	65.0%	43.3%	43.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	18.4	18.4	18.4	14.5	91.0	69.2	69.2
Actuated g/C Ratio	0.15	0.15	0.15	0.12	0.76	0.58	0.58
v/c Ratio	0.67	0.66	0.51	0.70	0.21	0.29	0.16
Control Delay	59.7	58.7	9.6	47.5	9.3	15.4	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	58.7	9.6	47.5	9.3	15.4	2.9
LOS	E	E	A	D	A	B	A
Approach Delay		39.8			31.5	11.3	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.70  
 Intersection Signal Delay: 28.8  
 Intersection LOS: C  
 Intersection Capacity Utilization 75.0%  
 ICU Level of Service D  
 Analysis Period (min) 15






















Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations							  					
Traffic Volume (veh/h)	0	0	0	295	22	204	391	281	0	0	291	142
Future Volume (veh/h)	0	0	0	295	22	204	391	281	0	0	291	142
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No				No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				341	0	154	430	309	0	0	320	52
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				445	0	198	525	1476	0	0	1186	992
Arrive On Green				0.12	0.00	0.12	0.17	1.00	0.00	0.00	0.62	0.62
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				341	0	154	430	309	0	0	320	52
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				10.9	0.0	11.1	9.7	0.0	0.0	0.0	9.1	1.5
Cycle Q Clear(g_c), s				10.9	0.0	11.1	9.7	0.0	0.0	0.0	9.1	1.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				445	0	198	525	1476	0	0	1186	992
V/C Ratio(X)				0.77	0.00	0.78	0.82	0.21	0.00	0.00	0.27	0.05
Avail Cap(c_a), veh/h				1086	0	483	850	1476	0	0	1186	992
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.74	0.74	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				51.0	0.0	51.0	48.6	0.0	0.0	0.0	10.2	8.8
Incr Delay (d2), s/veh				2.8	0.0	6.5	1.0	0.2	0.0	0.0	0.6	0.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.0	0.0	4.7	3.8	0.1	0.0	0.0	3.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				53.7	0.0	57.5	49.6	0.2	0.0	0.0	10.8	8.9
LnGrp LOS				D	A	E	D	A	A	A	B	A
Approach Vol, veh/h					495			739			372	
Approach Delay, s/veh					54.9			29.0			10.5	
Approach LOS					D			C			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		99.2			18.3	80.9		20.8				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 73			20.0	46.0		36.0				
Max Q Clear Time (g_c+I1), s		2.0			11.7	11.1		13.1				
Green Ext Time (p_c), s		1.8			0.6	1.9		1.6				

Intersection Summary

HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023

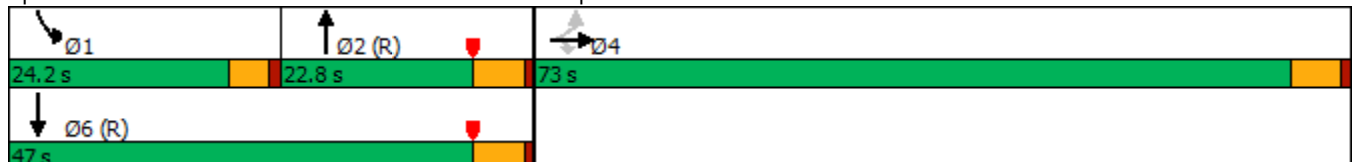


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↕	↗↗	↕↕↕	↖	↕↕
Traffic Volume (vph)	3	1560	492	178	409
Future Volume (vph)	3	1560	492	178	409
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	73.0	73.0	22.8	24.2	47.0
Total Split (%)	60.8%	60.8%	19.0%	20.2%	39.2%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effect Green (s)	65.1	65.1	22.9	16.4	43.9
Actuated g/C Ratio	0.54	0.54	0.19	0.14	0.37
v/c Ratio	0.19	0.91	0.63	0.73	0.31
Control Delay	14.0	27.1	45.9	65.0	38.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.0	27.1	45.9	65.0	38.6
LOS	B	C	D	E	D
Approach Delay	25.8		45.9		46.6
Approach LOS	C		D		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 80  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.91  
 Intersection Signal Delay: 34.1  
 Intersection LOS: C  
 Intersection Capacity Utilization 75.0%  
 ICU Level of Service D  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

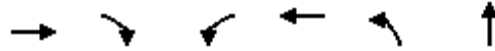
Green River TA (JN:12630)

05/18/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕	↗↘					↕↕↕		↘	↕↕	
Traffic Volume (veh/h)	180	3	1560	0	0	0	0	492	130	178	409	0
Future Volume (veh/h)	180	3	1560	0	0	0	0	492	130	178	409	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	182	3	1409				0	497	104	180	413	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	939	15	1494				0	983	201	210	1375	0
Arrive On Green	0.53	0.53	0.53				0.00	0.23	0.23	0.12	0.38	0.00
Sat Flow, veh/h	1782	29	2834				0	4488	882	1810	3705	0
Grp Volume(v), veh/h	185	0	1409				0	396	205	180	413	0
Grp Sat Flow(s),veh/h/ln	1811	0	1417				0	1729	1741	1810	1805	0
Q Serve(g_s), s	6.5	0.0	56.1				0.0	12.0	12.4	11.7	9.6	0.0
Cycle Q Clear(g_c), s	6.5	0.0	56.1				0.0	12.0	12.4	11.7	9.6	0.0
Prop In Lane	0.98		1.00				0.00		0.51	1.00		0.00
Lane Grp Cap(c), veh/h	955	0	1494				0	787	396	210	1375	0
V/C Ratio(X)	0.19	0.00	0.94				0.00	0.50	0.52	0.86	0.30	0.00
Avail Cap(c_a), veh/h	1019	0	1594				0	787	396	297	1375	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.91	0.91	0.00
Uniform Delay (d), s/veh	14.9	0.0	26.7				0.0	40.4	40.6	52.1	26.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	11.3				0.0	2.3	4.8	14.7	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	19.4				0.0	5.2	5.7	6.0	4.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.0	0.0	38.0				0.0	42.7	45.3	66.8	26.5	0.0
LnGrp LOS	B	A	D				A	D	D	E	C	A
Approach Vol, veh/h		1594						601			593	
Approach Delay, s/veh		35.3						43.6			38.7	
Approach LOS		D						D			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	18.4	32.8	68.8	51.2								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	19.7	17.3	67.5	41.5								
Max Q Clear Time (g_c+I1), s	13.7	14.4	58.1	11.6								
Green Ext Time (p_c), s	0.2	1.0	5.2	2.5								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			37.8									
HCM 6th LOS			D									

Timings  
4: Street A & Green River Rd.

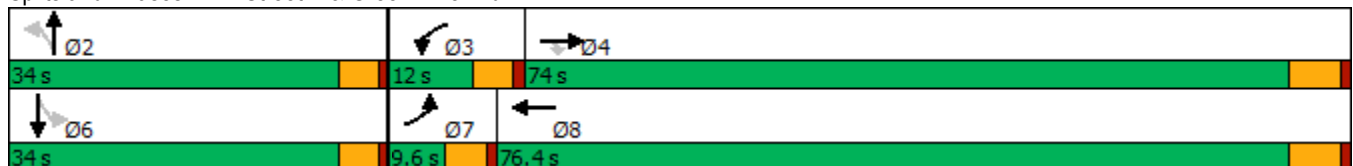


Lane Group	EBT	EBR	WBL	WBT	NBL	NBT	Ø6	Ø7
Lane Configurations	↑↑↑	↑	↵	↑↑↑	↵	↑		
Traffic Volume (vph)	1893	49	20	484	124	0		
Future Volume (vph)	1893	49	20	484	124	0		
Turn Type	NA	Perm	Prot	NA	Perm	NA		
Protected Phases	4		3	8		2	6	7
Permitted Phases		4			2			
Detector Phase	4	4	3	8	2	2		
Switch Phase								
Minimum Initial (s)	10.0	10.0	5.0	10.0	10.0	10.0	10.0	5.0
Minimum Split (s)	22.8	22.8	9.6	22.8	26.6	26.6	26.6	9.6
Total Split (s)	74.0	74.0	12.0	76.4	34.0	34.0	34.0	9.6
Total Split (%)	61.7%	61.7%	10.0%	63.7%	28.3%	28.3%	28%	8%
Yellow Time (s)	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0		
Total Lost Time (s)	5.8	5.8	4.6	5.8	4.6	4.6		
Lead/Lag	Lag	Lag	Lead	Lag				Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes				Yes
Recall Mode	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	50.7	50.7	6.1	54.2	15.4	15.4		
Actuated g/C Ratio	0.63	0.63	0.08	0.67	0.19	0.19		
v/c Ratio	0.63	0.05	0.16	0.15	0.49	0.23		
Control Delay	11.5	2.6	47.3	5.0	39.5	11.5		
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	11.5	2.6	47.3	5.0	39.5	11.5		
LOS	B	A	D	A	D	B		
Approach Delay	11.2			6.7		28.5		
Approach LOS	B			A		C		

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 80.7  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.63  
 Intersection Signal Delay: 11.7  
 Intersection LOS: B  
 Intersection Capacity Utilization 53.6%  
 ICU Level of Service A  
 Analysis Period (min) 15


























Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary  
4: Street A & Green River Rd.

Green River TA (JN:12630)

05/18/2023

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		  			  						 	
Traffic Volume (veh/h)	0	1893	49	20	484	0	124	0	80	0	0	0
Future Volume (veh/h)	0	1893	49	20	484	0	124	0	80	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	0	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	2058	53	22	526	0	135	0	87	0	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	3	3243	1007	45	3707	0	353	0	224	0	264	0
Arrive On Green	0.00	0.63	0.63	0.02	0.71	0.00	0.14	0.00	0.14	0.00	0.00	0.00
Sat Flow, veh/h	1810	5187	1610	1810	5358	0	1810	0	1610	0	1900	0
Grp Volume(v), veh/h	0	2058	53	22	526	0	135	0	87	0	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	0	1810	0	1610	0	1900	0
Q Serve(g_s), s	0.0	17.5	0.9	0.9	2.3	0.0	4.9	0.0	3.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.5	0.9	0.9	2.3	0.0	4.9	0.0	3.5	0.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	3	3243	1007	45	3707	0	353	0	224	0	264	0
V/C Ratio(X)	0.00	0.63	0.05	0.49	0.14	0.00	0.38	0.00	0.39	0.00	0.00	0.00
Avail Cap(c_a), veh/h	127	4977	1545	188	5152	0	850	0	666	0	786	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	8.3	5.2	34.2	3.2	0.0	28.5	0.0	27.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.0	3.1	0.0	0.0	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.4	0.2	0.4	0.4	0.0	2.2	0.0	1.4	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	8.5	5.2	37.3	3.2	0.0	29.2	0.0	29.0	0.0	0.0	0.0
LnGrp LOS	A	A	A	D	A	A	C	A	C	A	A	A
Approach Vol, veh/h		2111			548			222				0
Approach Delay, s/veh		8.4			4.6			29.1				0.0
Approach LOS		A			A			C				
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		14.5	6.4	50.2		14.5	0.0	56.6				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		29.4	7.4	68.2		29.4	5.0	70.6				
Max Q Clear Time (g_c+I1), s		6.9	2.9	19.5		0.0	0.0	4.3				
Green Ext Time (p_c), s		0.9	0.0	24.9		0.0	0.0	3.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			9.3									
HCM 6th LOS			A									

Timings  
5: Dominguez Ranch Rd. & Green River Rd.

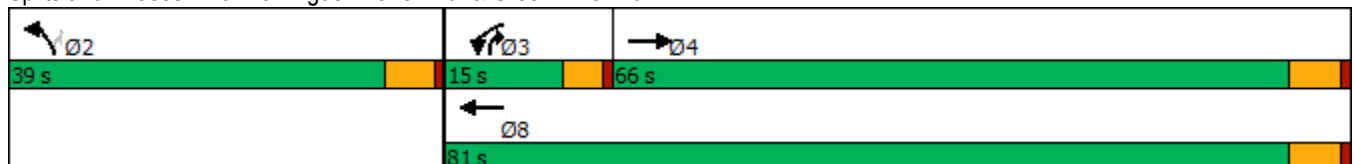


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↘	↑↑↑	↘	↗
Traffic Volume (vph)	1838	55	415	89	46
Future Volume (vph)	1838	55	415	89	46
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	66.0	15.0	81.0	39.0	15.0
Total Split (%)	55.0%	12.5%	67.5%	32.5%	12.5%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	53.6	7.7	62.8	14.4	22.2
Actuated g/C Ratio	0.66	0.09	0.77	0.18	0.27
v/c Ratio	0.61	0.34	0.11	0.30	0.11
Control Delay	13.9	48.0	4.3	37.1	21.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.9	48.0	4.3	37.1	21.6
LOS	B	D	A	D	C
Approach Delay	13.9		9.5	31.8	
Approach LOS	B		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 81.5  
 Natural Cycle: 90  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.61  
 Intersection Signal Delay: 14.0  
 Intersection LOS: B  
 Intersection Capacity Utilization 63.4%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)  
05/18/2023

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	1838	135	55	415	89	46
Future Volume (veh/h)	1838	135	55	415	89	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1935	118	58	437	94	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2965	180	88	3677	231	284
Arrive On Green	0.59	0.59	0.05	0.71	0.13	0.13
Sat Flow, veh/h	5170	304	1810	5358	1810	1610
Grp Volume(v), veh/h	1336	717	58	437	94	16
Grp Sat Flow(s),veh/h/ln	1729	1845	1810	1729	1810	1610
Q Serve(g_s), s	17.6	17.7	2.2	1.8	3.3	0.6
Cycle Q Clear(g_c), s	17.6	17.7	2.2	1.8	3.3	0.6
Prop In Lane		0.16	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2051	1094	88	3677	231	284
V/C Ratio(X)	0.65	0.65	0.66	0.12	0.41	0.06
Avail Cap(c_a), veh/h	3034	1619	274	5685	886	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.3	9.3	32.1	3.2	27.5	23.5
Incr Delay (d2), s/veh	0.4	0.7	3.1	0.0	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	5.1	0.9	0.3	1.4	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.6	10.0	35.2	3.2	28.7	23.6
LnGrp LOS	A	A	D	A	C	C
Approach Vol, veh/h	2053			495	110	
Approach Delay, s/veh	9.7			6.9	27.9	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.2	7.9	46.5		54.4
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		33.6	10.4	60.2		75.2
Max Q Clear Time (g_c+I1), s		5.3	4.2	19.7		3.8
Green Ext Time (p_c), s		0.3	0.0	21.0		2.9
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			10.0			
HCM 6th LOS			A			



Timings  
6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑	↖	↗
Traffic Volume (vph)	181	1695	443	15	116
Future Volume (vph)	181	1695	443	15	116
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	37.0	87.0	50.0	33.0	37.0
Total Split (%)	30.8%	72.5%	41.7%	27.5%	30.8%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	10.5	38.4	16.0	13.6	13.6
Actuated g/C Ratio	0.25	0.91	0.38	0.32	0.32
v/c Ratio	0.42	0.37	0.26	0.03	0.20
Control Delay	20.3	3.6	11.4	15.4	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	20.3	3.6	11.4	15.4	3.0
LOS	C	A	B	B	A
Approach Delay		5.2	11.4	4.4	
Approach LOS		A	B	A	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 42.1  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.42  
 Intersection Signal Delay: 6.4  
 Intersection LOS: A  
 Intersection Capacity Utilization 51.1%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
05/18/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑		↖	↗
Traffic Volume (veh/h)	181	1695	443	41	15	116
Future Volume (veh/h)	181	1695	443	41	15	116
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	187	1747	457	39	15	61
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	242	3272	1977	167	236	425
Arrive On Green	0.13	0.63	0.41	0.41	0.13	0.13
Sat Flow, veh/h	1810	5358	5044	411	1810	1610
Grp Volume(v), veh/h	187	1747	323	173	15	61
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1826	1810	1610
Q Serve(g_s), s	5.0	9.4	3.1	3.1	0.4	1.5
Cycle Q Clear(g_c), s	5.0	9.4	3.1	3.1	0.4	1.5
Prop In Lane	1.00			0.23	1.00	1.00
Lane Grp Cap(c), veh/h	242	3272	1403	741	236	425
V/C Ratio(X)	0.77	0.53	0.23	0.23	0.06	0.14
Avail Cap(c_a), veh/h	1168	8387	3044	1607	966	1074
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	5.2	9.8	9.8	19.2	14.1
Incr Delay (d2), s/veh	2.0	0.1	0.1	0.2	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	1.4	0.9	0.9	0.1	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.0	5.3	9.9	10.0	19.3	14.3
LnGrp LOS	C	A	A	A	B	B
Approach Vol, veh/h		1934	496		76	
Approach Delay, s/veh		7.0	9.9		15.3	
Approach LOS		A	A		B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.3	26.2			37.5	12.7
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	32.4	44.2			81.2	26.8
Max Q Clear Time (g_c+11), s	7.0	5.1			11.4	3.5
Green Ext Time (p_c), s	0.2	3.0			20.3	0.2
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			7.8			
HCM 6th LOS			A			

**APPENDIX 6.3: OPENING YEAR CUMULATIVE (2026) WITH PROJECT  
(PHASE 2) CONDITIONS INTERSECTION OPERATIONS ANALYSIS  
WORKSHEETS**

This Page Intentionally Left Blank

**Volume Development  
AM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 2) PCE:	1,708	223	0	0	260	282	0	0	0	115	4	129	2,720
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 2) PCE:	0	1,833	175	204	171	0	98	1	278	0	0	0	2,760
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 2) PCE:	0	0	0	0	0	0	0	433	0	0	1,983	0	2,416
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 2) PCE:	55	0	14	69	0	102	47	272	118	86	1,826	135	2,725
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 2) PCE:	148	0	46	0	0	0	0	324	30	15	1,899	0	2,460
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 2) PCE:	0	0	0	25	0	330	99	264	0	0	1,601	71	2,390

**Volume Development  
PM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 2) PCE:	398	283	0	0	295	142	0	0	0	307	22	204	1,651
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 2) PCE:	0	501	137	178	425	0	180	3	1,572	0	0	0	2,996
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 2) PCE:	0	0	0	0	0	0	0	1,967	0	0	623	0	2,590
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 2) PCE:	124	0	80	96	0	33	93	1,828	49	20	467	68	2,858
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 2) PCE:	97	0	46	0	0	0	0	1,863	140	55	459	0	2,661
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Phase 2) PCE:	0	0	0	15	0	128	188	1,714	0	0	475	41	2,561

Timings

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↶	↶↶↶	↶	↶	↶
Traffic Volume (vph)	115	4	129	1708	223	260	282
Future Volume (vph)	115	4	129	1708	223	260	282
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	56.0	88.0	32.0	32.0
Total Split (%)	26.7%	26.7%	26.7%	46.7%	73.3%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	12.5	12.5	12.5	49.6	96.9	39.9	39.9
Actuated g/C Ratio	0.10	0.10	0.10	0.41	0.81	0.33	0.33
v/c Ratio	0.38	0.37	0.49	0.92	0.16	0.46	0.43
Control Delay (s/veh)	53.7	53.6	12.5	47.4	2.3	37.1	5.9
Queue Delay	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Total Delay (s/veh)	53.7	53.6	12.5	48.2	2.3	37.1	5.9
LOS	D	D	B	D	A	D	A
Approach Delay (s/veh)		32.3			43.0	20.9	
Approach LOS		C			D	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.92  
 Intersection Signal Delay (s/veh): 37.6  
 Intersection LOS: D  
 Intersection Capacity Utilization 69.1%  
 ICU Level of Service C  
 Analysis Period (min) 15




















Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	115	4	129	1708	223	0	0	260	282
Future Volume (veh/h)	0	0	0	115	4	129	1708	223	0	0	260	282
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				135	0	42	1941	253	0	0	295	230
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				207	0	92	2063	1601	0	0	738	618
Arrive On Green				0.06	0.00	0.06	0.27	0.56	0.00	0.00	0.39	0.39
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				135	0	42	1941	253	0	0	295	230
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				4.4	0.0	3.0	44.7	7.6	0.0	0.0	13.5	12.4
Cycle Q Clear(g_c), s				4.4	0.0	3.0	44.7	7.6	0.0	0.0	13.5	12.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				207	0	92	2063	1601	0	0	738	618
V/C Ratio(X)				0.65	0.00	0.46	0.94	0.16	0.00	0.00	0.40	0.37
Avail Cap(c_a), veh/h				784	0	349	2126	1601	0	0	738	618
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.61	0.61	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.4	0.0	54.8	42.3	5.8	0.0	0.0	26.6	26.2
Incr Delay (d2), s/veh				3.5	0.0	3.5	5.8	0.1	0.0	0.0	1.6	1.7
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.1	0.0	1.3	20.1	1.9	0.0	0.0	6.2	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				58.9	0.0	58.3	48.2	5.9	0.0	0.0	28.2	27.9
LnGrp LOS				E		E	D	A			C	C
Approach Vol, veh/h					177			2194			525	
Approach Delay, s/veh					58.7			43.3			28.1	
Approach LOS					E			D			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		107.1			54.5	52.6		12.9				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			50.0	26.0		26.0				
Max Q Clear Time (g_c+I1), s		9.6			46.7	15.5		6.4				
Green Ext Time (p_c), s		1.4			1.9	1.7		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh				41.5								
HCM 6th LOS				D								
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												



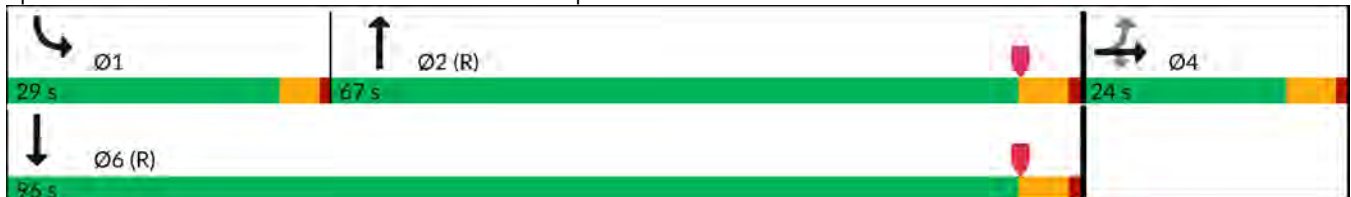


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↔↔↔	↔	↔↔
Traffic Volume (vph)	1	278	1833	204	171
Future Volume (vph)	1	278	1833	204	171
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effect Green (s)	12.7	12.7	72.0	19.8	96.3
Actuated g/C Ratio	0.11	0.11	0.60	0.17	0.80
v/c Ratio	0.57	0.53	0.72	0.76	0.06
Control Delay (s/veh)	62.1	8.7	20.0	54.6	5.2
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay (s/veh)	62.1	8.7	20.3	54.6	5.2
LOS	E	A	C	D	A
Approach Delay (s/veh)	22.7		20.4		32.2
Approach LOS	C		C		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.76  
 Intersection Signal Delay (s/veh): 22.3 Intersection LOS: C  
 Intersection Capacity Utilization 69.1% ICU Level of Service C  
 Analysis Period (min) 15




















Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

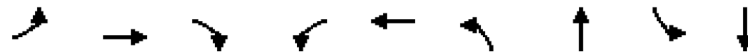
Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	1	278	0	0	0	0	1833	175	204	171	0
Future Volume (veh/h)	98	1	278	0	0	0	0	1833	175	204	171	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	109	1	151				0	2037	185	227	190	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	147	1	233				0	3123	281	258	2983	0
Arrive On Green	0.08	0.08	0.08				0.00	0.65	0.65	0.14	0.83	0.00
Sat Flow, veh/h	1794	16	2834				0	5004	435	1810	3705	0
Grp Volume(v), veh/h	110	0	151				0	1452	770	227	190	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1810	1810	1805	0
Q Serve(g_s), s	7.1	0.0	6.2				0.0	30.7	31.4	14.8	1.2	0.0
Cycle Q Clear(g_c), s	7.1	0.0	6.2				0.0	30.7	31.4	14.8	1.2	0.0
Prop In Lane	0.99		1.00				0.00		0.24	1.00		0.00
Lane Grp Cap(c), veh/h	149	0	233				0	2234	1170	258	2983	0
V/C Ratio(X)	0.74	0.00	0.65				0.00	0.65	0.66	0.88	0.06	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2234	1170	369	2983	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.89	0.89	0.00
Uniform Delay (d), s/veh	53.8	0.0	53.4				0.0	12.9	13.1	50.4	1.9	0.0
Incr Delay (d2), s/veh	7.0	0.0	3.0				0.0	1.5	2.9	14.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	2.3				0.0	10.8	12.0	7.5	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.9	0.0	56.4				0.0	14.4	16.0	64.7	1.9	0.0
LnGrp LOS	E		E					B	B	E	A	
Approach Vol, veh/h		261						2222			417	
Approach Delay, s/veh		58.3						15.0			36.1	
Approach LOS		E						B			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	21.6	83.0	15.3	104.7								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	24.5	61.5	18.5	90.5								
Max Q Clear Time (g_c+I1), s	16.8	33.4	9.1	3.2								
Green Ext Time (p_c), s	0.4	18.8	0.7	1.2								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			21.9									
HCM 6th LOS			C									

Timings

4: Street A & Green River Rd.

