PERRIS AT PENTECOSTAL TRAFFIC IMPACT ANALYSIS

City of Moreno Valley

January 9, 2022

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

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prepared by

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Project No. 19435

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ACRONYMS

AC	Acres
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
DU	Dwelling Unit
ICU	Intersection Capacity Utilization
GFA	Gross Floor Area
GLA	Gross Leasable Area
LMA	Local Mobility Analysis
LOS	Level of Service
MUTCD	Manual on Uniform Traffic Control Devices
NEPA	National Environmental Policy Act
PCE	Passenger Car Equivalent
SCAG	Southern California Association of Governments
SF	Square Feet
SCS/RTP	Sustainable Communities Strategy/Regional Transportation Plan
TAZ	Traffic Analysis Zone
TIA	Traffic/Transportation Impact Analysis
TSF	Thousand Square Feet
V/C	Volume/Capacity
VMT	Vehicle Miles Traveled

EXECUTIVE SUMMARY

The purpose of this study is to evaluate the potential for transportation impacts resulting from development of the proposed project both in the context of the City of Moreno Valley's discretionary authority for conformance with locally established operational standards and the California Environmental Quality Act (CEQA). Although this is a technical report, effort has been made to write the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with terms related to transportation engineering.

This study was prepared in consultation with City of Moreno Valley staff and in accordance with the procedures and methodologies for assessing transportation impacts established by the City of Moreno Valley. 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 CEQA purposes, this study also evaluates the significance of project-related transportation impacts as measured by vehicle miles traveled (VMT) relative to thresholds established by the City of Moreno Valley as the lead agency and, if necessary, identifies any feasible mitigation measures to mitigate any significant impacts.

Project Description

The approximately 20.4-acre project site is located east of Emma Lane between Santiago Drive and Iris Avenue in the City of Perris, California.

The proposed project involves construction of a gated 426-unit apartment complex on 18.05 net acres of land. The Project will require consolidation of the seven separate parcels and right-of-way dedication for ultimate street right-of-way. Construction of adjacent street improvements to ultimate right-of-way width for Emma Lane, Santiago Drive and Iris Avenue will occur with the Project. Construction and dedication of 1.845 acres for public open space at the northeast corner of the Project Site will also occur with the Project. Vehicular access is proposed at Emma Lane and Santiago Drive.

Existing Conditions

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

Project Trip Generation

The proposed project is forecast to generate approximately 2,871 daily vehicle trips, including 170 trips during the AM peak hour and 217 trips during the PM peak hour.

Operational Analysis Findings (Non-CEQA)

The proposed project is forecast to cause a substantial project-related LOS deficiency at the following study intersection for Opening Year (2024) With Project conditions, without improvements, based on the operational criteria established by the Cities of Moreno Valley and Perris:

6. Emma Lane at Iris Avenue AM and PM peak hours

Operational Improvements (Non-CEQA)

The following measures are recommended to address the project-related LOS deficiency for Opening Year (2024) With Project conditions:

6. Emma Lane (NS) at Iris Avenue (EW)
    - Install a raised median along Iris Avenue with eastbound and westbound left turn lanes that restricts the northbound and southbound approaches to right turns only.

The proposed project is forecast to result in no substantial LOS deficiencies at the study intersections for Opening Year (2024) With Project conditions with implementation of the recommended improvements.

VMT Analysis Findings (CEQA)

Implementation of Mitigation Measures #1 and #2 is estimated to result in a total VMT reduction of 1.85 percent for the proposed project, resulting in 12.73 residential home-based VMT per capita, which is below the City of Moreno Valley average of 12.79 VMT per capita. Therefore, the proposed project is forecast to result in a less than significant VMT impact with mitigation based on the City-established thresholds of significance.

Mitigation Measure #1:
In conjunction with construction of adjacent street improvements to ultimate right-of-way width, the proposed project shall construct sidewalks improvements on Emma Lane between Santiago Drive and Iris Avenue and on Santiago Drive between Emma Lane and Perris Boulevard. Additionally, the proposed project shall provide high-visibility, continental crosswalks markings on the north leg of Emma Lane and Iris Avenue.

Mitigation Measure #2:
The proposed project shall construct the following traffic calming measures:
- Install corner extensions/bulb-outs at the project driveways on Emma Lane.
- Install corner extensions/bulb-outs at the project driveway on Santiago Drive.
- Install speed cushions on Emma Lane between Santiago Drive and Iris Avenue.
- Install high-visibility, continental crosswalk markings on the north leg of Emma Lane and Iris Avenue.

1. INTRODUCTION

This section introduces the proposed project and the general scope of the analysis.

PROJECT DESCRIPTION

The approximately 20.4-acre project site is located east of Emma Lane between Santiago Drive and Iris Avenue in the City of Perris, California. Figure 1 shows the regional vicinity and Figure 2 shows the project location map.

The proposed project involves construction of a gated 426-unit apartment complex on 18.05 net acres of land. The Project will require consolidation of the seven separate parcels and right-of-way dedication for ultimate street right-of-way. Construction of adjacent street improvements to ultimate right-of-way width for Emma Lane, Santiago Drive and Iris Avenue will occur with the Project. Construction and dedication of 1.845 acres for public open space at the northeast corner of the Project Site will also occur with the Project. Vehicular access is proposed at Emma Lane and Santiago Drive. Figure 3 shows the project site plan.

SCOPE OF ANALYSIS

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

Study Area

Based on the study intersections identified in the approved scoping agreement (Appendix B), the study area consists of the following study intersections within the jurisdictions of the Cities of Moreno Valley and Perris:

Study Intersections[1]	Jurisdiction
1. Heacock Street (NS) at Cactus Avenue (EW)	City of Moreno Valley
2. Heacock Street (NS) at John F. Kennedy Drive (EW)	City of Moreno Valley
3. Heacock Street (NS) at Gentian Avenue (EW)	City of Moreno Valley
4. Heacock Street (NS) at Iris Avenue (EW)	City of Moreno Valley
5. Indian Street (NS) at Iris Avenue (EW)	City of Moreno Valley
6. Emma Lane (NS) at Iris Avenue (EW)	City of Moreno Valley
7. Perris Boulevard (NS) at John F. Kennedy Drive (EW)	City of Moreno Valley
8. Perris Boulevard (NS) at Gentian Avenue (EW)	City of Moreno Valley
9. Perris Boulevard (NS) at Santiago Drive (EW)	City of Moreno Valley
10. Perris Boulevard (NS) at Iris Avenue (EW)	City of Moreno Valley
11. Perris Boulevard (NS) at Harley Knox Boulevard (EW)	City of Perris

Notes:
1. (NS) = North-South roadway; (EW) = East-West roadway

Analysis Scenarios

The following scenarios are analyzed for typical weekday AM and PM peak hour conditions:

- Existing Conditions
- Opening Year (2024) Without Project Conditions
- Opening Year (2024) With Project Conditions

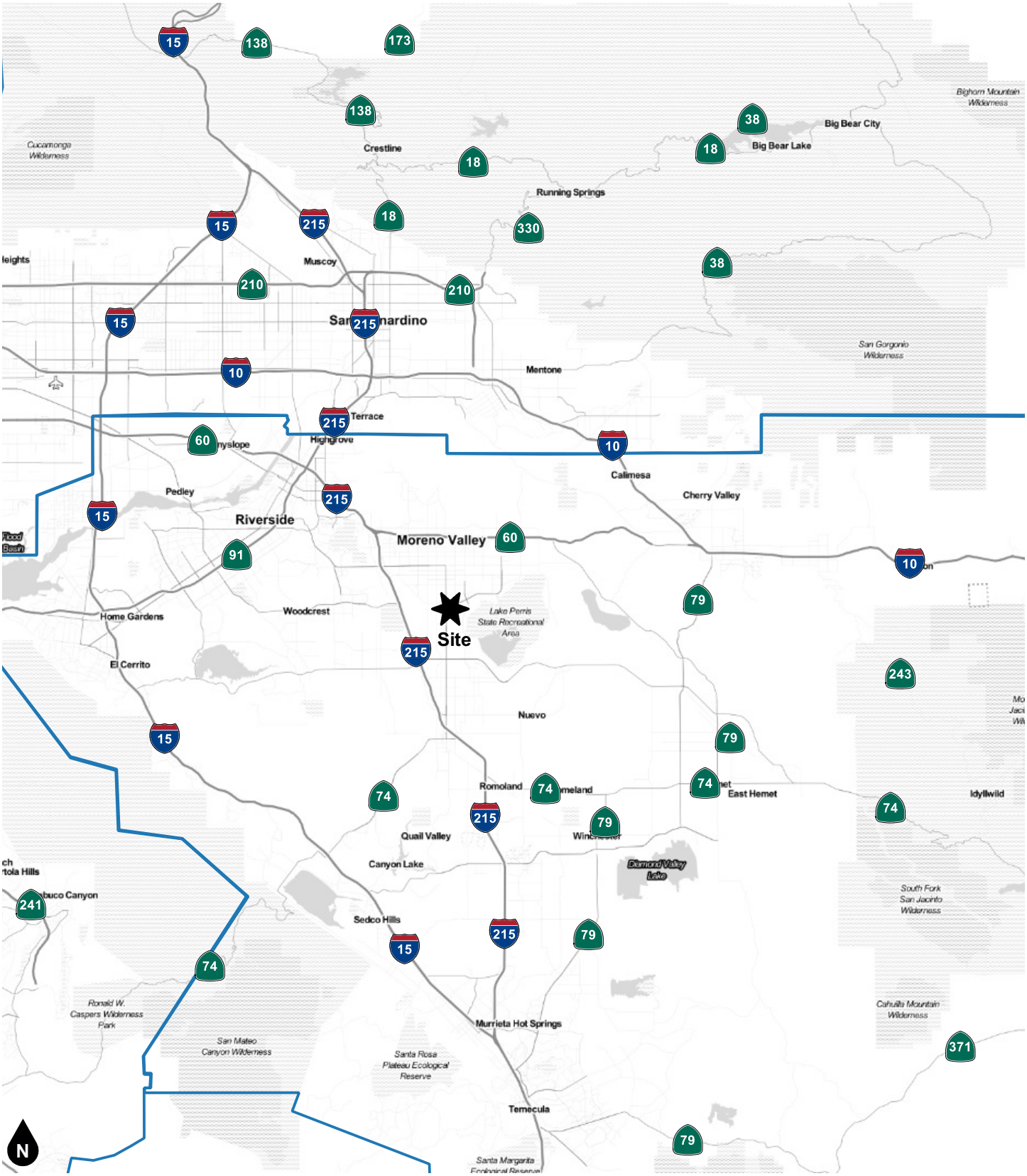
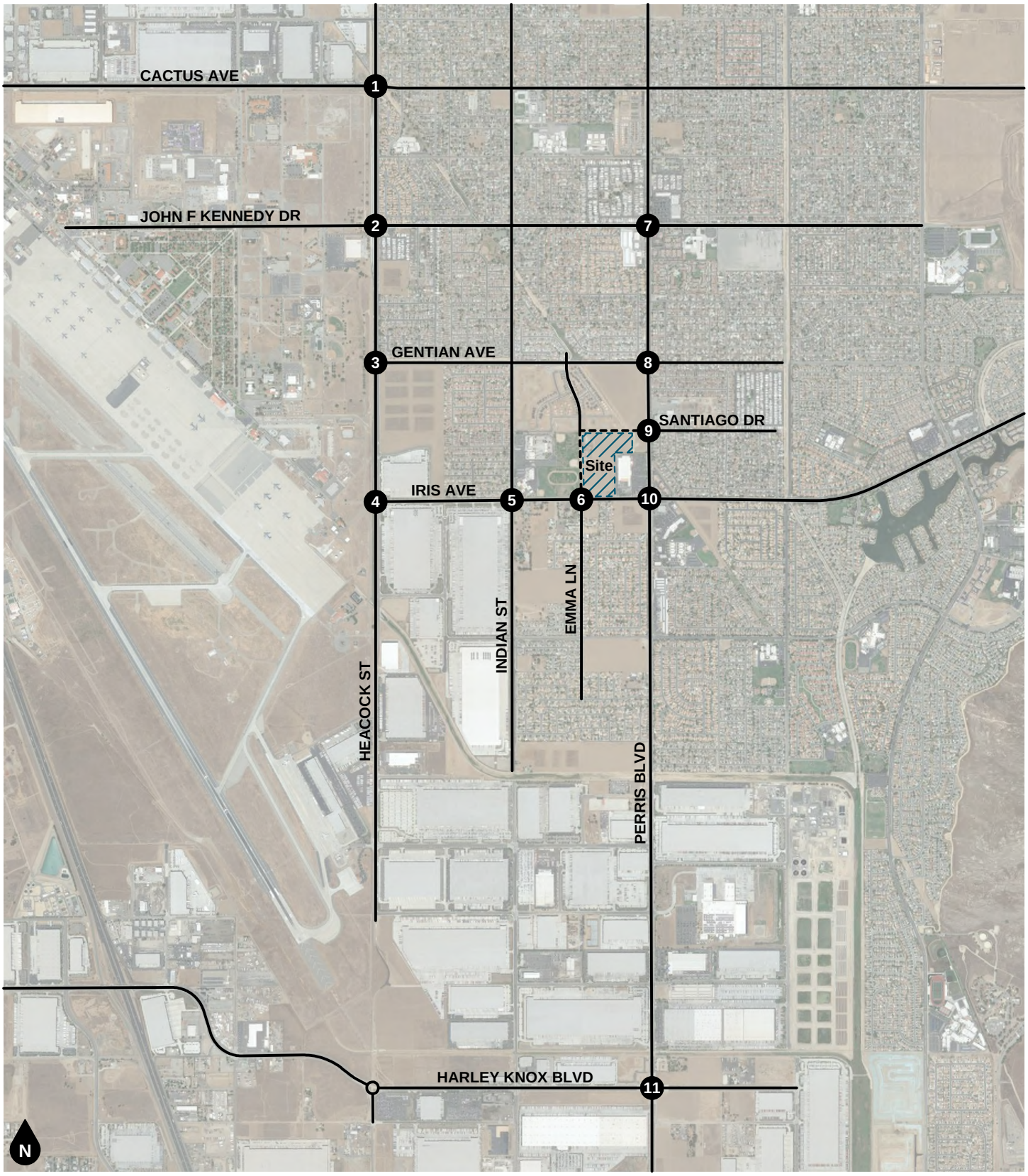


Figure 1
Regional Vicinity



Legend

Study Intersection

Figure 2
Project Location & Study Intersection Map

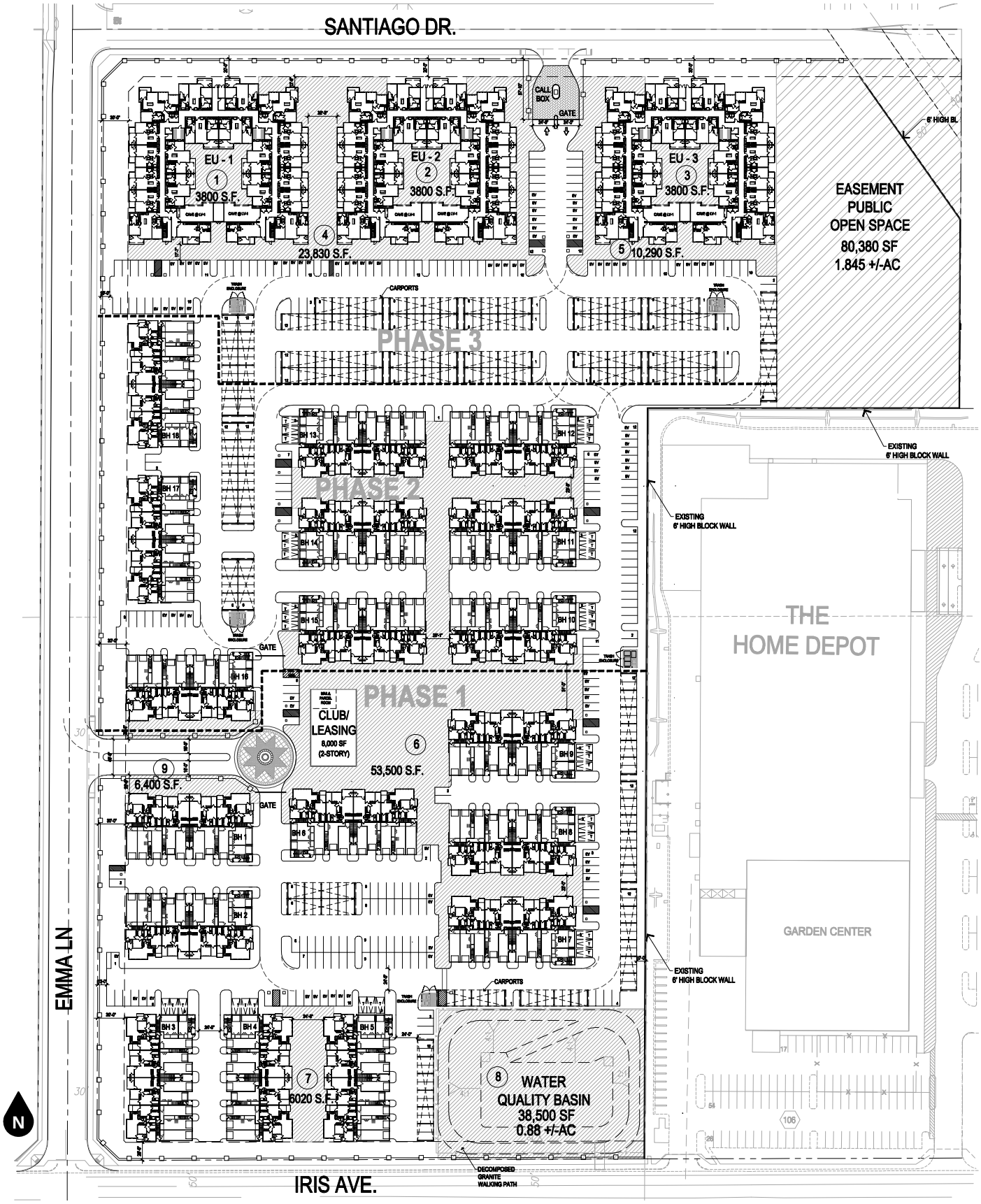


Figure 3
Site Plan

2. ANALYTICAL METHODOLOGIES

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies.

LEVEL OF SERVICE ANALYTICAL METHODOLOGY (NON-CEQA)

Level of Service analysis is performed for assessing conformance with General Plan and operational standards established by the applicable agencies. In accordance with current CEQA provisions, a project's effect on automobile delay (as measured by Level of Service) shall not constitute a significant environmental impact.

Intersection Delay Methodology

The technique used to assess the performance of intersections in the Cities of Moreno Valley and Perris is known as the intersection delay methodology based on the procedures contained in the *Highway Capacity Manual* (Transportation Research Board, 6th 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 (LOS). 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. The intersection control delay is then correlated to LOS based on the following thresholds:

Level of Service	Intersection Control Delay (Seconds / Vehicle)	
	Signalized 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: Transportation Research Board, Highway Capacity Manual (6th Edition).

LOS is used to qualitatively describe the performance of a roadway facility, ranging from LOS A (free-flow conditions) to LOS F (extreme congestion and system failure). At intersections with traffic signal or all way stop control, LOS 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), LOS is determined by the average control delay for the worst minor street approach or major street left turn movement. Intersection delay and Level of Service calculations were performed using the Vistro software in accordance with the parameters outlined in the City of Moreno Valley *Traffic Impact Preparation Guide for Vehicle Miles Traveled and Level of Service Assessment (June 2020)* ["the City of Moreno Valley TIA Guidelines"].

Performance Standards

City of Moreno Valley

The City of Moreno Valley LOS standards are illustrated on Figure 9-2 of the City's General Plan. In general, LOS D is applicable to intersections that are adjacent to freeway on/off ramps, and adjacent to employment

generating land uses. LOS C is applicable to all other intersections. For boundary intersections, LOS D is assumed to be acceptable.

Based on review of the City's LOS standards, the acceptable LOS for the study intersections within City of Moreno Valley jurisdiction are LOS D or better.

City of Perris

The City of Perris has established LOS D as the minimum acceptable LOS along all City maintained roads (including intersections) and LOS D along I-215 and SR-74 (including intersections with local streets and roads). An exception to the local road standard is LOS E at intersections of any Arterials and Expressways with SR-74, the Ramona-Cajalco Expressway, or at I-215 freeway ramps. LOS E may be allowed within the boundaries of the Downtown Specific Plan Area to the extent that it would support transit-oriented development and walkable communities. Increased congestion in this area will facilitate an increase in transit ridership and encourage development of a complementary mix of land uses within a comfortable walking distance from light rail stations.

Substantial Operational Deficiency Criteria

The following criteria are used to determine whether a project causes a substantial operational deficiency and should be required to provide improvements or corrective measures.

City of Moreno Valley

Intersection improvements should be considered at signalized intersections within City of Moreno Valley jurisdiction under the following conditions:

- Any signalized study intersection operating at acceptable LOS without project traffic in which the addition of project traffic causes the intersection to degrade to unacceptable LOS shall identify improvements to provide acceptable LOS.

- Any signalized study intersection that is operating at unacceptable LOS without project traffic where the project increases delay by 5.0 or more seconds shall identify improvements to offset the increase in delay.

Intersection improvements should be considered at unsignalized intersections within City of Moreno Valley jurisdiction under the following conditions:

- The addition of project trips causes an unsignalized intersection to degrade from acceptable LOS to unacceptable LOS; or

- The project adds 5.0 seconds or more of delay to an unsignalized intersection that is already projected to operate at unacceptable LOS without the addition of project trips – AND – the intersection meets peak hour traffic signal warrant after the addition of project trips.

City of Perris

A project is considered to result in a substantial operational deficiency at a study intersection within City of Perris jurisdiction if one or more of the following conditions are satisfied:

- The addition of 50 or more peak hour project generated trips is forecast to cause an intersection to deteriorate from acceptable LOS (D or better) to unacceptable LOS (E or F); or,

- The addition of 50 or more peak hour project generated trips worsens the delay by 2 seconds or more at an intersection operating at an unacceptable LOS (E or F) in the baseline condition.

- A cumulative impact is considered significant when a study intersection is forecast to operate at an unacceptable LOS (E or F) with the addition of cumulative/background traffic and 50 or more peak hour project trips.

If a project is forecast to result in a substantial operational deficiency, recommended corrective measures are identified that would reduce the project's effect to a level that does not exceed the specified deficiency criteria. Corrective measures can be in many forms, including the construction of physical improvements (e.g., addition of travel lanes, traffic control modifications, etc.) or the implementation of transportation demand management measures.

VEHICLE MILES TRAVELED ANALYTICAL METHODOLOGY (CEQA)

The metric used to evaluate the transportation impact of land use and transportation projects under CEQA is known as vehicle miles traveled (VMT). In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. Additional information and a detailed project assessment is provided in the Vehicle Miles Traveled section presented later in this report.

3. EXISTING TRANSPORTATION SETTING

This section describes the existing transportation setting in the project vicinity.

EXISTING ROADWAY SYSTEM

Figure 4 identifies 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 the Interstate 215 (I-215) Freeway located approximately 2.5 miles west of the project site and State Route 60 (SR-60) approximately 3.3 miles north of the project site. Key roadways providing local north-south circulation include Heacock Street, Indian Street, Emma Lane, and Perris Boulevard. Key roadways providing local east-west circulation include Cactus Avenue, John F. Kennedy Drive, Gentian Avenue, Santiago Drive, and Iris Avenue.

Heacock Street is a four-lane divided roadway with a painted two-way left-turn lane median in the project study area. The posted speed limit is 45 miles per hour north of John F. Kennedy Drive and 50 miles per hour south of John F. Kennedy Drive. On-street parking is prohibited on both sides of roadway. Class II (dedicated/on-street) bicycle lanes are provided between Cactus Avenue and John F. Kennedy Drive and between Gentian Avenue and Iris Avenue. Sidewalks are provided along the northbound side of the roadway.

Indian Street is a four-lane divided roadway north of Iris Avenue and three-lane divided roadway (one lane northbound, two lanes southbound) south of Iris Avenue with a painted two-way left-turn lane median in the project study area. The posted speed limit is 40 miles per hour north of Iris Avenue, with 25 mile per hour school zone adjacent to Rainbow Ridge Elementary and March Middle Schools, and 45 miles per hour south of Iris Avenue. On-Street parking is prohibited on both sides of roadway. Class II (dedicated/on-street) bicycle lanes are provided north of Iris Avenue. Sidewalks are provided on both sides of the roadway north of Iris Avenue and along the southbound side south of Iris Avenue.

Emma Lane is a two-lane undivided roadway in the project study area. The posted speed limit is 25 miles per hour. On-Street parking is generally permitted on both sides of roadway. There are no existing bicycle facilities. Sidewalks are provided on both sides of the roadway south of Iris Avenue; north of Iris Avenue, Emma Lane is only paved with no curb, gutter, or sidewalks.

Perris Boulevard is a six-lane divided roadway with alternating raised and painted two-way left-turn lane medians in the project study area. The posted speed limit is 45 miles per hour. On-street parking is prohibited on both sides of roadway. There are no existing bicycle facilities. Sidewalks are provided on both sides of the roadway.

Cactus Avenue is a four- to six-lane divided roadway with a raised median west of Heacock Street and a four-lane divided roadway with a painted two-way left-turn lane median east of Heacock Street in the project study area. The posted speed limit is 50 miles per hour west of Heacock Street and 40 miles per hour east of Heacock Street. On-street parking is prohibited on both sides of roadway. Class II (dedicated/on-street) bicycle lanes are provided on both sides of the roadway. Sidewalks are provided on both sides of the roadway except along the undeveloped frontage along the south side of the roadway west of Heacock Street.

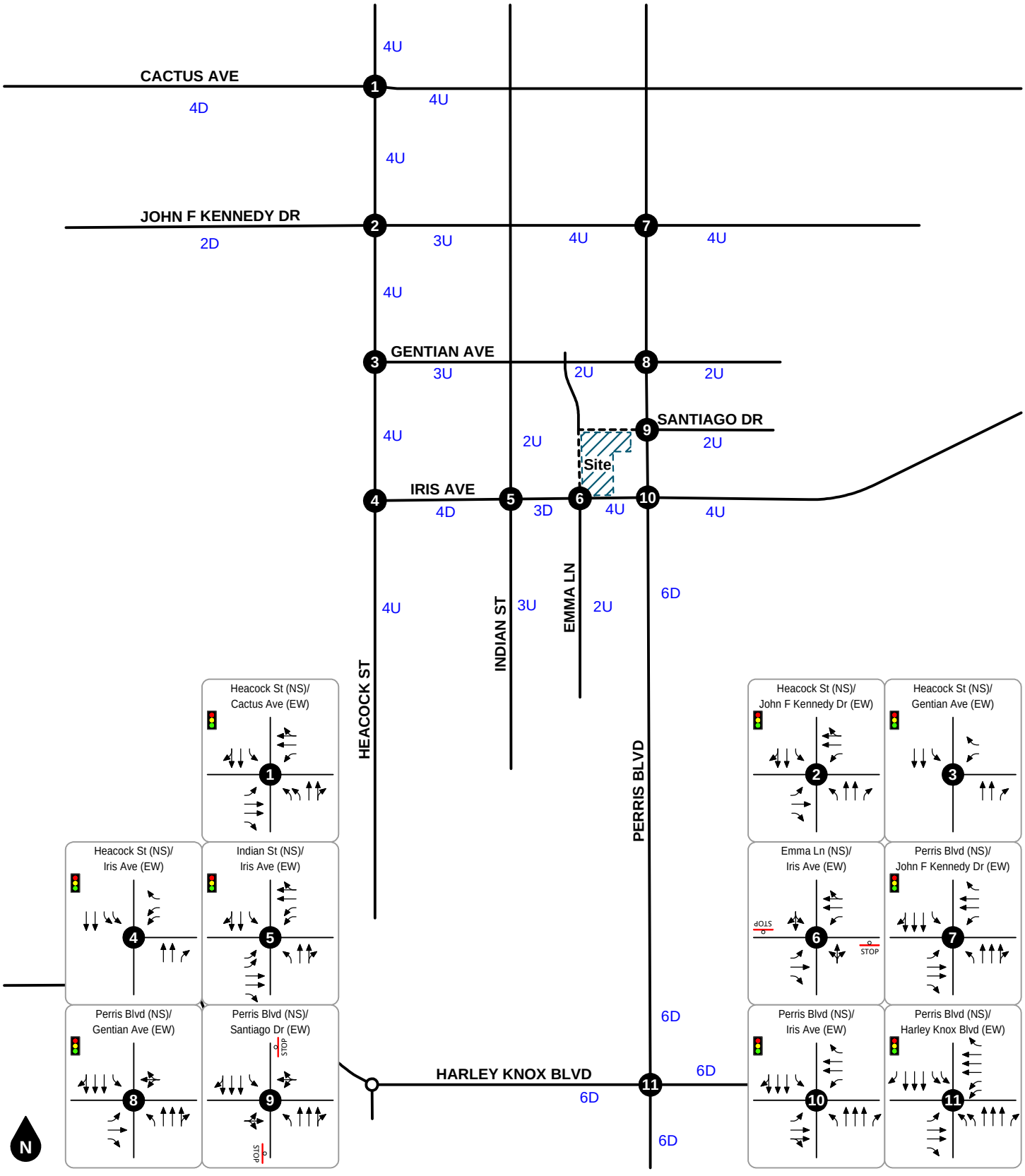
John F. Kennedy Drive is a four-lane divided roadway with a painted two-way left-turn lane median in the project study area, except for an approximately 1,000-foot segment east of Heacock Street that consists of one eastbound lane and two westbound lanes. The posted speed limit is 35 miles per hour west of Heacock Street, 45 miles per hour between Heacock Street and Perris Boulevard, and 40 miles per hour east of Perris Boulevard. On-street parking is prohibited on both sides of roadway. Class II (on-street, dedicated) bicycle

lanes are provided on both sides of the roadway. Sidewalks are provided on both sides of the roadway except along the undeveloped frontage along the south side of the roadway west of Heacock Street.

Gentian Avenue is a two- to four-lane undivided roadway between Heacock Street and Indian Street, a two-lane divided roadway between Indian Street and Perris Boulevard, and a two-lane undivided roadway east of Perris Boulevard in the project study area. The posted speed limit is 40 miles per hour west of Heacock Street, 35 miles per hour between Heacock Street and Perris Boulevard; the un-posted statutory speed limit is 25 miles per hour east of Perris Boulevard. On-street parking is prohibited on both sides of roadway west of Perris Boulevard and generally permitted east of Perris Boulevard. Buffered Class II (dedicated/on-street) bicycle lanes are provided on both sides of the roadway. Sidewalks are provided on both sides of the roadway except along the undeveloped frontage along the south side of the roadway east of Heacock Street.

Santiago Drive is a two-lane undivided roadway east of Perris Boulevard in the project study area and has not been constructed along the project site frontage west of Perris Boulevard. The un-posted statutory speed limit is 25 miles per hour. On-street parking is generally permitted on both sides of roadway. There are no existing bicycle facilities. Sidewalks are provided on both sides of the roadway.

Iris Avenue is a four-lane divided roadway with alternating raised and painted two-way left-turn lane medians in the project study area, except for an approximately one-quarter mile segment between Indian Street and immediately east of Emma Lane that consists of one eastbound lane and two westbound lanes. The posted speed limit is 40 miles per hour between Heacock Street and Perris Boulevard, with 25 mile per hour school zone adjacent to Rainbow Ridge Elementary School, and 45 miles per hour east of Perris Boulevard. On-street parking is prohibited on both sides of roadway. Class II (dedicated/on-street) bicycle lanes are provided on both sides of the roadway east of Indian Street, including buffered bicycle lanes east of Perris Boulevard. Sidewalks are provided on both sides of the roadway.



Legend

Study Intersection

Figure 4
Existing Lane Geometry and Intersection Traffic Controls

Existing Bicycle and Pedestrian Facilities

Existing bicycle and pedestrian facilities in the project vicinity are shown on Figure 5. As shown on Figure 5, sidewalks are currently provided along the project site frontage on Iris Avenue. Existing sidewalks along Indian Street, Iris Avenue, and the northerly adjacent residential development currently under construction will provide pedestrian connectivity between the project site and adjacent Rainbow Ridgle Elementary and March Middle Schools.

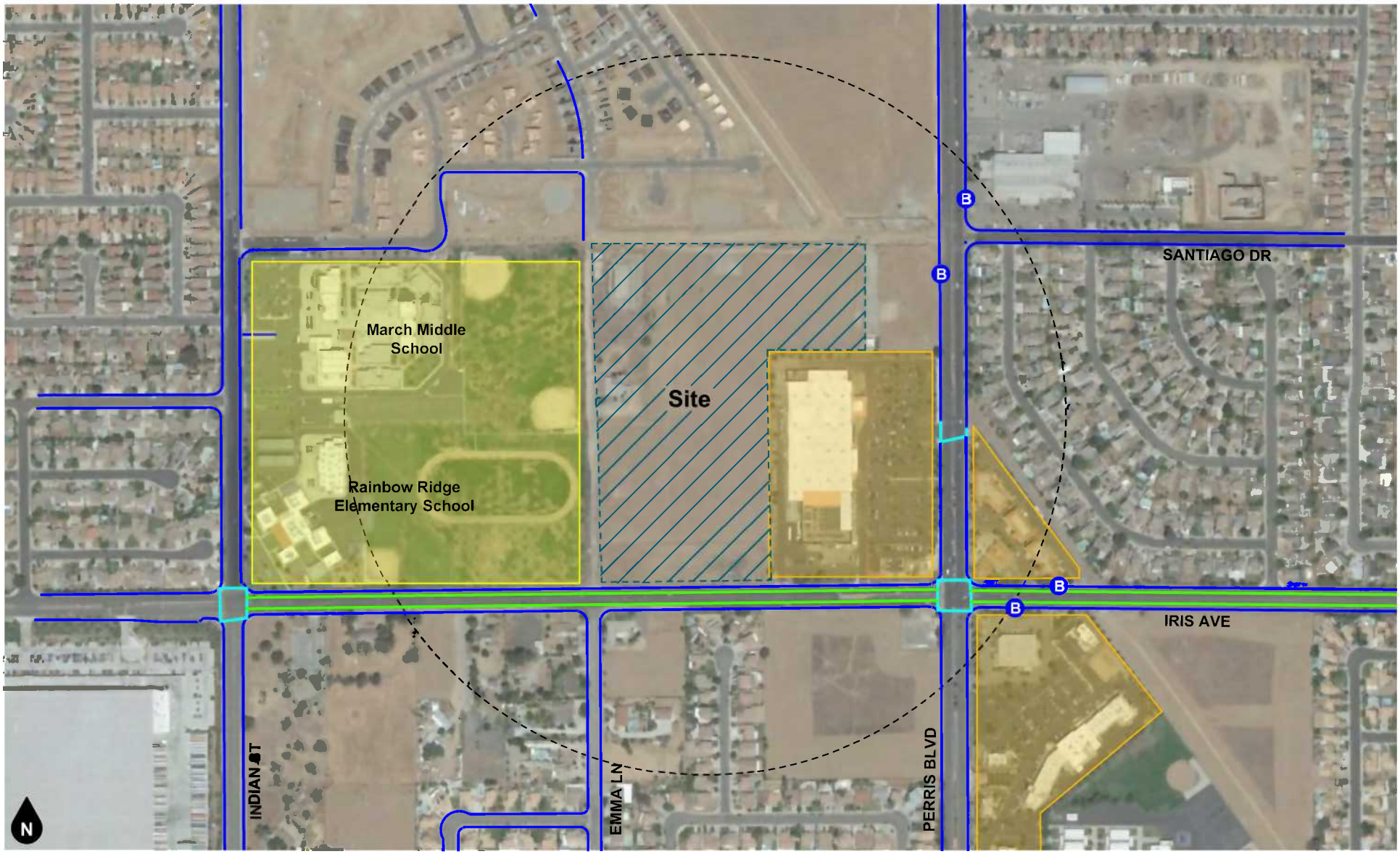
Existing Transit Routes

Figure 6 shows Existing public transit facilities and routes in the project vicinity. As shown on Figure 6, the study area is currently served by the Riverside Transit Agency (RTA) bus service. RTA Route 19 runs along Perris Street with the nearest stops located at the intersection of Santiago Drive and Perris Boulevard.

General Plan Context

Figure 7 shows the City of Moreno Valley General Plan street classifications map. 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 Moreno Valley standard roadway cross-sections are illustrated on Figure 8.

Figure 9 shows the City of Moreno Valley General Plan Bikeway Plan. In addition, the City of Moreno Valley has established a Bicycle Master Plan. Bicycle transportation improvements recommended in the Bicycle Master Plan are shown on Figure 10.



Legend

- Existing Sidewalk
- Existing Crosswalk
- Existing Class II Bicycle Lane
- RTA Route 19 Bus Stop
- 1/4-mile radius
- Schools/Institutional Uses
- Commercial Uses

Figure 5
Existing Bicycle and Pedestrian Facilities

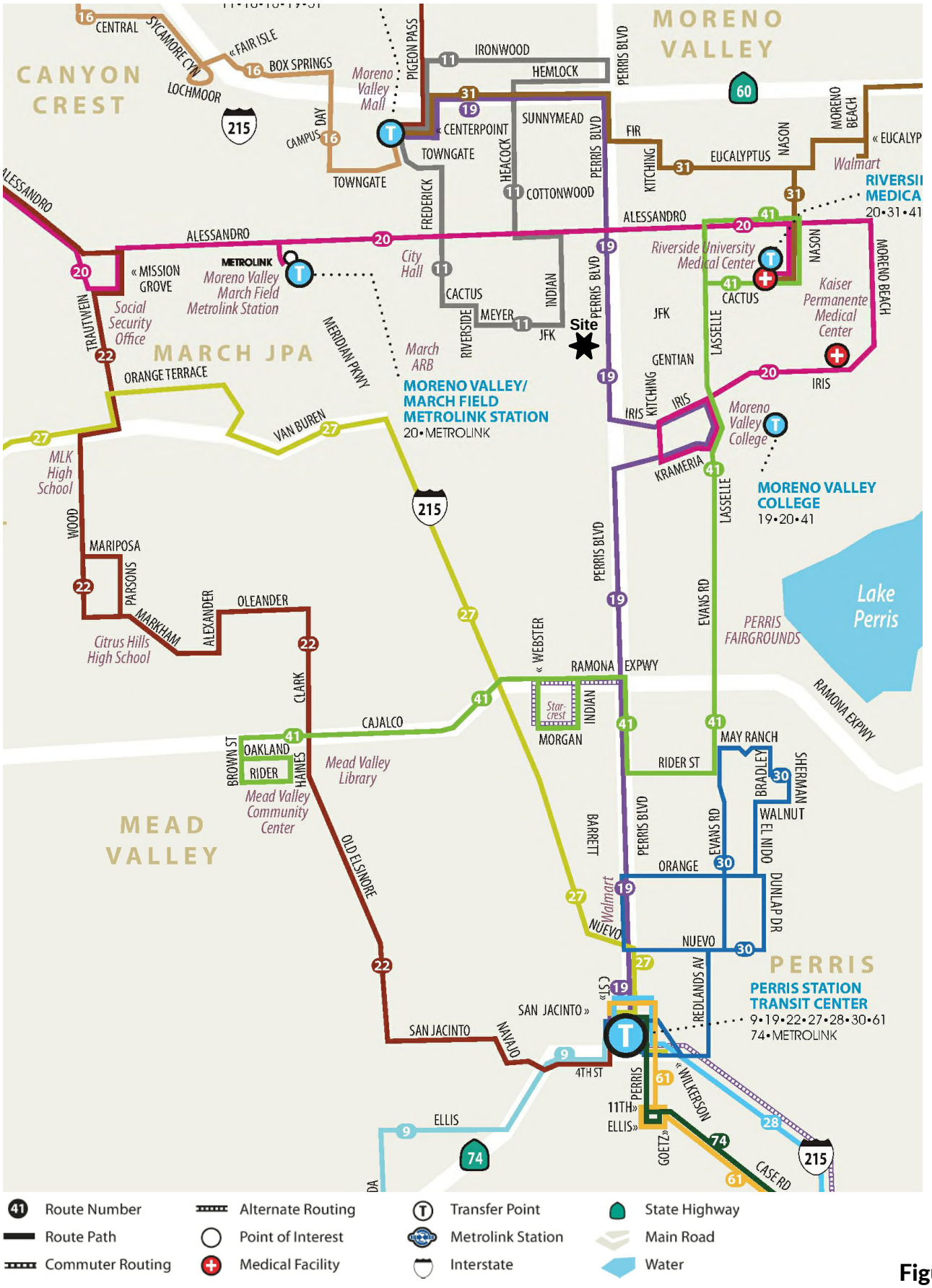


Figure 6
Existing Transit Routes

Source: Riverside Transit Agency

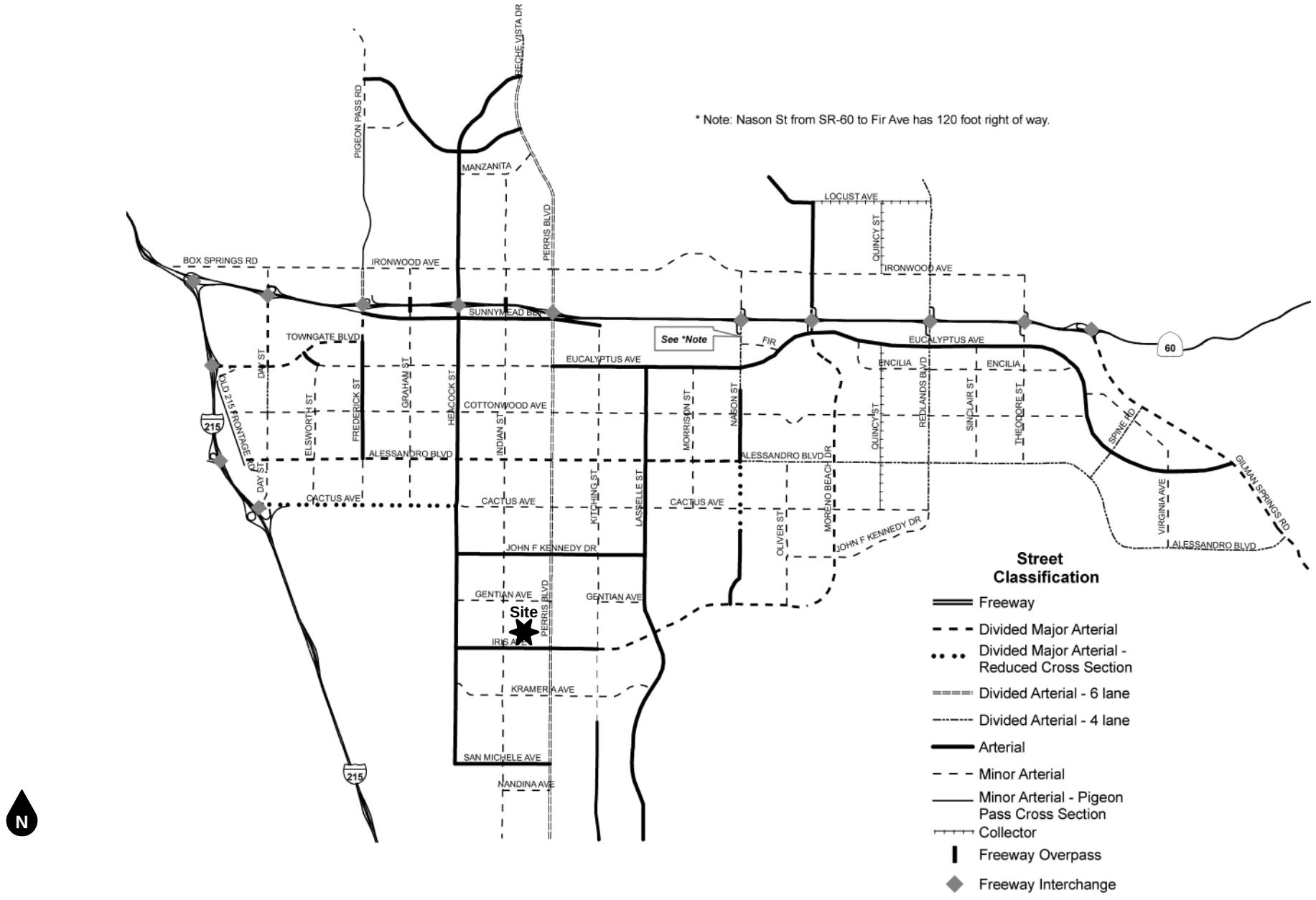


Figure 7
City of Moreno Valley General Plan Circulation Element

Source: City of Moreno Valley

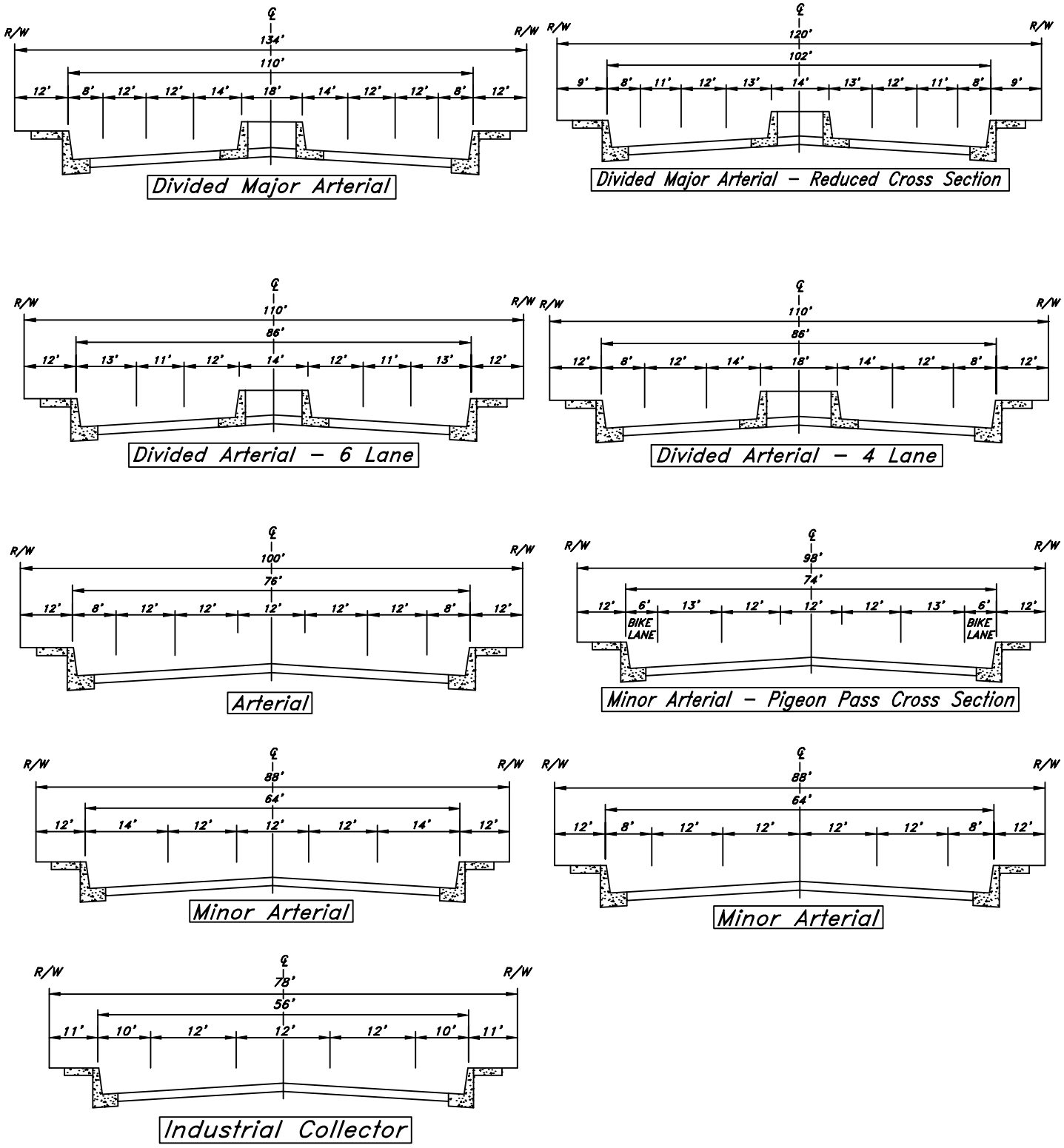


Figure 8
City of Moreno Valley General Plan Roadway Cross-Sections

Source: City of Moreno Valley

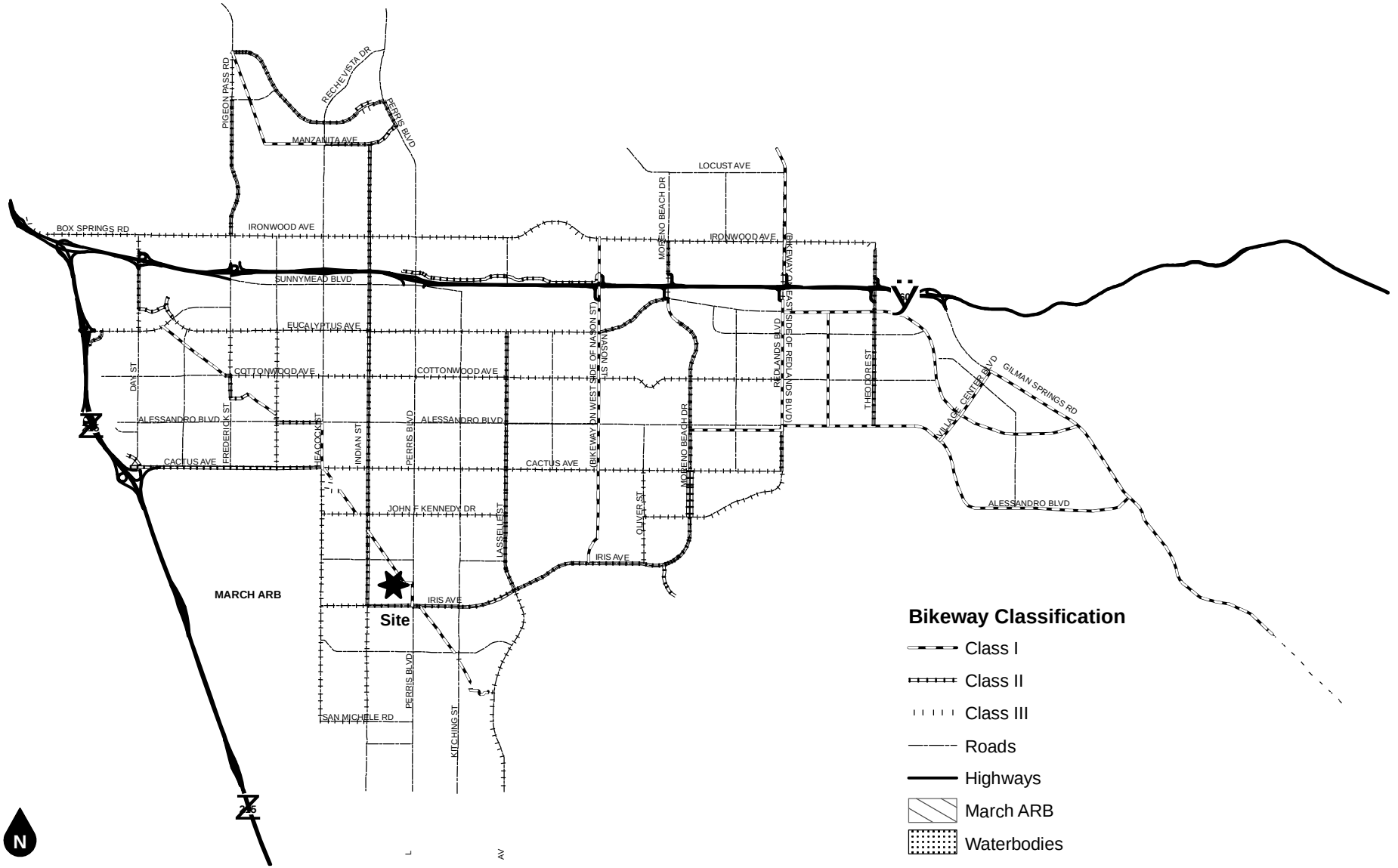


Figure 9
City of Moreno Valley General Plan Bikeway Plan

Source: City of Moreno Valley

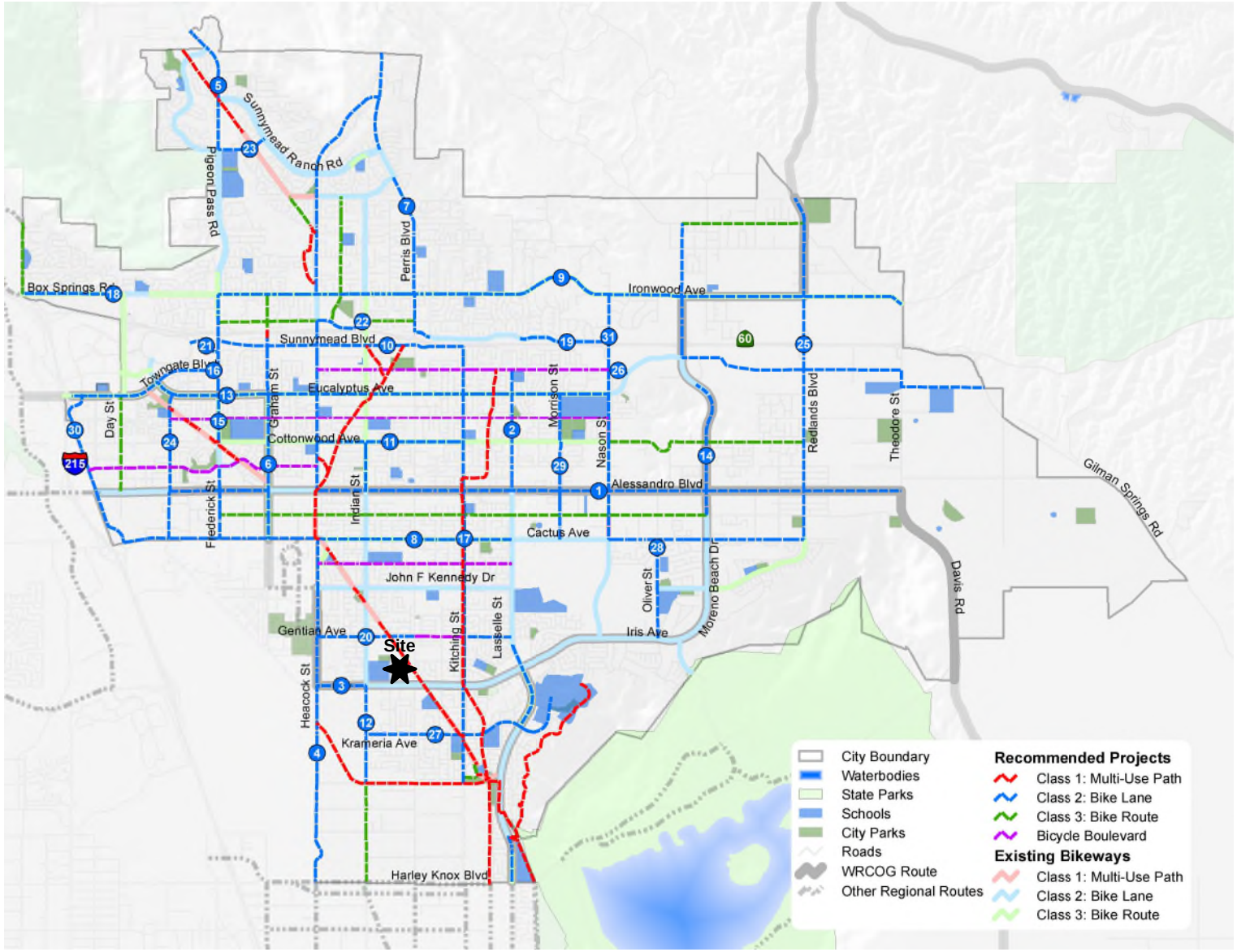


Figure 10
City of Moreno Valley Bikeway Master Plan Recommended Bikeways

Source: City of Moreno Valley

EXISTING ROADWAY VOLUMES

Figure 11 shows estimated existing average daily traffic volumes. The existing average daily traffic volumes were factored from peak hour intersection volumes using the following formula for each intersection leg:

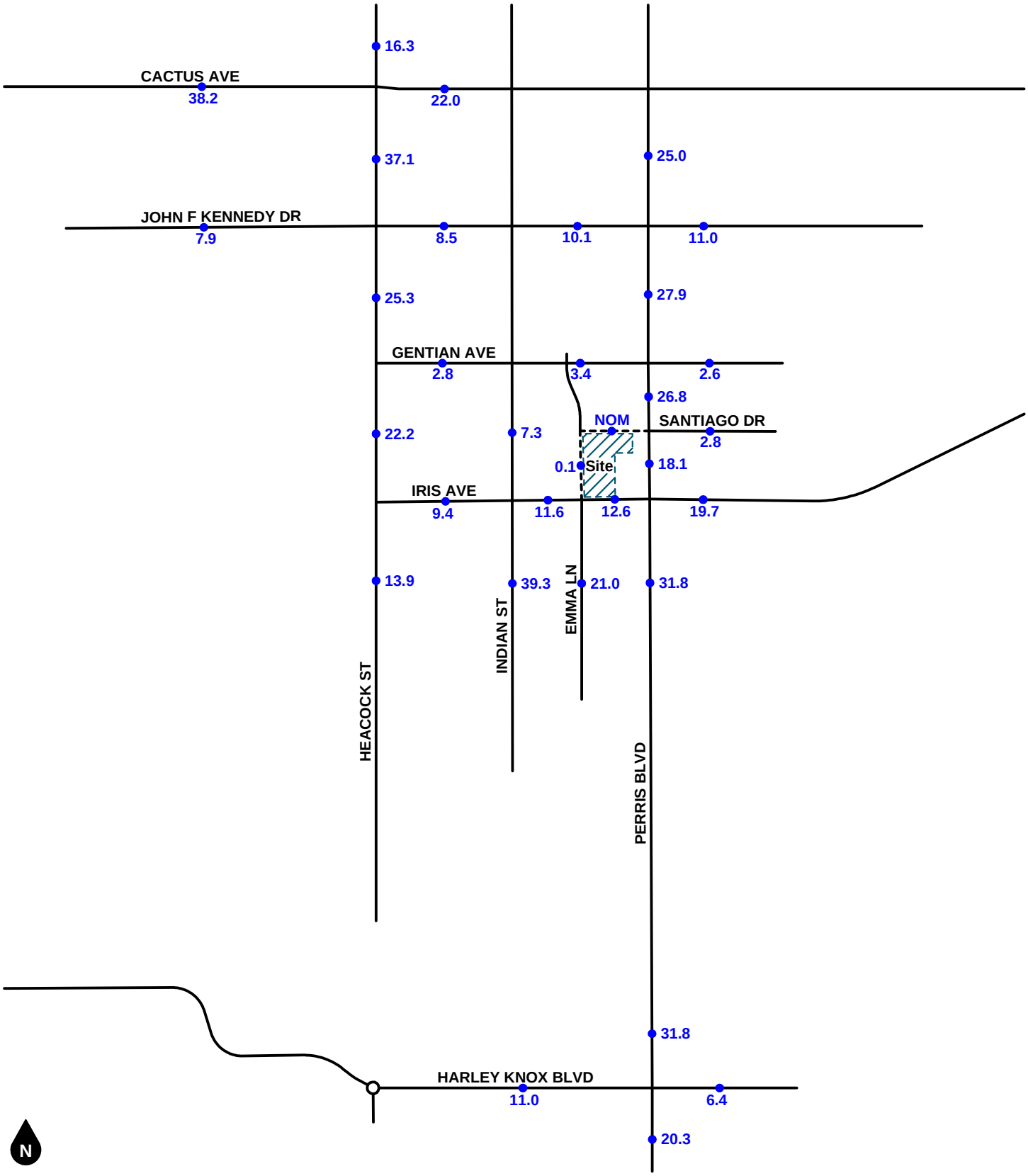
PM Peak Hour (Approach Volume + Exit Volume) x 12 = Leg Volume.

Figure 12 and Figure 13 show the Existing AM and PM peak hour intersection turning movement volumes. Existing peak hour intersection volumes are based upon AM peak period and PM peak period intersection turning movement counts obtained in December 2021 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 generally 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. Thus, the weekday PM peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15-minute periods have the highest total volume and may vary at other intersections. Intersection turning movement count worksheets are provided in Appendix C.

EXISTING LEVELS OF SERVICE

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

As shown in Table 1, the study intersections currently operate within acceptable LOS (D or better) during the peak hours for Existing conditions.



Legend

● ## Vehicles Per Day (1,000's)

NOM Nominal; Less Than 50 Vehicles Per Day

Figure 11
Existing Average Daily Traffic Volumes

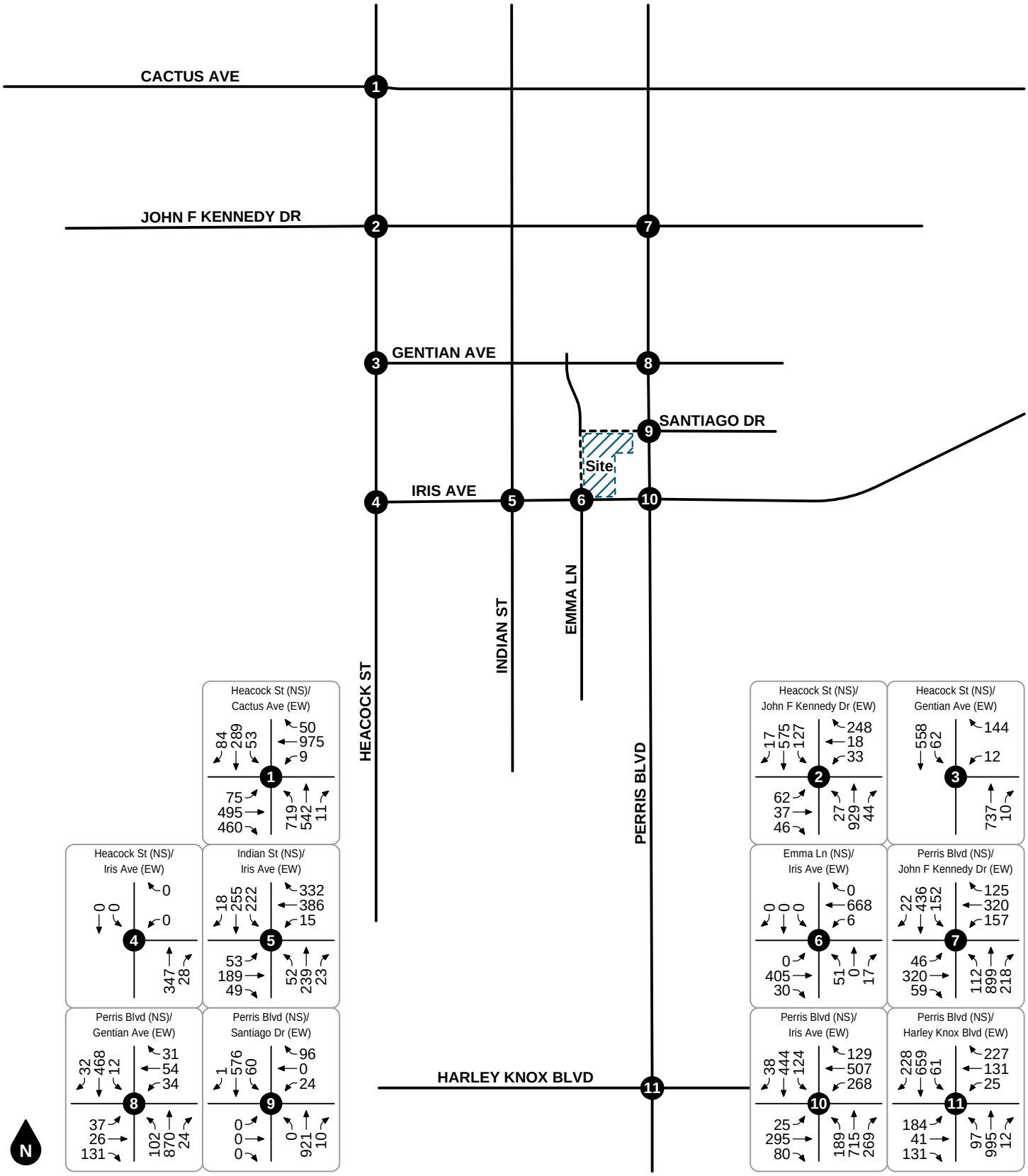


Figure 12
Existing AM Peak Hour Intersection Turning Movement Volumes

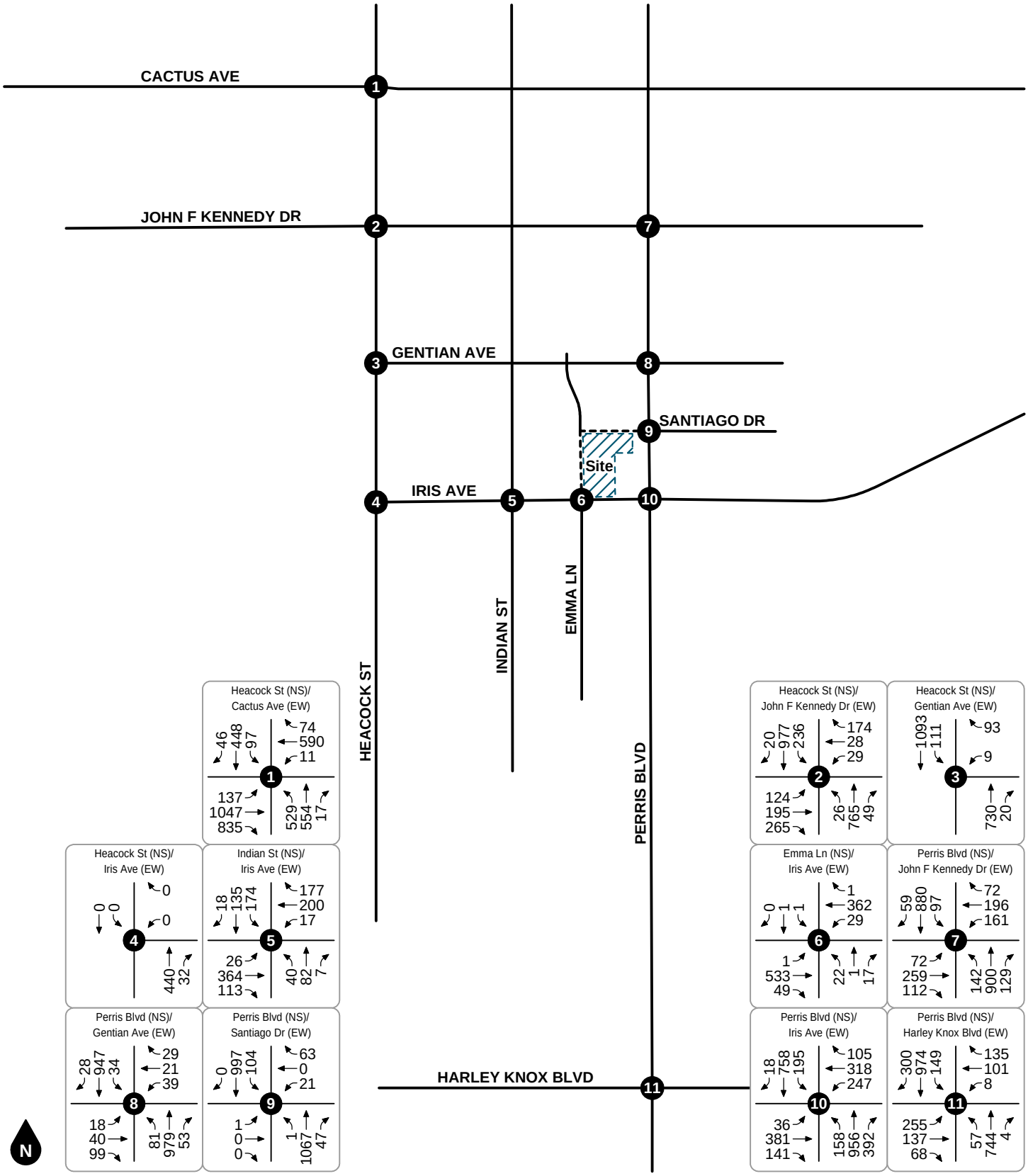


Figure 13
Existing PM Peak Hour Intersection Turning Movement Volumes

Table 1
Existing Intersection LOS

ID	Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
			Delay[2]	LOS[3]	Delay[2]	LOS[3]
1.	Heacock St at Cactus Ave	TS	45.0	D	44.3	D
2.	Heacock St at John F. Kennedy Dr	TS	38.1	D	38.6	D
3.	Heacock St at Gentian Ave	TS	19.2	B	12.9	B
4.	Heacock St at Iris Ave	TS	33.5	C	32.2	C
5.	Indian St at Iris Ave	TS	42.7	D	35.0	C
6.	Emma Ln at Iris Ave	CSS	53.6	F	26.3	D
7.	Perris Blvd at John F. Kennedy Dr	TS	42.2	D	39.4	D
8.	Perris Blvd at Gentian Ave	TS	32.4	C	26.2	C
9.	Perris Blvd at Santiago Dr	CSS	35.4	E	69.1	F
10.	Perris Blvd at Iris Ave	TS	40.8	D	42.5	D
11.	Perris Blvd at Harley Knox Blvd	TS	35.4	D	35.9	D

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) Delay is shown in seconds/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, Level of Service is based on average delay of the worst minor street approach or major street left turn movement.

(3) LOS = Level of Service

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 on figures contained in this section.

PROJECT TRIP GENERATION

Table 2 shows the project trip generation forecast based on rates obtained from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition, 2021). Based on review of the ITE land use description, trip generation rates for ITE Land Use Code 220 – Multifamily Housing (Low-Rise) were determined to adequately represent the proposed use and were selected for calculation of the project trip generation forecast. The number of trips generated is determined by multiplying the trip generation rates and directional distributions by the land use quantity.

As shown in Table 2, the proposed project is forecast to generate approximately 2,871 daily vehicle trips, including 170 trips during the AM peak hour and 217 trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Figure 14 shows the forecast directional distribution patterns for the project trips. The project trip distribution patterns were developed in consultation with City staff based on review of existing volume data, surrounding land uses, and the local and regional roadway facilities in the project vicinity.

Based on the identified project trip generation and distributions, project average daily traffic volumes are shown on Figure 15. Project-generated AM and PM peak hour intersection turning movement volumes are shown on Figure 16 and Figure 17.

SITE ACCESS

This analysis assumes the project will construct the roadway improvements necessary to provide project site access. Additional details are provided in the Site Access and Circulation section of this report.

