

Vega SES 6 Solar Energy Storage Project

TRAFFIC IMPACT STUDY
IMPERIAL COUNTY, CALIFORNIA

Prepared By:



January, 2022

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1.0 Introduction

This traffic impact analysis (TIA) has been prepared to identify the potential traffic impacts associated with developing the Vega SES 6 Solar Energy Storage (Project) in Imperial County. The study was completed following the guidelines described in the County of Imperial Department of Public Works *Traffic Study and Report Policy* dated March 12, 2007, revised June 29, 2007 and approved by the Board of Supervisors of the County of Imperial on August 7, 2007 ("Traffic Study and Report Policy").

KOA has coordinated with the County's Engineering Department on the scope of the traffic analysis, including the study area and future year analysis assumptions. As necessary, if required, projects will be identified to offset or reduce significant impacts. Based on discussions with County staff, current and future traffic conditions at select intersections in close proximity to the proposed project have been evaluated for the purposes of this TIA.

This report describes the existing roadway network in the vicinity of the project site. It includes a review of the existing and proposed traffic activities for weekday peak AM and PM periods and daily traffic conditions.

Project Location

The project location is shown in Figure 1.1.

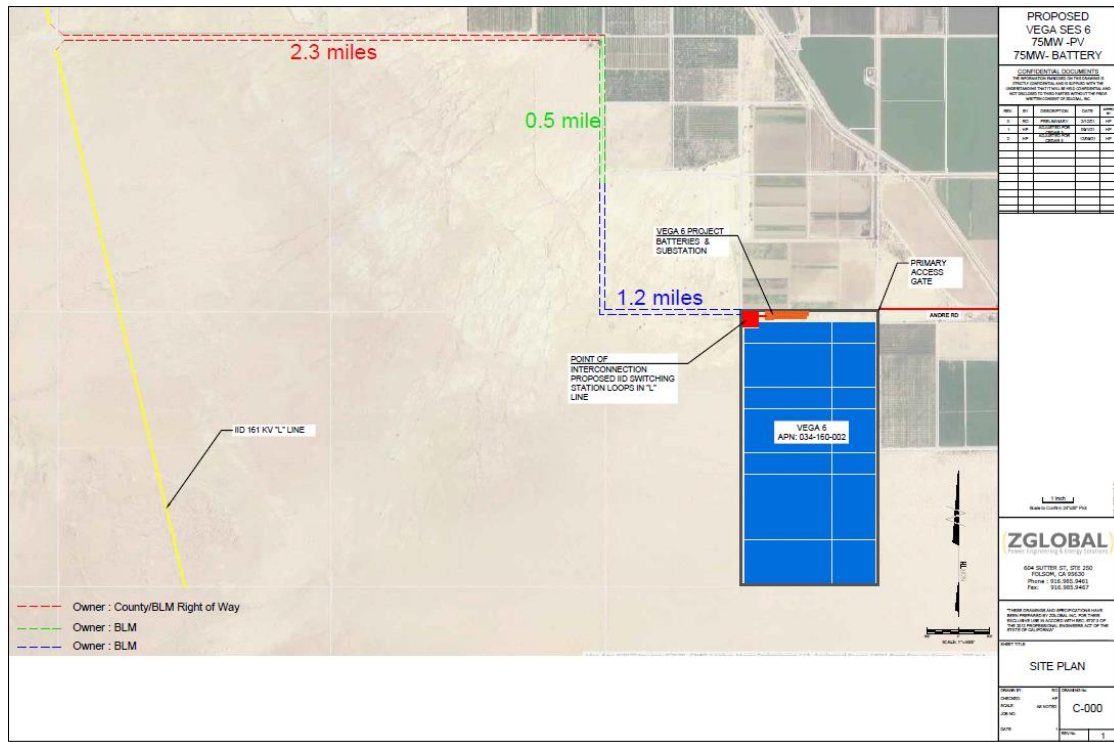
Figure 1.1 Study Area



Project Description

Vega SES 6 LLC. is proposing to develop the Vega SES 6 Solar Energy Storage Project. The project is an alternating current (MWAC) solar photovoltaic (PV) energy generation project with an integrated battery storage project in the County of Imperial, California. The Project would be located approximately six miles west of Westmorland. The construction of the site is estimated to take 12 months and would begin in 2022. The project opening is anticipated to be 2023. The project site plan is shown in Figure 1.2.