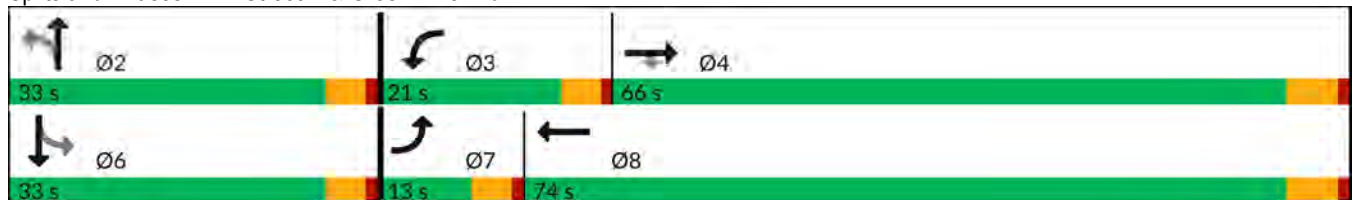


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↗	↖	↑↑↑	↖	↗		↕
Traffic Volume (vph)	47	272	118	86	1826	55	0	69	0
Future Volume (vph)	47	272	118	86	1826	55	0	69	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	26.6	26.6	26.6	26.6
Total Split (s)	13.0	66.0	66.0	21.0	74.0	33.0	33.0	33.0	33.0
Total Split (%)	10.8%	55.0%	55.0%	17.5%	61.7%	27.5%	27.5%	27.5%	27.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	7.1	46.9	46.9	9.4	51.8	13.3	13.3		13.3
Actuated g/C Ratio	0.09	0.57	0.57	0.11	0.63	0.16	0.16		0.16
v/c Ratio	0.33	0.10	0.13	0.45	0.66	0.37	0.01		0.55
Control Delay (s/veh)	49.1	9.3	2.4	47.3	11.9	43.8	0.0		24.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	49.1	9.3	2.4	47.3	11.9	43.8	0.0		24.0
LOS	D	A	A	D	B	D	A		C
Approach Delay (s/veh)		11.8			13.4		35.1		24.1
Approach LOS		B			B		D		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 82.7  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.66  
 Intersection Signal Delay (s/veh): 14.4                      Intersection LOS: B  
 Intersection Capacity Utilization 71.7%                      ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary  
 4: Street A & Green River Rd.

Green River TA (JN:12630)

06/05/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	272	118	86	1826	135	55	0	14	69	0	102
Future Volume (veh/h)	47	272	118	86	1826	135	55	0	14	69	0	102
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	51	296	128	93	1985	147	60	0	15	75	0	111
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	78	3022	938	121	2987	220	268	0	247	147	15	142
Arrive On Green	0.04	0.58	0.58	0.07	0.61	0.61	0.15	0.00	0.15	0.15	0.00	0.15
Sat Flow, veh/h	1810	5187	1610	1810	4929	363	1302	0	1610	527	101	928
Grp Volume(v), veh/h	51	296	128	93	1389	743	60	0	15	186	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1835	1302	0	1610	1555	0	0
Q Serve(g_s), s	2.1	1.9	2.7	3.8	20.1	20.4	0.0	0.0	0.6	7.0	0.0	0.0
Cycle Q Clear(g_c), s	2.1	1.9	2.7	3.8	20.1	20.4	3.8	0.0	0.6	8.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	0.40		0.60
Lane Grp Cap(c), veh/h	78	3022	938	121	2096	1112	268	0	247	305	0	0
V/C Ratio(X)	0.65	0.10	0.14	0.77	0.66	0.67	0.22	0.00	0.06	0.61	0.00	0.00
Avail Cap(c_a), veh/h	200	4109	1276	391	3103	1647	556	0	602	642	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	35.8	7.0	7.2	34.9	9.9	9.9	28.9	0.0	27.5	30.8	0.0	0.0
Incr Delay (d2), s/veh	3.3	0.0	0.1	3.8	0.4	0.7	0.4	0.0	0.1	2.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.6	0.7	1.7	5.6	6.2	1.0	0.0	0.2	3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.1	7.0	7.3	38.7	10.2	10.6	29.3	0.0	27.6	32.8	0.0	0.0
LnGrp LOS	D	A	A	D	B	B	C		C	C		
Approach Vol, veh/h		475			2225			75				186
Approach Delay, s/veh		10.5			11.5			28.9				32.8
Approach LOS		B			B			C				C
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.2	9.7	50.1		16.2	7.9	51.9				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		28.4	16.4	60.2		28.4	8.4	68.2				
Max Q Clear Time (g_c+I1), s		5.8	5.8	4.7		10.7	4.1	22.4				
Green Ext Time (p_c), s		0.2	0.1	2.3		1.0	0.0	23.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			13.2									
HCM 6th LOS			B									

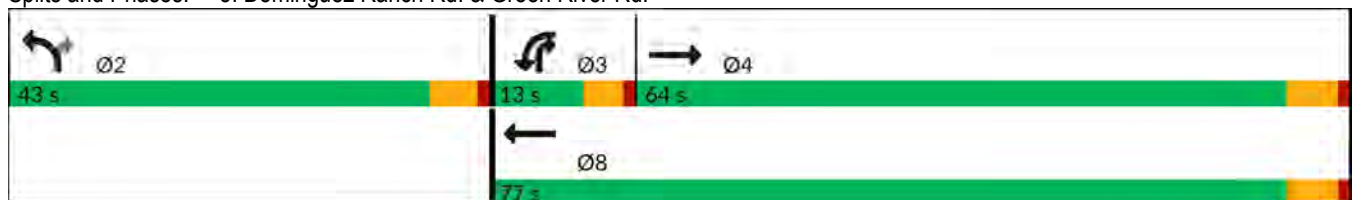
Timings  
5: Dominguez Ranch Rd. & Green River Rd.

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↙	↑↑↑	↘	↗
Traffic Volume (vph)	324	15	1899	148	46
Future Volume (vph)	324	15	1899	148	46
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	64.0	13.0	77.0	43.0	13.0
Total Split (%)	53.3%	10.8%	64.2%	35.8%	10.8%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	43.0	5.8	48.9	15.0	26.4
Actuated g/C Ratio	0.57	0.08	0.65	0.20	0.35
v/c Ratio	0.13	0.11	0.62	0.45	0.08
Control Delay (s/veh)	8.9	42.5	9.3	32.2	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.9	42.5	9.3	32.2	6.5
LOS	A	D	A	C	A
Approach Delay (s/veh)	9.0		9.6	26.2	
Approach LOS	A		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 75.7  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.62  
 Intersection Signal Delay (s/veh): 10.9  
 Intersection LOS: B  
 Intersection Capacity Utilization 54.4%  
 ICU Level of Service A  
 Analysis Period (min) 15







Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

06/05/2024

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↙	↑↑↑	↙	↗
Traffic Volume (veh/h)	324	30	15	1899	148	46
Future Volume (veh/h)	324	30	15	1899	148	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	356	26	16	2087	163	17
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2863	206	35	3485	274	275
Arrive On Green	0.58	0.58	0.02	0.67	0.15	0.15
Sat Flow, veh/h	5109	356	1810	5358	1810	1610
Grp Volume(v), veh/h	248	134	16	2087	163	17
Grp Sat Flow(s),veh/h/ln	1729	1836	1810	1729	1810	1610
Q Serve(g_s), s	2.1	2.1	0.6	14.0	5.3	0.6
Cycle Q Clear(g_c), s	2.1	2.1	0.6	14.0	5.3	0.6
Prop In Lane		0.19	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2005	1064	35	3485	274	275
V/C Ratio(X)	0.12	0.13	0.46	0.60	0.60	0.06
Avail Cap(c_a), veh/h	3179	1688	240	5833	1075	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.0	6.0	30.7	5.7	25.1	22.0
Incr Delay (d2), s/veh	0.0	0.1	3.4	0.2	2.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.6	0.3	2.6	2.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.0	6.1	34.1	5.9	27.1	22.1
LnGrp LOS	A	A	C	A	C	C
Approach Vol, veh/h	382			2103	180	
Approach Delay, s/veh	6.1			6.1	26.7	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		15.0	5.8	42.5		48.3
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		37.6	8.4	58.2		71.2
Max Q Clear Time (g_c+I1), s		7.3	2.6	4.1		16.0
Green Ext Time (p_c), s		0.5	0.0	2.3		26.5
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			7.5			
HCM 6th LOS			A			

Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↶	↑↑↑	↑↑↑	↶	↷
Traffic Volume (vph)	99	264	1601	25	330
Future Volume (vph)	99	264	1601	25	330
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	26.0	87.8	61.8	32.2	26.0
Total Split (%)	21.7%	73.2%	51.5%	26.8%	21.7%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	17.2	63.6	37.7	13.3	27.4
Actuated g/C Ratio	0.22	0.83	0.49	0.17	0.36
v/c Ratio	0.26	0.06	0.71	0.08	0.61
Control Delay (s/veh)	36.0	3.5	18.0	34.7	26.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.0	3.5	18.0	34.7	26.2
LOS	D	A	B	C	C
Approach Delay (s/veh)		12.4	18.0	26.8	
Approach LOS		B	B	C	

Intersection Summary

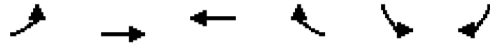
Cycle Length: 120  
 Actuated Cycle Length: 76.7  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.72  
 Intersection Signal Delay (s/veh): 18.5  
 Intersection LOS: B  
 Intersection Capacity Utilization 61.6%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
06/05/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↑↑↑	↑↑↑		↶	↷
Traffic Volume (veh/h)	99	264	1601	71	25	330
Future Volume (veh/h)	99	264	1601	71	25	330
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	108	287	1740	69	27	141
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	141	3497	2696	107	261	358
Arrive On Green	0.08	0.67	0.53	0.53	0.14	0.14
Sat Flow, veh/h	1810	5358	5290	203	1810	1610
Grp Volume(v), veh/h	108	287	1175	634	27	141
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1863	1810	1610
Q Serve(g_s), s	3.9	1.3	16.1	16.1	0.9	4.9
Cycle Q Clear(g_c), s	3.9	1.3	16.1	16.1	0.9	4.9
Prop In Lane	1.00			0.11	1.00	1.00
Lane Grp Cap(c), veh/h	141	3497	1822	982	261	358
V/C Ratio(X)	0.77	0.08	0.65	0.65	0.10	0.39
Avail Cap(c_a), veh/h	586	6433	2929	1578	712	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	3.7	11.2	11.2	24.6	21.9
Incr Delay (d2), s/veh	3.3	0.0	0.4	0.7	0.2	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.2	4.7	5.1	0.3	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	33.2	3.7	11.6	11.9	24.7	22.6
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h		395	1809		168	
Approach Delay, s/veh		11.8	11.7		23.0	
Approach LOS		B	B		C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.7	40.6			50.4	15.7
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	21.4	56.0			82.0	26.0
Max Q Clear Time (g_c+I1), s	5.9	18.1			3.3	6.9
Green Ext Time (p_c), s	0.1	16.7			1.9	0.4
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			12.5			
HCM 6th LOS			B			



Timings

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↖	↖	↖↖↖	↖	↖	↖
Traffic Volume (vph)	307	22	204	398	283	295	142
Future Volume (vph)	307	22	204	398	283	295	142
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	42.0	42.0	42.0	26.0	78.0	52.0	52.0
Total Split (%)	35.0%	35.0%	35.0%	21.7%	65.0%	43.3%	43.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	18.6	18.6	18.6	14.6	90.8	68.8	68.8
Actuated g/C Ratio	0.16	0.16	0.16	0.12	0.76	0.57	0.57
v/c Ratio	0.67	0.67	0.50	0.70	0.21	0.29	0.15
Control Delay (s/veh)	59.6	59.8	9.4	47.4	9.5	15.6	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.6	59.8	9.4	47.4	9.5	15.6	2.8
LOS	E	E	A	D	A	B	A
Approach Delay (s/veh)		40.5			31.7	11.5	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.71  
 Intersection Signal Delay (s/veh): 29.2      Intersection LOS: C  
 Intersection Capacity Utilization 75.9%      ICU Level of Service D  
 Analysis Period (min) 15






















Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

06/05/2024




















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations							  					
Traffic Volume (veh/h)	0	0	0	307	22	204	398	283	0	0	295	142
Future Volume (veh/h)	0	0	0	307	22	204	398	283	0	0	295	142
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No		No			No
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				354	0	154	437	311	0	0	324	52
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				454	0	202	532	1472	0	0	1179	986
Arrive On Green				0.13	0.00	0.13	0.17	1.00	0.00	0.00	0.62	0.62
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				354	0	154	437	311	0	0	324	52
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				11.4	0.0	11.1	9.9	0.0	0.0	0.0	9.4	1.5
Cycle Q Clear(g_c), s				11.4	0.0	11.1	9.9	0.0	0.0	0.0	9.4	1.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				454	0	202	532	1472	0	0	1179	986
V/C Ratio(X)				0.78	0.00	0.76	0.82	0.21	0.00	0.00	0.27	0.05
Avail Cap(c_a), veh/h				1086	0	483	850	1472	0	0	1179	986
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.70	0.70	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.9	0.0	50.7	48.5	0.0	0.0	0.0	10.4	8.9
Incr Delay (d2), s/veh				3.0	0.0	5.9	1.1	0.2	0.0	0.0	0.6	0.1
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.2	0.0	4.7	3.9	0.1	0.0	0.0	3.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				53.8	0.0	56.6	49.6	0.2	0.0	0.0	11.0	9.0
LnGrp LOS				D		E	D	A			B	A
Approach Vol, veh/h					508			748			376	
Approach Delay, s/veh					54.7			29.1			10.7	
Approach LOS					D			C			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		99.0			18.5	80.4		21.0				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 73			20.0	46.0		36.0				
Max Q Clear Time (g_c+I1), s		2.0			11.9	11.4		13.4				
Green Ext Time (p_c), s		1.8			0.6	2.0		1.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh				32.8								
HCM 6th LOS				C								
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

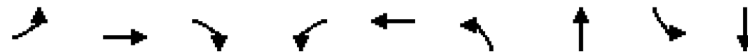
Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	3	1572	0	0	0	0	501	137	178	425	0
Future Volume (veh/h)	180	3	1572	0	0	0	0	501	137	178	425	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	182	3	1421				0	506	111	180	429	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	945	16	1504				0	960	206	210	1364	0
Arrive On Green	0.53	0.53	0.53				0.00	0.22	0.22	0.12	0.38	0.00
Sat Flow, veh/h	1782	29	2834				0	4448	916	1810	3705	0
Grp Volume(v), veh/h	185	0	1421				0	407	210	180	429	0
Grp Sat Flow(s),veh/h/ln	1811	0	1417				0	1729	1735	1810	1805	0
Q Serve(g_s), s	6.4	0.0	56.7				0.0	12.4	12.8	11.7	10.1	0.0
Cycle Q Clear(g_c), s	6.4	0.0	56.7				0.0	12.4	12.8	11.7	10.1	0.0
Prop In Lane	0.98		1.00				0.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	961	0	1504				0	776	389	210	1364	0
V/C Ratio(X)	0.19	0.00	0.95				0.00	0.52	0.54	0.86	0.31	0.00
Avail Cap(c_a), veh/h	1019	0	1594				0	776	389	297	1364	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.90	0.90	0.00
Uniform Delay (d), s/veh	14.7	0.0	26.5				0.0	40.9	41.1	52.1	26.4	0.0
Incr Delay (d2), s/veh	0.1	0.0	11.6				0.0	2.5	5.3	14.6	0.5	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	19.7				0.0	5.4	5.9	6.0	4.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.8	0.0	38.1				0.0	43.4	46.4	66.7	26.9	0.0
LnGrp LOS	B		D					D	D	E	C	
Approach Vol, veh/h		1606						617			609	
Approach Delay, s/veh		35.5						44.4			38.7	
Approach LOS		D						D			D	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	18.4	32.4		69.2				50.8				
Change Period (Y+Rc), s	4.5	5.5		5.5				5.5				
Max Green Setting (Gmax), s	19.7	17.3		67.5				41.5				
Max Q Clear Time (g_c+I1), s	13.7	14.8		58.7				12.1				
Green Ext Time (p_c), s	0.2	0.9		5.0				2.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			38.1									
HCM 6th LOS			D									

Timings

4: Street A & Green River Rd.

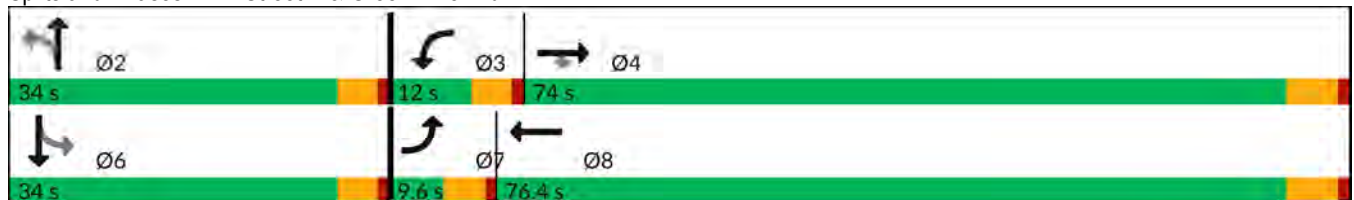


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↗	↖	↑↑↑	↖	↗		↕
Traffic Volume (vph)	93	1828	49	20	467	124	0	96	0
Future Volume (vph)	93	1828	49	20	467	124	0	96	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	26.6	26.6	26.6	26.6
Total Split (s)	9.6	74.0	74.0	12.0	76.4	34.0	34.0	34.0	34.0
Total Split (%)	8.0%	61.7%	61.7%	10.0%	63.7%	28.3%	28.3%	28.3%	28.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	5.6	45.1	45.1	6.2	37.7	15.3	15.3		15.3
Actuated g/C Ratio	0.07	0.60	0.60	0.08	0.50	0.20	0.20		0.20
v/c Ratio	0.75	0.63	0.05	0.14	0.22	0.50	0.22		0.43
Control Delay (s/veh)	77.5	11.6	2.6	45.8	9.0	39.4	10.7		23.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	77.5	11.6	2.6	45.8	9.0	39.4	10.7		23.3
LOS	E	B	A	D	A	D	B		C
Approach Delay (s/veh)		14.5			10.4		28.2		23.3
Approach LOS		B			B		C		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 75.4  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.76  
 Intersection Signal Delay (s/veh): 15.1  
 Intersection LOS: B  
 Intersection Capacity Utilization 66.0%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary  
 4: Street A & Green River Rd.

Green River TA (JN:12630)

06/05/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1828	49	20	467	68	124	0	80	96	0	33
Future Volume (veh/h)	93	1828	49	20	467	68	124	0	80	96	0	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	101	1987	53	22	508	74	135	0	87	104	0	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	125	3109	965	45	2544	364	342	0	272	212	13	48
Arrive On Green	0.07	0.60	0.60	0.02	0.56	0.56	0.17	0.00	0.17	0.17	0.00	0.17
Sat Flow, veh/h	1810	5187	1610	1810	4584	656	1394	0	1610	744	76	284
Grp Volume(v), veh/h	101	1987	53	22	381	201	135	0	87	140	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1782	1394	0	1610	1105	0	0
Q Serve(g_s), s	4.0	18.0	1.0	0.9	4.0	4.1	0.0	0.0	3.4	6.1	0.0	0.0
Cycle Q Clear(g_c), s	4.0	18.0	1.0	0.9	4.0	4.1	6.2	0.0	3.4	9.6	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.37	1.00		1.00	0.74		0.26
Lane Grp Cap(c), veh/h	125	3109	965	45	1919	989	342	0	272	273	0	0
V/C Ratio(X)	0.81	0.64	0.05	0.49	0.20	0.20	0.39	0.00	0.32	0.51	0.00	0.00
Avail Cap(c_a), veh/h	125	4880	1515	185	3368	1735	672	0	653	603	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	33.3	9.4	6.0	34.9	8.1	8.1	27.6	0.0	26.5	29.9	0.0	0.0
Incr Delay (d2), s/veh	29.5	0.2	0.0	3.1	0.1	0.1	0.7	0.0	0.7	1.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.9	0.3	0.4	1.2	1.2	2.2	0.0	1.3	2.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	62.8	9.7	6.0	38.0	8.1	8.2	28.3	0.0	27.1	31.4	0.0	0.0
LnGrp LOS	E	A	A	D	A	A	C		C	C		
Approach Vol, veh/h		2141			604			222				140
Approach Delay, s/veh		12.1			9.2			27.9				31.4
Approach LOS		B			A			C				C
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.9	6.4	49.2		16.9	9.6	46.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		29.4	7.4	68.2		29.4	5.0	70.6				
Max Q Clear Time (g_c+I1), s		8.2	2.9	20.0		11.6	6.0	6.1				
Green Ext Time (p_c), s		0.9	0.0	23.4		0.7	0.0	3.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh				13.5								
HCM 6th LOS				B								

Timings  
5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

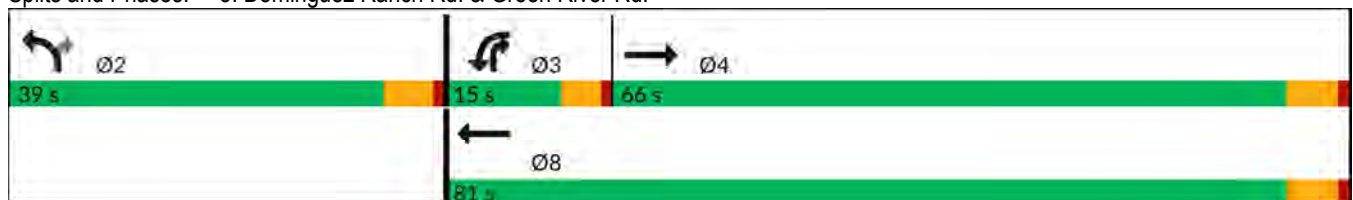
06/05/2024

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↙	↑↑↑	↘	↗
Traffic Volume (vph)	1863	55	459	97	46
Future Volume (vph)	1863	55	459	97	46
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	66.0	15.0	81.0	39.0	15.0
Total Split (%)	55.0%	12.5%	67.5%	32.5%	12.5%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	55.9	7.6	65.2	14.2	22.5
Actuated g/C Ratio	0.66	0.09	0.77	0.17	0.27
v/c Ratio	0.61	0.36	0.12	0.33	0.11
Control Delay (s/veh)	13.9	49.5	4.3	38.4	22.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.9	49.5	4.3	38.4	22.0
LOS	B	D	A	D	C
Approach Delay (s/veh)	13.9		9.2	33.2	
Approach LOS	B		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 84.5  
 Natural Cycle: 90  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.62  
 Intersection Signal Delay (s/veh): 14.0  
 Intersection LOS: B  
 Intersection Capacity Utilization 63.4%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.





HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

06/05/2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	1863	140	55	459	97	46
Future Volume (veh/h)	1863	140	55	459	97	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1961	123	58	483	102	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2977	186	88	3687	233	285
Arrive On Green	0.60	0.60	0.05	0.71	0.13	0.13
Sat Flow, veh/h	5161	312	1810	5358	1810	1610
Grp Volume(v), veh/h	1357	727	58	483	102	16
Grp Sat Flow(s),veh/h/ln	1729	1844	1810	1729	1810	1610
Q Serve(g_s), s	18.2	18.3	2.2	2.1	3.6	0.6
Cycle Q Clear(g_c), s	18.2	18.3	2.2	2.1	3.6	0.6
Prop In Lane		0.17	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2063	1100	88	3687	233	285
V/C Ratio(X)	0.66	0.66	0.66	0.13	0.44	0.06
Avail Cap(c_a), veh/h	2982	1590	270	5588	871	853
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.3	9.4	32.7	3.2	28.1	23.9
Incr Delay (d2), s/veh	0.4	0.7	3.2	0.0	1.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	5.3	1.0	0.4	1.5	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.7	10.1	35.8	3.2	29.4	24.0
LnGrp LOS	A	B	D	A	C	C
Approach Vol, veh/h	2084			541	118	
Approach Delay, s/veh	9.8			6.7	28.6	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.4	8.0	47.4		55.4
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		33.6	10.4	60.2		75.2
Max Q Clear Time (g_c+I1), s		5.6	4.2	20.3		4.1
Green Ext Time (p_c), s		0.3	0.0	21.3		3.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			10.0			
HCM 6th LOS			B			



Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↘	↑↑↑	↑↑↑	↘	↗
Traffic Volume (vph)	188	1714	475	15	128
Future Volume (vph)	188	1714	475	15	128
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	37.0	87.0	50.0	33.0	37.0
Total Split (%)	30.8%	72.5%	41.7%	27.5%	30.8%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	10.8	38.7	15.9	13.7	13.9
Actuated g/C Ratio	0.25	0.91	0.38	0.32	0.33
v/c Ratio	0.42	0.37	0.27	0.02	0.21
Control Delay (s/veh)	20.4	3.5	11.5	16.0	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.4	3.5	11.5	16.0	3.0
LOS	C	A	B	B	A
Approach Delay (s/veh)		5.3	11.6	4.3	
Approach LOS		A	B	A	

Intersection Summary

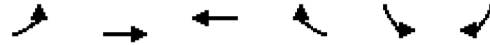
Cycle Length: 120  
 Actuated Cycle Length: 42.4  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.42  
 Intersection Signal Delay (s/veh): 6.5  
 Intersection LOS: A  
 Intersection Capacity Utilization 51.5%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
06/05/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑		↖	↗
Traffic Volume (veh/h)	188	1714	475	41	15	128
Future Volume (veh/h)	188	1714	475	41	15	128
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	194	1767	490	39	15	73
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	249	3266	1976	156	251	445
Arrive On Green	0.14	0.63	0.40	0.40	0.14	0.14
Sat Flow, veh/h	1810	5358	5073	386	1810	1610
Grp Volume(v), veh/h	194	1767	344	185	15	73
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1831	1810	1610
Q Serve(g_s), s	5.4	9.9	3.4	3.5	0.4	1.8
Cycle Q Clear(g_c), s	5.4	9.9	3.4	3.5	0.4	1.8
Prop In Lane	1.00			0.21	1.00	1.00
Lane Grp Cap(c), veh/h	249	3266	1394	738	251	445
V/C Ratio(X)	0.78	0.54	0.25	0.25	0.06	0.16
Avail Cap(c_a), veh/h	1132	8132	2951	1562	936	1055
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	5.4	10.2	10.3	19.4	14.2
Incr Delay (d2), s/veh	2.0	0.1	0.1	0.2	0.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.6	1.0	1.1	0.1	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	23.6	5.5	10.3	10.4	19.5	14.4
LnGrp LOS	C	A	B	B	B	B
Approach Vol, veh/h		1961	529		88	
Approach Delay, s/veh		7.3	10.4		15.2	
Approach LOS		A	B		B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.7	26.7			38.4	13.4
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	32.4	44.2			81.2	26.8
Max Q Clear Time (g_c+I1), s	7.4	5.5			11.9	3.8
Green Ext Time (p_c), s	0.2	3.3			20.7	0.2
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			8.2			
HCM 6th LOS			A			

**APPENDIX 6.4: OPENING YEAR CUMULATIVE (2026) WITH PROJECT  
(PROJECT BUILDOUT) CONDITIONS INTERSECTION OPERATIONS  
ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

**Volume Development  
AM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Buildout) PCE:	1,714	223	0	0	260	282	0	0	0	116	4	129	2,727
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Buildout) PCE:	0	1,840	178	204	172	0	98	1	280	0	0	0	2,773
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Buildout) PCE:	0	0	0	0	0	0	0	437	0	0	1,993	0	2,430
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Buildout) PCE:	66	0	20	69	0	105	47	272	122	88	1,823	138	2,751
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Buildout) PCE:	148	0	46	0	0	0	0	330	30	15	1,902	0	2,469
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Buildout) PCE:	0	0	0	25	0	331	101	268	0	0	1,603	71	2,399

**Volume Development  
PM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Buildout) PCE:	403	283	0	0	295	142	0	0	0	278	22	204	1,627
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Buildout) PCE:	0	506	139	178	428	0	180	3	1,580	0	0	0	3,014
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Buildout) PCE:	0	0	0	0	0	0	0	1,978	0	0	630	0	2,608
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Buildout) PCE:	131	0	84	96	0	33	93	1,828	60	28	467	68	2,888
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Buildout) PCE:	97	0	46	0	0	0	0	1,868	140	55	466	0	2,673
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2026 WP (Buildout) PCE:	0	0	0	15	0	131	189	1,716	0	0	479	41	2,571

Timings

1: Green River Rd. & SR-91 WB Ramps

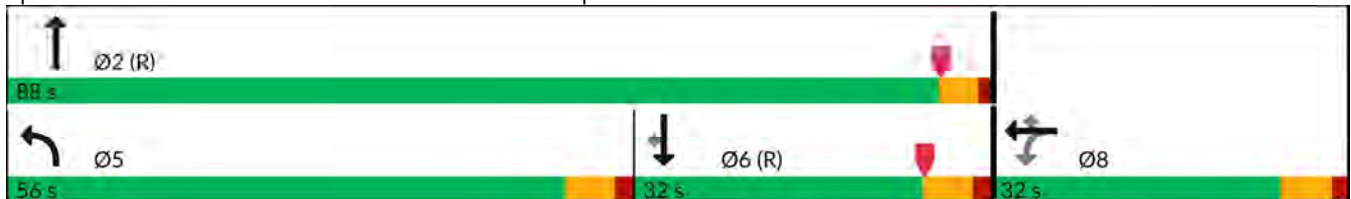


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↖	↗	↖↗	↑	↑	↗
Traffic Volume (vph)	116	4	129	1714	223	260	282
Future Volume (vph)	116	4	129	1714	223	260	282
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	56.0	88.0	32.0	32.0
Total Split (%)	26.7%	26.7%	26.7%	46.7%	73.3%	26.7%	26.7%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	12.5	12.5	12.5	49.7	96.9	39.7	39.7
Actuated g/C Ratio	0.10	0.10	0.10	0.41	0.81	0.33	0.33
v/c Ratio	0.38	0.37	0.49	0.92	0.16	0.46	0.43
Control Delay (s/veh)	53.8	53.5	12.5	47.3	2.3	37.2	5.9
Queue Delay	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Total Delay (s/veh)	53.8	53.5	12.5	48.3	2.3	37.2	5.9
LOS	D	D	B	D	A	D	A
Approach Delay (s/veh)		32.4			43.0	21.0	
Approach LOS		C			D	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.92  
 Intersection Signal Delay (s/veh): 37.7  
 Intersection LOS: D  
 Intersection Capacity Utilization 69.2%  
 ICU Level of Service C  
 Analysis Period (min) 15






















Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations							  					
Traffic Volume (veh/h)	0	0	0	116	4	129	1714	223	0	0	260	282
Future Volume (veh/h)	0	0	0	116	4	129	1714	223	0	0	260	282
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				136	0	42	1948	253	0	0	295	230
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				208	0	92	2068	1601	0	0	736	616
Arrive On Green				0.06	0.00	0.06	0.27	0.56	0.00	0.00	0.39	0.39
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				136	0	42	1948	253	0	0	295	230
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				4.4	0.0	3.0	44.8	7.6	0.0	0.0	13.5	12.4
Cycle Q Clear(g_c), s				4.4	0.0	3.0	44.8	7.6	0.0	0.0	13.5	12.4
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				208	0	92	2068	1601	0	0	736	616
V/C Ratio(X)				0.65	0.00	0.45	0.94	0.16	0.00	0.00	0.40	0.37
Avail Cap(c_a), veh/h				784	0	349	2126	1601	0	0	736	616
HCM Platoon Ratio				1.00	1.00	1.00	0.67	0.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.61	0.61	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.4	0.0	54.7	42.3	5.8	0.0	0.0	26.7	26.3
Incr Delay (d2), s/veh				3.5	0.0	3.5	5.9	0.1	0.0	0.0	1.6	1.7
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.1	0.0	1.3	20.2	1.9	0.0	0.0	6.2	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				58.9	0.0	58.2	48.3	5.9	0.0	0.0	28.3	28.1
LnGrp LOS				E		E	D	A			C	C
Approach Vol, veh/h					178			2201			525	
Approach Delay, s/veh					58.7			43.4			28.2	
Approach LOS					E			D			C	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		107.1			54.6	52.5		12.9				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			50.0	26.0		26.0				
Max Q Clear Time (g_c+I1), s		9.6			46.8	15.5		6.4				
Green Ext Time (p_c), s		1.4			1.8	1.7		0.5				

Intersection Summary

HCM 6th Ctrl Delay, s/veh	41.6
HCM 6th LOS	D

Notes

- User approved volume balancing among the lanes for turning movement.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



2: Green River Rd. & SR-91 EB Ramps

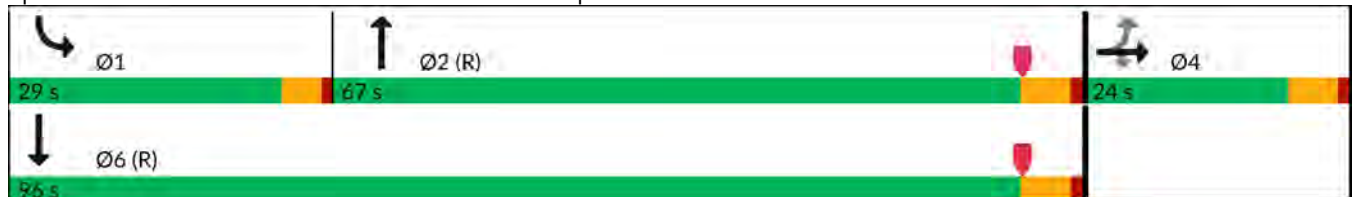


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↗↘	↕↗↘	↖	↕↕
Traffic Volume (vph)	1	280	1840	204	172
Future Volume (vph)	1	280	1840	204	172
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	12.7	12.7	72.0	19.8	96.3
Actuated g/C Ratio	0.11	0.11	0.60	0.17	0.80
v/c Ratio	0.57	0.53	0.72	0.76	0.06
Control Delay (s/veh)	62.1	8.7	20.0	54.4	5.2
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay (s/veh)	62.1	8.7	20.4	54.4	5.2
LOS	E	A	C	D	A
Approach Delay (s/veh)	22.7		20.5		32.0
Approach LOS	C		C		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 90  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.76  
 Intersection Signal Delay (s/veh): 22.3      Intersection LOS: C  
 Intersection Capacity Utilization 69.2%      ICU Level of Service C  
 Analysis Period (min) 15




















Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

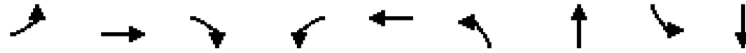
Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	1	280	0	0	0	0	1840	178	204	172	0
Future Volume (veh/h)	98	1	280	0	0	0	0	1840	178	204	172	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	109	1	153				0	2044	189	227	191	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	147	1	233				0	3118	285	258	2983	0
Arrive On Green	0.08	0.08	0.08				0.00	0.65	0.65	0.14	0.83	0.00
Sat Flow, veh/h	1794	16	2834				0	4996	442	1810	3705	0
Grp Volume(v), veh/h	110	0	153				0	1459	774	227	191	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1809	1810	1805	0
Q Serve(g_s), s	7.1	0.0	6.3				0.0	31.0	31.7	14.8	1.2	0.0
Cycle Q Clear(g_c), s	7.1	0.0	6.3				0.0	31.0	31.7	14.8	1.2	0.0
Prop In Lane	0.99		1.00				0.00		0.24	1.00		0.00
Lane Grp Cap(c), veh/h	149	0	233				0	2234	1169	258	2983	0
V/C Ratio(X)	0.74	0.00	0.66				0.00	0.65	0.66	0.88	0.06	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2234	1169	369	2983	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.89	0.89	0.00
Uniform Delay (d), s/veh	53.8	0.0	53.4				0.0	13.0	13.1	50.4	1.9	0.0
Incr Delay (d2), s/veh	7.0	0.0	3.1				0.0	1.5	3.0	14.2	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	2.3				0.0	10.9	12.1	7.5	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	60.9	0.0	56.6				0.0	14.5	16.1	64.7	1.9	0.0
LnGrp LOS	E		E					B	B	E	A	
Approach Vol, veh/h		263						2233			418	
Approach Delay, s/veh		58.4						15.1			36.0	
Approach LOS		E						B			D	
Timer - Assigned Phs	1	2		4				6				
Phs Duration (G+Y+Rc), s	21.6	83.0		15.4				104.6				
Change Period (Y+Rc), s	4.5	5.5		5.5				5.5				
Max Green Setting (Gmax), s	24.5	61.5		18.5				90.5				
Max Q Clear Time (g_c+I1), s	16.8	33.7		9.1				3.2				
Green Ext Time (p_c), s	0.4	18.8		0.7				1.2				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			22.0									
HCM 6th LOS			C									

Timings

4: Street A & Green River Rd.

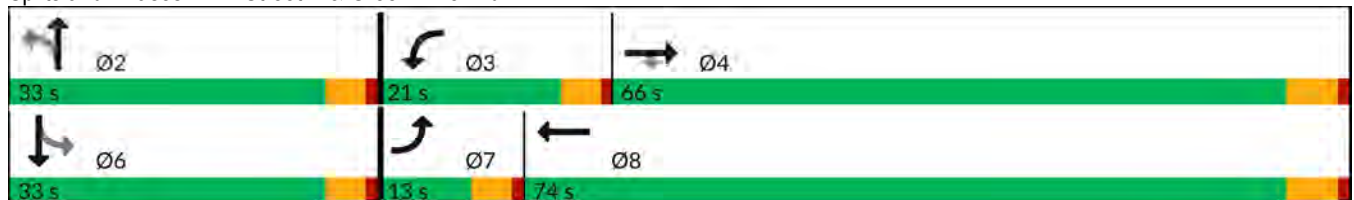


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↗	↖	↑↑↑	↖	↗		↕
Traffic Volume (vph)	47	272	122	88	1823	66	0	69	0
Future Volume (vph)	47	272	122	88	1823	66	0	69	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	26.6	26.6	26.6	26.6
Total Split (s)	13.0	66.0	66.0	21.0	74.0	33.0	33.0	33.0	33.0
Total Split (%)	10.8%	55.0%	55.0%	17.5%	61.7%	27.5%	27.5%	27.5%	27.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	7.1	46.6	46.6	9.6	51.7	13.5	13.5		13.5
Actuated g/C Ratio	0.09	0.56	0.56	0.12	0.62	0.16	0.16		0.16
v/c Ratio	0.32	0.10	0.13	0.46	0.66	0.43	0.02		0.56
Control Delay (s/veh)	49.3	9.5	2.4	47.5	12.1	46.3	0.0		24.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	49.3	9.5	2.4	47.5	12.1	46.3	0.0		24.3
LOS	D	A	A	D	B	D	A		C
Approach Delay (s/veh)		11.8			13.6		35.5		24.4
Approach LOS		B			B		D		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 82.8  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.67  
 Intersection Signal Delay (s/veh): 14.7  
 Intersection LOS: B  
 Intersection Capacity Utilization 71.9%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary

Green River TA (JN:12630)

4: Street A & Green River Rd.

06/05/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	272	122	88	1823	138	66	0	20	69	0	105
Future Volume (veh/h)	47	272	122	88	1823	138	66	0	20	69	0	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	51	296	133	96	1982	150	72	0	22	75	0	114
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	78	3004	933	125	2976	224	268	0	250	146	16	146
Arrive On Green	0.04	0.58	0.58	0.07	0.60	0.60	0.16	0.00	0.16	0.16	0.00	0.16
Sat Flow, veh/h	1810	5187	1610	1810	4921	370	1299	0	1610	516	100	937
Grp Volume(v), veh/h	51	296	133	96	1390	742	72	0	22	189	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1833	1299	0	1610	1553	0	0
Q Serve(g_s), s	2.1	1.9	2.9	4.0	20.3	20.5	0.0	0.0	0.9	7.1	0.0	0.0
Cycle Q Clear(g_c), s	2.1	1.9	2.9	4.0	20.3	20.5	4.7	0.0	0.9	8.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	0.40		0.60
Lane Grp Cap(c), veh/h	78	3004	933	125	2091	1109	268	0	250	307	0	0
V/C Ratio(X)	0.65	0.10	0.14	0.77	0.66	0.67	0.27	0.00	0.09	0.62	0.00	0.00
Avail Cap(c_a), veh/h	199	4089	1269	389	3088	1637	549	0	599	637	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	36.0	7.2	7.4	35.0	10.0	10.0	29.2	0.0	27.6	30.9	0.0	0.0
Incr Delay (d2), s/veh	3.4	0.0	0.1	3.7	0.4	0.7	0.5	0.0	0.1	2.0	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.6	0.8	1.8	5.7	6.2	1.2	0.0	0.4	3.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	39.3	7.2	7.4	38.7	10.3	10.7	29.8	0.0	27.8	32.9	0.0	0.0
LnGrp LOS	D	A	A	D	B	B	C		C	C		
Approach Vol, veh/h		480			2228			94				189
Approach Delay, s/veh		10.7			11.7			29.3				32.9
Approach LOS		B			B			C				C
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		16.5	9.9	50.0		16.5	7.9	52.0				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		28.4	16.4	60.2		28.4	8.4	68.2				
Max Q Clear Time (g_c+I1), s		6.7	6.0	4.9		10.9	4.1	22.5				
Green Ext Time (p_c), s		0.3	0.1	2.3		1.0	0.0	23.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			13.4									
HCM 6th LOS			B									

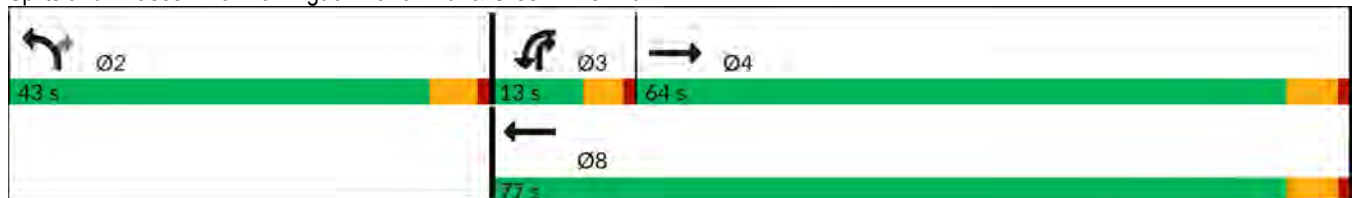
Timings  
5: Dominguez Ranch Rd. & Green River Rd.

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↙	↑↑↑	↘	↗
Traffic Volume (vph)	330	15	1902	148	46
Future Volume (vph)	330	15	1902	148	46
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	64.0	13.0	77.0	43.0	13.0
Total Split (%)	53.3%	10.8%	64.2%	35.8%	10.8%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	43.3	5.8	49.2	15.0	26.5
Actuated g/C Ratio	0.57	0.08	0.65	0.20	0.35
v/c Ratio	0.13	0.11	0.62	0.45	0.08
Control Delay (s/veh)	8.9	42.6	9.3	32.4	6.5
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.9	42.6	9.3	32.4	6.5
LOS	A	D	A	C	A
Approach Delay (s/veh)	9.0		9.6	26.3	
Approach LOS	A		A	C	

Intersection Summary







Cycle Length: 120  
 Actuated Cycle Length: 76  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.62  
 Intersection Signal Delay (s/veh): 10.9  
 Intersection LOS: B  
 Intersection Capacity Utilization 54.4%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)  
 06/05/2024

						
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↑	↑↑↑	↑	↑
Traffic Volume (veh/h)	330	30	15	1902	148	46
Future Volume (veh/h)	330	30	15	1902	148	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	363	26	16	2090	163	17
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2870	203	35	3487	273	274
Arrive On Green	0.58	0.58	0.02	0.67	0.15	0.15
Sat Flow, veh/h	5116	350	1810	5358	1810	1610
Grp Volume(v), veh/h	252	137	16	2090	163	17
Grp Sat Flow(s),veh/h/ln	1729	1837	1810	1729	1810	1610
Q Serve(g_s), s	2.1	2.1	0.6	14.0	5.3	0.6
Cycle Q Clear(g_c), s	2.1	2.1	0.6	14.0	5.3	0.6
Prop In Lane		0.19	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2007	1066	35	3487	273	274
V/C Ratio(X)	0.13	0.13	0.46	0.60	0.60	0.06
Avail Cap(c_a), veh/h	3174	1686	240	5824	1073	986
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.0	6.0	30.8	5.7	25.1	22.1
Incr Delay (d2), s/veh	0.0	0.1	3.4	0.2	2.1	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.6	0.3	2.6	2.2	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	6.1	6.1	34.2	5.9	27.2	22.1
LnGrp LOS	A	A	C	A	C	C
Approach Vol, veh/h	389			2106	180	
Approach Delay, s/veh	6.1			6.1	26.7	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		15.0	5.8	42.6		48.4
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		37.6	8.4	58.2		71.2
Max Q Clear Time (g_c+I1), s		7.3	2.6	4.1		16.0
Green Ext Time (p_c), s		0.5	0.0	2.4		26.6
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			7.5			
HCM 6th LOS			A			

Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↘	↑↑↑	↑↑↑	↘	↗
Traffic Volume (vph)	101	268	1603	25	331
Future Volume (vph)	101	268	1603	25	331
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	26.0	87.8	61.8	32.2	26.0
Total Split (%)	21.7%	73.2%	51.5%	26.8%	21.7%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	17.3	63.8	37.8	13.3	27.5
Actuated g/C Ratio	0.22	0.83	0.49	0.17	0.36
v/c Ratio	0.27	0.06	0.71	0.08	0.61
Control Delay (s/veh)	36.1	3.5	18.0	34.8	26.2
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	36.1	3.5	18.0	34.8	26.2
LOS	D	A	B	C	C
Approach Delay (s/veh)		12.5	18.1	26.9	
Approach LOS		B	B	C	