Table 2
Project Trip Generation

Trip Generation Rates									
Land Use	Source[1]	Land Use Variable[2]	AM Peak Hour			PM Peak Hour			Daily Rate
			% In	% Out	Rate	% In	% Out	Rate	
Multifamily Housing (Low-Rise)	ITE 220	DU	24%	76%	0.40	63%	37%	0.51	6.74

Trips Generated									
Land Use	Source	Quantity	AM Peak Hour			PM Peak Hour			Daily
			In	Out	Total	In	Out	Total	
Multifamily Housing (Low-Rise)	ITE 220	426 DU	41	130	171	137	80	217	2,871

Notes:

1. ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code. All rates based on General Urban/Suburban setting unless otherwise noted.
2. DU = Dwelling Units

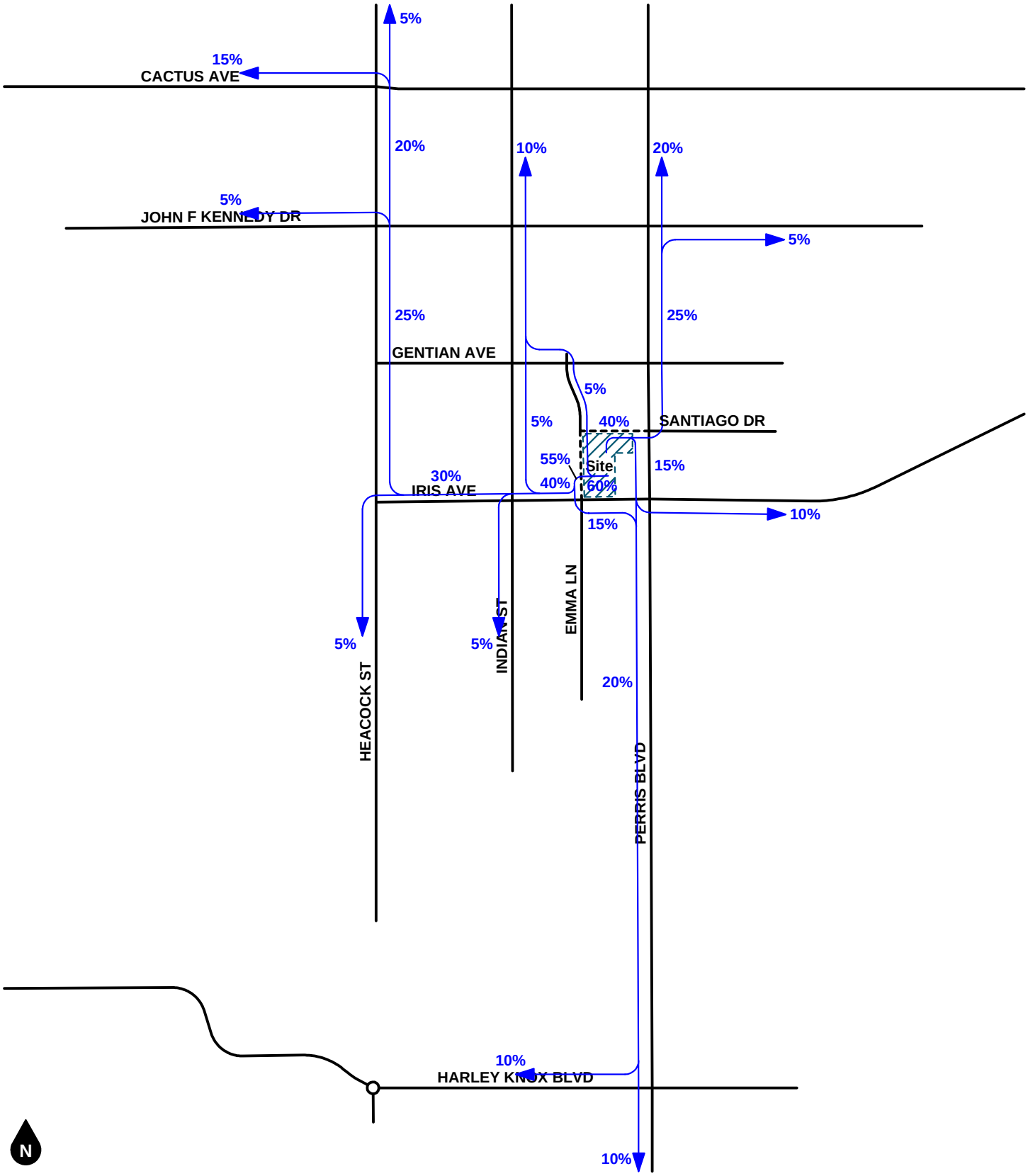
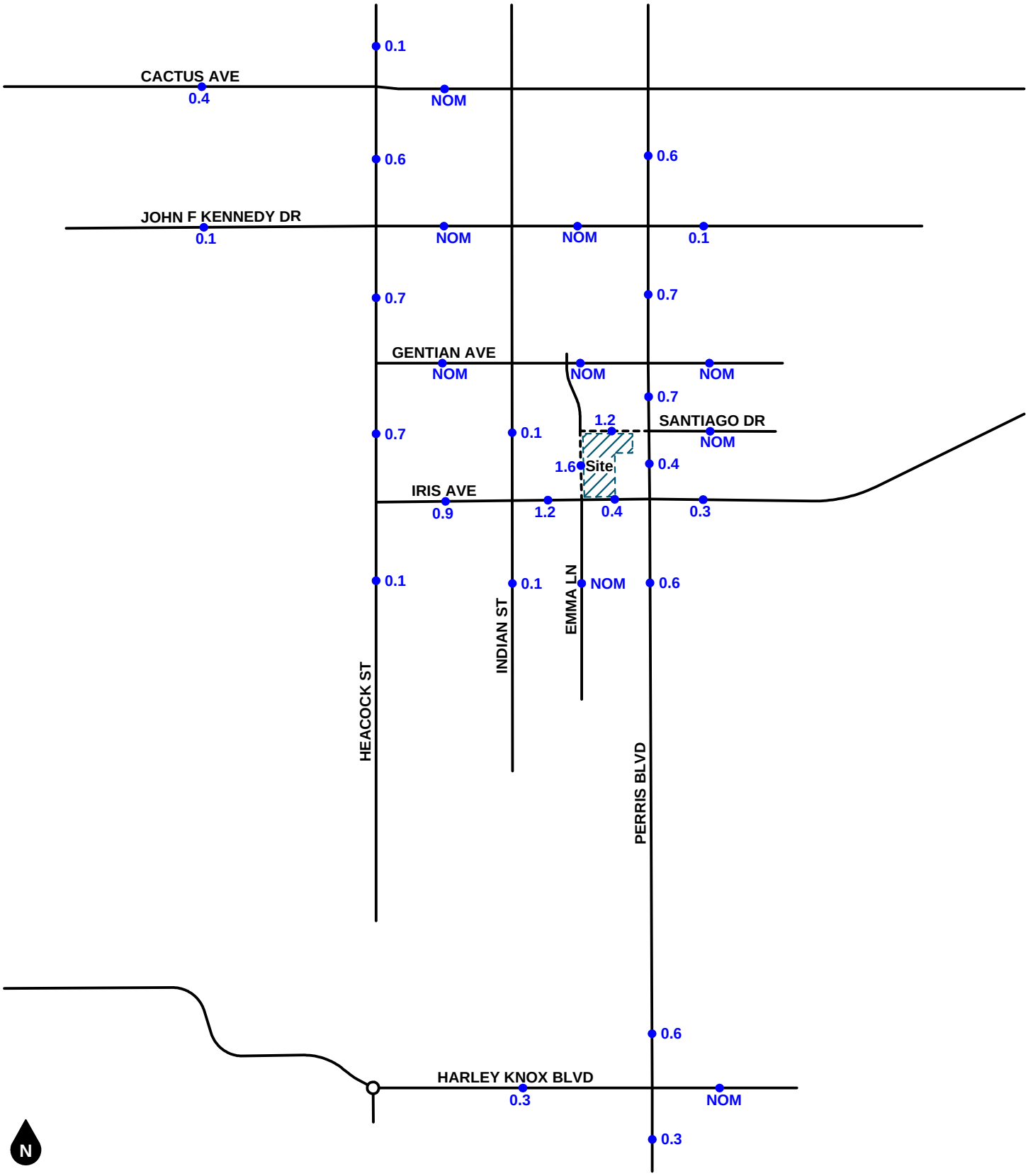


Figure 14
Project Trip Distribution

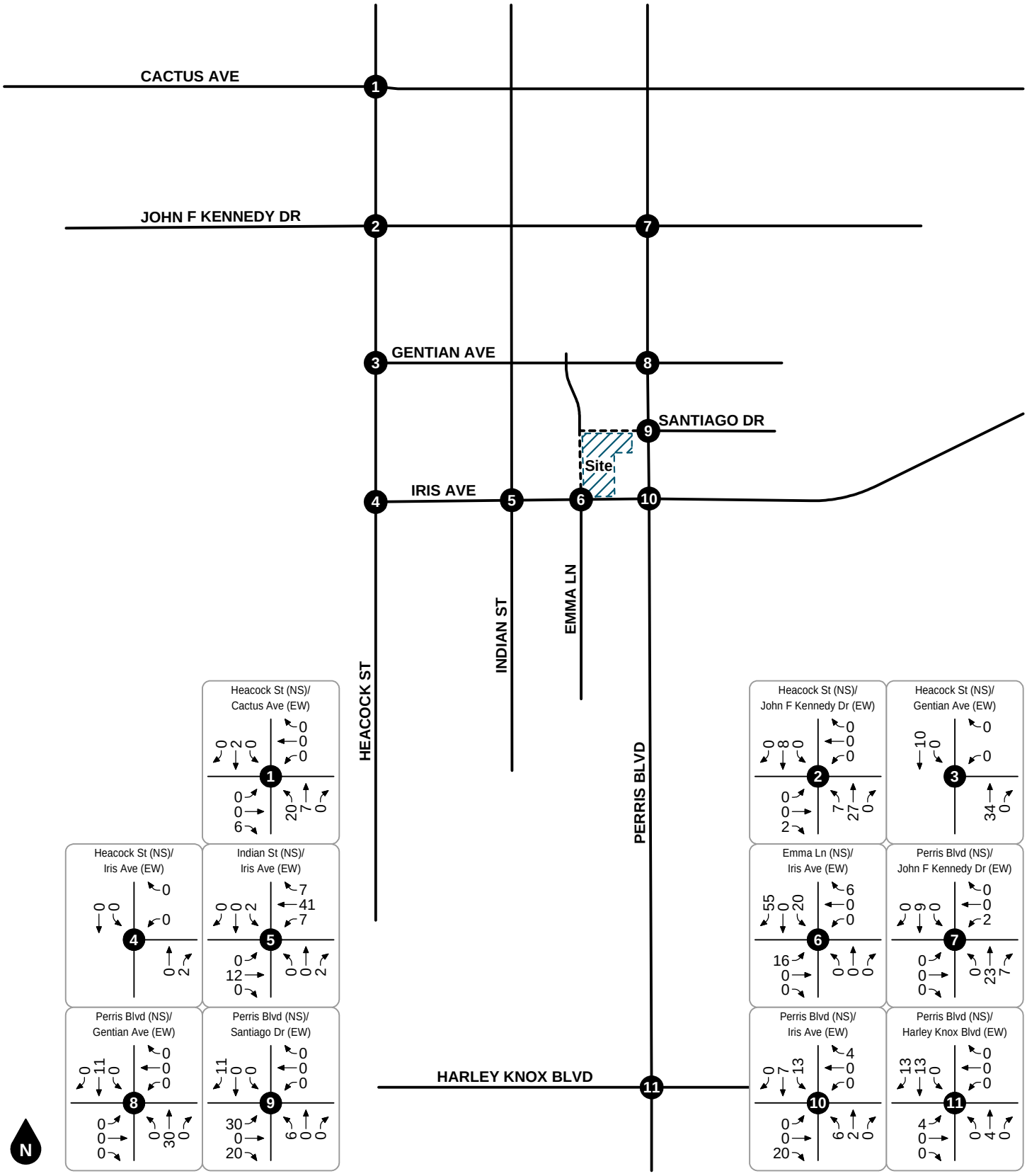


Legend

● ## Vehicles Per Day (1,000's)

NOM Nominal; Less Than 50 Vehicles Per Day

Figure 15
Project Average Daily Traffic Volumes



Legend

(#) Study Intersection

Figure 16
Project AM Peak Hour Intersection Turning Movement Volumes

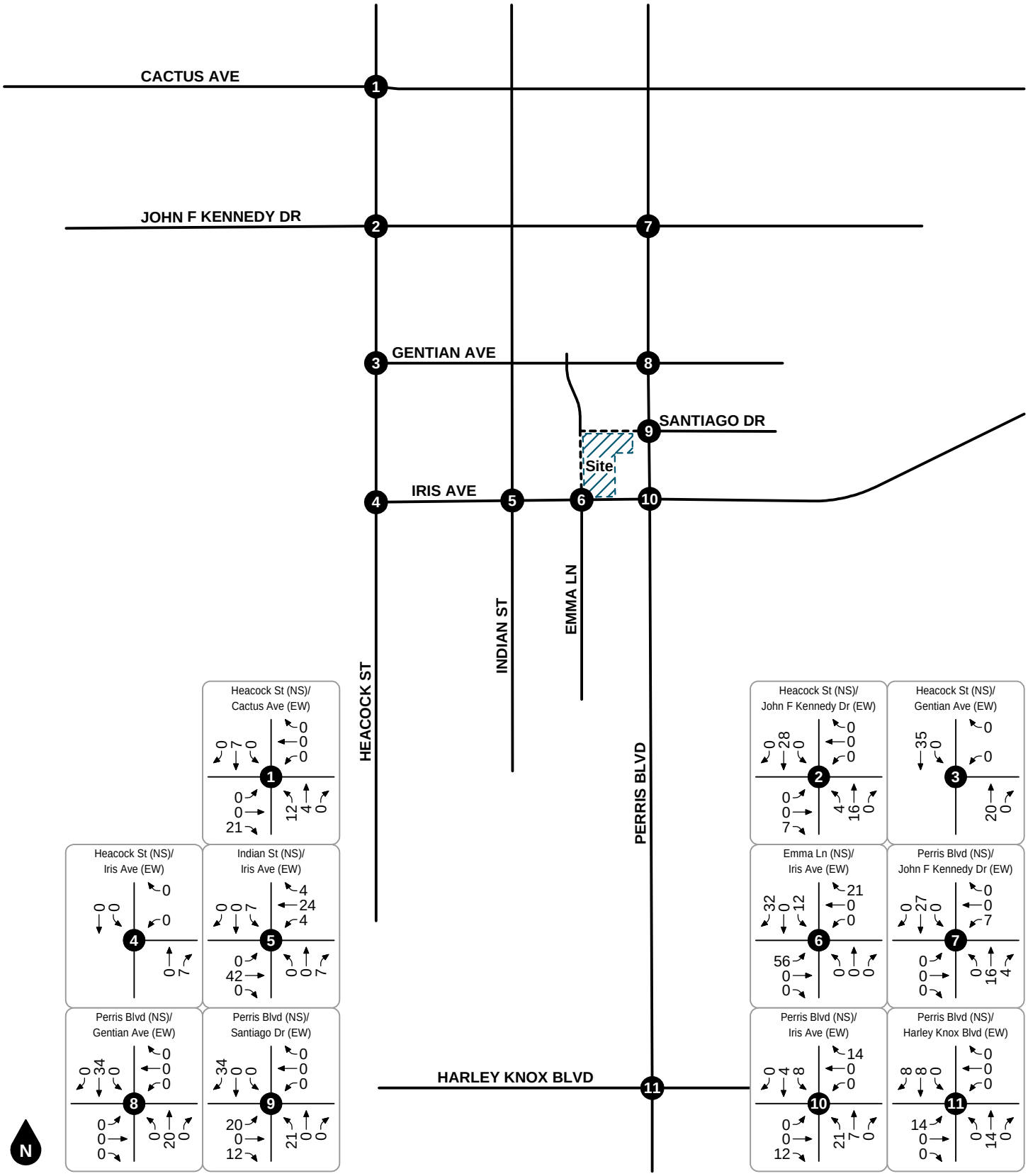


Figure 17
Project PM Peak Hour Intersection Turning Movement Volumes

5. FUTURE VOLUME FORECASTS

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

CUMULATIVE TRIPS

Regional Ambient Growth

To account for regional ambient growth, existing 2021 roadway volumes were increased by a growth rate of two percent (2%) per year over a three-year period for Opening Year 2024 conditions. This equates to a total growth factor of approximately 1.06. The ambient growth rate was conservatively applied to all movements at the study intersections.

Other Development

To account for future trips generated by other pending or approved/unconstructed development projects in the immediate vicinity, trips generated by other development projects in the Cities of Moreno Valley and Perris were obtained from readily available studies and/or calculated using the ITE *Trip Generation Manual* and added to the study area. Table 3 shows the other development trip generation forecast and Figure 18 shows the other development location map. Additional trips generated by other developments not specifically identified are assumed to be captured in the regional ambient growth.

Figure 19 shows the forecast average daily traffic volumes for the other development. Figure 20 and Figure 21 show the forecast AM and PM peak hour intersection turning movement volumes for trips generated by other developments.

ANALYSIS SCENARIO VOLUME FORECASTS

Opening Year (2024) Without Project

Opening Year (2024) Without Project volume forecasts were developed by adding ambient growth and other development trips to Existing volumes. Opening Year (2024) Without Project average daily traffic volumes are shown on Figure 22. Opening Year (2024) Without Project AM and PM peak hour intersection turning movement volumes are shown Figure 23 and Figure 24.

Opening Year (2024) With Project

Opening Year (2024) With Project volume forecasts were developed by adding project generated trips to the Opening Year (2024) Without Project forecast. Opening Year (2024) With Project daily traffic volumes are shown on Figure 25. Opening Year (2023) With Project AM and PM peak hour intersection turning movement volumes are shown on Figure 26 and Figure 27.

Table 3 (1 of 2)
Other Development Trip Generation

ID	Project Name	Land Use	Quantity[1]	Source[2]	Trips Generated						
					AM Peak Hour			PM Peak Hour			
					In	Out	Total	In	Out	Total	Daily
City of Moreno Valley											
MV1	Centerpointe Business Park	Warehousing & HCW Cold-Storage	295.236 TSF	[a]	46	13	59	16	48	64	742
		Office	258.000 TSF	ITE 710	345	47	392	63	308	371	2,797
		Subtotal			391	60	451	79	356	435	3,539
MV2	March LifeCare Campus	Medical Offices	190.000 TSF	ITE 720	412	97	509	135	405	540	6,053
		Shopping Center	210.000 TSF	ITE 820	109	67	176	343	371	714	7,772
		Pass-By Trips (29% PM) [3]			*0*	*0*	*0*	*-99*	*-108*	*-207*	*-207*
		Research & Education	200.000 TSF	ITE 760	169	37	206	31	165	196	2,216
		Hospital	50 BED	ITE 610	64	25	89	28	57	85	1,116
		Institutional Residential	660 BED	ITE 254	71	48	119	62	97	159	1,716
		Subtotal			825	274	1,099	500	987	1,487	18,666
MV3	PA16-0039 (Spruce Grove, Map #12)	Multi-Family Housing	272 DU	ITE 220	26	83	109	87	51	138	1,833
MV4	PA14-0015 (Century Communities, Map #15)	Multi-Family Housing	117 DU	ITE 220	11	36	47	38	22	60	789
MV5	PA06-0096 (TL Group, Map #16)	Multi-Family Housing	52 DU	ITE 220	5	16	21	17	10	27	350
MV6	PEN20-0063 (Passco Pacific, Map #23)	Multi-Family Housing	112 DU	ITE 220	11	34	45	36	21	57	755
MV7	PEN16-0095 (Mission Pacific Land, Map #27)	Single-Family Housing	221 DU	ITE 210	40	114	154	131	77	208	2,084
MV8	PEN19-0188 (PI Properties No. 67, Map #28)	Single-Family Housing	66 DU	ITE 210	12	34	46	39	23	62	622
MV9	PEN18-0042 (Ada Deturcios, Map #29)	Single-Family Housing	2 DU	ITE 210	0	1	1	1	1	2	19
City of Perris											
P1	March Plaza	Shopping Center	47.253 TSF	[b]	27	17	44	86	94	180	1,784
		Pass-By Trips (34% PM) [3]			*0*	*0*	*0*	*-29*	*-32*	*-61*	*-61*
		Subtotal			27	17	44	57	62	119	1,723
P2	Beyond Food Mart	RV Fueling Station & Convenience Store	23 VFP	[c]	121	121	242	130	130	260	2,605
P3	Harley Knox Industrial	Warehousing	143.168 TSF	[d]	20	6	26	9	25	34	378
P4	Westcoast Textile	Warehousing	180.000 TSF	[b]	23	7	30	9	25	34	313
P5	Cali Express Car Wash	Automated Car Wash	1 Site	[b]	35	29	64	67	67	134	944
P6	Harley Knox Commerce Park/DPR 16-004	High-Cube Parcel Hub Warehouse	386.278 TSF	[b]	135	135	270	170	77	247	2,994

Table 3 (2 of 2)
Other Development Trip Generation

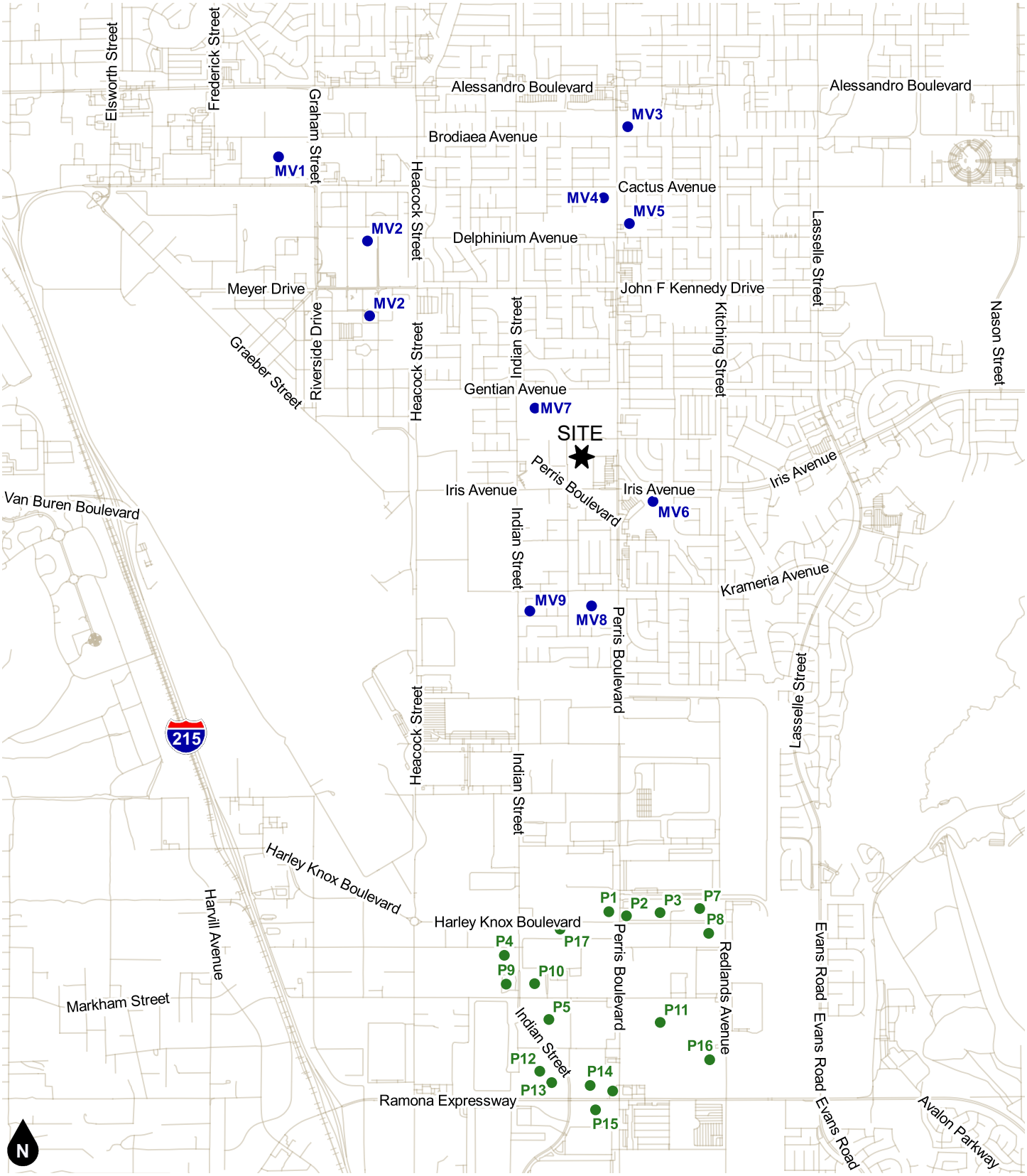
ID	Project Name	Land Use	Quantity[1]	Source[2]	Trips Generated						
					AM Peak Hour			PM Peak Hour			
					In	Out	Total	In	Out	Total	Daily
P7	Pheland Indus	General Light Industrial	81.000 TSF	[b]	50	6	56	6	45	51	402
P8	Indian/Ramona Warehouse/DPR 18-00002	High-Cube Parcel Hub Warehouse	428.730 TSF	[b]	150	150	300	189	86	275	3,323
P9	IDI @ Romona	High-Cube Parcel Hub Warehouse	426.000 TSF	[b]	149	149	298	187	85	272	3,302
P10	JM Realty	Hotel	125 RM	[b]	35	24	59	39	36	75	1,045
P11	Perris and Ramona Warehouse/Expressway Industrial	High-Cube Parcel Hub Warehouse	347.938 TSF	[b]	122	122	244	153	70	223	2,697
P12	Harley Knox Boulevard at Indian Avenue Industrial	Warehousing	141.000 TSF	[b]	24	5	29	9	25	34	347
TOTAL TRIPS GENERATED BY OTHER DEVELOPMENTS					**2,212**	**1,423**	**3,635**	**1,952**	**2,281**	**4,234**	**48,730**

Notes:

1. TSF = Thousand Square Feet; DU = Dwelling Units; VFP = Vehicle Fueling Positions

2. Sources:
   ITE = Institute of Transportation Engineers *Trip Generation Manual* (11th Edition, 2021); ### = Land Use Code. All rates based on General Urban/Suburban setting.
   [a] = Alessandro Warehouse Traffic Impact Analysis (Urban Crossroads, June 2021).
   [b] = Harley Knox Boulevard at Indian Avenue Industrial Warehouse Project Focused Traffic Study (Ganddini Group, August 2021).
   [c] = Perris at Harly Knox Boulevard Beyond Food Mart Project Traffic Impact Analysis (Ganddini Group, October 2020)
   [d] = Harley Knox Industrial Project Transprotation Study Screening Assessment (Ganddini Group, December 2021).

3. Source: ITE *Trip Generation Manual* (11th Edition, 2021). Where no daily pass-by rate is provided, daily pass-by trips are conservatively estimated as the sum of the peak hour pass-by trips.



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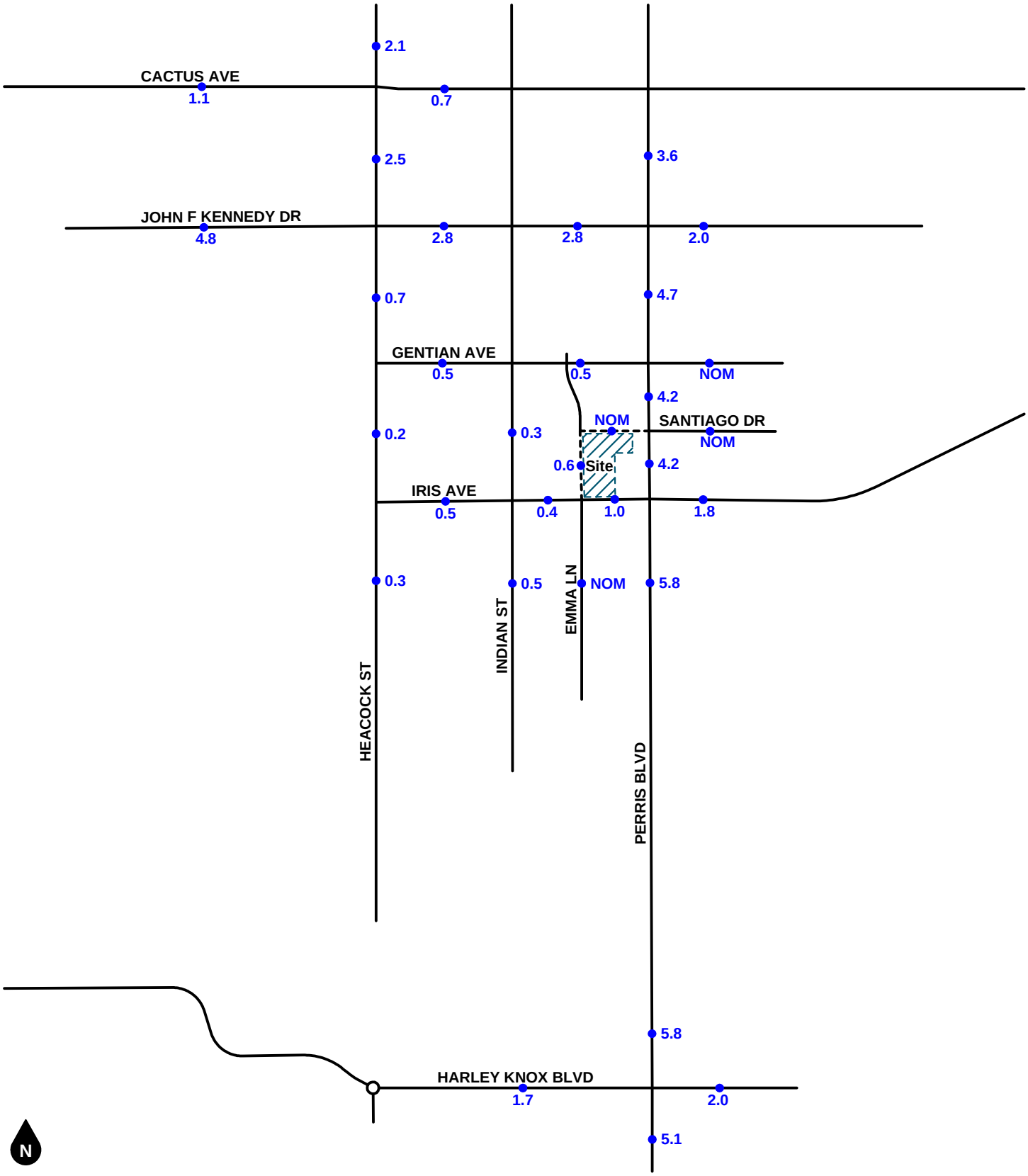
\# Other Development ID in:

- City of Moreno Valley
- City of Perris

Figure 18
Other Development Location Map



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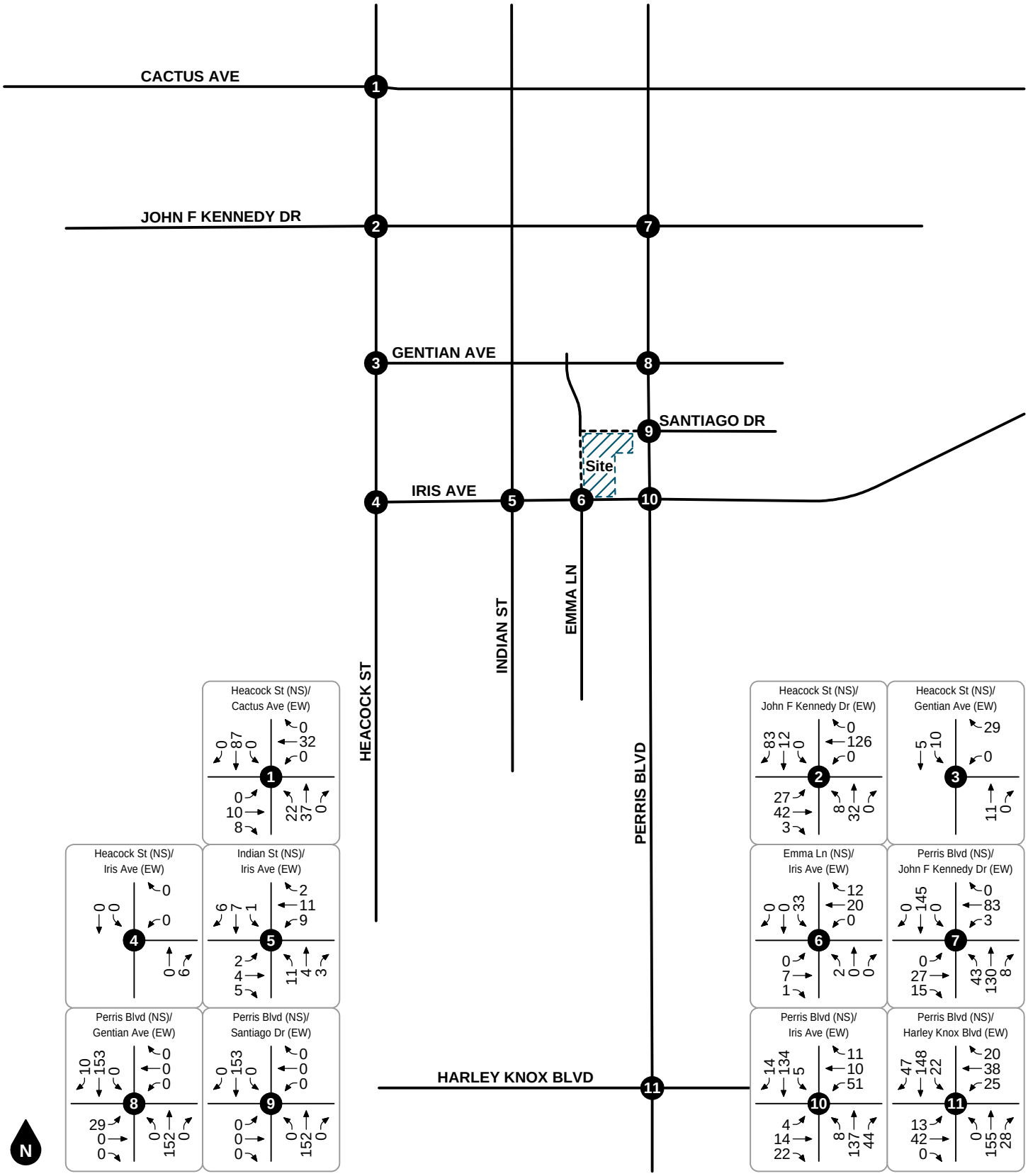
● ## Vehicles Per Day (1,000's)

NOM Nominal; Less Than 50 Vehicles Per Day

Figure 19
Other Development Average Daily Traffic Volumes



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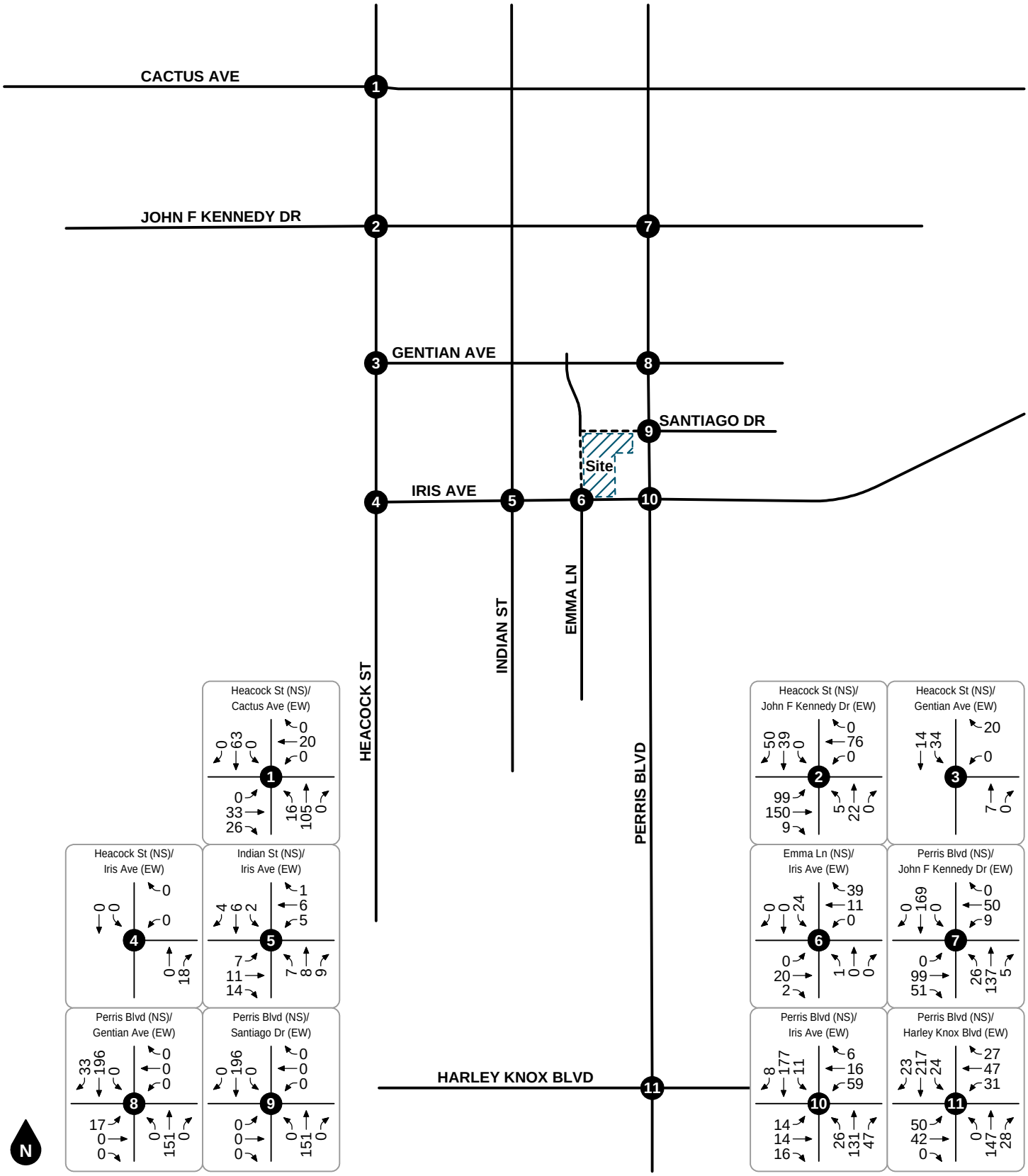
(#) Study Intersection

Figure 20
Other Development
AM Peak Hour Intersection Turning Movement Volumes



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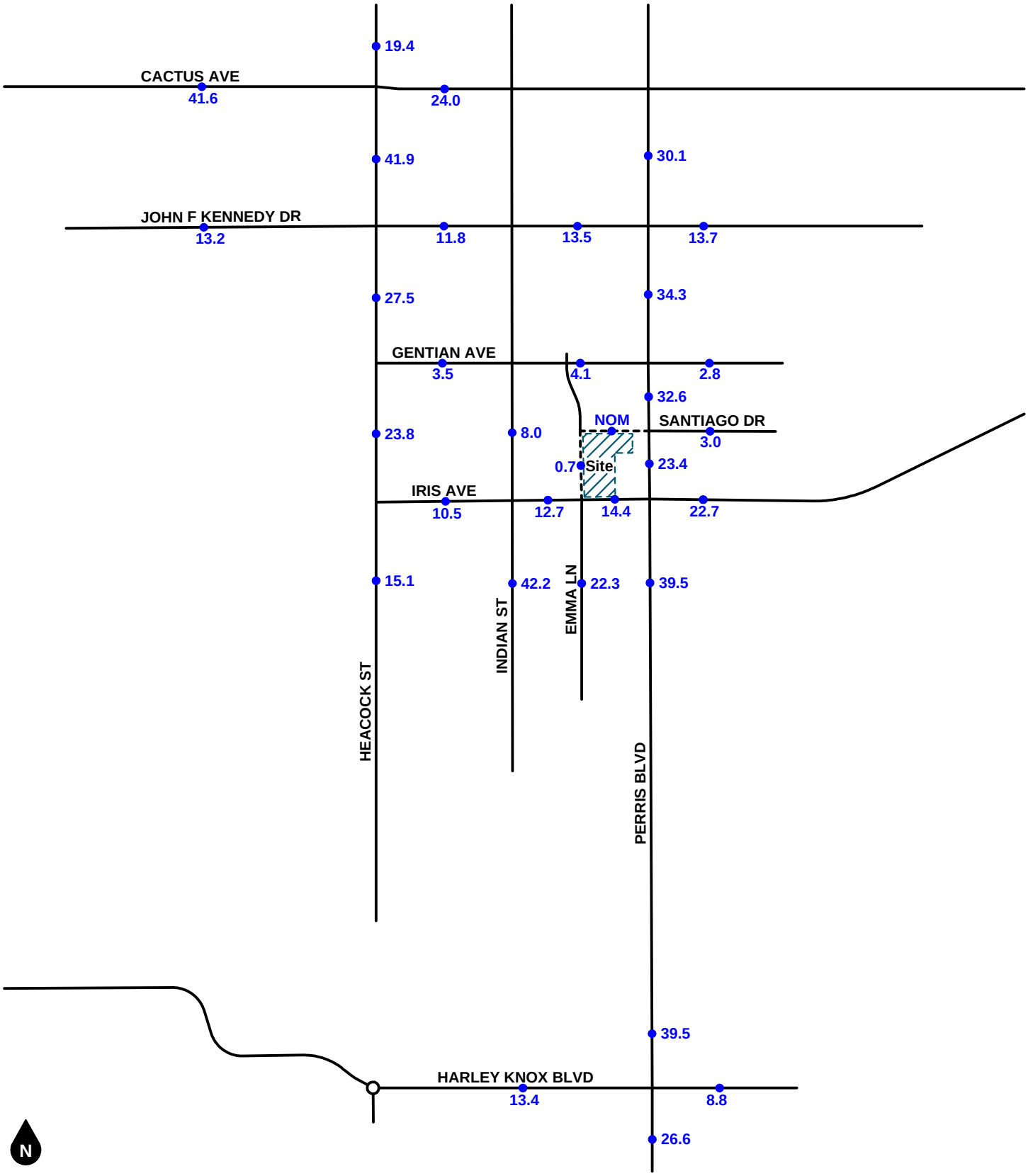
(#) Study Intersection

Figure 21
Other Development
PM Peak Hour Intersection Turning Movement Volumes



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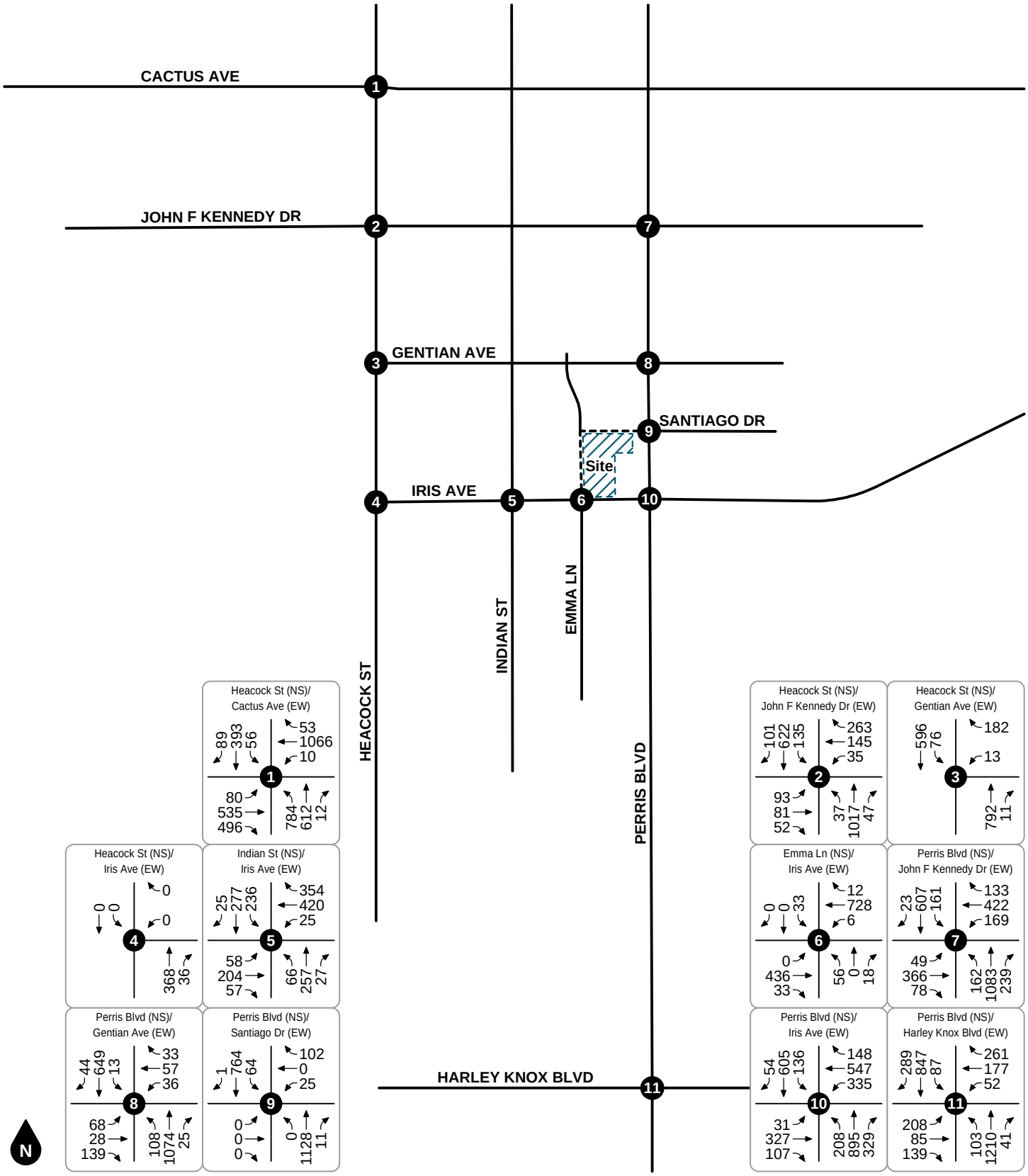
● ## Vehicles Per Day (1,000's)

NOM Nominal; Less Than 50 Vehicles Per Day

Figure 22

Opening Year (2024) Without Project Average Daily Traffic Volumes



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Study Intersection

Figure 23
Opening Year (2024) Without Project
AM Peak Hour Intersection Turning Movement Volumes

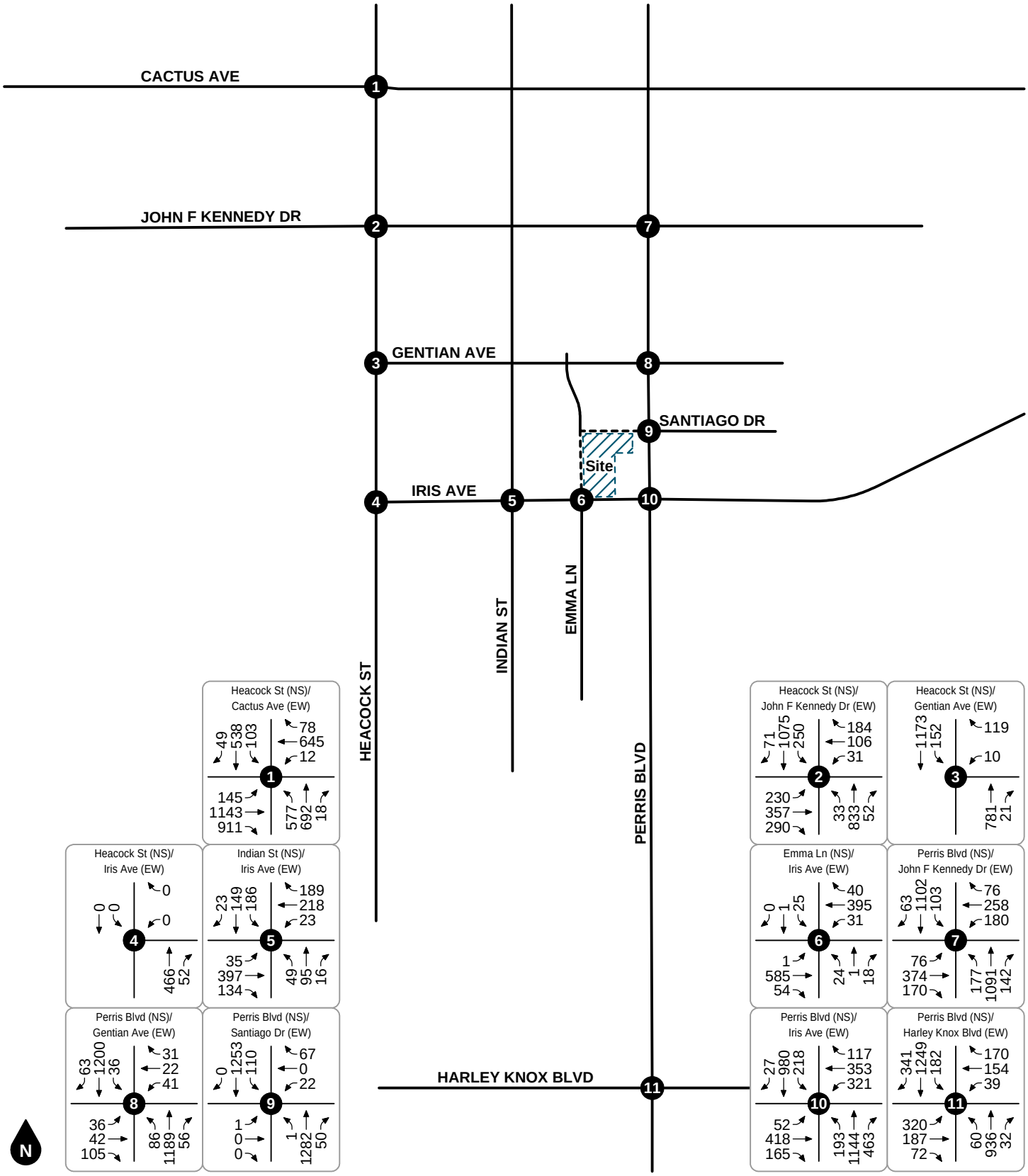
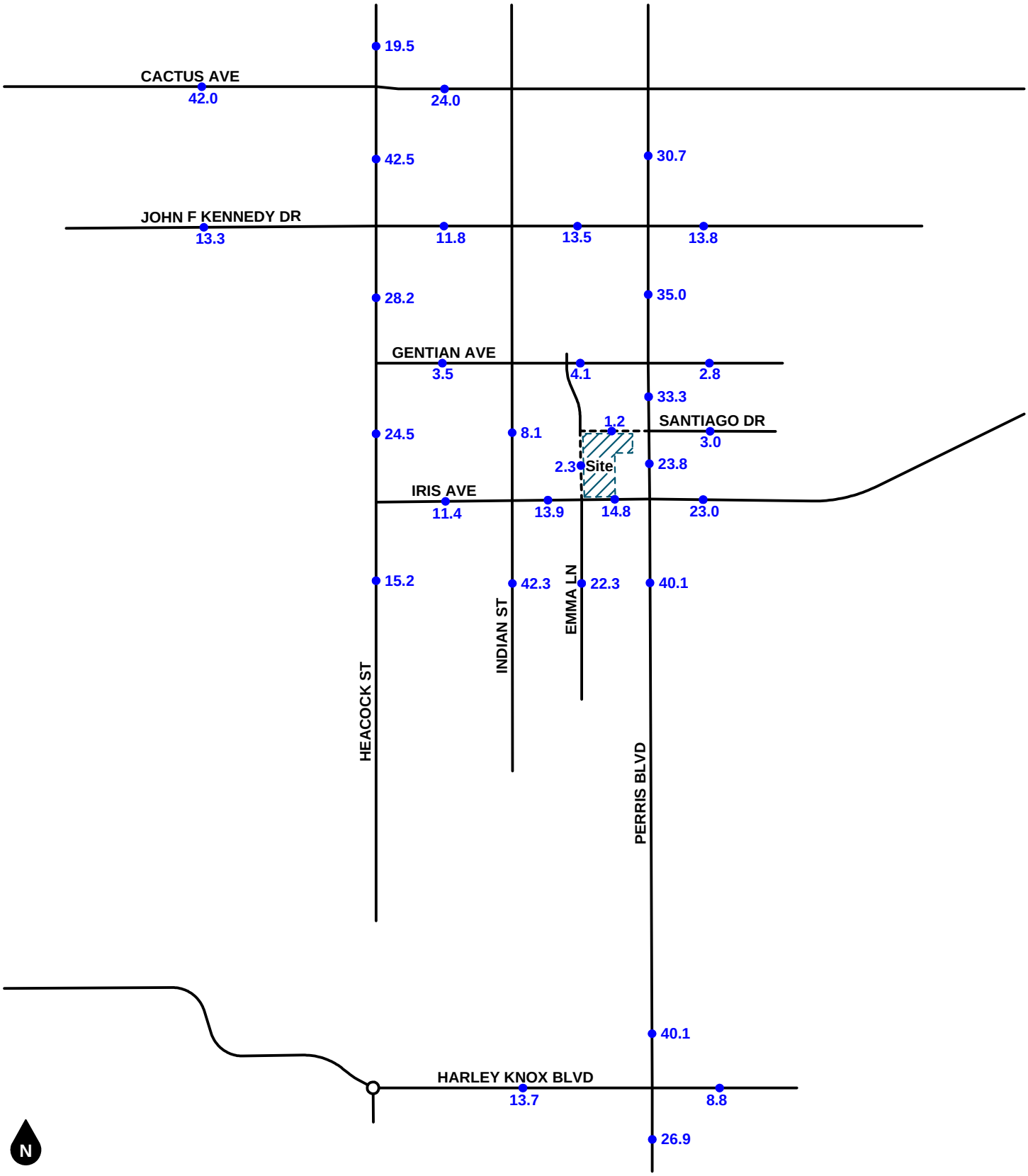


Figure 24
Opening Year (2024) Without Project
PM Peak Hour Intersection Turning Movement Volumes



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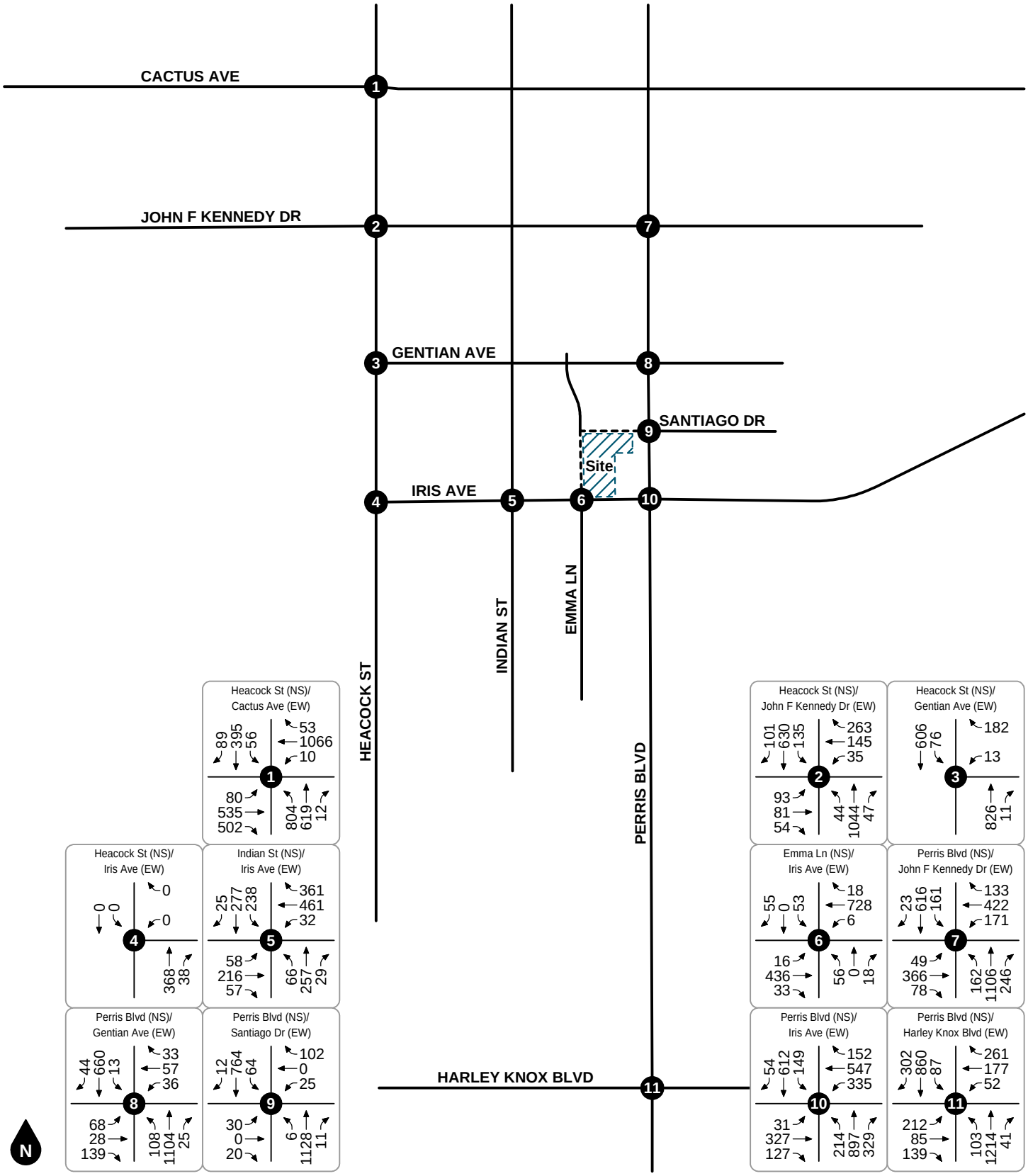
●## Vehicles Per Day (1,000's)

NOM Nominal; Less Than 50 Vehicles Per Day

Figure 25

Opening Year (2024) With Project Average Daily Traffic Volumes



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Study Intersection

Figure 26
Opening Year (2024) With Project
AM Peak Hour Intersection Turning Movement Volumes

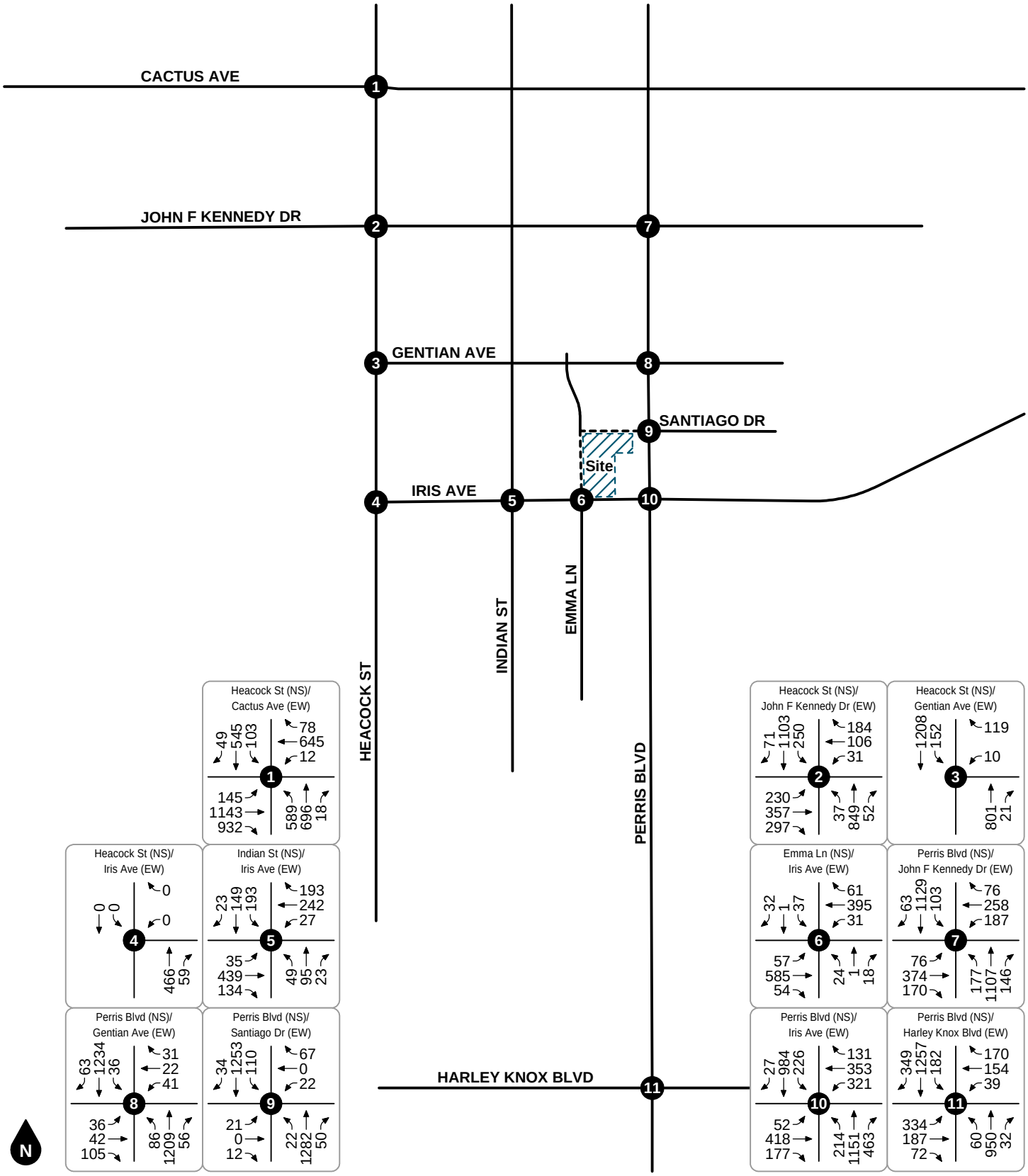


Figure 27
Opening Year (2024) With Project
PM Peak Hour Intersection Turning Movement Volumes

6. FUTURE OPERATIONAL ANALYSIS

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

OPENING YEAR (2024) WITHOUT PROJECT LOS ANALYSIS

Opening Year (2024) Without Project conditions are based on existing lane geometry and intersection traffic controls, except for the intersection of Perris Boulevard and Santiago Drive, which currently has a non-operational traffic signal installed that is assumed to be operational by project opening in Year 2024.

Intersection LOS for Opening Year (2024) Without Project conditions is shown in Table 4. As shown in Table 4, the study intersections are forecast to operate within acceptable LOS (D or better) during the peak hours for Opening Year (2024) Without Project conditions, except for the following study intersections:

1. Heacock Street at Cactus Avenue PM-LOS E
6. Emma Lane at Iris Avenue AM-LOS F / PM-LOS E

OPENING YEAR (2024) WITH PROJECT LOS ANALYSIS

Intersection LOS for Opening Year (2024) With Project conditions is shown in Table 5. As shown in Table 5, the study intersections are forecast to operate within acceptable LOS (D or better) during the peak hours for Opening Year (2024) With Project conditions, except for the following study intersections:

1. Heacock Street at Cactus Avenue PM-LOS E
6. Emma Lane at Iris Avenue AM-LOS F / PM-LOS F

Table 6 shows the project-related effect on LOS for Opening Year (2024) conditions. As shown in Table 6, the proposed project is forecast to cause a substantial project-related LOS deficiency at the following study intersection for Opening Year (2024) With Project conditions, without improvements, based on the operational criteria established by the Cities of Moreno Valley and Perris:

6. Emma Lane at Iris Avenue AM and PM peak hours

Project-Related LOS Improvements

The need for installation of a traffic signal at the currently unsignalized intersection of Emma Lane at Iris Avenue was evaluated based on the California Manual on Uniform Traffic Control Devices (CA MUTCD) Section 4C.04, peak hour volume warrant graphs (Warrant 3). Traffic signal warrant analysis worksheets are provided in Appendix E.

The intersection of Emma Lane at Iris Avenue is not forecast to satisfy the CA MUTCD peak hour volume warrant; therefore, installation of a traffic signal is not recommended as a suitable improvement to address the project-related LOS deficiency.

The following measures are recommended to address the project-related LOS deficiency for Opening Year (2024) With Project conditions:

6. Emma Lane (NS) at Iris Avenue (EW)
   - Install a raised median along Iris Avenue with eastbound and westbound left turn lanes that restricts the northbound and southbound approaches to right turns only.

As shown in Table 6, the intersection of Emma Lane and Iris Avenue is forecast to operate within acceptable LOS with implementation of the recommended improvements. Therefore, the proposed project is forecast to result in no substantial LOS deficiencies at the study intersections for Opening Year (2024) With Project conditions with implementation of the recommended improvements.

QUEUING ANALYSIS

Table 7 summarizes the results of an intersection queuing analysis for the following turning movements of concern identified during the City scoping process:

6. Emma Lane (NS) at Iris Avenue (EW)
   - Eastbound left turn lane

9. Perris Boulevard (NS) at Santiago Drive (EW)
   - Northbound left turn lane

11. Perris Boulevard (NS) at Harley Knox Boulevard (EW)
   - Southbound right turn lane

The forecasted queue lengths shown in Table 7 are based on the Highway Capacity Manual 95th-percentile back-of-queue methodology as reported in the delay/Level of Service worksheets (see Appendix D). The 95th-percentile represents a probability that the queue length would only exceed this value one out of 20 signal cycles, or approximately once during the peak hour based on a 120 second cycle length.

As shown in Table 7, adequate storage length is forecast to be provided at the evaluated turning movements, except for the following location:

11. Perris Boulevard (NS) at Harley Knox Boulevard (EW)
   - Southbound right turn lane

The proposed project is forecast to increase the southbound right turn queue length at the intersection of Perris Boulevard and Harley Knox Boulevard by 63 feet, or approximately two vehicle lengths, during the PM peak hour. If necessary, the project applicant should coordinate with the City of Perris to evaluate the need for and feasibility of installing southbound right turn overlap signal phasing at the intersections of Perris Boulevard and Harley Knox Boulevard.

Table 4
Opening Year Without Project Intersection LOS

ID	Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
			Delay[2]	LOS[3]	Delay[2]	LOS[3]
1.	Heacock St at Cactus Ave	TS	53.3	D	56.5	E
2.	Heacock St at John F. Kennedy Dr	TS	42.0	D	49.1	D
3.	Heacock St at Gentian Ave	TS	20.9	C	14.6	B
4.	Heacock St at Iris Ave	TS	34.0	C	33.0	C
5.	Indian St at Iris Ave	TS	45.8	D	35.7	D
6.	Emma Ln at Iris Ave	CSS	92.0	F	40.9	E
7.	Perris Blvd at John F. Kennedy Dr	TS	48.4	D	42.8	D
8.	Perris Blvd at Gentian Ave	TS	33.8	C	27.6	C
9.	Perris Blvd at Santiago Dr	CSS	16.6	C	13.5	B
10.	Perris Blvd at Iris Ave	TS	45.7	D	49.0	D
11.	Perris Blvd at Harley Knox Blvd	TS	37.5	D	39.2	D

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) Delay is shown in seconds/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, Level of Service is based on average delay of the worst minor street approach or major street left turn movement.

(3) LOS = Level of Service

Table 5
Opening Year With Project Intersection LOS

ID	Study Intersection	Traffic Control[1]	AM Peak Hour		PM Peak Hour	
			Delay[2]	LOS[3]	Delay[2]	LOS[3]
1.	Heacock St at Cactus Ave	TS	54.2	D	58.2	E
2.	Heacock St at John F. Kennedy Dr	TS	42.6	D	49.5	D
3.	Heacock St at Gentian Ave	TS	20.9	C	14.6	B
4.	Heacock St at Iris Ave	TS	34.2	C	33.7	C
5.	Indian St at Iris Ave	TS	48.5	D	36.2	D
6.	Emma Ln at Iris Ave	CSS	182.2	F	64.7	F
	With Improvements	CSS	19.0	C	13.5	B
7.	Perris Blvd at John F. Kennedy Dr	TS	49.6	D	43.3	D
8.	Perris Blvd at Gentian Ave	TS	33.9	C	27.7	C
9.	Perris Blvd at Santiago Dr	CSS	17.3	C	14.1	B
10.	Perris Blvd at Iris Ave	TS	46.5	D	49.9	D
11.	Perris Blvd at Harley Knox Blvd	TS	37.6	D	39.5	D

Notes:

(1) TS = Traffic Signal; CSS = Cross Street Stop

(2) Delay is shown in seconds/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, Level of Service is based on average delay of the worst minor street approach or major street left turn movement.

(3) LOS = Level of Service

Table 6
Opening Year Project-Related Effect on LOS

ID	Study Intersection	Acceptable LOS	AM Peak Hour						PM Peak Hour					
			Without Project		With Project		Project-Related Δ	Project LOS Deficiency?	Without Project		With Project		Project-Related Δ	Project LOS Deficiency?
			Delay[1]	LOS[2]	Delay	LOS			Delay	LOS	Delay	LOS		
1.	Heacock St at Cactus Ave	D	53.3	D	54.2	D	+0.9	No	56.5	E	58.2	E	+1.7	No
2.	Heacock St at John F. Kennedy Dr	D	42.0	D	42.6	D	+0.6	No	49.1	D	49.5	D	+0.4	No
3.	Heacock St at Gentian Ave	D	20.9	C	20.9	C	-	No	14.6	B	14.6	B	-	No
4.	Heacock St at Iris Ave	D	34.0	C	34.2	C	+0.2	No	33.0	C	33.7	C	+0.7	No
5.	Indian St at Iris Ave	D	45.8	D	48.5	D	+2.7	No	35.7	D	36.2	D	+0.5	No
6.	Emma Ln at Iris Ave	D	92.0	F	182.2	F	+90.2	**Yes**	40.9	E	64.7	F	+23.8	**Yes**
	With Improvements	D	-	-	19.0	C	-73.0	**No**	-	-	13.5	B	-27.4	**No**
7.	Perris Blvd at John F. Kennedy Dr	D	48.4	D	49.6	D	+1.2	No	42.8	D	43.3	D	+0.5	No
8.	Perris Blvd at Gentian Ave	D	33.8	C	33.9	C	+0.1	No	27.6	C	27.7	C	+0.1	No
9.	Perris Blvd at Santiago Dr	D	16.6	C	17.3	C	+0.7	No	13.5	B	14.1	B	+0.6	No
10.	Perris Blvd at Iris Ave	D	45.7	D	46.5	D	+0.8	No	49.0	D	49.9	D	+0.9	No
11.	Perris Blvd at Harley Knox Blvd	D	37.5	D	37.6	D	+0.1	No	39.2	D	39.5	D	+0.3	No

Notes:

(1) Delay is shown as seconds/vehicle.

(2) LOS = Level of Service

Table 7
Queuing Analysis

ID	Study Intersection	Lane[1]	Storage Length (feet)[2]	95th-Percentile Queue Length (feet/lane)[3]					
				Opening Year Without Project		Opening Year With Project		Project-Related Change[4]	
				AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
6.	Emma Ln at Iris Ave	EBL	225+	<25	<25	<25	<25	0	0
9.	Perris Blvd at Santiago Dr	NBL	225+	<25	<25	<25	34	0	+34
11.	Perris Blvd at Harley Knox Blvd	SBR	225	296	360	310	424	+14	+64

Notes:

(1) NB = Northbound; SB = Southbound; EB = Eastbound; L = Left; R = Right

(2) For locations with raised medians, the storage length includes approximately half of the turning bay taper length. "+" indicates additional storage length is available within a two-way left-turn lane.

(3) Based on Highway Capacity Manual back-of-queue methodology; see delay/LOS calculation worksheets included in Appendix D.

7. SITE ACCESS AND CIRCULATION

This section includes a description of project improvements necessary to provide site access.

SITE ACCESS IMPROVEMENTS

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

- Emma Lane (NS) at Project Driveway (EW)
  - Install westbound stop control
  - Construct the northbound approach to consist of one shared through/right turn lane
  - Construct the southbound approach to consist of one shared left turn/through lane
  - Construct the westbound approach to consist of one shared left/right turn lane

- Project Driveway (NS) at Santiago Drive (EW)
  - Install northbound stop control
  - Construct the northbound approach to consist of one shared left/right turn lane
  - Construct the eastbound approach to consist of one shared through/right turn lane
  - Construct the westbound approach to consist of one shared left turn/through lane

STANDARD CONDITIONS OF APPROVAL

This analysis also assumes the project shall comply with the following or similar conditions through compliance with the standard development review process and conditions of approval for the City of Moreno Valley:

- A construction work zone traffic control plan that complies with State/Federal standards as prescribed in the CA MUTCD shall be submitted to the City for review and approval prior to the issuance of a grading permit or start of construction. The plan shall identify any roadway, sidewalk, bicycle 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.

- All on-site and off-site roadway design, traffic signing and striping, and traffic control improvements relating to the proposed project shall be constructed in accordance with applicable State/Federal engineering standards.

- 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 Moreno Valley. Specifically, the proposed project includes construction of adjacent street improvements to ultimate right-of-way width for Emma Lane, Santiago Drive, and Iris Avenue.

- Adequate emergency vehicle access shall be provided to the satisfaction of the Moreno Valley Fire Department.

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

The proposed project is forecast to result in no significant impacts under CEQA relating to a substantial increase in hazards due to geometric design or inadequate emergency access based on compliance with the City's standard development review process and conditions of approval.

NON-MOTORIZED CIRCULATION

Figure 28 shows non-motorized circulation in the project vicinity for future conditions. As shown on Figure 28, upon construction of adjacent street improvements to ultimate right-of-way width for Emma Lane and Santiago Drive as proposed by the project, pedestrian connectivity will be provided to existing activity centers in the project vicinity, including adjacent schools, commercial uses, and bus stops.

TRAFFIC CALMING

Emma Lane and Iris Avenue both include frontage for the adjacent Rainbow Ridge Elementary and March Middle Schools; therefore, implementation of traffic calming measures is recommended to help achieve compliance with the appropriate speed limits. Traffic calming measures can consist of both physical and non-physical improvements. Physical measures generally fall into four categories: 1) horizontal deflection, 2) vertical deflection, 3) street width reduction, and 4) routing restriction. Non-physical measures, such as education and enforcement, are also effective traffic calming measures that may be considered as supplements to self-enforcing physical measures.

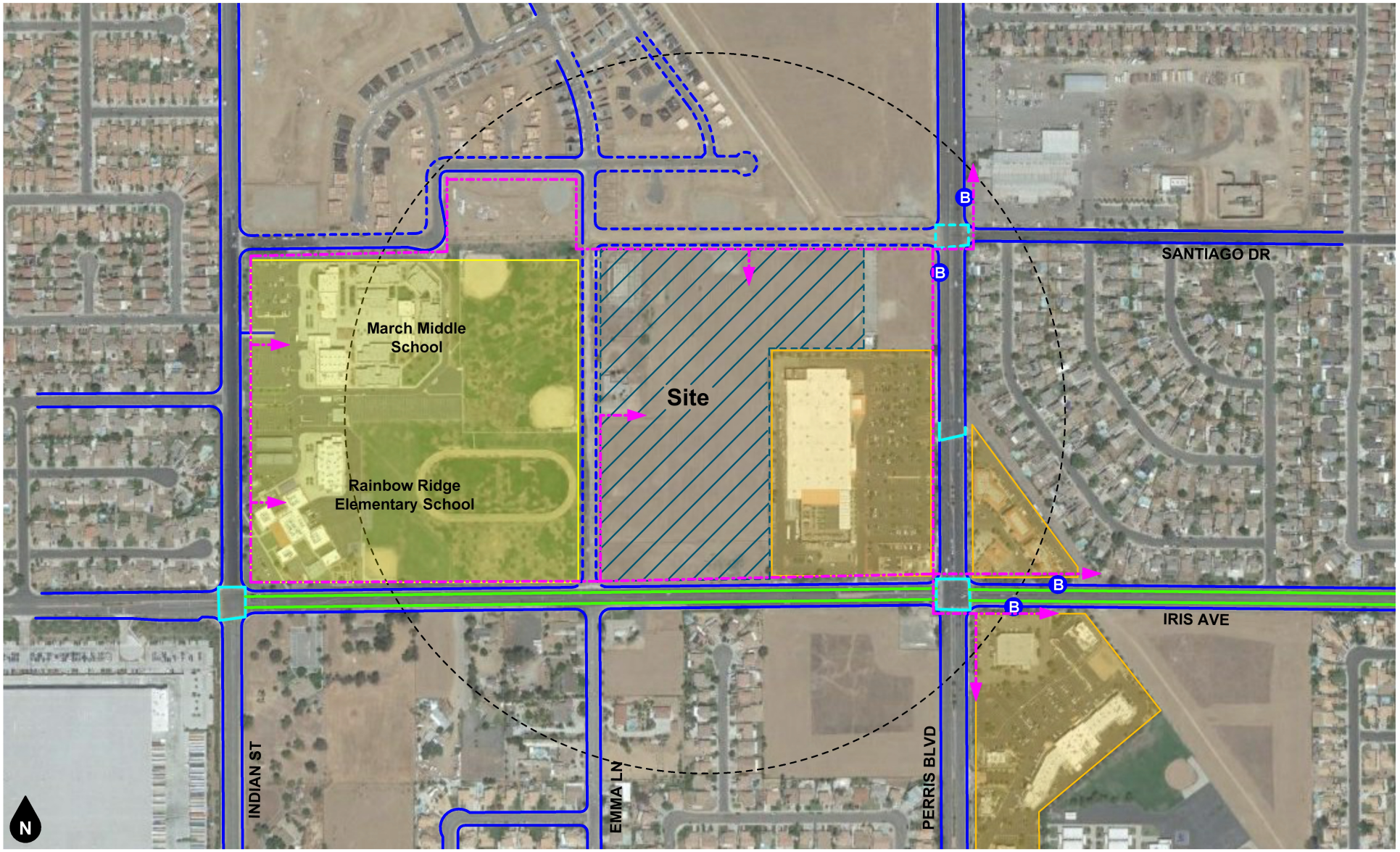
Emma Lane is proposed to consist of a two-lane local/residential street and would presumably have a 25 mile per hour speed limit; therefore, it is well-suited for incorporation of physical traffic calming measures into its ultimate construction. Horizontal and vertical deflections generally have a greater effect on reducing vehicle speeds than street width reductions. A combination of corner extensions/bulb-outs and speed cushions and/or mid-block chockers would be expected to physical reduce vehicle speeds and improve the pedestrian experience. Corner extensions/bulb-outs alone have a limited effect on vehicle speeds due to lack of deflection but has the positive effect of reducing pedestrian crossing distances.

