Appendix H-1

Iron Lofts Multifamily Project Traffic Impact Analysis

Ganddini Group, Inc

May 30, 2025

(Rev. November 19, 2025)

IRON LOFTS MULTIFAMILY RESIDENTIAL TRAFFIC IMPACT ANALYSIS

City of Riverside
May 30, 2025
(Rev. November 19, 2025)

gandhi

Traffic Engineering ● Transportation Planning ● Parking ● Noise & Vibration
Air Quality ● Global Climate Change ● Health Risk Assessment

IRON LOFTS MULTIFAMILY RESIDENTIAL TRAFFIC IMPACT ANALYSIS

City of Riverside
May 30, 2025
(Rev. November 19, 2025)

prepared by

Perrie Ilercil, PE (AZ)
Giancarlo Ganddini, PE, PTP

GANDDINI GROUP, INC.
555 Parkcenter Drive, Suite 225
Santa Ana, California 92705
(714) 795-3100 | ganddini.com

Project No. 19630

TABLE OF CONTENTS

EXECUTIVE SUMMARY ..... **V**

1. INTRODUCTION **1**

Purpose and Objectives 1
Project Description 1
Scope of Analysis 1
Study Area 1
Analysis Scenarios 2

2. METHODOLOGY **7**

Level of Service/Operational Analysis Methodology 7
Intersections: Highway Capacity Manual Delay Methodology 7
Roadway Segment Analysis Methodology 7
Performance Standards 8
Substantial Operational Deficiency Criteria 8

3. EXISTING CONDITIONS **10**

Existing Roadway System 10
Pedestrian Facilities 11
Transit Facilities 11
General Plan Context 11
Bicycle Facilities Master Plan 11
Designated Truck Routes 11
Existing Roadway Volumes 11
Existing Intersection Level of Service 12
Existing Roadway Segment Level of Service 12

4. PROJECT TRIP FORECASTS **24**

Project Trip Generation 24
Project Trip Distribution & Assignment 24

5. FUTURE VOLUME FORECASTS **31**

Method of Projection 31
Ambient Growth 31
Other Developments 31
Regional Travel Demand Model Growth 31
6th Street Vacation 32
Commerce Street Realignment 32
Analysis Scenario Volumes 32
Existing Plus Project 32
Opening Year (2026) Without Project 32
Opening Year (2026) With Project 32
Buildout Year 2045 Without Project 32
Buildout Year 2045 With Project 32

6. FUTURE LEVELS OF SERVICE ANALYSIS **54**

Current Commerce Street Alignment (Without Planned 3rd Street Grade Separation Project) 54
Existing Plus Project 54
Opening Year (2026) Without Project 54
Opening Year (2026) With Project 54
Buildout Year 2045 Without Project 54

Buildout Year 2045 With Project 54
Planned Commerce Street Re-alignment (With 3rd Street Grade Separation Project) 55
Existing Plus Project 55
Opening Year (2026) Without Project 55
Opening Year (2026) With Project 55
Buildout Year 2045 Without Project 55
Buildout Year 2045 With Project 55
Roadway Segment Level of Service 56
Traffic Signal Warrant Analysis 56
Railroad Crossing On Mission Inn Avenue West of Commerce Street 56

7. SITE ACCESS & ON-SITE CIRCULATION 64

Project Design Features 64
Site Access Queuing Analysis 65
Traffic Signal Warrant Analysis 65
Pedestrian, Bicycle and Transit Facility Access To and From Project 65
Pedestrian Crossing at Mission Inn Avenue And Commerce Street 66

8. SUMMARY OF IMPROVEMENTS 70

Off-Site Improvements 70
Development Impact Fee 70

9. CONCLUSIONS 71

Project Trip Generation 71
Level of Service Analysis 71
Summary of Improvements 71

APPENDICES

Appendix A Glossary
Appendix B Scoping Agreement
Appendix C Traffic Count Data
Appendix D Intersection Level of Service Worksheets
Appendix E Travel Demand Model Plots
Appendix F Travel Demand Post Processing Worksheets
Appendix G 3rd Street Grade Separation Project Preliminary Layout Plan
Appendix H Traffic Signal Warrant Worksheet
Appendix I Roadway Concept Plan
Appendix J California MUTCD 3B.18
Appendix K Roadway Concept Plan (Project Vicinity)

LIST OF TABLES

Table 1. Existing Intersection Levels of Service 13
Table 2. Existing Roadway Segment Levels of Service 14
Table 3. Project Trip Generation 25
Table 4. Other Development Trip Generation 34
Table 5. Existing Plus Project Intersection Levels of Service & Project-Related Effect 57
Table 6. Opening Year (2026) Intersection Levels of Service & Project-Related Effect 58
Table 7. Buildout Year 2045 Intersection Levels of Service & Project-Related Effect 59
Table 8. Existing Plus Project Intersection Levels of Service & Project-Related Effect With 3rd Street Grade Separation Project 60
Table 9. Opening Year (2026) Intersection Levels of Service & Project-Related Effect With 3rd Street Grade Separation Project 61
Table 10. Buildout Year 2045 Intersection Levels of Service & Project-Related Effect With 3rd Street Grade Separation Project 62
Table 11. Roadway Segment Levels of Service 63
Table 12. Site Access Queuing Analysis 68

LIST OF FIGURES

Figure 1. Regional Location Map 3
Figure 2. Project Location Map 4
Figure 3. Site Plan 5
Figure 4. Study Area 6
Figure 5. Existing Lane Geometry and Intersection Traffic Controls 15
Figure 6. Existing Pedestrian Facilities 16
Figure 7. Existing Transit Routes 17
Figure 8. City of Riverside Master Plan of Roadways 18
Figure 9. City of Riverside General Plan Roadway Cross-Sections 19
Figure 10. City of Riverside Master Plan of Trails and Bikeways 20
Figure 11. Existing Average Daily Traffic Volumes 21
Figure 12. Existing AM Peak Hour Intersection Turning Movement Volumes 22
Figure 13. Existing PM Peak Hour Intersection Turning Movement Volumes 23
Figure 14. Project Trip Distribution (Outbound) 26
Figure 15. Project Trip Distribution (Inbound) 27
Figure 16. Project Average Daily Traffic Volumes 28
Figure 17. Project AM Peak Hour Intersection Turning Movement Volumes 29
Figure 18. Project PM Peak Hour Intersection Turning Movement Volumes 30
Figure 19. Other Development Location Map 35
Figure 20. Other Development Average Daily Traffic Volumes 36
Figure 21. Other Development AM Peak Hour Intersection Turning Movement Volumes 37
Figure 22. Other Development PM Peak Hour Intersection Turning Movement Volumes 38
Figure 23. Existing Plus Project Average Daily Traffic Volumes 39
Figure 24. Existing Plus Project AM Peak Hour Intersection Turning Movement Volumes 40

Figure 25. Existing Plus Project PM Peak Hour Intersection Turning Movement Volumes 41
Figure 26. Opening Year (2026) Without Project Average Daily Traffic Volumes 42
Figure 27. Opening Year (2026) Without Project AM Peak Hour Intersection Turning Movement Volumes 43
Figure 28. Opening Year (2026) Without Project PM Peak Hour Intersection Turning Movement Volumes 44
Figure 29. Opening Year (2026) With Project Average Daily Traffic Volumes 45
Figure 30. Opening Year (2026) With Project AM Peak Hour Intersection Turning Movement Volumes 46
Figure 31. Opening Year (2026) With Project PM Peak Hour Intersection Turning Movement Volumes 47
Figure 32. Buildout Year 2045 Without Project Average Daily Traffic Volumes 48
Figure 33. Buildout Year 2045 Without Project AM Peak Hour Intersection Turning Movement Volumes 49
Figure 34. Buildout Year 2045 Without Project PM Peak Hour Intersection Turning Movement Volumes 50
Figure 35. Buildout Year 2045 With Project Average Daily Traffic Volumes 51
Figure 36. Buildout Year 2045 With Project AM Peak Hour Intersection Turning Movement Volumes 52
Figure 37. Buildout Year 2045 With Project PM Peak Hour Intersection Turning Movement Volumes 53
Figure 38. Project Train Station Access 69
Figure 39. Recommended Lane Geometry and Intersection Traffic Controls 72

EXECUTIVE SUMMARY

This section summarizes the proposed project, operational findings, and identifies recommendations (if any) as specified in this study.

Project Description

The 6.97-acre project site is located east of Commerce Street between 5th Street and Mission Inn Avenue in the City of Riverside, California. The project site is currently partially developed with commercial/industrial buildings and zoned as Business & Manufacturing Park Zone (BMP).

The proposed project (TTM 38624) involves removal of the existing buildings and construction of 295 mid-rise multifamily dwelling units and 5 low-rise multifamily dwelling units within a residential complex. Vehicular access for the project site is proposed via two driveways with one on 5th Street and one on Mission Inn Avenue.

The project site requires a General Plan Amendment and Zoning Amendment to rezone the site from Business & Manufacturing Park Zone (BMP) to Mixed-use Urban (MU-U) to accommodate the residential development and a Specific Plan Amendment to amend the Riverside Marketplace Specific Plan to expand the mixed-used Marketplace Sub-area. The proposed plan also includes a street vacation of 6th Street from Commerce Street to the east side of the project.

Project Trip Generation

The proposed project is forecast to generate a total of approximately 1,213 net new daily trips, including 90 net new trips during the AM peak hour and 72 net new trips during the PM peak hour.

Level of Service Analysis

The study intersections currently operate within acceptable Levels of Service (D or better) during the peak hours for the Existing conditions.

The study intersections are forecast to continue operating within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2026) conditions.

The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Buildout Year (2045) conditions, except for the following intersection that is forecast to operate at an unacceptable Levels of Service E during the PM peak hour:

4. Vine Street (NS) and Mission Inn Avenue (EW)

To address this, the Proposed Project will implement the City-directed improvements summarized below.

Summary of Improvements

Project design features, necessary to provide project access, are outlined in the Site Access & On-Site Circulation (Section 7).

The following improvement is recommended and will be installed by the project to ensure westbound queues at the rail crossing on Mission Inn Avenue do not block turning or north-south through movements at Commerce Street for all scenarios:

5. Commerce Street (NS) at Mission Inn Avenue (EW)
    - Install "KEEP CLEAR" markings in the intersection for westbound lanes on Mission Inn Avenue.

The Proposed Project will implement the following City-directed improvements:

- Project will install total of four stop signs equipped with solar powered flashing LEDs at all approaches.
- Project shall upgrade the existing crosswalks to the high visibility crosswalks at all approaches.

1. INTRODUCTION

This section provides an overview of the proposed project and the general scope of the analysis.

PURPOSE AND OBJECTIVES

The purpose of this study is to evaluate the potential for transportation impacts resulting from the development of the proposed project in the context of the City of Riverside's discretionary authority for conformance with locally established operational standards. Although this is a technical report, effort has been made to prepare the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with technical terms.

This study was prepared in consultation with the City of Riverside staff following the procedures and methodologies for assessing transportation impacts established by the City of Riverside. To assess the project's conformance with local operational standards, this study evaluates the project's effect on traffic operations and, if necessary, identifies recommended improvements or corrective measures to alleviate operational deficiencies substantially caused or worsened by the proposed project.

For compliance with California Environmental Quality Act (CEQA) requirements, a vehicle miles traveled (VMT) assessment is documented separately in the *Iron Lofts Multifamily Residential Vehicle Miles Traveled Assessment* (Ganddini Group, Inc., December 27, 2024).

PROJECT DESCRIPTION

The 6.97-acre project site is located east of Commerce Street between 5th Street and Mission Inn Avenue in the City of Riverside, California. The project site is currently partially developed with commercial/industrial buildings and zoned as Business & Manufacturing Park Zone (BMP). Figure 1 and Figure 2 show the regional and project location maps.

The proposed project (TTM 38624) involves removal of the existing buildings and construction of 295 mid-rise multifamily dwelling units and 5 low-rise multifamily dwelling units within a residential complex. Vehicular access for the project site is proposed via two driveways with one on 5th Street and one on Mission Inn Avenue. Figure 3 illustrates the project site plan.

The project site requires a General Plan Amendment and Zoning Amendment to rezone the site from Business & Manufacturing Park Zone (BMP) to Mixed-use Urban (MU-U) to accommodate the residential development and a Specific Plan Amendment to amend the Riverside Marketplace Specific Plan to expand the mixed-used Marketplace Sub-area. The proposed plan also includes a street vacation of 6th Street from Commerce Street to the east side of the project.

SCOPE OF ANALYSIS

The scope of this analysis was determined in consultation with the City of Riverside as documented in the City-approved scoping agreement provided in Appendix B.

Study Area

Figure 4 illustrates the study area. In accordance with the City of Riverside requirements, the study area was determined in consultation with the City of Riverside engineering staff and consists of classified roadway intersections to which the project is forecast to contribute 50 or more peak hour trips. Based on the project trip generation and distribution forecasts presented later in this report, the study area consists of the following study intersections:

Intersections

1. Lime Street (NS) and Mission Inn Avenue (EW) [1]
2. SR-91 Off-ramp (NS) and Mission Inn Avenue (EW)
3. Mulberry Street (NS) and Mission Inn Avenue (EW)
4. Vine Street (NS) and Mission Inn Avenue (EW)
5. Commerce Street (NS) and Mission Inn Avenue (EW)
6. Commerce Street (NS) and 6th Street (EW)
7. Commerce Street (NS) and 5th Street (EW)
8. Commerce Street (NS) and 3rd Street (EW)
9. Park Avenue (NS) and Mission Inn Avenue (EW)
10. Project Driveway (NS) and Mission Inn Avenue (EW)
11. Project Driveway (NS) and 5th Street (EW)
12. Commerce Street (NS) and 5th Street (EW) (future re-alignment)
13. Commerce Street (NS) and 3rd Street (EW) (future re-alignment)

Roadway Segments

1. Commerce Street between Mission Inn Avenue and 3rd Street
2. 5th Street between Commerce Street and Park Avenue
3. 6th Street between Commerce Street and Park Avenue

Analysis Scenarios

This study includes an evaluation of the following analysis scenarios for weekday AM and PM peak hour conditions:

Current Commerce Street Alignment (Without Planned 3rd Street Grade Separation Project)

- Existing
- Existing Plus Project
- Opening Year (2026) Without Project
- Opening Year (2026) With Project
- Buildout Year 2045 Without Project
- Buildout Year 2045 With Project

Planned Commerce Street Re-alignment (With 3rd Street Grade Separation Project)

- Existing
- Existing Plus Project
- Opening Year (2026) Without Project
- Opening Year (2026) With Project
- Buildout Year 2045 Without Project
- Buildout Year 2045 With Project

[1] (NS) = north-south roadway; (EW) = east-west roadway.

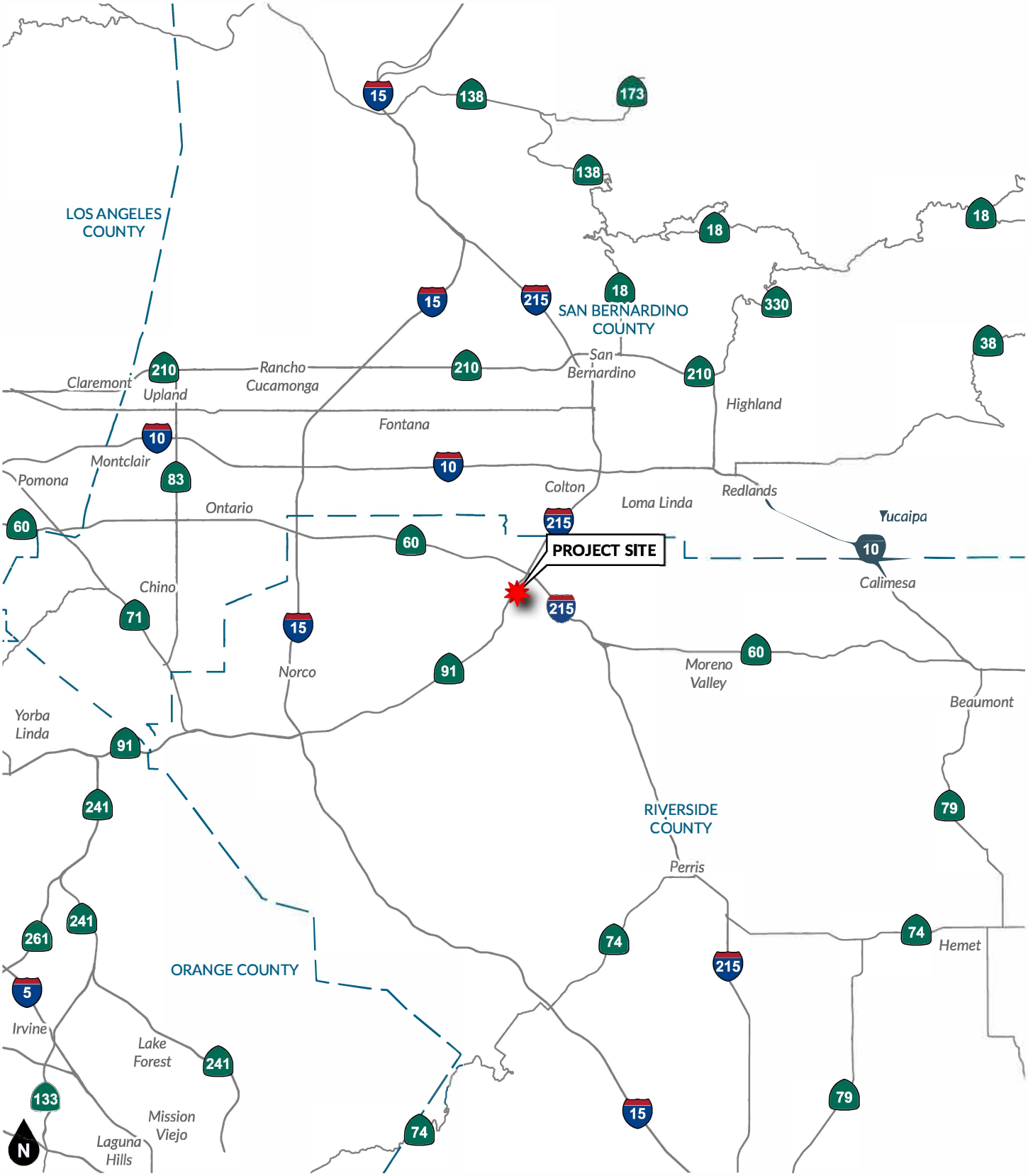
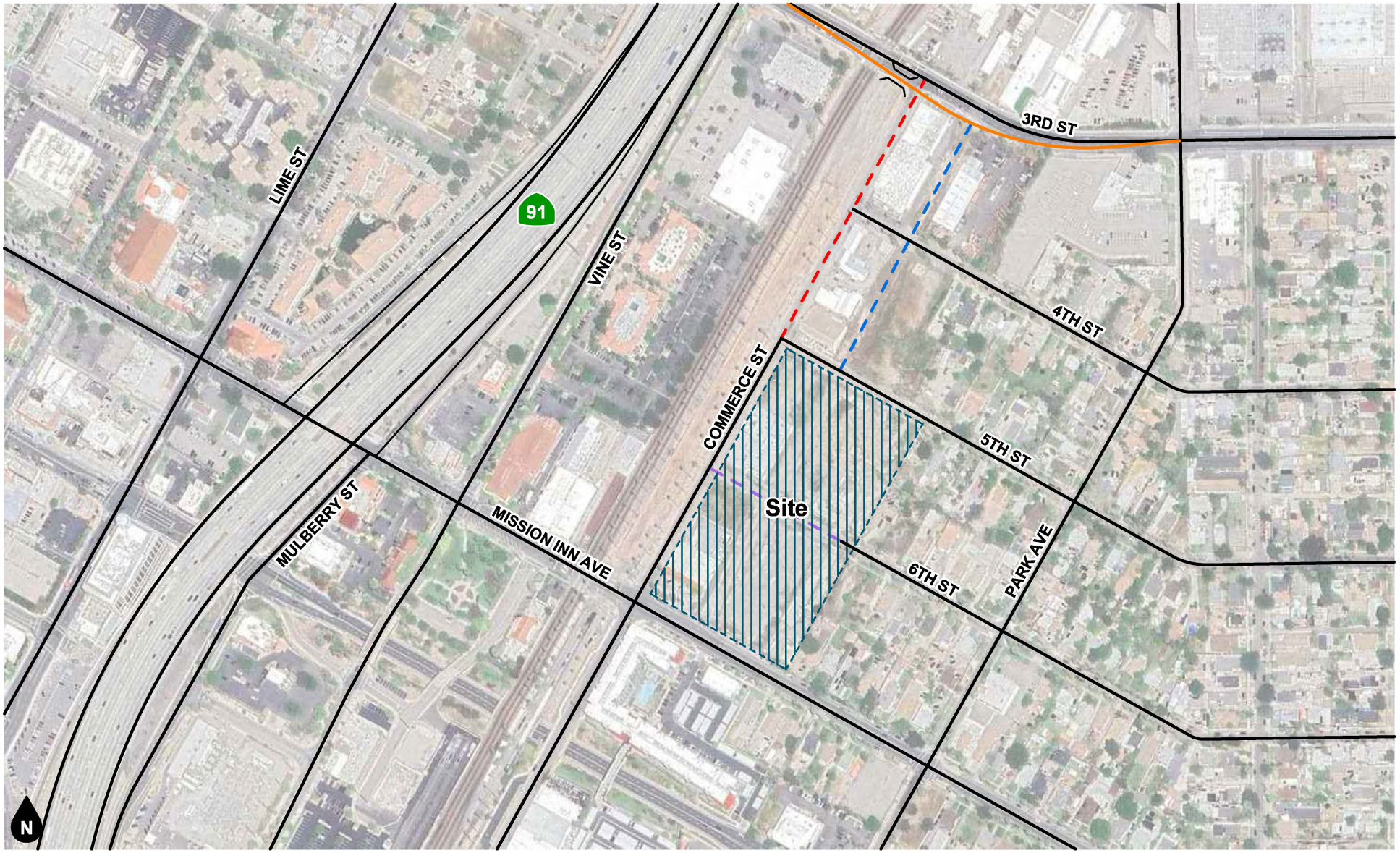


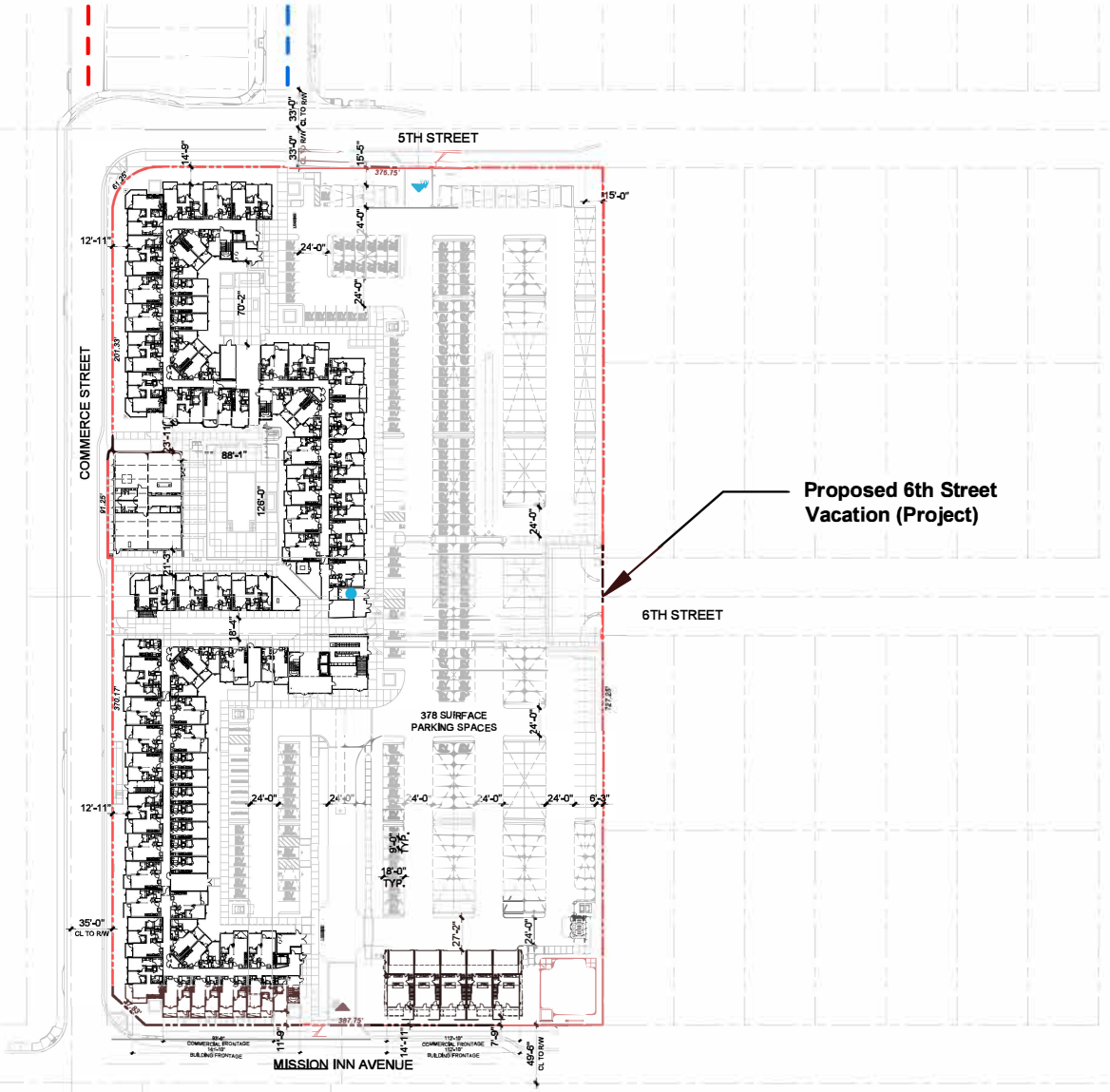
Figure 1
Regional Location Map



Legend

- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

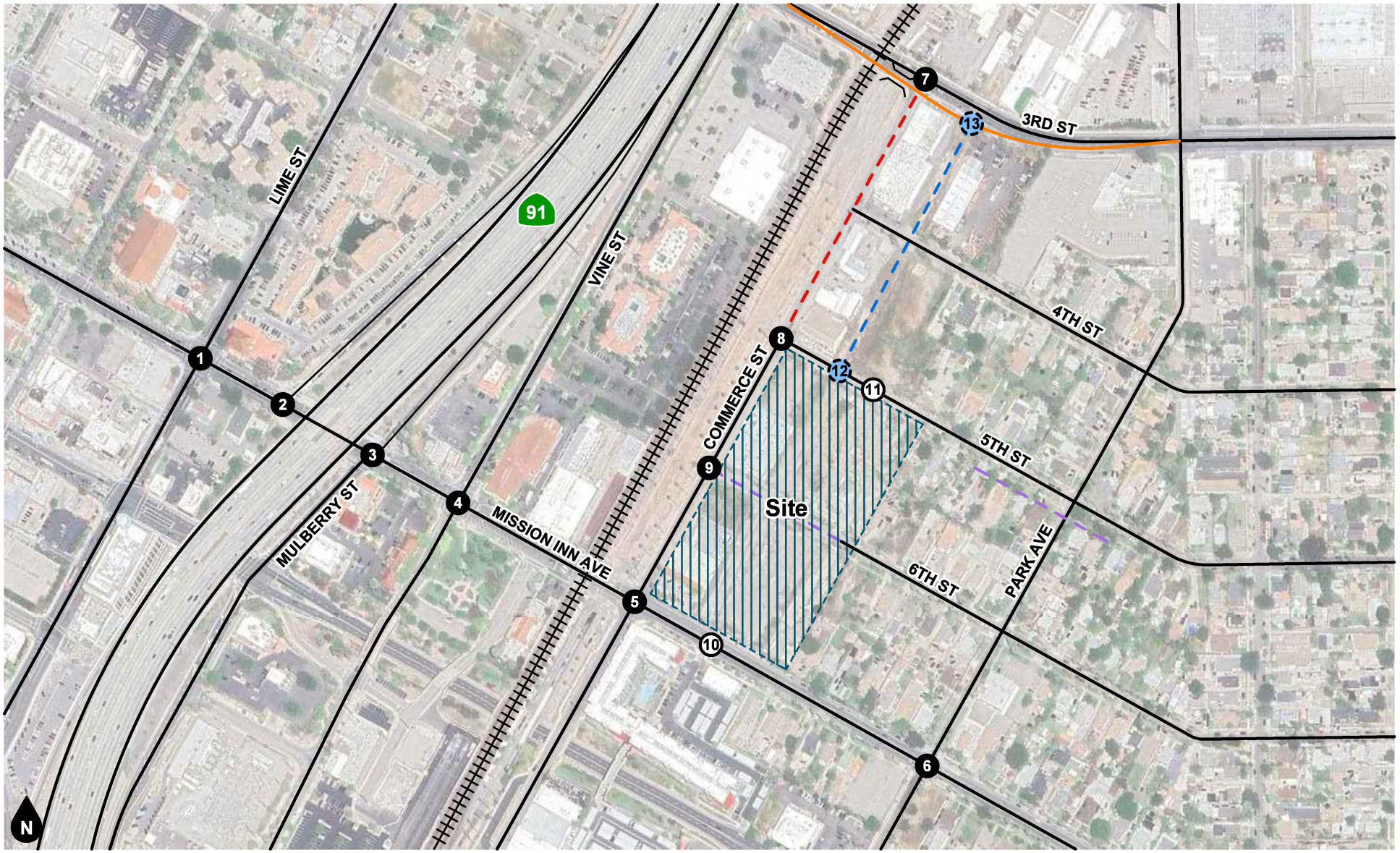
Figure 2
Project Location Map



Planned Commerce Street Realignment (City Project)

Planned Commerce Street Vacation (City Project)

Figure 3
Site Plan



Legend

- # Study Intersection
- # Project Driveway
- # Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)
- Railway Line

Figure 4
Study Area

2. METHODOLOGY

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies. This traffic impact analysis is based on the *City of Riverside Traffic Impact Analysis Guidelines for Vehicle Miles Traveled (VMT) and Level of Service (LOS) Assessment*, July 2020 ["City TIA Guidelines"].

LEVEL OF SERVICE/OPERATIONAL ANALYSIS METHODOLOGY

Level of Service (LOS) analysis is performed to assess conformance with General Plan and operational standards established by the applicable agencies.

Intersections: Highway Capacity Manual Delay Methodology

The methodology used to assess the performance of intersections in the City of Riverside is known as the intersection delay methodology based on procedures contained in the *Highway Capacity Manual* (HCM) (Transportation Research Board, 7th Edition). The methodology considers the traffic volume and distribution of movements, traffic composition, geometric characteristics, and signalization details to calculate the average control delay per vehicle and corresponding Level of Service. Control delay is defined as the portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign) and includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay. Intersection delay analysis was performed with default capacity values and adjustment factors recommended in the HCM. The intersection Level of Service is based on the thresholds contained within the HCM.

Level of Service	Intersection Control Delay (Seconds / Vehicle)	
	Unsignalized Intersection	Unsignalized Intersection
A	≤ 10.0	≤ 10.0
B	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	> 80.0	> 50.0

Source: *Highway Capacity Manual* (Transportation Research Board, 7th Edition).

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). At intersections with traffic signal or all way stop control, Level of Service is determined by the average control delay for the overall intersection. At intersections with cross street stop control (i.e., one- or two-way stop control), Level of Service is determined by the average control delay for the worst minor street approach or major street left-turn movement. The Level of Service analysis was performed in accordance with parameters specified in the City TIA Guidelines. Intersection analysis was performed using the Vistro software.

Roadway Segment Analysis Methodology

The methodology used to assess roadway segment operations is known as the daily volume-to-capacity method. The methodology compares the average daily traffic (ADT) volume using the roadway segment to the capacity of the roadway segment to calculate the volume-to-capacity (V/C) ratio, which is then correlated to Level of Service based on the following thresholds:

Level of Service	Volume / Capacity
A	0.000 - 0.600
B	0.601 - 0.700
C	0.701 - 0.800
D	0.801 - 0.900
E	0.901 - 1.000
F	> 1.0

Source: Transportation Research Board *Highway Capacity Manual* (7th Edition).

The roadway segment daily capacity analysis is intended to be used as a high-level planning guide to estimate anticipated roadway segment operations based on theoretical maximum two-way average daily traffic (ADT) volumes that a given roadway segment can accommodate within one day given typical peak hour characteristics. The actual capacity of a roadway is influenced by several factors, including street width, alignment, number of travel lanes, number of intersections and driveways, presence of on-street parking, and traffic signal cycle length. The number of turn lanes and intersection controls should be determined based on a more-detailed peak hour intersection analysis at the critical ends. Therefore, roadway segment widening is typically only recommended if the peak hour intersection analysis indicates the need for additional through lanes.

Roadway Classification	Number of Lanes	Maximum Two-way Daily Traffic Volume (ADT) Level of Service		
		C	D	Capacity E
Local	2	2,500 – 2,799	2,800 – 3,099	3,100+
Collector (60' to 80')	2	9,900 – 11,199	11,200 – 12,499	12,500+
Arterial	2	14,400 – 16,199	16,200 – 17,999	18,000+
Arterial (88')	4	16,800 – 19,399	19,400 – 21,199	22,000+
Arterial (100')	4	26,200 – 29,599	29,600 – 32,999	33,000+
Arterial (120')	6	38,700 – 44,099	44,100 – 49,499	49,500+
Arterial (144')	8	50,600 – 57,799	57,800 – 64,999	65,000+

Source: *Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment* (City of Riverside, July 2020).

PERFORMANCE STANDARDS

The City of Riverside has established a minimum acceptable Level of Service C for peak hour intersection operations; except for intersections of Collector or higher classification which should maintain Level of Service (D or better) at peak hours. In accordance with CCM-2.3, freeway interchanges may maintain Level of Service E at peak hours as the acceptable standard on a case-by-case basis.

Substantial Operational Deficiency Criteria

Intersections

In the City of Riverside, a project is considered to result in a substantial operational deficiency at a study intersection if one or more of the following conditions are satisfied:

A signalized intersection substantial transportation effect is defined to occur if the project causes intersection operations to degrade from an acceptable Level of Service (D or better) to an unacceptable Level of Service (E or F) or the project-related increase in delay is equal to or greater than the delay listed below and propose land uses or intensities above that contained in the General Plan.

LOS A/B	10 seconds
LOS C	8 seconds
LOS D	5 seconds
LOS E	2 seconds
LOS F	1 second.

An unsignalized intersection substantial transportation effect is defined to occur if one or more of the following conditions are met:

- The addition of project trips to a study intersection causes intersection operations to degrade from an acceptable Level of Service (D or better) to an unacceptable Level of Service (E or F). or
- The project-related increase in delay is equal to or greater than the delay listed above at an intersection that is already operating at an unacceptable Level of Service without the Project; and
- The intersection meets peak hour signal warrants either caused by project volumes or project volumes are added at an intersection that meets peak hour signal warrants in the baseline scenario(s). Peak hour signal warrants should be determined based on the latest California Manual on Uniform Traffic Control Devices (CA MUTCD).

Where improvements are identified to address cumulative Level of Service deficiencies, a project fair share cost estimate is provided based on the volume of project traffic using the impacted facility divided by the total "new" traffic (i.e., ambient growth and other developments). The City of Riverside does not have a "Fair Share Program"; however, the fair share estimate is to facilitate discussion with the City and will be used by the City for consideration purposes only.

Roadway Segments

Based on the City-established performance standards, roadway segment improvements should be considered if the project exceeds the following operational goals:

- Any study roadway segment operating at an acceptable Level of Service (D or better) without project traffic in which the addition of project traffic causes the segment to degrade to an unacceptable Level of Service (E or F) should identify improvements to maintain acceptable Level of Service.
- Any roadway segment that operates at an unacceptable Level of Service in the no project scenario where the project increases traffic in excess of five percent (5%) of the roadway capacity should identify improvements to improve operations.

3. EXISTING CONDITIONS

This section describes the existing transportation setting of the project study area.

EXISTING ROADWAY SYSTEM

Figure 5 shows the lane geometry and intersection traffic controls for existing conditions based on a field survey of the study area. Regional access to the project site is provided by State Route 91 approximately 0.2 miles to the northwest and State Route 60 approximately 1.3 miles to the northeast of the project site. Local north-south circulation is provided by Commerce Street, Park Avenue, Vine Street, Mulberry Street, and Lime Street; and east-west circulation is provided by Mission Inn Avenue, 5th Street and 3rd Street.

Commerce Street: This two-lane undivided roadway trends in a northeast-southwest direction and is unclassified in the City of Riverside General Plan Community Mobility Element in the study area. On-street parking is not restricted in the study area. Currently, there are no designated bicycle facilities or sidewalks in the study area.

Park Avenue: This two-lane undivided roadway trends in a northeast-southwest direction and is classified as a 66-foot Collector (two-lane) in the City of Riverside General Plan Community Mobility Element in the study area. On-street parking is not permitted on the west side of the street at any time and is not permitted on Tuesdays on the east side of the street in the study area. Currently, there are no designated bicycle facilities in the study area. Sidewalks are provided on both sides of the roadway in the study area.

Vine Street: This two-lane undivided roadway trends in a northeast-southwest direction and is unclassified in the City of Riverside General Plan Community Mobility Element in the study area. On-street parking is permitted on one side of the street northeast Mission Inn Avenue and is restricted on both sides of the street southwest of Mission Inn Avenue. Currently, there are sharrow bicycle markings southwest of Mission Inn Avenue in the study area. Sidewalks are generally provided on both sides of the roadway in the study area.

Mulberry Street: This two to three-lane undivided one-way roadway trends in a northeast-southwest direction and is unclassified in the City of Riverside General Plan Community Mobility Element in the study area. On-street parking and sidewalks are provided on the side of the street southwest of Mission Inn Avenue. Currently, there are no bicycle facilities in the project.

Lime Street: This four-lane divided (two-way turn lane) roadway trends in a northeast-southwest direction and is classified as an 88-foot Arterial (four-lane) in the City of Riverside General Plan Community Mobility Element in the study area. On-street parking is restricted in the study area. Currently, there are no designated bicycle facilities in the study area; however, marked Class II bike lanes are proposed for this roadway on the master plan. Sidewalks are provided on both sides of the roadway. The posted speed in the study area is 35 miles per hour.

Mission Inn Avenue: This two-lane undivided to four-lane divided roadway trends in a southeast-northwest direction and is classified as a 100-foot Arterial (four-lane) in the City of Riverside General Plan Community Mobility Element in the study area. On-street parking appears to be permitted on both sides of the roadway southeast of Commerce Street and on one side of the street southeast of Vine Street; however, parking is not permitted on Tuesdays. Currently, there are sharrow bicycle markings northwest of Vine Street in the study area. Sidewalks are generally provided on both sides of the roadway, except for undeveloped property frontage. The posted speed in the study area is 25 to 35 miles per hour.

6th Street: This two-lane undivided roadway trends in a southeast-northwest direction and is unclassified in the City of Riverside General Plan Community Mobility Element in the study area. On-street parking is not

permitted on Tuesdays in the study area. Currently, there are no designated bicycle facilities or sidewalks in the study area.

5th Street: This two-lane undivided roadway trends in a southeast-northwest direction and is unclassified in the City of Riverside General Plan Community Mobility Element in the study area. On-street parking is not permitted on Tuesdays in the study area. Currently, there are no designated bicycle facilities or sidewalks in the study area.

3rd Street: This three-lane divided to four-lane undivided roadway trends in a southeast-northwest direction and is classified as an 88-foot Arterial (four-lane) in the City of Riverside General Plan Community Mobility Element in the study area. On-street parking is not restricted in the study area. Bike lanes and sidewalks are provided on both sides of the roadway. The posted speed in the study area is 30 to 40 miles per hour.

PEDESTRIAN FACILITIES

Existing pedestrian facilities in the project vicinity are shown in Figure 6. As shown in Figure 6, sidewalks are not provided along the project site frontage.

TRANSIT FACILITIES

Figure 7 shows the existing Riverside Transit Agency (RTA) system map in the project vicinity. Route 10 runs along Mission Inn Avenue. The closest bus stop to the project is at the southeast corner of Mission Inn Avenue and Park Avenue. The Metrolink train station is southwest of Mission Inn Avenue between Vine Street and Commerce Street, within one-half mile of the project site. There is a pedestrian bridge over the train tracks to allow access between the southbound track adjacent to Vine Street and the northbound track adjacent to Commerce Street.

GENERAL PLAN CONTEXT

Figure 8 shows the City of Riverside Master Plan of Roadways. This figure shows the nature and extent of arterial and collector highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The City of Riverside standard roadway cross-sections are illustrated in Figure 9.

BICYCLE FACILITIES MASTER PLAN

The City of Riverside Master Plan of Trails and Bikeways is shown in Figure 10. As shown in Figure 10, there are proposed bike facilities on Lime Street and existing bike sharrow lanes on Mission Inn Avenue and Vine Street.

DESIGNATED TRUCK ROUTES

In the City of Riverside, trucks are generally not restricted to specific roadways. On certain roads, trucks weighing over a specified weight limit are prohibited, except when making deliveries. The restricted streets are prescribed by City Code 10.56.010 for vehicles over 6,000 pounds and 10.56.020 for vehicles over 10,000 pounds. Trucks over 6,000 pounds are generally not permitted on Fourth, Fifth and Sixth Streets.

EXISTING ROADWAY VOLUMES

Figure 11 shows the existing average daily traffic volumes. The existing average daily traffic volumes have been factored from peak hour intersection turning movement volumes at locations using the following formula for each intersection leg:

PM Peak Hour (Approach Volume + Exit Volume) x 12.1 = Leg Volume[2]

Figure 12 and Figure 13 show the existing AM and PM peak hour intersection turning movement volumes. Existing peak hour intersection turning movement volumes are based upon AM peak period and PM peak period intersection turning movement counts obtained in November 2024 during typical weekday conditions. The weekday AM peak period was counted between 7:00 AM and 9:00 AM and the weekday PM peak period was counted between 4:00 PM and 6:00 PM; these periods capture the peak times for commuter traffic when the roadway system is typically experiencing peak demand. The actual peak hour within each two-hour count period is determined based on the sum of the four consecutive 15-minute periods with the highest total volume entering the intersection. Thus, the weekday PM peak hour at one intersection may be 4:45 PM to 5:45 PM and may vary at other intersections depending on the four consecutive 15-minute periods that have the highest total volume. Intersection turning movement count worksheets are provided in Appendix C.

EXISTING INTERSECTION LEVEL OF SERVICE

The study intersection Levels of Service for Existing conditions are shown in Table 1. Detailed Level of Service worksheets are provided in Appendix D.

As shown in Table 1, the study intersections currently operate within acceptable Levels of Service (D or better) during peak hours.

EXISTING ROADWAY SEGMENT LEVEL OF SERVICE

The roadway segment capacity analysis for Existing conditions is shown Table 2. As Shown in Table 2, the study roadway segments currently operate within acceptable Levels of Service (D or better).

[2] Average PM peak hour K factor (ADT/PM peak hour volume) based on 24-hour on Commerce Street north of Mission Inn Avenue.

Table 1
Existing Intersection Levels of Service

Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
		Delay[2]	LOS[3]	Delay[2]	LOS
1. Lime Street at Mission Inn Avenue	TS	34.9	C	26.7	C
2. SR-91 Off Ramp at Mission Inn Avenue	TS	25.7	C	24.6	C
3. Mulberry Street at Mission Inn Avenue	TS	31.9	C	36.6	D
4. Vine Street at Mission Inn Avenue	AWS	9.4	A	14.4	B
5. Commerce Street at Mission Inn Ave	CSS	10.9	B	13.3	B
6. Park Avenue at Mission Inn Ave	AWS	8.5	A	9.8	A
7. Commerce Street at 3rd Street	CSS	12.2	B	28.8	D
8. Commerce Street at 5th Street	CSS	8.7	A	8.8	A
9. Commerce Street at 6th Street	CSS	8.9	A	8.9	A
10. Project Driveway at Mission Inn Ave	CSS	9.4	A	10.9	B

Notes:

1. TS = Traffic Signal; AWS = All Way Stop; CSS = Cross Street Stop
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn movement.
3. LOS = Level of Service

Table 2
Existing Roadway Segment Levels of Service

ID	Roadway	Segment		Classification	Lanes	Capacity	Existing		
		From	To				ADT[2]	V/C[2]	LOS[2]
1.	Commerce St	Mission Inn Ave	3rd Street	Local	2	2,500	1,010	0.40	A
2.	5th Street	Commerce Street	Park Avenue	Local	2	2,500	90	0.04	A
3.	6th Street	Commerce Street	Park Avenue	Local	2	2,500	120	0.05	A

Notes:

1. Roadway classifications from the City of Riverside General Plan Circultation Element, and the corresponding roadway capacity from the Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment, July 2020.
2. ADT = Average Daily Traffic; V/C = Volume to Capacity Ratio; LOS = Level of Service

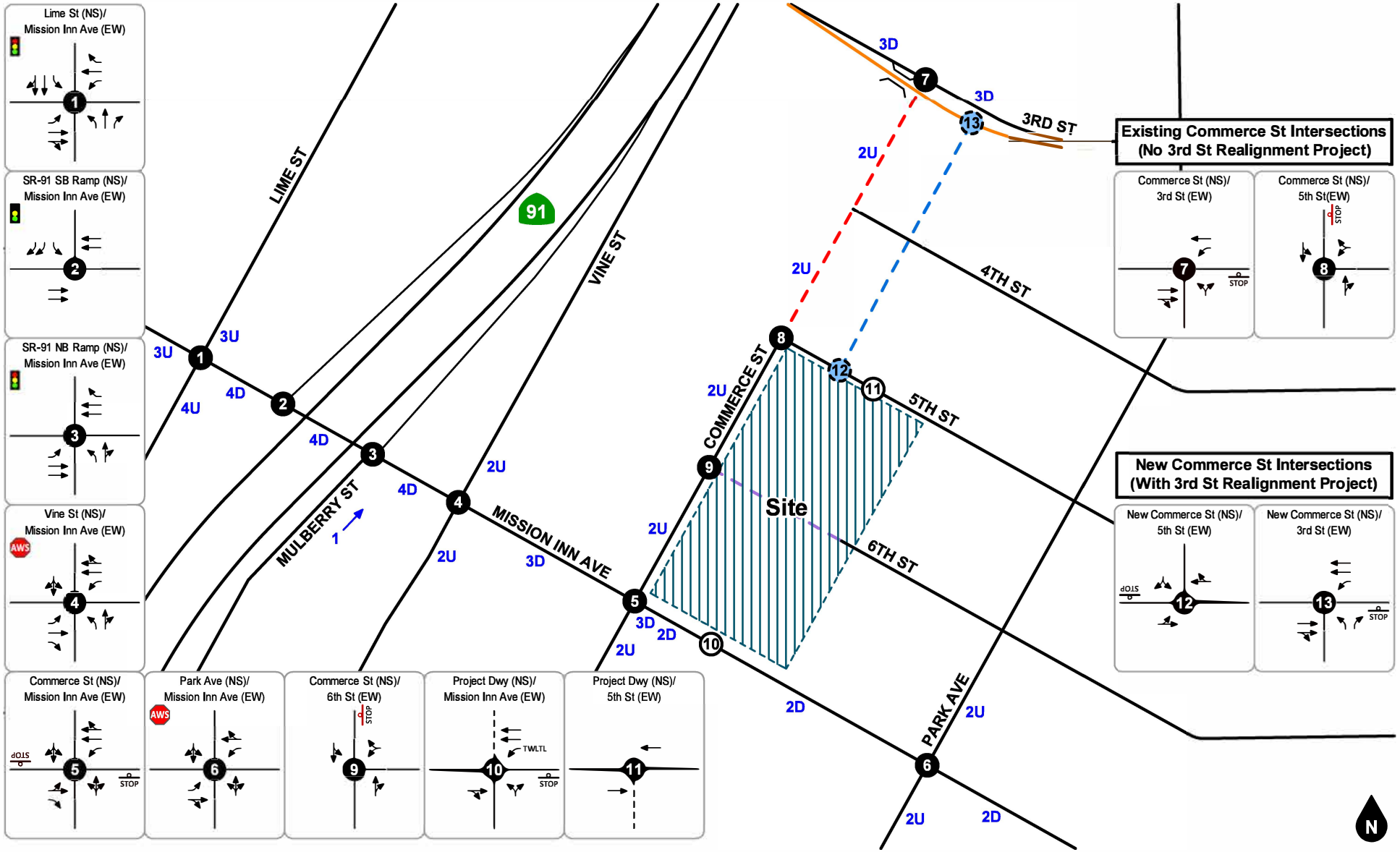
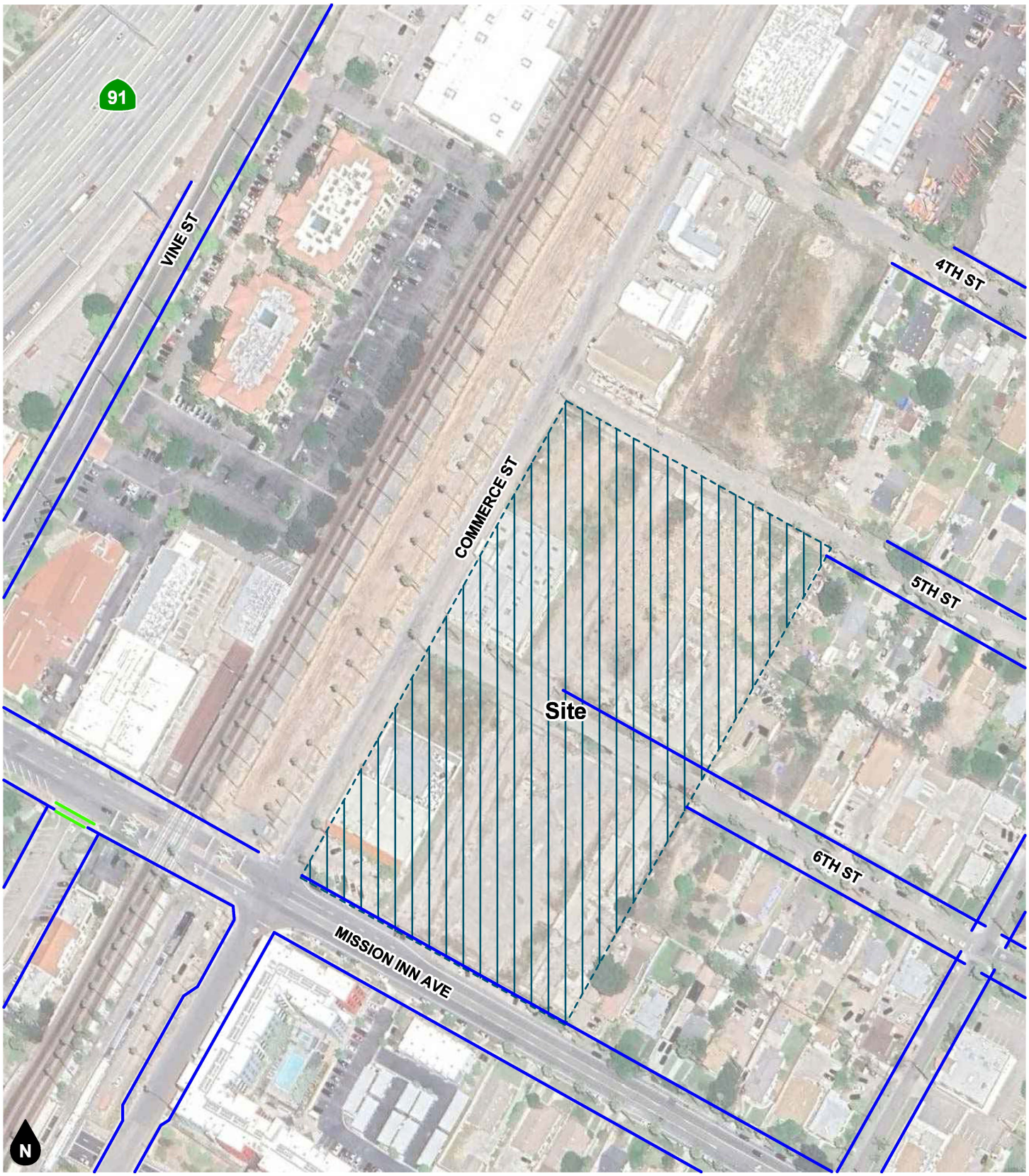


Figure 5
Existing Lane Geometry and Intersection Traffic Controls



Legend
Sidewalk
Cross Walk

Figure 6
Existing Pedestrian Facilities

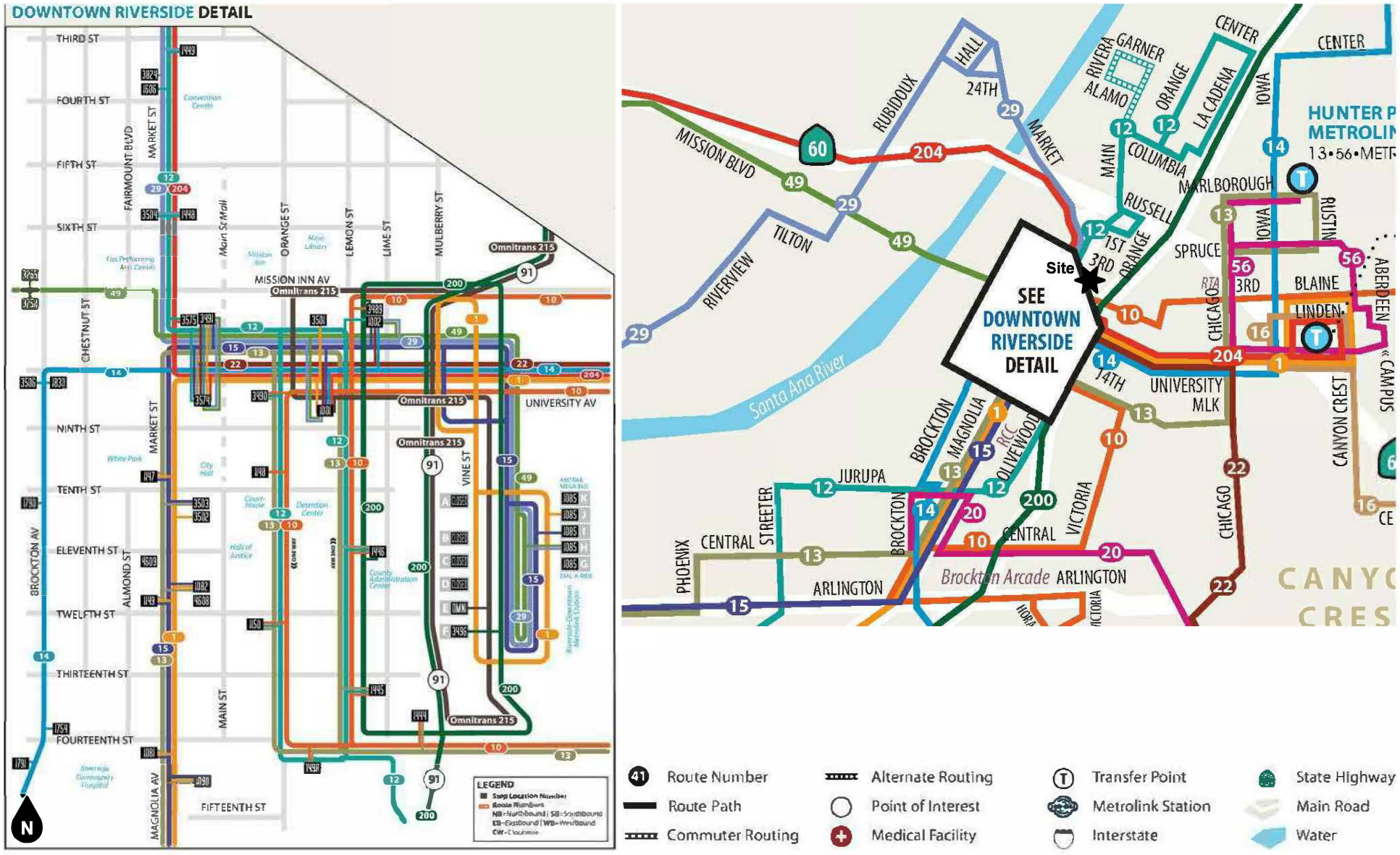
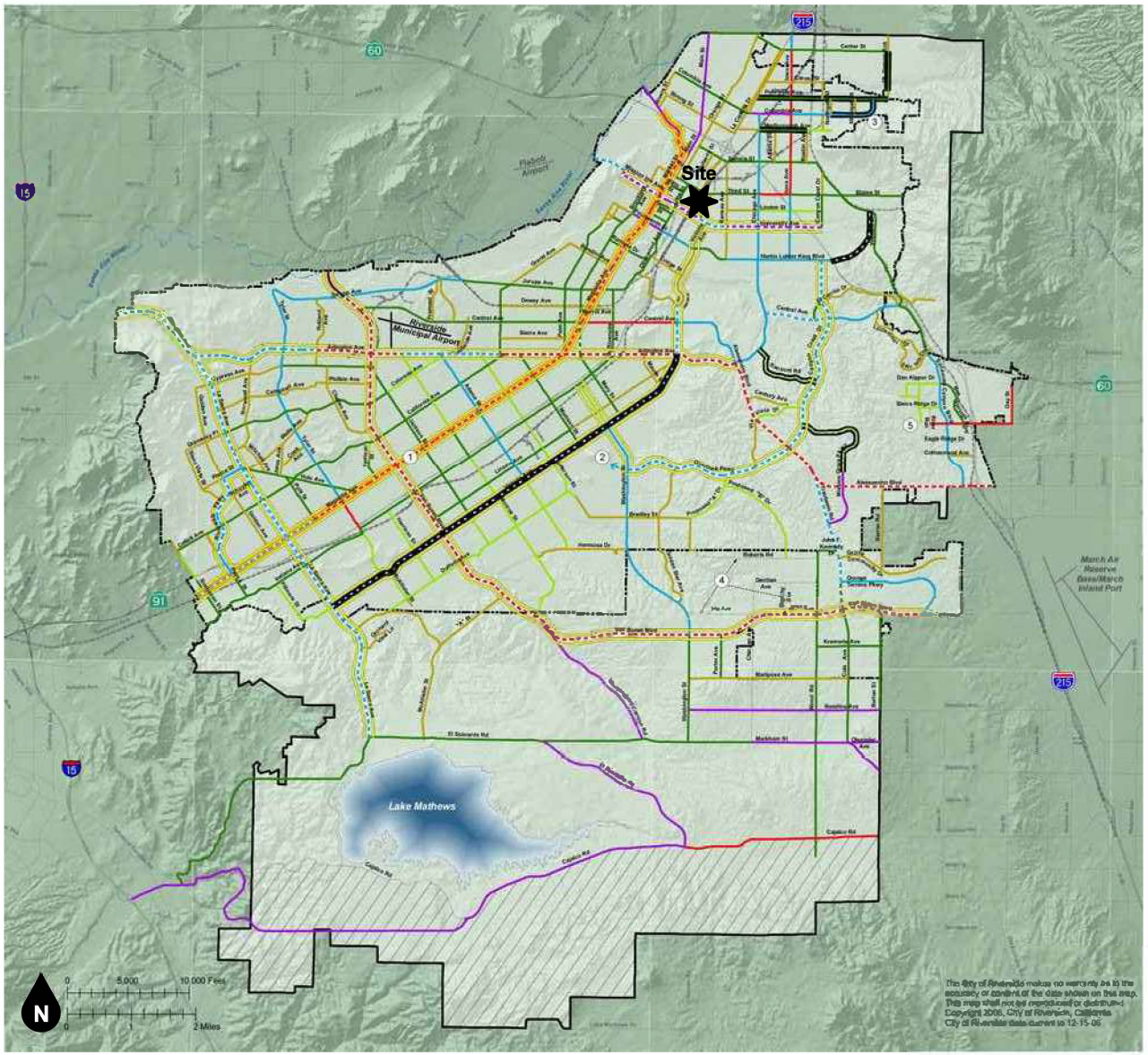


Figure 7
Existing Transit Routes

Source: Riverside Transit Agency



LEGEND

	66 FT LOCAL	2 LANES *
	66 FT COLLECTOR	2 LANES
	80 FT COLLECTOR	2 LANES
	88 FT ARTERIAL	4 LANES
	100 FT ARTERIAL	4 LANES
	110 FT ARTERIAL	4 LANES
	120 FT ARTERIAL	6 LANES
	144 FT ARTERIAL	8 LANES

SCENIC BOULEVARD
REQUIRES SPECIAL LANDSCAPING. ADDITIONAL RIGHT-OF-WAY MAY BE REQUIRED.

SPECIAL BOULEVARD
TWO-LANE DIVIDED ROADWAY OF VARIABLE GEOMETRIC DESIGN

SPECIAL BOULEVARD
VARIABLE WIDTHS AND DESIGN, CONTACT PUBLIC WORKS FOR DETAIL, SEE OBJECTIVE CCM-3 AND POLICIES CCM-3.1 THROUGH CCM-3.5.

PARKWAYS
FOR INFORMATION ON PARKWAYS SEE LAND USE ELEMENT.

CETAP CORRIDOR AREA
CORRIDOR OPTIONS SUBJECT TO SPECIAL STUDY.

RIVERSIDE CITY BOUNDARY

RIVERSIDE PROPOSED SPHERE OF INFLUENCE

NOTE:

* LOCAL STREETS ARE NOT SHOWN ON THIS PLAN EXCEPT WHERE NEEDED FOR CLARITY.

(1) MAGNOLIA AVENUE SHALL BE A SPECIAL BLVD. WITH 4 LANES EASTERLY OF HARRISON STREET.

(2) OVERLOOK PARKWAY SHALL BE A 2-LANE, 110-FOOT ARTERIAL WITH A WIDE MEDIAN PARKWAY. THE ALIGNMENT OF OVERLOOK PARKWAY WESTERLY OF WASHINGTON IS NOT YET DETERMINED PENDING PREPARATION OF SPECIFIC PLAN LEVEL STUDY.

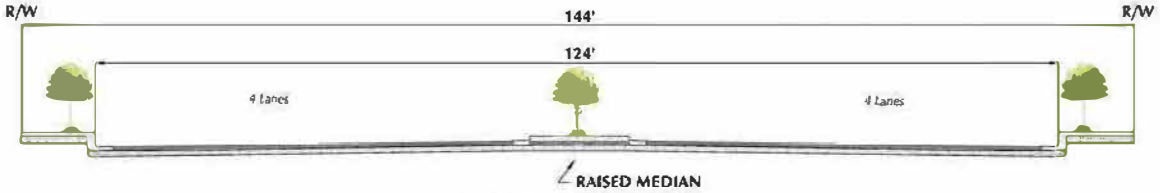
(3) COLUMBIA AVENUE IS SHOWN BY HUNTER BUSINESS PARK SPECIFIC PLAN AS A 134-FOOT ARTERIAL. ACTUAL STREET WIDTH, DUE TO RAILROAD OVERCROSSING , WILL BE DETERMINED BY PUBLIC WORKS.

(4) THESE STREETS SHALL BE 68-FOOT LOCAL ROADWAYS SERVING AS ALTERNATE ROUTES.

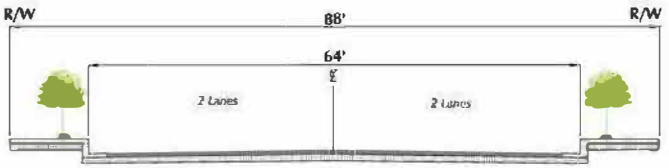
(5) THE STREETS IN SYCAMORE CANYON BUSINESS PARK SPECIFIC PLAN VARY IN SIZE. SEE THE SPECIFIC PLAN FOR DETAILS.

Figure 8
City of Riverside Master Plan of Roadways

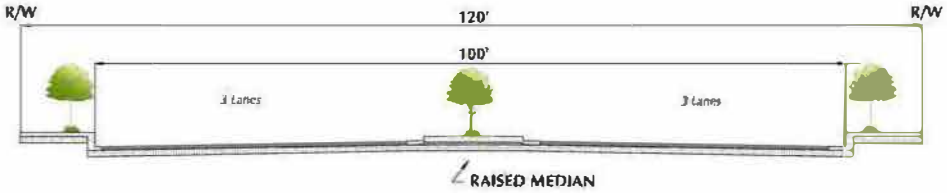
Source: City of Riverside



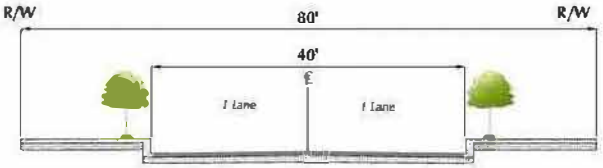
144-FOOT ARTERIAL



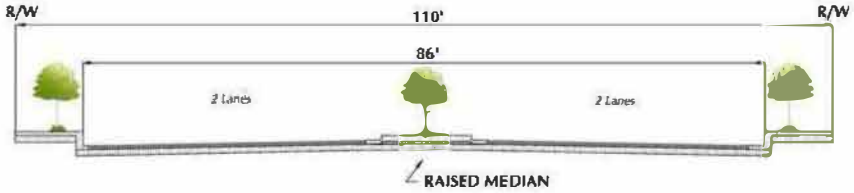
88-FOOT ARTERIAL



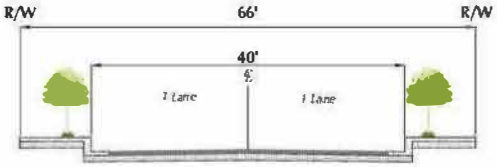
120-FOOT ARTERIAL



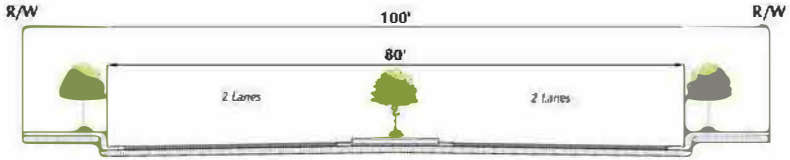
80-FOOT COLLECTOR



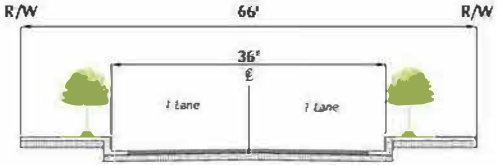
110-FOOT ARTERIAL



66-FOOT COLLECTOR



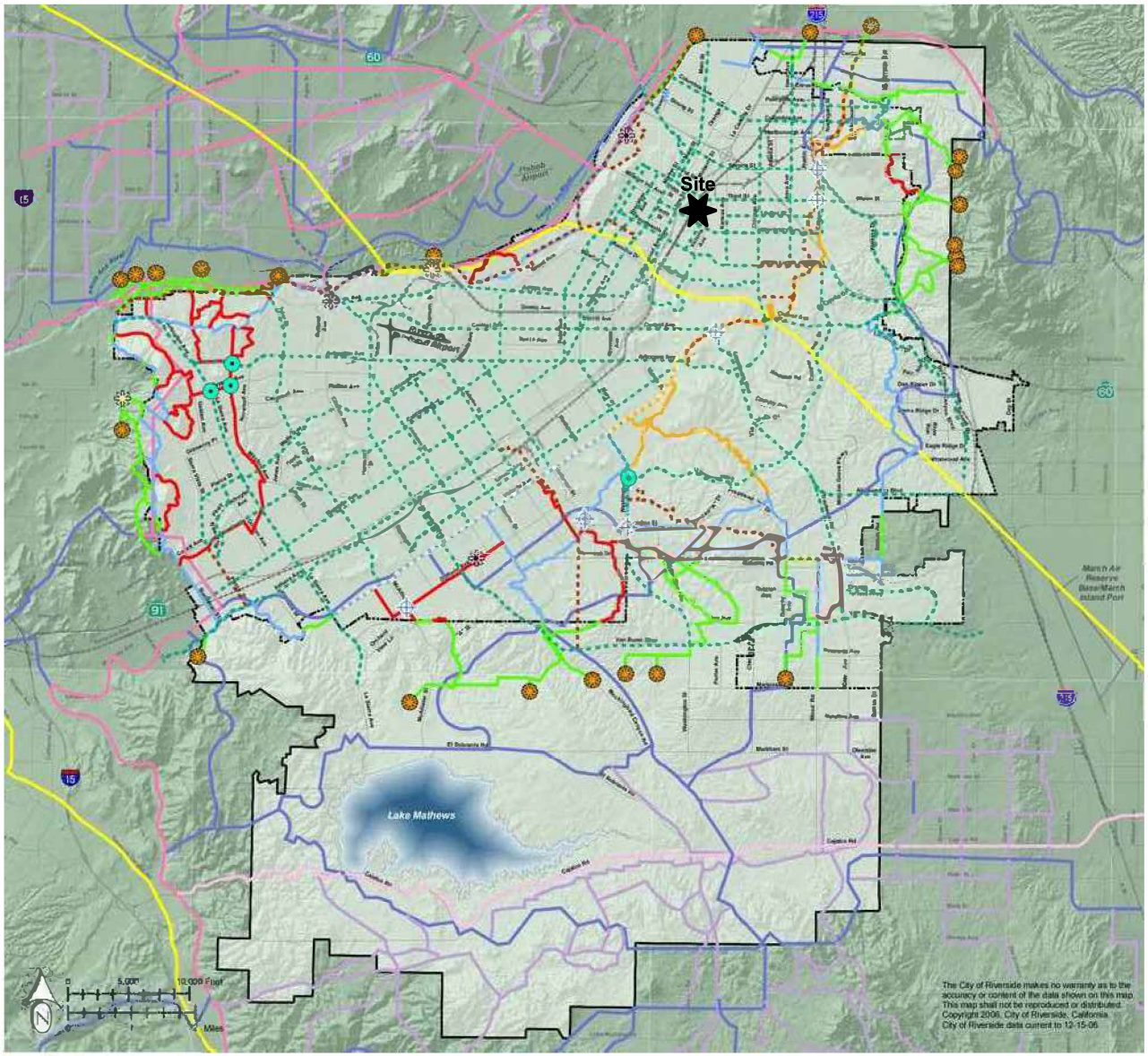
100-FOOT ARTERIAL



LOCAL STREET

Figure 9
City of Riverside General Plan Roadway Cross-Sections

Source: City of Riverside



LEGEND

CITY TRAIL POINTS
- STAGING AREAS EXISTING FACILITIES
- STAGING AREAS PROPOSED FACILITIES
- CONNECTION TO COUNTY DESIGNATED TRAILS
- TRAIL CROSSING PROPOSED STOP SIGN
- TRAIL CROSSING PROPOSED TRAFFIC SIGNAL

CITY TRAILS
- PRIMARY - EQUESTRIAN, BIKE & PEDESTRIAN TRAIL
- SECONDARY - EQUESTRIAN, BIKE & PEDESTRIAN TRAIL
- SECONDARY - NO EQUESTRIAN
- IN ADJACENT JURISDICTION

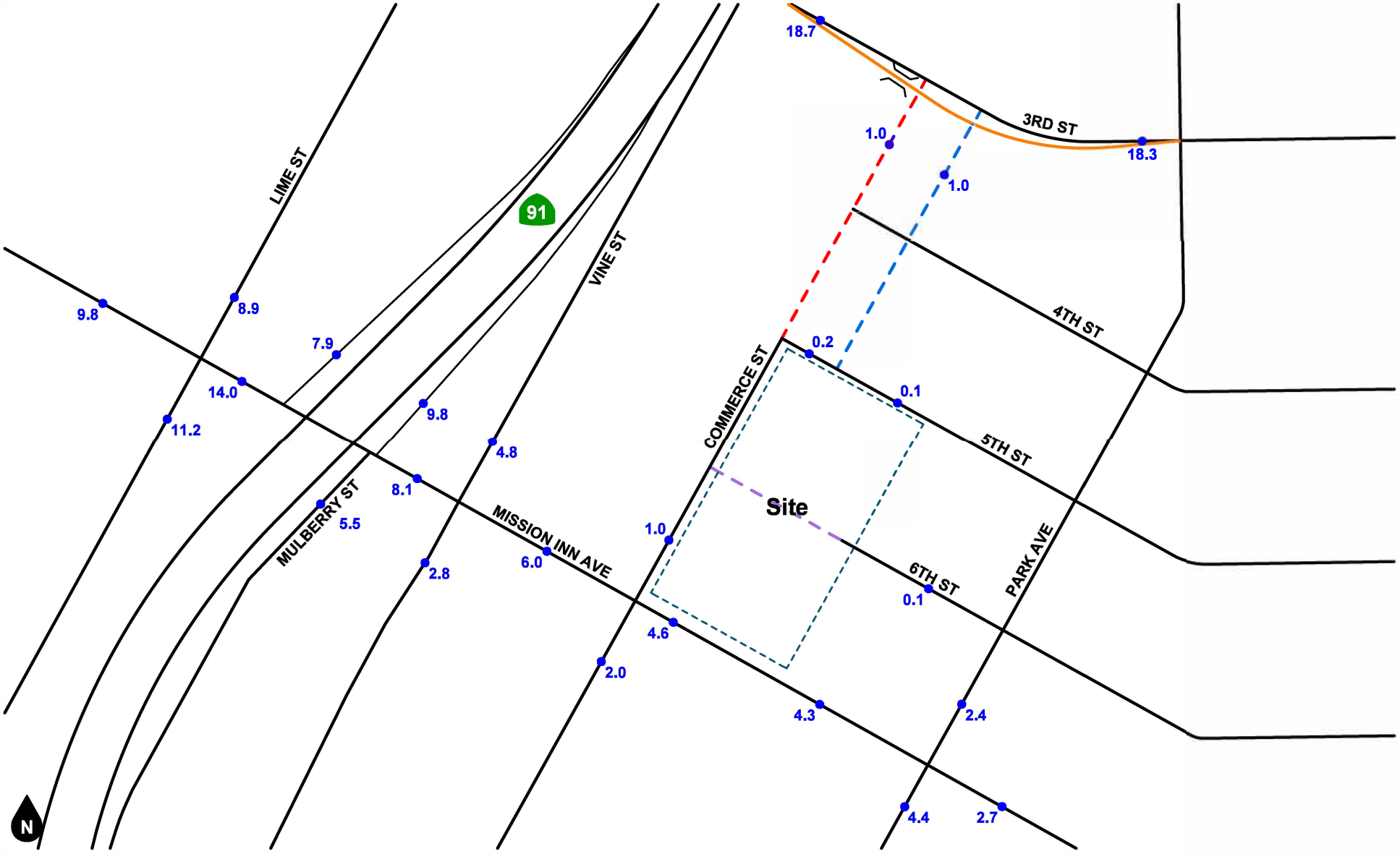
CITY BIKEWAYS
- CLASS 1
- CLASS 1&2
- CLASS 2

RIVERSIDE COUNTY TRAILS
- CLASS 1 BIKE PATH
- CLASS 1 BIKE PATH/REGIONAL TRAIL
- COMMUNITY TRAIL
- REGIONAL TRAIL
- HISTORIC TRAIL

- RIVERSIDE CITY BOUNDARY
- RIVERSIDE PROPOSED SPHERE OF INFLUENCE

Figure 10
City of Riverside Master Plan of Trails and Bikeways

Source: City of Riverside



Legend

●## Vehicles Per Day (1,000's)

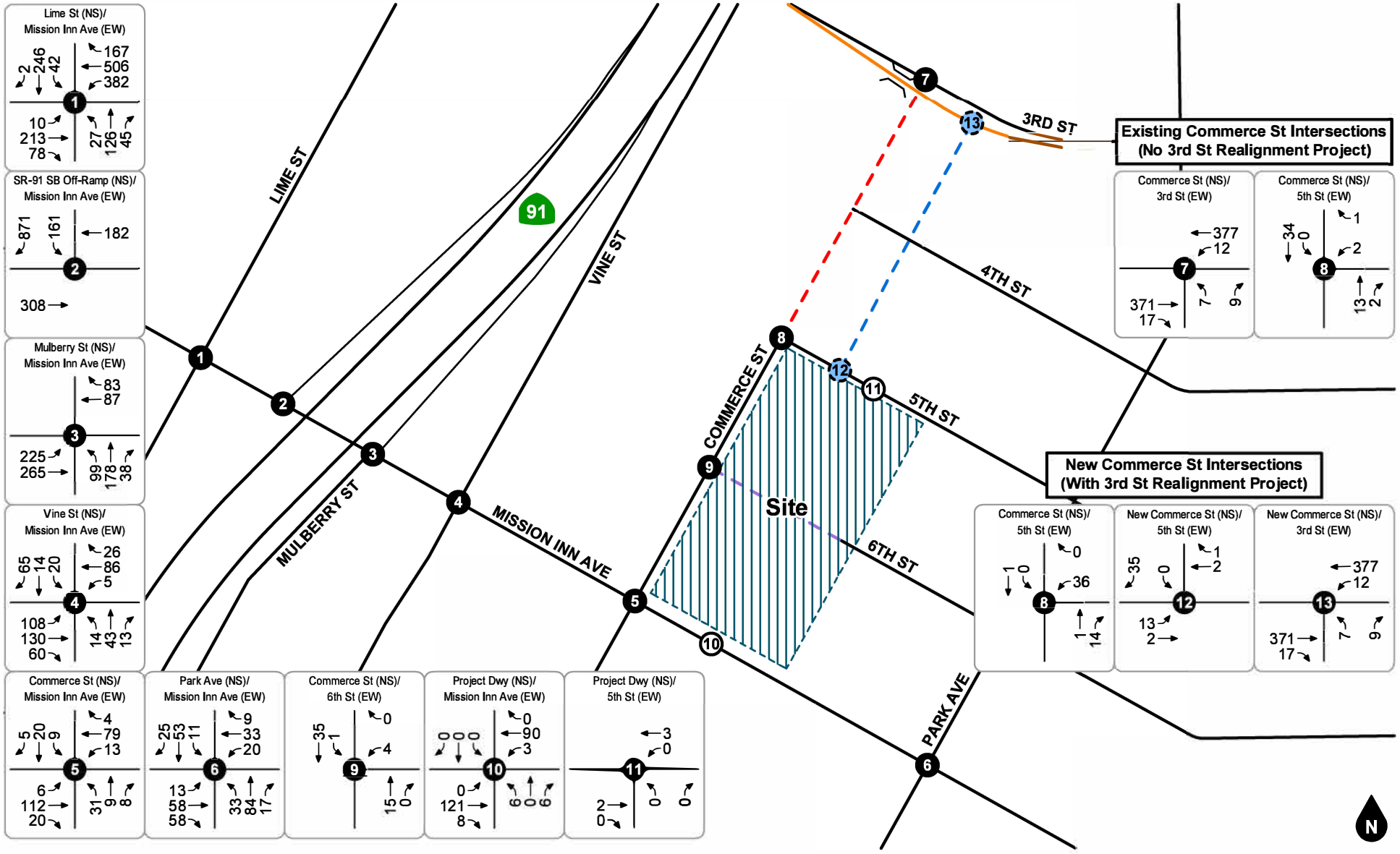
Planned 3rd Street Grade Separation Project (City Project)

Planned Commerce Street Realignment (City Project)

Planned Commerce Street Vacation (City Project)

Proposed 6th Street Vacation (Project)

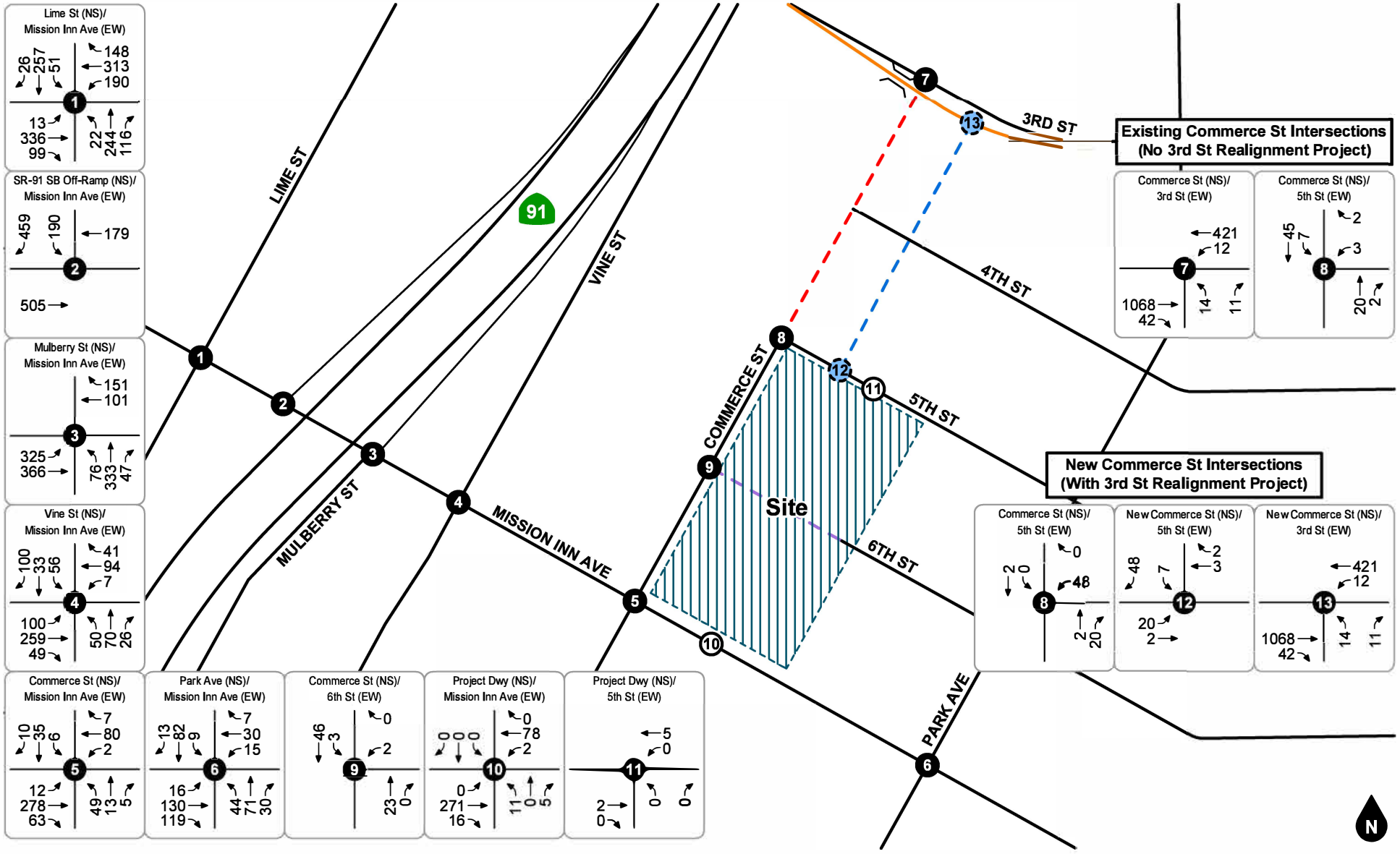
Figure 11
Existing Average Daily Traffic Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

Figure 12
Existing AM Peak Hour Intersection Turning Movement Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

Figure 13
Existing PM Peak Hour Intersection Turning Movement Volumes

4. PROJECT TRIP FORECASTS

This section describes how project trip generation, trip distribution, and trip assignment forecasts were developed. The forecast project volumes are illustrated in the figures contained in this section.

PROJECT TRIP GENERATION

Table 3 shows the existing, proposed and net new project trip generation forecast is based on average rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021) for Land Use Codes 869 (Discount Home Furnishing Superstore), 221 (Multifamily Housing – Mid-rise, Close to transit) and 220 (Multifamily Housing – Low-rise, Close to transit).

As shown in Table 3, the proposed project is forecast to generate a total of approximately 1,213 net new daily trips, including 90 net new trips during the AM peak hour and 72 net new trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION & ASSIGNMENT

Figure 14 and Figure 15 show the forecast outbound and inbound directional distribution patterns for the project generated trips, respectively. The project trip distribution patterns were developed using engineering judgment in consultation with the City engineering staff based on a review of existing traffic data, surrounding land uses, and the local and regional roadway facilities in the project vicinity.

Based on the identified project trip generation and distributions, The project-generated average daily traffic volumes are shown in Figure 16. The project-generated AM peak hour and PM peak hour intersection turning movement volumes are shown in Figure 17 and Figure 18.

Table 3
Project Trip Generation

Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Land Use Variable[2]	% In	% Out	Rate	% In	% Out	Rate	Daily Rate
Discount Home Furnishing Superstore	ITE 869	TSF	64%	36%	0.57	53%	47%	1.57	20.00
Multifamily Housing (Low-Rise, Close to Rail Transit)	ITE 220	DU	29%	71%	0.38	60%	40%	0.61	4.72
Multifamily Housing (Mid-Rise, Close to Rail Transit)	ITE 221	DU	36%	64%	0.32	65%	35%	0.29	4.75

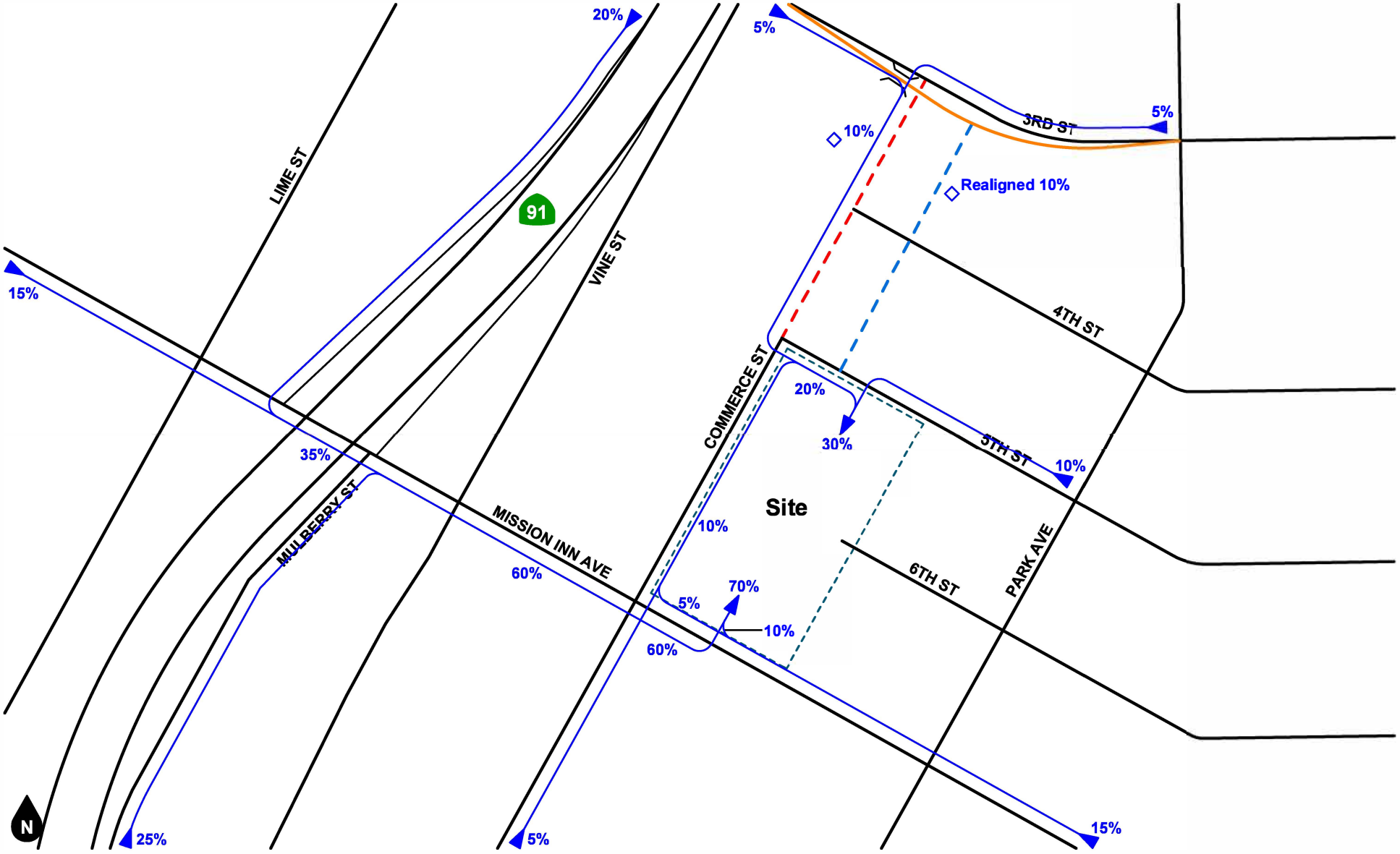
Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Source	Quantity	In	Out	Total	In	Out	Total	Daily
Existing to be removed									
Discount Home Furnishing Superstore	ITE 869	-10.620 TSF	-4	-2	-6	-9	-8	-17	-212
Proposed development									
Multifamily Housing (Mid-Rise, Close to Rail Transit)	ITE 221	295 DU	34	60	94	56	30	86	1,401
Multifamily Housing (Low-Rise, Close to Rail Transit)	ITE 220	5 DU	1	1	2	2	1	3	24
Subtotal Proposed Development			**35**	**61**	**96**	**58**	**31**	**89**	**1,425**
TOTAL NET NEW VEHICLE TRIPS GENERATED			**+ 31**	**+ 59**	**+ 90**	**+ 49**	**+ 23**	**+ 72**	**+ 1,213**

Notes:
1. ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code. All rates based on General Urban/Suburban setting.
2. DU = Dwelling Unit; TSF = Thousand Square Feet.