Intersection Summary

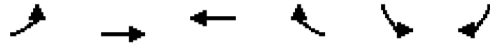
Cycle Length: 120  
 Actuated Cycle Length: 76.9  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.72  
 Intersection Signal Delay (s/veh): 18.5  
 Intersection LOS: B  
 Intersection Capacity Utilization 61.7%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
 6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
 06/05/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↑↑↑	↑↑↑↶		↶	↶
Traffic Volume (veh/h)	101	268	1603	71	25	331
Future Volume (veh/h)	101	268	1603	71	25	331
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	110	291	1742	69	27	142
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	143	3502	2695	107	261	360
Arrive On Green	0.08	0.68	0.53	0.53	0.14	0.14
Sat Flow, veh/h	1810	5358	5290	203	1810	1610
Grp Volume(v), veh/h	110	291	1176	635	27	142
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1864	1810	1610
Q Serve(g_s), s	4.0	1.3	16.2	16.2	0.9	5.0
Cycle Q Clear(g_c), s	4.0	1.3	16.2	16.2	0.9	5.0
Prop In Lane	1.00			0.11	1.00	1.00
Lane Grp Cap(c), veh/h	143	3502	1821	981	261	360
V/C Ratio(X)	0.77	0.08	0.65	0.65	0.10	0.39
Avail Cap(c_a), veh/h	584	6411	2919	1573	709	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	3.7	11.3	11.3	24.7	21.9
Incr Delay (d2), s/veh	3.2	0.0	0.4	0.7	0.2	0.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.3	4.7	5.2	0.3	1.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	33.2	3.7	11.7	12.0	24.8	22.7
LnGrp LOS	C	A	B	B	C	C
Approach Vol, veh/h		401	1811		169	
Approach Delay, s/veh		11.8	11.8		23.0	
Approach LOS		B	B		C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	9.9	40.7			50.6	15.8
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	21.4	56.0			82.0	26.0
Max Q Clear Time (g_c+I1), s	6.0	18.2			3.3	7.0
Green Ext Time (p_c), s	0.1	16.7			1.9	0.4
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			12.6			
HCM 6th LOS			B			



Timings

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↖	↖	↖↖↖	↑	↑	↖
Traffic Volume (vph)	278	22	204	403	283	295	142
Future Volume (vph)	278	22	204	403	283	295	142
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	42.0	42.0	42.0	26.0	78.0	52.0	52.0
Total Split (%)	35.0%	35.0%	35.0%	21.7%	65.0%	43.3%	43.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	17.8	17.8	17.8	14.8	91.6	69.4	69.4
Actuated g/C Ratio	0.15	0.15	0.15	0.12	0.76	0.58	0.58
v/c Ratio	0.64	0.63	0.52	0.70	0.21	0.29	0.15
Control Delay (s/veh)	59.1	58.4	9.8	46.9	9.3	15.3	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.1	58.4	9.8	46.9	9.3	15.3	2.8
LOS	E	E	A	D	A	B	A
Approach Delay (s/veh)		39.0			31.4	11.3	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 60  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.71  
 Intersection Signal Delay (s/veh): 28.4                      Intersection LOS: C  
 Intersection Capacity Utilization 76.3%                      ICU Level of Service D  
 Analysis Period (min) 15




















Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

06/05/2024




















												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	278	22	204	403	283	0	0	295	142
Future Volume (veh/h)	0	0	0	278	22	204	403	283	0	0	295	142
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No				No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				322	0	154	443	311	0	0	324	52
Peak Hour Factor				0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				443	0	197	538	1477	0	0	1182	989
Arrive On Green				0.12	0.00	0.12	0.18	1.00	0.00	0.00	0.62	0.62
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				322	0	154	443	311	0	0	324	52
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				10.3	0.0	11.1	10.0	0.0	0.0	0.0	9.3	1.5
Cycle Q Clear(g_c), s				10.3	0.0	11.1	10.0	0.0	0.0	0.0	9.3	1.5
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				443	0	197	538	1477	0	0	1182	989
V/C Ratio(X)				0.73	0.00	0.78	0.82	0.21	0.00	0.00	0.27	0.05
Avail Cap(c_a), veh/h				1086	0	483	850	1477	0	0	1182	989
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.69	0.69	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				50.7	0.0	51.1	48.4	0.0	0.0	0.0	10.3	8.9
Incr Delay (d2), s/veh				2.3	0.0	6.6	1.3	0.2	0.0	0.0	0.6	0.1
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				4.7	0.0	4.7	3.9	0.1	0.0	0.0	3.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				53.0	0.0	57.7	49.6	0.2	0.0	0.0	10.9	9.0
LnGrp LOS				D		E	D	A			B	A
Approach Vol, veh/h					476			754			376	
Approach Delay, s/veh					54.5			29.2			10.6	
Approach LOS					D			C			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		99.3			18.7	80.7		20.7				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 73			20.0	46.0		36.0				
Max Q Clear Time (g_c+I1), s		2.0			12.0	11.3		13.1				
Green Ext Time (p_c), s		1.8			0.6	2.0		1.6				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh				32.4								
HCM 6th LOS				C								
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

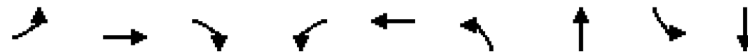
Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	3	1580	0	0	0	0	506	139	178	428	0
Future Volume (veh/h)	180	3	1580	0	0	0	0	506	139	178	428	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	182	3	1429				0	511	113	180	432	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	949	16	1510				0	949	205	210	1356	0
Arrive On Green	0.53	0.53	0.53				0.00	0.22	0.22	0.12	0.38	0.00
Sat Flow, veh/h	1782	29	2834				0	4441	922	1810	3705	0
Grp Volume(v), veh/h	185	0	1429				0	412	212	180	432	0
Grp Sat Flow(s),veh/h/ln	1811	0	1417				0	1729	1734	1810	1805	0
Q Serve(g_s), s	6.4	0.0	57.0				0.0	12.6	13.0	11.7	10.2	0.0
Cycle Q Clear(g_c), s	6.4	0.0	57.0				0.0	12.6	13.0	11.7	10.2	0.0
Prop In Lane	0.98		1.00				0.00		0.53	1.00		0.00
Lane Grp Cap(c), veh/h	965	0	1510				0	769	385	210	1356	0
V/C Ratio(X)	0.19	0.00	0.95				0.00	0.54	0.55	0.86	0.32	0.00
Avail Cap(c_a), veh/h	1019	0	1594				0	769	385	297	1356	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.91	0.91	0.00
Uniform Delay (d), s/veh	14.6	0.0	26.4				0.0	41.2	41.4	52.1	26.6	0.0
Incr Delay (d2), s/veh	0.1	0.0	11.9				0.0	2.7	5.6	14.7	0.6	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	19.8				0.0	5.5	6.0	6.0	4.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.7	0.0	38.3				0.0	43.9	46.9	66.8	27.1	0.0
LnGrp LOS	B		D					D	D	E	C	
Approach Vol, veh/h		1614						624			612	
Approach Delay, s/veh		35.6						44.9			38.8	
Approach LOS		D						D			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	18.4	32.2	69.4	50.6								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	19.7	17.3	67.5	41.5								
Max Q Clear Time (g_c+I1), s	13.7	15.0	59.0	12.2								
Green Ext Time (p_c), s	0.2	0.8	4.9	2.7								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			38.3									
HCM 6th LOS			D									

Timings

4: Street A & Green River Rd.

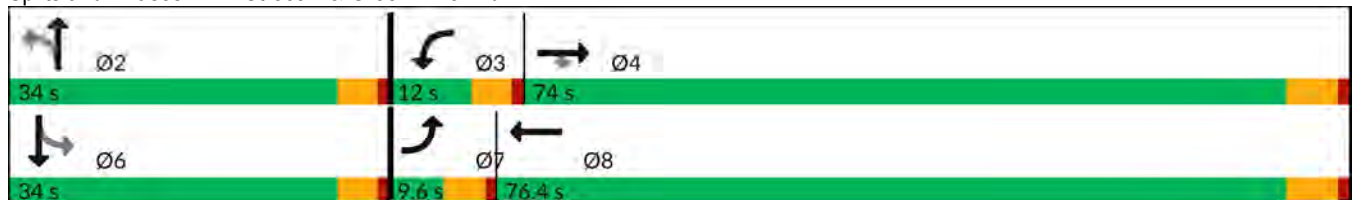


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↗	↖	↑↑↑	↖	↗		↕
Traffic Volume (vph)	93	1828	60	28	467	131	0	96	0
Future Volume (vph)	93	1828	60	28	467	131	0	96	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	26.6	26.6	26.6	26.6
Total Split (s)	9.6	74.0	74.0	12.0	76.4	34.0	34.0	34.0	34.0
Total Split (%)	8.0%	61.7%	61.7%	10.0%	63.7%	28.3%	28.3%	28.3%	28.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	5.6	47.2	47.2	6.5	42.0	16.1	16.1		16.1
Actuated g/C Ratio	0.07	0.59	0.59	0.08	0.52	0.20	0.20		0.20
v/c Ratio	0.80	0.65	0.06	0.20	0.21	0.53	0.23		0.43
Control Delay (s/veh)	88.4	13.1	3.5	48.8	8.8	42.8	11.6		24.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	88.4	13.1	3.5	48.8	8.8	42.8	11.6		24.6
LOS	F	B	A	D	A	D	B		C
Approach Delay (s/veh)		16.4			10.8		30.7		24.6
Approach LOS		B			B		C		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 80.6  
 Natural Cycle: 70  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.81  
 Intersection Signal Delay (s/veh): 16.7  
 Intersection LOS: B  
 Intersection Capacity Utilization 66.0%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary  
 4: Street A & Green River Rd.

Green River TA (JN:12630)

06/05/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1828	60	28	467	68	131	0	84	96	0	33
Future Volume (veh/h)	93	1828	60	28	467	68	131	0	84	96	0	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	101	1987	65	30	508	74	142	0	91	104	0	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	122	3086	958	56	2560	367	343	0	275	210	13	48
Arrive On Green	0.07	0.59	0.59	0.03	0.56	0.56	0.17	0.00	0.17	0.17	0.00	0.17
Sat Flow, veh/h	1810	5187	1610	1810	4584	656	1394	0	1610	732	74	279
Grp Volume(v), veh/h	101	1987	65	30	381	201	142	0	91	140	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1782	1394	0	1610	1085	0	0
Q Serve(g_s), s	4.1	18.6	1.3	1.2	4.0	4.1	0.0	0.0	3.7	6.3	0.0	0.0
Cycle Q Clear(g_c), s	4.1	18.6	1.3	1.2	4.0	4.1	6.7	0.0	3.7	9.9	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.37	1.00		1.00	0.74		0.26
Lane Grp Cap(c), veh/h	122	3086	958	56	1931	995	343	0	275	270	0	0
V/C Ratio(X)	0.83	0.64	0.07	0.53	0.20	0.20	0.41	0.00	0.33	0.52	0.00	0.00
Avail Cap(c_a), veh/h	122	4785	1486	181	3303	1702	659	0	640	585	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	34.0	9.8	6.3	35.3	8.1	8.1	28.2	0.0	26.9	30.5	0.0	0.0
Incr Delay (d2), s/veh	33.1	0.2	0.0	2.9	0.0	0.1	0.8	0.0	0.7	1.5	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	5.2	0.3	0.5	1.2	1.3	2.3	0.0	1.4	2.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	67.2	10.1	6.3	38.2	8.1	8.2	29.0	0.0	27.6	32.0	0.0	0.0
LnGrp LOS	E	B	A	D	A	A	C		C	C		
Approach Vol, veh/h		2153			612			233				140
Approach Delay, s/veh		12.6			9.6			28.4				32.0
Approach LOS		B			A			C				C
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		17.2	6.9	49.8		17.2	9.6	47.1				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		29.4	7.4	68.2		29.4	5.0	70.6				
Max Q Clear Time (g_c+I1), s		8.7	3.2	20.6		11.9	6.1	6.1				
Green Ext Time (p_c), s		0.9	0.0	23.4		0.7	0.0	3.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			14.1									
HCM 6th LOS			B									

Timings

5: Dominguez Ranch Rd. & Green River Rd.

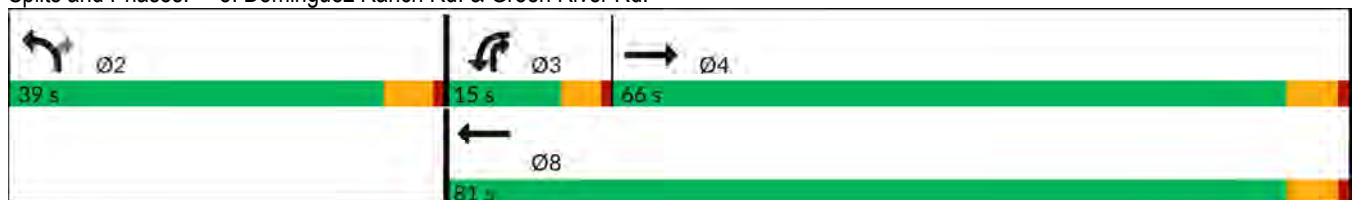


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↘	↑↑↑	↘	↗
Traffic Volume (vph)	1868	55	466	97	46
Future Volume (vph)	1868	55	466	97	46
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	66.0	15.0	81.0	39.0	15.0
Total Split (%)	55.0%	12.5%	67.5%	32.5%	12.5%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	56.0	7.6	65.3	14.2	22.5
Actuated g/C Ratio	0.66	0.09	0.77	0.17	0.27
v/c Ratio	0.62	0.35	0.12	0.33	0.11
Control Delay (s/veh)	13.9	49.5	4.3	38.4	22.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.9	49.5	4.3	38.4	22.0
LOS	B	D	A	D	C
Approach Delay (s/veh)	14.0		9.1	33.2	
Approach LOS	B		A	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 84.6  
 Natural Cycle: 90  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.62  
 Intersection Signal Delay (s/veh): 14.0  
 Intersection LOS: B  
 Intersection Capacity Utilization 63.4%  
 ICU Level of Service B  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.





HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

06/05/2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	1868	140	55	466	97	46
Future Volume (veh/h)	1868	140	55	466	97	46
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	1966	123	58	491	102	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	2981	186	87	3690	233	285
Arrive On Green	0.60	0.60	0.05	0.71	0.13	0.13
Sat Flow, veh/h	5162	311	1810	5358	1810	1610
Grp Volume(v), veh/h	1360	729	58	491	102	16
Grp Sat Flow(s),veh/h/ln	1729	1844	1810	1729	1810	1610
Q Serve(g_s), s	18.3	18.4	2.2	2.1	3.6	0.6
Cycle Q Clear(g_c), s	18.3	18.4	2.2	2.1	3.6	0.6
Prop In Lane		0.17	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2065	1101	87	3690	233	285
V/C Ratio(X)	0.66	0.66	0.66	0.13	0.44	0.06
Avail Cap(c_a), veh/h	2976	1587	269	5577	869	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.3	9.4	32.7	3.2	28.1	23.9
Incr Delay (d2), s/veh	0.4	0.7	3.2	0.0	1.3	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	5.3	1.0	0.4	1.6	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	9.7	10.1	35.9	3.2	29.4	24.0
LnGrp LOS	A	B	D	A	C	C
Approach Vol, veh/h	2089			549	118	
Approach Delay, s/veh	9.8			6.7	28.7	
Approach LOS	A			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.4	8.0	47.6		55.6
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		33.6	10.4	60.2		75.2
Max Q Clear Time (g_c+I1), s		5.6	4.2	20.4		4.1
Green Ext Time (p_c), s		0.3	0.0	21.4		3.3
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			10.0			
HCM 6th LOS			B			



Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↘	↑↑↑	↑↑↑↘	↘	↗
Traffic Volume (vph)	189	1716	479	15	131
Future Volume (vph)	189	1716	479	15	131
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	37.0	87.0	50.0	33.0	37.0
Total Split (%)	30.8%	72.5%	41.7%	27.5%	30.8%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	10.8	38.7	15.8	13.7	13.9
Actuated g/C Ratio	0.25	0.91	0.37	0.32	0.33
v/c Ratio	0.42	0.37	0.27	0.02	0.21
Control Delay (s/veh)	20.4	3.5	11.6	16.0	3.0
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.4	3.5	11.6	16.0	3.0
LOS	C	A	B	B	A
Approach Delay (s/veh)		5.3	11.6	4.3	
Approach LOS		A	B	A	

Intersection Summary

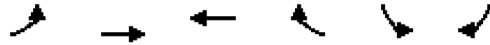
Cycle Length: 120  
 Actuated Cycle Length: 42.4  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.42  
 Intersection Signal Delay (s/veh): 6.5  
 Intersection LOS: A  
 Intersection Capacity Utilization 51.5%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
 6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
 06/05/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↵	↑↑↑	↑↑↑		↵	↵
Traffic Volume (veh/h)	189	1716	479	41	15	131
Future Volume (veh/h)	189	1716	479	41	15	131
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	195	1769	494	39	15	76
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	250	3262	1974	154	254	449
Arrive On Green	0.14	0.63	0.40	0.40	0.14	0.14
Sat Flow, veh/h	1810	5358	5077	383	1810	1610
Grp Volume(v), veh/h	195	1769	347	186	15	76
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1831	1810	1610
Q Serve(g_s), s	5.4	10.0	3.5	3.5	0.4	1.9
Cycle Q Clear(g_c), s	5.4	10.0	3.5	3.5	0.4	1.9
Prop In Lane	1.00			0.21	1.00	1.00
Lane Grp Cap(c), veh/h	250	3262	1391	737	254	449
V/C Ratio(X)	0.78	0.54	0.25	0.25	0.06	0.17
Avail Cap(c_a), veh/h	1126	8091	2936	1555	932	1052
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.7	5.4	10.3	10.4	19.4	14.2
Incr Delay (d2), s/veh	2.0	0.1	0.1	0.2	0.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.7	1.0	1.1	0.1	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	23.7	5.6	10.4	10.5	19.5	14.4
LnGrp LOS	C	A	B	B	B	B
Approach Vol, veh/h		1964	533		91	
Approach Delay, s/veh		7.4	10.5		15.2	
Approach LOS		A	B		B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.8	26.7			38.5	13.5
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	32.4	44.2			81.2	26.8
Max Q Clear Time (g_c+I1), s	7.4	5.5			12.0	3.9
Green Ext Time (p_c), s	0.2	3.3			20.7	0.2

Intersection Summary						
HCM 6th Ctrl Delay, s/veh			8.3			
HCM 6th LOS			A			

**APPENDIX 6.5: OPENING YEAR CUMULATIVE (2026) WITHOUT  
PROJECT CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	29	29	147	1895	247	278	320
v/c Ratio	0.19	0.19	0.53	0.91	0.16	0.42	0.42
Control Delay	49.6	49.5	14.1	49.3	1.8	34.5	5.7
Queue Delay	0.0	0.0	0.0	0.5	0.0	0.0	0.0
Total Delay	49.6	49.5	14.1	49.8	1.8	34.5	5.7
Queue Length 50th (ft)	23	23	0	432	13	157	0
Queue Length 95th (ft)	46	46	50	395	33	287	68
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	371	375	465	2139	1561	669	768
Starvation Cap Reductn	0	0	0	53	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.08	0.32	0.91	0.16	0.42	0.42

Intersection Summary



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	110	233	2137	227	98
v/c Ratio	0.58	0.46	0.69	0.76	0.03
Control Delay	62.3	8.9	19.2	62.3	4.7
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay	62.3	8.9	19.5	62.3	4.7
Queue Length 50th (ft)	83	0	392	190	9
Queue Length 95th (ft)	137	39	553	274	30
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	279	635	3077	370	2897
Starvation Cap Reductn	0	0	328	0	0
Spillback Cap Reductn	0	0	51	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.37	0.78	0.61	0.03
<b>Intersection Summary</b>					

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	161	162	224	367	298	318	156
v/c Ratio	0.65	0.65	0.53	0.67	0.20	0.28	0.15
Control Delay	59.5	59.3	10.0	47.4	8.4	14.0	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.5	59.3	10.0	47.4	8.4	14.0	2.7
Queue Length 50th (ft)	126	127	0	104	52	110	0
Queue Length 95th (ft)	186	187	65	138	164	210	34
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	514	519	641	848	1455	1133	1013
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.31	0.31	0.35	0.43	0.20	0.28	0.15

Intersection Summary

Queues  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	185	1553	503	180	387
v/c Ratio	0.19	0.90	0.49	0.73	0.29
Control Delay	14.4	25.3	44.1	65.1	37.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.4	25.3	44.1	65.1	37.6
Queue Length 50th (ft)	67	427	126	143	143
Queue Length 95th (ft)	106	561	171	219	190
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	1018	1794	1029	296	1348
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.18	0.87	0.49	0.61	0.29
<b>Intersection Summary</b>					



**APPENDIX 6.6: OPENING YEAR CUMULATIVE (2026) WITH PROJECT  
(PHASE 1) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	60	60	147	1926	249	290	320
v/c Ratio	0.35	0.34	0.50	0.92	0.16	0.45	0.43
Control Delay	52.9	52.8	12.8	47.8	2.2	36.5	5.9
Queue Delay	0.0	0.0	0.0	0.7	0.0	0.0	0.0
Total Delay	52.9	52.8	12.8	48.5	2.2	36.5	5.9
Queue Length 50th (ft)	47	47	0	415	16	172	0
Queue Length 95th (ft)	78	78	50	407	40	300	68
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	371	373	465	2146	1539	640	749
Starvation Cap Reductn	0	0	0	58	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.16	0.16	0.32	0.92	0.16	0.45	0.43

Intersection Summary

Queues  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/18/2023



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	110	293	2199	227	169
v/c Ratio	0.57	0.52	0.72	0.76	0.06
Control Delay	62.1	8.7	19.7	55.8	5.2
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay	62.1	8.7	20.0	55.8	5.2
Queue Length 50th (ft)	83	0	412	190	24
Queue Length 95th (ft)	136	42	580	272	56
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	279	685	3074	369	2895
Starvation Cap Reductn	0	0	318	0	0
Spillback Cap Reductn	0	0	66	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.43	0.80	0.62	0.06
<b>Intersection Summary</b>					

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	175	173	224	430	309	320	156
v/c Ratio	0.67	0.66	0.51	0.70	0.21	0.29	0.16
Control Delay	59.7	58.7	9.6	47.5	9.3	15.4	2.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	59.7	58.7	9.6	47.5	9.3	15.4	2.9
Queue Length 50th (ft)	135	133	0	122	64	120	0
Queue Length 95th (ft)	202	200	65	158	172	217	35
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	514	519	641	848	1441	1095	984
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.33	0.35	0.51	0.21	0.29	0.16

Intersection Summary

## 2: Green River Rd. &amp; SR-91 EB Ramps



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	185	1576	628	180	413
v/c Ratio	0.19	0.91	0.63	0.73	0.31
Control Delay	14.0	27.1	45.9	65.0	38.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	14.0	27.1	45.9	65.0	38.6
Queue Length 50th (ft)	66	461	158	143	154
Queue Length 95th (ft)	106	609	#210	219	196
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	1018	1775	996	296	1319
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.18	0.89	0.63	0.61	0.31

## Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

**APPENDIX 6.7: OPENING YEAR CUMULATIVE (2026) WITH PROJECT  
(PHASE 2) CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank



Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	68	68	147	1941	253	295	320
v/c Ratio	0.38	0.37	0.49	0.92	0.16	0.46	0.43
Control Delay (s/veh)	53.7	53.6	12.5	47.4	2.3	37.1	5.9
Queue Delay	0.0	0.0	0.0	0.8	0.0	0.0	0.0
Total Delay (s/veh)	53.7	53.6	12.5	48.2	2.3	37.1	5.9
Queue Length 50th (ft)	53	53	0	412	18	177	0
Queue Length 95th (ft)	86	86	50	413	44	306	68
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	371	373	465	2150	1534	631	743
Starvation Cap Reductn	0	0	0	62	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.18	0.32	0.93	0.16	0.47	0.43