Iris Avenue is classified as an Arterial in the City's General Plan circulation element and has a posted speed limit of 40 miles per hour (when no children are present); therefore, physical traffic calming measure are more limited.

Figure 29 shows traffic calming recommendations. In addition to applicable school zone speed limits, the project should consider implementation of the following traffic calming measures:

- Install corner extensions/bulb-outs at the project driveways on Emma Lane.
- Install corner extensions/bulb-outs at the project driveway on Santiago Drive.
- Install speed cushions on Emma Lane between Santiago Drive and Iris Avenue.
- Install high-visibility, continental crosswalk markings on the north leg of Emma Lane and Iris Avenue.

ITE Traffic Calming Fact Sheets for the recommended measures are provided in Appendix F.



Legend

- Existing Sidewalk
- Existing Crosswalk
- Existing Class II Bicycle Lane
- B RTA Route 19 Bus Stop
- 1/4-mile radius
- Future Sidewalk
- Future Crosswalk
- Pedestrian Circulation
- Schools/Institutional Uses
- Commercial Uses

Figure 28
Future Non-Motorized Circulation

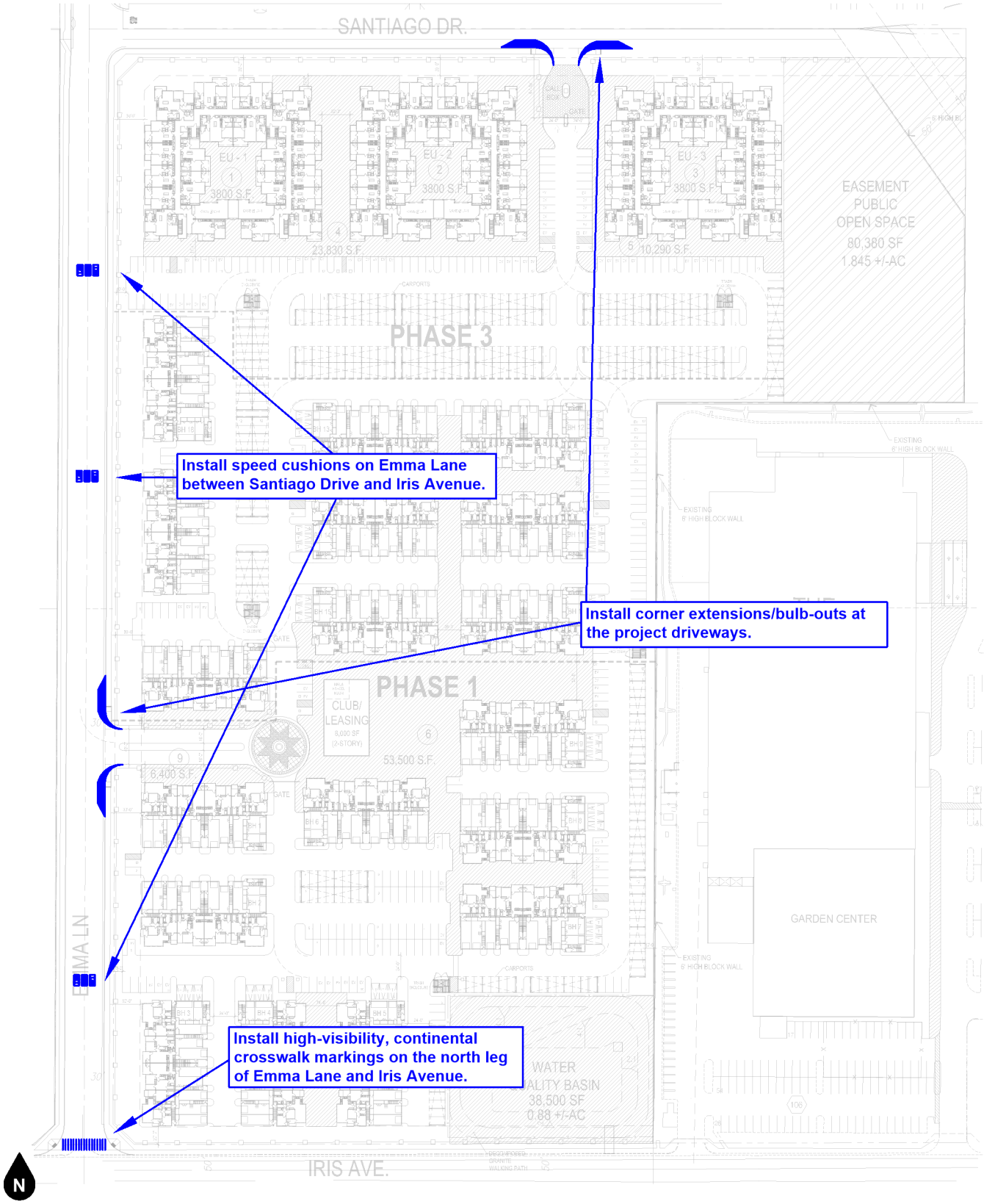


Figure 29
Conceptual Traffic Calming Recommendations

8. VEHICLES MILES TRAVELED (VMT)

BACKGROUND

California Senate Bill 743 (SB 743) directs the State Office of Planning and Research (OPR) to amend the California Environmental Quality Act (CEQA) Guidelines for evaluating transportation impacts to provide alternatives to Level of Service that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines package. The amended CEQA Guidelines, specifically Section 15064.3, recommend the use of Vehicle Miles Travelled (VMT) as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. All agencies and projects State-wide are required to utilize the updated CEQA guidelines recommending use of VMT for evaluating transportation impacts as of July 1, 2020.

The updated CEQA Guidelines allow for lead agency discretion in establishing methodologies and thresholds provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. Where quantitative models or methods are unavailable, Section 15064.3 allows agencies to assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (State of California, December 2018) ["OPR Technical Advisory"] provides technical considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT.

VMT SCREENING ASSESSMENT

The project VMT impact has been assessed in accordance with guidance from the City of Moreno Valley TIA Guidelines. The City of Moreno Valley TIA Guidelines include three steps for VMT screening: Transit Priority Area (TPA) screening, low VMT screening, and project type screening. As described below, the proposed project does not satisfy the City-established VMT screening criteria without mitigation.

TPA Screening

Projects located within a TPA, defined as within one-half mile of major transit stop[1] or high-quality transit corridor,[2] may be presumed to result in a less than significant VMT impact absent substantial evidence to the contrary. This presumption may not apply, however, if the project:

1. Has a Floor Area Ratio (FAR) of less than 0.75;
2. Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking)
3. Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency with input from the Metropolitan Planning Organization): or
4. Replaces affordable residential units with a smaller number of moderate or high-income residential units.

To identify if the project is in a TPA, the Western Riverside Council of Governments (WRCOG) VMT Screening Tool was used. Based on WRCOG VMT Screening Tool results for the project site, the proposed project is not located within a TPA; therefore, the project does not satisfy the TPA screening criteria.

[1] A major transit stop is defined as an existing rail transit station, ferry terminal with bus or rail service, or the intersection of two or more major bus routes with less than 15 minutes headways during the peak commute hours (Pub. Resources Code, § 21064.3.).

[2] Fixed route bus service with less than 15 minute headways during the peak commute hours (Pub. Resources Code, § 21155).

Low VMT Area Screening

Residential and office projects located within a low VMT generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area. Based on the City-established thresholds, a project would satisfy the low VMT screening criteria if it is located in a traffic analysis zone (TAZ) that does not exceed four percent below the existing County of San Bernardino baseline VMT per service population.

To identify if the project is in a low VMT area, the WRCOG VMT Screening Tool was used. The WRCOG VMT Screening Tool was developed from the Riverside Transportation Analysis Model (RIVTAM) travel forecasting model to measure VMT performance for individual jurisdictions and for individual traffic analysis zones (TAZs). TAZs are geographic polygons similar to census block groups used to represent areas of homogenous travel behavior. Projects located in areas that incorporate similar features of the TAZ will tend to exhibit similar VMT. This presumption may not be appropriate if the project land uses would alter the existing built environment in such a way as to increase the rate or length of vehicle trips.

The proposed project is consistent with existing residential land uses in the project TAZ and there does not appear to be anything unique about the project that would otherwise be mis-represented utilizing the data from the WRCOG VMT Screening Tool.

Based on the WRCOG VMT Screening Tool, the proposed project is located within TAZ 3781. Since the project consists of residential use only, residential home-based VMT per capita is the applicable metric. Based on the WRCOG VMT Screening Tool, the proposed project is located in a TAZ that generates 12.97 residential home-based VMT per capita, which exceeds the Citywide average of 12.79 VMT per capita by approximately 1.4 percent. Therefore, the proposed project does not satisfy the City-established screening criteria for projects located in low VMT areas without implementation of any project design features or mitigation measures that would reduce the project's baseline VMT.

Project Type Screening

The following uses can also be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature:

- Local serving retail less than 50,000 square feet
- Local-serving K-12 schools
- Local parks
- Day care centers
- Local-serving gas stations
- Local-serving banks
- Local-serving hotels (e.g. non-destination hotels)
- Student housing projects
- Local serving community colleges that are consistent with the assumptions noted in the RTP/SCS
- Projects generating less than 400 daily vehicle trips[3]

[3] The OPR technical advisory notes that CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).). Typical project types for which trip generation increases relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract an additional 110-124 trips per 10,000 square feet. However, local air quality analysis has shown that various developments can have GHG production below AQMD limits with up to 400 trips per day.

- This generally corresponds to the following "typical" development potentials:[4]
  - 42 single family housing units
  - 60 multi-family, condominiums, or townhouse housing units
  - 41,000 square feet of office
  - 10,500 square feet general retail
  - 57,500 square feet of light industrial
  - 112,500 square feet of warehousing
  - 285,700 square feet of high cube transload and short-term storage warehouse

The proposed project does not include local-serving retail uses and exceeds daily trip thresholds for residential projects; therefore, the project does not satisfy the project type screening criteria.

VMT Thresholds of Significance

The City of Moreno Valley has established the following thresholds of significance for use as part of the environmental review process under CEQA:

1. A project would have a significant VMT impact if, in the Existing Plus Project scenario, its net VMT per capita (for residential projects) or per employee (for office and industrial projects) exceeds the per capita VMT for Moreno Valley. For all other uses, a net increase in VMT would be considered a significant impact.

2. If a project is consistent with the regional RTP/SCS, then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence. If it is not consistent with the RTP/SCS, then it would have a significant VMT impact if:

    a. For residential projects its net VMT per capita exceeds the average VMT per capita for Moreno Valley in the RTP/SCS horizon-year.

    b. For office and industrial projects its net VMT per employee exceeds the average VMT per employee for Moreno Valley in the RTP/SCS horizon year.

    c. For all other land development project types, a net increase in VMT in the RTP/SCS horizon-year would be considered a significant impact.

Note that the Cumulative No Project scenario shall reflect the adopted RTP/SCS; as such, if a project is consistent with the regional RTP/SCS, then the cumulative impacts shall be considered less than significant subject to consideration of other substantial evidence.

Project-Generated VMT

Project-generated VMT was estimated using the WRCOG VMT Screening Tool for TAZ 3781, which generates 12.97 residential home-based VMT per capita and exceeds the Citywide average of 12.79 VMT per capita by approximately 1.4 percent. Therefore, the proposed project would have a significant VMT impact without mitigation.

Therefore, absent substantial evidence otherwise, it is reasonable to conclude that the addition of 400 or fewer trips could be considered not to lead to a significant impact.

[4] Threshold may be higher depending on the tenant and the use of the site. This number was estimated using rates from ITE's *Trip Generation Manual*.

CUMULATIVE VMT IMPACTS

The proposed project is consistent with long-term environmental plans, namely the applicable Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the region. The project is located within the Southern California Association of Governments (SCAG) Metropolitan Planning Organization (MPO). SCAG is the MPO responsible for development of Connect SoCal, the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) for the region. Through the local input process, SCAG solicited input from all 197 local jurisdictions, including the City of Banning, regarding current land use, socio-economic projections, sustainability and transit measures to develop the Connect SoCal plan. The information collected and used in development of the SCAG's long-range plans and environmental goals is documented in Data/Map Books for each jurisdiction. Based on review of the Data/Map Book for the City of Moreno Valley, the project site is zoned for Mixed Residential use per SCAG's land use codes, which includes high density residential (Anderson Land Use Classification Code 1110), and is therefore consistent with the RTP/SCS.

Since the proposed project is both consistent with the SCAG RTP/SCS and would have a less than significant project impact, the project's cumulative VMT impact would be less than significant based on the City-established thresholds of significance.

VMT MITIGATION MEASURES

In accordance with the VMT mitigation measures identified in the City of Moreno Valley TIA Guidelines, the following measures are recommended:

Mitigation Measure #1:
In conjunction with construction of adjacent street improvements to ultimate right-of-way width, the proposed project shall construct sidewalks improvements on Emma Lane between Santiago Drive and Iris Avenue and on Santiago Drive between Emma Lane and Perris Boulevard. Additionally, the proposed project shall provide high-visibility, continental crosswalks markings on the north leg of Emma Lane and Iris Avenue.

Mitigation Measure #2:
The proposed project shall construct the following traffic calming measures:

- Install corner extensions/bulb-outs at the project driveways on Emma Lane.
- Install corner extensions/bulb-outs at the project driveway on Santiago Drive.
- Install speed cushions on Emma Lane between Santiago Drive and Iris Avenue.
- Install high-visibility, continental crosswalk markings on the north leg of Emma Lane and Iris Avenue.

The VMT reduction associated with Mitigation Measures #1 and #2 was calculated in accordance with the WRCOG SB 743 Implementation Pathway Document Package, which is based on guidance from the California Air Pollution Control Officers Association (CAPCOA) *Quantifying Greenhouse Gas Mitigation Measures* (August 2010) ["CAPCOA guidance"] and additional research developed since the CAPCOA guidance. VMT reduction worksheets are provided in Appendix G.

Based on the estimated VMT reduction determined from WRCOG/CAPCOA guidance, implementation of Mitigation Measures #1 and #2 is estimated to result in a total VMT reduction of 1.85 percent for the proposed project, resulting in 12.73 residential home-based VMT per capita, which is below the City of Moreno Valley average of 12.79 VMT per capita. Therefore, the proposed project is forecast to result in a less than significant VMT impact with mitigation based on the City-established thresholds of significance.

9. CONCLUSIONS

This section summarizes the findings and recommended improvements or mitigation measures (if any) identified in previous sections of this study.

PROJECT TRIP GENERATION

The proposed project is forecast to generate approximately 2,871 daily vehicle trips, including 170 trips during the AM peak hour and 217 trips during the PM peak hour.

OPERATIONAL ANALYSIS FINDINGS (NON-CEQA)

The proposed project is forecast to cause a substantial project-related LOS deficiency at the following study intersection for Opening Year (2024) With Project conditions, without improvements, based on the operational criteria established by the Cities of Moreno Valley and Perris:

6. Emma Lane at Iris Avenue AM and PM peak hours

Operational Improvements

The following measures are recommended to address the project-related LOS deficiency for Opening Year (2024) With Project conditions:

6. Emma Lane (NS) at Iris Avenue (EW)
   - Install a raised median along Iris Avenue with eastbound and westbound left turn lanes that restricts the northbound and southbound approaches to right turns only.

The proposed project is forecast to result in no substantial LOS deficiencies at the study intersections for Opening Year (2024) With Project conditions with implementation of the recommended improvements.

VMT ANALYSIS FINDINGS (CEQA)

Implementation of Mitigation Measures #1 and #2 is estimated to result in a total VMT reduction of 1.85 percent for the proposed project, resulting in 12.73 residential home-based VMT per capita, which is below the City of Moreno Valley average of 12.79 VMT per capita. Therefore, the proposed project is forecast to result in a less than significant VMT impact with mitigation based on the City-established thresholds of significance.

Mitigation Measure #1:
In conjunction with construction of adjacent street improvements to ultimate right-of-way width, the proposed project shall construct sidewalks improvements on Emma Lane between Santiago Drive and Iris Avenue and on Santiago Drive between Emma Lane and Perris Boulevard. Additionally, the proposed project shall provide high-visibility, continental crosswalks markings on the north leg of Emma Lane and Iris Avenue.

Mitigation Measure #2:
The proposed project shall construct the following traffic calming measures:
- Install corner extensions/bulb-outs at the project driveways on Emma Lane.
- Install corner extensions/bulb-outs at the project driveway on Santiago Drive.
- Install speed cushions on Emma Lane between Santiago Drive and Iris Avenue.
- Install high-visibility, continental crosswalk markings on the north leg of Emma Lane and Iris Avenue.

APPENDICES

Appendix A Glossary
Appendix B Scoping Agreement
Appendix C Volume Count Worksheets
Appendix D Level of Service Worksheets
Appendix E Traffic Signal Warrant Worksheets
Appendix F ITE Traffic Calming Fact Sheets
Appendix G VMT Reduction Worksheets

APPENDIX A

GLOSSARY

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 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.

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).

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. This

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.

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.

TRUCK: A heavy motor vehicle generally used for transporting goods.

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

EXHIBIT A

Project Scoping Form

This scoping form shall be submitted to the Lead Agency to assist in identifying infrastructure improvements that may be required to support traffic from the proposed project.

Project Identification:

Case Number:	PEN20-0209, PEN 20-0210, PEN20-0211
Related Cases:	
SP No.	HPA# 20063
EIR No.	
GPA No.	
CZ No.	
Project Name:	Perris at Pentecostal Project
Project Address:	Northwest Corner of Perris Boulevard & Iris Avenue, Moreno Valley
Project Opening Year:	2024
Project Description:	Construct 426 DU Multi-Family Housing

	Consultant:	**Developer:**
Name:	Giancarlo Ganddini, PE, PTP	PERRIS @ PENTECOSTAL LLC
Address:	555 Park Center Drive, Suite 225	41 Corporate Park Suite 250
	Santa Ana, CA 92705	Irvine, CA 92606
Telephone:	(714) 795-3100*101	(959) 852-0266
Email:	giancarlo@ganddini.com	

Trip Generation Information:

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

The City of Moreno Valley reserves the right to use, share, and reproduce the information including, but not limited to, traffic counts, exhibits, and surveys provided in all submitted traffic studies and VMT assessments.

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11/23/21

Current General Plan Land Use: Residential: Max 30 du/ac

Proposed General Plan Land Use: Residential: Max 30 du/ac

Current Zoning: R30

Proposed Zoning: R30

	Existing Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips	-	-	-	41	129	170
PM Trips	-	-	-	137	80	217

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

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

Potential Screening Checks

Is your project screened from specific analyses (see Page 3 of the guidelines related to LOS assessment and Pages 22-23 for VMT screening criteria).

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

LOS screening justification (see Page 3 of the guidelines): LOS screening not justified; LOS analysis will be prepared.

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

VMT screening justification (see Pages 22-23 of the guidelines): VMT screening not satisfied; detailed VMT and/or mitigation required.

Level of Service Scoping

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

North	South	East	West
35 %	20 %	15 %	30 %

Link level of service and data collection:

____ will be required

_X_ will not be required

- Attach list of study intersections (and roadway segments if applicable)
- Attach site plan
- Other specific items to be addressed:
  - Site access
  - On-site circulation
  - Parking
  - Consistency with Plans supporting Bikes/Peds/Transit
  - Other _____

Other Items to be addressed:
1. Signal warrant analysis for Iris Ave/Emma Ln
2. Left turn lane storage at Iris/Emma and Perris/Santiago; right turn lane on Perris/Harley Knox.
3. Existing and planned non-motorized facilities (bike, ped, trails, etc.)
4. Traffic calming along Emma Lane and Iris Ave fronting the school.

- Date of Traffic Counts New counts
- Attach proposed analysis scenarios (years plus proposed forecasting approach)
- Attach proposed phasing approach (if the project is phased)

VMT Scoping

For projects that are not screened, identify the following:

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

APN:485220044; TAZ:3,781

Within a Transit Priority Area (TPA)?
No (Fail)

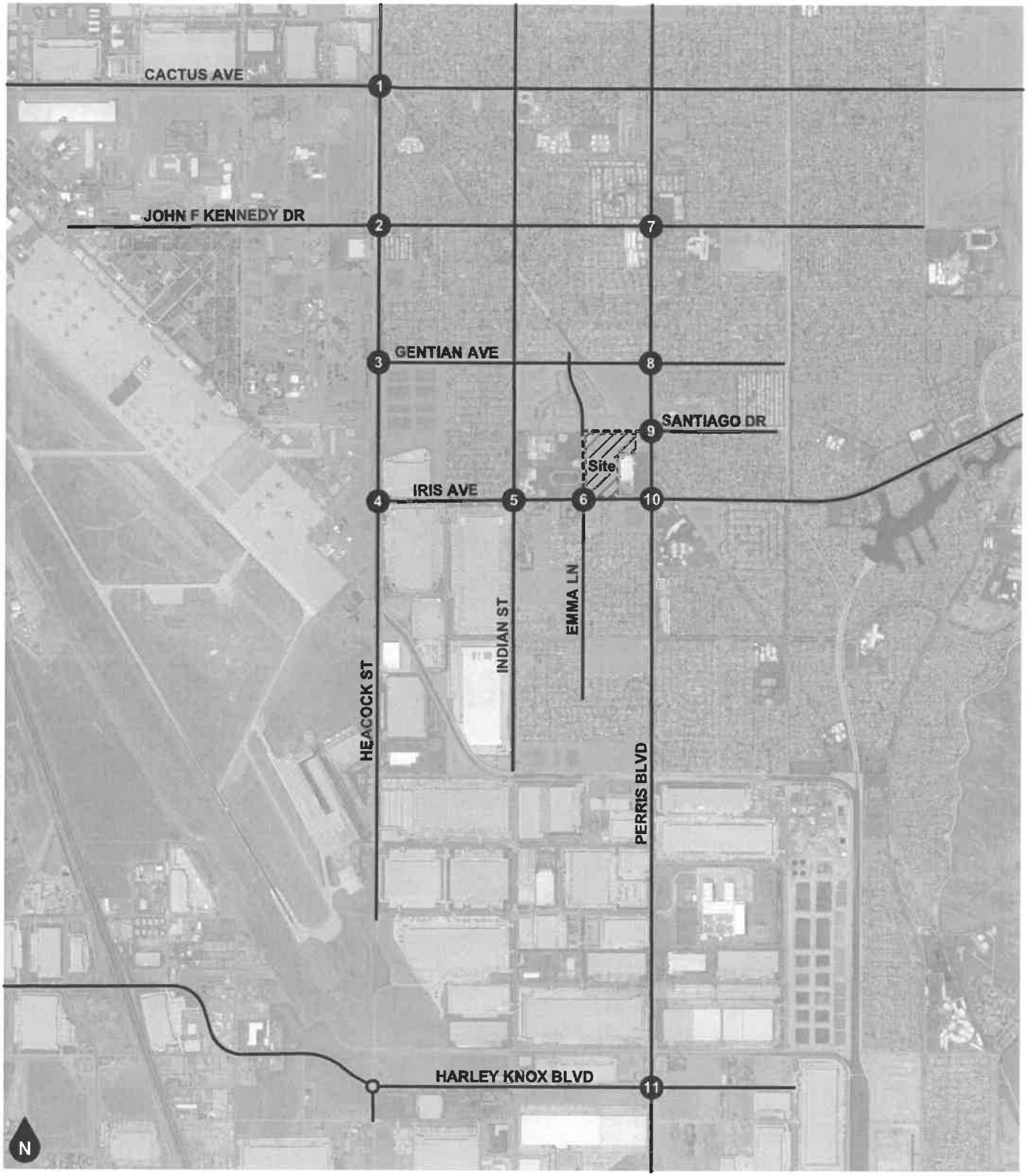
Within a low VMT generating TAZ based on Total VMT?
No (Fail)
Jurisdictional average 2012 daily total VMT per service population = 24.49
Project TAZ 2012 daily total VMT per service population = 24.71

Within a low VMT generating TAZ based on Residential Home-Based VMT?
No (Fail)
Jurisdictional average 2012 daily residential home-based VMT per capita = 12.79
Project TAZ 2012 daily residential home-based VMT per capita = 12.97

Within a low VMT generating TAZ based on Home-Based Work VMT?
No (Fail)
Jurisdictional average 2012 daily home-based work VMT per worker = 11.01
Project TAZ 2012 daily home-based work VMT per worker = 11.40

Analysis Scenarios:
1. Existing
2. Opening Year Without Project (Existing Plus Ambient Growth Plus Cumulative)
3. Opening Year With Project (Existing Plus Ambient Growth Plus Cumulative Plus Project)
Forecast will be manual, build-up approach by adding growth rate, cumulative, and project trips to existing volumes.

Study Intersections:
1. Heacock Street (NS) / Cactus Avenue (EW)
2. Heacock Street (NS) / John F. Kennedy Drive (EW)
3. Heacock Street (NS) / Gentian Avenue (EW)
4. Heacock Street (NS) / Iris Avenue (EW)
5. Indian Street (NS) / Iris Avenue (EW)
6. Emma Street (NS) / Iris Avenue (EW)
7. Perris Boulevard (NS) / John F. Kennedy Drive (EW)
8. Perris Boulevard (NS) / Gentian Avenue (EW)
9. Perris Boulevard (NS) / Santiago Drive (EW)
10. Perris Boulevard (NS) / Iris Avenue (EW)
11. Perris Boulevard (NS) / Harley Knox Boulevard (EW)



Legend

(#) Study Intersection

Figure 1
Project Location Map

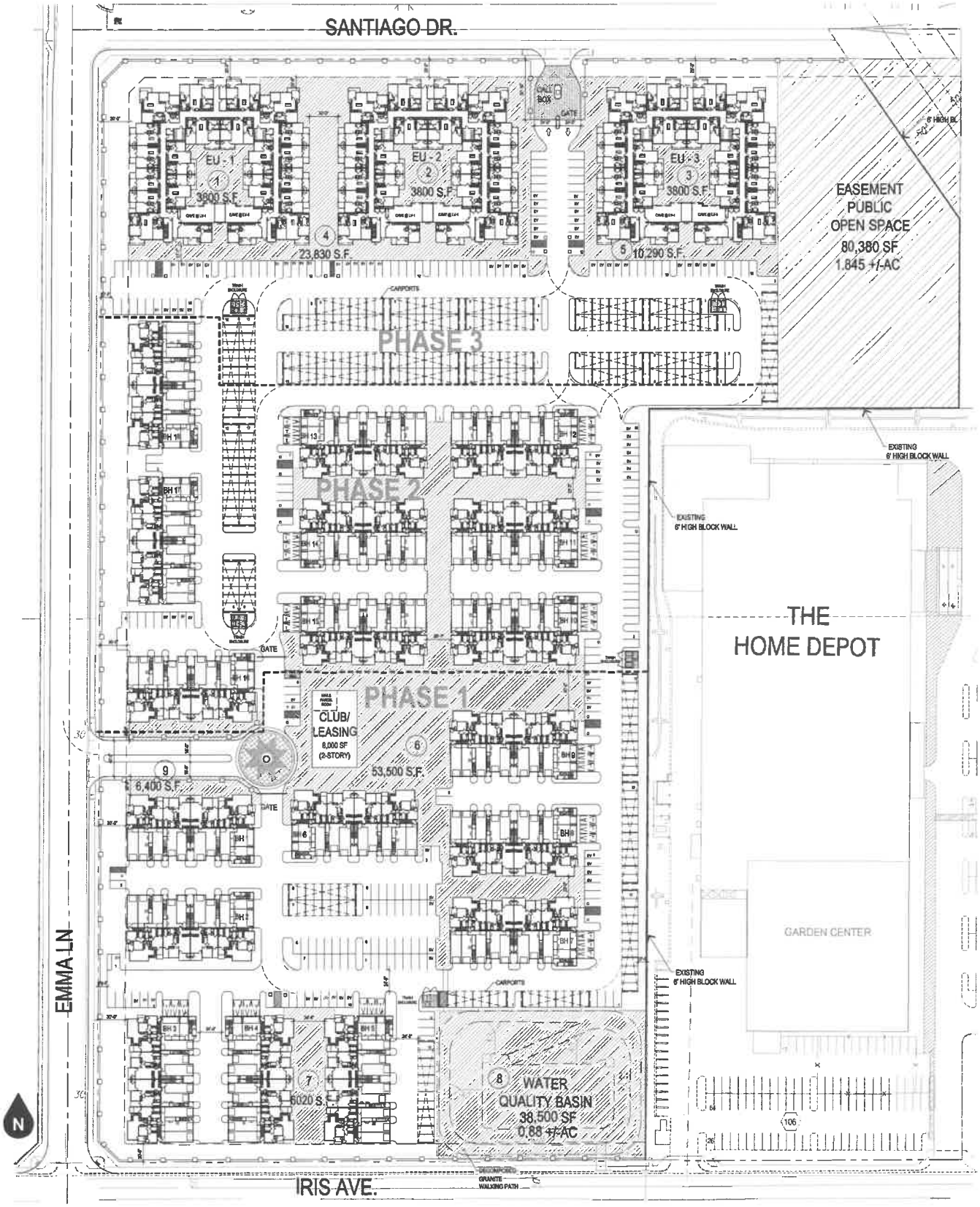
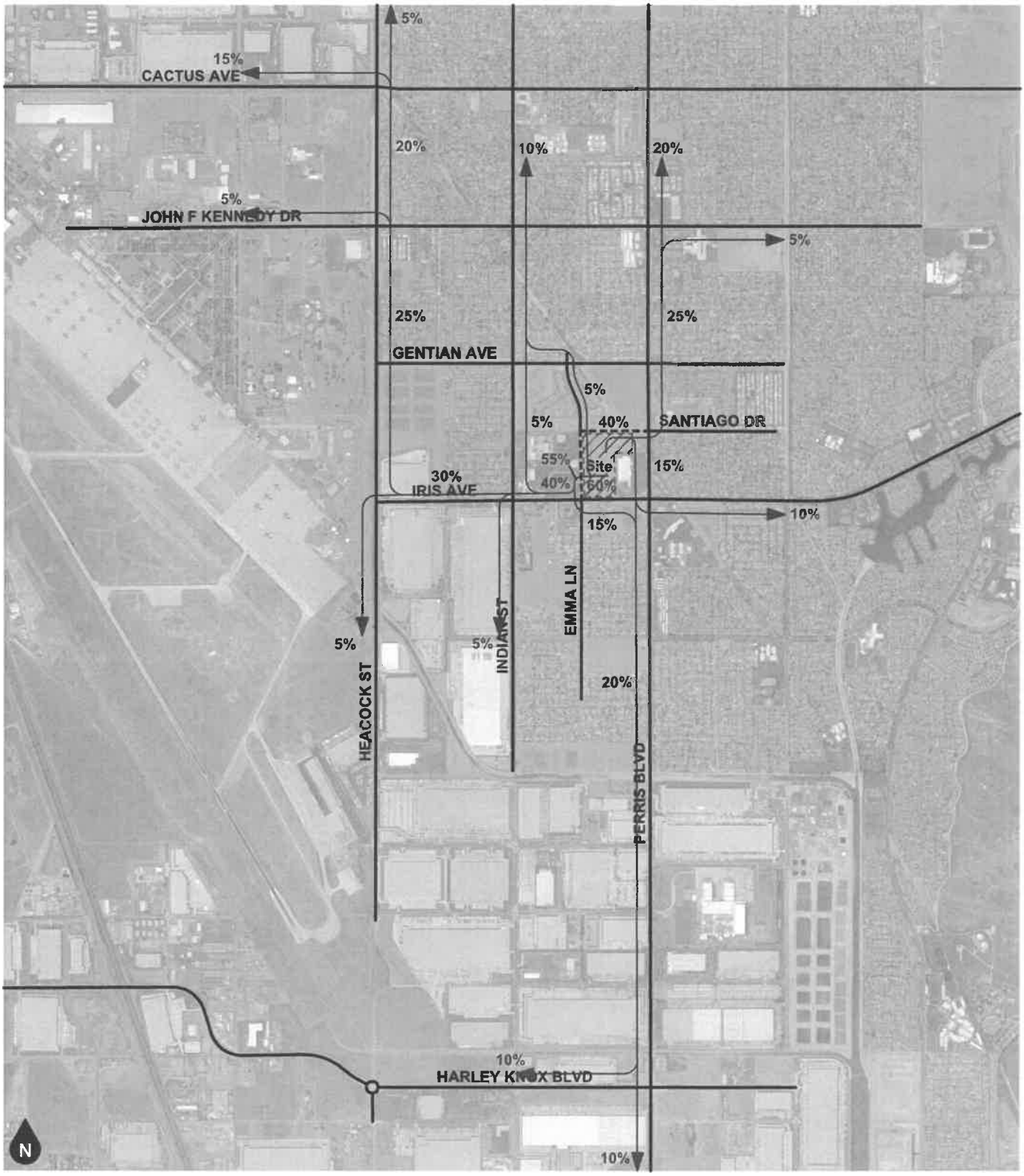


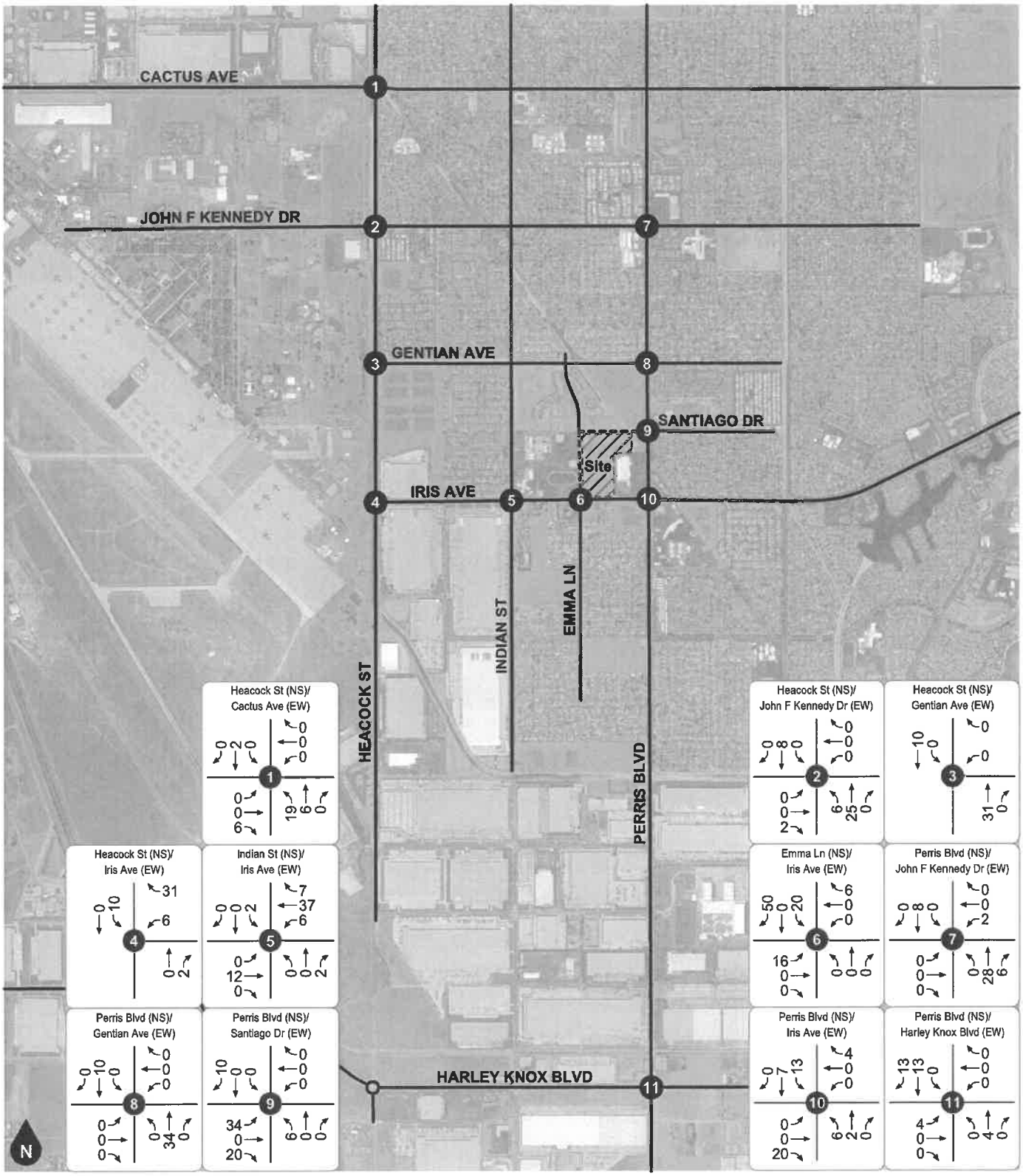
Figure 2
Site Plan



Legend

10% Percent To/From Project

Figure 3
Project Trip Distribution



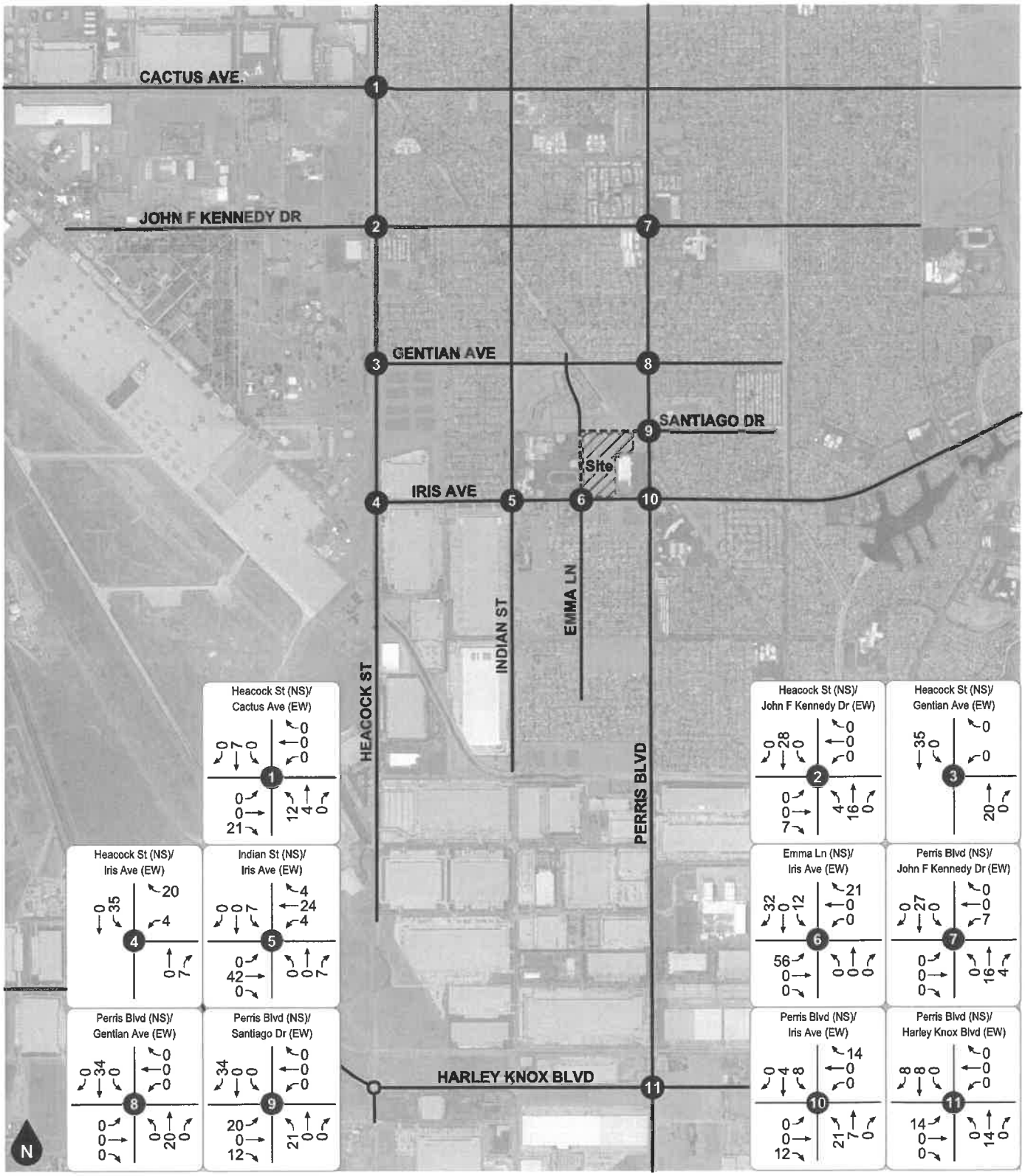
Legend

(#) Study Intersection

Figure 4
Project AM Peak Hour Intersection Turning Movement Volumes

ganddini

Perris at Pentecostal
Traffic Impact Analysis
19435



Legend

(#) Study Intersection

Figure 5
Project PM Peak Hour Intersection Turning Movement Volumes

ganddini

Perris at Pentecostal
Traffic Impact Analysis
19435

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
Multifamily Housing (Low-Rise)	ITE 220	DU	24%	76%	0.40	63%	37%	0.51	6.74

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Source	Quantity	In	Out	Total	In	Out	Total	Daily
Mutlifamily Housing (Low-Rise)	ITE 220	426 DU	41	129	170	137	80	217	2,871
TOTAL TRIPS GENERATED			**41**	**129**	**170**	**137**	**80**	**217**	**2,871**

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

APPENDIX C

VOLUME COUNT WORKSHEETS

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

City of Moreno Valley
N/S: Heacock Street
E/W: Cactus Avenue
Weather: Clear

File Name : 01_MRV_Heacock_Cactus AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Heacock Street Southbound				Cactus Avenue Westbound				Heacock Street Northbound				Cactus 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	3	52	17	72	1	203	6	210	162	82	1	245	8	88	96	192	719
07:15 AM	9	76	18	103	4	262	11	277	177	98	1	276	20	99	126	245	901
07:30 AM	14	72	25	111	2	229	14	245	181	138	2	321	11	130	122	263	940
07:45 AM	15	74	21	110	2	255	12	269	172	173	3	348	22	155	123	300	1027
Total	41	274	81	396	9	949	43	1001	692	491	7	1190	61	472	467	1000	3587
08:00 AM	15	67	20	102	1	229	13	243	189	133	5	327	22	111	89	222	894
08:15 AM	11	62	14	87	2	214	19	235	134	91	2	227	19	130	97	246	795
08:30 AM	16	36	5	57	1	137	16	154	154	109	2	265	10	104	80	194	670
08:45 AM	11	39	8	58	1	165	24	190	101	83	3	187	11	114	85	210	645
Total	53	204	47	304	5	745	72	822	578	416	12	1006	62	459	351	872	3004
Grand Total	94	478	128	700	14	1694	115	1823	1270	907	19	2196	123	931	818	1872	6591
Apprch %	13.4	68.3	18.3		0.8	92.9	6.3		57.8	41.3	0.9		6.6	49.7	43.7		
Total %	1.4	7.3	1.9	10.6	0.2	25.7	1.7	27.7	19.3	13.8	0.3	33.3	1.9	14.1	12.4	28.4	

	Heacock Street Southbound				Cactus Avenue Westbound				Heacock Street Northbound				Cactus 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 07:15 AM																	
07:15 AM	9	**76**	18	103	**4**	**262**	11	**277**	177	98	1	276	20	99	**126**	245	901
07:30 AM	14	72	**25**	**111**	2	229	**14**	245	181	138	2	321	11	130	122	263	940
07:45 AM	**15**	74	21	110	2	255	12	269	172	**173**	3	**348**	**22**	**155**	123	**300**	**1027**
08:00 AM	15	67	20	102	1	229	13	243	**189**	133	**5**	327	22	111	89	222	894
Total Volume	53	289	84	426	9	975	50	1034	719	542	11	1272	75	495	460	1030	3762
% App. Total	12.4	67.8	19.7		0.9	94.3	4.8		56.5	42.6	0.9		7.3	48.1	44.7		
PHF	.883	.951	.840	.959	.563	.930	.893	.933	.951	.783	.550	.914	.852	.798	.913	.858	.916

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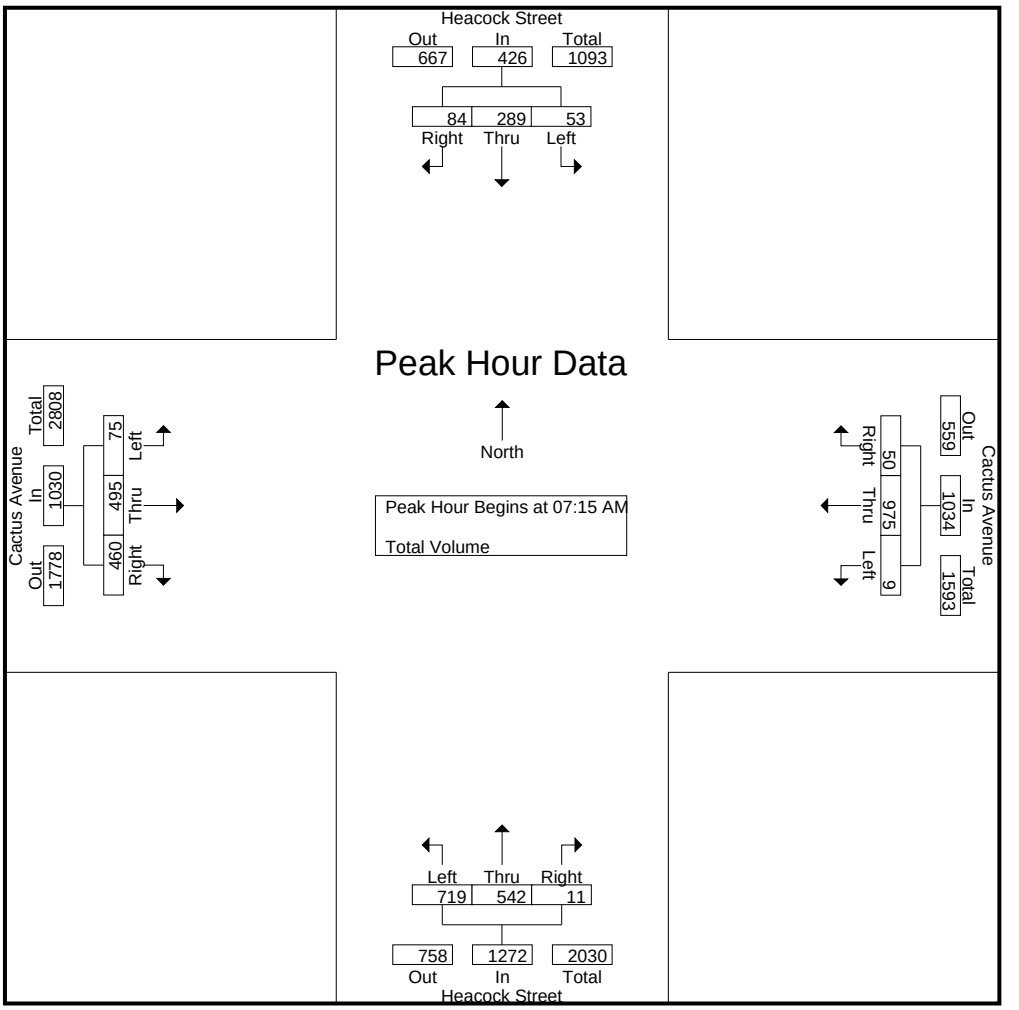
File Name : 01_MRV_Heacock_Cactus AM
Site Code : 22521732
Start Date : 12/7/2021



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

	07:15 AM				07:15 AM				07:15 AM				07:30 AM			
+0 mins.	9	**76**	18	103	**4**	**262**	11	**277**	177	98	1	276	11	130	122	263
+15 mins.	14	72	**25**	**111**	2	229	**14**	245	181	138	2	321	**22**	**155**	**123**	**300**
+30 mins.	**15**	74	21	110	2	255	12	269	172	**173**	3	**348**	22	111	89	222
+45 mins.	15	67	20	102	1	229	13	243	**189**	133	**5**	327	19	130	97	246
Total Volume	53	289	84	426	9	975	50	1034	719	542	11	1272	74	526	431	1031
% App. Total	12.4	67.8	19.7		0.9	94.3	4.8		56.5	42.6	0.9		7.2	51	41.8	
PHF	.883	.951	.840	.959	.563	.930	.893	.933	.951	.783	.550	.914	.841	.848	.876	.859

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File Name : 01_MRV_Heacock_Cactus PM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Heacock Street Southbound				Cactus Avenue Westbound				Heacock Street Northbound				Cactus 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	16	93	16	125	6	135	13	154	117	146	2	265	41	229	182	452	996
04:15 PM	18	95	9	122	4	126	23	153	149	119	6	274	32	242	204	478	1027
04:30 PM	19	131	13	163	2	145	12	159	128	177	3	308	31	264	216	511	1141
04:45 PM	35	125	14	174	3	167	23	193	141	156	5	302	35	262	215	512	1181
Total	88	444	52	584	15	573	71	659	535	598	16	1149	139	997	817	1953	4345
05:00 PM	25	97	10	132	2	152	16	170	111	102	3	216	39	279	200	518	1036
05:15 PM	21	113	14	148	1	154	20	175	136	114	3	253	23	203	205	431	1007
05:30 PM	18	83	16	117	3	150	14	167	116	136	3	255	23	251	229	503	1042
05:45 PM	14	115	12	141	4	149	15	168	114	89	5	208	20	234	216	470	987
Total	78	408	52	538	10	605	65	680	477	441	14	932	105	967	850	1922	4072
Grand Total	166	852	104	1122	25	1178	136	1339	1012	1039	30	2081	244	1964	1667	3875	8417
Apprch %	14.8	75.9	9.3		1.9	88	10.2		48.6	49.9	1.4		6.3	50.7	43		
Total %	2	10.1	1.2	13.3	0.3	14	1.6	15.9	12	12.3	0.4	24.7	2.9	23.3	19.8	46	

	Heacock Street Southbound				Cactus Avenue Westbound				Heacock Street Northbound				Cactus 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 04:15 PM																	
04:15 PM	18	95	9	122	**4**	126	**23**	153	**149**	119	**6**	274	32	242	204	478	1027
04:30 PM	19	**131**	13	163	2	145	12	159	128	**177**	3	**308**	31	264	**216**	511	1141
04:45 PM	**35**	125	**14**	**174**	3	**167**	23	**193**	141	156	5	302	35	262	215	512	**1181**
05:00 PM	25	97	10	132	2	152	16	170	111	102	3	216	**39**	**279**	200	**518**	1036
Total Volume	97	448	46	591	11	590	74	675	529	554	17	1100	137	1047	835	2019	4385
% App. Total	16.4	75.8	7.8		1.6	87.4	11		48.1	50.4	1.5		6.8	51.9	41.4		
PHF	.693	.855	.821	.849	.688	.883	.804	.874	.888	.782	.708	.893	.878	.938	.966	.974	.928

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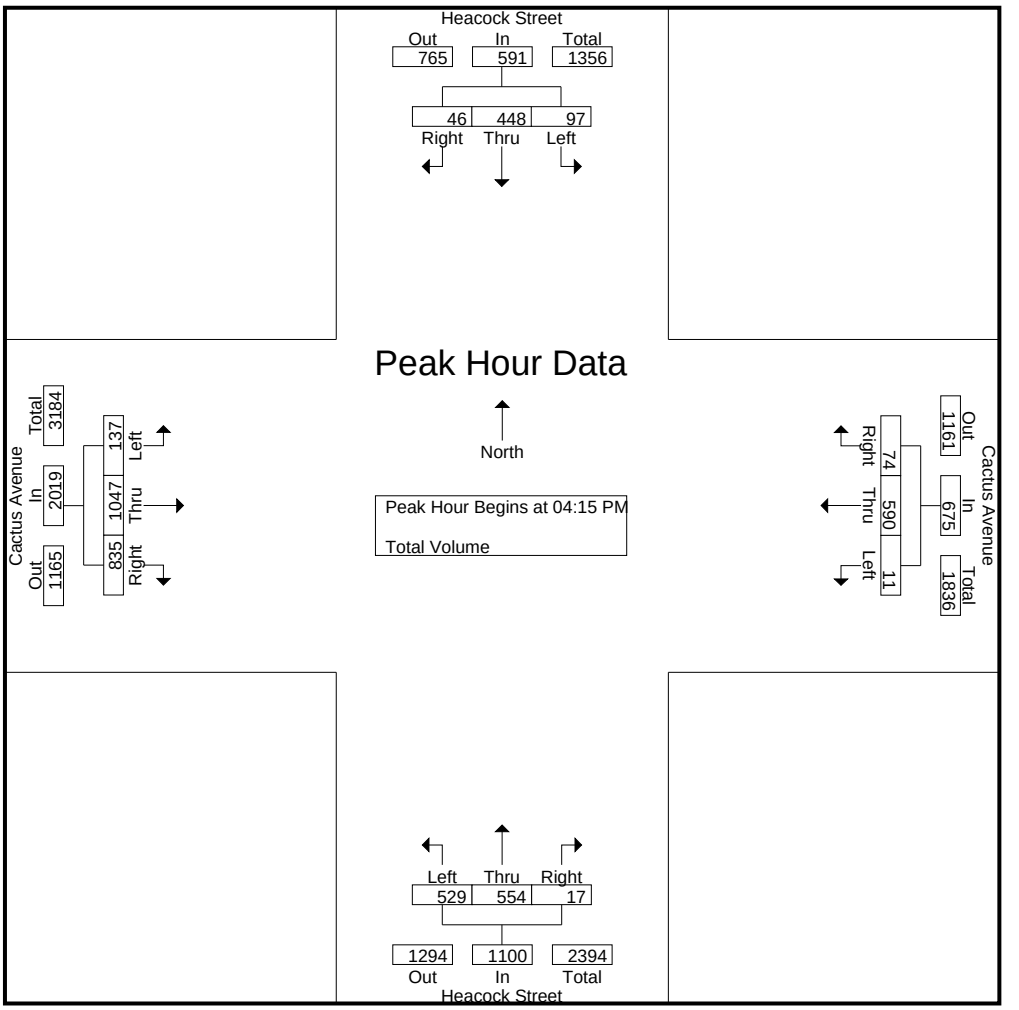

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:45 PM				04:00 PM				04:15 PM			
+0 mins.	19	**131**	13	163	**3**	**167**	**23**	**193**	117	146	2	265	32	242	204	478
+15 mins.	**35**	125	**14**	**174**	2	152	16	170	**149**	119	**6**	274	31	264	**216**	511
+30 mins.	25	97	10	132	1	154	20	175	128	**177**	3	**308**	35	262	215	512
+45 mins.	21	113	14	148	3	150	14	167	141	156	5	302	**39**	**279**	200	**518**
Total Volume	100	466	51	617	9	623	73	705	535	598	16	1149	137	1047	835	2019
% App. Total	16.2	75.5	8.3		1.3	88.4	10.4		46.6	52	1.4		6.8	51.9	41.4	
PHF	.714	.889	.911	.886	.750	.933	.793	.913	.898	.845	.667	.933	.878	.938	.966	.974

Location: Moreno Valley
N/S: Heacock Street
E/W: Cactus Avenue

Date: 12/7/2021
Day: Tuesday

PEDESTRIANS

	North Leg Heacock Street	East Leg Cactus Avenue	South Leg Heacock Street	West Leg Cactus Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	1	0	0	1
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1

	North Leg Heacock Street	East Leg Cactus Avenue	South Leg Heacock Street	West Leg Cactus Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	0	0	0	1
4:15 PM	1	0	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	1	0	1	1	3
5:00 PM	0	1	0	0	1
5:15 PM	1	0	0	0	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	4	1	1	1	7

Location: Moreno Valley
N/S: Heacock Street
E/W: Cactus Avenue

Date: 12/7/2021
Day: Tuesday

BICYCLES

	Southbound Heacock Street			Westbound Cactus Avenue			Northbound Heacock Street			Eastbound Cactus 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 Heacock Street			Westbound Cactus Avenue			Northbound Heacock Street			Eastbound Cactus 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	0	0	0	1
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	1	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
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	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	1	1	0	0	0	4

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City of Moreno Valley
N/S: Heacock Street
E/W: Meyer Drive/John F Kennedy Drive
Weather: Clear

File Name : 02_MRV_Heacock_JFK AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Heacock Street Southbound				John F Kennedy Drive Westbound				Heacock Street Northbound				Meyer Drive 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	16	125	3	144	6	2	53	61	3	167	2	172	13	7	15	35	412
07:15 AM	29	171	6	206	7	5	54	66	4	187	7	198	11	5	8	24	494
07:30 AM	30	129	0	159	11	4	60	75	9	237	15	261	13	14	15	42	537
07:45 AM	40	168	7	215	6	4	70	80	9	295	11	315	19	9	15	43	653
Total	115	593	16	724	30	15	237	282	25	886	35	946	56	35	53	144	2096
08:00 AM	28	107	4	139	9	5	64	78	5	210	11	226	19	9	8	36	479
08:15 AM	24	118	5	147	4	3	46	53	3	152	11	166	21	9	15	45	411
08:30 AM	22	75	1	98	2	2	55	59	2	170	10	182	11	9	9	29	368
08:45 AM	25	89	3	117	5	10	33	48	3	136	13	152	10	9	11	30	347
Total	99	389	13	501	20	20	198	238	13	668	45	726	61	36	43	140	1605
Grand Total	214	982	29	1225	50	35	435	520	38	1554	80	1672	117	71	96	284	3701
Apprch %	17.5	80.2	2.4		9.6	6.7	83.7		2.3	92.9	4.8		41.2	25	33.8		
Total %	5.8	26.5	0.8	33.1	1.4	0.9	11.8	14.1	1	42	2.2	45.2	3.2	1.9	2.6	7.7	

	Heacock Street Southbound				John F Kennedy Drive Westbound				Heacock Street Northbound				Meyer Drive 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 07:15 AM																	
07:15 AM	29	**171**	6	206	7	**5**	54	66	4	187	7	198	11	5	8	24	494
07:30 AM	30	129	0	159	**11**	4	60	75	**9**	237	**15**	261	13	**14**	**15**	42	537
07:45 AM	**40**	168	**7**	**215**	6	4	**70**	**80**	9	**295**	11	**315**	**19**	9	15	**43**	**653**
08:00 AM	28	107	4	139	9	5	64	78	5	210	11	226	19	9	8	36	479
Total Volume	127	575	17	719	33	18	248	299	27	929	44	1000	62	37	46	145	2163
% App. Total	17.7	80	2.4		11	6	82.9		2.7	92.9	4.4		42.8	25.5	31.7		
PHF	.794	.841	.607	.836	.750	.900	.886	.934	.750	.787	.733	.794	.816	.661	.767	.843	.828

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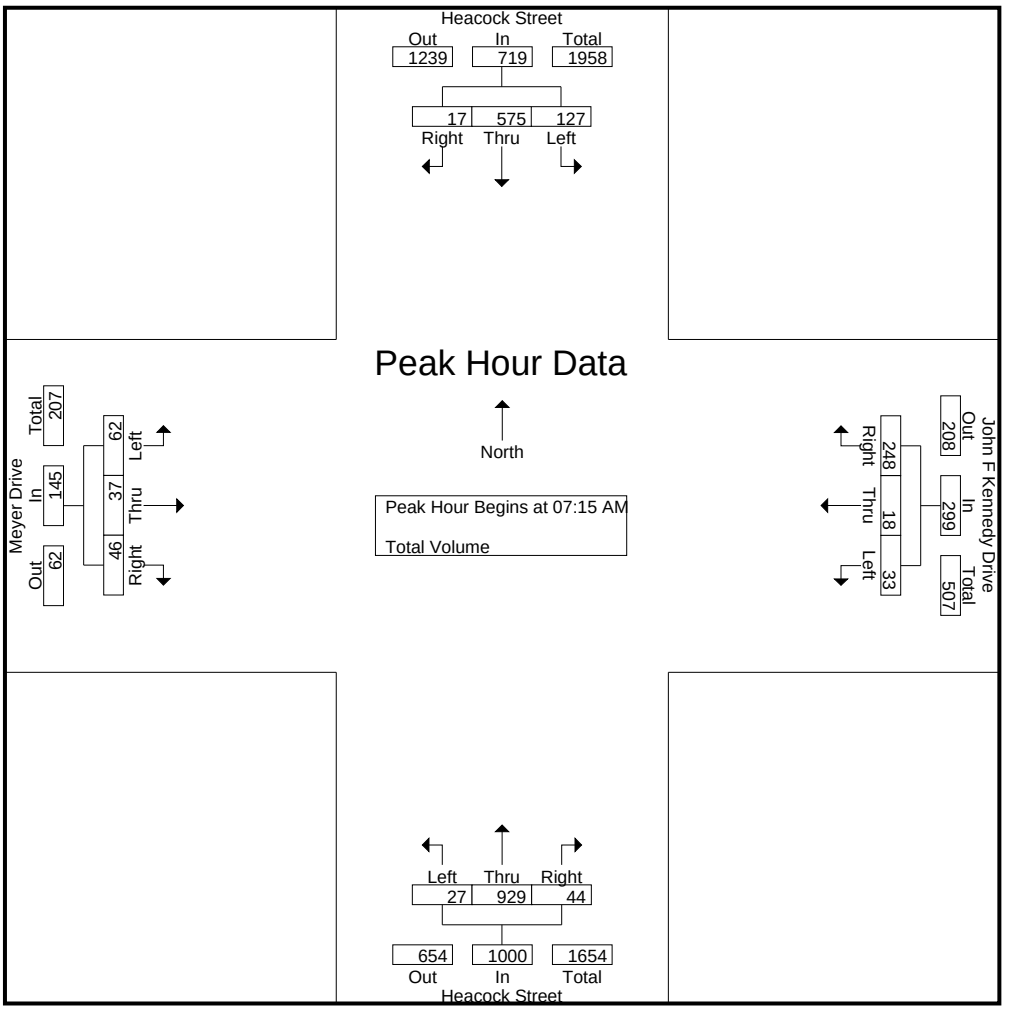
File Name : 02_MRV_Heacock_JFK AM
Site Code : 22521732
Start Date : 12/7/2021



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

	07:00 AM				07:15 AM				07:15 AM				07:30 AM			
+0 mins.	16	125	3	144	7	**5**	54	66	4	187	7	198	13	**14**	**15**	42
+15 mins.	29	**171**	6	206	**11**	4	60	75	**9**	237	**15**	261	19	9	15	43
+30 mins.	30	129	0	159	6	4	**70**	**80**	9	**295**	11	**315**	19	9	8	36
+45 mins.	**40**	168	**7**	**215**	9	5	64	78	5	210	11	226	**21**	9	15	**45**
Total Volume	115	593	16	724	33	18	248	299	27	929	44	1000	72	41	53	166
% App. Total	15.9	81.9	2.2		11	6	82.9		2.7	92.9	4.4		43.4	24.7	31.9	
PHF	.719	.867	.571	.842	.750	.900	.886	.934	.750	.787	.733	.794	.857	.732	.883	.922

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Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Heacock Street Southbound				John F Kennedy Drive Westbound				Heacock Street Northbound				Meyer Drive 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	46	211	6	263	6	6	37	49	5	189	9	203	71	41	34	146	661
04:15 PM	64	223	6	293	7	6	52	65	6	194	5	205	47	36	50	133	696
04:30 PM	50	252	7	309	7	6	40	53	6	261	17	284	43	53	55	151	797
04:45 PM	70	247	1	318	7	8	53	68	4	180	11	195	36	50	60	146	727
Total	230	933	20	1183	27	26	182	235	21	824	42	887	197	180	199	576	2881
05:00 PM	55	229	6	290	7	4	33	44	8	153	9	170	26	48	84	158	662
05:15 PM	61	249	6	316	8	10	48	66	8	171	12	191	19	44	66	129	702
05:30 PM	64	218	4	286	6	4	44	54	0	209	9	218	24	44	59	127	685
05:45 PM	72	254	1	327	3	5	36	44	3	135	7	145	19	19	50	88	604
Total	252	950	17	1219	24	23	161	208	19	668	37	724	88	155	259	502	2653
Grand Total	482	1883	37	2402	51	49	343	443	40	1492	79	1611	285	335	458	1078	5534
Apprch %	20.1	78.4	1.5		11.5	11.1	77.4		2.5	92.6	4.9		26.4	31.1	42.5		
Total %	8.7	34	0.7	43.4	0.9	0.9	6.2	8	0.7	27	1.4	29.1	5.1	6.1	8.3	19.5	

	Heacock Street Southbound				John F Kennedy Drive Westbound				Heacock Street Northbound				Meyer Drive 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	50	**252**	**7**	309	7	6	40	53	6	**261**	**17**	**284**	**43**	**53**	55	151	**797**
04:45 PM	**70**	247	1	**318**	7	8	**53**	**68**	4	180	11	195	36	50	60	146	727
05:00 PM	55	229	6	290	7	4	33	44	**8**	153	9	170	26	48	**84**	**158**	662
05:15 PM	61	249	6	316	**8**	**10**	48	66	8	171	12	191	19	44	66	129	702
Total Volume	236	977	20	1233	29	28	174	231	26	765	49	840	124	195	265	584	2888
% App. Total	19.1	79.2	1.6		12.6	12.1	75.3		3.1	91.1	5.8		21.2	33.4	45.4		
PHF	.843	.969	.714	.969	.906	.700	.821	.849	.813	.733	.721	.739	.721	.920	.789	.924	.906

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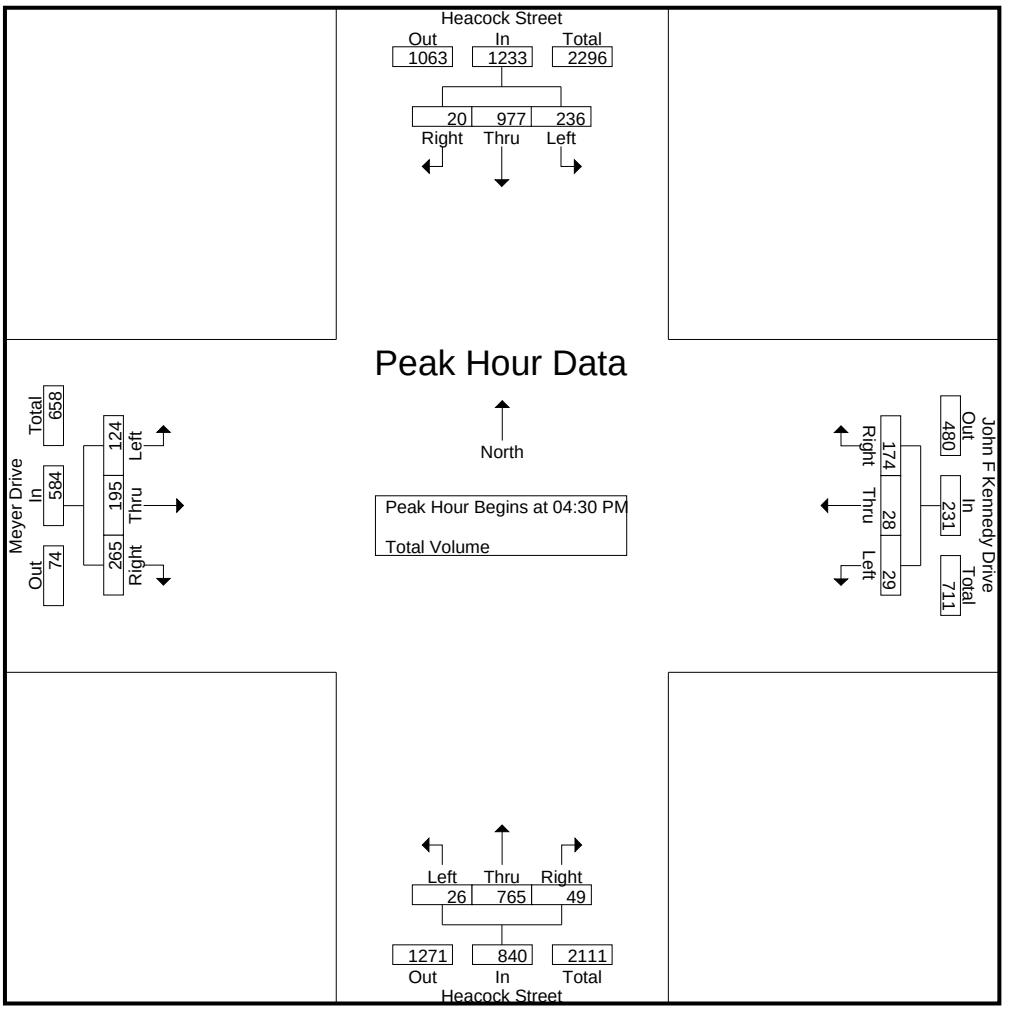
City of Moreno Valley
N/S: Heacock Street
E/W: Meyer Drive/John F Kennedy Drive
Weather: Clear

File Name : 02_MRV_Heacock_JFK PM
Site Code : 22521732
Start Date : 12/7/2021
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:

	04:30 PM				04:00 PM				04:00 PM				04:15 PM			
+0 mins.	50	**252**	**7**	309	6	6	37	49	5	189	9	203	**47**	36	50	133
+15 mins.	**70**	247	1	**318**	**7**	6	52	65	**6**	194	5	205	43	**53**	55	151
+30 mins.	55	229	6	290	7	6	40	53	6	**261**	**17**	**284**	36	50	60	146
+45 mins.	61	249	6	316	7	**8**	**53**	**68**	4	180	11	195	26	48	**84**	**158**
Total Volume	236	977	20	1233	27	26	182	235	21	824	42	887	152	187	249	588
% App. Total	19.1	79.2	1.6		11.5	11.1	77.4		2.4	92.9	4.7		25.9	31.8	42.3	
PHF	.843	.969	.714	.969	.964	.813	.858	.864	.875	.789	.618	.781	.809	.882	.741	.930

Location: Moreno Valley
N/S: Heacock Street
E/W: Meyer Dr/John F Kennedy Dr

Date: 12/7/2021
Day: Tuesday

PEDESTRIANS

	North Leg Heacock Street	East Leg John F Kennedy Drive	South Leg Heacock Street	West Leg Meyer Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	3	0	0	3
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	1	1	0	0	2
TOTAL VOLUMES:	1	4	0	0	5

	North Leg Heacock Street	East Leg John F Kennedy Drive	South Leg Heacock Street	West Leg Meyer Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	3	5	0	0	8
4:15 PM	3	1	0	0	4
4:30 PM	1	1	0	0	2
4:45 PM	0	0	0	0	0
5:00 PM	0	1	0	0	1
5:15 PM	2	1	0	0	3
5:30 PM	5	0	0	0	5
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	14	9	0	0	23

Location: Moreno Valley
N/S: Heacock Street
E/W: Meyer Dr/John F Kennedy Dr

Date: 12/7/2021
Day: Tuesday

BICYCLES

	Southbound Heacock Street			Westbound John F Kennedy Drive			Northbound Heacock Street			Eastbound Meyer Drive			
	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	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	1	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	1	0	0	0	0	0	1	0	2

	Southbound Heacock Street			Westbound John F Kennedy Drive			Northbound Heacock Street			Eastbound Meyer Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
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	0	1	0	0	0	1
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	1	0	0	0	0	0	0	0	0	1
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	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	2	0	0	0	0	1	0	0	0	3

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City of Moreno Valley
N/S: Heacock Street
E/W: Gentian Avenue
Weather: Clear

File Name : 03_MRV_Heacock_Gentian AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Heacock Street Southbound			Gentian Avenue Westbound			Heacock Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	18	114	132	1	34	35	132	2	134	301
07:15 AM	14	158	172	5	26	31	143	4	147	350
07:30 AM	15	135	150	2	41	43	207	4	211	404
07:45 AM	20	160	180	4	52	56	220	1	221	457
Total	67	567	634	12	153	165	702	11	713	1512
08:00 AM	13	105	118	1	25	26	167	1	168	312
08:15 AM	15	111	126	1	19	20	140	3	143	289
08:30 AM	9	74	83	2	26	28	118	1	119	230
08:45 AM	10	90	100	3	18	21	124	0	124	245
Total	47	380	427	7	88	95	549	5	554	1076
Grand Total	114	947	1061	19	241	260	1251	16	1267	2588
Apprch %	10.7	89.3		7.3	92.7		98.7	1.3		
Total %	4.4	36.6	41	0.7	9.3	10	48.3	0.6	49	

	Heacock Street Southbound			Gentian Avenue Westbound			Heacock 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 07:15 AM										
07:15 AM	14	158	172	**5**	26	31	143	**4**	147	350
07:30 AM	15	135	150	2	41	43	207	4	211	404
07:45 AM	**20**	**160**	**180**	4	**52**	**56**	**220**	1	**221**	**457**
08:00 AM	13	105	118	1	25	26	167	1	168	312
Total Volume	62	558	620	12	144	156	737	10	747	1523
% App. Total	10	90		7.7	92.3		98.7	1.3		
PHF	.775	.872	.861	.600	.692	.696	.838	.625	.845	.833