Legend

- 10% Percent From Project
- Planned 3rd Street Grade Separation Project (By Others)
- Planned Commerce Street Realignment (By Others)
- Planned Commerce Street Vacation (By Others)
- ◇ Movements north of the project will divert to the realigned Commerce Street when roadway construction is finished

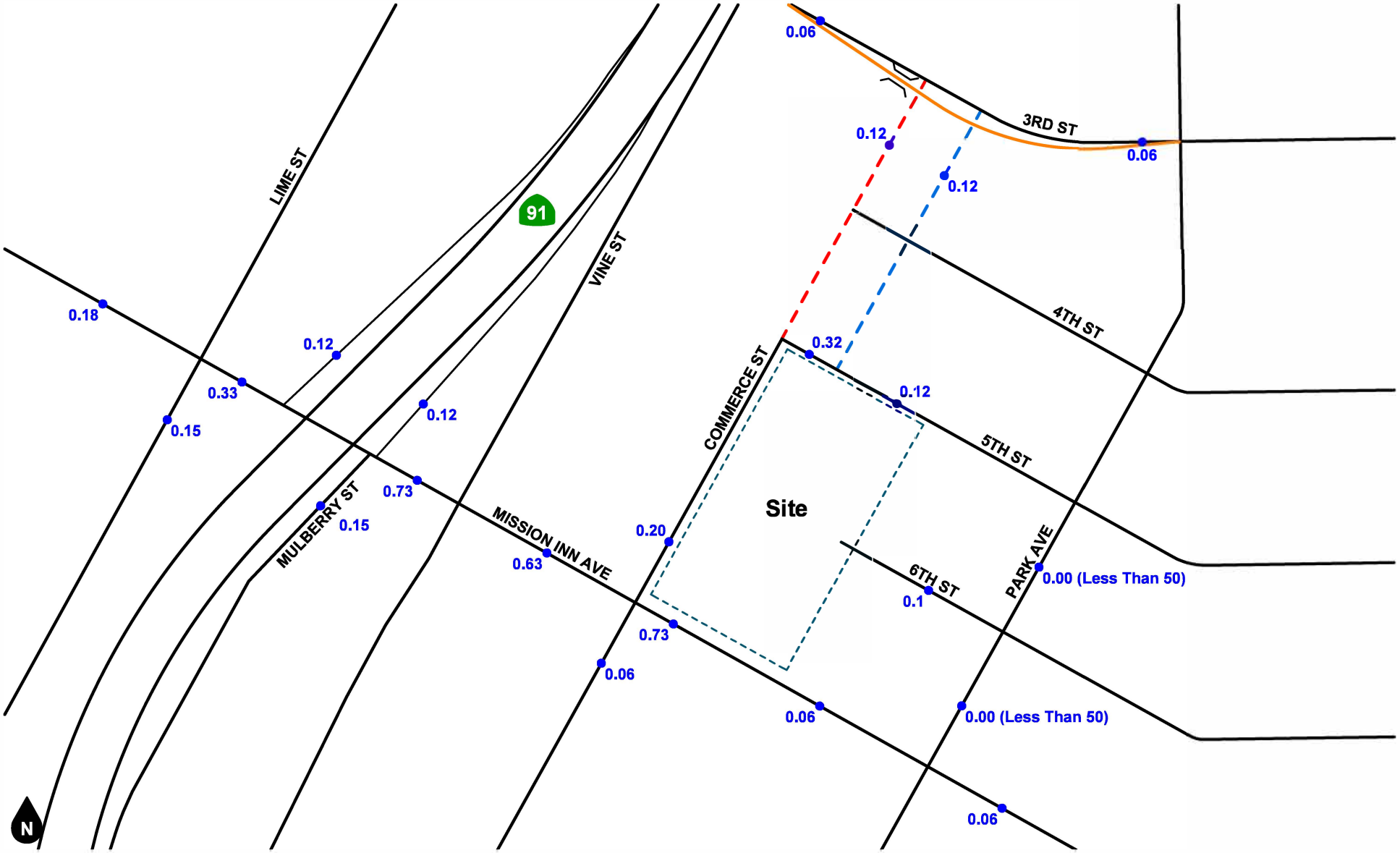
Figure 14
Project Trip Distribution (Outbound)



Legend

- 10% Percent To Project
- Planned 3rd Street Grade Separation Project (By Others)
- Planned Commerce Street Realignment (By Others)
- Planned Commerce Street Vacation (By Others)
- ◇ Movements north of the project will divert to the realigned Commerce Street when roadway construction is finished

Figure 15
Project Trip Distribution (Inbound)



Legend

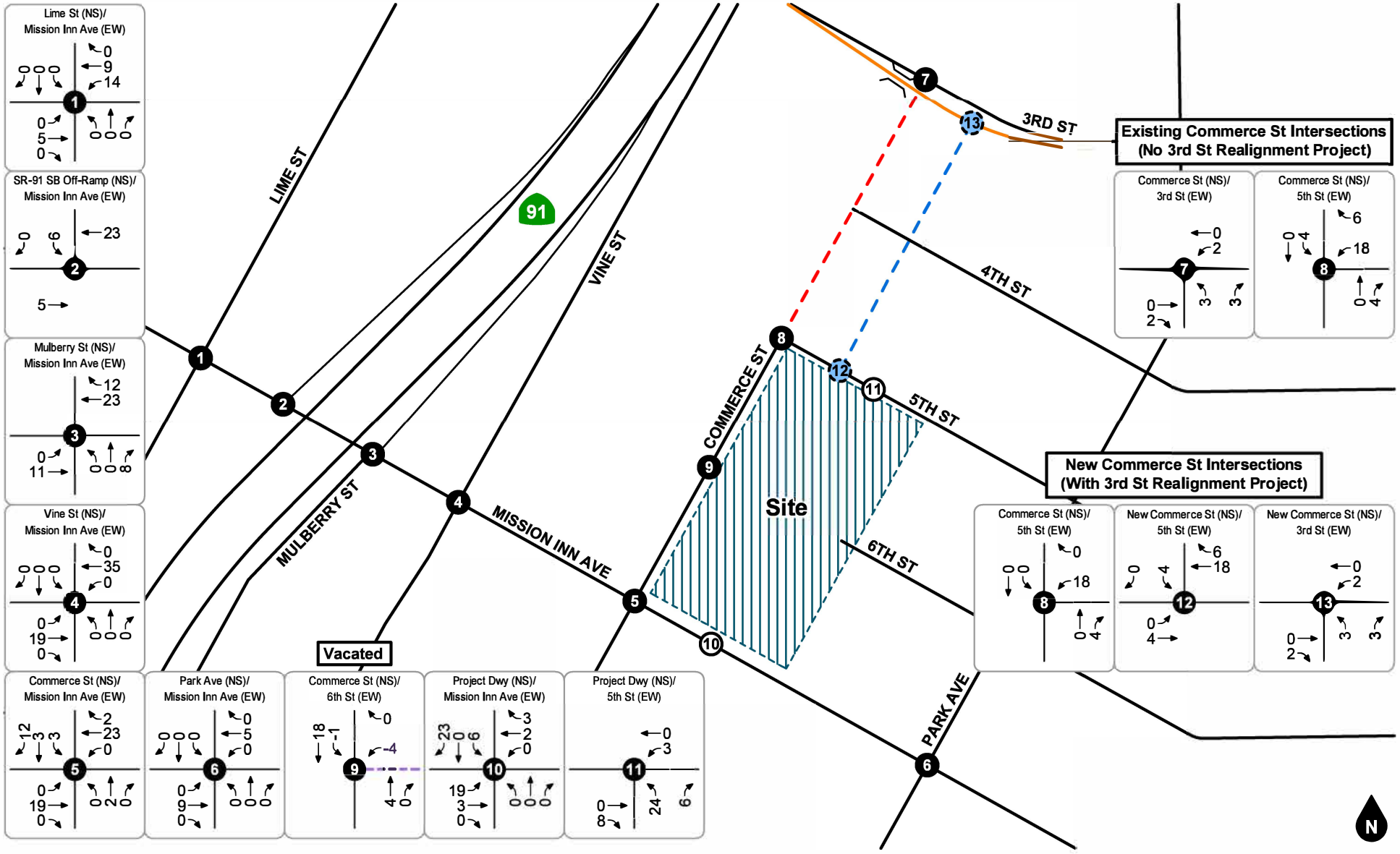
●## Vehicles Per Day (1,000's)

Planned 3rd Street Grade Separation Project (City Project)

Planned Commerce Street Realignment (City Project)

Planned Commerce Street Vacation (City Project)

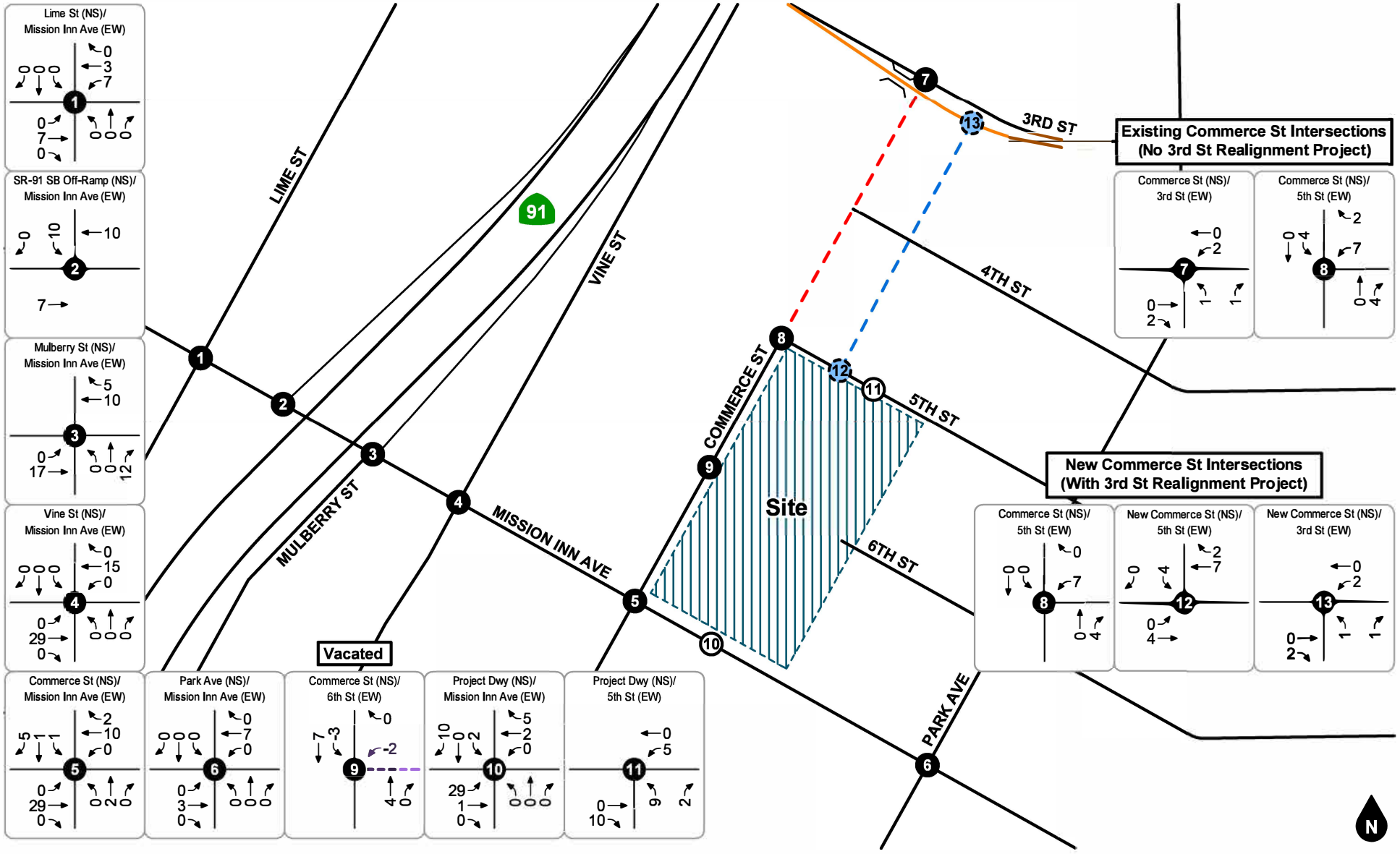
Figure 16
Project Average Daily Traffic Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

Figure 17
Project AM Peak Hour Intersection Turning Movement Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

Figure 18
Project PM Peak Hour Intersection Turning Movement Volumes

5. FUTURE VOLUME FORECASTS

This section describes how future volume forecasts for each analysis scenario were developed. Forecast study area volumes are illustrated in the figures contained in this section.

METHOD OF PROJECTION

To assess future conditions, existing volumes were combined with project trips, ambient growth, and other development trips. The project completion date for analysis purposes in this report is 2026.

Ambient Growth

To account for ambient growth, Opening Year (2026) roadway volumes were developed by increasing existing (year 2024) volumes by a growth rate of two percent (2.0%) per year over a two (2) year period for a total growth factor of 1.04. The ambient growth was applied to all movements at the study intersections.

Other Developments

To account for growth associated with other development projects, trips generated by other pending or approved but unconstructed developments in the City of Riverside were reviewed and added to the study area as appropriate. The other development trip generation summary is shown in Table 4 The regional ambient growth is assumed to account for any additional trips generated by other developments not specifically listed in Table 4. Figure 19 shows the other development location map.

Average daily traffic volumes generated by other developments are shown in Figure 20. Figure 21 and Figure 22 show the forecast AM peak hour and PM peak hour intersection turning movement volumes for trips generated by other developments.

Regional Travel Demand Model Growth

The Buildout Year 2045 average daily traffic volumes were determined using the Riverside County Transportation Model (RIVCOM) base Year (2018) and future Year (2045) average daily travel demand model plots. The difference, between the base traffic volumes and the future traffic volumes, defines the incremental growth in the forecasted volumes over the 27-year period between 2018 and 2045. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between the current year (2024) and year 2045 based on the linear growth determined between the base year and future year forecast. Since the increment between the current year and Year 2045 is 21 years of the 27-year time frame, a factor of 0.79 (i.e., 21/28) was used.

To derive Year 2045 AM and PM peak hour intersection turning movement volumes, the traffic volume growth forecasts from the base year and future year AM and PM travel demand model plots were further refined using a spreadsheet program developed by the Federal Highway Administration and consistent with traffic volume forecasting procedures outlined in the National Cooperative Highway Research Program Report 255. The spreadsheet program uses a linear programming algorithm to calculate future turning movements based on the relationship of existing intersection turning movements and forecast model growth. The forecast turning movements developed by the spreadsheet program were reviewed for reasonableness and adjusted as necessary to ensure growth over near-term forecasts. The end results of the post-processing procedures are future intersection turning movement volumes suitable for analysis. Travel demand model plots are included in Appendix E and post-processing worksheets are provided in Appendix F.

6th Street Vacation

The proposed plan also includes a street vacation of 6th Street from Commerce Street to the east side of the project. To account for the closure of 6th Street on the east side of the proposed project, the existing traffic has been redistributed to the adjacent streets and intersections.

Commerce Street Realignment

The 3rd Street Grade Separation project includes a bridge for the grade separation of train and vehicle traffic, roadway improvements on 3rd Street and the realignment of Commerce Street away from the bridge structure. The preliminary layout of the 3rd Street Grade Separation project is included in Appendix G.

For the 3rd Street Grade Separation project conditions, the Commerce Street traffic north of 5th Street is diverted to the new Commerce Street realignment.

ANALYSIS SCENARIO VOLUMES

The scenarios listed below are for the current Commerce Street alignment and for the planned Commerce Street realignment which is to occur with the 3rd Street Grade Separation project.

Existing Plus Project

The Existing Plus Project volume forecast was developed by adding project-generated trips and 6th Street vacation redistribution trips to the Existing volumes. Existing Plus Project average daily traffic volumes are shown in Figure 23. Existing Plus Project AM peak hour and PM peak hour intersection turning movement volumes are shown in Figure 24 and Figure 25.

Opening Year (2026) Without Project

The Opening Year (2026) Without Project volume forecast was developed by applying the ambient growth factor to existing volumes and adding trips generated by other developments. Opening Year (2026) Without Project average daily traffic volumes are shown in Figure 26. Opening Year (2026) Without Project AM peak hour and PM peak hour intersection turning movement volumes are shown in Figure 27 and Figure 28.

Opening Year (2026) With Project

The Opening Year (2026) With Project volume forecast was developed by adding project-generated trips and 6th Street vacation redistribution trips to the Opening Year (2026) Without Project volumes. Opening Year (2026) With Project average daily traffic volumes are shown in Figure 29. Opening Year (2026) With Project AM peak hour and PM peak hour intersection turning movement volumes are shown in Figure 30 and Figure 31.

Buildout Year 2045 Without Project

The Buildout Year 2045 Without Project volume forecast was developed based on the regional travel demand model growth as described above. Buildout Year 2045Without Project average daily traffic volumes are shown in Figure 32. Buildout Year 2045 Without Project AM peak hour and PM peak hour intersection turning movement volumes are shown in Figure 33 and Figure 34.

Buildout Year 2045 With Project

The Buildout Year 2045 With Project volume forecast was developed by adding project-generated trips and 6th Street vacation redistribution trips to the Buildout Year 2045 Without Project volumes. Buildout Year

2045 With Project average daily traffic volumes are shown in Figure 35. Buildout Year 2045 With Project AM peak hour and PM peak hour intersection turning movement volumes are shown in Figure 36 and Figure 37.

Table 4
Other Development Trip Generation

Trips Generated											
					AM Peak Hour			PM Peak Hour			
ID	Name/Address	Land Use	Source	Quantity	In	Out	Total	In	Out	Total	Daily
1	2375 Third St.	General Light Industrial	ITE 110	26.076 TSF	17	2	19	2	15	17	127
2	2069 Massachusetts Ave.	Warehousing	ITE 150	199.850 TSF	26	8	34	10	26	36	342
3	Patterson St. and Minnesota St.	Multifamily Housing (Low-Rise, Not Close to Rail Transit)	ITE 220	33 DU	3	10	13	11	6	17	222
4	1970 Patterson St.	Multifamily Housing (LRNCT)	ITE 220	57 DU	5	18	23	18	11	29	384
5	2060 University Ave	Library	ITE 590	15.000 TSF	11	4	15	59	63	122	1081
6	2039 University Ave.	Strip Retail Plaza (<40k)	ITE 822	5.000 TSF	7	5	12	16	17	33	272
7	3466 Mission Inn Ave.	Hotel	ITE 310	225 RM	58	46	104	68	65	133	1798
8	4088 Mission Inn Ave.	Multifamily Housing (LRNCT)	ITE 220	18 DU	2	5	7	6	3	9	121
		Strip Retail Plaza (<40k)	ITE 822	1.477 TSF	2	1	3	5	5	10	80
		Subtotal			4	6	10	11	8	19	201
9	4088 Mission Inn Ave.	Fast Casual Restaurant	ITE 930	1.006 TSF	1	0	1	7	6	13	98
10	1575 University Ave	Multifamily Housing (LRNCT)	ITE 220	257 DU	25	78	103	83	48	131	1732
		Strip Retail Plaza (<40k)	ITE 822	4.431 TSF	6	4	10	15	14	29	241
		Subtotal			31	82	113	98	62	160	1973
11	3521 Main St.	Fast Casual Restaurant	ITE 930	2.050 TSF	1	2	3	14	12	26	199
12	3491 Market St.	Strip Retail Plaza (<40k)	ITE 822	3.400 TSF	5	3	8	11	11	22	185
13	3491 Market St.	Multifamily Housing (LRNCT)	ITE 220	4 DU	0	2	2	1	1	2	27
14	3102 Main St.	Multifamily Housing (LRNCT)	ITE 220	85 DU	8	26	34	27	16	43	573
15	3102 Main St.	Convenience Store Gas Station	ITE 945	1.500 TSF	30	31	61	36	37	73	936
16	2941 Market St.	Single-Family Attached Housing	ITE 215	17 DU	2	6	8	6	4	10	122
17	3861 Third St	Affordable Housing - Income Limits	ITE 223	38 DU	6	13	19	10	7	17	183
18	2450 Market St.	Senior Adult Housing - Multifamily	ITE 252	75 DU	5	10	15	11	8	19	243
19	2610 Durahart St.	Small Office Building	ITE 712	4.000 TSF	5	2	7	3	6	9	58
		Strip Retail Plaza (<40k)	ITE 822	2.000 TSF	3	2	5	7	6	13	109
		Truck-Trailer Storage Yard	DATA[3]	52 PRK	1	3	4	3	2	5	68
		Subtotal			9	7	16	13	14	27	235
20	2790 Fourteenth St.	Strip Retail Plaza (<40k)	ITE 822	1.183 TSF	2	1	3	4	4	8	64
21	4135 Market St	Multifamily Housing (LRNCT)	ITE 220	30 DU	3	9	12	10	5	15	202
22	3112 Kansas Ave	Hospital	ITE 610	374 BED	482	187	669	209	423	632	8348
23	4414 Brockton Ave	Medical-Dental Office Building (Within/Near Hospital Campus)	ITE 720	18.000 TSF	39	9	48	13	38	51	573
		Automobile Parts and Service	ITE 943	4.500 TSF	6	3	9	4	5	9	75
		Subtotal			45	12	57	17	43	60	648

Notes:

1. ITE = Institute of Transportation Engineers Trip Generation Manual (11th Edition, 2021); ### = Land Use Code. All rates based on General Urban/Suburban setting.
2. DU = Dwelling Unit; TSF = Thousand Square Feet; RM = Hotel Rooms; BED = Hospital Beds, PRK = Truck-trailer parking spaces; LRNCT = Low-Rise Not Close to Transit.
3. DATA = Trip Generation from counts of truck-trailer yards.

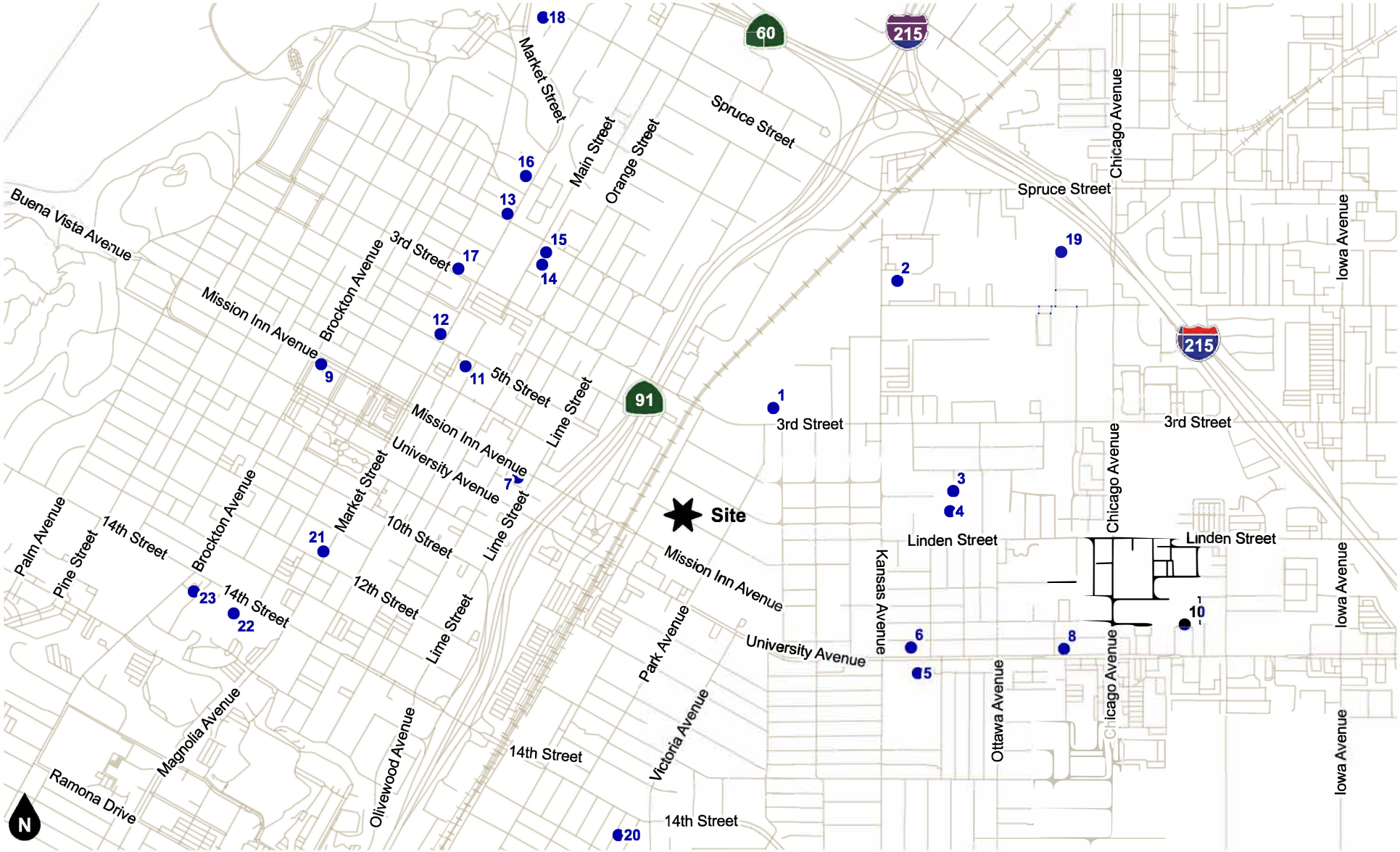
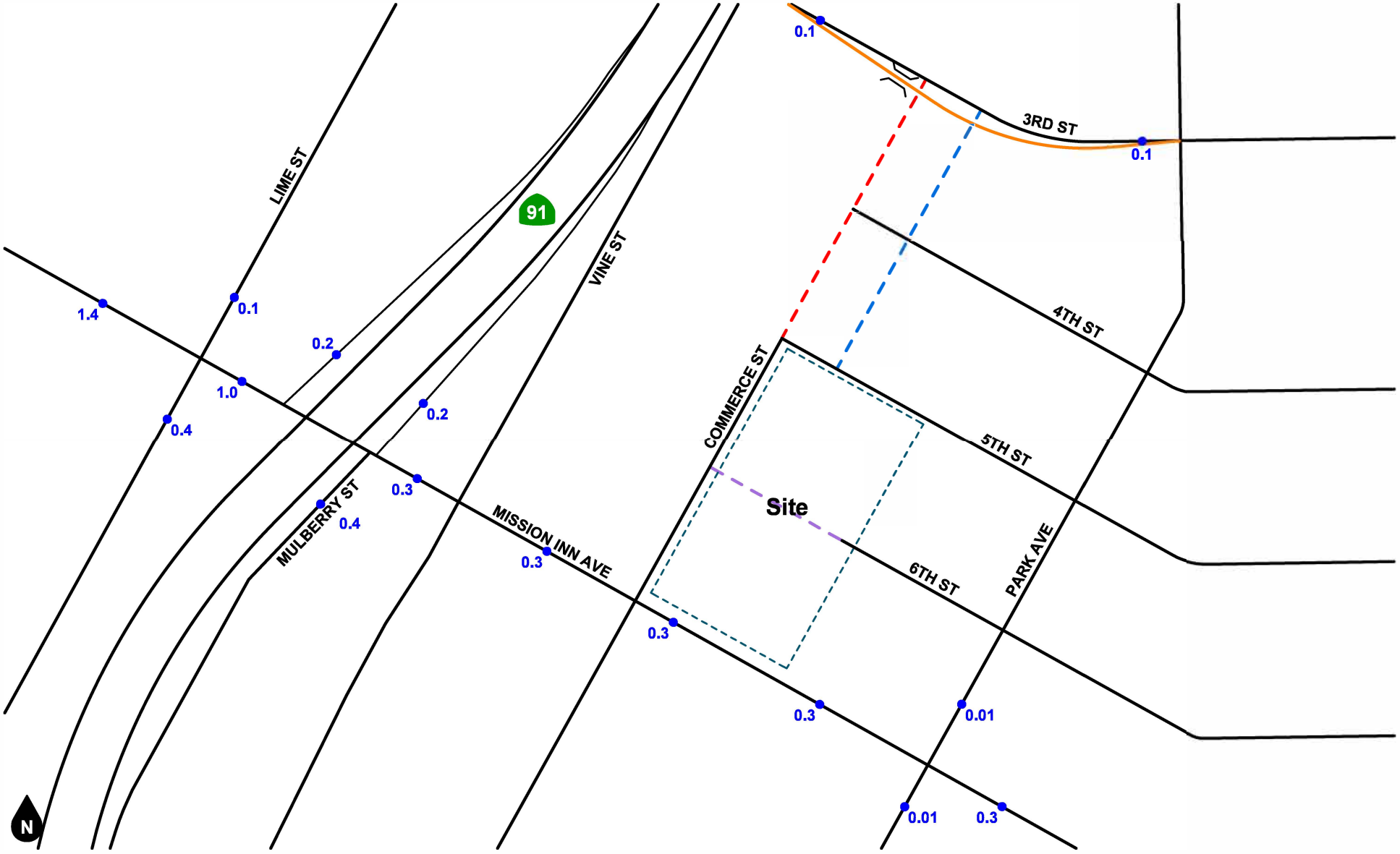


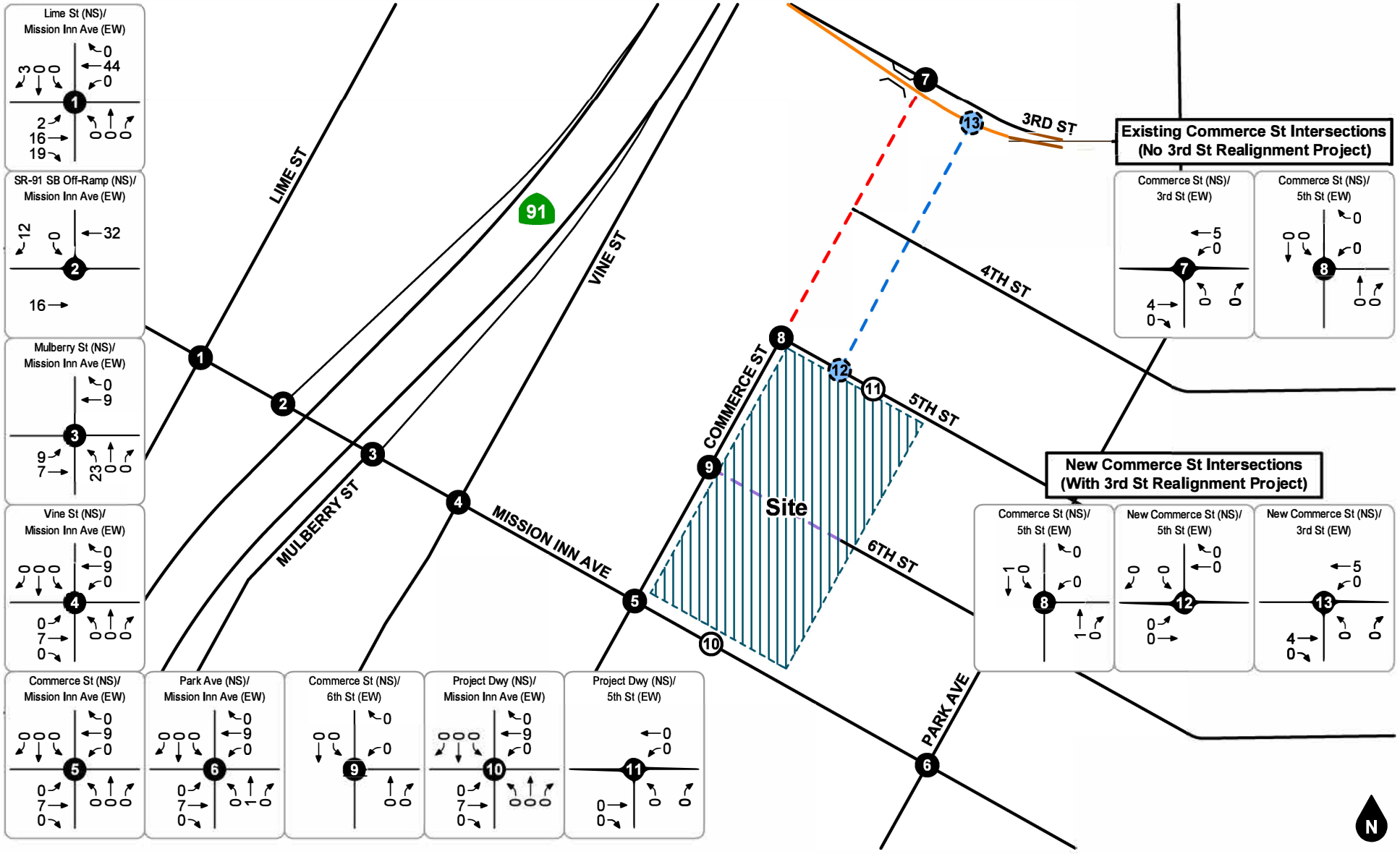
Figure 19
Other Development Location Map



Legend

- ●## Vehicles Per Day (1,000's)
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

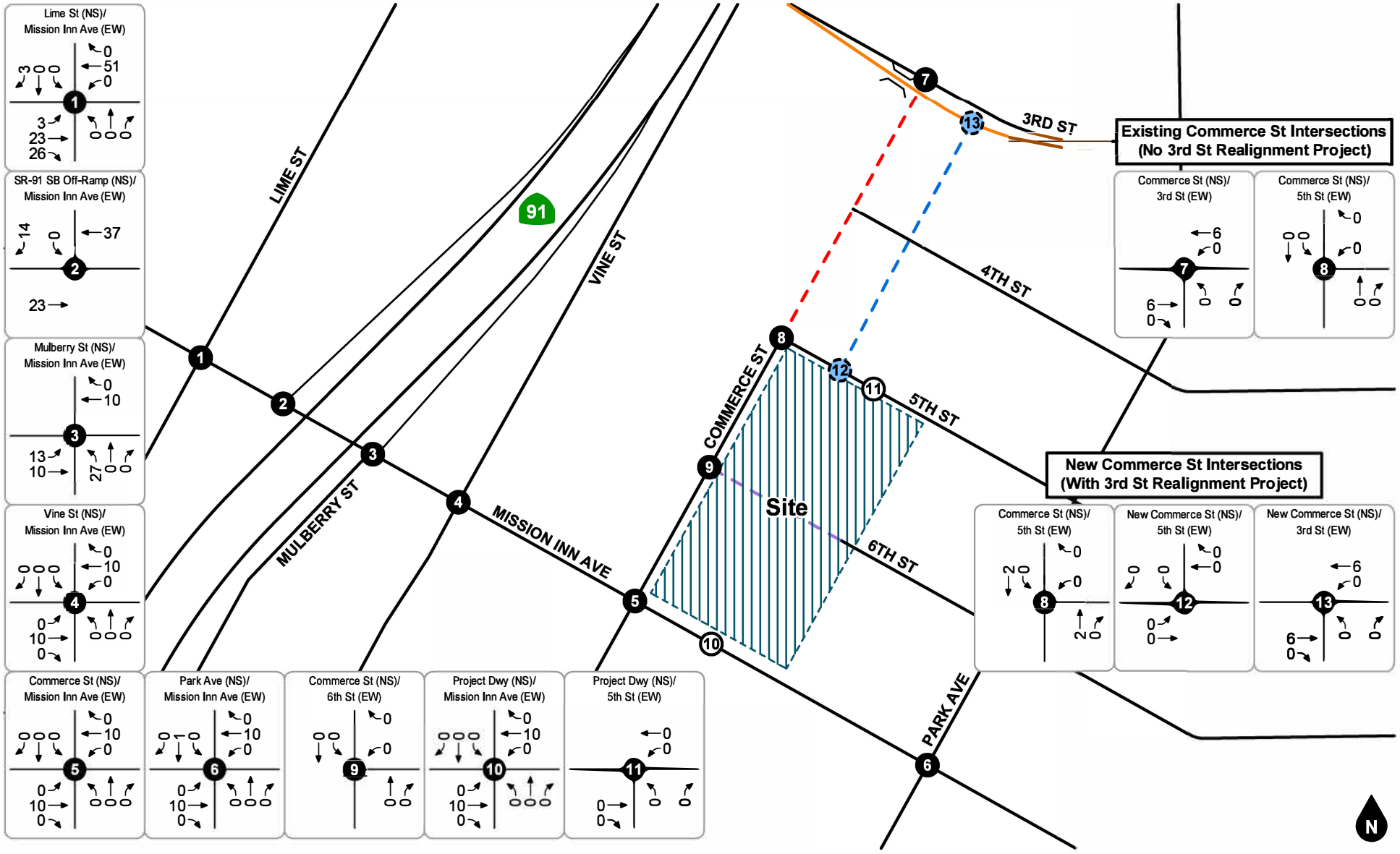
Figure 20
Other Development Average Daily Traffic Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

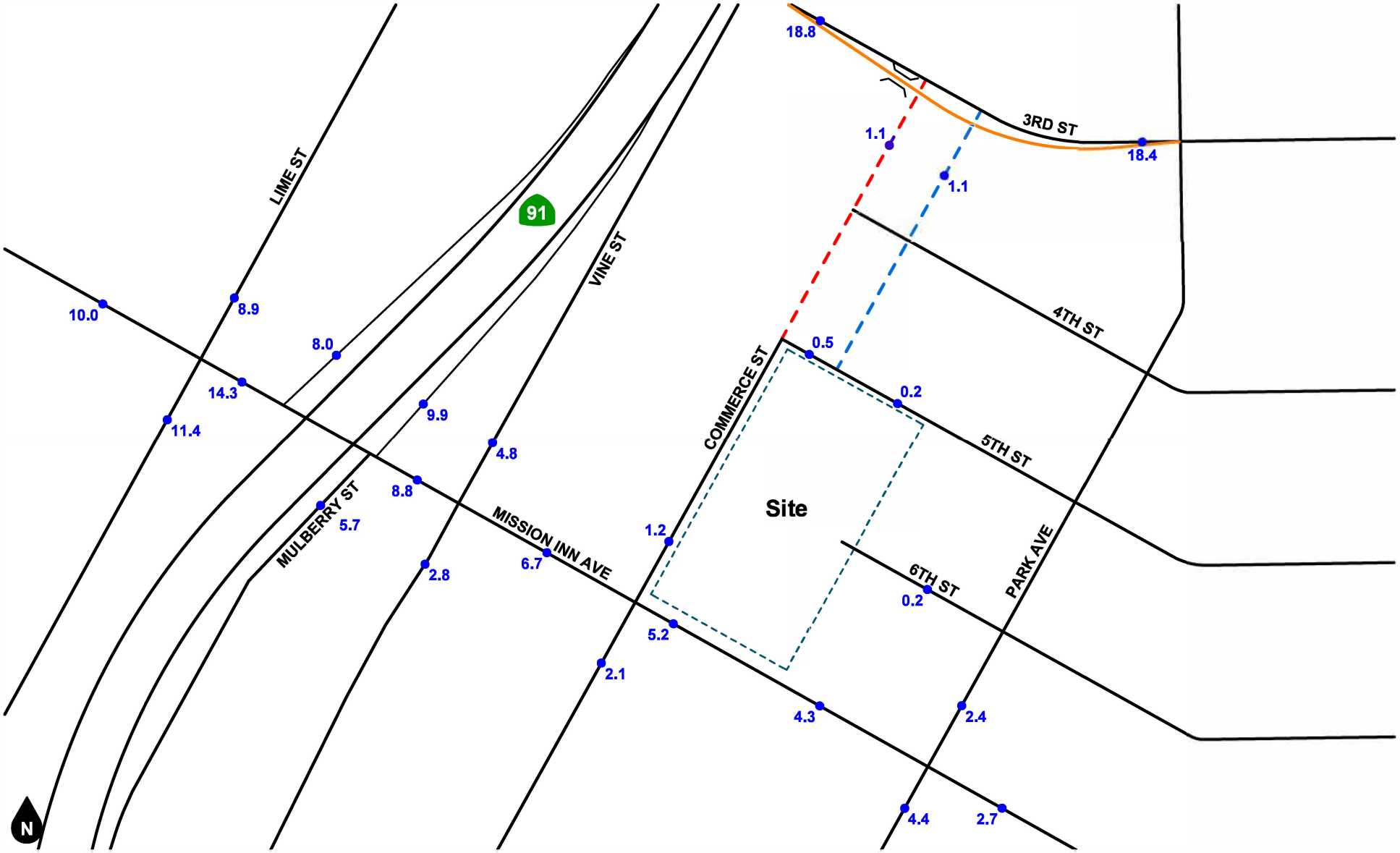
Figure 21
Other Development
AM Peak Hour Intersection Turning Movement Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

Figure 22
Other Development
PM Peak Hour Intersection Turning Movement Volumes



Legend

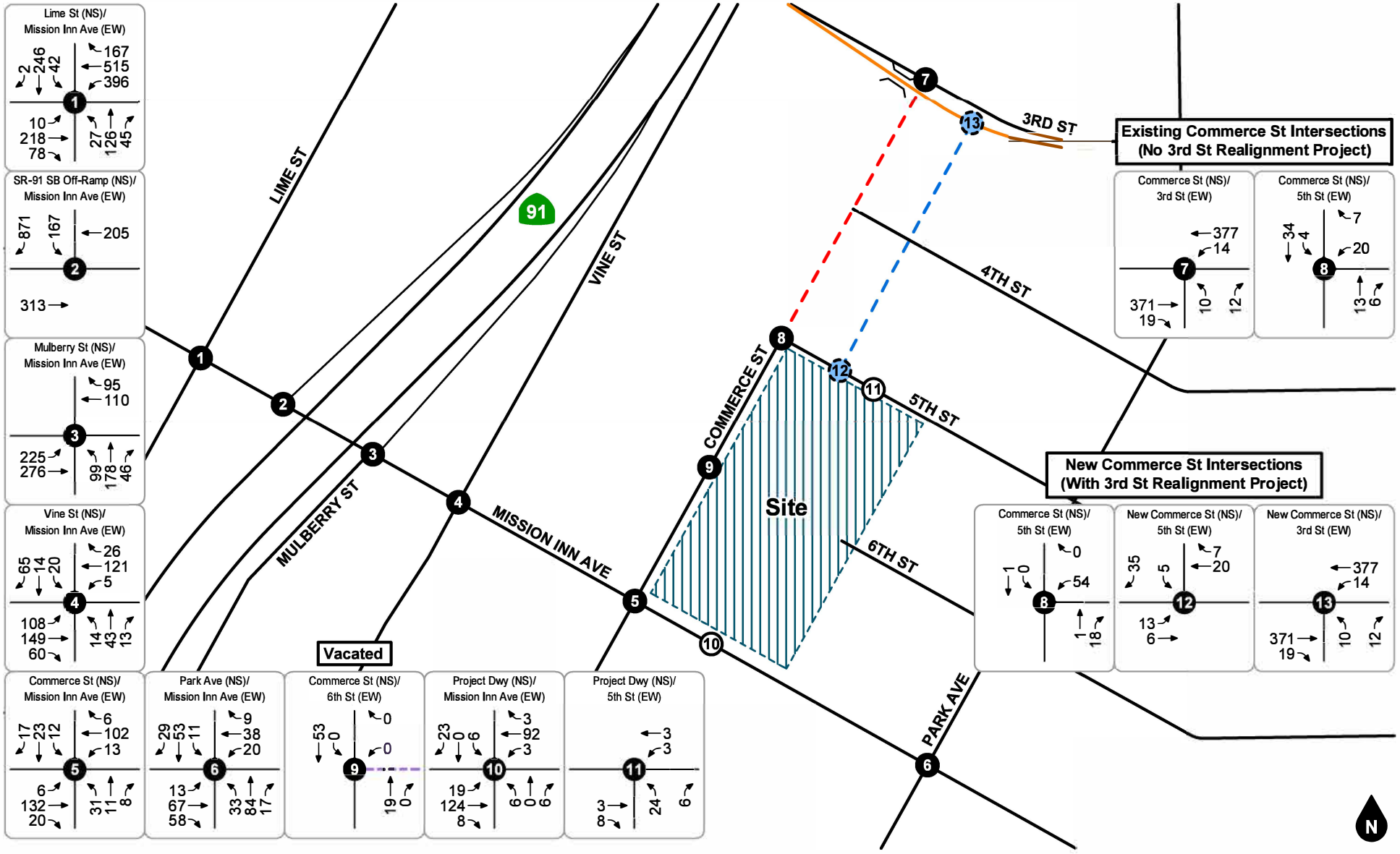
●## Vehicles Per Day (1,000's)

Planned 3rd Street Grade Separation Project (City Project)

Planned Commerce Street Realignment (City Project)

Planned Commerce Street Vacation (City Project)

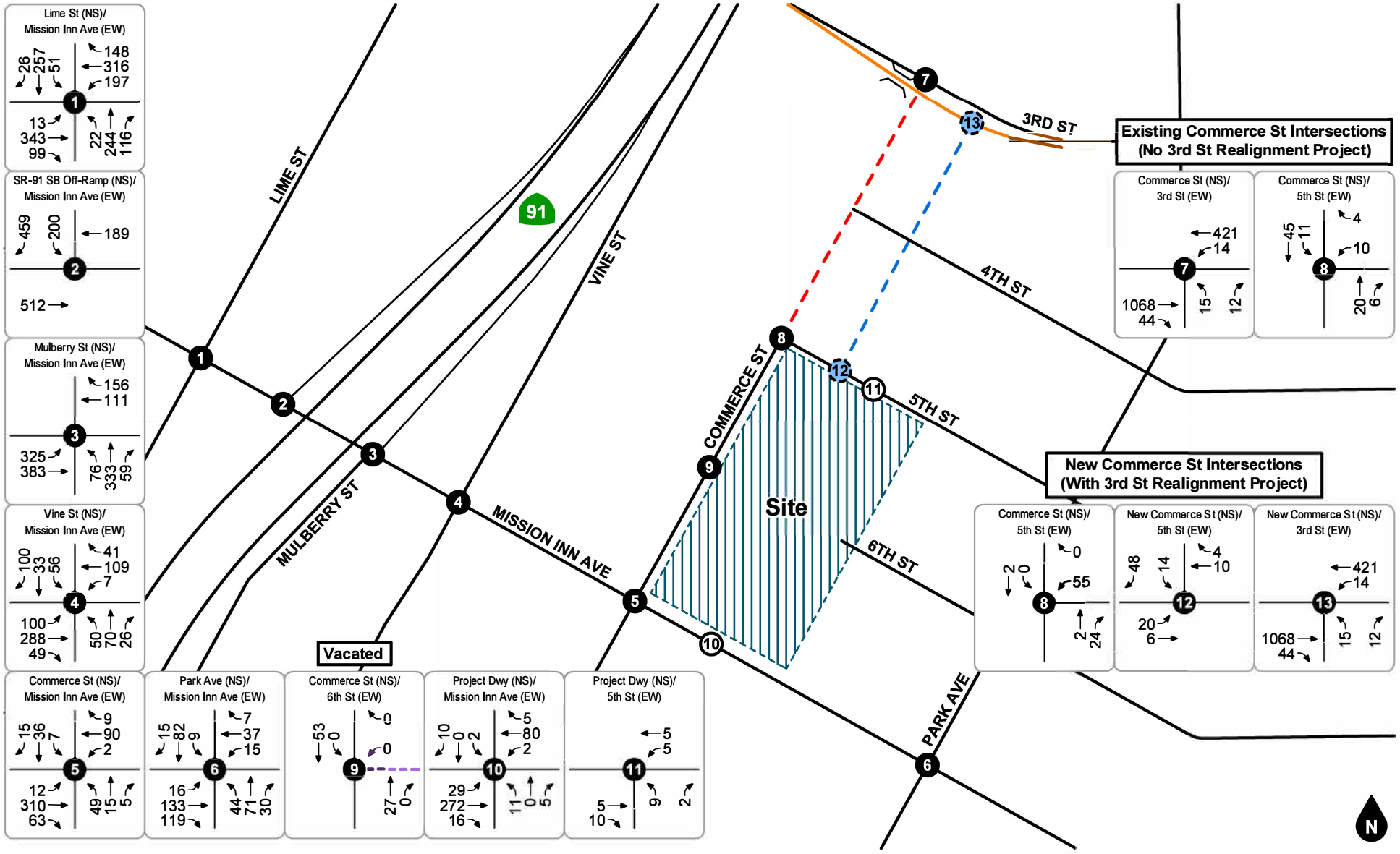
Figure 23
Existing Plus Project Project Average Daily Traffic Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

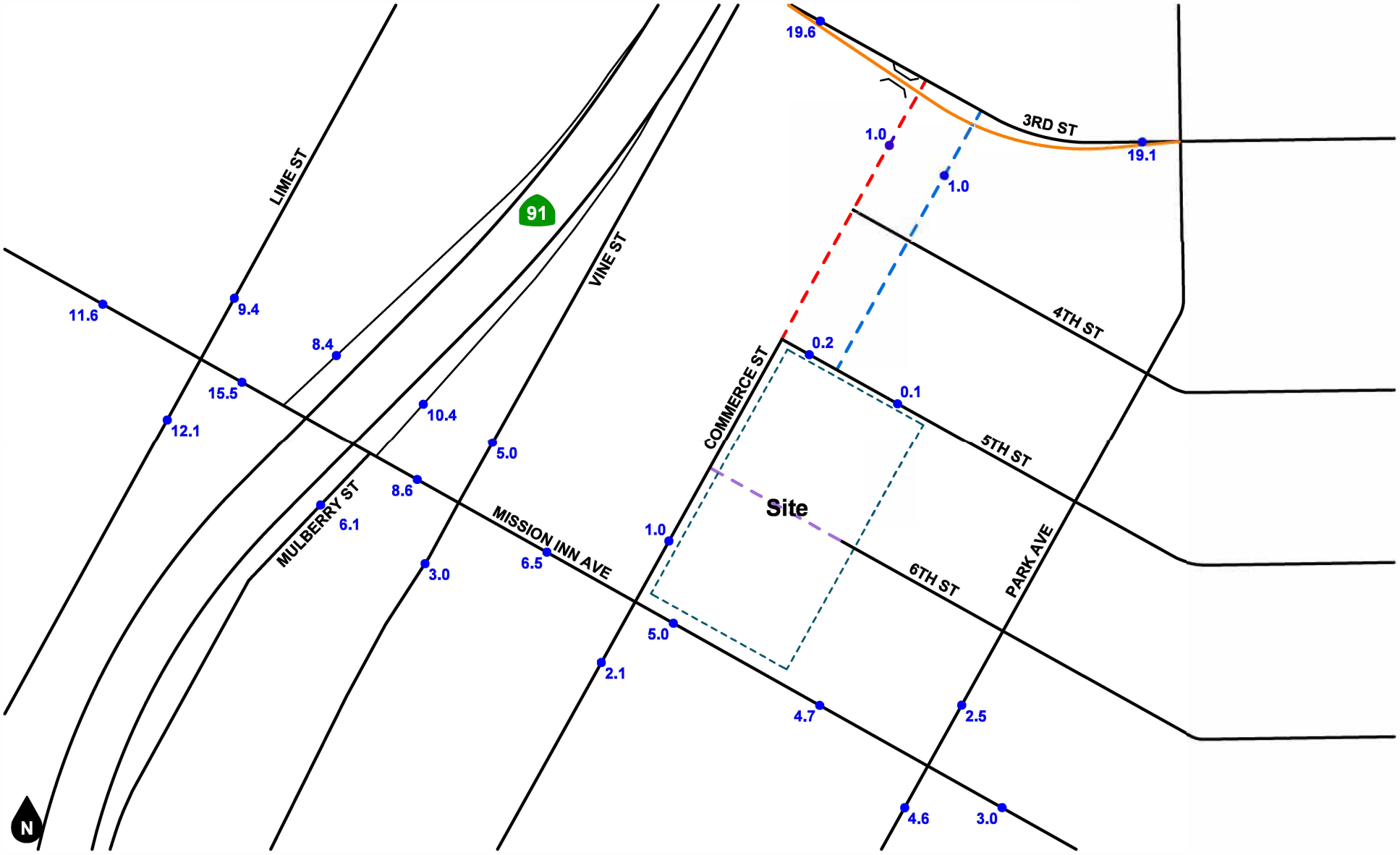
Figure 24
Existing Plus Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

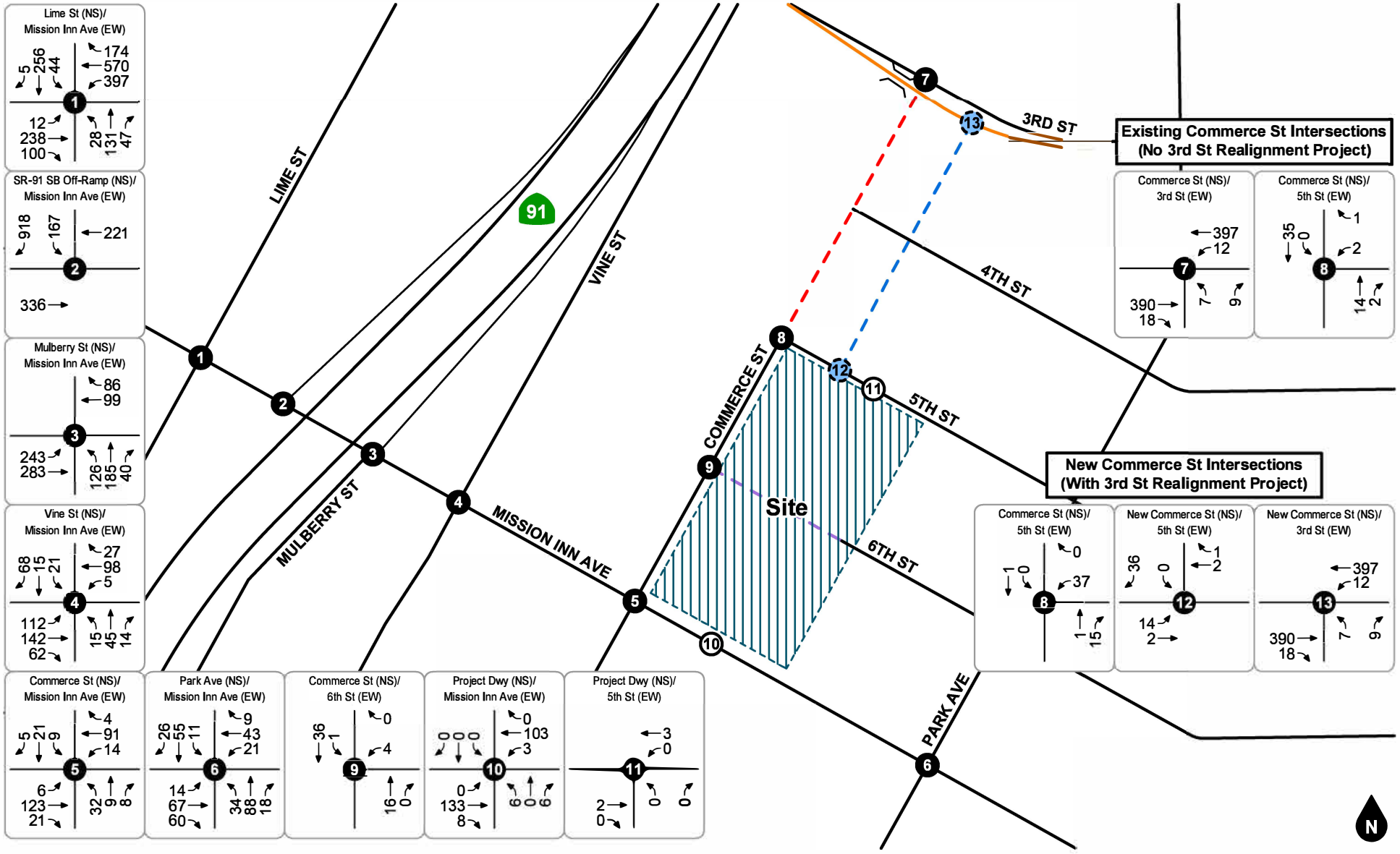
Figure 25
Existing Plus Project
PM Peak Hour Intersection Turning Movement Volumes



Legend

- ●## Vehicles Per Day (1,000's)
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

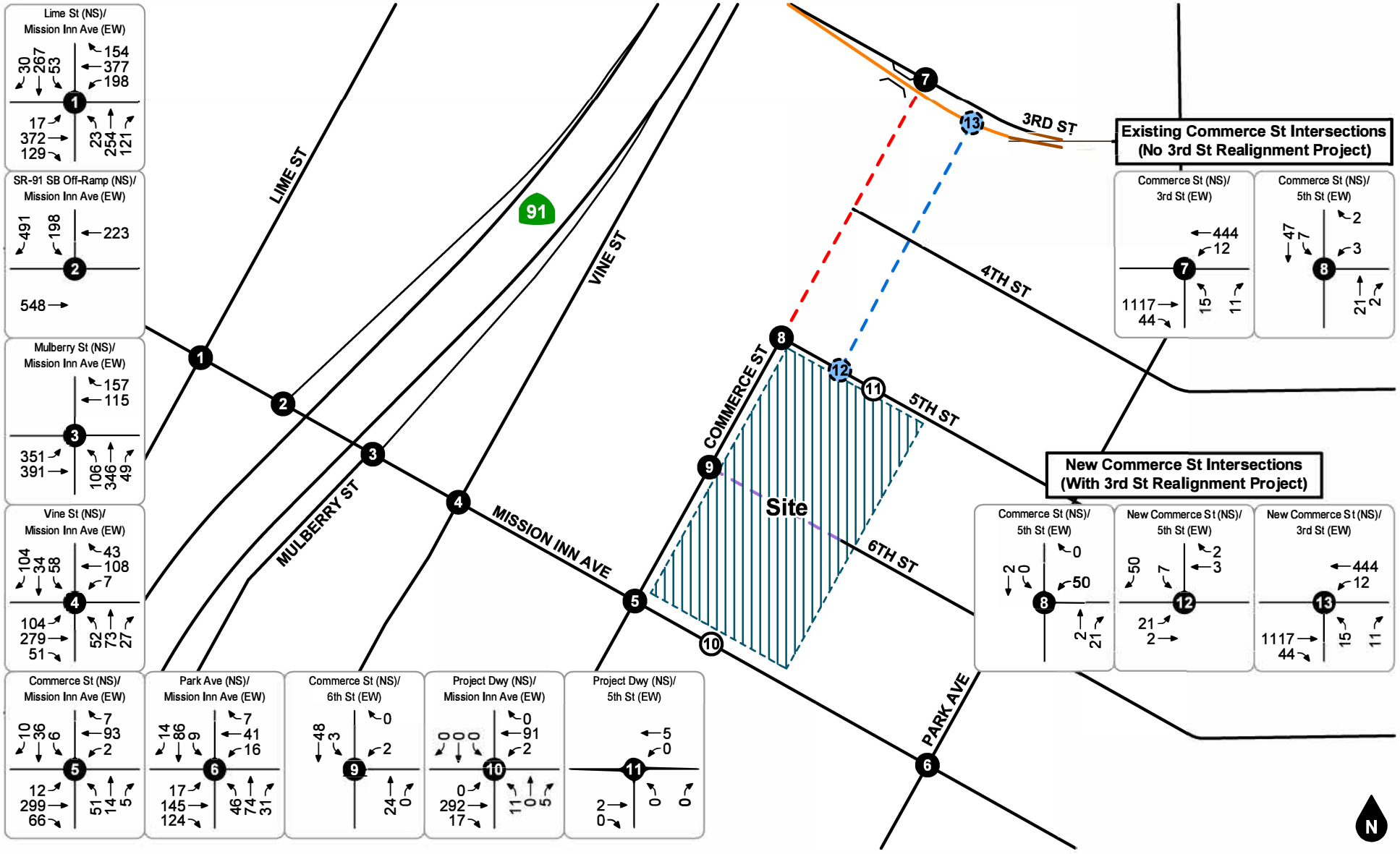
Figure 26
Opening Year (2026) Without Project Average Daily Traffic Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

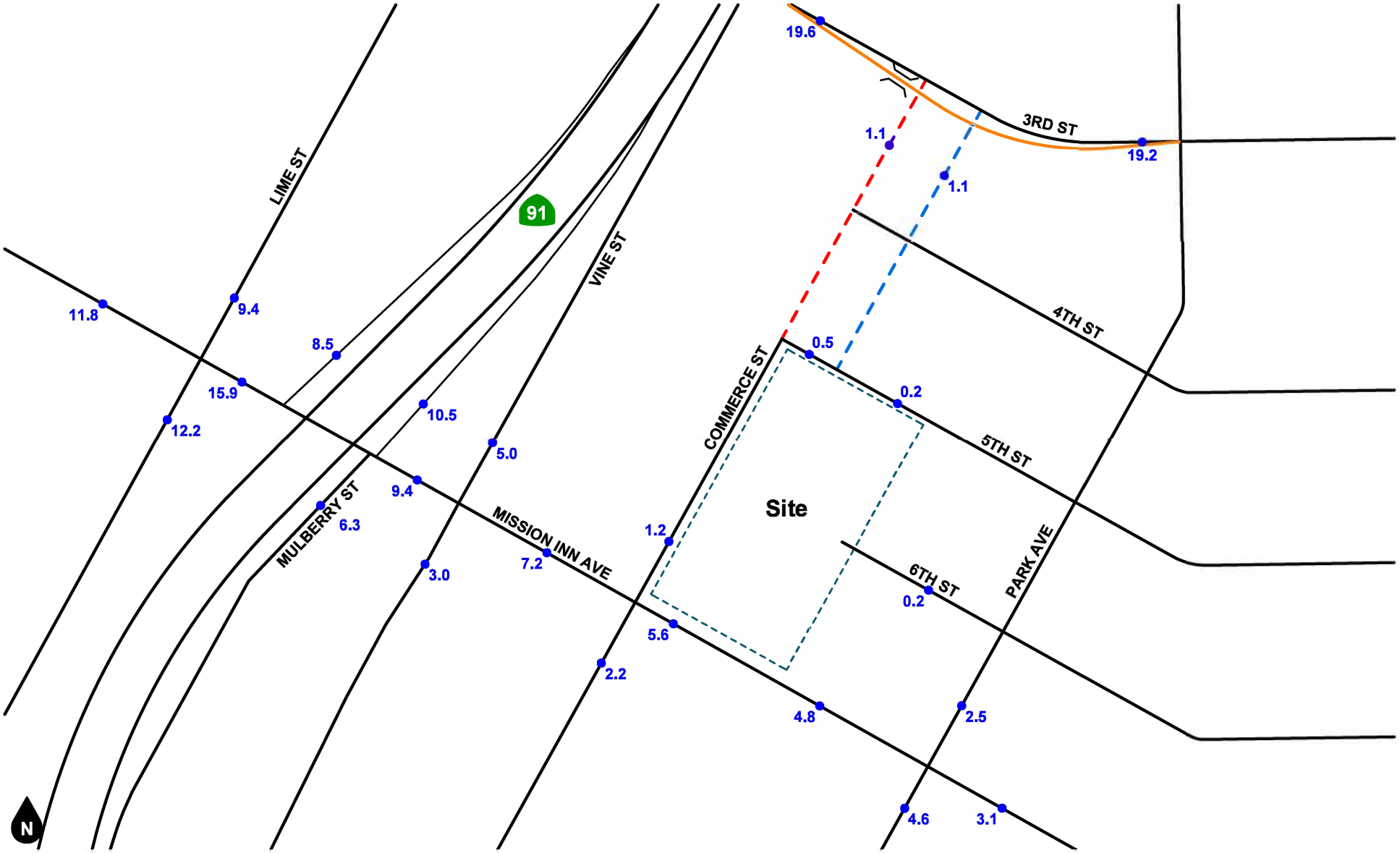
Figure 27
Opening Year (2026) Without Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

Figure 28
Opening Year (2026) Without Project
PM Peak Hour Intersection Turning Movement Volumes



Legend

●## Vehicles Per Day (1,000's)

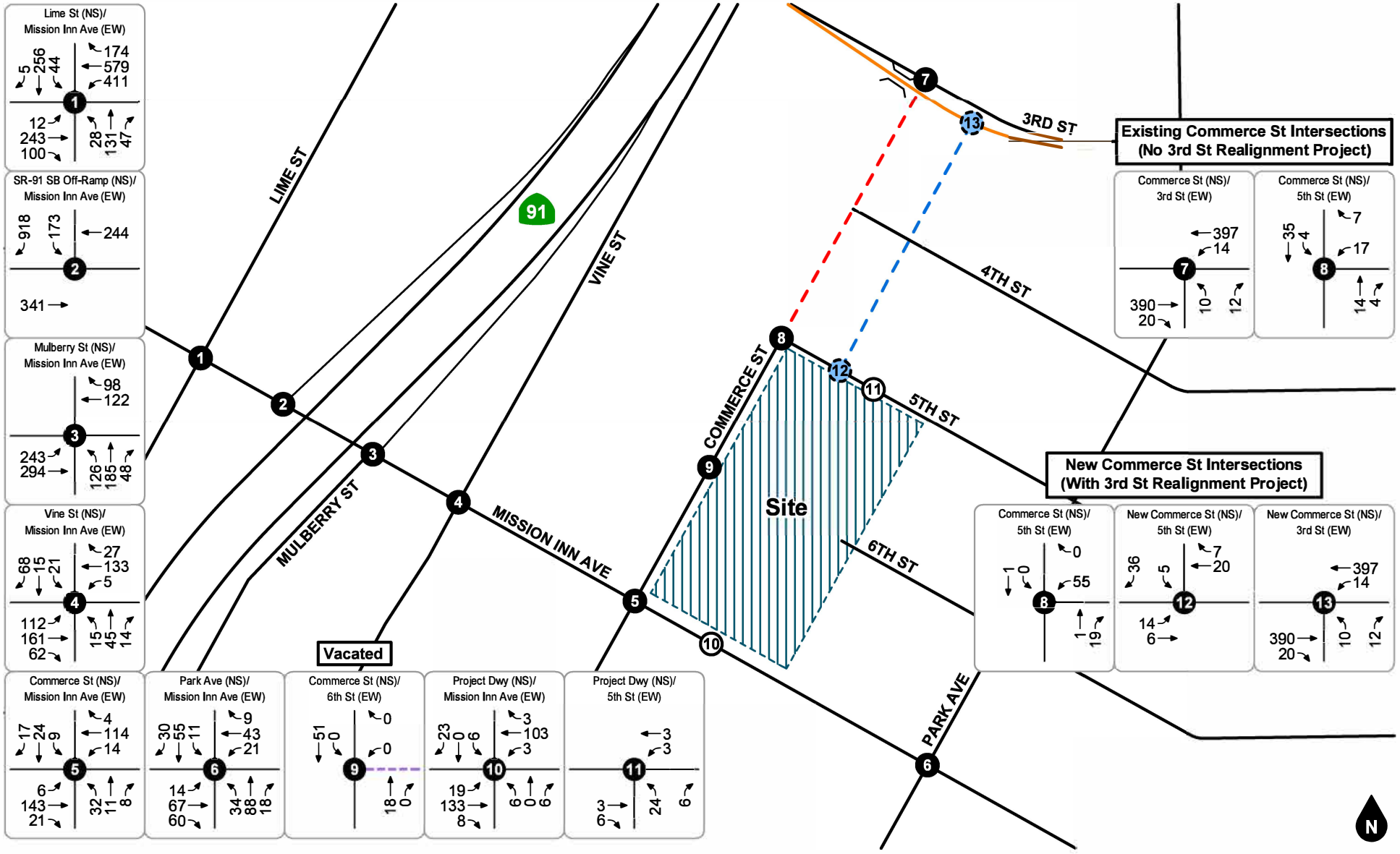
Planned 3rd Street Grade Separation Project (City Project)

Planned Commerce Street Realignment (City Project)

Planned Commerce Street Vacation (City Project)

Figure 29

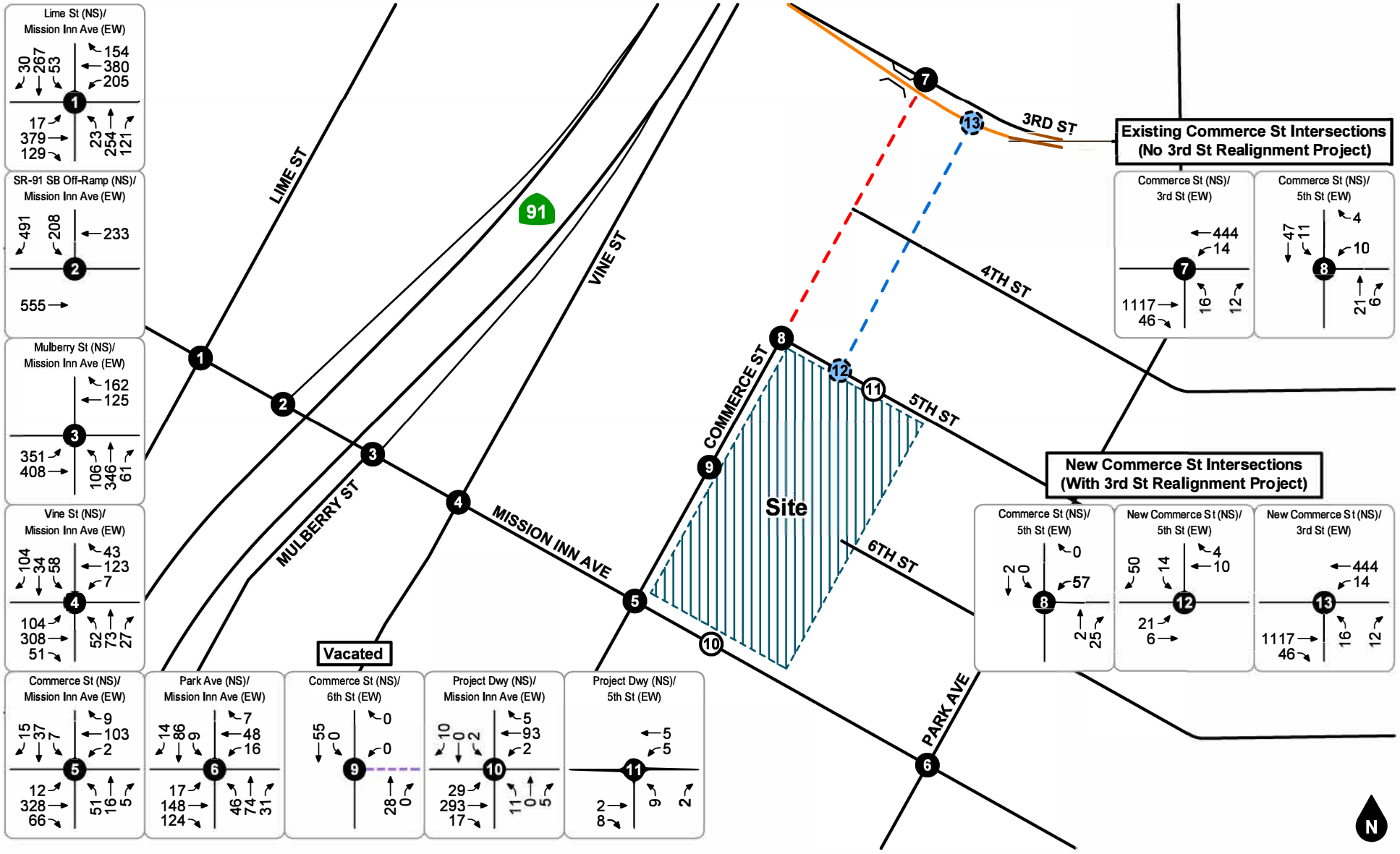
Opening Year (2026) With Project Average Daily Traffic Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

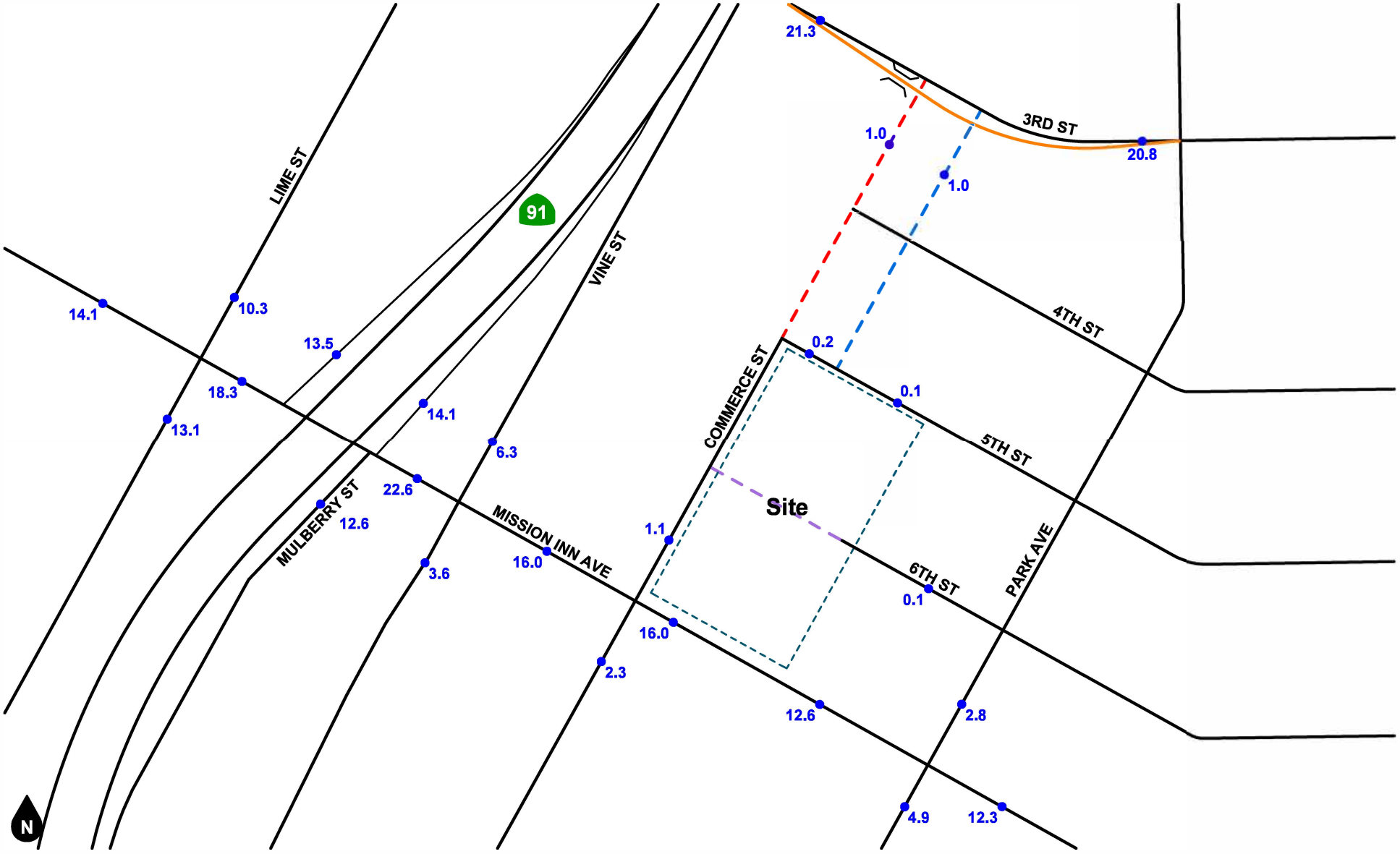
Figure 30
Opening Year (2026) With Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

Figure 31
Opening Year (2026) With Project
PM Peak Hour Intersection Turning Movement Volumes



Legend

●## Vehicles Per Day (1,000's)

Planned 3rd Street Grade Separation Project (City Project)

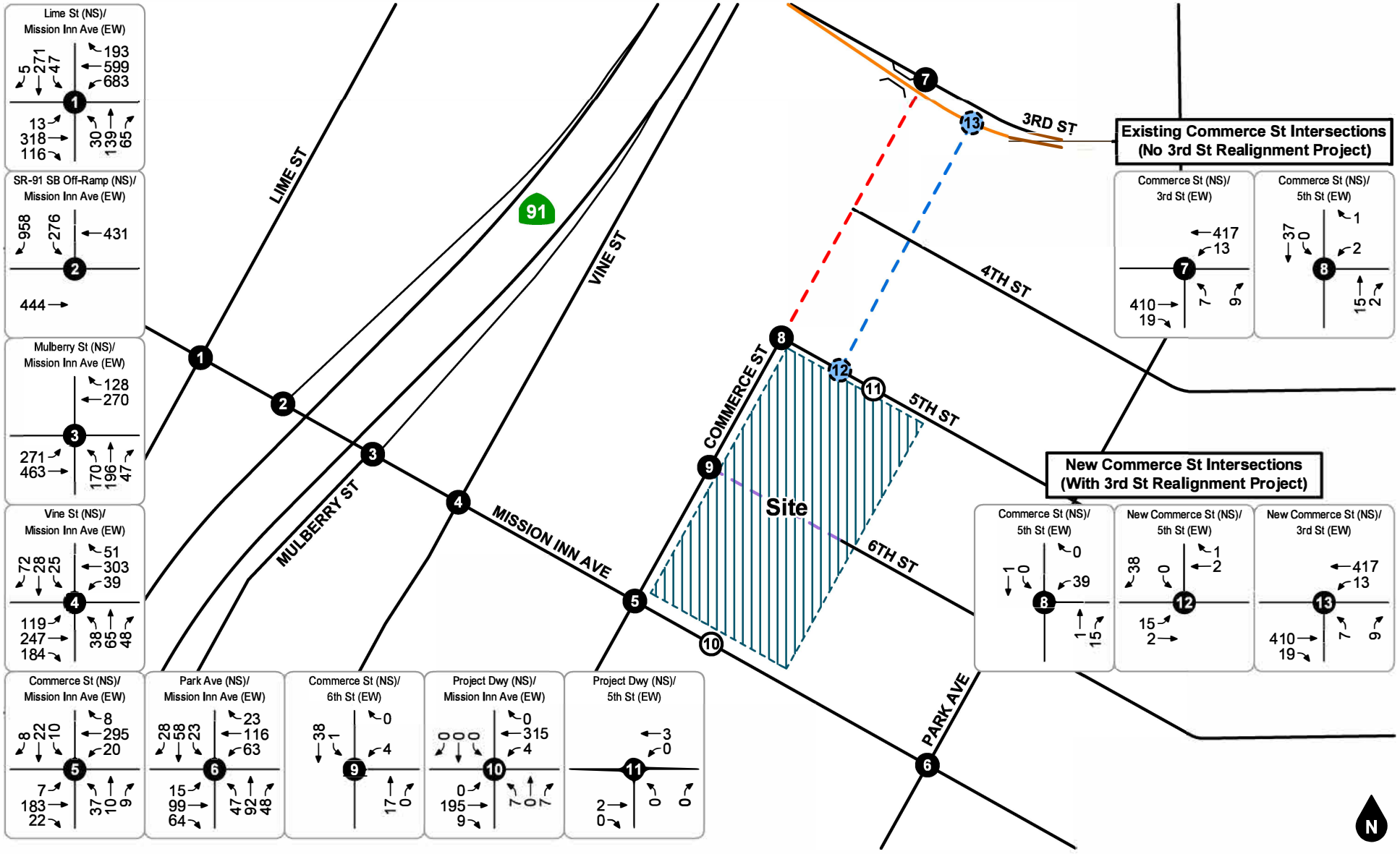
Planned Commerce Street Realignment (City Project)

Planned Commerce Street Vacation (City Project)

Proposed 6th Street Vacation (Project)

Figure 32

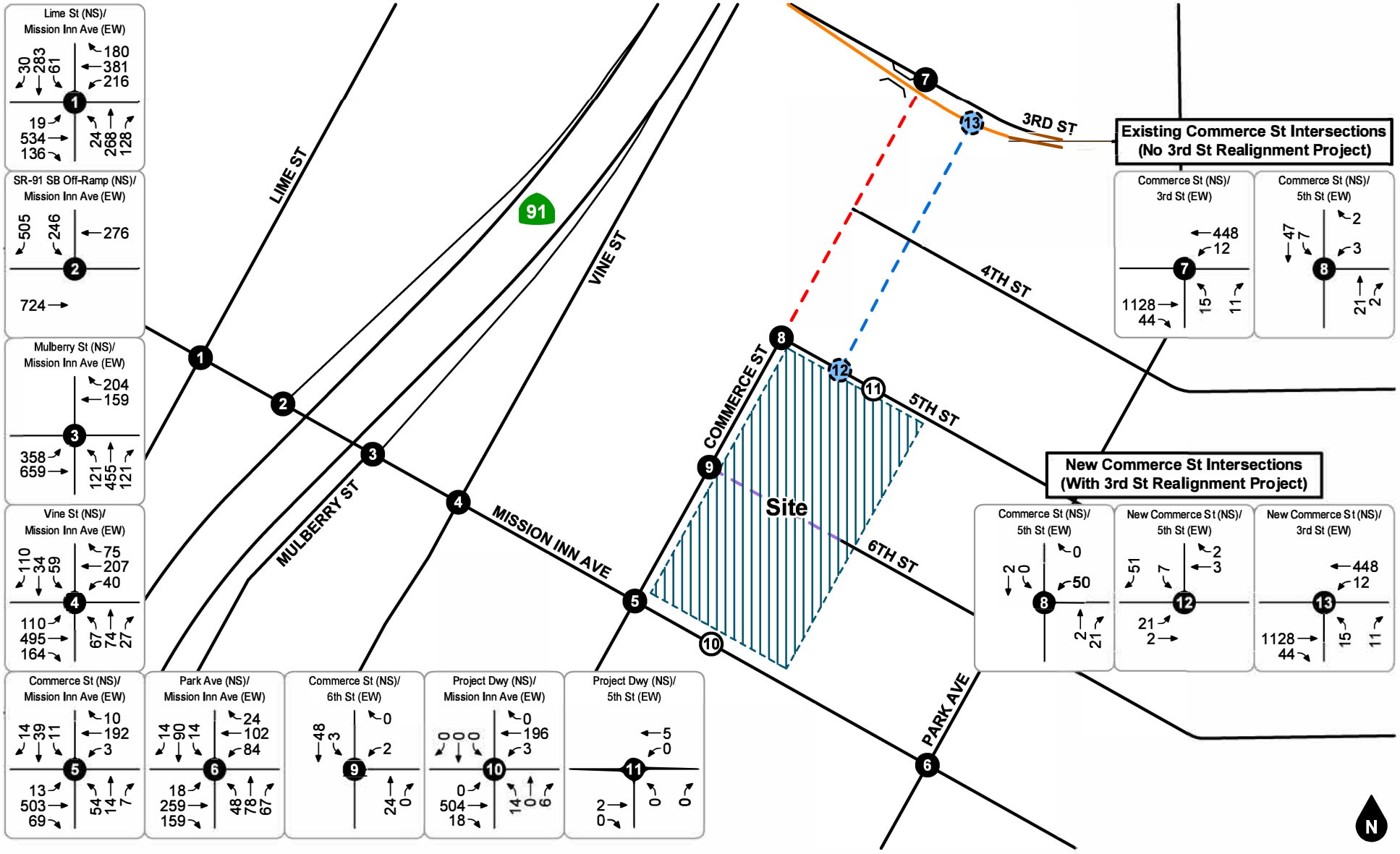
Buildout Year 2045 Without Project Average Daily Traffic Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

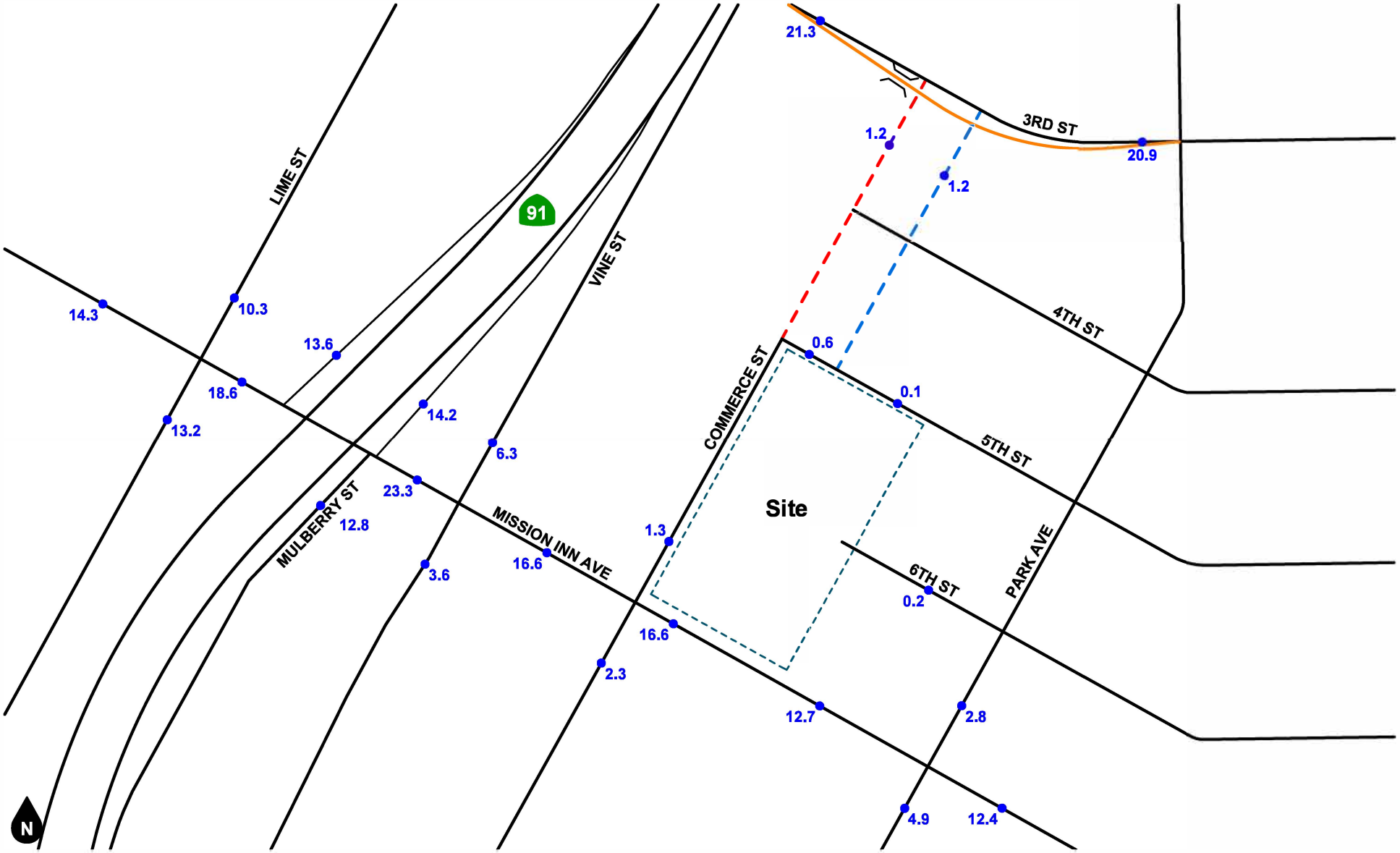
Figure 33
Buildout Year 2045 Without Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

Figure 34
Buildout Year 2045 Without Project
PM Peak Hour Intersection Turning Movement Volumes



Legend

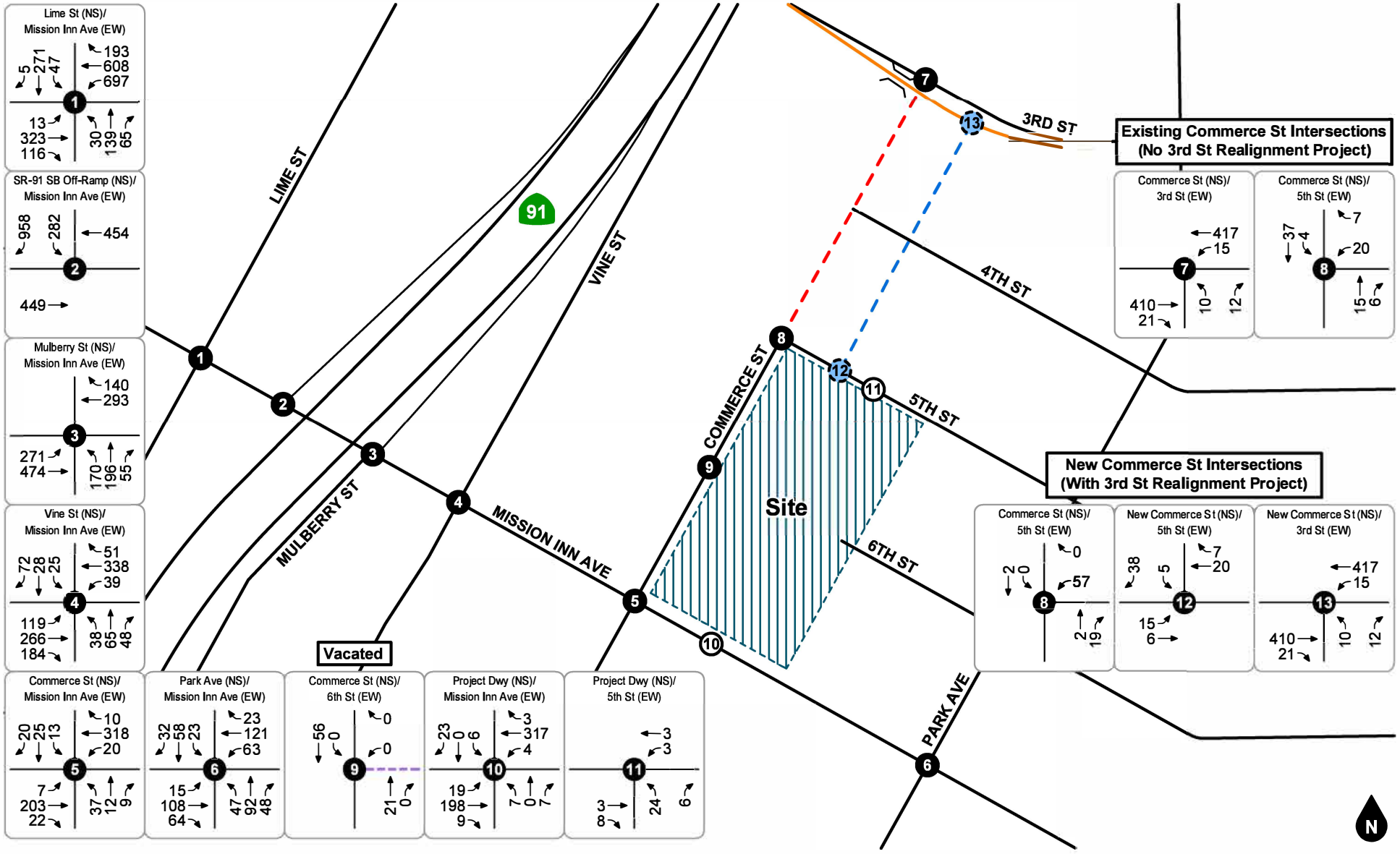
●## Vehicles Per Day (1,000's)

Planned 3rd Street Grade Separation Project (City Project)

Planned Commerce Street Realignment (City Project)

Planned Commerce Street Vacation (City Project)

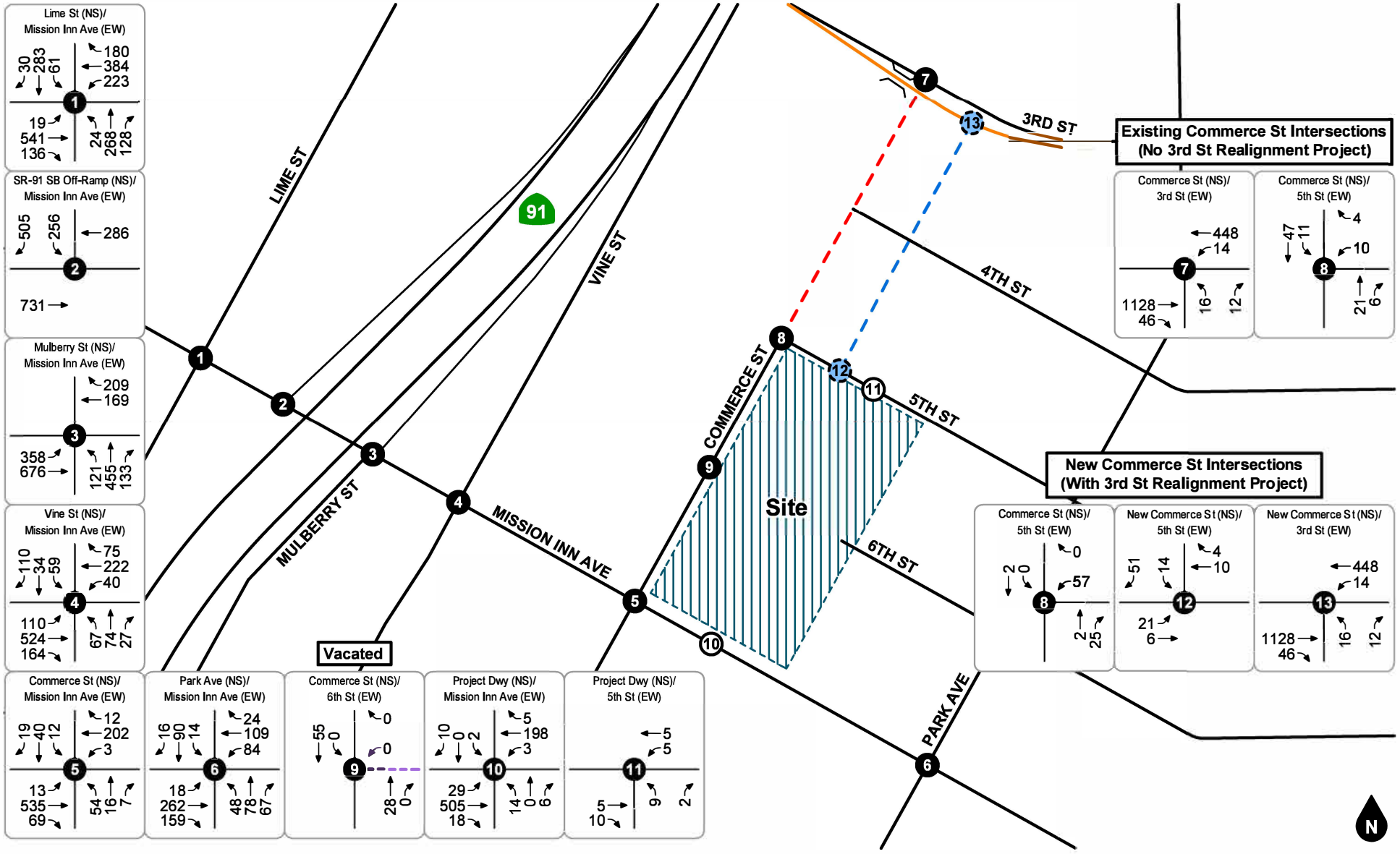
Figure 35
Buildout Year 2045 With Project Average Daily Traffic Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

Figure 36
Buildout Year 2045 With Project
AM Peak Hour Intersection Turning Movement Volumes



Legend

- Study Intersection
- Project Driveway
- Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

Figure 37
Buildout Year 2045 With Project
PM Peak Hour Intersection Turning Movement Volumes

6. FUTURE LEVELS OF SERVICE ANALYSIS

Detailed intersection Level of Service calculation worksheets for each of the following analysis scenarios are provided in Appendix D.

Project design features, such as improvements necessary to provide project site access, and construction along the project site frontage, are assumed to be constructed by the proposed project and are described in further detail in the Site Access & Circulation section presented later in this report.

CURRENT COMMERCE STREET ALIGNMENT (WITHOUT PLANNED 3RD STREET GRADE SEPARATION PROJECT)

The following summarizes study area operations based on the existing roadway geometry and traffic controls without the planned 3rd Street Grade Separation project.

Existing Plus Project

The study intersection Levels of Service for Existing Plus Project conditions are shown in Table 5. As shown in Table 5, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Existing Plus Project conditions.

As shown in Table 5, the proposed project is forecast to result in no substantial transportation effects at the study intersections for Existing Plus Project conditions.

Opening Year (2026) Without Project

The study intersection Levels of Service for Opening Year (2026) Without Project conditions are shown in Table 6. As shown in Table 6, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2026) Without Project conditions.

Opening Year (2026) With Project

The study intersection Levels of Service for Opening Year (2026) With Project conditions are also shown in Table 6. As shown in Table 6, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2026) With Project conditions.

As shown in Table 6, the proposed project is forecast to result in no substantial transportation effects at the study intersections for Opening Year (2026) With Project conditions.

Buildout Year 2045 Without Project

The study intersection Levels of Service for Buildout Year 2045 Without Project conditions are shown in Table 7. As shown in Table 7, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Buildout Year 2045 Without Project conditions except for the following intersection that is forecast to operate at Level of Service E during the AM peak hour:

4. Vine Street (NS) and Mission Inn Avenue (EW)

Buildout Year 2045 With Project

The study intersection Levels of Service for Buildout Year 2045 With Project conditions are also shown in Table 7. As shown in Table 7, the study intersections are forecast to operate within acceptable Levels of

Service (D or better) during the peak hours for Buildout Year 2045 With Project conditions except for the following intersection that is forecast to operate at Level of Service E during the AM peak hour:

4. Vine Street (NS) and Mission Inn Avenue (EW)

To address this, the Proposed Project will implement the following City-directed improvements:

- Project will install total of four stop signs equipped with solar powered flashing LEDs at all approaches.
- Project shall upgrade the existing crosswalks to the high visibility crosswalks at all approaches.

PLANNED COMMERCE STREET RE-ALIGNMENT (WITH 3RD STREET GRADE SEPARATION PROJECT)

The following summarizes study intersection operations based on future roadway geometry and traffic controls upon completion of the planned 3rd Street Grade Separation project. Study intersections one through six, nine, and ten are unaffected by and would have the same volumes and Level of Service operations with or without the planned 3rd Street Grade Separation Project. Therefore, the unaffected study intersections (#1 to 6, 9, 10) are omitted from Tables 8 through 10.

Existing Plus Project

The study intersection Levels of Service for Existing Plus Project conditions are shown in Table 8. As shown in Table 8, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Existing Plus Project conditions.

As shown in Table 8, the proposed project is forecast to result in no substantial transportation effects at the study intersections for Existing Plus Project conditions.

Opening Year (2026) Without Project

The study intersection Levels of Service for Opening Year (2026) Without Project conditions are shown in Table 9. As shown in Table 9, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2026) Without Project conditions.

Opening Year (2026) With Project

The study intersection Levels of Service for Opening Year (2026) With Project conditions are also shown in Table 9. As shown in Table 9, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2026) With Project conditions.

As shown in Table 9, the proposed project is forecast to result in no substantial transportation effects at the study intersections for Opening Year (2026) With Project conditions.

Buildout Year 2045 Without Project

The study intersection Levels of Service for Buildout Year 2045 Without Project conditions are shown in Table 10. As shown in Table 10, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Buildout Year 2045 Without Project conditions.