Intersection Summary

## 2: Green River Rd. &amp; SR-91 EB Ramps

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	110	309	2231	227	190
v/c Ratio	0.57	0.53	0.72	0.76	0.06
Control Delay (s/veh)	62.1	8.7	20.0	54.6	5.2
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay (s/veh)	62.1	8.7	20.3	54.6	5.2
Queue Length 50th (ft)	83	0	423	190	28
Queue Length 95th (ft)	136	43	595	272	64
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	279	699	3072	369	2895
Starvation Cap Reductn	0	0	311	0	0
Spillback Cap Reductn	0	0	73	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.44	0.81	0.62	0.07
Intersection Summary					

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	179	182	224	437	311	324	156
v/c Ratio	0.67	0.67	0.50	0.70	0.21	0.29	0.15
Control Delay (s/veh)	59.6	59.8	9.4	47.4	9.5	15.6	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.6	59.8	9.4	47.4	9.5	15.6	2.8
Queue Length 50th (ft)	138	141	0	124	68	123	0
Queue Length 95th (ft)	206	209	65	160	175	221	35
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	514	518	641	848	1436	1088	979
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.35	0.35	0.35	0.52	0.22	0.30	0.16

Intersection Summary

## 2: Green River Rd. &amp; SR-91 EB Ramps

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	185	1588	644	180	429
v/c Ratio	0.18	0.92	0.65	0.72	0.32
Control Delay (s/veh)	13.8	28.2	46.7	65.0	39.3
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.8	28.2	46.7	65.0	39.3
Queue Length 50th (ft)	66	483	163	143	161
Queue Length 95th (ft)	106	634	#226	217	204
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	1018	1764	976	296	1303
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.18	0.90	0.66	0.61	0.33

## Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

**APPENDIX 6.8: OPENING YEAR CUMULATIVE (2026) WITH PROJECT  
(PROJECT BUILDOUT) CONDITIONS OFF-RAMP QUEUING ANALYSIS  
WORKSHEETS**

This Page Intentionally Left Blank

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	69	68	147	1948	253	295	320
v/c Ratio	0.38	0.37	0.49	0.92	0.16	0.46	0.43
Control Delay (s/veh)	53.8	53.5	12.5	47.3	2.3	37.2	5.9
Queue Delay	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Total Delay (s/veh)	53.8	53.5	12.5	48.3	2.3	37.2	5.9
Queue Length 50th (ft)	54	53	0	412	18	178	0
Queue Length 95th (ft)	88	86	50	415	m45	306	68
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	371	373	465	2152	1533	628	741
Starvation Cap Reductn	0	0	0	62	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.18	0.32	0.93	0.17	0.47	0.43

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

## 2: Green River Rd. &amp; SR-91 EB Ramps

06/05/2024

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	110	311	2242	227	191
v/c Ratio	0.57	0.53	0.72	0.76	0.06
Control Delay (s/veh)	62.1	8.7	20.0	54.4	5.2
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay (s/veh)	62.1	8.7	20.4	54.4	5.2
Queue Length 50th (ft)	83	0	426	190	29
Queue Length 95th (ft)	136	44	600	273	64
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	279	701	3072	369	2895
Starvation Cap Reductn	0	0	309	0	0
Spillback Cap Reductn	0	0	78	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.39	0.44	0.81	0.62	0.07
<b>Intersection Summary</b>					



Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	165	164	224	443	311	324	156
v/c Ratio	0.64	0.63	0.52	0.70	0.21	0.29	0.15
Control Delay (s/veh)	59.1	58.4	9.8	46.9	9.3	15.3	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	59.1	58.4	9.8	46.9	9.3	15.3	2.8
Queue Length 50th (ft)	128	127	0	126	69	121	0
Queue Length 95th (ft)	190	188	65	162	175	221	36
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	514	519	641	848	1450	1098	987
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.32	0.35	0.52	0.21	0.30	0.16

Intersection Summary

## 2: Green River Rd. &amp; SR-91 EB Ramps

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	185	1596	651	180	432
v/c Ratio	0.18	0.92	0.67	0.72	0.33
Control Delay (s/veh)	13.8	28.7	47.1	64.9	38.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.8	28.7	47.1	64.9	38.6
Queue Length 50th (ft)	66	491	165	143	161
Queue Length 95th (ft)	106	645	#230	216	201
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	1018	1762	969	296	1299
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.18	0.91	0.67	0.61	0.33

## Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

**APPENDIX 7.1: HORIZON YEAR (2045) WITHOUT PROJECT  
CONDITIONS INTERSECTION OPERATIONS ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

**Volume Development  
AM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 NP PCE:	2,421	239	0	0	269	310	0	0	0	52	4	141	3,436
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 NP PCE:	0	2,525	149	225	97	0	135	1	231	0	0	0	3,362
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 NP PCE:	0	0	5	0	0	0	0	327	3	1	2,674	0	3,010
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 NP PCE:	0	0	0	0	0	0	0	332	0	0	2,675	0	3,007
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 NP PCE:	145	0	50	0	0	0	0	309	23	16	2,530	0	3,073
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 NP PCE:	161	0	21	27	0	327	92	243	22	8	2,149	78	3,128

**Volume Development  
PM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 NP PCE:	489	333	0	0	407	156	0	0	0	389	24	224	2,022
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 NP PCE:	0	624	80	196	600	0	198	4	1,691	0	0	0	3,392
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 NP PCE:	0	0	4	0	0	0	0	2,284	6	1	704	0	2,999
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 NP PCE:	0	0	0	0	0	0	0	2,083	0	0	532	0	2,615
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 NP PCE:	96	0	51	0	0	0	0	2,145	142	61	609	0	3,104
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 NP PCE:	90	0	40	16	0	123	179	1,803	127	51	472	45	2,947

Timings  
1: Green River Rd. & SR-91 WB Ramps

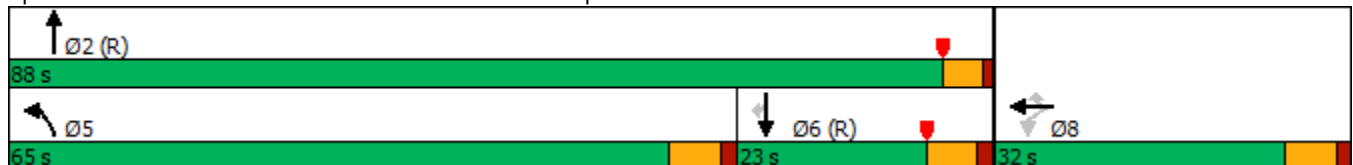


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↶	↶	↶↶↶	↑	↓	↷
Traffic Volume (vph)	52	4	141	2421	239	269	310
Future Volume (vph)	52	4	141	2421	239	269	310
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	65.0	88.0	23.0	23.0
Total Split (%)	26.7%	26.7%	26.7%	54.2%	73.3%	19.2%	19.2%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	10.8	10.8	10.8	70.2	98.6	21.0	21.0
Actuated g/C Ratio	0.09	0.09	0.09	0.58	0.82	0.18	0.18
v/c Ratio	0.19	0.20	0.54	0.88	0.17	0.88	0.61
Control Delay	49.7	49.8	14.1	27.1	2.6	75.4	11.0
Queue Delay	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Total Delay	49.7	49.8	14.1	27.9	2.6	75.4	11.0
LOS	D	D	B	C	A	E	B
Approach Delay		24.2			25.7	40.9	
Approach LOS		C			C	D	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 120  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.88  
 Intersection Signal Delay: 28.1  
 Intersection LOS: C  
 Intersection Capacity Utilization 85.0%  
 ICU Level of Service E  
 Analysis Period (min) 15

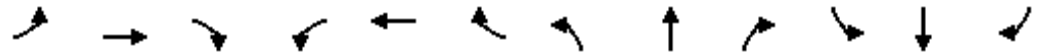
Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/24/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↖	↖	↖↖↖	↑			↑	↗
Traffic Volume (veh/h)	0	0	0	52	4	141	2421	239	0	0	269	310
Future Volume (veh/h)	0	0	0	52	4	141	2421	239	0	0	269	310
Initial Q (Qb), veh				0	0	0	92	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				60	0	53	2632	260	0	0	292	251
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				181	0	81	2509	1615	0	0	586	490
Arrive On Green				0.05	0.00	0.05	0.49	0.85	0.00	0.00	0.31	0.31
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				60	0	53	2632	260	0	0	292	251
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				1.9	0.0	3.9	59.0	2.9	0.0	0.0	15.1	15.6
Cycle Q Clear(g_c), s				1.9	0.0	3.9	59.0	2.9	0.0	0.0	15.1	15.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				181	0	81	2509	1615	0	0	586	490
V/C Ratio(X)				0.33	0.00	0.66	1.05	0.16	0.00	0.00	0.50	0.51
Avail Cap(c_a), veh/h				784	0	349	2509	1615	0	0	586	490
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.14	0.14	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.0	0.0	56.0	30.5	1.6	0.0	0.0	33.9	34.1
Incr Delay (d2), s/veh				1.1	0.0	8.7	24.1	0.0	0.0	0.0	3.0	3.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	132.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.9	0.0	1.7	58.3	0.4	0.0	0.0	7.2	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				56.1	0.0	64.7	186.6	1.6	0.0	0.0	36.9	37.9
LnGrp LOS				E	A	E	F	A	A	A	D	D
Approach Vol, veh/h					113			2892			543	
Approach Delay, s/veh					60.1			169.9			37.4	
Approach LOS					E			F			D	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		108.0			65.0	43.0		12.0				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			59.0	17.0		26.0				
Max Q Clear Time (g_c+I1), s		4.9			61.0	17.6		5.9				
Green Ext Time (p_c), s		1.5			0.0	0.0		0.3				

Intersection Summary

HCM 6th Ctrl Delay	146.1
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Timings  
2: Green River Rd. & SR-91 EB Ramps

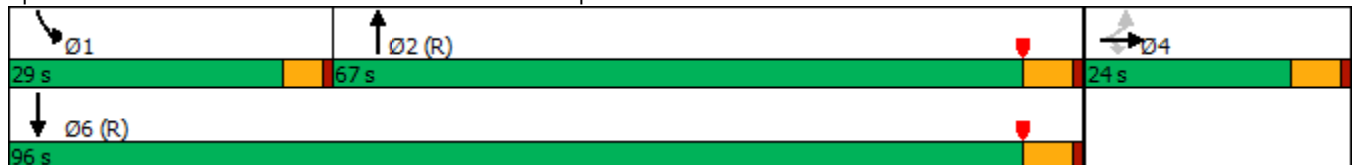


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↔↔↔	↔	↔↔
Traffic Volume (vph)	1	231	2525	225	97
Future Volume (vph)	1	231	2525	225	97
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	14.6	14.6	69.3	20.6	94.4
Actuated g/C Ratio	0.12	0.12	0.58	0.17	0.79
v/c Ratio	0.67	0.44	0.98	0.79	0.04
Control Delay	65.0	8.1	37.9	48.7	9.0
Queue Delay	0.0	0.0	20.6	0.0	0.0
Total Delay	65.0	8.1	58.6	48.7	9.0
LOS	E	A	E	D	A
Approach Delay	29.2		58.6		36.8
Approach LOS	C		E		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.98  
 Intersection Signal Delay: 53.3  
 Intersection LOS: D  
 Intersection Capacity Utilization 85.0%  
 ICU Level of Service E  
 Analysis Period (min) 15

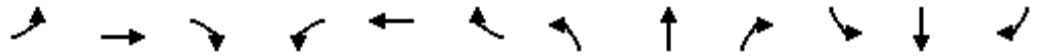
Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/24/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↑↑↑		↘	↑↑	
Traffic Volume (veh/h)	135	1	231	0	0	0	0	2525	149	225	97	0
Future Volume (veh/h)	135	1	231	0	0	0	0	2525	149	225	97	0
Initial Q (Qb), veh	0	0	0				0	92	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	147	1	97				0	2745	153	245	105	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	182	1	287				0	3191	92	276	2913	0
Arrive On Green	0.10	0.10	0.10				0.00	0.62	0.62	0.15	0.81	0.00
Sat Flow, veh/h	1798	12	2834				0	5198	275	1810	3705	0
Grp Volume(v), veh/h	148	0	97				0	1871	1027	245	105	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1843	1810	1805	0
Q Serve(g_s), s	9.6	0.0	3.8				0.0	54.2	57.8	15.9	0.7	0.0
Cycle Q Clear(g_c), s	9.6	0.0	3.8				0.0	54.2	57.8	15.9	0.7	0.0
Prop In Lane	0.99		1.00				0.00		0.15	1.00		0.00
Lane Grp Cap(c), veh/h	184	0	287				0	2134	1153	276	2913	0
V/C Ratio(X)	0.81	0.00	0.34				0.00	0.88	0.89	0.89	0.04	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2134	1137	369	2913	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.47	0.47	0.00
Uniform Delay (d), s/veh	52.8	0.0	50.2				0.0	22.7	22.9	49.9	2.3	0.0
Incr Delay (d2), s/veh	9.7	0.0	0.7				0.0	5.5	10.5	9.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	48.3	46.5	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	1.4				0.0	41.1	45.8	7.7	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.4	0.0	50.8				0.0	76.5	79.9	59.5	2.3	0.0
LnGrp LOS	E	A	D				A	E	E	E	A	A
Approach Vol, veh/h		245						2898			350	
Approach Delay, s/veh		57.8						77.7			42.4	
Approach LOS		E						E			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	22.8	79.5	17.7	102.3								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	24.5	61.5	18.5	90.5								
Max Q Clear Time (g_c+I1), s	17.9	59.8	11.6	2.7								
Green Ext Time (p_c), s	0.4	1.6	0.6	0.6								

Intersection Summary

HCM 6th Ctrl Delay	72.8
HCM 6th LOS	E

Timings  
1: Green River Rd. & SR-91 WB Ramps

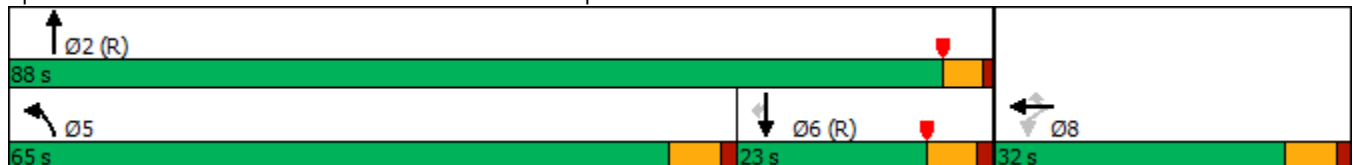


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↖	↖	↖↖↖	↖	↖	↖
Traffic Volume (vph)	52	4	141	2421	239	269	310
Future Volume (vph)	52	4	141	2421	239	269	310
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	65.0	88.0	23.0	23.0
Total Split (%)	26.7%	26.7%	26.7%	54.2%	73.3%	19.2%	19.2%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	10.8	10.8	10.8	70.2	98.6	21.0	21.0
Actuated g/C Ratio	0.09	0.09	0.09	0.58	0.82	0.18	0.18
v/c Ratio	0.19	0.20	0.54	0.88	0.17	0.88	0.61
Control Delay	49.7	49.8	14.1	27.1	2.6	75.4	11.0
Queue Delay	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Total Delay	49.7	49.8	14.1	27.9	2.6	75.4	11.0
LOS	D	D	B	C	A	E	B
Approach Delay		24.2			25.7	40.9	
Approach LOS		C			C	D	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 120  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.88  
 Intersection Signal Delay: 28.1  
 Intersection LOS: C  
 Intersection Capacity Utilization 85.0%  
 ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/19/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↖	↖	↖↖↖	↖			↖	↖
Traffic Volume (veh/h)	0	0	0	52	4	141	2421	239	0	0	269	310
Future Volume (veh/h)	0	0	0	52	4	141	2421	239	0	0	269	310
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				60	0	53	2632	260	0	0	292	251
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				181	0	81	2509	1615	0	0	586	490
Arrive On Green				0.05	0.00	0.05	0.49	0.85	0.00	0.00	0.31	0.31
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				60	0	53	2632	260	0	0	292	251
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				1.9	0.0	3.9	59.0	2.9	0.0	0.0	15.1	15.6
Cycle Q Clear(g_c), s				1.9	0.0	3.9	59.0	2.9	0.0	0.0	15.1	15.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				181	0	81	2509	1615	0	0	586	490
V/C Ratio(X)				0.33	0.00	0.66	1.05	0.16	0.00	0.00	0.50	0.51
Avail Cap(c_a), veh/h				784	0	349	2509	1615	0	0	586	490
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.14	0.14	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.0	0.0	56.0	30.5	1.6	0.0	0.0	33.9	34.1
Incr Delay (d2), s/veh				1.1	0.0	8.7	24.1	0.0	0.0	0.0	3.0	3.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				0.9	0.0	1.7	27.6	0.4	0.0	0.0	7.2	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				56.1	0.0	64.7	54.6	1.6	0.0	0.0	36.9	37.9
LnGrp LOS				E	A	E	F	A	A	A	D	D
Approach Vol, veh/h					113			2892			543	
Approach Delay, s/veh					60.1			49.8			37.4	
Approach LOS					E			D			D	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		108.0			65.0	43.0		12.0				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			59.0	17.0		26.0				
Max Q Clear Time (g_c+I1), s		4.9			61.0	17.6		5.9				
Green Ext Time (p_c), s		1.5			0.0	0.0		0.3				

Intersection Summary

HCM 6th Ctrl Delay	48.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.  
 \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/19/2023

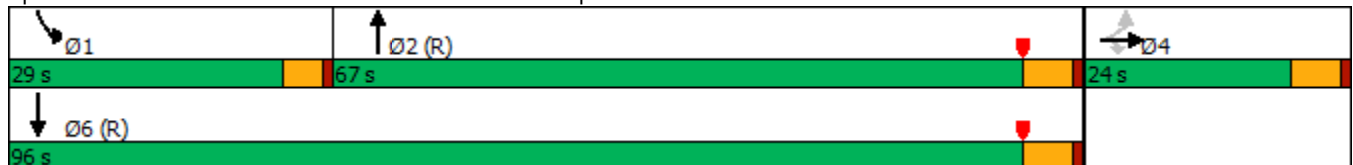


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↔↔↔	↔	↔↔
Traffic Volume (vph)	1	231	2525	225	97
Future Volume (vph)	1	231	2525	225	97
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	14.6	14.6	69.3	20.6	94.4
Actuated g/C Ratio	0.12	0.12	0.58	0.17	0.79
v/c Ratio	0.67	0.44	0.98	0.79	0.04
Control Delay	65.0	8.1	37.9	48.7	9.0
Queue Delay	0.0	0.0	20.6	0.0	0.0
Total Delay	65.0	8.1	58.6	48.7	9.0
LOS	E	A	E	D	A
Approach Delay	29.2		58.6		36.8
Approach LOS	C		E		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 110  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.98  
 Intersection Signal Delay: 53.3  
 Intersection LOS: D  
 Intersection Capacity Utilization 85.0%  
 ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/19/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↑↑↑		↘	↑↑	
Traffic Volume (veh/h)	135	1	231	0	0	0	0	2525	149	225	97	0
Future Volume (veh/h)	135	1	231	0	0	0	0	2525	149	225	97	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	147	1	97				0	2745	153	245	105	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	182	1	287				0	3102	169	276	2913	0
Arrive On Green	0.10	0.10	0.10				0.00	0.62	0.62	0.15	0.81	0.00
Sat Flow, veh/h	1798	12	2834				0	5198	275	1810	3705	0
Grp Volume(v), veh/h	148	0	97				0	1871	1027	245	105	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1843	1810	1805	0
Q Serve(g_s), s	9.6	0.0	3.8				0.0	54.2	57.8	15.9	0.7	0.0
Cycle Q Clear(g_c), s	9.6	0.0	3.8				0.0	54.2	57.8	15.9	0.7	0.0
Prop In Lane	0.99		1.00				0.00		0.15	1.00		0.00
Lane Grp Cap(c), veh/h	184	0	287				0	2134	1137	276	2913	0
V/C Ratio(X)	0.81	0.00	0.34				0.00	0.88	0.90	0.89	0.04	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2134	1137	369	2913	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.47	0.47	0.00
Uniform Delay (d), s/veh	52.8	0.0	50.2				0.0	19.2	19.9	49.9	2.3	0.0
Incr Delay (d2), s/veh	9.7	0.0	0.7				0.0	5.5	11.6	9.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	1.4				0.0	20.4	25.0	7.7	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.4	0.0	50.8				0.0	24.6	31.5	59.5	2.3	0.0
LnGrp LOS	E	A	D				A	C	C	E	A	A
Approach Vol, veh/h		245						2898			350	
Approach Delay, s/veh		57.8						27.1			42.4	
Approach LOS		E						C			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	22.8	79.5	17.7	102.3								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	24.5	61.5	18.5	90.5								
Max Q Clear Time (g_c+I1), s	17.9	59.8	11.6	2.7								
Green Ext Time (p_c), s	0.4	1.6	0.6	0.6								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			30.8									
HCM 6th LOS			C									

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	327	3	1	2674	0	5
Future Vol, veh/h	327	3	1	2674	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	355	3	1	2907	0	5

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	358	0	179
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	-	-	1212	0	839
Stage 1	-	-	-	0	-
Stage 2	-	-	-	0	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	1212	-	839
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.3
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	839	-	-	1212	-
HCM Lane V/C Ratio	0.006	-	-	0.001	-
HCM Control Delay (s)	9.3	-	-	8	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	0	-	-	0	-

Timings  
5: Dominguez Ranch Rd. & Green River Rd.

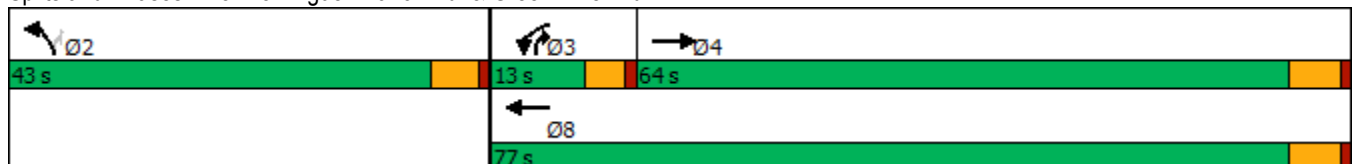


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↵	↑↑↑	↵	↵
Traffic Volume (vph)	309	16	2530	145	50
Future Volume (vph)	309	16	2530	145	50
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	64.0	13.0	77.0	43.0	13.0
Total Split (%)	53.3%	10.8%	64.2%	35.8%	10.8%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	62.3	5.7	70.6	15.7	26.9
Actuated g/C Ratio	0.64	0.06	0.72	0.16	0.28
v/c Ratio	0.11	0.16	0.73	0.54	0.11
Control Delay	8.2	50.1	10.6	44.3	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	8.2	50.1	10.6	44.3	7.1
LOS	A	D	B	D	A
Approach Delay	8.2		10.9	34.8	
Approach LOS	A		B	C	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 97.6  
 Natural Cycle: 90  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.73  
 Intersection Signal Delay: 12.1  
 Intersection LOS: B  
 Intersection Capacity Utilization 66.5%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.





HCM 6th Signalized Intersection Summary  
5: Dominguez Ranch Rd. & Green River Rd.