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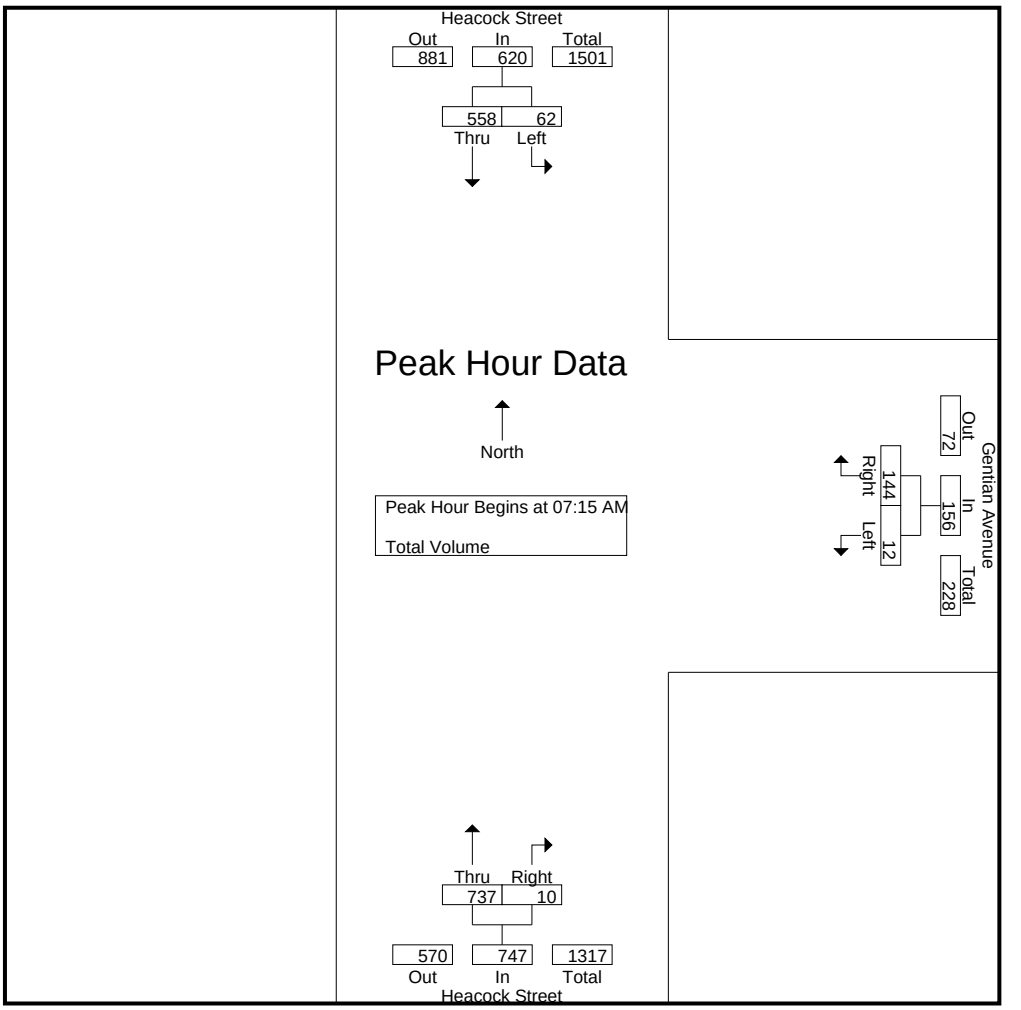
City of Moreno Valley
N/S: Heacock Street
E/W: Gentian Avenue
Weather: Clear

File Name : 03_MRV_Heacock_Gentian AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 2



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

	07:00 AM			07:00 AM			07:15 AM		
+0 mins.	18	114	132	1	34	35	143	**4**	147
+15 mins.	14	158	172	**5**	26	31	207	4	211
+30 mins.	15	135	150	2	41	43	**220**	1	**221**
+45 mins.	**20**	**160**	**180**	4	**52**	**56**	167	1	168
Total Volume	67	567	634	12	153	165	737	10	747
% App. Total	10.6	89.4		7.3	92.7		98.7	1.3	
PHF	.838	.886	.881	.600	.736	.737	.838	.625	.845

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City of Moreno Valley
N/S: Heacock Street
E/W: Gentian Avenue
Weather: Clear

File Name : 03_MRV_Heacock_Gentian PM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Heacock Street Southbound			Gentian Avenue Westbound			Heacock Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	27	212	239	2	15	17	168	2	170	426
04:15 PM	23	246	269	0	24	24	166	3	169	462
04:30 PM	29	281	310	3	16	19	248	7	255	584
04:45 PM	31	300	331	2	31	33	166	5	171	535
Total	110	1039	1149	7	86	93	748	17	765	2007
05:00 PM	28	266	294	4	22	26	150	5	155	475
05:15 PM	37	239	276	1	18	19	141	0	141	436
05:30 PM	36	266	302	1	24	25	159	3	162	489
05:45 PM	36	299	335	1	17	18	108	1	109	462
Total	137	1070	1207	7	81	88	558	9	567	1862
Grand Total	247	2109	2356	14	167	181	1306	26	1332	3869
Apprch %	10.5	89.5		7.7	92.3		98	2		
Total %	6.4	54.5	60.9	0.4	4.3	4.7	33.8	0.7	34.4	

	Heacock Street Southbound			Gentian Avenue Westbound			Heacock 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 04:15 PM										
04:15 PM	23	246	269	0	24	24	166	3	169	462
04:30 PM	29	281	310	3	16	19	**248**	**7**	**255**	**584**
04:45 PM	**31**	**300**	**331**	2	**31**	**33**	166	5	171	535
05:00 PM	28	266	294	**4**	22	26	150	5	155	475
Total Volume	111	1093	1204	9	93	102	730	20	750	2056
% App. Total	9.2	90.8		8.8	91.2		97.3	2.7		
PHF	.895	.911	.909	.563	.750	.773	.736	.714	.735	.880

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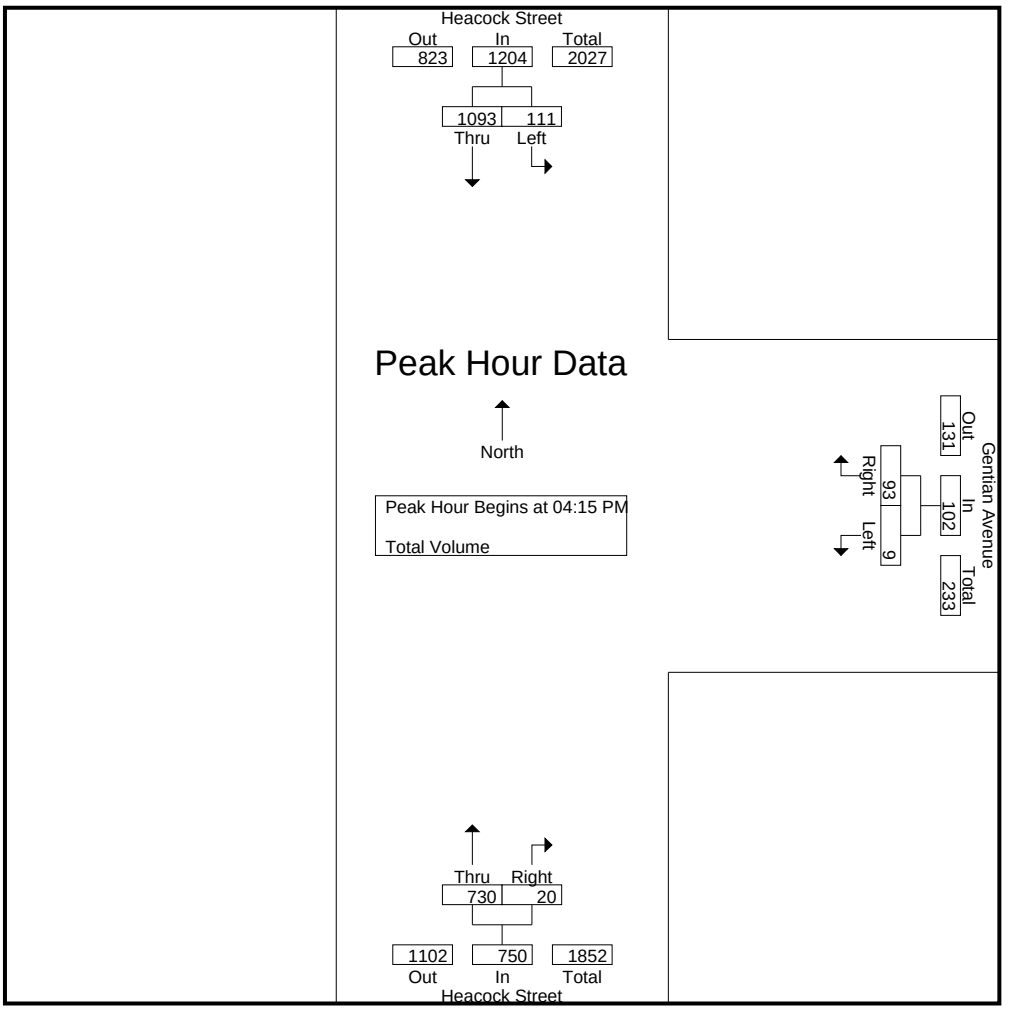
City of Moreno Valley
N/S: Heacock Street
E/W: Gentian Avenue
Weather: Clear

File Name : 03_MRV_Heacock_Gentian PM
Site Code : 22521732
Start Date : 12/7/2021
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:

	04:30 PM			04:45 PM			04:00 PM		
+0 mins.	29	281	310	2	**31**	**33**	168	2	170
+15 mins.	31	**300**	**331**	**4**	22	26	166	3	169
+30 mins.	28	266	294	1	18	19	**248**	**7**	**255**
+45 mins.	**37**	239	276	1	24	25	166	5	171
Total Volume	125	1086	1211	8	95	103	748	17	765
% App. Total	10.3	89.7		7.8	92.2		97.8	2.2	
PHF	.845	.905	.915	.500	.766	.780	.754	.607	.750

Location: Moreno Valley
N/S: Heacock Street
E/W: Gentian Avenue

Date: 12/7/2021
Day: Tuesday

PEDESTRIANS

	North Leg Heacock Street	East Leg Gentian Avenue	South Leg Heacock Street	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Heacock Street	East Leg Gentian Avenue	South Leg Heacock Street	West Leg Dead End	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

Location: Moreno Valley
N/S: Heacock Street
E/W: Gentian Avenue

Date: 12/7/2021
Day: Tuesday

BICYCLES

	Southbound Heacock Street			Westbound Gentian Avenue			Northbound Heacock 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	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	0	0	0	0	0	0

	Southbound Heacock Street			Westbound Gentian Avenue			Northbound Heacock 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	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	2	0	0	0	0	0	1	0	0	0	0	3
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	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	0	0	0	0	4

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City of Moreno Valley
N/S: Heacock Street
E/W: Iris Avenue
Weather: Clear

File Name : 04_MRV_Heacock_Iris AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Heacock Street Southbound			Iris Avenue Westbound			Heacock Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	35	84	119	7	88	95	51	7	58	272
07:15 AM	49	122	171	8	92	100	66	7	73	344
07:30 AM	51	82	133	9	101	110	103	10	113	356
07:45 AM	66	92	158	18	127	145	100	8	108	411
Total	201	380	581	42	408	450	320	32	352	1383
08:00 AM	51	68	119	8	88	96	78	3	81	296
08:15 AM	39	72	111	8	92	100	59	7	66	277
08:30 AM	37	41	78	9	70	79	63	1	64	221
08:45 AM	44	44	88	8	66	74	54	10	64	226
Total	171	225	396	33	316	349	254	21	275	1020
Grand Total	372	605	977	75	724	799	574	53	627	2403
Apprch %	38.1	61.9		9.4	90.6		91.5	8.5		
Total %	15.5	25.2	40.7	3.1	30.1	33.3	23.9	2.2	26.1	

	Heacock Street Southbound			Iris Avenue Westbound			Heacock 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 07:15 AM										
07:15 AM	49	**122**	**171**	8	92	100	66	7	73	344
07:30 AM	51	82	133	9	101	110	**103**	**10**	**113**	356
07:45 AM	**66**	92	158	**18**	**127**	**145**	100	8	108	**411**
08:00 AM	51	68	119	8	88	96	78	3	81	296
Total Volume	217	364	581	43	408	451	347	28	375	1407
% App. Total	37.3	62.7		9.5	90.5		92.5	7.5		
PHF	.822	.746	.849	.597	.803	.778	.842	.700	.830	.856

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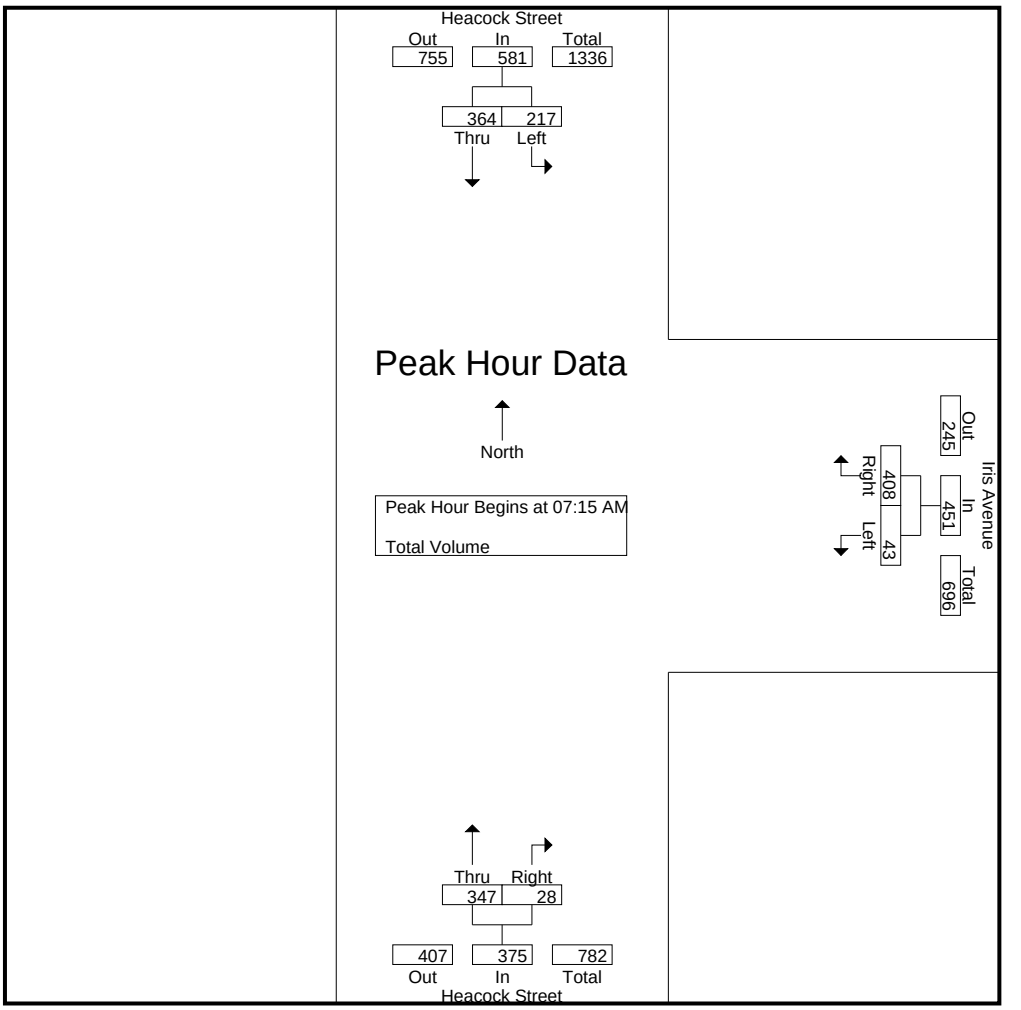
City of Moreno Valley
N/S: Heacock Street
E/W: Iris Avenue
Weather: Clear

File Name : 04_MRV_Heacock_Iris AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 2



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

	07:00 AM			07:15 AM			07:15 AM		
+0 mins.	35	84	119	8	92	100	66	7	73
+15 mins.	49	**122**	**171**	9	101	110	**103**	**10**	**113**
+30 mins.	51	82	133	**18**	**127**	**145**	100	8	108
+45 mins.	**66**	92	158	8	88	96	78	3	81
Total Volume	201	380	581	43	408	451	347	28	375
% App. Total	34.6	65.4		9.5	90.5		92.5	7.5	
PHF	.761	.779	.849	.597	.803	.778	.842	.700	.830

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City of Moreno Valley
N/S: Heacock Street
E/W: Iris Avenue
Weather: Clear

File Name : 04_MRV_Heacock_Iris PM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Heacock Street Southbound			Iris Avenue Westbound			Heacock Street Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	107	110	217	13	73	86	95	7	102	405
04:15 PM	107	128	235	9	72	81	108	2	110	426
04:30 PM	101	165	266	9	70	79	169	13	182	527
04:45 PM	112	180	292	12	54	66	99	8	107	465
Total	427	583	1010	43	269	312	471	30	501	1823
05:00 PM	117	154	271	12	69	81	75	4	79	431
05:15 PM	121	138	259	16	60	76	97	7	104	439
05:30 PM	115	140	255	17	56	73	115	6	121	449
05:45 PM	132	157	289	13	63	76	58	12	70	435
Total	485	589	1074	58	248	306	345	29	374	1754
Grand Total	912	1172	2084	101	517	618	816	59	875	3577
Apprch %	43.8	56.2		16.3	83.7		93.3	6.7		
Total %	25.5	32.8	58.3	2.8	14.5	17.3	22.8	1.6	24.5	

	Heacock Street Southbound			Iris Avenue Westbound			Heacock 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	101	165	266	9	**70**	79	**169**	**13**	**182**	**527**
04:45 PM	112	**180**	**292**	12	54	66	99	8	107	465
05:00 PM	117	154	271	12	69	**81**	75	4	79	431
05:15 PM	**121**	138	259	**16**	60	76	97	7	104	439
Total Volume	451	637	1088	49	253	302	440	32	472	1862
% App. Total	41.5	58.5		16.2	83.8		93.2	6.8		
PHF	.932	.885	.932	.766	.904	.932	.651	.615	.648	.883

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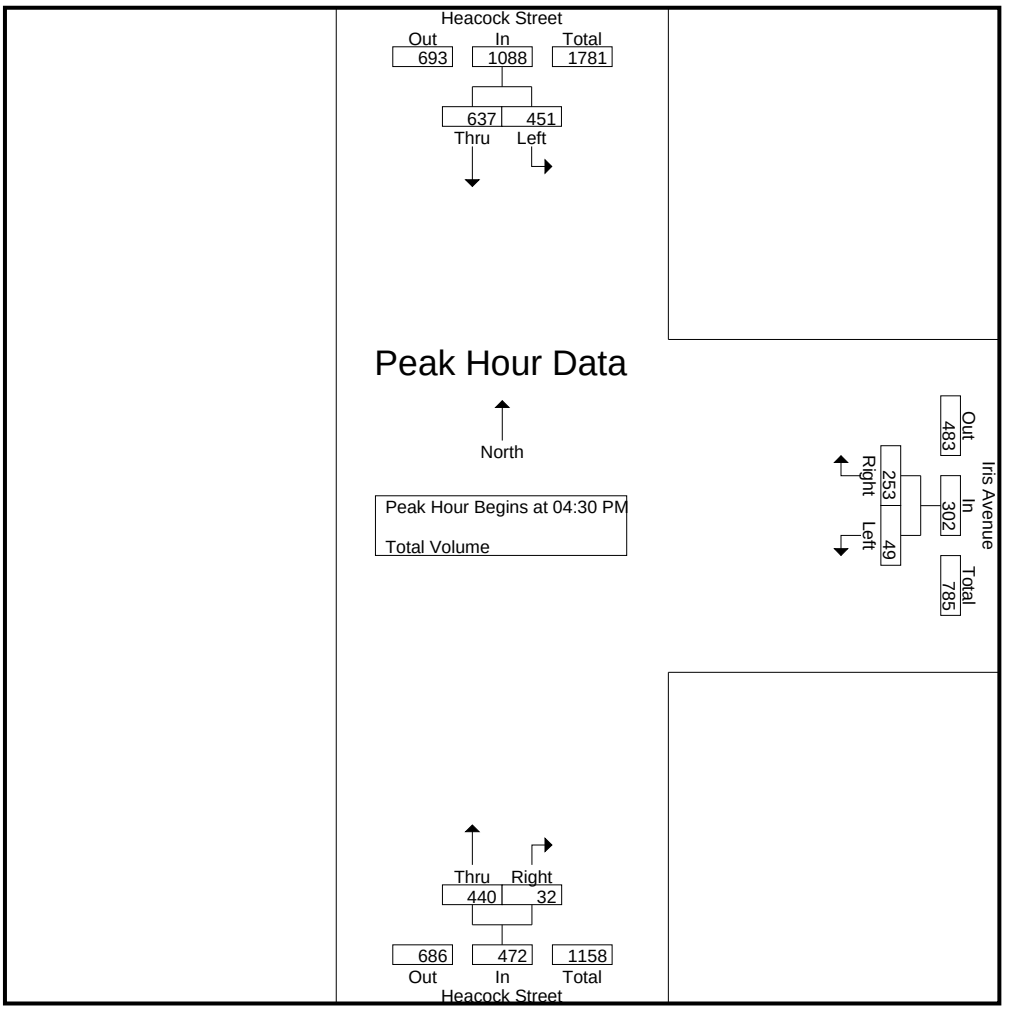
City of Moreno Valley
N/S: Heacock Street
E/W: Iris Avenue
Weather: Clear

File Name : 04_MRV_Heacock_Iris PM
Site Code : 22521732
Start Date : 12/7/2021
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:

	04:30 PM			04:00 PM			04:00 PM		
+0 mins.	101	165	266	**13**	**73**	**86**	95	7	102
+15 mins.	112	**180**	**292**	9	72	81	108	2	110
+30 mins.	117	154	271	9	70	79	**169**	**13**	**182**
+45 mins.	**121**	138	259	12	54	66	99	8	107
Total Volume	451	637	1088	43	269	312	471	30	501
% App. Total	41.5	58.5		13.8	86.2		94	6	
PHF	.932	.885	.932	.827	.921	.907	.697	.577	.688

Location: Moreno Valley
N/S: Heacock Street
E/W: Iris Avenue

Date: 12/7/2021
Day: Tuesday

PEDESTRIANS

	North Leg Heacock Street Pedestrians	East Leg Iris Avenue Pedestrians	South Leg Heacock 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	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0

	North Leg Heacock Street Pedestrians	East Leg Iris Avenue Pedestrians	South Leg Heacock 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	2	0	0	2
5:45 PM	0	1	0	0	1
TOTAL VOLUMES:	0	3	0	0	3

Location: Moreno Valley
N/S: Heacock Street
E/W: Iris Avenue

Date: 12/7/2021
Day: Tuesday

BICYCLES

	Southbound Heacock Street			Westbound Iris Avenue			Northbound Heacock 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	1	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	0	0	0	0	0	0	0	1	0	0	0	1

	Southbound Heacock Street			Westbound Iris Avenue			Northbound Heacock 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	1	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	0	0	0	0	0	1	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	1	0	1	0	0	0	0	4

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City of Moreno Valley
N/S: Indian Street
E/W: Iris Avenue
Weather: Clear

File Name : 05_MRV_Indian_Iris AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Indian Street Southbound				Iris Avenue Westbound				Indian Street Northbound				Iris 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	15	22	5	42	2	74	51	127	14	24	1	39	5	33	9	47	255
07:15 AM	35	49	2	86	3	78	70	151	12	53	1	66	13	39	6	58	361
07:30 AM	50	66	4	120	2	106	107	215	10	91	9	110	25	52	15	92	537
07:45 AM	88	92	9	189	4	114	113	231	18	74	11	103	14	58	17	89	612
Total	188	229	20	437	11	372	341	724	54	242	22	318	57	182	47	286	1765
08:00 AM	49	48	3	100	6	88	42	136	12	21	2	35	1	40	11	52	323
08:15 AM	27	13	4	44	7	66	27	100	19	17	1	37	4	33	11	48	229
08:30 AM	26	7	3	36	2	67	30	99	12	17	1	30	1	38	8	47	212
08:45 AM	21	16	3	40	1	59	18	78	8	4	0	12	8	43	10	61	191
Total	123	84	13	220	16	280	117	413	51	59	4	114	14	154	40	208	955
Grand Total	311	313	33	657	27	652	458	1137	105	301	26	432	71	336	87	494	2720
Apprch %	47.3	47.6	5		2.4	57.3	40.3		24.3	69.7	6		14.4	68	17.6		
Total %	11.4	11.5	1.2	24.2	1	24	16.8	41.8	3.9	11.1	1	15.9	2.6	12.4	3.2	18.2	

	Indian Street Southbound				Iris Avenue Westbound				Indian Street Northbound				Iris 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 07:15 AM																	
07:15 AM	35	49	2	86	3	78	70	151	12	53	1	66	13	39	6	58	361
07:30 AM	50	66	4	120	2	106	107	215	10	**91**	9	**110**	**25**	52	15	**92**	537
07:45 AM	**88**	**92**	**9**	**189**	4	**114**	**113**	**231**	**18**	74	**11**	103	14	**58**	**17**	89	**612**
08:00 AM	49	48	3	100	**6**	88	42	136	12	21	2	35	1	40	11	52	323
Total Volume	222	255	18	495	15	386	332	733	52	239	23	314	53	189	49	291	1833
% App. Total	44.8	51.5	3.6		2	52.7	45.3		16.6	76.1	7.3		18.2	64.9	16.8		
PHF	.631	.693	.500	.655	.625	.846	.735	.793	.722	.657	.523	.714	.530	.815	.721	.791	.749

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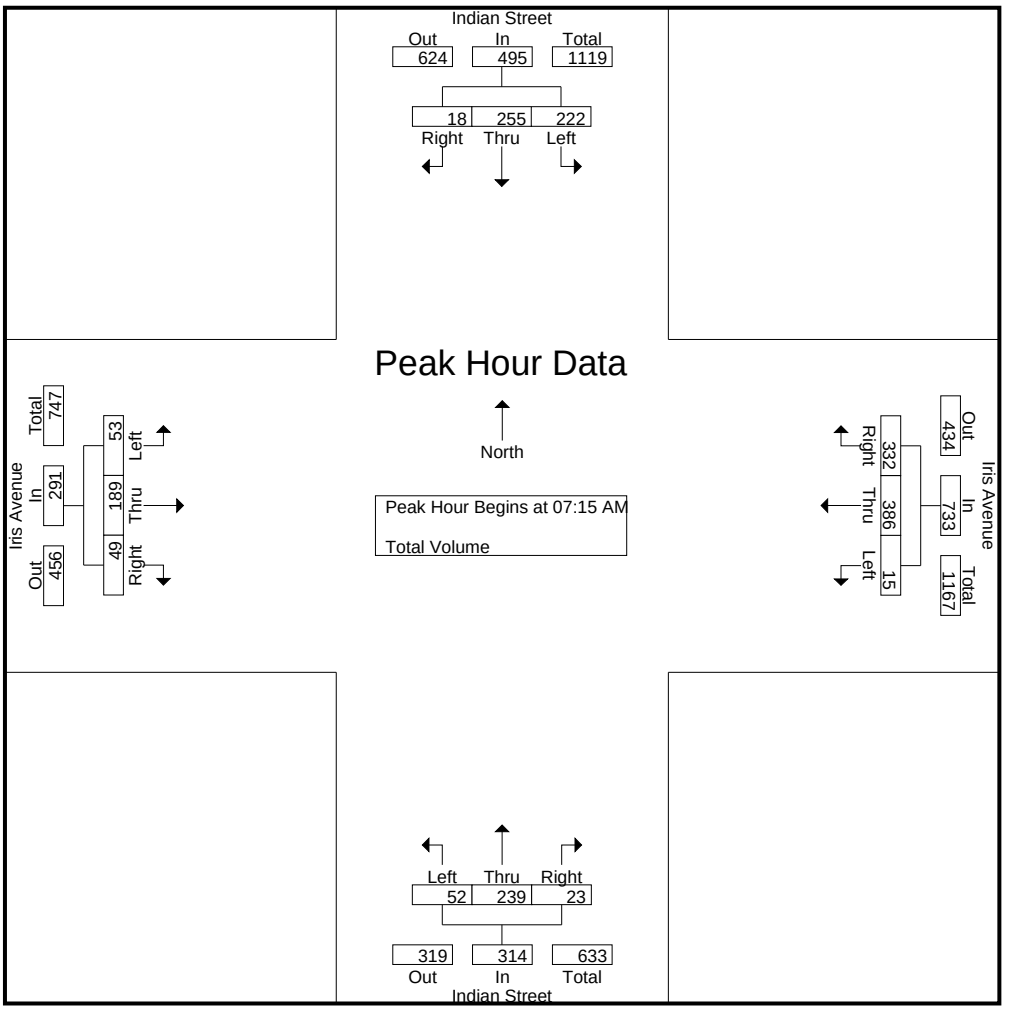
City of Moreno Valley
N/S: Indian Street
E/W: Iris Avenue
Weather: Clear

File Name : 05_MRV_Indian_Iris AM
Site Code : 22521732
Start Date : 12/7/2021
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:

	07:15 AM				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	35	49	2	86	3	78	70	151	14	24	1	39	13	39	6	58
+15 mins.	50	66	4	120	2	106	107	215	12	53	1	66	**25**	52	15	**92**
+30 mins.	**88**	**92**	**9**	**189**	4	**114**	**113**	**231**	10	**91**	9	**110**	14	**58**	**17**	89
+45 mins.	49	48	3	100	**6**	88	42	136	**18**	74	**11**	103	1	40	11	52
Total Volume	222	255	18	495	15	386	332	733	54	242	22	318	53	189	49	291
% App. Total	44.8	51.5	3.6		2	52.7	45.3		17	76.1	6.9		18.2	64.9	16.8	
PHF	.631	.693	.500	.655	.625	.846	.735	.793	.750	.665	.500	.723	.530	.815	.721	.791

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City of Moreno Valley
N/S: Indian Street
E/W: Iris Avenue
Weather: Clear

File Name : 05_MRV_Indian_Iris PM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Indian Street Southbound				Iris Avenue Westbound				Indian Street Northbound				Iris 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	30	31	5	66	5	50	50	105	7	17	4	28	9	102	36	147	346
04:15 PM	49	29	3	81	3	51	57	111	14	27	2	43	3	87	32	122	357
04:30 PM	39	34	5	78	6	47	38	91	8	18	2	28	11	82	28	121	318
04:45 PM	42	31	7	80	3	42	42	87	11	20	1	32	10	82	26	118	317
Total	160	125	20	305	17	190	187	394	40	82	9	131	33	353	122	508	1338
05:00 PM	44	41	3	88	5	60	40	105	7	17	2	26	2	113	27	142	361
05:15 PM	41	39	10	90	10	49	28	87	6	14	1	21	3	106	28	137	335
05:30 PM	38	32	8	78	10	51	29	90	7	9	3	19	3	77	30	110	297
05:45 PM	30	42	6	78	8	59	33	100	8	9	2	19	2	112	27	141	338
Total	153	154	27	334	33	219	130	382	28	49	8	85	10	408	112	530	1331
Grand Total	313	279	47	639	50	409	317	776	68	131	17	216	43	761	234	1038	2669
Apprch %	49	43.7	7.4		6.4	52.7	40.9		31.5	60.6	7.9		4.1	73.3	22.5		
Total %	11.7	10.5	1.8	23.9	1.9	15.3	11.9	29.1	2.5	4.9	0.6	8.1	1.6	28.5	8.8	38.9	

	Indian Street Southbound				Iris Avenue Westbound				Indian Street Northbound				Iris 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 04:15 PM																	
04:15 PM	**49**	29	3	81	3	51	**57**	**111**	**14**	**27**	**2**	**43**	3	87	**32**	122	357
04:30 PM	39	34	5	78	**6**	47	38	91	8	18	2	28	**11**	82	28	121	318
04:45 PM	42	31	**7**	80	3	42	42	87	11	20	1	32	10	82	26	118	317
05:00 PM	44	**41**	3	**88**	5	**60**	40	105	7	17	2	26	2	**113**	27	**142**	**361**
Total Volume	174	135	18	327	17	200	177	394	40	82	7	129	26	364	113	503	1353
% App. Total	53.2	41.3	5.5		4.3	50.8	44.9		31	63.6	5.4		5.2	72.4	22.5		
PHF	.888	.823	.643	.929	.708	.833	.776	.887	.714	.759	.875	.750	.591	.805	.883	.886	.937

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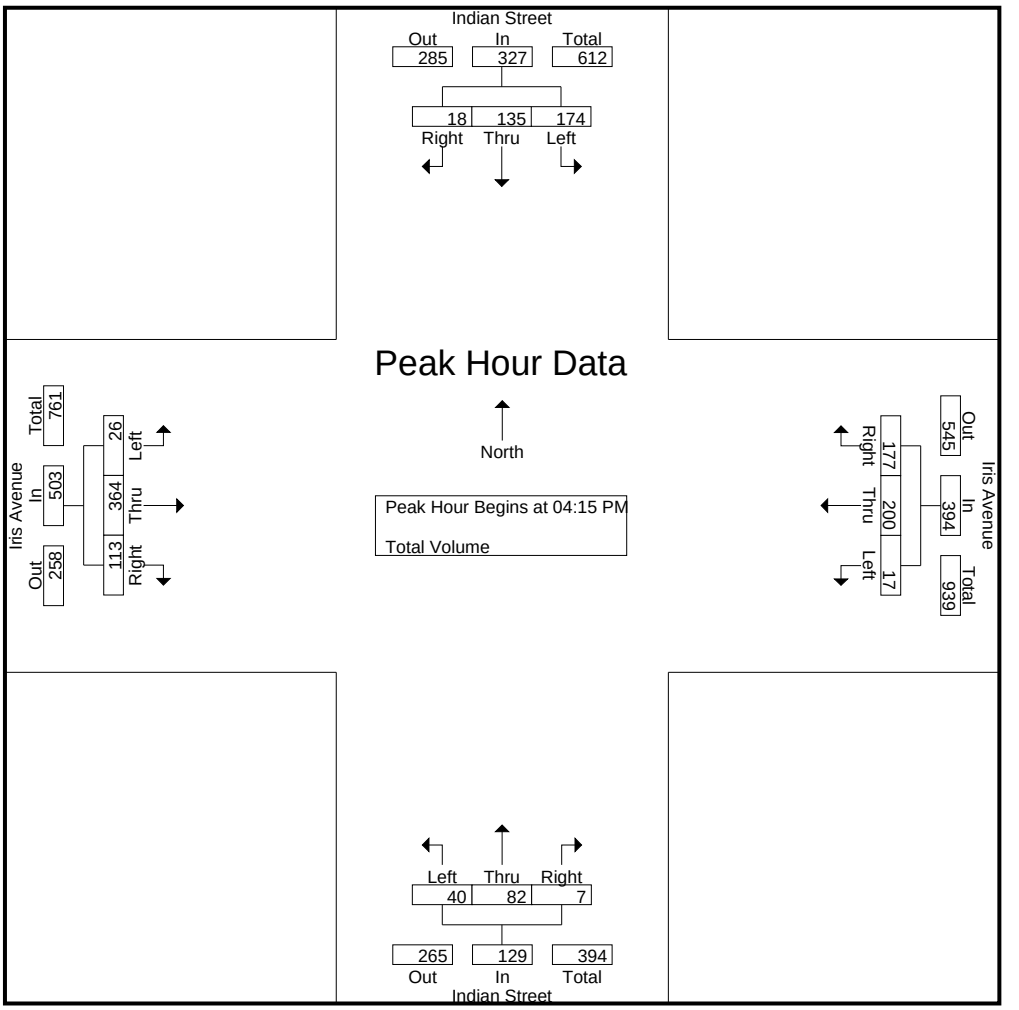
City of Moreno Valley
N/S: Indian Street
E/W: Iris Avenue
Weather: Clear

File Name : 05_MRV_Indian_Iris PM
Site Code : 22521732
Start Date : 12/7/2021
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:

	04:30 PM				04:00 PM				04:00 PM				05:00 PM			
+0 mins.	39	34	5	78	5	50	50	105	7	17	**4**	28	2	**113**	27	**142**
+15 mins.	42	31	7	80	3	**51**	**57**	**111**	**14**	**27**	2	**43**	**3**	106	28	137
+30 mins.	**44**	**41**	3	88	**6**	47	38	91	8	18	2	28	3	77	**30**	110
+45 mins.	41	39	**10**	**90**	3	42	42	87	11	20	1	32	2	112	27	141
Total Volume	166	145	25	336	17	190	187	394	40	82	9	131	10	408	112	530
% App. Total	49.4	43.2	7.4		4.3	48.2	47.5		30.5	62.6	6.9		1.9	77	21.1	
PHF	.943	.884	.625	.933	.708	.931	.820	.887	.714	.759	.563	.762	.833	.903	.933	.933

Location: Moreno Valley
N/S: Indian Street
E/W: Iris Avenue

Date: 12/7/2021
Day: Tuesday

PEDESTRIANS

	North Leg Indian Street	East Leg Iris Avenue	South Leg Indian Street	West Leg Iris Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	1	0	1	2
7:15 AM	0	6	0	0	6
7:30 AM	4	30	0	0	34
7:45 AM	0	12	0	0	12
8:00 AM	0	1	1	0	2
8:15 AM	1	0	0	0	1
8:30 AM	0	0	2	0	2
8:45 AM	1	0	0	0	1
TOTAL VOLUMES:	6	50	3	1	60

	North Leg Indian Street	East Leg Iris Avenue	South Leg Indian Street	West Leg Iris Avenue	
	Pedestrians	Pedestrians	Pedestrians	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	1	4	0	0	5
5:15 PM	0	0	0	1	1
5:30 PM	0	0	0	0	0
5:45 PM	0	0	1	2	3
TOTAL VOLUMES:	3	4	1	3	11

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Location: Moreno Valley
N/S: Indian Street
E/W: Iris Avenue

Date: 12/7/2021
Day: Tuesday

BICYCLES

	Southbound Indian Street			Westbound Iris Avenue			Northbound Indian Street			Eastbound Iris 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	2	0	0	0	0	0	0	2
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	3	0	0	0	0	1	0	4

	Southbound Indian Street			Westbound Iris Avenue			Northbound Indian Street			Eastbound Iris Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	1	0	0	0	0	1	0	0	0	0	2
4:15 PM	1	0	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	0	0	0
5:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	1
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	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	1	1	1	0	1	0	0	1	0	0	0	0	5

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City of Moreno Valley
N/S: Emma Lane
E/W: Iris Avenue
Weather: Clear

File Name : 06_MRV_Emma_Iris AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Emma Lane Southbound				Iris Avenue Westbound				Emma Lane Northbound				Iris 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	121	0	121	11	0	1	12	0	45	3	48	181
07:15 AM	0	0	0	0	0	147	0	147	14	0	0	14	0	73	3	76	237
07:30 AM	0	0	0	0	1	193	0	194	21	0	8	29	0	97	9	106	329
07:45 AM	0	0	0	0	0	203	0	203	12	0	6	18	0	138	11	149	370
Total	0	0	0	0	1	664	0	665	58	0	15	73	0	353	26	379	1117
08:00 AM	0	0	0	0	5	125	0	130	4	0	3	7	0	97	7	104	241
08:15 AM	0	0	0	0	3	109	0	112	4	0	7	11	0	57	3	60	183
08:30 AM	1	0	0	1	3	80	0	83	8	0	1	9	0	60	3	63	156
08:45 AM	0	0	0	0	6	72	0	78	5	0	4	9	0	64	2	66	153
Total	1	0	0	1	17	386	0	403	21	0	15	36	0	278	15	293	733
Grand Total	1	0	0	1	18	1050	0	1068	79	0	30	109	0	631	41	672	1850
Apprch %	100	0	0		1.7	98.3	0		72.5	0	27.5		0	93.9	6.1		
Total %	0.1	0	0	0.1	1	56.8	0	57.7	4.3	0	1.6	5.9	0	34.1	2.2	36.3	

	Emma Lane Southbound				Iris Avenue Westbound				Emma Lane Northbound				Iris 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 07:15 AM																	
07:15 AM	0	0	0	0	0	147	0	147	14	0	0	14	0	73	3	76	237
07:30 AM	0	0	0	0	1	193	0	194	**21**	0	**8**	**29**	0	97	9	106	329
07:45 AM	0	0	0	0	0	**203**	0	**203**	12	0	6	18	0	**138**	**11**	**149**	**370**
08:00 AM	0	0	0	0	**5**	125	0	130	4	0	3	7	0	97	7	104	241
Total Volume	0	0	0	0	6	668	0	674	51	0	17	68	0	405	30	435	1177
% App. Total	0	0	0		0.9	99.1	0		75	0	25		0	93.1	6.9		
PHF	.000	.000	.000	.000	.300	.823	.000	.830	.607	.000	.531	.586	.000	.734	.682	.730	.795

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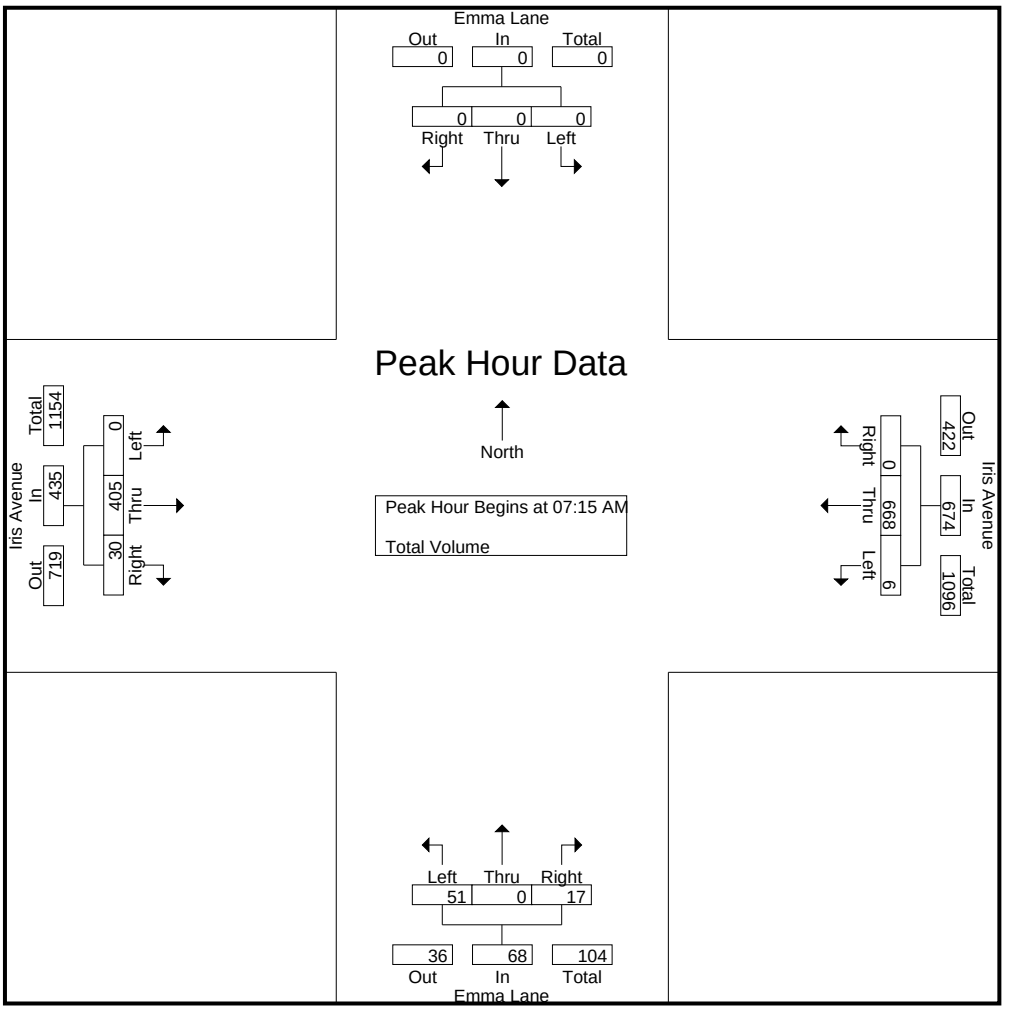
City of Moreno Valley
N/S: Emma Lane
E/W: Iris Avenue
Weather: Clear

File Name : 06_MRV_Emma_Iris AM
Site Code : 22521732
Start Date : 12/7/2021
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				07:15 AM				07:00 AM				07:15 AM			
+0 mins.	0	0	0	0	0	147	0	147	11	0	1	12	0	73	3	76
+15 mins.	0	0	0	0	1	193	0	194	14	0	0	14	0	97	9	106
+30 mins.	0	0	0	0	0	**203**	0	**203**	**21**	0	**8**	**29**	0	**138**	**11**	**149**
+45 mins.	**1**	0	0	**1**	**5**	125	0	130	12	0	6	18	0	97	7	104
Total Volume	1	0	0	1	6	668	0	674	58	0	15	73	0	405	30	435
% App. Total	100	0	0		0.9	99.1	0		79.5	0	20.5		0	93.1	6.9	
PHF	.250	.000	.000	.250	.300	.823	.000	.830	.690	.000	.469	.629	.000	.734	.682	.730

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City of Moreno Valley
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Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Emma Lane Southbound				Iris Avenue Westbound				Emma Lane Northbound				Iris 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	7	106	0	113	2	0	1	3	0	132	5	137	253
04:15 PM	0	0	0	0	8	104	0	112	8	0	5	13	0	128	10	138	263
04:30 PM	0	0	0	0	10	94	0	104	2	0	4	6	1	122	5	128	238
04:45 PM	1	0	0	1	8	78	0	86	7	0	1	8	0	107	10	117	212
Total	1	0	0	1	33	382	0	415	19	0	11	30	1	489	30	520	966
05:00 PM	1	0	0	1	10	103	1	114	3	0	9	12	1	155	15	171	298
05:15 PM	0	0	0	0	10	75	0	85	9	0	3	12	0	138	13	151	248
05:30 PM	0	1	0	1	3	97	0	100	7	1	2	10	0	113	6	119	230
05:45 PM	0	0	0	0	6	87	0	93	3	0	3	6	0	127	15	142	241
Total	1	1	0	2	29	362	1	392	22	1	17	40	1	533	49	583	1017
Grand Total	2	1	0	3	62	744	1	807	41	1	28	70	2	1022	79	1103	1983
Apprch %	66.7	33.3	0		7.7	92.2	0.1		58.6	1.4	40		0.2	92.7	7.2		
Total %	0.1	0.1	0	0.2	3.1	37.5	0.1	40.7	2.1	0.1	1.4	3.5	0.1	51.5	4	55.6	

	Emma Lane Southbound				Iris Avenue Westbound				Emma Lane Northbound				Iris 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 05:00 PM																	
05:00 PM	**1**	0	0	**1**	**10**	**103**	**1**	**114**	3	0	**9**	**12**	**1**	**155**	**15**	**171**	**298**
05:15 PM	0	0	0	0	10	75	0	85	**9**	0	3	12	0	138	13	151	248
05:30 PM	0	**1**	0	1	3	97	0	100	7	**1**	2	10	0	113	6	119	230
05:45 PM	0	0	0	0	6	87	0	93	3	0	3	6	0	127	15	142	241
Total Volume	1	1	0	2	29	362	1	392	22	1	17	40	1	533	49	583	1017
% App. Total	50	50	0		7.4	92.3	0.3		55	2.5	42.5		0.2	91.4	8.4		
PHF	.250	.250	.000	.500	.725	.879	.250	.860	.611	.250	.472	.833	.250	.860	.817	.852	.853

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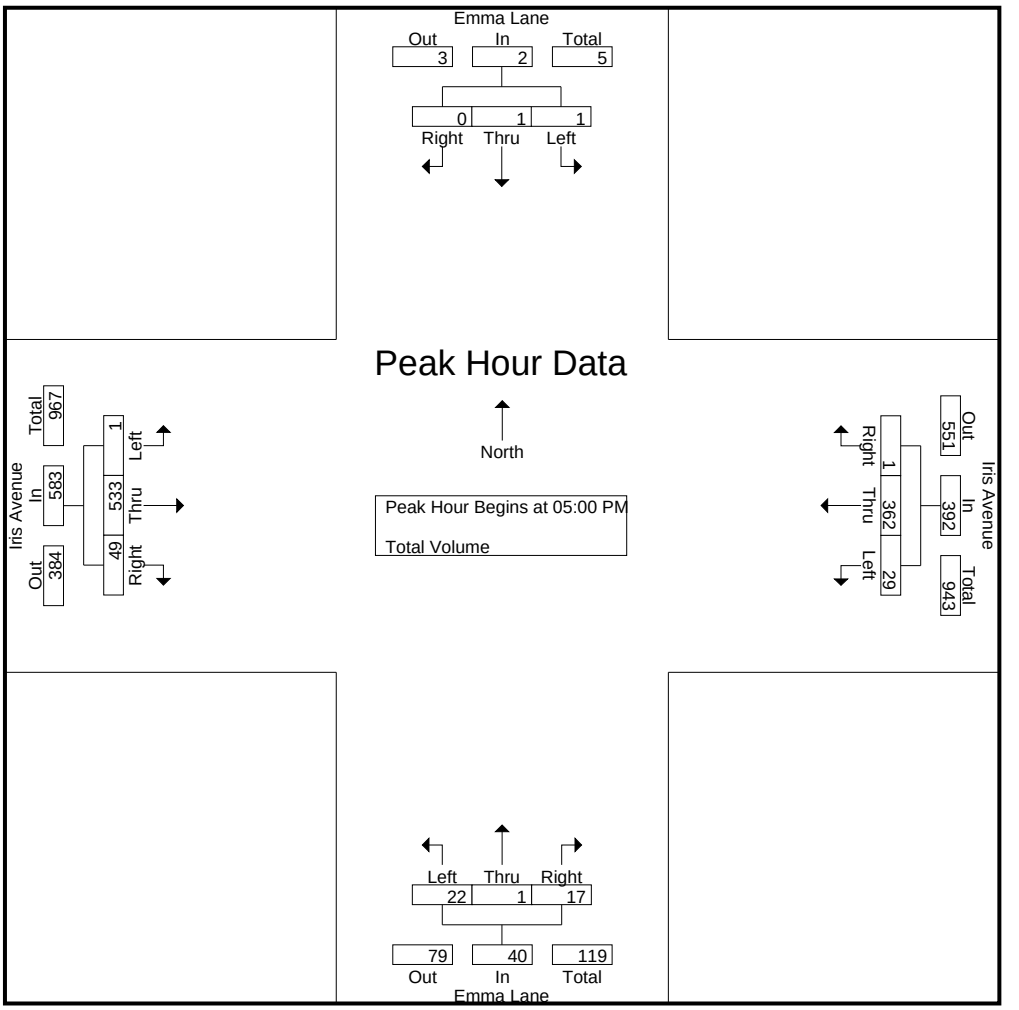

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:45 PM				04:15 PM				04:45 PM				05:00 PM			
+0 mins.	**1**	0	0	**1**	8	**104**	0	112	7	0	1	8	**1**	**155**	**15**	**171**
+15 mins.	1	0	0	1	**10**	94	0	104	3	0	**9**	**12**	0	138	13	151
+30 mins.	0	0	0	0	8	78	0	86	**9**	0	3	12	0	113	6	119
+45 mins.	0	**1**	0	1	10	103	**1**	**114**	7	**1**	2	10	0	127	15	142
Total Volume	2	1	0	3	36	379	1	416	26	1	15	42	1	533	49	583
% App. Total	66.7	33.3	0		8.7	91.1	0.2		61.9	2.4	35.7		0.2	91.4	8.4	
PHF	.500	.250	.000	.750	.900	.911	.250	.912	.722	.250	.417	.875	.250	.860	.817	.852

Location: Moreno Valley
N/S: Emma Lane
E/W: Iris Avenue

Date: 12/7/2021
Day: Tuesday

PEDESTRIANS

	North Leg Emma Lane	East Leg Iris Avenue	South Leg Emma Lane	West Leg Iris Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	1	1
7:15 AM	1	0	0	0	1
7:30 AM	3	1	0	0	4
7:45 AM	0	0	0	0	0
8:00 AM	2	0	0	0	2
8:15 AM	1	0	1	0	2
8:30 AM	1	0	0	0	1
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	8	1	1	1	11

	North Leg Emma Lane	East Leg Iris Avenue	South Leg Emma Lane	West Leg Iris Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	2	0	0	0	2
4:15 PM	0	0	0	0	0
4:30 PM	3	0	0	0	3
4:45 PM	1	0	0	0	1
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	6	0	0	0	6

Location: Moreno Valley
N/S: Emma Lane
E/W: Iris Avenue

Date: 12/7/2021
Day: Tuesday

BICYCLES

	Southbound Emma Lane			Westbound Iris Avenue			Northbound Emma Lane			Eastbound Iris 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	3	0	0	0	0	0	0	0	3
7:30 AM	0	0	0	0	2	0	0	0	0	0	0	0	2
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:00 AM	0	0	0	0	1	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	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	6	0	0	0	0	0	1	0	7

	Southbound Emma Lane			Westbound Iris Avenue			Northbound Emma Lane			Eastbound Iris 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	1	0	0	0	0	0	2	0	3
4:30 PM	0	0	0	0	1	0	0	0	0	0	1	0	2
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
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	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	2	0	0	0	0	0	3	0	5

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City of Moreno Valley
N/S: Perris Boulevard
E/W: John F Kennedy Drive
Weather: Clear

File Name : 07_MRV_Perris_JFK AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Perris Boulevard Southbound				John F Kennedy Drive Westbound				Perris Boulevard Northbound				John F Kennedy Drive 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	14	62	5	81	14	35	20	69	21	174	25	220	5	25	12	42	412
07:15 AM	21	111	3	135	15	28	15	58	21	157	37	215	5	55	10	70	478
07:30 AM	44	93	3	140	26	60	25	111	25	222	77	324	16	107	20	143	718
07:45 AM	63	108	4	175	39	104	45	188	32	227	83	342	11	135	14	160	865
Total	142	374	15	531	94	227	105	426	99	780	222	1101	37	322	56	415	2473
08:00 AM	30	124	8	162	65	121	34	220	31	240	45	316	14	49	19	82	780
08:15 AM	15	111	7	133	27	35	21	83	24	210	13	247	5	29	6	40	503
08:30 AM	12	79	5	96	18	27	19	64	21	186	16	223	11	27	7	45	428
08:45 AM	11	94	10	115	16	20	15	51	15	211	12	238	13	34	18	65	469
Total	68	408	30	506	126	203	89	418	91	847	86	1024	43	139	50	232	2180
Grand Total	210	782	45	1037	220	430	194	844	190	1627	308	2125	80	461	106	647	4653
Apprch %	20.3	75.4	4.3		26.1	50.9	23		8.9	76.6	14.5		12.4	71.3	16.4		
Total %	4.5	16.8	1	22.3	4.7	9.2	4.2	18.1	4.1	35	6.6	45.7	1.7	9.9	2.3	13.9	

	Perris Boulevard Southbound				John F Kennedy Drive Westbound				Perris Boulevard Northbound				John F Kennedy Drive 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	44	93	3	140	26	60	25	111	25	222	77	324	**16**	107	**20**	143	718
07:45 AM	**63**	108	4	**175**	39	104	**45**	188	**32**	227	**83**	**342**	11	**135**	14	**160**	**865**
08:00 AM	30	**124**	**8**	162	**65**	**121**	34	**220**	31	**240**	45	316	14	49	19	82	780
08:15 AM	15	111	7	133	27	35	21	83	24	210	13	247	5	29	6	40	503
Total Volume	152	436	22	610	157	320	125	602	112	899	218	1229	46	320	59	425	2866
% App. Total	24.9	71.5	3.6		26.1	53.2	20.8		9.1	73.1	17.7		10.8	75.3	13.9		
PHF	.603	.879	.688	.871	.604	.661	.694	.684	.875	.936	.657	.898	.719	.593	.738	.664	.828

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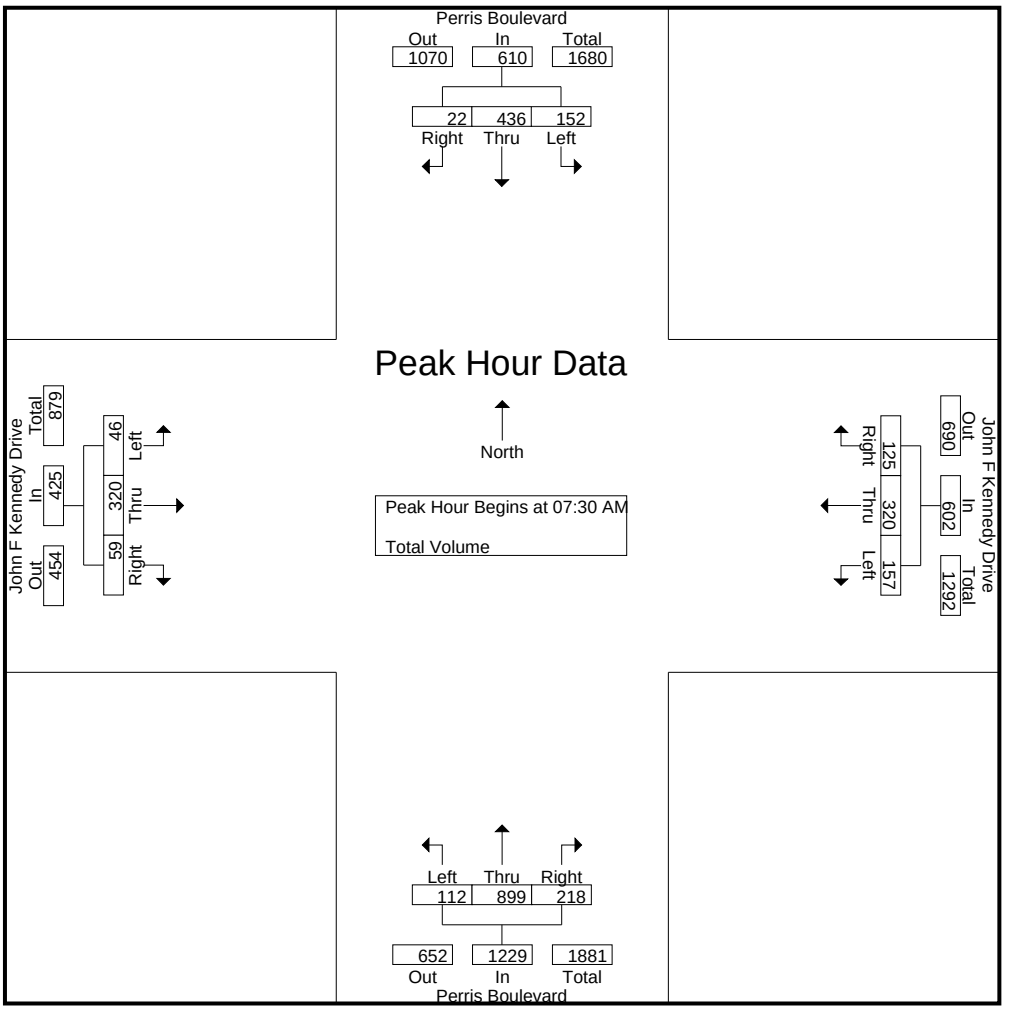
File Name : 07_MRV_Perris_JFK AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 2



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

	07:15 AM				07:30 AM				07:30 AM				07:15 AM			
+0 mins.	21	111	3	135	26	60	25	111	25	222	77	324	5	55	10	70
+15 mins.	44	93	3	140	39	104	**45**	188	**32**	227	**83**	**342**	**16**	107	**20**	143
+30 mins.	**63**	108	4	**175**	**65**	**121**	34	**220**	31	**240**	45	316	11	**135**	14	**160**
+45 mins.	30	**124**	**8**	162	27	35	21	83	24	210	13	247	14	49	19	82
Total Volume	158	436	18	612	157	320	125	602	112	899	218	1229	46	346	63	455
% App. Total	25.8	71.2	2.9		26.1	53.2	20.8		9.1	73.1	17.7		10.1	76	13.8	
PHF	.627	.879	.563	.874	.604	.661	.694	.684	.875	.936	.657	.898	.719	.641	.788	.711

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City of Moreno Valley
N/S: Perris Boulevard
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Weather: Clear

File Name : 07_MRV_Perris_JFK PM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Perris Boulevard Southbound				John F Kennedy Drive Westbound				Perris Boulevard Northbound				John F Kennedy Drive 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	15	192	6	213	37	39	13	89	46	256	26	328	14	58	31	103	733
04:15 PM	24	221	12	257	43	42	10	95	44	202	31	277	17	43	23	83	712
04:30 PM	28	231	13	272	45	38	23	106	43	254	34	331	26	56	30	112	821
04:45 PM	21	239	14	274	43	41	21	105	36	234	40	310	16	62	25	103	792
Total	88	883	45	1016	168	160	67	395	169	946	131	1246	73	219	109	401	3058
05:00 PM	21	206	15	242	38	57	12	107	34	203	28	265	11	82	29	122	736
05:15 PM	27	204	17	248	35	60	16	111	29	209	27	265	19	59	28	106	730
05:30 PM	19	199	17	235	44	47	16	107	34	210	29	273	18	67	31	116	731
05:45 PM	22	230	19	271	41	33	12	86	29	177	25	231	17	49	34	100	688
Total	89	839	68	996	158	197	56	411	126	799	109	1034	65	257	122	444	2885
Grand Total	177	1722	113	2012	326	357	123	806	295	1745	240	2280	138	476	231	845	5943
Apprch %	8.8	85.6	5.6		40.4	44.3	15.3		12.9	76.5	10.5		16.3	56.3	27.3		
Total %	3	29	1.9	33.9	5.5	6	2.1	13.6	5	29.4	4	38.4	2.3	8	3.9	14.2	

	Perris Boulevard Southbound				John F Kennedy Drive Westbound				Perris Boulevard Northbound				John F Kennedy Drive 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	**28**	231	13	272	**45**	38	**23**	106	**43**	**254**	34	**331**	**26**	56	**30**	112	**821**
04:45 PM	21	**239**	14	**274**	43	41	21	105	36	234	**40**	310	16	62	25	103	792
05:00 PM	21	206	15	242	38	57	12	107	34	203	28	265	11	**82**	29	**122**	736
05:15 PM	27	204	**17**	248	35	**60**	16	**111**	29	209	27	265	19	59	28	106	730
Total Volume	97	880	59	1036	161	196	72	429	142	900	129	1171	72	259	112	443	3079
% App. Total	9.4	84.9	5.7		37.5	45.7	16.8		12.1	76.9	11		16.3	58.5	25.3		
PHF	.866	.921	.868	.945	.894	.817	.783	.966	.826	.886	.806	.884	.692	.790	.933	.908	.938

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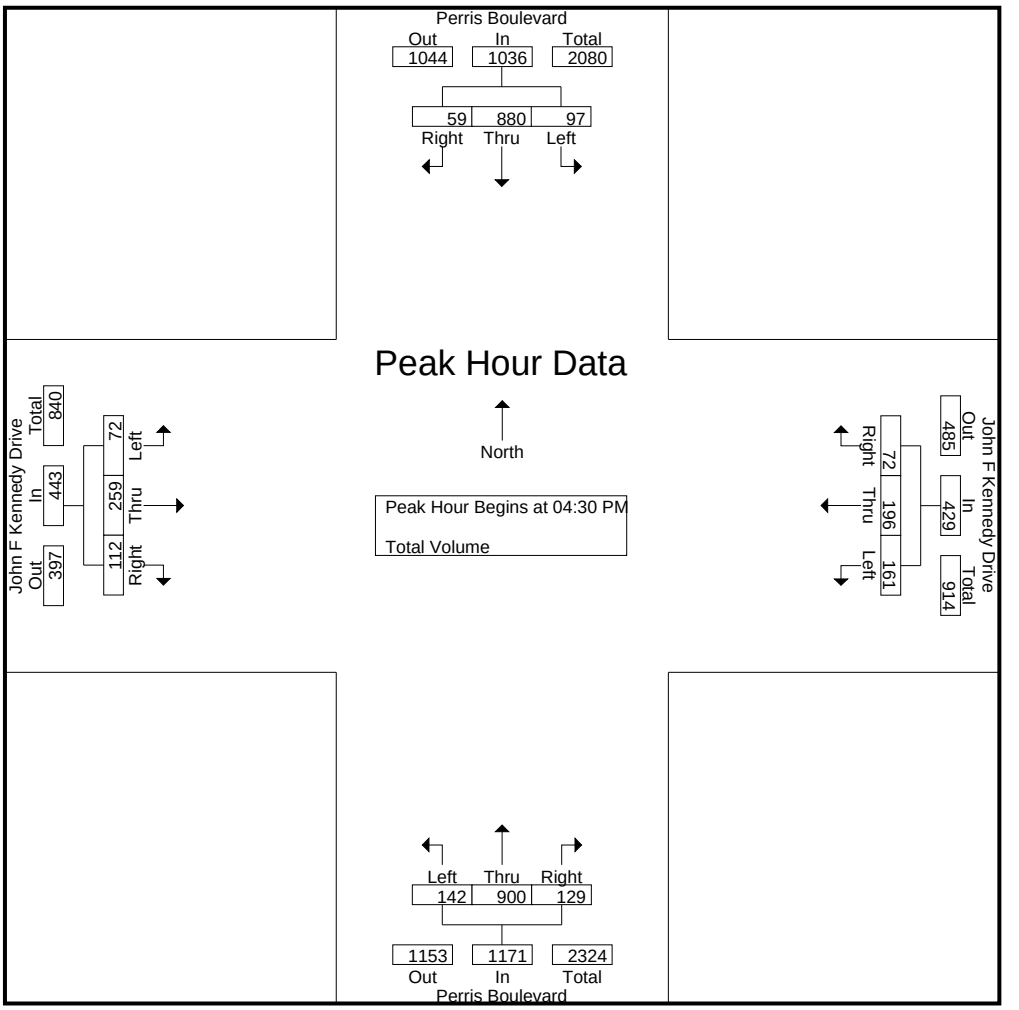

Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:45 PM				04:00 PM				04:45 PM			
+0 mins.	24	221	12	257	43	41	**21**	105	**46**	**256**	26	328	16	62	25	103
+15 mins.	**28**	231	13	272	38	57	12	107	44	202	31	277	11	**82**	29	**122**
+30 mins.	21	**239**	14	**274**	35	**60**	16	**111**	43	254	34	**331**	**19**	59	28	106
+45 mins.	21	206	**15**	242	**44**	47	16	107	36	234	**40**	310	18	67	**31**	116
Total Volume	94	897	54	1045	160	205	65	430	169	946	131	1246	64	270	113	447
% App. Total	9	85.8	5.2		37.2	47.7	15.1		13.6	75.9	10.5		14.3	60.4	25.3	
PHF	.839	.938	.900	.953	.909	.854	.774	.968	.918	.924	.819	.941	.842	.823	.911	.916

Location: Moreno Valley
N/S: Perris Boulevard
E/W: John F Kennedy Drive

Date: 12/7/2021
Day: Tuesday

PEDESTRIANS

	North Leg Perris Boulevard	East Leg John F Kennedy Drive	South Leg Perris Boulevard	West Leg John F Kennedy Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	2	2	0	0	4
7:15 AM	1	4	0	1	6
7:30 AM	1	0	0	0	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	1	1
8:15 AM	1	2	1	0	4
8:30 AM	0	1	0	0	1
8:45 AM	2	1	0	0	3
TOTAL VOLUMES:	7	10	1	2	20

	North Leg Perris Boulevard	East Leg John F Kennedy Drive	South Leg Perris Boulevard	West Leg John F Kennedy Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	1	5	3	1	10
4:15 PM	0	2	2	1	5
4:30 PM	0	7	3	0	10
4:45 PM	0	3	3	0	6
5:00 PM	0	1	4	0	5
5:15 PM	0	3	0	0	3
5:30 PM	2	2	1	1	6
5:45 PM	4	1	2	0	7
TOTAL VOLUMES:	7	24	18	3	52

Location: Moreno Valley
N/S: Perris Boulevard
E/W: John F Kennedy Drive

Date: 12/7/2021
Day: Tuesday

BICYCLES

	Southbound Perris Boulevard			Westbound John F Kennedy Drive			Northbound Perris Boulevard			Eastbound John F Kennedy Drive			
	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	1	0	1
7:30 AM	0	0	2	0	0	0	0	0	0	0	0	0	2
7:45 AM	0	1	0	0	0	3	0	0	0	0	2	0	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1
8:15 AM	1	0	0	0	1	0	0	0	0	0	0	0	2
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	1	2	0	1	3	0	0	0	0	4	0	12

	Southbound Perris Boulevard			Westbound John F Kennedy Drive			Northbound Perris Boulevard			Eastbound John F Kennedy Drive			
	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	1	0	0	0	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	1	0	0	0	0	0	0	0	1	0	2
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	1	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	0	1	0	0	0	0	1	2	0	5

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City of Moreno Valley
N/S: Perris Boulevard
E/W: Gentian Avenue
Weather: Clear

File Name : 08_MRV_Perris_Gentian AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Perris Boulevard Southbound				Gentian Avenue Westbound				Perris Boulevard Northbound				Gentian 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	2	82	3	87	7	12	6	25	12	143	3	158	7	4	16	27	297
07:15 AM	1	115	9	125	12	9	5	26	14	163	2	179	5	6	25	36	366
07:30 AM	2	108	12	122	7	23	5	35	34	240	4	278	7	7	35	49	484
07:45 AM	3	124	3	130	8	17	13	38	36	242	6	284	14	7	55	76	528
Total	8	429	27	464	34	61	29	124	96	788	15	899	33	24	131	188	1675
08:00 AM	6	121	8	135	7	5	8	20	18	225	12	255	11	6	16	33	443
08:15 AM	4	100	4	108	8	3	5	16	17	177	8	202	5	5	15	25	351
08:30 AM	7	100	5	112	9	9	5	23	17	198	6	221	2	4	13	19	375
08:45 AM	9	102	3	114	3	0	3	6	14	175	6	195	3	5	8	16	331
Total	26	423	20	469	27	17	21	65	66	775	32	873	21	20	52	93	1500
Grand Total	34	852	47	933	61	78	50	189	162	1563	47	1772	54	44	183	281	3175
Apprch %	3.6	91.3	5		32.3	41.3	26.5		9.1	88.2	2.7		19.2	15.7	65.1		
Total %	1.1	26.8	1.5	29.4	1.9	2.5	1.6	6	5.1	49.2	1.5	55.8	1.7	1.4	5.8	8.9	

	Perris Boulevard Southbound				Gentian Avenue Westbound				Perris Boulevard Northbound				Gentian 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 07:15 AM																	
07:15 AM	1	115	9	125	**12**	9	5	26	14	163	2	179	5	6	25	36	366
07:30 AM	2	108	**12**	122	7	**23**	5	35	34	240	4	278	7	**7**	35	49	484
07:45 AM	3	**124**	3	130	8	17	**13**	**38**	**36**	**242**	6	**284**	**14**	7	**55**	**76**	**528**
08:00 AM	**6**	121	8	**135**	7	5	8	20	18	225	**12**	255	11	6	16	33	443
Total Volume	12	468	32	512	34	54	31	119	102	870	24	996	37	26	131	194	1821
% App. Total	2.3	91.4	6.2		28.6	45.4	26.1		10.2	87.3	2.4		19.1	13.4	67.5		
PHF	.500	.944	.667	.948	.708	.587	.596	.783	.708	.899	.500	.877	.661	.929	.595	.638	.862

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City of Moreno Valley
N/S: Perris Boulevard
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File Name : 08_MRV_Perris_Gentian AM
Site Code : 22521732
Start Date : 12/7/2021
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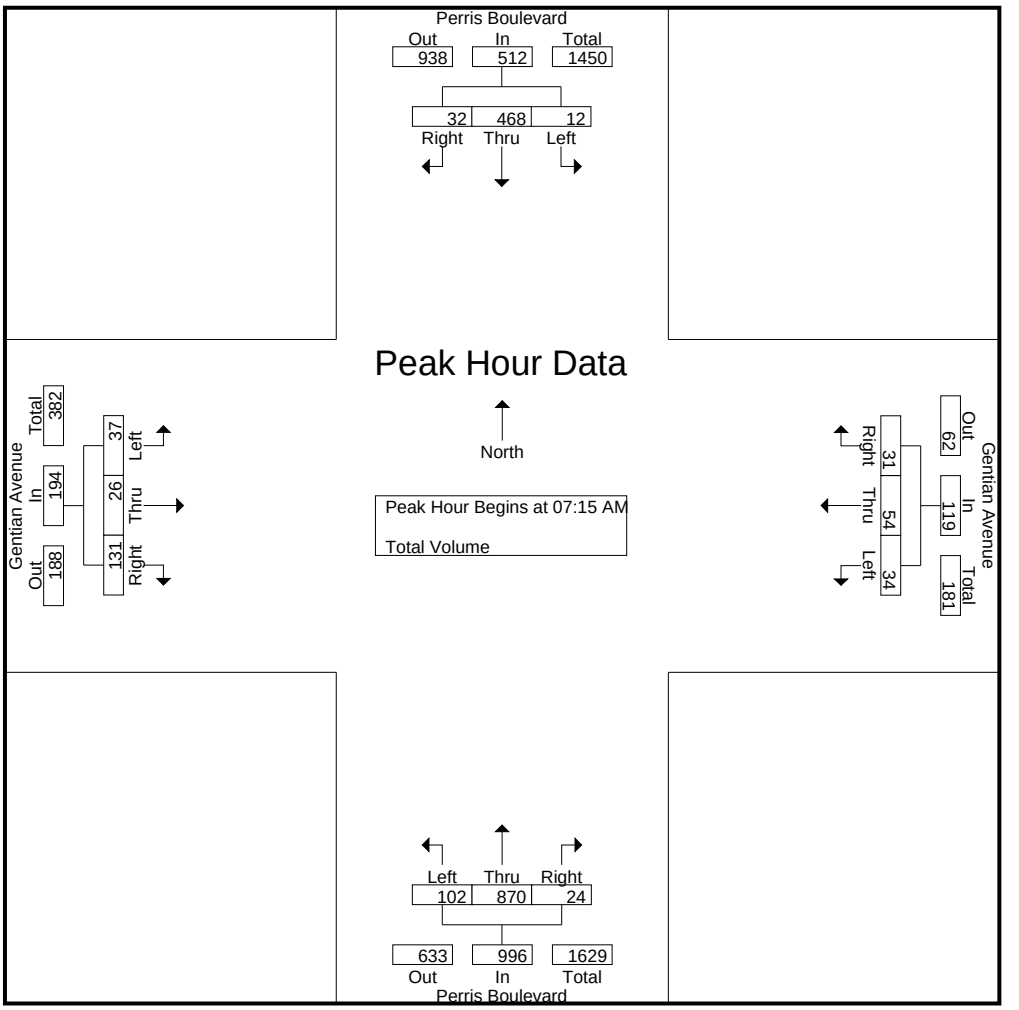