Buildout Year 2045 With Project

The study intersection Levels of Service for Buildout Year 2045 With Project conditions are also shown in Table 10. As shown in Table 10, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Buildout Year 2045 With Project conditions.

As shown in Table 10, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours with improvements.

ROADWAY SEGMENT LEVEL OF SERVICE

The roadway segment capacity analysis for all scenarios conditions is shown Table 11. As Shown in Table 11, the study roadway segments continue operating within acceptable Levels of Service (D or better).

TRAFFIC SIGNAL WARRANT ANALYSIS

The potential need for installation of a traffic signal at the unsignalized study intersections was evaluated based on the *California Manual on Uniform Traffic Control Devices* ("*California MUTCD*," November 2014), Section 4C-04, peak hour volume warrant (Warrant 3). The *California MUTCD* Section 4C-01 states "satisfaction of one or more traffic signal warrants shall not in itself require the installation of a traffic signal" as engineering judgement should be applied to the physical considerations of the location. Traffic signal warrant worksheets are provided in Appendix H.

Installation of a traffic signal is not warranted based on the peak hour volume warrant (Warrant 3) at the study area intersections. However, the peak hour warrant at Vine Street and Mission Inn Avenue is just below the traffic signal warrant threshold for the PM peak hour.

RAILROAD CROSSING ON MISSION INN AVENUE WEST OF COMMERCE STREET

There are existing train tracks crossing Mission Inn Avenue approximately 100 feet west of Commerce Street which provides approximately 74 feet of storage length between the railroad stop bar and the intersection corner for westbound vehicles during a train crossing. Based on standard vehicle length and the available storage length, there is storage for three (3) vehicles. The existing westbound Mission Inn Avenue AM peak hour volume is 115 vehicles per hour (2 vehicles per minute) and PM peak hour volume 139 vehicles per hour (2 vehicles per minute). Vehicle queue lengths at the railroad crossing are forecast to exceed the available storage lengths during the peak hours for the all scenario conditions for any train crossing which is longer than a one and one-half (1.5) minutes.

Based on the westbound traffic volume and storage length approaching the railroad crossing on Mission Inn Avenue west of Commerce Street, the following improvement is recommended and will be installed by the project to ensure westbound queues at the rail crossing on Mission Inn Avenue do not block turning or north-south through movements at Commerce Street for all scenarios:

5. Commerce Street (NS) at Mission Inn Avenue (EW)
    - Install "KEEP CLEAR" markings in the intersection for westbound lanes on Mission Inn Avenue.

A roadway concept plan for the above recommended improvement is included in Appendix I.

Table 5
Existing Plus Project Intersection Levels of Service & Project-Related Effect

Study Intersection	Traffic Control[1]	Existing				Existing Plus Project				AM Peak Hour		PM Peak Hour	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
		Delay[2]	LOS[3]	Delay[2]	LOS	Delay[2]	LOS[3]	Delay[2]	LOS	Change	Substantial Effect?	Change	Substantial Effect?
1. Lime Street at Mission Inn Avenue	TS	34.9	C	26.7	C	35.3	D	26.8	C	+0.4	NO	+0.1	NO
2. SR-91 Off Ramp at Mission Inn Avenue	TS	25.7	C	24.6	C	26.7	C	24.6	C	+1.0	NO	+0.0	NO
3. Mulberry Street at Mission Inn Avenue	TS	31.9	C	36.6	D	32.7	C	36.6	D	+0.8	NO	+0.0	NO
4. Vine Street at Mission Inn Avenue	AWS	9.4	A	14.4	B	9.7	A	16.0	C	+0.3	NO	+1.6	NO
5. Commerce Street at Mission Inn Ave	CSS	10.9	B	13.3	B	10.8	B	14.1	B	-0.1	NO	+0.8	NO
6. Park Avenue at Mission Inn Ave	AWS	8.5	A	9.8	A	8.6	A	9.9	A	+0.1	NO	+0.1	NO
7. Commerce Street at 3rd Street	CSS	12.2	B	28.8	D	12.6	B	29.3	D	+0.4	NO	+0.5	NO
8. Commerce Street at 5th Street	CSS	8.7	A	8.8	A	8.9	A	8.9	A	+0.2	NO	+0.1	NO
9. Commerce Street at 6th Street	CSS	8.9	A	8.9	A	9.0	A	9.0	A	+0.1	NO	+0.1	NO
10. Project Driveway at Mission Inn Ave	CSS	9.4	A	10.9	B	9.7	A	11.6	B	+0.3	NO	+0.7	NO
11. Project Driveway at 5th Street	CSS	-	-	-	-	8.7	A	8.6	A	+8.7	NA	+8.6	NA

Notes:

1. TS = Traffic Signal; AWS = All Way Stop; CSS = Cross Street Stop
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn
3. LOS = Level of Service

Table 6
Opening Year (2026) Intersection Levels of Service & Project-Related Effect

Study Intersection	Traffic Control[1]	Opening Year (2026) Without Project				Opening Year (2026) With Project				AM Peak Hour		PM Peak Hour	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
		Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Change	Substantial Effect?	Change	Substantial Effect?
1. Lime Street at Mission Inn Avenue	TS	35.0	C	26.9	C	35.4	D	27.0	C	+0.4	NO	+0.1	NO
2. SR-91 Off Ramp at Mission Inn Avenue	TS	25.1	C	24.0	C	26.1	C	25.0	C	+1.0	NO	+1.0	NO
3. Mulberry Street at Mission Inn Avenue	TS	31.9	C	37.2	D	32.7	C	38.7	D	+0.8	NO	+1.5	NO
4. Vine Street at Mission Inn Avenue	AWS	9.6	A	15.8	C	10.0	A	18.0	C	+0.4	NO	+2.2	NO
5. Commerce Street at Mission Inn Ave	CSS	10.6	B	13.9	B	11.1	B	14.7	B	+0.5	NO	+0.8	NO
6. Park Avenue at Mission Inn Ave	AWS	8.7	A	10.2	B	8.7	A	10.3	B	+0.0	NO	+0.1	NO
7. Commerce Street at 3rd Street	CSS	12.5	B	32.4	D	12.9	B	32.9	D	+0.4	NO	+0.5	NO
8. Commerce Street at 5th Street	CSS	8.7	A	8.9	A	8.9	A	9.0	A	+0.2	NO	+0.1	NO
9. Commerce Street at 6th Street	CSS	8.9	A	8.9	A	-	-	-	-	-	NO	-	NO
10. Project Driveway at Mission Inn Ave	CSS	9.5	A	11.2	B	9.8	A	11.9	B	+0.3	NO	+0.7	NO
11. Project Driveway at 5th Street	CSS	-	-	-	-	8.7	A	8.6	A	+8.7	NA	+8.6	NA

Notes:

1. TS = Traffic Signal; AWS = All Way Stop; CSS = Cross Street Stop
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn
3. LOS = Level of Service

Table 7
Build-out Year 2045 Intersection Levels of Service & Project-Related Effect

Study Intersection	Traffic Control[1]	Build-out Year 2045 Without Project				Build-out Year 2045 With Project				AM Peak Hour		PM Peak Hour	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
		Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Change	Substantial Effect?	Change	Substantial Effect?
1. Lime Street at Mission Inn Avenue	TS	40.1	D	27.3	C	41.7	D	27.5	C	+1.6	NO	+0.2	NO
2. SR-91 Off Ramp at Mission Inn Avenue	TS	25.1	C	22.8	C	26.1	C	22.8	C	+1.0	NO	+0.0	NO
3. Mulberry Street at Mission Inn Avenue	TS	28.6	C	39.3	D	29.4	C	39.7	D	+0.8	NO	+0.4	NO
4. Vine Street at Mission Inn Avenue	AWS	12.8	B	35.4	E	13.5	B	43.7	E	+0.7	NO	+8.3	YES
5. Commerce Street at Mission Inn Ave	CSS	13.0	B	20.2	C	13.8	B	22.0	C	+0.8	NO	+1.8	NO
6. Park Avenue at Mission Inn Ave	AWS	9.7	A	14.8	B	9.8	A	15.1	C	+0.1	NO	+0.3	NO
7. Commerce Street at 3rd Street	CSS	12.0	B	30.7	D	12.3	B	31.2	D	+0.3	NO	+0.5	NO
8. Commerce Street at 5th Street	CSS	8.7	A	8.8	A	8.8	A	8.9	A	+0.1	NO	+0.1	NO
9. Commerce Street at 6th Street	CSS	8.8	A	8.9	A	-	-	-	-	-	NO	-	NO
10. Project Driveway at Mission Inn Ave	CSS	10.3	B	14.2	B	10.8	B	15.4	C	+0.5	NO	+1.2	NO
11. Project Driveway at 5th Street	CSS	-	-	-	-	8.7	A	8.6	A	+8.7	NA	+8.6	NA

Notes:

1. TS = Traffic Signal; AWS = All Way Stop; CSS = Cross Street Stop
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn
3. LOS = Level of Service

Table 8
Existing Plus Project Intersection Levels of Service & Project-Related Effect
With 3rd Street Grade Separation Project

Study Intersection[4]	Traffic Control[1]	Existing				Existing Plus Project				AM Peak Hour		PM Peak Hour	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
		Delay[2]	LOS[3]	Delay[2]	LOS	Delay[2]	LOS[3]	Delay[2]	LOS	Change	Substantial Effect?	Change	Substantial Effect?
8. Commerce Street at 5th Street	CSS	9.3	A	9.4	A	9.4	A	9.4	A	+0.1	NO	+0.0	NO
12. Realigned Commerce Street at 5th Street	CSS	8.5	A	8.0	A	8.6	A	8.7	A	+0.1	NO	+0.7	NO
13. Realigned Commerce Street at 3rd Street	CSS	12.0	B	27.6	D	12.4	B	28.0	D	+0.4	NO	+0.4	NO

Notes:

1. CSS = Cross Street Stop.
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn
3. LOS = Level of Service
4. This analysis is provided for the intersections modified by the Commerce Street Realignment included in the 3rd Street Grade Separation Project.

Table 9
Opening Year (2026) Intersection Levels of Service & Project-Related Effect
With 3rd Street Grade Separation Project

Study Intersection[4]	Traffic Control[1]	Opening Year (2026) Without Project				Opening Year (2026) With Project				AM Peak Hour		PM Peak Hour	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
		Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Change	Substantial Effect?	Change	Substantial Effect?
8. Commerce Street at 5th Street	CSS	9.3	A	9.3	A	9.4	A	9.4	A	+0.1	NO	+0.1	NO
12. Realigned Commerce Street at 5th Street	CSS	8.5	A	8.6	A	8.6	A	8.7	A	+0.1	NO	+0.1	NO
13. Realigned Commerce Street at 3rd Street	CSS	12.3	B	30.9	D	12.7	B	31.3	D	+0.4	NO	+0.4	NO

Notes:

1. CSS = Cross Street Stop.
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn
3. LOS = Level of Service
4. This analysis is provided for the intersections modified by the Commerce Street Realignment included in the 3rd Street Grade Separation Project.

Table 10
Build-out Year 2045 Intersection Levels of Service & Project-Related Effect
With 3rd Street Grade Separation Project

Study Intersection[4]	Traffic Control[1]	Buildout Year 2045 Without Project				Buildout Year 2045 With Project				AM Peak Hour		PM Peak Hour	
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour					
		Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Delay[2]	LOS[3]	Change	Substantial Effect?	Change	Substantial Effect?
8. Commerce Street at 5th Street	CSS	9.2	A	9.3	A	9.3	A	9.3	A	+0.1	NO	+0.0	NO
12. Realigned Commerce Street at 5th Street	CSS	8.5	A	8.6	A	8.6	A	8.7	A	+0.1	NO	+0.1	NO
13. Realigned Commerce Street at 3rd Street	CSS	11.9	B	29.4	D	12.1	B	29.8	D	+0.2	NO	+0.4	NO

Notes:

1. CSS = Cross Street Stop.
2. Delay is shown in seconds per vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst minor street approach or major street left turn
3. LOS = Level of Service
4. This analysis is provided for the intersections modified by the Commerce Street Realignment included in the 3rd Street Grade Separation Project.

Table 11
Roadway Segment Level of Service

ID	Roadway	Segment		Roadway Capacity[1]			Existing			Existing Plus Project			Change	Substantial Effect?
				Ultimate	Existing/Proposed									
		From	To	Classification	Lanes	Capacity	ADT[2]	V/C[2]	LOS[2]	ADT[3]	V/C[3]	LOS[3]		
1.	Commerce St	Mission Inn Ave	3rd Street	Local	2	2,500	1,010	0.40	A	1,210	0.48	A	8.0%	NO
2.	5th Street	Commerce Street	Park Avenue	Local	2	2,500	90	0.04	A	410	0.16	A	12.8%	NO
3.	6th Street	Commerce Street	Park Avenue	Local	2	2,500	120	0.05	A	180	0.07	A	2.4%	NO

ID	Roadway	Segment		Roadway Capacity[1]			Opening Year (2026) Without Project			Opening Year (2026) With Project			Change	Substantial Effect?
				Ultimate	Existing/Proposed									
		From	To	Classification	Lanes	Capacity	ADT[2]	V/C[2]	LOS[2]	ADT[2]	V/C[2]	LOS[2]		
1.	Commerce St	Mission Inn Ave	3rd Street	Local	2	2,500	1,050	0.42	A	1,250	0.50	A	8.0%	NO
2.	5th Street	Commerce Street	Park Avenue	Local	2	2,500	96	0.04	A	420	0.17	A	12.8%	NO
3.	6th Street	Commerce Street	Park Avenue	Local	2	2,500	121	0.05	A	180	0.07	A	2.4%	NO

ID	Roadway	Segment		Roadway Capacity[1]			Buildout Year 2045 Without Project			Buildout Year 2045 With Project			Change	Substantial Effect?
				Ultimate	Existing/Proposed									
		From	To	Classification	Lanes	Capacity	ADT[2]	V/C[2]	LOS[2]	ADT[2]	V/C[2]	LOS[2]		
1.	Commerce St	Mission Inn Ave	3rd Street	Local	2	2,500	1,110	0.44	A	1,311	0.52	A	8.0%	NO
2.	5th Street	Commerce Street	Park Avenue	Local	2	2,500	100	0.04	A	421	0.17	A	12.8%	NO
3.	6th Street	Commerce Street	Park Avenue	Local	2	2,500	130	0.05	A	191	0.08	A	2.4%	NO

Notes:

1. Roadway classifications from the City of Riverside General Plan Circultation Element, and the corresponding roadway capacity from the Traffic Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment, July 2020.
2. ADT = Average Daily Traffic; V/C = Volume to Capacity Ratio; LOS = Level of Service

7. SITE ACCESS & ON-SITE CIRCULATION

This section evaluates the project site access and on-site circulation. Vehicular access for the project site is proposed via two driveways with one on 5th Street and one on Mission Inn Avenue. Roadway concept plans for either roadway segment or intersection improvements not included in the 3rd Street Grade Separation project are provided in Appendix I.

PROJECT DESIGN FEATURES

This analysis assumes the following improvements will be constructed by the project to provide project site access:

Roadway Segments

Mission Inn Avenue
- Construct ultimate half-section width (four-lane divided (two-way turn lane) Arterial roadway), including landscaping and parkway improvements along project boundary abutting Mission Inn Avenue (from Commerce Street to the east project boundary) in conjunction with the development.

5th Street
- Construct ultimate half-section width (two-lane undivided roadway), including landscaping and parkway improvements along project boundary abutting 5th Street (from Commerce Street to the east project boundary) in conjunction with the development.
- Coordinate with the planned 3rd Street Grade Separation project contractor for roadway construction.

Commerce Street
- Construct ultimate half-section width (two-lane undivided roadway), including landscaping and parkway improvements along project boundary abutting Commerce Street (from 5th Street to Mission Inn Avenue) in conjunction with the development.
- Coordinate with the planned 3rd Street Grade Separation project contractor for roadway construction.

Intersections

5. Commerce Street (NS) at Mission Inn Avenue (EW)
   - Install high-visibility pedestrian crosswalk on the east leg of the intersection including an overhead infrastructure with advanced pedestrian warning signs.

10. Project Driveway (NS) at Mission Inn Avenue (EW)
   - Construct the project driveway with one inbound lane and one outbound lane.
   - Install southbound stop control at site egress.

11. Project Driveway (NS) at 5th Street (EW)
   - Construct the project driveway with one inbound lane and one outbound lane.
   - Install northbound stop control at site egress.

This analysis also assumes the project shall comply with the following conditions as part of the City of Riverside standard development review process to ensure adequate geometric design and emergency access:

- Site-adjacent roadways shall be constructed or repaired at their ultimate half-section width, including landscaping and parkway improvements in conjunction with development, or as otherwise required by the City of Riverside.

- All on-site and off-site roadway design, signing/striping, and traffic control improvements relating to the proposed project shall be submitted to the City for review and constructed following applicable State/Federal engineering standards to the satisfaction of the City of Riverside.

- The final grading, landscaping, and street improvement plans shall demonstrate that applicable sight distance requirements are met.

- Final project plans shall demonstrate adequate emergency vehicle access and circulation to the satisfaction of the City of Riverside Public Works and Fire Departments.

- A construction worksite traffic control plan shall comply with applicable engineering standards outlined in the California *Manual of Uniform Traffic Control Devices* and shall be submitted to the City for review and approval before the issuance of a grading permit or start of construction. The plan shall identify any roadway, sidewalk, bike route, or bus stop closures and detours as well as haul routes and hours of operation. All construction-related trips shall be restricted to off-peak hours to the extent possible.

- The final placement of the ADA compliant crosswalk ramp at the northwest corner of Mission Inn Avenue and Commerce Street will require coordination with California Public Utility Commission (CPUC) and Burlington Northern Santa Fe (BNSF) railroad due to the proximity to the railroad tracks. The placement of ADA crosswalk ramp on the northwest corner is shown as a feature of the Commerce Street improvements included in the 3rd Street Grade Separation project.

SITE ACCESS QUEUING ANALYSIS

Table 12 summarizes the results of the queue analysis to check for potential conflicts between the project driveways and the adjacent key intersections. The forecasted queue lengths shown in Table 12, are based on the HCM 95th-percentile back-of-queue methodology. Queuing calculations for the project driveways and the adjacent intersection are shown in the Level of Service worksheets provided in Appendix D.

As shown in Table 12, vehicle queue lengths at for project driveways are forecast to operate within the available storage lengths during the peak hours for the Opening Year (2026) With Project conditions.

TRAFFIC SIGNAL WARRANT ANALYSIS

The potential need for installation of a traffic signal at the project driveways was evaluated based on the *California Manual on Uniform Traffic Control Devices* ("*California MUTCD*," November 2014), Section 4C-04, peak hour volume warrant (Warrant 3). The *California MUTCD* Section 4C-01 states "satisfaction of one or more traffic signal warrants shall not in itself require the installation of a traffic signal" as engineering judgement should be applied to the physical considerations of the location. Traffic signal warrant worksheets are provided in Appendix H.

Installation of a traffic signal is not warranted at the project driveways based on the peak hour volume warrant (Warrant 3) for the analysis scenarios.

PEDESTRIAN, BICYCLE AND TRANSIT FACILITY ACCESS TO AND FROM PROJECT

The Metrolink train station is on Vine Street southwest of Mission Inn Avenue. Access to the east (northbound) tract is within a quarter mile of the project site. There is a pedestrian bridge over the train tracks to allow access to the southbound track adjacent to Vine Street or the northbound track adjacent to Commerce Street. Figure 38 shows the pedestrian and bicycle path to and from the project to the train station.

PEDESTRIAN CROSSING AT MISSION INN AVENUE AND COMMERCE STREET

The intersection approaches are stop-controlled on Commerce Street and uncontrolled on Mission Avenue Inn. Mission Inn Avenue currently provides two westbound lanes and one eastbound through lane with a raised median on the west leg and a painted two-way left-turn lane median on the east leg of the intersection. The nearest marked pedestrian crossings for Mission Inn Avenue are located approximately 520 feet to the west at Vine Street and 860 feet to the east at Park Avenue. The crossing distance is approximately 84 feet from the existing northerly roadside edge to the pedestrian curb ramp on the south side of Mission Inn Avenue. There is one existing streetlight near the northwest corner of the intersection.

The existing average daily traffic (ADT) volume on Mission Inn Avenue is currently estimated at approximately 6,000 vehicles per day and is forecast to increase to approximately 7,200 vehicles per day for Opening Year With Project conditions. Mission Inn Avenue has a posted speed limit of 35 miles per hour east of the intersection.

Existing pedestrian volumes across Mission Inn Avenue at Commerce Street are relatively low at the intersection since the project site is currently underutilized; however, the proposed project is likely to increase pedestrian crossings of Mission Inn Avenue at Commerce Street associated with travel to/from the Metrolink Station. Per the ITE Trip Generation Manual, mid-rise multifamily housing near transit (Land Use Code 221) generates an average of 0.12 to 0.13 walk/bike/transit trips per dwelling unit during the AM and PM peak hours, respectively. Therefore, the project is forecast to generate up to 39 walk/bike/transit trip ends during the peak hours of adjacent street traffic. Additional pedestrian volumes across Mission Inn Avenue were observed at the nearby Mission Lofts Apartments driveway.

Based on the following considerations, installation of a marked pedestrian crosswalk is recommended on Mission Inn Avenue on the east leg of the intersection at Commerce Street:

- The crosswalk would consolidate crossing points from the proposed project and the adjacent Mission Lofts Apartments driveway.
- Future pedestrian crossing volume upon completion of the proposed project is expected to increase (>20 pedestrian crossings during peak hours).
- The nearest controlled crossing location is more than 300 feet.

Section 3B.18 of the CA MUTCD states the following with regard to crosswalk markings across uncontrolled roadways (see Appendix J):

> *09 New marked crosswalks across uncontrolled roadways should include other measures designed to reduce traffic speeds, shorten crossing distances, enhance driver awareness of the crossing, and/or provide active warning of pedestrian presence, where the speed limit exceeds 40 mph and either:*
>
> *A. The roadway has four or more lanes of travel without a raised median or pedestrian refuge island and an ADT of 12,000 vehicles per day or greater; or*
> *B. The roadway has four or more lanes of travel with a raised median or pedestrian refuge island and an ADT of 15,000 vehicles per day or greater.*
>
> *09a If a marked crosswalk exists across an uncontrolled roadway where the speed limit exceeds 40 mph and the roadway has four or more lanes of travel and an ADT of 12,000 vehicles per day or greater, advanced yield lines with associated Yield Here to Pedestrians (R1-5, R1-5a) signs should be placed 20 to 50 ft in advance of the crosswalk, adequate visibility should be provided by parking prohibitions, pedestrian crossing (W11-2) warning signs with diagonal downward pointing arrow (W16-7p) plaques should be installed at the crosswalk, and a high-visibility crosswalk marking pattern should be used (See Figure 3B-17(CA)).*

Mission Inn Avenue has posted speed limits of less than 40 miles per hour and an ADT below 12,000; therefore, the other crossing measures are not required per CA MUTCD guidance. Nevertheless, the recommended crosswalk would cross multiple lanes on an uncontrolled roadway and pedestrian demand is forecast to exceed 20 crossings per hour. Therefore, it is recommended that the crosswalk be installed with high-visibility crosswalk marking pattern, advanced warning signs in both directions including solar powered rectangular rapid flashing beacon (RRFB), LED edge-lit advance warning signs, pedestrian crossing (W11-2) warning signs with diagonal downward pointing arrow (W16-7p) plaques and crosswalk push button controls, ADA compliant crosswalk ramps, improved crosswalk lighting, and on-street parking prohibition to provide adequate visibility. The use of advanced yield lines/signs may be considered optional but would further enhance crosswalk safety, in particular for the westbound approach.

A roadway concept plan for the above recommended improvement is included in Appendix I.

Table 12
Site Access Queuing Analysis

Study Intersection	Approach	Lane	Storage Length (Feet)[2]	Peak Hour 95th-Percentile Queue Length (Feet)[1] Buildout Year 2045 With Project AM	Peak Hour 95th-Percentile Queue Length (Feet)[1] Buildout Year 2045 With Project PM	Adequate Storage Provided
4. Vine Street at Mission Inn Avenue	Northbound	left	150	90	45	YES
	Northbound	Thru-Right	230	70	55	YES
	Southbound	Shared	135	80	135	YES
	Eastbound	Left	150	90	25	YES
	Eastbound	Thru	190	60	110	YES
	Eastbound	Right	190	45	30	YES
	Westbound	Left	85	30	<20	YES
	Westbound	Thru	175	55	25	YES
	Westbound	Thru-Right	175	55	25	YES
5. Commerce Street at Mission Inn Ave	Northbound	Shared	350	<20	30	YES
	Southbound	Shared	360	<20	<20	YES
	Eastbound	Left-Thru	90	<20	<20	YES
	Eastbound	Right	90	<20	<20	YES
	Westbound	Left	90	<20	<20	YES
	Westbound	Thru-Right	170	<20	<20	YES
10. Project Driveway at Mission Inn Ave	Northbound	Shared	75	<20	<20	YES
	Southbound	Shared	75	<20	<20	YES
	Eastbound	Left	50	<20	<20	YES
	Westbound	Thru-Right	215	<20	<20	YES
11. Project Driveway at 5th Street	Northbound	Shared	50	<20	<20	YES
	Eastbound	Shared	300	<20	<20	YES
	Westbound	Shared	95	<20	<20	YES

Notes:

1. The forecast 95th-percentile queue lengths shown in the delay calculation worksheets have been rounded up to nearest 5-foot increment.
2. Length of turning lane storage or distance to the adjacent driveway.

Legend

- Pedestrian Routes
- Unmarked, Uncontrolled Pedestrian Crossing
- Bicycle Routes
- Bicycle Parking
- Pedestrian Bridge Over Tracks

Figure 38
Project Train Station Access

8. SUMMARY OF IMPROVEMENTS

This section summarizes the recommended improvements identified in the previous sections of this report and the project's fair share toward any improvements required for cumulative conditions. The City of Riverside does not have a "Fair Share Program"; however, the fair share estimate is provided to facilitate discussion with the City and that any improvements will be discussed and recommended at the discretion of the City.

Project design features (as detailed in the Site Access & On-Site Circulation Section 7) involve improvements necessary to provide project site, and the construction along the project site frontage.

OFF-SITE IMPROVEMENTS

The following improvement is recommended and will be installed by the project to ensure westbound queues at the rail crossing on Mission Inn Avenue do not block turning or north-south through movements at Commerce Street for all scenarios:

5. Commerce Street (NS) at Mission Inn Avenue (EW)
    - Install "KEEP CLEAR" markings in the intersection for westbound lanes on Mission Inn Avenue.

The Proposed Project will implement the following City-directed improvements:

- Project will install total of four stop signs equipped with solar powered flashing LEDs at all approaches.
- Project shall upgrade the existing crosswalks to the high visibility crosswalks at all approaches.

In the event that this project's completion proceeds the construction of the 3rd Street Grade Separation project roadway improvements, roadway concept plans for the following pavement marking improvements are shown in Appendix K.

Commerce Street (between 3rd Street and Mission Inn Avenue)
- Install Type III bike lane sharrow pavement markings

5th Street (between Commerce Street and Park Avenue)
- Install Type III bike lane sharrow pavement markings

4th Street (between Commerce Street and Park Avenue)
- Install Type III bike lane sharrow pavement markings

DEVELOPMENT IMPACT FEE

The proposed project shall contribute towards the City of Riverside Development Impact Fee program and the Western Riverside Council of Governments transportation uniform mitigation fee (TUMF). The Development Impact Fee provides a funding mechanism for arterial streets, traffic signals, interchange improvements as well as emergency services. The purpose of such fees is to minimize, to the greatest extent practicable, the impact that new development has on the City's public services and public facilities. The City intends for new development project applicants to pay their fair share of the costs of providing such public services and public facilities. Unless otherwise approved by the City, all development projects are required to pay the Development Impact Fee as a condition of development.

9. CONCLUSIONS

This section summarizes the proposed project, operational findings, and identifies recommendations (if any) as specified in previous sections of this study. Figure 39 summarizes the recommended improvements.

PROJECT TRIP GENERATION

The proposed project is forecast to generate a total of approximately 1,213 net new daily trips, including 90 net new trips during the AM peak hour and 72 net new trips during the PM peak hour

LEVEL OF SERVICE ANALYSIS

The study intersections currently operate within acceptable Levels of Service (D or better) during the peak hours for the Existing conditions.

The study intersections are forecast to continue operating within acceptable Levels of Service (D or better) during the peak hours for Opening Year (2026) conditions.

The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Buildout Year (2045) conditions, except for the following intersection that is forecast to operate at an unacceptable Levels of Service E during the PM peak hour:

4. Vine Street (NS) and Mission Inn Avenue (EW)

To address this, the Proposed Project will implement the City-directed improvements summarized below.

SUMMARY OF IMPROVEMENTS

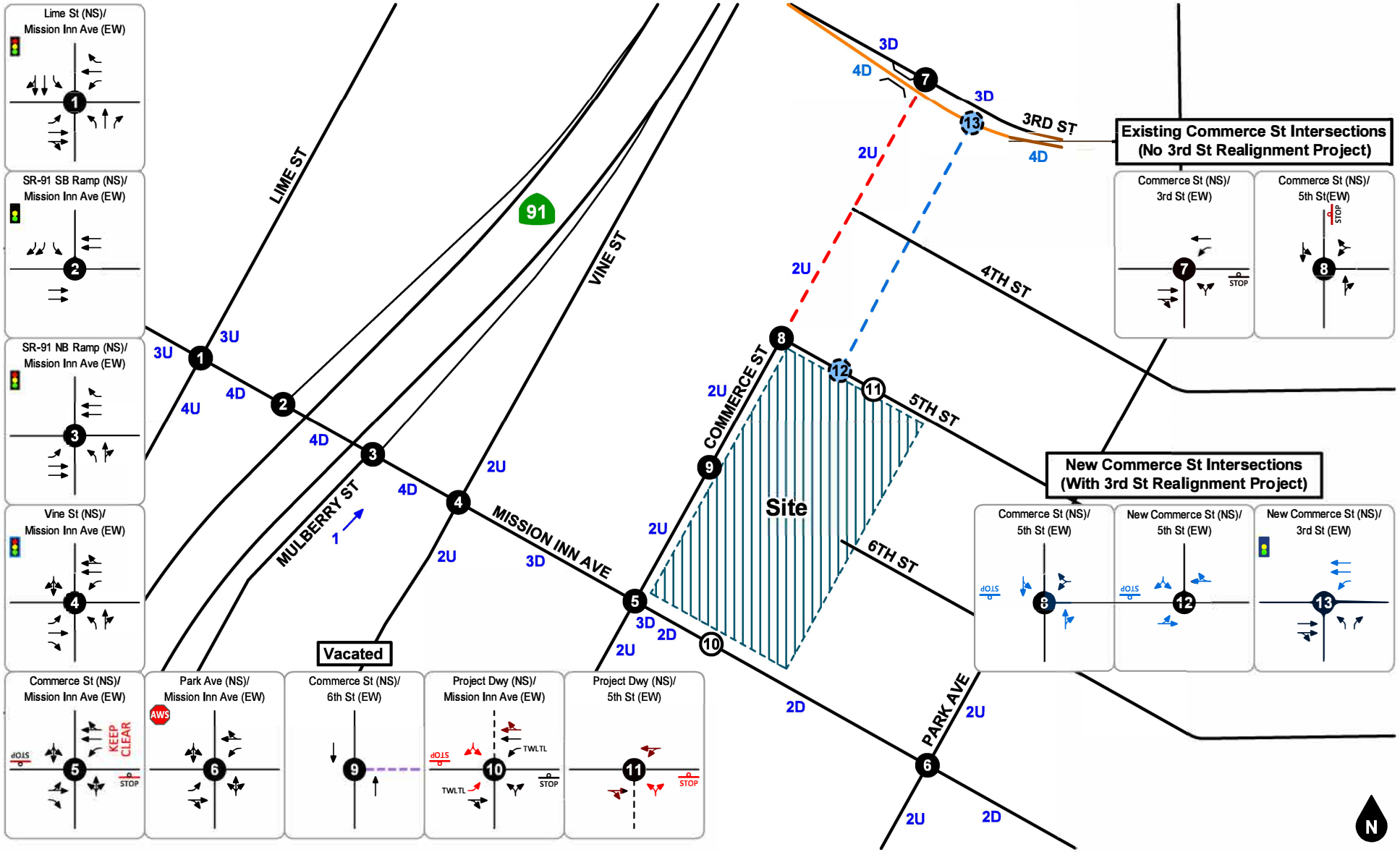
Project design features, necessary to provide project access, are outlined in the Site Access & On-Site Circulation (Section 7).

The following improvement is recommended and will be installed by the project to ensure westbound queues at the rail crossing on Mission Inn Avenue do not block turning or north-south through movements at Commerce Street for all scenarios:

5. Commerce Street (NS) at Mission Inn Avenue (EW)
    - Install "KEEP CLEAR" markings in the intersection for westbound lanes on Mission Inn Avenue.

The Proposed Project will implement the following City-directed improvements:

- Project will install total of four stop signs equipped with solar powered flashing LEDs at all approaches.
- Project shall upgrade the existing crosswalks to the high visibility crosswalks at all approaches.



Legend

- Traffic Signal
- All Way Stop
- Stop Sign
- #D #-Lane Divided Roadway
- #U #-Lane Undivided Roadway
- # Study Intersection
- # Project Driveway
- # Study Intersection after Street Realignment
- Existing Lane
- Project Driveway

TWLTL Two-Way Left-Turn Lane

- Planned 3rd Street Grade Separation Project (City Project)
- Planned Commerce Street Realignment (City Project)
- Planned Commerce Street Vacation (City Project)
- Proposed 6th Street Vacation (Project)

- Recommendations
- Cumulative Improvements

Figure 39
Recommended Lane Geometry and Intersection Traffic Controls

APPENDICES

Appendix A Glossary
Appendix B Scoping Agreement
Appendix C Traffic Count Data
Appendix D Intersection Level of Service Worksheets
Appendix E Travel Demand Model Plots
Appendix F Travel Demand Post Processing Worksheets
Appendix G 3rd Street Grade Separation Project Preliminary Layout Plan
Appendix H Traffic Signal Warrant Worksheet
Appendix I Roadway Concept Plan
Appendix J California MUTCD 3B.18
Appendix K Roadway Concept Plan (Project Vicinity)

APPENDIX A

GLOSSARY

ACRONYMS

AC	Acres
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
DU	Dwelling Unit
ICU	Intersection Capacity Utilization
GFA	Gross Floor Area
LOS	Level of Service
PCE	Passenger Car Equivalent
SF	Square Foot
SP	Service Population
TSF	Thousand Square Feet
V/C	Volume to Capacity Ratio
VMT	Vehicle Miles Traveled

TERMS

ACTUATED SIGNAL CONTROL: A type of traffic signal control in which display of each phase depends on whether the corresponding phase detector has registered a service call or the phase is on recall.

ACTUATION: Detection of a roadway user that is forwarded to the signal controller.

AVERAGE DAILY TRAFFIC: The average 24-hour volume for a stated period is divided by the number of days in that period. For example, Annual Average Daily Traffic is the total volume during a year divided by 365 days.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A point of constriction along a roadway that limits the amount of traffic that can proceed downstream from its location.

CALL: An indication within a signal controller that a particular phase is waiting for service, either through actuation from a roadway user or phase recall.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass through a roadway facility during a specified period.

CHANNELIZATION: The separation of conflicting traffic movements by use of pavement markings, raised curbs, or other suitable means to facilitate free flow movement.

CLEARANCE INTERVAL: Equal to the yellow plus all-red time, if any, when a traffic signal changes between phases (i.e., the amount of time between the end of a green light from one movement to the beginning of a green light for the next).

COORDINATED SIGNAL CONTROL: A type of traffic signal control in which non-coordinated phases associated with minor movements are constrained such that the coordinated phases are served at a specific time during the signal cycle, thus maintaining the efficient progression of traffic flow along the major roadway.

CONTROL DELAY: The portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign). It includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay.

CORDON: An imaginary boundary line around or across a study area across which vehicles, persons, or other information can be collected for survey and analytical purposes.

CORNER SIGHT DISTANCE: The minimum sight distance required by the driver of a vehicle to cross or enter the lanes of the major roadway without requiring approaching traffic traveling at a given speed to radically alter their speed or trajectory.

CYCLE: A complete sequence of signal indications for all phases. Also known as a signal cycle.

CYCLE LENGTH: The total time for a traffic signal to complete one full cycle.

DAILY CAPACITY: A theoretical value representing the daily traffic volume that will typically result in a peak hour volume equal to the capacity of the roadway.

DELAY: The total additional travel time experienced by a roadway user (driver, passenger, bicyclist, or pedestrian) beyond that required to travel at a desired speed.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device used to count or determine the presence of a roadway user.

DESIGN SPEED: A speed used for purposes of designing horizontal and vertical alignments of a highway.

DIRECTIONAL SPLIT: The percent of two-way traffic traveling in a specified direction.

DIVERSION: The rerouting of traffic from a normal path of travel between two points, such as to avoid congestion or perform a secondary trip.

FREE FLOW: Traffic flow that is unaffected by a traffic control and/or or upstream or downstream conditions.

GAP: Time or distance between two vehicles measured from rear bumper of the front vehicle to front bumper of the second vehicle.

GAP ACCEPTANCE: The method by which a driver accepts an available gap in traffic to enter or cross the road.

HEADWAY: Time or distance between two successive vehicles measured from same point on both vehicles (i.e., front bumper to front bumper). Also known as gap.

LEVEL OF SERVICE: A grading scale of quantitative performance measures representing the quality of service of a transportation facility or service from an average traveler's perspective.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MULTI-MODAL: More than one mode, such as automobile, transit, bicycle, and pedestrian.

OFFSET: The time interval between the beginning of a traffic signal cycle at one intersection and the beginning of signal cycle an adjacent intersection.

PLATOON: A set of vehicles traveling at similar speed and moving as a general group with clear separation between other vehicles ahead and behind.

PASSENGER CAR EQUIVALENT: A metric used to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars.

PEDESTRIAN CLEARANCE INTERVAL: Also known as the "Flashing Don't Walk" interval, it signals the end of pedestrian entry into the crosswalk following the "Walk" indication and provides time for pedestrians who have already entered the crosswalk to finishing crossing.

PEAK HOUR: The hour within a day in which the maximum volume occurs.

PEAK HOUR FACTOR: The peak hour volume divided by the four times the peak 15-minute flow rate.

PHASE: In traffic signals, the green, yellow, and red clearance intervals assigned to a specified traffic movement.

PRETIMED SIGNAL: A traffic signal operation in which the cycle length, phasing sequence, and phasing times are predetermined and fixed, regardless of actual demand for any given traffic movement. Also known as a fixed time signal.

PROGRESSION: The coordinated movement of vehicles through signalized intersections along a corridor.

QUEUE: The number of vehicles waiting at a service area such as a traffic signal, stop sign, or access gate.

QUEUE LENGTH: The length of vehicle queue, typically expressed in feet, waiting at a service area such as a traffic signal, stop sign, or access gate.

RECALL: A signal phasing operation in which a specified phase places a call to the signal controller each time a conflicting phase is served, thus ensuring the specified phase will be serviced again.

SEMI-ACTUATED CONTROL: A type of traffic signal control in which only the minor movements are provided detection.

SIGHT DISTANCE: The continuous length of roadway visible to a driver or roadway user.

STACKING DISTANCE: The length of area available behind a service area, such as a traffic signal or gate, for vehicle queuing to occur.

STOPPING SIGHT DISTANCE: The minimum distance required by the driver of a vehicle traveling at a given speed to bring the vehicle to a stop after an object on the road becomes visible, including reaction and response time.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors. Also known as a demand responsive signal.

TRIP OR TRIP END: The one-directional movement of a person or vehicle. Every trip has an origin and a destination at its respective ends (i.e., trip ends). In terms of site trip generation, the same vehicle entering and exiting a site generates two trips: one inbound trip and one outbound trip.

TRIP GENERATION RATE: The rate at which a land use generates trips per the specified land use variable, such per dwelling unit or per thousand square feet.

TURNING RADIUS: The circular arc formed by the smallest turning path radius of the front outside tire of a vehicle, such as that performed by a U-turn maneuver. This is based on the length and width of the wheelbase as well as the steering mechanism of the vehicle.

VEHICLE MILES TRAVELED: A measure of the amount and distance of automobile travel essentially calculated as the sum of each trip times the trip length.

APPENDIX B

SCOPING AGREEMENT

Subject: FW: Response to Comments and SA revision Iron Lofts MFR on Commerce St between Mission Inn Ave and 5th St - SA APPROVAL

Attachments: Final - Iron Loft Multifamily Residential Traffic Analysis Scoping Agreement.pdf

---

From: Patel, Vital
Sent: Tuesday, October 22, 2024 3:08 PM
To: Perrie Ilercil; Nitollama, Philip
Cc: Christine Saunders; Todd Cadwell; Darrin Olson; Giancarlo Ganddini
Subject: RE: Response to Comments and SA revision Iron Lofts MFR on Commerce St between Mission Inn Ave and 5th St

Hello Perrie,

Attached is the approved scoping agreement for the Iron Lofts Project.

Sincerely,

Vital Patel
City of Riverside
Public Works Department, Traffic Engineering
Main: 951.826.5366
RiversideCA.gov

From: Perrie Ilercil
Sent: Tuesday, October 8, 2024 5:35 PM
To: Patel, Vital; Nitollama, Philip
Cc: Christine Saunders; Todd Cadwell; Darrin Olson; Giancarlo Ganddini
Subject: [EXTERNAL] RE: Response to Comments and SA revision Iron Lofts MFR on Commerce St between Mission Inn Ave and 5th St

Hi Vital,
See the Response to Comment Letter and the revised Scoping Agreement for your review and approval.
The SA has been reviewed numerous times, so it is anticipated that there will be no further changes for the traffic LOS analysis report.
Please, review the SA over the next couple of days, and I will follow up on Tuesday Oct 15th.
Thank you

Other items in progress or waiting for final plans:

- update on the 3rd Street Grade Separation project (esp. roadway plan changes and construction timing) – Will provide the latest information soon **(2021-0918 email)**
- Confirm that the left turn as shown in the 3SGS traffic report will be provided. **(See email Aug 8, 2023 earlier in this email chain)**

Sincerely,
Perrie Ilercil, **PE (AZ)**
Senior Engineer
GANDDINI GROUP, INC

From: Patel, Vital
Sent: Thursday, September 19, 2024 10:58 AM
To: Perrie Ilercil; Nitollama, Philip
Cc: Giancarlo Ganddini; Eguez, Judy
Subject: RE: Responses-RE: [External] RE: Iron Lofts MFR on Commerce Street between Mission Inn Avenue and 4th Street - Scoping Agreement

Hello Perrie,

Please see the attached for our comments on the revised scope and let us know if you have any questions. Thank you.

Sincerely,

Vital Patel
City of Riverside
Public Works Department, Traffic Engineering
Main: 951.826.5366
RiversideCA.gov

From: Patel, Vital
Sent: Wednesday, September 18, 2024 8:14 AM
To: Perrie Ilercil; Nitollama, Philip
Cc: Giancarlo Ganddini
Subject: RE: Responses-RE: [External] RE: Iron Lofts MFR on Commerce Street between Mission Inn Avenue and 4th Street - Scoping Agreement

Hello Perrie,

We are currently reviewing the revised scoping agreement.

For the requested information per your email below, please see my response in red:

- update on the 3rd Street Grade Separation project (esp. roadway plan changes and construction timing) – Will provide the latest information soon
- contact person/information for RCTC - Jenny Chan jchan@rctc.org, Edward Emery eemery@rctc.org
- contact person/information for FRA and CPUC so that a copy of the scoping agreement can be sent when it is approved.: Jason SanchezJason.Sanchez@BNSF.com (BNSF Railway), Sergio Licon, sergio.licon@cpuc.ca.gov (Rail Crossings & Engineering Branch - Rail Safety Division)

Sincerely,

Vital Patel
City of Riverside
Public Works Department, Traffic Engineering
Main: 951.826.5366
RiversideCA.gov

From: Perrie Ilercil
Sent: Friday, September 6, 2024 3:39 PM
To: Patel, Vital; Nitollama, Philip
Cc: Giancarlo Ganddini
Subject: RE: Responses-RE: [External] RE: Iron Lofts MFR on Commerce Street between Mission Inn Avenue and 4th Street - Scoping Agreement

Hi Vital,
See the revised Scoping agreement for your review and approval.

Please provide the following:

- update on the 3rd Street Grade Separation project (esp. roadway plan changes and construction timing)
- contact person/information for RCTC
- contact person/information for FRA and CPUC so that a copy of the scoping agreement can be sent when it is approved.

At your earliest convenience, please provide acceptance of the Scoping Agreement for this project.

Sincerely,
***Perrie Ilercil*, PE (AZ)**
Senior Engineer
GANDDINI GROUP, INC

From: Patel, Vital
Sent: Wednesday, August 9, 2023 7:29 AM
To: Perrie Ilercil
Cc: Nitollama, Philip
Subject: RE: Responses-RE: [External] RE: Iron Lofts MFR on Commerce Street between Mission Inn Avenue and 4th Street - Scoping Agreement

Perrie,

We will get back to you soon with the requested information.

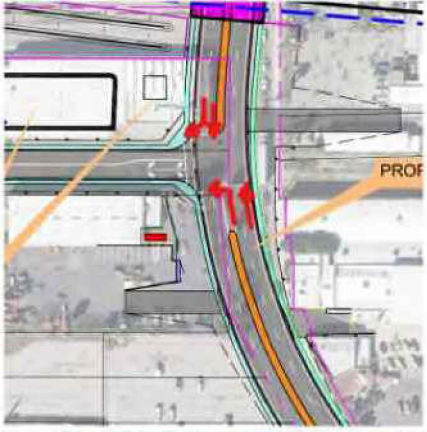
Sincerely,

Vital Patel
City of Riverside
Public Works Department, Traffic Engineering
Main: 951.826.5366
RiversideCA.gov

From: Perrie Ilercil
Sent: Tuesday, August 8, 2023 4:37 PM
To: Patel, Vital
Subject: RE: Responses-RE: [External] RE: Iron Lofts MFR on Commerce Street between Mission Inn Avenue and 4th Street - Scoping Agreement

Vital,

The 2020 report shows north-westbound left turn from 3rd Street to Commerce Street.
The orange median stops prior to the intersection, but the white striping does not look like a left-turn lane.



Confirm that the left turn as shown in the 3SGS traffic report will be provided.

What is the anticipated timeline for the 3rd Street Separation Project?
When is construction anticipated to start?
What is the anticipated duration of construction?

Sincerely,
***Perrie Ilercil,* PE (AZ)**
Senior Engineer
GANDDINI GROUP, INC

From: Patel, Vital
Sent: Monday, August 7, 2023 4:06 PM
To: Perrie Ilercil; Christine Saunders
Cc: Giancarlo Ganddini; Todd Cadwell; Darrin Olson
Subject: RE: Responses-RE: [External] RE: Iron Lofts MFR on Commerce Street between Mission Inn Avenue and 4th Street - Scoping Agreement

Perrie,

Please see the attached.

Please include a section in the traffic study report to show how project site plan conforms to the latest 3rd Street Grade Separation Project site plan. I am attaching the exhibit for reference.

Sincerely,

Vital Patel
City of Riverside
Public Works Department, Traffic Engineering
Main: 951.826.5366
RiversideCA.gov

From: Perrie Ilercil
Sent: Friday, August 4, 2023 2:57 PM
To: Patel, Vital; Christine Saunders
Cc: Giancarlo Ganddini; Todd Cadwell; Darrin Olson
Subject: RE: Responses-RE: [External] RE: Iron Lofts MFR on Commerce Street between Mission Inn Avenue and 4th Street - Scoping Agreement

Hi Vital,
See the revised Scoping agreement.

At your earliest convenience, please provide acceptance of the Scoping Agreement for this project.

Sincerely,
Perrie Ilercil, PE (AZ)
Senior Engineer
GANDDINI GROUP, INC

From: Patel, Vital
Sent: Thursday, August 3, 2023 8:13 AM
To: Perrie Ilercil; Christine Saunders
Cc: Giancarlo Ganddini; Todd Cadwell; Darrin Olson
Subject: RE: Responses-RE: [External] RE: Iron Lofts MFR on Commerce Street between Mission Inn Avenue and 4th Street - Scoping Agreement

Good morning Perrie,

Apologies but upon further review of the scoping agreement, we have added two more comments.

Please let us know if you have any questions.

Sincerely,

Vital Patel
City of Riverside
Public Works Department, Traffic Engineering
Main: 951.826.5366
RiversideCA.gov

From: Perrie Ilercil
Sent: Monday, July 31, 2023 3:19 PM
To: Patel, Vital; Christine Saunders
Cc: Giancarlo Ganddini; Todd Cadwell; Darrin Olson
Subject: RE: Responses-RE: [External] RE: Iron Lofts MFR on Commerce Street between Mission Inn Avenue and 4th Street - Scoping Agreement

Hi Vital,
See the revised Scoping Agreement dated July 31, 2023.
Also, see the Other Development Table created from the information provided by Judy Eguez, City Planner.

Please provide acceptance of the Scoping Agreement for this project.

Sincerely,
Perrie Ilercil, PE (AZ)

APPROVED
Vital Patel
10/22/2024
Public Works Department

City of Arts & Innovation

Traffic Analysis Scoping Form

This scoping form shall be submitted to the City of Riverside Traffic Engineering Division

Project Identification:

Case Number:	PR 2023-001469
Related Cases:	
SP No.	
EIR No.	
GPA No.	
CZ No.	
Project Name:	Iron Lofts Multifamily Residential
Project Address:	east of Commerce Street between 5th Street and Mission Inn Avenue
Project Opening Year:	2026
Project Description:	The 6.97-acre site is proposed to consist of a four-story, mixed-use development with 295 multifamily dwelling units and five two-story townhomes.

	Consultant:	Developer:
Name:	Ganddini Group, Inc / Perrie Ilercil	IRON LOFTS, LLC
Address:	555 Parkcenter Dr, Ste 225	1201 Dove Street, Suite 520
	Santa Ana, CA 92705	Newport Beach, California 92660
Telephone:	714-795-3100 ext.103	
Fax/Email:	perrie@ganddini.com	

Scoping & Study Fees:

Fees to be made payable to "City of Riverside" and delivered to Land Development, City Hall 3rd Floor, 3900 Main Street, Riverside, CA 92522

1) Scoping Agreement Fee (For all projects not screened from analysis): **$271.00**

2) TIA Review (For projects with both LOS & VMT analysis of any scale, or standalone LOS analyses with over 100 vehicle trips per hour): **$2671.02**

3) TIA Review (For standalone VMT analysis, or standalone LOS analyses with under 100 vehicle trips per hour): **$1288.20**

Public Works Department

City of Arts & Innovation

Trip Generation Information:

Trip Generation Data Source: ITE Trip Generation Manual (11th Edition, 2021)

Current General Plan Land Use: vacant and mixed industrial & commercial

Proposed General Plan Land Use: Residential

Current Zoning: Business & Manufacturing Park Zone (BMP)

Proposed Zoning: Mixed-use Urban (MU-U)

	Existing Trip Generation			Proposed Trip Generation [1]		
	In	Out	Total	In	Out	Total
AM Trips	4	2	6	54	42	96
PM Trips	9	8	17	39	50	89

1.Source ITE Land Use code 221 Multifamily Housing Mid-rise (close to transit)

Trip Internalization: ☐ Yes ☑ No (_____% Trip Discount)

Pass-By Allowance: ☐ Yes ☑ No (_____% Trip Discount)

Potential Screening Checks

Is your project screened from specific analyses in accordance with City Guidelines?

Is the project screened from LOS assessment? ☐ Yes ☑ No

City of Arts & Innovation

Public Works Department

LOS screening justification (see Page 6 of the guidelines): _____
LOS screening is not justified; LOS analysis will be prepared.

Is the project screened from VMT assessment? ☑ Yes ☐ No

VMT screening justification (see Pages 23-25 of the guidelines): _____
VMT screening is satisfied; project is within high quality transit (HQT) area.
A seperate VMT Screening Assessment letter-report will be provided for the project.

Level of Service Scoping

- Proposed Trip Distribution (Attach Graphic for Detailed Distribution):

North	South	East	West
30 %	30 %	25 %	15 %

- Attach list of Approved and Pending Projects that need to be considered (provided by the lead agency and adjacent agencies)
- Attach list of study intersections/roadway segments
- Attach legible site plan
- Note other specific items to be addressed:
  - Site access
  - On-site circulation
  - Parking
  - Consistency with Plans supporting Bikes/Peds/Transit
  - Other _____
- Date of Traffic Counts New counts will be conducted
- Attach proposed analysis scenarios (years plus proposed forecasting approach)
- Attach proposed phasing approach (if the project is phased)

3900 Main Street, Riverside, CA 92522 | Phone: (951) 826-5366| **RiversideCA.gov**

Public Works Department

City of Arts & Innovation

VMT Scoping

For projects that are not screened, identify the following:

- Travel Demand Forecasting Model WRCOG VMT Screening
- Attach WRCOG Screening VMT Assessment output or describe why it is not appropriate for use
- Attach proposed Model Land Use Inputs and Assumed Conversion Factors (attach)

Specific Issues to be addressed in the Study (in addition to the standard analysis described in the Guidelines) (To be filled out by the Public Works Traffic Engineering Division)

See following page for specific issues added by City Traffic Engineering Division and additional analysis scenerios to address the 3rd Street Grade Separation Project (3GS).

Scenarios[1]
12 scenarios; 6 Standard; and 6 3Gs (3 - without Project, with 3GS ; 3 - with Project and 3GS)

Existing	Existing Plus Project
Opening Year Without Project(s)	Opening Year +Project
General Build-out Without Project(s)	General Build-out +Project

Study Intersections
1. Lime Street and Mission Inn Avenue
2. SR-91 Off-ramp and Mission Inn Avenue
3. Mulberry Street and Mission Inn Avenue
4. Vine Street and Mission Inn Avenue
5. Commerce Street and Mission Inn Avenue
6. Commerce Street and 6th Street
7. Commerce Street and 5th Street (current Commerce Street alignment)
8. Commerce Street and 3rd Street (current Commerce Street alignment)
9. Park Avenue and Mission Inn Avenue
10. Project Driveway and Mission Inn Avenue
11. Project Driveway and 5th Street
12. Commerce Street and 5th Street (future Commerce Street re-alignment)
13. Commerce Street and 3rd Street (future Commerce Street re-alignment)

Study Roadway Segments
1. Commerce Street between Mission Inn Ave to 3rd St
2. 5th Street between Commerce St to Park Ave
3. 6th Street between Commerce St to Park Ave

3900 Main Street, Riverside, CA 92522 | Phone: (951) 826-5366| **RiversideCA.gov**

1. Opening Year includes 2% ambient growth and cumulative other projects

Traffic Analysis Scoping

Specific Issues

Issues to be addressed in the Study (In addition to the standard analysis described in the Guidelines)
[To be filled out by the Public Works Traffic Engineering Division]

Issues

1. Include traffic signal warrant analysis for Commerce St at Mission Inn Ave and Park Ave at Mission Inn Ave.
2. Include left-turn assessment for Commerce St at Mission Inn Ave.
3. Include traffic signal warrant analysis and queuing analysis for Project Driveway at Mission Inn Ave.
4. Include traffic pattern modification where existing traffic is re-routed because of 6th Street vacation.
5. Contact RCTC for planned improvements in the study area.
6. Show pedestrian and bike path to nearby railway station. Assess potential connection improvements.
7. Include pedestrian and bike related improvements on the project frontage. The City may condition related improvements at nearby intersections as a part of the project approval process.
8. Coordinate with the Federal Railroad Administration (FRA) and California Public Utilities Commission (CPUC) for their input/comments for project close to railway. Include response and requested analysis (if any) in the report.
9. Discuss 3rd Street grade separation and realignment of Commerce Street.
10. Show existing traffic volumes on 6th Street being relocated to adjacent parallel streets due to street vacation.
11. Show traffic volumes on Commerce Street being relocated to the future re-aligned Commerce because of street vacation.

Additional scenarios to address the 3rd Street Grade Separation Project (3GS)

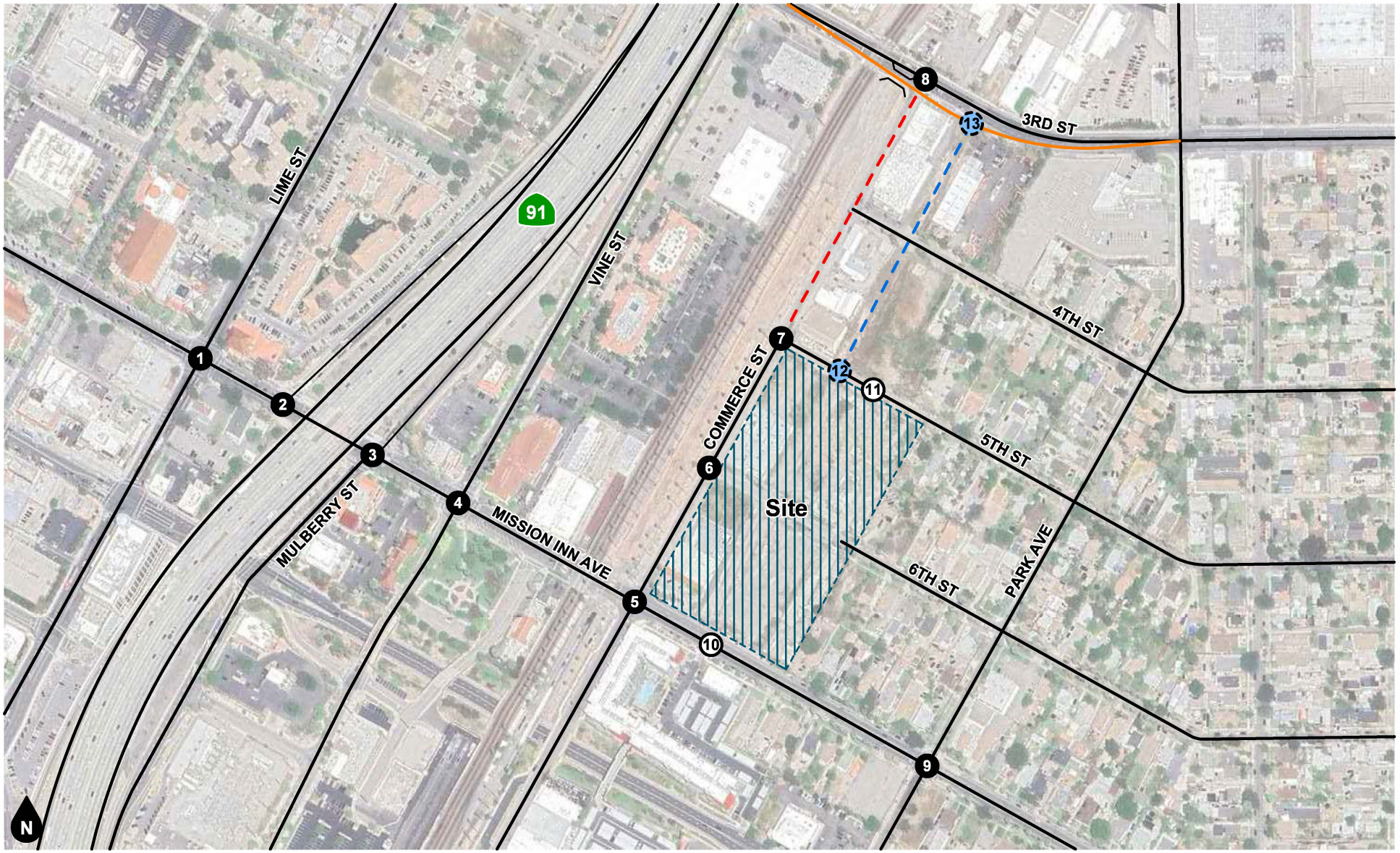
Existing Plus 3GS	Existing Plus Project & 3GS
Opening Year Plus 3GS	Opening Year Plus Project & 3GS
General Build-out Plus 3GS	General Build-out Plus Project & 3GS

Table 1
Project Trip Generation

Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			
Land Use	Source[1]	Land Use Variable[2]	% In	% Out	Rate	% In	% Out	Rate	Daily Rate
Discount Home Furnishing Superstore	ITE 869	TSF	64%	36%	0.57	53%	47%	1.57	20.00
Multifamily Housing (Low-Rise, Close to Rail Transit)	ITE 220	DU	29%	71%	0.38	60%	40%	0.61	4.72
Multifamily Housing (Mid-Rise, Close to Rail Transit)	ITE 221	DU	56%	44%	0.32	43%	57%	0.29	4.75

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Source	Quantity	In	Out	Total	In	Out	Total	Daily
Existing to be removed									
Discount Home Furnishing Superstore	ITE 869	-10.620 TSF	-4	-2	-6	-9	-8	-17	-212
Proposed development									
Multifamily Housing (Mid-Rise, Close to Rail Transit)	ITE 221	295 DU	53	41	94	37	49	86	1,401
Multifamily Housing (Low-Rise, Close to Rail Transit)	ITE 220	5 DU	1	1	2	2	1	3	24
Subtotal Proposed Development Trips			**54**	**42**	**96**	**39**	**50**	**89**	**1,425**
TOTAL NET NEW VEHICLE TRIPS GENERATED			**50**	**40**	**90**	**30**	**42**	**72**	**1,213**

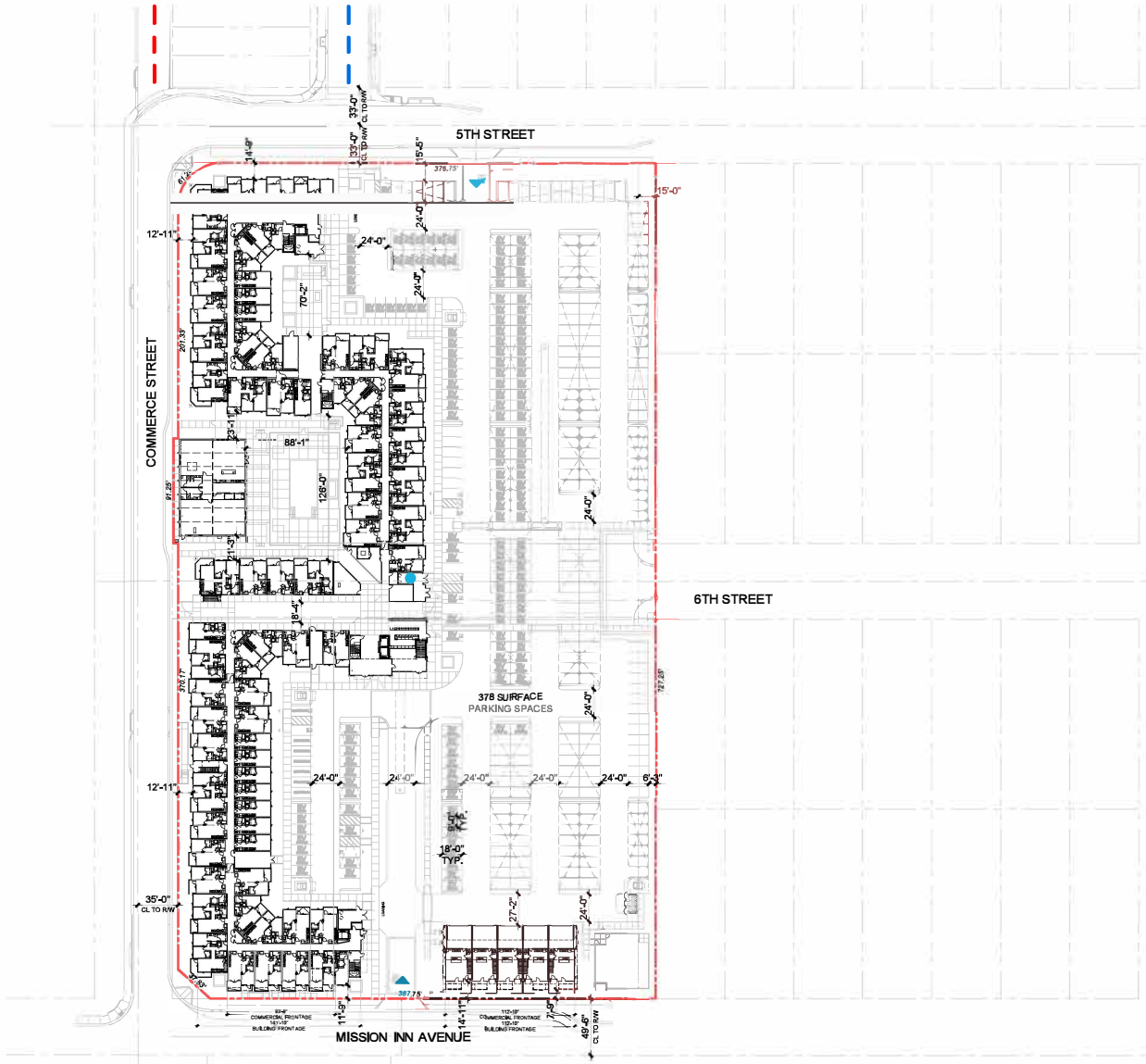
Notes:
1. ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code. All rates based on General Urban/Suburban setting.
2. DU = Dwelling Unit; TSF = Thousand Square Feet.



Legend

- # Study Intersection
- # Project Driveway
- # Study Intersection after Street Realignment
- Planned 3rd Street Grade Separation Project (By Others)
- Planned Commerce Street Realignment (By Others)
- Planned Commerce Street Vacation (By Others)

Figure 1
Project Location Map



Planned Commerce Street Realignment (By Others)

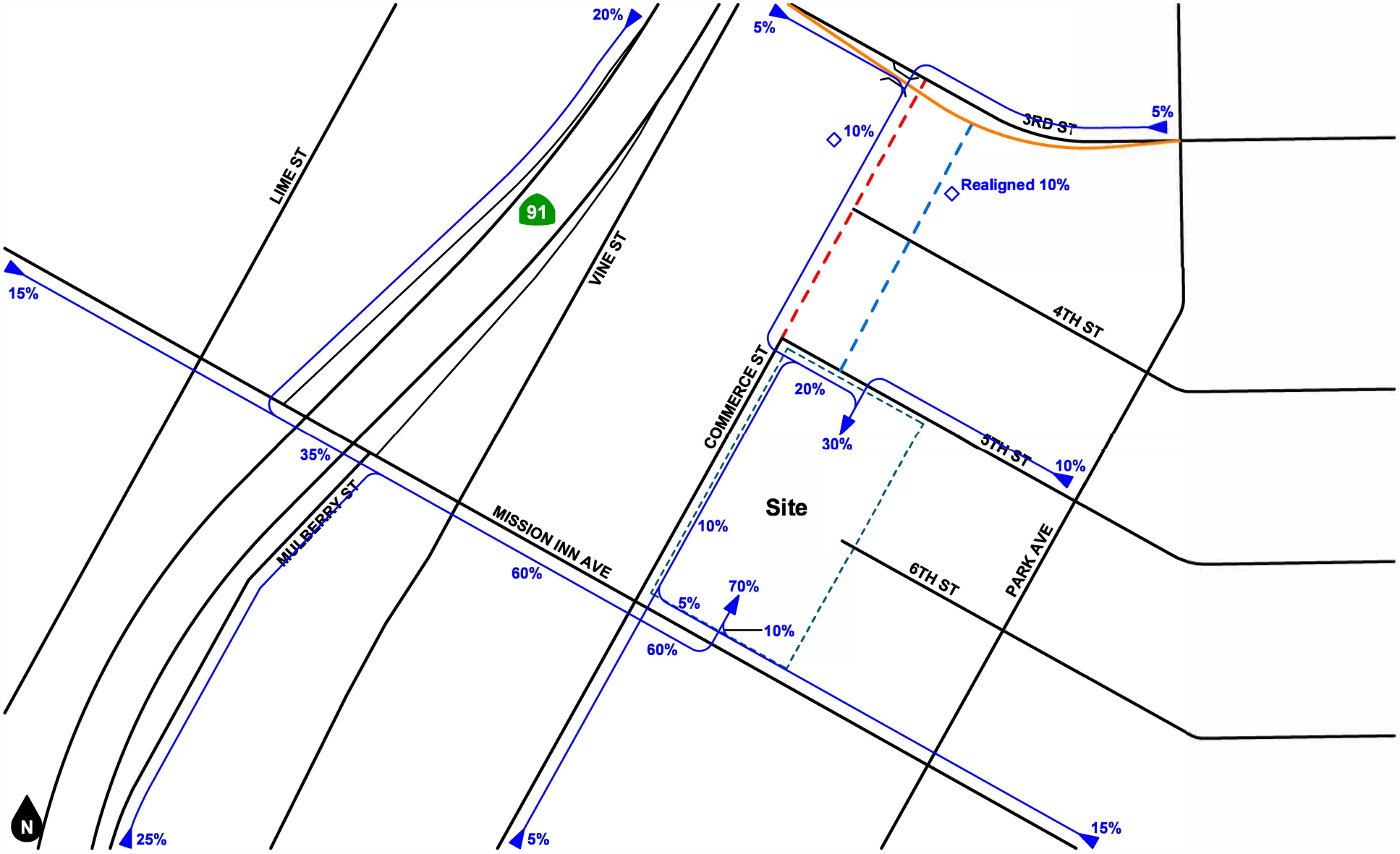
Planned Commerce Street Vacation (By Others)

Figure 2
Site Plan

Legend

- 10% Percent From Project
- Planned 3rd Street Grade Separation Project (By Others)
- Planned Commerce Street Realignment (By Others)
- Planned Commerce Street Vacation (By Others)
- ◇ Movements north of the project will divert to the realigned Commerce Street when roadway construction is finished

Figure 3
Project Trip Distribution (Outbound)



Legend

10% Percent To Project

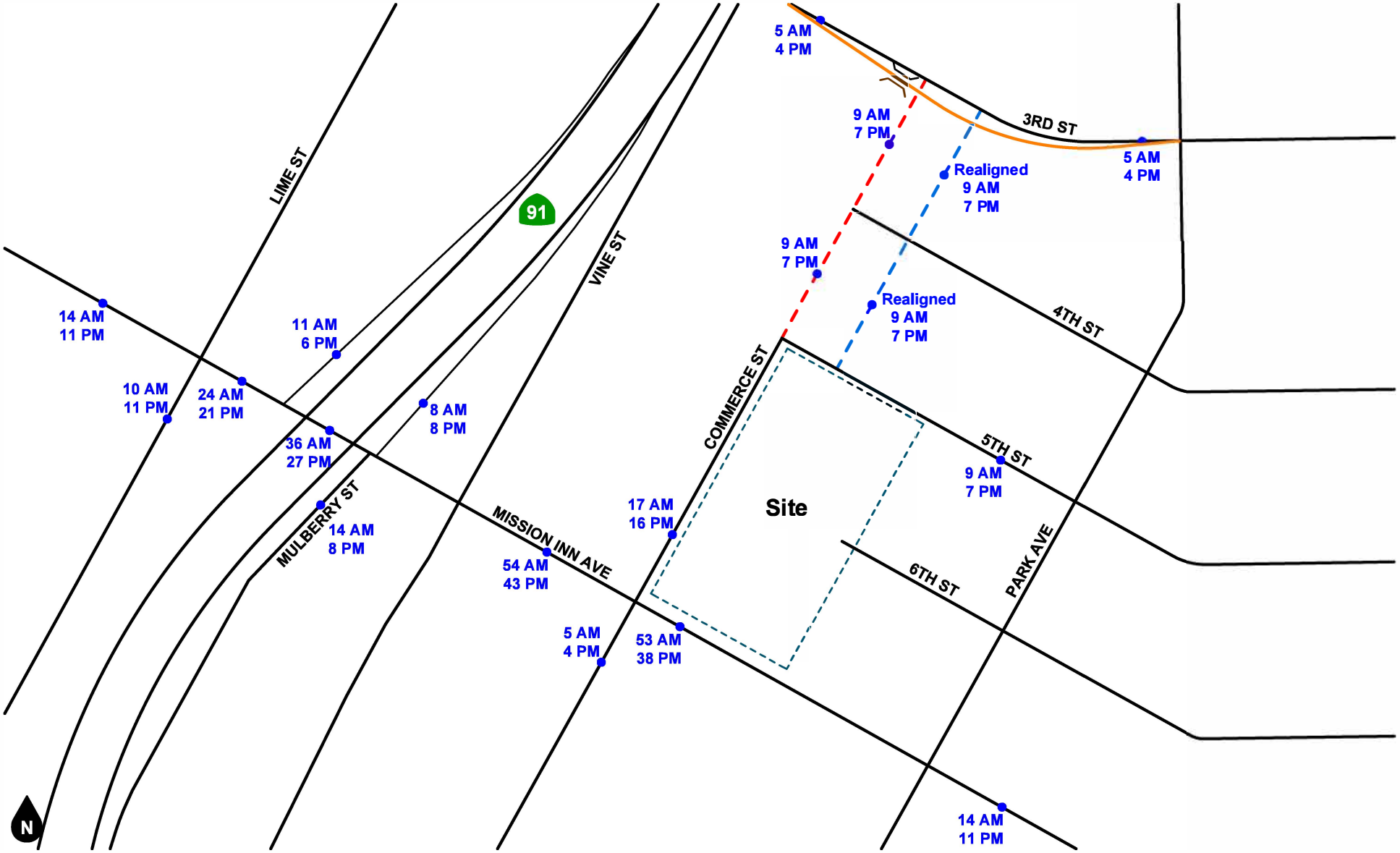
Planned 3rd Street Grade Separation Project (By Others)

Planned Commerce Street Realignment (By Others)

Planned Commerce Street Vacation (By Others)

◇ Movements north of the project will divert to the realigned Commerce Street when roadway construction is finished

Figure 4
Project Trip Distribution (Inbound)



Intersection turning movements to be provided in the traffic study.

Planned 3rd Street Grade Separation Project (By Others)
Planned Commerce Street Realignment (By Others)
Planned Commerce Street Vacation (By Others)

Figure 5
Project Trip Assignment

APPENDIX C

TRAFFIC COUNT DATA

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

City of Riverside
N/S: Lime Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 01_RIV_Lime_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

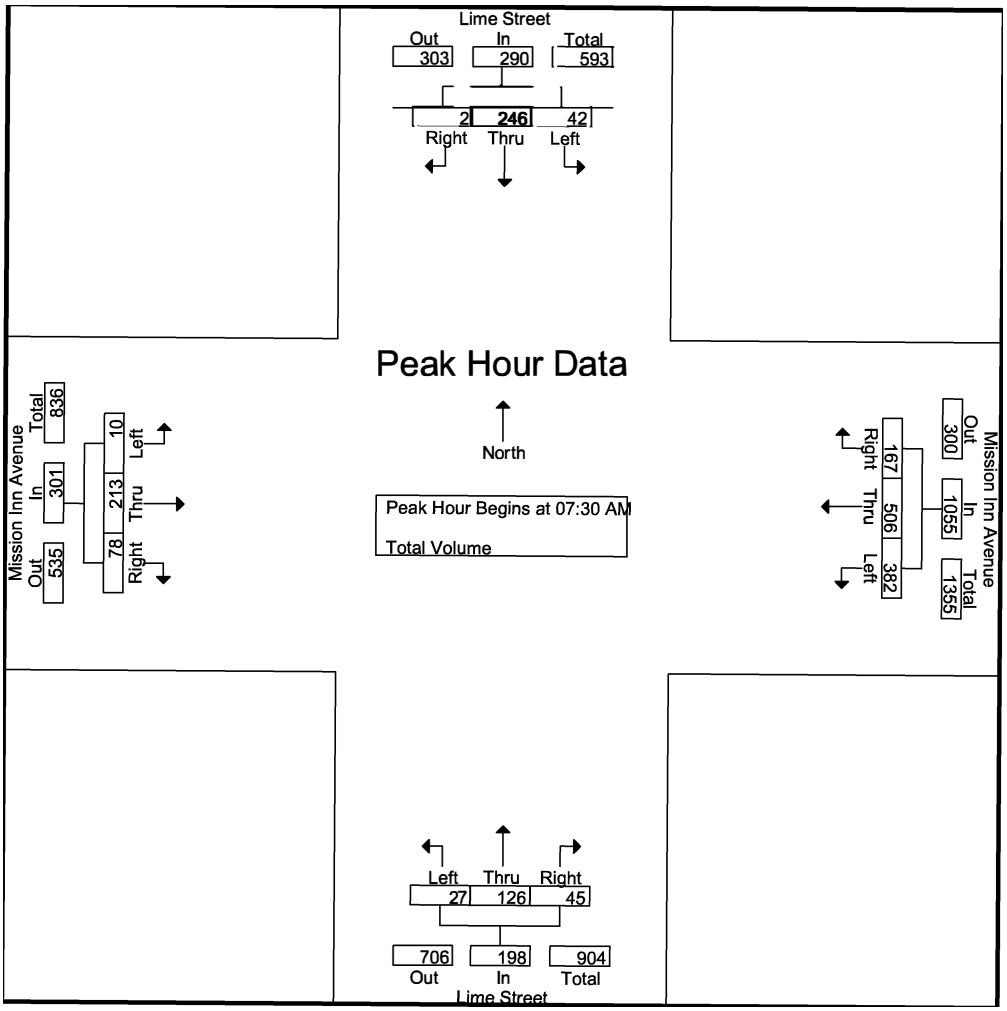
	Lime Street Southbound				Mission Inn Avenue Westbound				Lime Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	36	3	44	88	116	21	225	3	20	5	28	0	41	7	48	345
07:15 AM	9	36	1	46	78	123	18	219	0	21	6	27	3	48	18	69	361
07:30 AM	9	53	0	62	88	110	37	235	3	19	13	35	3	56	20	79	411
07:45 AM	10	85	2	97	102	142	48	292	10	42	9	61	4	55	25	84	534
Total	33	210	6	249	356	491	124	971	16	102	33	151	10	200	70	280	1651
08:00 AM	15	62	0	77	103	146	50	299	6	34	15	55	1	54	13	68	499
08:15 AM	8	46	0	54	89	108	32	229	8	31	8	47	2	48	20	70	400
08:30 AM	4	25	2	31	80	95	30	205	6	32	9	47	1	62	15	78	361
08:45 AM	8	49	2	59	101	133	53	287	7	32	7	46	5	62	16	83	475
Total	35	182	4	221	373	482	165	1020	27	129	39	195	9	226	64	299	1735
Grand Total	68	392	10	470	729	973	289	1991	43	231	72	346	19	426	134	579	3386
Apprch %	14.5	83.4	2.1		36.6	48.9	14.5		12.4	66.8	20.8		3.3	73.6	23.1		
Total %	2	11.6	0.3	13.9	21.5	28.7	8.5	58.8	1.3	6.8	2.1	10.2	0.6	12.6	4	17.1	

	Lime Street Southbound				Mission Inn Avenue Westbound				Lime Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	9	53	0	62	88	110	37	235	3	19	13	35	3	**56**	20	79	411
07:45 AM	10	**85**	**2**	**97**	102	142	48	292	**10**	**42**	9	**61**	**4**	55	**25**	**84**	**534**
08:00 AM	**15**	62	0	77	**103**	**146**	**50**	**299**	6	34	**15**	55	1	54	13	68	499
08:15 AM	8	46	0	54	89	108	32	229	8	31	8	47	2	48	20	70	400
Total Volume	42	246	2	290	382	506	167	1055	27	126	45	198	10	213	78	301	1844
% App. Total	14.5	84.8	0.7		36.2	48	15.8		13.6	63.6	22.7		3.3	70.8	25.9		
PHF	.700	.724	.250	.747	.927	.866	.835	.882	.675	.750	.750	.811	.625	.951	.780	.896	.863

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

City of Riverside
N/S: Lime Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 01_RIV_Lime_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 2



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

Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:45 AM				07:30 AM			
+0 mins.	9	53	0	62	88	110	37	235	**10**	**42**	9	**61**	3	**56**	20	79
+15 mins.	10	**85**	**2**	**97**	102	142	48	292	6	34	**15**	55	**4**	55	**25**	**84**
+30 mins.	**15**	62	0	77	**103**	**146**	**50**	**299**	8	31	8	47	1	54	13	68
+45 mins.	8	46	0	54	89	108	32	229	6	32	9	47	2	48	20	70
Total Volume	42	246	2	290	382	506	167	1055	30	139	41	210	10	213	78	301
% App. Total	14.5	84.8	0.7		36.2	48	15.8		14.3	66.2	19.5		3.3	70.8	25.9	
PHF	.700	.724	.250	.747	.927	.866	.835	.882	.750	.827	.683	.861	.625	.951	.780	.896

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

City of Riverside
N/S: Lime Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 01_RIV_Lime_MI PM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

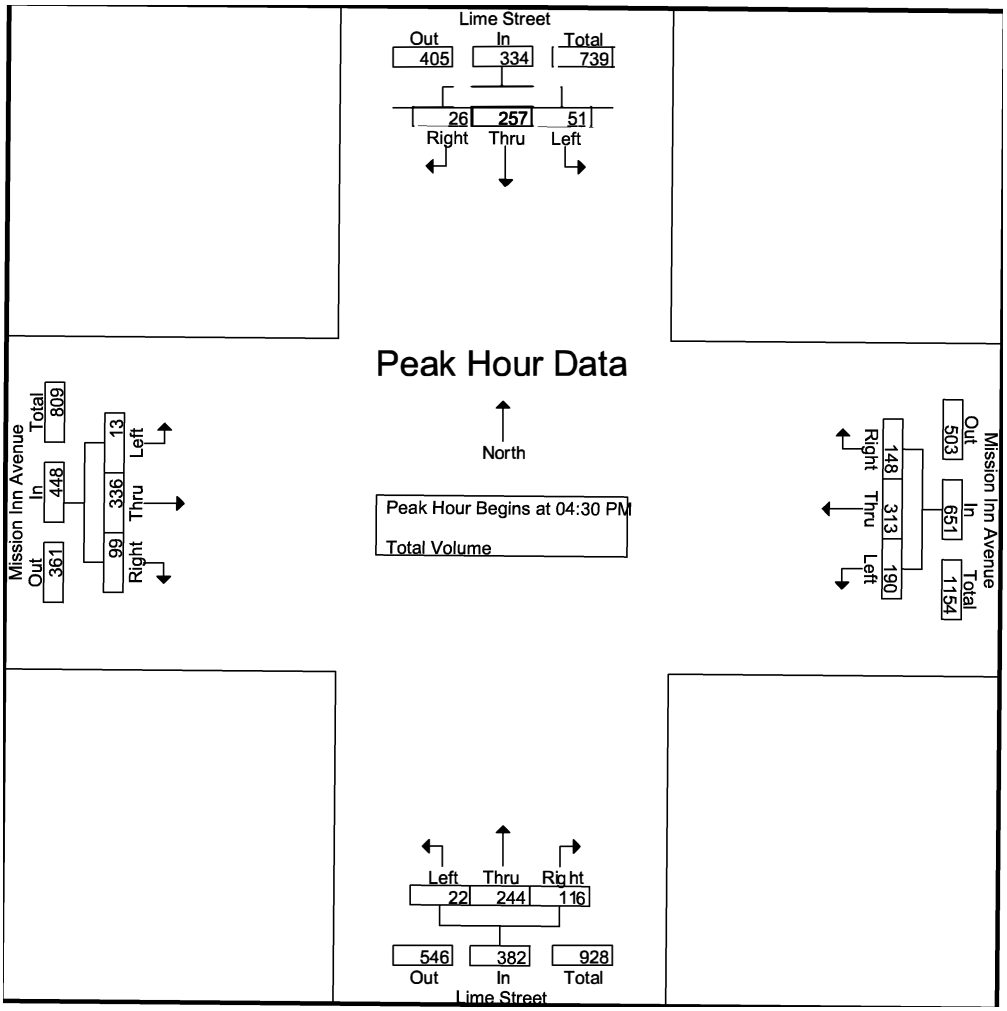
	Lime Street Southbound				Mission Inn Avenue Westbound				Lime Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	17	82	1	100	62	100	38	200	4	63	16	83	3	65	26	94	477
04:15 PM	17	70	3	90	48	67	30	145	4	52	14	70	8	57	22	87	392
04:30 PM	14	72	7	93	46	75	34	155	5	40	21	66	0	91	24	115	429
04:45 PM	10	71	3	84	50	62	33	145	1	61	17	79	4	75	22	101	409
Total	58	295	14	367	206	304	135	645	14	216	68	298	15	288	94	397	1707
05:00 PM	15	65	7	87	41	81	37	159	11	73	38	122	4	84	28	116	484
05:15 PM	12	49	9	70	53	95	44	192	5	70	40	115	5	86	25	116	493
05:30 PM	13	68	9	90	44	71	40	155	4	66	13	83	5	63	18	86	414
05:45 PM	15	58	2	75	40	81	33	154	5	49	16	70	4	69	22	95	394
Total	55	240	27	322	178	328	154	660	25	258	107	390	18	302	93	413	1785
Grand Total	113	535	41	689	384	632	289	1305	39	474	175	688	33	590	187	810	3492
Apprch %	16.4	77.6	6		29.4	48.4	22.1		5.7	68.9	25.4		4.1	72.8	23.1		
Total %	3.2	15.3	1.2	19.7	11	18.1	8.3	37.4	1.1	13.6	5	19.7	0.9	16.9	5.4	23.2	

	Lime Street Southbound				Mission Inn Avenue Westbound				Lime Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	14	**72**	7	**93**	46	75	34	155	5	40	21	66	0	**91**	24	115	429
04:45 PM	10	71	3	84	50	62	33	145	1	61	17	79	4	75	22	101	409
05:00 PM	**15**	65	7	87	41	81	37	159	**11**	**73**	38	**122**	4	84	**28**	**116**	484
05:15 PM	12	49	**9**	70	**53**	**95**	**44**	**192**	5	70	**40**	115	**5**	86	25	116	**493**
Total Volume	51	257	26	334	190	313	148	651	22	244	116	382	13	336	99	448	1815
% App. Total	15.3	76.9	7.8		29.2	48.1	22.7		5.8	63.9	30.4		2.9	75	22.1		
PHF	.850	.892	.722	.898	.896	.824	.841	.848	.500	.836	.725	.783	.650	.923	.884	.966	.920

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

City of Riverside
N/S: Lime Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 01_RIV_Lime_MI PM
Site Code : 22524972
Start Date : 11/6/2024
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				04:30 PM			
+0 mins.	**17**	**82**	1	**100**	41	81	37	159	1	61	17	79	0	**91**	24	115
+15 mins.	17	70	3	90	**53**	**95**	**44**	**192**	**11**	**73**	38	**122**	4	75	22	101
+30 mins.	14	72	**7**	93	44	71	40	155	5	70	**40**	115	4	84	**28**	**116**
+45 mins.	10	71	3	84	40	81	33	154	4	66	13	83	**5**	86	25	116
Total Volume	58	295	14	367	178	328	154	660	21	270	108	399	13	336	99	448
% App. Total	15.8	80.4	3.8		27	49.7	23.3		5.3	67.7	27.1		2.9	75	22.1	
PHF	.853	.899	.500	.918	.840	.863	.875	.859	.477	.925	.675	.818	.650	.923	.884	.966

Location: Riverside
N/S: Lime Street
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

PEDESTRIANS

	North Leg Lime Street Pedestrians	East Leg Mission Inn Avenue Pedestrians	South Leg Lime Street Pedestrians	West Leg Mission Inn Avenue Pedestrians	
7:00 AM	1	0	2	0	3
7:15 AM	1	0	1	1	3
7:30 AM	3	1	2	0	6
7:45 AM	2	0	0	1	3
8:00 AM	1	0	3	1	5
8:15 AM	0	0	1	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1
TOTAL VOLUMES:	8	2	9	3	22

	North Leg Lime Street Pedestrians	East Leg Mission Inn Avenue Pedestrians	South Leg Lime Street Pedestrians	West Leg Mission Inn Avenue Pedestrians	
4:00 PM	0	0	2	1	3
4:15 PM	4	0	2	1	7
4:30 PM	2	0	2	1	5
4:45 PM	3	2	1	1	7
5:00 PM	5	2	5	0	12
5:15 PM	3	2	1	1	7
5:30 PM	0	1	3	1	5
5:45 PM	6	0	3	0	9
TOTAL VOLUMES:	23	7	19	6	55

Counts Unlimited, Inc.
PO Box1178
Corona, CA 92878
951-268-6268

Location: Riverside
N/S: Lime Street
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

BICYCLES

	Southbound Lime Street			Westbound Mission Inn Avenue			Northbound Lime Street			Eastbound Mission Inn Avenue			
	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	1	0	0	1	0	0	0	0	0	0	1	3
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	1	0	0	0	0	0	0	1	3

	Southbound Lime Street			Westbound Mission Inn Avenue			Northbound Lime Street			Eastbound Mission Inn Avenue			
	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	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	3	1	4

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

City of Riverside
N/S: SR-91 Westbound Off Ramp
E/W: Mission Inn Avenue
Weather: Clear

File Name : 02_RIV_91W_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

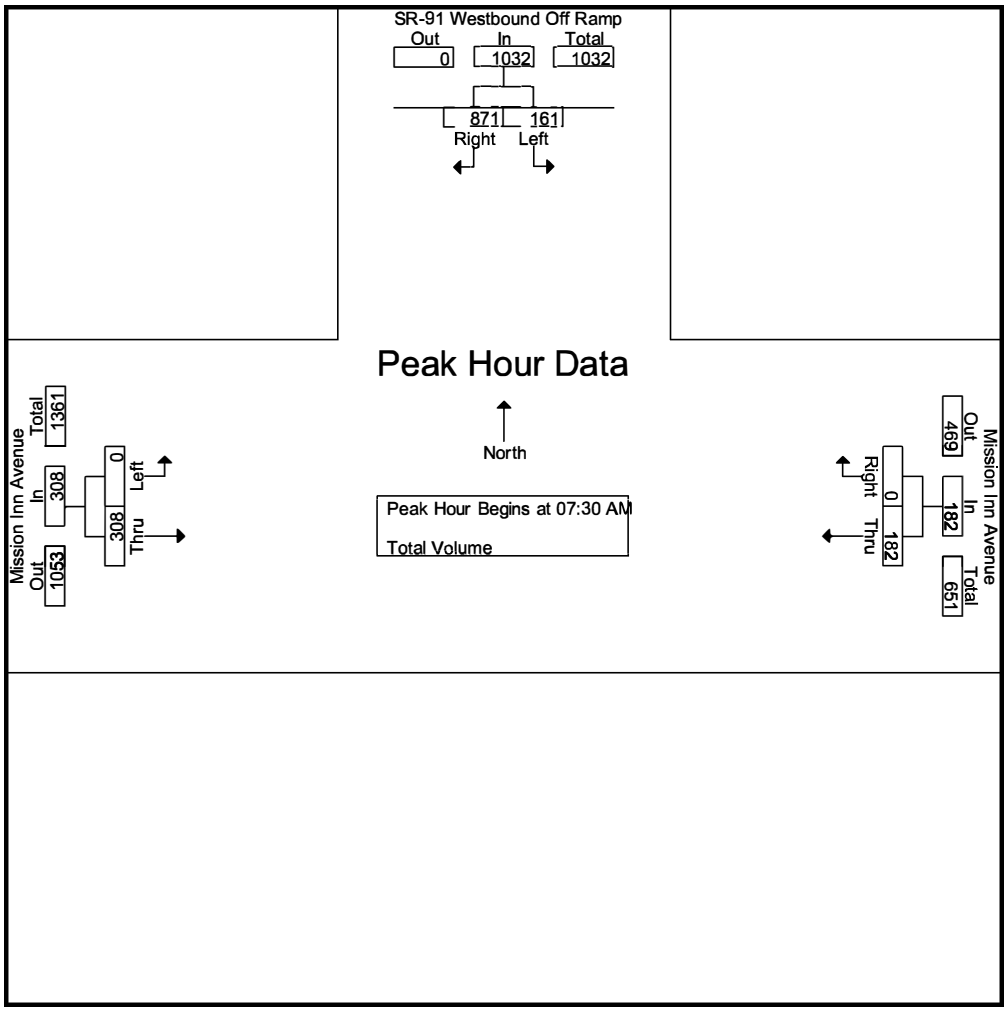
	SR-91 Westbound Off Ramp Southbound			Mission Inn Avenue Westbound			Mission Inn Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
07:00 AM	24	199	223	29	0	29	0	51	51	303
07:15 AM	28	178	206	34	0	34	0	57	57	297
07:30 AM	34	205	239	37	0	37	0	79	79	355
07:45 AM	49	244	293	50	0	50	0	77	77	420
Total	135	826	961	150	0	150	0	264	264	1375
08:00 AM	43	244	287	55	0	55	0	88	88	430
08:15 AM	35	178	213	40	0	40	0	64	64	317
08:30 AM	42	173	215	39	0	39	0	74	74	328
08:45 AM	76	234	310	50	0	50	0	74	74	434
Total	196	829	1025	184	0	184	0	300	300	1509
Grand Total	331	1655	1986	334	0	334	0	564	564	2884
Apprch %	16.7	83.3		100	0		0	100		
Total %	11.5	57.4	68.9	11.6	0	11.6	0	19.6	19.6	

	SR-91 Westbound Off Ramp Southbound			Mission Inn Avenue Westbound			Mission Inn Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	34	205	239	37	0	37	0	79	79	355
07:45 AM	**49**	**244**	**293**	50	0	50	0	77	77	420
08:00 AM	43	244	287	**55**	0	**55**	0	**88**	**88**	**430**
08:15 AM	35	178	213	40	0	40	0	64	64	317
Total Volume	161	871	1032	182	0	182	0	308	308	1522
% App. Total	15.6	84.4		100	0		0	100		
PHF	.821	.892	.881	.827	.000	.827	.000	.875	.875	.885

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

City of Riverside
N/S: SR-91 Westbound Off Ramp
E/W: Mission Inn Avenue
Weather: Clear

File Name : 02_RIV_91W_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 2



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

Peak Hour for Each Approach Begins at:

	07:30 AM			07:45 AM			07:30 AM		
+0 mins.	34	205	239	50	0	50	0	79	79
+15 mins.	**49**	**244**	**293**	**55**	0	**55**	0	77	77
+30 mins.	43	244	287	40	0	40	0	**88**	**88**
+45 mins.	35	178	213	39	0	39	0	64	64
Total Volume	161	871	1032	184	0	184	0	308	308
% App. Total	15.6	84.4		100	0		0	100	
PHF	.821	.892	.881	.836	.000	.836	.000	.875	.875

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

City of Riverside
N/S: SR-91 Westbound Off Ramp
E/W: Mission Inn Avenue
Weather: Clear

File Name : 02_RIV_91W_MI PM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

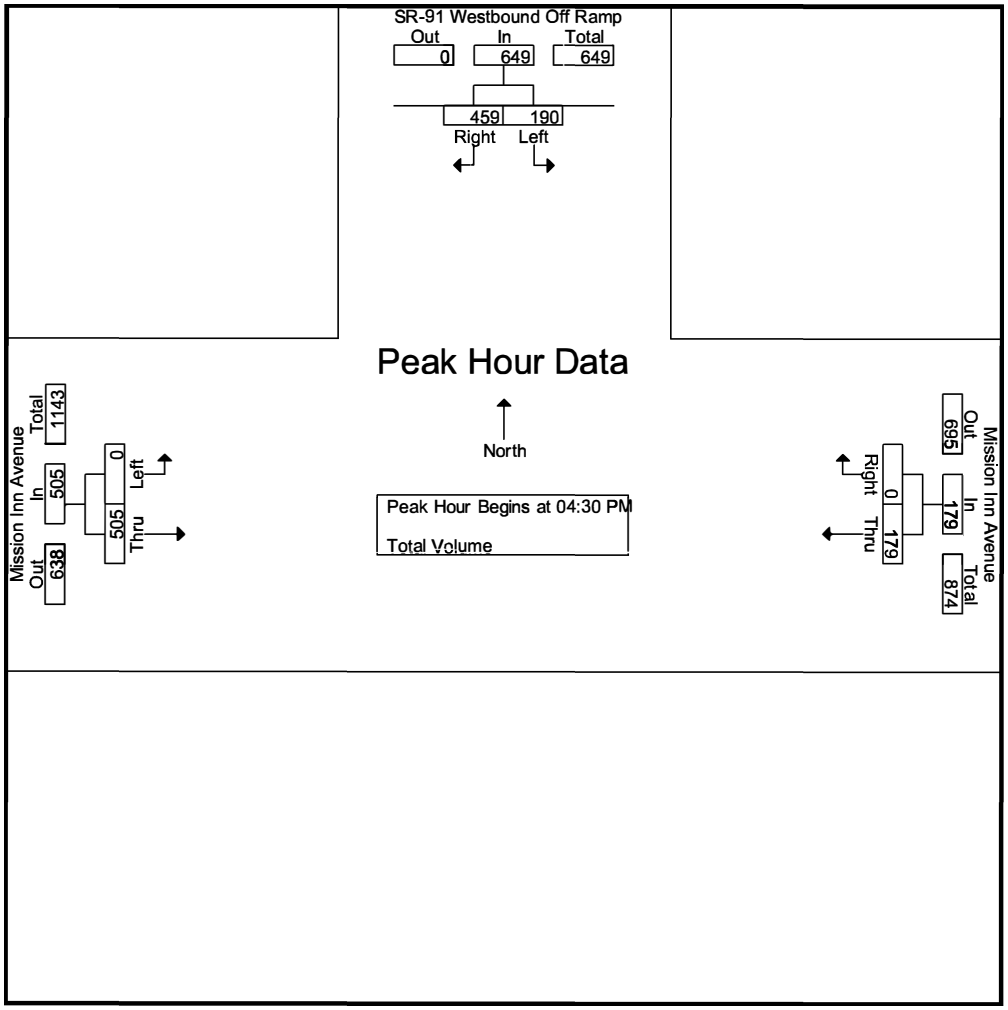
	SR-91 Westbound Off Ramp Southbound			Mission Inn Avenue Westbound			Mission Inn Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
04:00 PM	48	146	194	57	0	57	0	100	100	351
04:15 PM	39	101	140	45	0	45	0	86	86	271
04:30 PM	32	103	135	43	0	43	0	128	128	306
04:45 PM	53	109	162	37	0	37	0	102	102	301
Total	172	459	631	182	0	182	0	416	416	1229
05:00 PM	53	113	166	46	0	46	0	136	136	348
05:15 PM	52	134	186	53	0	53	0	139	139	378
05:30 PM	41	118	159	37	0	37	0	93	93	289
05:45 PM	53	112	165	40	0	40	0	100	100	305
Total	199	477	676	176	0	176	0	468	468	1320
Grand Total	371	936	1307	358	0	358	0	884	884	2549
Apprch %	28.4	71.6		100	0		0	100		
Total %	14.6	36.7	51.3	14	0	14	0	34.7	34.7	

	SR-91 Westbound Off Ramp Southbound			Mission Inn Avenue Westbound			Mission Inn Avenue Eastbound			
Start Time	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	32	103	135	43	0	43	0	128	128	306
04:45 PM	**53**	109	162	37	0	37	0	102	102	301
05:00 PM	53	113	166	46	0	46	0	136	136	348
05:15 PM	52	**134**	**186**	**53**	0	**53**	0	**139**	**139**	**378**
Total Volume	190	459	649	179	0	179	0	505	505	1333
% App. Total	29.3	70.7		100	0		0	100		
PHF	.896	.856	.872	.844	.000	.844	.000	.908	.908	.882

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

City of Riverside
N/S: SR-91 Westbound Off Ramp
E/W: Mission Inn Avenue
Weather: Clear

File Name : 02_RIV_91W_MI PM
Site Code : 22524972
Start Date : 11/6/2024
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			04:30 PM		
+0 mins.	**53**	113	166	**57**	0	**57**	0	128	128
+15 mins.	52	**134**	**186**	45	0	45	0	102	102
+30 mins.	41	118	159	43	0	43	0	136	136
+45 mins.	53	112	165	37	0	37	0	**139**	**139**
Total Volume	199	477	676	182	0	182	0	505	505
% App. Total	29.4	70.6		100	0		0	100	
PHF	.939	.890	.909	.798	.000	.798	.000	.908	.908

Location: Riverside
N/S: SR-91 WB Off Ramp
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

PEDESTRIANS

	North Leg SR-91 WB Off Ramp	East Leg Mission Inn Avenue	South Leg Dead End	West Leg Mission Inn Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	3	0	0	0	3
7:15 AM	0	0	0	0	0
7:30 AM	3	0	0	0	3
7:45 AM	2	0	0	0	2
8:00 AM	1	0	0	0	1
8:15 AM	1	0	0	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	10	0	0	0	10

	North Leg SR-91 WB Off Ramp	East Leg Mission Inn Avenue	South Leg Dead End	West Leg Mission Inn Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	0	0	0	1
4:15 PM	1	0	0	0	1
4:30 PM	2	0	0	0	2
4:45 PM	1	0	0	0	1
5:00 PM	1	0	0	0	1
5:15 PM	2	0	0	0	2
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	8	0	0	0	8

Location: Riverside
N/S: SR-91 WB Off Ramp
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

BICYCLES

	Southbound SR-91 WB Off Ramp			Westbound Mission Inn Avenue			Northbound Dead End			Eastbound Mission Inn Avenue			
	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	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0	0	0	0	0	0	0

	Southbound SR-91 WB Off Ramp			Westbound Mission Inn Avenue			Northbound Dead End			Eastbound Mission Inn Avenue			
	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	0	0	0
4:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
TOTAL VOLUMES:	0	3	0	0	1	0	0	0	0	0	2	0	6

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

City of Riverside
N/S: SR-91 EB On Ramp/Mulberry Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 03_RIV_Mul_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

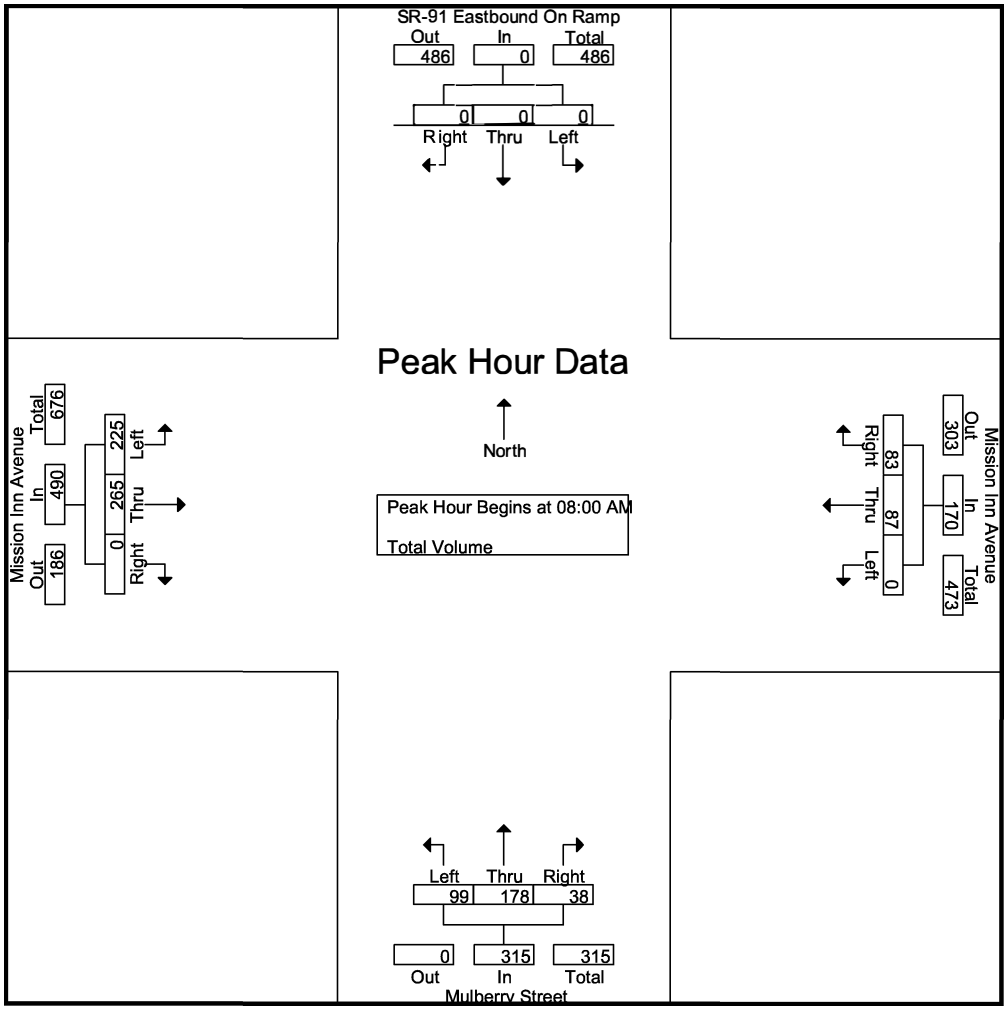
	SR-91 Eastbound On Ramp Southbound				Mission Inn Avenue Westbound				Mulberry Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	16	25	41	15	36	6	57	43	33	0	76	174
07:15 AM	0	0	0	0	0	10	16	26	22	45	4	71	47	35	0	82	179
07:30 AM	0	0	0	0	0	13	20	33	30	42	14	86	85	29	0	114	233
07:45 AM	0	0	0	0	0	24	19	43	21	48	13	82	67	59	0	126	251
Total	0	0	0	0	0	63	80	143	88	171	37	296	242	156	0	398	837
08:00 AM	0	0	0	0	0	27	23	50	27	53	14	94	55	72	0	127	271
08:15 AM	0	0	0	0	0	16	23	39	25	45	7	77	56	46	0	102	218
08:30 AM	0	0	0	0	0	21	21	42	17	39	9	65	53	58	0	111	218
08:45 AM	0	0	0	0	0	23	16	39	30	41	8	79	61	89	0	150	268
Total	0	0	0	0	0	87	83	170	99	178	38	315	225	265	0	490	975
Grand Total	0	0	0	0	0	150	163	313	187	349	75	611	467	421	0	888	1812
Apprch %	0	0	0		0	47.9	52.1		30.6	57.1	12.3		52.6	47.4	0		
Total %	0	0	0	0	0	8.3	9	17.3	10.3	19.3	4.1	33.7	25.8	23.2	0	49	

	SR-91 Eastbound On Ramp Southbound				Mission Inn Avenue Westbound				Mulberry Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	0	0	0	0	0	**27**	**23**	**50**	27	**53**	**14**	**94**	55	72	0	127	**271**
08:15 AM	0	0	0	0	0	16	23	39	25	45	7	77	56	46	0	102	218
08:30 AM	0	0	0	0	0	21	21	42	17	39	9	65	53	58	0	111	218
08:45 AM	0	0	0	0	0	23	16	39	**30**	41	8	79	**61**	**89**	0	**150**	268
Total Volume	0	0	0	0	0	87	83	170	99	178	38	315	225	265	0	490	975
% App. Total	0	0	0		0	51.2	48.8		31.4	56.5	12.1		45.9	54.1	0		
PHF	.000	.000	.000	.000	.000	.806	.902	.850	.825	.840	.679	.838	.922	.744	.000	.817	.899

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

City of Riverside
N/S: SR-91 EB On Ramp/Mulberry Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 03_RIV_Mul_MI AM
Site Code : 22524972
Start Date : 11/6/2024
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				07:45 AM				07:30 AM				08:00 AM			
+0 mins.	0	0	0	0	0	24	19	43	**30**	42	**14**	86	55	72	0	127
+15 mins.	0	0	0	0	0	**27**	**23**	**50**	21	48	13	82	56	46	0	102
+30 mins.	0	0	0	0	0	16	23	39	27	**53**	14	**94**	53	58	0	111
+45 mins.	0	0	0	0	0	21	21	42	25	45	7	77	**61**	**89**	0	**150**
Total Volume	0	0	0	0	0	88	86	174	103	188	48	339	225	265	0	490
% App. Total	0	0	0		0	50.6	49.4		30.4	55.5	14.2		45.9	54.1	0	
PHF	.000	.000	.000	.000	.000	.815	.935	.870	.858	.887	.857	.902	.922	.744	.000	.817

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

City of Riverside
N/S: SR-91 EB On Ramp/Mulberry Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 03_RIV_Mul_MI PM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

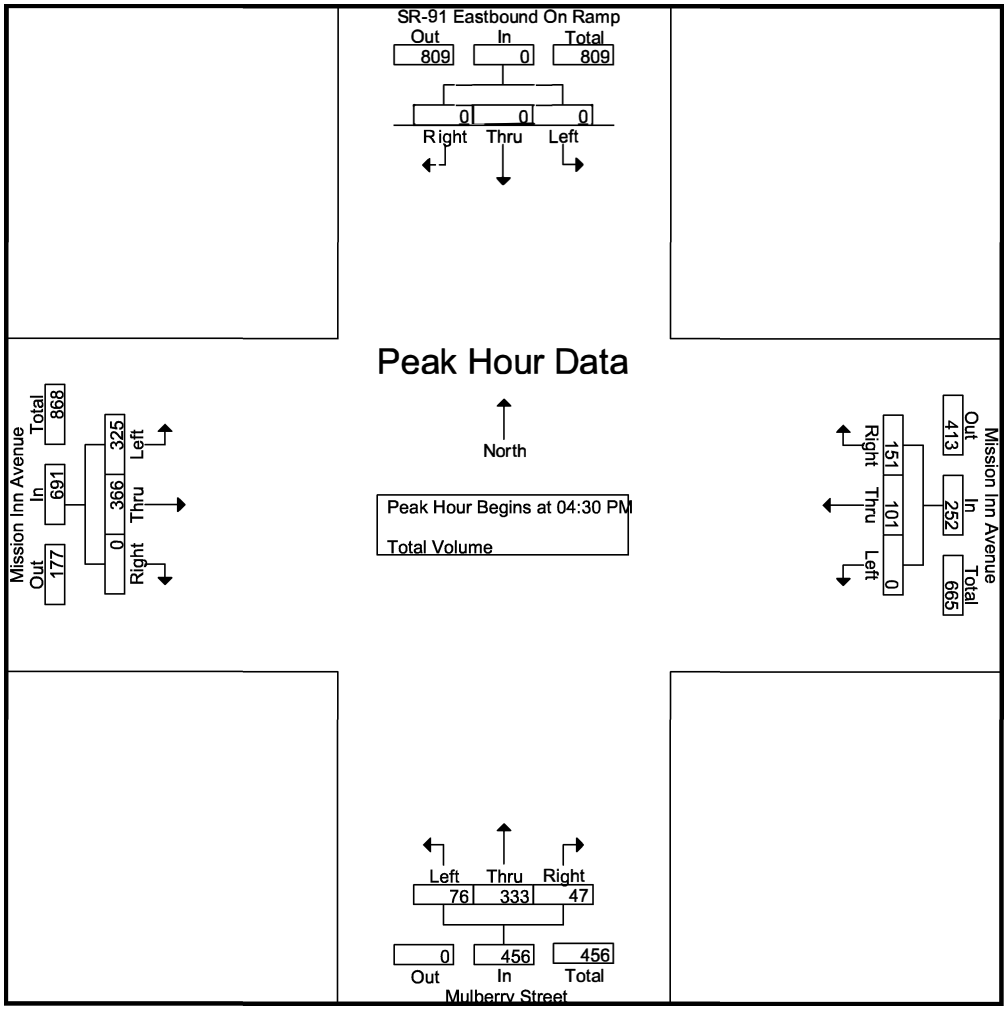
	SR-91 Eastbound On Ramp Southbound				Mission Inn Avenue Westbound				Mulberry Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	30	39	69	28	66	16	110	59	87	0	146	325
04:15 PM	0	0	0	0	0	28	18	46	16	56	15	87	49	77	0	126	259
04:30 PM	0	0	0	0	0	27	33	60	14	69	11	94	80	80	0	160	314
04:45 PM	0	0	0	0	0	14	24	38	23	92	15	130	63	88	0	151	319
Total	0	0	0	0	0	99	114	213	81	283	57	421	251	332	0	583	1217
05:00 PM	0	0	0	0	0	28	62	90	18	89	9	116	90	99	0	189	395
05:15 PM	0	0	0	0	0	32	32	64	21	83	12	116	92	99	0	191	371
05:30 PM	0	0	0	0	0	18	19	37	23	78	15	116	67	71	0	138	291
05:45 PM	0	0	0	0	0	17	12	29	19	61	12	92	58	89	0	147	268
Total	0	0	0	0	0	95	125	220	81	311	48	440	307	358	0	665	1325
Grand Total	0	0	0	0	0	194	239	433	162	594	105	861	558	690	0	1248	2542
Apprch %	0	0	0		0	44.8	55.2		18.8	69	12.2		44.7	55.3	0		
Total %	0	0	0	0	0	7.6	9.4	17	6.4	23.4	4.1	33.9	22	27.1	0	49.1	

	SR-91 Eastbound On Ramp Southbound				Mission Inn Avenue Westbound				Mulberry Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	27	33	60	14	69	11	94	80	80	0	160	314
04:45 PM	0	0	0	0	0	14	24	38	**23**	**92**	**15**	**130**	63	88	0	151	319
05:00 PM	0	0	0	0	0	28	**62**	**90**	18	89	9	116	90	**99**	0	189	**395**
05:15 PM	0	0	0	0	0	**32**	32	64	21	83	12	116	**92**	99	0	**191**	371
Total Volume	0	0	0	0	0	101	151	252	76	333	47	456	325	366	0	691	1399
% App. Total	0	0	0		0	40.1	59.9		16.7	73	10.3		47	53	0		
PHF	.000	.000	.000	.000	.000	.789	.609	.700	.826	.905	.783	.877	.883	.924	.000	.904	.885

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

City of Riverside
N/S: SR-91 EB On Ramp/Mulberry Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 03_RIV_Mul_MI PM
Site Code : 22524972
Start Date : 11/6/2024
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				04:30 PM				04:45 PM				04:30 PM			
+0 mins.	0	0	0	0	0	27	33	60	**23**	**92**	**15**	**130**	80	80	0	160
+15 mins.	0	0	0	0	0	14	24	38	18	89	9	116	63	88	0	151
+30 mins.	0	0	0	0	0	28	**62**	**90**	21	83	12	116	90	**99**	0	189
+45 mins.	0	0	0	0	0	**32**	32	64	23	78	15	116	**92**	99	0	**191**
Total Volume	0	0	0	0	0	101	151	252	85	342	51	478	325	366	0	691
% App. Total	0	0	0		0	40.1	59.9		17.8	71.5	10.7		47	53	0	
PHF	.000	.000	.000	.000	.000	.789	.609	.700	.924	.929	.850	.919	.883	.924	.000	.904

Location: Riverside
N/S: SR-91 EB On Ramp/Mulberry St
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

PEDESTRIANS

	North Leg SR-91 EB On Ramp	East Leg Mission Inn Avenue	South Leg Mulberry Street	West Leg Mission Inn Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	2	0	2	0	4
7:15 AM	0	0	0	0	0
7:30 AM	3	0	2	0	5
7:45 AM	1	0	0	0	1
8:00 AM	3	0	2	0	5
8:15 AM	1	0	0	0	1
8:30 AM	0	0	1	0	1
8:45 AM	1	0	0	0	1
TOTAL VOLUMES:	11	0	7	0	18

	North Leg SR-91 EB On Ramp	East Leg Mission Inn Avenue	South Leg Mulberry Street	West Leg Mission Inn Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	0	2	0	3
4:15 PM	1	0	0	0	1
4:30 PM	3	0	1	0	4
4:45 PM	1	0	0	0	1
5:00 PM	0	0	1	0	1
5:15 PM	5	0	2	0	7
5:30 PM	0	0	0	0	0
5:45 PM	2	0	3	0	5
TOTAL VOLUMES:	13	0	9	0	22

Location: Riverside
N/S: SR-91 EB On Ramp/Mulberry St
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

BICYCLES

	Southbound SR-91 EB On Ramp			Westbound Mission Inn Avenue			Northbound Mulberry Street			Eastbound Mission Inn Avenue			
	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	1	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	0	0	0	0	0	0	0	1

	Southbound SR-91 EB On Ramp			Westbound Mission Inn Avenue			Northbound Mulberry Street			Eastbound Mission Inn Avenue			
	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	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
5:00 PM	0	0	0	0	0	0	0	1	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	1	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	3	0	0	3	0	7

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

City of Riverside
N/S: Vine Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 04_RIV_Vine_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

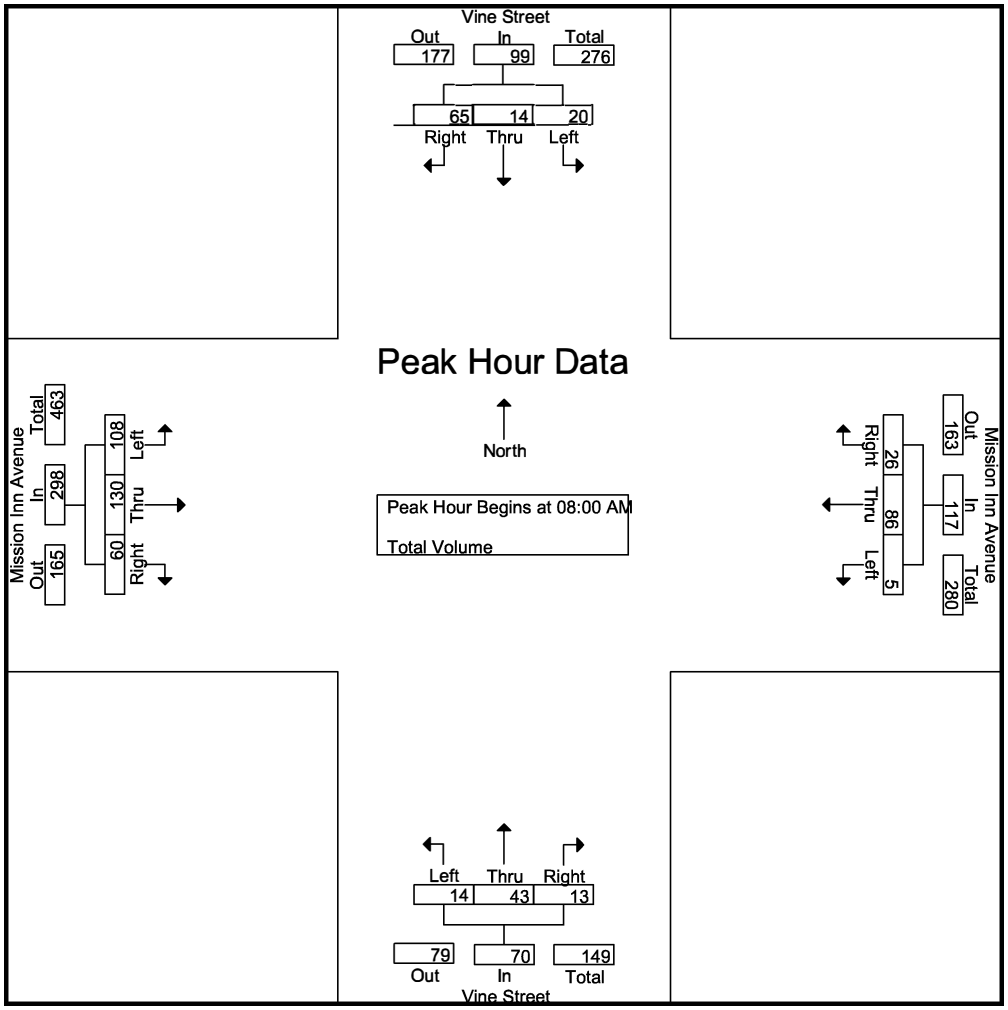
	Vine Street Southbound				Mission Inn Avenue Westbound				Vine Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	7	8	0	23	3	26	10	3	6	19	12	21	7	40	93
07:15 AM	4	2	8	14	1	15	4	20	2	9	3	14	13	19	6	38	86
07:30 AM	5	3	7	15	1	25	3	29	3	4	2	9	19	16	6	41	94
07:45 AM	7	6	21	34	1	21	5	27	2	15	3	20	32	25	16	73	154
Total	16	12	43	71	3	84	15	102	17	31	14	62	76	81	35	192	427
08:00 AM	6	3	17	26	3	23	7	33	8	10	0	18	29	46	11	86	163
08:15 AM	4	4	19	27	0	19	6	25	1	14	5	20	21	27	5	53	125
08:30 AM	2	4	14	20	0	26	8	34	0	9	3	12	30	28	6	64	130
08:45 AM	8	3	15	26	2	18	5	25	5	10	5	20	28	29	38	95	166
Total	20	14	65	99	5	86	26	117	14	43	13	70	108	130	60	298	584
Grand Total	36	26	108	170	8	170	41	219	31	74	27	132	184	211	95	490	1011
Apprch %	21.2	15.3	63.5		3.7	77.6	18.7		23.5	56.1	20.5		37.6	43.1	19.4		
Total %	3.6	2.6	10.7	16.8	0.8	16.8	4.1	21.7	3.1	7.3	2.7	13.1	18.2	20.9	9.4	48.5	

	Vine Street Southbound				Mission Inn Avenue Westbound				Vine Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 08:00 AM																	
08:00 AM	6	3	17	26	**3**	23	7	33	**8**	10	0	18	29	**46**	11	86	163
08:15 AM	4	**4**	**19**	**27**	0	19	6	25	1	**14**	**5**	**20**	21	27	5	53	125
08:30 AM	2	4	14	20	0	**26**	**8**	**34**	0	9	3	12	**30**	28	6	64	130
08:45 AM	**8**	3	15	26	2	18	5	25	5	10	5	20	28	29	**38**	**95**	**166**
Total Volume	20	14	65	99	5	86	26	117	14	43	13	70	108	130	60	298	584
% App. Total	20.2	14.1	65.7		4.3	73.5	22.2		20	61.4	18.6		36.2	43.6	20.1		
PHF	.625	.875	.855	.917	.417	.827	.813	.860	.438	.768	.650	.875	.900	.707	.395	.784	.880

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

City of Riverside
N/S: Vine Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 04_RIV_Vine_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 2



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

Peak Hour for Each Approach Begins at:

	07:45 AM				07:45 AM				07:45 AM				08:00 AM			
+0 mins.	**7**	**6**	**21**	**34**	1	21	5	27	2	**15**	3	**20**	29	**46**	11	86
+15 mins.	6	3	17	26	**3**	23	7	33	**8**	10	0	18	21	27	5	53
+30 mins.	4	4	19	27	0	19	6	25	1	14	**5**	20	**30**	28	6	64
+45 mins.	2	4	14	20	0	**26**	**8**	**34**	0	9	3	12	28	29	**38**	**95**
Total Volume	19	17	71	107	4	89	26	119	11	48	11	70	108	130	60	298
% App. Total	17.8	15.9	66.4		3.4	74.8	21.8		15.7	68.6	15.7		36.2	43.6	20.1	
PHF	.679	.708	.845	.787	.333	.856	.813	.875	.344	.800	.550	.875	.900	.707	.395	.784

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

City of Riverside
N/S: Vine Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 04_RIV_Vine_MI PM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

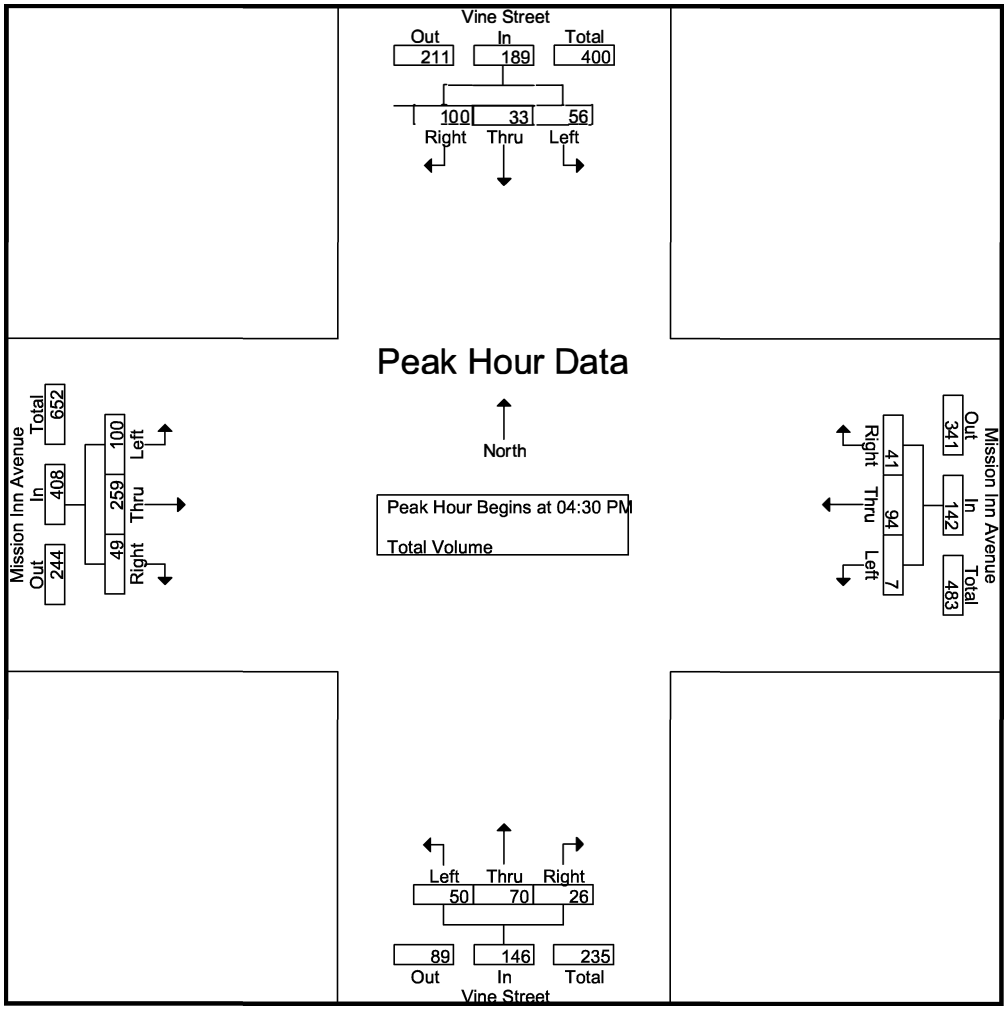
	Vine Street Southbound				Mission Inn Avenue Westbound				Vine Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	12	27	45	1	25	7	33	19	19	10	48	23	57	17	97	223
04:15 PM	9	12	28	49	0	10	6	16	5	9	2	16	31	46	14	91	172
04:30 PM	11	8	25	44	3	26	8	37	8	14	3	25	20	61	10	91	197
04:45 PM	12	7	21	40	1	11	14	26	6	10	4	20	28	61	14	103	189
Total	38	39	101	178	5	72	35	112	38	52	19	109	102	225	55	382	781
05:00 PM	20	7	34	61	2	29	11	42	28	31	13	72	28	65	12	105	280
05:15 PM	13	11	20	44	1	28	8	37	8	15	6	29	24	72	13	109	219
05:30 PM	9	12	13	34	1	18	5	24	5	11	2	18	22	44	21	87	163
05:45 PM	7	4	10	21	2	9	6	17	7	23	7	37	27	57	17	101	176
Total	49	34	77	160	6	84	30	120	48	80	28	156	101	238	63	402	838
Grand Total	87	73	178	338	11	156	65	232	86	132	47	265	203	463	118	784	1619
Apprch %	25.7	21.6	52.7		4.7	67.2	28		32.5	49.8	17.7		25.9	59.1	15.1		
Total %	5.4	4.5	11	20.9	0.7	9.6	4	14.3	5.3	8.2	2.9	16.4	12.5	28.6	7.3	48.4	

	Vine Street Southbound				Mission Inn Avenue Westbound				Vine Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	11	8	25	44	**3**	26	8	37	8	14	3	25	20	61	10	91	197
04:45 PM	12	7	21	40	1	11	**14**	26	6	10	4	20	**28**	61	**14**	103	189
05:00 PM	**20**	7	**34**	**61**	2	**29**	11	**42**	**28**	**31**	**13**	**72**	28	65	12	105	**280**
05:15 PM	13	**11**	20	44	1	28	8	37	8	15	6	29	24	**72**	13	**109**	219
Total Volume	56	33	100	189	7	94	41	142	50	70	26	146	100	259	49	408	885
% App. Total	29.6	17.5	52.9		4.9	66.2	28.9		34.2	47.9	17.8		24.5	63.5	12		
PHF	.700	.750	.735	.775	.583	.810	.732	.845	.446	.565	.500	.507	.893	.899	.875	.936	.790

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

City of Riverside
N/S: Vine Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 04_RIV_Vine_MI PM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 2



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

Peak Hour for Each Approach Begins at:

	04:15 PM				04:30 PM				05:00 PM				04:30 PM			
+0 mins.	9	**12**	28	49	**3**	26	8	37	**28**	**31**	**13**	**72**	20	61	10	91
+15 mins.	11	8	25	44	1	11	**14**	26	8	15	6	29	**28**	61	**14**	103
+30 mins.	12	7	21	40	2	**29**	11	**42**	5	11	2	18	28	65	12	105
+45 mins.	**20**	7	**34**	**61**	1	28	8	37	7	23	7	37	24	**72**	13	**109**
Total Volume	52	34	108	194	7	94	41	142	48	80	28	156	100	259	49	408
% App. Total	26.8	17.5	55.7		4.9	66.2	28.9		30.8	51.3	17.9		24.5	63.5	12	
PHF	.650	.708	.794	.795	.583	.810	.732	.845	.429	.645	.538	.542	.893	.899	.875	.936

Location: Riverside
N/S: Vine Street
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

PEDESTRIANS

	North Leg Vine Street Pedestrians	East Leg Mission Inn Avenue Pedestrians	South Leg Vine Street Pedestrians	West Leg Mission Inn Avenue Pedestrians	
7:00 AM	1	0	0	1	2
7:15 AM	0	1	1	0	2
7:30 AM	1	1	2	2	6
7:45 AM	1	0	0	0	1
8:00 AM	2	1	2	1	6
8:15 AM	1	1	1	0	3
8:30 AM	0	1	3	1	5
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	6	5	9	5	25

	North Leg Vine Street Pedestrians	East Leg Mission Inn Avenue Pedestrians	South Leg Vine Street Pedestrians	West Leg Mission Inn Avenue Pedestrians	
4:00 PM	1	0	2	0	3
4:15 PM	5	0	0	0	5
4:30 PM	6	0	0	0	6
4:45 PM	2	1	0	0	3
5:00 PM	2	0	1	0	3
5:15 PM	3	0	2	0	5
5:30 PM	0	0	0	1	1
5:45 PM	1	1	0	0	2
TOTAL VOLUMES:	20	2	5	1	28

Counts Unlimited, Inc.
PO Box1178
Corona, CA 92878
951-268-6268

Location: Riverside
N/S: Vine Street
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

BICYCLES

	Southbound Vine Street			Westbound Mission Inn Avenue			Northbound Vine Street			Eastbound Mission Inn Avenue			
	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	1	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
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:	1	0	0	0	0	0	0	0	0	0	0	0	1

	Southbound Vine Street			Westbound Mission Inn Avenue			Northbound Vine Street			Eastbound Mission Inn Avenue			
	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	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	1	0	1	0	0	0	0	1	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	1	0	1	0	1	0	0	2	0	5

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

City of Riverside
N/S: Commerce Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 05_RIV_Com_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

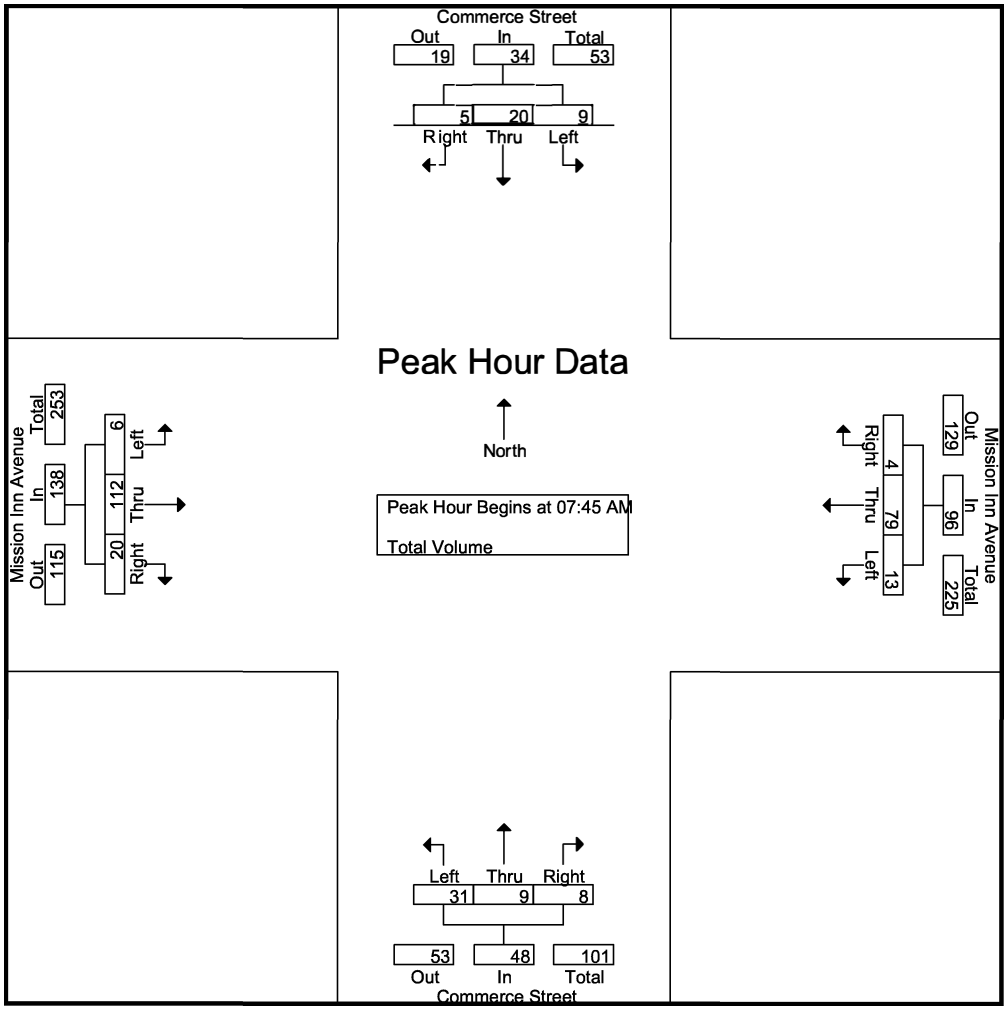
	Commerce Street Southbound				Mission Inn Avenue Westbound				Commerce Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	5	1	6	0	14	0	14	9	2	1	12	4	13	9	26	58
07:15 AM	0	2	0	2	0	14	1	15	6	1	0	7	2	17	5	24	48
07:30 AM	3	7	2	12	3	19	0	22	4	0	0	4	3	10	8	21	59
07:45 AM	3	4	5	12	4	13	2	19	10	3	3	16	1	30	5	36	83
Total	6	18	8	32	7	60	3	70	29	6	4	39	10	70	27	107	248
08:00 AM	1	5	0	6	3	22	0	25	7	0	2	9	3	30	8	41	81
08:15 AM	1	7	0	8	5	18	0	23	7	4	1	12	1	20	4	25	68
08:30 AM	4	4	0	8	1	26	2	29	7	2	2	11	1	32	3	36	84
08:45 AM	4	1	3	8	2	17	2	21	7	2	0	9	2	31	10	43	81
Total	10	17	3	30	11	83	4	98	28	8	5	41	7	113	25	145	314
Grand Total	16	35	11	62	18	143	7	168	57	14	9	80	17	183	52	252	562
Apprch %	25.8	56.5	17.7		10.7	85.1	4.2		71.2	17.5	11.2		6.7	72.6	20.6		
Total %	2.8	6.2	2	11	3.2	25.4	1.2	29.9	10.1	2.5	1.6	14.2	3	32.6	9.3	44.8	

	Commerce Street Southbound				Mission Inn Avenue Westbound				Commerce Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	3	4	**5**	**12**	4	13	**2**	19	**10**	3	**3**	**16**	1	30	5	36	83
08:00 AM	1	5	0	6	3	22	0	25	7	0	2	9	**3**	30	**8**	**41**	81
08:15 AM	1	**7**	0	8	**5**	18	0	23	7	**4**	1	12	1	20	4	25	68
08:30 AM	**4**	4	0	8	1	**26**	2	**29**	7	2	2	11	1	**32**	3	36	**84**
Total Volume	9	20	5	34	13	79	4	96	31	9	8	48	6	112	20	138	316
% App. Total	26.5	58.8	14.7		13.5	82.3	4.2		64.6	18.8	16.7		4.3	81.2	14.5		
PHF	.563	.714	.250	.708	.650	.760	.500	.828	.775	.563	.667	.750	.500	.875	.625	.841	.940

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

City of Riverside
N/S: Commerce Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 05_RIV_Com_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 2



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

Peak Hour for Each Approach Begins at:

	07:30 AM				08:00 AM				07:45 AM				08:00 AM			
+0 mins.	**3**	**7**	2	**12**	3	22	0	25	**10**	3	**3**	**16**	**3**	30	8	41
+15 mins.	3	4	**5**	12	**5**	18	0	23	7	0	2	9	1	20	4	25
+30 mins.	1	5	0	6	1	**26**	**2**	**29**	7	**4**	1	12	1	**32**	3	36
+45 mins.	1	7	0	8	2	17	2	21	7	2	2	11	2	31	**10**	**43**
Total Volume	8	23	7	38	11	83	4	98	31	9	8	48	7	113	25	145
% App. Total	21.1	60.5	18.4		11.2	84.7	4.1		64.6	18.8	16.7		4.8	77.9	17.2	
PHF	.667	.821	.350	.792	.550	.798	.500	.845	.775	.563	.667	.750	.583	.883	.625	.843

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

City of Riverside
N/S: Commerce Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 05_RIV_Com_MI PM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

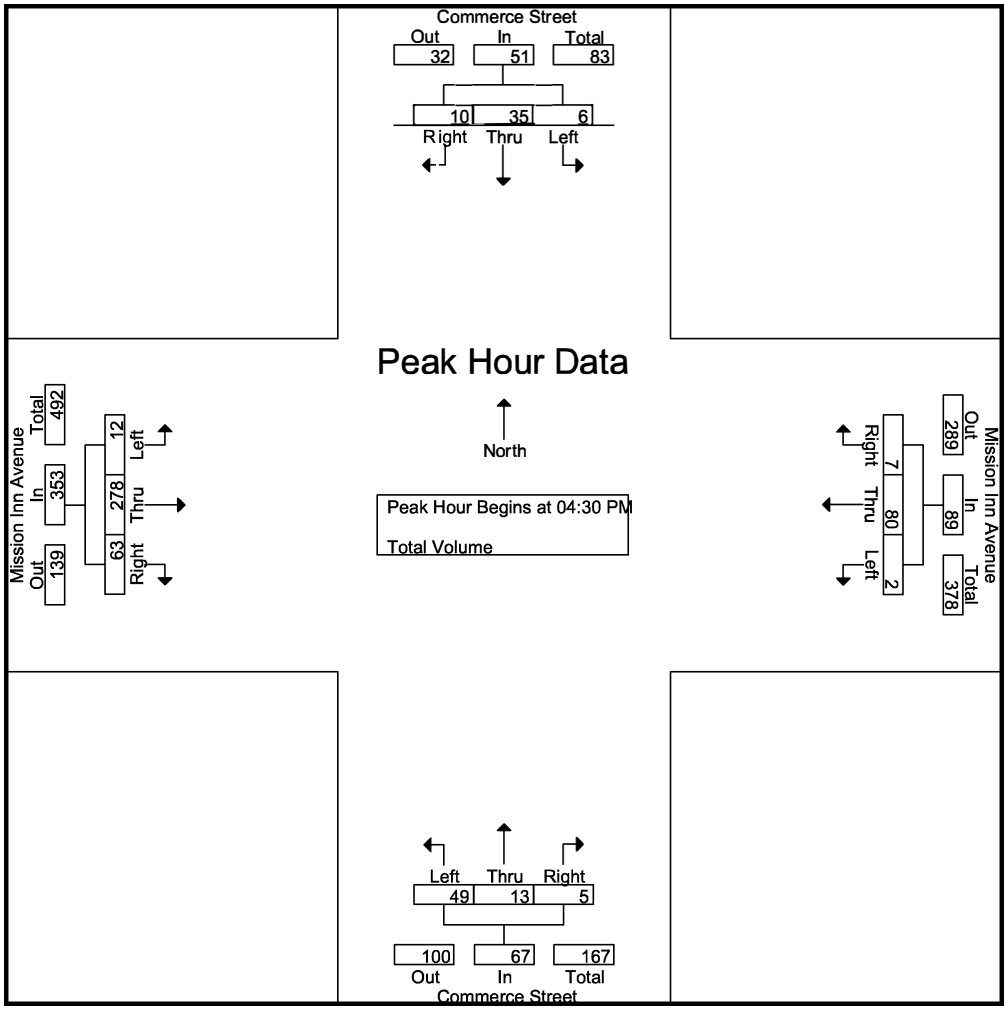
	Commerce Street Southbound				Mission Inn Avenue Westbound				Commerce Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	1	6	3	10	1	19	2	22	9	3	1	13	4	60	10	74	119
04:15 PM	0	0	1	1	4	10	1	15	6	1	1	8	5	46	7	58	82
04:30 PM	2	7	2	11	0	14	1	15	20	3	2	25	4	60	13	77	128
04:45 PM	0	10	3	13	0	16	1	17	9	3	1	13	3	74	5	82	125
Total	3	23	9	35	5	59	5	69	44	10	5	59	16	240	35	291	454
05:00 PM	2	8	2	12	0	25	2	27	12	3	1	16	3	70	26	99	154
05:15 PM	2	10	3	15	2	25	3	30	8	4	1	13	2	74	19	95	153
05:30 PM	4	8	2	14	3	13	0	16	2	0	0	2	3	44	9	56	88
05:45 PM	4	9	0	13	3	17	0	20	2	1	1	4	2	52	9	63	100
Total	12	35	7	54	8	80	5	93	24	8	3	35	10	240	63	313	495
Grand Total	15	58	16	89	13	139	10	162	68	18	8	94	26	480	98	604	949
Apprch %	16.9	65.2	18		8	85.8	6.2		72.3	19.1	8.5		4.3	79.5	16.2		
Total %	1.6	6.1	1.7	9.4	1.4	14.6	1.1	17.1	7.2	1.9	0.8	9.9	2.7	50.6	10.3	63.6	

	Commerce Street Southbound				Mission Inn Avenue Westbound				Commerce Street Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	**2**	7	2	11	0	14	1	15	**20**	3	**2**	**25**	**4**	60	13	77	128
04:45 PM	0	**10**	**3**	13	0	16	1	17	9	3	1	13	3	**74**	5	82	125
05:00 PM	2	8	2	12	0	**25**	2	27	12	3	1	16	3	70	**26**	**99**	**154**
05:15 PM	2	10	3	**15**	**2**	25	**3**	**30**	8	**4**	1	13	2	74	19	95	153
Total Volume	6	35	10	51	2	80	7	89	49	13	5	67	12	278	63	353	560
% App. Total	11.8	68.6	19.6		2.2	89.9	7.9		73.1	19.4	7.5		3.4	78.8	17.8		
PHF	.750	.875	.833	.850	.250	.800	.583	.742	.613	.813	.625	.670	.750	.939	.606	.891	.909

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

City of Riverside
N/S: Commerce Street
E/W: Mission Inn Avenue
Weather: Clear

File Name : 05_RIV_Com_MI PM
Site Code : 22524972
Start Date : 11/6/2024
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:

	04:45 PM				05:00 PM				04:30 PM				04:30 PM			
+0 mins.	0	**10**	**3**	13	0	**25**	2	27	**20**	3	**2**	**25**	**4**	60	13	77
+15 mins.	2	8	2	12	2	25	**3**	**30**	9	3	1	13	3	**74**	5	82
+30 mins.	2	10	3	**15**	**3**	13	0	16	12	3	1	16	3	70	**26**	**99**
+45 mins.	**4**	8	2	14	3	17	0	20	8	**4**	1	13	2	74	19	95
Total Volume	8	36	10	54	8	80	5	93	49	13	5	67	12	278	63	353
% App. Total	14.8	66.7	18.5		8.6	86	5.4		73.1	19.4	7.5		3.4	78.8	17.8	
PHF	.500	.900	.833	.900	.667	.800	.417	.775	.613	.813	.625	.670	.750	.939	.606	.891

Location: Riverside
N/S: Commerce Street
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

PEDESTRIANS

	North Leg Commerce Street	East Leg Mission Inn Avenue	South Leg Commerce Street	West Leg Mission Inn Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	3	0	3
7:15 AM	0	0	3	0	3
7:30 AM	1	0	0	0	1
7:45 AM	0	0	2	0	2
8:00 AM	1	0	2	0	3
8:15 AM	0	1	0	0	1
8:30 AM	0	0	2	0	2
8:45 AM	0	0	1	1	2
TOTAL VOLUMES:	2	1	13	1	17

	North Leg Commerce Street	East Leg Mission Inn Avenue	South Leg Commerce Street	West Leg Mission Inn Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	3	1	4
4:15 PM	1	0	1	0	2
4:30 PM	2	0	2	0	4
4:45 PM	0	0	3	0	3
5:00 PM	0	0	7	0	7
5:15 PM	0	0	4	0	4
5:30 PM	0	0	0	0	0
5:45 PM	0	0	1	0	1
TOTAL VOLUMES:	3	0	21	1	25

Location: Riverside
N/S: Commerce Street
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

BICYCLES

	Southbound Commerce Street			Westbound Mission Inn Avenue			Northbound Commerce Street			Eastbound Mission Inn Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	1
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	1	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	1	0	0	0	1	3

	Southbound Commerce Street			Westbound Mission Inn Avenue			Northbound Commerce Street			Eastbound Mission Inn Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	1	0	0	0	0	1	0	0	1	3
4:15 PM	0	0	0	0	0	0	0	1	0	0	1	0	2
4:30 PM	0	0	0	0	1	0	0	1	0	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	1	1	0	2
5:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	1	0	0	0	1	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	1	0	0	1	0	0	1	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	1	2	0	1	3	0	0	3	1	1	4	1	17

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

City of Riverside
N/S: Park Avenue
E/W: Mission Inn Avenue
Weather: Clear

File Name : 06_RIV_Park_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

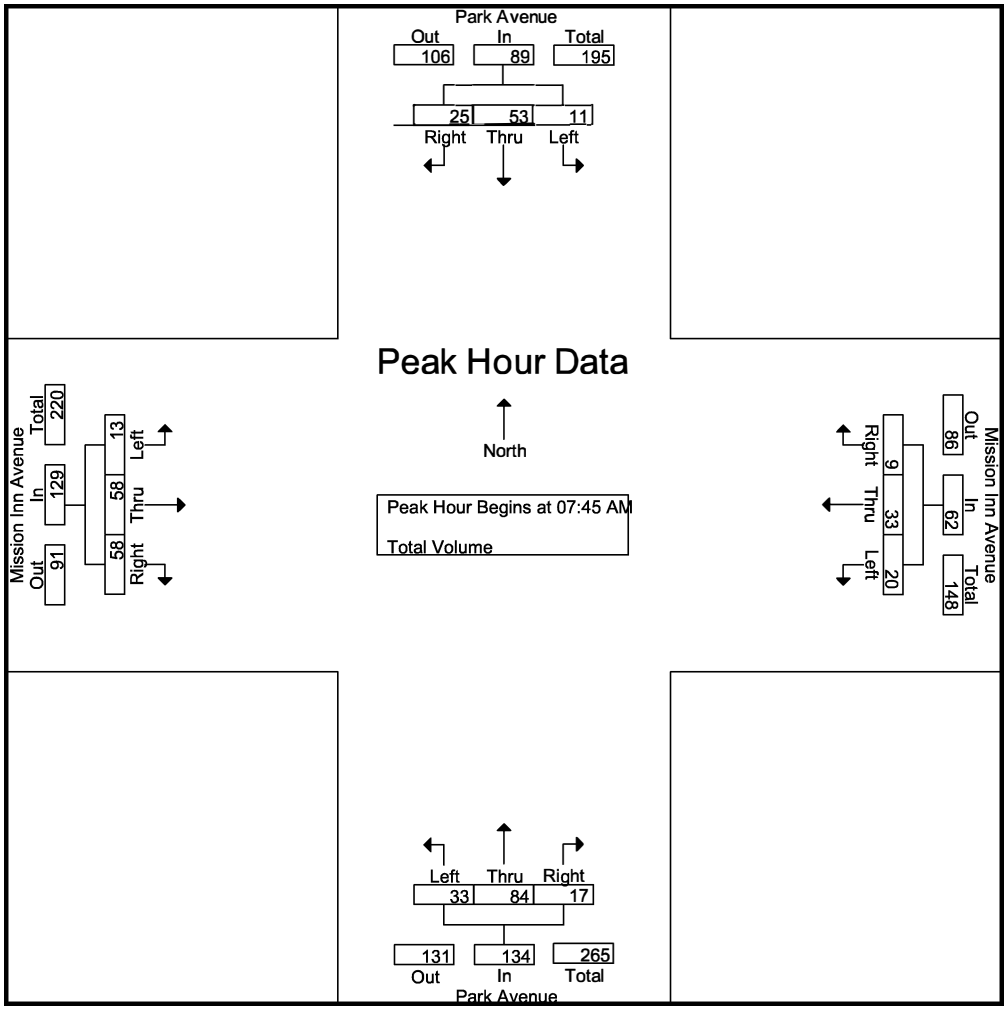
	Park Avenue Southbound				Mission Inn Avenue Westbound				Park Avenue Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	14	0	14	5	5	0	10	3	3	1	7	2	9	5	16	47
07:15 AM	1	12	3	16	7	5	1	13	5	11	2	18	1	13	5	19	66
07:30 AM	0	13	3	16	7	11	1	19	4	12	1	17	2	6	7	15	67
07:45 AM	6	12	7	25	3	4	1	8	5	21	7	33	4	16	14	34	100
Total	7	51	13	71	22	25	3	50	17	47	11	75	9	44	31	84	280
08:00 AM	4	19	5	28	7	14	6	27	7	23	1	31	5	16	13	34	120
08:15 AM	1	8	3	12	5	11	2	18	10	19	5	34	3	9	13	25	89
08:30 AM	0	14	10	24	5	4	0	9	11	21	4	36	1	17	18	36	105
08:45 AM	1	13	1	15	2	10	0	12	6	20	2	28	2	10	21	33	88
Total	6	54	19	79	19	39	8	66	34	83	12	129	11	52	65	128	402
Grand Total	13	105	32	150	41	64	11	116	51	130	23	204	20	96	96	212	682
Apprch %	8.7	70	21.3		35.3	55.2	9.5		25	63.7	11.3		9.4	45.3	45.3		
Total %	1.9	15.4	4.7	22	6	9.4	1.6	17	7.5	19.1	3.4	29.9	2.9	14.1	14.1	31.1	

	Park Avenue Southbound				Mission Inn Avenue Westbound				Park Avenue Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:45 AM																	
07:45 AM	**6**	12	7	25	3	4	1	8	5	21	**7**	33	4	16	14	34	100
08:00 AM	4	**19**	5	**28**	**7**	**14**	**6**	**27**	7	**23**	1	31	**5**	16	13	34	**120**
08:15 AM	1	8	3	12	5	11	2	18	10	19	5	34	3	9	13	25	89
08:30 AM	0	14	**10**	24	5	4	0	9	**11**	21	4	**36**	1	**17**	**18**	**36**	105
Total Volume	11	53	25	89	20	33	9	62	33	84	17	134	13	58	58	129	414
% App. Total	12.4	59.6	28.1		32.3	53.2	14.5		24.6	62.7	12.7		10.1	45	45		
PHF	.458	.697	.625	.795	.714	.589	.375	.574	.750	.913	.607	.931	.650	.853	.806	.896	.863

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

City of Riverside
N/S: Park Avenue
E/W: Mission Inn Avenue
Weather: Clear

File Name : 06_RIV_Park_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 2



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

Peak Hour for Each Approach Begins at:

	07:45 AM				07:30 AM				07:45 AM				07:45 AM			
+0 mins.	**6**	12	7	25	**7**	11	1	19	5	21	**7**	33	4	16	14	34
+15 mins.	4	**19**	5	**28**	3	4	1	8	7	**23**	1	31	**5**	16	13	34
+30 mins.	1	8	3	12	7	**14**	**6**	**27**	10	19	5	34	3	9	13	25
+45 mins.	0	14	**10**	24	5	11	2	18	**11**	21	4	**36**	1	**17**	**18**	**36**
Total Volume	11	53	25	89	22	40	10	72	33	84	17	134	13	58	58	129
% App. Total	12.4	59.6	28.1		30.6	55.6	13.9		24.6	62.7	12.7		10.1	45	45	
PHF	.458	.697	.625	.795	.786	.714	.417	.667	.750	.913	.607	.931	.650	.853	.806	.896

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

City of Riverside
N/S: Park Avenue
E/W: Mission Inn Avenue
Weather: Clear

File Name : 06_RIV_Park_MI PM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

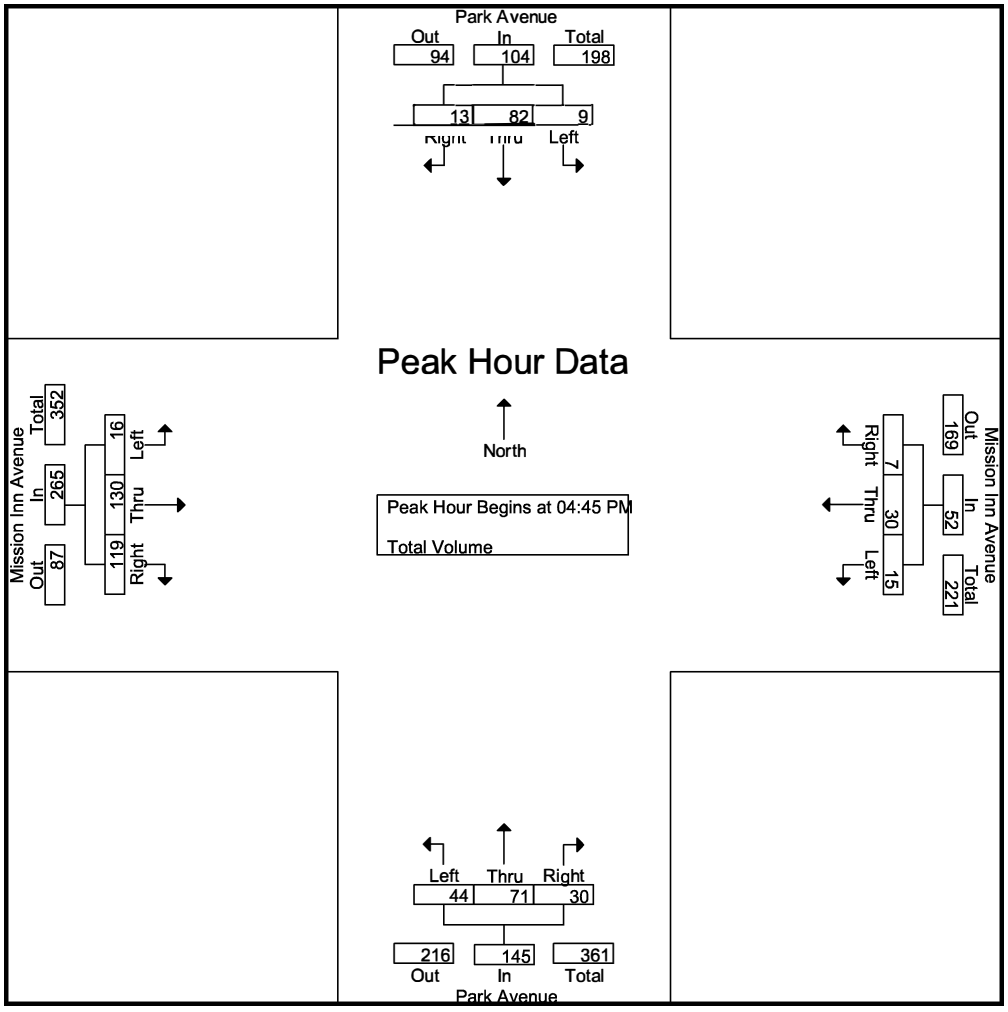
	Park Avenue Southbound				Mission Inn Avenue Westbound				Park Avenue Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	17	3	20	3	4	2	9	11	15	7	33	5	30	24	59	121
04:15 PM	2	11	2	15	3	7	0	10	9	9	7	25	1	23	19	43	93
04:30 PM	2	11	1	14	6	7	0	13	8	16	8	32	2	37	19	58	117
04:45 PM	2	15	2	19	5	6	1	12	11	21	11	43	3	41	29	73	147
Total	6	54	8	68	17	24	3	44	39	61	33	133	11	131	91	233	478
05:00 PM	2	19	3	24	4	7	2	13	17	7	7	31	4	39	28	71	139
05:15 PM	3	25	3	31	1	10	2	13	11	20	5	36	6	31	40	77	157
05:30 PM	2	23	5	30	5	7	2	14	5	23	7	35	3	19	22	44	123
05:45 PM	2	20	3	25	3	4	2	9	12	19	5	36	3	30	16	49	119
Total	9	87	14	110	13	28	8	49	45	69	24	138	16	119	106	241	538
Grand Total	15	141	22	178	30	52	11	93	84	130	57	271	27	250	197	474	1016
Apprch %	8.4	79.2	12.4		32.3	55.9	11.8		31	48	21		5.7	52.7	41.6		
Total %	1.5	13.9	2.2	17.5	3	5.1	1.1	9.2	8.3	12.8	5.6	26.7	2.7	24.6	19.4	46.7	

	Park Avenue Southbound				Mission Inn Avenue Westbound				Park Avenue Northbound				Mission Inn Avenue Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	2	15	2	19	**5**	6	1	12	11	21	**11**	**43**	3	**41**	29	73	147
05:00 PM	2	19	3	24	4	7	**2**	13	**17**	7	7	31	4	39	28	71	139
05:15 PM	**3**	**25**	3	**31**	1	**10**	2	13	11	20	5	36	**6**	31	**40**	**77**	**157**
05:30 PM	2	23	**5**	30	5	7	2	**14**	5	**23**	7	35	3	19	22	44	123
Total Volume	9	82	13	104	15	30	7	52	44	71	30	145	16	130	119	265	566
% App. Total	8.7	78.8	12.5		28.8	57.7	13.5		30.3	49	20.7		6	49.1	44.9		
PHF	.750	.820	.650	.839	.750	.750	.875	.929	.647	.772	.682	.843	.667	.793	.744	.860	.901

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

City of Riverside
N/S: Park Avenue
E/W: Mission Inn Avenue
Weather: Clear

File Name : 06_RIV_Park_MI PM
Site Code : 22524972
Start Date : 11/6/2024
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				04:45 PM				04:45 PM				04:30 PM			
+0 mins.	2	19	3	24	**5**	6	1	12	11	21	**11**	**43**	2	37	19	58
+15 mins.	**3**	**25**	3	**31**	4	7	**2**	13	**17**	7	7	31	3	**41**	29	73
+30 mins.	2	23	**5**	30	1	**10**	2	13	11	20	5	36	4	39	28	71
+45 mins.	2	20	3	25	5	7	2	**14**	5	**23**	7	35	**6**	31	**40**	**77**
Total Volume	9	87	14	110	15	30	7	52	44	71	30	145	15	148	116	279
% App. Total	8.2	79.1	12.7		28.8	57.7	13.5		30.3	49	20.7		5.4	53	41.6	
PHF	.750	.870	.700	.887	.750	.750	.875	.929	.647	.772	.682	.843	.625	.902	.725	.906

Location: Riverside
N/S: Park Avenue
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

PEDESTRIANS

	North Leg Park Avenue Pedestrians	East Leg Mission Inn Avenue Pedestrians	South Leg Park Avenue Pedestrians	West Leg Mission Inn Avenue Pedestrians	
7:00 AM	0	0	1	0	1
7:15 AM	0	0	0	1	1
7:30 AM	0	0	2	0	2
7:45 AM	0	0	5	3	8
8:00 AM	0	2	1	0	3
8:15 AM	0	1	3	0	4
8:30 AM	0	1	2	0	3
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	4	14	4	22

	North Leg Park Avenue Pedestrians	East Leg Mission Inn Avenue Pedestrians	South Leg Park Avenue Pedestrians	West Leg Mission Inn Avenue Pedestrians	
4:00 PM	0	0	2	2	4
4:15 PM	1	1	2	0	4
4:30 PM	0	1	5	0	6
4:45 PM	0	2	1	3	6
5:00 PM	0	1	0	2	3
5:15 PM	0	1	4	0	5
5:30 PM	2	1	0	0	3
5:45 PM	1	0	0	2	3
TOTAL VOLUMES:	4	7	14	9	34

Counts Unlimited, Inc.
PO Box1178
Corona, CA 92878
951-268-6268

Location: Riverside
N/S: Park Avenue
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

BICYCLES

	Southbound Park Avenue			Westbound Mission Inn Avenue			Northbound Park Avenue			Eastbound Mission Inn Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	1	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1	0	0	2	0	0	1	0	5

	Southbound Park Avenue			Westbound Mission Inn Avenue			Northbound Park Avenue			Eastbound Mission Inn Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	0	0	0	0	0	1	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	0	1	2
5:00 PM	0	0	0	1	0	2	0	0	0	0	0	0	3
5:15 PM	0	2	0	0	1	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	1	0	0	1	0	0	1	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
TOTAL VOLUMES:	0	4	0	1	2	2	0	1	0	1	3	2	16

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

City of Riverside
N/S: Commerce Street
E/W: 3rd Street
Weather: Clear

File Name : 07_RIV_Com_3rd AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

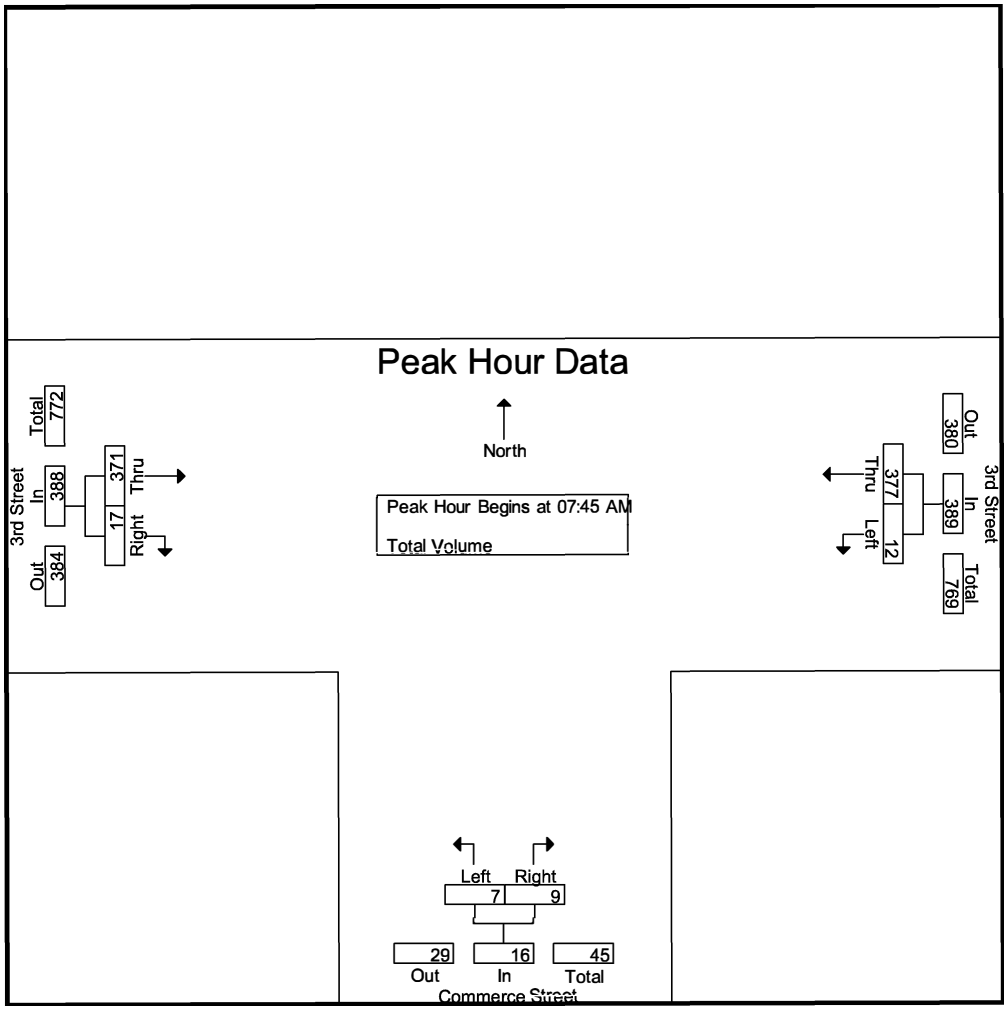
	3rd Street Westbound			Commerce Street Northbound			3rd Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	3	53	56	1	3	4	64	4	68	128
07:15 AM	3	61	64	1	2	3	107	1	108	175
07:30 AM	7	76	83	0	1	1	64	3	67	151
07:45 AM	6	103	109	2	2	4	97	3	100	213
Total	19	293	312	4	8	12	332	11	343	667
08:00 AM	0	100	100	1	1	2	132	5	137	239
08:15 AM	3	86	89	2	3	5	79	5	84	178
08:30 AM	3	88	91	2	3	5	63	4	67	163
08:45 AM	6	52	58	1	3	4	68	3	71	133
Total	12	326	338	6	10	16	342	17	359	713
Grand Total	31	619	650	10	18	28	674	28	702	1380
Apprch %	4.8	95.2		35.7	64.3		96	4		
Total %	2.2	44.9	47.1	0.7	1.3	2	48.8	2	50.9	

	3rd Street Westbound			Commerce Street Northbound			3rd Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	**6**	**103**	**109**	**2**	2	4	97	3	100	213
08:00 AM	0	100	100	1	1	2	**132**	**5**	**137**	**239**
08:15 AM	3	86	89	2	**3**	**5**	79	5	84	178
08:30 AM	3	88	91	2	3	5	63	4	67	163
Total Volume	12	377	389	7	9	16	371	17	388	793
% App. Total	3.1	96.9		43.8	56.2		95.6	4.4		
PHF	.500	.915	.892	.875	.750	.800	.703	.850	.708	.829

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

City of Riverside
N/S: Commerce Street
E/W: 3rd Street
Weather: Clear

File Name : 07_RIV_Com_3rd AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 2



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

	07:45 AM			07:45 AM			07:15 AM		
+0 mins.	**6**	**103**	**109**	**2**	2	4	107	1	108
+15 mins.	0	100	100	1	1	2	64	3	67
+30 mins.	3	86	89	2	**3**	**5**	97	3	100
+45 mins.	3	88	91	2	3	5	**132**	**5**	**137**
Total Volume	12	377	389	7	9	16	400	12	412
% App. Total	3.1	96.9		43.8	56.2		97.1	2.9	
PHF	.500	.915	.892	.875	.750	.800	.758	.600	.752

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

City of Riverside
N/S: Commerce Street
E/W: 3rd Street
Weather: Clear

File Name : 07_RIV_Com_3rd PM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

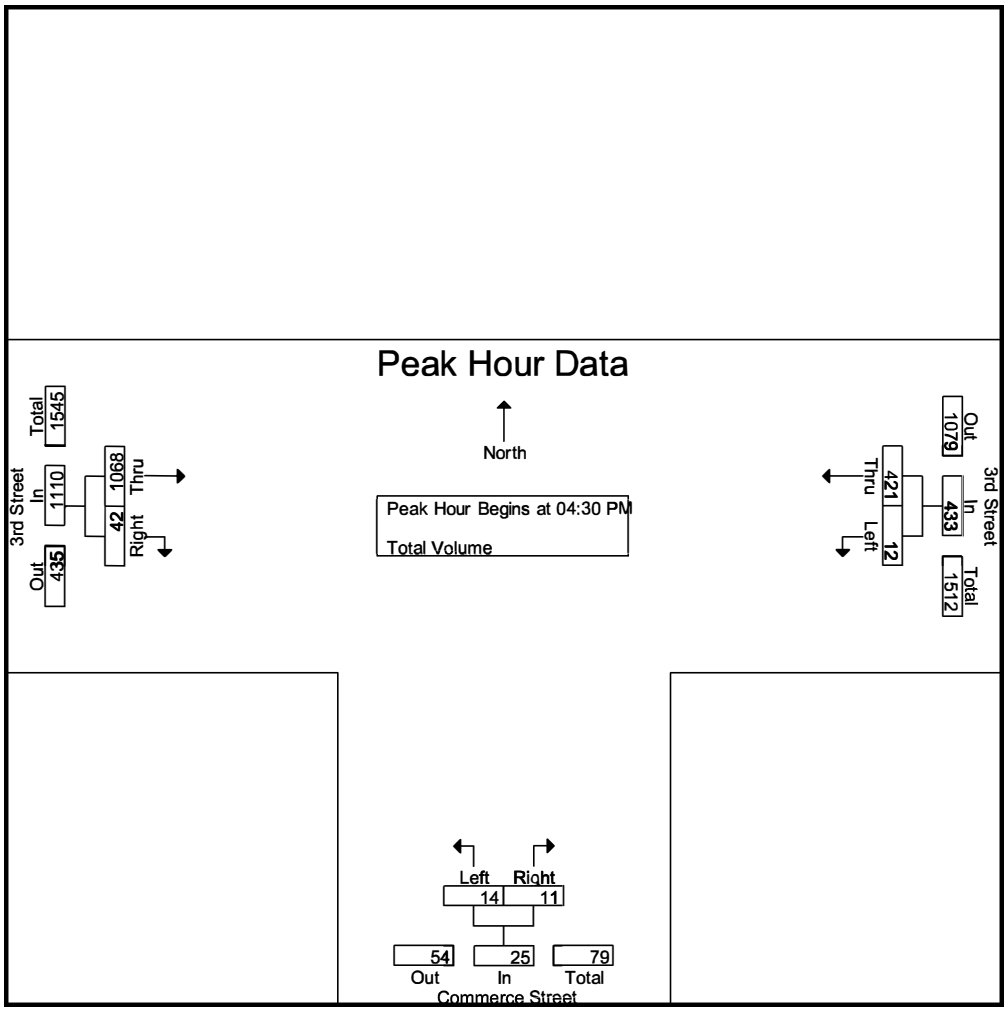
	3rd Street Westbound			Commerce Street Northbound			3rd Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	3	123	126	1	7	8	253	6	259	393
04:15 PM	3	86	89	0	2	2	219	2	221	312
04:30 PM	2	100	102	3	4	7	241	13	254	363
04:45 PM	3	109	112	1	1	2	251	8	259	373
Total	11	418	429	5	14	19	964	29	993	1441
05:00 PM	6	128	134	5	5	10	272	11	283	427
05:15 PM	1	84	85	5	1	6	304	10	314	405
05:30 PM	7	74	81	0	1	1	183	2	185	267
05:45 PM	3	74	77	1	2	3	281	7	288	368
Total	17	360	377	11	9	20	1040	30	1070	1467
Grand Total	28	778	806	16	23	39	2004	59	2063	2908
Apprch %	3.5	96.5		41	59		97.1	2.9		
Total %	1	26.8	27.7	0.6	0.8	1.3	68.9	2	70.9	

	3rd Street Westbound			Commerce Street Northbound			3rd Street Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	2	100	102	3	4	7	241	**13**	254	363
04:45 PM	3	109	112	1	1	2	251	8	259	373
05:00 PM	**6**	**128**	**134**	**5**	**5**	**10**	272	11	283	**427**
05:15 PM	1	84	85	5	1	6	**304**	10	**314**	405
Total Volume	12	421	433	14	11	25	1068	42	1110	1568
% App. Total	2.8	97.2		56	44		96.2	3.8		
PHF	.500	.822	.808	.700	.550	.625	.878	.808	.884	.918

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

City of Riverside
N/S: Commerce Street
E/W: 3rd Street
Weather: Clear

File Name : 07_RIV_Com_3rd PM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 2



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

	04:15 PM			04:30 PM			04:30 PM		
+0 mins.	3	86	89	3	4	7	241	**13**	254
+15 mins.	2	100	102	1	1	2	251	8	259
+30 mins.	3	109	112	**5**	**5**	**10**	272	11	283
+45 mins.	**6**	**128**	**134**	5	1	6	**304**	10	**314**
Total Volume	14	423	437	14	11	25	1068	42	1110
% App. Total	3.2	96.8		56	44		96.2	3.8	
PHF	.583	.826	.815	.700	.550	.625	.878	.808	.884

Location: Riverside
N/S: Commerce Street
E/W: 3rd Street

Date: 11/6/2024
Day: Wednesday

PEDESTRIANS

	North Leg Dead End	East Leg 3rd Street	South Leg Commerce Street	West Leg 3rd Street	
	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	1	0	1
7:45 AM	0	0	2	0	2
8:00 AM	0	0	2	1	3
8:15 AM	0	0	1	0	1
8:30 AM	0	0	2	0	2
8:45 AM	0	0	3	0	3
TOTAL VOLUMES:	0	0	11	1	12

	North Leg Dead End	East Leg 3rd Street	South Leg Commerce Street	West Leg 3rd Street	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	1	0	1
4:15 PM	0	0	0	0	0
4:30 PM	0	0	1	0	1
4:45 PM	0	0	0	1	1
5:00 PM	0	0	1	0	1
5:15 PM	0	1	4	1	6
5:30 PM	0	0	2	0	2
5:45 PM	0	0	1	0	1
TOTAL VOLUMES:	0	1	10	2	13

Counts Unlimited, Inc.
PO Box1178
Corona, CA92878
951-268-6268

Location: Riverside
N/S: Commerce Street
E/W: 3rd Street

Date: 11/6/2024
Day: Wednesday

BICYCLES

	Southbound Dead End			Westbound 3rd Street			Northbound Commerce Street			Eastbound 3rd Street			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	1	2
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
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	0	0	0
8:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	1	0	0	2	0	0	1	0	4
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	1	0	0	5	0	0	1	1	8

	Southbound Dead End			Westbound 3rd Street			Northbound Commerce Street			Eastbound 3rd Street			
	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	1	0	1
4:15 PM	0	0	0	0	2	0	0	0	0	0	0	0	2
4:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	1	1	0	0	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	0	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
TOTAL VOLUMES:	0	0	0	0	5	0	0	2	1	0	3	0	11

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

City of Riverside
N/S: Commerce Street
E/W: 5th Street
Weather: Clear

File Name : 08_RIV_Com_5th AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

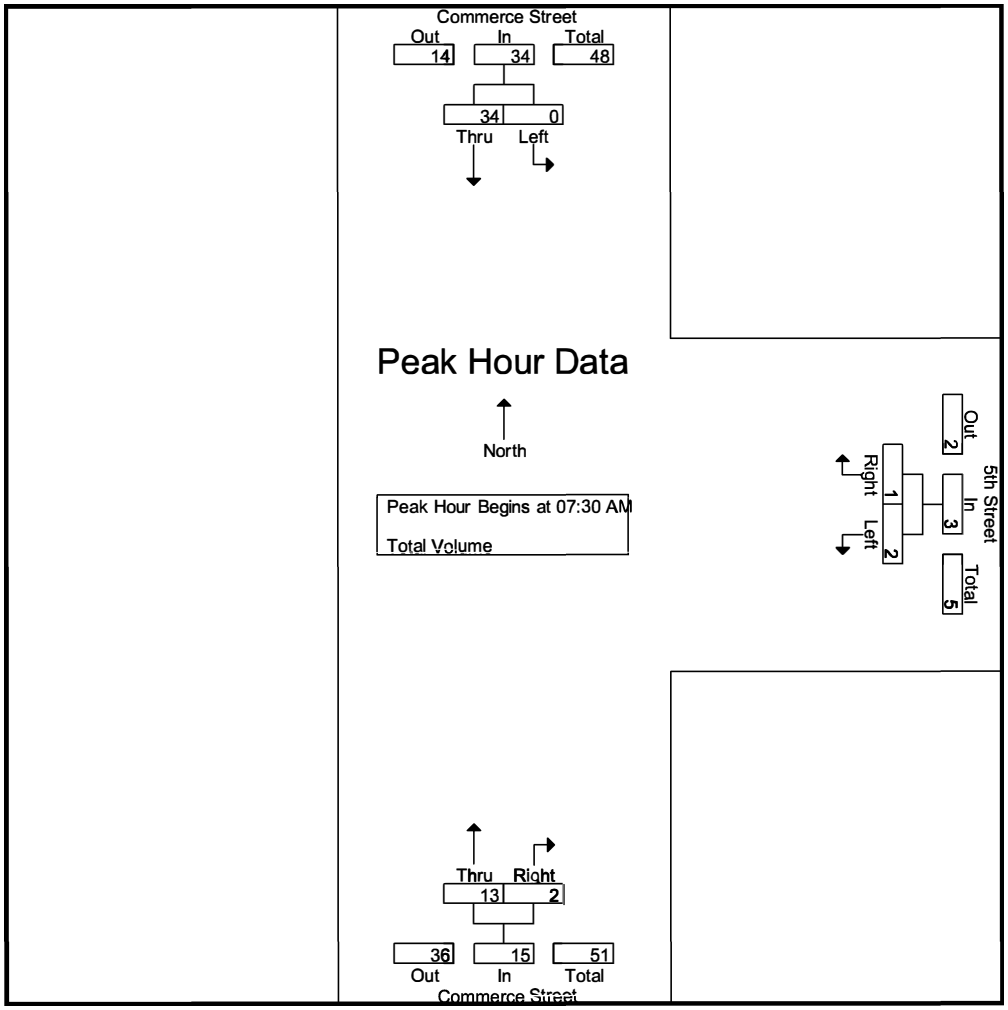
	Commerce Street Southbound			5th Street Westbound			Commerce Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	1	6	7	0	0	0	6	0	6	13
07:15 AM	0	2	2	0	0	0	4	0	4	6
07:30 AM	0	10	10	0	0	0	2	0	2	12
07:45 AM	0	10	10	1	0	1	5	1	6	17
Total	1	28	29	1	0	1	17	1	18	48
08:00 AM	0	6	6	0	0	0	1	1	2	8
08:15 AM	0	8	8	1	1	2	5	0	5	15
08:30 AM	1	6	7	0	0	0	4	0	4	11
08:45 AM	0	7	7	2	0	2	4	0	4	13
Total	1	27	28	3	1	4	14	1	15	47
Grand Total	2	55	57	4	1	5	31	2	33	95
Apprch %	3.5	96.5		80	20		93.9	6.1		
Total %	2.1	57.9	60	4.2	1.1	5.3	32.6	2.1	34.7	

	Commerce Street Southbound			5th Street Westbound			Commerce Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	**10**	**10**	0	0	0	2	0	2	12
07:45 AM	0	10	10	**1**	0	1	**5**	**1**	**6**	**17**
08:00 AM	0	6	6	0	0	0	1	1	2	8
08:15 AM	0	8	8	1	**1**	**2**	5	0	5	15
Total Volume	0	34	34	2	1	3	13	2	15	52
% App. Total	0	100		66.7	33.3		86.7	13.3		
PHF	.000	.850	.850	.500	.250	.375	.650	.500	.625	.765

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

City of Riverside
N/S: Commerce Street
E/W: 5th Street
Weather: Clear

File Name : 08_RIV_Com_5th AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 2



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

Peak Hour for Each Approach Begins at:

	07:30 AM			08:00 AM			07:00 AM		
+0 mins.	0	**10**	**10**	0	0	0	**6**	0	**6**
+15 mins.	0	10	10	1	**1**	**2**	4	0	4
+30 mins.	0	6	6	0	0	0	2	0	2
+45 mins.	0	8	8	**2**	0	2	5	**1**	6
Total Volume	0	34	34	3	1	4	17	1	18
% App. Total	0	100		75	25		94.4	5.6	
PHF	.000	.850	.850	.375	.250	.500	.708	.250	.750

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

City of Riverside
N/S: Commerce Street
E/W: 5th Street
Weather: Clear

File Name : 08_RIV_Com_5th PM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

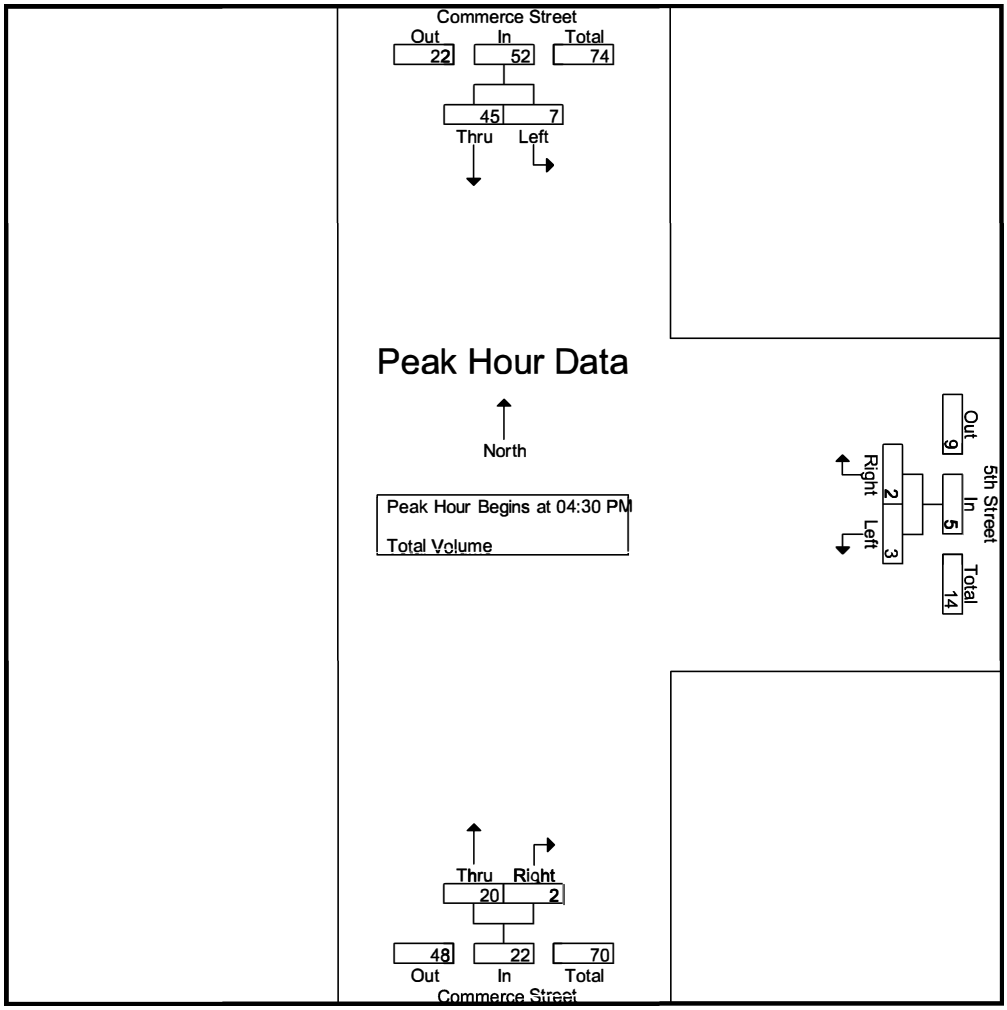
	Commerce Street Southbound			5th Street Westbound			Commerce Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	9	9	2	1	3	7	1	8	20
04:15 PM	0	1	1	0	0	0	4	0	4	5
04:30 PM	2	9	11	1	1	2	6	1	7	20
04:45 PM	1	11	12	0	0	0	3	0	3	15
Total	3	30	33	3	2	5	20	2	22	60
05:00 PM	3	14	17	0	1	1	6	0	6	24
05:15 PM	1	11	12	2	0	2	5	1	6	20
05:30 PM	0	12	12	1	0	1	2	1	3	16
05:45 PM	0	11	11	1	1	2	2	1	3	16
Total	4	48	52	4	2	6	15	3	18	76
Grand Total	7	78	85	7	4	11	35	5	40	136
Apprch %	8.2	91.8		63.6	36.4		87.5	12.5		
Total %	5.1	57.4	62.5	5.1	2.9	8.1	25.7	3.7	29.4	

	Commerce Street Southbound			5th Street Westbound			Commerce Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	2	9	11	1	**1**	**2**	**6**	**1**	**7**	20
04:45 PM	1	11	12	0	0	0	3	0	3	15
05:00 PM	**3**	**14**	**17**	0	1	1	6	0	6	**24**
05:15 PM	1	11	12	**2**	0	2	5	1	6	20
Total Volume	7	45	52	3	2	5	20	2	22	79
% App. Total	13.5	86.5		60	40		90.9	9.1		
PHF	.583	.804	.765	.375	.500	.625	.833	.500	.786	.823

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

City of Riverside
N/S: Commerce Street
E/W: 5th Street
Weather: Clear

File Name : 08_RIV_Com_5th PM
Site Code : 22524972
Start Date : 11/6/2024
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:

	04:45 PM			05:00 PM			04:00 PM		
+0 mins.	1	11	12	0	**1**	1	**7**	**1**	**8**
+15 mins.	**3**	**14**	**17**	**2**	0	**2**	4	0	4
+30 mins.	1	11	12	1	0	1	6	1	7
+45 mins.	0	12	12	1	1	2	3	0	3
Total Volume	5	48	53	4	2	6	20	2	22
% App. Total	9.4	90.6		66.7	33.3		90.9	9.1	
PHF	.417	.857	.779	.500	.500	.750	.714	.500	.688

Location: Riverside
N/S: Commerce Street
E/W: 5th Street

Date: 11/6/2024
Day: Wednesday

PEDESTRIANS

	North Leg Commerce Street Pedestrians	East Leg 5th Street Pedestrians	South Leg Commerce Street Pedestrians	West Leg Dead End 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	2	0	0	2
8:15 AM	0	1	0	0	1
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	3	0	0	3

	North Leg Commerce Street Pedestrians	East Leg 5th Street Pedestrians	South Leg Commerce Street Pedestrians	West Leg Dead End Pedestrians	
4:00 PM	1	0	0	0	1
4:15 PM	0	0	0	0	0
4:30 PM	1	0	0	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	2	0	0	2
TOTAL VOLUMES:	2	2	0	0	4

Counts Unlimited, Inc.
PO Box1178
Corona, CA 92878
951-268-6268

Location: Riverside
N/S: Commerce Street
E/W: 5th Street

Date: 11/6/2024
Day: Wednesday

BICYCLES

	Southbound Commerce Street			Westbound 5th Street			Northbound Commerce Street			Eastbound Dead End			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	1
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	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
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:	1	0	0	0	0	0	0	0	0	0	0	0	1

	Southbound Commerce Street			Westbound 5th Street			Northbound Commerce Street			Eastbound Dead End			
	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	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00 PM	0	2	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	2	0	0	0	0	0	2	0	0	0	0	5

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

City of Riverside
N/S: Commerce Street
E/W: 6th Street
Weather: Clear

File Name : 09_RIV_Com_6th AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