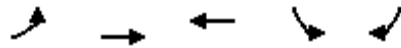
Green River TA (JN:12630)

05/19/2023

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	309	23	16	2530	145	50
Future Volume (veh/h)	309	23	16	2530	145	50
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	336	18	17	2750	158	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	3373	179	35	3862	216	224
Arrive On Green	0.67	0.67	0.02	0.74	0.12	0.12
Sat Flow, veh/h	5213	267	1810	5358	1810	1610
Grp Volume(v), veh/h	229	125	17	2750	158	20
Grp Sat Flow(s),veh/h/ln	1729	1852	1810	1729	1810	1610
Q Serve(g_s), s	1.9	2.0	0.8	23.7	6.9	0.9
Cycle Q Clear(g_c), s	1.9	2.0	0.8	23.7	6.9	0.9
Prop In Lane		0.14	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2313	1239	35	3862	216	224
V/C Ratio(X)	0.10	0.10	0.48	0.71	0.73	0.09
Avail Cap(c_a), veh/h	2445	1310	185	4487	827	767
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	4.8	4.8	39.9	5.7	35.0	30.9
Incr Delay (d2), s/veh	0.0	0.0	3.7	0.5	4.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.5	0.4	4.6	3.2	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.8	4.9	43.6	6.2	39.7	31.1
LnGrp LOS	A	A	D	A	D	C
Approach Vol, veh/h	354			2767	178	
Approach Delay, s/veh	4.9			6.4	38.7	
Approach LOS	A			A	D	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		15.2	6.2	60.9		67.1
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		37.6	8.4	58.2		71.2
Max Q Clear Time (g_c+I1), s		8.9	2.8	4.0		25.7
Green Ext Time (p_c), s		0.5	0.0	2.1		35.5
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			8.0			
HCM 6th LOS			A			

Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑	↖	↗
Traffic Volume (vph)	92	243	2149	27	327
Future Volume (vph)	92	243	2149	27	327
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	26.0	87.8	61.8	32.2	26.0
Total Split (%)	21.7%	73.2%	51.5%	26.8%	21.7%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effect Green (s)	16.7	79.9	55.8	12.8	28.3
Actuated g/C Ratio	0.18	0.84	0.59	0.14	0.30
v/c Ratio	0.31	0.06	0.80	0.12	0.73
Control Delay	41.5	3.2	19.8	38.7	38.6
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	41.5	3.2	19.8	38.7	38.6
LOS	D	A	B	D	D
Approach Delay		13.7	19.8	38.6	
Approach LOS		B	B	D	

Intersection Summary

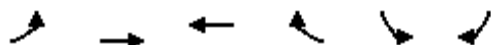
Cycle Length: 120  
 Actuated Cycle Length: 94.7  
 Natural Cycle: 90  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.80  
 Intersection Signal Delay: 21.3  
 Intersection LOS: C  
 Intersection Capacity Utilization 72.2%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↶↶↶	↶↶↶		↷	↷
Traffic Volume (veh/h)	92	243	2149	78	27	327
Future Volume (veh/h)	92	243	2149	78	27	327
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	100	264	2336	77	29	137
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	130	3794	3110	102	218	309
Arrive On Green	0.07	0.73	0.60	0.60	0.12	0.12
Sat Flow, veh/h	1810	5358	5329	169	1810	1610
Grp Volume(v), veh/h	100	264	1562	851	29	137
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1870	1810	1610
Q Serve(g_s), s	4.4	1.2	26.5	26.8	1.2	6.1
Cycle Q Clear(g_c), s	4.4	1.2	26.5	26.8	1.2	6.1
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	130	3794	2085	1127	218	309
V/C Ratio(X)	0.77	0.07	0.75	0.75	0.13	0.44
Avail Cap(c_a), veh/h	478	5250	2390	1292	581	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	3.1	11.6	11.7	31.8	28.9
Incr Delay (d2), s/veh	3.6	0.0	1.2	2.2	0.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.2	8.0	9.1	0.5	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.6	3.1	12.8	13.9	32.1	29.9
LnGrp LOS	D	A	B	B	C	C
Approach Vol, veh/h		364	2413		166	
Approach Delay, s/veh		13.4	13.2		30.3	
Approach LOS		B	B		C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	10.4	54.6			65.0	16.0
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	21.4	56.0			82.0	26.0
Max Q Clear Time (g_c+11), s	6.4	28.8			3.2	8.1
Green Ext Time (p_c), s	0.1	20.0			1.7	0.4
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			14.2			
HCM 6th LOS			B			

Timings  
1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/19/2023

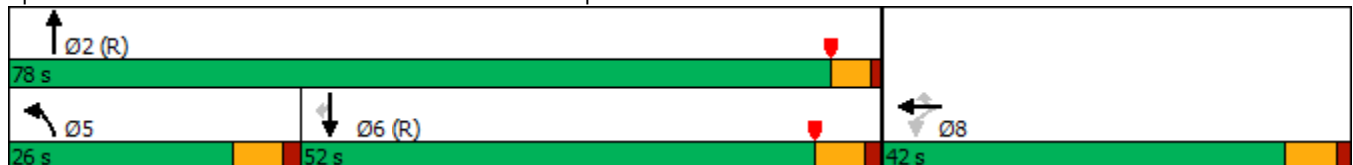


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↖	↖	↖	↖↖↖	↑	↑	↖
Traffic Volume (vph)	389	24	224	489	333	407	156
Future Volume (vph)	389	24	224	489	333	407	156
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	42.0	42.0	42.0	26.0	78.0	52.0	52.0
Total Split (%)	35.0%	35.0%	35.0%	21.7%	65.0%	43.3%	43.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	22.2	22.2	22.2	16.8	87.2	63.0	63.0
Actuated g/C Ratio	0.18	0.18	0.18	0.14	0.73	0.52	0.52
v/c Ratio	0.71	0.71	0.49	0.75	0.26	0.44	0.19
Control Delay	57.5	57.2	8.1	48.4	14.0	21.3	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.5	57.2	8.1	48.4	14.0	21.3	3.5
LOS	E	E	A	D	B	C	A
Approach Delay		40.0			34.5	16.4	
Approach LOS		D			C	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.75  
 Intersection Signal Delay: 31.2  
 Intersection LOS: C  
 Intersection Capacity Utilization 84.9%  
 ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

05/19/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations				↖	↖	↖	↖↖↖	↖			↖	↖
Traffic Volume (veh/h)	0	0	0	389	24	224	489	333	0	0	407	156
Future Volume (veh/h)	0	0	0	389	24	224	489	333	0	0	407	156
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				442	0	173	532	362	0	0	442	67
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				549	0	244	625	1422	0	0	1094	915
Arrive On Green				0.15	0.00	0.15	0.20	1.00	0.00	0.00	0.58	0.58
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				442	0	173	532	362	0	0	442	67
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				14.2	0.0	12.3	12.0	0.0	0.0	0.0	15.4	2.2
Cycle Q Clear(g_c), s				14.2	0.0	12.3	12.0	0.0	0.0	0.0	15.4	2.2
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				549	0	244	625	1422	0	0	1094	915
V/C Ratio(X)				0.81	0.00	0.71	0.85	0.25	0.00	0.00	0.40	0.07
Avail Cap(c_a), veh/h				1086	0	483	850	1422	0	0	1094	915
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.45	0.45	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				49.2	0.0	48.4	46.7	0.0	0.0	0.0	14.1	11.3
Incr Delay (d2), s/veh				2.8	0.0	3.8	2.2	0.2	0.0	0.0	1.1	0.2
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.4	0.0	5.1	4.7	0.1	0.0	0.0	6.4	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				52.0	0.0	52.2	48.9	0.2	0.0	0.0	15.2	11.4
LnGrp LOS				D	A	D	D	A	A	A	B	B
Approach Vol, veh/h					615			894			509	
Approach Delay, s/veh					52.1			29.2			14.7	
Approach LOS					D			C			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		95.8			20.7	75.1		24.2				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 73			20.0	46.0		36.0				
Max Q Clear Time (g_c+I1), s		2.0			14.0	17.4		16.2				
Green Ext Time (p_c), s		2.1			0.7	2.8		2.0				

Intersection Summary

HCM 6th Ctrl Delay	32.5
HCM 6th LOS	C

Notes

- User approved volume balancing among the lanes for turning movement.
- \* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Timings  
2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/19/2023

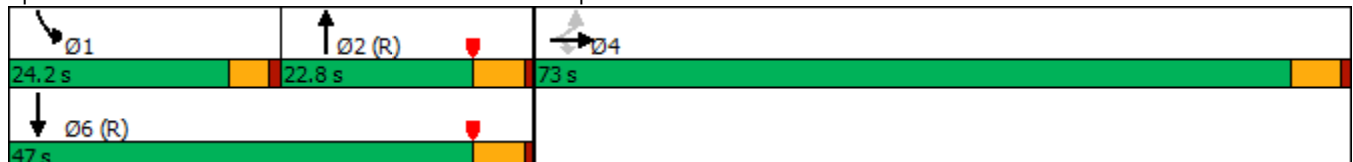


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↔↔↔	↔	↔↔
Traffic Volume (vph)	4	1691	624	196	600
Future Volume (vph)	4	1691	624	196	600
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	73.0	73.0	22.8	24.2	47.0
Total Split (%)	60.8%	60.8%	19.0%	20.2%	39.2%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	67.5	67.5	19.9	17.1	41.5
Actuated g/C Ratio	0.56	0.56	0.17	0.14	0.35
v/c Ratio	0.20	1.02	0.83	0.77	0.49
Control Delay	13.6	49.9	57.0	67.3	39.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	49.9	57.0	67.3	39.1
LOS	B	D	E	E	D
Approach Delay	46.0		57.0		46.1
Approach LOS	D		E		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 100  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.02  
 Intersection Signal Delay: 48.3  
 Intersection LOS: D  
 Intersection Capacity Utilization 84.9%  
 ICU Level of Service E  
 Analysis Period (min) 15

Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

Green River TA (JN:12630)

05/19/2023



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↖	↗					↑↑↑		↘	↑↑	
Traffic Volume (veh/h)	198	4	1691	0	0	0	0	624	80	196	600	0
Future Volume (veh/h)	198	4	1691	0	0	0	0	624	80	196	600	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	200	4	1541				0	630	54	198	606	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	991	20	1581				0	912	78	227	1265	0
Arrive On Green	0.56	0.56	0.56				0.00	0.19	0.19	0.13	0.35	0.00
Sat Flow, veh/h	1776	36	2834				0	5040	414	1810	3705	0
Grp Volume(v), veh/h	204	0	1541				0	446	238	198	606	0
Grp Sat Flow(s),veh/h/ln	1811	0	1417				0	1729	1825	1810	1805	0
Q Serve(g_s), s	6.7	0.0	63.2				0.0	14.4	14.6	12.9	15.7	0.0
Cycle Q Clear(g_c), s	6.7	0.0	63.2				0.0	14.4	14.6	12.9	15.7	0.0
Prop In Lane	0.98		1.00				0.00		0.23	1.00		0.00
Lane Grp Cap(c), veh/h	1010	0	1581				0	648	342	227	1265	0
V/C Ratio(X)	0.20	0.00	0.97				0.00	0.69	0.70	0.87	0.48	0.00
Avail Cap(c_a), veh/h	1019	0	1594				0	648	342	297	1265	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.83	0.83	0.00
Uniform Delay (d), s/veh	13.2	0.0	25.7				0.0	45.5	45.6	51.5	30.4	0.0
Incr Delay (d2), s/veh	0.1	0.0	16.8				0.0	5.9	11.2	16.4	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	22.6				0.0	6.6	7.5	6.7	6.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.3	0.0	42.5				0.0	51.4	56.7	67.9	31.5	0.0
LnGrp LOS	B	A	D				A	D	E	E	C	A
Approach Vol, veh/h		1745						684			804	
Approach Delay, s/veh		39.1						53.3			40.5	
Approach LOS		D						D			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	19.6	28.0	72.4	47.6								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	19.7	17.3	67.5	41.5								
Max Q Clear Time (g_c+I1), s	14.9	16.6	65.2	17.7								
Green Ext Time (p_c), s	0.2	0.3	1.7	3.8								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay			42.4									
HCM 6th LOS			D									

Intersection						
Int Delay, s/veh	0					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑		↘	↑↑↑		↗
Traffic Vol, veh/h	2284	6	1	704	0	4
Future Vol, veh/h	2284	6	1	704	0	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	2355	6	1	726	0	4

Major/Minor	Major1	Major2	Minor1	Minor2	Minor3
Conflicting Flow All	0	0	2361	0	1181
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-
Critical Hdwy	-	-	4.1	-	6.9
Critical Hdwy Stg 1	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-
Follow-up Hdwy	-	-	2.2	-	3.3
Pot Cap-1 Maneuver	-	-	210	-	186
Stage 1	-	-	-	-	0
Stage 2	-	-	-	-	0
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	-	-	210	-	186
Mov Cap-2 Maneuver	-	-	-	-	-
Stage 1	-	-	-	-	-
Stage 2	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	24.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	186	-	-	210	-
HCM Lane V/C Ratio	0.022	-	-	0.005	-
HCM Control Delay (s)	24.8	-	-	22.2	-
HCM Lane LOS	C	-	-	C	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-



Timings  
5: Dominguez Ranch Rd. & Green River Rd.

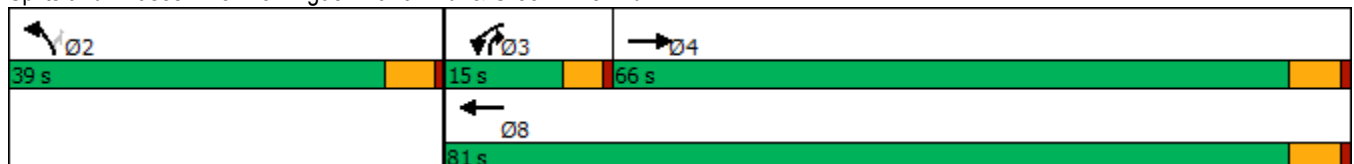


Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↘	↑↑↑	↘	↗
Traffic Volume (vph)	2145	61	609	96	51
Future Volume (vph)	2145	61	609	96	51
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	66.0	15.0	81.0	39.0	15.0
Total Split (%)	55.0%	12.5%	67.5%	32.5%	12.5%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	60.0	7.6	69.9	14.0	27.1
Actuated g/C Ratio	0.63	0.08	0.73	0.15	0.28
v/c Ratio	0.74	0.44	0.17	0.38	0.12
Control Delay	16.3	55.1	4.6	41.8	25.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	16.3	55.1	4.6	41.8	25.1
LOS	B	E	A	D	C
Approach Delay	16.3		9.2	36.0	
Approach LOS	B		A	D	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 95.3  
 Natural Cycle: 90  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.74  
 Intersection Signal Delay: 15.7  
 Intersection LOS: B  
 Intersection Capacity Utilization 68.4%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

05/19/2023

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	2145	142	61	609	96	51
Future Volume (veh/h)	2145	142	61	609	96	51
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2258	125	64	641	101	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	3172	174	87	3825	216	269
Arrive On Green	0.63	0.63	0.05	0.74	0.12	0.12
Sat Flow, veh/h	5203	277	1810	5358	1810	1610
Grp Volume(v), veh/h	1547	836	64	641	101	22
Grp Sat Flow(s),veh/h/ln	1729	1850	1810	1729	1810	1610
Q Serve(g_s), s	23.4	23.8	2.7	2.9	4.1	0.9
Cycle Q Clear(g_c), s	23.4	23.8	2.7	2.9	4.1	0.9
Prop In Lane		0.15	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2180	1166	87	3825	216	269
V/C Ratio(X)	0.71	0.72	0.74	0.17	0.47	0.08
Avail Cap(c_a), veh/h	2666	1426	241	4996	779	770
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.6	9.7	36.7	3.1	32.1	27.5
Incr Delay (d2), s/veh	0.7	1.4	4.5	0.0	1.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	7.2	1.2	0.5	1.8	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.3	11.1	41.1	3.1	33.7	27.6
LnGrp LOS	B	B	D	A	C	C
Approach Vol, veh/h	2383			705	123	
Approach Delay, s/veh	10.6			6.5	32.6	
Approach LOS	B			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.7	8.4	55.0		63.4
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		33.6	10.4	60.2		75.2
Max Q Clear Time (g_c+I1), s		6.1	4.7	25.8		4.9
Green Ext Time (p_c), s		0.3	0.0	23.4		4.5
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay			10.6			
HCM 6th LOS			B			

Timings  
6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑	↖	↗
Traffic Volume (vph)	179	1803	472	16	123
Future Volume (vph)	179	1803	472	16	123
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	37.0	87.0	50.0	33.0	37.0
Total Split (%)	30.8%	72.5%	41.7%	27.5%	30.8%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effect Green (s)	11.1	40.7	17.5	13.8	14.2
Actuated g/C Ratio	0.25	0.92	0.39	0.31	0.32
v/c Ratio	0.41	0.39	0.26	0.03	0.21
Control Delay	21.5	3.5	11.1	17.4	3.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	21.5	3.5	11.1	17.4	3.4
LOS	C	A	B	B	A
Approach Delay		5.2	11.1	4.9	
Approach LOS		A	B	A	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 44.4  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.41  
 Intersection Signal Delay: 6.3  
 Intersection LOS: A  
 Intersection Capacity Utilization 53.2%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
05/19/2023



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑		↖	↗
Traffic Volume (veh/h)	179	1803	472	45	16	123
Future Volume (veh/h)	179	1803	472	45	16	123
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	185	1859	487	43	16	68
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	237	3368	2109	184	238	423
Arrive On Green	0.13	0.65	0.43	0.43	0.13	0.13
Sat Flow, veh/h	1810	5358	5029	424	1810	1610
Grp Volume(v), veh/h	185	1859	345	185	16	68
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1824	1810	1610
Q Serve(g_s), s	5.4	10.7	3.4	3.5	0.4	1.8
Cycle Q Clear(g_c), s	5.4	10.7	3.4	3.5	0.4	1.8
Prop In Lane	1.00			0.23	1.00	1.00
Lane Grp Cap(c), veh/h	237	3368	1501	792	238	423
V/C Ratio(X)	0.78	0.55	0.23	0.23	0.07	0.16
Avail Cap(c_a), veh/h	1070	7688	2790	1471	885	999
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	5.3	9.7	9.8	20.8	15.5
Incr Delay (d2), s/veh	2.1	0.1	0.1	0.1	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.8	1.0	1.1	0.2	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.1	5.4	9.8	9.9	21.0	15.7
LnGrp LOS	C	A	A	A	C	B
Approach Vol, veh/h		2044	530		84	
Approach Delay, s/veh		7.2	9.9		16.7	
Approach LOS		A	A		B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.8	29.6			41.4	13.4
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	32.4	44.2			81.2	26.8
Max Q Clear Time (g_c+11), s	7.4	5.5			12.7	3.8
Green Ext Time (p_c), s	0.2	3.3			22.8	0.2

Intersection Summary

HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

**APPENDIX 7.2: HORIZON YEAR (2045) WITH PROJECT CONDITIONS  
INTERSECTION OPERATIONS ANALYSIS WORKSHEETS**

This Page Intentionally Left Blank

**Volume Development**  
**AM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 WP PCE:	2,467	245	0	0	284	310	0	0	0	121	4	141	3,572
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 WP PCE:	0	2,577	192	225	181	0	135	1	301	0	0	0	3,611
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 WP PCE:	0	0	0	0	0	0	0	482	0	0	2,769	0	3,251
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 WP PCE:	66	0	20	69	0	105	47	318	122	88	2,599	138	3,572
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 WP PCE:	161	0	50	0	0	0	0	374	32	16	2,664	0	3,297
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 WP PCE:	161	0	21	27	0	361	110	290	22	8	2,249	78	3,327

**Volume Development**  
**PM Peak Hour**

<b>1: Green River Rd. &amp; SR-91 WB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 WP PCE:	558	345	0	0	413	156	0	0	0	395	24	224	2,115
<b>2: Green River Rd. &amp; SR-91 EB Ramps</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 WP PCE:	0	705	146	196	645	0	198	4	1,734	0	0	0	3,627
<b>3: Fresno Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 WP PCE:	0	0	0	0	0	0	0	2,372	0	0	851	0	3,223
<b>4: Street A &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 WP PCE:	131	0	84	96	0	33	93	2,018	60	28	515	68	3,126
<b>5: Dominguez Ranch Rd. &amp; Green River Rd.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 WP PCE:	106	0	51	0	0	0	0	2,249	153	61	678	0	3,298
<b>6: Green River Rd. &amp; Palisades Dr.</b>													
	<u>NBL</u>	<u>NBT</u>	<u>NBR</u>	<u>SBL</u>	<u>SBT</u>	<u>SBR</u>	<u>EBL</u>	<u>EBT</u>	<u>EBR</u>	<u>WBL</u>	<u>WBT</u>	<u>WBR</u>	<u>TOTAL</u>
2045 WP PCE:	90	0	40	16	0	142	205	1,880	127	51	522	45	3,119



Timings

1: Green River Rd. & SR-91 WB Ramps

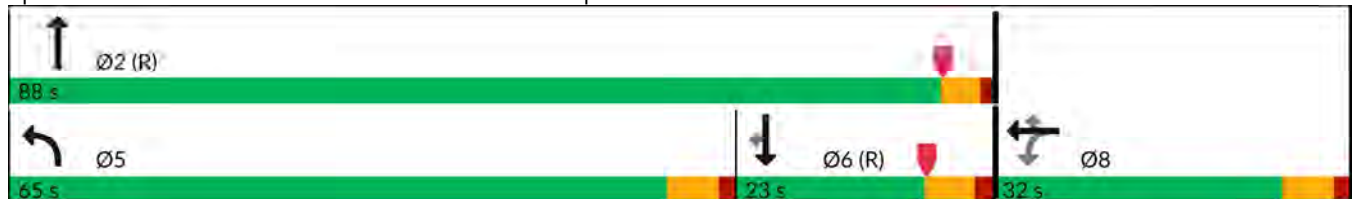


Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↷	↷	↶↷↷	↷	↷	↷
Traffic Volume (vph)	121	4	141	2467	245	284	310
Future Volume (vph)	121	4	141	2467	245	284	310
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	32.0	32.0	32.0	65.0	88.0	23.0	23.0
Total Split (%)	26.7%	26.7%	26.7%	54.2%	73.3%	19.2%	19.2%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	12.5	12.5	12.5	72.5	96.9	17.0	17.0
Actuated g/C Ratio	0.10	0.10	0.10	0.60	0.81	0.14	0.14
v/c Ratio	0.37	0.38	0.50	0.87	0.17	1.14	0.66
Control Delay (s/veh)	53.4	53.7	12.5	23.6	2.8	147.0	13.0
Queue Delay	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Total Delay (s/veh)	53.4	53.7	12.5	24.5	2.8	147.0	13.0
LOS	D	D	B	C	A	F	B
Approach Delay (s/veh)		31.9			22.6	77.1	
Approach LOS		C			C	E	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 120  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.15  
 Intersection Signal Delay (s/veh): 32.3  
 Intersection LOS: C  
 Intersection Capacity Utilization 87.0%  
 ICU Level of Service E  
 Analysis Period (min) 15






















Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations							  					
Traffic Volume (veh/h)	0	0	0	121	4	141	2467	245	0	0	284	310
Future Volume (veh/h)	0	0	0	121	4	141	2467	245	0	0	284	310
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No			No				No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				135	0	53	2682	266	0	0	309	251
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				208	0	92	2509	1601	0	0	572	478
Arrive On Green				0.06	0.00	0.06	0.49	0.84	0.00	0.00	0.30	0.30
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				135	0	53	2682	266	0	0	309	251
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				4.4	0.0	3.8	59.0	3.1	0.0	0.0	16.3	15.7
Cycle Q Clear(g_c), s				4.4	0.0	3.8	59.0	3.1	0.0	0.0	16.3	15.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				208	0	92	2509	1601	0	0	572	478
V/C Ratio(X)				0.65	0.00	0.57	1.07	0.17	0.00	0.00	0.54	0.52
Avail Cap(c_a), veh/h				784	0	349	2509	1601	0	0	572	478
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.09	0.09	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				55.4	0.0	55.1	30.5	1.7	0.0	0.0	35.0	34.8
Incr Delay (d2), s/veh				3.4	0.0	5.5	32.0	0.0	0.0	0.0	3.6	4.1
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.1	0.0	1.7	29.5	0.5	0.0	0.0	7.9	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				58.8	0.0	60.6	62.5	1.7	0.0	0.0	38.7	38.9
LnGrp LOS				E		E	F	A			D	D
Approach Vol, veh/h					188			2948			560	
Approach Delay, s/veh					59.3			57.0			38.8	
Approach LOS					E			E			D	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		107.1			65.0	42.1		12.9				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 83			59.0	17.0		26.0				
Max Q Clear Time (g_c+I1), s		5.1			61.0	18.3		6.4				
Green Ext Time (p_c), s		1.5			0.0	0.0		0.5				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh				54.4								
HCM 6th LOS				D								
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