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:30 AM				07:15 AM			
+0 mins.	1	115	9	125	7	12	6	25	34	240	4	278	5	6	25	36
+15 mins.	2	108	**12**	122	**12**	9	5	26	**36**	**242**	6	**284**	7	**7**	35	49
+30 mins.	3	**124**	3	130	7	**23**	5	35	18	225	**12**	255	**14**	7	**55**	**76**
+45 mins.	**6**	121	8	**135**	8	17	**13**	**38**	17	177	8	202	11	6	16	33
Total Volume	12	468	32	512	34	61	29	124	105	884	30	1019	37	26	131	194
% App. Total	2.3	91.4	6.2		27.4	49.2	23.4		10.3	86.8	2.9		19.1	13.4	67.5	
PHF	.500	.944	.667	.948	.708	.663	.558	.816	.729	.913	.625	.897	.661	.929	.595	.638

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City of Moreno Valley
N/S: Perris Boulevard
E/W: Gentian Avenue
Weather: Clear

File Name : 08_MRV_Perris_Gentian PM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Perris Boulevard Southbound				Gentian Avenue Westbound				Perris Boulevard Northbound				Gentian 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	7	225	7	239	9	4	6	19	23	257	9	289	2	3	31	36	583
04:15 PM	6	229	6	241	6	2	6	14	26	215	16	257	6	12	20	38	550
04:30 PM	9	245	6	260	14	9	8	31	16	274	21	311	3	10	27	40	642
04:45 PM	12	248	9	269	10	6	9	25	16	233	7	256	7	15	21	43	593
Total	34	947	28	1009	39	21	29	89	81	979	53	1113	18	40	99	157	2368
05:00 PM	13	211	9	233	7	5	6	18	19	215	11	245	9	13	24	46	542
05:15 PM	10	221	11	242	11	3	4	18	13	208	16	237	6	10	20	36	533
05:30 PM	4	225	8	237	12	10	7	29	19	203	9	231	9	11	20	40	537
05:45 PM	9	206	13	228	5	3	9	17	16	191	18	225	2	6	27	35	505
Total	36	863	41	940	35	21	26	82	67	817	54	938	26	40	91	157	2117
Grand Total	70	1810	69	1949	74	42	55	171	148	1796	107	2051	44	80	190	314	4485
Apprch %	3.6	92.9	3.5		43.3	24.6	32.2		7.2	87.6	5.2		14	25.5	60.5		
Total %	1.6	40.4	1.5	43.5	1.6	0.9	1.2	3.8	3.3	40	2.4	45.7	1	1.8	4.2	7	

	Perris Boulevard Southbound				Gentian Avenue Westbound				Perris Boulevard Northbound				Gentian 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 04:00 PM																	
04:00 PM	7	225	7	239	9	4	6	19	23	257	9	289	2	3	**31**	36	583
04:15 PM	6	229	6	241	6	2	6	14	**26**	215	16	257	6	12	20	38	550
04:30 PM	9	245	6	260	**14**	**9**	8	**31**	16	**274**	**21**	**311**	3	10	27	40	**642**
04:45 PM	**12**	**248**	**9**	**269**	10	6	**9**	25	16	233	7	256	**7**	**15**	21	**43**	593
Total Volume	34	947	28	1009	39	21	29	89	81	979	53	1113	18	40	99	157	2368
% App. Total	3.4	93.9	2.8		43.8	23.6	32.6		7.3	88	4.8		11.5	25.5	63.1		
PHF	.708	.955	.778	.938	.696	.583	.806	.718	.779	.893	.631	.895	.643	.667	.798	.913	.922

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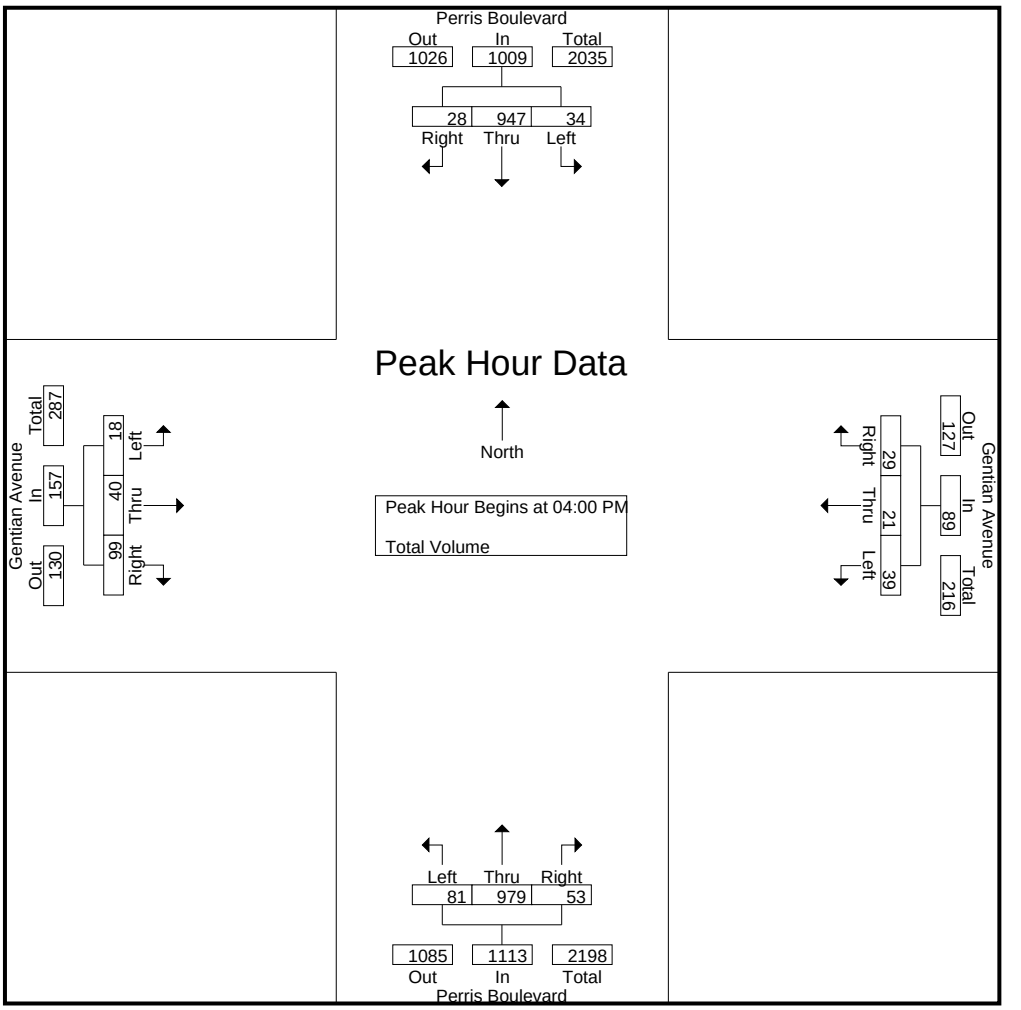
Weather: Clear

File Name : 08_MRV_Perris_Gentian PM
Site Code : 22521732
Start Date : 12/7/2021
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				04:00 PM				04:15 PM			
+0 mins.	7	225	7	239	**14**	**9**	8	**31**	23	257	9	289	6	12	20	38
+15 mins.	6	229	6	241	10	6	**9**	25	**26**	215	16	257	3	10	**27**	40
+30 mins.	9	245	6	260	7	5	6	18	16	**274**	**21**	**311**	7	**15**	21	43
+45 mins.	**12**	**248**	**9**	**269**	11	3	4	18	16	233	7	256	**9**	13	24	**46**
Total Volume	34	947	28	1009	42	23	27	92	81	979	53	1113	25	50	92	167
% App. Total	3.4	93.9	2.8		45.7	25	29.3		7.3	88	4.8		15	29.9	55.1	
PHF	.708	.955	.778	.938	.750	.639	.750	.742	.779	.893	.631	.895	.694	.833	.852	.908

Location: Moreno Valley
N/S: Perris Boulevard
E/W: Gentian Avenue

Date: 12/7/2021
Day: Tuesday

PEDESTRIANS

	North Leg Perris Boulevard	East Leg Gentian Avenue	South Leg Perris Boulevard	West Leg Gentian Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	1	1
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	1	2	3
8:30 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	0	1	3	4

	North Leg Perris Boulevard	East Leg Gentian Avenue	South Leg Perris Boulevard	West Leg Gentian Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	0	0	1
4:15 PM	0	0	0	0	0
4:30 PM	3	1	0	1	5
4:45 PM	0	0	0	0	0
5:00 PM	0	0	1	0	1
5:15 PM	0	1	0	0	1
5:30 PM	0	1	0	0	1
5:45 PM	0	0	0	1	1
TOTAL VOLUMES:	3	4	1	2	10

Location: Moreno Valley
N/S: Perris Boulevard
E/W: Gentian Avenue

Date: 12/7/2021
Day: Tuesday

BICYCLES

	Southbound Perris Boulevard			Westbound Gentian Avenue			Northbound Perris Boulevard			Eastbound Gentian 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	1	0	0	0	0	0	0	0	0	0	0	1
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	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	1	0	0	0	0	3

	Southbound Perris Boulevard			Westbound Gentian Avenue			Northbound Perris Boulevard			Eastbound Gentian Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	1	0	0	0	1	3
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	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	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	0	0	0	2	1	0	0	1	5

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City of Moreno Valley
N/S: Perris Boulevard
E/W: Santiago Drive
Weather: Clear

File Name : 09_MRV_Perris_Santiago AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Perris Boulevard Southbound				Santiago Drive Westbound				Perris Boulevard Northbound				Santiago Drive 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	9	96	0	105	6	0	16	22	0	148	3	151	0	0	0	0	278
07:15 AM	8	146	0	154	7	0	22	29	0	172	2	174	0	0	0	0	357
07:30 AM	19	138	0	157	12	0	31	43	0	250	2	252	0	0	0	0	452
07:45 AM	17	164	1	182	4	0	30	34	0	249	4	253	0	0	0	0	469
Total	53	544	1	598	29	0	99	128	0	819	11	830	0	0	0	0	1556
08:00 AM	16	128	0	144	1	0	13	14	0	250	2	252	0	0	0	0	410
08:15 AM	12	117	0	129	6	0	14	20	0	176	6	182	0	0	0	0	331
08:30 AM	15	103	0	118	1	0	22	23	0	189	3	192	0	0	0	0	333
08:45 AM	8	97	1	106	4	0	17	21	1	191	3	195	0	0	0	0	322
Total	51	445	1	497	12	0	66	78	1	806	14	821	0	0	0	0	1396
Grand Total	104	989	2	1095	41	0	165	206	1	1625	25	1651	0	0	0	0	2952
Apprch %	9.5	90.3	0.2		19.9	0	80.1		0.1	98.4	1.5		0	0	0		
Total %	3.5	33.5	0.1	37.1	1.4	0	5.6	7	0	55	0.8	55.9	0	0	0	0	

	Perris Boulevard Southbound				Santiago Drive Westbound				Perris Boulevard Northbound				Santiago Drive 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 07:15 AM																	
07:15 AM	8	146	0	154	7	0	22	29	0	172	2	174	0	0	0	0	357
07:30 AM	**19**	138	0	157	**12**	0	**31**	**43**	0	**250**	2	252	0	0	0	0	452
07:45 AM	17	**164**	**1**	**182**	4	0	30	34	0	249	**4**	**253**	0	0	0	0	**469**
08:00 AM	16	128	0	144	1	0	13	14	0	250	2	252	0	0	0	0	410
Total Volume	60	576	1	637	24	0	96	120	0	921	10	931	0	0	0	0	1688
% App. Total	9.4	90.4	0.2		20	0	80		0	98.9	1.1		0	0	0		
PHF	.789	.878	.250	.875	.500	.000	.774	.698	.000	.921	.625	.920	.000	.000	.000	.000	.900

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City of Moreno Valley
N/S: Perris Boulevard
E/W: Santiago Drive
Weather: Clear

File Name : 09_MRV_Perris_Santiago AM
Site Code : 22521732
Start Date : 12/7/2021
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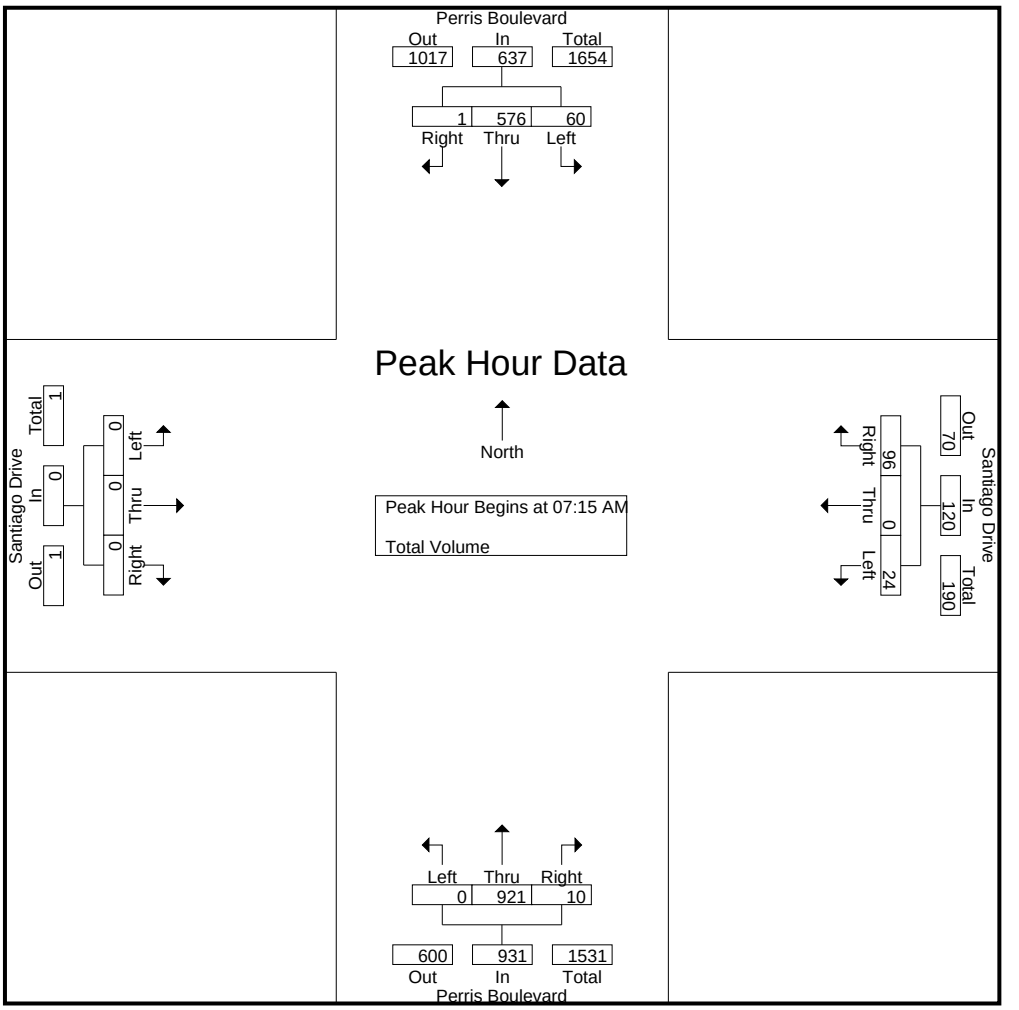

Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:00 AM				07:30 AM				07:00 AM			
+0 mins.	8	146	0	154	6	0	16	22	0	**250**	2	252	0	0	0	0
+15 mins.	**19**	138	0	157	7	0	22	29	0	249	4	**253**	0	0	0	0
+30 mins.	17	**164**	**1**	**182**	**12**	0	**31**	**43**	0	250	2	252	0	0	0	0
+45 mins.	16	128	0	144	4	0	30	34	0	176	**6**	182	0	0	0	0
Total Volume	60	576	1	637	29	0	99	128	0	925	14	939	0	0	0	0
% App. Total	9.4	90.4	0.2		22.7	0	77.3		0	98.5	1.5		0	0	0	
PHF	.789	.878	.250	.875	.604	.000	.798	.744	.000	.925	.583	.928	.000	.000	.000	.000

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City of Moreno Valley
N/S: Perris Boulevard
E/W: Santiago Drive
Weather: Clear

File Name : 09_MRV_Perris_Santiago PM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Perris Boulevard Southbound				Santiago Drive Westbound				Perris Boulevard Northbound				Santiago Drive 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	25	245	0	270	2	0	19	21	0	267	9	276	1	0	0	1	568
04:15 PM	21	235	0	256	8	0	16	24	1	269	18	288	0	0	0	0	568
04:30 PM	31	264	0	295	8	0	22	30	0	272	6	278	0	0	0	0	603
04:45 PM	27	253	0	280	3	0	6	9	0	259	14	273	0	0	0	0	562
Total	104	997	0	1101	21	0	63	84	1	1067	47	1115	1	0	0	1	2301
05:00 PM	29	212	0	241	7	0	15	22	0	242	10	252	0	0	0	0	515
05:15 PM	29	232	0	261	10	0	17	27	0	234	10	244	0	0	0	0	532
05:30 PM	21	242	0	263	4	0	20	24	0	213	14	227	0	0	0	0	514
05:45 PM	32	212	0	244	2	0	17	19	0	203	8	211	0	0	0	0	474
Total	111	898	0	1009	23	0	69	92	0	892	42	934	0	0	0	0	2035
Grand Total	215	1895	0	2110	44	0	132	176	1	1959	89	2049	1	0	0	1	4336
Apprch %	10.2	89.8	0		25	0	75		0	95.6	4.3		100	0	0		
Total %	5	43.7	0	48.7	1	0	3	4.1	0	45.2	2.1	47.3	0	0	0	0	

	Perris Boulevard Southbound				Santiago Drive Westbound				Perris Boulevard Northbound				Santiago Drive 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 04:00 PM																	
04:00 PM	25	245	0	270	2	0	19	21	0	267	9	276	**1**	0	0	**1**	568
04:15 PM	21	235	0	256	**8**	0	16	24	**1**	269	**18**	**288**	0	0	0	0	568
04:30 PM	**31**	**264**	0	**295**	8	0	**22**	**30**	0	**272**	6	278	0	0	0	0	**603**
04:45 PM	27	253	0	280	3	0	6	9	0	259	14	273	0	0	0	0	562
Total Volume	104	997	0	1101	21	0	63	84	1	1067	47	1115	1	0	0	1	2301
% App. Total	9.4	90.6	0		25	0	75		0.1	95.7	4.2		100	0	0		
PHF	.839	.944	.000	.933	.656	.000	.716	.700	.250	.981	.653	.968	.250	.000	.000	.250	.954

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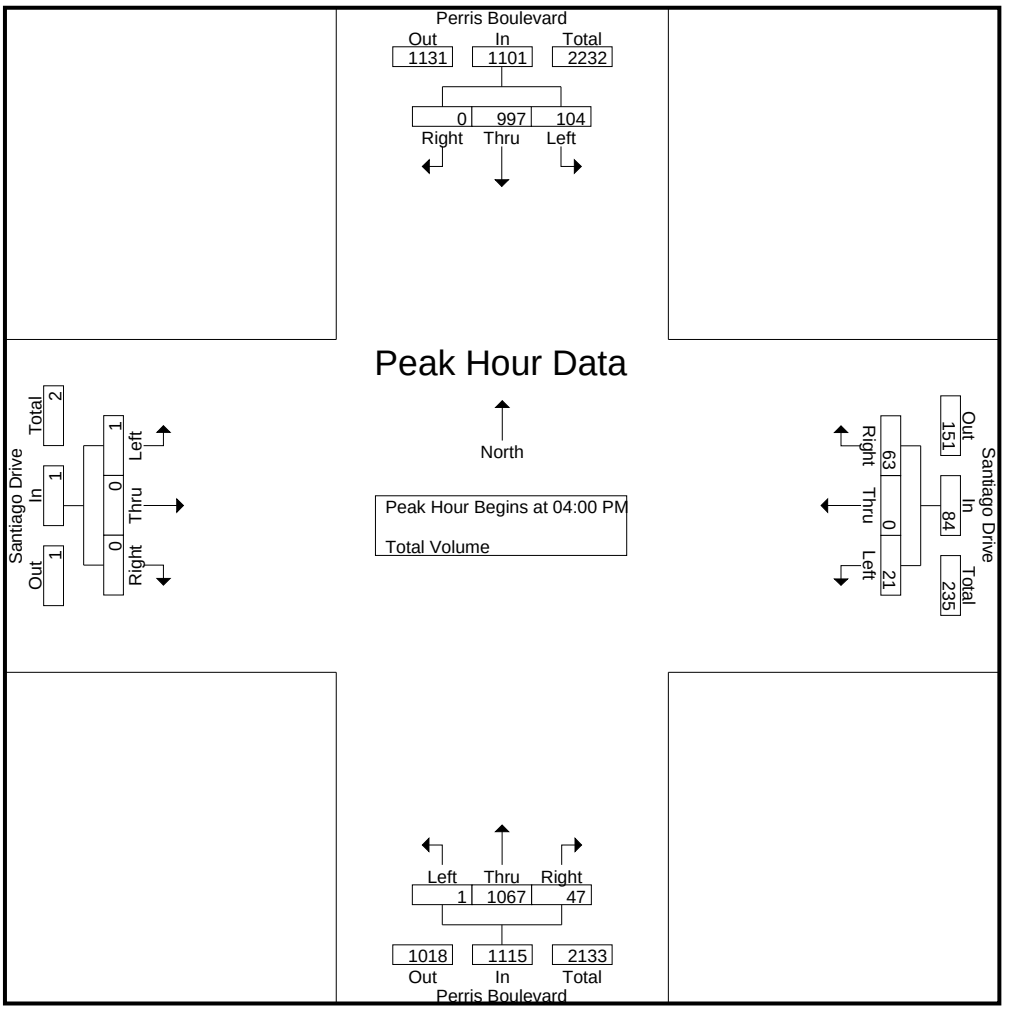
City of Moreno Valley
N/S: Perris Boulevard
E/W: Santiago Drive
Weather: Clear

File Name : 09_MRV_Perris_Santiago PM
Site Code : 22521732
Start Date : 12/7/2021
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				04:00 PM				04:00 PM			
+0 mins.	25	245	0	270	7	0	15	22	0	267	9	276	**1**	0	0	**1**
+15 mins.	21	235	0	256	**10**	0	17	**27**	**1**	269	**18**	**288**	0	0	0	0
+30 mins.	**31**	**264**	0	**295**	4	0	**20**	24	0	**272**	6	278	0	0	0	0
+45 mins.	27	253	0	280	2	0	17	19	0	259	14	273	0	0	0	0
Total Volume	104	997	0	1101	23	0	69	92	1	1067	47	1115	1	0	0	1
% App. Total	9.4	90.6	0		25	0	75		0.1	95.7	4.2		100	0	0	
PHF	.839	.944	.000	.933	.575	.000	.863	.852	.250	.981	.653	.968	.250	.000	.000	.250

Location: Moreno Valley
N/S: Perris Boulevard
E/W: Santiago Drive

Date: 12/7/2021
Day: Tuesday

PEDESTRIANS

	North Leg Perris Boulevard	East Leg Santiago Drive	South Leg Perris Boulevard	West Leg Santiago Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	1	0	1	2
7:45 AM	0	0	0	0	0
8:00 AM	0	2	1	1	4
8:15 AM	0	0	0	1	1
8:30 AM	0	0	1	1	2
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	0	3	2	4	9

	North Leg Perris Boulevard	East Leg Santiago Drive	South Leg Perris Boulevard	West Leg Santiago Drive	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	0	0	1
4:15 PM	0	1	0	0	1
4:30 PM	0	1	0	0	1
4:45 PM	0	0	1	1	2
5:00 PM	0	1	0	0	1
5:15 PM	0	0	0	0	0
5:30 PM	0	1	0	0	1
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	5	1	1	7

Location: Moreno Valley
N/S: Perris Boulevard
E/W: Santiago Drive

Date: 12/7/2021
Day: Tuesday

BICYCLES

	Southbound Perris Boulevard			Westbound Santiago Drive			Northbound Perris Boulevard			Eastbound Santiago Drive			
	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	1	0	0	0	0	0	0	0	0	0	0	1
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	1	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	0	0	0	0	1	0	0	0	0	3

	Southbound Perris Boulevard			Westbound Santiago Drive			Northbound Perris Boulevard			Eastbound Santiago Drive			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	2	0	1	0	0	0	1	0	0	0	0	4
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	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	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	2	0	1	0	0	0	3	0	0	0	0	6

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City of Moreno Valley
N/S: Perris Boulevard
E/W: Iris Avenue
Weather: Clear

File Name : 10_MRV_Perris_Iris AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Perris Boulevard Southbound				Iris Avenue Westbound				Perris Boulevard Northbound				Iris 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	11	79	9	99	68	78	10	156	43	135	50	228	2	26	9	37	520
07:15 AM	20	119	12	151	59	107	17	183	41	145	54	240	4	46	14	64	638
07:30 AM	27	76	14	117	69	148	30	247	47	195	72	314	2	88	24	114	792
07:45 AM	39	137	5	181	81	162	45	288	62	182	67	311	9	99	27	135	915
Total	97	411	40	548	277	495	102	874	193	657	243	1093	17	259	74	350	2865
08:00 AM	38	112	7	157	59	90	37	186	39	193	76	308	10	62	15	87	738
08:15 AM	31	97	2	130	68	85	29	182	45	144	64	253	6	51	13	70	635
08:30 AM	25	74	3	102	49	69	24	142	37	155	65	257	4	35	15	54	555
08:45 AM	23	78	4	105	32	52	22	106	31	158	43	232	7	35	29	71	514
Total	117	361	16	494	208	296	112	616	152	650	248	1050	27	183	72	282	2442
Grand Total	214	772	56	1042	485	791	214	1490	345	1307	491	2143	44	442	146	632	5307
Apprch %	20.5	74.1	5.4		32.6	53.1	14.4		16.1	61	22.9		7	69.9	23.1		
Total %	4	14.5	1.1	19.6	9.1	14.9	4	28.1	6.5	24.6	9.3	40.4	0.8	8.3	2.8	11.9	

	Perris Boulevard Southbound				Iris Avenue Westbound				Perris Boulevard Northbound				Iris 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 07:15 AM																	
07:15 AM	20	119	12	151	59	107	17	183	41	145	54	240	4	46	14	64	638
07:30 AM	27	76	**14**	117	69	148	30	247	47	**195**	72	**314**	2	88	24	114	792
07:45 AM	**39**	**137**	5	**181**	**81**	**162**	**45**	**288**	**62**	182	67	311	9	**99**	**27**	**135**	**915**
08:00 AM	38	112	7	157	59	90	37	186	39	193	**76**	308	**10**	62	15	87	738
Total Volume	124	444	38	606	268	507	129	904	189	715	269	1173	25	295	80	400	3083
% App. Total	20.5	73.3	6.3		29.6	56.1	14.3		16.1	61	22.9		6.2	73.8	20		
PHF	.795	.810	.679	.837	.827	.782	.717	.785	.762	.917	.885	.934	.625	.745	.741	.741	.842

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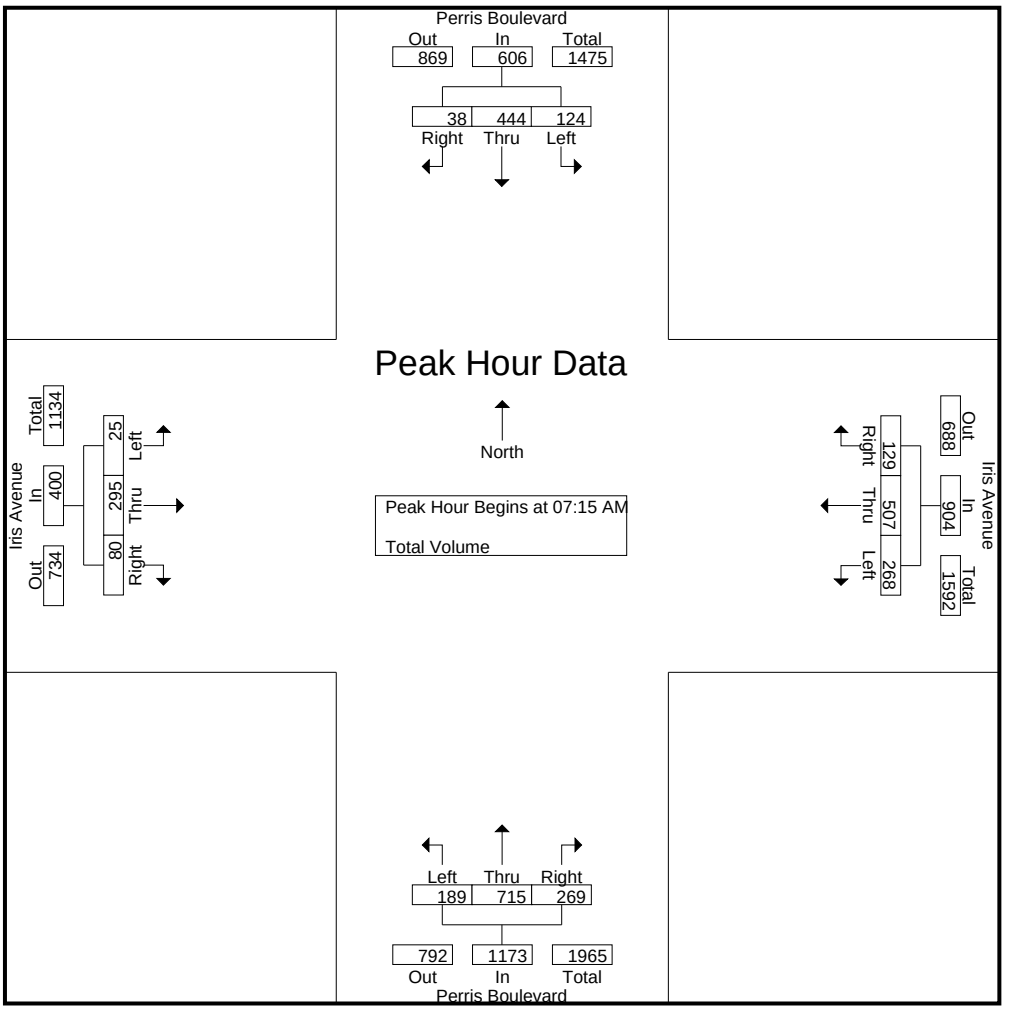
City of Moreno Valley
N/S: Perris Boulevard
E/W: Iris Avenue
Weather: Clear

File Name : 10_MRV_Perris_Iris AM
Site Code : 22521732
Start Date : 12/7/2021
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:

	07:15 AM				07:15 AM				07:30 AM				07:30 AM			
+0 mins.	20	119	12	151	59	107	17	183	47	**195**	72	**314**	2	88	24	114
+15 mins.	27	76	**14**	117	69	148	30	247	**62**	182	67	311	9	**99**	**27**	**135**
+30 mins.	**39**	**137**	5	**181**	**81**	**162**	**45**	**288**	39	193	**76**	308	**10**	62	15	87
+45 mins.	38	112	7	157	59	90	37	186	45	144	64	253	6	51	13	70
Total Volume	124	444	38	606	268	507	129	904	193	714	279	1186	27	300	79	406
% App. Total	20.5	73.3	6.3		29.6	56.1	14.3		16.3	60.2	23.5		6.7	73.9	19.5	
PHF	.795	.810	.679	.837	.827	.782	.717	.785	.778	.915	.918	.944	.675	.758	.731	.752

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City of Moreno Valley
N/S: Perris Boulevard
E/W: Iris Avenue
Weather: Clear

File Name : 10_MRV_Perris_Iris PM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Perris Boulevard Southbound				Iris Avenue Westbound				Perris Boulevard Northbound				Iris 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	52	209	2	263	55	75	20	150	36	231	93	360	8	126	39	173	946
04:15 PM	56	167	5	228	63	83	34	180	51	242	100	393	11	71	40	122	923
04:30 PM	44	196	5	245	68	80	30	178	33	244	101	378	12	82	27	121	922
04:45 PM	43	186	6	235	61	80	21	162	38	239	98	375	5	102	35	142	914
Total	195	758	18	971	247	318	105	670	158	956	392	1506	36	381	141	558	3705
05:00 PM	45	185	1	231	61	76	27	164	41	185	74	300	7	90	40	137	832
05:15 PM	43	151	6	200	69	69	30	168	37	173	56	266	10	102	35	147	781
05:30 PM	44	194	6	244	64	58	26	148	39	184	62	285	3	100	29	132	809
05:45 PM	39	173	5	217	62	59	31	152	38	182	68	288	8	99	41	148	805
Total	171	703	18	892	256	262	114	632	155	724	260	1139	28	391	145	564	3227
Grand Total	366	1461	36	1863	503	580	219	1302	313	1680	652	2645	64	772	286	1122	6932
Apprch %	19.6	78.4	1.9		38.6	44.5	16.8		11.8	63.5	24.7		5.7	68.8	25.5		
Total %	5.3	21.1	0.5	26.9	7.3	8.4	3.2	18.8	4.5	24.2	9.4	38.2	0.9	11.1	4.1	16.2	

	Perris Boulevard Southbound				Iris Avenue Westbound				Perris Boulevard Northbound				Iris 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 04:00 PM																	
04:00 PM	52	**209**	2	**263**	55	75	20	150	36	231	93	360	8	**126**	39	**173**	**946**
04:15 PM	**56**	167	5	228	63	**83**	**34**	**180**	**51**	242	100	**393**	11	71	**40**	122	923
04:30 PM	44	196	5	245	**68**	80	30	178	33	**244**	**101**	378	**12**	82	27	121	922
04:45 PM	43	186	**6**	235	61	80	21	162	38	239	98	375	5	102	35	142	914
Total Volume	195	758	18	971	247	318	105	670	158	956	392	1506	36	381	141	558	3705
% App. Total	20.1	78.1	1.9		36.9	47.5	15.7		10.5	63.5	26		6.5	68.3	25.3		
PHF	.871	.907	.750	.923	.908	.958	.772	.931	.775	.980	.970	.958	.750	.756	.881	.806	.979

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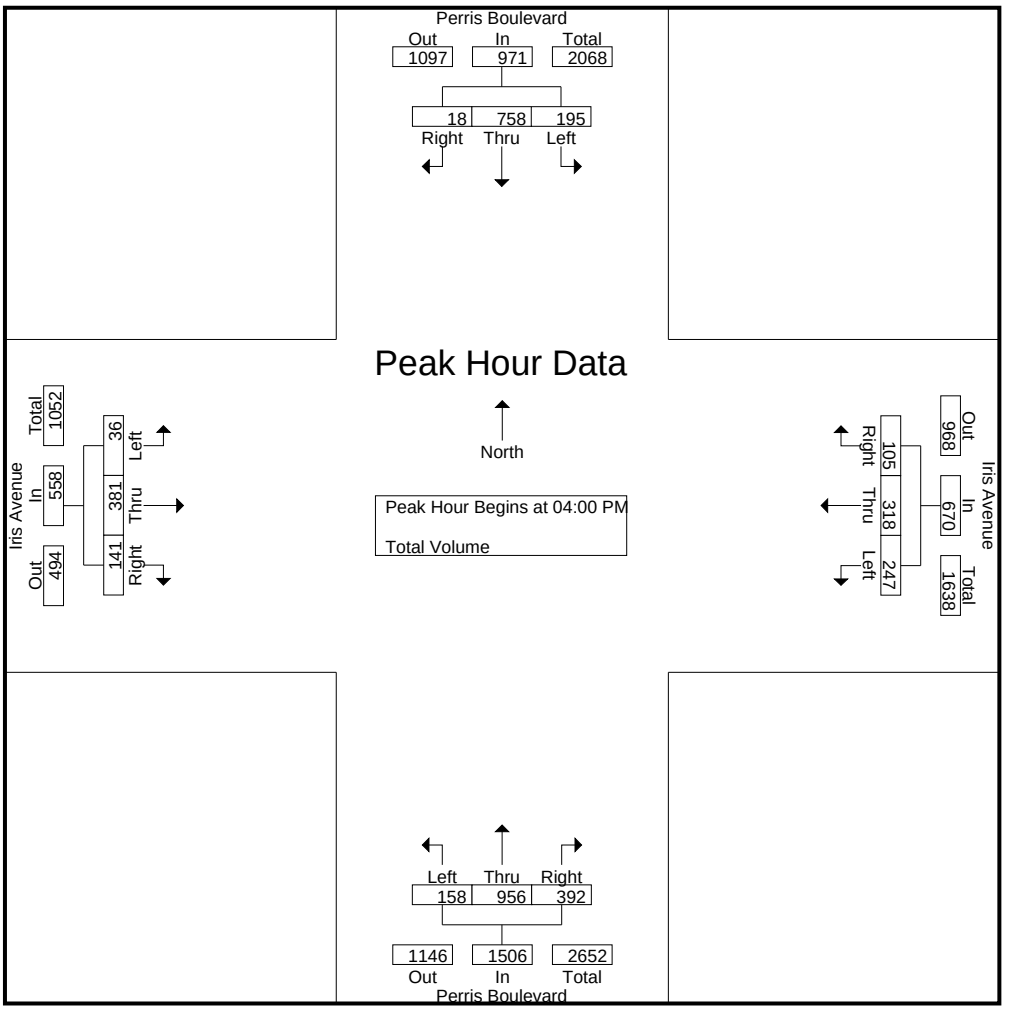
City of Moreno Valley
N/S: Perris Boulevard
E/W: Iris Avenue
Weather: Clear

File Name : 10_MRV_Perris_Iris PM
Site Code : 22521732
Start Date : 12/7/2021
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				04:15 PM				04:00 PM				05:00 PM			
+0 mins.	52	**209**	2	**263**	63	**83**	**34**	**180**	36	231	93	360	7	90	40	137
+15 mins.	**56**	167	5	228	**68**	80	30	178	**51**	242	100	**393**	**10**	**102**	35	147
+30 mins.	44	196	5	245	61	80	21	162	33	**244**	**101**	378	3	100	29	132
+45 mins.	43	186	**6**	235	61	76	27	164	38	239	98	375	8	99	**41**	**148**
Total Volume	195	758	18	971	253	319	112	684	158	956	392	1506	28	391	145	564
% App. Total	20.1	78.1	1.9		37	46.6	16.4		10.5	63.5	26		5	69.3	25.7	
PHF	.871	.907	.750	.923	.930	.961	.824	.950	.775	.980	.970	.958	.700	.958	.884	.953

Location: Moreno Valley
N/S: Perris Boulevard
E/W: Iris Avenue

Date: 12/7/2021
Day: Tuesday

PEDESTRIANS

	North Leg Perris Boulevard	East Leg Iris Avenue	South Leg Perris Boulevard	West Leg Iris Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	1	1	2
7:15 AM	2	0	3	3	8
7:30 AM	1	0	1	1	3
7:45 AM	0	0	0	0	0
8:00 AM	1	1	2	1	5
8:15 AM	1	2	0	0	3
8:30 AM	3	4	0	0	7
8:45 AM	0	0	0	0	0
TOTAL VOLUMES:	8	7	7	6	28

	North Leg Perris Boulevard	East Leg Iris Avenue	South Leg Perris Boulevard	West Leg Iris Avenue	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	1	1	0	2
4:15 PM	3	1	0	0	4
4:30 PM	1	1	0	0	2
4:45 PM	0	2	2	0	4
5:00 PM	1	1	0	0	2
5:15 PM	0	1	0	0	1
5:30 PM	0	2	2	0	4
5:45 PM	1	1	0	0	2
TOTAL VOLUMES:	6	10	5	0	21

Location: Moreno Valley
N/S: Perris Boulevard
E/W: Iris Avenue

Date: 12/7/2021
Day: Tuesday

BICYCLES

	Southbound Perris Boulevard			Westbound Iris Avenue			Northbound Perris Boulevard			Eastbound Iris 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	1	0	0	2	0	0	3
7:30 AM	0	0	0	0	1	0	0	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	1	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1
TOTAL VOLUMES:	0	0	0	0	1	0	2	1	0	2	0	0	6

	Southbound Perris Boulevard			Westbound Iris Avenue			Northbound Perris Boulevard			Eastbound Iris Avenue			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
4:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1
5:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	2	0	0	0	0	0	1	0	4

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City of Moreno Valley
N/S: Perris Boulevard
E/W: Harley Knox Boulevard
Weather: Clear

File Name : 11_MRV_Perris_Harley AM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Perris Boulevard Southbound				Harley Knox Boulevard Westbound				Perris Boulevard Northbound				Harley Knox Boulevard 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	7	129	54	190	3	51	44	98	33	205	3	241	35	8	14	57	586
07:15 AM	9	112	60	181	6	37	69	112	31	262	9	302	60	5	35	100	695
07:30 AM	18	145	53	216	7	31	69	107	24	270	2	296	51	8	27	86	705
07:45 AM	19	207	62	288	7	42	54	103	27	232	0	259	45	14	36	95	745
Total	53	593	229	875	23	161	236	420	115	969	14	1098	191	35	112	338	2731
08:00 AM	15	195	53	263	5	21	35	61	15	231	1	247	28	14	33	75	646
08:15 AM	9	188	37	234	2	23	29	54	11	190	0	201	52	8	12	72	561
08:30 AM	6	117	18	141	0	28	18	46	15	202	0	217	45	9	7	61	465
08:45 AM	2	128	23	153	0	16	20	36	14	158	1	173	46	10	4	60	422
Total	32	628	131	791	7	88	102	197	55	781	2	838	171	41	56	268	2094
Grand Total	85	1221	360	1666	30	249	338	617	170	1750	16	1936	362	76	168	606	4825
Apprch %	5.1	73.3	21.6		4.9	40.4	54.8		8.8	90.4	0.8		59.7	12.5	27.7		
Total %	1.8	25.3	7.5	34.5	0.6	5.2	7	12.8	3.5	36.3	0.3	40.1	7.5	1.6	3.5	12.6	

	Perris Boulevard Southbound				Harley Knox Boulevard Westbound				Perris Boulevard Northbound				Harley Knox Boulevard 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 07:15 AM																	
07:15 AM	9	112	60	181	6	37	**69**	**112**	**31**	262	**9**	**302**	**60**	5	35	**100**	695
07:30 AM	18	145	53	216	**7**	31	69	107	24	**270**	2	296	51	8	27	86	705
07:45 AM	**19**	**207**	**62**	**288**	7	**42**	54	103	27	232	0	259	45	**14**	**36**	95	**745**
08:00 AM	15	195	53	263	5	21	35	61	15	231	1	247	28	14	33	75	646
Total Volume	61	659	228	948	25	131	227	383	97	995	12	1104	184	41	131	356	2791
% App. Total	6.4	69.5	24.1		6.5	34.2	59.3		8.8	90.1	1.1		51.7	11.5	36.8		
PHF	.803	.796	.919	.823	.893	.780	.822	.855	.782	.921	.333	.914	.767	.732	.910	.890	.937

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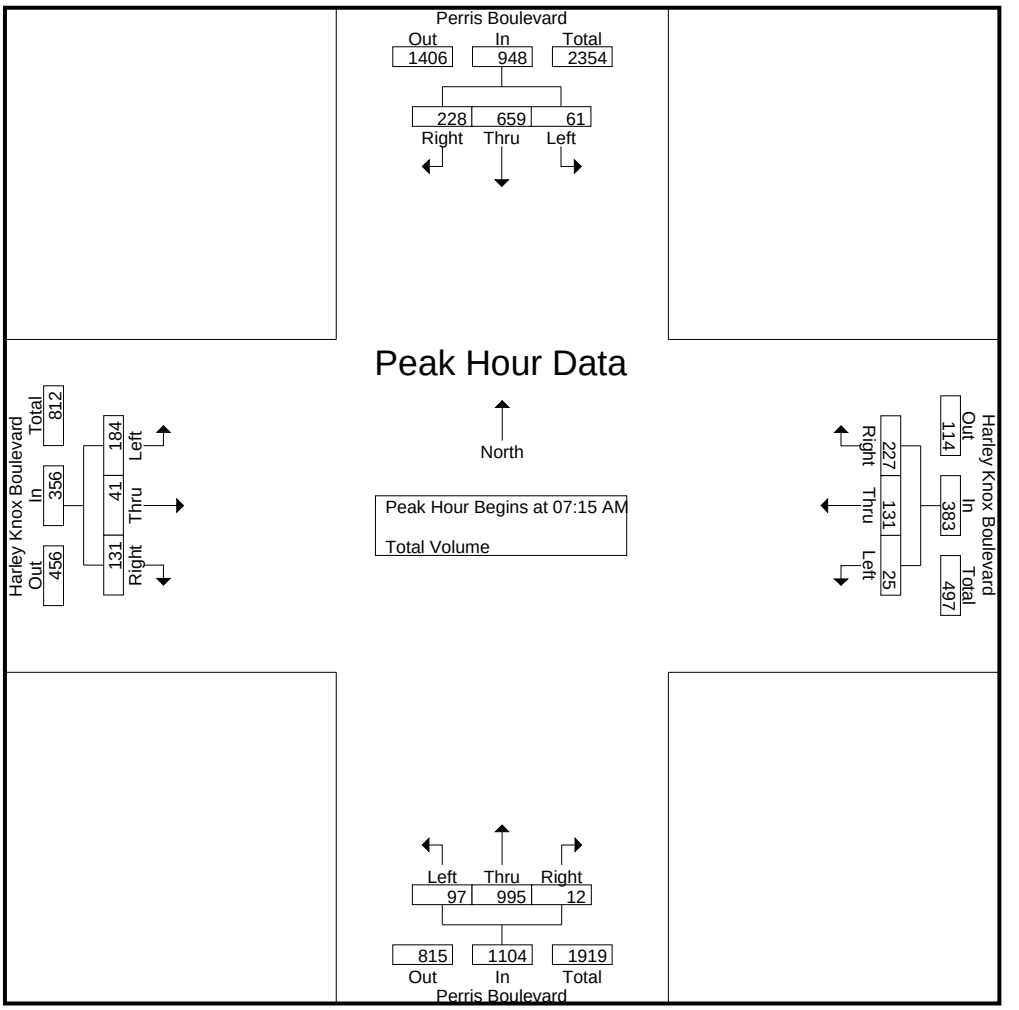
City of Moreno Valley
N/S: Perris Boulevard
E/W: Harley Knox Boulevard
Weather: Clear

File Name : 11_MRV_Perris_Harley AM
Site Code : 22521732
Start Date : 12/7/2021



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				07:15 AM				07:15 AM			
+0 mins.	18	145	53	216	3	**51**	44	98	**31**	262	**9**	**302**	**60**	5	35	**100**
+15 mins.	**19**	**207**	**62**	**288**	6	37	**69**	**112**	24	**270**	2	296	51	8	27	86
+30 mins.	15	195	53	263	**7**	31	69	107	27	232	0	259	45	**14**	**36**	95
+45 mins.	9	188	37	234	7	42	54	103	15	231	1	247	28	14	33	75
Total Volume	61	735	205	1001	23	161	236	420	97	995	12	1104	184	41	131	356
% App. Total	6.1	73.4	20.5		5.5	38.3	56.2		8.8	90.1	1.1		51.7	11.5	36.8	
PHF	.803	.888	.827	.869	.821	.789	.855	.938	.782	.921	.333	.914	.767	.732	.910	.890

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City of Moreno Valley
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E/W: Harley Knox Boulevard
Weather: Clear

File Name : 11_MRV_Perris_Harley PM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 1

Groups Printed- Total Volume

	Perris Boulevard Southbound				Harley Knox Boulevard Westbound				Perris Boulevard Northbound				Harley Knox Boulevard 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	39	229	83	351	6	25	43	74	16	182	3	201	58	28	12	98	724
04:15 PM	21	245	77	343	0	20	37	57	19	187	0	206	73	26	17	116	722
04:30 PM	61	269	69	399	1	23	29	53	14	203	0	217	69	41	17	127	796
04:45 PM	28	231	71	330	1	33	26	60	8	172	1	181	55	42	22	119	690
Total	149	974	300	1423	8	101	135	244	57	744	4	805	255	137	68	460	2932
05:00 PM	35	226	61	322	2	12	20	34	14	156	0	170	64	34	18	116	642
05:15 PM	33	239	64	336	1	14	19	34	17	151	0	168	61	41	11	113	651
05:30 PM	41	195	63	299	0	23	24	47	12	153	0	165	63	29	18	110	621
05:45 PM	23	206	61	290	1	13	23	37	5	176	3	184	50	30	11	91	602
Total	132	866	249	1247	4	62	86	152	48	636	3	687	238	134	58	430	2516
Grand Total	281	1840	549	2670	12	163	221	396	105	1380	7	1492	493	271	126	890	5448
Apprch %	10.5	68.9	20.6		3	41.2	55.8		7	92.5	0.5		55.4	30.4	14.2		
Total %	5.2	33.8	10.1	49	0.2	3	4.1	7.3	1.9	25.3	0.1	27.4	9	5	2.3	16.3	

	Perris Boulevard Southbound				Harley Knox Boulevard Westbound				Perris Boulevard Northbound				Harley Knox Boulevard 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 04:00 PM																	
04:00 PM	39	229	**83**	351	**6**	25	**43**	**74**	16	182	**3**	201	58	28	12	98	724
04:15 PM	21	245	77	343	0	20	37	57	**19**	187	0	206	**73**	26	17	116	722
04:30 PM	**61**	**269**	69	**399**	1	23	29	53	14	**203**	0	**217**	69	41	17	**127**	**796**
04:45 PM	28	231	71	330	1	**33**	26	60	8	172	1	181	55	**42**	**22**	119	690
Total Volume	149	974	300	1423	8	101	135	244	57	744	4	805	255	137	68	460	2932
% App. Total	10.5	68.4	21.1		3.3	41.4	55.3		7.1	92.4	0.5		55.4	29.8	14.8		
PHF	.611	.905	.904	.892	.333	.765	.785	.824	.750	.916	.333	.927	.873	.815	.773	.906	.921

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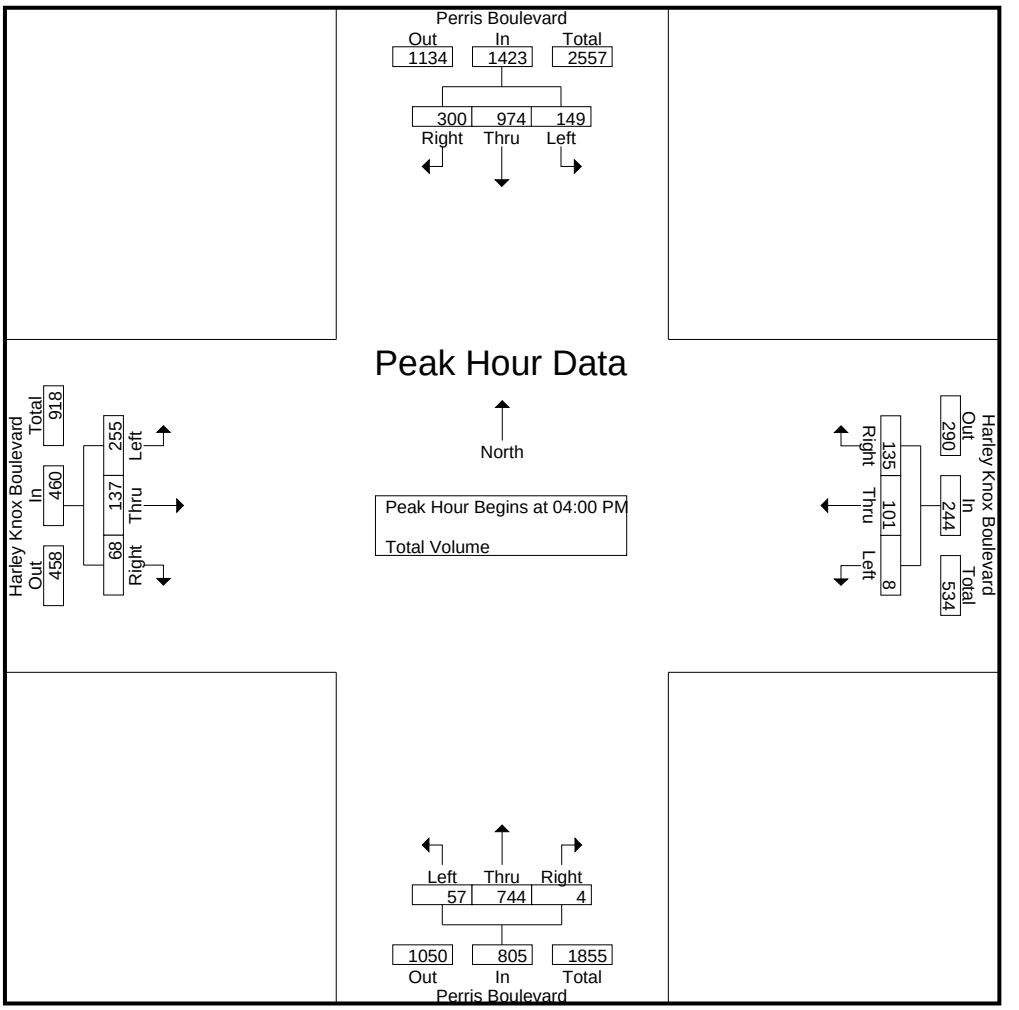
File Name : 11_MRV_Perris_Harley PM
Site Code : 22521732
Start Date : 12/7/2021
Page No : 2



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				04:00 PM				04:00 PM				04:15 PM			
+0 mins.	39	229	**83**	351	**6**	25	**43**	**74**	16	182	**3**	201	**73**	26	17	116
+15 mins.	21	245	77	343	0	20	37	57	**19**	187	0	206	69	41	17	**127**
+30 mins.	**61**	**269**	69	**399**	1	23	29	53	14	**203**	0	**217**	55	**42**	**22**	119
+45 mins.	28	231	71	330	1	**33**	26	60	8	172	1	181	64	34	18	116
Total Volume	149	974	300	1423	8	101	135	244	57	744	4	805	261	143	74	478
% App. Total	10.5	68.4	21.1		3.3	41.4	55.3		7.1	92.4	0.5		54.6	29.9	15.5	
PHF	.611	.905	.904	.892	.333	.765	.785	.824	.750	.916	.333	.927	.894	.851	.841	.941

Location: Moreno Valley
N/S: Perris Boulevard
E/W: Harley Knox Boulevard

Date: 12/7/2021
Day: Tuesday

PEDESTRIANS

	North Leg Perris Boulevard	East Leg Harley Knox Boulevard	South Leg Perris Boulevard	West Leg Harley Knox Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
7:00 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0
8:45 AM	0	1	0	0	1
TOTAL VOLUMES:	0	1	0	0	1

	North Leg Perris Boulevard	East Leg Harley Knox Boulevard	South Leg Perris Boulevard	West Leg Harley Knox Boulevard	
	Pedestrians	Pedestrians	Pedestrians	Pedestrians	
4:00 PM	0	0	0	0	0
4:15 PM	0	1	0	0	1
4:30 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0
5:00 PM	0	0	0	0	0
5:15 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0
5:45 PM	0	0	0	0	0
TOTAL VOLUMES:	0	1	0	0	1

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Location: Moreno Valley
N/S: Perris Boulevard
E/W: Harley Knox Boulevard

Date: 12/7/2021
Day: Tuesday

BICYCLES

	Southbound Perris Boulevard			Westbound Harley Knox Boulevard			Northbound Perris Boulevard			Eastbound Harley Knox Boulevard			
	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	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	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	0	0	0	0	1	0	0	0	1	2

	Southbound Perris Boulevard			Westbound Harley Knox Boulevard			Northbound Perris Boulevard			Eastbound Harley Knox Boulevard			
	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	0	0	0	0	0	0
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	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL VOLUMES:	0	0	0	0	0	0	0	1	0	0	0	0	1

APPENDIX D

LEVEL OF SERVICE WORKSHEETS

Existing

Intersection Level Of Service Report
Intersection 1: Heacock St (NS) at Cactus Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	45.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.798

Intersection Setup

Name	Heacock St			Heacock St			Cactus 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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	320.00	100.00	100.00	100.00	100.00	100.00	140.00	100.00	100.00	140.00	100.00	100.00
Speed [mph]	45.00			45.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Heacock St			Heacock St			Cactus Ave					
Base Volume Input [veh/h]	719	542	11	53	289	84	75	495	460	9	975	50
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	719	542	11	53	289	84	75	495	460	9	975	50
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	195	147	3	14	79	23	20	135	125	2	265	14
Total Analysis Volume [veh/h]	782	589	12	58	314	91	82	538	500	10	1060	54
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	37	47	0	12	22	0	12	49	49	12	49	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	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	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	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	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	33	43	43	8	18	18	8	45	45	8	45	45
g / C, Green / Cycle	0.28	0.36	0.36	0.07	0.15	0.15	0.07	0.38	0.38	0.07	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.23	0.16	0.16	0.03	0.11	0.11	0.05	0.15	0.32	0.01	0.30	0.30
s, saturation flow rate [veh/h]	3431	1855	1842	1767	1855	1715	1767	3532	1577	1767	1855	1824
c, Capacity [veh/h]	943	665	660	118	278	257	118	1324	591	118	696	684
d1, Uniform Delay [s]	40.85	29.50	29.50	54.04	48.83	48.97	54.81	27.65	34.32	52.56	33.62	33.62
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	8.34	2.23	2.25	13.97	16.78	19.23	28.91	0.93	13.90	1.41	9.75	9.92
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	0.83	0.45	0.45	0.49	0.75	0.76	0.70	0.41	0.85	0.08	0.81	0.81
d, Delay for Lane Group [s/veh]	49.19	31.72	31.75	68.02	65.62	68.20	83.72	28.58	48.22	53.98	43.37	43.54
Lane Group LOS	D	C	C	E	E	E	F	C	D	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	11.53	6.82	6.79	2.11	7.11	6.88	3.33	5.72	15.09	0.33	16.34	16.11
50th-Percentile Queue Length [ft/ln]	288.15	170.61	169.75	52.73	177.74	171.91	83.36	143.06	377.31	8.25	408.58	402.67
95th-Percentile Queue Length [veh/ln]	17.09	11.11	11.06	3.80	11.48	11.18	6.00	9.65	21.46	0.59	22.97	22.69
95th-Percentile Queue Length [ft/ln]	427.34	277.72	276.59	94.91	287.07	279.43	150.04	241.14	536.59	14.85	574.33	567.22

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	49.19	31.74	31.75	68.02	66.49	68.20	83.72	28.58	48.22	53.98	43.45	43.54
Movement LOS	D	C	C	E	E	E	F	C	D	D	D	D
d_A, Approach Delay [s/veh]	41.60			67.01			41.38			43.55		
Approach LOS	D			E			D			D		
d_I, Intersection Delay [s/veh]	44.95											
Intersection LOS	D											
Intersection V/C	0.798											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.005	2.661	3.128	2.651
Crosswalk LOS	C	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	300	750	750
d_b, Bicycle Delay [s]	24.70	43.35	23.44	23.44
l_b,int, Bicycle LOS Score for Intersection	2.701	1.942	2.484	2.487
Bicycle LOS	B	A	B	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: Heacock St (NS) at John F Kennedy Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	38.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.725

Intersection Setup

Name	Heacock St			Heacock St			John F Kennedy Dr			John F Kennedy Dr		
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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	200.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Heacock St			Heacock St			John F Kennedy Dr			John F Kennedy Dr		
Base Volume Input [veh/h]	27	929	44	127	575	17	62	37	46	33	18	248
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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	929	44	127	575	17	62	37	46	33	18	248
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
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	280	13	38	173	5	19	11	14	10	5	75
Total Analysis Volume [veh/h]	33	1119	53	153	693	20	75	45	55	40	22	299
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	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	12	59	0	20	67	0	13	36	0	15	38	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	R	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	55	55	16	63	63	9	32	32	11	34	34
g / C, Green / Cycle	0.06	0.42	0.42	0.12	0.48	0.48	0.07	0.25	0.25	0.08	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.02	0.32	0.03	0.09	0.19	0.19	0.04	0.02	0.03	0.02	0.01	0.19
s, saturation flow rate [veh/h]	1767	3532	1577	1767	1855	1837	1767	1855	1577	1767	1855	1577
c, Capacity [veh/h]	109	1494	667	217	899	890	122	457	388	149	485	412
d1, Uniform Delay [s]	58.34	31.67	22.39	54.72	21.40	21.40	58.81	37.86	38.27	55.73	35.87	43.74
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	7.06	3.48	0.23	17.39	1.32	1.33	20.84	0.43	0.76	4.34	0.18	10.60
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	0.30	0.75	0.08	0.70	0.40	0.40	0.61	0.10	0.14	0.27	0.05	0.73
d, Delay for Lane Group [s/veh]	65.39	35.15	22.62	72.11	22.72	22.73	79.65	38.29	39.04	60.07	36.05	54.34
Lane Group LOS	E	D	C	E	C	C	E	D	D	E	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.23	14.87	0.99	5.76	7.01	6.95	3.06	1.15	1.43	1.41	0.55	9.91
50th-Percentile Queue Length [ft/ln]	30.82	371.64	24.75	143.94	175.25	173.63	76.53	28.64	35.76	35.15	13.70	247.65
95th-Percentile Queue Length [veh/ln]	2.22	21.19	1.78	9.69	11.35	11.27	5.51	2.06	2.58	2.53	0.99	15.07
95th-Percentile Queue Length [ft/ln]	55.48	529.72	44.56	242.32	283.80	281.68	137.76	51.55	64.38	63.26	24.67	376.69

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	65.39	35.15	22.62	72.11	22.72	22.73	79.65	38.29	39.04	60.07	36.05	54.34
Movement LOS	E	D	C	E	C	C	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	35.43			31.45			56.25			53.86		
Approach LOS	D			C			E			D		
d_I, Intersection Delay [s/veh]	38.06											
Intersection LOS	D											
Intersection V/C	0.725											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	0.0	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]	0.00	54.47	0.00	54.47
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.045	0.000	2.323
Crosswalk LOS	F	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	846	969	492	523
d_b, Bicycle Delay [s]	21.63	17.27	36.94	35.45
l_b,int, Bicycle LOS Score for Intersection	2.554	2.274	1.848	1.857
Bicycle LOS	B	B	A	A

Sequence

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

Intersection Level Of Service Report
Intersection 3: Heacock St (NS) at Gentian Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	19.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.416

Intersection Setup

Name	Heacock St		Heacock St		Gentian Ave	
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 Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	140.00	100.00
Speed [mph]	50.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Heacock St		Heacock St		Gentian Ave	
Base Volume Input [veh/h]	737	10	62	558	12	144
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	737	10	62	558	12	144
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	222	3	19	168	4	43
Total Analysis Volume [veh/h]	888	12	75	672	14	173
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	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	7	0	7	7	7	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	4.0	0.0	4.0	4.0	4.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	77	0	17	94	36	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	3.0	3.0	3.0	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
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	C	R	L	C	L	R
C, Cycle Length [s]	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00
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	3.00	3.00	3.00
g_i, Effective Green Time [s]	72	72	12	89	31	31
g / C, Green / Cycle	0.55	0.55	0.09	0.68	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.25	0.01	0.04	0.19	0.01	0.11
s, saturation flow rate [veh/h]	3532	1577	1767	3532	1767	1577
c, Capacity [veh/h]	1956	873	163	2418	421	376
d1, Uniform Delay [s]	17.28	13.04	55.93	7.98	38.00	42.34
k, delay calibration	0.50	0.50	0.50	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]	0.76	0.03	9.06	0.29	0.15	4.01
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	0.45	0.01	0.46	0.28	0.03	0.46
d, Delay for Lane Group [s/veh]	18.05	13.07	64.99	8.27	38.14	46.36
Lane Group LOS	B	B	E	A	D	D
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	7.51	0.16	2.70	3.34	0.36	5.11
50th-Percentile Queue Length [ft/ln]	187.84	3.90	67.46	83.57	8.95	127.86
95th-Percentile Queue Length [veh/ln]	12.01	0.28	4.86	6.02	0.64	8.82
95th-Percentile Queue Length [ft/ln]	300.22	7.02	121.44	150.42	16.12	220.58

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.05	13.07	64.99	8.27	38.14	46.36
Movement LOS	B	B	E	A	D	D
d_A, Approach Delay [s/veh]	17.98		13.97		45.74	
Approach LOS	B		B		D	
d_I, Intersection Delay [s/veh]	19.18					
Intersection LOS	B					
Intersection V/C	0.416					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0
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]	0.00	54.47	54.47
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.911	2.077
Crosswalk LOS	F	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	65.00	65.00	65.00
l_b,int, Bicycle LOS Score for Intersection	4.875	4.749	4.132
Bicycle LOS	E	E	D

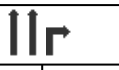
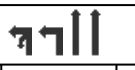
Sequence

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

Intersection Level Of Service Report
Intersection 4: Heacock St (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	33.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.563

Intersection Setup

Name	Heacock St		Heacock St			Iris Ave	
Approach	Northbound		Southbound			Westbound	
Lane Configuration							
Turning Movement	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	2	0	0	1	1
Pocket Length [ft]	100.00	150.00	200.00	100.00	100.00	150.00	300.00
Speed [mph]	50.00		45.00			40.00	
Grade [%]	0.00		0.00			0.00	
Curb Present	No		No			No	
Crosswalk	No		No			Yes	

Volumes

Name	Heacock St		Heacock St			Iris Ave	
Base Volume Input [veh/h]	347	28	0	217	364	43	408
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	347	28	0	217	364	43	408
Peak Hour Factor	0.8600	0.8600	0.9500	0.8600	0.8600	0.8600	0.8600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	101	8	0	63	106	13	119
Total Analysis Volume [veh/h]	403	33	0	252	423	50	474
Presence of On-Street Parking	No	No	No		No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	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	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Protected	Permissive	Split	Split
Signal group	2	0	0	1	6	7	0
Auxiliary Signal Groups							
Lead / Lag	-	-	-	Lead	-	Lead	-
Minimum Green [s]	7	0	0	7	7	7	0
Maximum Green [s]	30	0	0	30	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	1.0	0.0
Split [s]	28	0	0	20	48	72	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	0	10	10	0
Rest In Walk	No				No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0	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
Detector Length [ft]	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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	24	24	16	44	68	68
g / C, Green / Cycle	0.20	0.20	0.13	0.37	0.57	0.57
(v / s)_i Volume / Saturation Flow Rate	0.11	0.02	0.07	0.12	0.01	0.30
s, saturation flow rate [veh/h]	3532	1577	3431	3532	3431	1577
c, Capacity [veh/h]	706	315	457	1295	1944	893
d1, Uniform Delay [s]	43.35	39.22	48.64	27.34	11.43	16.11
k, delay calibration	0.50	0.50	0.50	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]	3.33	0.67	4.72	0.67	0.02	2.25
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	0.57	0.10	0.55	0.33	0.03	0.53
d, Delay for Lane Group [s/veh]	46.67	39.89	53.36	28.01	11.46	18.36
Lane Group LOS	D	D	D	C	B	B
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.53	0.83	3.74	4.34	0.29	8.09
50th-Percentile Queue Length [ft/ln]	138.23	20.73	93.59	108.42	7.21	202.16
95th-Percentile Queue Length [veh/ln]	9.39	1.49	6.74	7.75	0.52	12.75
95th-Percentile Queue Length [ft/ln]	234.64	37.32	168.45	193.81	12.98	318.76

Movement, Approach, & Intersection Results

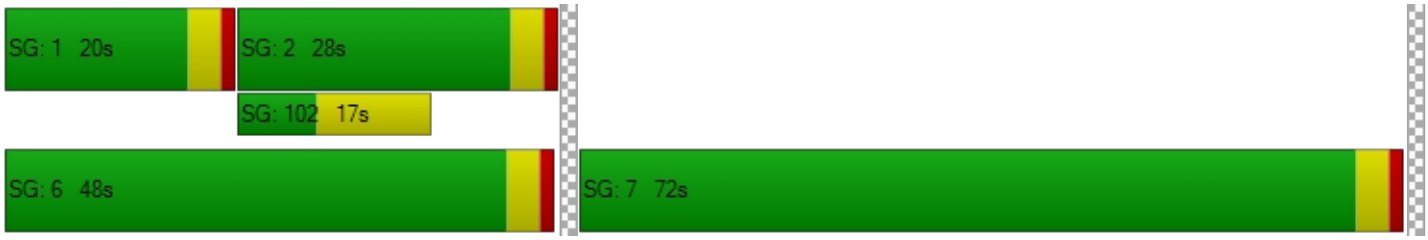
d_M, Delay for Movement [s/veh]	46.67	39.89	53.36	53.36	28.01	11.46	18.36
Movement LOS	D	D	D	D	C	B	B
d_A, Approach Delay [s/veh]	46.16		37.47			17.70	
Approach LOS	D		D			B	
d_I, Intersection Delay [s/veh]	33.45						
Intersection LOS	C						
Intersection V/C	0.563						

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0
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]	0.00	0.00	49.50
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.524
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
l_b,int, Bicycle LOS Score for Intersection	4.492	4.481	4.132
Bicycle LOS	E	E	D

Sequence

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



Intersection Level Of Service Report
Intersection 5: Indian St (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	42.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.653

Intersection Setup

Name	Indian St						Iris Ave			Iris 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 Pocket	1	0	0	1	0	0	2	0	1	2	0	0
Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	200.00	150.00	100.00	100.00
Speed [mph]	25.00			40.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indian St						Iris Ave			Iris Ave		
Base Volume Input [veh/h]	52	239	23	222	255	18	53	189	49	15	386	332
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	52	239	23	222	255	18	53	189	49	15	386	332
Peak Hour Factor	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500
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]	17	80	8	74	85	6	18	63	16	5	129	111
Total Analysis Volume [veh/h]	69	319	31	296	340	24	71	252	65	20	515	443
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	14	34	0	29	49	0	11	46	0	11	46	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	23	0	0	21	0	0	29	0	0	26	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	30	30	25	45	45	7	42	42	7	42	42
g / C, Green / Cycle	0.08	0.25	0.25	0.21	0.38	0.38	0.06	0.35	0.35	0.06	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.04	0.10	0.10	0.17	0.10	0.10	0.02	0.07	0.04	0.01	0.28	0.28
s, saturation flow rate [veh/h]	1767	1855	1798	1767	1855	1812	3431	3532	1577	3431	1855	1577
c, Capacity [veh/h]	147	464	450	368	696	680	200	1236	552	200	649	552
d1, Uniform Delay [s]	52.47	37.31	37.35	45.17	26.02	26.02	54.33	27.30	26.44	53.52	35.09	35.26
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	10.34	2.37	2.49	16.86	0.93	0.95	4.86	0.37	0.43	1.00	9.64	11.73
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	0.47	0.38	0.39	0.80	0.26	0.26	0.35	0.20	0.12	0.10	0.79	0.80
d, Delay for Lane Group [s/veh]	62.80	39.68	39.83	62.04	26.94	26.98	59.19	27.67	26.87	54.51	44.73	46.98
Lane Group LOS	E	D	D	E	C	C	E	C	C	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.43	4.67	4.59	9.92	3.75	3.68	1.18	2.64	1.36	0.31	14.81	13.09
50th-Percentile Queue Length [ft/ln]	60.65	116.83	114.78	248.01	93.77	91.96	29.42	66.08	33.88	7.75	370.14	327.25
95th-Percentile Queue Length [veh/ln]	4.37	8.22	8.11	15.09	6.75	6.62	2.12	4.76	2.44	0.56	21.12	19.02
95th-Percentile Queue Length [ft/ln]	109.17	205.46	202.63	377.15	168.78	165.53	52.95	118.94	60.99	13.94	527.90	475.59

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	62.80	39.75	39.83	62.04	26.96	26.98	59.19	27.67	26.87	54.51	44.73	46.98
Movement LOS	E	D	D	E	C	C	E	C	C	D	D	D
d_A, Approach Delay [s/veh]	43.55			42.69			33.31			45.95		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	42.65											
Intersection LOS	D											
Intersection V/C	0.653											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	2.451	2.702	2.723	2.804
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]	500	750	700	700
d_b, Bicycle Delay [s]	33.75	23.44	25.35	25.35
l_b,int, Bicycle LOS Score for Intersection	1.905	2.104	1.880	2.366
Bicycle LOS	A	B	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 6: Emma Ln (NS) at Iris Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	59.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.513

Intersection Setup

Name	Emma Ln			Emma Ln			Iris Ave			Iris 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 Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	75.00	150.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Emma Ln			Emma Ln			Iris Ave			Iris Ave		
Base Volume Input [veh/h]	51	0	17	0	0	0	0	405	30	6	668	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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	51	0	17	0	0	0	0	405	30	6	668	0
Peak Hour Factor	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000
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	0	5	0	0	0	0	127	9	2	209	0
Total Analysis Volume [veh/h]	64	0	21	0	0	0	0	506	38	8	835	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	0.51	0.00	0.04	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	59.15	54.78	36.69	35.88	30.80	14.83	9.53	0.00	0.00	8.56	0.00	0.00
Movement LOS	F	F	E	E	D	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.78	2.78	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	69.46	69.46	69.46	0.00	0.00	0.00	0.00	0.00	0.00	0.59	0.00	0.00
d_A, Approach Delay [s/veh]	53.60			27.17			0.00			0.08		
Approach LOS	F			D			A			A		
d_I, Intersection Delay [s/veh]	3.14											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: Perris Blvd (NS) at John F Kennedy Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	42.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.667

Intersection Setup

Name	Perris Blvd						John F Kennedy Dr			John F Kennedy Dr		
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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	160.00	100.00	100.00	145.00	100.00	100.00	90.00	100.00	100.00	145.00	100.00	100.00
Speed [mph]	40.00			30.00			40.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd						John F Kennedy Dr			John F Kennedy Dr		
Base Volume Input [veh/h]	112	899	218	152	436	22	46	320	59	157	320	125
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	112	899	218	152	436	22	46	320	59	157	320	125
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
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]	34	271	66	46	131	7	14	96	18	47	96	38
Total Analysis Volume [veh/h]	135	1083	263	183	525	27	55	386	71	189	386	151
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	19	44	0	20	45	0	11	35	0	21	45	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	29	0	0	29	0	0	24	0	0	26	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	C	L	C	C	L	C	R	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	40	40	16	41	41	7	31	31	17	41	41
g / C, Green / Cycle	0.13	0.33	0.33	0.13	0.34	0.34	0.06	0.26	0.26	0.14	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.08	0.26	0.26	0.10	0.10	0.10	0.03	0.11	0.05	0.11	0.11	0.10
s, saturation flow rate [veh/h]	1767	3532	1675	1767	3532	1809	1767	3532	1577	1767	3532	1577
c, Capacity [veh/h]	221	1177	558	236	1207	618	103	912	407	250	1207	539
d1, Uniform Delay [s]	49.74	35.96	35.96	50.27	28.99	29.02	54.91	37.05	34.56	49.50	29.19	28.76
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	12.00	5.03	10.12	21.85	0.64	1.27	18.38	1.44	0.93	18.93	0.70	1.30
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	0.61	0.78	0.78	0.78	0.30	0.30	0.53	0.42	0.17	0.76	0.32	0.28
d, Delay for Lane Group [s/veh]	61.74	40.99	46.08	72.13	29.64	30.28	73.29	38.49	35.49	68.43	29.89	30.05
Lane Group LOS	E	D	D	E	C	C	E	D	D	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.51	12.45	12.60	6.74	3.98	4.21	2.12	4.82	1.70	6.62	4.10	3.26
50th-Percentile Queue Length [ft/ln]	112.78	311.18	314.98	168.47	99.47	105.24	52.96	120.40	42.38	165.42	102.49	81.58
95th-Percentile Queue Length [veh/ln]	7.99	18.23	18.42	11.00	7.16	7.57	3.81	8.41	3.05	10.84	7.38	5.87
95th-Percentile Queue Length [ft/ln]	199.87	455.83	460.51	274.90	179.04	189.36	95.34	210.37	76.28	270.89	184.49	146.84