Figure 1.2 Site Plan



Construction Activities

The construction of the site to include site preparation and construction is estimated to take 12 months and would begin in 2022. The number of on-site construction workers for the solar project facilities is not expected to exceed 100 workers at any one time. The number of on-site construction workers for the battery storage facility and the substation is not expected to exceed 50 workers at any one time. Construction of the Projects will include the following activities:

- Site preparation
- Grading and earthwork
- Concrete foundations
- Structural steel work
- Electrical/instrumentation work
- Collector line installation
- Architecture and landscaping

2.0 Capacity Analysis Methodologies

This section presents a brief overview of traffic analysis methodologies and concepts used in this study. Street system operating conditions are typically described in terms of “level of service (LOS)” to compare without project and with project alternatives. LOS is a report-card scale used to indicate the quality of traffic flow on roadway segments and at intersections. The levels of service range from Level A (free flow, little congestion) to Level F (forced flow, higher congestion).

Study Area Criteria

The study area is determined based on the County of Imperial Department of Public Works *Traffic Study and Report Policy* dated March 12, 2007, revised June 29, 2007 and approved by the Board of Supervisors of the County of Imperial on August 7, 2007 (“Traffic Study and Report Policy”). “Any project that has the potential to degrade an existing road section, an existing signalized intersection, or an existing unsignalized intersection to below the existing level of service or to cause it to be lower than a level of service (LOS) “C” during any peak hour, using the HCM Methods of analysis on any individual, existing traffic movement.” Traffic Study and Report Policy, 4-5.

The study area for this project includes those locations that likely will be affected by this project. The project study area was determined based on similar solar projects. The specific study area intersections are those that would have 50 peak hour trips, and consist of the following:

1. Buck Road and SR/78/86 (located west of Westmorland)
2. Martin Road and SR-78/86 (located on the west edge of Westmorland)
3. Center Street and SR-78/86 (located midway in Westmorland)
4. Boarts Road (CR-26) and SR-78/86 (located on the eastside of Westmorland)
5. SR-86 and SR-78 (Brawley Bypass)

The study area also includes the following study segments:

1. SR-78/86 from SR-78/86 from the Buck Road to the north
2. SR-78/86 from Buck Road to Martin Road
3. SR-78/86 from Martin Road to Center Street
4. SR-78/86 SR-7 from Center Street to Boarts Road (CR-26)
5. SR-78/86 SR-7 from Boarts Road (CR-26) to Brawley Bypass
6. Center Street from Baughman Road to SR 78/86

Scenario Criteria

The proposed project's traffic impacts were analyzed in three scenarios as listed below. The traffic analysis included intersections and roadway segments within Imperial County and Caltrans District 11 in the following scenarios to determine the potential impacts.

- Existing Year (2020) Conditions
- Construction Year (2023) Baseline Conditions
- Construction Year (2023) + Project Construction Conditions

Peak Hour Intersection Level of Service Standards

Traffic conditions on most roadway facilities are analyzed using the principles of the specific analysis methods contained in the latest version (2010) of the *Highway Capacity Manual (HCM)*, a publication of the Transportation Research Board, a research agency affiliated with the Federal Government. Chapter 18 of the *HCM 2010* is devoted to analysis of signalized intersections. The methodology in the *HCM 2010* for signalized intersections is based upon measurements or forecasts of control delay for traffic utilizing all approaches to the intersection.

Unsignalized intersections, including two-way and all-way stop controlled intersections were analyzed using the 2010 Highway Capacity Manual unsignalized intersection analysis methodology. The LOS for a two-way stop controlled (TWSC) intersection is determined by the computed or measured control delay and is defined for each minor movement. The analysis of peak hour intersection conditions was conducted using the Synchro 10 software program developed by Trafficware. Results are displayed in terms of control delay (seconds per vehicle) and an equivalent LOS as shown in Table 2.1.