2: Green River Rd. & SR-91 EB Ramps

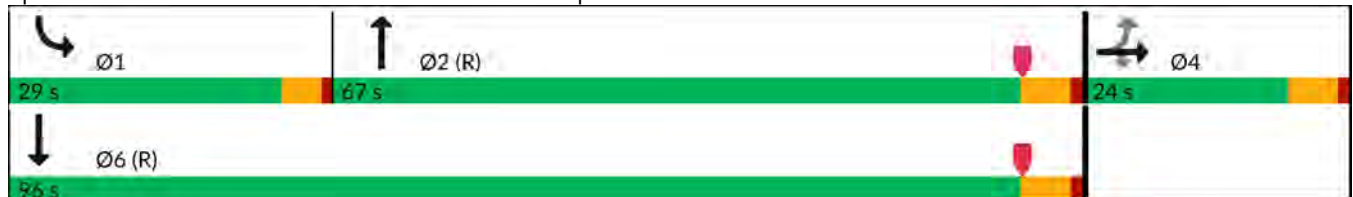


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↔↔↔	↔	↔↔
Traffic Volume (vph)	1	301	2577	225	181
Future Volume (vph)	1	301	2577	225	181
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	24.0	24.0	67.0	29.0	96.0
Total Split (%)	20.0%	20.0%	55.8%	24.2%	80.0%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	14.8	14.8	69.1	20.6	94.2
Actuated g/C Ratio	0.12	0.12	0.58	0.17	0.79
v/c Ratio	0.66	0.51	1.01	0.79	0.06
Control Delay (s/veh)	64.1	7.8	47.4	39.9	12.2
Queue Delay	0.0	0.0	27.5	0.0	0.0
Total Delay (s/veh)	64.1	7.8	75.0	39.9	12.2
LOS	E	A	E	D	B
Approach Delay (s/veh)	25.4		75.0		27.6
Approach LOS	C		E		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 120  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.02  
 Intersection Signal Delay (s/veh): 63.7  
 Intersection LOS: E  
 Intersection Capacity Utilization 87.0%  
 ICU Level of Service E  
 Analysis Period (min) 15




















Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

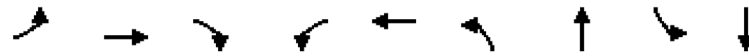
Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	1	301	0	0	0	0	2577	192	225	181	0
Future Volume (veh/h)	135	1	301	0	0	0	0	2577	192	225	181	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	147	1	173				0	2801	200	245	197	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	185	1	292				0	3042	212	276	2907	0
Arrive On Green	0.10	0.10	0.10				0.00	0.62	0.62	0.15	0.81	0.00
Sat Flow, veh/h	1798	12	2834				0	5114	344	1810	3705	0
Grp Volume(v), veh/h	148	0	173				0	1937	1064	245	197	0
Grp Sat Flow(s),veh/h/ln	1810	0	1417				0	1729	1829	1810	1805	0
Q Serve(g_s), s	9.6	0.0	7.0				0.0	58.8	64.2	15.9	1.3	0.0
Cycle Q Clear(g_c), s	9.6	0.0	7.0				0.0	58.8	64.2	15.9	1.3	0.0
Prop In Lane	0.99		1.00				0.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	186	0	292				0	2128	1126	276	2907	0
V/C Ratio(X)	0.79	0.00	0.59				0.00	0.91	0.95	0.89	0.07	0.00
Avail Cap(c_a), veh/h	279	0	437				0	2128	1126	369	2907	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.09	0.09	0.00
Uniform Delay (d), s/veh	52.6	0.0	51.4				0.0	20.2	21.2	49.9	2.4	0.0
Incr Delay (d2), s/veh	8.9	0.0	1.9				0.0	7.3	16.5	2.1	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	2.5				0.0	22.5	28.7	7.2	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	61.5	0.0	53.3				0.0	27.4	37.8	52.0	2.4	0.0
LnGrp LOS	E		D					C	D	D	A	
Approach Vol, veh/h		321						3001			442	
Approach Delay, s/veh		57.1						31.1			29.9	
Approach LOS		E						C			C	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	22.8	79.4	17.9	102.1								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	24.5	61.5	18.5	90.5								
Max Q Clear Time (g_c+I1), s	17.9	66.2	11.6	3.3								
Green Ext Time (p_c), s	0.4	0.0	0.8	1.2								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			33.2									
HCM 6th LOS			C									

Timings

4: Street A & Green River Rd.

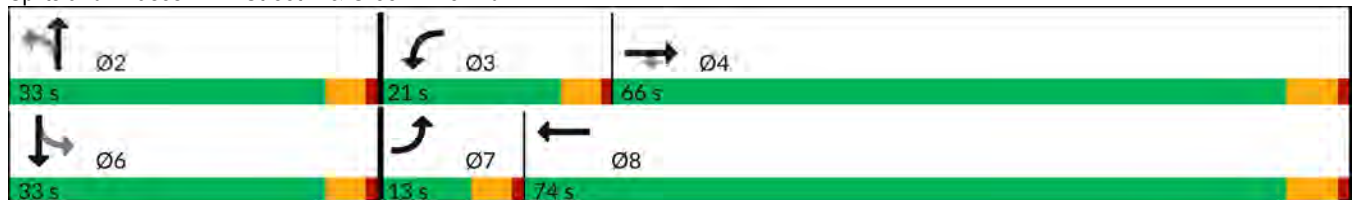


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↗	↖	↑↑↑	↖	↗		↕
Traffic Volume (vph)	47	318	122	88	2599	66	0	69	0
Future Volume (vph)	47	318	122	88	2599	66	0	69	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	26.6	26.6	26.6	26.6
Total Split (s)	13.0	66.0	66.0	21.0	74.0	33.0	33.0	33.0	33.0
Total Split (%)	10.8%	55.0%	55.0%	17.5%	61.7%	27.5%	27.5%	27.5%	27.5%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	7.0	66.6	66.6	9.8	69.3	13.4	13.4		13.4
Actuated g/C Ratio	0.07	0.65	0.65	0.10	0.68	0.13	0.13		0.13
v/c Ratio	0.41	0.10	0.12	0.55	0.85	0.62	0.03		0.65
Control Delay (s/veh)	58.2	8.3	2.2	57.9	17.8	66.8	0.1		29.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	58.2	8.3	2.2	57.9	17.8	66.8	0.1		29.8
LOS	E	A	A	E	B	E	A		C
Approach Delay (s/veh)		11.6			19.1		51.2		29.9
Approach LOS		B			B		D		C

Intersection Summary

Cycle Length: 120	
Actuated Cycle Length: 102.6	
Natural Cycle: 100	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.86	
Intersection Signal Delay (s/veh): 19.4	Intersection LOS: B
Intersection Capacity Utilization 86.9%	ICU Level of Service E
Analysis Period (min) 15	

Splits and Phases: 4: Street A & Green River Rd.



HCM 6th Signalized Intersection Summary  
 4: Street A & Green River Rd.

Green River TA (JN:12630)

06/05/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	318	122	88	2599	138	66	0	20	69	0	105
Future Volume (veh/h)	47	318	122	88	2599	138	66	0	20	69	0	105
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	51	346	133	96	2825	150	72	0	22	75	0	114
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	69	3287	1020	123	3349	175	221	0	238	129	12	138
Arrive On Green	0.04	0.63	0.63	0.07	0.66	0.66	0.15	0.00	0.15	0.15	0.00	0.15
Sat Flow, veh/h	1810	5187	1610	1810	5047	263	1299	0	1610	532	82	934
Grp Volume(v), veh/h	51	346	133	96	1920	1055	72	0	22	189	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1853	1299	0	1610	1548	0	0
Q Serve(g_s), s	2.8	2.6	3.3	5.2	41.8	44.2	0.0	0.0	1.2	10.0	0.0	0.0
Cycle Q Clear(g_c), s	2.8	2.6	3.3	5.2	41.8	44.2	7.1	0.0	1.2	11.7	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.14	1.00		1.00	0.40		0.60
Lane Grp Cap(c), veh/h	69	3287	1020	123	2295	1229	221	0	238	279	0	0
V/C Ratio(X)	0.74	0.11	0.13	0.78	0.84	0.86	0.33	0.00	0.09	0.68	0.00	0.00
Avail Cap(c_a), veh/h	153	3287	1020	299	2373	1271	400	0	460	490	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	47.3	7.1	7.3	45.6	12.7	13.1	39.1	0.0	36.6	41.0	0.0	0.0
Incr Delay (d2), s/veh	5.7	0.0	0.1	4.1	2.7	5.9	0.8	0.0	0.2	2.9	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.8	1.0	2.4	13.2	16.1	1.7	0.0	0.5	4.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	53.1	7.2	7.3	49.7	15.4	19.0	40.0	0.0	36.8	43.9	0.0	0.0
LnGrp LOS	D	A	A	D	B	B	D		D	D		
Approach Vol, veh/h		530			3071			94				189
Approach Delay, s/veh		11.6			17.7			39.2				43.9
Approach LOS		B			B			D				D
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		19.3	11.3	68.8		19.3	8.4	71.8				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		28.4	16.4	60.2		28.4	8.4	68.2				
Max Q Clear Time (g_c+I1), s		9.1	7.2	5.3		13.7	4.8	46.2				
Green Ext Time (p_c), s		0.3	0.1	2.7		0.9	0.0	19.7				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			18.7									
HCM 6th LOS			B									

Timings  
5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

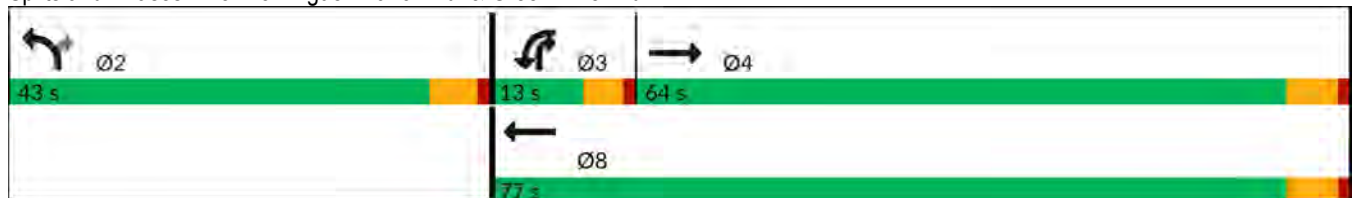
06/05/2024

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↙	↑↑↑	↘	↗
Traffic Volume (vph)	374	16	2664	161	50
Future Volume (vph)	374	16	2664	161	50
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	64.0	13.0	77.0	43.0	13.0
Total Split (%)	53.3%	10.8%	64.2%	35.8%	10.8%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	64.3	5.7	72.7	16.5	27.6
Actuated g/C Ratio	0.64	0.06	0.72	0.16	0.27
v/c Ratio	0.13	0.16	0.77	0.59	0.11
Control Delay (s/veh)	8.3	50.6	11.8	46.4	7.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.3	50.6	11.8	46.4	7.1
LOS	A	D	B	D	A
Approach Delay (s/veh)	8.4		12.0	37.1	
Approach LOS	A		B	D	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 100.4  
 Natural Cycle: 90  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.77  
 Intersection Signal Delay (s/veh): 13.2  
 Intersection LOS: B  
 Intersection Capacity Utilization 69.7%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.





HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

06/05/2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	374	32	16	2664	161	50
Future Volume (veh/h)	374	32	16	2664	161	50
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	407	28	17	2896	175	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	3348	228	35	3879	221	228
Arrive On Green	0.67	0.67	0.02	0.75	0.12	0.12
Sat Flow, veh/h	5131	337	1810	5358	1810	1610
Grp Volume(v), veh/h	282	153	17	2896	175	20
Grp Sat Flow(s),veh/h/ln	1729	1839	1810	1729	1810	1610
Q Serve(g_s), s	2.5	2.5	0.8	27.5	8.1	0.9
Cycle Q Clear(g_c), s	2.5	2.5	0.8	27.5	8.1	0.9
Prop In Lane		0.18	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2334	1241	35	3879	221	228
V/C Ratio(X)	0.12	0.12	0.48	0.75	0.79	0.09
Avail Cap(c_a), veh/h	2337	1243	177	4289	790	734
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.0	5.0	41.8	6.2	36.7	32.1
Incr Delay (d2), s/veh	0.0	0.0	3.8	0.7	6.3	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.7	0.4	5.7	3.8	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	5.0	5.0	45.6	6.9	43.0	32.3
LnGrp LOS	A	A	D	A	D	C
Approach Vol, veh/h	435			2913	195	
Approach Delay, s/veh	5.0			7.1	41.9	
Approach LOS	A			A	D	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		15.9	6.3	63.9		70.2
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		37.6	8.4	58.2		71.2
Max Q Clear Time (g_c+I1), s		10.1	2.8	4.5		29.5
Green Ext Time (p_c), s		0.5	0.0	2.7		34.9
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			8.8			
HCM 6th LOS			A			



Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↶	↑↑↑	↑↑↑↶	↶	↷
Traffic Volume (vph)	110	290	2249	27	361
Future Volume (vph)	110	290	2249	27	361
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	26.0	87.8	61.8	32.2	26.0
Total Split (%)	21.7%	73.2%	51.5%	26.8%	21.7%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	18.9	82.9	56.8	12.9	30.6
Actuated g/C Ratio	0.19	0.85	0.58	0.13	0.31
v/c Ratio	0.34	0.07	0.84	0.12	0.77
Control Delay (s/veh)	40.9	3.1	22.6	40.0	40.7
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	40.9	3.1	22.6	40.0	40.7
LOS	D	A	C	D	D
Approach Delay (s/veh)		13.5	22.7	40.7	
Approach LOS		B	C	D	

Intersection Summary

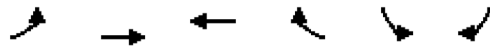
Cycle Length: 120	
Actuated Cycle Length: 97.9	
Natural Cycle: 90	
Control Type: Actuated-Uncoordinated	
Maximum v/c Ratio: 0.85	
Intersection Signal Delay (s/veh): 23.7	Intersection LOS: C
Intersection Capacity Utilization 76.2%	ICU Level of Service D
Analysis Period (min) 15	

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
 6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
 06/05/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↙	↑↑↑	↑↑↑		↘	↗
Traffic Volume (veh/h)	110	290	2249	78	27	361
Future Volume (veh/h)	110	290	2249	78	27	361
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	120	315	2445	77	29	174
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	153	3819	3091	97	224	336
Arrive On Green	0.08	0.74	0.60	0.60	0.12	0.12
Sat Flow, veh/h	1810	5358	5338	162	1810	1610
Grp Volume(v), veh/h	120	315	1632	890	29	174
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1871	1810	1610
Q Serve(g_s), s	5.6	1.5	30.8	31.3	1.2	8.2
Cycle Q Clear(g_c), s	5.6	1.5	30.8	31.3	1.2	8.2
Prop In Lane	1.00			0.09	1.00	1.00
Lane Grp Cap(c), veh/h	153	3819	2069	1119	224	336
V/C Ratio(X)	0.79	0.08	0.79	0.80	0.13	0.52
Avail Cap(c_a), veh/h	451	4951	2254	1220	548	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	3.2	13.1	13.2	33.5	30.2
Incr Delay (d2), s/veh	3.3	0.0	1.8	3.5	0.3	1.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.3	9.8	11.3	0.5	3.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	41.9	3.2	14.9	16.7	33.8	31.4
LnGrp LOS	D	A	B	B	C	C
Approach Vol, veh/h		435	2522		203	
Approach Delay, s/veh		13.9	15.6		31.7	
Approach LOS		B	B		C	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	11.9	57.2			69.1	16.9
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	21.4	56.0			82.0	26.0
Max Q Clear Time (g_c+I1), s	7.6	33.3			3.5	10.2
Green Ext Time (p_c), s	0.1	18.1			2.1	0.5
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			16.4			
HCM 6th LOS			B			

Timings

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Configurations	↶	↷	↷	↶↷	↷	↷	↷
Traffic Volume (vph)	395	24	224	558	345	413	156
Future Volume (vph)	395	24	224	558	345	413	156
Turn Type	Perm	NA	Perm	Prot	NA	NA	Perm
Protected Phases		8		5	2	6	
Permitted Phases	8		8				6
Detector Phase	8	8	8	5	2	6	6
Switch Phase							
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	32.0	32.0	32.0	11.0	9.6	11.0	11.0
Total Split (s)	42.0	42.0	42.0	26.0	78.0	52.0	52.0
Total Split (%)	35.0%	35.0%	35.0%	21.7%	65.0%	43.3%	43.3%
Yellow Time (s)	4.5	4.5	4.5	4.5	3.6	4.5	4.5
All-Red Time (s)	1.5	1.5	1.5	1.5	1.0	1.5	1.5
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	4.6	6.0	6.0
Lead/Lag				Lead		Lag	Lag
Lead-Lag Optimize?				Yes		Yes	Yes
Recall Mode	None	None	None	None	C-Max	C-Max	C-Max
Act Effct Green (s)	22.4	22.4	22.4	18.6	87.0	61.1	61.1
Actuated g/C Ratio	0.19	0.19	0.19	0.16	0.73	0.51	0.51
v/c Ratio	0.71	0.70	0.48	0.77	0.27	0.46	0.19
Control Delay (s/veh)	57.3	57.0	8.0	47.7	15.4	22.9	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.3	57.0	8.0	47.7	15.4	22.9	3.6
LOS	E	E	A	D	B	C	A
Approach Delay (s/veh)		40.1			35.4	17.7	
Approach LOS		D			D	B	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 70  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 0.77  
 Intersection Signal Delay (s/veh): 32.1  
 Intersection LOS: C  
 Intersection Capacity Utilization 87.7%  
 ICU Level of Service E  
 Analysis Period (min) 15




















Splits and Phases: 1: Green River Rd. & SR-91 WB Ramps



HCM 6th Signalized Intersection Summary  
 1: Green River Rd. & SR-91 WB Ramps

Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	395	24	224	558	345	0	0	413	156
Future Volume (veh/h)	0	0	0	395	24	224	558	345	0	0	413	156
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach				No				No			No	
Adj Sat Flow, veh/h/ln				1900	1900	1900	1900	1900	0	0	1900	1900
Adj Flow Rate, veh/h				448	0	173	607	375	0	0	449	67
Peak Hour Factor				0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.91
Percent Heavy Veh, %				0	0	0	0	0	0	0	0	0
Cap, veh/h				555	0	247	696	1419	0	0	1064	891
Arrive On Green				0.15	0.00	0.15	0.23	1.00	0.00	0.00	0.56	0.56
Sat Flow, veh/h				3619	0	1610	5103	1900	0	0	1900	1590
Grp Volume(v), veh/h				448	0	173	607	375	0	0	449	67
Grp Sat Flow(s),veh/h/ln				1810	0	1610	1701	1900	0	0	1900	1590
Q Serve(g_s), s				14.4	0.0	12.2	13.8	0.0	0.0	0.0	16.3	2.3
Cycle Q Clear(g_c), s				14.4	0.0	12.2	13.8	0.0	0.0	0.0	16.3	2.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				555	0	247	696	1419	0	0	1064	891
V/C Ratio(X)				0.81	0.00	0.70	0.87	0.26	0.00	0.00	0.42	0.08
Avail Cap(c_a), veh/h				1086	0	483	850	1419	0	0	1064	891
HCM Platoon Ratio				1.00	1.00	1.00	1.67	1.67	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.10	0.10	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				49.1	0.0	48.2	45.3	0.0	0.0	0.0	15.2	12.1
Incr Delay (d2), s/veh				2.8	0.0	3.6	0.8	0.0	0.0	0.0	1.2	0.2
Initial Q Delay(d3), s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.5	0.0	5.0	5.2	0.0	0.0	0.0	6.9	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh				51.9	0.0	51.8	46.1	0.0	0.0	0.0	16.4	12.3
LnGrp LOS				D		D	D	A			B	B
Approach Vol, veh/h					621			982			516	
Approach Delay, s/veh					51.9			28.5			15.9	
Approach LOS					D			C			B	
Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		95.6			22.4	73.2		24.4				
Change Period (Y+Rc), s		* 6			6.0	6.0		6.0				
Max Green Setting (Gmax), s		* 73			20.0	46.0		36.0				
Max Q Clear Time (g_c+I1), s		2.0			15.8	18.3		16.4				
Green Ext Time (p_c), s		2.2			0.6	2.8		2.0				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh				32.3								
HCM 6th LOS				C								
<b>Notes</b>												
User approved volume balancing among the lanes for turning movement.												
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.												

Timings

2: Green River Rd. & SR-91 EB Ramps

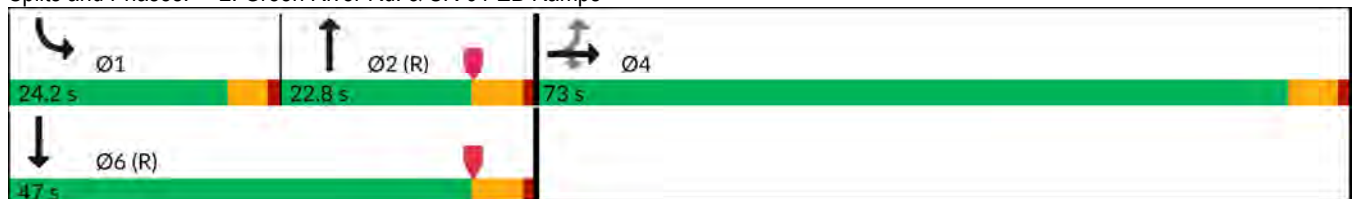


Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Configurations	↔	↔↔	↕↕↕	↔	↕↕
Traffic Volume (vph)	4	1734	705	196	645
Future Volume (vph)	4	1734	705	196	645
Turn Type	NA	Perm	NA	Prot	NA
Protected Phases	4		2	1	6
Permitted Phases		4			
Detector Phase	4	4	2	1	6
Switch Phase					
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	23.5	23.5	10.5	9.5	10.5
Total Split (s)	73.0	73.0	22.8	24.2	47.0
Total Split (%)	60.8%	60.8%	19.0%	20.2%	39.2%
Yellow Time (s)	4.5	4.5	4.5	3.5	4.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.5	5.5	5.5	4.5	5.5
Lead/Lag			Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	
Recall Mode	None	None	C-Max	None	C-Max
Act Effct Green (s)	67.5	67.5	19.9	17.1	41.5
Actuated g/C Ratio	0.56	0.56	0.17	0.14	0.35
v/c Ratio	0.20	1.05	0.99	0.77	0.52
Control Delay (s/veh)	13.5	61.3	77.8	67.5	39.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.5	61.3	77.8	67.5	39.1
LOS	B	E	E	E	D
Approach Delay (s/veh)	56.3		77.8		45.8
Approach LOS	E		E		D

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 120  
 Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow  
 Natural Cycle: 120  
 Control Type: Actuated-Coordinated  
 Maximum v/c Ratio: 1.05  
 Intersection Signal Delay (s/veh): 58.9      Intersection LOS: E  
 Intersection Capacity Utilization 87.7%      ICU Level of Service E  
 Analysis Period (min) 15




















Splits and Phases: 2: Green River Rd. & SR-91 EB Ramps



HCM 6th Signalized Intersection Summary  
 2: Green River Rd. & SR-91 EB Ramps

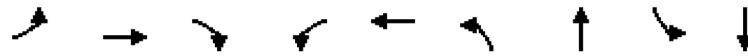
Green River TA (JN:12630)

06/05/2024

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	198	4	1734	0	0	0	0	705	146	196	645	0
Future Volume (veh/h)	198	4	1734	0	0	0	0	705	146	196	645	0
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900				0	1900	1900	1900	1900	0
Adj Flow Rate, veh/h	200	4	1585				0	712	120	198	652	0
Peak Hour Factor	0.99	0.99	0.99				0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	0	0	0				0	0	0	0	0	0
Cap, veh/h	999	20	1594				0	818	136	227	1248	0
Arrive On Green	0.56	0.56	0.56				0.00	0.18	0.18	0.13	0.35	0.00
Sat Flow, veh/h	1776	36	2834				0	4648	747	1810	3705	0
Grp Volume(v), veh/h	204	0	1585				0	548	284	198	652	0
Grp Sat Flow(s),veh/h/ln	1811	0	1417				0	1729	1766	1810	1805	0
Q Serve(g_s), s	6.7	0.0	66.6				0.0	18.5	18.8	12.9	17.3	0.0
Cycle Q Clear(g_c), s	6.7	0.0	66.6				0.0	18.5	18.8	12.9	17.3	0.0
Prop In Lane	0.98		1.00				0.00		0.42	1.00		0.00
Lane Grp Cap(c), veh/h	1019	0	1594				0	632	322	227	1248	0
V/C Ratio(X)	0.20	0.00	0.99				0.00	0.87	0.88	0.87	0.52	0.00
Avail Cap(c_a), veh/h	1019	0	1594				0	632	322	297	1248	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.82	0.82	0.00
Uniform Delay (d), s/veh	12.9	0.0	26.1				0.0	47.6	47.8	51.5	31.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	21.1				0.0	15.0	27.2	16.3	1.3	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	24.5				0.0	9.0	10.4	6.7	7.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.0	0.0	47.2				0.0	62.6	74.9	67.8	32.6	0.0
LnGrp LOS	B		D					E	E	E	C	
Approach Vol, veh/h		1789						832			850	
Approach Delay, s/veh		43.3						66.8			40.8	
Approach LOS		D						E			D	
Timer - Assigned Phs	1	2	4	6								
Phs Duration (G+Y+Rc), s	19.6	27.4	73.0	47.0								
Change Period (Y+Rc), s	4.5	5.5	5.5	5.5								
Max Green Setting (Gmax), s	19.7	17.3	67.5	41.5								
Max Q Clear Time (g_c+I1), s	14.9	20.8	68.6	19.3								
Green Ext Time (p_c), s	0.2	0.0	0.0	4.0								
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			48.3									
HCM 6th LOS			D									

Timings

4: Street A & Green River Rd.