Movement, Approach, & Intersection Results

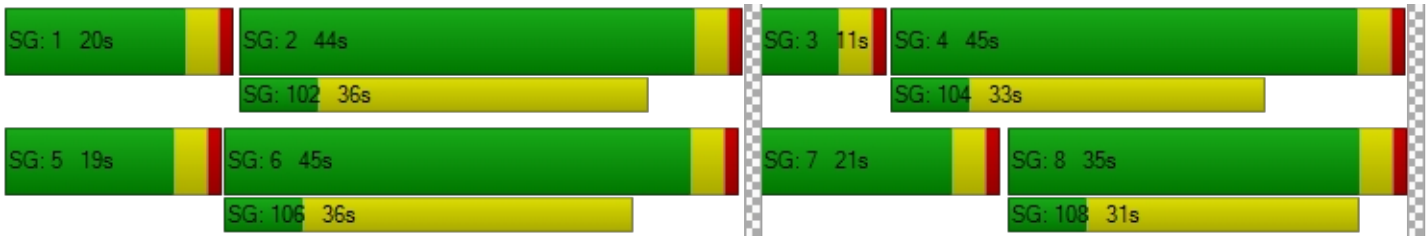
d_M, Delay for Movement [s/veh]	61.74	41.79	46.08	72.13	29.83	30.28	73.29	38.49	35.49	68.43	29.89	30.05
Movement LOS	E	D	D	E	C	C	E	D	D	E	C	C
d_A, Approach Delay [s/veh]	44.37			40.38			41.81			39.96		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	42.22											
Intersection LOS	D											
Intersection V/C	0.667											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.029	2.890	2.696	2.846
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	683	517	683
d_b, Bicycle Delay [s]	26.67	26.00	33.00	26.00
l_b,int, Bicycle LOS Score for Intersection	2.374	1.964	1.982	2.159
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 8: Perris Blvd (NS) at Gentian Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	32.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.436

Intersection Setup

Name	Perris Blvd			Perris Blvd			Gentian Ave			Gentian 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 Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			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	Perris Blvd			Perris Blvd			Gentian Ave			Gentian Ave		
Base Volume Input [veh/h]	102	870	24	12	468	32	37	26	131	34	54	31
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	102	870	24	12	468	32	37	26	131	34	54	31
Peak Hour Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
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]	30	253	7	3	136	9	11	8	38	10	16	9
Total Analysis Volume [veh/h]	119	1012	28	14	544	37	43	30	152	40	63	36
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	22	55	0	11	44	0	0	29	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	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	C	L	C	C	L	C	R	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	51	51	7	40	40	25	25	25	21
g / C, Green / Cycle	0.15	0.43	0.43	0.06	0.33	0.33	0.21	0.21	0.21	0.18
(v / s)_i Volume / Saturation Flow Rate	0.07	0.19	0.19	0.01	0.11	0.11	0.02	0.02	0.10	0.08
s, saturation flow rate [veh/h]	1767	3532	1830	1767	3532	1796	1767	1855	1577	1750
c, Capacity [veh/h]	265	1501	778	103	1177	599	368	386	328	306
d1, Uniform Delay [s]	46.48	24.61	24.61	53.63	29.92	29.96	38.54	38.22	41.62	44.36
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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
d2, Incremental Delay [s]	5.42	1.00	1.93	2.73	0.74	1.47	0.65	0.39	4.63	4.79
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
Rp, platoon ratio	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

Lane Group Results

X, volume / capacity	0.45	0.46	0.46	0.14	0.33	0.33	0.12	0.08	0.46	0.45
d, Delay for Lane Group [s/veh]	51.90	25.61	26.54	56.36	30.65	31.43	39.19	38.61	46.25	49.15
Lane Group LOS	D	C	C	E	C	C	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	3.56	6.84	7.29	0.47	4.14	4.38	1.11	0.77	4.41	4.09
50th-Percentile Queue Length [ft/ln]	88.98	170.95	182.24	11.77	103.41	109.50	27.80	19.14	110.36	102.26
95th-Percentile Queue Length [veh/ln]	6.41	11.13	11.72	0.85	7.45	7.81	2.00	1.38	7.86	7.36
95th-Percentile Queue Length [ft/ln]	160.16	278.16	292.93	21.18	186.13	195.30	50.04	34.45	196.50	184.06

Movement, Approach, & Intersection Results

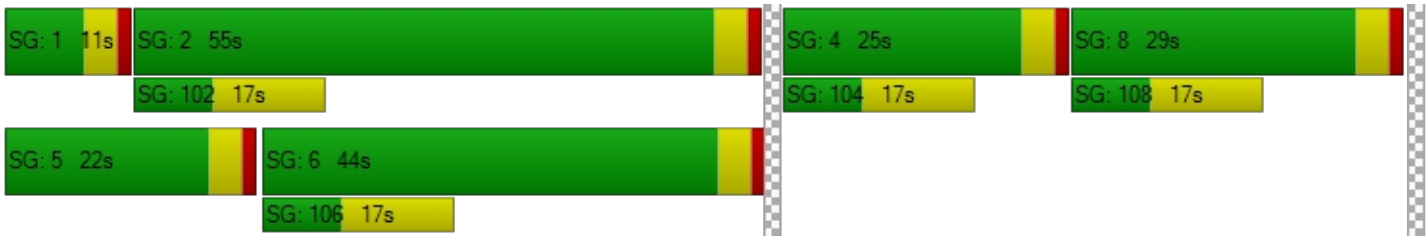
d_M, Delay for Movement [s/veh]	51.90	25.91	26.54	56.36	30.88	31.43	39.19	38.61	46.25	49.15	49.15	49.15
Movement LOS	D	C	C	E	C	C	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	28.60			31.52			43.88			49.15		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	32.39											
Intersection LOS	C											
Intersection V/C	0.436											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.004	2.960	2.235	1.849
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	850	667	417	350
d_b, Bicycle Delay [s]	19.84	26.67	37.60	40.84
l_b,int, Bicycle LOS Score for Intersection	2.197	1.887	1.931	1.789
Bicycle LOS	B	A	A	A

Sequence

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



Intersection Level Of Service Report
Intersection 9: Perris Blvd (NS) at Santiago Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	72.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Perris Bllvd			Perris Blvd			Santiago Dr			Santiago Dr		
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 Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Perris Bllvd			Perris Blvd			Santiago Dr			Santiago Dr		
Base Volume Input [veh/h]	0	921	10	60	576	1	0	0	0	24	0	96
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	0	921	10	60	576	1	0	0	0	24	0	96
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
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]	0	256	3	17	160	0	0	0	0	7	0	27
Total Analysis Volume [veh/h]	0	1023	11	67	640	1	0	0	0	27	0	107
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.00	0.01	0.00	0.18	0.01	0.00	0.00	0.00	0.00	0.22	0.00	0.25
d_M, Delay for Movement [s/veh]	11.23	0.00	0.00	16.72	0.00	0.00	33.16	61.81	11.27	44.86	72.04	24.04
Movement LOS	B	A	A	C	A	A	D	F	B	E	F	C
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.64	0.00	0.00	0.00	0.00	0.00	2.36	2.36	2.36
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	16.10	0.00	0.00	0.00	0.00	0.00	58.88	58.88	58.88
d_A, Approach Delay [s/veh]	0.00			1.58			35.41			28.23		
Approach LOS	A			A			E			D		
d_I, Intersection Delay [s/veh]	2.61											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Perris Blvd (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	40.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name	Perris Blvd			Perris Bllvd			Iris Ave			Iris 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 Pocket	0	0	0	0	0	0	0	0	0	0	0	0
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
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd			Perris Bllvd			Iris Ave			Iris Ave		
Base Volume Input [veh/h]	189	715	269	124	444	38	25	295	80	268	507	129
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	189	715	269	124	444	38	25	295	80	268	507	129
Peak Hour Factor	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400
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]	56	213	80	37	132	11	7	88	24	80	151	38
Total Analysis Volume [veh/h]	225	851	320	148	529	45	30	351	95	319	604	154
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]	115
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	26	37	0	19	30	0	11	26	0	33	48	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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]	115	115	115	115	115	115	115	115	115	115	115	115
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	33	33	15	26	26	7	22	22	29	44	44
g / C, Green / Cycle	0.19	0.29	0.29	0.13	0.23	0.23	0.06	0.19	0.19	0.25	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.12	0.16	0.20	0.08	0.11	0.11	0.02	0.12	0.12	0.18	0.17	0.10
s, saturation flow rate [veh/h]	1810	5176	1615	1810	3618	1825	1810	1900	1764	1810	3618	1615
c, Capacity [veh/h]	346	1485	463	236	818	413	110	363	337	456	1384	618
d1, Uniform Delay [s]	42.94	34.99	36.46	47.35	38.48	38.53	51.57	42.76	42.88	39.04	26.31	24.23
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	9.13	1.61	8.18	11.97	1.90	3.80	6.01	8.06	9.08	8.62	1.00	0.96
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	0.65	0.57	0.69	0.63	0.46	0.47	0.27	0.63	0.64	0.70	0.44	0.25
d, Delay for Lane Group [s/veh]	52.07	36.60	44.64	59.32	40.38	42.33	57.57	50.82	51.95	47.65	27.31	25.19
Lane Group LOS	D	D	D	E	D	D	E	D	D	D	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.60	6.74	8.72	4.69	4.71	5.02	0.99	6.62	6.36	8.96	6.05	2.92
50th-Percentile Queue Length [ft/ln]	164.99	168.61	218.02	117.18	117.75	125.56	24.76	165.45	158.89	224.07	151.26	72.90
95th-Percentile Queue Length [veh/ln]	10.81	11.00	13.56	8.24	8.27	8.70	1.78	10.84	10.49	13.87	10.08	5.25
95th-Percentile Queue Length [ft/ln]	270.31	275.08	339.10	205.95	206.73	217.45	44.56	270.92	262.25	346.82	252.10	131.22

Movement, Approach, & Intersection Results

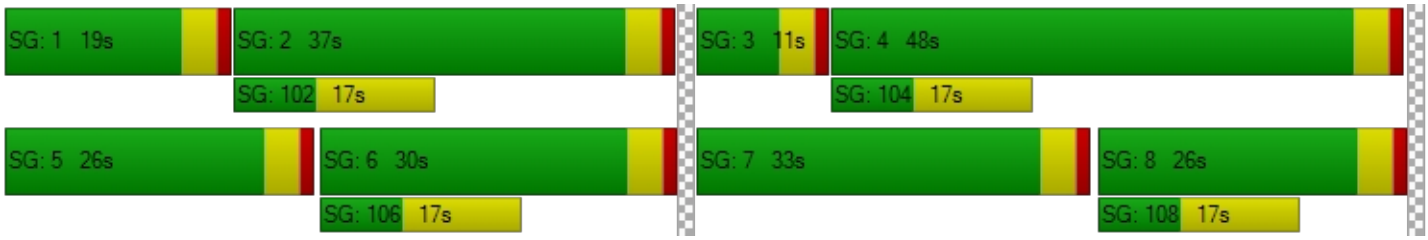
d_M, Delay for Movement [s/veh]	52.07	36.60	44.64	59.32	40.93	42.33	57.57	51.22	51.95	47.65	27.31	25.19
Movement LOS	D	D	D	E	D	D	E	D	D	D	C	C
d_A, Approach Delay [s/veh]	40.94			44.79			51.76			33.03		
Approach LOS	D			D			D			C		
d_I, Intersection Delay [s/veh]	40.78											
Intersection LOS	D											
Intersection V/C	0.673											

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]	47.03	47.03	47.03	47.03
l_p,int, Pedestrian LOS Score for Intersection	3.165	2.973	2.706	2.927
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	574	452	383	765
d_b, Bicycle Delay [s]	29.23	34.44	37.60	21.92
l_b,int, Bicycle LOS Score for Intersection	2.327	1.957	1.952	2.448
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 11: Perris Blvd (NS) at Harley Knox Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	35.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.568

Intersection Setup

Name	Perris Blvd			Perris Blvd			Harley Knox Blvd			Harley Knox Blvd		
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 Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	320.00	100.00	230.00	215.00	100.00	210.00	300.00	100.00	300.00	335.00	100.00	230.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd			Perris Blvd			Harley Knox Blvd			Harley Knox Blvd		
Base Volume Input [veh/h]	97	995	12	61	659	228	184	41	131	25	131	227
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	97	995	12	61	659	228	184	41	131	25	131	227
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
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]	26	265	3	16	175	61	49	11	35	7	35	60
Total Analysis Volume [veh/h]	103	1059	13	65	701	243	196	44	139	27	139	241
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	11	47	0	11	47	0	27	51	0	11	35	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	R	L	C	R	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	43	43	7	43	43	23	47	47	7	31	31
g / C, Green / Cycle	0.06	0.36	0.36	0.06	0.36	0.36	0.19	0.39	0.39	0.06	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.03	0.21	0.01	0.02	0.14	0.15	0.11	0.01	0.09	0.01	0.03	0.15
s, saturation flow rate [veh/h]	3431	5053	1577	3431	5053	1577	1767	3532	1577	3431	5053	1577
c, Capacity [veh/h]	200	1811	565	200	1811	565	339	1383	618	200	1305	407
d1, Uniform Delay [s]	54.85	31.25	24.91	54.23	28.68	29.21	44.10	22.48	24.35	53.63	33.94	38.96
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	9.15	1.39	0.08	4.27	0.63	2.38	7.04	0.04	0.84	1.40	0.16	6.19
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	0.51	0.58	0.02	0.32	0.39	0.43	0.58	0.03	0.23	0.13	0.11	0.59
d, Delay for Lane Group [s/veh]	64.00	32.64	24.98	58.50	29.31	31.59	51.14	22.53	25.20	55.02	34.10	45.15
Lane Group LOS	E	C	C	E	C	C	D	C	C	E	C	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.73	8.19	0.25	1.04	4.94	5.49	5.82	0.38	2.69	0.42	1.03	6.72
50th-Percentile Queue Length [ft/ln]	43.29	204.83	6.14	26.01	123.52	137.35	145.42	9.51	67.31	10.44	25.70	167.99
95th-Percentile Queue Length [veh/ln]	3.12	12.89	0.44	1.87	8.59	9.34	9.77	0.68	4.85	0.75	1.85	10.97
95th-Percentile Queue Length [ft/ln]	77.93	322.19	11.04	46.81	214.65	233.46	244.30	17.12	121.16	18.79	46.25	274.27

Movement, Approach, & Intersection Results

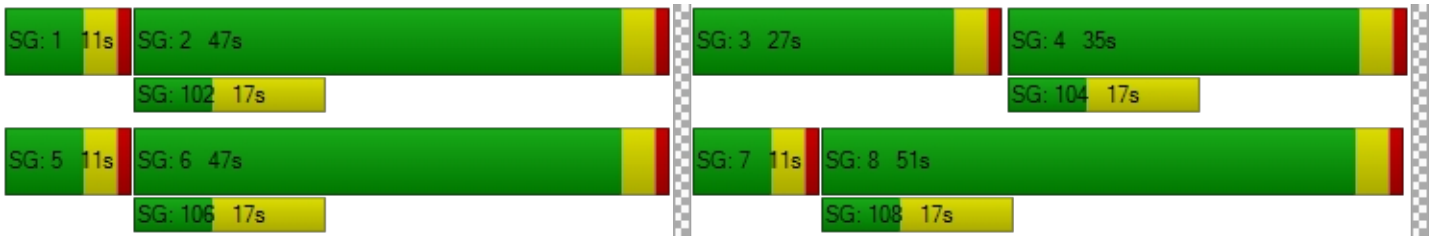
d_M, Delay for Movement [s/veh]	64.00	32.64	24.98	58.50	29.31	31.59	51.14	22.53	25.20	55.02	34.10	45.15
Movement LOS	E	C	C	E	C	C	D	C	C	E	C	D
d_A, Approach Delay [s/veh]	35.31			31.74			38.30			42.03		
Approach LOS	D			C			D			D		
d_I, Intersection Delay [s/veh]	35.40											
Intersection LOS	D											
Intersection V/C	0.568											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.195	3.270	2.788	2.949
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	717	783	517
d_b, Bicycle Delay [s]	24.70	24.70	22.20	33.00
l_b,int, Bicycle LOS Score for Intersection	2.206	2.115	1.872	1.783
Bicycle LOS	B	B	A	A

Sequence

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



Intersection Level Of Service Report
Intersection 1: Heacock St (NS) at Cactus Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	44.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.887

Intersection Setup

Name	Heacock St			Heacock St			Cactus 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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	320.00	100.00	100.00	100.00	100.00	100.00	140.00	100.00	100.00	140.00	100.00	100.00
Speed [mph]	45.00			45.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Heacock St			Heacock St			Cactus Ave					
Base Volume Input [veh/h]	529	554	17	97	448	46	137	1047	835	11	590	74
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	529	554	17	97	448	46	137	1047	835	11	590	74
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
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]	142	149	5	26	120	12	37	281	224	3	159	20
Total Analysis Volume [veh/h]	569	596	18	104	482	49	147	1126	898	12	634	80
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									1,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	28	28	0	27	27	0	18	54	54	11	47	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	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	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	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	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	24	24	24	23	23	23	14	50	77	7	43	43
g / C, Green / Cycle	0.20	0.20	0.20	0.19	0.19	0.19	0.12	0.42	0.64	0.06	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.17	0.17	0.17	0.06	0.15	0.15	0.08	0.32	0.57	0.01	0.20	0.20
s, saturation flow rate [veh/h]	3431	1855	1836	1767	1855	1796	1767	3532	1577	1767	1855	1783
c, Capacity [veh/h]	686	371	367	339	356	344	206	1472	1012	103	665	639
d1, Uniform Delay [s]	46.03	46.06	46.07	41.66	45.86	45.89	51.07	29.97	17.90	53.57	30.73	30.75
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	11.13	19.13	19.33	2.34	14.01	14.62	18.94	3.85	11.45	2.29	3.22	3.37
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	0.83	0.83	0.83	0.31	0.76	0.76	0.71	0.77	0.89	0.12	0.55	0.55
d, Delay for Lane Group [s/veh]	57.16	65.19	65.40	44.00	59.87	60.51	70.01	33.82	29.35	55.86	33.95	34.11
Lane Group LOS	E	E	E	D	E	E	E	C	C	E	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	8.94	10.52	10.44	2.80	8.75	8.56	5.27	14.10	21.17	0.41	8.96	8.67
50th-Percentile Queue Length [ft/ln]	223.49	263.01	260.94	70.09	218.73	213.99	131.76	352.45	529.34	10.25	224.08	216.67
95th-Percentile Queue Length [veh/ln]	13.84	15.84	15.74	5.05	13.60	13.36	9.04	20.26	28.72	0.74	13.87	13.50
95th-Percentile Queue Length [ft/ln]	346.08	395.99	393.40	126.16	340.00	333.94	225.88	506.40	718.00	18.45	346.83	337.38

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	57.16	65.29	65.40	44.00	60.15	60.51	70.01	33.82	29.35	55.86	34.02	34.11
Movement LOS	E	E	E	D	E	E	E	C	C	E	C	C
d_A, Approach Delay [s/veh]	61.38			57.54			34.42			34.39		
Approach LOS	E			E			C			C		
d_I, Intersection Delay [s/veh]	44.29											
Intersection LOS	D											
Intersection V/C	0.887											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.094	2.740	3.208	2.699
Crosswalk LOS	C	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	383	833	717
d_b, Bicycle Delay [s]	38.40	39.20	20.42	24.70
l_b,int, Bicycle LOS Score for Intersection	2.536	2.083	3.351	2.159
Bicycle LOS	B	B	C	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: Heacock St (NS) at John F Kennedy Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	38.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.678

Intersection Setup

Name	Heacock St			Heacock St			John F Kennedy Dr			John F Kennedy Dr		
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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	200.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Heacock St			Heacock St			John F Kennedy Dr			John F Kennedy Dr		
Base Volume Input [veh/h]	26	765	49	236	977	20	124	195	265	29	28	174
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	26	765	49	236	977	20	124	195	265	29	28	174
Peak Hour Factor	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100
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]	7	210	13	65	268	5	34	54	73	8	8	48
Total Analysis Volume [veh/h]	29	841	54	259	1074	22	136	214	291	32	31	191
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	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	11	44	0	29	62	0	19	36	0	11	28	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	40	40	25	58	58	15	32	32	7	24	24
g / C, Green / Cycle	0.06	0.33	0.33	0.21	0.48	0.48	0.13	0.27	0.27	0.06	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.02	0.24	0.03	0.15	0.30	0.30	0.08	0.12	0.18	0.02	0.02	0.12
s, saturation flow rate [veh/h]	1767	3532	1577	1767	1855	1842	1767	1855	1577	1767	1855	1577
c, Capacity [veh/h]	103	1177	526	368	897	890	221	495	420	103	371	315
d1, Uniform Delay [s]	54.09	35.00	27.61	44.06	22.76	22.77	49.77	36.47	39.57	54.19	39.05	43.69
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	6.70	3.72	0.39	10.75	3.12	3.16	12.21	2.75	9.03	7.68	0.44	8.37
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	0.28	0.71	0.10	0.70	0.61	0.61	0.62	0.43	0.69	0.31	0.08	0.61
d, Delay for Lane Group [s/veh]	60.79	38.72	28.00	54.81	25.89	25.93	61.97	39.22	48.60	61.86	39.49	52.07
Lane Group LOS	E	D	C	D	C	C	E	D	D	E	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	1.01	10.90	1.10	8.03	11.45	11.39	4.52	5.43	8.51	1.14	0.79	5.85
50th-Percentile Queue Length [ft/ln]	25.30	272.62	27.51	200.65	286.14	284.72	113.02	135.70	212.65	28.53	19.70	146.32
95th-Percentile Queue Length [veh/ln]	1.82	16.32	1.98	12.67	16.99	16.92	8.01	9.25	13.29	2.05	1.42	9.82
95th-Percentile Queue Length [ft/ln]	45.55	408.02	49.52	316.80	424.85	423.08	200.20	231.22	332.23	51.36	35.47	245.51

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	60.79	38.72	28.00	54.81	25.91	25.93	61.97	39.22	48.60	61.86	39.49	52.07
Movement LOS	E	D	C	D	C	C	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	38.78			31.43			48.31			51.77		
Approach LOS	D			C			D			D		
d_I, Intersection Delay [s/veh]	38.61											
Intersection LOS	D											
Intersection V/C	0.678											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	0.0	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]	0.00	49.50	0.00	49.50
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.082	0.000	2.367
Crosswalk LOS	F	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	967	533	400
d_b, Bicycle Delay [s]	26.67	16.02	32.27	38.40
l_b,int, Bicycle LOS Score for Intersection	2.322	2.677	2.617	1.769
Bicycle LOS	B	B	B	A

Sequence

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

Intersection Level Of Service Report
Intersection 3: Heacock St (NS) at Gentian Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	12.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.483

Intersection Setup

Name	Heacock St		Heacock St		Gentian Ave	
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 Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	140.00	100.00
Speed [mph]	50.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Heacock St		Heacock St		Gentian Ave	
Base Volume Input [veh/h]	730	20	111	1093	9	93
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00
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]	730	20	111	1093	9	93
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	207	6	32	311	3	26
Total Analysis Volume [veh/h]	830	23	126	1242	10	106
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	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	7	0	7	7	7	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	75	0	23	98	22	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	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
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	C	R	L	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	71	71	19	94	18	18
g / C, Green / Cycle	0.59	0.59	0.16	0.78	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.24	0.01	0.07	0.35	0.01	0.07
s, saturation flow rate [veh/h]	3532	1577	1767	3532	1767	1577
c, Capacity [veh/h]	2090	933	280	2767	265	237
d1, Uniform Delay [s]	13.08	10.15	45.77	4.34	43.60	46.47
k, delay calibration	0.50	0.50	0.50	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]	0.57	0.05	5.17	0.53	0.27	6.03
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	0.02	0.45	0.45	0.04	0.45
d, Delay for Lane Group [s/veh]	13.64	10.20	50.94	4.87	43.86	52.51
Lane Group LOS	B	B	D	A	D	D
Critical Lane Group	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	5.49	0.24	3.72	3.71	0.27	3.24
50th-Percentile Queue Length [ft/ln]	137.27	6.05	93.11	92.65	6.77	80.92
95th-Percentile Queue Length [veh/ln]	9.33	0.44	6.70	6.67	0.49	5.83
95th-Percentile Queue Length [ft/ln]	233.34	10.88	167.59	166.78	12.19	145.66

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	13.64	10.20	50.94	4.87	43.86	52.51
Movement LOS	B	B	D	A	D	D
d_A, Approach Delay [s/veh]	13.55		9.12		51.76	
Approach LOS	B		A		D	
d_I, Intersection Delay [s/veh]	12.85					
Intersection LOS	B					
Intersection V/C	0.483					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0
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]	0.00	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.028	2.069
Crosswalk LOS	F	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
l_b,int, Bicycle LOS Score for Intersection	4.836	5.261	4.132
Bicycle LOS	E	F	D

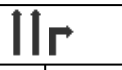
Sequence

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

Intersection Level Of Service Report
Intersection 4: Heacock St (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	32.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.489

Intersection Setup

Name	Heacock St		Heacock St			Iris Ave	
Approach	Northbound		Southbound			Westbound	
Lane Configuration							
Turning Movement	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	2	0	0	1	1
Pocket Length [ft]	100.00	150.00	200.00	100.00	100.00	150.00	300.00
Speed [mph]	50.00		45.00			40.00	
Grade [%]	0.00		0.00			0.00	
Curb Present	No		No			No	
Crosswalk	No		No			Yes	

Volumes

Name	Heacock St		Heacock St			Iris Ave	
Base Volume Input [veh/h]	440	32	0	451	637	49	253
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	440	32	0	451	637	49	253
Peak Hour Factor	0.8800	0.8800	0.9500	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	125	9	0	128	181	14	72
Total Analysis Volume [veh/h]	500	36	0	513	724	56	288
Presence of On-Street Parking	No	No	No		No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	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	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Protected	Permissive	Split	Split
Signal group	2	0	0	1	6	7	0
Auxiliary Signal Groups							
Lead / Lag	-	-	-	Lead	-	Lead	-
Minimum Green [s]	7	0	0	7	7	7	0
Maximum Green [s]	30	0	0	30	30	30	0
Amber [s]	4.0	0.0	0.0	4.0	4.0	4.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	1.0	0.0
Split [s]	38	0	0	42	80	50	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	0	10	10	0
Rest In Walk	No				No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	3.0	3.0	3.0	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
Detector Length [ft]	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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00
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	3.00	3.00	3.00
g_i, Effective Green Time [s]	33	33	37	75	45	45
g / C, Green / Cycle	0.25	0.25	0.28	0.58	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.14	0.02	0.15	0.20	0.02	0.18
s, saturation flow rate [veh/h]	3532	1577	3431	3532	3431	1577
c, Capacity [veh/h]	897	400	976	2038	1188	546
d1, Uniform Delay [s]	42.16	37.03	39.11	14.63	28.25	34.00
k, delay calibration	0.50	0.50	0.50	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]	2.50	0.44	2.02	0.49	0.07	3.62
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	0.56	0.09	0.53	0.36	0.05	0.53
d, Delay for Lane Group [s/veh]	44.66	37.48	41.14	15.12	28.32	37.62
Lane Group LOS	D	D	D	B	C	D
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	7.05	0.90	6.99	5.47	0.59	7.69
50th-Percentile Queue Length [ft/ln]	176.34	22.56	174.75	136.77	14.74	192.32
95th-Percentile Queue Length [veh/ln]	11.41	1.62	11.33	9.31	1.06	12.24
95th-Percentile Queue Length [ft/ln]	285.23	40.60	283.15	232.67	26.52	306.04

Movement, Approach, & Intersection Results

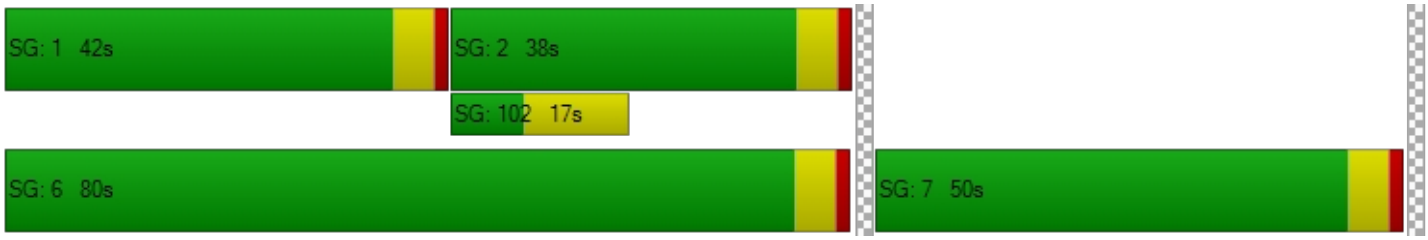
d_M, Delay for Movement [s/veh]	44.66	37.48	41.14	41.14	15.12	28.32	37.62
Movement LOS	D	D	D	D	B	C	D
d_A, Approach Delay [s/veh]	44.17		25.91			36.11	
Approach LOS	D		C			D	
d_I, Intersection Delay [s/veh]	32.19						
Intersection LOS	C						
Intersection V/C	0.489						

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0
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]	0.00	0.00	54.47
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.550
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	65.00	65.00	65.00
l_b,int, Bicycle LOS Score for Intersection	4.575	4.730	4.132
Bicycle LOS	E	E	D

Sequence

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



Intersection Level Of Service Report
Intersection 5: Indian St (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	35.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.299

Intersection Setup

Name	Indian St						Iris Ave			Iris 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 Pocket	1	0	0	1	0	0	2	0	1	2	0	0
Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	200.00	150.00	100.00	100.00
Speed [mph]	45.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indian St						Iris Ave			Iris Ave		
Base Volume Input [veh/h]	40	82	7	174	135	18	26	364	113	17	200	177
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	40	82	7	174	135	18	26	364	113	17	200	177
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
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]	11	22	2	46	36	5	7	97	30	5	53	47
Total Analysis Volume [veh/h]	43	87	7	185	144	19	28	387	120	18	213	188
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	14	34	0	35	55	0	11	40	0	11	40	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	23	0	0	21	0	0	29	0	0	26	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	30	30	31	51	51	7	36	36	7	36	36
g / C, Green / Cycle	0.08	0.25	0.25	0.26	0.43	0.43	0.06	0.30	0.30	0.06	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.02	0.03	0.03	0.10	0.04	0.05	0.01	0.11	0.08	0.01	0.11	0.12
s, saturation flow rate [veh/h]	1767	1855	1807	1767	1855	1781	3431	3532	1577	3431	1855	1578
c, Capacity [veh/h]	147	464	452	456	788	757	200	1060	473	200	556	474
d1, Uniform Delay [s]	51.67	34.63	34.65	36.86	20.76	20.78	53.64	33.02	31.82	53.48	33.19	33.41
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	4.97	0.44	0.46	2.66	0.27	0.28	1.46	0.97	1.29	0.89	1.97	2.51
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	0.29	0.10	0.10	0.41	0.10	0.11	0.14	0.37	0.25	0.09	0.38	0.40
d, Delay for Lane Group [s/veh]	56.64	35.07	35.11	39.53	21.03	21.06	55.10	33.99	33.11	54.37	35.16	35.91
Lane Group LOS	E	D	D	D	C	C	E	C	C	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.39	1.09	1.09	4.76	1.42	1.39	0.44	4.49	2.77	0.28	5.08	4.63
50th-Percentile Queue Length [ft/ln]	34.82	27.35	27.21	118.91	35.62	34.86	10.91	112.22	69.16	6.96	127.09	115.77
95th-Percentile Queue Length [veh/ln]	2.51	1.97	1.96	8.33	2.56	2.51	0.79	7.96	4.98	0.50	8.78	8.16
95th-Percentile Queue Length [ft/ln]	62.67	49.22	48.98	208.33	64.12	62.74	19.64	199.08	124.49	12.53	219.53	204.00

Movement, Approach, & Intersection Results

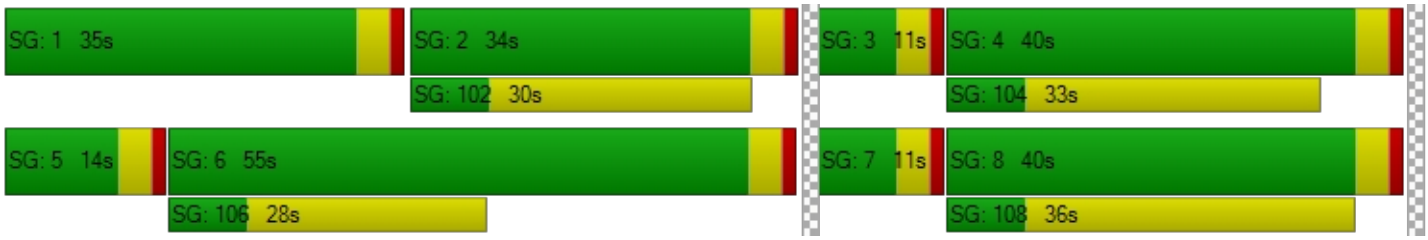
d_M, Delay for Movement [s/veh]	56.64	35.09	35.11	39.53	21.04	21.06	55.10	33.99	33.11	54.37	35.16	35.91
Movement LOS	E	D	D	D	C	C	E	C	C	D	D	D
d_A, Approach Delay [s/veh]	41.85			30.87			34.90			36.33		
Approach LOS	D			C			C			D		
d_I, Intersection Delay [s/veh]	35.00											
Intersection LOS	D											
Intersection V/C	0.299											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	2.436	2.483	2.758	2.683
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	500	850	600	600
d_b, Bicycle Delay [s]	33.75	19.84	29.40	29.40
l_b,int, Bicycle LOS Score for Intersection	1.673	1.847	2.001	1.905
Bicycle LOS	A	A	B	A

Sequence

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



Intersection Level Of Service Report
Intersection 6: Emma Ln (NS) at Iris Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	29.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.148

Intersection Setup

Name	Emma Ln			Emma Ln			Iris Ave			Iris 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 Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	75.00	150.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Emma Ln			Emma Ln			Iris Ave			Iris Ave		
Base Volume Input [veh/h]	22	1	17	1	1	0	1	533	49	29	362	1
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	22	1	17	1	1	0	1	533	49	29	362	1
Peak Hour Factor	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
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	0	5	0	0	0	0	157	14	9	106	0
Total Analysis Volume [veh/h]	26	1	20	1	1	0	1	627	58	34	426	1
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	0.15	0.01	0.04	0.01	0.01	0.00	0.00	0.01	0.00	0.04	0.00	0.00
d_M, Delay for Movement [s/veh]	29.06	26.88	16.04	27.62	25.06	11.00	8.20	0.00	0.00	9.14	0.00	0.00
Movement LOS	D	D	C	D	D	B	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.70	0.70	0.70	0.04	0.04	0.04	0.00	0.00	0.00	0.12	0.00	0.00
95th-Percentile Queue Length [ft/ln]	17.61	17.61	17.61	0.89	0.89	0.89	0.07	0.00	0.00	2.93	0.00	0.00
d_A, Approach Delay [s/veh]	23.47			26.34			0.01			0.67		
Approach LOS	C			D			A			A		
d_I, Intersection Delay [s/veh]	1.23											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 7: Perris Blvd (NS) at John F Kennedy Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	39.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.517

Intersection Setup

Name	Perris Blvd						John F Kennedy Dr			John F Kennedy Dr		
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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	160.00	100.00	100.00	145.00	100.00	100.00	90.00	100.00	100.00	145.00	100.00	100.00
Speed [mph]	40.00			30.00			40.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd						John F Kennedy Dr			John F Kennedy Dr		
Base Volume Input [veh/h]	142	900	129	97	880	59	72	259	112	161	196	72
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	142	900	129	97	880	59	72	259	112	161	196	72
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
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]	38	239	34	26	234	16	19	69	30	43	52	19
Total Analysis Volume [veh/h]	151	957	137	103	936	63	77	276	119	171	209	77
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	21	47	0	15	41	0	16	35	0	23	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	29	0	0	29	0	0	24	0	0	26	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	C	L	C	C	L	C	R	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	43	43	11	37	37	12	31	31	19	38	38
g / C, Green / Cycle	0.14	0.36	0.36	0.09	0.31	0.31	0.10	0.26	0.26	0.16	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.09	0.21	0.21	0.06	0.19	0.19	0.04	0.08	0.08	0.10	0.06	0.05
s, saturation flow rate [veh/h]	1767	3532	1739	1767	3532	1796	1767	3532	1577	1767	3532	1577
c, Capacity [veh/h]	250	1266	623	162	1089	554	177	912	407	280	1118	499
d1, Uniform Delay [s]	48.34	31.17	31.18	52.57	35.32	35.34	50.81	35.80	35.70	47.06	29.78	29.46
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	10.34	1.94	3.91	17.54	2.52	4.92	7.64	0.85	1.81	9.60	0.37	0.66
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	0.60	0.58	0.58	0.64	0.61	0.61	0.44	0.30	0.29	0.61	0.19	0.15
d, Delay for Lane Group [s/veh]	58.68	33.11	35.09	70.11	37.85	40.26	58.46	36.66	37.51	56.65	30.15	30.11
Lane Group LOS	E	C	D	E	D	D	E	D	D	E	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.89	8.69	8.91	3.79	8.60	9.13	2.52	3.31	2.96	5.38	2.19	1.65
50th-Percentile Queue Length [ft/ln]	122.30	217.14	222.65	94.64	214.91	228.26	63.04	82.73	73.94	134.56	54.79	41.16
95th-Percentile Queue Length [veh/ln]	8.52	13.52	13.80	6.81	13.40	14.09	4.54	5.96	5.32	9.19	3.94	2.96
95th-Percentile Queue Length [ft/ln]	212.98	337.97	345.01	170.34	335.12	352.14	113.47	148.92	133.10	229.67	98.61	74.09

Movement, Approach, & Intersection Results

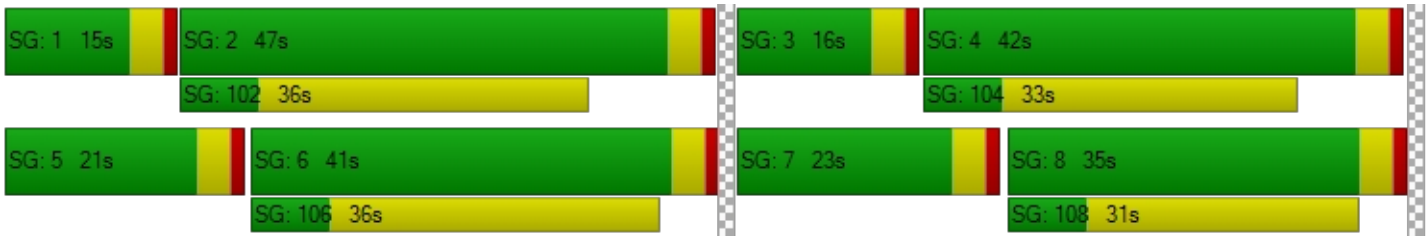
d_M, Delay for Movement [s/veh]	58.68	33.57	35.09	70.11	38.56	40.26	58.46	36.66	37.51	56.65	30.15	30.11
Movement LOS	E	C	D	E	D	D	E	D	D	E	C	C
d_A, Approach Delay [s/veh]	36.78			41.60			40.43			40.06		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	39.39											
Intersection LOS	D											
Intersection V/C	0.517											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.067	2.916	2.661	2.704
Crosswalk LOS	C	C	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	617	517	633
d_b, Bicycle Delay [s]	24.70	28.70	33.00	28.02
l_b,int, Bicycle LOS Score for Intersection	2.244	2.166	1.949	1.937
Bicycle LOS	B	B	A	A

Sequence

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



Intersection Level Of Service Report
Intersection 8: Perris Blvd (NS) at Gentian Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	26.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.430

Intersection Setup

Name	Perris Blvd			Perris Blvd			Gentian Ave			Gentian 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 Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			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	Perris Blvd			Perris Blvd			Gentian Ave			Gentian Ave		
Base Volume Input [veh/h]	81	979	53	34	947	28	18	40	99	39	21	29
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	81	979	53	34	947	28	18	40	99	39	21	29
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	22	266	14	9	257	8	5	11	27	11	6	8
Total Analysis Volume [veh/h]	88	1064	58	37	1029	30	20	43	108	42	23	32
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	18	65	0	11	58	0	0	23	0	0	21	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	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	C	L	C	C	L	C	R	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	61	61	7	54	54	19	19	19	17
g / C, Green / Cycle	0.12	0.51	0.51	0.06	0.45	0.45	0.16	0.16	0.16	0.14
(v / s)_i Volume / Saturation Flow Rate	0.05	0.21	0.21	0.02	0.20	0.20	0.01	0.02	0.07	0.06
s, saturation flow rate [veh/h]	1767	3532	1806	1767	3532	1828	1767	1855	1577	1718
c, Capacity [veh/h]	206	1795	918	103	1589	823	280	294	250	243
d1, Uniform Delay [s]	49.27	18.36	18.37	54.34	22.62	22.62	42.99	43.51	45.63	46.85
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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
d2, Incremental Delay [s]	6.35	0.70	1.38	9.47	0.88	1.70	0.49	1.05	5.38	4.82
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
Rp, platoon ratio	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

Lane Group Results

X, volume / capacity	0.43	0.41	0.41	0.36	0.44	0.44	0.07	0.15	0.43	0.40
d, Delay for Lane Group [s/veh]	55.62	19.07	19.74	63.82	23.50	24.32	43.49	44.56	51.01	51.67
Lane Group LOS	E	B	B	E	C	C	D	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	2.76	6.20	6.52	1.32	6.61	7.04	0.55	1.20	3.32	2.95
50th-Percentile Queue Length [ft/ln]	69.01	155.01	162.98	33.07	165.34	176.04	13.81	30.09	82.95	73.68
95th-Percentile Queue Length [veh/ln]	4.97	10.28	10.71	2.38	10.83	11.39	0.99	2.17	5.97	5.30
95th-Percentile Queue Length [ft/ln]	124.22	257.10	267.66	59.52	270.78	284.84	24.85	54.16	149.31	132.62

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.62	19.27	19.74	63.82	23.77	24.32	43.49	44.56	51.01	51.67	51.67	51.67
Movement LOS	E	B	B	E	C	C	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	21.94			25.13			48.51			51.67		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	26.18											
Intersection LOS	C											
Intersection V/C	0.430											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.107	3.070	2.208	1.862
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1017	900	317	283
d_b, Bicycle Delay [s]	14.50	18.15	42.50	44.20
l_b,int, Bicycle LOS Score for Intersection	2.225	2.162	1.842	1.720
Bicycle LOS	B	B	A	A

Sequence

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

Intersection Level Of Service Report
Intersection 9: Perris Blvd (NS) at Santiago Dr (EW)

Control Type:	Two-way stop	Delay (sec / veh):	199.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name	Perris Bllvd			Perris Blvd			Santiago Dr			Santiago Dr		
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 Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Perris Bllvd			Perris Blvd			Santiago Dr			Santiago Dr		
Base Volume Input [veh/h]	1	1067	47	104	997	0	1	0	0	21	0	63
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	1	1067	47	104	997	0	1	0	0	21	0	63
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]	0	281	12	27	262	0	0	0	0	6	0	17
Total Analysis Volume [veh/h]	1	1123	49	109	1049	0	1	0	0	22	0	66
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Free	Free	Stop	Stop
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	0.00	0.01	0.00	0.34	0.01	0.00	0.02	0.00	0.00	0.35	0.00	0.17
d_M, Delay for Movement [s/veh]	14.82	0.00	0.00	21.93	0.00	0.00	69.14	185.23	14.61	83.96	199.02	35.64
Movement LOS	B	A	A	C	A	A	F	F	B	F	F	E
95th-Percentile Queue Length [veh/ln]	0.01	0.00	0.00	1.47	0.00	0.00	0.05	0.05	0.05	2.61	2.61	2.61
95th-Percentile Queue Length [ft/ln]	0.20	0.00	0.00	36.65	0.00	0.00	1.33	1.33	1.33	65.24	65.24	65.24
d_A, Approach Delay [s/veh]	0.01			2.06			69.14			47.72		
Approach LOS	A			A			F			E		
d_I, Intersection Delay [s/veh]	2.76											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 10: Perris Blvd (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	42.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.744

Intersection Setup

Name	Perris Blvd			Perris Bllvd			Iris Ave			Iris 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 Pocket	0	0	0	0	0	0	0	0	0	0	0	0
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
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd			Perris Bllvd			Iris Ave			Iris Ave		
Base Volume Input [veh/h]	158	956	392	195	758	18	36	381	141	247	318	105
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	158	956	392	195	758	18	36	381	141	247	318	105
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
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]	40	244	100	50	193	5	9	97	36	63	81	27
Total Analysis Volume [veh/h]	161	976	400	199	773	18	37	389	144	252	324	107
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	22	44	0	22	44	0	11	28	0	26	43	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	40	40	18	40	40	7	24	24	22	39	39
g / C, Green / Cycle	0.15	0.33	0.33	0.15	0.33	0.33	0.06	0.20	0.20	0.18	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.09	0.19	0.25	0.11	0.14	0.14	0.02	0.15	0.15	0.14	0.09	0.07
s, saturation flow rate [veh/h]	1810	5176	1615	1810	3618	1878	1810	1900	1728	1810	3618	1615
c, Capacity [veh/h]	271	1725	538	271	1206	626	106	380	346	332	1176	525
d1, Uniform Delay [s]	47.58	32.86	35.45	48.71	31.15	31.15	54.31	44.95	45.08	46.49	30.03	29.28
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	9.21	1.35	8.97	16.07	1.13	2.17	8.93	11.63	13.34	15.05	0.58	0.88
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	0.59	0.57	0.74	0.73	0.43	0.43	0.35	0.73	0.74	0.76	0.28	0.20
d, Delay for Lane Group [s/veh]	56.79	34.21	44.42	64.78	32.28	33.32	63.25	56.59	58.41	61.54	30.61	30.15
Lane Group LOS	E	C	D	E	C	C	E	E	E	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	5.07	7.70	11.26	6.75	5.86	6.27	1.31	8.72	8.22	8.31	3.46	2.30
50th-Percentile Queue Length [ft/ln]	126.78	192.40	281.54	168.74	146.51	156.84	32.82	218.00	205.55	207.83	86.60	57.44
95th-Percentile Queue Length [veh/ln]	8.76	12.25	16.76	11.01	9.83	10.38	2.36	13.56	12.92	13.04	6.24	4.14
95th-Percentile Queue Length [ft/ln]	219.11	306.14	419.12	275.26	245.76	259.54	59.08	339.07	323.11	326.04	155.89	103.39

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.79	34.21	44.42	64.78	32.62	33.32	63.25	57.11	58.41	61.54	30.61	30.15
Movement LOS	E	C	D	E	C	C	E	E	E	E	C	C
d_A, Approach Delay [s/veh]	39.23			39.10			57.84			41.95		
Approach LOS	D			D			E			D		
d_I, Intersection Delay [s/veh]	42.49											
Intersection LOS	D											
Intersection V/C	0.744											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.234	3.049	2.627	2.874
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	400	650
d_b, Bicycle Delay [s]	26.67	26.67	38.40	27.34
l_b,int, Bicycle LOS Score for Intersection	2.405	2.104	2.030	2.123
Bicycle LOS	B	B	B	B

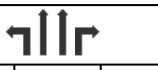
Sequence

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

Intersection Level Of Service Report
Intersection 11: Perris Blvd (NS) at Harley Knox Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	35.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.551

Intersection Setup

Name	Perris Blvd			Perris Blvd			Harley Knox Blvd			Harley Knox Blvd		
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 Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	320.00	100.00	230.00	215.00	100.00	210.00	300.00	100.00	300.00	335.00	100.00	230.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd			Perris Blvd			Harley Knox Blvd			Harley Knox Blvd		
Base Volume Input [veh/h]	57	744	4	149	974	300	255	137	68	8	101	135
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
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]	57	744	4	149	974	300	255	137	68	8	101	135
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	15	202	1	40	265	82	69	37	18	2	27	37
Total Analysis Volume [veh/h]	62	809	4	162	1059	326	277	149	74	9	110	147
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	11	45	0	14	48	0	38	50	0	11	23	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	R	L	C	R	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	41	41	10	44	44	34	46	46	7	19	19
g / C, Green / Cycle	0.06	0.34	0.34	0.08	0.37	0.37	0.28	0.38	0.38	0.06	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.02	0.16	0.00	0.05	0.21	0.21	0.16	0.04	0.05	0.00	0.02	0.09
s, saturation flow rate [veh/h]	3431	5053	1577	3431	5053	1577	1767	3532	1577	3431	5053	1577
c, Capacity [veh/h]	200	1726	539	286	1853	578	501	1354	604	200	800	250
d1, Uniform Delay [s]	54.18	30.96	26.07	52.92	30.45	30.34	36.55	23.82	23.94	53.34	43.45	46.87
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	3.99	0.92	0.02	7.91	1.29	3.95	4.36	0.16	0.42	0.42	0.36	9.81
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	0.31	0.47	0.01	0.57	0.57	0.56	0.55	0.11	0.12	0.04	0.14	0.59
d, Delay for Lane Group [s/veh]	58.17	31.88	26.10	60.83	31.74	34.29	40.91	23.99	24.36	53.77	43.81	56.68
Lane Group LOS	E	C	C	E	C	C	D	C	C	D	D	E
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.99	6.05	0.08	2.61	8.06	7.84	7.28	1.35	1.39	0.14	0.94	4.65
50th-Percentile Queue Length [ft/ln]	24.73	151.19	1.94	65.22	201.42	196.12	182.07	33.81	34.72	3.43	23.61	116.26
95th-Percentile Queue Length [veh/ln]	1.78	10.08	0.14	4.70	12.71	12.44	11.71	2.43	2.50	0.25	1.70	8.19
95th-Percentile Queue Length [ft/ln]	44.51	252.01	3.49	117.39	317.80	310.95	292.72	60.86	62.50	6.18	42.50	204.67

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.17	31.88	26.10	60.83	31.74	34.29	40.91	23.99	24.36	53.77	43.81	56.68
Movement LOS	E	C	C	E	C	C	D	C	C	D	D	E
d_A, Approach Delay [s/veh]	33.71			35.32			33.42			51.26		
Approach LOS	C			D			C			D		
d_I, Intersection Delay [s/veh]	35.91											
Intersection LOS	D											
Intersection V/C	0.551											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.191	3.315	2.816	2.957
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	683	733	767	317
d_b, Bicycle Delay [s]	26.00	24.07	22.82	42.50
l_b,int, Bicycle LOS Score for Intersection	2.041	2.410	1.972	1.706
Bicycle LOS	B	B	A	A

Sequence

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

Opening Year (2024) Without Project

Intersection Level Of Service Report
Intersection 1: Heacock St (NS) at Cactus Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	53.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.894

Intersection Setup

Name	Heacock St			Heacock St			Cactus 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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	320.00	100.00	100.00	100.00	100.00	100.00	140.00	100.00	100.00	140.00	100.00	100.00
Speed [mph]	45.00			45.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Heacock St			Heacock St			Cactus Ave					
Base Volume Input [veh/h]	719	542	11	53	289	84	75	495	460	9	975	50
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	22	37	0	0	87	0	0	10	8	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	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]	784	612	12	56	393	89	80	535	496	10	1066	53
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	213	166	3	15	107	24	22	145	135	3	290	14
Total Analysis Volume [veh/h]	852	665	13	61	427	97	87	582	539	11	1159	58
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	37	47	0	12	22	0	12	49	49	12	49	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	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	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	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	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	33	43	43	8	18	18	8	45	45	8	45	45
g / C, Green / Cycle	0.28	0.36	0.36	0.07	0.15	0.15	0.07	0.38	0.38	0.07	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.25	0.18	0.18	0.03	0.15	0.15	0.05	0.16	0.34	0.01	0.33	0.33
s, saturation flow rate [veh/h]	3431	1855	1842	1767	1855	1738	1767	3532	1577	1767	1855	1824
c, Capacity [veh/h]	943	665	660	118	278	261	118	1324	591	118	696	684
d1, Uniform Delay [s]	41.96	30.24	30.26	54.14	50.71	50.80	54.97	28.06	35.61	52.59	35.01	35.03
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	13.56	2.80	2.83	15.34	46.26	50.22	33.60	1.06	20.66	1.57	15.03	15.34
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	0.90	0.51	0.51	0.52	0.97	0.98	0.74	0.44	0.91	0.09	0.88	0.88
d, Delay for Lane Group [s/veh]	55.51	33.04	33.09	69.47	96.96	101.02	88.58	29.12	56.27	54.16	50.04	50.37
Lane Group LOS	E	C	C	E	F	F	F	C	E	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	13.45	7.93	7.90	2.24	11.37	11.03	3.64	6.29	17.72	0.36	19.35	19.11
50th-Percentile Queue Length [ft/ln]	336.31	198.26	197.56	56.05	284.36	275.81	91.02	157.27	443.04	9.09	483.71	477.79
95th-Percentile Queue Length [veh/ln]	19.47	12.55	12.51	4.04	16.91	16.48	6.55	10.40	24.63	0.65	26.56	26.28
95th-Percentile Queue Length [ft/ln]	486.69	313.72	312.82	100.90	422.64	411.99	163.83	260.11	615.64	16.37	664.06	657.03

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.51	33.06	33.09	69.47	98.46	101.02	88.58	29.12	56.27	54.16	50.20	50.37
Movement LOS	E	C	C	E	F	F	F	C	E	D	D	D
d_A, Approach Delay [s/veh]	45.57			95.86			45.52			50.24		
Approach LOS	D			F			D			D		
d_I, Intersection Delay [s/veh]	53.28											
Intersection LOS	D											
Intersection V/C	0.894											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.078	2.722	3.185	2.681
Crosswalk LOS	C	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	300	750	750
d_b, Bicycle Delay [s]	24.70	43.35	23.44	23.44
l_b,int, Bicycle LOS Score for Intersection	2.822	2.042	2.556	2.573
Bicycle LOS	C	B	B	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: Heacock St (NS) at John F Kennedy Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	42.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.802

Intersection Setup

Name	Heacock St			Heacock St			John F Kennedy Dr			John F Kennedy Dr		
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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	200.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Heacock St			Heacock St			John F Kennedy Dr			John F Kennedy Dr		
Base Volume Input [veh/h]	27	929	44	127	575	17	62	37	46	33	18	248
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	32	0	0	12	83	27	42	3	0	126	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]	37	1017	47	135	622	101	93	81	52	35	145	263
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
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]	11	306	14	41	187	30	28	24	16	11	44	79
Total Analysis Volume [veh/h]	45	1225	57	163	749	122	112	98	63	42	175	317
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	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	12	59	0	20	67	0	13	36	0	15	38	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	R	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	55	55	16	63	63	9	32	32	11	34	34
g / C, Green / Cycle	0.06	0.42	0.42	0.12	0.48	0.48	0.07	0.25	0.25	0.08	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.03	0.35	0.04	0.09	0.24	0.24	0.06	0.05	0.04	0.02	0.09	0.20
s, saturation flow rate [veh/h]	1767	3532	1577	1767	1855	1765	1767	1855	1577	1767	1855	1577
c, Capacity [veh/h]	109	1494	667	217	899	856	122	457	388	149	485	412
d1, Uniform Delay [s]	58.74	33.12	22.45	55.07	22.73	22.74	60.12	39.00	38.48	55.79	39.14	44.37
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	11.22	5.15	0.25	20.91	1.96	2.06	61.19	1.07	0.90	4.64	2.08	12.91
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	0.41	0.82	0.09	0.75	0.50	0.50	0.92	0.21	0.16	0.28	0.36	0.77
d, Delay for Lane Group [s/veh]	69.96	38.28	22.70	75.97	24.69	24.79	121.32	40.07	39.37	60.43	41.22	57.27
Lane Group LOS	E	D	C	E	C	C	F	D	D	E	D	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.74	17.26	1.07	6.31	9.33	8.90	5.67	2.58	1.65	1.48	4.83	10.82
50th-Percentile Queue Length [ft/ln]	43.47	431.57	26.70	157.73	233.23	222.62	141.80	64.60	41.23	37.02	120.80	270.62
95th-Percentile Queue Length [veh/ln]	3.13	24.08	1.92	10.43	14.34	13.80	9.58	4.65	2.97	2.67	8.44	16.22
95th-Percentile Queue Length [ft/ln]	78.25	601.92	48.06	260.71	358.46	344.97	239.44	116.28	74.21	66.64	210.92	405.51

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.96	38.28	22.70	75.97	24.73	24.79	121.32	40.07	39.37	60.43	41.22	57.27
Movement LOS	E	D	C	E	C	C	F	D	D	E	D	E
d_A, Approach Delay [s/veh]	38.68			32.82			73.24			52.26		
Approach LOS	D			C			E			D		
d_I, Intersection Delay [s/veh]	42.03											
Intersection LOS	D											
Intersection V/C	0.802											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	0.0	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]	0.00	54.47	0.00	54.47
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.126	0.000	2.391
Crosswalk LOS	F	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	846	969	492	523
d_b, Bicycle Delay [s]	21.63	17.27	36.94	35.45
l_b,int, Bicycle LOS Score for Intersection	2.654	2.413	2.010	2.000
Bicycle LOS	B	B	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 3: Heacock St (NS) at Gentian Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	20.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.476

Intersection Setup

Name	Heacock St		Heacock St		Gentian Ave	
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 Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	140.00	100.00
Speed [mph]	50.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Heacock St		Heacock St		Gentian Ave	
Base Volume Input [veh/h]	737	10	62	558	12	144
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	0	10	5	0	29
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]	792	11	76	596	13	182
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	239	3	23	180	4	55
Total Analysis Volume [veh/h]	954	13	92	718	16	219
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	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	7	0	7	7	7	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	4.0	0.0	4.0	4.0	4.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	77	0	17	94	36	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	3.0	3.0	3.0	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
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	C	R	L	C	L	R
C, Cycle Length [s]	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00
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	3.00	3.00	3.00
g_i, Effective Green Time [s]	72	72	12	89	31	31
g / C, Green / Cycle	0.55	0.55	0.09	0.68	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.27	0.01	0.05	0.20	0.01	0.14
s, saturation flow rate [veh/h]	3532	1577	1767	3532	1767	1577
c, Capacity [veh/h]	1956	873	163	2418	421	376
d1, Uniform Delay [s]	17.73	13.05	56.50	8.12	38.04	43.78
k, delay calibration	0.50	0.50	0.50	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]	0.87	0.03	13.38	0.31	0.17	6.46
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	0.01	0.56	0.30	0.04	0.58
d, Delay for Lane Group [s/veh]	18.60	13.08	69.87	8.43	38.21	50.23
Lane Group LOS	B	B	E	A	D	D
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.29	0.17	3.44	3.63	0.41	6.82
50th-Percentile Queue Length [ft/ln]	207.19	4.23	86.03	90.77	10.25	170.48
95th-Percentile Queue Length [veh/ln]	13.01	0.30	6.19	6.54	0.74	11.10
95th-Percentile Queue Length [ft/ln]	325.22	7.61	154.85	163.39	18.44	277.55

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.60	13.08	69.87	8.43	38.21	50.23
Movement LOS	B	B	E	A	D	D
d_A, Approach Delay [s/veh]	18.53		15.41		49.41	
Approach LOS	B		B		D	
d_I, Intersection Delay [s/veh]	20.88					
Intersection LOS	C					
Intersection V/C	0.476					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0
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]	0.00	54.47	54.47
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.954	2.105
Crosswalk LOS	F	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	65.00	65.00	65.00
l_b,int, Bicycle LOS Score for Intersection	4.930	4.801	4.132
Bicycle LOS	E	E	D

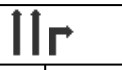
Sequence

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

Intersection Level Of Service Report
Intersection 4: Heacock St (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	34.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.609

Intersection Setup

Name	Heacock St		Heacock St			Iris Ave	
Approach	Northbound		Southbound			Westbound	
Lane Configuration							
Turning Movement	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	2	0	0	1	1
Pocket Length [ft]	100.00	150.00	200.00	100.00	100.00	150.00	300.00
Speed [mph]	50.00		45.00			40.00	
Grade [%]	0.00		0.00			0.00	
Curb Present	No		No			No	
Crosswalk	No		No			Yes	

Volumes

Name	Heacock St		Heacock St			Iris Ave	
Base Volume Input [veh/h]	347	28	0	217	364	43	408
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.00	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	6	0	5	0	17	11
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	368	36	0	235	386	63	443
Peak Hour Factor	0.8600	0.8600	0.9500	0.8600	0.8600	0.8600	0.8600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	107	10	0	68	112	18	129
Total Analysis Volume [veh/h]	428	42	0	273	449	73	515
Presence of On-Street Parking	No	No	No		No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	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	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Protected	Permissive	Split	Split
Signal group	2	0	0	1	6	7	0
Auxiliary Signal Groups							
Lead / Lag	-	-	-	Lead	-	Lead	-
Minimum Green [s]	7	0	0	7	7	7	0
Maximum Green [s]	30	0	0	30	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	1.0	0.0
Split [s]	28	0	0	20	48	72	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	0	10	10	0
Rest In Walk	No				No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0	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
Detector Length [ft]	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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	24	24	16	44	68	68
g / C, Green / Cycle	0.20	0.20	0.13	0.37	0.57	0.57
(v / s)_i Volume / Saturation Flow Rate	0.12	0.03	0.08	0.13	0.02	0.33
s, saturation flow rate [veh/h]	3532	1577	3431	3532	3431	1577
c, Capacity [veh/h]	706	315	457	1295	1944	893
d1, Uniform Delay [s]	43.70	39.45	48.96	27.57	11.51	16.73
k, delay calibration	0.50	0.50	0.50	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]	3.83	0.88	5.65	0.74	0.04	2.70
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	0.13	0.60	0.35	0.04	0.58
d, Delay for Lane Group [s/veh]	47.53	40.33	54.61	28.31	11.55	19.43
Lane Group LOS	D	D	D	C	B	B
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.95	1.06	4.11	4.65	0.42	9.17
50th-Percentile Queue Length [ft/ln]	148.66	26.59	102.86	116.13	10.60	229.13
95th-Percentile Queue Length [veh/ln]	9.95	1.91	7.41	8.18	0.76	14.13
95th-Percentile Queue Length [ft/ln]	248.63	47.86	185.15	204.49	19.08	353.26

Movement, Approach, & Intersection Results

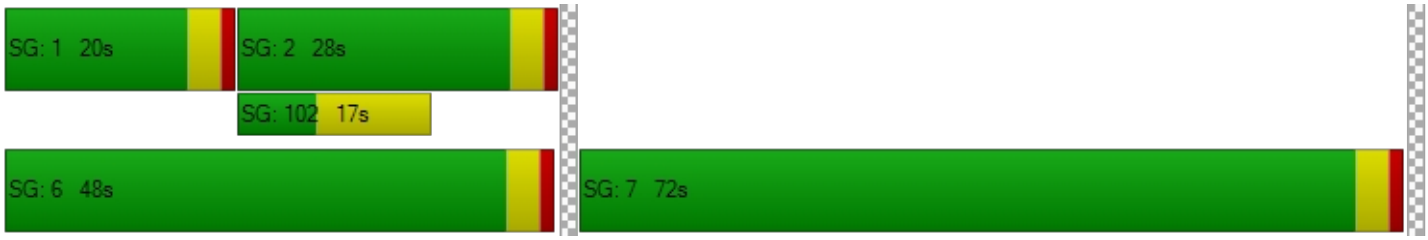
d_M, Delay for Movement [s/veh]	47.53	40.33	54.61	54.61	28.31	11.55	19.43
Movement LOS	D	D	D	D	C	B	B
d_A, Approach Delay [s/veh]	46.89		38.25			18.46	
Approach LOS	D		D			B	
d_I, Intersection Delay [s/veh]	33.99						
Intersection LOS	C						
Intersection V/C	0.609						

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0
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]	0.00	0.00	49.50
I_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.548
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
I_b,int, Bicycle LOS Score for Intersection	4.520	4.503	4.132
Bicycle LOS	E	E	D

Sequence

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



Intersection Level Of Service Report
Intersection 5: Indian St (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	45.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.699

Intersection Setup

Name	Indian St						Iris Ave			Iris 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 Pocket	1	0	0	1	0	0	2	0	1	2	0	0
Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	200.00	150.00	100.00	100.00
Speed [mph]	25.00			40.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indian St						Iris Ave			Iris Ave		
Base Volume Input [veh/h]	52	239	23	222	255	18	53	189	49	15	386	332
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	4	3	1	7	6	2	4	5	9	11	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
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	66	257	27	236	277	25	58	204	57	25	420	354
Peak Hour Factor	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500
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]	22	86	9	79	92	8	19	68	19	8	140	118
Total Analysis Volume [veh/h]	88	343	36	315	369	33	77	272	76	33	560	472
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	14	34	0	29	49	0	11	46	0	11	46	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	23	0	0	21	0	0	29	0	0	26	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	30	30	25	45	45	7	42	42	7	42	42
g / C, Green / Cycle	0.08	0.25	0.25	0.21	0.38	0.38	0.06	0.35	0.35	0.06	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.05	0.10	0.10	0.18	0.11	0.11	0.02	0.08	0.05	0.01	0.30	0.30
s, saturation flow rate [veh/h]	1767	1855	1794	1767	1855	1802	3431	3532	1577	3431	1855	1578
c, Capacity [veh/h]	147	464	449	368	696	676	200	1236	552	200	649	552
d1, Uniform Delay [s]	53.06	37.64	37.68	45.76	26.33	26.34	54.43	27.47	26.63	53.72	36.24	36.26
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	16.64	2.71	2.84	21.75	1.07	1.10	5.51	0.41	0.52	1.77	13.81	15.92
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	0.60	0.41	0.42	0.86	0.29	0.29	0.38	0.22	0.14	0.16	0.86	0.86
d, Delay for Lane Group [s/veh]	69.70	40.35	40.53	67.51	27.40	27.44	59.94	27.88	27.15	55.49	50.04	52.18
Lane Group LOS	E	D	D	E	C	C	E	C	C	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.26	5.13	5.02	11.06	4.21	4.11	1.28	2.87	1.60	0.52	17.09	14.89
50th-Percentile Queue Length [ft/ln]	81.60	128.22	125.59	276.50	105.25	102.63	32.12	71.78	39.94	12.91	427.27	372.21
95th-Percentile Queue Length [veh/ln]	5.88	8.84	8.70	16.51	7.58	7.39	2.31	5.17	2.88	0.93	23.87	21.22
95th-Percentile Queue Length [ft/ln]	146.89	221.08	217.48	412.86	189.38	184.73	57.82	129.21	71.89	23.24	596.77	530.41

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.70	40.43	40.53	67.51	27.42	27.44	59.94	27.88	27.15	55.49	50.06	52.18
Movement LOS	E	D	D	E	C	C	E	C	C	E	D	D
d_A, Approach Delay [s/veh]	45.95			45.03			33.56			51.17		
Approach LOS	D			D			C			D		
d_I, Intersection Delay [s/veh]	45.81											
Intersection LOS	D											
Intersection V/C	0.699											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	2.467	2.732	2.736	2.832
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]	500	750	700	700
d_b, Bicycle Delay [s]	33.75	23.44	25.35	25.35
l_b,int, Bicycle LOS Score for Intersection	1.945	2.151	1.910	2.438
Bicycle LOS	A	B	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 6: Emma Ln (NS) at Iris Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	92.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.681

Intersection Setup

Name	Emma Ln			Emma Ln			Iris Ave			Iris 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 Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	75.00	150.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Emma Ln			Emma Ln			Iris Ave			Iris Ave		
Base Volume Input [veh/h]	51	0	17	0	0	0	0	405	30	6	668	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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	33	0	0	0	7	1	0	20	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
Total Hourly Volume [veh/h]	56	0	18	33	0	0	0	436	33	6	728	12
Peak Hour Factor	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000
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	0	6	10	0	0	0	136	10	2	228	4
Total Analysis Volume [veh/h]	70	0	23	41	0	0	0	545	41	8	910	15
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	0.68	0.00	0.04	0.43	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	91.97	86.24	63.64	68.85	61.74	41.99	9.90	0.00	0.00	8.69	0.00	0.00
Movement LOS	F	F	F	F	F	E	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	4.09	4.09	4.09	1.80	1.80	1.80	0.00	0.00	0.00	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	102.35	102.35	102.35	44.89	44.89	44.89	0.00	0.00	0.00	0.61	0.00	0.00
d_A, Approach Delay [s/veh]	84.96			68.85			0.00			0.07		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	6.53											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: Perris Blvd (NS) at John F Kennedy Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	48.4
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.757

Intersection Setup

Name	Perris Blvd						John F Kennedy Dr			John F Kennedy Dr		
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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	160.00	100.00	100.00	145.00	100.00	100.00	90.00	100.00	100.00	145.00	100.00	100.00
Speed [mph]	40.00			30.00			40.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd						John F Kennedy Dr			John F Kennedy Dr		
Base Volume Input [veh/h]	112	899	218	152	436	22	46	320	59	157	320	125
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	43	130	8	0	145	0	0	27	15	3	83	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]	162	1083	239	161	607	23	49	366	78	169	422	133
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
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]	49	326	72	48	183	7	15	110	23	51	127	40
Total Analysis Volume [veh/h]	195	1305	288	194	731	28	59	441	94	204	508	160
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	19	44	0	20	45	0	11	35	0	21	45	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	29	0	0	29	0	0	24	0	0	26	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	C	L	C	C	L	C	R	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	40	40	16	41	41	7	31	31	17	41	41
g / C, Green / Cycle	0.13	0.33	0.33	0.13	0.34	0.34	0.06	0.26	0.26	0.14	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.11	0.30	0.31	0.11	0.14	0.14	0.03	0.12	0.06	0.12	0.14	0.10
s, saturation flow rate [veh/h]	1767	3532	1689	1767	3532	1820	1767	3532	1577	1767	3532	1577
c, Capacity [veh/h]	221	1177	563	236	1207	622	103	912	407	250	1207	539
d1, Uniform Delay [s]	51.64	38.35	38.43	50.63	30.30	30.31	55.04	37.71	35.10	49.97	30.37	28.94
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	36.38	12.33	22.34	26.70	1.05	2.04	21.08	1.83	1.32	24.50	1.08	1.41
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	0.88	0.91	0.92	0.82	0.41	0.42	0.57	0.48	0.23	0.82	0.42	0.30
d, Delay for Lane Group [s/veh]	88.02	50.68	60.76	77.32	31.35	32.35	76.12	39.54	36.42	74.47	31.45	30.35
Lane Group LOS	F	D	E	E	C	C	E	D	D	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.89	16.63	17.56	7.41	5.73	6.10	2.32	5.62	2.29	7.48	5.63	3.48
50th-Percentile Queue Length [ft/ln]	197.34	415.71	439.01	185.35	143.34	152.40	57.89	140.50	57.18	186.98	140.84	87.08
95th-Percentile Queue Length [veh/ln]	12.50	23.32	24.43	11.88	9.66	10.15	4.17	9.51	4.12	11.96	9.53	6.27
95th-Percentile Queue Length [ft/ln]	312.53	582.90	610.82	296.99	241.52	253.63	104.21	237.70	102.92	299.11	238.16	156.74

Movement, Approach, & Intersection Results

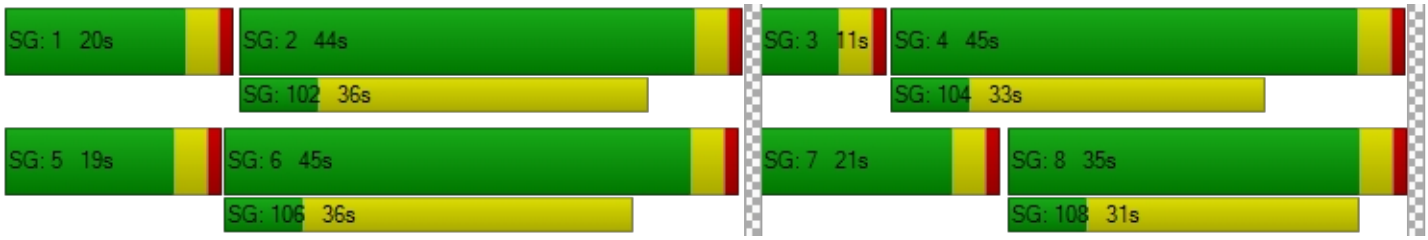
d_M, Delay for Movement [s/veh]	88.02	52.45	60.76	77.32	31.67	32.35	76.12	39.54	36.42	74.47	31.45	30.35
Movement LOS	F	D	E	E	C	C	E	D	D	E	C	C
d_A, Approach Delay [s/veh]	57.67			40.98			42.68			41.31		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	48.38											
Intersection LOS	D											
Intersection V/C	0.757											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.131	2.953	2.754	2.904
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	683	517	683
d_b, Bicycle Delay [s]	26.67	26.00	33.00	26.00
l_b,int, Bicycle LOS Score for Intersection	2.543	2.084	2.050	2.279
Bicycle LOS	B	B	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 8: Perris Blvd (NS) at Gentian Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	33.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.499