Table 2.1: HCM Level of Service Definitions for Intersections

LOS	Signalized Intersection Delay (Seconds per Vehicle)	Unsignalized Intersection Average Stop Delay (Seconds)
A	<10	<10
B	> 10 and <20	>10 and <15
C	>20 and <35	>15 and <25
D	>35 and <55	>25 and <35
E	>55 and <80	>35 and <50
F	>80	>50

Source: Highway Capacity Manual, 2010.

Roadway Segment Level of Service Standards

Roadway segment LOS standards and thresholds provide the basis for analysis of roadway segment performance. The analysis of roadway segment LOS is based on the functional classification of the roadway, the maximum capacity, roadway geometrics, and existing or forecast Average Daily Traffic (ADT) volumes.

The County of Imperial level of service analysis was performed by utilizing the *Circulation and Scenic Highways Element, January 2008*. The thresholds for each facility type are presented in Table 2.2.

Table 2.2 County of Imperial ADT Level of Service Volumes by Roadway Type

Road		Level of Service (LOS)				
Class	X-Section	A	B	C	D	E
Expressway	154/210	30,000	42,000	60,000	70,000	80,000
Prime Arterial	106/136	22,200	37,000	44,600	50,000	57,000
Minor Arterial	82/102	14,800	24,700	29,600	33,400	37,000
Major Collector	64/84	13,700	22,800	27,400	30,800	34,200
Minor (Local) Collector	40/70	1,900	4,100	7,100	10,900	16,200
<p>* Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors. Source: <i>Imperial County Circulation and Scenic Highways Element 2008 and Imperial County Long Range Transportation Plan 2013 Update</i></p>						

Analysis of Significance

Imperial County

The significance criteria for traffic impacts are based on the Imperial County Planning & Development Services Department LOS standard as outlined in the "Circulation Element". The County's goal for an acceptable traffic service standard on an Average Daily Traffic (ADT) basis and during AM and PM peak periods for all County-Maintained Roads shall be LOS C for all street segment links and intersections.

- Strive to maintain LOS "C" or better on arterial and collector streets, at all intersections, and on principal arterials during the hour of highest volume during the AM hours and also during the PM hours. Imperial County has established LOS "C" as the general threshold for acceptable overall traffic operations for both signalized and un-signalized intersections.
- Accept LOS "D" after finding that there is no practical and feasible way to mitigate to LOS "C;" and the development causing the lower level of service provides a clear, overall public benefit.
- For segments that operate at LOS D or lower, an incremental increase in v/c of greater than 0.02 is considered to be a significant impact. For intersections that operate at LOS D or lower, an incremental increase in vehicle delay of 2.0 seconds or greater is considered to be a significant impact.

Caltrans

- For segments that operate at LOS D or lower, an incremental increase in v/c of greater than 0.02 is considered to be a significant impact. For intersections that operate at LOS D or

lower, an incremental increase in vehicle delay of 2.0 seconds or greater is considered to be a significant impact.

- For freeway segments that operate at LOS D or lower, an incremental increase in v/c of greater than 0.01 is considered to be a significant impact.

3.0 Existing Conditions

This section documents the Existing Year conditions in the study area. The Existing Year is taken to be 2020 for analysis purposes based on existing traffic counts taken in December, 2020. The discussion presented here is limited to segments and intersections in the project's vicinity.

Existing Roadways

Each of the key roadways, as well as associated study intersections within the study area, are discussed below.