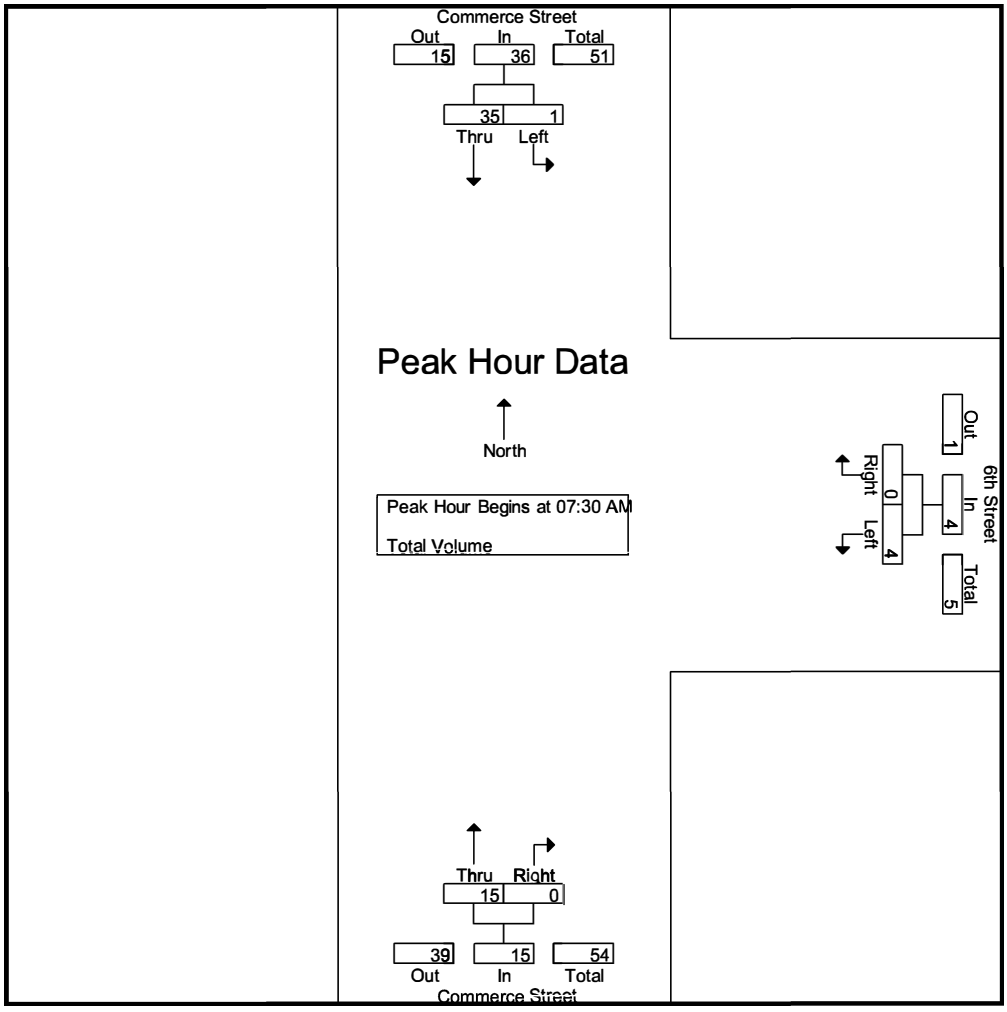
	Commerce Street Southbound			6th Street Westbound			Commerce Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	7	7	0	0	0	6	0	6	13
07:15 AM	0	2	2	0	0	0	4	0	4	6
07:30 AM	0	9	9	3	0	3	2	0	2	14
07:45 AM	1	11	12	1	0	1	6	0	6	19
Total	1	29	30	4	0	4	18	0	18	52
08:00 AM	0	6	6	0	0	0	2	0	2	8
08:15 AM	0	9	9	0	0	0	5	0	5	14
08:30 AM	0	6	6	0	0	0	4	0	4	10
08:45 AM	1	8	9	0	0	0	4	0	4	13
Total	1	29	30	0	0	0	15	0	15	45
Grand Total	2	58	60	4	0	4	33	0	33	97
Apprch %	3.3	96.7		100	0		100	0		
Total %	2.1	59.8	61.9	4.1	0	4.1	34	0	34	

	Commerce Street Southbound			6th Street Westbound			Commerce Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	0	9	9	**3**	0	**3**	2	0	2	14
07:45 AM	**1**	**11**	**12**	1	0	1	**6**	0	**6**	**19**
08:00 AM	0	6	6	0	0	0	2	0	2	8
08:15 AM	0	9	9	0	0	0	5	0	5	14
Total Volume	1	35	36	4	0	4	15	0	15	55
% App. Total	2.8	97.2		100	0		100	0		
PHF	.250	.795	.750	.333	.000	.333	.625	.000	.625	.724

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

City of Riverside
N/S: Commerce Street
E/W: 6th Street
Weather: Clear

File Name : 09_RIV_Com_6th AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 2



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

Peak Hour for Each Approach Begins at:

	07:30 AM			07:00 AM			07:00 AM		
+0 mins.	0	9	9	0	0	0	**6**	0	**6**
+15 mins.	**1**	**11**	**12**	0	0	0	4	0	4
+30 mins.	0	6	6	**3**	0	**3**	2	0	2
+45 mins.	0	9	9	1	0	1	6	0	6
Total Volume	1	35	36	4	0	4	18	0	18
% App. Total	2.8	97.2		100	0		100	0	
PHF	.250	.795	.750	.333	.000	.333	.750	.000	.750

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

City of Riverside
N/S: Commerce Street
E/W: 6th Street
Weather: Clear

File Name : 09_RIV_Com_6th PM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

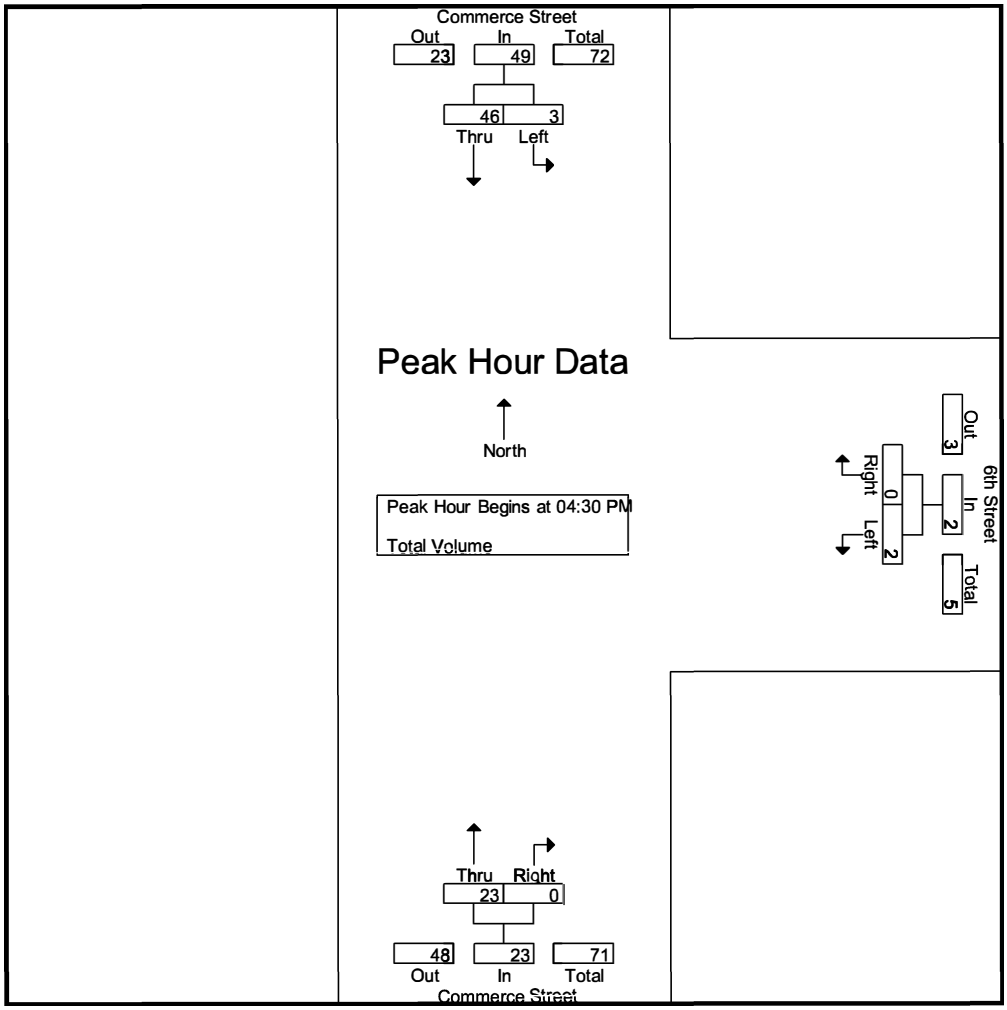
	Commerce Street Southbound			6th Street Westbound			Commerce Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	1	10	11	0	0	0	8	0	8	19
04:15 PM	0	1	1	1	0	1	4	0	4	6
04:30 PM	0	10	10	2	0	2	7	0	7	19
04:45 PM	1	11	12	0	0	0	4	0	4	16
Total	2	32	34	3	0	3	23	0	23	60
05:00 PM	1	12	13	0	0	0	6	0	6	19
05:15 PM	1	13	14	0	0	0	6	0	6	20
05:30 PM	0	13	13	0	0	0	3	0	3	16
05:45 PM	0	12	12	1	0	1	3	0	3	16
Total	2	50	52	1	0	1	18	0	18	71
Grand Total	4	82	86	4	0	4	41	0	41	131
Apprch %	4.7	95.3		100	0		100	0		
Total %	3.1	62.6	65.6	3.1	0	3.1	31.3	0	31.3	

	Commerce Street Southbound			6th Street Westbound			Commerce Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	0	10	10	**2**	0	**2**	**7**	0	**7**	19
04:45 PM	**1**	11	12	0	0	0	4	0	4	16
05:00 PM	1	12	13	0	0	0	6	0	6	19
05:15 PM	1	**13**	**14**	0	0	0	6	0	6	**20**
Total Volume	3	46	49	2	0	2	23	0	23	74
% App. Total	6.1	93.9		100	0		100	0		
PHF	.750	.885	.875	.250	.000	.250	.821	.000	.821	.925

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

City of Riverside
N/S: Commerce Street
E/W: 6th Street
Weather: Clear

File Name : 09_RIV_Com_6th PM
Site Code : 22524972
Start Date : 11/6/2024
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:

	04:45 PM			04:00 PM			04:00 PM		
+0 mins.	**1**	11	12	0	0	0	**8**	0	**8**
+15 mins.	1	12	13	1	0	1	4	0	4
+30 mins.	1	**13**	**14**	**2**	0	**2**	7	0	7
+45 mins.	0	13	13	0	0	0	4	0	4
Total Volume	3	49	52	3	0	3	23	0	23
% App. Total	5.8	94.2		100	0		100	0	
PHF	.750	.942	.929	.375	.000	.375	.719	.000	.719

Location: Riverside
N/S: Commerce Street
E/W: 6th Street

Date: 11/6/2024
Day: Wednesday

PEDESTRIANS

	North Leg Commerce Street Pedestrians	East Leg 6th Street Pedestrians	South Leg Commerce Street Pedestrians	West Leg Dead End 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	2	0	0	2
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	1	2	0	0	3
TOTAL VOLUMES:	1	4	0	0	5

	North Leg Commerce Street Pedestrians	East Leg 6th Street Pedestrians	South Leg Commerce Street Pedestrians	West Leg Dead End 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	1	0	0	1
TOTAL VOLUMES:	0	1	0	0	1

Counts Unlimited, Inc.
PO Box1178
Corona, CA92878
951-268-6268

Location: Riverside
N/S: Commerce Street
E/W: 6th Street

Date: 11/6/2024
Day: Wednesday

BICYCLES

	Southbound Commerce Street			Westbound 6th Street			Northbound Commerce Street			Eastbound Dead End			
	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	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	1	0	0	0	1

	Southbound Commerce Street			Westbound 6th Street			Northbound Commerce Street			Eastbound Dead End			
	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	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	4	0	0	0	4
4:30 PM	0	0	0	0	0	0	0	1	1	0	0	0	2
4:45 PM	0	0	0	0	0	0	0	1	2	0	0	0	3
5:00 PM	0	2	0	0	0	0	0	0	1	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	2	0	0	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:	0	2	0	0	0	0	0	2	10	0	0	0	14

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

City of Riverside
N/S: Mission Lofts Apartments Driveway
E/W: Mission Inn Avenue
Weather: Clear

File Name : 10_RIV_MLA DW_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

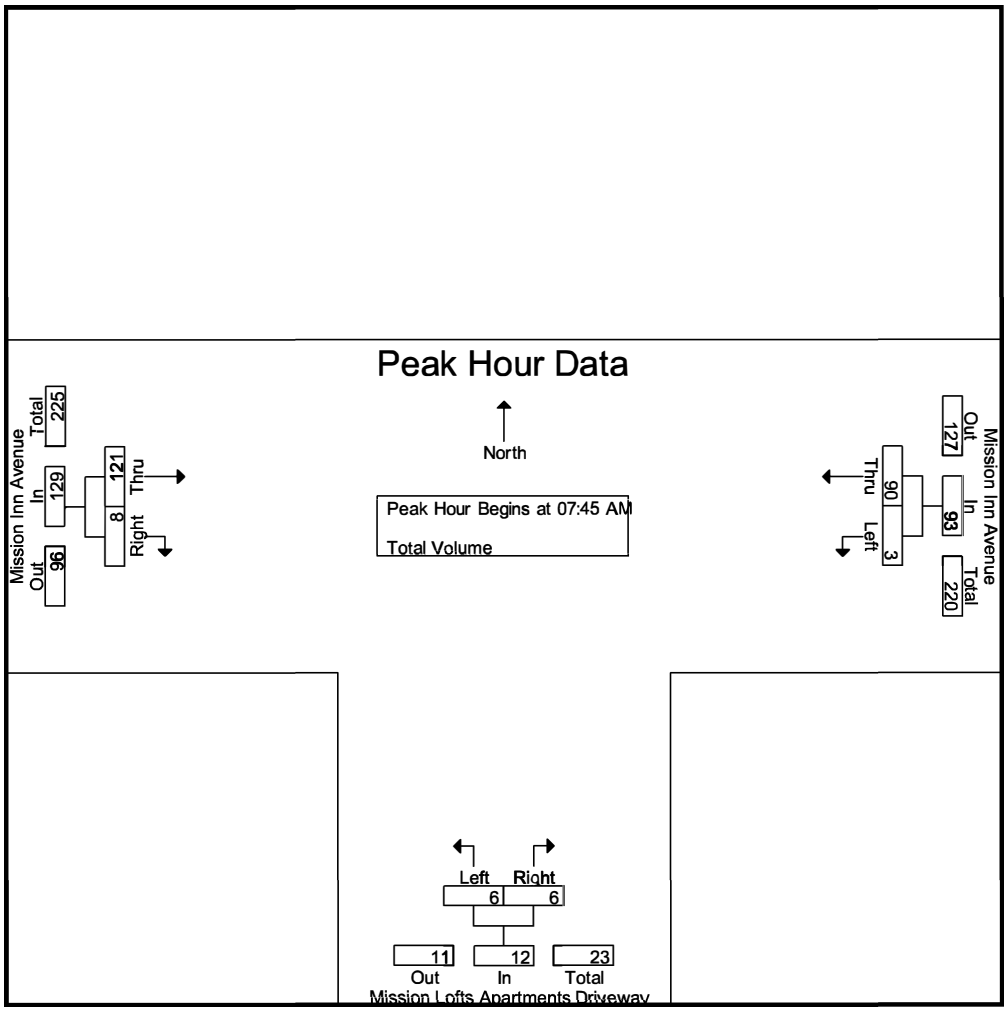
	Mission Inn Avenue Westbound			Mission Lofts Apartments Driveway Northbound			Mission Inn Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	0	11	11	3	1	4	15	1	16	31
07:15 AM	0	12	12	2	1	3	17	0	17	32
07:30 AM	0	19	19	2	1	3	14	1	15	37
07:45 AM	0	17	17	2	0	2	33	3	36	55
Total	0	59	59	9	3	12	79	5	84	155
08:00 AM	0	24	24	2	5	7	32	1	33	64
08:15 AM	0	24	24	0	1	1	20	2	22	47
08:30 AM	3	25	28	2	0	2	36	2	38	68
08:45 AM	0	18	18	2	1	3	32	2	34	55
Total	3	91	94	6	7	13	120	7	127	234
Grand Total	3	150	153	15	10	25	199	12	211	389
Apprch %	2	98		60	40		94.3	5.7		
Total %	0.8	38.6	39.3	3.9	2.6	6.4	51.2	3.1	54.2	

	Mission Inn Avenue Westbound			Mission Lofts Apartments Driveway Northbound			Mission Inn Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:45 AM										
07:45 AM	0	17	17	**2**	0	2	33	**3**	36	55
08:00 AM	0	24	24	2	**5**	**7**	32	1	33	64
08:15 AM	0	24	24	0	1	1	20	2	22	47
08:30 AM	**3**	**25**	**28**	2	0	2	**36**	2	**38**	**68**
Total Volume	3	90	93	6	6	12	121	8	129	234
% App. Total	3.2	96.8		50	50		93.8	6.2		
PHF	.250	.900	.830	.750	.300	.429	.840	.667	.849	.860

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

City of Riverside
N/S: Mission Lofts Apartments Driveway
E/W: Mission Inn Avenue
Weather: Clear

File Name : 10_RIV_MLA DW_MI AM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 2



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

Peak Hour for Each Approach Begins at:

	08:00 AM			07:15 AM			07:45 AM		
+0 mins.	0	24	24	**2**	1	3	33	**3**	36
+15 mins.	0	24	24	2	1	3	32	1	33
+30 mins.	**3**	**25**	**28**	2	0	2	20	2	22
+45 mins.	0	18	18	2	**5**	**7**	**36**	2	**38**
Total Volume	3	91	94	8	7	15	121	8	129
% App. Total	3.2	96.8		53.3	46.7		93.8	6.2	
PHF	.250	.910	.839	1.000	.350	.536	.840	.667	.849

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

City of Riverside
N/S: Mission Lofts Apartments Driveway
E/W: Mission Inn Avenue
Weather: Clear

File Name : 10_RIV_MLA DW_MI PM
Site Code : 22524972
Start Date : 11/6/2024
Page No : 1

Groups Printed- Total Volume

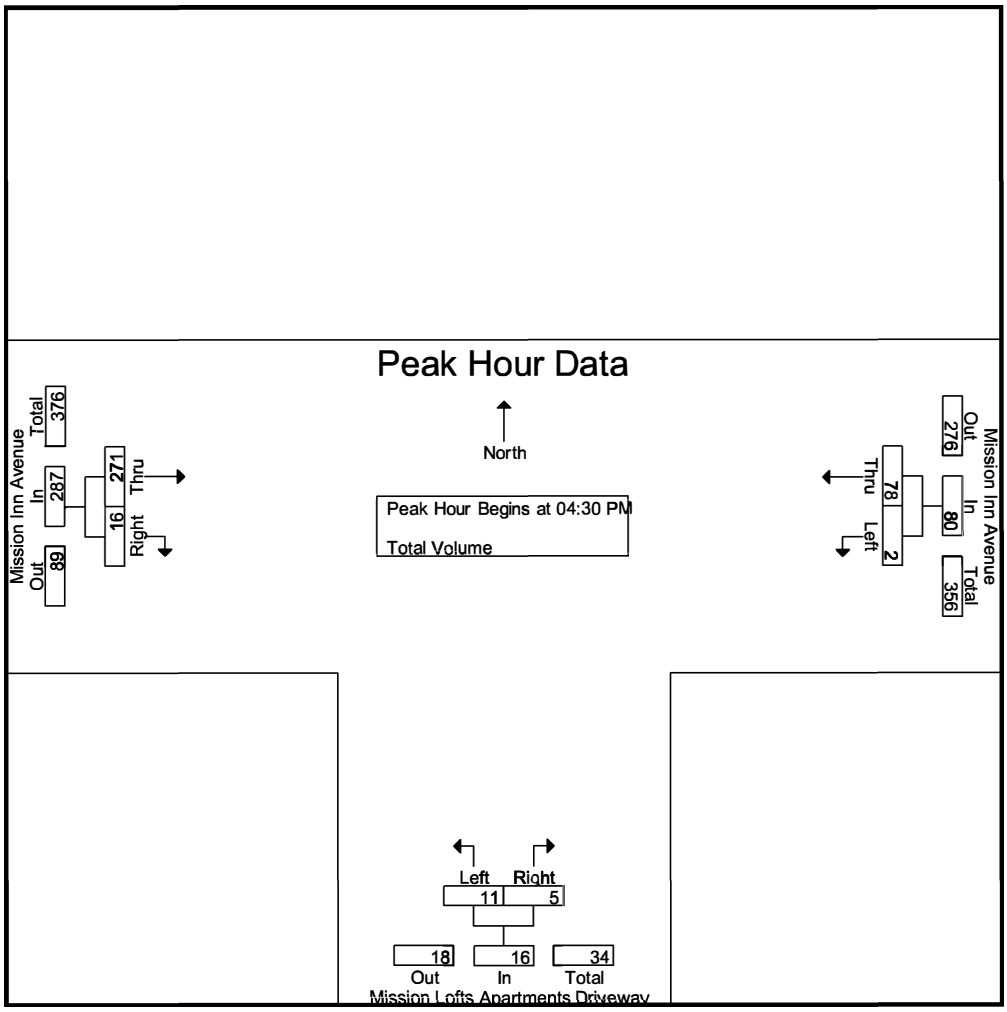
	Mission Inn Avenue Westbound			Mission Lofts Apartments Driveway Northbound			Mission Inn Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	0	18	18	2	0	2	59	1	60	80
04:15 PM	1	14	15	1	0	1	43	5	48	64
04:30 PM	0	14	14	1	0	1	60	4	64	79
04:45 PM	0	16	16	2	1	3	70	4	74	93
Total	1	62	63	6	1	7	232	14	246	316
05:00 PM	1	24	25	3	1	4	69	4	73	102
05:15 PM	1	24	25	5	3	8	72	4	76	109
05:30 PM	3	14	17	2	0	2	44	4	48	67
05:45 PM	0	19	19	2	1	3	51	5	56	78
Total	5	81	86	12	5	17	236	17	253	356
Grand Total	6	143	149	18	6	24	468	31	499	672
Apprch %	4	96		75	25		93.8	6.2		
Total %	0.9	21.3	22.2	2.7	0.9	3.6	69.6	4.6	74.3	

	Mission Inn Avenue Westbound			Mission Lofts Apartments Driveway Northbound			Mission Inn Avenue Eastbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	0	14	14	1	0	1	60	**4**	64	79
04:45 PM	0	16	16	2	1	3	70	4	74	93
05:00 PM	**1**	**24**	**25**	3	1	4	69	4	73	102
05:15 PM	1	24	25	**5**	**3**	**8**	**72**	4	**76**	**109**
Total Volume	2	78	80	11	5	16	271	16	287	383
% App. Total	2.5	97.5		68.8	31.2		94.4	5.6		
PHF	.500	.813	.800	.550	.417	.500	.941	1.00	.944	.878

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

City of Riverside
N/S: Mission Lofts Apartments Driveway
E/W: Mission Inn Avenue
Weather: Clear

File Name : 10_RIV_MLA DW_MI PM
Site Code : 22524972
Start Date : 11/6/2024
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			04:45 PM			04:30 PM		
+0 mins.	1	**24**	**25**	2	1	3	60	**4**	64
+15 mins.	1	24	25	3	1	4	70	4	74
+30 mins.	**3**	14	17	**5**	**3**	**8**	69	4	73
+45 mins.	0	19	19	2	0	2	**72**	4	**76**
Total Volume	5	81	86	12	5	17	271	16	287
% App. Total	5.8	94.2		70.6	29.4		94.4	5.6	
PHF	.417	.844	.860	.600	.417	.531	.941	1.000	.944

Location: Riverside
N/S: Mission Lofts Apts DW
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

PEDESTRIANS

	North Leg Dead End	East Leg Mission Inn Avenue	South Leg Mission Lofts Apts DW	West Leg Mission Inn Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	3	5	4	12
7:15 AM	0	0	3	0	3
7:30 AM	0	0	5	2	7
7:45 AM	0	0	4	0	4
8:00 AM	0	1	7	1	9
8:15 AM	0	0	4	0	4
8:30 AM	0	0	6	1	7
8:45 AM	0	0	7	0	7
TOTAL VOLUMES:	0	4	41	8	53

	North Leg Dead End	East Leg Mission Inn Avenue	South Leg Mission Lofts Apts DW	West Leg Mission Inn Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	3	0	3
4:15 PM	0	1	3	3	7
4:30 PM	0	0	6	5	11
4:45 PM	0	0	4	1	5
5:00 PM	0	0	12	1	13
5:15 PM	0	1	6	3	10
5:30 PM	0	0	2	1	3
5:45 PM	0	2	7	0	9
TOTAL VOLUMES:	0	4	43	14	61

Location: Riverside
N/S: Mission Lofts Apts DW
E/W: Mission Inn Avenue

Date: 11/6/2024
Day: Wednesday

BICYCLES

	Southbound Dead End			Westbound Mission Inn Avenue			Northbound Mission Lofts Apts DW			Eastbound Mission Inn Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
7:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
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	1	0	0	0	0	0	1
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	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	1	0	1	0	1	0	0	0	3

	Southbound Dead End			Westbound Mission Inn Avenue			Northbound Mission Lofts Apts DW			Eastbound Mission Inn Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	1	2	0	0	2	1	6
5:30 PM	0	0	0	0	1	0	0	1	0	0	1	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	2
TOTAL VOLUMES:	0	0	0	0	2	0	1	3	0	0	8	1	15

Counts Unimited, Inc.

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

City of Riverside
Commerce Street
B/ Mission Inn Avenue - 3rd Street
24 Hour Directional Volume Count

RIV001
Site Code: 225-24972

Start Time	11/6/24 Wed	Northbound Morning	Northbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Southbound Morning	Southbound Afternoon	Hour Totals Morning	Hour Totals Afternoon	Combined Totals Morning	Combined Totals Afternoon
12:00		1	6			1	**81**				
12:15		0	5			0	**53**				
12:30		0	9			0	**11**				
12:45		2	2	3	22	0	**10**	1	155	4	177
01:00		0	11			1	3				
01:15		0	5			0	6				
01:30		1	4			1	6				
01:45		0	**9**	1	29	0	10	2	25	3	54
02:00		2	**6**			0	7				
02:15		1	**6**			0	5				
02:30		0	**11**			0	12				
02:45		1	6	4	29	1	10	1	34	5	63
03:00		0	3			0	7				
03:15		0	5			0	6				
03:30		1	1			0	5				
03:45		2	6	3	15	2	8	2	26	5	41
04:00		0	10			1	8				
04:15		3	3			1	3				
04:30		1	7			1	11				
04:45		5	6	9	26	2	13	5	35	14	61
05:00		0	7			1	19				
05:15		1	5			4	9				
05:30		6	2			3	14				
05:45		5	3	12	17	4	9	12	51	24	68
06:00		6	0			6	6				
06:15		5	7			0	6				
06:30		6	2			1	8				
06:45		5	6	22	15	8	2	15	22	37	37
07:00		5	2			6	4				
07:15		4	2			2	2				
07:30		2	2			12	4				
07:45		5	0	16	6	10	3	30	13	46	19
08:00		1	1			6	1				
08:15		7	2			8	4				
08:30		3	1			7	4				
08:45		4	4	15	8	14	2	35	11	50	19
09:00		**9**	2			**42**	1				
09:15		**4**	1			**15**	4				
09:30		**5**	2			**10**	7				
09:45		**8**	0	26	5	**45**	1	112	13	138	18
10:00		3	1			19	1				
10:15		4	0			9	0				
10:30		4	0			6	3				
10:45		2	1	13	2	4	0	38	4	51	6
11:00		7	1			8	3				
11:15		0	1			17	1				
11:30		3	0			6	2				
11:45		4	0	14	2	16	0	47	6	61	8
Total		138	176	138	176	300	395	300	395	438	571
Combined Total		314		314		695		695		1009	
AM Peak	-	09:00	-	-	-	09:00	-	-	-	-	-
Vol.	-	26	-	-	-	112	-	-	-	-	-
P.H.F.		0.722				0.622					
PM Peak	-	-	01:45	-	-	-	12:00	-	-	-	-
Vol.	-	-	32	-	-	-	155	-	-	-	-
P.H.F.			0.727				0.478				
Percentage		43.9%	56.1%			43.2%	56.8%				
ADT/AADT		ADT 1,009		AADT 1,009							

Counts Unimited, Inc.

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

City of Riverside
5th Street
B/ Commerce Street - Park Avenue
24 Hour Directional Volume Count

RIV002
Site Code: 225-24972

Start	11/6/24	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		0	2			0	0				
12:15		0	1			0	0				
12:30		0	0			0	0				
12:45		0	0	0	3	0	0	0	0	0	3
01:00		0	1			0	1				
01:15		0	1			0	0				
01:30		0	0			0	1				
01:45		0	1	0	3	0	0	0	2	0	5
02:00		0	1			0	0				
02:15		0	0			0	0				
02:30		0	1			0	2				
02:45		0	1	0	3	0	0	0	2	0	5
03:00		0	1			0	0				
03:15		0	0			1	1				
03:30		**0**	0			0	0				
03:45		**0**	2	0	3	0	**1**	1	2	1	5
04:00		**0**	1			0	**3**				
04:15		**3**	0			0	**0**				
04:30		0	**3**			0	**2**				
04:45		0	**1**	3	5	0	0	0	5	3	10
05:00		0	**3**			**2**	1				
05:15		0	**2**			**0**	2				
05:30		0	1			**1**	1				
05:45		0	1	0	7	**2**	2	5	6	5	13
06:00		0	0			0	1				
06:15		0	0			2	0				
06:30		1	2			0	2				
06:45		0	1	1	3	0	1	2	4	3	7
07:00		1	2			0	1				
07:15		0	0			0	0				
07:30		0	0			0	1				
07:45		1	3	2	5	1	0	1	2	3	7
08:00		1	0			0	1				
08:15		0	0			2	1				
08:30		1	0			0	0				
08:45		0	0	2	0	2	0	4	2	6	2
09:00		0	0			1	0				
09:15		0	0			0	0				
09:30		1	1			0	0				
09:45		2	0	3	1	3	0	4	0	7	1
10:00		0	0			1	0				
10:15		0	0			0	0				
10:30		1	1			0	0				
10:45		0	1	1	2	1	0	2	0	3	2
11:00		0	0			0	0				
11:15		0	0			0	0				
11:30		0	0			0	0				
11:45		1	0	1	0	0	0	0	0	1	0
Total		13	35	13	35	19	25	19	25	32	60
Combined Total		48		48		44		44		92	
AM Peak	-	03:30	-	-	-	05:00	-	-	-	-	-
Vol.	-	3	-	-	-	5	-	-	-	-	-
P.H.F.		0.250				0.625					
PM Peak	-	-	04:30	-	-	-	03:45	-	-	-	-
Vol.	-	-	9	-	-	-	6	-	-	-	-
P.H.F.			0.750				0.500				
Percentage		27.1%	72.9%			43.2%	56.8%				
ADT/AADT		ADT 92		AADT 92							

Counts Unimited, Inc.

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

City of Riverside
6th Street
B/ Commerce Street - Park Avenue
24 Hour Directional Volume Count

RIV003
Site Code: 225-24972

Start	11/6/24	Eastbound		Hour Totals		Westbound		Hour Totals		Combined Totals	
Time	Wed	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon	Morning	Afternoon
12:00		1	2			1	0				
12:15		1	0			0	1				
12:30		0	1			0	1				
12:45		0	2	2	5	0	1	1	3	3	8
01:00		0	0			0	1				
01:15		0	0			0	3				
01:30		0	0			0	0				
01:45		0	2	0	2	0	1	0	5	0	7
02:00		0	1			0	0				
02:15		0	0			0	0				
02:30		0	2			0	1				
02:45		0	1	0	4	0	1	0	2	0	6
03:00		0	2			0	**1**				
03:15		0	2			0	**2**				
03:30		0	1			0	**2**				
03:45		0	0	0	5	0	**3**	0	8	0	13
04:00		0	**1**			0	0				
04:15		0	**4**			1	0				
04:30		0	**1**			1	1				
04:45		0	**4**	0	10	2	2	4	3	4	13
05:00		0	1			0	0				
05:15		0	3			0	0				
05:30		0	0			2	0				
05:45		1	0	1	4	0	1	2	1	3	5
06:00		0	2			0	0				
06:15		0	2			1	1				
06:30		0	0			0	0				
06:45		1	1	1	5	1	0	2	1	3	6
07:00		0	1			**0**	1				
07:15		0	2			**1**	3				
07:30		0	1			**2**	0				
07:45		0	1	0	5	**2**	0	5	4	5	9
08:00		0	1			0	0				
08:15		1	0			0	2				
08:30		0	1			0	1				
08:45		**3**	0	4	2	0	0	0	3	4	5
09:00		**0**	0			1	0				
09:15		**1**	0			1	1				
09:30		**1**	0			0	0				
09:45		0	0	2	0	0	0	2	1	4	1
10:00		0	0			2	1				
10:15		1	0			2	0				
10:30		1	0			1	0				
10:45		0	0	2	0	0	0	5	1	7	1
11:00		1	1			1	0				
11:15		0	0			0	0				
11:30		2	0			0	0				
11:45		1	0	4	1	3	0	4	0	8	1
Total		16	43	16	43	25	32	25	32	41	75
Combined Total		59		59		57		57		116	
AM Peak	-	08:45	-	-	-	07:00	-	-	-	-	-
Vol.	-	5	-	-	-	5	-	-	-	-	-
P.H.F.		0.417				0.625					
PM Peak	-	-	04:00	-	-	-	03:00	-	-	-	-
Vol.	-	-	10	-	-	-	8	-	-	-	-
P.H.F.			0.625				0.667				
Percentage		27.1%	72.9%			43.9%	56.1%				
ADT/AADT		ADT 116		AADT 116							

APPENDIX D

INTERSECTION LEVEL OF SERVICE WORKSHEETS

EXISTING

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Lime St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	34.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.515

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	27	126	45	42	246	2	10	213	78	382	506	167
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	126	45	42	246	2	10	213	78	382	506	167
Peak Hour Factor	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	36	13	12	71	1	3	62	23	111	147	48
Total Analysis Volume [veh/h]	31	146	52	49	285	2	12	247	90	442	586	193
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	13	34	0	13	34	0	16	30	0	43	57	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	22	12	12	22	13	13	2	51	51	32	81	81
g / C, Green / Cycle	0.19	0.10	0.10	0.19	0.11	0.11	0.02	0.43	0.43	0.27	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.03	0.03	0.08	0.08	0.01	0.09	0.10	0.25	0.31	0.12
s, saturation flow rate [veh/h]	1327	1870	1589	1418	1870	1865	1781	1870	1705	1781	1870	1589
c, Capacity [veh/h]	258	182	154	265	199	199	35	801	730	473	1261	1072
d1, Uniform Delay [s]	40.71	53.07	50.58	41.15	51.91	51.91	58.07	21.61	21.69	43.07	9.28	7.25
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.29	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.21	8.06	1.28	0.33	4.87	4.90	5.64	0.62	0.71	18.96	1.23	0.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.80	0.34	0.18	0.72	0.72	0.34	0.22	0.22	0.93	0.46	0.18
d, Delay for Lane Group [s/veh]	40.92	61.13	51.86	41.49	56.78	56.82	63.71	22.23	22.40	62.04	10.51	7.62
Lane Group LOS	D	E	D	D	E	E	E	C	C	E	B	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.77	4.68	1.51	1.23	4.42	4.42	0.42	3.26	3.11	15.06	7.03	1.81
50th-Percentile Queue Length [ft/ln]	19.30	117.03	37.65	30.85	110.50	110.38	10.45	81.61	77.84	376.51	175.79	45.21
95th-Percentile Queue Length [veh/ln]	1.39	8.23	2.71	2.22	7.87	7.86	0.75	5.88	5.60	21.43	11.38	3.26
95th-Percentile Queue Length [ft/ln]	34.75	205.74	67.76	55.53	196.69	196.54	18.80	146.90	140.11	535.63	284.51	81.38

Movement, Approach, & Intersection Results

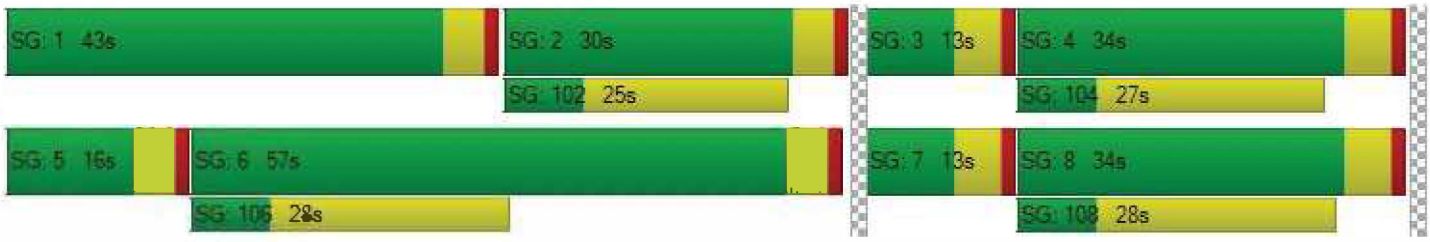
d_M, Delay for Movement [s/veh]	40.92	61.13	51.86	41.49	56.80	56.82	63.71	22.28	22.40	62.04	10.51	7.62
Movement LOS	D	E	D	D	E	E	E	C	C	E	B	A
d_A, Approach Delay [s/veh]	56.29			54.57			23.73			28.71		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	34.92											
Intersection LOS	C											
Intersection V/C	0.515											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	49.51	49.51	49.51	49.51
l_p,int, Pedestrian LOS Score for Intersectio	2.552	2.340	2.347	2.679
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	482	482	423	873
d_b, Bicycle Delay [s]	34.59	34.59	37.30	19.05
l_b,int, Bicycle LOS Score for Intersection	1.937	1.837	1.848	3.574
Bicycle LOS	A	A	A	D

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																	



Intersection Level Of Service Report
Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	25.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.484

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	161	871	0	308	182	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	161	871	0	308	182	0
Peak Hour Factor	0.8849	0.8849	0.9500	0.8849	0.8849	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	45	246	0	87	51	0
Total Analysis Volume [veh/h]	182	984	0	348	206	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	77	0	0	28	28	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	105	105	105	105
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	41	41	53	53
g / C, Green / Cycle	0.39	0.39	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.10	0.35	0.10	0.06
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	694	1096	1799	1799
d1, Uniform Delay [s]	21.75	30.03	14.21	13.61
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.20	2.92	0.24	0.13
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.90	0.19	0.11
d, Delay for Lane Group [s/veh]	21.95	32.95	14.45	13.74
Lane Group LOS	C	C	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	3.01	11.54	2.24	1.27
50th-Percentile Queue Length [ft/ln]	75.26	288.47	56.06	31.74
95th-Percentile Queue Length [veh/ln]	5.42	17.11	4.04	2.29
95th-Percentile Queue Length [ft/ln]	135.48	427.75	100.91	57.13

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	21.95	32.95	0.00	14.45	13.74	0.00
Movement LOS	C	C		B	B	
d_A, Approach Delay [s/veh]	31.24		14.45		13.74	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	25.74					
Intersection LOS	C					
Intersection V/C	0.484					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	42.04	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.470	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1372	419	419
d_b, Bicycle Delay [s]	5.17	32.77	32.77
l_b,int, Bicycle LOS Score for Intersection	1.560	1.847	1.730
Bicycle LOS	A	A	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																

Intersection Level Of Service Report
Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	31.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.339

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	99	178	38	0	0	0	225	265	0	0	87	83
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	99	178	38	0	0	0	225	265	0	0	87	83
Peak Hour Factor	0.8994	0.8994	0.8994	0.9500	0.9500	0.9500	0.8994	0.8994	0.9500	0.9500	0.8994	0.8994
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	28	49	11	0	0	0	63	74	0	0	24	0
Total Analysis Volume [veh/h]	110	198	42	0	0	0	250	295	0	0	97	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	14.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	34	0	0	0	0	35	71	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	19	0	0	23	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	105	105		105	105	105	105
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	16	16		17	78	56	56
g / C, Green / Cycle	0.15	0.15		0.16	0.74	0.53	0.53
(v / s)_i Volume / Saturation Flow Rate	0.06	0.13		0.14	0.08	0.03	0.00
s, saturation flow rate [veh/h]	1781	1814		1781	3560	3560	1589
c, Capacity [veh/h]	277	282		287	2635	1892	844
d1, Uniform Delay [s]	39.97	43.21		43.02	3.87	11.87	0.00
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.93	7.17		8.03	0.09	0.05	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.40	0.85		0.87	0.11	0.05	0.00
d, Delay for Lane Group [s/veh]	40.89	50.38		51.05	3.96	11.92	0.00
Lane Group LOS	D	D		D	A	B	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.62	6.58		6.86	0.75	0.54	0.00
50th-Percentile Queue Length [ft/ln]	65.61	164.61		171.43	18.74	13.49	0.00
95th-Percentile Queue Length [veh/ln]	4.72	10.79		11.15	1.35	0.97	0.00
95th-Percentile Queue Length [ft/ln]	118.09	269.82		278.80	33.73	24.27	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	40.89	50.38	50.38	0.00	0.00	0.00	51.05	3.96	0.00	0.00	11.92	0.00
Movement LOS	D	D	D				D	A			B	A
d_A, Approach Delay [s/veh]	47.40			0.00			25.56			11.92		
Approach LOS	D			A			C			B		
d_I, Intersection Delay [s/veh]	31.93											
Intersection LOS	C											
Intersection V/C	0.339											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	42.10	42.10	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.061	1.867	0.000	0.000
Crosswalk LOS	B	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	552	0	1237	571
d_b, Bicycle Delay [s]	27.53	52.53	7.64	26.81
l_b,int, Bicycle LOS Score for Intersection	2.137	4.132	2.009	1.640
Bicycle LOS	B	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																

Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.225

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	14	43	13	20	14	65	108	130	60	5	86	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	43	13	20	14	65	108	130	60	5	86	26
Peak Hour Factor	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	12	4	6	4	18	31	37	17	1	24	7
Total Analysis Volume [veh/h]	16	49	15	23	16	74	123	148	68	6	98	30
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	558	621	651	603	658	756	568	616	653
Degree of Utilization, x	0.03	0.10	0.17	0.20	0.22	0.09	0.01	0.10	0.10

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.09	0.34	0.62	0.76	0.86	0.30	0.03	0.35	0.32
95th-Percentile Queue Length [ft]	2.21	8.57	15.60	18.99	21.47	7.39	0.80	8.65	8.11
Approach Delay [s/veh]	9.19		9.69	9.55			9.02		
Approach LOS	A		A	A			A		
Intersection Delay [s/veh]	9.42								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	31	9	8	9	20	5	6	112	20	13	79	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	31	9	8	9	20	5	6	112	20	13	79	4
Peak Hour Factor	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	2	2	2	5	1	2	30	5	3	21	1
Total Analysis Volume [veh/h]	33	10	9	10	21	5	6	119	21	14	84	4
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.02	0.01	0.01	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	10.59	10.97	9.01	9.86	10.49	8.79	7.40	0.00	0.00	7.52	0.00	0.00
Movement LOS	B	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.23	0.23	0.23	0.15	0.15	0.15	0.01	0.01	0.00	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.83	5.83	5.83	3.80	3.80	3.80	0.25	0.25	0.00	0.74	0.00	0.00
d_A, Approach Delay [s/veh]	10.39			10.08			0.30			1.03		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	3.13											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.197

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	33	84	17	11	53	25	13	58	58	20	33	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	84	17	11	53	25	13	58	58	20	33	9
Peak Hour Factor	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	24	5	3	15	7	4	17	17	6	10	3
Total Analysis Volume [veh/h]	38	97	20	13	61	29	15	67	67	23	38	10
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	787	796	627	737	620	697
Degree of Utilization, x	0.20	0.13	0.02	0.18	0.04	0.07

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.73	0.44	0.07	0.66	0.12	0.22
95th-Percentile Queue Length [ft]	18.21	11.09	1.84	16.52	2.89	5.53
Approach Delay [s/veh]	8.69	8.19	8.66		8.41	
Approach LOS	A	A	A		A	
Intersection Delay [s/veh]	8.53					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	7	9	371	17	12	377
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	9	371	17	12	377
Peak Hour Factor	0.8295	0.8295	0.8295	0.8295	0.8295	0.8295
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	3	112	5	4	114
Total Analysis Volume [veh/h]	8	11	447	20	14	454
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	15.20	9.95	0.00	0.00	8.34	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	2.83	2.83	0.00	0.00	0.97	0.00
d_A, Approach Delay [s/veh]	12.16		0.00		0.25	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.36					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	13	2	0	34	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	2	0	34	2	1
Peak Hour Factor	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	0	11	1	0
Total Analysis Volume [veh/h]	17	3	0	44	3	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.26	0.00	8.83	8.41
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.31	0.31
d_A, Approach Delay [s/veh]	0.00		0.00		8.73	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.51					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	15	0	1	35	4	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	0	1	35	4	0
Peak Hour Factor	0.7237	0.7237	0.7237	0.7237	0.7237	0.7237
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	0	0	12	1	0
Total Analysis Volume [veh/h]	21	0	1	48	6	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.26	0.00	8.88	8.43
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.04	0.04	0.49	0.49
d_A, Approach Delay [s/veh]	0.00		0.15		8.88	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.80					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	6	0	6	0	0	0	0	121	8	3	90	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	0	6	0	0	0	0	121	8	3	90	0
Peak Hour Factor	0.8603	0.9500	0.8603	0.8603	0.9500	0.8603	0.8603	0.8603	0.8603	0.8603	0.8603	0.8603
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	2	0	0	0	0	35	2	1	26	0
Total Analysis Volume [veh/h]	7	0	7	0	0	0	0	141	9	3	105	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.98	0.00	8.78	9.79	0.00	8.59	7.43	0.00	0.00	7.52	0.00	0.00
Movement LOS	A		A	A		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.28	0.00	1.28	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
d_A, Approach Delay [s/veh]	9.38			9.19			0.00			0.21		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.57											
Intersection LOS	A											

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Lime St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	26.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.505

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	22	244	116	51	257	26	13	336	99	190	313	148
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	244	116	51	257	26	13	336	99	190	313	148
Peak Hour Factor	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	66	32	14	70	7	4	91	27	52	85	40
Total Analysis Volume [veh/h]	24	265	126	55	279	28	14	365	108	206	340	161
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	9	30	0	9	29	0	24	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	26	15	15	26	17	17	2	38	38	12	48	48
g / C, Green / Cycle	0.28	0.17	0.17	0.28	0.19	0.19	0.02	0.42	0.42	0.14	0.53	0.53
(v / s)_i Volume / Saturation Flow Rate	0.02	0.14	0.08	0.04	0.08	0.08	0.01	0.13	0.13	0.12	0.18	0.10
s, saturation flow rate [veh/h]	1248	1870	1589	1252	1870	1811	1781	1870	1727	1781	1870	1589
c, Capacity [veh/h]	397	317	269	340	360	348	43	781	721	247	994	845
d1, Uniform Delay [s]	23.59	36.25	33.79	24.66	32.08	32.12	43.26	17.59	17.64	37.85	12.09	11.01
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.06	5.82	1.26	0.22	0.82	0.86	4.19	1.04	1.16	7.27	0.94	0.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.06	0.84	0.47	0.16	0.43	0.44	0.32	0.31	0.32	0.84	0.34	0.19
d, Delay for Lane Group [s/veh]	23.66	42.07	35.05	24.88	32.90	32.98	47.45	18.63	18.80	45.12	13.03	11.51
Lane Group LOS	C	D	D	C	C	C	D	B	B	D	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.37	5.97	2.51	0.86	2.97	2.92	0.36	3.56	3.38	4.80	3.82	1.65
50th-Percentile Queue Length [ft/ln]	9.17	149.32	62.87	21.51	74.34	73.07	8.95	88.88	84.38	120.00	95.55	41.34
95th-Percentile Queue Length [veh/ln]	0.66	9.98	4.53	1.55	5.35	5.26	0.64	6.40	6.08	8.39	6.88	2.98
95th-Percentile Queue Length [ft/ln]	16.51	249.52	113.17	38.73	133.81	131.52	16.10	159.98	151.89	209.82	171.99	74.41

Movement, Approach, & Intersection Results

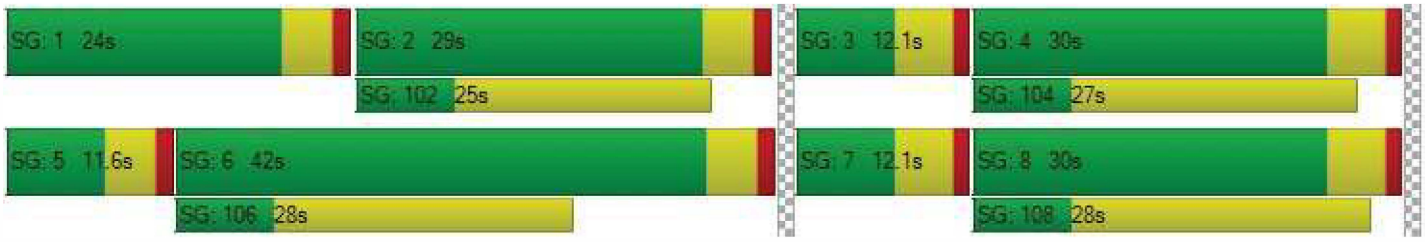
d_M, Delay for Movement [s/veh]	23.66	42.07	35.05	24.88	32.93	32.98	47.45	18.69	18.80	45.12	13.03	11.51
Movement LOS	C	D	D	C	C	C	D	B	B	D	B	B
d_A, Approach Delay [s/veh]	38.87			31.71			19.54			22.03		
Approach LOS	D			C			B			C		
d_I, Intersection Delay [s/veh]	26.74											
Intersection LOS	C											
Intersection V/C	0.505											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.72	34.72	34.72	34.72
l_p,int, Pedestrian LOS Score for Intersectio	2.529	2.359	2.316	2.599
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	553	553	542	830
d_b, Bicycle Delay [s]	23.59	23.59	23.95	15.41
l_b,int, Bicycle LOS Score for Intersection	2.244	1.858	1.961	2.726
Bicycle LOS	B	A	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	24.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.373

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	190	459	0	505	179	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	190	459	0	505	179	0
Peak Hour Factor	0.8816	0.8816	0.9500	0.8816	0.8816	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	54	130	0	143	51	0
Total Analysis Volume [veh/h]	216	521	0	573	203	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	57	0	0	53	53	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	24	24	75	75
g / C, Green / Cycle	0.21	0.21	0.68	0.68
(v / s)_i Volume / Saturation Flow Rate	0.12	0.19	0.16	0.06
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	383	605	2438	2438
d1, Uniform Delay [s]	38.51	41.53	6.50	5.79
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.30	3.76	0.23	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.56	0.86	0.24	0.08
d, Delay for Lane Group [s/veh]	39.81	45.28	6.73	5.85
Lane Group LOS	D	D	A	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	5.27	6.98	2.30	0.72
50th-Percentile Queue Length [ft/ln]	131.65	174.61	57.48	18.08
95th-Percentile Queue Length [veh/ln]	9.03	11.32	4.14	1.30
95th-Percentile Queue Length [ft/ln]	225.74	282.96	103.47	32.55

Movement, Approach, & Intersection Results

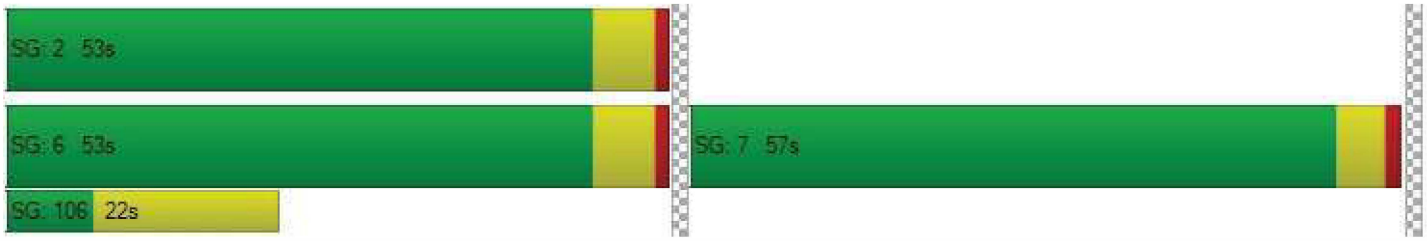
d_M, Delay for Movement [s/veh]	39.81	45.28	0.00	6.73	5.85	0.00
Movement LOS	D	D		A	A	
d_A, Approach Delay [s/veh]	43.68		6.73		5.85	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	24.61					
Intersection LOS	C					
Intersection V/C	0.373					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.51	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.350	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	946	855	855
d_b, Bicycle Delay [s]	15.26	18.01	18.01
l_b,int, Bicycle LOS Score for Intersection	1.560	2.032	1.727
Bicycle LOS	A	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	36.6
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.530

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	76	333	47	0	0	0	325	366	0	0	101	151
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	76	333	47	0	0	0	325	366	0	0	101	151
Peak Hour Factor	0.8854	0.8854	0.8854	0.9500	0.9500	0.9500	0.8854	0.8854	0.9500	0.9500	0.8854	0.8854
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	21	94	13	0	0	0	92	103	0	0	29	0
Total Analysis Volume [veh/h]	86	376	53	0	0	0	367	413	0	0	114	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	22.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	39	0	0	0	0	35	71	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	20	0	0	23	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	110	110		110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	28	28		25	71	41	41
g / C, Green / Cycle	0.25	0.25		0.22	0.65	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.05	0.23		0.21	0.12	0.03	0.00
s, saturation flow rate [veh/h]	1781	1830		1781	3560	3560	1589
c, Capacity [veh/h]	453	466		400	2298	1337	597
d1, Uniform Delay [s]	32.14	39.95		41.68	7.83	22.18	0.00
k, delay calibration	0.11	0.14		0.25	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.20	9.71		17.38	0.17	0.13	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.19	0.92		0.92	0.18	0.09	0.00
d, Delay for Lane Group [s/veh]	32.34	49.66		59.06	8.00	22.31	0.00
Lane Group LOS	C	D		E	A	C	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.82	12.41		11.45	1.86	0.96	0.00
50th-Percentile Queue Length [ft/ln]	45.61	310.34		286.32	46.44	24.09	0.00
95th-Percentile Queue Length [veh/ln]	3.28	18.19		17.00	3.34	1.73	0.00
95th-Percentile Queue Length [ft/ln]	82.10	454.80		425.07	83.59	43.35	0.00

Movement, Approach, & Intersection Results

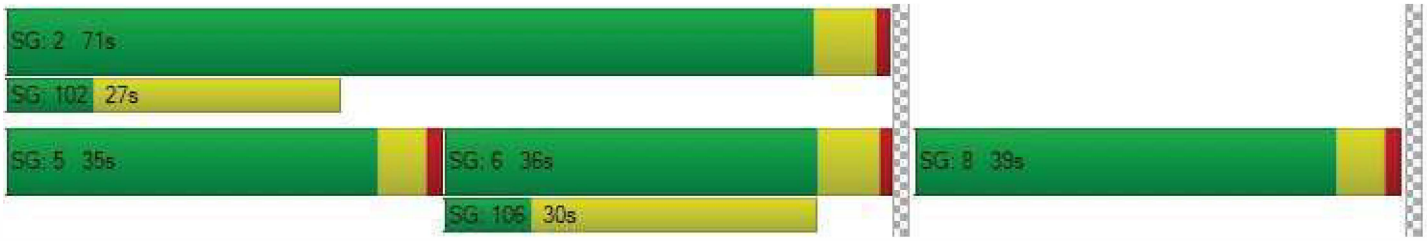
d_M, Delay for Movement [s/veh]	32.34	49.66	49.66	0.00	0.00	0.00	59.06	8.00	0.00	0.00	22.31	0.00
Movement LOS	C	D	D				E	A			C	A
d_A, Approach Delay [s/veh]	46.77			0.00			32.02			22.31		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	36.63											
Intersection LOS	D											
Intersection V/C	0.530											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.57	44.57	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.117	2.157	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	618	0	1181	545
d_b, Bicycle Delay [s]	26.27	55.02	9.22	29.11
l_b,int, Bicycle LOS Score for Intersection	2.409	4.132	2.203	1.654
Bicycle LOS	B	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	14.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.606

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	50	70	26	56	33	100	100	259	49	7	94	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	70	26	56	33	100	100	259	49	7	94	41
Peak Hour Factor	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	22	8	18	10	32	32	82	16	2	30	13
Total Analysis Volume [veh/h]	63	89	33	71	42	127	127	328	62	9	119	52
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	471	516	545	503	541	606	459	490	520
Degree of Utilization, x	0.13	0.24	0.44	0.25	0.61	0.10	0.02	0.17	0.16

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.46	0.91	2.23	0.99	4.02	0.34	0.06	0.63	0.58
95th-Percentile Queue Length [ft]	11.49	22.80	55.82	24.84	100.39	8.51	1.50	15.67	14.59
Approach Delay [s/veh]	11.72		14.72	16.23			11.26		
Approach LOS	B		B	C			B		
Intersection Delay [s/veh]	14.37								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	13.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.111

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	49	13	5	6	35	10	12	278	63	2	80	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	49	13	5	6	35	10	12	278	63	2	80	7
Peak Hour Factor	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	4	1	2	10	3	3	76	17	1	22	2
Total Analysis Volume [veh/h]	54	14	5	7	38	11	13	306	69	2	88	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.11	0.03	0.01	0.01	0.07	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.58	13.27	10.35	10.71	12.10	9.13	7.42	0.00	0.00	8.06	0.00	0.00
Movement LOS	B	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.50	0.50	0.50	0.29	0.29	0.29	0.02	0.02	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	12.51	12.51	12.51	7.37	7.37	7.37	0.55	0.55	0.00	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	13.30			11.35			0.25			0.16		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.79											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.382

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	44	71	30	9	82	13	16	130	119	15	30	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	71	30	9	82	13	16	130	119	15	30	7
Peak Hour Factor	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	20	8	2	23	4	4	36	33	4	8	2
Total Analysis Volume [veh/h]	49	79	33	10	91	14	18	144	132	17	33	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	734	723	618	722	593	663
Degree of Utilization, x	0.22	0.16	0.03	0.38	0.03	0.06

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.83	0.56	0.09	1.80	0.09	0.20
95th-Percentile Queue Length [ft]	20.84	14.08	2.25	44.94	2.21	4.94
Approach Delay [s/veh]	9.28	8.92	10.61		8.63	
Approach LOS	A	A	B		A	
Intersection Delay [s/veh]	9.78					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	38.5
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.124

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	11	1068	42	12	421
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	291	11	3	115
Total Analysis Volume [veh/h]	15	12	1163	46	13	459
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.03	0.01	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	38.46	16.74	0.00	0.00	11.43	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.52	0.52	0.00	0.00	0.07	0.00
95th-Percentile Queue Length [ft/ln]	13.05	13.05	0.00	0.00	1.74	0.00
d_A, Approach Delay [s/veh]	28.81		0.00		0.31	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.54					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	20	2	7	45	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	2	7	45	3	2
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	2	14	1	1
Total Analysis Volume [veh/h]	24	2	8	54	4	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.28	0.00	9.02	8.45
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.33	0.33	0.48	0.48
d_A, Approach Delay [s/veh]	0.00		0.94		8.83	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.18					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	23	0	3	46	2	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	0	3	46	2	0
Peak Hour Factor	0.9250	0.9250	0.9250	0.9250	0.9250	0.9250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	1	12	1	0
Total Analysis Volume [veh/h]	25	0	3	50	2	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	8.92	8.43
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.13	0.13	0.16	0.16
d_A, Approach Delay [s/veh]	0.00		0.41		8.92	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.50					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.023

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	11	0	5	0	0	0	0	271	16	2	78	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	0	5	0	0	0	0	271	16	2	78	0
Peak Hour Factor	0.8784	0.9500	0.8784	0.8784	0.9500	0.8784	0.8784	0.8784	0.8784	0.8784	0.8784	0.8784
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	1	0	0	0	0	77	5	1	22	0
Total Analysis Volume [veh/h]	13	0	6	0	0	0	0	309	18	2	89	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.56	0.00	9.40	10.32	0.00	8.54	7.39	0.00	0.00	7.93	0.00	0.00
Movement LOS	B		A	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.32	0.00	2.32	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00
d_A, Approach Delay [s/veh]	10.88			9.43			0.00			0.17		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	0.51											
Intersection LOS	B											

EXISTING PLUS PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Lime St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	35.3
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.528

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	27	126	45	42	246	2	10	213	78	382	506	167
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	5	0	14	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	27	126	45	42	246	2	10	218	78	396	515	167
Peak Hour Factor	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	36	13	12	71	1	3	63	23	115	149	48
Total Analysis Volume [veh/h]	31	146	52	49	285	2	12	253	90	459	597	193
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	13	34	0	13	34	0	16	30	0	43	57	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	22	12	12	22	13	13	2	50	50	33	81	81
g / C, Green / Cycle	0.19	0.10	0.10	0.19	0.11	0.11	0.02	0.42	0.42	0.27	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.03	0.03	0.08	0.08	0.01	0.09	0.10	0.26	0.32	0.12
s, saturation flow rate [veh/h]	1327	1870	1589	1418	1870	1865	1781	1870	1707	1781	1870	1589
c, Capacity [veh/h]	258	182	154	265	199	199	35	784	716	489	1261	1072
d1, Uniform Delay [s]	40.71	53.07	50.58	41.15	51.91	51.91	58.07	22.34	22.43	42.55	9.36	7.25
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.31	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.21	8.06	1.28	0.33	4.87	4.90	5.64	0.66	0.76	20.06	1.28	0.37
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.80	0.34	0.18	0.72	0.72	0.34	0.22	0.23	0.94	0.47	0.18
d, Delay for Lane Group [s/veh]	40.92	61.13	51.86	41.49	56.78	56.82	63.71	23.01	23.19	62.61	10.64	7.62
Lane Group LOS	D	E	D	D	E	E	E	C	C	E	B	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.77	4.68	1.51	1.23	4.42	4.42	0.42	3.39	3.24	15.76	7.23	1.81
50th-Percentile Queue Length [ft/ln]	19.30	117.03	37.65	30.85	110.50	110.38	10.45	84.79	80.89	393.97	180.72	45.21
95th-Percentile Queue Length [veh/ln]	1.39	8.23	2.71	2.22	7.87	7.86	0.75	6.10	5.82	22.27	11.64	3.26
95th-Percentile Queue Length [ft/ln]	34.75	205.74	67.76	55.53	196.69	196.54	18.80	152.62	145.60	556.73	290.96	81.38

Movement, Approach, & Intersection Results

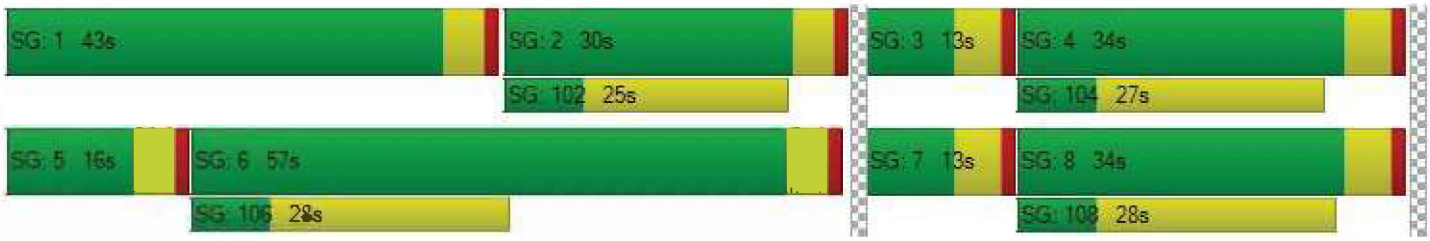
d_M, Delay for Movement [s/veh]	40.92	61.13	51.86	41.49	56.80	56.82	63.71	23.06	23.19	62.61	10.64	7.62
Movement LOS	D	E	D	D	E	E	E	C	C	E	B	A
d_A, Approach Delay [s/veh]	56.29			54.57			24.47			29.27		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	35.26											
Intersection LOS	D											
Intersection V/C	0.528											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	49.51	49.51	49.51	49.51
l_p,int, Pedestrian LOS Score for Intersectio	2.555	2.340	2.350	2.686
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	482	482	423	873
d_b, Bicycle Delay [s]	34.59	34.59	37.30	19.05
l_b,int, Bicycle LOS Score for Intersection	1.937	1.837	1.852	3.620
Bicycle LOS	A	A	A	D

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																	



Intersection Level Of Service Report
Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	26.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.484

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	161	871	0	308	182	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	0	0	5	23	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	167	871	0	313	205	0
Peak Hour Factor	0.8849	0.8849	0.9500	0.8849	0.8849	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	246	0	88	58	0
Total Analysis Volume [veh/h]	189	984	0	354	232	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	82	0	0	28	28	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	43	43	56	56
g / C, Green / Cycle	0.39	0.39	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.11	0.35	0.10	0.07
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	691	1092	1822	1822
d1, Uniform Delay [s]	23.00	31.62	14.54	14.01
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.21	3.04	0.24	0.14
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.90	0.19	0.13
d, Delay for Lane Group [s/veh]	23.21	34.65	14.78	14.15
Lane Group LOS	C	C	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	3.33	12.23	2.38	1.50
50th-Percentile Queue Length [ft/ln]	83.25	305.79	59.54	37.55
95th-Percentile Queue Length [veh/ln]	5.99	17.97	4.29	2.70
95th-Percentile Queue Length [ft/ln]	149.85	449.18	107.17	67.59

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	23.21	34.65	0.00	14.78	14.15	0.00
Movement LOS	C	C		B	B	
d_A, Approach Delay [s/veh]	32.81		14.78		14.15	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	26.72					
Intersection LOS	C					
Intersection V/C	0.484					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.51	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.474	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1401	400	400
d_b, Bicycle Delay [s]	4.93	35.16	35.16
l_b,int, Bicycle LOS Score for Intersection	1.560	1.852	1.751
Bicycle LOS	A	A	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																

Intersection Level Of Service Report
Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	32.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.351

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	99	178	38	0	0	0	225	265	0	0	87	83
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	0	0	0	0	11	0	0	23	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	99	178	46	0	0	0	225	276	0	0	110	95
Peak Hour Factor	0.8994	0.8994	0.8994	0.9500	0.9500	0.9500	0.8994	0.8994	0.9500	0.9500	0.8994	0.8994
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	28	49	13	0	0	0	63	77	0	0	31	0
Total Analysis Volume [veh/h]	110	198	51	0	0	0	250	307	0	0	122	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	12.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	37	0	0	0	0	37	73	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	19	0	0	23	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	110	110		110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	18	18		18	81	59	59
g / C, Green / Cycle	0.16	0.16		0.16	0.74	0.53	0.53
(v / s)_i Volume / Saturation Flow Rate	0.06	0.14		0.14	0.09	0.03	0.00
s, saturation flow rate [veh/h]	1781	1805		1781	3560	3560	1589
c, Capacity [veh/h]	285	289		285	2635	1902	849
d1, Uniform Delay [s]	41.39	45.05		45.15	4.07	12.36	0.00
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.85	7.49		8.36	0.09	0.06	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.39	0.86		0.88	0.12	0.06	0.00
d, Delay for Lane Group [s/veh]	42.24	52.54		53.51	4.16	12.43	0.00
Lane Group LOS	D	D		D	A	B	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.74	7.19		7.23	0.84	0.72	0.00
50th-Percentile Queue Length [ft/ln]	68.52	179.68		180.63	21.10	17.97	0.00
95th-Percentile Queue Length [veh/ln]	4.93	11.58		11.63	1.52	1.29	0.00
95th-Percentile Queue Length [ft/ln]	123.34	289.60		290.84	37.98	32.34	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	42.24	52.54	52.54	0.00	0.00	0.00	53.51	4.16	0.00	0.00	12.43	0.00
Movement LOS	D	D	D				D	A			B	A
d_A, Approach Delay [s/veh]	49.38			0.00			26.31			12.43		
Approach LOS	D			A			C			B		
d_I, Intersection Delay [s/veh]	32.66											
Intersection LOS	C											
Intersection V/C	0.351											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.57	44.57	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.066	1.870	0.000	0.000
Crosswalk LOS	B	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	582	0	1218	545
d_b, Bicycle Delay [s]	27.68	55.02	8.42	29.11
l_b,int, Bicycle LOS Score for Intersection	2.152	4.132	2.019	1.660
Bicycle LOS	B	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																

Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.263

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	14	43	13	20	14	65	108	130	60	5	86	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	19	0	0	35	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	43	13	20	14	65	108	149	60	5	121	26
Peak Hour Factor	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	12	4	6	4	18	31	42	17	1	34	7
Total Analysis Volume [veh/h]	16	49	15	23	16	74	123	169	68	6	138	30
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	543	603	631	591	644	737	560	608	634
Degree of Utilization, x	0.03	0.11	0.18	0.21	0.26	0.09	0.01	0.14	0.13

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.09	0.35	0.65	0.78	1.05	0.30	0.03	0.48	0.46
95th-Percentile Queue Length [ft]	2.27	8.87	16.19	19.47	26.24	7.60	0.81	11.95	11.38
Approach Delay [s/veh]	9.42		9.94	9.90			9.40		
Approach LOS	A		A	A			A		
Intersection Delay [s/veh]	9.73								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.020

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	31	9	8	9	20	5	6	112	20	13	79	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	3	3	12	0	19	0	0	23	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	1	0	0	0	0
Total Hourly Volume [veh/h]	31	11	8	12	23	17	6	132	20	13	102	6
Peak Hour Factor	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	3	2	3	6	5	2	35	5	3	27	2
Total Analysis Volume [veh/h]	33	12	9	13	24	18	6	140	21	14	108	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.02	0.01	0.02	0.04	0.02	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	11.08	11.40	9.15	10.15	10.78	8.97	7.45	0.00	0.00	7.57	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.26	0.26	0.26	0.23	0.23	0.23	0.01	0.01	0.00	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	6.54	6.54	6.54	5.76	5.76	5.76	0.25	0.25	0.00	0.75	0.00	0.00
d_A, Approach Delay [s/veh]	10.83			10.04			0.27			0.83		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	3.19											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.199

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	33	84	17	11	53	25	13	58	58	20	33	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	9	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	4	0	0	0	0	0	0
Total Hourly Volume [veh/h]	33	84	17	11	53	29	13	67	58	20	38	9
Peak Hour Factor	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	24	5	3	15	8	4	19	17	6	11	3
Total Analysis Volume [veh/h]	38	97	20	13	61	34	15	78	67	23	44	10
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	779	791	625	729	616	690
Degree of Utilization, x	0.20	0.14	0.02	0.20	0.04	0.08

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.74	0.47	0.07	0.74	0.12	0.25
95th-Percentile Queue Length [ft]	18.47	11.79	1.84	18.43	2.91	6.34
Approach Delay [s/veh]	8.77	8.27	8.83		8.48	
Approach LOS	A	A	A		A	
Intersection Delay [s/veh]	8.64					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.034

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	7	9	371	17	12	377
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	3	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	12	371	19	14	377
Peak Hour Factor	0.8295	0.8295	0.8295	0.8295	0.8295	0.8295
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	4	112	6	4	114
Total Analysis Volume [veh/h]	12	14	447	23	17	454
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.02	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	15.47	10.09	0.00	0.00	8.36	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.16	0.16	0.00	0.00	0.05	0.00
95th-Percentile Queue Length [ft/ln]	4.09	4.09	0.00	0.00	1.19	0.00
d_A, Approach Delay [s/veh]	12.57		0.00		0.30	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.48					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.028

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	13	2	0	34	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	4	0	18	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	13	6	4	34	20	7
Peak Hour Factor	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	2	1	11	7	2
Total Analysis Volume [veh/h]	17	8	5	44	26	9
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.03	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	9.03	8.55
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.11	0.11
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.21	0.21	2.85	2.85
d_A, Approach Delay [s/veh]	0.00		0.74		8.91	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.19					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	15	0	1	35	4	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	18	0	0
Diverted Trips [veh/h]	0	0	-1	0	-4	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	19	0	0	53	0	0
Peak Hour Factor	0.7237	0.7237	0.7237	0.7237	0.7237	0.7237
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	0	18	0	0
Total Analysis Volume [veh/h]	26	0	0	73	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	9.00	8.43
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.71	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	6	0	6	0	0	0	0	121	8	3	90	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	6	0	23	19	3	0	0	2	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	0	6	6	0	23	19	124	8	3	92	3
Peak Hour Factor	0.8603	0.9500	0.8603	0.8603	0.9500	0.8603	0.8603	0.8603	0.8603	0.8603	0.8603	0.8603
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	2	2	0	7	6	36	2	1	27	1
Total Analysis Volume [veh/h]	7	0	7	7	0	27	22	144	9	3	107	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.01	0.00	0.03	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.61	0.00	8.80	10.42	0.00	8.75	7.47	0.00	0.00	7.53	0.00	0.00
Movement LOS	B		A	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.00	0.05	0.12	0.00	0.12	0.05	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.37	0.00	1.37	2.90	0.00	2.90	1.13	0.00	0.00	0.16	0.00	0.00
d_A, Approach Delay [s/veh]	9.71			9.09			0.94			0.20		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.88											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 11: Project Dwy (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.026

Intersection Setup

Name	Project Dwy		5th St		5th St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project Dwy		5th St		5th St	
Base Volume Input [veh/h]	0	0	2	0	0	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	24	6	0	8	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	1	0	0	0
Total Hourly Volume [veh/h]	24	6	3	8	3	3
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	2	1	2	1	1
Total Analysis Volume [veh/h]	26	7	3	9	3	3
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.72	8.47	0.00	0.00	7.24	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.10	0.10	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	2.52	2.52	0.00	0.00	0.13	0.13
d_A, Approach Delay [s/veh]	8.67		0.00		3.62	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.03					
Intersection LOS	A					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Lime St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	26.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.513

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	22	244	116	51	257	26	13	336	99	190	313	148
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	7	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	244	116	51	257	26	13	343	99	197	316	148
Peak Hour Factor	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	66	32	14	70	7	4	93	27	54	86	40
Total Analysis Volume [veh/h]	24	265	126	55	279	28	14	373	108	214	343	161
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	9	30	0	9	29	0	24	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	26	15	15	26	17	17	2	37	37	13	48	48
g / C, Green / Cycle	0.28	0.17	0.17	0.28	0.19	0.19	0.02	0.41	0.41	0.14	0.53	0.53
(v / s)_i Volume / Saturation Flow Rate	0.02	0.14	0.08	0.04	0.08	0.08	0.01	0.13	0.13	0.12	0.18	0.10
s, saturation flow rate [veh/h]	1248	1870	1589	1252	1870	1811	1781	1870	1729	1781	1870	1589
c, Capacity [veh/h]	397	317	269	340	360	348	43	772	714	255	994	845
d1, Uniform Delay [s]	23.59	36.25	33.79	24.66	32.08	32.12	43.26	17.91	17.96	37.64	12.12	11.01
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.06	5.82	1.26	0.22	0.82	0.86	4.19	1.10	1.22	7.28	0.95	0.50
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.06	0.84	0.47	0.16	0.43	0.44	0.32	0.32	0.33	0.84	0.35	0.19
d, Delay for Lane Group [s/veh]	23.66	42.07	35.05	24.88	32.90	32.98	47.45	19.01	19.18	44.92	13.07	11.51
Lane Group LOS	C	D	D	C	C	C	D	B	B	D	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.37	5.97	2.51	0.86	2.97	2.92	0.36	3.66	3.48	4.98	3.86	1.65
50th-Percentile Queue Length [ft/ln]	9.17	149.32	62.87	21.51	74.34	73.07	8.95	91.52	86.91	124.48	96.60	41.34
95th-Percentile Queue Length [veh/ln]	0.66	9.98	4.53	1.55	5.35	5.26	0.64	6.59	6.26	8.64	6.96	2.98
95th-Percentile Queue Length [ft/ln]	16.51	249.52	113.17	38.73	133.81	131.52	16.10	164.74	156.45	215.97	173.88	74.41

Movement, Approach, & Intersection Results

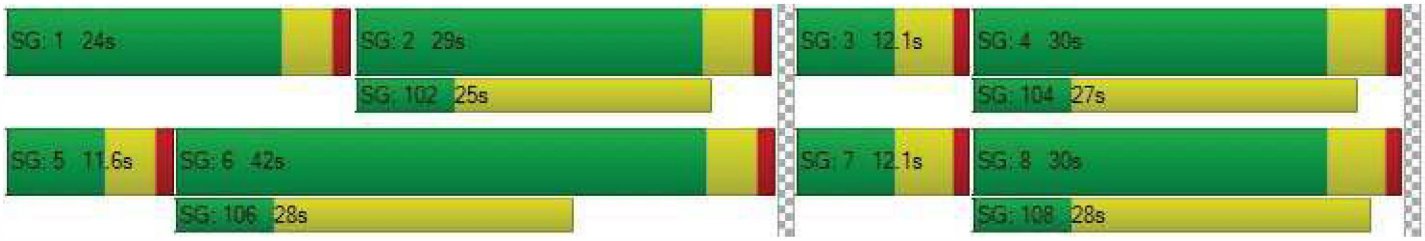
d_M, Delay for Movement [s/veh]	23.66	42.07	35.05	24.88	32.93	32.98	47.45	19.07	19.18	44.92	13.07	11.51
Movement LOS	C	D	D	C	C	C	D	B	B	D	B	B
d_A, Approach Delay [s/veh]	38.87			31.71			19.89			22.21		
Approach LOS	D			C			B			C		
d_I, Intersection Delay [s/veh]	26.84											
Intersection LOS	C											
Intersection V/C	0.513											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.72	34.72	34.72	34.72
l_p,int, Pedestrian LOS Score for Intersectio	2.531	2.359	2.319	2.604
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	553	553	542	830
d_b, Bicycle Delay [s]	23.59	23.59	23.95	15.41
l_b,int, Bicycle LOS Score for Intersection	2.244	1.858	1.968	2.744
Bicycle LOS	B	A	A	B

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	24.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.376

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	190	459	0	505	179	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	0	0	7	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	200	459	0	512	189	0
Peak Hour Factor	0.8816	0.8816	0.9500	0.8816	0.8816	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	57	130	0	145	54	0
Total Analysis Volume [veh/h]	227	521	0	581	214	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	57	0	0	53	53	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	24	24	75	75
g / C, Green / Cycle	0.22	0.22	0.68	0.68
(v / s)_i Volume / Saturation Flow Rate	0.13	0.19	0.16	0.06
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	383	606	2437	2437
d1, Uniform Delay [s]	38.76	41.50	6.53	5.81
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.46	3.73	0.23	0.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.86	0.24	0.09
d, Delay for Lane Group [s/veh]	40.22	45.23	6.76	5.89
Lane Group LOS	D	D	A	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	5.58	6.98	2.34	0.77
50th-Percentile Queue Length [ft/ln]	139.51	174.50	58.50	19.15
95th-Percentile Queue Length [veh/ln]	9.45	11.31	4.21	1.38
95th-Percentile Queue Length [ft/ln]	236.36	282.82	105.31	34.46

Movement, Approach, & Intersection Results

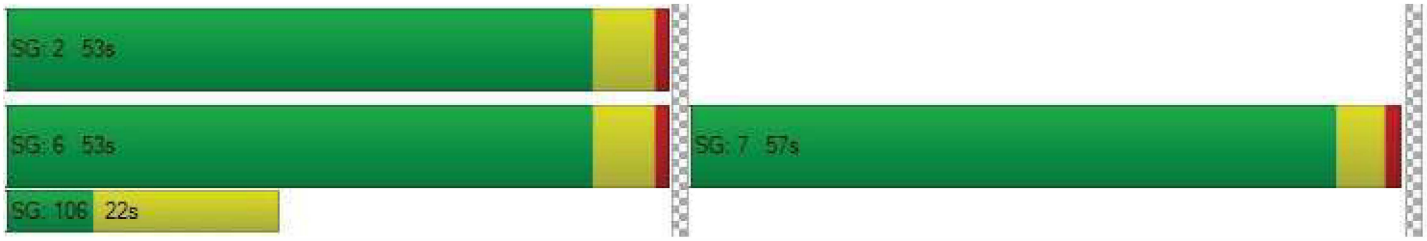
d_M, Delay for Movement [s/veh]	40.22	45.23	0.00	6.76	5.89	0.00
Movement LOS	D	D		A	A	
d_A, Approach Delay [s/veh]	43.71		6.76		5.89	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	24.55					
Intersection LOS	C					
Intersection V/C	0.376					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.51	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.353	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	946	855	855
d_b, Bicycle Delay [s]	15.26	18.01	18.01
l_b,int, Bicycle LOS Score for Intersection	1.560	2.039	1.736
Bicycle LOS	A	B	A

Sequence

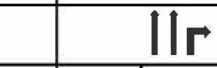
Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	36.6
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.544

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	76	333	47	0	0	0	325	366	0	0	101	151
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	12	0	0	0	0	17	0	0	10	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	76	333	59	0	0	0	325	383	0	0	111	156
Peak Hour Factor	0.8854	0.8854	0.8854	0.9500	0.9500	0.9500	0.8854	0.8854	0.9500	0.9500	0.8854	0.8854
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	21	94	17	0	0	0	92	108	0	0	31	0
Total Analysis Volume [veh/h]	86	376	67	0	0	0	367	433	0	0	125	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	22.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	39	0	0	0	0	35	71	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	20	0	0	23	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	110	110		110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	29	29		25	70	40	40
g / C, Green / Cycle	0.26	0.26		0.22	0.64	0.37	0.37
(v / s)_i Volume / Saturation Flow Rate	0.05	0.24		0.21	0.12	0.04	0.00
s, saturation flow rate [veh/h]	1781	1821		1781	3560	3560	1589
c, Capacity [veh/h]	468	479		400	2269	1307	584
d1, Uniform Delay [s]	31.42	39.52		41.68	8.25	22.85	0.00
k, delay calibration	0.11	0.15		0.25	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.19	10.80		17.38	0.19	0.15	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.18	0.93		0.92	0.19	0.10	0.00
d, Delay for Lane Group [s/veh]	31.61	50.32		59.06	8.44	22.99	0.00
Lane Group LOS	C	D		E	A	C	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	1.80	12.94		11.45	2.02	1.08	0.00
50th-Percentile Queue Length [ft/ln]	45.01	323.56		286.32	50.60	26.93	0.00
95th-Percentile Queue Length [veh/ln]	3.24	18.84		17.00	3.64	1.94	0.00
95th-Percentile Queue Length [ft/ln]	81.02	471.07		425.07	91.08	48.47	0.00

Movement, Approach, & Intersection Results

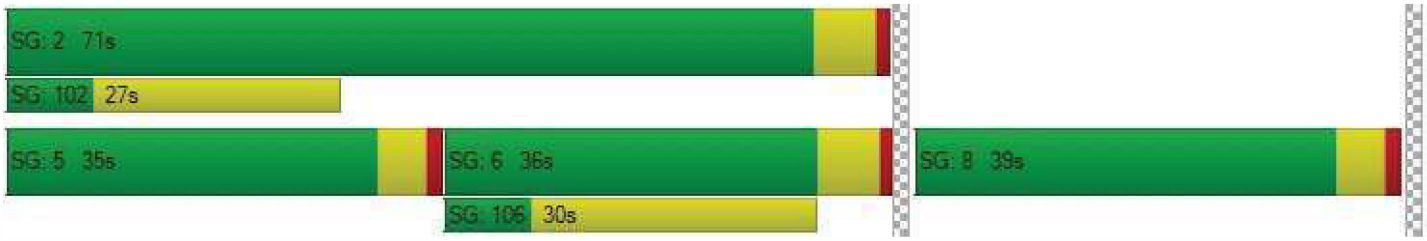
d_M, Delay for Movement [s/veh]	31.61	50.32	50.32	0.00	0.00	0.00	59.06	8.44	0.00	0.00	22.99	0.00
Movement LOS	C	D	D				E	A			C	A
d_A, Approach Delay [s/veh]	47.28			0.00			31.66			22.99		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	36.60											
Intersection LOS	D											
Intersection V/C	0.544											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.57	44.57	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.122	2.157	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	618	0	1181	545
d_b, Bicycle Delay [s]	26.27	55.02	9.22	29.11
l_b,int, Bicycle LOS Score for Intersection	2.432	4.132	2.220	1.663
Bicycle LOS	B	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	16.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.686

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	50	70	26	56	33	100	100	259	49	7	94	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	29	0	0	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	50	70	26	56	33	100	100	288	49	7	109	41
Peak Hour Factor	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	22	8	18	10	32	32	91	16	2	34	13
Total Analysis Volume [veh/h]	63	89	33	71	42	127	127	364	62	9	138	52
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	457	500	529	494	531	594	449	479	505
Degree of Utilization, x	0.14	0.24	0.45	0.26	0.69	0.10	0.02	0.20	0.19

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.47	0.95	2.34	1.02	5.23	0.35	0.06	0.73	0.69
95th-Percentile Queue Length [ft]	11.87	23.73	58.49	25.40	130.76	8.71	1.53	18.30	17.16
Approach Delay [s/veh]	12.08		15.33	19.06			11.74		
Approach LOS	B		C	C			B		
Intersection Delay [s/veh]	15.96								
Intersection LOS	C								

Intersection Level Of Service Report
Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	14.4
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.120

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	49	13	5	6	35	10	12	278	63	2	80	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	1	1	5	0	29	0	0	10	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	3	0	0	0	0
Total Hourly Volume [veh/h]	49	15	5	7	36	15	12	310	63	2	90	9
Peak Hour Factor	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	4	1	2	10	4	3	85	17	1	25	2
Total Analysis Volume [veh/h]	54	16	5	8	40	16	13	341	69	2	99	10
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.03	0.01	0.01	0.08	0.02	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	14.45	13.98	10.71	10.99	12.46	9.26	7.45	0.00	0.00	8.15	0.00	0.00
Movement LOS	B	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.56	0.56	0.56	0.34	0.34	0.34	0.02	0.02	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	14.07	14.07	14.07	8.59	8.59	8.59	0.55	0.55	0.00	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	14.10			11.47			0.23			0.15		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.83											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.390

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	44	71	30	9	82	13	16	130	119	15	30	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	3	0	0	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	2	0	0	0	0	0	0
Total Hourly Volume [veh/h]	44	71	30	9	82	15	16	133	119	15	37	7
Peak Hour Factor	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	20	8	2	23	4	4	37	33	4	10	2
Total Analysis Volume [veh/h]	49	79	33	10	91	17	18	148	132	17	41	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	728	720	616	719	591	657
Degree of Utilization, x	0.22	0.16	0.03	0.39	0.03	0.07

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.84	0.58	0.09	1.85	0.09	0.24
95th-Percentile Queue Length [ft]	21.05	14.59	2.26	46.33	2.22	6.02
Approach Delay [s/veh]	9.34	8.98	10.74		8.71	
Approach LOS	A	A	B		A	
Intersection Delay [s/veh]	9.86					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	39.2
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.134

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	12	1068	44	14	421
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	291	12	4	115
Total Analysis Volume [veh/h]	16	13	1163	48	15	459
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.03	0.01	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	39.15	17.12	0.00	0.00	11.47	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.57	0.57	0.00	0.00	0.08	0.00
95th-Percentile Queue Length [ft/ln]	14.25	14.25	0.00	0.00	2.02	0.00
d_A, Approach Delay [s/veh]	29.27		0.00		0.36	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.60					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	20	2	7	45	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	4	0	7	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	20	6	11	45	10	4
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	2	3	14	3	1
Total Analysis Volume [veh/h]	24	7	13	54	12	5
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.29	0.00	9.15	8.51
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.06	0.06
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.55	0.55	1.40	1.40
d_A, Approach Delay [s/veh]	0.00		1.41		8.96	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.15					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.027

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	11	0	5	0	0	0	0	271	16	2	78	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	10	29	1	0	0	2	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	0	5	2	0	10	29	272	16	2	80	5
Peak Hour Factor	0.8784	0.9500	0.8784	0.8784	0.9500	0.8784	0.8784	0.8784	0.8784	0.8784	0.8784	0.8784
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	1	1	0	3	8	77	5	1	23	1
Total Analysis Volume [veh/h]	13	0	6	2	0	11	33	310	18	2	91	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.60	0.00	9.45	11.17	0.00	8.62	7.46	0.00	0.00	7.94	0.00	0.00
Movement LOS	B		A	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.10	0.00	0.10	0.04	0.00	0.04	0.07	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.61	0.00	2.61	1.09	0.00	1.09	1.69	0.00	0.00	0.12	0.00	0.00
d_A, Approach Delay [s/veh]	11.61			9.01			0.68			0.16		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	1.22											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 11: Project Dwy (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Project Dwy		5th St		5th St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project Dwy		5th St		5th St	
Base Volume Input [veh/h]	0	0	2	0	0	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	2	0	8	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	2	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	3	0	0	0
Total Hourly Volume [veh/h]	9	2	5	10	5	5
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	1	1	3	1	1
Total Analysis Volume [veh/h]	10	2	5	11	5	5
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.69	8.41	0.00	0.00	7.25	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.91	0.91	0.00	0.00	0.21	0.21
d_A, Approach Delay [s/veh]	8.64		0.00		3.63	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.68					
Intersection LOS	A					

OPENING YEAR (2026) WITHOUT PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Lime St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	35.0
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.550

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	27	126	45	42	246	2	10	213	78	382	506	167
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	3	2	16	19	0	44	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	131	47	44	256	5	12	238	100	397	570	174
Peak Hour Factor	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	38	14	13	74	1	3	69	29	115	165	50
Total Analysis Volume [veh/h]	32	152	54	51	297	6	14	276	116	460	660	202
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	13	34	0	13	34	0	16	30	0	43	57	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	23	12	12	23	13	13	3	50	50	33	80	80
g / C, Green / Cycle	0.19	0.10	0.10	0.19	0.11	0.11	0.02	0.41	0.41	0.28	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.03	0.04	0.08	0.08	0.01	0.11	0.11	0.26	0.35	0.13
s, saturation flow rate [veh/h]	1315	1870	1589	1411	1870	1857	1781	1870	1687	1781	1870	1589
c, Capacity [veh/h]	258	188	160	268	206	204	40	774	699	490	1247	1060
d1, Uniform Delay [s]	40.32	52.86	50.27	40.77	51.76	51.78	57.80	23.12	23.22	42.51	10.31	7.64
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.31	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.21	7.97	1.24	0.34	5.11	5.20	5.01	0.82	0.95	20.04	1.61	0.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.81	0.34	0.19	0.74	0.74	0.35	0.26	0.27	0.94	0.53	0.19
d, Delay for Lane Group [s/veh]	40.54	60.83	51.51	41.11	56.88	56.98	62.80	23.94	24.17	62.55	11.93	8.04
Lane Group LOS	D	E	D	D	E	E	E	C	C	E	B	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.79	4.86	1.56	1.28	4.68	4.67	0.48	4.01	3.78	15.79	8.69	1.96
50th-Percentile Queue Length [ft/ln]	19.82	121.61	38.94	31.96	117.07	116.71	11.97	100.25	94.44	394.76	217.22	49.05
95th-Percentile Queue Length [veh/ln]	1.43	8.48	2.80	2.30	8.23	8.21	0.86	7.22	6.80	22.31	13.52	3.53
95th-Percentile Queue Length [ft/ln]	35.68	212.04	70.10	57.52	205.79	205.30	21.55	180.46	170.00	557.68	338.07	88.30

Movement, Approach, & Intersection Results

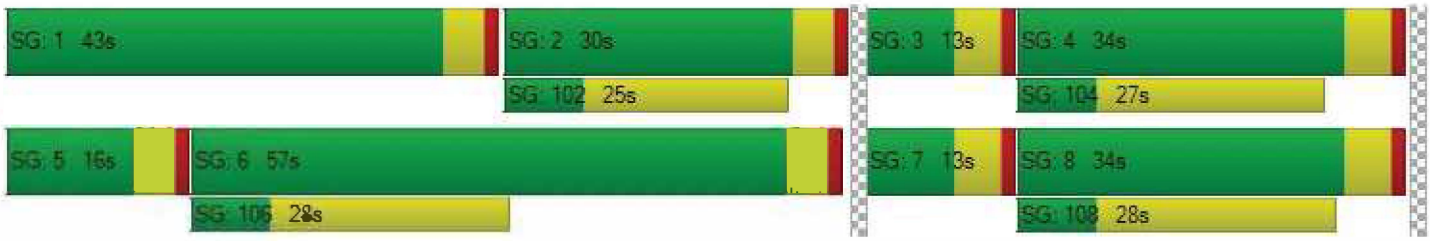
d_M, Delay for Movement [s/veh]	40.54	60.83	51.51	41.11	56.93	56.98	62.80	24.00	24.17	62.55	11.93	8.04
Movement LOS	D	E	D	D	E	E	E	C	C	E	B	A
d_A, Approach Delay [s/veh]	55.99			54.65			25.39			28.95		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	35.02											
Intersection LOS	D											
Intersection V/C	0.550											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersectio	2.566	2.350	2.375	2.710
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	482	482	423	873
d_b, Bicycle Delay [s]	34.60	34.60	37.31	19.06
l_b,int, Bicycle LOS Score for Intersection	1.952	1.852	1.895	3.741
Bicycle LOS	A	A	A	D

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																	



Intersection Level Of Service Report

Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	25.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.515

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	161	871	0	308	182	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0400	1.0400	1.0000	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	12	0	16	32	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	167	918	0	336	221	0
Peak Hour Factor	0.8849	0.8849	0.9500	0.8849	0.8849	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	47	259	0	95	62	0
Total Analysis Volume [veh/h]	189	1037	0	380	250	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	77	0	0	28	28	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	105	105	105	105
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	43	43	51	51
g / C, Green / Cycle	0.41	0.41	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate	0.11	0.37	0.11	0.07
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	731	1154	1726	1726
d1, Uniform Delay [s]	20.40	28.88	15.57	14.96
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.19	2.81	0.29	0.18
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.90	0.22	0.14
d, Delay for Lane Group [s/veh]	20.59	31.70	15.86	15.14
Lane Group LOS	C	C	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	3.01	12.00	2.61	1.64
50th-Percentile Queue Length [ft/ln]	75.28	299.98	65.13	41.11
95th-Percentile Queue Length [veh/ln]	5.42	17.68	4.69	2.96
95th-Percentile Queue Length [ft/ln]	135.50	442.01	117.23	73.99

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	20.59	31.70	0.00	15.86	15.14	0.00
Movement LOS	C	C		B	B	
d_A, Approach Delay [s/veh]	29.98		15.86		15.14	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	25.09					
Intersection LOS	C					
Intersection V/C	0.515					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	42.04	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.487	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1372	419	419
d_b, Bicycle Delay [s]	5.17	32.77	32.77
I_b,int, Bicycle LOS Score for Intersection	1.560	1.873	1.766
Bicycle LOS	A	A	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																