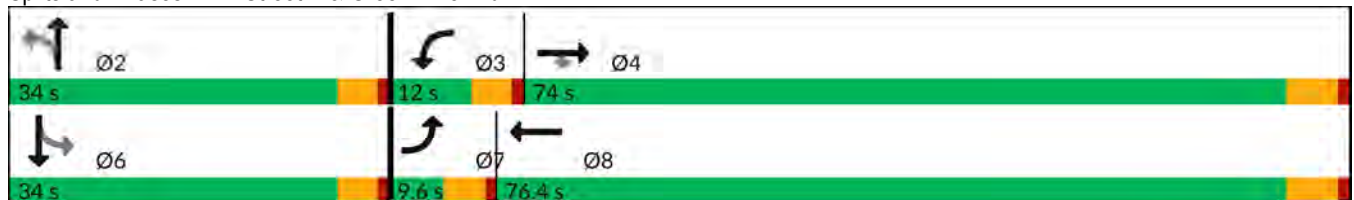


Lane Group	EBL	EBT	EBR	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations	↖	↑↑↑	↗	↖	↑↑↑	↖	↗		↕
Traffic Volume (vph)	93	2018	60	28	515	131	0	96	0
Future Volume (vph)	93	2018	60	28	515	131	0	96	0
Turn Type	Prot	NA	Perm	Prot	NA	Perm	NA	Perm	NA
Protected Phases	7	4		3	8		2		6
Permitted Phases			4			2		6	
Detector Phase	7	4	4	3	8	2	2	6	6
Switch Phase									
Minimum Initial (s)	5.0	10.0	10.0	5.0	10.0	10.0	10.0	10.0	10.0
Minimum Split (s)	9.6	22.8	22.8	9.6	22.8	26.6	26.6	26.6	26.6
Total Split (s)	9.6	74.0	74.0	12.0	76.4	34.0	34.0	34.0	34.0
Total Split (%)	8.0%	61.7%	61.7%	10.0%	63.7%	28.3%	28.3%	28.3%	28.3%
Yellow Time (s)	3.6	4.8	4.8	3.6	4.8	3.6	3.6	3.6	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Lost Time (s)	4.6	5.8	5.8	4.6	5.8	4.6	4.6		4.6
Lead/Lag	Lead	Lag	Lag	Lead	Lag				
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes				
Recall Mode	None	Min	Min	None	Min	None	None	None	None
Act Effct Green (s)	5.5	54.1	54.1	6.5	49.2	16.6	16.6		16.6
Actuated g/C Ratio	0.06	0.62	0.62	0.07	0.56	0.19	0.19		0.19
v/c Ratio	0.89	0.68	0.06	0.22	0.22	0.56	0.24		0.46
Control Delay (s/veh)	111.2	13.5	3.4	52.1	8.6	47.0	13.2		26.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0
Total Delay (s/veh)	111.2	13.5	3.4	52.1	8.6	47.0	13.2		26.4
LOS	F	B	A	D	A	D	B		C
Approach Delay (s/veh)		17.5			10.6		33.9		26.4
Approach LOS		B			B		C		C

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 87.8  
 Natural Cycle: 75  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.89  
 Intersection Signal Delay (s/veh): 17.6  
 Intersection LOS: B  
 Intersection Capacity Utilization 69.7%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 4: Street A & Green River Rd.





HCM 6th Signalized Intersection Summary  
 4: Street A & Green River Rd.

Green River TA (JN:12630)

06/05/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	2018	60	28	515	68	131	0	84	96	0	33
Future Volume (veh/h)	93	2018	60	28	515	68	131	0	84	96	0	33
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	101	2193	65	30	560	74	142	0	91	104	0	36
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	110	3209	996	55	2731	356	328	0	272	199	11	46
Arrive On Green	0.06	0.62	0.62	0.03	0.59	0.59	0.17	0.00	0.17	0.17	0.00	0.17
Sat Flow, veh/h	1810	5187	1610	1810	4644	605	1394	0	1610	728	67	275
Grp Volume(v), veh/h	101	2193	65	30	415	219	142	0	91	140	0	0
Grp Sat Flow(s),veh/h/ln	1810	1729	1610	1810	1729	1791	1394	0	1610	1070	0	0
Q Serve(g_s), s	4.6	23.0	1.3	1.3	4.6	4.7	0.0	0.0	4.1	7.1	0.0	0.0
Cycle Q Clear(g_c), s	4.6	23.0	1.3	1.3	4.6	4.7	7.5	0.0	4.1	11.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.34	1.00		1.00	0.74		0.26
Lane Grp Cap(c), veh/h	110	3209	996	55	2033	1053	328	0	272	257	0	0
V/C Ratio(X)	0.92	0.68	0.07	0.55	0.20	0.21	0.43	0.00	0.33	0.54	0.00	0.00
Avail Cap(c_a), veh/h	110	4302	1335	163	2969	1538	591	0	576	519	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	38.4	10.4	6.2	39.3	7.9	8.0	31.5	0.0	30.1	34.3	0.0	0.0
Incr Delay (d2), s/veh	59.5	0.3	0.0	3.2	0.0	0.1	0.9	0.0	0.7	1.8	0.0	0.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	6.6	0.4	0.6	1.4	1.5	2.7	0.0	1.6	2.8	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	97.9	10.6	6.3	42.5	8.0	8.0	32.4	0.0	30.8	36.0	0.0	0.0
LnGrp LOS	F	B	A	D	A	A	C		C	D		
Approach Vol, veh/h		2359			664			233				140
Approach Delay, s/veh		14.3			9.6			31.8				36.0
Approach LOS		B			A			C				D
Timer - Assigned Phs		2	3	4		6	7	8				
Phs Duration (G+Y+Rc), s		18.5	7.1	56.7		18.5	9.6	54.2				
Change Period (Y+Rc), s		4.6	4.6	5.8		4.6	4.6	5.8				
Max Green Setting (Gmax), s		29.4	7.4	68.2		29.4	5.0	70.6				
Max Q Clear Time (g_c+I1), s		9.5	3.3	25.0		13.2	6.6	6.7				
Green Ext Time (p_c), s		0.9	0.0	25.9		0.7	0.0	4.1				
<b>Intersection Summary</b>												
HCM 6th Ctrl Delay, s/veh			15.4									
HCM 6th LOS			B									



Timings

5: Dominguez Ranch Rd. & Green River Rd.

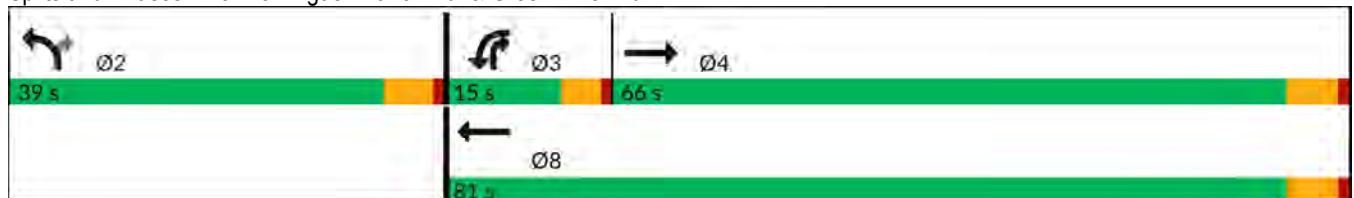
06/05/2024

	→	↙	←	↘	↗
Lane Group	EBT	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↙	↑↑↑	↘	↗
Traffic Volume (vph)	2249	61	678	106	51
Future Volume (vph)	2249	61	678	106	51
Turn Type	NA	Prot	NA	Prot	pm+ov
Protected Phases	4	3	8	2	3
Permitted Phases					2
Detector Phase	4	3	8	2	3
Switch Phase					
Minimum Initial (s)	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	23.8	9.6	15.8	35.4	9.6
Total Split (s)	66.0	15.0	81.0	39.0	15.0
Total Split (%)	55.0%	12.5%	67.5%	32.5%	12.5%
Yellow Time (s)	4.8	3.6	4.8	4.4	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.8	4.6	5.8	5.4	4.6
Lead/Lag	Lag	Lead			Lead
Lead-Lag Optimize?	Yes	Yes			Yes
Recall Mode	Min	None	Min	None	None
Act Effct Green (s)	62.0	7.7	72.2	14.3	27.4
Actuated g/C Ratio	0.63	0.08	0.74	0.15	0.28
v/c Ratio	0.77	0.45	0.18	0.42	0.11
Control Delay (s/veh)	17.2	55.8	4.6	42.9	25.4
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.2	55.8	4.6	42.9	25.4
LOS	B	E	A	D	C
Approach Delay (s/veh)	17.3		8.9	37.2	
Approach LOS	B		A	D	

Intersection Summary

Cycle Length: 120  
 Actuated Cycle Length: 97.8  
 Natural Cycle: 100  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.78  
 Intersection Signal Delay (s/veh): 16.4  
 Intersection LOS: B  
 Intersection Capacity Utilization 68.4%  
 ICU Level of Service C  
 Analysis Period (min) 15

Splits and Phases: 5: Dominguez Ranch Rd. & Green River Rd.



HCM 6th Signalized Intersection Summary  
 5: Dominguez Ranch Rd. & Green River Rd.

Green River TA (JN:12630)

06/05/2024

	→	↘	↙	←	↖	↗
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑		↘	↑↑↑	↘	↗
Traffic Volume (veh/h)	2249	153	61	678	106	51
Future Volume (veh/h)	2249	153	61	678	106	51
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	2367	137	64	714	112	22
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	3214	184	85	3861	212	265
Arrive On Green	0.64	0.64	0.05	0.74	0.12	0.12
Sat Flow, veh/h	5190	288	1810	5358	1810	1610
Grp Volume(v), veh/h	1624	880	64	714	112	22
Grp Sat Flow(s),veh/h/ln	1729	1848	1810	1729	1810	1610
Q Serve(g_s), s	25.8	26.5	2.8	3.3	4.7	0.9
Cycle Q Clear(g_c), s	25.8	26.5	2.8	3.3	4.7	0.9
Prop In Lane		0.16	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2215	1184	85	3861	212	265
V/C Ratio(X)	0.73	0.74	0.75	0.18	0.53	0.08
Avail Cap(c_a), veh/h	2570	1374	232	4815	751	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	9.9	10.0	38.1	3.1	33.6	28.7
Incr Delay (d2), s/veh	0.9	1.9	4.9	0.0	2.0	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	8.3	1.3	0.6	2.1	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	10.8	11.9	43.0	3.1	35.7	28.8
LnGrp LOS	B	B	D	A	D	C
Approach Vol, veh/h	2504			778	134	
Approach Delay, s/veh	11.2			6.4	34.5	
Approach LOS	B			A	C	
Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		14.9	8.4	57.7		66.1
Change Period (Y+Rc), s		5.4	4.6	5.8		5.8
Max Green Setting (Gmax), s		33.6	10.4	60.2		75.2
Max Q Clear Time (g_c+I1), s		6.7	4.8	28.5		5.3
Green Ext Time (p_c), s		0.3	0.0	23.4		5.2
<b>Intersection Summary</b>						
HCM 6th Ctrl Delay, s/veh			11.0			
HCM 6th LOS			B			

Timings

6: Green River Rd. & Palisades Dr.



Lane Group	EBL	EBT	WBT	SBL	SBR
Lane Configurations	↖	↑↑↑	↑↑↑	↖	↗
Traffic Volume (vph)	205	1880	522	16	142
Future Volume (vph)	205	1880	522	16	142
Turn Type	Prot	NA	NA	Prot	pm+ov
Protected Phases	1	6	2	8	1
Permitted Phases					8
Detector Phase	1	6	2	8	1
Switch Phase					
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0
Minimum Split (s)	9.6	15.8	30.8	32.2	9.6
Total Split (s)	37.0	87.0	50.0	33.0	37.0
Total Split (%)	30.8%	72.5%	41.7%	27.5%	30.8%
Yellow Time (s)	3.6	4.8	4.8	5.2	3.6
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.6	5.8	5.8	6.2	4.6
Lead/Lag	Lead		Lag		Lead
Lead-Lag Optimize?	Yes		Yes		Yes
Recall Mode	None	Min	Min	None	None
Act Effct Green (s)	12.3	41.9	17.8	14.4	18.1
Actuated g/C Ratio	0.25	0.85	0.36	0.29	0.37
v/c Ratio	0.46	0.43	0.31	0.03	0.21
Control Delay (s/veh)	25.1	4.9	13.6	22.0	2.8
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	25.1	4.9	13.6	22.0	2.8
LOS	C	A	B	C	A
Approach Delay (s/veh)		7.0	13.6	4.8	
Approach LOS		A	B	A	

Intersection Summary

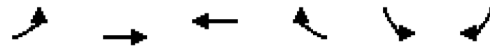
Cycle Length: 120  
 Actuated Cycle Length: 49.2  
 Natural Cycle: 80  
 Control Type: Actuated-Uncoordinated  
 Maximum v/c Ratio: 0.47  
 Intersection Signal Delay (s/veh): 8.2  
 Intersection LOS: A  
 Intersection Capacity Utilization 54.7%  
 ICU Level of Service A  
 Analysis Period (min) 15

Splits and Phases: 6: Green River Rd. & Palisades Dr.



HCM 6th Signalized Intersection Summary  
 6: Green River Rd. & Palisades Dr.

Green River TA (JN:12630)  
 06/05/2024



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↶	↑↑↑	↑↑↑↶		↶	↶
Traffic Volume (veh/h)	205	1880	522	45	16	142
Future Volume (veh/h)	205	1880	522	45	16	142
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No	No		No	
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	211	1938	538	43	16	87
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	265	3412	2124	168	250	458
Arrive On Green	0.15	0.66	0.43	0.43	0.14	0.14
Sat Flow, veh/h	1810	5358	5071	388	1810	1610
Grp Volume(v), veh/h	211	1938	378	203	16	87
Grp Sat Flow(s),veh/h/ln	1810	1729	1729	1830	1810	1610
Q Serve(g_s), s	6.6	12.0	4.1	4.2	0.5	2.4
Cycle Q Clear(g_c), s	6.6	12.0	4.1	4.2	0.5	2.4
Prop In Lane	1.00			0.21	1.00	1.00
Lane Grp Cap(c), veh/h	265	3412	1499	793	250	458
V/C Ratio(X)	0.80	0.57	0.25	0.26	0.06	0.19
Avail Cap(c_a), veh/h	996	7155	2597	1374	824	969
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	5.5	10.6	10.6	22.0	15.9
Incr Delay (d2), s/veh	2.1	0.1	0.1	0.2	0.1	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	2.1	1.2	1.3	0.2	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d), s/veh	26.4	5.7	10.7	10.8	22.2	16.1
LnGrp LOS	C	A	B	B	C	B
Approach Vol, veh/h		2149	581		103	
Approach Delay, s/veh		7.7	10.7		17.1	
Approach LOS		A	B		B	
Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	13.2	31.3			44.5	14.3
Change Period (Y+Rc), s	4.6	5.8			5.8	6.2
Max Green Setting (Gmax), s	32.4	44.2			81.2	26.8
Max Q Clear Time (g_c+I1), s	8.6	6.2			14.0	4.4
Green Ext Time (p_c), s	0.3	3.6			24.7	0.2

Intersection Summary						
HCM 6th Ctrl Delay, s/veh			8.7			
HCM 6th LOS			A			

**APPENDIX 7.3: HORIZON YEAR (2045) WITHOUT PROJECT  
CONDITIONS OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH  
IMPROVEMENTS**

This Page Intentionally Left Blank

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	30	31	153	2632	260	292	337
v/c Ratio	0.19	0.20	0.54	0.88	0.17	0.88	0.61
Control Delay	49.7	49.8	14.1	27.1	2.6	75.4	11.0
Queue Delay	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Total Delay	49.7	49.8	14.1	27.9	2.6	75.4	11.0
Queue Length 50th (ft)	24	24	0	467	23	214	6
Queue Length 95th (ft)	47	49	55	m#804	m38	#429	99
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	371	374	469	2976	1560	332	548
Starvation Cap Reductn	0	0	0	132	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.08	0.08	0.33	0.93	0.17	0.88	0.61

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues  
2: Green River Rd. & SR-91 EB Ramps



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	148	251	2907	245	105
v/c Ratio	0.67	0.44	0.98	0.79	0.04
Control Delay	65.0	8.1	37.9	48.7	9.0
Queue Delay	0.0	0.0	20.6	0.0	0.0
Total Delay	65.0	8.1	58.6	48.7	9.0
Queue Length 50th (ft)	111	0	779	205	13
Queue Length 95th (ft)	177	40	#1026	m243	m33
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	279	650	2971	368	2839
Starvation Cap Reductn	0	0	202	0	0
Spillback Cap Reductn	0	0	132	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.53	0.39	1.05	0.67	0.04

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.



Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	224	225	243	532	362	442	170
v/c Ratio	0.71	0.71	0.49	0.75	0.26	0.44	0.19
Control Delay	57.5	57.2	8.1	48.4	14.0	21.3	3.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	57.5	57.2	8.1	48.4	14.0	21.3	3.5
Queue Length 50th (ft)	173	173	0	152	117	203	0
Queue Length 95th (ft)	242	243	63	m186	m210	355	41
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	514	518	654	852	1381	998	918
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.43	0.37	0.62	0.26	0.44	0.19

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

Queues  
2: Green River Rd. & SR-91 EB Ramps



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	204	1708	711	198	606
v/c Ratio	0.20	1.02	0.83	0.77	0.49
Control Delay	13.6	49.9	57.0	67.3	39.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	49.9	57.0	67.3	39.1
Queue Length 50th (ft)	74	~719	195	157	232
Queue Length 95th (ft)	116	#908	#281	216	224
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	1018	1681	859	296	1248
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.20	1.02	0.83	0.67	0.49

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

**APPENDIX 7.4: HORIZON YEAR (2045) WITH PROJECT CONDITIONS  
INTERSECTION OFF-RAMP QUEUING ANALYSIS WORKSHEETS WITH  
IMPROVEMENTS**

This Page Intentionally Left Blank

1: Green River Rd. & SR-91 WB Ramps

06/05/2024



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	67	69	153	2682	266	309	337
v/c Ratio	0.37	0.38	0.50	0.87	0.17	1.14	0.66
Control Delay (s/veh)	53.4	53.7	12.5	23.6	2.8	147.0	13.0
Queue Delay	0.0	0.0	0.0	0.9	0.0	0.0	0.0
Total Delay (s/veh)	53.4	53.7	12.5	24.5	2.8	147.0	13.0
Queue Length 50th (ft)	52	54	0	393	28	~281	7
Queue Length 95th (ft)	88	90	55	m#776	m37	#460	100
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	371	373	469	3073	1533	269	505
Starvation Cap Reductn	0	0	0	168	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.18	0.33	0.92	0.17	1.15	0.67

Intersection Summary

- ~ Volume exceeds capacity, queue is theoretically infinite.  
Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.
- m Volume for 95th percentile queue is metered by upstream signal.

Queues  
2: Green River Rd. & SR-91 EB Ramps

	→	↘	↑	↙	↓
Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	148	327	3010	245	197
v/c Ratio	0.66	0.51	1.01	0.79	0.06
Control Delay (s/veh)	64.1	7.8	47.4	39.9	12.2
Queue Delay	0.0	0.0	27.5	0.0	0.0
Total Delay (s/veh)	64.1	7.8	75.0	39.9	12.2
Queue Length 50th (ft)	111	0	~915	205	57
Queue Length 95th (ft)	177	44	#1087	m213	m57
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	279	714	2958	368	2833
Starvation Cap Reductn	0	0	189	0	0
Spillback Cap Reductn	0	0	140	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.53	0.46	1.09	0.67	0.07

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

m Volume for 95th percentile queue is metered by upstream signal.

Queues

1: Green River Rd. & SR-91 WB Ramps



Lane Group	WBL	WBT	WBR	NBL	NBT	SBT	SBR
Lane Group Flow (vph)	227	228	243	607	375	449	171
v/c Ratio	0.71	0.70	0.48	0.77	0.27	0.46	0.19
Control Delay (s/veh)	57.3	57.0	8.0	47.7	15.4	22.9	3.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	57.3	57.0	8.0	47.7	15.4	22.9	3.6
Queue Length 50th (ft)	175	176	0	174	138	215	0
Queue Length 95th (ft)	245	246	63	m185	m177	375	43
Internal Link Dist (ft)		1291			517	693	
Turn Bay Length (ft)			500	215			
Base Capacity (vph)	514	518	654	871	1377	966	894
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.44	0.37	0.70	0.27	0.46	0.19

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBT	EBR	NBT	SBL	SBT
Lane Group Flow (vph)	204	1752	859	198	652
v/c Ratio	0.20	1.05	0.99	0.77	0.52
Control Delay (s/veh)	13.5	61.3	77.8	67.5	39.1
Queue Delay	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	13.5	61.3	77.8	67.5	39.1
Queue Length 50th (ft)	74	~809	~259	154	251
Queue Length 95th (ft)	116	#962	#368	217	228
Internal Link Dist (ft)	1023		159		517
Turn Bay Length (ft)		500		115	
Base Capacity (vph)	1018	1667	864	296	1248
Starvation Cap Reductn	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.20	1.05	0.99	0.67	0.52

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

# 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.