Intersection Setup

Name	Perris Blvd			Perris Blvd			Gentian Ave			Gentian 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 Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			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	Perris Blvd			Perris Blvd			Gentian Ave			Gentian Ave		
Base Volume Input [veh/h]	102	870	24	12	468	32	37	26	131	34	54	31
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	152	0	0	153	10	29	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]	108	1074	25	13	649	44	68	28	139	36	57	33
Peak Hour Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
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]	31	312	7	4	189	13	20	8	40	10	17	10
Total Analysis Volume [veh/h]	126	1249	29	15	755	51	79	33	162	42	66	38
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	22	55	0	11	44	0	0	29	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	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	C	L	C	C	L	C	R	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	51	51	7	40	40	25	25	25	21
g / C, Green / Cycle	0.15	0.43	0.43	0.06	0.33	0.33	0.21	0.21	0.21	0.18
(v / s)_i Volume / Saturation Flow Rate	0.07	0.24	0.24	0.01	0.15	0.15	0.04	0.02	0.10	0.08
s, saturation flow rate [veh/h]	1767	3532	1833	1767	3532	1796	1767	1855	1577	1749
c, Capacity [veh/h]	265	1501	779	103	1177	599	368	386	328	306
d1, Uniform Delay [s]	46.68	26.04	26.04	53.66	31.41	31.44	39.36	38.29	41.91	44.56
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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
d2, Incremental Delay [s]	6.00	1.52	2.90	2.95	1.26	2.49	1.33	0.43	5.21	5.24
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
Rp, platoon ratio	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

Lane Group Results

X, volume / capacity	0.48	0.56	0.56	0.15	0.45	0.46	0.21	0.09	0.49	0.48
d, Delay for Lane Group [s/veh]	52.68	27.56	28.94	56.61	32.67	33.94	40.70	38.72	47.12	49.80
Lane Group LOS	D	C	C	E	C	C	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	3.80	8.93	9.57	0.51	6.06	6.42	2.10	0.84	4.76	4.33
50th-Percentile Queue Length [ft/ln]	95.06	223.27	239.31	12.64	151.62	160.38	52.47	21.10	119.01	108.27
95th-Percentile Queue Length [veh/ln]	6.84	13.83	14.65	0.91	10.10	10.57	3.78	1.52	8.34	7.74
95th-Percentile Queue Length [ft/ln]	171.11	345.80	366.17	22.75	252.59	264.23	94.44	37.98	208.46	193.60

Movement, Approach, & Intersection Results

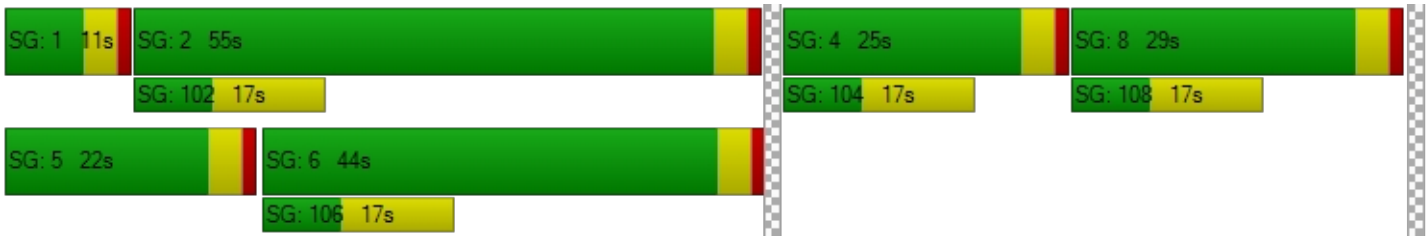
d_M, Delay for Movement [s/veh]	52.68	28.01	28.94	56.61	33.04	33.94	40.70	38.72	47.12	49.80	49.80	49.80
Movement LOS	D	C	C	E	C	C	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	30.24			33.53			44.26			49.80		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	33.79											
Intersection LOS	C											
Intersection V/C	0.499											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.101	3.065	2.250	1.855
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	850	667	417	350
d_b, Bicycle Delay [s]	19.84	26.67	37.60	40.84
l_b,int, Bicycle LOS Score for Intersection	2.332	2.011	2.012	1.801
Bicycle LOS	B	B	B	A

Sequence

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



Intersection Level Of Service Report
Intersection 9: Perris Blvd (NS) at Santiago Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	16.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.406

Intersection Setup

Name	Perris Bllvd			Perris Blvd			Santiago Dr			Santiago Dr		
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 Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Perris Bllvd			Perris Blvd			Santiago Dr			Santiago Dr		
Base Volume Input [veh/h]	0	921	10	60	576	1	0	0	0	24	0	96
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	152	0	0	153	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]	0	1128	11	64	764	1	0	0	0	25	0	102
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
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]	0	313	3	18	212	0	0	0	0	7	0	28
Total Analysis Volume [veh/h]	0	1253	12	71	849	1	0	0	0	28	0	113
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	12	74	0	17	79	0	0	29	0	0	29	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	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	C	L	C	C	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	7	69	69	12	74	74	24	24
g / C, Green / Cycle	0.06	0.58	0.58	0.10	0.62	0.62	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.00	0.24	0.24	0.04	0.16	0.16	0.00	0.09
s, saturation flow rate [veh/h]	1767	3532	1846	1767	3532	1854	1855	1566
c, Capacity [veh/h]	103	2031	1061	177	2178	1143	401	349
d1, Uniform Delay [s]	0.00	14.17	14.17	50.63	10.47	10.47	0.00	42.06
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.00	0.61	1.17	6.68	0.28	0.54	0.00	3.45
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.00	0.41	0.41	0.40	0.26	0.26	0.00	0.40
d, Delay for Lane Group [s/veh]	0.00	14.78	15.34	57.32	10.75	11.01	0.00	45.50
Lane Group LOS	A	B	B	E	B	B	A	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.00	5.93	6.36	2.28	3.13	3.37	0.00	4.04
50th-Percentile Queue Length [ft/ln]	0.00	148.27	159.11	57.08	78.37	84.31	0.00	101.07
95th-Percentile Queue Length [veh/ln]	0.00	9.92	10.50	4.11	5.64	6.07	0.00	7.28
95th-Percentile Queue Length [ft/ln]	0.00	248.12	262.54	102.75	141.06	151.76	0.00	181.93

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	14.97	15.34	57.32	10.84	11.01	0.00	0.00	0.00	45.50	45.50	45.50
Movement LOS	A	B	B	E	B	B	A	A	A	D	D	D
d_A, Approach Delay [s/veh]	14.97			14.42			0.00			45.50		
Approach LOS	B			B			A			D		
d_I, Intersection Delay [s/veh]	16.61											
Intersection LOS	B											
Intersection V/C	0.406											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	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]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1150	1233	400	400
d_b, Bicycle Delay [s]	10.84	8.82	38.40	38.40
l_b,int, Bicycle LOS Score for Intersection	2.255	2.066	1.560	1.792
Bicycle LOS	B	B	A	A

Sequence

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

Intersection Level Of Service Report
Intersection 10: Perris Blvd (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	45.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.808

Intersection Setup

Name	Perris Blvd			Perris Bllvd			Iris Ave			Iris 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 Pocket	0	0	0	0	0	0	0	0	0	0	0	0
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
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd			Perris Bllvd			Iris Ave			Iris Ave		
Base Volume Input [veh/h]	189	715	269	124	444	38	25	295	80	268	507	129
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	137	44	5	134	14	4	14	22	51	10	11
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]	208	895	329	136	605	54	31	327	107	335	547	148
Peak Hour Factor	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400
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]	62	266	98	40	180	16	9	97	32	100	163	44
Total Analysis Volume [veh/h]	248	1065	392	162	720	64	37	389	127	399	651	176
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]	115
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	26	37	0	19	30	0	11	26	0	33	48	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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]	115	115	115	115	115	115	115	115	115	115	115	115
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	33	33	15	26	26	7	22	22	29	44	44
g / C, Green / Cycle	0.19	0.29	0.29	0.13	0.23	0.23	0.06	0.19	0.19	0.25	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.14	0.21	0.24	0.09	0.14	0.14	0.02	0.14	0.14	0.22	0.18	0.11
s, saturation flow rate [veh/h]	1810	5176	1615	1810	3618	1822	1810	1900	1743	1810	3618	1615
c, Capacity [veh/h]	346	1485	463	236	818	412	110	363	333	456	1384	618
d1, Uniform Delay [s]	43.58	36.81	38.61	47.75	40.23	40.26	51.77	43.76	43.87	41.25	26.73	24.60
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	12.01	3.00	17.10	15.08	3.77	7.42	8.05	12.43	14.14	20.22	1.15	1.16
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	0.72	0.72	0.85	0.69	0.64	0.64	0.34	0.73	0.75	0.87	0.47	0.28
d, Delay for Lane Group [s/veh]	55.58	39.81	55.70	62.83	43.99	47.68	59.82	56.19	58.00	61.48	27.88	25.75
Lane Group LOS	E	D	E	E	D	D	E	E	E	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.55	9.00	12.15	5.30	6.86	7.37	1.24	8.18	7.77	12.97	6.63	3.39
50th-Percentile Queue Length [ft/ln]	188.85	225.01	303.66	132.42	171.49	184.15	31.12	204.41	194.37	324.16	165.85	84.75
95th-Percentile Queue Length [veh/ln]	12.06	13.92	17.86	9.07	11.15	11.82	2.24	12.87	12.35	18.87	10.86	6.10
95th-Percentile Queue Length [ft/ln]	301.54	348.01	446.56	226.78	278.87	295.42	56.02	321.65	308.69	471.80	271.46	152.54

Movement, Approach, & Intersection Results

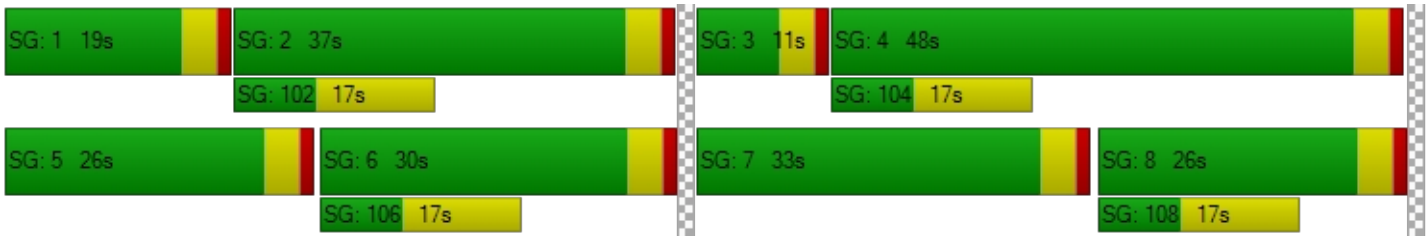
d_M, Delay for Movement [s/veh]	55.58	39.81	55.70	62.83	45.01	47.68	59.82	56.76	58.00	61.48	27.88	25.75
Movement LOS	E	D	E	E	D	D	E	E	E	E	C	C
d_A, Approach Delay [s/veh]	45.76			48.25			57.25			38.51		
Approach LOS	D			D			E			D		
d_I, Intersection Delay [s/veh]	45.72											
Intersection LOS	D											
Intersection V/C	0.808											

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]	47.03	47.03	47.03	47.03
l_p,int, Pedestrian LOS Score for Intersection	3.277	3.070	2.755	2.993
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	574	452	383	765
d_b, Bicycle Delay [s]	29.23	34.44	37.60	21.92
l_b,int, Bicycle LOS Score for Intersection	2.497	2.080	2.016	2.571
Bicycle LOS	B	B	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 11: Perris Blvd (NS) at Harley Knox Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	37.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.673

Intersection Setup

Name	Perris Blvd			Perris Blvd			Harley Knox Blvd			Harley Knox Blvd		
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 Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	320.00	100.00	230.00	215.00	100.00	210.00	300.00	100.00	300.00	335.00	100.00	230.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd			Perris Blvd			Harley Knox Blvd			Harley Knox Blvd		
Base Volume Input [veh/h]	97	995	12	61	659	228	184	41	131	25	131	227
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	155	28	22	148	47	13	42	0	25	38	20
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]	103	1210	41	87	847	289	208	85	139	52	177	261
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
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]	27	322	11	23	225	77	55	23	37	14	47	69
Total Analysis Volume [veh/h]	110	1287	44	93	901	307	221	90	148	55	188	278
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	11	47	0	11	47	0	27	51	0	11	35	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	R	L	C	R	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	43	43	7	43	43	23	47	47	7	31	31
g / C, Green / Cycle	0.06	0.36	0.36	0.06	0.36	0.36	0.19	0.39	0.39	0.06	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.03	0.25	0.03	0.03	0.18	0.19	0.13	0.03	0.09	0.02	0.04	0.18
s, saturation flow rate [veh/h]	3431	5053	1577	3431	5053	1577	1767	3532	1577	3431	5053	1577
c, Capacity [veh/h]	200	1811	565	200	1811	565	339	1383	618	200	1305	407
d1, Uniform Delay [s]	54.97	33.15	25.41	54.69	30.07	30.68	44.81	22.78	24.50	54.07	34.28	40.07
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	10.44	2.40	0.27	7.57	0.98	3.72	9.42	0.09	0.92	3.37	0.23	8.94
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	0.55	0.71	0.08	0.46	0.50	0.54	0.65	0.07	0.24	0.27	0.14	0.68
d, Delay for Lane Group [s/veh]	65.41	35.55	25.68	62.26	31.05	34.40	54.23	22.88	25.42	57.44	34.51	49.01
Lane Group LOS	E	D	C	E	C	C	D	C	C	E	C	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.87	10.66	0.85	1.54	6.68	7.38	6.79	0.79	2.89	0.87	1.41	8.15
50th-Percentile Queue Length [ft/ln]	46.78	266.54	21.22	38.51	166.98	184.48	169.79	19.73	72.17	21.78	35.13	203.81
95th-Percentile Queue Length [veh/ln]	3.37	16.02	1.53	2.77	10.92	11.83	11.07	1.42	5.20	1.57	2.53	12.83
95th-Percentile Queue Length [ft/ln]	84.20	400.42	38.20	69.31	272.94	295.86	276.64	35.51	129.91	39.21	63.23	320.87

Movement, Approach, & Intersection Results

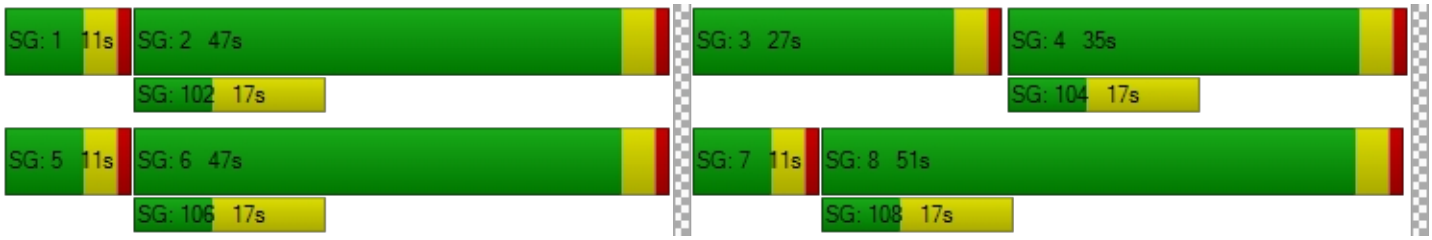
d_M, Delay for Movement [s/veh]	65.41	35.55	25.68	62.26	31.05	34.40	54.23	22.88	25.42	57.44	34.51	49.01
Movement LOS	E	D	C	E	C	C	D	C	C	E	C	D
d_A, Approach Delay [s/veh]	37.52			34.07			38.79			44.67		
Approach LOS	D			C			D			D		
d_I, Intersection Delay [s/veh]	37.47											
Intersection LOS	D											
Intersection V/C	0.673											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.277	3.365	2.830	2.985
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	717	783	517
d_b, Bicycle Delay [s]	24.70	24.70	22.20	33.00
l_b,int, Bicycle LOS Score for Intersection	2.352	2.275	1.938	1.846
Bicycle LOS	B	B	A	A

Sequence

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



Intersection Level Of Service Report
Intersection 1: Heacock St (NS) at Cactus Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	56.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.445

Intersection Setup

Name	Heacock St			Heacock St			Cactus 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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	320.00	100.00	100.00	100.00	100.00	100.00	140.00	100.00	100.00	140.00	100.00	100.00
Speed [mph]	45.00			45.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Heacock St			Heacock St			Cactus Ave					
Base Volume Input [veh/h]	529	554	17	97	448	46	137	1047	835	11	590	74
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	16	105	0	0	63	0	0	33	26	0	20	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]	577	692	18	103	538	49	145	1143	911	12	645	78
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
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]	155	186	5	28	145	13	39	307	245	3	173	21
Total Analysis Volume [veh/h]	620	744	19	111	578	53	156	1229	980	13	694	84
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									1,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	28	28	0	27	27	0	18	54	54	11	47	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	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	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	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	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	24	24	24	23	23	23	14	50	77	7	43	43
g / C, Green / Cycle	0.20	0.20	0.20	0.19	0.19	0.19	0.12	0.42	0.64	0.06	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.18	0.21	0.21	0.06	0.17	0.17	0.09	0.35	0.62	0.01	0.21	0.21
s, saturation flow rate [veh/h]	3431	1855	1839	1767	1855	1801	1767	3532	1577	1767	1855	1786
c, Capacity [veh/h]	686	371	368	339	356	345	206	1472	1012	103	665	640
d1, Uniform Delay [s]	46.87	48.00	48.00	41.83	47.37	47.39	51.35	31.31	20.36	53.60	31.41	31.42
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	17.51	55.22	55.88	2.57	28.03	28.86	22.54	5.75	21.67	2.51	3.91	4.07
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	0.90	1.03	1.03	0.33	0.90	0.90	0.76	0.84	0.97	0.13	0.60	0.60
d, Delay for Lane Group [s/veh]	64.38	103.22	103.88	44.40	75.41	76.25	73.89	37.06	42.03	56.10	35.32	35.50
Lane Group LOS	E	F	F	D	E	E	E	D	D	E	D	D
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.41	16.40	16.33	3.01	11.81	11.56	5.76	16.36	28.38	0.45	10.04	9.71
50th-Percentile Queue Length [ft/ln]	260.26	410.10	408.20	75.27	295.17	288.97	143.94	408.88	709.43	11.13	251.09	242.79
95th-Percentile Queue Length [veh/ln]	15.70	23.45	23.38	5.42	17.44	17.13	9.69	22.99	37.11	0.80	15.24	14.82
95th-Percentile Queue Length [ft/ln]	392.54	586.26	584.42	135.49	436.05	428.37	242.33	574.69	927.84	20.03	381.02	370.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	64.38	103.54	103.88	44.40	75.79	76.25	73.89	37.06	42.03	56.10	35.40	35.50
Movement LOS	E	F	F	D	E	E	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	85.99			71.12			41.55			35.75		
Approach LOS	F			E			D			D		
d_I, Intersection Delay [s/veh]	56.47											
Intersection LOS	E											
Intersection V/C	0.445											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.187	2.818	3.275	2.733
Crosswalk LOS	C	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	383	833	717
d_b, Bicycle Delay [s]	38.40	39.20	20.42	24.70
l_b,int, Bicycle LOS Score for Intersection	2.701	2.172	3.511	2.212
Bicycle LOS	B	B	D	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: Heacock St (NS) at John F Kennedy Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	49.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.792

Intersection Setup

Name	Heacock St			Heacock St			John F Kennedy Dr			John F Kennedy Dr		
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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	200.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Heacock St			Heacock St			John F Kennedy Dr			John F Kennedy Dr		
Base Volume Input [veh/h]	26	765	49	236	977	20	124	195	265	29	28	174
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	22	0	0	39	50	99	150	9	0	76	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]	33	833	52	250	1075	71	230	357	290	31	106	184
Peak Hour Factor	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100
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	229	14	69	295	20	63	98	80	9	29	51
Total Analysis Volume [veh/h]	36	915	57	275	1181	78	253	392	319	34	116	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	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	11	44	0	29	62	0	19	36	0	11	28	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	40	40	25	58	58	15	32	32	7	24	24
g / C, Green / Cycle	0.06	0.33	0.33	0.21	0.48	0.48	0.13	0.27	0.27	0.06	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.02	0.26	0.04	0.16	0.34	0.34	0.14	0.21	0.20	0.02	0.06	0.13
s, saturation flow rate [veh/h]	1767	3532	1577	1767	1855	1815	1767	1855	1577	1767	1855	1577
c, Capacity [veh/h]	103	1177	526	368	897	877	221	495	420	103	371	315
d1, Uniform Delay [s]	54.31	35.99	27.67	44.54	24.34	24.43	52.50	40.91	40.45	54.25	40.96	44.04
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	9.09	5.08	0.42	12.97	4.68	4.90	105.42	12.28	12.11	8.37	2.19	9.60
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	0.35	0.78	0.11	0.75	0.71	0.71	1.15	0.79	0.76	0.33	0.31	0.64
d, Delay for Lane Group [s/veh]	63.41	41.07	28.08	57.51	29.02	29.32	157.92	53.19	52.56	62.62	43.15	53.65
Lane Group LOS	E	D	C	E	C	C	F	D	D	E	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.28	12.35	1.16	8.76	14.32	14.21	12.93	12.07	9.76	1.22	3.14	6.30
50th-Percentile Queue Length [ft/ln]	32.07	308.76	29.10	219.00	358.10	355.22	323.20	301.63	244.10	30.50	78.52	157.47
95th-Percentile Queue Length [veh/ln]	2.31	18.11	2.10	13.61	20.53	20.39	19.94	17.76	14.89	2.20	5.65	10.41
95th-Percentile Queue Length [ft/ln]	57.73	452.84	52.38	340.35	513.28	509.77	498.40	444.04	372.22	54.89	141.33	260.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	63.41	41.07	28.08	57.51	29.16	29.32	157.92	53.19	52.56	62.62	43.15	53.65
Movement LOS	E	D	C	E	C	C	F	D	D	E	D	D
d_A, Approach Delay [s/veh]	41.13			34.25			80.47			51.05		
Approach LOS	D			C			F			D		
d_I, Intersection Delay [s/veh]	49.13											
Intersection LOS	D											
Intersection V/C	0.792											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	0.0	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]	0.00	49.50	0.00	49.50
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.174	0.000	2.451
Crosswalk LOS	F	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	967	533	400
d_b, Bicycle Delay [s]	26.67	16.02	32.27	38.40
l_b,int, Bicycle LOS Score for Intersection	2.391	2.825	3.150	1.850
Bicycle LOS	B	C	C	A

Sequence

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

Intersection Level Of Service Report
Intersection 3: Heacock St (NS) at Gentian Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	14.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.534

Intersection Setup

Name	Heacock St		Heacock St		Gentian Ave	
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 Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	140.00	100.00
Speed [mph]	50.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Heacock St		Heacock St		Gentian Ave	
Base Volume Input [veh/h]	730	20	111	1093	9	93
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	0	34	14	0	20
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]	781	21	152	1173	10	119
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	222	6	43	333	3	34
Total Analysis Volume [veh/h]	888	24	173	1333	11	135
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	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	7	0	7	7	7	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	75	0	23	98	22	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	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
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	C	R	L	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	71	71	19	94	18	18
g / C, Green / Cycle	0.59	0.59	0.16	0.78	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.25	0.02	0.10	0.38	0.01	0.09
s, saturation flow rate [veh/h]	3532	1577	1767	3532	1767	1577
c, Capacity [veh/h]	2090	933	280	2767	265	237
d1, Uniform Delay [s]	13.36	10.16	47.12	4.52	43.62	47.41
k, delay calibration	0.50	0.50	0.50	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]	0.63	0.05	9.87	0.60	0.29	9.64
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	0.42	0.03	0.62	0.48	0.04	0.57
d, Delay for Lane Group [s/veh]	14.00	10.21	56.98	5.13	43.92	57.05
Lane Group LOS	B	B	E	A	D	E
Critical Lane Group	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	6.01	0.25	5.46	4.15	0.30	4.32
50th-Percentile Queue Length [ft/ln]	150.20	6.31	136.58	103.67	7.46	108.09
95th-Percentile Queue Length [veh/ln]	10.03	0.45	9.30	7.46	0.54	7.73
95th-Percentile Queue Length [ft/ln]	250.69	11.36	232.41	186.61	13.42	193.35

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.00	10.21	56.98	5.13	43.92	57.05
Movement LOS	B	B	E	A	D	E
d_A, Approach Delay [s/veh]	13.90		11.08		56.06	
Approach LOS	B		B		E	
d_I, Intersection Delay [s/veh]	14.65					
Intersection LOS	B					
Intersection V/C	0.534					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0
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]	0.00	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.083	2.103
Crosswalk LOS	F	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
l_b,int, Bicycle LOS Score for Intersection	4.885	5.375	4.132
Bicycle LOS	E	F	D

Sequence

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

Intersection Level Of Service Report
Intersection 4: Heacock St (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	33.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.528

Intersection Setup

Name	Heacock St		Heacock St			Iris Ave	
Approach	Northbound		Southbound			Westbound	
Lane Configuration							
Turning Movement	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	2	0	0	1	1
Pocket Length [ft]	100.00	150.00	200.00	100.00	100.00	150.00	300.00
Speed [mph]	50.00		45.00			40.00	
Grade [%]	0.00		0.00			0.00	
Curb Present	No		No			No	
Crosswalk	No		No			Yes	

Volumes

Name	Heacock St		Heacock St			Iris Ave	
Base Volume Input [veh/h]	440	32	0	451	637	49	253
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.00	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	18	0	14	0	10	7
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	466	52	0	492	675	62	275
Peak Hour Factor	0.8800	0.8800	0.9500	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	132	15	0	140	192	18	78
Total Analysis Volume [veh/h]	530	59	0	559	767	70	313
Presence of On-Street Parking	No	No	No		No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	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	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Protected	Permissive	Split	Split
Signal group	2	0	0	1	6	7	0
Auxiliary Signal Groups							
Lead / Lag	-	-	-	Lead	-	Lead	-
Minimum Green [s]	7	0	0	7	7	7	0
Maximum Green [s]	30	0	0	30	30	30	0
Amber [s]	4.0	0.0	0.0	4.0	4.0	4.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	1.0	0.0
Split [s]	38	0	0	42	80	50	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	0	10	10	0
Rest In Walk	No				No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	3.0	3.0	3.0	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
Detector Length [ft]	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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00
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	3.00	3.00	3.00
g_i, Effective Green Time [s]	33	33	37	75	45	45
g / C, Green / Cycle	0.25	0.25	0.28	0.58	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.15	0.04	0.16	0.22	0.02	0.20
s, saturation flow rate [veh/h]	3532	1577	3431	3532	3431	1577
c, Capacity [veh/h]	897	400	976	2038	1188	546
d1, Uniform Delay [s]	42.58	37.60	39.74	14.86	28.37	34.67
k, delay calibration	0.50	0.50	0.50	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]	2.86	0.78	2.44	0.53	0.09	4.34
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	0.59	0.15	0.57	0.38	0.06	0.57
d, Delay for Lane Group [s/veh]	45.44	38.37	42.18	15.39	28.46	39.01
Lane Group LOS	D	D	D	B	C	D
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	7.57	1.51	7.77	5.89	0.74	8.57
50th-Percentile Queue Length [ft/ln]	189.36	37.63	194.15	147.21	18.50	214.37
95th-Percentile Queue Length [veh/ln]	12.09	2.71	12.34	9.87	1.33	13.38
95th-Percentile Queue Length [ft/ln]	302.20	67.74	308.41	246.70	33.30	334.43

Movement, Approach, & Intersection Results

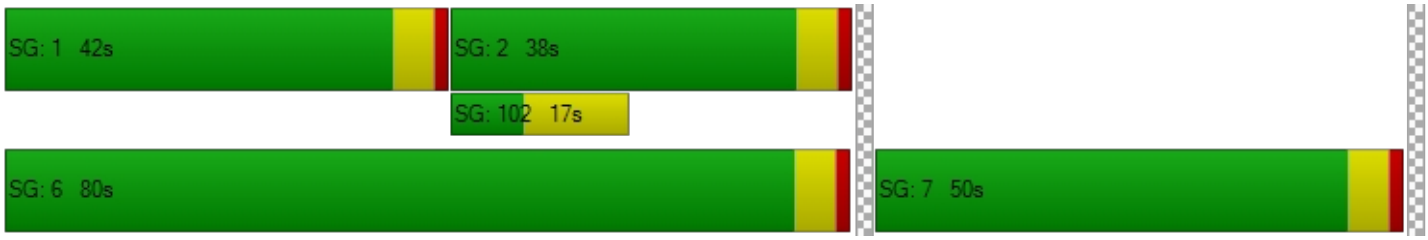
d_M, Delay for Movement [s/veh]	45.44	38.37	42.18	42.18	15.39	28.46	39.01
Movement LOS	D	D	D	D	B	C	D
d_A, Approach Delay [s/veh]	44.73		26.69			37.08	
Approach LOS	D		C			D	
d_I, Intersection Delay [s/veh]	33.04						
Intersection LOS	C						
Intersection V/C	0.528						

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0
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]	0.00	0.00	54.47
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.578
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	65.00	65.00	65.00
l_b,int, Bicycle LOS Score for Intersection	4.618	4.765	4.132
Bicycle LOS	E	E	D

Sequence

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



Intersection Level Of Service Report
Intersection 5: Indian St (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	35.7
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.329

Intersection Setup

Name	Indian St						Iris Ave			Iris 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 Pocket	1	0	0	1	0	0	2	0	1	2	0	0
Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	200.00	150.00	100.00	100.00
Speed [mph]	45.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indian St						Iris Ave			Iris Ave		
Base Volume Input [veh/h]	40	82	7	174	135	18	26	364	113	17	200	177
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	8	9	2	6	4	7	11	14	5	6	1
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]	49	95	16	186	149	23	35	397	134	23	218	189
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
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	25	4	49	40	6	9	106	36	6	58	50
Total Analysis Volume [veh/h]	52	101	17	198	159	24	37	422	143	24	232	201
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	14	34	0	35	55	0	11	40	0	11	40	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	23	0	0	21	0	0	29	0	0	26	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	30	30	31	51	51	7	36	36	7	36	36
g / C, Green / Cycle	0.08	0.25	0.25	0.26	0.43	0.43	0.06	0.30	0.30	0.06	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.03	0.03	0.03	0.11	0.05	0.05	0.01	0.12	0.09	0.01	0.12	0.13
s, saturation flow rate [veh/h]	1767	1855	1765	1767	1855	1772	3431	3532	1577	3431	1855	1580
c, Capacity [veh/h]	147	464	441	456	788	753	200	1060	473	200	556	474
d1, Uniform Delay [s]	51.95	34.87	34.91	37.17	20.88	20.90	53.78	33.39	32.33	53.58	33.55	33.75
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	6.53	0.57	0.62	2.99	0.30	0.32	2.03	1.12	1.64	1.22	2.25	2.83
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	0.35	0.13	0.13	0.43	0.12	0.12	0.18	0.40	0.30	0.12	0.41	0.43
d, Delay for Lane Group [s/veh]	58.48	35.44	35.53	40.16	21.19	21.23	55.81	34.51	33.97	54.80	35.79	36.59
Lane Group LOS	E	D	D	D	C	C	E	C	C	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.71	1.39	1.37	5.15	1.61	1.57	0.58	4.96	3.36	0.37	5.58	5.05
50th-Percentile Queue Length [ft/ln]	42.83	34.77	34.34	128.68	40.34	39.29	14.52	123.91	84.00	9.32	139.44	126.26
95th-Percentile Queue Length [veh/ln]	3.08	2.50	2.47	8.87	2.90	2.83	1.05	8.61	6.05	0.67	9.45	8.74
95th-Percentile Queue Length [ft/ln]	77.09	62.58	61.82	221.70	72.61	70.73	26.14	215.19	151.20	16.78	236.27	218.39

Movement, Approach, & Intersection Results

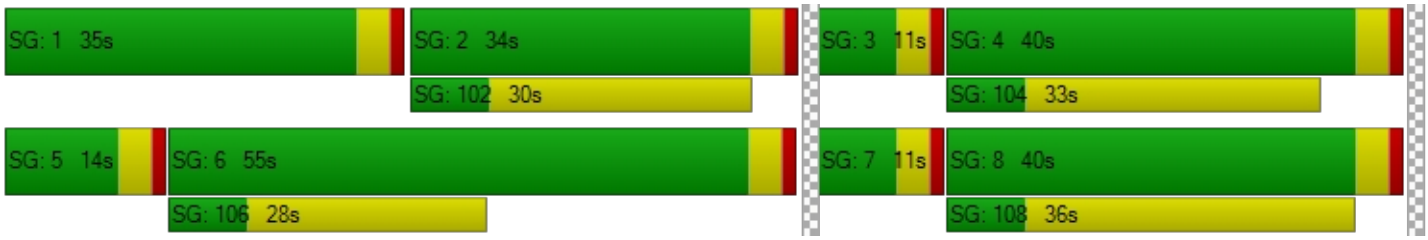
d_M, Delay for Movement [s/veh]	58.48	35.48	35.53	40.16	21.20	21.23	55.81	34.51	33.97	54.80	35.80	36.59
Movement LOS	E	D	D	D	C	C	E	C	C	D	D	D
d_A, Approach Delay [s/veh]	42.52			31.05			35.69			37.14		
Approach LOS	D			C			D			D		
d_I, Intersection Delay [s/veh]	35.73											
Intersection LOS	D											
Intersection V/C	0.329											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	2.459	2.501	2.777	2.704
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	500	850	600	600
d_b, Bicycle Delay [s]	33.75	19.84	29.40	29.40
l_b,int, Bicycle LOS Score for Intersection	1.700	1.874	2.056	1.937
Bicycle LOS	A	A	B	A

Sequence

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



Intersection Level Of Service Report
Intersection 6: Emma Ln (NS) at Iris Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	40.9
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.224

Intersection Setup

Name	Emma Ln			Emma Ln			Iris Ave			Iris 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 Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	75.00	150.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Emma Ln			Emma Ln			Iris Ave			Iris Ave		
Base Volume Input [veh/h]	22	1	17	1	1	0	1	533	49	29	362	1
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	24	0	0	0	20	2	0	11	39
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]	24	1	18	25	1	0	1	585	54	31	395	40
Peak Hour Factor	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
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]	7	0	5	7	0	0	0	172	16	9	116	12
Total Analysis Volume [veh/h]	28	1	21	29	1	0	1	688	64	36	465	47
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	0.20	0.01	0.05	0.22	0.01	0.00	0.00	0.01	0.00	0.04	0.00	0.00
d_M, Delay for Movement [s/veh]	36.03	33.47	18.96	40.88	37.02	19.33	8.44	0.00	0.00	9.41	0.00	0.00
Movement LOS	E	D	C	E	E	C	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.95	0.95	0.95	0.84	0.84	0.84	0.00	0.00	0.00	0.13	0.00	0.00
95th-Percentile Queue Length [ft/ln]	23.71	23.71	23.71	21.05	21.05	21.05	0.07	0.00	0.00	3.30	0.00	0.00
d_A, Approach Delay [s/veh]	28.81			40.76			0.01			0.62		
Approach LOS	D			E			A			A		
d_I, Intersection Delay [s/veh]	2.18											
Intersection LOS	E											

Intersection Level Of Service Report
Intersection 7: Perris Blvd (NS) at John F Kennedy Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	42.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.648

Intersection Setup

Name	Perris Blvd				Perris Blvd		John F Kennedy Dr			John F Kennedy Dr		
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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	160.00	100.00	100.00	145.00	100.00	100.00	90.00	100.00	100.00	145.00	100.00	100.00
Speed [mph]	40.00			30.00			40.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd				Perris Blvd		John F Kennedy Dr			John F Kennedy Dr		
Base Volume Input [veh/h]	142	900	129	97	880	59	72	259	112	161	196	72
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	26	137	5	0	169	0	0	99	51	9	50	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]	177	1091	142	103	1102	63	76	374	170	180	258	76
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
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]	47	290	38	27	293	17	20	99	45	48	69	20
Total Analysis Volume [veh/h]	188	1161	151	110	1172	67	81	398	181	191	274	81
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	21	47	0	15	41	0	16	35	0	23	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	29	0	0	29	0	0	24	0	0	26	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	C	L	C	C	L	C	R	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	43	43	11	37	37	12	31	31	19	38	38
g / C, Green / Cycle	0.14	0.36	0.36	0.09	0.31	0.31	0.10	0.26	0.26	0.16	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.11	0.25	0.25	0.06	0.23	0.23	0.05	0.11	0.11	0.11	0.08	0.05
s, saturation flow rate [veh/h]	1767	3532	1748	1767	3532	1804	1767	3532	1577	1767	3532	1577
c, Capacity [veh/h]	250	1266	626	162	1089	556	177	912	407	280	1118	499
d1, Uniform Delay [s]	49.47	32.87	32.87	52.79	37.38	37.39	50.94	37.20	37.28	47.66	30.37	29.53
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	18.62	3.15	6.22	20.60	4.83	9.12	8.34	1.52	3.49	12.72	0.52	0.70
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	0.75	0.69	0.69	0.68	0.75	0.75	0.46	0.44	0.44	0.68	0.24	0.16
d, Delay for Lane Group [s/veh]	68.09	36.02	39.10	73.39	42.21	46.51	59.28	38.71	40.77	60.38	30.89	30.23
Lane Group LOS	E	D	D	E	D	D	E	D	D	E	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.61	11.09	11.52	4.14	11.50	12.42	2.67	4.99	4.77	6.23	2.93	1.74
50th-Percentile Queue Length [ft/ln]	165.29	277.35	287.89	103.50	287.56	310.41	66.82	124.71	119.17	155.83	73.36	43.43
95th-Percentile Queue Length [veh/ln]	10.83	16.56	17.08	7.45	17.06	18.20	4.81	8.65	8.35	10.33	5.28	3.13
95th-Percentile Queue Length [ft/ln]	270.71	413.91	427.02	186.30	426.61	454.89	120.27	216.28	208.69	258.19	132.05	78.17

Movement, Approach, & Intersection Results

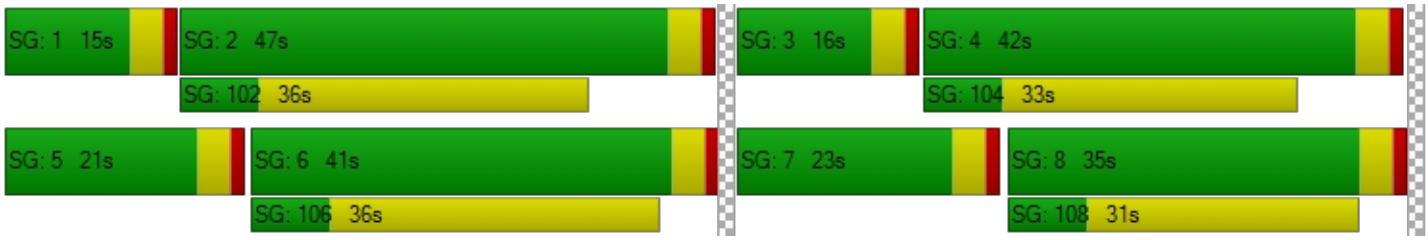
d_M, Delay for Movement [s/veh]	68.09	36.77	39.10	73.39	43.50	46.51	59.28	38.71	40.77	60.38	30.89	30.23
Movement LOS	E	D	D	E	D	D	E	D	D	E	C	C
d_A, Approach Delay [s/veh]	40.93			46.09			41.80			41.11		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	42.81											
Intersection LOS	D											
Intersection V/C	0.648											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.173	2.980	2.724	2.760
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	617	517	633
d_b, Bicycle Delay [s]	24.70	28.70	33.00	28.02
l_b,int, Bicycle LOS Score for Intersection	2.385	2.302	2.104	2.010
Bicycle LOS	B	B	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 8: Perris Blvd (NS) at Gentian Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	27.6
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.510

Intersection Setup

Name	Perris Blvd			Perris Blvd			Gentian Ave			Gentian 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 Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			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	Perris Blvd			Perris Blvd			Gentian Ave			Gentian Ave		
Base Volume Input [veh/h]	81	979	53	34	947	28	18	40	99	39	21	29
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	151	0	0	196	33	17	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]	86	1189	56	36	1200	63	36	42	105	41	22	31
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	323	15	10	326	17	10	11	29	11	6	8
Total Analysis Volume [veh/h]	93	1292	61	39	1304	68	39	46	114	45	24	34
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	18	65	0	11	58	0	0	23	0	0	21	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	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	C	L	C	C	L	C	R	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	61	61	7	54	54	19	19	19	17
g / C, Green / Cycle	0.12	0.51	0.51	0.06	0.45	0.45	0.16	0.16	0.16	0.14
(v / s)_i Volume / Saturation Flow Rate	0.05	0.25	0.25	0.02	0.26	0.26	0.02	0.02	0.07	0.06
s, saturation flow rate [veh/h]	1767	3532	1812	1767	3532	1808	1767	1855	1577	1717
c, Capacity [veh/h]	206	1795	921	103	1589	814	280	294	250	243
d1, Uniform Delay [s]	49.42	19.42	19.42	54.41	24.43	24.43	43.46	43.58	45.82	47.02
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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
d2, Incremental Delay [s]	6.98	0.99	1.92	10.26	1.50	2.90	1.04	1.13	5.92	5.32
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
Rp, platoon ratio	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

Lane Group Results

X, volume / capacity	0.45	0.50	0.50	0.38	0.57	0.57	0.14	0.16	0.46	0.42
d, Delay for Lane Group [s/veh]	56.40	20.41	21.34	64.66	25.92	27.33	44.50	44.72	51.73	52.35
Lane Group LOS	E	C	C	E	C	C	D	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	2.94	7.92	8.37	1.40	9.35	9.89	1.09	1.29	3.53	3.15
50th-Percentile Queue Length [ft/ln]	73.51	198.09	209.27	35.08	233.68	247.23	27.34	32.26	88.28	78.85
95th-Percentile Queue Length [veh/ln]	5.29	12.54	13.12	2.53	14.36	15.05	1.97	2.32	6.36	5.68
95th-Percentile Queue Length [ft/ln]	132.31	313.50	327.89	63.15	359.03	376.16	49.21	58.08	158.91	141.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.40	20.70	21.34	64.66	26.35	27.33	44.50	44.72	51.73	52.35	52.35	52.35
Movement LOS	E	C	C	E	C	C	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	23.02			27.45			48.70			52.35		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	27.57											
Intersection LOS	C											
Intersection V/C	0.510											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.215	3.188	2.223	1.870
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1017	900	317	283
d_b, Bicycle Delay [s]	14.50	18.15	42.50	44.20
l_b,int, Bicycle LOS Score for Intersection	2.355	2.336	1.888	1.730
Bicycle LOS	B	B	A	A

Sequence

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

Intersection Level Of Service Report
Intersection 9: Perris Blvd (NS) at Santiago Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	13.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.433

Intersection Setup

Name	Perris Bllvd			Perris Blvd			Santiago Dr			Santiago Dr		
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 Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Perris Bllvd			Perris Blvd			Santiago Dr			Santiago Dr		
Base Volume Input [veh/h]	1	1067	47	104	997	0	1	0	0	21	0	63
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	151	0	0	196	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]	1	1282	50	110	1253	0	1	0	0	22	0	67
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]	0	337	13	29	330	0	0	0	0	6	0	18
Total Analysis Volume [veh/h]	1	1349	53	116	1319	0	1	0	0	23	0	71
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]	115
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	12	74	0	23	85	0	0	18	0	0	18	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	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	C	L	C	C	C	C
C, Cycle Length [s]	115	115	115	115	115	115	115	115
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	7	69	69	18	80	80	13	13
g / C, Green / Cycle	0.06	0.60	0.60	0.16	0.70	0.70	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.00	0.26	0.26	0.07	0.24	0.24	0.00	0.06
s, saturation flow rate [veh/h]	1767	3532	1819	1767	3532	1855	1081	1567
c, Capacity [veh/h]	108	2119	1092	277	2457	1290	185	216
d1, Uniform Delay [s]	50.74	12.47	12.47	43.78	7.05	7.05	45.28	48.01
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.16	0.66	1.27	4.62	0.40	0.76	0.05	6.26
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.01	0.44	0.44	0.42	0.35	0.35	0.01	0.43
d, Delay for Lane Group [s/veh]	50.90	13.12	13.74	48.41	7.45	7.81	45.34	54.27
Lane Group LOS	D	B	B	D	A	A	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.03	5.97	6.34	3.26	3.66	3.97	0.03	2.94
50th-Percentile Queue Length [ft/ln]	0.78	149.22	158.40	81.44	91.53	99.36	0.71	73.46
95th-Percentile Queue Length [veh/ln]	0.06	9.98	10.46	5.86	6.59	7.15	0.05	5.29
95th-Percentile Queue Length [ft/ln]	1.40	249.39	261.60	146.59	164.75	178.84	1.28	132.24

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	50.90	13.32	13.74	48.41	7.57	7.81	45.34	45.34	45.34	54.27	54.27	54.27
Movement LOS	D	B	B	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	13.36			10.87			45.34			54.27		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	13.47											
Intersection LOS	B											
Intersection V/C	0.433											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	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]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1200	1391	226	226
d_b, Bicycle Delay [s]	9.20	5.33	45.23	45.23
l_b,int, Bicycle LOS Score for Intersection	2.331	2.349	1.561	1.715
Bicycle LOS	B	B	A	A

Sequence

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

Intersection Level Of Service Report
Intersection 10: Perris Blvd (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	49.0
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.879

Intersection Setup

Name	Perris Blvd			Perris Bllvd			Iris Ave			Iris 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 Pocket	0	0	0	0	0	0	0	0	0	0	0	0
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
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd			Perris Bllvd			Iris Ave			Iris Ave		
Base Volume Input [veh/h]	158	956	392	195	758	18	36	381	141	247	318	105
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	26	131	47	11	177	8	14	14	16	59	16	6
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]	193	1144	463	218	980	27	52	418	165	321	353	117
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
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]	49	292	118	56	250	7	13	107	42	82	90	30
Total Analysis Volume [veh/h]	197	1167	472	222	1000	28	53	427	168	328	360	119
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	22	44	0	22	44	0	11	28	0	26	43	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	40	40	18	40	40	7	24	24	22	39	39
g / C, Green / Cycle	0.15	0.33	0.33	0.15	0.33	0.33	0.06	0.20	0.20	0.18	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.11	0.23	0.29	0.12	0.19	0.19	0.03	0.16	0.17	0.18	0.10	0.07
s, saturation flow rate [veh/h]	1810	5176	1615	1810	3618	1874	1810	1900	1721	1810	3618	1615
c, Capacity [veh/h]	271	1725	538	271	1206	625	106	380	344	332	1176	525
d1, Uniform Delay [s]	48.65	34.43	37.68	49.41	32.81	32.81	54.81	45.91	46.00	48.88	30.36	29.51
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	15.58	2.15	17.97	23.21	1.89	3.63	16.05	17.50	19.84	46.66	0.67	1.00
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	0.73	0.68	0.88	0.82	0.56	0.56	0.50	0.82	0.83	0.99	0.31	0.23
d, Delay for Lane Group [s/veh]	64.23	36.58	55.65	72.62	34.70	36.44	70.86	63.40	65.84	95.53	31.03	30.51
Lane Group LOS	E	D	E	E	C	D	E	E	E	F	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.65	9.71	15.13	8.02	8.09	8.68	1.99	10.43	9.77	13.78	3.90	2.58
50th-Percentile Queue Length [ft/ln]	166.26	242.85	378.24	200.44	202.23	217.06	49.74	260.67	244.13	344.43	97.38	64.47
95th-Percentile Queue Length [veh/ln]	10.88	14.83	21.51	12.66	12.75	13.51	3.58	15.72	14.89	19.86	7.01	4.64
95th-Percentile Queue Length [ft/ln]	271.99	370.63	537.72	316.53	318.84	337.87	89.54	393.06	372.26	496.61	175.28	116.04

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	64.23	36.58	55.65	72.62	35.26	36.44	70.86	64.07	65.84	95.53	31.03	30.51
Movement LOS	E	D	E	E	D	D	E	E	E	F	C	C
d_A, Approach Delay [s/veh]	44.45			41.92			65.08			57.17		
Approach LOS	D			D			E			E		
d_I, Intersection Delay [s/veh]	48.96											
Intersection LOS	D											
Intersection V/C	0.879											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.348	3.149	2.674	2.937
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	400	650
d_b, Bicycle Delay [s]	26.67	26.67	38.40	27.34
l_b,int, Bicycle LOS Score for Intersection	2.569	2.247	2.094	2.225
Bicycle LOS	B	B	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 11: Perris Blvd (NS) at Harley Knox Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	39.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.695

Intersection Setup

Name	Perris Blvd			Perris Blvd			Harley Knox Blvd			Harley Knox Blvd		
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 Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	320.00	100.00	230.00	215.00	100.00	210.00	300.00	100.00	300.00	335.00	100.00	230.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd			Perris Blvd			Harley Knox Blvd			Harley Knox Blvd		
Base Volume Input [veh/h]	57	744	4	149	974	300	255	137	68	8	101	135
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	147	28	24	217	23	50	42	0	31	47	27
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]	60	936	32	182	1249	341	320	187	72	39	154	170
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	254	9	49	339	93	87	51	20	11	42	46
Total Analysis Volume [veh/h]	65	1017	35	198	1358	371	348	203	78	42	167	185
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	11	45	0	14	48	0	38	50	0	11	23	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	R	L	C	R	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	41	41	10	44	44	34	46	46	7	19	19
g / C, Green / Cycle	0.06	0.34	0.34	0.08	0.37	0.37	0.28	0.38	0.38	0.06	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.02	0.20	0.02	0.06	0.27	0.24	0.20	0.06	0.05	0.01	0.03	0.12
s, saturation flow rate [veh/h]	3431	5053	1577	3431	5053	1577	1767	3532	1577	3431	5053	1577
c, Capacity [veh/h]	200	1726	539	286	1853	578	501	1354	604	200	800	250
d1, Uniform Delay [s]	54.23	32.56	26.59	53.50	32.91	31.47	38.38	24.21	24.00	53.86	43.96	48.15
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	4.27	1.48	0.23	12.97	2.61	5.40	7.76	0.23	0.44	2.37	0.59	17.89
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	0.32	0.59	0.06	0.69	0.73	0.64	0.70	0.15	0.13	0.21	0.21	0.74
d, Delay for Lane Group [s/veh]	58.50	34.04	26.83	66.47	35.52	36.87	46.14	24.44	24.44	56.24	44.55	66.04
Lane Group LOS	E	C	C	E	D	D	D	C	C	E	D	E
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.04	8.04	0.69	3.35	11.31	9.38	9.89	1.87	1.47	0.66	1.45	6.37
50th-Percentile Queue Length [ft/ln]	26.01	200.94	17.32	83.76	282.73	234.48	247.18	46.84	36.71	16.44	36.34	159.34
95th-Percentile Queue Length [veh/ln]	1.87	12.69	1.25	6.03	16.82	14.40	15.04	3.37	2.64	1.18	2.62	10.51
95th-Percentile Queue Length [ft/ln]	46.81	317.18	31.17	150.78	420.61	360.04	376.10	84.32	66.07	29.59	65.42	262.84

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.50	34.04	26.83	66.47	35.52	36.87	46.14	24.44	24.44	56.24	44.55	66.04
Movement LOS	E	C	C	E	D	D	D	C	C	E	D	E
d_A, Approach Delay [s/veh]	35.24			38.96			36.45			55.89		
Approach LOS	D			D			D			E		
d_I, Intersection Delay [s/veh]	39.19											
Intersection LOS	D											
Intersection V/C	0.695											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.285	3.428	2.865	2.998
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	683	733	767	317
d_b, Bicycle Delay [s]	26.00	24.07	22.82	42.50
l_b,int, Bicycle LOS Score for Intersection	2.174	2.619	2.079	1.776
Bicycle LOS	B	B	B	A

Sequence

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

Opening Year (2024) With Project

Intersection Level Of Service Report
Intersection 1: Heacock St (NS) at Cactus Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	54.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.902

Intersection Setup

Name	Heacock St			Heacock St			Cactus 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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	320.00	100.00	100.00	100.00	100.00	100.00	140.00	100.00	100.00	140.00	100.00	100.00
Speed [mph]	45.00			45.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Heacock St			Heacock St			Cactus Ave					
Base Volume Input [veh/h]	719	542	11	53	289	84	75	495	460	9	975	50
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	42	44	0	0	89	0	0	10	14	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	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]	804	619	12	56	395	89	80	535	502	10	1066	53
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	218	168	3	15	107	24	22	145	136	3	290	14
Total Analysis Volume [veh/h]	874	673	13	61	429	97	87	582	546	11	1159	58
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	37	47	0	12	22	0	12	49	49	12	49	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	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	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	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	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	33	43	43	8	18	18	8	45	45	8	45	45
g / C, Green / Cycle	0.28	0.36	0.36	0.07	0.15	0.15	0.07	0.38	0.38	0.07	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.25	0.19	0.19	0.03	0.15	0.15	0.05	0.16	0.35	0.01	0.33	0.33
s, saturation flow rate [veh/h]	3431	1855	1843	1767	1855	1739	1767	3532	1577	1767	1855	1824
c, Capacity [veh/h]	943	665	660	118	278	261	118	1324	591	118	696	684
d1, Uniform Delay [s]	42.32	30.32	30.34	54.14	50.74	50.83	54.97	28.06	35.85	52.59	35.01	35.03
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	16.14	2.86	2.90	15.34	47.07	51.04	33.60	1.06	22.29	1.57	15.03	15.34
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	0.93	0.52	0.52	0.52	0.97	0.98	0.74	0.44	0.92	0.09	0.88	0.88
d, Delay for Lane Group [s/veh]	58.46	33.19	33.24	69.47	97.81	101.87	88.58	29.12	58.15	54.16	50.04	50.37
Lane Group LOS	E	C	C	E	F	F	F	C	E	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	14.20	8.05	8.02	2.24	11.47	11.13	3.64	6.29	18.27	0.36	19.35	19.11
50th-Percentile Queue Length [ft/ln]	354.88	201.21	200.58	56.05	286.80	278.15	91.02	157.27	456.86	9.09	483.71	477.79
95th-Percentile Queue Length [veh/ln]	20.37	12.70	12.67	4.04	17.03	16.60	6.55	10.40	25.28	0.65	26.56	26.28
95th-Percentile Queue Length [ft/ln]	509.36	317.53	316.72	100.90	425.66	414.91	163.83	260.11	632.12	16.37	664.06	657.03

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.46	33.21	33.24	69.47	99.31	101.87	88.58	29.12	58.15	54.16	50.20	50.37
Movement LOS	E	C	C	E	F	F	F	C	E	D	D	D
d_A, Approach Delay [s/veh]	47.36			96.64			46.42			50.24		
Approach LOS	D			F			D			D		
d_I, Intersection Delay [s/veh]	54.18											
Intersection LOS	D											
Intersection V/C	0.902											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.087	2.725	3.191	2.681
Crosswalk LOS	C	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	300	750	750
d_b, Bicycle Delay [s]	24.70	43.35	23.44	23.44
l_b,int, Bicycle LOS Score for Intersection	2.847	2.044	2.562	2.573
Bicycle LOS	C	B	B	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: Heacock St (NS) at John F Kennedy Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	42.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.813

Intersection Setup

Name	Heacock St			Heacock St			John F Kennedy Dr			John F Kennedy Dr		
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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	200.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Heacock St			Heacock St			John F Kennedy Dr			John F Kennedy Dr		
Base Volume Input [veh/h]	27	929	44	127	575	17	62	37	46	33	18	248
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	59	0	0	20	83	27	42	5	0	126	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]	44	1044	47	135	630	101	93	81	54	35	145	263
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
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	314	14	41	190	30	28	24	16	11	44	79
Total Analysis Volume [veh/h]	53	1258	57	163	759	122	112	98	65	42	175	317
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	1 - Coordination Group
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	12	59	0	20	67	0	13	36	0	15	38	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	R	L	C	C
C, Cycle Length [s]	130	130	130	130	130	130	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	8	55	55	16	63	63	9	32	32	11	34	34
g / C, Green / Cycle	0.06	0.42	0.42	0.12	0.48	0.48	0.07	0.25	0.25	0.08	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.03	0.36	0.04	0.09	0.24	0.24	0.06	0.05	0.04	0.02	0.09	0.20
s, saturation flow rate [veh/h]	1767	3532	1577	1767	1855	1766	1767	1855	1577	1767	1855	1577
c, Capacity [veh/h]	109	1494	667	217	899	856	122	457	388	149	485	412
d1, Uniform Delay [s]	59.02	33.60	22.45	55.07	22.81	22.82	60.12	39.00	38.53	55.79	39.14	44.37
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	14.80	5.92	0.25	20.91	2.00	2.10	61.19	1.07	0.93	4.64	2.08	12.91
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	0.49	0.84	0.09	0.75	0.50	0.50	0.92	0.21	0.17	0.28	0.36	0.77
d, Delay for Lane Group [s/veh]	73.82	39.53	22.70	75.97	24.81	24.92	121.32	40.07	39.46	60.43	41.22	57.27
Lane Group LOS	E	D	C	E	C	C	F	D	D	E	D	E
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.10	18.10	1.07	6.31	9.47	9.05	5.67	2.58	1.70	1.48	4.83	10.82
50th-Percentile Queue Length [ft/ln]	52.60	452.50	26.70	157.73	236.76	226.13	141.80	64.60	42.60	37.02	120.80	270.62
95th-Percentile Queue Length [veh/ln]	3.79	25.08	1.92	10.43	14.52	13.98	9.58	4.65	3.07	2.67	8.44	16.22
95th-Percentile Queue Length [ft/ln]	94.67	626.93	48.06	260.71	362.93	349.44	239.44	116.28	76.69	66.64	210.92	405.51

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	73.82	39.53	22.70	75.97	24.86	24.92	121.32	40.07	39.46	60.43	41.22	57.27
Movement LOS	E	D	C	E	C	C	F	D	D	E	D	E
d_A, Approach Delay [s/veh]	40.15			32.84			73.02			52.26		
Approach LOS	D			C			E			D		
d_I, Intersection Delay [s/veh]	42.60											
Intersection LOS	D											
Intersection V/C	0.813											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	0.0	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]	0.00	54.47	0.00	54.47
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.136	0.000	2.391
Crosswalk LOS	F	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	846	969	492	523
d_b, Bicycle Delay [s]	21.63	17.27	36.94	35.45
l_b,int, Bicycle LOS Score for Intersection	2.688	2.421	2.013	2.000
Bicycle LOS	B	B	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 3: Heacock St (NS) at Gentian Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	20.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.488

Intersection Setup

Name	Heacock St		Heacock St		Gentian Ave	
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 Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	140.00	100.00
Speed [mph]	50.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Heacock St		Heacock St		Gentian Ave	
Base Volume Input [veh/h]	737	10	62	558	12	144
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	45	0	10	15	0	29
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]	826	11	76	606	13	182
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	249	3	23	183	4	55
Total Analysis Volume [veh/h]	995	13	92	730	16	219
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	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	7	0	7	7	7	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	4.0	0.0	4.0	4.0	4.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	77	0	17	94	36	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	3.0	3.0	3.0	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
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	C	R	L	C	L	R
C, Cycle Length [s]	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00
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	3.00	3.00	3.00
g_i, Effective Green Time [s]	72	72	12	89	31	31
g / C, Green / Cycle	0.55	0.55	0.09	0.68	0.24	0.24
(v / s)_i Volume / Saturation Flow Rate	0.28	0.01	0.05	0.21	0.01	0.14
s, saturation flow rate [veh/h]	3532	1577	1767	3532	1767	1577
c, Capacity [veh/h]	1956	873	163	2418	421	376
d1, Uniform Delay [s]	18.01	13.05	56.50	8.15	38.04	43.78
k, delay calibration	0.50	0.50	0.50	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]	0.95	0.03	13.38	0.32	0.17	6.46
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	0.51	0.01	0.56	0.30	0.04	0.58
d, Delay for Lane Group [s/veh]	18.96	13.08	69.87	8.47	38.21	50.23
Lane Group LOS	B	B	E	A	D	D
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	8.79	0.17	3.44	3.71	0.41	6.82
50th-Percentile Queue Length [ft/ln]	219.74	4.23	86.03	92.69	10.25	170.48
95th-Percentile Queue Length [veh/ln]	13.65	0.30	6.19	6.67	0.74	11.10
95th-Percentile Queue Length [ft/ln]	341.30	7.61	154.85	166.85	18.44	277.55

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	18.96	13.08	69.87	8.47	38.21	50.23
Movement LOS	B	B	E	A	D	D
d_A, Approach Delay [s/veh]	18.89		15.34		49.41	
Approach LOS	B		B		D	
d_I, Intersection Delay [s/veh]	20.95					
Intersection LOS	C					
Intersection V/C	0.488					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0
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]	0.00	54.47	54.47
l_p,int, Pedestrian LOS Score for Intersection	0.000	2.967	2.105
Crosswalk LOS	F	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	65.00	65.00	65.00
l_b,int, Bicycle LOS Score for Intersection	4.964	4.811	4.132
Bicycle LOS	E	E	D

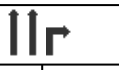
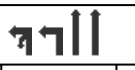
Sequence

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

Intersection Level Of Service Report
Intersection 4: Heacock St (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	34.2
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.642

Intersection Setup

Name	Heacock St		Heacock St			Iris Ave	
Approach	Northbound		Southbound			Westbound	
Lane Configuration							
Turning Movement	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	2	0	0	1	1
Pocket Length [ft]	100.00	150.00	200.00	100.00	100.00	150.00	300.00
Speed [mph]	50.00		45.00			40.00	
Grade [%]	0.00		0.00			0.00	
Curb Present	No		No			No	
Crosswalk	No		No			Yes	

Volumes

Name	Heacock St		Heacock St			Iris Ave	
Base Volume Input [veh/h]	347	28	0	217	364	43	408
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.00	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	8	0	15	0	24	45
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	368	38	0	245	386	70	477
Peak Hour Factor	0.8600	0.8600	0.9500	0.8600	0.8600	0.8600	0.8600
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	107	11	0	71	112	20	139
Total Analysis Volume [veh/h]	428	44	0	285	449	81	555
Presence of On-Street Parking	No	No	No		No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	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	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Protected	Permissive	Split	Split
Signal group	2	0	0	1	6	7	0
Auxiliary Signal Groups							
Lead / Lag	-	-	-	Lead	-	Lead	-
Minimum Green [s]	7	0	0	7	7	7	0
Maximum Green [s]	30	0	0	30	30	30	0
Amber [s]	3.0	0.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	1.0	0.0
Split [s]	28	0	0	20	48	72	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	0	10	10	0
Rest In Walk	No				No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0	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
Detector Length [ft]	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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	24	24	16	44	68	68
g / C, Green / Cycle	0.20	0.20	0.13	0.37	0.57	0.57
(v / s)_i Volume / Saturation Flow Rate	0.12	0.03	0.08	0.13	0.02	0.35
s, saturation flow rate [veh/h]	3532	1577	3431	3532	3431	1577
c, Capacity [veh/h]	706	315	457	1295	1944	893
d1, Uniform Delay [s]	43.70	39.50	49.15	27.57	11.54	17.39
k, delay calibration	0.50	0.50	0.50	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]	3.83	0.92	6.27	0.74	0.04	3.24
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	0.14	0.62	0.35	0.04	0.62
d, Delay for Lane Group [s/veh]	47.53	40.43	55.42	28.31	11.58	20.63
Lane Group LOS	D	D	E	C	B	C
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	5.95	1.12	4.33	4.65	0.47	10.32
50th-Percentile Queue Length [ft/ln]	148.66	27.91	108.35	116.13	11.79	257.93
95th-Percentile Queue Length [veh/ln]	9.95	2.01	7.75	8.18	0.85	15.58
95th-Percentile Queue Length [ft/ln]	248.63	50.23	193.71	204.49	21.22	389.62

Movement, Approach, & Intersection Results

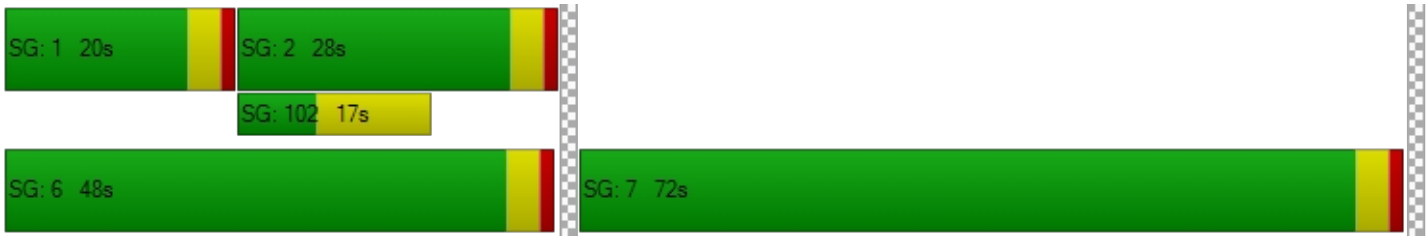
d_M, Delay for Movement [s/veh]	47.53	40.43	55.42	55.42	28.31	11.58	20.63
Movement LOS	D	D	E	E	C	B	C
d_A, Approach Delay [s/veh]	46.87		38.84			19.48	
Approach LOS	D		D			B	
d_I, Intersection Delay [s/veh]	34.21						
Intersection LOS	C						
Intersection V/C	0.642						

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0
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]	0.00	0.00	49.50
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.565
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
l_b,int, Bicycle LOS Score for Intersection	4.522	4.503	4.132
Bicycle LOS	E	E	D

Sequence

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



Intersection Level Of Service Report
Intersection 5: Indian St (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	48.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.722

Intersection Setup

Name	Indian St						Iris Ave			Iris 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 Pocket	1	0	0	1	0	0	2	0	1	2	0	0
Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	200.00	150.00	100.00	100.00
Speed [mph]	25.00			40.00			25.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indian St						Iris Ave			Iris Ave		
Base Volume Input [veh/h]	52	239	23	222	255	18	53	189	49	15	386	332
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	11	4	5	3	7	6	2	16	5	16	52	9
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]	66	257	29	238	277	25	58	216	57	32	461	361
Peak Hour Factor	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500	0.7500
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]	22	86	10	79	92	8	19	72	19	11	154	120
Total Analysis Volume [veh/h]	88	343	39	317	369	33	77	288	76	43	615	481
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	14	34	0	29	49	0	11	46	0	11	46	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	23	0	0	21	0	0	29	0	0	26	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	30	30	25	45	45	7	42	42	7	42	42
g / C, Green / Cycle	0.08	0.25	0.25	0.21	0.38	0.38	0.06	0.35	0.35	0.06	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.05	0.10	0.11	0.18	0.11	0.11	0.02	0.08	0.05	0.01	0.32	0.32
s, saturation flow rate [veh/h]	1767	1855	1790	1767	1855	1802	3431	3532	1577	3431	1855	1589
c, Capacity [veh/h]	147	464	447	368	696	676	200	1236	552	200	649	556
d1, Uniform Delay [s]	53.06	37.68	37.72	45.83	26.33	26.34	54.43	27.60	26.63	53.88	37.15	37.22
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	16.64	2.75	2.90	22.36	1.07	1.10	5.51	0.44	0.52	2.44	18.76	21.59
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	0.60	0.42	0.42	0.86	0.29	0.29	0.38	0.23	0.14	0.21	0.91	0.91
d, Delay for Lane Group [s/veh]	69.70	40.43	40.62	68.19	27.40	27.44	59.94	28.04	27.15	56.32	55.91	58.81
Lane Group LOS	E	D	D	E	C	C	E	C	C	E	E	E
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.26	5.18	5.07	11.19	4.21	4.10	1.28	3.06	1.60	0.68	19.21	16.97
50th-Percentile Queue Length [ft/ln]	81.60	129.54	126.66	279.78	105.25	102.62	32.12	76.40	39.94	16.97	480.23	424.36
95th-Percentile Queue Length [veh/ln]	5.88	8.91	8.76	16.68	7.58	7.39	2.31	5.50	2.88	1.22	26.40	23.73
95th-Percentile Queue Length [ft/ln]	146.89	222.87	218.95	416.93	189.38	184.72	57.82	137.52	71.89	30.54	659.93	593.28

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	69.70	40.51	40.62	68.19	27.42	27.44	59.94	28.04	27.15	56.32	56.03	58.81
Movement LOS	E	D	D	E	C	C	E	C	C	E	E	E
d_A, Approach Delay [s/veh]	45.99			45.39			33.46			57.21		
Approach LOS	D			D			C			E		
d_I, Intersection Delay [s/veh]	48.46											
Intersection LOS	D											
Intersection V/C	0.722											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	2.469	2.735	2.744	2.853
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]	500	750	700	700
d_b, Bicycle Delay [s]	33.75	23.44	25.35	25.35
l_b,int, Bicycle LOS Score for Intersection	1.947	2.153	1.923	2.499
Bicycle LOS	A	B	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 6: Emma Ln (NS) at Iris Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	182.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.947

Intersection Setup

Name	Emma Ln			Emma Ln			Iris Ave			Iris 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 Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	75.00	150.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Emma Ln			Emma Ln			Iris Ave			Iris Ave		
Base Volume Input [veh/h]	51	0	17	0	0	0	0	405	30	6	668	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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	53	0	55	16	7	1	0	20	18
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]	56	0	18	53	0	55	16	436	33	6	728	18
Peak Hour Factor	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000	0.8000
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	0	6	17	0	17	5	136	10	2	228	6
Total Analysis Volume [veh/h]	70	0	23	66	0	69	20	545	41	8	910	23
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	0.95	0.00	0.04	0.76	0.00	0.21	0.03	0.01	0.00	0.01	0.01	0.00
d_M, Delay for Movement [s/veh]	182.20	165.73	140.20	146.83	138.97	116.39	10.07	0.00	0.00	8.69	0.00	0.00
Movement LOS	F	F	F	F	F	F	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	5.85	5.85	5.85	6.88	6.88	6.88	0.08	0.00	0.00	0.02	0.00	0.00
95th-Percentile Queue Length [ft/ln]	146.20	146.20	146.20	171.90	171.90	171.90	2.11	0.00	0.00	0.61	0.00	0.00
d_A, Approach Delay [s/veh]	171.82			131.27			0.33			0.07		
Approach LOS	F			F			A			A		
d_I, Intersection Delay [s/veh]	19.14											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: Perris Blvd (NS) at John F Kennedy Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	49.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.767

Intersection Setup

Name	Perris Blvd						John F Kennedy Dr			John F Kennedy Dr		
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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	160.00	100.00	100.00	145.00	100.00	100.00	90.00	100.00	100.00	145.00	100.00	100.00
Speed [mph]	40.00			30.00			40.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd						John F Kennedy Dr			John F Kennedy Dr		
Base Volume Input [veh/h]	112	899	218	152	436	22	46	320	59	157	320	125
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	43	153	15	0	154	0	0	27	15	5	83	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]	162	1106	246	161	616	23	49	366	78	171	422	133
Peak Hour Factor	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300	0.8300
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]	49	333	74	48	186	7	15	110	23	52	127	40
Total Analysis Volume [veh/h]	195	1333	296	194	742	28	59	441	94	206	508	160
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	19	44	0	20	45	0	11	35	0	21	45	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	29	0	0	29	0	0	24	0	0	26	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	C	L	C	C	L	C	R	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	40	40	16	41	41	7	31	31	17	41	41
g / C, Green / Cycle	0.13	0.33	0.33	0.13	0.34	0.34	0.06	0.26	0.26	0.14	0.34	0.34
(v / s)_i Volume / Saturation Flow Rate	0.11	0.31	0.31	0.11	0.14	0.14	0.03	0.12	0.06	0.12	0.14	0.10
s, saturation flow rate [veh/h]	1767	3532	1688	1767	3532	1821	1767	3532	1577	1767	3532	1577
c, Capacity [veh/h]	221	1177	563	236	1207	622	103	912	407	250	1207	539
d1, Uniform Delay [s]	51.64	38.73	38.83	50.63	30.37	30.38	55.04	37.71	35.10	50.04	30.37	28.94
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	36.38	14.59	25.64	26.70	1.08	2.09	21.08	1.83	1.32	25.38	1.08	1.41
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	0.88	0.93	0.94	0.82	0.42	0.42	0.57	0.48	0.23	0.82	0.42	0.30
d, Delay for Lane Group [s/veh]	88.02	53.32	64.47	77.32	31.45	32.47	76.12	39.54	36.42	75.41	31.45	30.35
Lane Group LOS	F	D	E	E	C	C	E	D	D	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes	No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.89	17.47	18.55	7.41	5.83	6.20	2.32	5.62	2.29	7.60	5.63	3.48
50th-Percentile Queue Length [ft/ln]	197.34	436.83	463.77	185.35	145.79	155.06	57.89	140.50	57.18	190.12	140.84	87.08
95th-Percentile Queue Length [veh/ln]	12.50	24.33	25.61	11.88	9.79	10.29	4.17	9.51	4.12	12.13	9.53	6.27
95th-Percentile Queue Length [ft/ln]	312.53	608.22	640.35	296.99	244.80	257.16	104.21	237.70	102.92	303.18	238.16	156.74

Movement, Approach, & Intersection Results

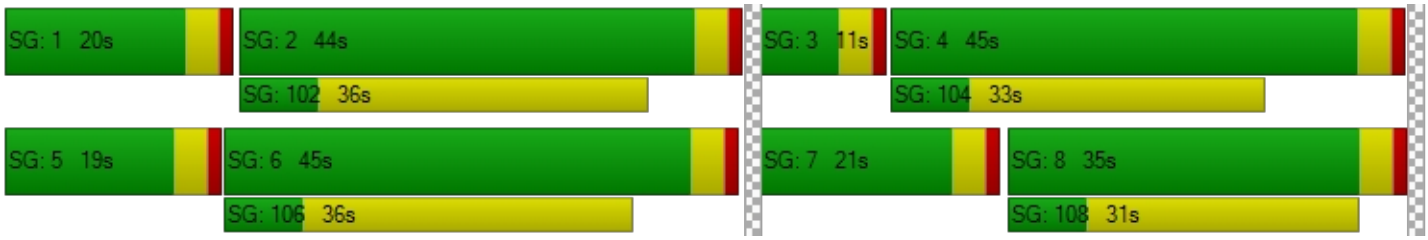
d_M, Delay for Movement [s/veh]	88.02	55.27	64.47	77.32	31.77	32.47	76.12	39.54	36.42	75.41	31.45	30.35
Movement LOS	F	E	E	E	C	C	E	D	D	E	C	C
d_A, Approach Delay [s/veh]	60.26			40.96			42.68			41.61		
Approach LOS	E			D			D			D		
d_I, Intersection Delay [s/veh]	49.61											
Intersection LOS	D											
Intersection V/C	0.767											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.140	2.958	2.754	2.907
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	683	517	683
d_b, Bicycle Delay [s]	26.67	26.00	33.00	26.00
l_b,int, Bicycle LOS Score for Intersection	2.563	2.090	2.050	2.281
Bicycle LOS	B	B	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 8: Perris Blvd (NS) at Gentian Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	33.9
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.507