Intersection Level Of Service Report
Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	31.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.362

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	99	178	38	0	0	0	225	265	0	0	87	83
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	0	0	0	0	9	7	0	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	126	185	40	0	0	0	243	283	0	0	99	86
Peak Hour Factor	0.8994	0.8994	0.8994	0.9500	0.9500	0.9500	0.8994	0.8994	0.9500	0.9500	0.8994	0.8994
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	35	51	11	0	0	0	68	79	0	0	28	0
Total Analysis Volume [veh/h]	140	206	44	0	0	0	270	315	0	0	110	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	105
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	14.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	34	0	0	0	0	35	71	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	19	0	0	23	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	105	105		105	105	105	105
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	17	17		18	77	54	54
g / C, Green / Cycle	0.16	0.16		0.17	0.73	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.08	0.14		0.15	0.09	0.03	0.00
s, saturation flow rate [veh/h]	1781	1814		1781	3560	3560	1589
c, Capacity [veh/h]	287	293		307	2613	1830	817
d1, Uniform Delay [s]	40.11	42.87		42.43	4.08	12.81	0.00
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.28	7.03		8.03	0.09	0.06	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.49	0.85		0.88	0.12	0.06	0.00
d, Delay for Lane Group [s/veh]	41.39	49.90		50.46	4.17	12.87	0.00
Lane Group LOS	D	D		D	A	B	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.38	6.84		7.38	0.84	0.64	0.00
50th-Percentile Queue Length [ft/ln]	84.60	170.88		184.60	20.91	16.08	0.00
95th-Percentile Queue Length [veh/ln]	6.09	11.12		11.84	1.51	1.16	0.00
95th-Percentile Queue Length [ft/ln]	152.29	278.07		296.02	37.63	28.95	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	41.39	49.90	49.90	0.00	0.00	0.00	50.46	4.17	0.00	0.00	12.87	0.00
Movement LOS	D	D	D				D	A			B	A
d_A, Approach Delay [s/veh]	46.85			0.00			25.54			12.87		
Approach LOS	D			A			C			B		
d_I, Intersection Delay [s/veh]	31.91											
Intersection LOS	C											
Intersection V/C	0.362											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	42.10	42.10	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.074	1.895	0.000	0.000
Crosswalk LOS	B	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	552	0	1237	571
d_b, Bicycle Delay [s]	27.53	52.53	7.64	26.81
l_b,int, Bicycle LOS Score for Intersection	2.203	4.132	2.042	1.650
Bicycle LOS	B	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																

Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.248

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	14	43	13	20	14	65	108	130	60	5	86	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	45	14	21	15	68	112	142	62	5	98	27
Peak Hour Factor	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	13	4	6	4	19	32	40	18	1	28	8
Total Analysis Volume [veh/h]	17	51	16	24	17	77	127	161	70	6	111	31
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	550	611	640	595	650	744	560	608	640
Degree of Utilization, x	0.03	0.11	0.18	0.21	0.25	0.09	0.01	0.12	0.11

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.10	0.37	0.67	0.80	0.97	0.31	0.03	0.39	0.37
95th-Percentile Queue Length [ft]	2.39	9.19	16.78	20.06	24.34	7.76	0.81	9.86	9.30
Approach Delay [s/veh]	9.35		9.89	9.78			9.21		
Approach LOS	A		A	A			A		
Intersection Delay [s/veh]	9.63								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	31	9	8	9	20	5	6	112	20	13	79	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	9	8	9	21	5	6	123	21	14	91	4
Peak Hour Factor	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	2	2	2	6	1	2	33	6	4	24	1
Total Analysis Volume [veh/h]	34	10	9	10	22	5	6	131	22	15	97	4
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.02	0.01	0.01	0.03	0.00	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	10.83	11.21	9.08	9.98	10.62	8.84	7.42	0.00	0.00	7.55	0.00	0.00
Movement LOS	B	B	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.25	0.25	0.25	0.16	0.16	0.16	0.01	0.01	0.00	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	6.17	6.17	6.17	4.01	4.01	4.01	0.25	0.25	0.00	0.80	0.00	0.00
d_A, Approach Delay [s/veh]	10.60			10.21			0.28			0.98		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	3.01											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.209

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	33	84	17	11	53	25	13	58	58	20	33	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	0	0	0	0	7	0	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	88	18	11	55	26	14	67	60	21	43	9
Peak Hour Factor	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	26	5	3	16	8	4	19	17	6	12	3
Total Analysis Volume [veh/h]	39	102	21	13	64	30	16	78	70	24	50	10
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	774	780	621	726	613	685
Degree of Utilization, x	0.21	0.14	0.03	0.20	0.04	0.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.79	0.47	0.08	0.76	0.12	0.29
95th-Percentile Queue Length [ft]	19.66	11.85	1.98	19.00	3.05	7.17
Approach Delay [s/veh]	8.88	8.34	8.90		8.56	
Approach LOS	A	A	A		A	
Intersection Delay [s/veh]	8.72					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.023

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	7	9	371	17	12	377
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	4	0	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	9	390	18	12	397
Peak Hour Factor	0.8295	0.8295	0.8295	0.8295	0.8295	0.8295
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	3	118	5	4	120
Total Analysis Volume [veh/h]	8	11	470	22	14	479
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	15.77	10.06	0.00	0.00	8.42	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.12	0.12	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	2.95	2.95	0.00	0.00	1.00	0.00
d_A, Approach Delay [s/veh]	12.46		0.00		0.24	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.35					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	13	2	0	34	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	2	0	35	2	1
Peak Hour Factor	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	1	0	11	1	0
Total Analysis Volume [veh/h]	18	3	0	46	3	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.26	0.00	8.85	8.42
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.31	0.31
d_A, Approach Delay [s/veh]	0.00		0.00		8.74	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.49					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	15	0	1	35	4	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	0	1	36	4	0
Peak Hour Factor	0.7237	0.7237	0.7237	0.7237	0.7237	0.7237
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	0	12	1	0
Total Analysis Volume [veh/h]	22	0	1	50	6	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.26	0.00	8.90	8.44
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.04	0.04	0.49	0.49
d_A, Approach Delay [s/veh]	0.00		0.14		8.90	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.77					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	6	0	6	0	0	0	0	121	8	3	90	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	0	6	0	0	0	0	133	8	3	103	0
Peak Hour Factor	0.8603	0.9500	0.8603	0.8603	0.9500	0.8603	0.8603	0.8603	0.8603	0.8603	0.8603	0.8603
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	2	0	0	0	0	39	2	1	30	0
Total Analysis Volume [veh/h]	7	0	7	0	0	0	0	155	9	3	120	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.15	0.00	8.82	9.96	0.00	8.63	7.46	0.00	0.00	7.56	0.00	0.00
Movement LOS	B		A	A		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.31	0.00	1.31	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
d_A, Approach Delay [s/veh]	9.49			9.29			0.00			0.18		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.52											
Intersection LOS	B											

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Lime St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	26.9
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.544

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	22	244	116	51	257	26	13	336	99	190	313	148
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	3	3	23	26	0	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	254	121	53	267	30	17	372	129	198	377	154
Peak Hour Factor	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	69	33	14	73	8	5	101	35	54	102	42
Total Analysis Volume [veh/h]	25	276	131	58	290	33	18	404	140	215	410	167
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	9	30	0	9	29	0	24	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	26	16	16	26	18	18	3	37	37	13	47	47
g / C, Green / Cycle	0.29	0.17	0.17	0.29	0.20	0.20	0.03	0.41	0.41	0.14	0.52	0.52
(v / s)_i Volume / Saturation Flow Rate	0.02	0.15	0.08	0.05	0.09	0.09	0.01	0.15	0.15	0.12	0.22	0.11
s, saturation flow rate [veh/h]	1235	1870	1589	1239	1870	1804	1781	1870	1709	1781	1870	1589
c, Capacity [veh/h]	398	328	279	342	371	358	53	758	692	256	971	825
d1, Uniform Delay [s]	23.16	35.98	33.43	24.30	31.74	31.78	42.90	18.79	18.85	37.62	13.36	11.65
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	5.84	1.23	0.23	0.82	0.87	3.76	1.40	1.57	7.28	1.35	0.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.06	0.84	0.47	0.17	0.44	0.45	0.34	0.37	0.38	0.84	0.42	0.20
d, Delay for Lane Group [s/veh]	23.23	41.82	34.66	24.53	32.56	32.65	46.66	20.20	20.42	44.90	14.71	12.21
Lane Group LOS	C	D	C	C	C	C	D	C	C	D	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.38	6.21	2.60	0.90	3.12	3.06	0.45	4.35	4.07	5.00	5.03	1.79
50th-Percentile Queue Length [ft/ln]	9.44	155.26	64.98	22.45	77.97	76.41	11.22	108.68	101.83	125.04	125.78	44.63
95th-Percentile Queue Length [veh/ln]	0.68	10.30	4.68	1.62	5.61	5.50	0.81	7.77	7.33	8.67	8.71	3.21
95th-Percentile Queue Length [ft/ln]	17.00	257.44	116.96	40.42	140.35	137.54	20.19	194.16	183.30	216.73	217.74	80.33

Movement, Approach, & Intersection Results

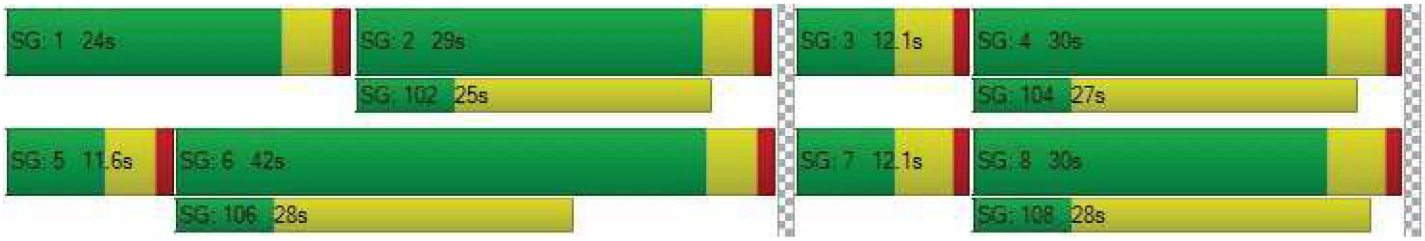
d_M, Delay for Movement [s/veh]	23.23	41.82	34.66	24.53	32.60	32.65	46.66	20.26	20.42	44.90	14.71	12.21
Movement LOS	C	D	C	C	C	C	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	38.57			31.38			21.15			22.38		
Approach LOS	D			C			C			C		
d_I, Intersection Delay [s/veh]	26.87											
Intersection LOS	C											
Intersection V/C	0.544											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.72	34.72	34.72	34.72
l_p,int, Pedestrian LOS Score for Intersectio	2.544	2.370	2.348	2.631
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	553	553	542	830
d_b, Bicycle Delay [s]	23.59	23.59	23.95	15.41
l_b,int, Bicycle LOS Score for Intersection	2.272	1.874	2.023	2.866
Bicycle LOS	B	A	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	24.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.402

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	190	459	0	505	179	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0400	1.0400	1.0000	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	14	0	23	37	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	198	491	0	548	223	0
Peak Hour Factor	0.8816	0.8816	0.9500	0.8816	0.8816	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	56	139	0	155	63	0
Total Analysis Volume [veh/h]	225	557	0	622	253	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	57	0	0	53	53	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	25	25	74	74
g / C, Green / Cycle	0.23	0.23	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.13	0.20	0.17	0.07
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	407	643	2391	2391
d1, Uniform Delay [s]	37.42	40.77	7.18	6.38
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.18	3.71	0.26	0.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.55	0.87	0.26	0.11
d, Delay for Lane Group [s/veh]	38.60	44.47	7.45	6.47
Lane Group LOS	D	D	A	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	5.40	7.43	2.70	0.97
50th-Percentile Queue Length [ft/ln]	134.98	185.79	67.39	24.30
95th-Percentile Queue Length [veh/ln]	9.21	11.90	4.85	1.75
95th-Percentile Queue Length [ft/ln]	230.24	297.55	121.29	43.74

Movement, Approach, & Intersection Results

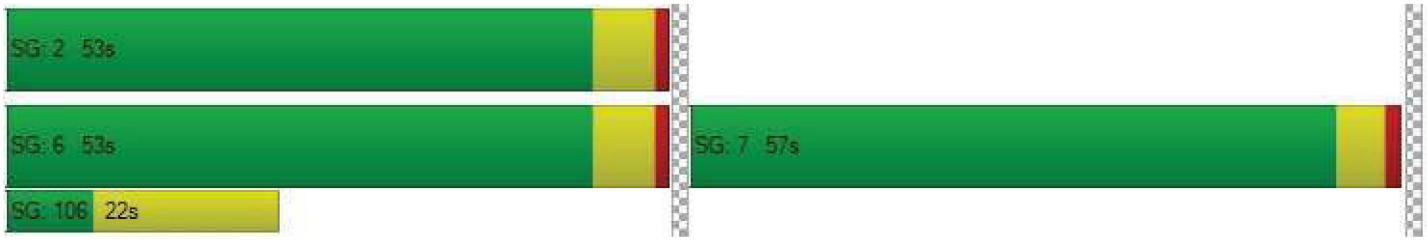
d_M, Delay for Movement [s/veh]	38.60	44.47	0.00	7.45	6.47	0.00
Movement LOS	D	D		A	A	
d_A, Approach Delay [s/veh]	42.78		7.45		6.47	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	23.98					
Intersection LOS	C					
Intersection V/C	0.402					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.51	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.363	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	946	855	855
d_b, Bicycle Delay [s]	15.26	18.01	18.01
l_b,int, Bicycle LOS Score for Intersection	1.560	2.073	1.768
Bicycle LOS	A	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	37.2
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.564

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	76	333	47	0	0	0	325	366	0	0	101	151
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	27	0	0	0	0	0	13	10	0	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	106	346	49	0	0	0	351	391	0	0	115	157
Peak Hour Factor	0.8854	0.8854	0.8854	0.9500	0.9500	0.9500	0.8854	0.8854	0.9500	0.9500	0.8854	0.8854
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	30	98	14	0	0	0	99	110	0	0	32	0
Total Analysis Volume [veh/h]	120	391	55	0	0	0	396	442	0	0	130	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	22.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	39	0	0	0	0	35	71	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	20	0	0	23	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	110	110		110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	29	29		26	70	39	39
g / C, Green / Cycle	0.26	0.26		0.24	0.64	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.07	0.24		0.22	0.12	0.04	0.00
s, saturation flow rate [veh/h]	1781	1830		1781	3560	3560	1589
c, Capacity [veh/h]	470	483		428	2266	1249	558
d1, Uniform Delay [s]	31.99	39.45		40.88	8.31	24.07	0.00
k, delay calibration	0.11	0.15		0.30	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.28	10.66		19.74	0.19	0.17	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.26	0.92		0.93	0.20	0.10	0.00
d, Delay for Lane Group [s/veh]	32.28	50.12		60.62	8.50	24.24	0.00
Lane Group LOS	C	D		E	A	C	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.56	13.01		12.59	2.08	1.16	0.00
50th-Percentile Queue Length [ft/ln]	64.07	325.15		314.85	51.97	28.92	0.00
95th-Percentile Queue Length [veh/ln]	4.61	18.92		18.41	3.74	2.08	0.00
95th-Percentile Queue Length [ft/ln]	115.33	473.01		460.35	93.54	52.06	0.00

Movement, Approach, & Intersection Results

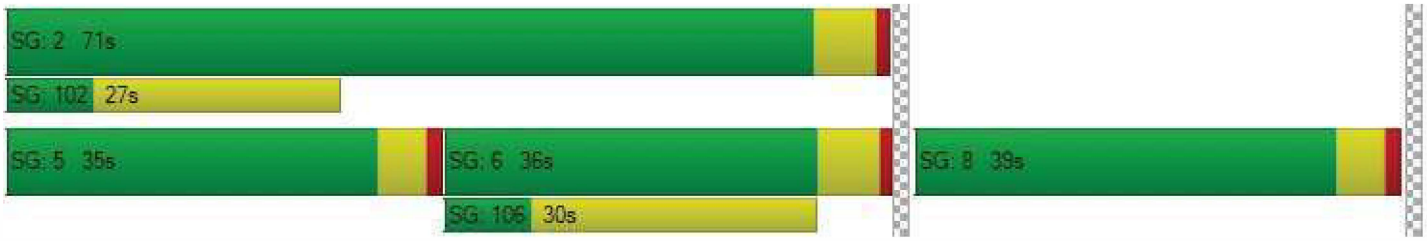
d_M, Delay for Movement [s/veh]	32.28	50.12	50.12	0.00	0.00	0.00	60.62	8.50	0.00	0.00	24.24	0.00
Movement LOS	C	D	D				E	A			C	A
d_A, Approach Delay [s/veh]	46.33			0.00			33.13			24.24		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	37.25											
Intersection LOS	D											
Intersection V/C	0.564											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.57	44.57	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.134	2.200	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	618	0	1181	545
d_b, Bicycle Delay [s]	26.27	55.02	9.22	29.11
l_b,int, Bicycle LOS Score for Intersection	2.494	4.132	2.251	1.667
Bicycle LOS	B	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	15.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.671

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	50	70	26	56	33	100	100	259	49	7	94	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	10	0	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	73	27	58	34	104	104	279	51	7	108	43
Peak Hour Factor	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	23	9	18	11	33	33	88	16	2	34	14
Total Analysis Volume [veh/h]	66	92	34	73	43	132	132	353	65	9	137	54
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	455	499	529	490	526	587	445	475	502
Degree of Utilization, x	0.14	0.25	0.47	0.27	0.67	0.11	0.02	0.20	0.19

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.50	0.99	2.48	1.08	4.98	0.37	0.06	0.74	0.70
95th-Percentile Queue Length [ft]	12.57	24.85	61.94	27.04	124.45	9.28	1.55	18.58	17.40
Approach Delay [s/veh]	12.21		15.69	18.57			11.82		
Approach LOS	B		C	C			B		
Intersection Delay [s/veh]	15.81								
Intersection LOS	C								

Intersection Level Of Service Report
Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	14.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.122

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	49	13	5	6	35	10	12	278	63	2	80	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	10	0	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	51	14	5	6	36	10	12	299	66	2	93	7
Peak Hour Factor	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	4	1	2	10	3	3	82	18	1	26	2
Total Analysis Volume [veh/h]	56	15	5	7	40	11	13	329	73	2	102	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.03	0.01	0.01	0.07	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	14.23	13.84	10.64	10.90	12.37	9.23	7.45	0.00	0.00	8.13	0.00	0.00
Movement LOS	B	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.56	0.56	0.56	0.32	0.32	0.32	0.02	0.02	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	13.97	13.97	13.97	7.94	7.94	7.94	0.55	0.55	0.00	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	13.92			11.60			0.23			0.15		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.79											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	10.2
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.420

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	44	71	30	9	82	13	16	130	119	15	30	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	1	0	0	10	0	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	74	31	9	86	14	17	145	124	16	41	7
Peak Hour Factor	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	21	9	2	24	4	5	40	34	4	11	2
Total Analysis Volume [veh/h]	51	82	34	10	95	16	19	161	138	18	45	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	717	707	612	711	584	649
Degree of Utilization, x	0.23	0.17	0.03	0.42	0.03	0.08

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.90	0.61	0.10	2.09	0.10	0.27
95th-Percentile Queue Length [ft]	22.50	15.35	2.40	52.25	2.38	6.65
Approach Delay [s/veh]	9.54	9.14	11.22		8.82	
Approach LOS	A	A	B		A	
Intersection Delay [s/veh]	10.18					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	42.9
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.147

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	6	0	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	11	1117	44	12	444
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	304	12	3	121
Total Analysis Volume [veh/h]	16	12	1217	48	13	484
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.03	0.01	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	42.91	18.27	0.00	0.00	11.76	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.62	0.62	0.00	0.00	0.07	0.00
95th-Percentile Queue Length [ft/ln]	15.41	15.41	0.00	0.00	1.83	0.00
d_A, Approach Delay [s/veh]	32.35		0.00		0.31	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.59					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	20	2	7	45	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	2	7	47	3	2
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	2	14	1	1
Total Analysis Volume [veh/h]	25	2	8	56	4	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.28	0.00	9.04	8.45
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.33	0.33	0.48	0.48
d_A, Approach Delay [s/veh]	0.00		0.91		8.85	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.15					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	23	0	3	46	2	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	0	3	48	2	0
Peak Hour Factor	0.9250	0.9250	0.9250	0.9250	0.9250	0.9250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	1	13	1	0
Total Analysis Volume [veh/h]	26	0	3	52	2	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	8.94	8.44
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.13	0.13	0.16	0.16
d_A, Approach Delay [s/veh]	0.00		0.40		8.94	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.48					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.9
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.024

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	11	0	5	0	0	0	0	271	16	2	78	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	10	0	0	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	0	5	0	0	0	0	292	17	2	91	0
Peak Hour Factor	0.8784	0.9500	0.8784	0.8784	0.9500	0.8784	0.8784	0.8784	0.8784	0.8784	0.8784	0.8784
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	1	0	0	0	0	83	5	1	26	0
Total Analysis Volume [veh/h]	13	0	6	0	0	0	0	332	19	2	104	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.91	0.00	9.49	10.56	0.00	8.58	7.42	0.00	0.00	7.99	0.00	0.00
Movement LOS	B		A	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.10	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.43	0.00	2.43	0.00	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00
d_A, Approach Delay [s/veh]	11.15			9.57			0.00			0.15		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	0.48											
Intersection LOS	B											

OPENING YEAR (2026) WITH PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Lime St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	35.4
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.562

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	27	126	45	42	246	2	10	213	78	382	506	167
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	3	2	21	19	14	53	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	131	47	44	256	5	12	243	100	411	579	174
Peak Hour Factor	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633	0.8633
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	38	14	13	74	1	3	70	29	119	168	50
Total Analysis Volume [veh/h]	32	152	54	51	297	6	14	281	116	476	671	202
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	13	34	0	13	34	0	16	30	0	43	57	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	23	12	12	23	13	13	3	49	49	34	80	80
g / C, Green / Cycle	0.19	0.10	0.10	0.19	0.11	0.11	0.02	0.41	0.41	0.28	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.03	0.04	0.08	0.08	0.01	0.11	0.11	0.27	0.36	0.13
s, saturation flow rate [veh/h]	1315	1870	1589	1411	1870	1857	1781	1870	1690	1781	1870	1589
c, Capacity [veh/h]	258	188	160	268	206	204	40	758	685	505	1247	1060
d1, Uniform Delay [s]	40.32	52.86	50.27	40.77	51.76	51.78	57.80	23.83	23.93	42.04	10.41	7.64
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.33	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.21	7.97	1.24	0.34	5.11	5.20	5.01	0.88	1.02	21.10	1.67	0.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.12	0.81	0.34	0.19	0.74	0.74	0.35	0.27	0.28	0.94	0.54	0.19
d, Delay for Lane Group [s/veh]	40.54	60.83	51.51	41.11	56.88	56.98	62.80	24.71	24.94	63.13	12.08	8.04
Lane Group LOS	D	E	D	D	E	E	E	C	C	E	B	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.79	4.86	1.56	1.28	4.68	4.67	0.48	4.14	3.90	16.46	8.92	1.96
50th-Percentile Queue Length [ft/ln]	19.82	121.61	38.94	31.96	117.07	116.71	11.97	103.44	97.47	411.47	223.00	49.05
95th-Percentile Queue Length [veh/ln]	1.43	8.48	2.80	2.30	8.23	8.21	0.86	7.45	7.02	23.11	13.82	3.53
95th-Percentile Queue Length [ft/ln]	35.68	212.04	70.10	57.52	205.79	205.30	21.55	186.20	175.45	577.81	345.45	88.30

Movement, Approach, & Intersection Results

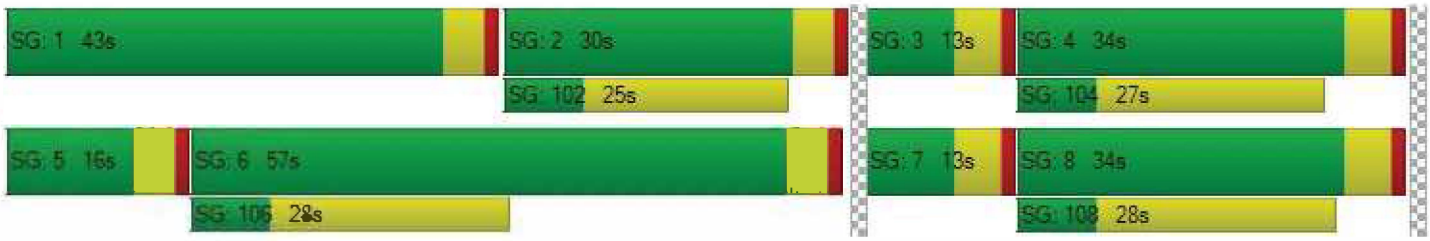
d_M, Delay for Movement [s/veh]	40.54	60.83	51.51	41.11	56.93	56.98	62.80	24.77	24.94	63.13	12.08	8.04
Movement LOS	D	E	D	D	E	E	E	C	C	E	B	A
d_A, Approach Delay [s/veh]	55.99			54.65			26.12			29.49		
Approach LOS	E			D			C			C		
d_I, Intersection Delay [s/veh]	35.37											
Intersection LOS	D											
Intersection V/C	0.562											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	49.52	49.52	49.52	49.52
l_p,int, Pedestrian LOS Score for Intersectio	2.570	2.350	2.378	2.717
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	482	482	423	873
d_b, Bicycle Delay [s]	34.60	34.60	37.31	19.06
l_b,int, Bicycle LOS Score for Intersection	1.952	1.852	1.899	3.785
Bicycle LOS	A	A	A	D

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report

Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	26.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.514

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	161	871	0	308	182	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0400	1.0400	1.0000	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	12	0	21	55	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	173	918	0	341	244	0
Peak Hour Factor	0.8849	0.8849	0.9500	0.8849	0.8849	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	49	259	0	96	69	0
Total Analysis Volume [veh/h]	196	1037	0	385	276	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	81	0	0	29	29	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	45	45	54	54
g / C, Green / Cycle	0.41	0.41	0.49	0.49
(v / s)_i Volume / Saturation Flow Rate	0.11	0.37	0.11	0.08
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	728	1150	1749	1749
d1, Uniform Delay [s]	21.58	30.42	15.94	15.41
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.20	2.92	0.29	0.19
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.27	0.90	0.22	0.16
d, Delay for Lane Group [s/veh]	21.78	33.33	16.23	15.61
Lane Group LOS	C	C	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	3.33	12.73	2.75	1.91
50th-Percentile Queue Length [ft/ln]	83.21	318.18	68.87	47.68
95th-Percentile Queue Length [veh/ln]	5.99	18.58	4.96	3.43
95th-Percentile Queue Length [ft/ln]	149.77	464.45	123.97	85.83

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	21.78	33.33	0.00	16.23	15.61	0.00
Movement LOS	C	C		B	B	
d_A, Approach Delay [s/veh]	31.50		16.23		15.61	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	26.08					
Intersection LOS	C					
Intersection V/C	0.514					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.51	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.491	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1383	418	418
d_b, Bicycle Delay [s]	5.23	34.37	34.37
l_b,int, Bicycle LOS Score for Intersection	1.560	1.877	1.787
Bicycle LOS	A	A	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																

Intersection Level Of Service Report
Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	32.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.374

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	99	178	38	0	0	0	225	265	0	0	87	83
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	8	0	0	0	9	18	0	0	32	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	126	185	48	0	0	0	243	294	0	0	122	98
Peak Hour Factor	0.8994	0.8994	0.8994	0.9500	0.9500	0.9500	0.8994	0.8994	0.9500	0.9500	0.8994	0.8994
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	35	51	13	0	0	0	68	82	0	0	34	0
Total Analysis Volume [veh/h]	140	206	53	0	0	0	270	327	0	0	136	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	14.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	36	0	0	0	0	38	74	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	19	0	0	23	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	110	110		110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	18	18		19	81	57	57
g / C, Green / Cycle	0.17	0.17		0.17	0.73	0.52	0.52
(v / s)_i Volume / Saturation Flow Rate	0.08	0.14		0.15	0.09	0.04	0.00
s, saturation flow rate [veh/h]	1781	1805		1781	3560	3560	1589
c, Capacity [veh/h]	296	300		306	2614	1841	822
d1, Uniform Delay [s]	41.55	44.70		44.52	4.29	13.35	0.00
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.18	7.38		8.31	0.10	0.08	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.47	0.86		0.88	0.13	0.07	0.00
d, Delay for Lane Group [s/veh]	42.73	52.08		52.83	4.38	13.43	0.00
Lane Group LOS	D	D		D	A	B	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	3.53	7.45		7.78	0.94	0.84	0.00
50th-Percentile Queue Length [ft/ln]	88.34	186.36		194.42	23.44	21.07	0.00
95th-Percentile Queue Length [veh/ln]	6.36	11.93		12.35	1.69	1.52	0.00
95th-Percentile Queue Length [ft/ln]	159.01	298.31		308.76	42.19	37.92	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	42.73	52.08	52.08	0.00	0.00	0.00	52.83	4.38	0.00	0.00	13.43	0.00
Movement LOS	D	D	D				D	A			B	A
d_A, Approach Delay [s/veh]	48.80			0.00			26.30			13.43		
Approach LOS	D			A			C			B		
d_I, Intersection Delay [s/veh]	32.68											
Intersection LOS	C											
Intersection V/C	0.374											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.57	44.57	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.079	1.897	0.000	0.000
Crosswalk LOS	B	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	563	0	1236	545
d_b, Bicycle Delay [s]	28.39	55.02	8.03	29.11
l_b,int, Bicycle LOS Score for Intersection	2.218	4.132	2.052	1.672
Bicycle LOS	B	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																

Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.288

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	14	43	13	20	14	65	108	130	60	5	86	26
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	26	0	0	44	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	45	14	21	15	68	112	161	62	5	133	27
Peak Hour Factor	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795	0.8795
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	13	4	6	4	19	32	46	18	1	38	8
Total Analysis Volume [veh/h]	17	51	16	24	17	77	127	183	70	6	151	31
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	534	592	620	583	635	725	553	598	623
Degree of Utilization, x	0.03	0.11	0.19	0.22	0.29	0.10	0.01	0.15	0.15

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.10	0.38	0.70	0.82	1.19	0.32	0.03	0.53	0.51
95th-Percentile Queue Length [ft]	2.46	9.52	17.42	20.59	29.75	7.99	0.82	13.34	12.73
Approach Delay [s/veh]	9.58		10.16	10.18			9.62		
Approach LOS	A		B	B			A		
Intersection Delay [s/veh]	9.97								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.6
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.020

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	31	9	8	9	20	5	6	112	20	13	79	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	0	3	12	0	26	0	0	32	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	1	0	0	0	0
Total Hourly Volume [veh/h]	32	11	8	9	24	17	6	143	21	14	114	4
Peak Hour Factor	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405	0.9405
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	3	2	2	6	5	2	38	6	4	30	1
Total Analysis Volume [veh/h]	34	12	9	10	26	18	6	152	22	15	121	4
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.02	0.01	0.01	0.04	0.02	0.00	0.00	0.00	0.01	0.00	0.00
d_M, Delay for Movement [s/veh]	11.35	11.64	9.23	10.26	10.91	9.01	7.47	0.00	0.00	7.60	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.28	0.28	0.28	0.23	0.23	0.23	0.01	0.01	0.00	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	6.93	6.93	6.93	5.78	5.78	5.78	0.25	0.25	0.00	0.81	0.00	0.00
d_A, Approach Delay [s/veh]	11.07			10.15			0.25			0.81		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	3.07											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.210

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	33	84	17	11	53	25	13	58	58	20	33	9
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	1	0	0	0	0	0	7	0	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	4	0	0	0	0	0	0
Total Hourly Volume [veh/h]	34	88	18	11	55	30	14	67	60	21	43	9
Peak Hour Factor	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625	0.8625
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	26	5	3	16	9	4	19	17	6	12	3
Total Analysis Volume [veh/h]	39	102	21	13	64	35	16	78	70	24	50	10
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	773	784	620	724	612	684
Degree of Utilization, x	0.21	0.14	0.03	0.20	0.04	0.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.79	0.50	0.08	0.76	0.12	0.29
95th-Percentile Queue Length [ft]	19.70	12.43	1.98	19.06	3.06	7.19
Approach Delay [s/veh]	8.89	8.36	8.91		8.57	
Approach LOS	A	A	A		A	
Intersection Delay [s/veh]	8.73					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	7	9	371	17	12	377
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	3	4	2	2	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	12	390	20	14	397
Peak Hour Factor	0.8295	0.8295	0.8295	0.8295	0.8295	0.8295
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	4	118	6	4	120
Total Analysis Volume [veh/h]	12	14	470	24	17	479
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.02	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	16.05	10.21	0.00	0.00	8.43	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.17	0.17	0.00	0.00	0.05	0.00
95th-Percentile Queue Length [ft/ln]	4.27	4.27	0.00	0.00	1.22	0.00
d_A, Approach Delay [s/veh]	12.90		0.00		0.29	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.47					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.024

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	13	2	0	34	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	4	0	15	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	4	4	35	17	7
Peak Hour Factor	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	1	1	11	6	2
Total Analysis Volume [veh/h]	18	5	5	46	22	9
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	9.02	8.53
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.10	0.10
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.21	0.21	2.50	2.50
d_A, Approach Delay [s/veh]	0.00		0.71		8.88	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.97					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.011

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	6	0	6	0	0	0	0	121	8	3	90	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	23	19	7	0	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	6	0	0	0	0	0	0	0	3
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	0	6	6	0	23	19	133	8	3	103	3
Peak Hour Factor	0.8603	0.9500	0.8603	0.8603	0.9500	0.8603	0.8603	0.8603	0.8603	0.8603	0.8603	0.8603
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	2	2	0	7	6	39	2	1	30	1
Total Analysis Volume [veh/h]	7	0	7	7	0	27	22	155	9	3	120	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.01	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	10.78	0.00	8.83	10.58	0.00	8.79	7.50	0.00	0.00	7.56	0.00	0.00
Movement LOS	B		A	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.00	0.06	0.12	0.00	0.12	0.05	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.40	0.00	1.40	2.94	0.00	2.94	1.15	0.00	0.00	0.16	0.00	0.00
d_A, Approach Delay [s/veh]	9.81			9.16			0.89			0.18		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.77											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 11: Project Dwy (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.026

Intersection Setup

Name	Project Dwy		5th St		5th St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project Dwy		5th St		5th St	
Base Volume Input [veh/h]	0	0	2	0	0	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	6	0	6	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	3	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	1	0	0	0
Total Hourly Volume [veh/h]	24	6	3	6	3	3
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	2	1	2	1	1
Total Analysis Volume [veh/h]	26	7	3	7	3	3
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.71	8.46	0.00	0.00	7.24	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.10	0.10	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	2.52	2.52	0.00	0.00	0.13	0.13
d_A, Approach Delay [s/veh]	8.66		0.00		3.62	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.28					
Intersection LOS	A					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Lime St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	27.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.552

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	22	244	116	51	257	26	13	336	99	190	313	148
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	3	3	30	26	7	54	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	23	254	121	53	267	30	17	379	129	205	380	154
Peak Hour Factor	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204	0.9204
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	69	33	14	73	8	5	103	35	56	103	42
Total Analysis Volume [veh/h]	25	276	131	58	290	33	18	412	140	223	413	167
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	9	30	0	9	29	0	24	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	26	16	16	26	18	18	3	36	36	13	47	47
g / C, Green / Cycle	0.29	0.17	0.17	0.29	0.20	0.20	0.03	0.40	0.40	0.15	0.52	0.52
(v / s)_i Volume / Saturation Flow Rate	0.02	0.15	0.08	0.05	0.09	0.09	0.01	0.15	0.16	0.13	0.22	0.11
s, saturation flow rate [veh/h]	1235	1870	1589	1239	1870	1804	1781	1870	1711	1781	1870	1589
c, Capacity [veh/h]	398	328	279	342	371	358	53	749	685	264	971	825
d1, Uniform Delay [s]	23.16	35.98	33.43	24.30	31.74	31.78	42.90	19.13	19.18	37.41	13.39	11.65
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.07	5.84	1.23	0.23	0.82	0.87	3.76	1.48	1.65	7.30	1.37	0.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.06	0.84	0.47	0.17	0.44	0.45	0.34	0.38	0.39	0.85	0.43	0.20
d, Delay for Lane Group [s/veh]	23.23	41.82	34.66	24.53	32.56	32.65	46.66	20.61	20.83	44.71	14.75	12.21
Lane Group LOS	C	D	C	C	C	C	D	C	C	D	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.38	6.21	2.60	0.90	3.12	3.06	0.45	4.47	4.19	5.18	5.08	1.79
50th-Percentile Queue Length [ft/ln]	9.44	155.26	64.98	22.45	77.97	76.41	11.22	111.67	104.67	129.52	126.99	44.63
95th-Percentile Queue Length [veh/ln]	0.68	10.30	4.68	1.62	5.61	5.50	0.81	7.93	7.54	8.91	8.78	3.21
95th-Percentile Queue Length [ft/ln]	17.00	257.44	116.96	40.42	140.35	137.54	20.19	198.32	188.41	222.85	219.39	80.33

Movement, Approach, & Intersection Results

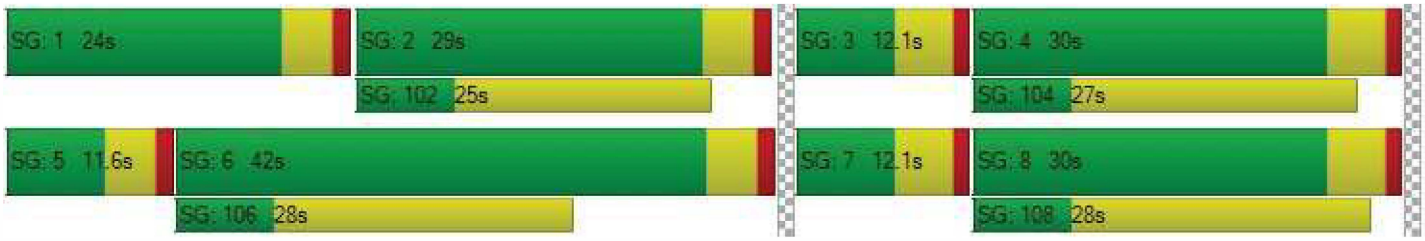
d_M, Delay for Movement [s/veh]	23.23	41.82	34.66	24.53	32.60	32.65	46.66	20.67	20.83	44.71	14.75	12.21
Movement LOS	C	D	C	C	C	C	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	38.57			31.38			21.53			22.54		
Approach LOS	D			C			C			C		
d_I, Intersection Delay [s/veh]	26.99											
Intersection LOS	C											
Intersection V/C	0.552											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.72	34.72	34.72	34.72
l_p,int, Pedestrian LOS Score for Intersectio	2.546	2.370	2.350	2.635
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	553	553	542	830
d_b, Bicycle Delay [s]	23.59	23.59	23.95	15.41
l_b,int, Bicycle LOS Score for Intersection	2.272	1.874	2.030	2.885
Bicycle LOS	B	A	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																	



Intersection Level Of Service Report
Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	25.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.403

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	190	459	0	505	179	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0400	1.0400	1.0000	1.0400	1.0400	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	14	0	30	47	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	208	491	0	555	233	0
Peak Hour Factor	0.8816	0.8816	0.9500	0.8816	0.8816	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	59	139	0	157	66	0
Total Analysis Volume [veh/h]	236	557	0	630	264	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	115
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	60	0	0	55	55	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	115	115	115	115
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	26	26	78	78
g / C, Green / Cycle	0.23	0.23	0.68	0.68
(v / s)_i Volume / Saturation Flow Rate	0.13	0.20	0.18	0.07
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	404	639	2411	2411
d1, Uniform Delay [s]	39.53	42.76	7.26	6.46
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.34	3.90	0.26	0.09
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.87	0.26	0.11
d, Delay for Lane Group [s/veh]	40.87	46.66	7.53	6.55
Lane Group LOS	D	D	A	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.01	7.83	2.84	1.06
50th-Percentile Queue Length [ft/ln]	150.35	195.74	71.04	26.41
95th-Percentile Queue Length [veh/ln]	10.04	12.42	5.11	1.90
95th-Percentile Queue Length [ft/ln]	250.89	310.47	127.87	47.53

Movement, Approach, & Intersection Results

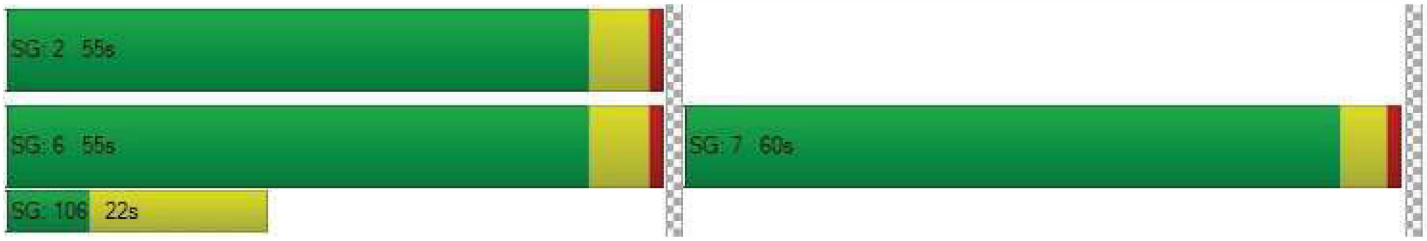
d_M, Delay for Movement [s/veh]	40.87	46.66	0.00	7.53	6.55	0.00
Movement LOS	D	D		A	A	
d_A, Approach Delay [s/veh]	44.93		7.53		6.55	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	24.96					
Intersection LOS	C					
Intersection V/C	0.403					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	46.97	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.368	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	957	853	853
d_b, Bicycle Delay [s]	15.61	18.89	18.89
l_b,int, Bicycle LOS Score for Intersection	1.560	2.079	1.777
Bicycle LOS	A	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report

Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	38.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.574

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	76	333	47	0	0	0	325	366	0	0	101	151
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0400	1.0400	1.0400	1.0000	1.0000	1.0000	1.0400	1.0400	1.0000	1.0000	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	27	0	12	0	0	0	13	27	0	0	20	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	106	346	61	0	0	0	351	408	0	0	125	162
Peak Hour Factor	0.8854	0.8854	0.8854	0.9500	0.9500	0.9500	0.8854	0.8854	0.9500	0.9500	0.8854	0.8854
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	30	98	17	0	0	0	99	115	0	0	35	0
Total Analysis Volume [veh/h]	120	391	69	0	0	0	396	461	0	0	141	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	115
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	22.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	42	0	0	0	0	37	73	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	20	0	0	23	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	115	115		115	115	115	115
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	31	31		28	73	40	40
g / C, Green / Cycle	0.27	0.27		0.24	0.63	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.07	0.25		0.22	0.13	0.04	0.00
s, saturation flow rate [veh/h]	1781	1822		1781	3560	3560	1589
c, Capacity [veh/h]	484	495		427	2252	1244	555
d1, Uniform Delay [s]	32.70	40.80		42.78	8.93	25.36	0.00
k, delay calibration	0.11	0.19		0.29	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.26	12.84		19.59	0.21	0.18	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.25	0.93		0.93	0.20	0.11	0.00
d, Delay for Lane Group [s/veh]	32.96	53.63		62.37	9.14	25.55	0.00
Lane Group LOS	C	D		E	A	C	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.66	14.31		13.11	2.35	1.33	0.00
50th-Percentile Queue Length [ft/ln]	66.47	357.81		327.86	58.73	33.22	0.00
95th-Percentile Queue Length [veh/ln]	4.79	20.52		19.05	4.23	2.39	0.00
95th-Percentile Queue Length [ft/ln]	119.64	512.92		476.33	105.71	59.80	0.00

Movement, Approach, & Intersection Results

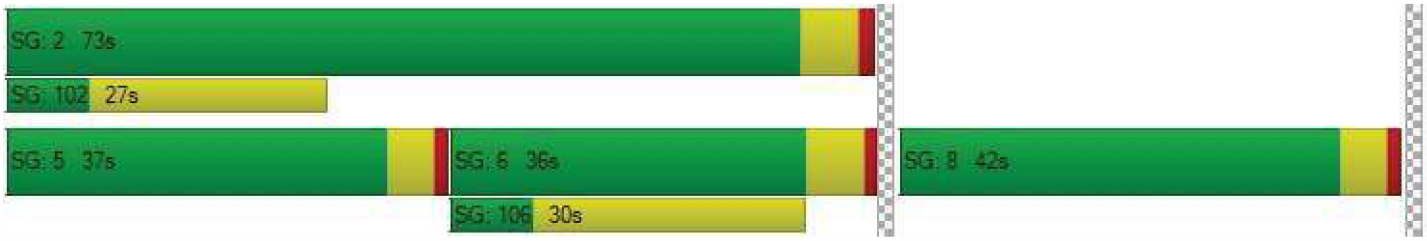
d_M, Delay for Movement [s/veh]	32.96	53.63	53.63	0.00	0.00	0.00	62.37	9.14	0.00	0.00	25.55	0.00
Movement LOS	C	D	D				E	A			C	A
d_A, Approach Delay [s/veh]	49.36			0.00			33.73			25.55		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	38.74											
Intersection LOS	D											
Intersection V/C	0.574											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	47.04	47.04	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.140	2.202	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	643	0	1165	522
d_b, Bicycle Delay [s]	26.47	57.52	10.03	31.43
l_b,int, Bicycle LOS Score for Intersection	2.517	4.132	2.267	1.676
Bicycle LOS	B	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	18.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.753

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	50	70	26	56	33	100	100	259	49	7	94	41
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	39	0	0	25	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	73	27	58	34	104	104	308	51	7	123	43
Peak Hour Factor	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902	0.7902
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	23	9	18	11	33	33	97	16	2	39	14
Total Analysis Volume [veh/h]	66	92	34	73	43	132	132	390	65	9	156	54
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	444	485	514	482	518	577	437	466	489
Degree of Utilization, x	0.15	0.26	0.48	0.27	0.75	0.11	0.02	0.23	0.21

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.52	1.03	2.59	1.10	6.51	0.38	0.06	0.86	0.81
95th-Percentile Queue Length [ft]	12.96	25.79	64.77	27.56	162.71	9.47	1.58	21.43	20.19
Approach Delay [s/veh]	12.56		16.34	22.52			12.32		
Approach LOS	B		C	C			B		
Intersection Delay [s/veh]	17.96								
Intersection LOS	C								

Intersection Level Of Service Report
Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.131

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	49	13	5	6	35	10	12	278	63	2	80	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	1	1	5	0	39	0	0	20	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	51	16	5	7	37	15	12	328	66	2	103	9
Peak Hour Factor	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091	0.9091
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	4	1	2	10	4	3	90	18	1	28	2
Total Analysis Volume [veh/h]	56	18	5	8	41	16	13	361	73	2	113	10
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.04	0.01	0.01	0.08	0.02	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	15.12	14.59	11.04	11.18	12.70	9.35	7.48	0.00	0.00	8.21	0.00	0.00
Movement LOS	C	B	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.63	0.63	0.63	0.36	0.36	0.36	0.02	0.02	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	15.83	15.83	15.83	9.01	9.01	9.01	0.55	0.55	0.00	0.13	0.00	0.00
d_A, Approach Delay [s/veh]	14.74			11.69			0.22			0.13		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.85											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	10.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.426

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	44	71	30	9	82	13	16	130	119	15	30	7
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	1	0	0	13	0	0	17	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	46	74	31	9	86	14	17	148	124	16	48	7
Peak Hour Factor	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013	0.9013
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	21	9	2	24	4	5	41	34	4	13	2
Total Analysis Volume [veh/h]	51	82	34	10	95	16	19	164	138	18	53	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	713	703	610	709	583	646
Degree of Utilization, x	0.23	0.17	0.03	0.43	0.03	0.09

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.91	0.62	0.10	2.14	0.10	0.31
95th-Percentile Queue Length [ft]	22.67	15.47	2.41	53.41	2.38	7.79
Approach Delay [s/veh]	9.60	9.19	11.33		8.90	
Approach LOS	A	A	B		A	
Intersection Delay [s/veh]	10.25					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	43.8
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.158

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	6	2	2	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	12	1117	46	14	444
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	304	13	4	121
Total Analysis Volume [veh/h]	17	13	1217	50	15	484
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.03	0.01	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	43.75	18.75	0.00	0.00	11.80	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.67	0.67	0.00	0.00	0.08	0.00
95th-Percentile Queue Length [ft/ln]	16.79	16.79	0.00	0.00	2.12	0.00
d_A, Approach Delay [s/veh]	32.92		0.00		0.35	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.65					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	20	2	7	45	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	4	0	7	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	6	11	47	10	4
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	2	3	14	3	1
Total Analysis Volume [veh/h]	25	7	13	56	12	5
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.29	0.00	9.17	8.51
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.06	0.06
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.55	0.55	1.41	1.41
d_A, Approach Delay [s/veh]	0.00		1.37		8.98	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.10					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	23	0	3	46	2	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	7	0	0
Diverted Trips [veh/h]	0	0	-3	0	-2	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	0	0	55	0	0
Peak Hour Factor	0.9250	0.9250	0.9250	0.9250	0.9250	0.9250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	0	0	15	0	0
Total Analysis Volume [veh/h]	30	0	0	59	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	8.95	8.45
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.70	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	13.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.028

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	11	0	5	0	0	0	0	271	16	2	78	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0000	1.0400	1.0400	1.0000	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	10	29	11	0	0	12	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	0	5	2	0	10	29	293	17	2	93	5
Peak Hour Factor	0.8784	0.9500	0.8784	0.8784	0.9500	0.8784	0.8784	0.8784	0.8784	0.8784	0.8784	0.8784
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	1	1	0	3	8	83	5	1	26	1
Total Analysis Volume [veh/h]	13	0	6	2	0	11	33	334	19	2	106	6
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.01	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	13.02	0.00	9.55	11.45	0.00	8.66	7.50	0.00	0.00	8.00	0.00	0.00
Movement LOS	B		A	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.00	0.11	0.04	0.00	0.04	0.07	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.74	0.00	2.74	1.11	0.00	1.11	1.72	0.00	0.00	0.12	0.00	0.00
d_A, Approach Delay [s/veh]	11.93			9.09			0.64			0.14		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	1.14											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 11: Project Dwy (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.010

Intersection Setup

Name	Project Dwy		5th St		5th St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project Dwy		5th St		5th St	
Base Volume Input [veh/h]	0	0	2	0	0	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	2	0	8	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	9	2	2	8	5	5
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	1	1	2	1	1
Total Analysis Volume [veh/h]	10	2	2	9	5	5
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.67	8.39	0.00	0.00	7.24	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.91	0.91	0.00	0.00	0.21	0.21
d_A, Approach Delay [s/veh]	8.62		0.00		3.62	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.23					
Intersection LOS	A					

BUILDOUT YEAR 2045

WITHOUT PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Lime St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	40.1
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.733

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	30	139	65	47	271	5	13	318	116	683	599	193
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	139	65	47	271	5	13	318	116	683	599	193
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	37	17	12	71	1	3	84	31	180	158	51
Total Analysis Volume [veh/h]	32	146	68	49	285	5	14	335	122	719	631	203
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	9	30	0	9	29	0	54	72	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	22	12	12	22	13	13	3	34	34	49	81	81
g / C, Green / Cycle	0.19	0.10	0.10	0.19	0.11	0.11	0.02	0.28	0.28	0.41	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.04	0.03	0.08	0.08	0.01	0.13	0.13	0.40	0.34	0.13
s, saturation flow rate [veh/h]	1327	1870	1589	1407	1870	1859	1781	1870	1704	1781	1870	1589
c, Capacity [veh/h]	256	181	154	264	198	196	39	531	484	731	1257	1068
d1, Uniform Delay [s]	40.77	53.07	51.12	41.18	52.04	52.05	57.85	35.23	35.35	35.00	9.73	7.39
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.45	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.22	8.09	1.97	0.34	5.23	5.30	5.42	2.69	3.08	27.81	1.43	0.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.13	0.80	0.44	0.19	0.73	0.74	0.36	0.45	0.46	0.98	0.50	0.19
d, Delay for Lane Group [s/veh]	40.99	61.16	53.09	41.52	57.26	57.35	63.27	37.92	38.44	62.80	11.17	7.79
Lane Group LOS	D	E	D	D	E	E	E	D	D	E	B	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.80	4.68	2.00	1.23	4.49	4.48	0.48	6.14	5.79	25.57	7.94	1.93
50th-Percentile Queue Length [ft/ln]	19.94	117.05	50.05	30.86	112.31	112.02	12.04	153.58	144.87	639.24	198.45	48.36
95th-Percentile Queue Length [veh/ln]	1.44	8.23	3.60	2.22	7.97	7.95	0.87	10.21	9.74	33.86	12.56	3.48
95th-Percentile Queue Length [ft/ln]	35.90	205.77	90.09	55.54	199.20	198.81	21.67	255.20	243.57	846.57	313.97	87.05

Movement, Approach, & Intersection Results

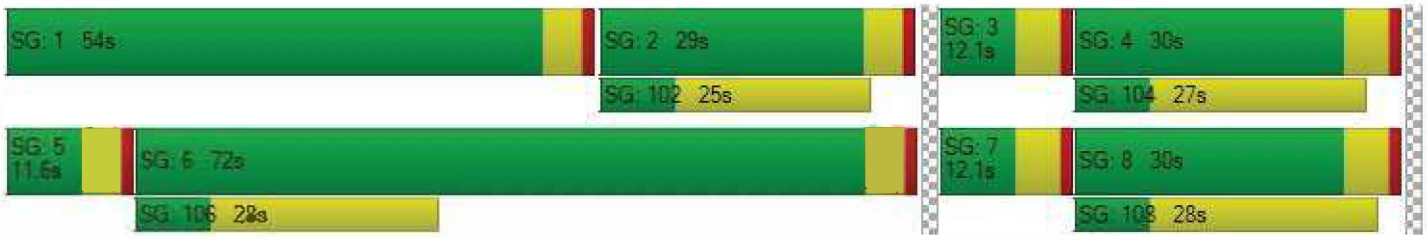
d_M, Delay for Movement [s/veh]	40.99	61.16	53.09	41.52	57.30	57.35	63.27	38.07	38.44	62.80	11.17	7.79
Movement LOS	D	E	D	D	E	E	E	D	D	E	B	A
d_A, Approach Delay [s/veh]	56.30			55.02			38.92			34.63		
Approach LOS	E			E			D			C		
d_I, Intersection Delay [s/veh]	40.10											
Intersection LOS	D											
Intersection V/C	0.733											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	49.51	49.51	49.51	49.51
l_p,int, Pedestrian LOS Score for Intersectio	2.626	2.344	2.382	2.778
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	415	415	407	1123
d_b, Bicycle Delay [s]	37.69	37.69	38.09	11.53
l_b,int, Bicycle LOS Score for Intersection	1.966	1.839	1.948	4.122
Bicycle LOS	A	A	A	D

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	25.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.528

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	276	958	0	444	431	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	276	958	0	444	431	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	73	252	0	117	113	0
Total Analysis Volume [veh/h]	291	1008	0	467	454	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	77	0	0	33	33	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	44	44	55	55
g / C, Green / Cycle	0.40	0.40	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate	0.16	0.36	0.13	0.13
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	711	1123	1782	1782
d1, Uniform Delay [s]	23.69	30.89	15.76	15.70
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.38	2.85	0.36	0.34
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.41	0.90	0.26	0.25
d, Delay for Lane Group [s/veh]	24.07	33.74	16.12	16.04
Lane Group LOS	C	C	B	B
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	5.37	12.40	3.35	3.25
50th-Percentile Queue Length [ft/ln]	134.22	309.98	83.83	81.15
95th-Percentile Queue Length [veh/ln]	9.17	18.17	6.04	5.84
95th-Percentile Queue Length [ft/ln]	229.22	454.35	150.90	146.07

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	24.07	33.74	0.00	16.12	16.04	0.00
Movement LOS	C	C		B	B	
d_A, Approach Delay [s/veh]	31.58		16.12		16.04	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	25.15					
Intersection LOS	C					
Intersection V/C	0.528					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.51	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.510	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1310	491	491
d_b, Bicycle Delay [s]	6.54	31.28	31.28
I_b,int, Bicycle LOS Score for Intersection	1.560	1.945	1.934
Bicycle LOS	A	A	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																

Intersection Level Of Service Report
Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	28.6
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.427

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	170	196	47	0	0	0	271	463	0	0	270	128
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	170	196	47	0	0	0	271	463	0	0	270	128
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	45	52	12	0	0	0	71	122	0	0	71	0
Total Analysis Volume [veh/h]	179	206	49	0	0	0	285	487	0	0	284	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	27.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	36	0	0	0	0	38	74	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	20	0	0	23	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	110	110		110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	18	18		20	81	56	56
g / C, Green / Cycle	0.16	0.16		0.18	0.74	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.10	0.14		0.16	0.14	0.08	0.00
s, saturation flow rate [veh/h]	1781	1809		1781	3560	3560	1589
c, Capacity [veh/h]	292	297		321	2620	1817	811
d1, Uniform Delay [s]	42.75	44.76		44.06	4.45	14.34	0.00
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.07	7.14		8.31	0.16	0.18	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.61	0.86		0.89	0.19	0.16	0.00
d, Delay for Lane Group [s/veh]	44.82	51.90		52.37	4.61	14.52	0.00
Lane Group LOS	D	D		D	A	B	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.68	7.32		8.19	1.45	1.87	0.00
50th-Percentile Queue Length [ft/ln]	117.02	183.00		204.79	36.36	46.83	0.00
95th-Percentile Queue Length [veh/ln]	8.23	11.76		12.89	2.62	3.37	0.00
95th-Percentile Queue Length [ft/ln]	205.72	293.93		322.13	65.46	84.29	0.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	44.82	51.90	51.90	0.00	0.00	0.00	52.37	4.61	0.00	0.00	14.52	0.00
Movement LOS	D	D	D				D	A			B	A
d_A, Approach Delay [s/veh]	48.98			0.00			22.24			14.52		
Approach LOS	D			A			C			B		
d_I, Intersection Delay [s/veh]	28.56											
Intersection LOS	C											
Intersection V/C	0.427											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.57	44.57	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.091	1.912	0.000	0.000
Crosswalk LOS	B	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	563	0	1236	545
d_b, Bicycle Delay [s]	28.39	55.02	8.03	29.11
l_b,int, Bicycle LOS Score for Intersection	2.276	4.132	2.197	1.794
Bicycle LOS	B	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																

Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	12.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.480

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	38	65	48	25	28	72	119	247	184	39	303	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	65	48	25	28	72	119	247	184	39	303	51
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	17	13	7	7	19	31	65	48	10	80	13
Total Analysis Volume [veh/h]	40	68	51	26	29	76	125	260	194	41	319	54
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	468	519	536	503	542	605	486	521	537
Degree of Utilization, x	0.09	0.23	0.24	0.25	0.48	0.32	0.08	0.36	0.35

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.28	0.88	0.95	0.97	2.58	1.38	0.28	1.61	1.54
95th-Percentile Queue Length [ft]	6.98	21.94	23.82	24.30	64.61	34.46	6.88	40.24	38.55
Approach Delay [s/veh]	11.55		11.88	13.36			12.93		
Approach LOS	B		B	B			B		
Intersection Delay [s/veh]	12.84								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	14.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.026

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	37	10	9	10	22	8	7	183	22	20	295	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	37	10	9	10	22	8	7	183	22	20	295	8
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	3	2	3	6	2	2	48	6	5	78	2
Total Analysis Volume [veh/h]	39	11	9	11	23	8	7	193	23	21	311	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.03	0.01	0.02	0.04	0.01	0.01	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	13.38	14.47	9.76	11.80	12.16	9.67	7.92	0.00	0.00	7.71	0.00	0.00
Movement LOS	B	B	A	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.39	0.39	0.39	0.23	0.23	0.23	0.01	0.01	0.00	0.05	0.00	0.00
95th-Percentile Queue Length [ft/ln]	9.80	9.80	9.80	5.75	5.75	5.75	0.29	0.29	0.00	1.18	0.00	0.00
d_A, Approach Delay [s/veh]	13.03			11.59			0.25			0.48		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.22											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.274

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	47	92	48	23	58	28	15	99	64	63	116	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	92	48	23	58	28	15	99	64	63	116	23
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	24	13	6	15	7	4	26	17	17	31	6
Total Analysis Volume [veh/h]	49	97	51	24	61	29	16	104	67	66	122	24
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	719	701	586	672	591	658
Degree of Utilization, x	0.27	0.16	0.03	0.25	0.11	0.22

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.11	0.58	0.08	1.01	0.37	0.84
95th-Percentile Queue Length [ft]	27.87	14.45	2.10	25.16	9.37	21.10
Approach Delay [s/veh]	9.90	9.13	9.79		9.67	
Approach LOS	A	A	A		A	
Intersection Delay [s/veh]	9.68					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	14.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	7	9	410	19	13	417
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	9	410	19	13	417
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	2	108	5	3	110
Total Analysis Volume [veh/h]	7	9	432	20	14	439
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	14.82	9.85	0.00	0.00	8.30	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	2.34	2.34	0.00	0.00	0.96	0.00
d_A, Approach Delay [s/veh]	12.02		0.00		0.26	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.34					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	15	2	0	37	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	2	0	37	2	1
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	1	0	10	1	0
Total Analysis Volume [veh/h]	16	2	0	39	2	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	8.79	8.40
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.23	0.23
d_A, Approach Delay [s/veh]	0.00		0.00		8.66	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.43					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	17	0	1	38	4	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	0	1	38	4	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	0	10	1	0
Total Analysis Volume [veh/h]	18	0	1	40	4	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.25	0.00	8.82	8.41
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.04	0.04	0.32	0.32
d_A, Approach Delay [s/veh]	0.00		0.18		8.82	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.68					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.7
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	7	0	7	0	0	0	0	195	9	4	315	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	0	7	0	0	0	0	195	9	4	315	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	2	0	0	0	0	51	2	1	83	0
Total Analysis Volume [veh/h]	7	0	7	0	0	0	0	205	9	4	332	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	11.68	0.00	8.99	12.34	0.00	9.24	7.94	0.00	0.00	7.67	0.00	0.00
Movement LOS	B		A	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.56	0.00	1.56	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00
d_A, Approach Delay [s/veh]	10.34			10.79			0.00			0.09		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.31											
Intersection LOS	B											

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Lime St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	27.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.611

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	24	268	128	61	283	30	19	534	136	216	381	180
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	268	128	61	283	30	19	534	136	216	381	180
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	71	34	16	74	8	5	141	36	57	100	47
Total Analysis Volume [veh/h]	25	282	135	64	298	32	20	562	143	227	401	189
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	9	30	0	9	29	0	24	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	27	16	16	27	18	18	3	36	36	13	46	46
g / C, Green / Cycle	0.30	0.18	0.18	0.30	0.20	0.20	0.03	0.39	0.39	0.15	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.02	0.15	0.08	0.05	0.09	0.09	0.01	0.19	0.20	0.13	0.21	0.12
s, saturation flow rate [veh/h]	1226	1870	1589	1235	1870	1807	1781	1870	1741	1781	1870	1589
c, Capacity [veh/h]	402	334	284	346	382	369	57	734	684	268	956	812
d1, Uniform Delay [s]	22.81	35.84	33.26	24.06	31.36	31.39	42.73	20.65	20.68	37.31	13.73	12.24
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.06	5.86	1.24	0.26	0.79	0.83	3.62	2.39	2.58	7.31	1.35	0.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.06	0.85	0.48	0.19	0.44	0.44	0.35	0.50	0.50	0.85	0.42	0.23
d, Delay for Lane Group [s/veh]	22.87	41.71	34.50	24.32	32.15	32.23	46.35	23.04	23.26	44.62	15.08	12.91
Lane Group LOS	C	D	C	C	C	C	D	C	C	D	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.37	6.34	2.67	0.99	3.16	3.10	0.49	6.14	5.79	5.27	5.00	2.10
50th-Percentile Queue Length [ft/ln]	9.35	158.53	66.83	24.63	79.07	77.52	12.35	153.62	144.70	131.77	125.01	52.53
95th-Percentile Queue Length [veh/ln]	0.67	10.47	4.81	1.77	5.69	5.58	0.89	10.21	9.73	9.04	8.67	3.78
95th-Percentile Queue Length [ft/ln]	16.83	261.77	120.30	44.33	142.33	139.54	22.23	255.25	243.34	225.90	216.69	94.56

Movement, Approach, & Intersection Results

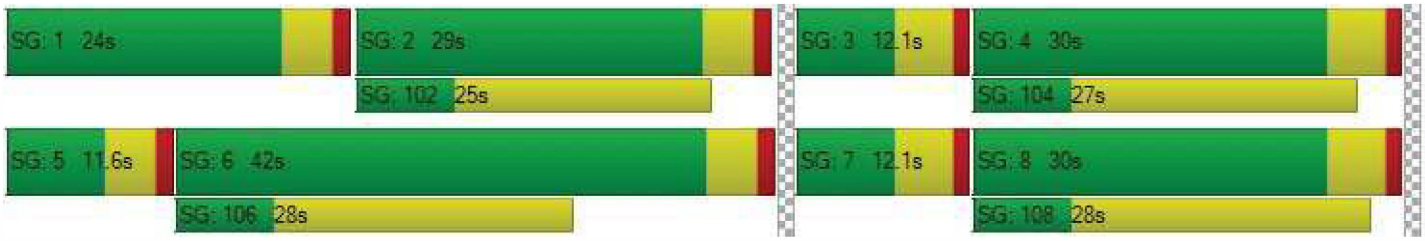
d_M, Delay for Movement [s/veh]	22.87	41.71	34.50	24.32	32.18	32.23	46.35	23.12	23.26	44.62	15.08	12.91
Movement LOS	C	D	C	C	C	C	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	38.44			30.91			23.79			22.79		
Approach LOS	D			C			C			C		
d_I, Intersection Delay [s/veh]	27.35											
Intersection LOS	C											
Intersection V/C	0.611											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.72	34.72	34.72	34.72
l_p,int, Pedestrian LOS Score for Intersectio	2.552	2.382	2.379	2.677
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	553	553	542	830
d_b, Bicycle Delay [s]	23.59	23.59	23.95	15.41
l_b,int, Bicycle LOS Score for Intersection	2.289	1.885	2.158	2.908
Bicycle LOS	B	A	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.435

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	246	505	0	724	276	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	246	505	0	724	276	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	65	133	0	191	73	0
Total Analysis Volume [veh/h]	259	532	0	762	291	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	51	0	0	59	59	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	24	24	75	75
g / C, Green / Cycle	0.22	0.22	0.68	0.68
(v / s)_i Volume / Saturation Flow Rate	0.15	0.19	0.21	0.08
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	391	618	2421	2421
d1, Uniform Delay [s]	39.12	41.23	7.15	6.12
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.92	3.66	0.34	0.10
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.66	0.86	0.31	0.12
d, Delay for Lane Group [s/veh]	41.04	44.89	7.49	6.22
Lane Group LOS	D	D	A	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.49	7.11	3.34	1.09
50th-Percentile Queue Length [ft/ln]	162.17	177.74	83.49	27.21
95th-Percentile Queue Length [veh/ln]	10.66	11.48	6.01	1.96
95th-Percentile Queue Length [ft/ln]	266.60	287.06	150.28	48.97

Movement, Approach, & Intersection Results

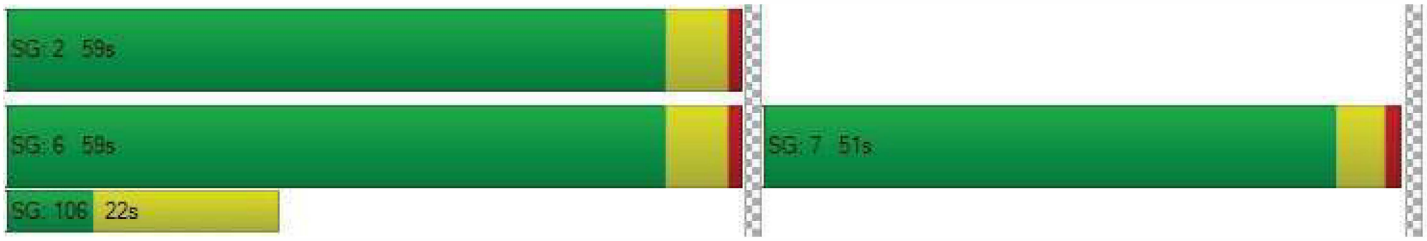
d_M, Delay for Movement [s/veh]	41.04	44.89	0.00	7.49	6.22	0.00
Movement LOS	D	D		A	A	
d_A, Approach Delay [s/veh]	43.63		7.49		6.22	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	22.79					
Intersection LOS	C					
Intersection V/C	0.435					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.51	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.366	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	837	964	964
d_b, Bicycle Delay [s]	18.59	14.74	14.74
l_b,int, Bicycle LOS Score for Intersection	1.560	2.188	1.800
Bicycle LOS	A	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report

Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	39.3
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.667

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	121	455	121	0	0	0	358	659	0	0	159	204
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	121	455	121	0	0	0	358	659	0	0	159	204
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	32	120	32	0	0	0	94	173	0	0	42	0
Total Analysis Volume [veh/h]	127	479	127	0	0	0	377	694	0	0	167	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	34.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	45	0	0	0	0	29	65	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	20	0	0	23	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	110	110		110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	39	39		24	60	31	31
g / C, Green / Cycle	0.35	0.35		0.22	0.55	0.29	0.29
(v / s)_i Volume / Saturation Flow Rate	0.07	0.34		0.21	0.19	0.05	0.00
s, saturation flow rate [veh/h]	1781	1803		1781	3560	3560	1589
c, Capacity [veh/h]	626	634		389	1953	1014	453
d1, Uniform Delay [s]	24.92	34.85		42.68	13.94	29.54	0.00
k, delay calibration	0.11	0.32		0.27	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.16	19.72		26.97	0.51	0.35	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.20	0.96		0.97	0.36	0.16	0.00
d, Delay for Lane Group [s/veh]	25.07	54.57		69.65	14.45	29.89	0.00
Lane Group LOS	C	D		E	B	C	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.34	18.94		12.85	4.74	1.69	0.00
50th-Percentile Queue Length [ft/ln]	58.61	473.43		321.32	118.59	42.29	0.00
95th-Percentile Queue Length [veh/ln]	4.22	26.07		18.73	8.32	3.04	0.00
95th-Percentile Queue Length [ft/ln]	105.50	651.84		468.31	207.88	76.12	0.00

Movement, Approach, & Intersection Results

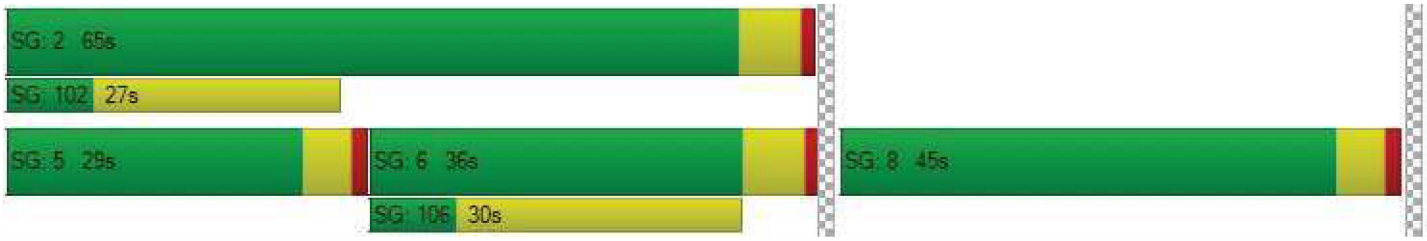
d_M, Delay for Movement [s/veh]	25.07	54.57	54.57	0.00	0.00	0.00	69.65	14.45	0.00	0.00	29.89	0.00
Movement LOS	C	D	D				E	B			C	A
d_A, Approach Delay [s/veh]	49.46			0.00			33.88			29.89		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	39.33											
Intersection LOS	D											
Intersection V/C	0.667											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.57	44.57	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.188	2.268	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	727	0	1072	545
d_b, Bicycle Delay [s]	22.29	55.02	11.84	29.11
l_b,int, Bicycle LOS Score for Intersection	2.769	4.132	2.443	1.697
Bicycle LOS	C	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	35.4
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.039

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	67	74	27	59	34	110	110	495	164	40	207	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	74	27	59	34	110	110	495	164	40	207	75
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	19	7	16	9	29	29	130	43	11	54	20
Total Analysis Volume [veh/h]	71	78	28	62	36	116	116	521	173	42	218	79
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	412	446	480	469	521	557	422	448	470
Degree of Utilization, x	0.17	0.24	0.45	0.25	1.04	0.31	0.10	0.33	0.32

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.61	0.92	2.27	0.97	15.27	1.32	0.33	1.43	1.34
95th-Percentile Queue Length [ft]	15.36	22.91	56.64	24.17	381.70	32.95	8.23	35.79	33.54
Approach Delay [s/veh]	13.26		16.43	54.21			14.00		
Approach LOS	B		C	F			B		
Intersection Delay [s/veh]	35.40								
Intersection LOS	E								

Intersection Level Of Service Report
Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	21.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.195

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	54	14	7	11	39	14	13	503	69	3	192	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	54	14	7	11	39	14	13	503	69	3	192	10
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	4	2	3	10	4	3	132	18	1	51	3
Total Analysis Volume [veh/h]	57	15	7	12	41	15	14	529	73	3	202	11
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.19	0.05	0.01	0.02	0.10	0.02	0.01	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	21.10	20.00	13.70	12.55	14.61	9.99	7.67	0.00	0.00	8.72	0.00	0.00
Movement LOS	C	C	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.97	0.97	0.97	0.46	0.46	0.46	0.02	0.02	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	24.35	24.35	24.35	11.56	11.56	11.56	0.59	0.59	0.00	0.23	0.00	0.00
d_A, Approach Delay [s/veh]	20.24			13.23			0.17			0.12		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	2.69											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	14.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.688

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	48	78	67	14	90	14	18	259	159	84	102	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	48	78	67	14	90	14	18	259	159	84	102	24
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	21	18	4	24	4	5	68	42	22	27	6
Total Analysis Volume [veh/h]	51	82	71	15	95	15	19	273	167	88	107	25
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	615	586	562	640	536	593
Degree of Utilization, x	0.33	0.21	0.03	0.69	0.16	0.22

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.45	0.80	0.10	5.43	0.58	0.85
95th-Percentile Queue Length [ft]	36.20	20.06	2.62	135.83	14.58	21.18
Approach Delay [s/veh]	11.73	10.80	19.37		10.60	
Approach LOS	B	B	C		B	
Intersection Delay [s/veh]	14.85					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	40.6
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.139

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	15	11	1128	44	12	448
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	11	1128	44	12	448
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	297	12	3	118
Total Analysis Volume [veh/h]	16	12	1187	46	13	472
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.03	0.01	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	40.56	17.56	0.00	0.00	11.57	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.58	0.58	0.00	0.00	0.07	0.00
95th-Percentile Queue Length [ft/ln]	14.54	14.54	0.00	0.00	1.78	0.00
d_A, Approach Delay [s/veh]	30.70		0.00		0.31	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.58					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	21	2	7	47	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	2	7	47	3	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	1	2	12	1	1
Total Analysis Volume [veh/h]	22	2	7	49	3	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	8.97	8.44
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.02	0.02
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.29	0.29	0.39	0.39
d_A, Approach Delay [s/veh]	0.00		0.91		8.76	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	1.11					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	24	0	3	48	2	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	0	3	48	2	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	1	13	1	0
Total Analysis Volume [veh/h]	25	0	3	51	2	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	8.93	8.43
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.13	0.13	0.16	0.16
d_A, Approach Delay [s/veh]	0.00		0.40		8.93	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.49					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.042

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	14	0	6	0	0	0	0	504	18	3	196	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	0	6	0	0	0	0	504	18	3	196	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	2	0	0	0	0	133	5	1	52	0
Total Analysis Volume [veh/h]	15	0	6	0	0	0	0	531	19	3	206	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	15.65	0.00	10.45	12.77	0.00	8.86	7.64	0.00	0.00	8.55	0.00	0.00
Movement LOS	C		B	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.16	0.00	0.16	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.00	0.00	4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22	0.00	0.00
d_A, Approach Delay [s/veh]	14.16			10.82			0.00			0.12		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	0.41											
Intersection LOS	C											

BUILDOUT YEAR 2045

WITH PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Lime St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	41.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.745

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	30	139	65	47	271	5	13	318	116	683	599	193
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	5	0	14	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	30	139	65	47	271	5	13	323	116	697	608	193
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	37	17	12	71	1	3	85	31	183	160	51
Total Analysis Volume [veh/h]	32	146	68	49	285	5	14	340	122	734	640	203
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	9	30	0	9	29	0	54	72	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	22	12	12	22	13	13	3	34	34	49	81	81
g / C, Green / Cycle	0.19	0.10	0.10	0.19	0.11	0.11	0.02	0.28	0.28	0.41	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate	0.02	0.08	0.04	0.03	0.08	0.08	0.01	0.13	0.13	0.41	0.34	0.13
s, saturation flow rate [veh/h]	1327	1870	1589	1407	1870	1859	1781	1870	1705	1781	1870	1589
c, Capacity [veh/h]	256	181	154	264	198	196	39	531	484	731	1257	1068
d1, Uniform Delay [s]	40.77	53.07	51.12	41.18	52.04	52.05	57.85	35.29	35.41	35.38	9.81	7.39
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.46	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.22	8.09	1.97	0.34	5.23	5.30	5.42	2.75	3.14	33.06	1.48	0.39
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.13	0.80	0.44	0.19	0.73	0.74	0.36	0.45	0.46	1.00	0.51	0.19
d, Delay for Lane Group [s/veh]	40.99	61.16	53.09	41.52	57.26	57.35	63.27	38.04	38.55	68.44	11.28	7.79
Lane Group LOS	D	E	D	D	E	E	E	D	D	F	B	A
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.80	4.68	2.00	1.23	4.49	4.48	0.48	6.22	5.87	27.19	8.11	1.93
50th-Percentile Queue Length [ft/ln]	19.94	117.05	50.05	30.86	112.31	112.02	12.04	155.56	146.77	679.78	202.84	48.36
95th-Percentile Queue Length [veh/ln]	1.44	8.23	3.60	2.22	7.97	7.95	0.87	10.31	9.84	35.86	12.79	3.48
95th-Percentile Queue Length [ft/ln]	35.90	205.77	90.09	55.54	199.20	198.81	21.67	257.83	246.11	896.55	319.63	87.05

Movement, Approach, & Intersection Results

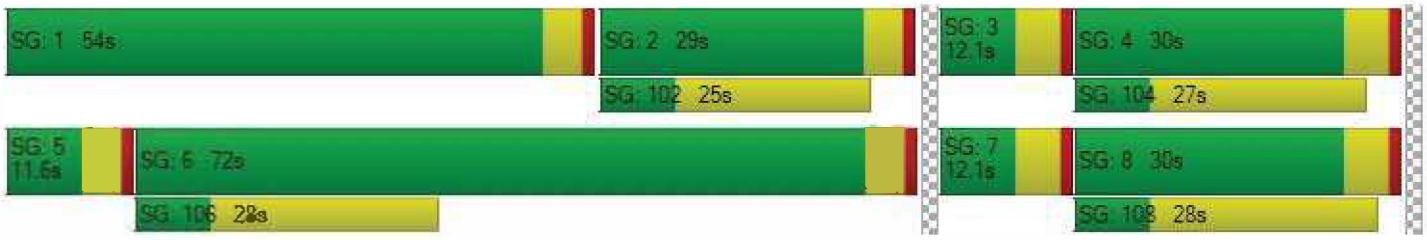
d_M, Delay for Movement [s/veh]	40.99	61.16	53.09	41.52	57.30	57.35	63.27	38.19	38.55	68.44	11.28	7.79
Movement LOS	D	E	D	D	E	E	E	D	D	F	B	A
d_A, Approach Delay [s/veh]	56.30			55.02			39.02			37.44		
Approach LOS	E			E			D			D		
d_I, Intersection Delay [s/veh]	41.74											
Intersection LOS	D											
Intersection V/C	0.745											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	49.51	49.51	49.51	49.51
l_p,int, Pedestrian LOS Score for Intersectio	2.629	2.344	2.385	2.784
Crosswalk LOS	B	B	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	415	415	407	1123
d_b, Bicycle Delay [s]	37.69	37.69	38.09	11.53
l_b,int, Bicycle LOS Score for Intersection	1.966	1.839	1.952	4.162
Bicycle LOS	A	A	A	D

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report

Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	26.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.529

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	276	958	0	444	431	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	0	0	5	23	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	282	958	0	449	454	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	74	252	0	118	119	0
Total Analysis Volume [veh/h]	297	1008	0	473	478	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	115
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	80	0	0	35	35	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	115	115	115	115
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	46	46	58	58
g / C, Green / Cycle	0.40	0.40	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.17	0.36	0.13	0.13
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	709	1119	1803	1803
d1, Uniform Delay [s]	25.00	32.46	16.14	16.17
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.40	2.95	0.35	0.36
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.90	0.26	0.27
d, Delay for Lane Group [s/veh]	25.39	35.41	16.49	16.53
Lane Group LOS	C	D	B	B
Critical Lane Group	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	5.82	13.11	3.54	3.58
50th-Percentile Queue Length [ft/ln]	145.46	327.69	88.52	89.61
95th-Percentile Queue Length [veh/ln]	9.77	19.04	6.37	6.45
95th-Percentile Queue Length [ft/ln]	244.35	476.12	159.34	161.30

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.39	35.41	0.00	16.49	16.53	0.00
Movement LOS	C	D		B	B	
d_A, Approach Delay [s/veh]	33.13		16.49		16.53	
Approach LOS	C		B		B	
d_I, Intersection Delay [s/veh]	26.12					
Intersection LOS	C					
Intersection V/C	0.529					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	47.00	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.514	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1305	505	505
d_b, Bicycle Delay [s]	6.94	32.13	32.13
I_b,int, Bicycle LOS Score for Intersection	1.560	1.950	1.954
Bicycle LOS	A	A	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																

Intersection Level Of Service Report

Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	29.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.439

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	170	196	47	0	0	0	271	463	0	0	270	128
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	8	0	0	0	0	11	0	0	23	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	170	196	55	0	0	0	271	474	0	0	293	140
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	45	52	14	0	0	0	71	125	0	0	77	0
Total Analysis Volume [veh/h]	179	206	58	0	0	0	285	499	0	0	308	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	115
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	29.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	38	0	0	0	0	41	77	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	20	0	0	23	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	115	115		115	115	115	115
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	19	19		21	85	59	59
g / C, Green / Cycle	0.17	0.17		0.18	0.74	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.10	0.15		0.16	0.14	0.09	0.00
s, saturation flow rate [veh/h]	1781	1800		1781	3560	3560	1589
c, Capacity [veh/h]	301	304		319	2619	1826	815
d1, Uniform Delay [s]	44.18	46.57		46.14	4.68	14.95	0.00
k, delay calibration	0.11	0.11		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.88	7.48		8.59	0.16	0.20	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.60	0.87		0.89	0.19	0.17	0.00
d, Delay for Lane Group [s/veh]	46.06	54.05		54.72	4.84	15.15	0.00
Lane Group LOS	D	D		D	A	B	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	4.87	7.96		8.61	1.61	2.15	0.00
50th-Percentile Queue Length [ft/ln]	121.75	198.96		215.16	40.16	53.72	0.00
95th-Percentile Queue Length [veh/ln]	8.49	12.58		13.42	2.89	3.87	0.00
95th-Percentile Queue Length [ft/ln]	212.22	314.62		335.44	72.28	96.69	0.00

Movement, Approach, & Intersection Results

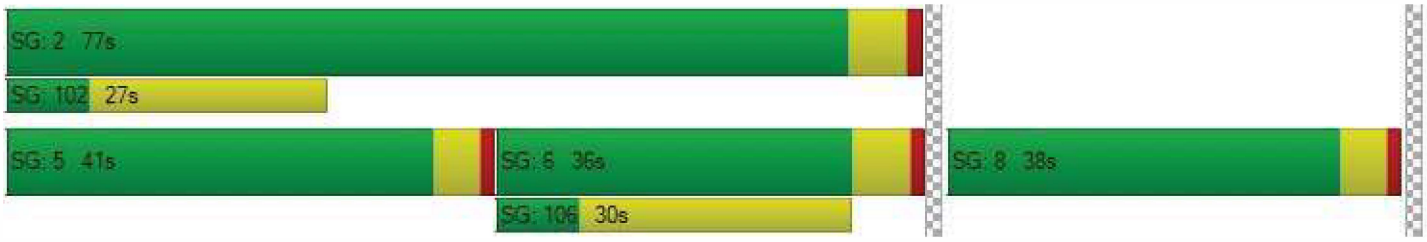
d_M, Delay for Movement [s/veh]	46.06	54.05	54.05	0.00	0.00	0.00	54.72	4.84	0.00	0.00	15.15	0.00
Movement LOS	D	D	D				D	A			B	A
d_A, Approach Delay [s/veh]	50.82			0.00			22.98			15.15		
Approach LOS	D			A			C			B		
d_I, Intersection Delay [s/veh]	29.44											
Intersection LOS	C											
Intersection V/C	0.439											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	47.04	47.04	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.096	1.914	0.000	0.000
Crosswalk LOS	B	A	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	574	0	1234	522
d_b, Bicycle Delay [s]	29.25	57.52	8.43	31.43
l_b,int, Bicycle LOS Score for Intersection	2.291	4.132	2.206	1.814
Bicycle LOS	B	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	13.5
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.526

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	38	65	48	25	28	72	119	247	184	39	303	51
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	19	0	0	35	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	38	65	48	25	28	72	119	266	184	39	338	51
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	17	13	7	7	19	31	70	48	10	89	13
Total Analysis Volume [veh/h]	40	68	51	26	29	76	125	280	194	41	356	54
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	459	508	526	495	532	595	481	516	530
Degree of Utilization, x	0.09	0.23	0.25	0.25	0.53	0.33	0.09	0.40	0.39

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.28	0.90	0.98	0.99	3.04	1.41	0.28	1.89	1.81
95th-Percentile Queue Length [ft]	7.12	22.51	24.38	24.77	75.89	35.34	6.95	47.21	45.34
Approach Delay [s/veh]	11.77		12.09	14.18			13.69		
Approach LOS	B		B	B			B		
Intersection Delay [s/veh]	13.52								
Intersection LOS	B								

Intersection Level Of Service Report
Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.033

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	37	10	9	10	22	8	7	183	22	20	295	8
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	3	3	12	0	19	0	0	23	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	1	0	0	0	0
Total Hourly Volume [veh/h]	37	12	9	13	25	20	7	203	22	20	318	10
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	3	2	3	7	5	2	53	6	5	84	3
Total Analysis Volume [veh/h]	39	13	9	14	26	21	7	214	23	21	335	11
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.03	0.01	0.03	0.05	0.02	0.01	0.00	0.00	0.02	0.00	0.00
d_M, Delay for Movement [s/veh]	14.21	15.25	10.03	12.25	12.57	9.95	7.98	0.00	0.00	7.76	0.00	0.00
Movement LOS	B	C	B	B	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.44	0.44	0.44	0.33	0.33	0.33	0.01	0.01	0.00	0.05	0.00	0.00
95th-Percentile Queue Length [ft/ln]	11.11	11.11	11.11	8.34	8.34	8.34	0.29	0.29	0.00	1.21	0.00	0.00
d_A, Approach Delay [s/veh]	13.81			11.59			0.23			0.44		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	2.41											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.277

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	47	92	48	23	58	28	15	99	64	63	116	23
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	9	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	4	0	0	0	0	0	0
Total Hourly Volume [veh/h]	47	92	48	23	58	32	15	108	64	63	121	23
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	12	24	13	6	15	8	4	28	17	17	32	6
Total Analysis Volume [veh/h]	49	97	51	24	61	34	16	114	67	66	127	24
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	711	697	584	667	588	653
Degree of Utilization, x	0.28	0.17	0.03	0.27	0.11	0.23

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.13	0.61	0.08	1.10	0.38	0.89
95th-Percentile Queue Length [ft]	28.26	15.30	2.11	27.42	9.43	22.22
Approach Delay [s/veh]	10.00	9.22	10.01		9.78	
Approach LOS	A	A	B		A	
Intersection Delay [s/veh]	9.81					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.030

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	7	9	410	19	13	417
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	3	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	12	410	21	15	417
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	3	108	6	4	110
Total Analysis Volume [veh/h]	11	13	432	22	16	439
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.02	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	15.04	9.98	0.00	0.00	8.31	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.15	0.15	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	3.64	3.64	0.00	0.00	1.10	0.00
d_A, Approach Delay [s/veh]	12.30		0.00		0.29	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.46					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	15	2	0	37	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	4	0	18	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	6	4	37	20	7
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	2	1	10	5	2
Total Analysis Volume [veh/h]	16	6	4	39	21	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.02	0.01
d_M, Delay for Movement [s/veh]	0.00	0.00	7.26	0.00	8.95	8.51
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.01	0.01	0.09	0.09
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.17	0.17	2.24	2.24
d_A, Approach Delay [s/veh]	0.00		0.68		8.84	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.97					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	17	0	1	38	4	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	18	0	0
Diverted Trips [veh/h]	0	0	-1	0	-4	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	0	0	56	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	0	15	0	0
Total Analysis Volume [veh/h]	22	0	0	59	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.26	0.00	8.91	8.41
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.66	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	13.3
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	7	0	7	0	0	0	0	195	9	4	315	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	6	0	23	19	3	0	0	2	3
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	0	7	6	0	23	19	198	9	4	317	3
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	2	2	0	6	5	52	2	1	83	1
Total Analysis Volume [veh/h]	7	0	7	6	0	24	20	208	9	4	334	3
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.01	0.01	0.00	0.03	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	12.52	0.00	9.02	13.25	0.00	9.47	8.00	0.00	0.00	7.67	0.00	0.00
Movement LOS	B		A	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.00	0.07	0.13	0.00	0.13	0.05	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.68	0.00	1.68	3.26	0.00	3.26	1.25	0.00	0.00	0.22	0.00	0.00
d_A, Approach Delay [s/veh]	10.77			10.23			0.68			0.09		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	1.04											
Intersection LOS	B											

Intersection Level Of Service Report
Intersection 11: Project Dwy (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.025

Intersection Setup

Name	Project Dwy		5th St		5th St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project Dwy		5th St		5th St	
Base Volume Input [veh/h]	0	0	2	0	0	3
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	24	6	0	8	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	1	0	0	0
Total Hourly Volume [veh/h]	24	6	3	8	3	3
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	2	1	2	1	1
Total Analysis Volume [veh/h]	25	6	3	8	3	3
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.71	8.46	0.00	0.00	7.24	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	2.36	2.36	0.00	0.00	0.13	0.13
d_A, Approach Delay [s/veh]	8.66		0.00		3.62	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.05					
Intersection LOS	A					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 1: Lime St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	27.5
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.619

Intersection Setup

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	72.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	185.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00			35.00			25.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Lime St			Lime St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	24	268	128	61	283	30	19	534	136	216	381	180
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	7	0	7	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	268	128	61	283	30	19	541	136	223	384	180
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	71	34	16	74	8	5	142	36	59	101	47
Total Analysis Volume [veh/h]	25	282	135	64	298	32	20	569	143	235	404	189
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	90
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	ProtPer	Permiss	Permiss	ProtPer	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal Group	3	8	0	7	4	0	5	2	0	1	6	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	10	0	7	10	0	7	10	0	7	10	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [s]	4.1	4.1	0.0	4.1	4.1	0.0	3.6	3.6	0.0	3.6	3.6	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	0.0
Split [s]	9	30	0	9	30	0	9	29	0	24	42	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	21	0	0	20	0	0	18	0	0	21	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.1	3.1	0.0	3.1	3.1	0.0	2.6	2.6	0.0	2.6	2.6	0.0
Minimum Recall	No	No		No	No		No	No		No	No	
Maximum Recall	No	No		No	No		No	No		No	No	
Pedestrian Recall	No	No		No	No		No	No		No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	R	L	C	C	L	C	C	L	C	R
C, Cycle Length [s]	90	90	90	90	90	90	90	90	90	90	90	90
L, Total Lost Time per Cycle [s]	5.10	5.10	5.10	5.10	5.10	5.10	4.60	4.60	4.60	4.60	4.60	4.60
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	0.00	3.10	3.10	0.00	3.10	3.10	2.60	2.60	2.60	2.60	2.60	2.60
g_i, Effective Green Time [s]	27	16	16	27	18	18	3	35	35	14	46	46
g / C, Green / Cycle	0.30	0.18	0.18	0.30	0.20	0.20	0.03	0.39	0.39	0.15	0.51	0.51
(v / s)_i Volume / Saturation Flow Rate	0.02	0.15	0.08	0.05	0.09	0.09	0.01	0.20	0.20	0.13	0.22	0.12
s, saturation flow rate [veh/h]	1226	1870	1589	1235	1870	1807	1781	1870	1742	1781	1870	1589
c, Capacity [veh/h]	402	334	284	346	382	369	57	726	676	276	956	812
d1, Uniform Delay [s]	22.81	35.84	33.26	24.06	31.36	31.39	42.73	21.01	21.03	37.11	13.75	12.24
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.06	5.86	1.24	0.26	0.79	0.83	3.62	2.52	2.72	7.34	1.37	0.67
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, 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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.06	0.85	0.48	0.19	0.44	0.44	0.35	0.51	0.51	0.85	0.42	0.23
d, Delay for Lane Group [s/veh]	22.87	41.71	34.50	24.32	32.15	32.23	46.35	23.52	23.75	44.45	15.13	12.91
Lane Group LOS	C	D	C	C	C	C	D	C	C	D	B	B
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	0.37	6.34	2.67	0.99	3.16	3.10	0.49	6.29	5.92	5.45	5.05	2.10
50th-Percentile Queue Length [ft/ln]	9.35	158.53	66.83	24.63	79.07	77.52	12.35	157.13	148.06	136.26	126.23	52.53
95th-Percentile Queue Length [veh/ln]	0.67	10.47	4.81	1.77	5.69	5.58	0.89	10.40	9.91	9.28	8.73	3.78
95th-Percentile Queue Length [ft/ln]	16.83	261.77	120.30	44.33	142.33	139.54	22.23	259.92	247.84	231.98	218.36	94.56

Movement, Approach, & Intersection Results

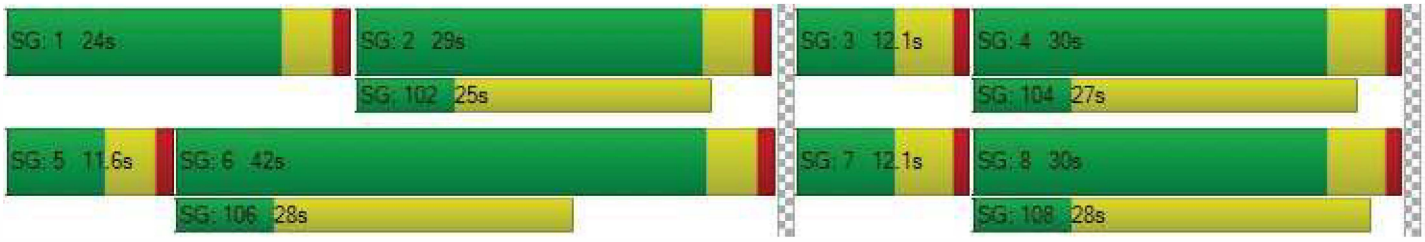
d_M, Delay for Movement [s/veh]	22.87	41.71	34.50	24.32	32.18	32.23	46.35	23.60	23.75	44.45	15.13	12.91
Movement LOS	C	D	C	C	C	C	D	C	C	D	B	B
d_A, Approach Delay [s/veh]	38.44			30.91			24.25			22.94		
Approach LOS	D			C			C			C		
d_I, Intersection Delay [s/veh]	27.51											
Intersection LOS	C											
Intersection V/C	0.619											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	34.72	34.72	34.72	34.72
l_p,int, Pedestrian LOS Score for Intersectio	2.554	2.382	2.381	2.681
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	553	553	542	830
d_b, Bicycle Delay [s]	23.59	23.59	23.95	15.41
l_b,int, Bicycle LOS Score for Intersection	2.289	1.885	2.164	2.926
Bicycle LOS	B	A	B	C

Sequence

Ring 1	1	2	3	4	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	7	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 2: SR-91 SB Off-Ramp (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	22.8
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.437

Intersection Setup

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	35.00		35.00		35.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	Yes		No		No	

Volumes

Name	SR-91 SB Off-Ramp		Mission Inn Ave		Mission Inn Ave	
Base Volume Input [veh/h]	246	505	0	724	276	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00					
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	0	0	7	10	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	256	505	0	731	286	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	133	0	192	75	0
Total Analysis Volume [veh/h]	269	532	0	769	301	0
Presence of On-Street Parking	No	No	No	No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0		0		0	
v_di, Inbound Pedestrian Volume crossing m	0		0		0	
v_co, Outbound Pedestrian Volume crossing	0		0		0	
v_ci, Inbound Pedestrian Volume crossing mi	0		0		0	
v_ab, Corner Pedestrian Volume [ped/h]	0		0		0	
Bicycle Volume [bicycles/h]	0		0		0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Split	Split	Permissive	Permissive	Permissive	Permissive
Signal Group	7	0	0	2	6	0
Auxiliary Signal Groups						
Lead / Lag	Lead	-	-	-	-	-
Minimum Green [s]	7	0	0	10	10	0
Maximum Green [s]	47	0	0	42	42	0
Amber [s]	4.0	0.0	0.0	5.0	5.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	0.0
Split [s]	51	0	0	59	59	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	15	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	4.0	4.0	0.0
Minimum Recall	No			No	No	
Maximum Recall	No			No	No	
Pedestrian Recall	No			No	No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	R	C	C
C, Cycle Length [s]	110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00	4.00	4.00
g_i, Effective Green Time [s]	24	24	75	75
g / C, Green / Cycle	0.22	0.22	0.68	0.68
(v / s)_i Volume / Saturation Flow Rate	0.15	0.19	0.22	0.08
s, saturation flow rate [veh/h]	1781	2813	3560	3560
c, Capacity [veh/h]	392	619	2421	2421
d1, Uniform Delay [s]	39.36	41.21	7.18	6.15
k, delay calibration	0.11	0.11	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	2.14	3.64	0.35	0.11
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.69	0.86	0.32	0.12
d, Delay for Lane Group [s/veh]	41.50	44.84	7.53	6.25
Lane Group LOS	D	D	A	A
Critical Lane Group	No	Yes	Yes	No
50th-Percentile Queue Length [veh/ln]	6.79	7.11	3.38	1.13
50th-Percentile Queue Length [ft/ln]	169.87	177.64	84.55	28.26
95th-Percentile Queue Length [veh/ln]	11.07	11.48	6.09	2.03
95th-Percentile Queue Length [ft/ln]	276.75	286.93	152.19	50.86

Movement, Approach, & Intersection Results

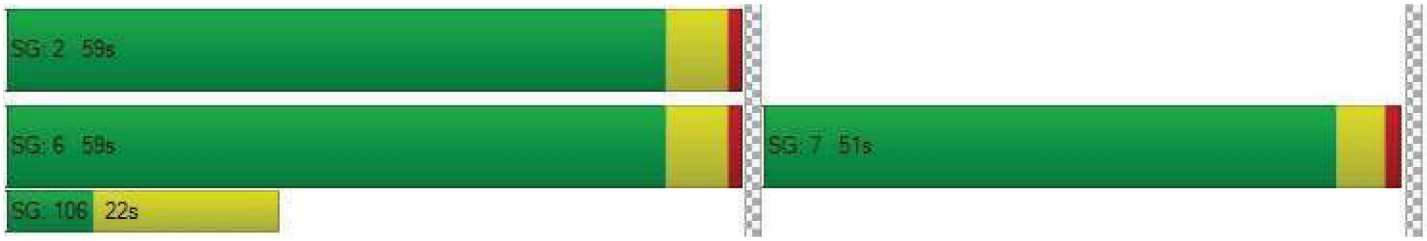
d_M, Delay for Movement [s/veh]	41.50	44.84	0.00	7.53	6.25	0.00
Movement LOS	D	D		A	A	
d_A, Approach Delay [s/veh]	43.72		7.53		6.25	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	22.82					
Intersection LOS	C					
Intersection V/C	0.437					

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.51	0.00	0.00
I_p,int, Pedestrian LOS Score for Intersectio	2.368	0.000	0.000
Crosswalk LOS	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	837	964	964
d_b, Bicycle Delay [s]	18.59	14.74	14.74
I_b,int, Bicycle LOS Score for Intersection	1.560	2.194	1.808
Bicycle LOS	A	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	6	7	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 3: Mulberry St (NS) at Mission Inn Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	39.7
Analysis Method:	HCM 7th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.680

Intersection Setup

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	0	0	1
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	178.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	Yes			Yes			No			No		

Volumes

Name	Mulberry St			SR-91 NB On-Ramp			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	121	455	121	0	0	0	358	659	0	0	159	204
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Proportion of CAVs [%]	0.00											
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	12	0	0	0	0	17	0	0	10	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	121	455	133	0	0	0	358	676	0	0	169	209
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000
Total 15-Minute Volume [veh/h]	32	120	35	0	0	0	94	178	0	0	44	0
Total Analysis Volume [veh/h]	127	479	140	0	0	0	377	712	0	0	178	0
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	1 - Coordination Group
Cycle Length [s]	110
Coordination Type	Time of Day Pattern Coordinated
Actuation Type	Fully actuated
Offset [s]	34.0
Offset Reference	Lead Green - Beginning of First Green
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss
Signal Group	0	8	0	0	0	0	5	2	0	0	6	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	Lead	-	-	-	-	-
Minimum Green [s]	0	10	0	0	0	0	7	10	0	0	10	0
Maximum Green [s]	0	45	0	0	0	0	30	42	0	0	42	0
Amber [s]	0.0	4.0	0.0	0.0	0.0	0.0	4.0	5.0	0.0	0.0	5.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	45	0	0	0	0	29	65	0	0	36	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	20	0	0	23	0
Delayed Vehicle Green [s]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	3.0	0.0	0.0	0.0	0.0	3.0	4.0	0.0	0.0	4.0	0.0
Minimum Recall		No					No	No			No	
Maximum Recall		No					No	No			No	
Pedestrian Recall		No					No	No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C		L	C	C	R
C, Cycle Length [s]	110	110		110	110	110	110
L, Total Lost Time per Cycle [s]	5.00	5.00		5.00	6.00	6.00	6.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00		0.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	3.00	3.00		3.00	4.00	4.00	4.00
g_i, Effective Green Time [s]	39	39		24	60	31	31
g / C, Green / Cycle	0.36	0.36		0.22	0.54	0.28	0.28
(v / s)_i Volume / Saturation Flow Rate	0.07	0.34		0.21	0.20	0.05	0.00
s, saturation flow rate [veh/h]	1781	1798		1781	3560	3560	1589
c, Capacity [veh/h]	638	644		389	1929	991	442
d1, Uniform Delay [s]	24.41	34.57		42.68	14.44	30.19	0.00
k, delay calibration	0.11	0.33		0.27	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.15	20.99		26.97	0.54	0.40	0.00
d3, Initial Queue Delay [s]	0.00	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.20	0.96		0.97	0.37	0.18	0.00
d, Delay for Lane Group [s/veh]	24.56	55.56		69.65	14.99	30.58	0.00
Lane Group LOS	C	E		E	B	C	A
Critical Lane Group	No	Yes		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]	2.32	19.56		12.85	4.99	1.83	0.00
50th-Percentile Queue Length [ft/ln]	57.90	488.92		321.32	124.78	45.74	0.00
95th-Percentile Queue Length [veh/ln]	4.17	26.81		18.73	8.65	3.29	0.00
95th-Percentile Queue Length [ft/ln]	104.23	670.24		468.31	216.37	82.34	0.00

Movement, Approach, & Intersection Results

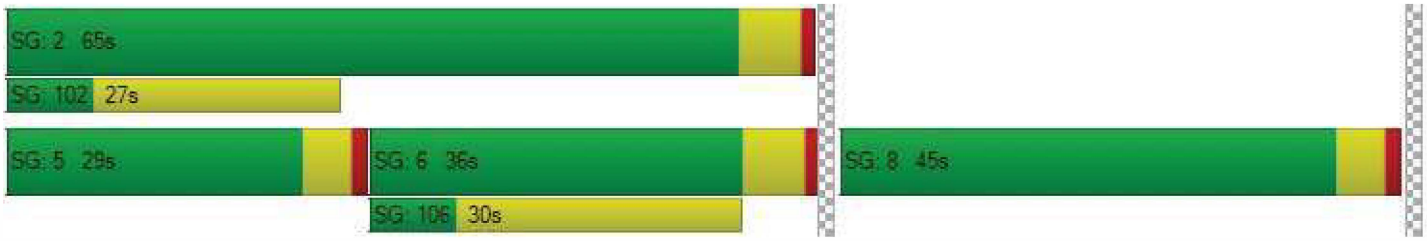
d_M, Delay for Movement [s/veh]	24.56	55.56	55.56	0.00	0.00	0.00	69.65	14.99	0.00	0.00	30.58	0.00
Movement LOS	C	E	E				E	B			C	A
d_A, Approach Delay [s/veh]	50.28			0.00			33.91			30.58		
Approach LOS	D			A			C			C		
d_I, Intersection Delay [s/veh]	39.68											
Intersection LOS	D											
Intersection V/C	0.680											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	44.57	44.57	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersectio	2.192	2.268	0.000	0.000
Crosswalk LOS	B	B	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	727	0	1072	545
d_b, Bicycle Delay [s]	22.29	55.02	11.84	29.11
l_b,int, Bicycle LOS Score for Intersection	2.791	4.132	2.458	1.706
Bicycle LOS	C	D	B	A

Sequence

Ring 1	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	5	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4																



Intersection Level Of Service Report
Intersection 4: Vine St (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	43.7
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.109

Intersection Setup

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	1	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	152.00	100.00	100.00	100.00	100.00	100.00	135.00	100.00	100.00	75.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Vine St			Vine St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	67	74	27	59	34	110	110	495	164	40	207	75
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	29	0	0	15	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	67	74	27	59	34	110	110	524	164	40	222	75
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	18	19	7	16	9	29	29	138	43	11	58	20
Total Analysis Volume [veh/h]	71	78	28	62	36	116	116	552	173	42	234	79
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	410	443	478	465	552	552	422	448	468
Degree of Utilization, x	0.17	0.24	0.45	0.25	1.11	0.31	0.10	0.35	0.33

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	0.62	0.92	2.28	0.97	18.16	1.33	0.33	1.55	1.45
95th-Percentile Queue Length [ft]	15.45	23.06	56.99	24.36	454.02	33.29	8.24	38.66	36.31
Approach Delay [s/veh]	13.33		16.52	69.42			14.31		
Approach LOS	B		C	F			B		
Intersection Delay [s/veh]	43.71								
Intersection LOS	E								

Intersection Level Of Service Report
Intersection 5: Commerce St (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	23.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.211

Intersection Setup

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	0	0	1	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	220.00	150.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Commerce St			Commerce St			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	54	14	7	11	39	14	13	503	69	3	192	10
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	2	0	1	1	5	0	29	0	0	10	2
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	3	0	0	0	0
Total Hourly Volume [veh/h]	54	16	7	12	40	19	13	535	69	3	202	12
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	14	4	2	3	11	5	3	141	18	1	53	3
Total Analysis Volume [veh/h]	57	17	7	13	42	20	14	563	73	3	213	13
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	Yes		
Number of Storage Spaces in Median	0	2	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.21	0.06	0.01	0.02	0.10	0.02	0.01	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	22.99	21.60	14.69	12.93	15.07	10.17	7.70	0.00	0.00	8.83	0.00	0.00
Movement LOS	C	C	B	B	C	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.10	1.10	1.10	0.52	0.52	0.52	0.02	0.02	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	27.61	27.61	27.61	13.00	13.00	13.00	0.59	0.59	0.00	0.24	0.00	0.00
d_A, Approach Delay [s/veh]	21.98			13.39			0.17			0.12		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	2.82											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 6: Park Ave (NS) at Mission Inn Ave (EW)

Control Type:	All-way stop	Delay (sec / veh):	15.1
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.696

Intersection Setup

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	97.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	Yes			No			Yes			Yes		

Volumes

Name	Park Ave			Park Ave			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	48	78	67	14	90	14	18	259	159	84	102	24
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	3	0	0	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	2	0	0	0	0	0	0
Total Hourly Volume [veh/h]	48	78	67	14	90	16	18	262	159	84	109	24
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	13	21	18	4	24	4	5	69	42	22	29	6
Total Analysis Volume [veh/h]	51	82	71	15	95	17	19	276	167	88	115	25
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Lanes

Capacity per Entry Lane [veh/h]	611	583	560	636	534	589
Degree of Utilization, x	0.33	0.22	0.03	0.70	0.16	0.24

Movement, Approach, & Intersection Results

95th-Percentile Queue Length [veh]	1.46	0.82	0.11	5.58	0.59	0.92
95th-Percentile Queue Length [ft]	36.56	20.59	2.63	139.62	14.64	22.97
Approach Delay [s/veh]	11.82	10.89	19.83		10.72	
Approach LOS	B	B	C		B	
Intersection Delay [s/veh]	15.09					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 7: Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	41.3
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.150

Intersection Setup

Name	Commerce St		3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	132.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		30.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		3rd St		3rd St	
Base Volume Input [veh/h]	15	11	1128	44	12	448
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	12	1128	46	14	448
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	297	12	4	118
Total Analysis Volume [veh/h]	17	13	1187	48	15	472
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.03	0.01	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	41.33	17.98	0.00	0.00	11.61	0.00
Movement LOS	E	C	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.63	0.63	0.00	0.00	0.08	0.00
95th-Percentile Queue Length [ft/ln]	15.83	15.83	0.00	0.00	2.06	0.00
d_A, Approach Delay [s/veh]	31.21		0.00		0.36	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.63					
Intersection LOS	E					

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.012

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	21	2	7	47	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	4	0	7	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	6	11	47	10	4
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	2	3	12	3	1
Total Analysis Volume [veh/h]	22	6	12	49	11	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.01	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.28	0.00	9.09	8.49
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.02	0.02	0.05	0.05
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.50	0.50	1.23	1.23
d_A, Approach Delay [s/veh]	0.00		1.43		8.93	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.13					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 9: Commerce St (NS) at 6th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		6th Street	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		6th Street	
Base Volume Input [veh/h]	24	0	3	48	2	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	7	0	0
Diverted Trips [veh/h]	0	0	-3	0	-2	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	0	0	55	0	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	0	14	0	0
Total Analysis Volume [veh/h]	29	0	0	58	0	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Free	Stop
Flared Lane			No
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			No
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	7.27	0.00	8.94	8.44
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		8.69	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 10: Project Dwy (NS) at Mission Inn Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	17.3
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.049

Intersection Setup

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0	1	0	0	1	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	30.00			25.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Other Dwy			Project Dwy			Mission Inn Ave			Mission Inn Ave		
Base Volume Input [veh/h]	14	0	6	0	0	0	0	504	18	3	196	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	2	0	10	29	1	0	0	2	5
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	0	6	2	0	10	29	505	18	3	198	5
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	2	1	0	3	8	133	5	1	52	1
Total Analysis Volume [veh/h]	15	0	6	2	0	11	31	532	19	3	208	5
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.00	0.01	0.00	0.00	0.01	0.02	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	17.33	0.00	10.58	13.96	0.00	8.96	7.72	0.00	0.00	8.56	0.00	0.00
Movement LOS	C		B	B		A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.18	0.00	0.18	0.05	0.00	0.05	0.07	0.00	0.00	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.53	0.00	4.53	1.28	0.00	1.28	1.76	0.00	0.00	0.22	0.00	0.00
d_A, Approach Delay [s/veh]	15.40			9.73			0.41			0.12		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	0.86											
Intersection LOS	C											

Intersection Level Of Service Report
Intersection 11: Project Dwy (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.7
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name	Project Dwy		5th St		5th St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		30.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Project Dwy		5th St		5th St	
Base Volume Input [veh/h]	0	0	2	0	0	5
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	2	0	8	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	2	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	3	0	0	0
Total Hourly Volume [veh/h]	9	2	5	10	5	5
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	1	1	3	1	1
Total Analysis Volume [veh/h]	9	2	5	11	5	5
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.69	8.40	0.00	0.00	7.25	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.00	0.00	0.01	0.01
95th-Percentile Queue Length [ft/ln]	0.83	0.83	0.00	0.00	0.21	0.21
d_A, Approach Delay [s/veh]	8.64		0.00		3.63	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.55					
Intersection LOS	A					

THIRD STREET GRADE SEPARATION /COMMERCE STREET RELOCATION PROJECT

EXISTING

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	1	14	0	1	36	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	14	0	1	36	0
Peak Hour Factor	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	0	0	12	0
Total Analysis Volume [veh/h]	1	18	0	1	47	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.31	0.00	8.84	9.27	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.92	0.92	0.09	0.09	0.00	0.00
d_A, Approach Delay [s/veh]	0.38		9.27		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.25					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	0	35	13	2	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	35	13	2	2	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	10	4	1	1	0
Total Analysis Volume [veh/h]	0	38	14	2	2	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.82	8.45	7.24	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.73	2.73	0.59	0.59	0.00	0.00
d_A, Approach Delay [s/veh]	8.45		6.33		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.41					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.2
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	7	9	371	17	12	377
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	9	371	17	12	377
Peak Hour Factor	0.8295	0.8295	0.8295	0.8295	0.8295	0.8295
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	3	112	5	4	114
Total Analysis Volume [veh/h]	8	11	447	20	14	454
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	15.16	9.75	0.00	0.00	8.34	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.04	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	1.69	1.09	0.00	0.00	0.97	0.00
d_A, Approach Delay [s/veh]	12.03		0.00		0.25	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.36					
Intersection LOS	C					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	20	0	2	48	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	20	0	2	48	0
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	6	0	1	14	0
Total Analysis Volume [veh/h]	2	24	0	2	58	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.33	0.00	8.94	9.33	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.28	1.28	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.56		9.33		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.39					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	7	48	20	2	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	48	20	2	3	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	13	5	1	1	1
Total Analysis Volume [veh/h]	8	52	22	2	3	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.05	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.01	8.54	7.25	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.50	4.50	0.95	0.95	0.00	0.00
d_A, Approach Delay [s/veh]	8.60		6.65		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.59					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	39.1
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.124

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	14	11	1068	42	12	421
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	291	11	3	115
Total Analysis Volume [veh/h]	15	12	1163	46	13	459
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.12	0.03	0.01	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	39.08	13.39	0.00	0.00	11.43	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.41	0.08	0.00	0.00	0.07	0.00
95th-Percentile Queue Length [ft/ln]	10.34	2.09	0.00	0.00	1.74	0.00
d_A, Approach Delay [s/veh]	27.66		0.00		0.31	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.52					
Intersection LOS	E					

THIRD STREET GRADE SEPARATION /COMMERCE STREET RELOCATION PROJECT

EXISTING PLUS PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	1	14	0	1	36	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	18	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	18	0	1	54	0
Peak Hour Factor	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	6	0	0	18	0
Total Analysis Volume [veh/h]	1	24	0	1	71	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.36	0.00	8.99	9.40	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.25	1.25	0.09	0.09	0.00	0.00
d_A, Approach Delay [s/veh]	0.29		9.40		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.17					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	0	35	13	2	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	4	18	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	1	0	0	0	0	0
Total Hourly Volume [veh/h]	5	35	13	6	20	7
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	10	4	2	5	2
Total Analysis Volume [veh/h]	5	38	14	7	22	8
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.99	8.58	7.29	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.02	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.25	3.25	0.59	0.59	0.00	0.00
d_A, Approach Delay [s/veh]	8.63		4.86		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.03					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.4
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.034

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	7	9	371	17	12	377
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	3	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	12	371	19	14	377
Peak Hour Factor	0.8295	0.8295	0.8295	0.8295	0.8295	0.8295
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	4	112	6	4	114
Total Analysis Volume [veh/h]	12	14	447	23	17	454
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.02	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	15.42	9.78	0.00	0.00	8.36	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.10	0.06	0.00	0.00	0.05	0.00
95th-Percentile Queue Length [ft/ln]	2.60	1.39	0.00	0.00	1.19	0.00
d_A, Approach Delay [s/veh]	12.39		0.00		0.30	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.48					
Intersection LOS	C					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	20	0	2	48	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	24	0	2	55	0
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	7	0	1	17	0
Total Analysis Volume [veh/h]	2	29	0	2	66	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.35	0.00	9.00	9.38	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.54	1.54	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.47		9.38		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.34					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	7	48	20	2	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	4	7	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	3	0	0	0	0	0
Total Hourly Volume [veh/h]	14	48	20	6	10	4
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	13	5	2	3	1
Total Analysis Volume [veh/h]	15	52	22	7	11	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.05	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.12	8.61	7.27	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.19	5.19	0.93	0.93	0.00	0.00
d_A, Approach Delay [s/veh]	8.73		5.52		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.71					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	39.8
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.134

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	12	1068	44	14	421
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	291	12	4	115
Total Analysis Volume [veh/h]	16	13	1163	48	15	459
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.13	0.03	0.01	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	39.84	13.42	0.00	0.00	11.47	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.45	0.09	0.00	0.00	0.08	0.00
95th-Percentile Queue Length [ft/ln]	11.24	2.28	0.00	0.00	2.02	0.00
d_A, Approach Delay [s/veh]	28.00		0.00		0.36	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.57					
Intersection LOS	E					

THIRD STREET GRADE SEPARATION /COMMERCE STREET RELOCATION PROJECT

OPENING YEAR (2026)

WITHOUT PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	1	14	0	1	36	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	15	0	1	37	0
Peak Hour Factor	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	5	0	0	12	0
Total Analysis Volume [veh/h]	1	20	0	1	48	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.31	0.00	8.85	9.27	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.02	1.02	0.09	0.09	0.00	0.00
d_A, Approach Delay [s/veh]	0.35		9.27		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.24					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.036

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	0	35	13	2	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	36	14	2	2	1
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	10	4	1	1	0
Total Analysis Volume [veh/h]	0	39	15	2	2	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.84	8.45	7.24	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.11	0.03	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.80	2.80	0.63	0.63	0.00	0.00
d_A, Approach Delay [s/veh]	8.45		6.39		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.43					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.7
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.023

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	7	9	371	17	12	377
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	4	0	0	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	9	390	18	12	397
Peak Hour Factor	0.8295	0.8295	0.8295	0.8295	0.8295	0.8295
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	3	118	5	4	120
Total Analysis Volume [veh/h]	8	11	470	22	14	479
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	15.74	9.84	0.00	0.00	8.42	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.04	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	1.79	1.11	0.00	0.00	1.00	0.00
d_A, Approach Delay [s/veh]	12.32		0.00		0.24	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.35					
Intersection LOS	C					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	20	0	2	48	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	21	0	2	50	0
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	6	0	1	15	0
Total Analysis Volume [veh/h]	2	25	0	2	60	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.34	0.00	8.95	9.34	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.33	1.33	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.54		9.34		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.37					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	7	48	20	2	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	50	21	2	3	2
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	14	6	1	1	1
Total Analysis Volume [veh/h]	8	54	23	2	3	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.05	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.03	8.55	7.25	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.19	0.19	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.65	4.65	1.00	1.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.61		6.67		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.61					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	43.8
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.147

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	6	0	0	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	11	1117	44	12	444
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	304	12	3	121
Total Analysis Volume [veh/h]	16	12	1217	48	13	484
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.03	0.01	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	43.80	13.76	0.00	0.00	11.76	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.50	0.09	0.00	0.00	0.07	0.00
95th-Percentile Queue Length [ft/ln]	12.43	2.19	0.00	0.00	1.83	0.00
d_A, Approach Delay [s/veh]	30.93		0.00		0.31	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.57					
Intersection LOS	E					

THIRD STREET GRADE SEPARATION /COMMERCE STREET RELOCATION PROJECT

OPENING YEAR (2026)

WITH PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	1	14	0	1	36	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	18	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	19	0	1	55	0
Peak Hour Factor	0.7647	0.7647	0.7647	0.7647	0.7647	0.7647
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	6	0	0	18	0
Total Analysis Volume [veh/h]	1	25	0	1	72	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.36	0.00	9.00	9.40	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.30	1.30	0.09	0.09	0.00	0.00
d_A, Approach Delay [s/veh]	0.28		9.40		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.17					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	0	35	13	2	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	4	18	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	1	0	0	0	0	0
Total Hourly Volume [veh/h]	5	36	14	6	20	7
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	10	4	2	5	2
Total Analysis Volume [veh/h]	5	39	15	7	22	8
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.01	8.58	7.29	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.03	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.33	3.33	0.63	0.63	0.00	0.00
d_A, Approach Delay [s/veh]	8.63		4.97		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.10					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	16.0
Analysis Method:	HCM 7th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	7	9	371	17	12	377
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	3	4	2	2	5
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	12	390	20	14	397
Peak Hour Factor	0.8295	0.8295	0.8295	0.8295	0.8295	0.8295
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	4	118	6	4	120
Total Analysis Volume [veh/h]	12	14	470	24	17	479
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.02	0.00	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	16.02	9.87	0.00	0.00	8.43	0.00
Movement LOS	C	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.11	0.06	0.00	0.00	0.05	0.00
95th-Percentile Queue Length [ft/ln]	2.75	1.42	0.00	0.00	1.22	0.00
d_A, Approach Delay [s/veh]	12.71		0.00		0.29	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.47					
Intersection LOS	C					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	20	0	2	48	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	25	0	2	57	0
Peak Hour Factor	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	8	0	1	17	0
Total Analysis Volume [veh/h]	2	30	0	2	68	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.35	0.00	9.02	9.39	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.60	1.60	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.46		9.39		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.33					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	7	48	20	2	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	4	7	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	3	0	0	0	0	0
Total Hourly Volume [veh/h]	14	50	21	6	10	4
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	14	6	2	3	1
Total Analysis Volume [veh/h]	15	54	23	7	11	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.05	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.14	8.62	7.27	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.36	5.36	0.97	0.97	0.00	0.00
d_A, Approach Delay [s/veh]	8.73		5.58		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.75					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	44.7
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.158

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	14	11	1068	42	12	421
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0400	1.0400	1.0400	1.0400	1.0400	1.0400
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	6	2	2	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	12	1117	46	14	444
Peak Hour Factor	0.9180	0.9180	0.9180	0.9180	0.9180	0.9180
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	304	13	4	121
Total Analysis Volume [veh/h]	17	13	1217	50	15	484
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.16	0.03	0.01	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	44.74	13.80	0.00	0.00	11.80	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.54	0.10	0.00	0.00	0.08	0.00
95th-Percentile Queue Length [ft/ln]	13.47	2.38	0.00	0.00	2.12	0.00
d_A, Approach Delay [s/veh]	31.33		0.00		0.35	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.62					
Intersection LOS	E					

THIRD STREET GRADE SEPARATION /COMMERCE STREET RELOCATION PROJECT

BUILDOUT YEAR 2045

WITHOUT PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	15	0	2	39	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	15	0	2	39	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	4	0	1	10	0
Total Analysis Volume [veh/h]	2	16	0	2	41	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.30	0.00	8.81	9.24	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.03	0.03	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.87	0.87	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.81		9.24		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.54					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.5
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.037

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	0	38	15	2	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	38	15	2	2	1
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	10	4	1	1	0
Total Analysis Volume [veh/h]	0	40	16	2	2	1
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.85	8.46	7.24	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.12	0.12	0.03	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.88	2.88	0.67	0.67	0.00	0.00
d_A, Approach Delay [s/veh]	8.46		6.44		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.44					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	14.8
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	7	9	410	19	13	417
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	9	410	19	13	417
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	2	108	5	3	110
Total Analysis Volume [veh/h]	7	9	432	20	14	439
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.01	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	14.80	9.69	0.00	0.00	8.30	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.04	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	1.43	0.88	0.00	0.00	0.96	0.00
d_A, Approach Delay [s/veh]	11.92		0.00		0.26	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.33					
Intersection LOS	B					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	21	0	2	50	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	21	0	2	50	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	6	0	1	13	0
Total Analysis Volume [veh/h]	2	22	0	2	53	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.32	0.00	8.90	9.30	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.18	1.18	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.61		9.30		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.42					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	7	51	21	2	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	7	51	21	2	3	2
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	13	6	1	1	1
Total Analysis Volume [veh/h]	7	54	22	2	3	2
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.05	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.01	8.54	7.25	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.18	0.18	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	4.56	4.56	0.95	0.95	0.00	0.00
d_A, Approach Delay [s/veh]	8.60		6.65		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.60					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	41.3
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.139

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	15	11	1128	44	12	448
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	11	1128	44	12	448
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	297	12	3	118
Total Analysis Volume [veh/h]	16	12	1187	46	13	472
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.03	0.01	0.00	0.02	0.00
d_M, Delay for Movement [s/veh]	41.31	13.55	0.00	0.00	11.57	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.47	0.09	0.00	0.00	0.07	0.00
95th-Percentile Queue Length [ft/ln]	11.68	2.13	0.00	0.00	1.78	0.00
d_A, Approach Delay [s/veh]	29.41		0.00		0.31	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.56					
Intersection LOS	E					

THIRD STREET GRADE SEPARATION /COMMERCE STREET RELOCATION PROJECT

BUILDOUT YEAR 2045

WITH PROJECT

AM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	15	0	2	39	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	18	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	19	0	2	57	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	5	0	1	15	0
Total Analysis Volume [veh/h]	2	20	0	2	60	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.34	0.00	8.93	9.34	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.04	0.04	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.08	1.08	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.67		9.34		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.40					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	0	38	15	2	2	1
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	4	18	6
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	1	0	0	0	0	0
Total Hourly Volume [veh/h]	5	38	15	6	20	7
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	10	4	2	5	2
Total Analysis Volume [veh/h]	5	40	16	6	21	7
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.04	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.01	8.58	7.29	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.14	0.14	0.03	0.03	0.00	0.00
95th-Percentile Queue Length [ft/ln]	3.40	3.40	0.67	0.67	0.00	0.00
d_A, Approach Delay [s/veh]	8.63		5.30		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.31					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.0
Analysis Method:	HCM 7th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.030

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	7	9	410	19	13	417
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	3	3	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	12	410	21	15	417
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	3	108	6	4	110
Total Analysis Volume [veh/h]	11	13	432	22	16	439
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.02	0.00	0.00	0.01	0.00
d_M, Delay for Movement [s/veh]	15.00	9.72	0.00	0.00	8.31	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.05	0.00	0.00	0.04	0.00
95th-Percentile Queue Length [ft/ln]	2.29	1.28	0.00	0.00	1.10	0.00
d_A, Approach Delay [s/veh]	12.14		0.00		0.29	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	0.45					
Intersection LOS	B					

PM PEAK HOUR

Intersection Level Of Service Report
Intersection 8: Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name	Commerce St		Commerce St		5th St	
Approach	Northbound		Southbound		Westbound	
Lane Configuration						
Turning Movement	Thru	Right	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	Commerce St		Commerce St		5th St	
Base Volume Input [veh/h]	2	21	0	2	50	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	4	0	0	7	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	25	0	2	57	0
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	7	0	1	15	0
Total Analysis Volume [veh/h]	2	26	0	2	60	0
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Free	Stop	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance		No	
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	7.34	0.00	8.96	9.34	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.06	0.06	0.01	0.01	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.39	1.39	0.18	0.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.52		9.34		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.37					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 12: New Commerce St (NS) at 5th St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 7th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name	New Commerce St		5th St		5th St	
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	0	0	0	0	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	0	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	0.00	0.00	0.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name	New Commerce St		5th St		5th St	
Base Volume Input [veh/h]	7	51	21	2	3	2
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	4	7	2
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	3	0	0	0	0	0
Total Hourly Volume [veh/h]	14	51	21	6	10	4
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	13	6	2	3	1
Total Analysis Volume [veh/h]	15	54	22	6	11	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.05	0.01	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.12	8.62	7.27	0.00	0.00	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.04	0.04	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.35	5.35	0.93	0.93	0.00	0.00
d_A, Approach Delay [s/veh]	8.73		5.71		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.81					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 13: New Commerce St (NS) at 3rd St (EW)

Control Type:	Two-way stop	Delay (sec / veh):	42.2
Analysis Method:	HCM 7th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.150

Intersection Setup

Name			3rd St		3rd St	
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Entry Pocket	0	1	0	0	1	0
Entry Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
No. of Lanes in Exit Pocket	0	0	0	1	0	0
Exit Pocket Length [ft]	0.00	0.00	0.00	100.00	0.00	0.00
Speed [mph]	25.00		40.00		40.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name			3rd St		3rd St	
Base Volume Input [veh/h]	15	11	1128	44	12	448
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	1	0	2	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	16	12	1128	46	14	448
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	3	297	12	4	118
Total Analysis Volume [veh/h]	17	13	1187	48	15	472
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

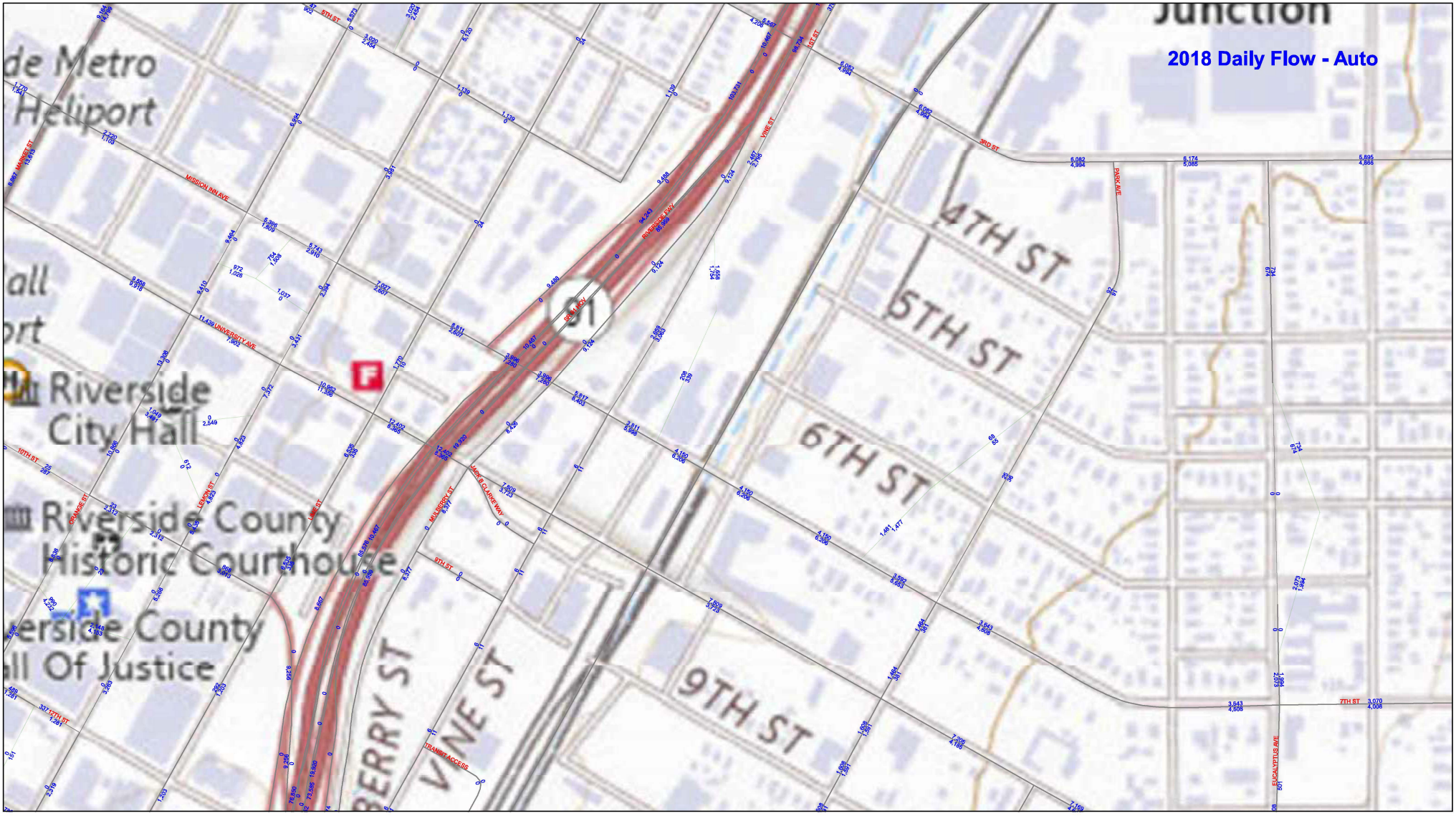
Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

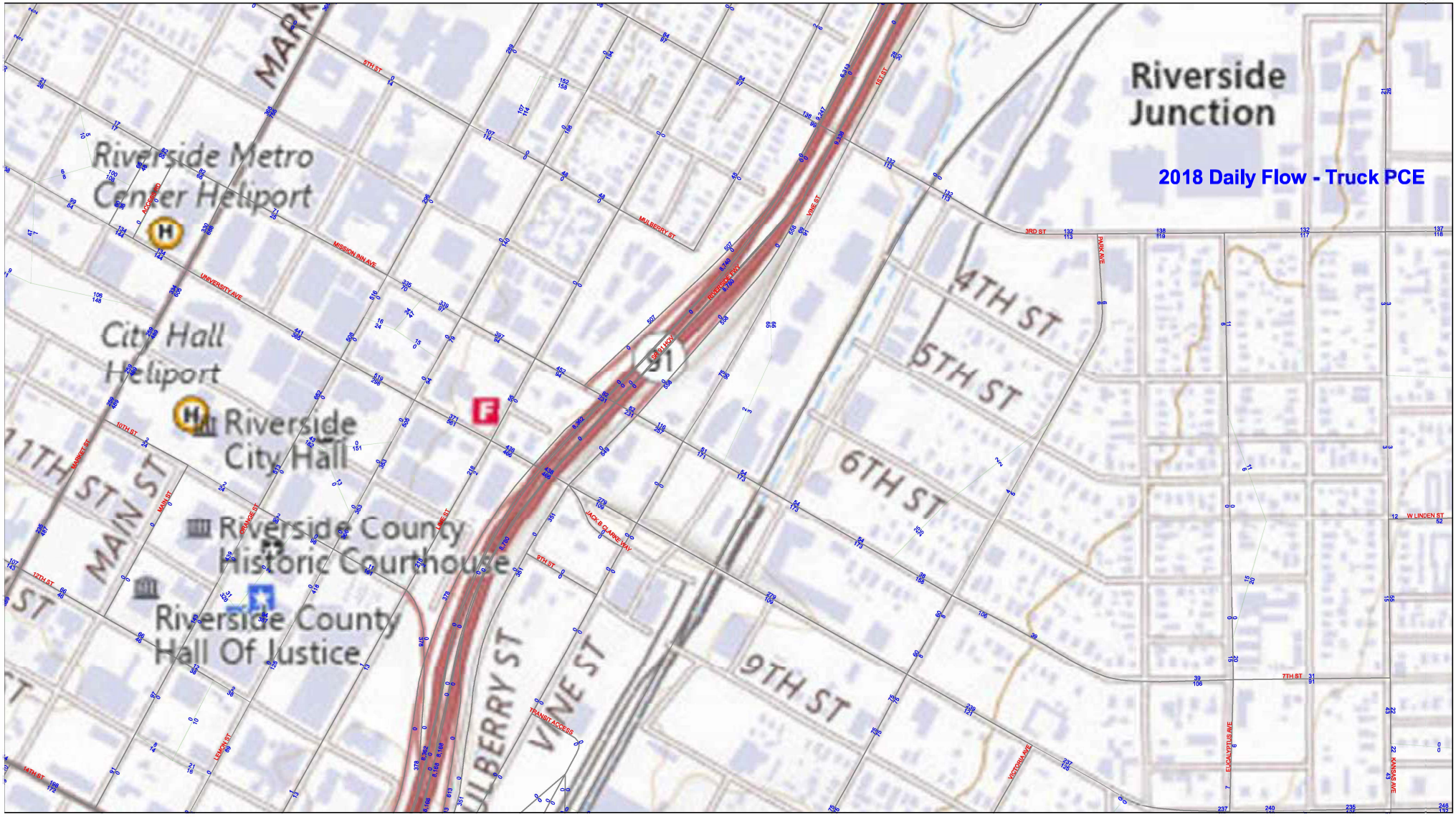
Movement, Approach, & Intersection Results

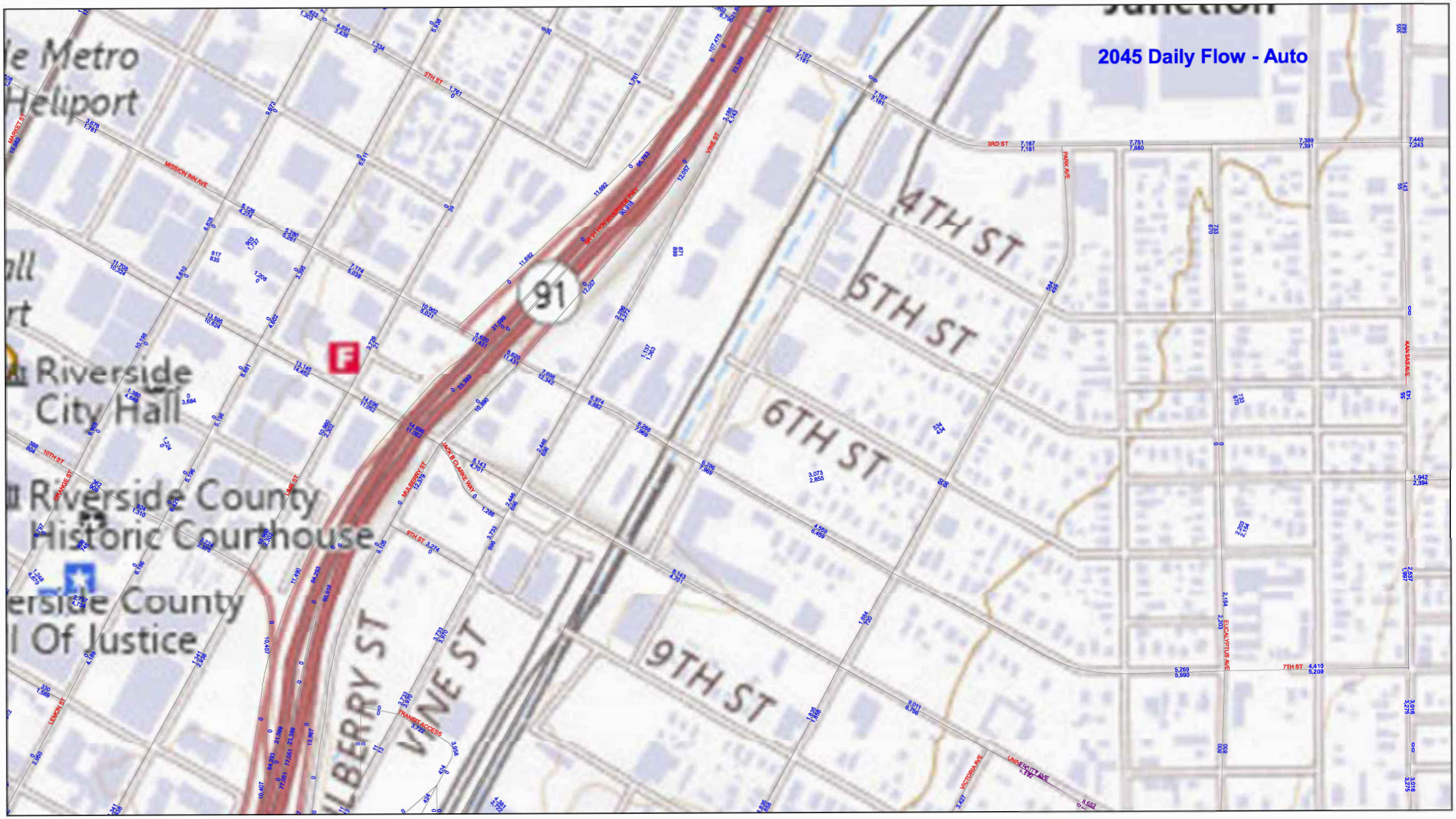
V/C, Movement V/C Ratio	0.15	0.03	0.01	0.00	0.03	0.00
d_M, Delay for Movement [s/veh]	42.16	13.58	0.00	0.00	11.61	0.00
Movement LOS	E	B	A	A	B	A
95th-Percentile Queue Length [veh/ln]	0.51	0.09	0.00	0.00	0.08	0.00
95th-Percentile Queue Length [ft/ln]	12.66	2.32	0.00	0.00	2.06	0.00
d_A, Approach Delay [s/veh]	29.77		0.00		0.36	
Approach LOS	D		A		A	
d_I, Intersection Delay [s/veh]	0.61					
Intersection LOS	E					

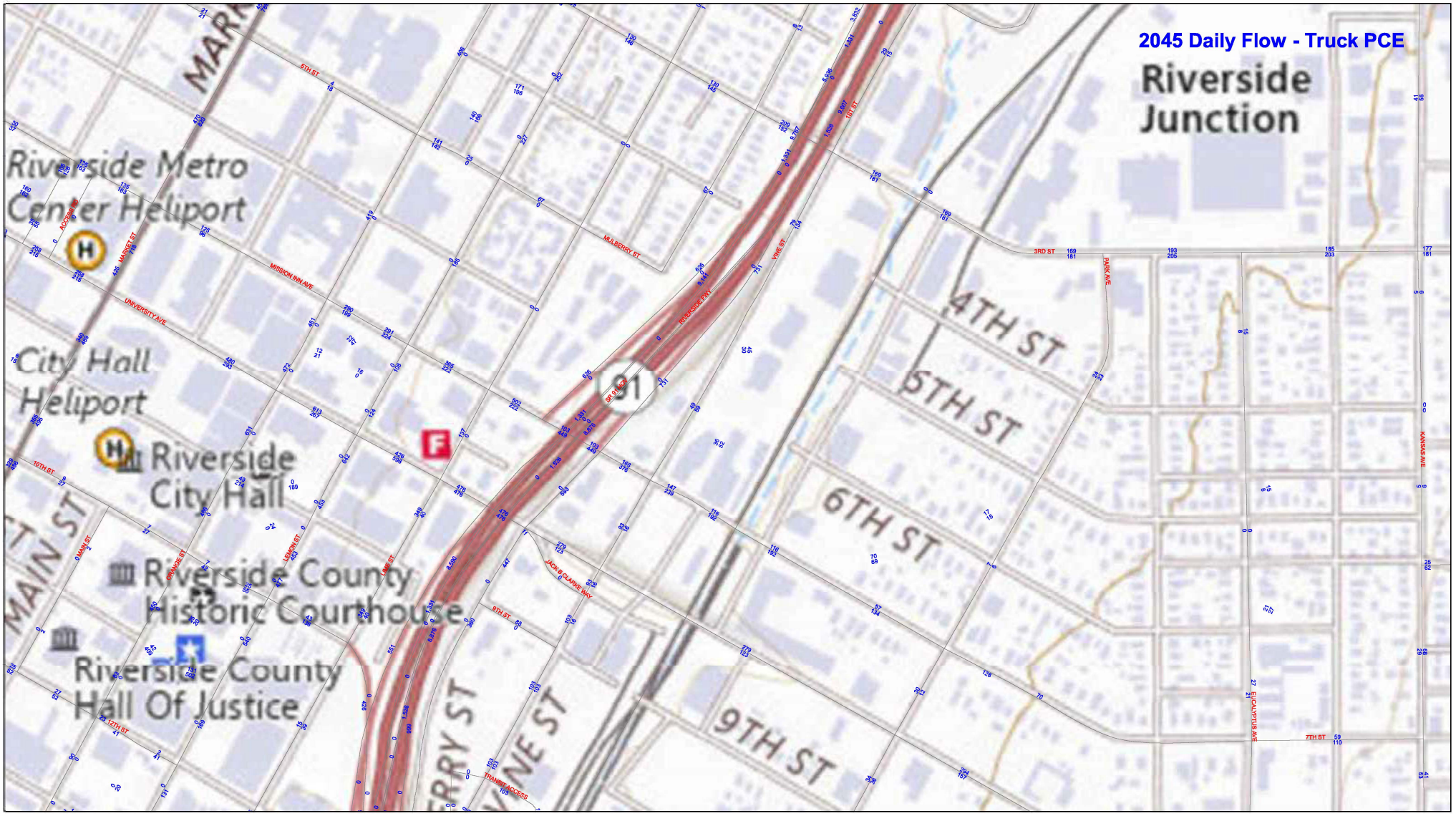
APPENDIX E

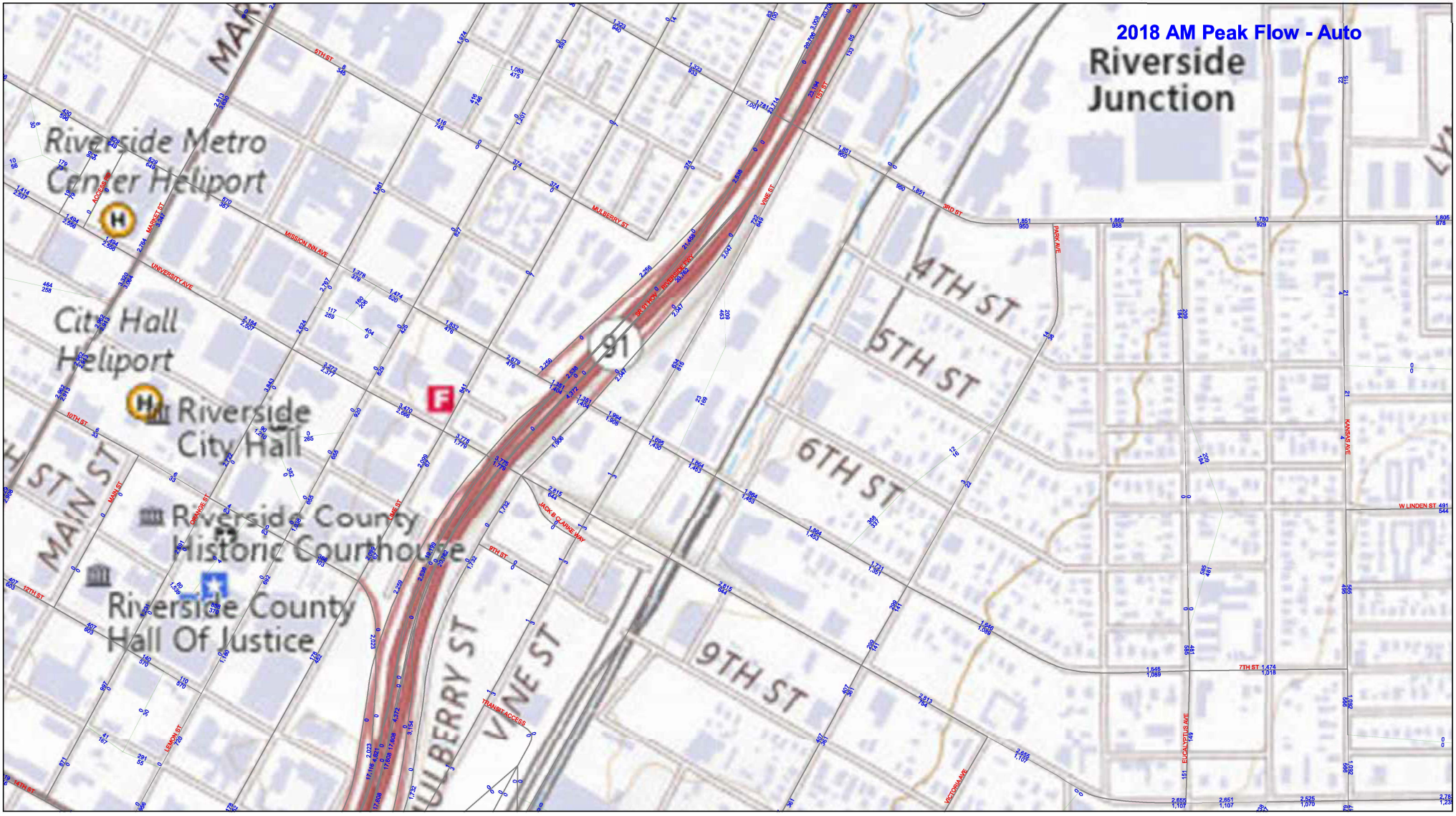
TRAVEL DEMAND MODEL PLOTS

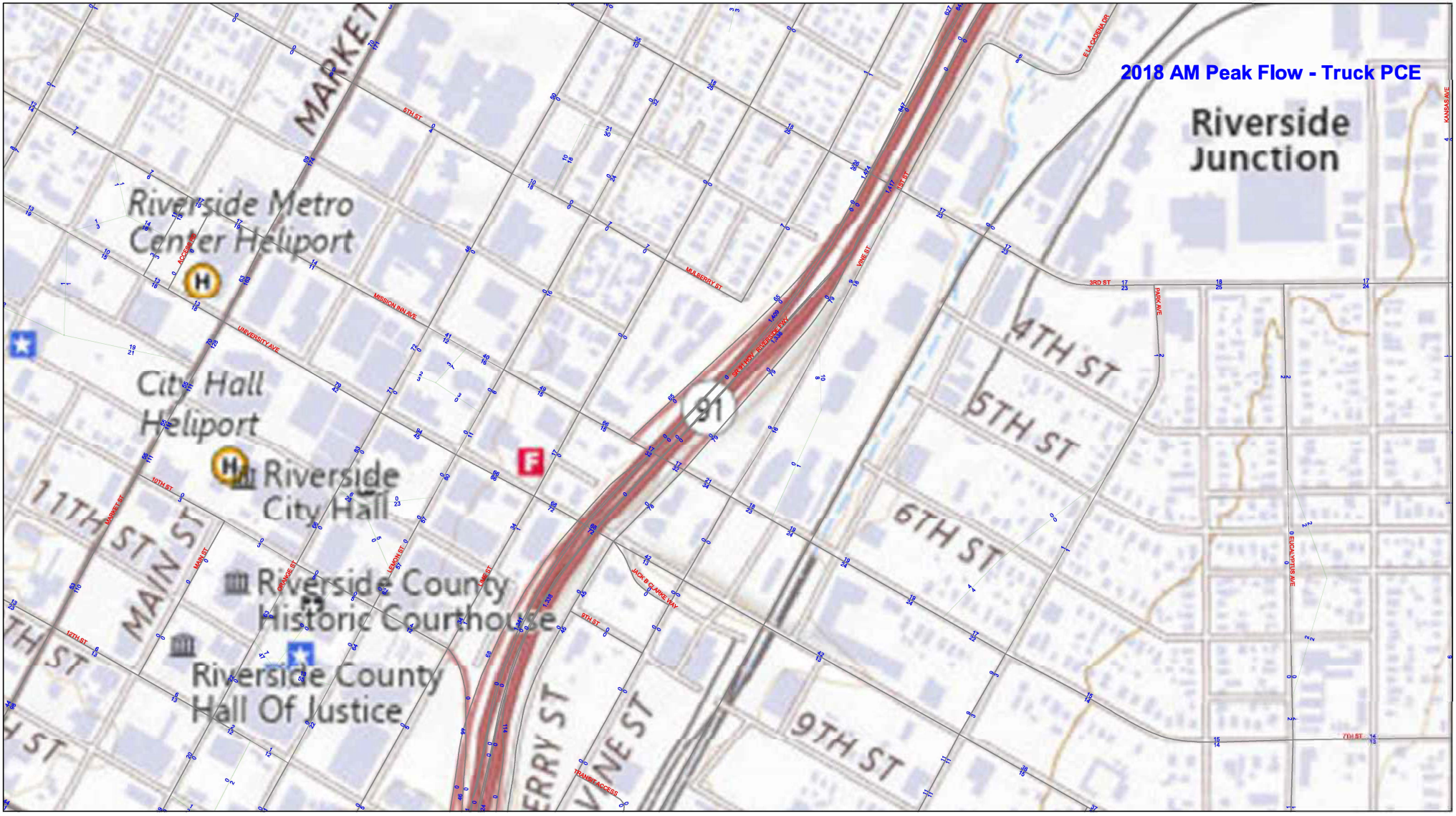

2018 Daily Flow - Auto
Junction
de Metro
Heliport
Riverside
City Hall
Riverside County
Historic Courthouse
erside County
ll Of Justice
4TH ST
5TH ST
6TH ST
9TH ST
BERRY ST
VINE ST
MISSION INN AVE
UNIVERSITY AVE
10TH ST
LEMON ST
ORANGE ST
MULBERRY ST
JACK B CLARKE WAY
9TH ST
TRANSIT ACCESS
3RD ST
PARK AVE
7TH ST
EUCALYPTUS AVE
RIVERSIDE FWY
SEMI HOV
91

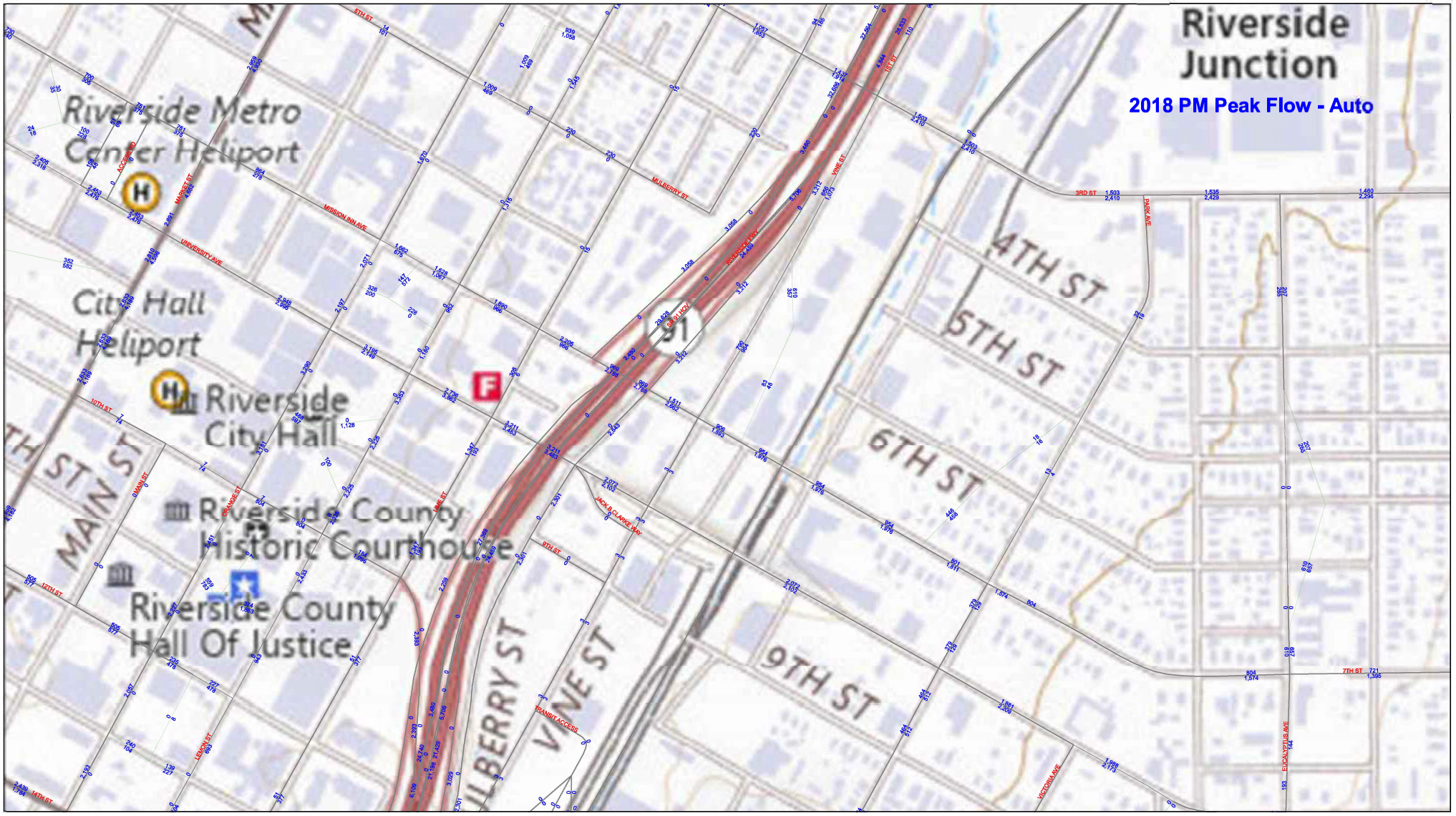

Riverside Junction
2018 Daily Flow - Truck PCE
Riverside Metro Center Heliport
City Hall Heliport
Riverside City Hall
Riverside County Historic Courthouse
Riverside County Hall Of Justice
MAIN ST
MULBERRY ST
VINE ST
4TH ST
5TH ST
6TH ST
9TH ST
91

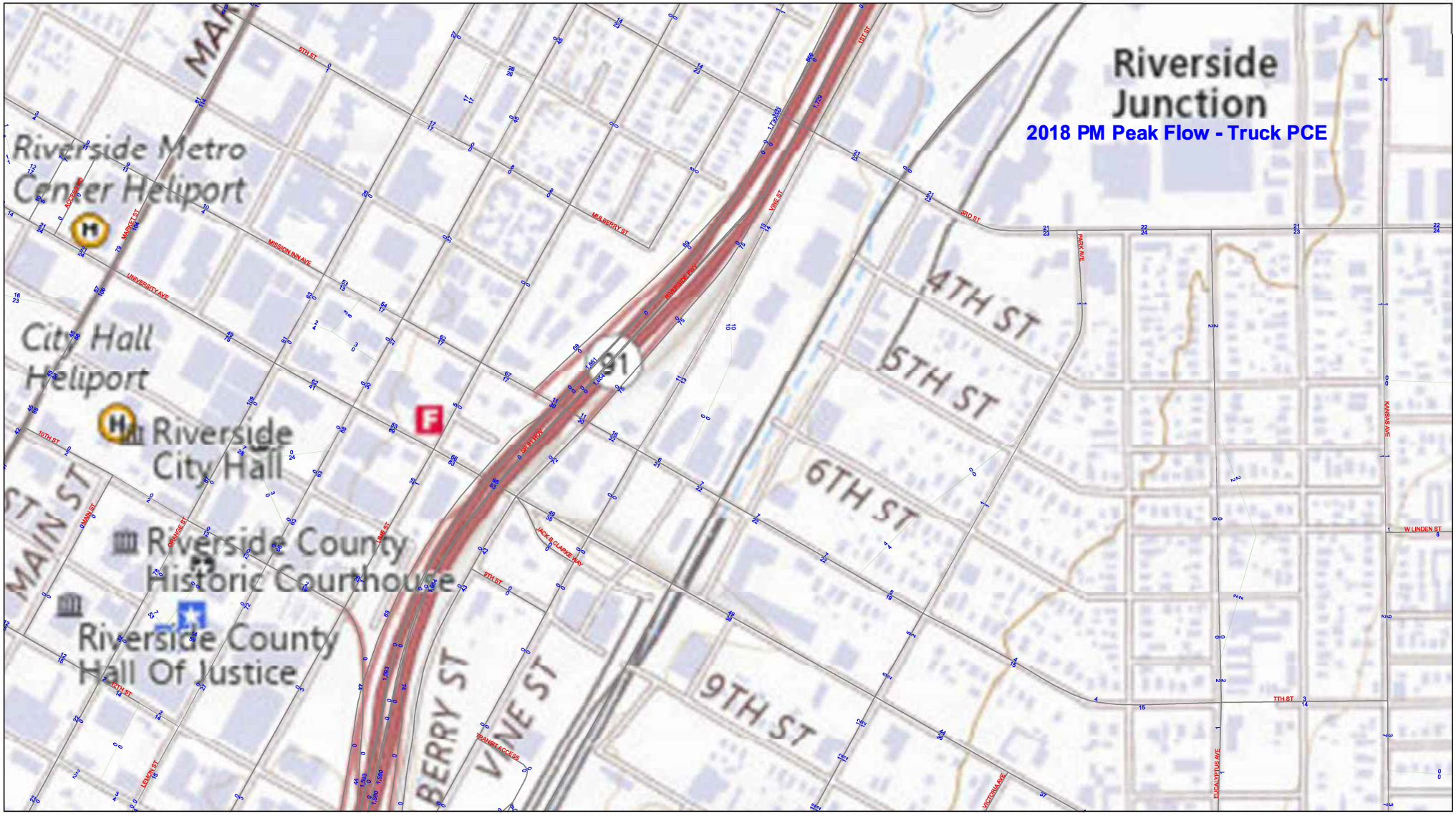

2045 Daily Flow - Auto
4TH ST
5TH ST
6TH ST
9TH ST
VINE ST
Riverside
City Hall
Riverside County
Historic Courthouse
91

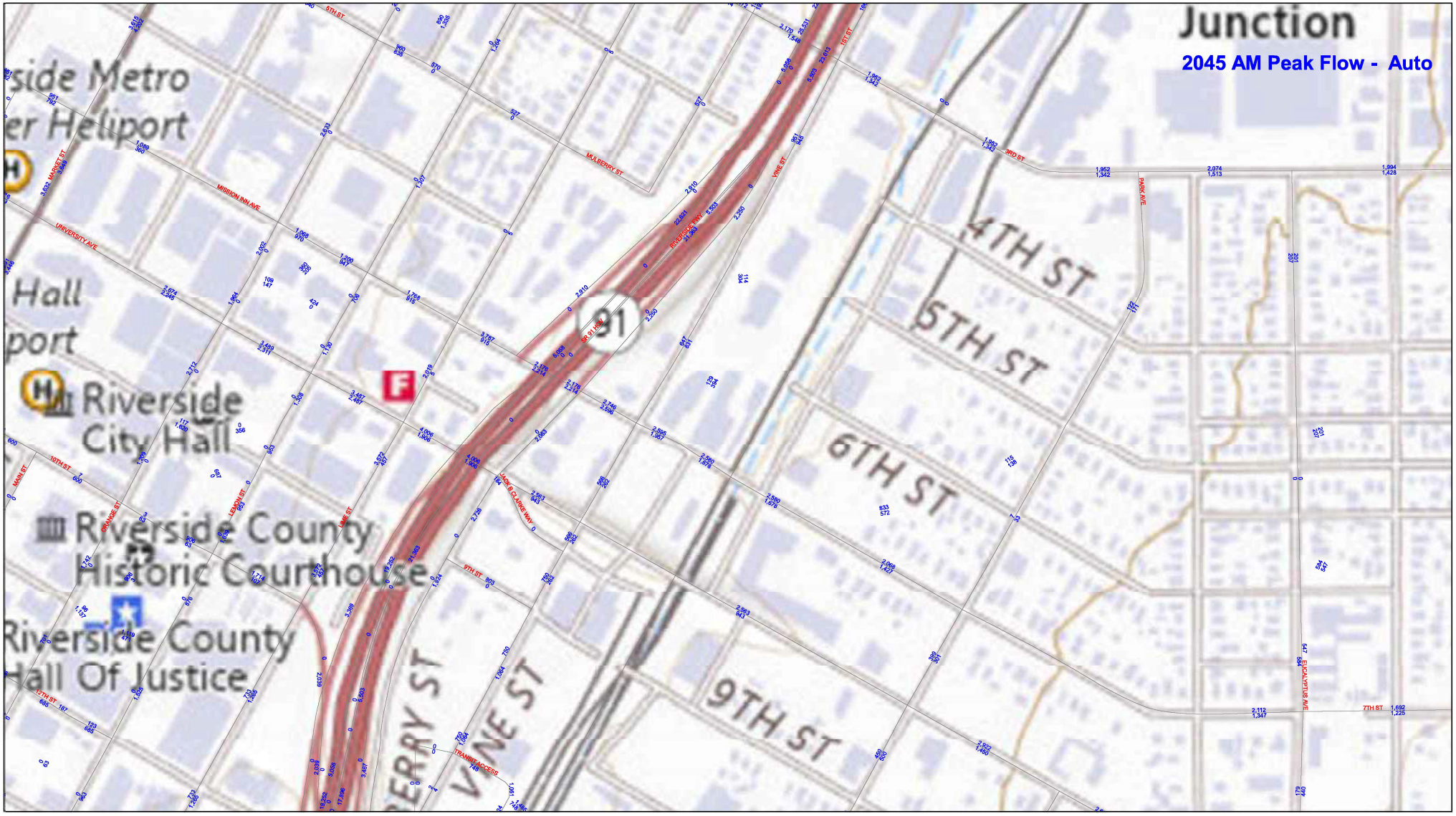

2045 Daily Flow - Truck PCE
Riverside Junction
Riverside Metro Center Heliport
City Hall Heliport
Riverside City Hall
Riverside County Historic Courthouse
Riverside County Hall Of Justice
4TH ST
5TH ST
6TH ST
9TH ST
MAIN ST
MULBERRY ST
MISSION INN AVE
UNIVERSITY AVE
MARKET ST
RIVERSIDE FWY
VINE ST
1ST ST
3RD ST
PARK AVE
KANSAS AVE
EUCALYPTUS AVE
7TH ST
10TH ST
12TH ST
9TH ST
JACK B CLARKE WAY
TRANSIT ACCESS
5TH ST
ACCESS RD
LEMON ST
LIME ST
ORANGE ST
MAIN ST
SR 91
91

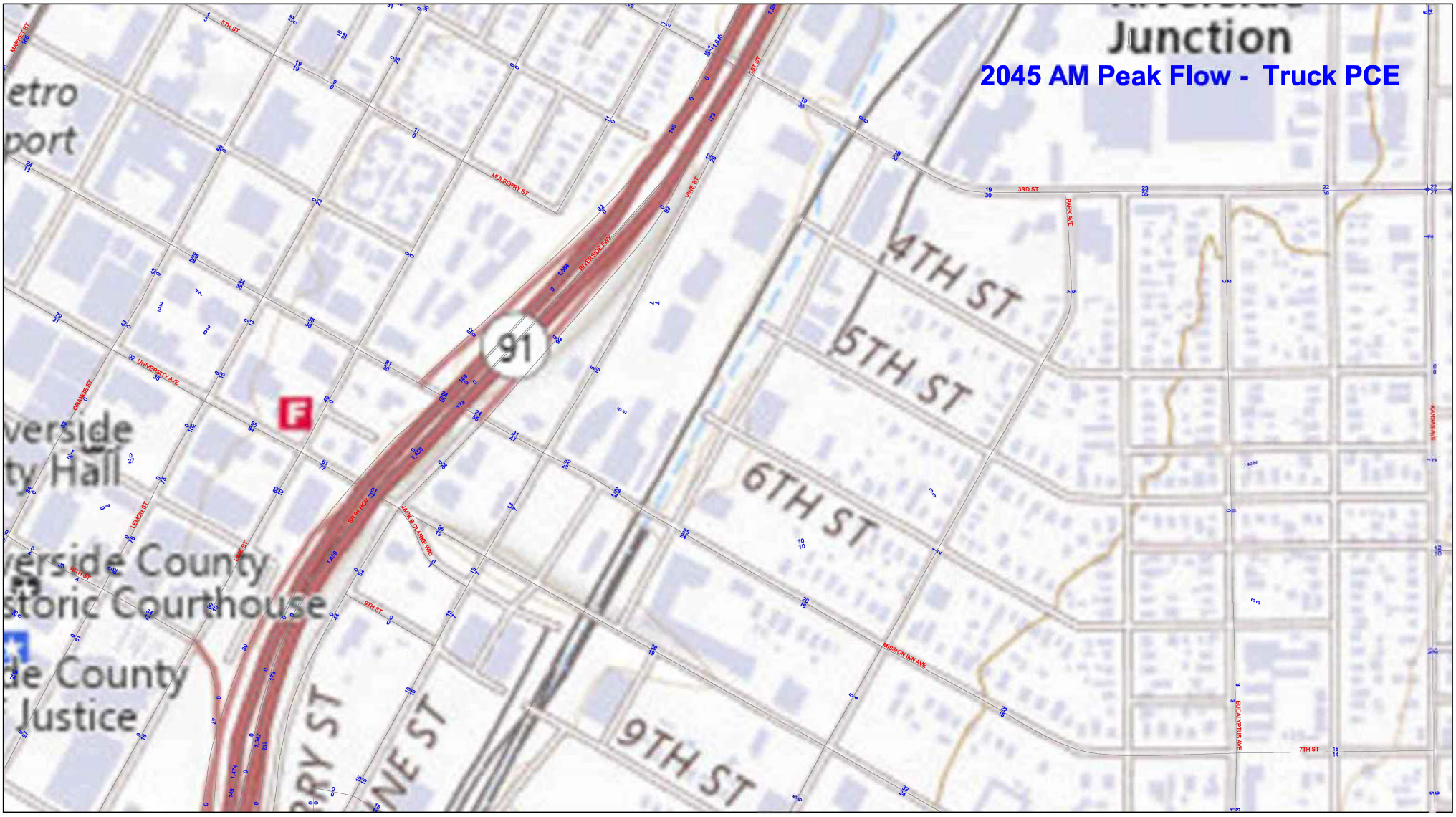

2018 AM Peak Flow - Auto
Riverside Junction
Riverside Metro Center Heliport
City Hall Heliport
Riverside City Hall
Riverside County Historic Courthouse
Riverside County Hall Of Justice
4TH ST
5TH ST
6TH ST
9TH ST
MAIN ST
MULBERRY ST
VINE ST
91

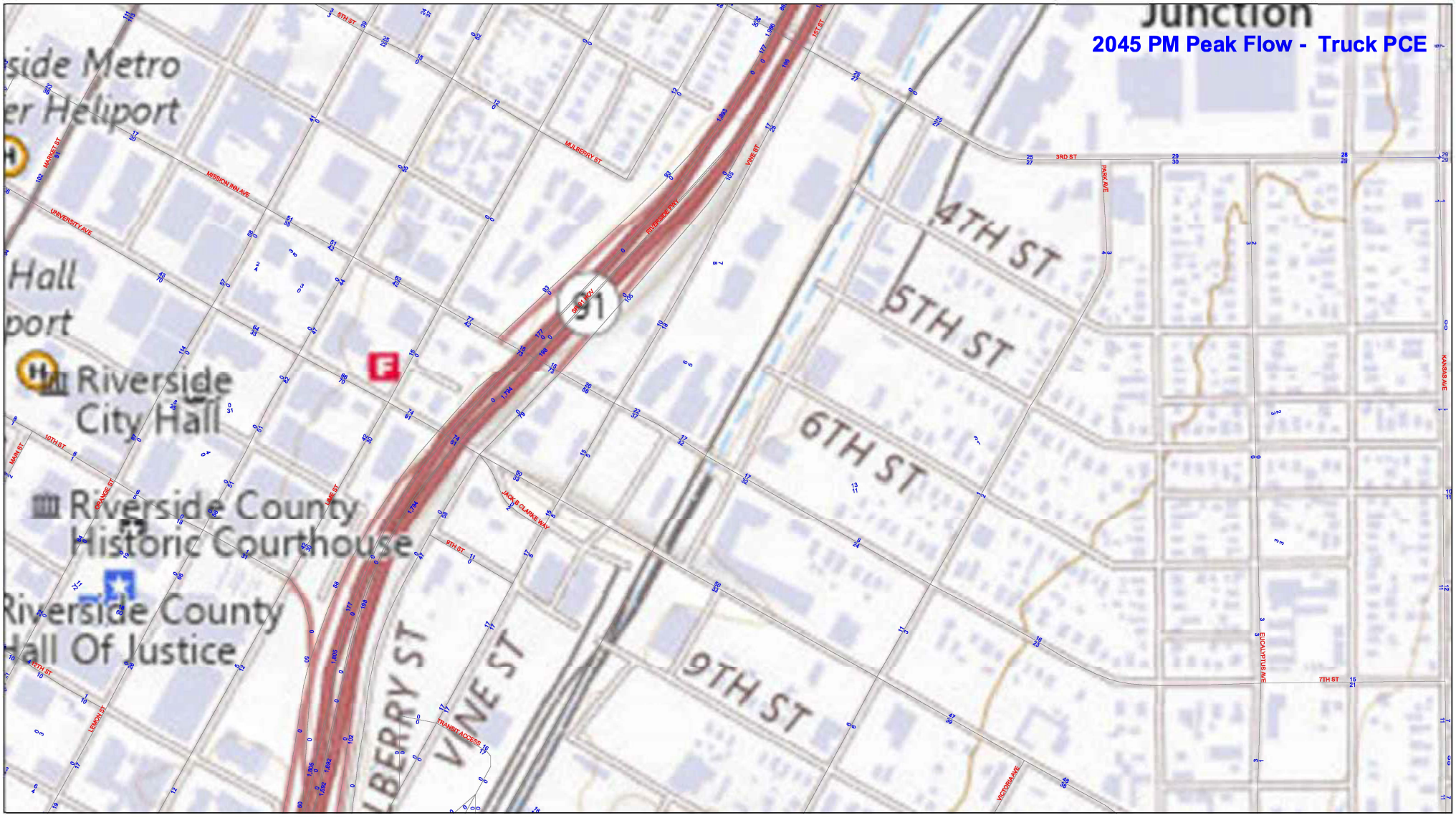

2018 AM Peak Flow - Truck PCE
Riverside Junction
Riverside Metro Center Heliport
City Hall Heliport
Riverside City Hall
Riverside County Historic Courthouse
Riverside County Hall Of Justice
MARKET ST
MAIN ST
11TH ST
4TH ST
5TH ST
6TH ST
9TH ST
91

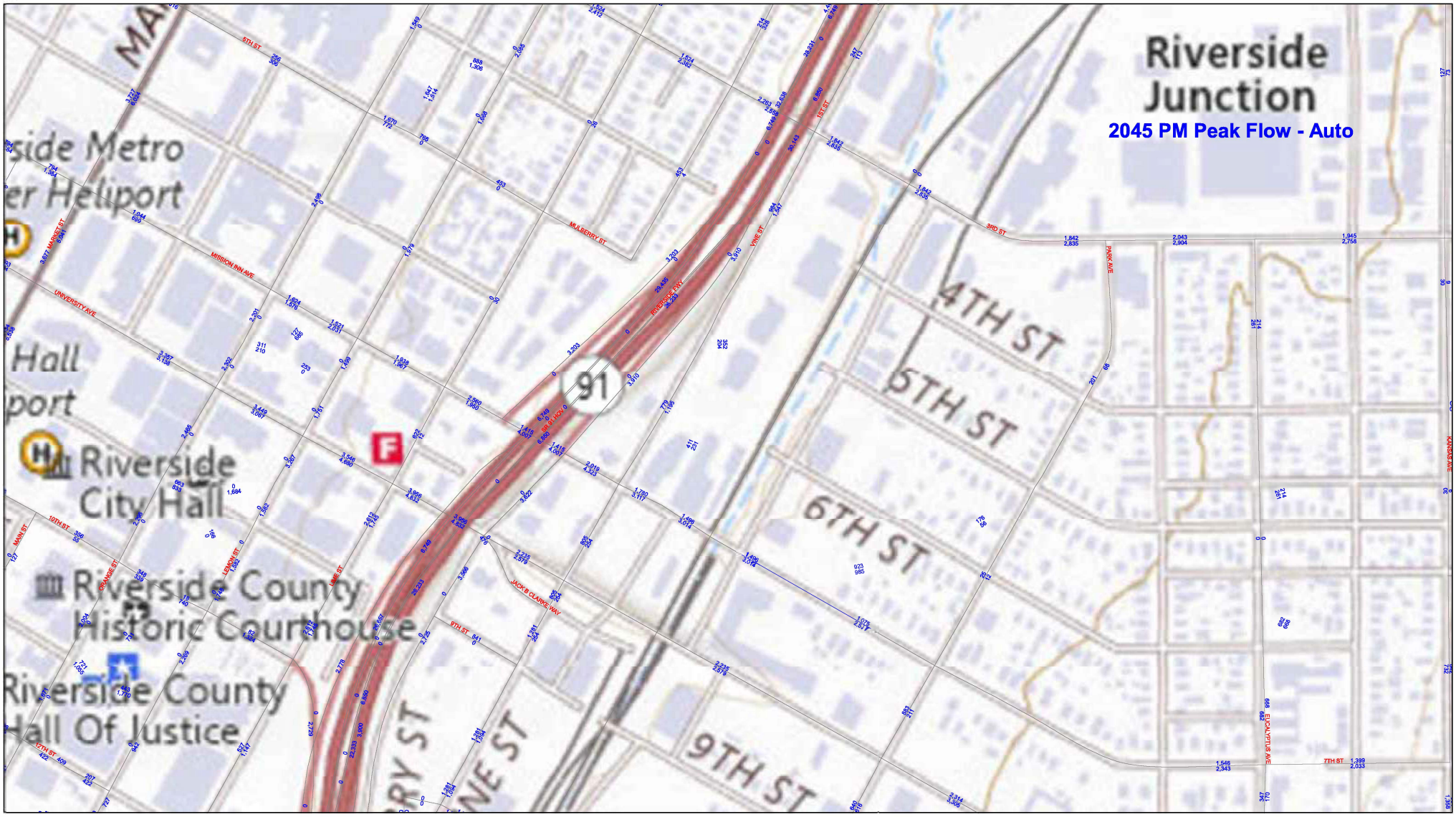

Riverside Junction
2018 PM Peak Flow - Auto
Riverside Metro Center Heliport
City Hall Heliport
Riverside City Hall
Riverside County Historic Courthouse
Riverside County Hall Of Justice
MAIN ST
MULBERRY ST
VINE ST
4TH ST
5TH ST
6TH ST
9TH ST
91


Riverside Junction
2018 PM Peak Flow - Truck PCE
Riverside Metro Center Heliport
City Hall Heliport
Riverside City Hall
Riverside County Historic Courthouse
Riverside County Hall Of Justice
MAIN ST
BERRY ST
VINE ST
4TH ST
5TH ST
6TH ST
9TH ST
5TH ST
MULBERRY ST
MISSION INN AVE
UNIVERSITY AVE
10TH ST
9TH ST
12TH ST
LEMON ST
JACK B CLARKE WAY
TRANSIT ACCESS
VICTORIA AVE
EUCALYPTUS AVE
7TH ST
W LINDEN ST
KANSAS AVE
PARK AVE
3RD ST
1ST ST
VINE ST
RIVERSIDE PKY
SR 91 HOV
91


Junction
2045 AM Peak Flow - Auto
Riverside City Hall
Riverside County Historic Courthouse
Riverside County Hall Of Justice
4TH ST
5TH ST
6TH ST
9TH ST
VINE ST
MISSION INN AVE
UNIVERSITY AVE
MULBERRY ST
3RD ST
PARK AVE
ELICALYPTUS AVE
7TH ST
10TH ST
12TH ST
MAIN ST
LEMON ST
LIME ST
9TH ST
JACK B CLARKE WAY
TRANSIT ACCESS
RIVERSIDE FWY
91


Junction
2045 AM Peak Flow - Truck PCE
4TH ST
5TH ST
6TH ST
9TH ST
91
MULBERRY ST
VINE ST
RIVERSIDE FWY
UNIVERSITY AVE
LEMON ST
JACK B CLARKE WAY
MISSION INN AVE
3RD ST
PARK AVE
ELCALYPTUS AVE
7TH ST
5TH ST
MARKET ST
ORANGE ST
10TH ST
9TH ST
SR 91 HOV
1ST ST
etro
port
verside
ty Hall
verside County
storic Courthouse
de County
Justice


2045 PM Peak Flow - Truck PCE
Junction
Riverside Metro
Heliport
Hall
port
Riverside
City Hall
Riverside County
Historic Courthouse
Riverside County
Hall Of Justice
4TH ST
5TH ST
6TH ST
9TH ST
MULBERRY ST
VINE ST
MARKET ST
MISSION INN AVE
UNIVERSITY AVE
10TH ST
MAIN ST
ORANGE ST
LIME ST
9TH ST
JACK B CLARKE WAY
TRANSIT ACCESS
LEMON ST
3RD ST
PARK AVE
7TH ST
EUCALYPTUS AVE
VICTORIA AVE
KANSAS AVE
91


Riverside Junction
2045 PM Peak Flow - Auto
Riverside City Hall
Riverside County Historic Courthouse
Riverside County Hall Of Justice
4TH ST
5TH ST
6TH ST
9TH ST
91
MULBERRY ST
MISSION INN AVE
UNIVERSITY AVE
VINE ST
1ST ST
3RD ST
PARK AVE
JACK B CLARKE WAY
9TH ST
7TH ST
EUCALYPTUS AVE
KANSAS AVE
MAIN ST
10TH ST
12TH ST
ORANGE ST
LEMON ST
LIME ST
MARKET ST
5TH ST

APPENDIX F

TRAVEL DEMAND POST PROCESSING WORKSHEETS

AVERAGE DAILY TRAFFIC

ID	INTERSECTION	LEG	MODEL 2018 ADT	EXISTING 2024 ADT	MODEL 2045 ADT	FUTURE 2045 ADT[1]	OPENING 2026 ADT	ADJUSTED BUILDOUT ADT[2]
1	Lime Street at:	North	24	8,900	39	8,900	8,900	9,800
	Mission Inn Avenue	South	1,835	11,100	3,887	12,700	11,300	12,700
		East	11,964	13,800	16,647	18,300	14,100	18,300
		West	10,125	9,700	12,799	14,100	9,900	14,100
2	SR-91 Off Ramp at:	North	9,995	7,800	12,318	13,500	8,000	13,500
	Mission Inn Avenue	South	-	-	-	-	-	-
		East	11,562	10,500	17,603	19,400	10,900	19,400
		West	11,964	13,700	16,647	18,300	14,000	18,300
3	Mulberry Street at:	North	9,682	9,700	12,788	14,100	9,900	14,100
	Mission Inn Avenue	South	8,975	5,500	11,483	12,600	5,700	12,600
		East	14,593	8,000	20,584	22,600	8,400	22,600
		West	11,589	10,400	17,603	19,400	10,800	19,400
4	Vine Street at:	North	5,892	4,800	5,696	6,300	4,800	6,300
	Mission Inn Avenue	South	17	2,800	3,251	3,600	3,000	3,600
		East	10,031	5,800	16,242	17,900	6,300	17,900
		West	14,593	7,800	20,584	22,600	8,200	22,600
5	Commerce Street at:	North	-	1,000	-	1,000	1,010	1,110
	Mission Inn Ave	South	-	2,000	-	2,000	2,020	2,220
		East	10,583	4,500	14,563	16,000	4,800	16,000
		West	10,583	5,900	14,563	16,000	6,200	16,000
6	Park Avenue at:	North	5,892	2,400	131	2,400	2,420	2,660
	Mission Inn Ave	South	5,892	4,300	2,646	4,300	4,340	4,770
		East	8,396	2,700	11,457	12,600	2,900	12,600
		West	9,441	4,200	11,209	12,300	4,300	12,300
7	Commerce Street at:	North	9,682	-	-	-	-	-
	3rd Street	South	9,682	900	-	900	910	1,000
		East	11,321	18,100	14,698	20,700	18,400	20,700
		West	11,321	18,500	14,698	21,100	18,800	21,100
8	Commerce Street at:	North	-	900	-	900	910	1,030
	5th Street	South	-	900	-	900	910	1,030
		East	-	200	-	200	200	230
		West	-	-	-	-	-	-
9	Commerce Street at:	North	-	900	-	900	910	1,030
	6th Street	South	-	900	-	900	910	1,030
		East	-	100	-	100	100	110
		West	-	-	-	-	-	-
10	Project Driveway at:	North	-	0	-	-	-	-
	Mission Inn Ave	South	-	400	-	400	400	440
		East	10,583	4,300	14,563	16,000	4,600	16,000
		West	10,583	4,500	14,563	16,000	4,800	16,000

Notes:

1. Future volumes adjusted for minimum 10% growth over existing average dally traffic volumes.
2. Future volumes adjusted for minimum 5% growth over opening year dally traffic volumes.