Intersection Setup

Name	Perris Blvd			Perris Blvd			Gentian Ave			Gentian 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 Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			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	Perris Blvd			Perris Blvd			Gentian Ave			Gentian Ave		
Base Volume Input [veh/h]	102	870	24	12	468	32	37	26	131	34	54	31
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	182	0	0	164	10	29	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]	108	1104	25	13	660	44	68	28	139	36	57	33
Peak Hour Factor	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600	0.8600
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]	31	321	7	4	192	13	20	8	40	10	17	10
Total Analysis Volume [veh/h]	126	1284	29	15	767	51	79	33	162	42	66	38
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	22	55	0	11	44	0	0	29	0	0	25	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	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	C	L	C	C	L	C	R	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	51	51	7	40	40	25	25	25	21
g / C, Green / Cycle	0.15	0.43	0.43	0.06	0.33	0.33	0.21	0.21	0.21	0.18
(v / s)_i Volume / Saturation Flow Rate	0.07	0.24	0.24	0.01	0.15	0.15	0.04	0.02	0.10	0.08
s, saturation flow rate [veh/h]	1767	3532	1834	1767	3532	1797	1767	1855	1577	1749
c, Capacity [veh/h]	265	1501	779	103	1177	599	368	386	328	306
d1, Uniform Delay [s]	46.68	26.26	26.26	53.66	31.49	31.52	39.36	38.29	41.91	44.56
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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
d2, Incremental Delay [s]	6.00	1.61	3.08	2.95	1.29	2.56	1.33	0.43	5.21	5.24
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
Rp, platoon ratio	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

Lane Group Results

X, volume / capacity	0.48	0.58	0.58	0.15	0.46	0.46	0.21	0.09	0.49	0.48
d, Delay for Lane Group [s/veh]	52.68	27.88	29.35	56.61	32.79	34.08	40.70	38.72	47.12	49.80
Lane Group LOS	D	C	C	E	C	C	D	D	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	3.80	9.26	9.94	0.51	6.17	6.53	2.10	0.84	4.76	4.33
50th-Percentile Queue Length [ft/ln]	95.06	231.55	248.44	12.64	154.32	163.30	52.47	21.10	119.01	108.27
95th-Percentile Queue Length [veh/ln]	6.84	14.25	15.11	0.91	10.25	10.72	3.78	1.52	8.34	7.74
95th-Percentile Queue Length [ft/ln]	171.11	356.33	377.69	22.75	256.19	268.09	94.44	37.98	208.46	193.60

Movement, Approach, & Intersection Results

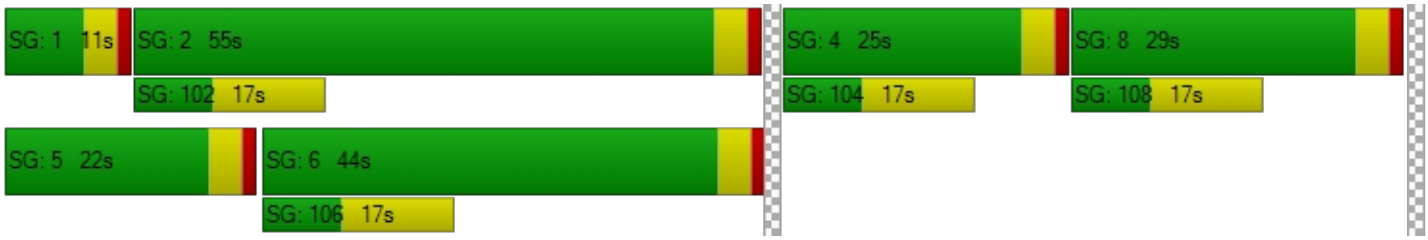
d_M, Delay for Movement [s/veh]	52.68	28.36	29.35	56.61	33.17	34.08	40.70	38.72	47.12	49.80	49.80	49.80
Movement LOS	D	C	C	E	C	C	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	30.51			33.65			44.26			49.80		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	33.92											
Intersection LOS	C											
Intersection V/C	0.507											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.111	3.074	2.250	1.855
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	850	667	417	350
d_b, Bicycle Delay [s]	19.84	26.67	37.60	40.84
l_b,int, Bicycle LOS Score for Intersection	2.351	2.018	2.012	1.801
Bicycle LOS	B	B	B	A

Sequence

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



Intersection Level Of Service Report
Intersection 9: Perris Blvd (NS) at Santiago Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	17.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.406

Intersection Setup

Name	Perris Bllvd			Perris Blvd			Santiago Dr			Santiago Dr		
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 Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Perris Bllvd			Perris Blvd			Santiago Dr			Santiago Dr		
Base Volume Input [veh/h]	0	921	10	60	576	1	0	0	0	24	0	96
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	6	152	0	0	153	11	30	0	20	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]	6	1128	11	64	764	12	30	0	20	25	0	102
Peak Hour Factor	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000	0.9000
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	313	3	18	212	3	8	0	6	7	0	28
Total Analysis Volume [veh/h]	7	1253	12	71	849	13	33	0	22	28	0	113
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	12	74	0	17	79	0	0	29	0	0	29	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	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	C	L	C	C	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	7	69	69	12	74	74	24	24
g / C, Green / Cycle	0.06	0.58	0.58	0.10	0.62	0.62	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.00	0.24	0.24	0.04	0.16	0.16	0.04	0.09
s, saturation flow rate [veh/h]	1767	3532	1846	1767	3532	1841	1259	1562
c, Capacity [veh/h]	103	2031	1061	177	2178	1135	300	348
d1, Uniform Delay [s]	53.42	14.17	14.17	50.63	10.50	10.50	39.95	42.06
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.27	0.61	1.17	6.68	0.29	0.56	1.34	3.47
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.07	0.41	0.41	0.40	0.26	0.26	0.18	0.40
d, Delay for Lane Group [s/veh]	54.68	14.78	15.34	57.32	10.79	11.06	41.29	45.53
Lane Group LOS	D	B	B	E	B	B	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.23	5.93	6.36	2.28	3.20	3.42	1.49	4.04
50th-Percentile Queue Length [ft/ln]	5.80	148.27	159.11	57.08	79.89	85.47	37.29	101.11
95th-Percentile Queue Length [veh/ln]	0.42	9.92	10.50	4.11	5.75	6.15	2.69	7.28
95th-Percentile Queue Length [ft/ln]	10.43	248.12	262.54	102.75	143.80	153.85	67.13	182.00

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	54.68	14.97	15.34	57.32	10.88	11.06	41.29	41.29	41.29	45.53	45.53	45.53
Movement LOS	D	B	B	E	B	B	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	15.19			14.42			41.29			45.53		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	17.27											
Intersection LOS	B											
Intersection V/C	0.406											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	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]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1150	1233	400	400
d_b, Bicycle Delay [s]	10.84	8.82	38.40	38.40
l_b,int, Bicycle LOS Score for Intersection	2.259	2.073	1.650	1.792
Bicycle LOS	B	B	A	A

Sequence

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

Intersection Level Of Service Report
Intersection 10: Perris Blvd (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	46.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.826

Intersection Setup

Name	Perris Blvd			Perris Bllvd			Iris Ave			Iris 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 Pocket	0	0	0	0	0	0	0	0	0	0	0	0
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
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd			Perris Bllvd			Iris Ave			Iris Ave		
Base Volume Input [veh/h]	189	715	269	124	444	38	25	295	80	268	507	129
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	14	139	44	18	141	14	4	14	42	51	10	15
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]	214	897	329	149	612	54	31	327	127	335	547	152
Peak Hour Factor	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400	0.8400
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]	64	267	98	44	182	16	9	97	38	100	163	45
Total Analysis Volume [veh/h]	255	1068	392	177	729	64	37	389	151	399	651	181
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]	115
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	26	37	0	19	30	0	11	26	0	33	48	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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]	115	115	115	115	115	115	115	115	115	115	115	115
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	22	33	33	15	26	26	7	22	22	29	44	44
g / C, Green / Cycle	0.19	0.29	0.29	0.13	0.23	0.23	0.06	0.19	0.19	0.25	0.38	0.38
(v / s)_i Volume / Saturation Flow Rate	0.14	0.21	0.24	0.10	0.15	0.15	0.02	0.15	0.15	0.22	0.18	0.11
s, saturation flow rate [veh/h]	1810	5176	1615	1810	3618	1823	1810	1900	1723	1810	3618	1615
c, Capacity [veh/h]	346	1485	463	236	818	412	110	363	330	456	1384	618
d1, Uniform Delay [s]	43.77	36.84	38.61	48.19	40.31	40.34	51.77	44.13	44.25	41.25	26.73	24.68
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	13.10	3.03	17.10	19.49	3.88	7.63	8.05	14.76	17.01	20.22	1.15	1.20
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	0.74	0.72	0.85	0.75	0.64	0.65	0.34	0.77	0.79	0.87	0.47	0.29
d, Delay for Lane Group [s/veh]	56.87	39.87	55.70	67.69	44.19	47.97	59.82	58.90	61.26	61.48	27.88	25.89
Lane Group LOS	E	D	E	E	D	D	E	E	E	E	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.87	9.03	12.15	6.03	6.96	7.48	1.24	8.84	8.34	12.97	6.63	3.50
50th-Percentile Queue Length [ft/ln]	196.73	225.87	303.66	150.71	173.98	186.93	31.12	220.94	208.54	324.16	165.85	87.50
95th-Percentile Queue Length [veh/ln]	12.47	13.96	17.86	10.05	11.29	11.96	2.24	13.71	13.08	18.87	10.86	6.30
95th-Percentile Queue Length [ft/ln]	311.74	349.11	446.56	251.37	282.14	299.04	56.02	342.83	326.95	471.80	271.46	157.50

Movement, Approach, & Intersection Results

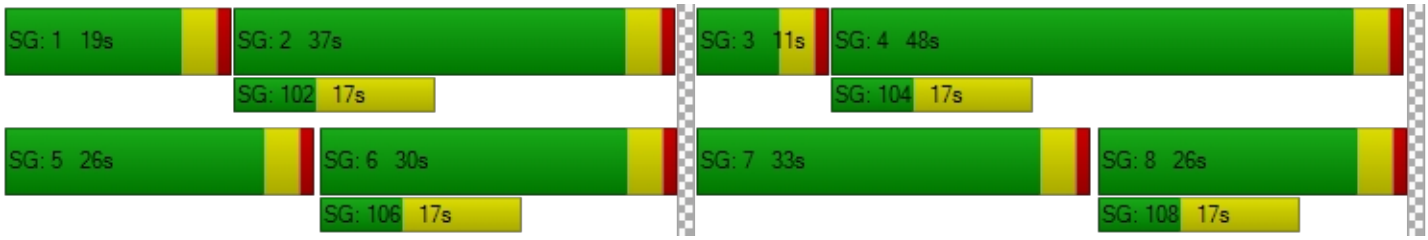
d_M, Delay for Movement [s/veh]	56.87	39.87	55.70	67.69	45.24	47.97	59.82	59.56	61.26	61.48	27.88	25.89
Movement LOS	E	D	E	E	D	D	E	E	E	E	C	C
d_A, Approach Delay [s/veh]	46.01			49.51			60.02			38.47		
Approach LOS	D			D			E			D		
d_I, Intersection Delay [s/veh]	46.50											
Intersection LOS	D											
Intersection V/C	0.826											

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]	47.03	47.03	47.03	47.03
l_p,int, Pedestrian LOS Score for Intersection	3.285	3.077	2.764	2.998
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	574	452	383	765
d_b, Bicycle Delay [s]	29.23	34.44	37.60	21.92
l_b,int, Bicycle LOS Score for Intersection	2.503	2.093	2.036	2.575
Bicycle LOS	B	B	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 11: Perris Blvd (NS) at Harley Knox Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	37.6
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.677

Intersection Setup

Name	Perris Blvd			Perris Blvd			Harley Knox Blvd			Harley Knox Blvd		
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 Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	320.00	100.00	230.00	215.00	100.00	210.00	300.00	100.00	300.00	335.00	100.00	230.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd			Perris Blvd			Harley Knox Blvd			Harley Knox Blvd		
Base Volume Input [veh/h]	97	995	12	61	659	228	184	41	131	25	131	227
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	159	28	22	161	60	17	42	0	25	38	20
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]	103	1214	41	87	860	302	212	85	139	52	177	261
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
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]	27	323	11	23	229	80	56	23	37	14	47	69
Total Analysis Volume [veh/h]	110	1291	44	93	915	321	226	90	148	55	188	278
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	11	47	0	11	47	0	27	51	0	11	35	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	R	L	C	R	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	43	43	7	43	43	23	47	47	7	31	31
g / C, Green / Cycle	0.06	0.36	0.36	0.06	0.36	0.36	0.19	0.39	0.39	0.06	0.26	0.26
(v / s)_i Volume / Saturation Flow Rate	0.03	0.26	0.03	0.03	0.18	0.20	0.13	0.03	0.09	0.02	0.04	0.18
s, saturation flow rate [veh/h]	3431	5053	1577	3431	5053	1577	1767	3532	1577	3431	5053	1577
c, Capacity [veh/h]	200	1811	565	200	1811	565	339	1383	618	200	1305	407
d1, Uniform Delay [s]	54.97	33.18	25.41	54.69	30.17	31.02	44.96	22.78	24.50	54.07	34.28	40.07
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	10.44	2.42	0.27	7.57	1.01	4.10	10.00	0.09	0.92	3.37	0.23	8.94
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	0.55	0.71	0.08	0.46	0.51	0.57	0.67	0.07	0.24	0.27	0.14	0.68
d, Delay for Lane Group [s/veh]	65.41	35.61	25.68	62.26	31.18	35.12	54.96	22.88	25.42	57.44	34.51	49.01
Lane Group LOS	E	D	C	E	C	D	D	C	C	E	C	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.87	10.71	0.85	1.54	6.81	7.83	7.00	0.79	2.89	0.87	1.41	8.15
50th-Percentile Queue Length [ft/ln]	46.78	267.72	21.22	38.51	170.20	195.71	174.99	19.73	72.17	21.78	35.13	203.81
95th-Percentile Queue Length [veh/ln]	3.37	16.08	1.53	2.77	11.09	12.42	11.34	1.42	5.20	1.57	2.53	12.83
95th-Percentile Queue Length [ft/ln]	84.20	401.89	38.20	69.31	277.17	310.42	283.46	35.51	129.91	39.21	63.23	320.87

Movement, Approach, & Intersection Results

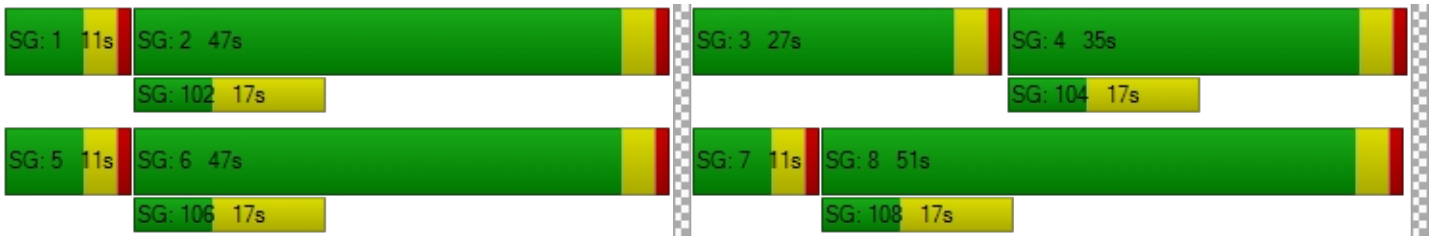
d_M, Delay for Movement [s/veh]	65.41	35.61	25.68	62.26	31.18	35.12	54.96	22.88	25.42	57.44	34.51	49.01
Movement LOS	E	D	C	E	C	D	D	C	C	E	C	D
d_A, Approach Delay [s/veh]	37.57			34.31			39.31			44.67		
Approach LOS	D			C			D			D		
d_I, Intersection Delay [s/veh]	37.62											
Intersection LOS	D											
Intersection V/C	0.677											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.279	3.371	2.834	2.985
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	717	783	517
d_b, Bicycle Delay [s]	24.70	24.70	22.20	33.00
l_b,int, Bicycle LOS Score for Intersection	2.354	2.291	1.942	1.846
Bicycle LOS	B	B	A	A

Sequence

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



Intersection Level Of Service Report
Intersection 1: Heacock St (NS) at Cactus Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	58.2
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.462

Intersection Setup

Name	Heacock St			Heacock St			Cactus 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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	320.00	100.00	100.00	100.00	100.00	100.00	140.00	100.00	100.00	140.00	100.00	100.00
Speed [mph]	45.00			45.00			40.00			30.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Heacock St			Heacock St			Cactus Ave					
Base Volume Input [veh/h]	529	554	17	97	448	46	137	1047	835	11	590	74
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	28	109	0	0	70	0	0	33	47	0	20	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]	589	696	18	103	545	49	145	1143	932	12	645	78
Peak Hour Factor	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300	0.9300
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]	158	187	5	28	147	13	39	307	251	3	173	21
Total Analysis Volume [veh/h]	633	748	19	111	586	53	156	1229	1002	13	694	84
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Overlap	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	8	7	4	0
Auxiliary Signal Groups									1,8			
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	7	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	30	30	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	1.0	1.0	1.0	1.0	1.0	0.0
Split [s]	28	28	0	27	27	0	18	54	54	11	47	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	3.0	3.0	3.0	3.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	7	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	10	0	10	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	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	2.0	2.0	2.0	0.0
Minimum Recall	No	No		No	No		No	No	No	No	No	
Maximum Recall	No	No		No	No		No	No	No	No	No	
Pedestrian Recall	No	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	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	0.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	24	24	24	23	23	23	14	50	77	7	43	43
g / C, Green / Cycle	0.20	0.20	0.20	0.19	0.19	0.19	0.12	0.42	0.64	0.06	0.36	0.36
(v / s)_i Volume / Saturation Flow Rate	0.18	0.21	0.21	0.06	0.17	0.17	0.09	0.35	0.64	0.01	0.21	0.21
s, saturation flow rate [veh/h]	3431	1855	1839	1767	1855	1801	1767	3532	1577	1767	1855	1786
c, Capacity [veh/h]	686	371	368	339	356	345	206	1472	1012	103	665	640
d1, Uniform Delay [s]	47.09	48.00	48.00	41.83	47.50	47.51	51.35	31.31	21.14	53.60	31.41	31.42
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	19.89	56.73	57.44	2.57	29.76	30.59	22.54	5.75	26.08	2.51	3.91	4.07
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	0.92	1.04	1.04	0.33	0.91	0.91	0.76	0.84	0.99	0.13	0.60	0.60
d, Delay for Lane Group [s/veh]	66.98	104.73	105.44	44.40	77.25	78.11	73.89	37.06	47.21	56.10	35.32	35.50
Lane Group LOS	E	F	F	D	E	E	E	D	D	E	D	D
Critical Lane Group	No	No	Yes	No	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	10.86	16.56	16.49	3.01	12.11	11.86	5.76	16.36	30.99	0.45	10.04	9.71
50th-Percentile Queue Length [ft/ln]	271.53	413.99	412.19	75.27	302.86	296.54	143.94	408.88	774.70	11.13	251.09	242.79
95th-Percentile Queue Length [veh/ln]	16.27	23.71	23.64	5.42	17.82	17.51	9.69	22.99	40.12	0.80	15.24	14.82
95th-Percentile Queue Length [ft/ln]	406.66	592.68	590.99	135.49	445.56	437.75	242.33	574.69	1002.93	20.03	381.02	370.56

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	66.98	105.08	105.44	44.40	77.64	78.11	73.89	37.06	47.21	56.10	35.40	35.50
Movement LOS	E	F	F	D	E	E	E	D	D	E	D	D
d_A, Approach Delay [s/veh]	87.85			72.75			43.73			35.75		
Approach LOS	F			E			D			D		
d_I, Intersection Delay [s/veh]	58.22											
Intersection LOS	E											
Intersection V/C	0.462											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.198	2.822	3.283	2.733
Crosswalk LOS	C	C	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	400	383	833	717
d_b, Bicycle Delay [s]	38.40	39.20	20.42	24.70
l_b,int, Bicycle LOS Score for Intersection	2.715	2.178	3.529	2.212
Bicycle LOS	B	B	D	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: Heacock St (NS) at John F Kennedy Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	49.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.797

Intersection Setup

Name	Heacock St			Heacock St			John F Kennedy Dr			John F Kennedy Dr		
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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	200.00	100.00	100.00
Speed [mph]	45.00			45.00			45.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			Yes			No			Yes		

Volumes

Name	Heacock St			Heacock St			John F Kennedy Dr			John F Kennedy Dr		
Base Volume Input [veh/h]	26	765	49	236	977	20	124	195	265	29	28	174
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	38	0	0	67	50	99	150	16	0	76	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]	37	849	52	250	1103	71	230	357	297	31	106	184
Peak Hour Factor	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100	0.9100
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	233	14	69	303	20	63	98	82	9	29	51
Total Analysis Volume [veh/h]	41	933	57	275	1212	78	253	392	326	34	116	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	1 - Coordination Group
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	11	44	0	29	62	0	19	36	0	11	28	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	40	40	25	58	58	15	32	32	7	24	24
g / C, Green / Cycle	0.06	0.33	0.33	0.21	0.48	0.48	0.13	0.27	0.27	0.06	0.20	0.20
(v / s)_i Volume / Saturation Flow Rate	0.02	0.26	0.04	0.16	0.35	0.35	0.14	0.21	0.21	0.02	0.06	0.13
s, saturation flow rate [veh/h]	1767	3532	1577	1767	1855	1816	1767	1855	1577	1767	1855	1577
c, Capacity [veh/h]	103	1177	526	368	897	878	221	495	420	103	371	315
d1, Uniform Delay [s]	54.47	36.24	27.67	44.54	24.64	24.75	52.50	40.91	40.68	54.25	40.96	44.04
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	11.09	5.51	0.42	12.97	5.07	5.31	105.42	12.28	13.08	8.37	2.19	9.60
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	0.40	0.79	0.11	0.75	0.72	0.73	1.15	0.79	0.78	0.33	0.31	0.64
d, Delay for Lane Group [s/veh]	65.56	41.75	28.08	57.51	29.71	30.06	157.92	53.19	53.76	62.62	43.15	53.65
Lane Group LOS	E	D	C	E	C	C	F	D	D	E	D	D
Critical Lane Group	No	Yes	No	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.49	12.73	1.16	8.76	14.91	14.81	12.93	12.07	10.11	1.22	3.14	6.30
50th-Percentile Queue Length [ft/ln]	37.13	318.24	29.10	219.00	372.65	370.35	323.20	301.63	252.72	30.50	78.52	157.47
95th-Percentile Queue Length [veh/ln]	2.67	18.58	2.10	13.61	21.24	21.13	19.94	17.76	15.32	2.20	5.65	10.41
95th-Percentile Queue Length [ft/ln]	66.84	464.53	52.38	340.35	530.94	528.15	498.40	444.04	383.07	54.89	141.33	260.36

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	65.56	41.75	28.08	57.51	29.87	30.06	157.92	53.19	53.76	62.62	43.15	53.65
Movement LOS	E	D	C	E	C	C	F	D	D	E	D	D
d_A, Approach Delay [s/veh]	41.94			34.74			80.67			51.05		
Approach LOS	D			C			F			D		
d_I, Intersection Delay [s/veh]	49.48											
Intersection LOS	D											
Intersection V/C	0.797											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	0.0	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]	0.00	49.50	0.00	49.50
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.186	0.000	2.451
Crosswalk LOS	F	C	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	967	533	400
d_b, Bicycle Delay [s]	26.67	16.02	32.27	38.40
l_b,int, Bicycle LOS Score for Intersection	2.410	2.851	3.162	1.850
Bicycle LOS	B	C	C	A

Sequence

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

Intersection Level Of Service Report
Intersection 3: Heacock St (NS) at Gentian Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	14.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.547

Intersection Setup

Name	Heacock St		Heacock St		Gentian Ave	
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 Pocket	0	0	1	0	1	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	140.00	100.00
Speed [mph]	50.00		45.00		40.00	
Grade [%]	0.00		0.00		0.00	
Curb Present	No		No		No	
Crosswalk	No		Yes		Yes	

Volumes

Name	Heacock St		Heacock St		Gentian Ave	
Base Volume Input [veh/h]	730	20	111	1093	9	93
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	27	0	34	49	0	20
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]	801	21	152	1208	10	119
Peak Hour Factor	0.8800	0.8800	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	228	6	43	343	3	34
Total Analysis Volume [veh/h]	910	24	173	1373	11	135
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	-
Cycle Length [s]	120
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Permissive	Permissive	Protected	Permissive	Split	Split
Signal group	2	0	1	6	7	0
Auxiliary Signal Groups						
Lead / Lag	-	-	Lead	-	Lead	-
Minimum Green [s]	7	0	7	7	7	0
Maximum Green [s]	30	0	30	30	30	0
Amber [s]	3.0	0.0	3.0	3.0	3.0	0.0
All red [s]	1.0	0.0	1.0	1.0	1.0	0.0
Split [s]	75	0	23	98	22	0
Vehicle Extension [s]	3.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	10	10	0
Rest In Walk	No			No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	0.0	2.0	2.0	2.0	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
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	C	R	L	C	L	R
C, Cycle Length [s]	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	71	71	19	94	18	18
g / C, Green / Cycle	0.59	0.59	0.16	0.78	0.15	0.15
(v / s)_i Volume / Saturation Flow Rate	0.26	0.02	0.10	0.39	0.01	0.09
s, saturation flow rate [veh/h]	3532	1577	1767	3532	1767	1577
c, Capacity [veh/h]	2090	933	280	2767	265	237
d1, Uniform Delay [s]	13.48	10.16	47.12	4.61	43.62	47.41
k, delay calibration	0.50	0.50	0.50	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]	0.66	0.05	9.87	0.64	0.29	9.64
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	0.44	0.03	0.62	0.50	0.04	0.57
d, Delay for Lane Group [s/veh]	14.14	10.21	56.98	5.25	43.92	57.05
Lane Group LOS	B	B	E	A	D	E
Critical Lane Group	No	No	No	Yes	No	Yes
50th-Percentile Queue Length [veh/ln]	6.21	0.25	5.46	4.35	0.30	4.32
50th-Percentile Queue Length [ft/ln]	155.26	6.31	136.58	108.82	7.46	108.09
95th-Percentile Queue Length [veh/ln]	10.30	0.45	9.30	7.77	0.54	7.73
95th-Percentile Queue Length [ft/ln]	257.43	11.36	232.41	194.36	13.42	193.35

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	14.14	10.21	56.98	5.25	43.92	57.05
Movement LOS	B	B	E	A	D	E
d_A, Approach Delay [s/veh]	14.04		11.04		56.06	
Approach LOS	B		B		E	
d_I, Intersection Delay [s/veh]	14.61					
Intersection LOS	B					
Intersection V/C	0.547					

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	11.0	11.0
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]	0.00	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	0.000	3.098	2.103
Crosswalk LOS	F	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	60.00	60.00	60.00
l_b,int, Bicycle LOS Score for Intersection	4.903	5.408	4.132
Bicycle LOS	E	F	D

Sequence

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

Intersection Level Of Service Report
Intersection 4: Heacock St (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	33.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.554

Intersection Setup

Name	Heacock St		Heacock St			Iris Ave	
Approach	Northbound		Southbound			Westbound	
Lane Configuration							
Turning Movement	Thru	Right	U-turn	Left	Thru	Left	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	1	2	0	0	1	1
Pocket Length [ft]	100.00	150.00	200.00	100.00	100.00	150.00	300.00
Speed [mph]	50.00		45.00			40.00	
Grade [%]	0.00		0.00			0.00	
Curb Present	No		No			No	
Crosswalk	No		No			Yes	

Volumes

Name	Heacock St		Heacock St			Iris Ave	
Base Volume Input [veh/h]	440	32	0	451	637	49	253
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.00	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	25	0	49	0	14	27
Diverted Trips [veh/h]	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	466	59	0	527	675	66	295
Peak Hour Factor	0.8800	0.8800	0.9500	0.8800	0.8800	0.8800	0.8800
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	132	17	0	150	192	19	84
Total Analysis Volume [veh/h]	530	67	0	599	767	75	335
Presence of On-Street Parking	No	No	No		No	No	No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	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	-
Cycle Length [s]	130
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	4.00

Phasing & Timing

Control Type	Permissive	Permissive	Permissive	Protected	Permissive	Split	Split
Signal group	2	0	0	1	6	7	0
Auxiliary Signal Groups							
Lead / Lag	-	-	-	Lead	-	Lead	-
Minimum Green [s]	7	0	0	7	7	7	0
Maximum Green [s]	30	0	0	30	30	30	0
Amber [s]	4.0	0.0	0.0	4.0	4.0	4.0	0.0
All red [s]	1.0	0.0	0.0	1.0	1.0	1.0	0.0
Split [s]	38	0	0	42	80	50	0
Vehicle Extension [s]	3.0	0.0	0.0	3.0	3.0	3.0	0.0
Walk [s]	7	0	0	0	7	7	0
Pedestrian Clearance [s]	10	0	0	0	10	10	0
Rest In Walk	No				No	No	
I1, Start-Up Lost Time [s]	2.0	0.0	0.0	2.0	2.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	0.0	0.0	3.0	3.0	3.0	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
Detector Length [ft]	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

Exclusive Pedestrian Phase

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

Lane Group Calculations

Lane Group	C	R	L	C	L	R
C, Cycle Length [s]	130	130	130	130	130	130
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00
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	3.00	3.00	3.00
g_i, Effective Green Time [s]	33	33	37	75	45	45
g / C, Green / Cycle	0.25	0.25	0.28	0.58	0.35	0.35
(v / s)_i Volume / Saturation Flow Rate	0.15	0.04	0.17	0.22	0.02	0.21
s, saturation flow rate [veh/h]	3532	1577	3431	3532	3431	1577
c, Capacity [veh/h]	897	400	976	2038	1188	546
d1, Uniform Delay [s]	42.58	37.79	40.30	14.86	28.41	35.29
k, delay calibration	0.50	0.50	0.50	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]	2.86	0.90	2.88	0.53	0.10	5.09
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	0.59	0.17	0.61	0.38	0.06	0.61
d, Delay for Lane Group [s/veh]	45.44	38.70	43.18	15.39	28.51	40.38
Lane Group LOS	D	D	D	B	C	D
Critical Lane Group	Yes	No	Yes	No	No	Yes
50th-Percentile Queue Length [veh/ln]	7.57	1.72	8.47	5.89	0.79	9.40
50th-Percentile Queue Length [ft/ln]	189.36	43.01	211.76	147.21	19.85	234.90
95th-Percentile Queue Length [veh/ln]	12.09	3.10	13.24	9.87	1.43	14.42
95th-Percentile Queue Length [ft/ln]	302.20	77.41	331.08	246.70	35.73	360.57

Movement, Approach, & Intersection Results

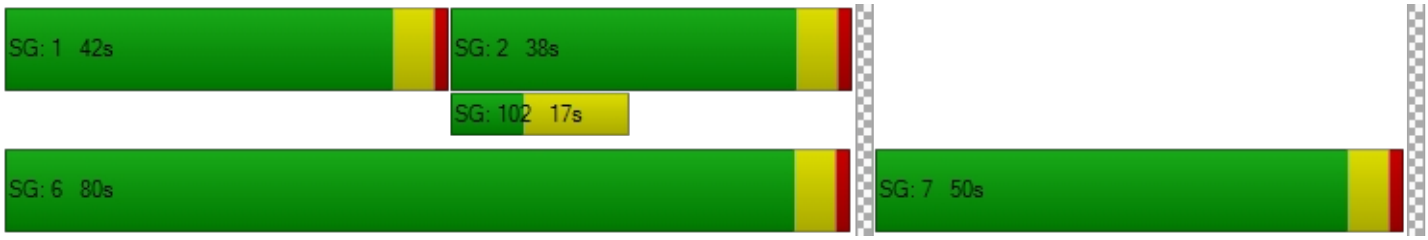
d_M, Delay for Movement [s/veh]	45.44	38.70	43.18	43.18	15.39	28.51	40.38
Movement LOS	D	D	D	D	B	C	D
d_A, Approach Delay [s/veh]	44.68		27.58			38.21	
Approach LOS	D		C			D	
d_I, Intersection Delay [s/veh]	33.72						
Intersection LOS	C						
Intersection V/C	0.554						

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	11.0
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]	0.00	0.00	54.47
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	2.597
Crosswalk LOS	F	F	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	0	0
d_b, Bicycle Delay [s]	65.00	65.00	65.00
l_b,int, Bicycle LOS Score for Intersection	4.625	4.765	4.132
Bicycle LOS	E	E	D

Sequence

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



Intersection Level Of Service Report
Intersection 5: Indian St (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	36.2
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.345

Intersection Setup

Name	Indian St						Iris Ave			Iris 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 Pocket	1	0	0	1	0	0	2	0	1	2	0	0
Pocket Length [ft]	100.00	100.00	100.00	200.00	100.00	100.00	200.00	100.00	200.00	150.00	100.00	100.00
Speed [mph]	45.00			40.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Indian St						Iris Ave			Iris Ave		
Base Volume Input [veh/h]	40	82	7	174	135	18	26	364	113	17	200	177
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	7	8	16	9	6	4	7	53	14	9	30	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]	49	95	23	193	149	23	35	439	134	27	242	193
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
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	25	6	51	40	6	9	117	36	7	64	51
Total Analysis Volume [veh/h]	52	101	24	205	159	24	37	467	143	29	257	205
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	14	34	0	35	55	0	11	40	0	11	40	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	23	0	0	21	0	0	29	0	0	26	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	C	L	C	C	L	C	R	L	C	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10	30	30	31	51	51	7	36	36	7	36	36
g / C, Green / Cycle	0.08	0.25	0.25	0.26	0.43	0.43	0.06	0.30	0.30	0.06	0.30	0.30
(v / s)_i Volume / Saturation Flow Rate	0.03	0.03	0.04	0.12	0.05	0.05	0.01	0.13	0.09	0.01	0.13	0.14
s, saturation flow rate [veh/h]	1767	1855	1736	1767	1855	1772	3431	3532	1577	3431	1855	1590
c, Capacity [veh/h]	147	464	434	456	788	753	200	1060	473	200	556	477
d1, Uniform Delay [s]	51.95	34.94	35.00	37.34	20.88	20.90	53.78	33.88	32.33	53.66	33.87	34.05
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	6.53	0.61	0.69	3.18	0.30	0.32	2.03	1.33	1.64	1.52	2.51	3.12
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	0.35	0.14	0.14	0.45	0.12	0.12	0.18	0.44	0.30	0.14	0.44	0.46
d, Delay for Lane Group [s/veh]	58.48	35.55	35.68	40.51	21.19	21.23	55.81	35.21	33.97	55.18	36.38	37.17
Lane Group LOS	E	D	D	D	C	C	E	D	C	E	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.71	1.48	1.46	5.36	1.61	1.57	0.58	5.58	3.36	0.45	6.02	5.45
50th-Percentile Queue Length [ft/ln]	42.83	37.03	36.41	134.05	40.35	39.28	14.52	139.41	84.00	11.31	150.59	136.18
95th-Percentile Queue Length [veh/ln]	3.08	2.67	2.62	9.16	2.91	2.83	1.05	9.45	6.05	0.81	10.05	9.27
95th-Percentile Queue Length [ft/ln]	77.09	66.66	65.54	228.99	72.63	70.71	26.14	236.23	151.20	20.36	251.21	231.87

Movement, Approach, & Intersection Results

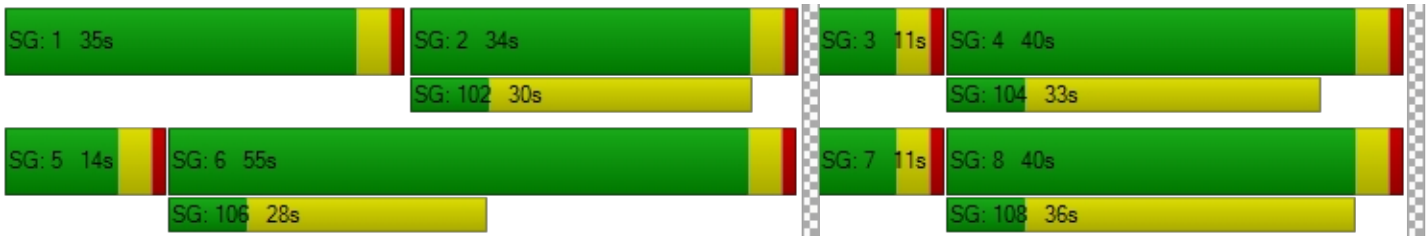
d_M, Delay for Movement [s/veh]	58.48	35.60	35.68	40.51	21.20	21.23	55.81	35.21	33.97	55.18	36.42	37.17
Movement LOS	E	D	D	D	C	C	E	D	C	E	D	D
d_A, Approach Delay [s/veh]	42.33			31.41			36.12			37.84		
Approach LOS	D			C			D			D		
d_I, Intersection Delay [s/veh]	36.19											
Intersection LOS	D											
Intersection V/C	0.345											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	2.462	2.504	2.790	2.724
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	500	850	600	600
d_b, Bicycle Delay [s]	33.75	19.84	29.40	29.40
l_b,int, Bicycle LOS Score for Intersection	1.706	1.880	2.093	1.965
Bicycle LOS	A	A	B	A

Sequence

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



Intersection Level Of Service Report
Intersection 6: Emma Ln (NS) at Iris Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	64.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.450

Intersection Setup

Name	Emma Ln			Emma Ln			Iris Ave			Iris 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 Pocket	0	0	0	0	0	0	1	0	1	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	150.00	100.00	75.00	150.00	100.00	100.00
Speed [mph]	25.00			25.00			40.00			40.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name	Emma Ln			Emma Ln			Iris Ave			Iris Ave		
Base Volume Input [veh/h]	22	1	17	1	1	0	1	533	49	29	362	1
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	0	36	0	32	56	20	2	0	11	60
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]	24	1	18	37	1	32	57	585	54	31	395	61
Peak Hour Factor	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500	0.8500
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]	7	0	5	11	0	9	17	172	16	9	116	18
Total Analysis Volume [veh/h]	28	1	21	44	1	38	67	688	64	36	465	72
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	0.28	0.01	0.05	0.45	0.01	0.07	0.07	0.01	0.00	0.04	0.00	0.00
d_M, Delay for Movement [s/veh]	52.35	46.66	24.68	64.72	59.14	34.20	8.75	0.00	0.00	9.41	0.00	0.00
Movement LOS	F	E	C	F	F	D	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.36	1.36	1.36	2.60	2.60	2.60	0.21	0.00	0.00	0.13	0.00	0.00
95th-Percentile Queue Length [ft/ln]	33.88	33.88	33.88	65.10	65.10	65.10	5.23	0.00	0.00	3.30	0.00	0.00
d_A, Approach Delay [s/veh]	40.61			50.68			0.72			0.59		
Approach LOS	E			F			A			A		
d_I, Intersection Delay [s/veh]	4.70											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: Perris Blvd (NS) at John F Kennedy Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	43.3
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.659

Intersection Setup

Name	Perris Blvd				Perris Blvd		John F Kennedy Dr			John F Kennedy Dr		
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 Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	160.00	100.00	100.00	145.00	100.00	100.00	90.00	100.00	100.00	145.00	100.00	100.00
Speed [mph]	40.00			30.00			40.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd				Perris Blvd		John F Kennedy Dr			John F Kennedy Dr		
Base Volume Input [veh/h]	142	900	129	97	880	59	72	259	112	161	196	72
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	26	153	9	0	196	0	0	99	51	16	50	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]	177	1107	146	103	1129	63	76	374	170	187	258	76
Peak Hour Factor	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400	0.9400
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]	47	294	39	27	300	17	20	99	45	50	69	20
Total Analysis Volume [veh/h]	188	1178	155	110	1201	67	81	398	181	199	274	81
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	21	47	0	15	41	0	16	35	0	23	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	29	0	0	29	0	0	24	0	0	26	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	C	L	C	C	L	C	R	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	17	43	43	11	37	37	12	31	31	19	38	38
g / C, Green / Cycle	0.14	0.36	0.36	0.09	0.31	0.31	0.10	0.26	0.26	0.16	0.32	0.32
(v / s)_i Volume / Saturation Flow Rate	0.11	0.25	0.25	0.06	0.24	0.24	0.05	0.11	0.11	0.11	0.08	0.05
s, saturation flow rate [veh/h]	1767	3532	1747	1767	3532	1805	1767	3532	1577	1767	3532	1577
c, Capacity [veh/h]	250	1266	626	162	1089	557	177	912	407	280	1118	499
d1, Uniform Delay [s]	49.47	33.05	33.05	52.79	37.65	37.65	50.94	37.20	37.28	47.90	30.37	29.53
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	18.62	3.31	6.54	20.60	5.28	9.91	8.34	1.52	3.49	14.29	0.52	0.70
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	0.75	0.70	0.70	0.68	0.77	0.77	0.46	0.44	0.44	0.71	0.24	0.16
d, Delay for Lane Group [s/veh]	68.09	36.36	39.59	73.39	42.93	47.56	59.28	38.71	40.77	62.19	30.89	30.23
Lane Group LOS	E	D	D	E	D	D	E	D	D	E	C	C
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	6.61	11.35	11.79	4.14	11.90	12.88	2.67	4.99	4.77	6.60	2.93	1.74
50th-Percentile Queue Length [ft/ln]	165.29	283.78	294.77	103.50	297.46	322.01	66.82	124.71	119.17	165.07	73.36	43.43
95th-Percentile Queue Length [veh/ln]	10.83	16.88	17.42	7.45	17.56	18.77	4.81	8.65	8.35	10.82	5.28	3.13
95th-Percentile Queue Length [ft/ln]	270.71	421.92	435.56	186.30	438.89	469.15	120.27	216.28	208.69	270.42	132.05	78.17

Movement, Approach, & Intersection Results

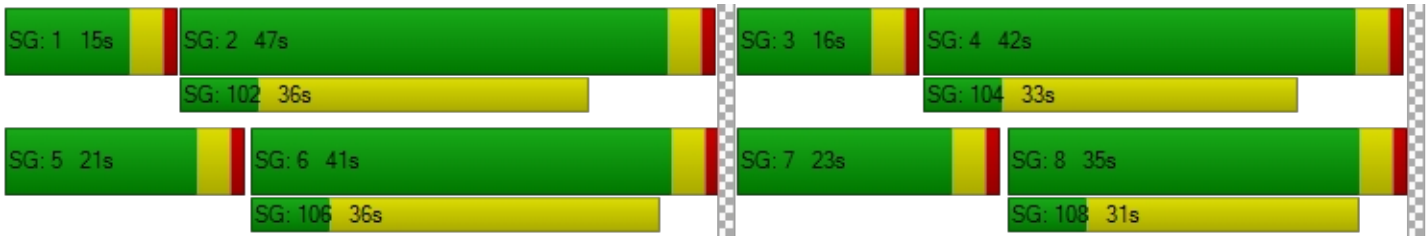
d_M, Delay for Movement [s/veh]	68.09	37.15	39.59	73.39	44.32	47.56	59.28	38.71	40.77	62.19	30.89	30.23
Movement LOS	E	D	D	E	D	D	E	D	D	E	C	C
d_A, Approach Delay [s/veh]	41.22			46.80			41.80			42.04		
Approach LOS	D			D			D			D		
d_I, Intersection Delay [s/veh]	43.29											
Intersection LOS	D											
Intersection V/C	0.659											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.184	2.986	2.724	2.763
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	717	617	517	633
d_b, Bicycle Delay [s]	24.70	28.70	33.00	28.02
l_b,int, Bicycle LOS Score for Intersection	2.396	2.318	2.104	2.017
Bicycle LOS	B	B	B	B

Sequence

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



Intersection Level Of Service Report
Intersection 8: Perris Blvd (NS) at Gentian Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	27.7
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.518

Intersection Setup

Name	Perris Blvd			Perris Blvd			Gentian Ave			Gentian 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 Pocket	1	0	0	1	0	0	1	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	200.00	100.00	100.00	145.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			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	Perris Blvd			Perris Blvd			Gentian Ave			Gentian Ave		
Base Volume Input [veh/h]	81	979	53	34	947	28	18	40	99	39	21	29
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	171	0	0	230	33	17	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]	86	1209	56	36	1234	63	36	42	105	41	22	31
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	23	329	15	10	335	17	10	11	29	11	6	8
Total Analysis Volume [veh/h]	93	1314	61	39	1341	68	39	46	114	45	24	34
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Split	Split	Split	Split	Split	Split
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	18	65	0	11	58	0	0	23	0	0	21	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	2.0	2.0	0.0	2.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	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	C	L	C	C	L	C	R	C
C, Cycle Length [s]	120	120	120	120	120	120	120	120	120	120
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14	61	61	7	54	54	19	19	19	17
g / C, Green / Cycle	0.12	0.51	0.51	0.06	0.45	0.45	0.16	0.16	0.16	0.14
(v / s)_i Volume / Saturation Flow Rate	0.05	0.26	0.26	0.02	0.26	0.26	0.02	0.02	0.07	0.06
s, saturation flow rate [veh/h]	1767	3532	1813	1767	3532	1809	1767	1855	1577	1717
c, Capacity [veh/h]	206	1795	922	103	1589	814	280	294	250	243
d1, Uniform Delay [s]	49.42	19.53	19.53	54.41	24.65	24.65	43.46	43.58	45.82	47.02
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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
d2, Incremental Delay [s]	6.98	1.02	1.98	10.26	1.59	3.08	1.04	1.13	5.92	5.32
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
Rp, platoon ratio	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

Lane Group Results

X, volume / capacity	0.45	0.51	0.51	0.38	0.59	0.59	0.14	0.16	0.46	0.42
d, Delay for Lane Group [s/veh]	56.40	20.55	21.51	64.66	26.24	27.73	44.50	44.72	51.73	52.35
Lane Group LOS	E	C	C	E	C	C	D	D	D	D
Critical Lane Group	Yes	No	No	No	No	Yes	No	No	Yes	Yes
50th-Percentile Queue Length [veh/ln]	2.94	8.10	8.56	1.40	9.70	10.27	1.09	1.29	3.53	3.15
50th-Percentile Queue Length [ft/ln]	73.51	202.46	214.02	35.08	242.39	256.80	27.34	32.26	88.28	78.85
95th-Percentile Queue Length [veh/ln]	5.29	12.77	13.36	2.53	14.80	15.53	1.97	2.32	6.36	5.68
95th-Percentile Queue Length [ft/ln]	132.31	319.14	333.98	63.15	370.06	388.20	49.21	58.08	158.91	141.92

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	56.40	20.85	21.51	64.66	26.70	27.73	44.50	44.72	51.73	52.35	52.35	52.35
Movement LOS	E	C	C	E	C	C	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	23.13			27.77			48.70			52.35		
Approach LOS	C			C			D			D		
d_I, Intersection Delay [s/veh]	27.73											
Intersection LOS	C											
Intersection V/C	0.518											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.228	3.200	2.223	1.870
Crosswalk LOS	C	C	B	A
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1017	900	317	283
d_b, Bicycle Delay [s]	14.50	18.15	42.50	44.20
l_b,int, Bicycle LOS Score for Intersection	2.367	2.356	1.888	1.730
Bicycle LOS	B	B	A	A

Sequence

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

Intersection Level Of Service Report
Intersection 9: Perris Blvd (NS) at Santiago Dr (EW)

Control Type:	Signalized	Delay (sec / veh):	14.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.433

Intersection Setup

Name	Perris Bllvd			Perris Blvd			Santiago Dr			Santiago Dr		
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 Pocket	1	0	0	1	0	0	0	0	0	0	0	0
Pocket Length [ft]	150.00	100.00	100.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	45.00			45.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	No			No			No			No		

Volumes

Name	Perris Bllvd			Perris Blvd			Santiago Dr			Santiago Dr		
Base Volume Input [veh/h]	1	1067	47	104	997	0	1	0	0	21	0	63
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	151	0	0	196	34	20	0	12	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	1282	50	110	1253	34	21	0	12	22	0	67
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	337	13	29	330	9	6	0	3	6	0	18
Total Analysis Volume [veh/h]	23	1349	53	116	1319	36	22	0	13	23	0	71
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]	115
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	12.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	5	2	0	1	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	-	-	-	-	-	-
Minimum Green [s]	7	7	0	7	7	0	0	7	0	0	7	0
Maximum Green [s]	30	30	0	30	30	0	0	30	0	0	30	0
Amber [s]	4.0	4.0	0.0	4.0	4.0	0.0	0.0	4.0	0.0	0.0	4.0	0.0
All red [s]	1.0	1.0	0.0	1.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	12	74	0	23	85	0	0	18	0	0	18	0
Vehicle Extension [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	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	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	3.0	3.0	0.0	3.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Minimum Recall	No	No		No	No			No			No	
Maximum Recall	No	No		No	No			No			No	
Pedestrian Recall	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	C	L	C	C	C	C
C, Cycle Length [s]	115	115	115	115	115	115	115	115
L, Total Lost Time per Cycle [s]	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
l1_p, Permitted Start-Up Lost Time [s]	0.00	0.00	0.00	0.00	0.00	0.00	2.00	2.00
l2, Clearance Lost Time [s]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
g_i, Effective Green Time [s]	7	69	69	18	80	80	13	13
g / C, Green / Cycle	0.06	0.60	0.60	0.16	0.70	0.70	0.11	0.11
(v / s)_i Volume / Saturation Flow Rate	0.01	0.26	0.26	0.07	0.25	0.25	0.03	0.06
s, saturation flow rate [veh/h]	1767	3532	1819	1767	3532	1830	1356	1565
c, Capacity [veh/h]	108	2119	1092	277	2457	1273	204	216
d1, Uniform Delay [s]	51.38	12.47	12.47	43.78	7.13	7.13	46.23	48.01
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.50	0.66	1.27	4.62	0.42	0.80	1.81	6.28
d3, Initial Queue Delay [s]	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
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.21	0.44	0.44	0.42	0.36	0.36	0.17	0.44
d, Delay for Lane Group [s/veh]	55.88	13.12	13.74	48.41	7.54	7.93	48.05	54.28
Lane Group LOS	E	B	B	D	A	A	D	D
Critical Lane Group	No	No	Yes	Yes	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	0.75	5.97	6.34	3.26	3.82	4.09	1.02	2.94
50th-Percentile Queue Length [ft/ln]	18.76	149.22	158.40	81.44	95.49	102.37	25.57	73.48
95th-Percentile Queue Length [veh/ln]	1.35	9.98	10.46	5.86	6.88	7.37	1.84	5.29
95th-Percentile Queue Length [ft/ln]	33.77	249.39	261.60	146.59	171.88	184.26	46.02	132.26

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	55.88	13.32	13.74	48.41	7.67	7.93	48.05	48.05	48.05	54.28	54.28	54.28
Movement LOS	E	B	B	D	A	A	D	D	D	D	D	D
d_A, Approach Delay [s/veh]	14.02			10.89			48.05			54.28		
Approach LOS	B			B			D			D		
d_I, Intersection Delay [s/veh]	14.14											
Intersection LOS	B											
Intersection V/C	0.433											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	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]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1200	1391	226	226
d_b, Bicycle Delay [s]	9.20	5.33	45.23	45.23
l_b,int, Bicycle LOS Score for Intersection	2.343	2.369	1.617	1.715
Bicycle LOS	B	B	A	A

Sequence

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

Intersection Level Of Service Report
Intersection 10: Perris Blvd (NS) at Iris Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	49.9
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.889

Intersection Setup

Name	Perris Blvd			Perris Bllvd			Iris Ave			Iris 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 Pocket	0	0	0	0	0	0	0	0	0	0	0	0
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
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd			Perris Bllvd			Iris Ave			Iris Ave		
Base Volume Input [veh/h]	158	956	392	195	758	18	36	381	141	247	318	105
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 [%]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	47	138	47	19	181	8	14	14	28	59	16	20
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]	214	1151	463	226	984	27	52	418	177	321	353	131
Peak Hour Factor	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800	0.9800
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]	55	294	118	58	251	7	13	107	45	82	90	33
Total Analysis Volume [veh/h]	218	1174	472	231	1004	28	53	427	181	328	360	134
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	22	44	0	22	44	0	11	28	0	26	43	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	40	40	18	40	40	7	24	24	22	39	39
g / C, Green / Cycle	0.15	0.33	0.33	0.15	0.33	0.33	0.06	0.20	0.20	0.18	0.33	0.33
(v / s)_i Volume / Saturation Flow Rate	0.12	0.23	0.29	0.13	0.19	0.19	0.03	0.17	0.17	0.18	0.10	0.08
s, saturation flow rate [veh/h]	1810	5176	1615	1810	3618	1874	1810	1900	1711	1810	3618	1615
c, Capacity [veh/h]	271	1725	538	271	1206	625	106	380	342	332	1176	525
d1, Uniform Delay [s]	49.29	34.49	37.68	49.69	32.84	32.84	54.81	46.13	46.22	48.88	30.36	29.81
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	21.73	2.19	17.97	27.01	1.91	3.66	16.05	19.33	21.98	46.66	0.67	1.17
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	0.80	0.68	0.88	0.85	0.56	0.56	0.50	0.84	0.85	0.99	0.31	0.26
d, Delay for Lane Group [s/veh]	71.02	36.68	55.65	76.70	34.75	36.50	70.86	65.46	68.21	95.53	31.03	30.98
Lane Group LOS	E	D	E	E	C	D	E	E	E	F	C	C
Critical Lane Group	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	No
50th-Percentile Queue Length [veh/ln]	7.78	9.79	15.13	8.60	8.13	8.73	1.99	10.87	10.15	13.78	3.90	2.94
50th-Percentile Queue Length [ft/ln]	194.43	244.82	378.24	214.88	203.23	218.16	49.74	271.87	253.63	344.43	97.38	73.44
95th-Percentile Queue Length [veh/ln]	12.35	14.92	21.51	13.40	12.80	13.57	3.58	16.28	15.37	19.86	7.01	5.29
95th-Percentile Queue Length [ft/ln]	308.77	373.12	537.72	335.08	320.12	339.28	89.54	407.07	384.22	496.61	175.28	132.19

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	71.02	36.68	55.65	76.70	35.31	36.50	70.86	66.16	68.21	95.53	31.03	30.98
Movement LOS	E	D	E	E	D	D	E	E	E	F	C	C
d_A, Approach Delay [s/veh]	45.50			42.91			67.10			56.76		
Approach LOS	D			D			E			E		
d_I, Intersection Delay [s/veh]	49.89											
Intersection LOS	D											
Intersection V/C	0.889											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.357	3.156	2.684	2.942
Crosswalk LOS	C	C	B	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	667	667	400	650
d_b, Bicycle Delay [s]	26.67	26.67	38.40	27.34
l_b,int, Bicycle LOS Score for Intersection	2.585	2.254	2.105	2.238
Bicycle LOS	B	B	B	B

Sequence

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

Intersection Level Of Service Report
Intersection 11: Perris Blvd (NS) at Harley Knox Blvd (EW)

Control Type:	Signalized	Delay (sec / veh):	39.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

Intersection Setup

Name	Perris Blvd			Perris Blvd			Harley Knox Blvd			Harley Knox Blvd		
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 Pocket	1	0	1	1	0	1	1	0	1	1	0	1
Pocket Length [ft]	320.00	100.00	230.00	215.00	100.00	210.00	300.00	100.00	300.00	335.00	100.00	230.00
Speed [mph]	45.00			45.00			45.00			45.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name	Perris Blvd			Perris Blvd			Harley Knox Blvd			Harley Knox Blvd		
Base Volume Input [veh/h]	57	744	4	149	974	300	255	137	68	8	101	135
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 [%]	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Growth Rate	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06	1.06
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	161	28	24	225	31	64	42	0	31	47	27
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]	60	950	32	182	1257	349	334	187	72	39	154	170
Peak Hour Factor	0.9200	0.9200	0.9200	0.9200	0.9200	0.9200	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	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	258	9	49	342	95	91	51	20	11	42	46
Total Analysis Volume [veh/h]	65	1033	35	198	1366	379	363	203	78	42	167	185
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	Fixed time
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	16.00

Phasing & Timing

Control Type	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss	Protecte	Permiss	Permiss
Signal group	5	2	0	1	6	0	3	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	Lead	-	-	Lead	-	-	Lead	-	-	Lead	-	-
Minimum Green [s]	7	7	0	7	7	0	7	7	0	7	7	0
Maximum Green [s]	30	30	0	30	30	0	30	30	0	30	30	0
Amber [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
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]	11	45	0	14	48	0	38	50	0	11	23	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	10	0	0	10	0	0	10	0	0	10	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]	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0	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	R	L	C	R	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]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
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]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7	41	41	10	44	44	34	46	46	7	19	19
g / C, Green / Cycle	0.06	0.34	0.34	0.08	0.37	0.37	0.28	0.38	0.38	0.06	0.16	0.16
(v / s)_i Volume / Saturation Flow Rate	0.02	0.20	0.02	0.06	0.27	0.24	0.21	0.06	0.05	0.01	0.03	0.12
s, saturation flow rate [veh/h]	3431	5053	1577	3431	5053	1577	1767	3532	1577	3431	5053	1577
c, Capacity [veh/h]	200	1726	539	286	1853	578	501	1354	604	200	800	250
d1, Uniform Delay [s]	54.23	32.69	26.59	53.50	32.98	31.68	38.79	24.21	24.00	53.86	43.96	48.15
k, delay calibration	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	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]	4.27	1.54	0.23	12.97	2.67	5.72	8.86	0.23	0.44	2.37	0.59	17.89
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	0.32	0.60	0.06	0.69	0.74	0.66	0.73	0.15	0.13	0.21	0.21	0.74
d, Delay for Lane Group [s/veh]	58.50	34.23	26.83	66.47	35.65	37.40	47.64	24.44	24.44	56.24	44.55	66.04
Lane Group LOS	E	C	C	E	D	D	D	C	C	E	D	E
Critical Lane Group	Yes	No	No	No	Yes	No	Yes	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	1.04	8.20	0.69	3.35	11.41	9.67	10.52	1.87	1.47	0.66	1.45	6.37
50th-Percentile Queue Length [ft/ln]	26.01	205.03	17.32	83.76	285.17	241.80	262.92	46.84	36.71	16.44	36.34	159.34
95th-Percentile Queue Length [veh/ln]	1.87	12.90	1.25	6.03	16.95	14.77	15.84	3.37	2.64	1.18	2.62	10.51
95th-Percentile Queue Length [ft/ln]	46.81	322.44	31.17	150.78	423.64	369.31	395.88	84.32	66.07	29.59	65.42	262.84

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	58.50	34.23	26.83	66.47	35.65	37.40	47.64	24.44	24.44	56.24	44.55	66.04
Movement LOS	E	C	C	E	D	D	D	C	C	E	D	E
d_A, Approach Delay [s/veh]	35.39			39.13			37.52			55.89		
Approach LOS	D			D			D			E		
d_I, Intersection Delay [s/veh]	39.45											
Intersection LOS	D											
Intersection V/C	0.706											

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]	49.50	49.50	49.50	49.50
l_p,int, Pedestrian LOS Score for Intersection	3.289	3.436	2.870	2.998
Crosswalk LOS	C	C	C	C
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	683	733	767	317
d_b, Bicycle Delay [s]	26.00	24.07	22.82	42.50
l_b,int, Bicycle LOS Score for Intersection	2.183	2.628	2.091	1.776
Bicycle LOS	B	B	B	A

Sequence

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

APPENDIX E

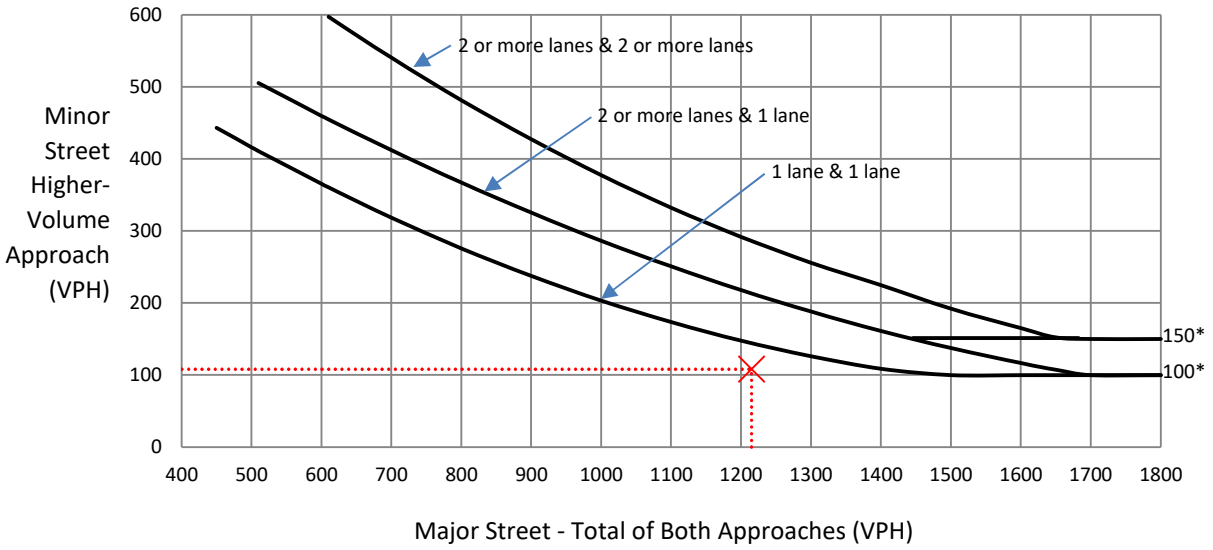
TRAFFIC SIGNAL WARRANT WORKSHEETS

Figure E-1

Emma Ln (NS) / Iris Ave (EW) - #6
Opening Year With Project
AM Peak Hour

Major Street:	Iris Ave	Volume:	1215
Minor Street:	Emma Ln	Volume:	108

Warrant 3, Peak Hour Vehicular Volume (100% Factor)



Traffic Signal Warrant Is NOT Satisfied

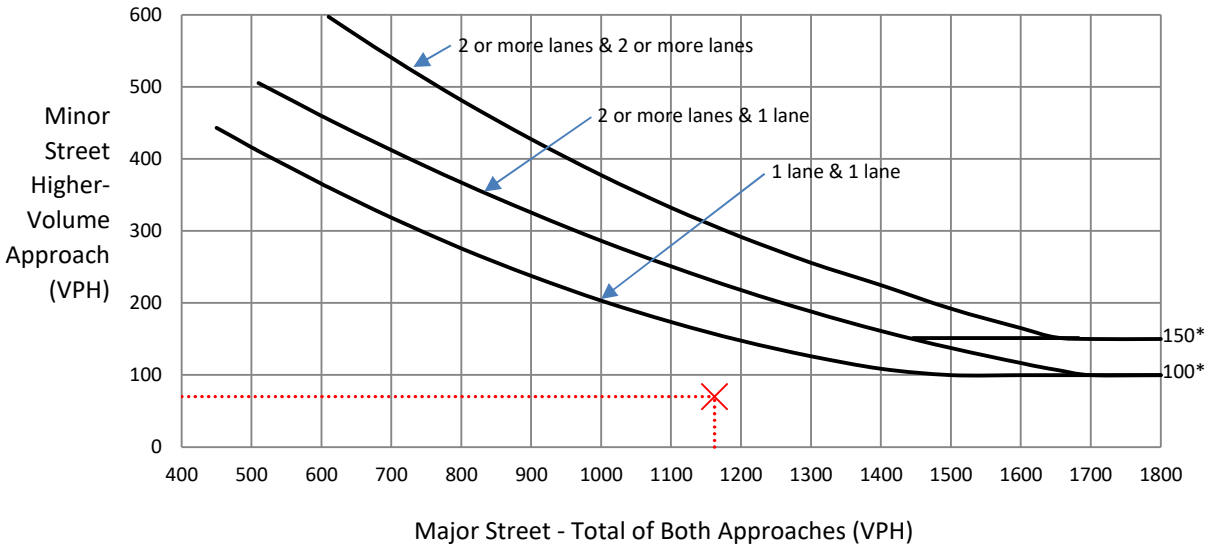
*Note: 150 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor street approach with one lane.

Figure E-2

Emma Ln (NS) / Iris Ave (EW) - #6
Opening Year With Project
PM Peak Hour

Major Street:	Iris Ave	Volume:	1162
Minor Street:	Emma Ln	Volume:	70

Warrant 3, Peak Hour Vehicular Volume (100% Factor)



Traffic Signal Warrant Is 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.

APPENDIX F

ITE TRAFFIC CALMING FACT SHEETS

Corner Extension/Bulb-Out

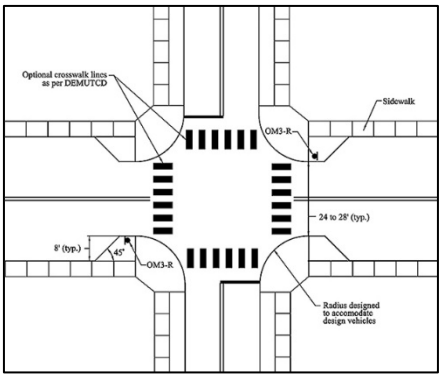
Description:

- Horizontal extension of the sidewalk into the street, resulting in a narrower roadway section
- If located at a mid-block location, it is typically called a choker

Applications:

- When combined with on-street parking, a corner extension can create protected parking bays
- Effective method for narrowing pedestrian crossing distances and increase pedestrian visibility
- Appropriate for arterials, collectors, or local streets
- Can be used on one-way and two-way streets
- Installed only on closed-section roads (i.e. curb and gutter)
- Appropriate for any speed, provided an adequate shy distance is provided between the extension and the travel lane
- Adequate turning radii must be provided to use on bus routes

(Source: James Barrera, Horrocks, New Mexico)



(Source: Delaware DOT)

ITE/FHWA Traffic Calming EPrimer: https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm

Design/Installation Issues:

- Effects on vehicle speeds are limited due to lack of deflection
- Must check drainage due to possible gutter realignment
- Major utility relocation may be required, especially drainage inlets
- Typical width between 6 and 8 feet
- Typical offset from travel lane at least 1.5 feet
- Should not extend into bicycle lanes

Potential Impacts:

- Effects on vehicle speeds are limited due to lack of deflection
- Can achieve greater speed reduction if combined with vertical deflection
- Smaller curb radii can slow turning vehicles
- Shorter pedestrian crossing distances can improve pedestrian safety
- More pedestrian waiting areas may become available
- May require some parking removal adjacent to intersections

Emergency Response Issues:

- Retains sufficient width for ease of emergency-vehicle access
- Shortened curb radii may require large turning vehicles to cross centerlines

Typical Cost (2017 dollars):

- Cost between $1,500 and $20,000, depending on length and width of barriers

Speed Cushion

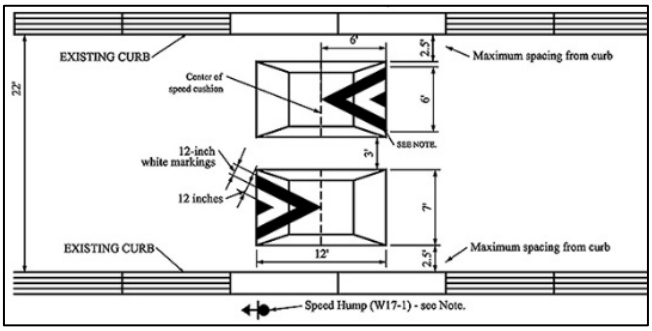
Description:

- Two or more raised areas placed laterally across a roadway with gaps between raised areas
- Height and length similar to a speed hump; spacing of gaps allow emergency vehicles to pass through at higher speeds
- Often placed in a series (typically spaced 260 to 500 feet apart)
- Sometimes called speed lump, speed slot, and speed pillow

Applications:

- Appropriate on local and collector streets
- Appropriate at mid-block locations only
- Not appropriate on grades greater than 8 percent

(Source: James Barrera, Horrocks, New Mexico)



(Source: Delaware Department of Transportation)

ITE/FHWA Traffic Calming EPrimer: https://safety.fhwa.dot.gov/speedmgt/traffic_calm.cfm

Design/Installation Issues:

- Two or more cushions at each location
- Typically 12 to 14 feet in length and 7 feet in width
- Cushion heights range between 3 and 4 inches, with trend toward 3 - 3 ½ inches maximum
- Speed cushion shapes include parabolic, circular, and sinusoidal
- Material can be asphalt or rubber
- Often have associated signing (advance-warning sign before first cushion at each cushion)
- Typically have pavement markings (zigzag, shark's tooth, chevron, zebra)
- Some have speed advisories

Potential Impacts:

- Limited-to-no impact on non-emergency access
- Speeds determined by height and spacing; speed reductions between cushions have been observed averaging 20 and 25 percent
- Speeds typically increase by 0.5 mph midway between cushions for each 100 feet of separation
- Studies indicate that average traffic volumes have reduced by 20 percent depending on alternative routes available
- Average collision rates have been reduced by 13 percent on treated streets

Emergency Response Issues:

- Speed cushions have minimal impact on emergency response times, with less than a 1 second delay experienced by most emergency vehicles

Typical Cost (2017 dollars):

- Cost ranges between $3,000 and $4,000 for a set of rubber cushions

APPENDIX G

VMT REDUCTION WORKSHEETS

VMT Reduction Measure:
Provide Pedestrian Network Improvements (CAPCOA Measure # SDT-1)

Range of Effectiveness:
0.5 - 5.7% VMT reduction

Measure Description:
Providing pedestrian access at and near a project site encourages people to walk instead of drive, presuming that desirable destinations exist within walking distance of the project. This mode shift results in people driving less and thus a reduction in VMT. The pedestrian access network should internally link all uses and connect to all existing or planned external streets and pedestrian facilities contiguous with the project site. It should also minimize barriers to pedestrian access and interconnectivity. Physical barriers such as walls, landscaping, and slopes that impede pedestrian circulation should be eliminated (CAPCOA 2010, p. 186).

Measure Applicability:
- Urban, suburban, and rural context
- Appropriate for residential, retail, office, industrial, and mixed-use projects
- Reduction benefit only occurs if the project has both pedestrian network improvements on site and connections to the larger off-site network. All calculations should incorporate the status of the network in the project's walkshed (i.e., within a ¼ mile radius).
- Desirable destinations external to the project site must be within walking distance (i.e., preferably within a ¼ mile and no greater than ½ mile).

Mitigation Method:
% VMT Reduction = $E_{PedAccess}$ x Sidewalk Delta

Where:

$E_{PedAccess}$ = % change in VMT per % increase in sidewalk coverage

Sidewalk Delta = assumed change in sidewalk coverage compared to background condition

Detail:

$E_{PedAccess}$ = 0.0 to 0.14 (0.07 preferred in absence of other data)

Sidewalk Delta = 5% to 100%

Project Inputs:

$E_{PedAccess}$ =	0.07
Sidewalk Delta =	14%

Network in project's walkshed (i.e., 1/4 mile radius)	3.20	miles
Existing sidewalks within project walkshed	2.18	miles
Project sidewalk added	0.44	miles
Total future sidewalk	2.62	miles
Current walkshed coverage	68%	
Future walkshed coverage	82%	
Net Walkshed Change	+14%	

Output:

% VMT Reduction = 1.0%

VMT Reduction Measure:
Provide Pedestrian Network Improvements (CAPCOA Measure # SDT-1)

References:

Handy, S. et al. (2014). Impacts of Pedestrian Strategies on Passenger Vehicle Use and Greenhouse Gas Emissions – Policy Brief and Technical Background Document. California Air Resources Board. Retrieved from: https://arb.ca.gov/cc/sb375/policies/policies.htm

Quantifying Greenhouse Gas Mitigation Measures, California Air Pollution Control Officers Association (CAPCOA), 2010. Chapter 3.2.1 Provide Pedestrian Network Improvements.

VMT Reduction Measure:
Provide Traffic Calming Measures (CAPCOA Measure # SDT-2)

Range of Effectiveness:
0 - 1.7% VMT reduction

Measure Description:
Providing traffic calming measures encourages people to walk or bike instead of using a vehicle. This mode shift results in a decrease in VMT. Project design should include pedestrian/bicycle safety and traffic calming measures in excess of jurisdiction requirements. Roadways should be designed to reduce motor vehicle speeds and encourage pedestrian and bicycle trips with traffic calming features. Traffic calming features may include: marked crosswalks, count-down signal timers, curb extensions, speed tables, raised crosswalks, raised intersections, median islands, tight corner radii, roundabouts or mini-circles, on-street parking, planter strips with street trees, chicanes/chokers, etc. (CAPCOA 2010, p. 190).

Measure Applicability:
- Urban, suburban, and rural context
- Appropriate for residential, retail, office, industrial, and mixed-use projects

Mitigation Method:

VMT Reduction Matrix		Percent of Street Improvements			
		25%	50%	75%	100%
Percent of Intersections with Improvements	25%	0.425%	0.425%	0.850%	0.850%
	50%	0.425%	**0.850%**	0.850%	1.275%
	75%	0.850%	0.850%	1.275%	1.275%
	100%	0.850%	1.275%	1.275%	1.700%

Project Inputs:

Project Streets with Traffic Calming =	67.0%
Project Intersections with Traffic Calming =	100.0%

Output:

% VMT Reduction = 0.850%

References:
California Air Resources Board. (2016). Greenhouse Gas Quantification Methodology for the California Transportation Commission Active Transportation Program Greenhouse Gas Reduction Fund Fiscal Year 2016-17. Retrieved from: https://www.arb.ca.govicc/capandtrade/auctionproceeds/ctc_atp_finalqm_16-17.pdf.

Quantifying Greenhouse Gas Mitigation Measures, California Air Pollution Control Officers Association (CAPCOA), 2010. Chapter 3.2.2 Provide Traffic Calming Measures.

Zahabi, S. et al. (2016). Exploring the link between the neighborhood typologies, bicycle infrastructure and commuting cycling over time and the potential impact on commuter GHG emissions. Transportation Research Part D: Transport and Environment. 47, 89-103.

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