Lime Street (NS) / Mission Inn Avenue (EW) - #1

MORNING PEAK HOUR	EVENING PEAK HOUR
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):	EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):
2024 2 246 42	2024 26 257 51
< v >	< v >
10 ^ ^ 167	13 ^ ^ 148
213 > < 506	336 > < 313
78 v v 382	99 v v 190
< ^ >	< ^ >
27 126 45	22 244 116
EXISTING PEAK HOUR COUNT YEAR (AUTOS):	EXISTING PEAK HOUR COUNT YEAR (AUTOS):
2024 290 303	2024 334 405
v ^	v ^
535 < IN = 1844 < 1055	361 < IN = 1815 < 651
301 > OUT = 1844 > 300	448 > OUT = 1815 > 503
v ^	v ^
706 198	546 382
EXISTING PEAK PERIOD MODEL YEAR (AUTO):	EXISTING PEAK PERIOD MODEL YEAR (AUTO):
2018 0 7	2018 0 15
v ^	v ^
1832 < IN = 3157 < 2679	1890 < IN = 3177 < 2205
476 > OUT = 3156 > 476	966 > OUT = 3176 > 966
v ^	v ^
841 2	305 6
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):	EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):
2018 0 0	2018 0 0
v ^	v ^
49 < IN = 81 < 66	62 < IN = 84 < 67
15 > OUT = 81 > 15	17 > OUT = 84 > 17
v ^	v ^
17 0	5 0
EXISTING PEAK HOUR MODEL YEAR (PCEs):	EXISTING PEAK HOUR MODEL YEAR (PCEs):
PHF FOR CARS: 0.38	PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.333	PHF FOR TRUCKS: 0.25
0 3	0 4
v ^	v ^
712 < IN = 1227 < 1040	545 < IN = 911 < 634
186 > OUT = 1226 > 186	275 > OUT = 910 > 275
v ^	v ^
325 1	87 2
FUTURE PEAK PERIOD MODEL YEAR (AUTO):	FUTURE PEAK PERIOD MODEL YEAR (AUTO):
2045 0 5	2045 0 30
v ^	v ^
1768 < IN = 4707 < 3787	1938 < IN = 4539 < 2560
915 > OUT = 4707 > 915	1967 > OUT = 4540 > 1950
v ^	v ^
2019 5	622 12
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):	FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):
2045 0 0	2045 0 0
v ^	v ^
35 < IN = 111 < 81	62 < IN = 119 < 77
30 > OUT = 111 > 30	42 > OUT = 119 > 42
v ^	v ^
46 0	15 0
FUTURE PEAK HOUR MODEL YEAR (PCEs):	FUTURE PEAK HOUR MODEL YEAR (PCEs):
PHF FOR CARS: 0.38	PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.333	PHF FOR TRUCKS: 0.25
0 2	0 8
v ^	v ^
683 < IN = 1826 < 1466	558 < IN = 1301 < 736
358 > OUT = 1826 > 358	561 > OUT = 1301 > 557
v ^	v ^
783 2	178 3
RAW GROWTH (PCEs): 2018 TO 2045	RAW GROWTH (PCEs): 2018 TO 2045
CONVERSION OF TRUCKS TO: 2045	CONVERSION OF TRUCKS TO: 2045
FACTOR = 1.00	FACTOR = 1.00
0 -1	0 4
v ^	v ^
-29 < < 426	13 < < 102
172 > > 172	287 > > 282
v ^	v ^
457 1	91 2

Lime Street (NS) / Mission Inn Avenue (EW) - #1

MORNING PEAK HOUR	EVENING PEAK HOUR
ADJUSTED GROWTH (PCEs): 2018 TO 2045 10.00 MINIMUM GROWTH % 30 30 v ^ 50 < IN = 630 < 430 170 > OUT = 710 > 170 v ^ 460 0	ADJUSTED GROWTH (PCEs): 2018 TO 2045 10 MINIMUM GROWTH % 30 40 v ^ 40 < IN = 420 < 100 290 > OUT = 450 > 280 v ^ 90 0
PRORATED GROWTH (PCEs): 2024 TO 2045 21 YEARS 20 20 v ^ 40 < < 330 130 > > 130 v ^ 360 0	PRORATED GROWTH (PCEs): 2024 TO 2045 21 YEARS 20 30 v ^ 30 < < 80 230 > > 220 v ^ 70 0
NEW PROJECTED VOLUMES (PCEs): 2045 310 320 v ^ 580 < < 1390 430 > > 430 v ^ 1070 200	NEW PROJECTED VOLUMES (PCEs): 2045 350 440 v ^ 390 < < 730 680 > > 720 v ^ 620 380
ADT BY LEG: 2045 9,800 N 14,080 W LEG E 18,310 S 12,700	ADT BY LEG: 2045 9,800 N 14,080 W LEG E 18,310 S 12,700

SR-91 Off Ramp (NS) / Mission Inn Avenue (EW) - #2

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2024

			871	0	161			
			<	v	>			
0	^					^	0	
308	>					<	182	
0	v					v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2024

				1032	0			
				v	^			
1053	<		IN =	1522		<	182	
308	>		OUT =	1522		>	469	
				v	^			
				0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2018

				2256	0			
				v	^			
2679	<		IN =	4083		<	1351	
476	>		OUT =	4083		>	1404	
				v	^			
				0	0			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2018

				65	0			
				v	^			
66	<		IN =	97		<	17	
15	>		OUT =	98		>	32	
				v	^			
				0	0			

EXISTING PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				879	0			
				v	^			
1040	<		IN =	1584		<	519	
186	>		OUT =	1584		>	544	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2045

				2910	0			
				v	^			
3787	<		IN =	6001		<	2176	
915	>		OUT =	6001		>	2214	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2045

				82	0			
				v	^			
81	<		IN =	136		<	24	
30	>		OUT =	136		>	55	
				v	^			
				0	0			

FUTURE PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				1133	0			
				v	^			
1466	<		IN =	2326		<	835	
358	>		OUT =	2326		>	860	
				v	^			
				0	0			

RAW GROWTH (PCEs): 2018 TO 2045

CONVERSION OF TRUCKS TO: 2045

FACTOR = 1.00

				254	0			
				v	^			
426	<					<	316	
172	>					>	315	
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2024

			459	0	190			
			<	v	>			
0	^					^	0	
505	>					<	179	
0	v					v	0	
			<	^	>			
			0	0	0			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2024

				649	0			
				v	^			
638	<		IN =	1333		<	179	
505	>		OUT =	1333		>	695	
				v	^			
				0	0			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2018

				3058	0			
				v	^			
2205	<		IN =	4993		<	969	
966	>		OUT =	4993		>	2788	
				v	^			
				0	0			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2018

				69	0			
				v	^			
67	<		IN =	97		<	11	
17	>		OUT =	97		>	30	
				v	^			
				0	0			

EXISTING PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				873	0			
				v	^			
634	<		IN =	1422		<	274	
275	>		OUT =	1422		>	788	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2045

				3203	0			
				v	^			
2560	<		IN =	6568		<	1415	
1950	>		OUT =	6567		>	4007	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2045

				93	0			
				v	^			
77	<		IN =	150		<	15	
42	>		OUT =	150		>	73	
				v	^			
				0	0			

FUTURE PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				920	0			
				v	^			
736	<		IN =	1877		<	400	
557	>		OUT =	1876		>	1140	
				v	^			
				0	0			

RAW GROWTH (PCEs): 2018 TO 2045

CONVERSION OF TRUCKS TO: 2045

FACTOR = 1.00

				47	0			
				v	^			
102	<					<	126	
282	>					>	352	
				v	^			
				0	0			

SR-91 Off Ramp (NS) / Mission Inn Avenue (EW) - #2

MORNING PEAK HOUR	EVENING PEAK HOUR
ADJUSTED GROWTH (PCEs): 2018 TO 2045	ADJUSTED GROWTH (PCEs): 2018 TO 2045
10.00 MINIMUM GROWTH %	10 MINIMUM GROWTH %
250 0	60 0
v ^	v ^
430 < IN = 740 < 320	100 < IN = 470 < 130
170 > OUT = 750 > 320	280 > OUT = 450 > 350
v ^	v ^
0 0	0 0
PRORATED GROWTH (PCEs): 2024 TO 2045	PRORATED GROWTH (PCEs): 2024 TO 2045
21 YEARS	21 YEARS
190 0	50 0
v ^	v ^
330 < < 250	80 < < 100
130 > > 250	220 > > 270
v ^	v ^
0 0	0 0
NEW PROJECTED VOLUMES (PCEs): 2045	NEW PROJECTED VOLUMES (PCEs): 2045
1220 0	700 0
v ^	v ^
1380 < < 430	720 < < 280
440 > > 720	730 > > 970
v ^	v ^
0 0	0 0
ADT BY LEG:	ADT BY LEG:
2045	2045
13,550	13,550
N	N
18,310 W LEG E 19,360	18,310 W LEG E 19,360
S	S
0	0

Mulberry Street (NS) / Mission Inn Avenue (EW) - #3

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2024

			0	0	0			
			<	v	>			
	225	^				^	83	
	265	>				<	87	
	0	v				v	0	
			<	^	>			
			99	178	38			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2024

				0	486			
				v	^			
	186	<	IN =	975		<	170	
	490	>	OUT =	975		>	303	
				v	^			
				0	315			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2018

				0	2047			
				v	^			
	1351	<	IN =	5304		<	1994	
	1404	>	OUT =	5306		>	1908	
				v	^			
				0	1906			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2018

				0	79			
				v	^			
	17	<	IN =	131		<	21	
	32	>	OUT =	130		>	34	
				v	^			
				0	78			

EXISTING PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	804			
				v	^			
	519	<	IN =	2059		<	765	
	544	>	OUT =	2060		>	736	
				v	^			
				0	750			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2045

				0	2250			
				v	^			
	2176	<	IN =	7023		<	2746	
	2214	>	OUT =	7022		>	2596	
				v	^			
				0	2063			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2045

				0	99			
				v	^			
	24	<	IN =	170		<	31	
	55	>	OUT =	170		>	47	
				v	^			
				0	84			

FUTURE PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	888			
				v	^			
	835	<	IN =	2725		<	1054	
	860	>	OUT =	2725		>	1002	
				v	^			
				0	812			

RAW GROWTH (PCEs): 2018 TO 2045

CONVERSION OF TRUCKS TO: 2045

FACTOR = 1.00

				0	84			
				v	^			
	316	<				<	289	
	315	>				>	266	
				v	^			
				0	62			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2024

			0	0	0			
			<	v	>			
	325	^				^	151	
	366	>				<	101	
	0	v				v	0	
			<	^	>			
			76	333	47			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2024

				0	809			
				v	^			
	177	<	IN =	1399		<	252	
	691	>	OUT =	1399		>	413	
				v	^			
				0	456			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2018

				0	3212			
				v	^			
	969	<	IN =	6842		<	1511	
	2788	>	OUT =	6843		>	2662	
				v	^			
				0	2543			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2018

				0	75			
				v	^			
	11	<	IN =	118		<	16	
	30	>	OUT =	118		>	32	
				v	^			
				0	72			

EXISTING PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	918			
				v	^			
	274	<	IN =	1945		<	427	
	788	>	OUT =	1946		>	753	
				v	^			
				0	730			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2045

				0	3910			
				v	^			
	1415	<	IN =	9648		<	2019	
	4007	>	OUT =	9648		>	4323	
				v	^			
				0	3622			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2045

				0	105			
				v	^			
	15	<	IN =	178		<	26	
	73	>	OUT =	178		>	58	
				v	^			
				0	79			

FUTURE PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	1121			
				v	^			
	400	<	IN =	2746		<	572	
	1140	>	OUT =	2746		>	1225	
				v	^			
				0	1034			

RAW GROWTH (PCEs): 2018 TO 2045

CONVERSION OF TRUCKS TO: 2045

FACTOR = 1.00

				0	203			
				v	^			
	126	<				<	145	
	352	>				>	472	
				v	^			
				0	304			

Mulberry Street (NS) / Mission Inn Avenue (EW) - #3

MORNING PEAK HOUR	EVENING PEAK HOUR
ADJUSTED GROWTH (PCEs): 2018 TO 2045 10.00 MINIMUM GROWTH % 0 80 v ^ 320 < IN = 670 < 290 320 > OUT = 670 > 270 v ^ 0 60	ADJUSTED GROWTH (PCEs): 2018 TO 2045 10 MINIMUM GROWTH % 0 200 v ^ 130 < IN = 790 < 140 350 > OUT = 800 > 470 v ^ 0 300
PRORATED GROWTH (PCEs): 2024 TO 2045 21 YEARS 0 60 v ^ 250 < < 230 250 > > 210 v ^ 0 50	PRORATED GROWTH (PCEs): 2024 TO 2045 21 YEARS 0 160 v ^ 100 < < 110 270 > > 370 v ^ 0 230
NEW PROJECTED VOLUMES (PCEs): 2045 0 550 v ^ 440 < < 400 740 > > 510 v ^ 0 370	NEW PROJECTED VOLUMES (PCEs): 2045 0 970 v ^ 280 < < 360 960 > > 780 v ^ 0 690
ADT BY LEG: 2045 14,070 N 19,360 W LEG E 22,640 S 12,630	ADT BY LEG: 2045 14,070 N 19,360 W LEG E 22,640 S 12,630

Vine Street (NS) / Mission Inn Avenue (EW) - #4

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2024

			65	14	20			
			<	v	>			
108	^					^	26	
130	>					<	86	
60	v					v	5	
			<	^	>			
			14	43	13			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2024

				99	177			
				v	^			
165	<	IN =		584		<	117	
298	>	OUT =		584		>	163	
				v	^			
				79	70			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2018

				634	815			
				v	^			
1994	<	IN =		4240		<	1695	
1908	>	OUT =		4240		>	1430	
				v	^			
				1	3			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2018

				9	16			
				v	^			
21	<	IN =		61		<	18	
34	>	OUT =		60		>	23	
				v	^			
				0	0			

EXISTING PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				244	315			
				v	^			
765	<	IN =		1632		<	650	
736	>	OUT =		1631		>	551	
				v	^			
				0	1			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2045

				647	831			
				v	^			
2746	<	IN =		6100		<	2595	
2596	>	OUT =		6100		>	1957	
				v	^			
				566	262			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2045

				5	19			
				v	^			
31	<	IN =		91		<	32	
47	>	OUT =		91		>	28	
				v	^			
				13	7			

FUTURE PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				248	322			
				v	^			
1054	<	IN =		2348		<	997	
1002	>	OUT =		2348		>	753	
				v	^			
				219	102			

RAW GROWTH (PCEs): 2018 TO 2045

CONVERSION OF TRUCKS TO: 2045

FACTOR = 1.00

				4	7			
				v	^			
289	<					<	347	
266	>					>	202	
				v	^			
				219	101			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2024

			100	33	56			
			<	v	>			
100	^					^	41	
259	>					<	94	
49	v					v	7	
			<	^	>			
			50	70	26			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2024

				189	211			
				v	^			
244	<	IN =		885		<	142	
408	>	OUT =		885		>	341	
				v	^			
				89	146			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2018

				790	954			
				v	^			
1511	<	IN =		4361		<	906	
2662	>	OUT =		4361		>	1893	
				v	^			
				3	3			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2018

				11	13			
				v	^			
16	<	IN =		49		<	6	
32	>	OUT =		50		>	21	
				v	^			
				0	0			

EXISTING PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				224	270			
				v	^			
427	<	IN =		1233		<	255	
753	>	OUT =		1234		>	535	
				v	^			
				1	1			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2045

				779	1195			
				v	^			
2019	<	IN =		7136		<	1780	
4323	>	OUT =		7136		>	3117	
				v	^			
				805	254			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2045

				10	18			
				v	^			
26	<	IN =		95		<	22	
58	>	OUT =		96		>	37	
				v	^			
				15	5			

FUTURE PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				221	339			
				v	^			
572	<	IN =		2022		<	504	
1225	>	OUT =		2022		>	882	
				v	^			
				229	72			

RAW GROWTH (PCEs): 2018 TO 2045

CONVERSION OF TRUCKS TO: 2045

FACTOR = 1.00

				-3	69			
				v	^			
145	<					<	249	
472	>					>	347	
				v	^			
				228	72			

Vine Street (NS) / Mission Inn Avenue (EW) - #4

MORNING PEAK HOUR										EVENING PEAK HOUR									
ADJUSTED GROWTH (PCEs):	2018	TO	2045							ADJUSTED GROWTH (PCEs):	2018	TO	2045						
10.00 MINIMUM GROWTH %					10	20				10 MINIMUM GROWTH %					20	70			
					v	^									v	^			
			290	<	IN =	730	<	350					140	<	IN =	810	<	250	
			270	>	OUT =	730	>	200					470	>	OUT =	790	>	350	
					v	^									v	^			
					220	100									230	70			
PRORATED GROWTH (PCEs):	2024	TO	2045							PRORATED GROWTH (PCEs):	2024	TO	2045						
21 YEARS					10	20				21 YEARS					20	50			
					v	^									v	^			
			230	<			<	270					110	<			<	190	
			210	>			>	160					370	>			>	270	
					v	^									v	^			
					170	80									180	50			
NEW PROJECTED VOLUMES (PCEs):	2045									NEW PROJECTED VOLUMES (PCEs):	2045								
					110	200									210	260			
					v	^									v	^			
			400	<			<	390					350	<			<	330	
			510	>			>	320					780	>			>	610	
					v	^									v	^			
					250	150									270	200			
ADT BY LEG:										ADT BY LEG:									
2045					6,270					2045					6,270				
					N										N				
			22,640	W	LEG	E		17,870					22,640	W	LEG	E		17,870	
					S										S				
					3,580										3,580				

Commerce Street (NS) / Mission Inn Avenue (EW) - #5

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2024

			5	20	9			
			<	v	>			
6	^					^	4	
112	>					<	79	
20	v					v	13	
			<	^	>			
			31	9	8			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2024

				34	19			
				v	^			
115	<	IN =		316		<	96	
138	>	OUT =		316		>	129	
				v	^			
				53	48			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2018

				0	0			
				v	^			
1864	<	IN =		3317		<	1864	
1453	>	OUT =		3317		>	1453	
				v	^			
				0	0			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2018

				0	0			
				v	^			
19	<	IN =		43		<	19	
24	>	OUT =		43		>	24	
				v	^			
				0	0			

EXISTING PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
715	<	IN =		1275		<	715	
560	>	OUT =		1275		>	560	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2045

				0	0			
				v	^			
2580	<	IN =		4258		<	2580	
1678	>	OUT =		4258		>	1678	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2045

				0	0			
				v	^			
28	<	IN =		52		<	28	
24	>	OUT =		52		>	24	
				v	^			
				0	0			

FUTURE PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
990	<	IN =		1635		<	990	
646	>	OUT =		1635		>	646	
				v	^			
				0	0			

RAW GROWTH (PCEs): 2018 TO 2045

CONVERSION OF TRUCKS TO: 2045

FACTOR = 1.00

				0	0			
				v	^			
275	<					<	275	
86	>					>	86	
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2024

			10	35	6			
			<	v	>			
12	^					^	7	
278	>					<	80	
63	v					v	2	
			<	^	>			
			49	13	5			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2024

				51	32			
				v	^			
139	<	IN =		560		<	89	
353	>	OUT =		560		>	289	
				v	^			
				100	67			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2018

				0	0			
				v	^			
954	<	IN =		2930		<	954	
1976	>	OUT =		2930		>	1976	
				v	^			
				0	0			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2018

				0	0			
				v	^			
7	<	IN =		29		<	7	
22	>	OUT =		29		>	22	
				v	^			
				0	0			

EXISTING PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
269	<	IN =		828		<	269	
559	>	OUT =		828		>	559	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2045

				0	0			
				v	^			
1496	<	IN =		4510		<	1496	
3014	>	OUT =		4510		>	3014	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2045

				0	0			
				v	^			
17	<	IN =		49		<	17	
32	>	OUT =		49		>	32	
				v	^			
				0	0			

FUTURE PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
423	<	IN =		1275		<	423	
852	>	OUT =		1275		>	852	
				v	^			
				0	0			

RAW GROWTH (PCEs): 2018 TO 2045

CONVERSION OF TRUCKS TO: 2045

FACTOR = 1.00

				0	0			
				v	^			
154	<					<	154	
293	>					>	293	
				v	^			
				0	0			

Commerce Street (NS) / Mission Inn Avenue (EW) - #5

MORNING PEAK HOUR	EVENING PEAK HOUR
ADJUSTED GROWTH (PCEs): 2018 TO 2045	ADJUSTED GROWTH (PCEs): 2018 TO 2045
10.00 MINIMUM GROWTH %	10 MINIMUM GROWTH %
0 0 v ^ 280 < IN = 370 < 280 90 > OUT = 370 > 90 v ^ 0 0	10 0 v ^ 150 < IN = 450 < 150 290 > OUT = 440 > 290 v ^ 0 0
PRORATED GROWTH (PCEs): 2024 TO 2045	PRORATED GROWTH (PCEs): 2024 TO 2045
21 YEARS	21 YEARS
0 0 v ^ 220 < < 220 70 > > 70 v ^ 0 0	10 0 v ^ 120 < < 120 230 > > 230 v ^ 0 0
NEW PROJECTED VOLUMES (PCEs): 2045	NEW PROJECTED VOLUMES (PCEs): 2045
30 20 v ^ 340 < < 320 210 > > 200 v ^ 50 50	60 30 v ^ 260 < < 210 580 > > 520 v ^ 100 70
ADT BY LEG:	ADT BY LEG:
2045	2045
1,110 N 16,020 W LEG E 16,020 S 2,220	1,110 N 16,020 W LEG E 16,020 S 2,220

Park Avenue (NS) / Mission Inn Avenue (EW) - #6

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2024

			25	53	11			
			<	v	>			
13	^					^	9	
58	>					<	33	
58	v					v	20	
			<	^	>			
			33	84	17			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2024

				89	106			
				v	^			
		91	<	IN =	414	<	62	
		129	>	OUT =	414	>	86	
				v	^			
				131	134			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2018

				3	22			
				v	^			
		1731	<	IN =	3141	<	1646	
		1351	>	OUT =	3141	>	1089	
				v	^			
				299	141			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2018

				1	1			
				v	^			
		17	<	IN =	41	<	15	
		22	>	OUT =	41	>	14	
				v	^			
				9	3			

EXISTING PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				1	9			
				v	^			
		663	<	IN =	1207	<	630	
		521	>	OUT =	1207	>	418	
				v	^			
				117	55			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2045

				7	33			
				v	^			
		2068	<	IN =	3847	<	2112	
		1427	>	OUT =	3847	>	1347	
				v	^			
				399	301			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2045

				1	2			
				v	^			
		20	<	IN =	44	<	22	
		16	>	OUT =	41	>	15	
				v	^			
				4	5			

FUTURE PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				3	13			
				v	^			
		793	<	IN =	1477	<	810	
		548	>	OUT =	1476	>	517	
				v	^			
				153	116			

RAW GROWTH (PCEs): 2018 TO 2045

CONVERSION OF TRUCKS TO: 2045

FACTOR = 1.00

				2	5			
				v	^			
		129	<			<	179	
		27	>			>	98	
				v	^			
				36	61			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2024

			13	82	9			
			<	v	>			
16	^					^	7	
130	>					<	30	
119	v					v	15	
			<	^	>			
			44	71	30			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2024

				104	94			
				v	^			
		87	<	IN =	566	<	52	
		265	>	OUT =	566	>	169	
				v	^			
				216	145			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2018

				13	4			
				v	^			
		801	<	IN =	2757	<	804	
		1811	>	OUT =	2758	>	1574	
				v	^			
				379	129			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2018

				1	1			
				v	^			
		5	<	IN =	26	<	4	
		19	>	OUT =	26	>	15	
				v	^			
				5	2			

EXISTING PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				4	1			
				v	^			
		226	<	IN =	778	<	226	
		512	>	OUT =	779	>	444	
				v	^			
				107	37			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2045

				25	12			
				v	^			
		1075	<	IN =	4313	<	1546	
		2531	>	OUT =	4313	>	2343	
				v	^			
				883	211			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2045

				1	2			
				v	^			
		8	<	IN =	44	<	16	
		24	>	OUT =	44	>	23	
				v	^			
				11	3			

FUTURE PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				7	4			
				v	^			
		303	<	IN =	1219	<	437	
		715	>	OUT =	1219	>	662	
				v	^			
				250	60			

RAW GROWTH (PCEs): 2018 TO 2045

CONVERSION OF TRUCKS TO: 2045

FACTOR = 1.00

				3	2			
				v	^			
		77	<			<	211	
		203	>			>	217	
				v	^			
				143	23			

Park Avenue (NS) / Mission Inn Avenue (EW) - #6

MORNING PEAK HOUR										EVENING PEAK HOUR									
ADJUSTED GROWTH (PCEs):	2018	TO	2045							ADJUSTED GROWTH (PCEs):	2018	TO	2045						
10.00 MINIMUM GROWTH %					10	10				10 MINIMUM GROWTH %					10	10			
					v	^									v	^			
			130	<	IN =	280	<	180					80	<	IN =	440	<	210	
			30	>	OUT =	280	>	100					200	>	OUT =	450	>	220	
					v	^									v	^			
					40	60									140	20			
PRORATED GROWTH (PCEs):	2024	TO	2045							PRORATED GROWTH (PCEs):	2024	TO	2045						
21 YEARS					10	10				21 YEARS					10	10			
					v	^									v	^			
			100	<			<	140					60	<			<	160	
			20	>			>	80					160	>			>	170	
					v	^									v	^			
					30	50									110	20			
NEW PROJECTED VOLUMES (PCEs):	2045									NEW PROJECTED VOLUMES (PCEs):	2045								
					100	120									110	100			
					v	^									v	^			
			190	<			<	200					150	<			<	210	
			150	>			>	170					430	>			>	340	
					v	^									v	^			
					160	180									330	170			
ADT BY LEG:										ADT BY LEG:									
2045					2,660					2045					2,660				
					N										N				
			12,330	W	LEG	E		12,600					12,330	W	LEG	E		12,600	
					S										S				
					4,770										4,770				

Commerce Street (NS) / 3rd Street (EW) - #7

MORNING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2024

			0	0	0			
			<	v	>			
	0	^				^	0	
	371	>				<	377	
	17	v				v	12	
			<	^	>			
			7	0	9			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2024

				0	0			
				v	^			
		384	<	IN =	793	<	389	
		388	>	OUT =	793	>	380	
				v	^			
				29	16			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2018

				0	0			
				v	^			
		1851	<	IN =	2801	<	1851	
		950	>	OUT =	2801	>	950	
				v	^			
				0	0			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2018

				0	0			
				v	^			
		17	<	IN =	40	<	17	
		23	>	OUT =	40	>	23	
				v	^			
				0	0			

EXISTING PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
		709	<	IN =	1078	<	709	
		369	>	OUT =	1078	>	369	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2045

				0	0			
				v	^			
		1952	<	IN =	3294	<	1952	
		1342	>	OUT =	3294	>	1342	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2045

				0	0			
				v	^			
		19	<	IN =	49	<	19	
		30	>	OUT =	49	>	30	
				v	^			
				0	0			

FUTURE PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.38

PHF FOR TRUCKS: 0.333

				0	0			
				v	^			
		748	<	IN =	1268	<	748	
		520	>	OUT =	1268	>	520	
				v	^			
				0	0			

RAW GROWTH (PCEs): 2018 TO 2045

CONVERSION OF TRUCKS TO: 2045

FACTOR = 1.00

				0	0			
				v	^			
		39	<			<	39	
		151	>			>	151	
				v	^			
				0	0			

EVENING PEAK HOUR

EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):

2024

			0	0	0			
			<	v	>			
	0	^				^	0	
	1068	>				<	421	
	42	v				v	12	
			<	^	>			
			14	0	11			

EXISTING PEAK HOUR COUNT YEAR (AUTOS):

2024

				0	0			
				v	^			
		435	<	IN =	1568	<	433	
		1110	>	OUT =	1568	>	1079	
				v	^			
				54	25			

EXISTING PEAK PERIOD MODEL YEAR (AUTO):

2018

				0	0			
				v	^			
		1503	<	IN =	3913	<	1503	
		2410	>	OUT =	3913	>	2410	
				v	^			
				0	0			

EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2018

				0	0			
				v	^			
		21	<	IN =	44	<	21	
		23	>	OUT =	44	>	23	
				v	^			
				0	0			

EXISTING PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
		426	<	IN =	1107	<	426	
		681	>	OUT =	1107	>	681	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (AUTO):

2045

				0	0			
				v	^			
		1842	<	IN =	4677	<	1842	
		2835	>	OUT =	4677	>	2835	
				v	^			
				0	0			

FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):

2045

				0	0			
				v	^			
		25	<	IN =	52	<	25	
		27	>	OUT =	52	>	27	
				v	^			
				0	0			

FUTURE PEAK HOUR MODEL YEAR (PCEs):

PHF FOR CARS: 0.28

PHF FOR TRUCKS: 0.25

				0	0			
				v	^			
		522	<	IN =	1323	<	522	
		801	>	OUT =	1323	>	801	
				v	^			
				0	0			

RAW GROWTH (PCEs): 2018 TO 2045

CONVERSION OF TRUCKS TO: 2045

FACTOR = 1.00

				0	0			
				v	^			
		96	<			<	96	
		120	>			>	120	
				v	^			
				0	0			

Commerce Street (NS) / 3rd Street (EW) - #7

MORNING PEAK HOUR	EVENING PEAK HOUR
ADJUSTED GROWTH (PCEs): 2018 TO 2045	ADJUSTED GROWTH (PCEs): 2018 TO 2045
10.00 MINIMUM GROWTH %	10 MINIMUM GROWTH %
0 0 v ^ 40 < IN = 190 < 40 150 > OUT = 190 > 150 v ^ 0 0	0 0 v ^ 100 < IN = 220 < 100 120 > OUT = 220 > 120 v ^ 0 0
PRORATED GROWTH (PCEs): 2024 TO 2045	PRORATED GROWTH (PCEs): 2024 TO 2045
21 YEARS	21 YEARS
0 0 v ^ 30 < < 30 120 > > 120 v ^ 0 0	0 0 v ^ 80 < < 80 90 > > 90 v ^ 0 0
NEW PROJECTED VOLUMES (PCEs): 2045	NEW PROJECTED VOLUMES (PCEs): 2045
0 0 v ^ 410 < < 420 510 > > 500 v ^ 30 20	0 0 v ^ 520 < < 510 1200 > > 1170 v ^ 50 30
ADT BY LEG:	ADT BY LEG:
2045	2045
0 N 21,130 W LEG E 20,730 S 1,000	0 N 21,130 W LEG E 20,730 S 1,000

Project Driveway (NS) / Mission Inn Avenue (EW) - #10

MORNING PEAK HOUR	EVENING PEAK HOUR
EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):	EXISTING PEAK HOUR TURNING MOVEMENT VOLUMES (AUTOS):
2024	2024
0 0 0 < v > 0 ^ ^ 0 121 > < 90 8 v v 3 < ^ > 6 0 6	0 0 0 < v > 0 ^ ^ 0 271 > < 78 16 v v 2 < ^ > 11 0 5
EXISTING PEAK HOUR COUNT YEAR (AUTOS):	EXISTING PEAK HOUR COUNT YEAR (AUTOS):
2024	2024
0 0 v ^ 96 < IN = 234 < 93 129 > OUT = 234 > 127 v ^ 11 12	0 0 v ^ 89 < IN = 383 < 80 287 > OUT = 383 > 276 v ^ 18 16
EXISTING PEAK PERIOD MODEL YEAR (AUTO):	EXISTING PEAK PERIOD MODEL YEAR (AUTO):
2018	2018
0 0 v ^ 1864 < IN = 3317 < 1864 1453 > OUT = 3317 > 1453 v ^ 0 0	0 0 v ^ 954 < IN = 2930 < 954 1976 > OUT = 2930 > 1976 v ^ 0 0
EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):	EXISTING PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):
2018	2018
0 0 v ^ 19 < IN = 43 < 19 24 > OUT = 43 > 24 v ^ 0 0	0 0 v ^ 7 < IN = 29 < 7 22 > OUT = 29 > 22 v ^ 0 0
EXISTING PEAK HOUR MODEL YEAR (PCEs):	EXISTING PEAK HOUR MODEL YEAR (PCEs):
PHF FOR CARS: 0.38	PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.333	PHF FOR TRUCKS: 0.25
0 0 v ^ 715 < IN = 1275 < 715 560 > OUT = 1275 > 560 v ^ 0 0	0 0 v ^ 269 < IN = 828 < 269 559 > OUT = 828 > 559 v ^ 0 0
FUTURE PEAK PERIOD MODEL YEAR (AUTO):	FUTURE PEAK PERIOD MODEL YEAR (AUTO):
2045	2045
0 0 v ^ 2580 < IN = 4258 < 2580 1678 > OUT = 4258 > 1678 v ^ 0 0	0 0 v ^ 1496 < IN = 4510 < 1496 3014 > OUT = 4510 > 3014 v ^ 0 0
FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):	FUTURE PEAK PERIOD MODEL YEAR (TRUCKS IN PCEs):
2045	2045
0 0 v ^ 28 < IN = 52 < 28 24 > OUT = 52 > 24 v ^ 0 0	0 0 v ^ 17 < IN = 49 < 17 32 > OUT = 49 > 32 v ^ 0 0
FUTURE PEAK HOUR MODEL YEAR (PCEs):	FUTURE PEAK HOUR MODEL YEAR (PCEs):
PHF FOR CARS: 0.38	PHF FOR CARS: 0.28
PHF FOR TRUCKS: 0.333	PHF FOR TRUCKS: 0.25
0 0 v ^ 990 < IN = 1635 < 990 646 > OUT = 1635 > 646 v ^ 0 0	0 0 v ^ 423 < IN = 1275 < 423 852 > OUT = 1275 > 852 v ^ 0 0
RAW GROWTH (PCEs): 2018 TO 2045	RAW GROWTH (PCEs): 2018 TO 2045
CONVERSION OF TRUCKS TO: 2045	CONVERSION OF TRUCKS TO: 2045
FACTOR = 1.00	FACTOR = 1.00
0 0 v ^ 275 < < 275 86 > > 86 v ^ 0 0	0 0 v ^ 154 < < 154 293 > > 293 v ^ 0 0

Project Driveway (NS) / Mission Inn Avenue (EW) - #10

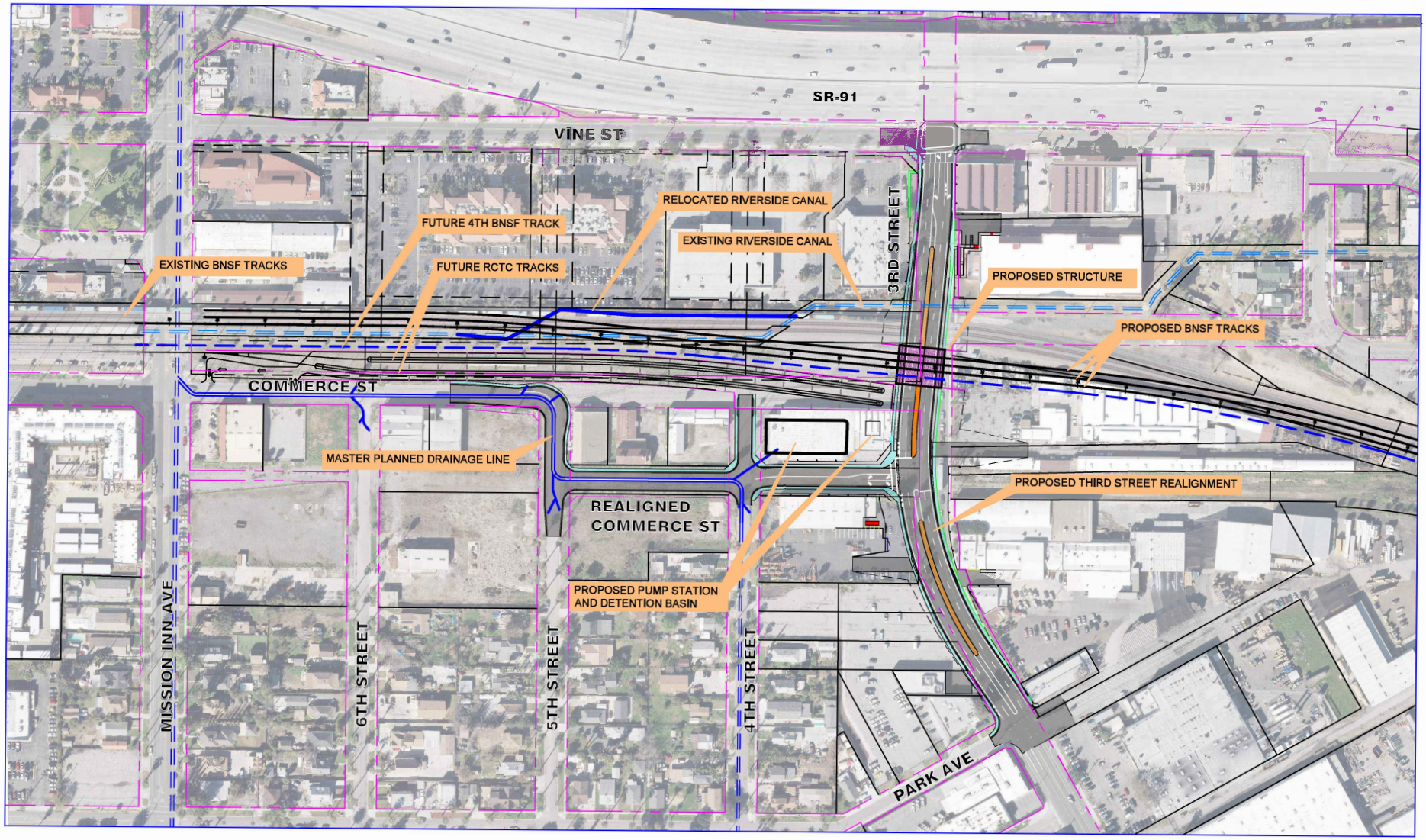
MORNING PEAK HOUR	EVENING PEAK HOUR
ADJUSTED GROWTH (PCEs): 2018 TO 2045	ADJUSTED GROWTH (PCEs): 2018 TO 2045
10.00 MINIMUM GROWTH %	10 MINIMUM GROWTH %
0 0 v ^ 280 < IN = 370 < 280 90 > OUT = 370 > 90 v ^ 0 0	0 0 v ^ 150 < IN = 440 < 150 290 > OUT = 440 > 290 v ^ 0 0
PRORATED GROWTH (PCEs): 2024 TO 2045	PRORATED GROWTH (PCEs): 2024 TO 2045
21 YEARS	21 YEARS
0 0 v ^ 220 < < 220 70 > > 70 v ^ 0 0	0 0 v ^ 120 < < 120 230 > > 230 v ^ 0 0
NEW PROJECTED VOLUMES (PCEs): 2045	NEW PROJECTED VOLUMES (PCEs): 2045
0 0 v ^ 320 < < 310 200 > > 200 v ^ 10 10	0 0 v ^ 210 < < 200 520 > > 510 v ^ 20 20
ADT BY LEG:	ADT BY LEG:
2045	2045
0 N 16,020 W LEG E 16,020 S 440	0 N 16,020 W LEG E 16,020 S 440

APPENDIX G

3RD STREET GRADE SEPARATION PROJECT
PRELIMINARY LAYOUT PLAN

Third Street Grade Separation at BNSF Railroad

City of Riverside



APPENDIX H

TRAFFIC SIGNAL WARRANT WORKSHEET

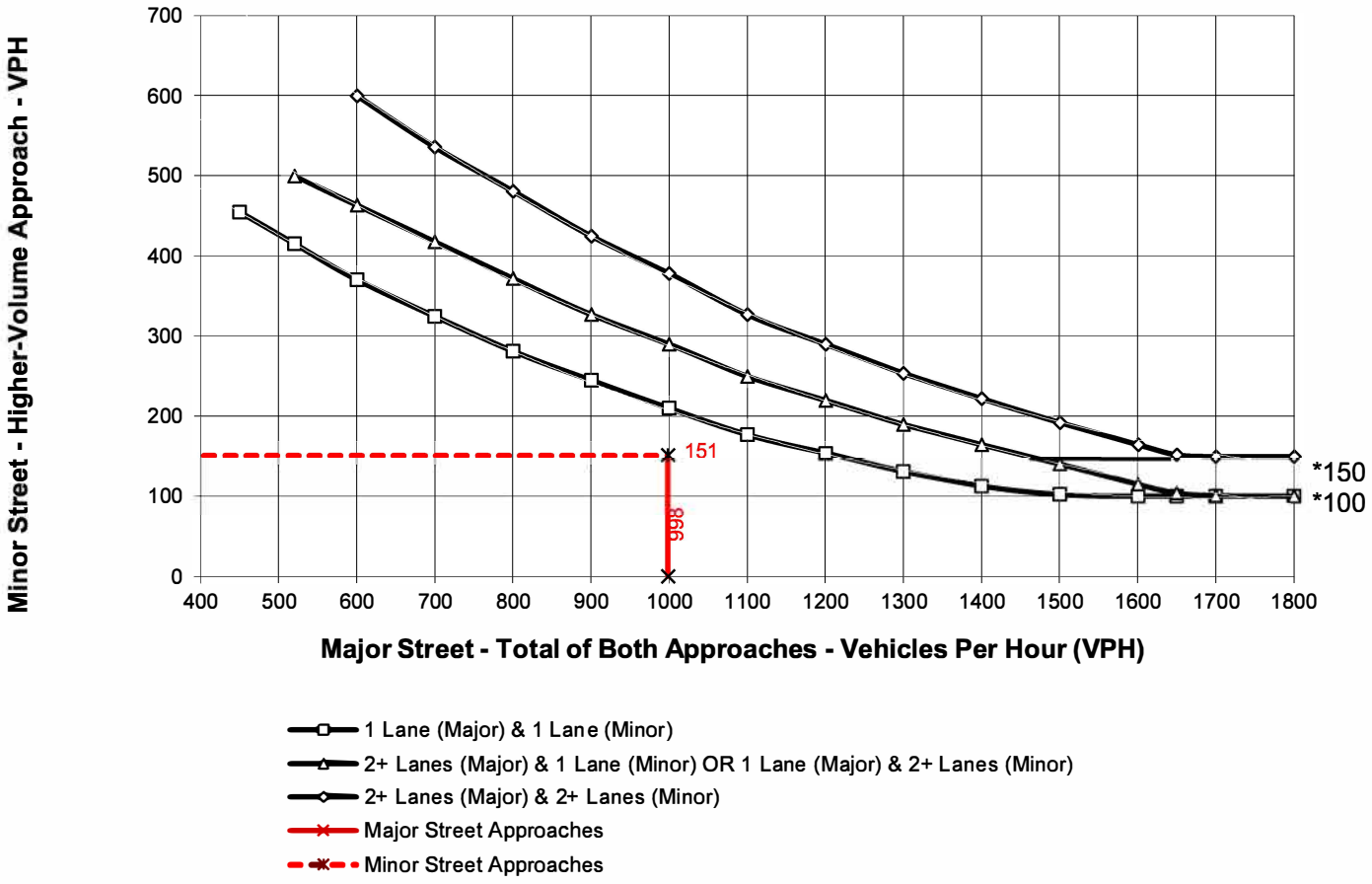
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - AM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **998**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Vine Street** High Volume Approach (VPH) = **151**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

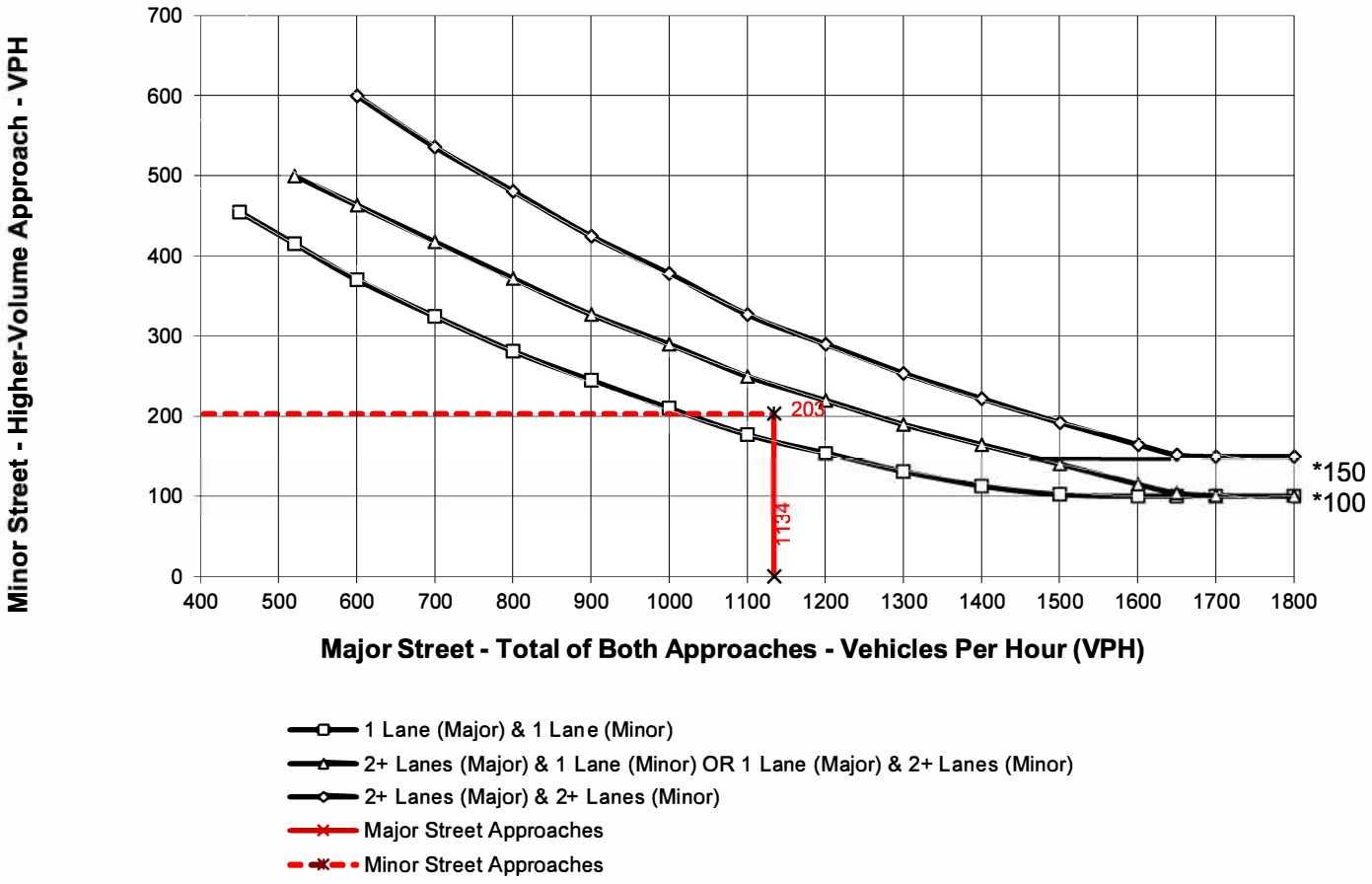
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - PM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **1134**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Vine Street** High Volume Approach (VPH) = **203**
Number of Approach Lanes On Minor Street = **2**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

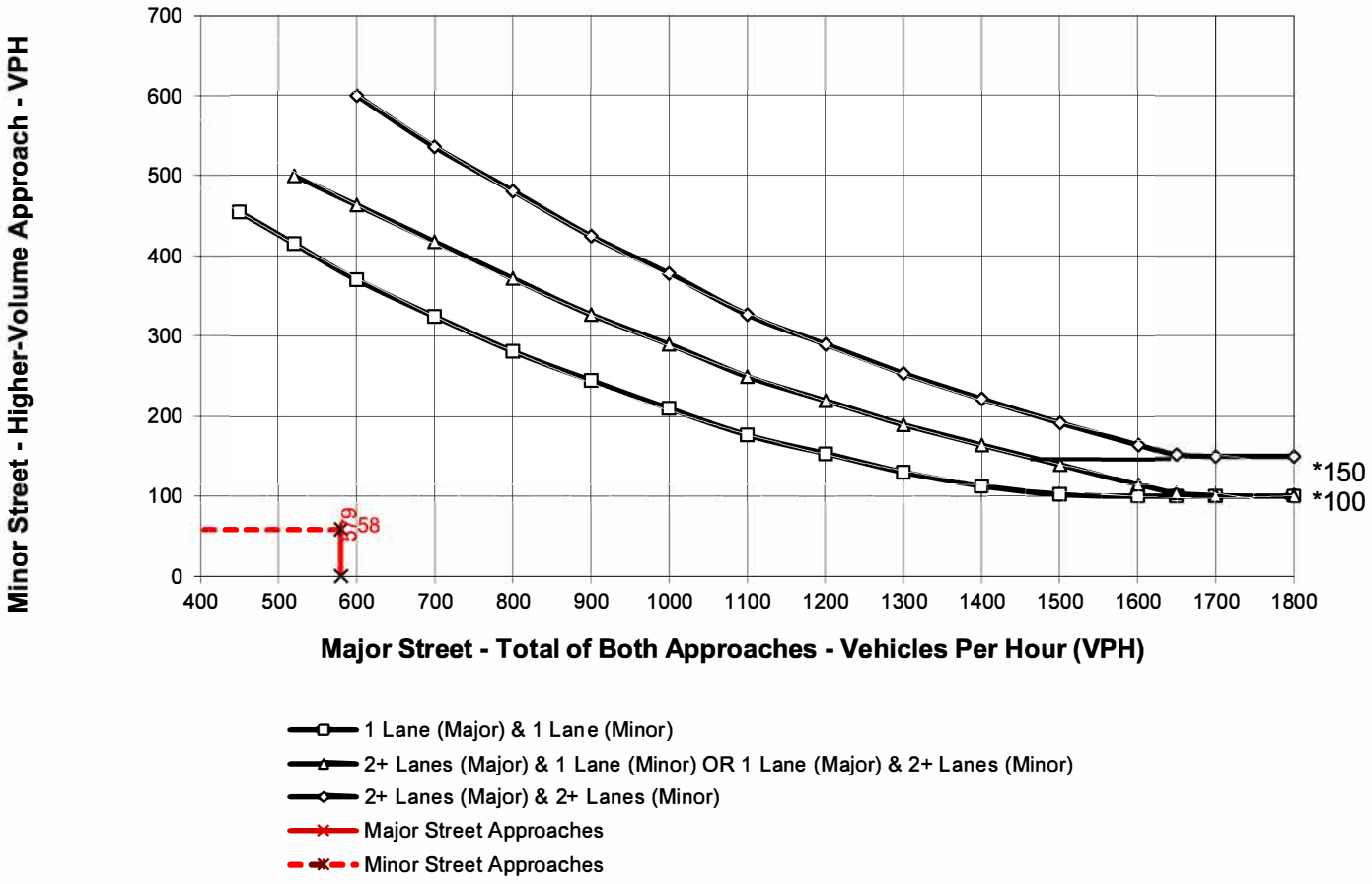
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - AM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **579**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Commerce Street** High Volume Approach (VPH) = **58**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

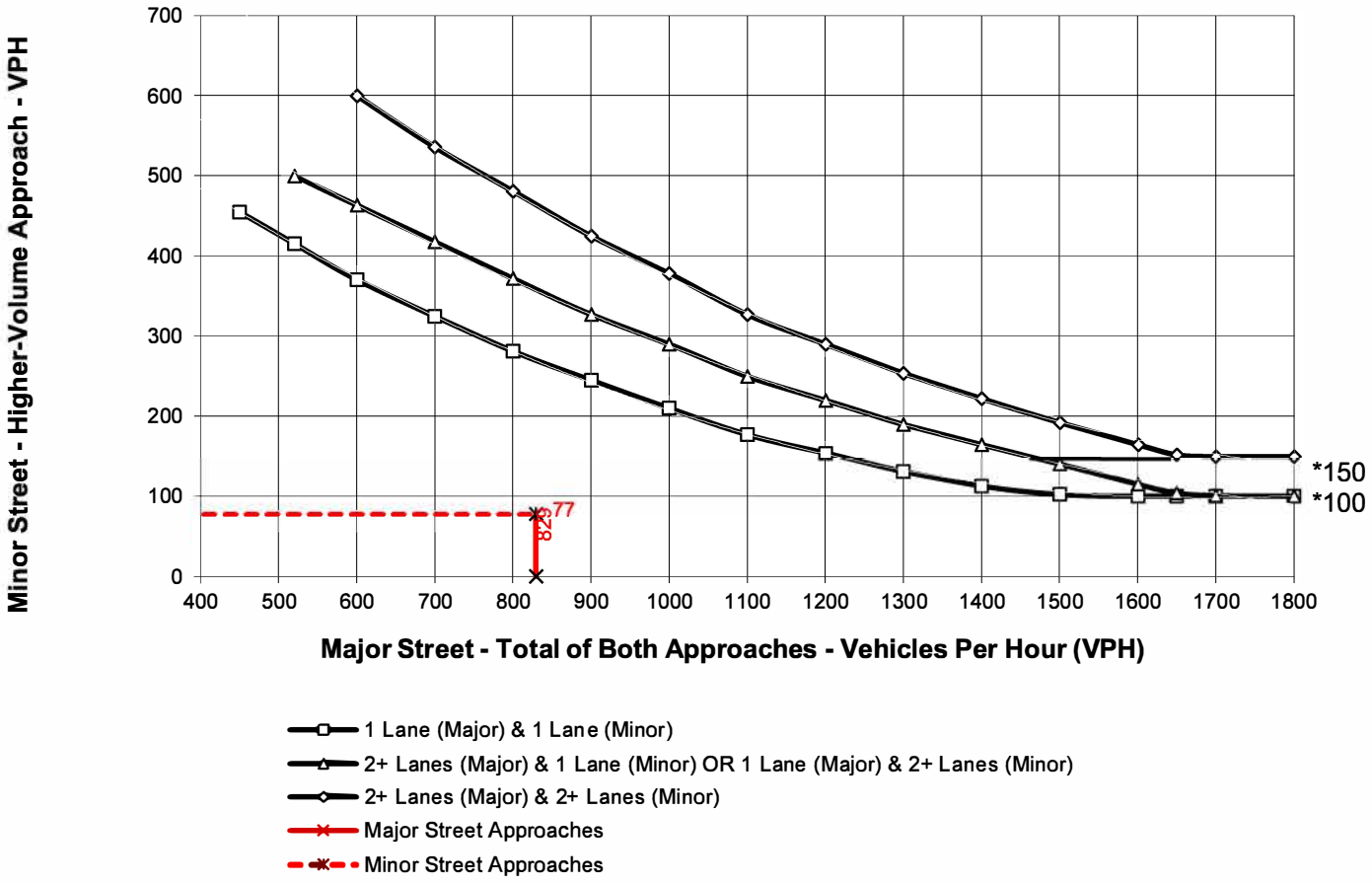
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - PM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **829**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Commerce Street** High Volume Approach (VPH) = **77**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

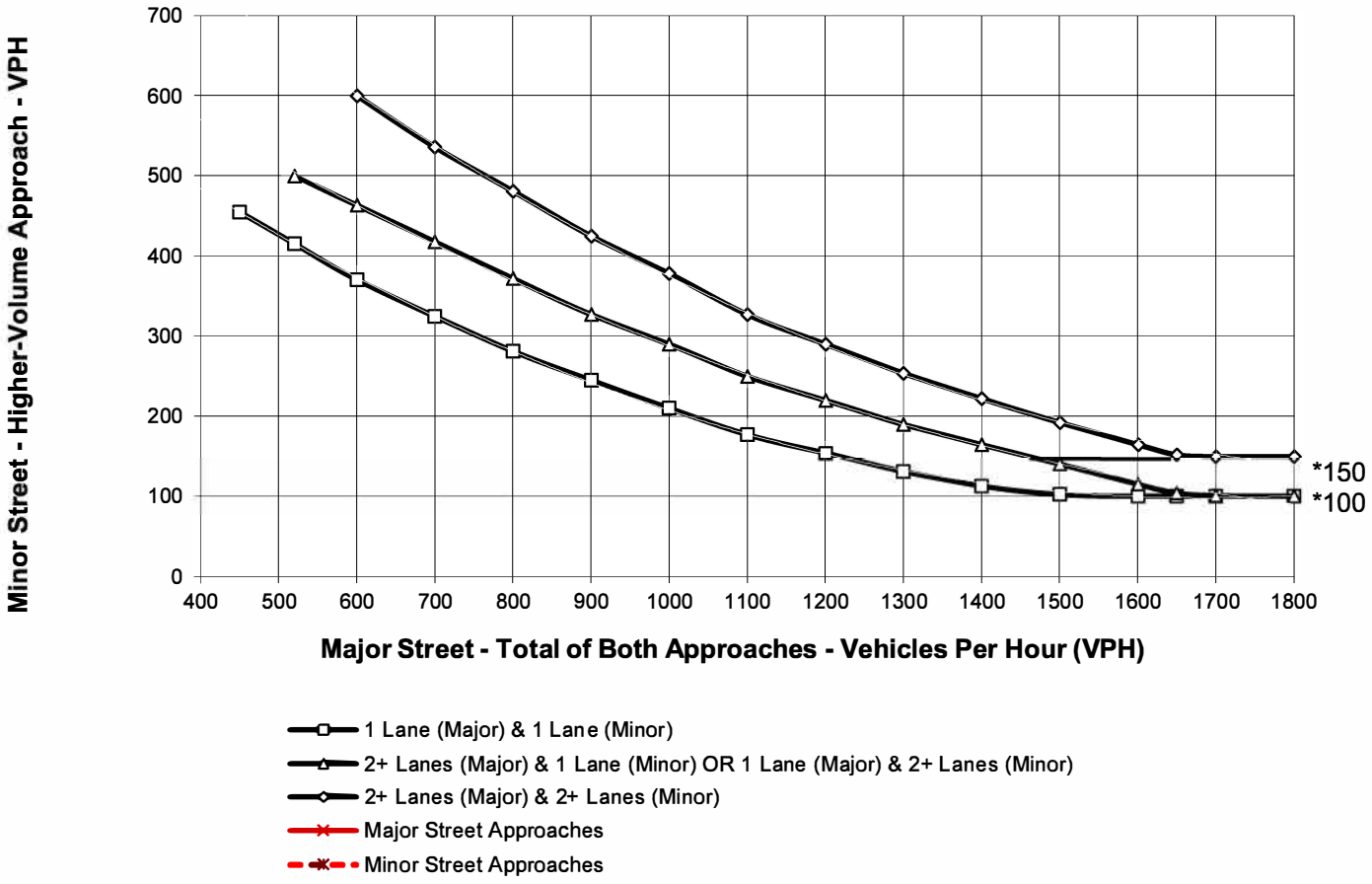
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - AM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **385**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Park Avenue** High Volume Approach (VPH) = **187**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

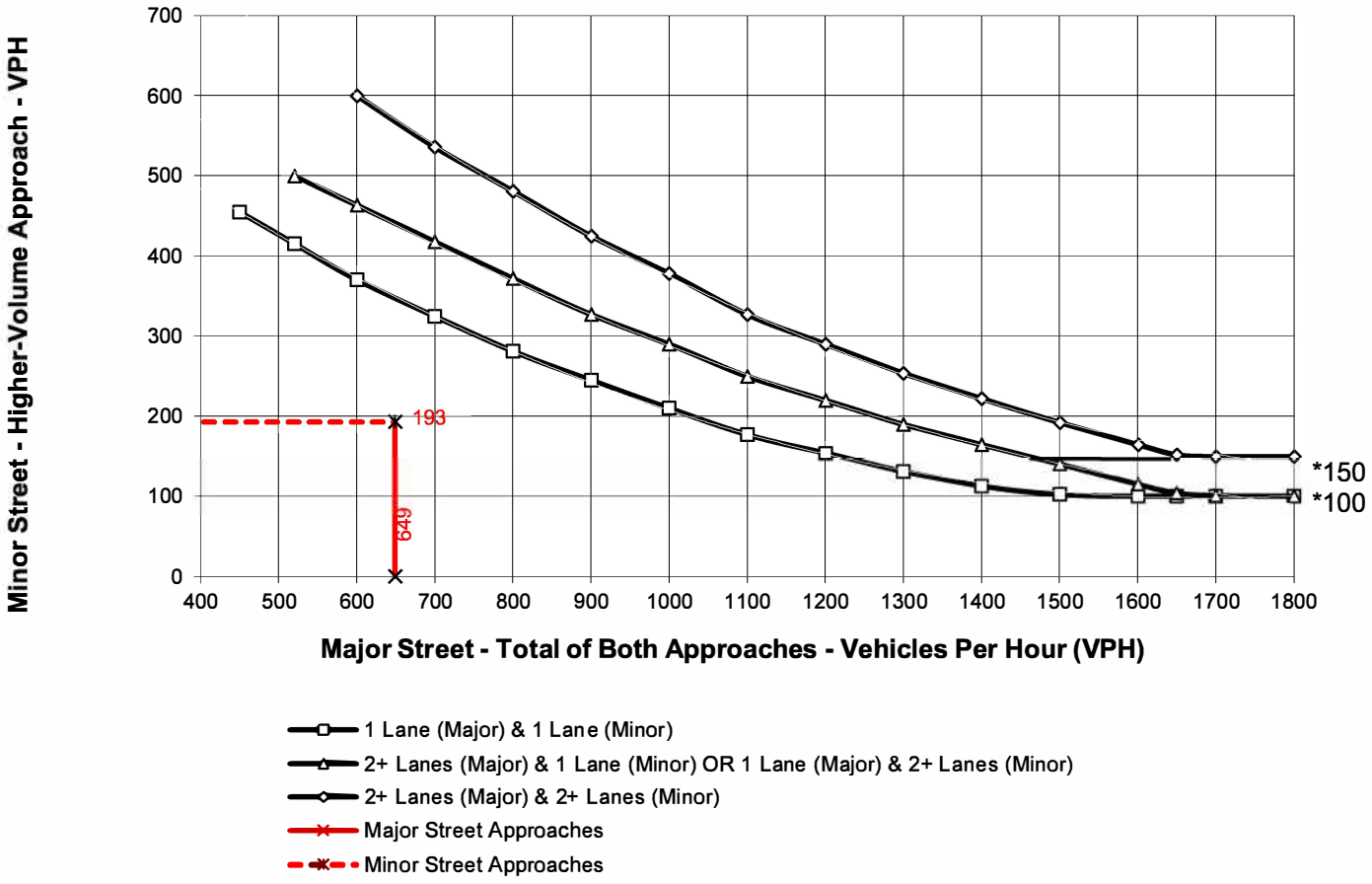
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - PM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **649**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Park Avenue** High Volume Approach (VPH) = **193**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

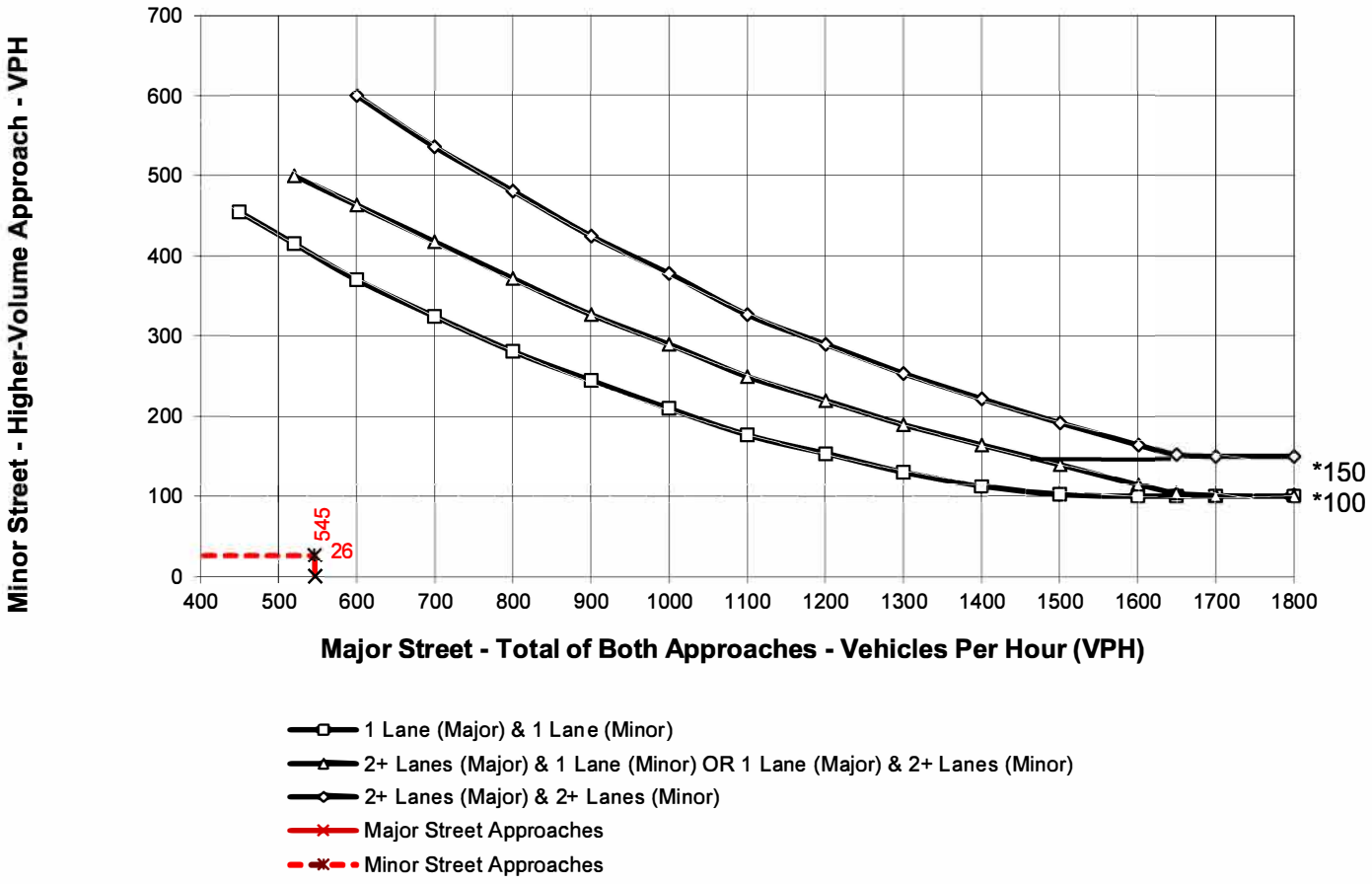
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - AM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **545**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Project Dwy** High Volume Approach (VPH) = **26**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

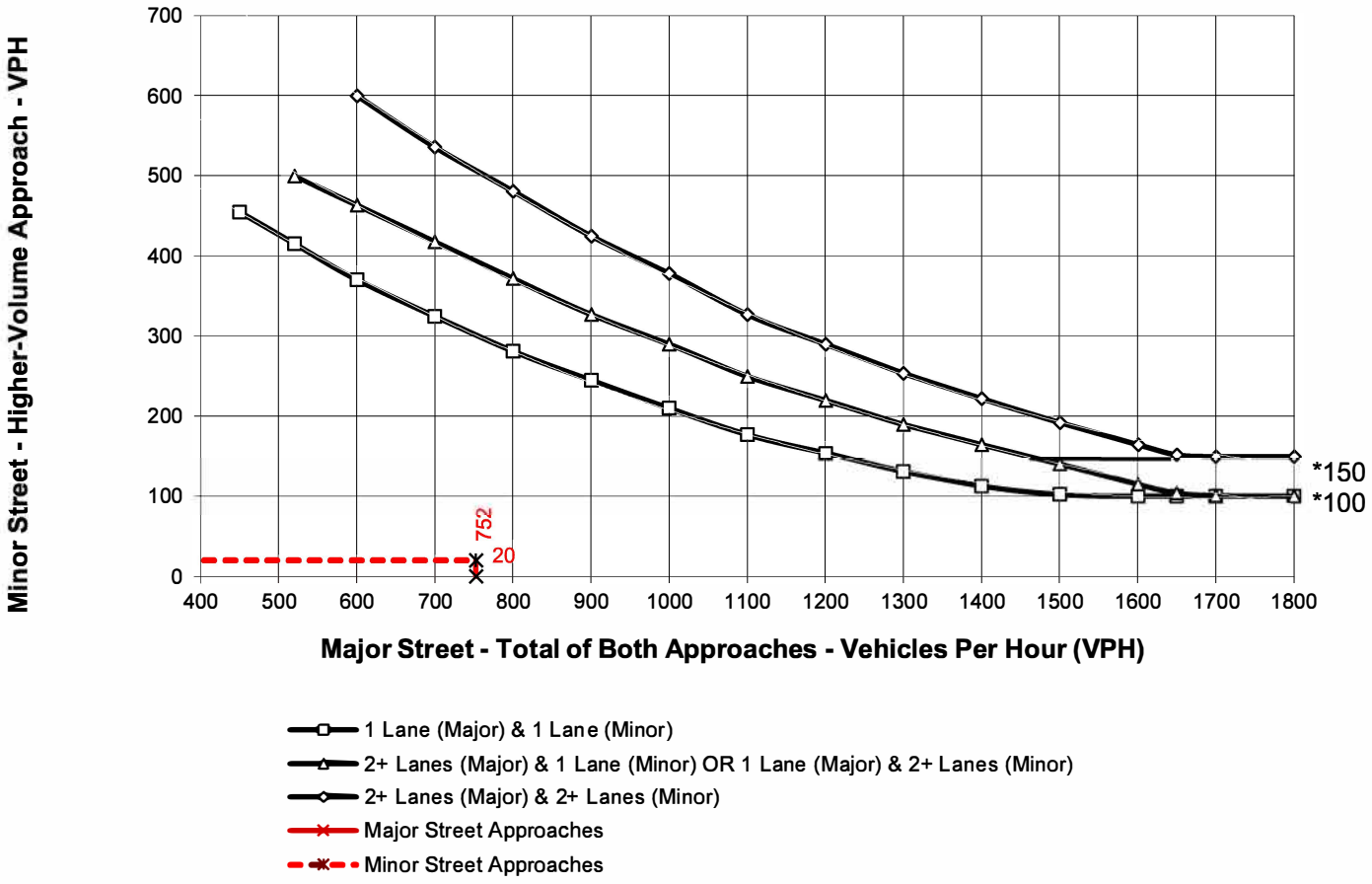
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - PM**

Major Street Name = **Mission Inn Avenue** Total of Both Approaches (VPH) = **752**
Number of Approach Lanes on Major Street = **2**

Minor Street Name = **Project Dwy** High Volume Approach (VPH) = **20**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

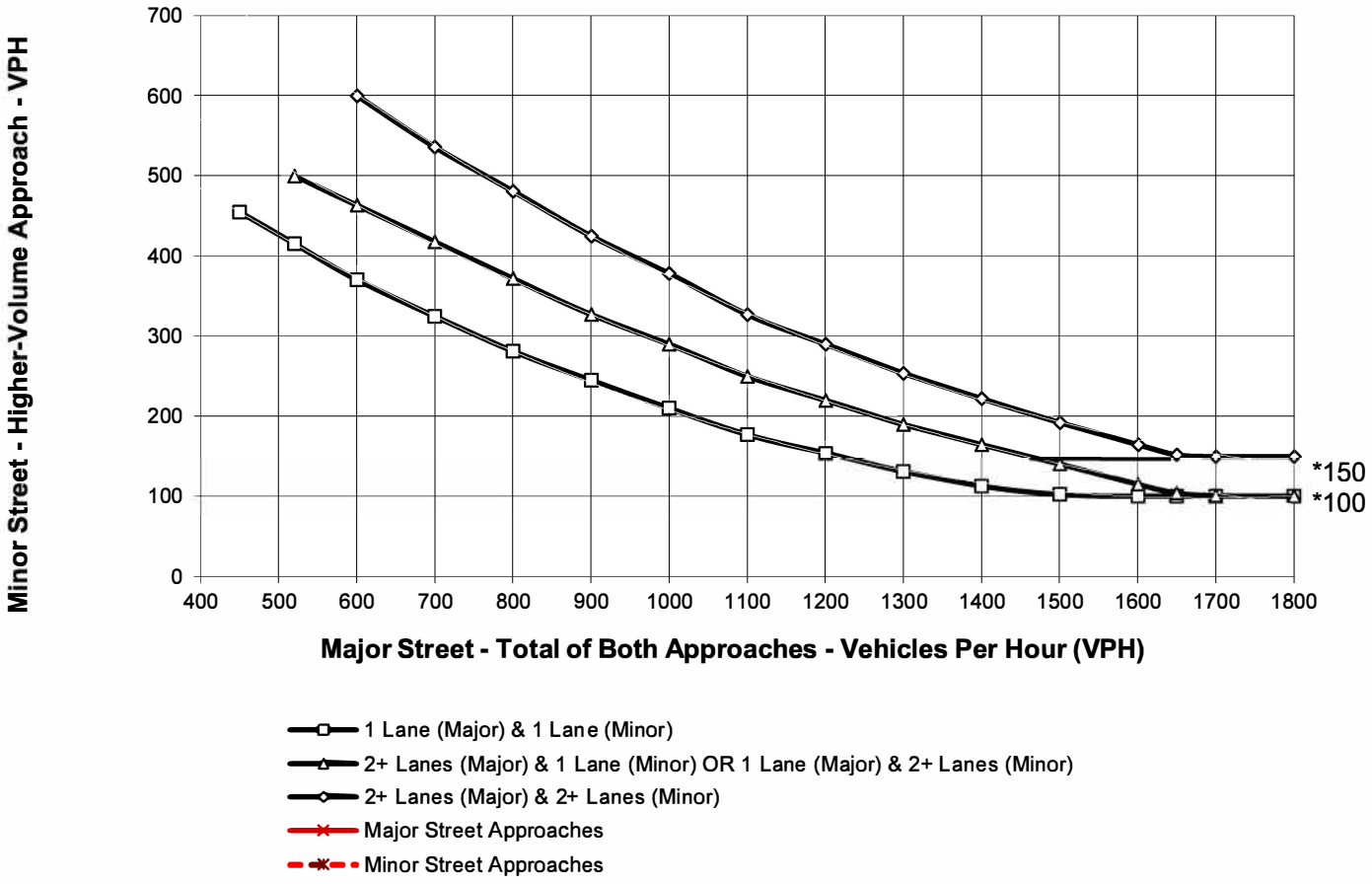
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - AM**

Major Street Name = **Project Dwy** Total of Both Approaches (VPH) = **28**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **5th Street** High Volume Approach (VPH) = **9**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

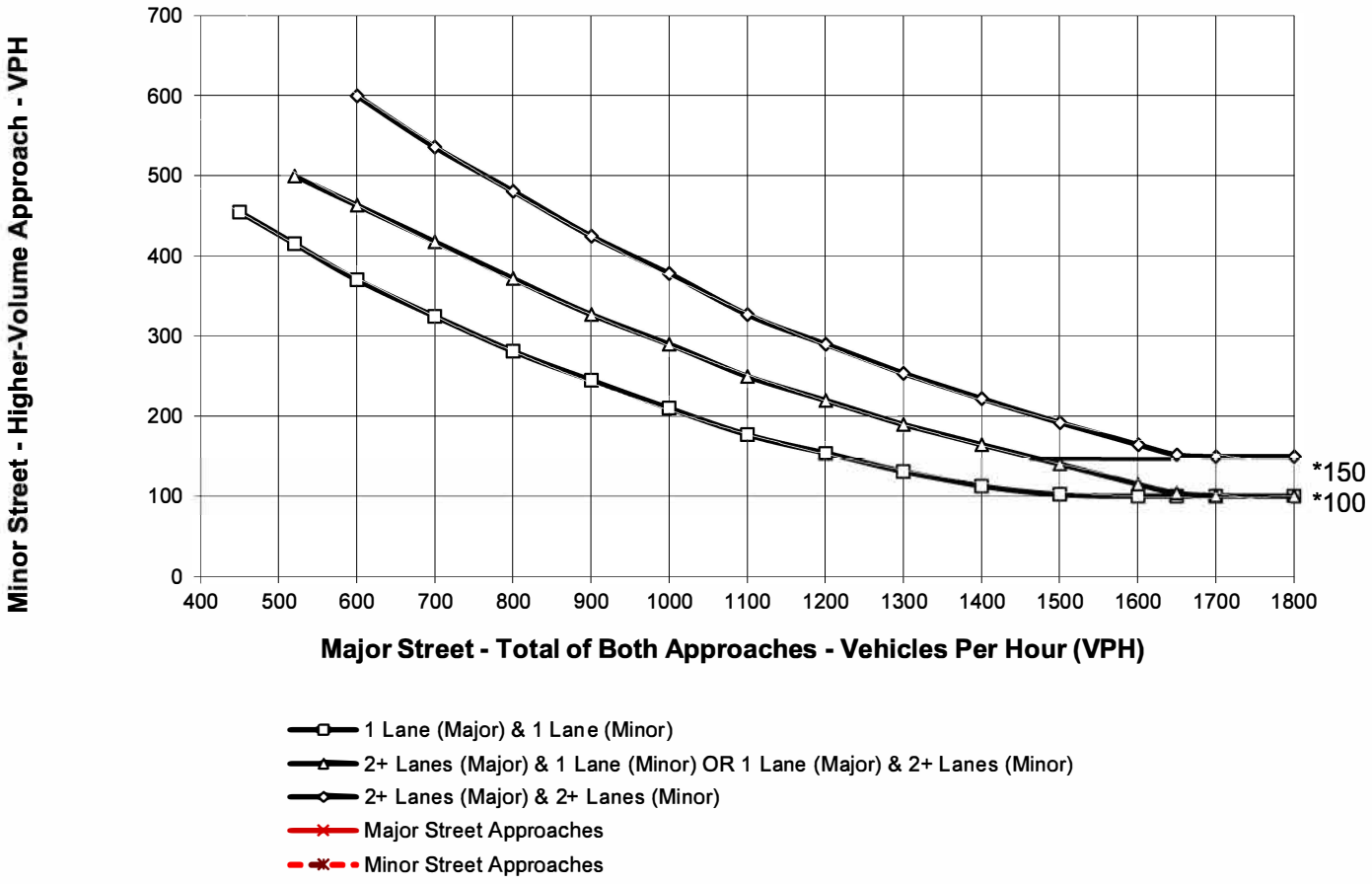
WARRANT 3, PEAK HOUR
(Urban Areas)

Traffic Conditions = **Buildout 2045 With Project - PM**

Major Street Name = **5th Street** Total of Both Approaches (VPH) = **19**
Number of Approach Lanes on Major Street = **1**

Minor Street Name = **Project Dwy** High Volume Approach (VPH) = **10**
Number of Approach Lanes On Minor Street = **1**

SIGNAL WARRANT NOT SATISFIED



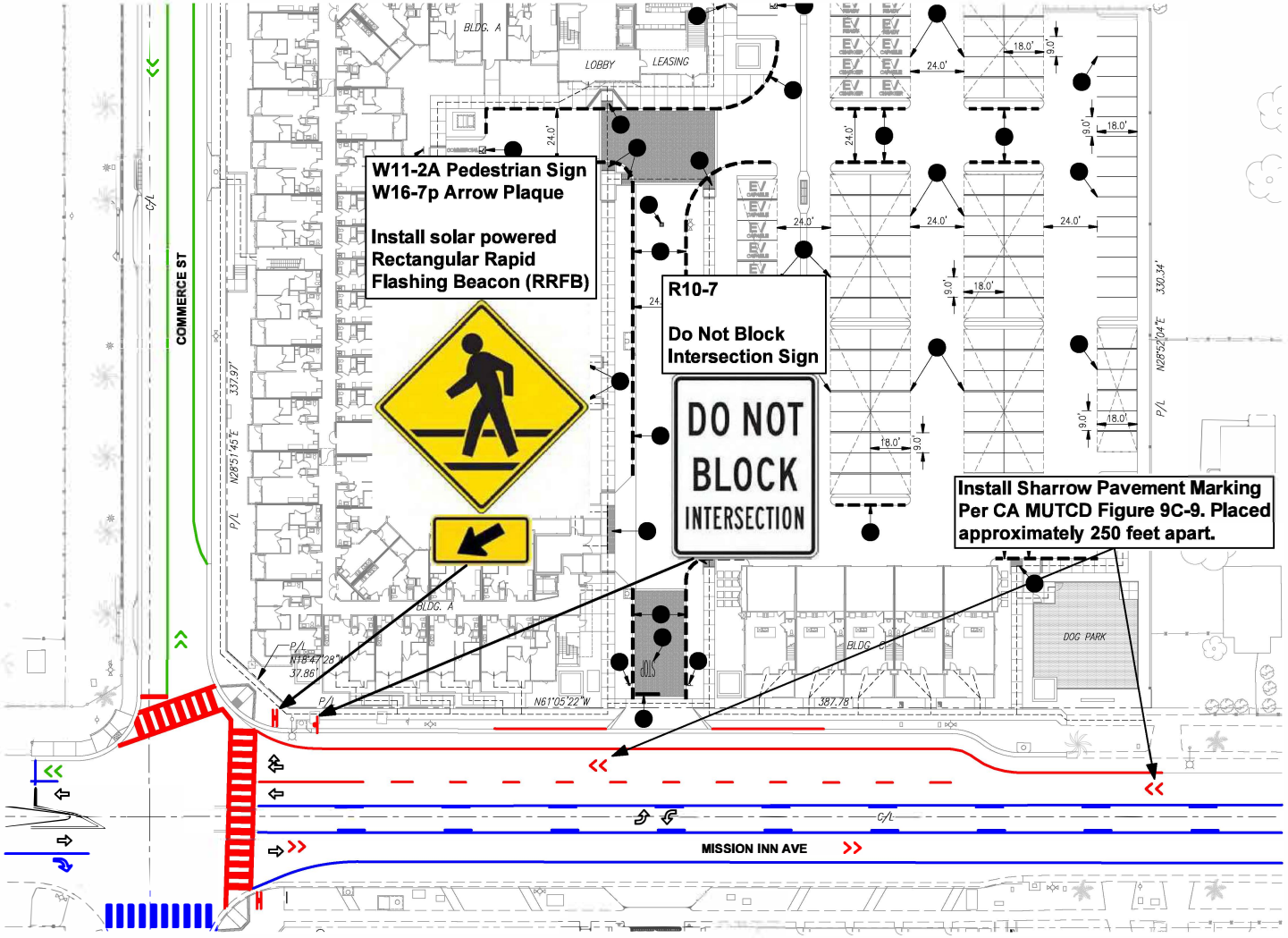
Note:

* - 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Major street approaches with less than 400 vph are low volume and outside the graph boundaries.

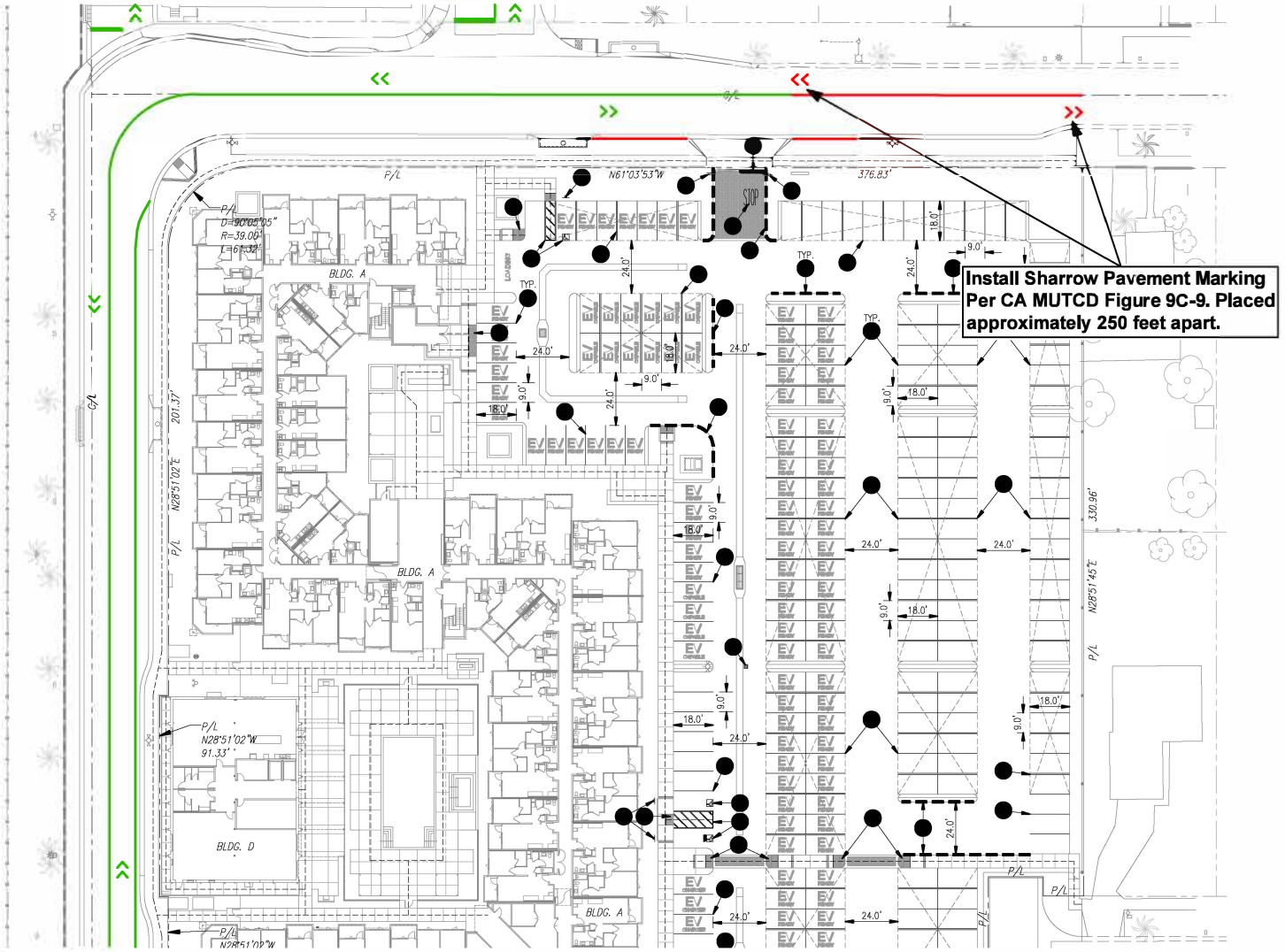
APPENDIX I

ROADWAY CONCEPT PLAN (ADJACENT TO PROJECT)



Legend
- Existing Pavement Marking
- Proposed Pavement Marking
- 3SGS Project by Others

Figure 1
Conceptual Roadway Plan



0 25 50
Scale: 1" = 50'

Legend
- Existing Pavement Marking
- Proposed Pavement Marking
- 3SGS Project by Others

Figure 2
Conceptual Roadway Plan

APPENDIX J

CALIFORNIA MUTCD 3B.18

Section 3B.18 Crosswalk Markings

Support:

01 Crosswalk markings provide guidance for pedestrians who are crossing roadways by defining and delineating paths on approaches to and within signalized intersections, and on approaches to other intersections where traffic stops.

02 In conjunction with signs and other measures, crosswalk markings help to alert road users of a designated pedestrian crossing point across roadways at locations that are not controlled by traffic control signals or STOP or YIELD signs.

03 At non-intersection locations, crosswalk markings legally establish the crosswalk.

Standard:

04 **When crosswalk lines are used, they shall consist of solid white lines that mark the crosswalk. They shall not be less than ~~6~~ 12 inches or greater than 24 inches in width.**

Guidance:

05 *If transverse lines are used to mark a crosswalk, the gap between the lines should not be less than 6 feet. If diagonal or longitudinal lines are used without transverse lines to mark a crosswalk, the crosswalk should be not less than 6 feet wide.*

06 *Crosswalk lines, if used on both sides of the crosswalk, should extend across the full width of pavement or to the edge of the intersecting crosswalk to discourage diagonal walking between crosswalks (see Figures 3B-17 and 3B-19).*

07 *At locations controlled by traffic control signals or on approaches controlled by STOP or YIELD signs, crosswalk lines should be installed where engineering judgment indicates they are needed to direct pedestrians to the proper crossing path(s).*

08 *Crosswalk lines should not be used indiscriminately. An engineering study should be performed before a marked crosswalk is installed at a location away from a traffic control signal or an approach controlled by a STOP or YIELD sign. The engineering study should consider the number of lanes, the presence of a median, the distance from adjacent signalized intersections, the pedestrian volumes and delays, the average daily traffic (ADT), the posted or statutory speed limit or 85th-percentile speed, the geometry of the location, the possible consolidation of multiple crossing points, the availability of street lighting, and other appropriate factors.*

09 *New marked crosswalks across uncontrolled roadways should include ~~alone, without~~ other measures designed to reduce traffic speeds, shorten crossing distances, enhance driver awareness of the crossing, and/or provide active warning of pedestrian presence, ~~should not be installed across uncontrolled roadways~~ where the speed limit exceeds 40 mph and either:*

A. The roadway has four or more lanes of travel without a raised median or pedestrian refuge island and an ADT of 12,000 vehicles per day or greater; or

B. The roadway has four or more lanes of travel with a raised median or pedestrian refuge island and an ADT of 15,000 vehicles per day or greater.

09a *If a marked crosswalk exists across an uncontrolled roadway where the speed limit exceeds 40 mph and the roadway has four or more lanes of travel and an ADT of 12,000 vehicles per day or greater, advanced yield lines with associated Yield Here to Pedestrians (R1-5, R1-5a) signs should be placed 20 to 50 ft in advance of the crosswalk, adequate visibility should be provided by parking prohibitions, pedestrian crossing (W11-2) warning signs with diagonal downward pointing arrow (W16-7p) plaques should be installed at the crosswalk, and a high-visibility crosswalk marking pattern should be used (See Figure 3B-17(CA)).*

Support:

10 Chapter 4F contains information on Pedestrian Hybrid Beacons. Section 4L.03 contains information regarding Warning Beacons to provide active warning of a pedestrian's presence. Section 4N.02 contains information regarding In-Roadway Warning Lights at crosswalks. Chapter 7D contains information regarding school crossing supervision.

APPENDIX K

ROADWAY CONCEPT PLAN (PROJECT VICINITY)

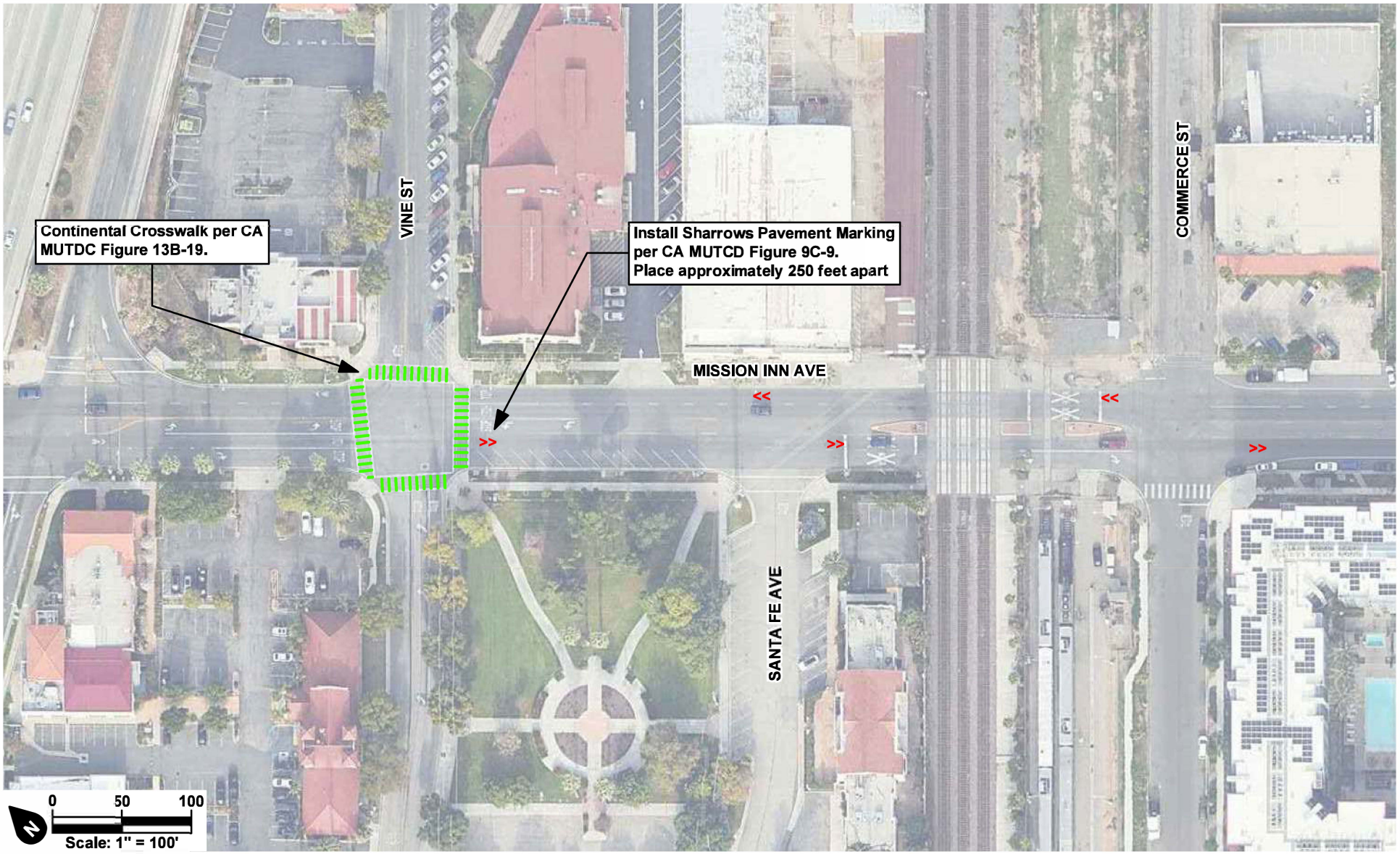
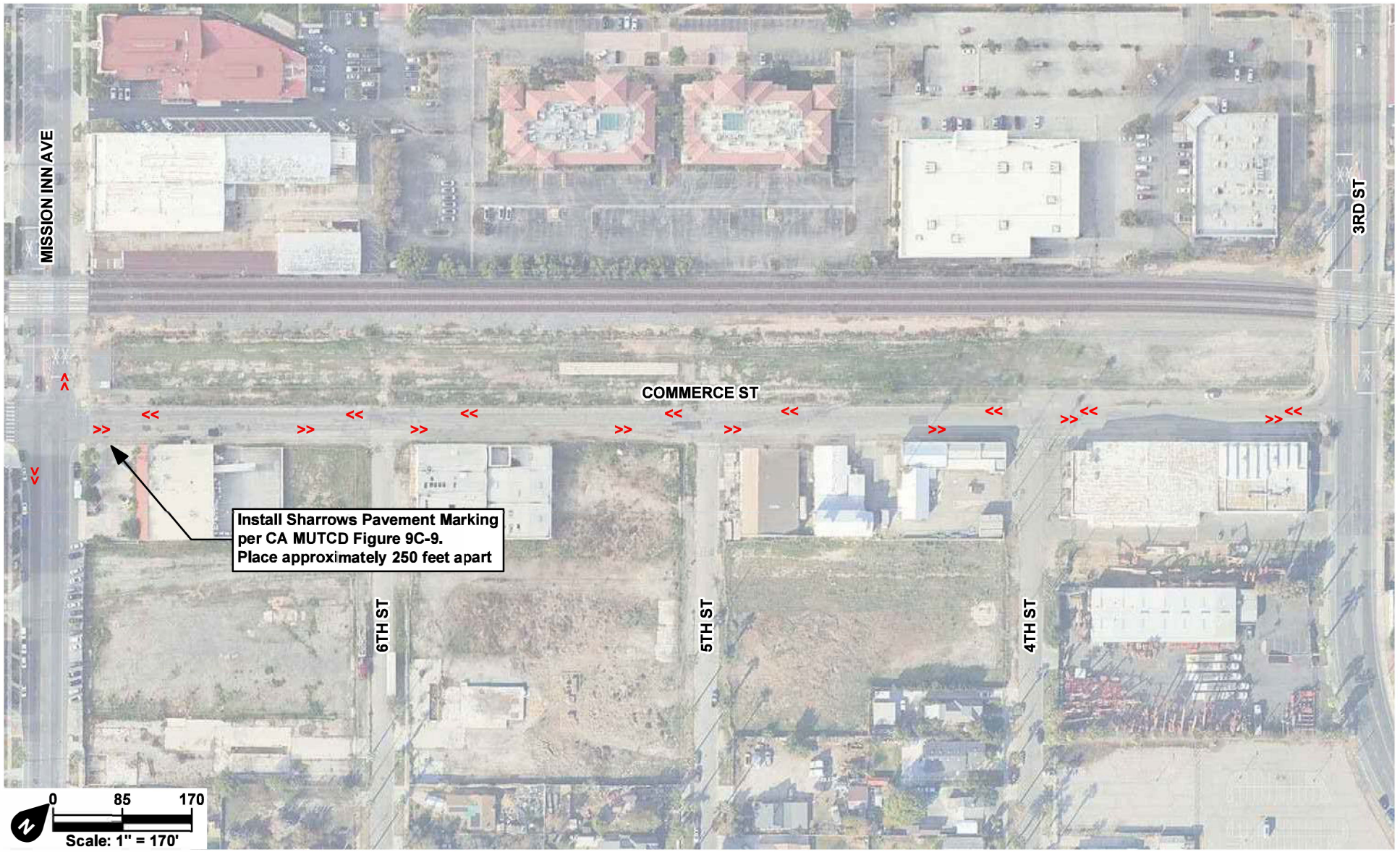


Figure K1
Conceptual Sharrow Markings On Mission Inn Avenue

Figure K2
Conceptual Sharrow Markings On 4th Street and 5th Street



Legend

Proposed Pavement Markings

Figure K3
Conceptual Sharrow Markings On Commerce Street

GANDDINI GROUP INC.

714.795.3100 | ganddini.com