Roadway Facilities

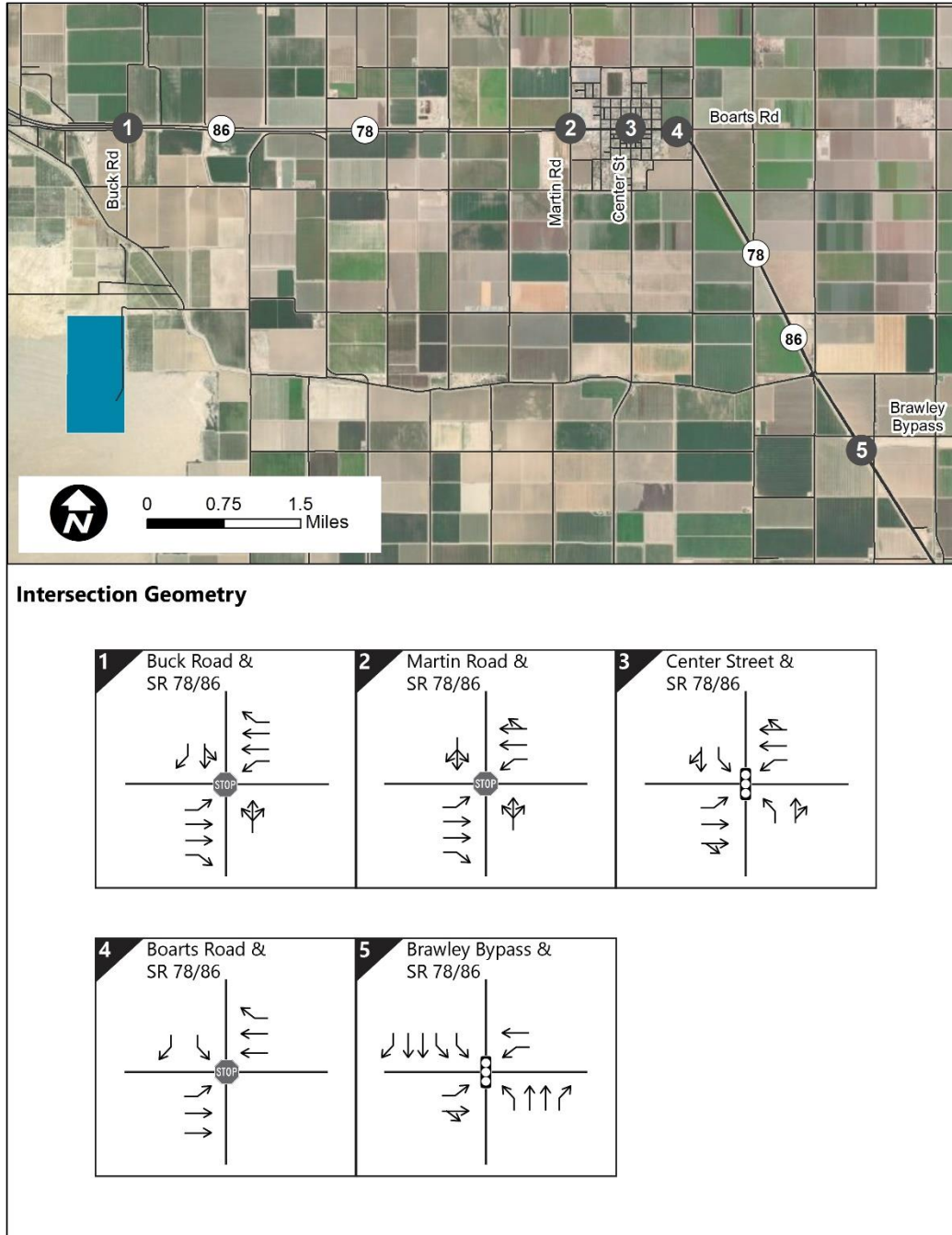
State Route 78/86 south of Westmoreland is a four lane divided highway. It has recently be widened to provide two lanes in each direction with left turn bays provided. Within the City of Westmoreland, the route transitions to a four lane roadway (named Main Street) with a center two-way left turn lane provided. The intersection of Main Street and Center Street is signalized. West of Martin Road, SR 78/86 transitions back to a four-lane divided highway.

Center Street is a two-lane street in the City of Westmoreland. Diagonal parking is provided on the two blocks south of Main Street. Outside the City, this roadway is Forrester Road a two lane rural county highway.

Baughman Road/Martin Road are two lane roads that are partly in the County and partly in the City of Westmoreland. These roads are paved and they are used by heavy vehicles and other vehicles connecting between SR 78/86 and Forrester Road.

Figure 3.1 displays the existing intersection geometrics for study area intersections.

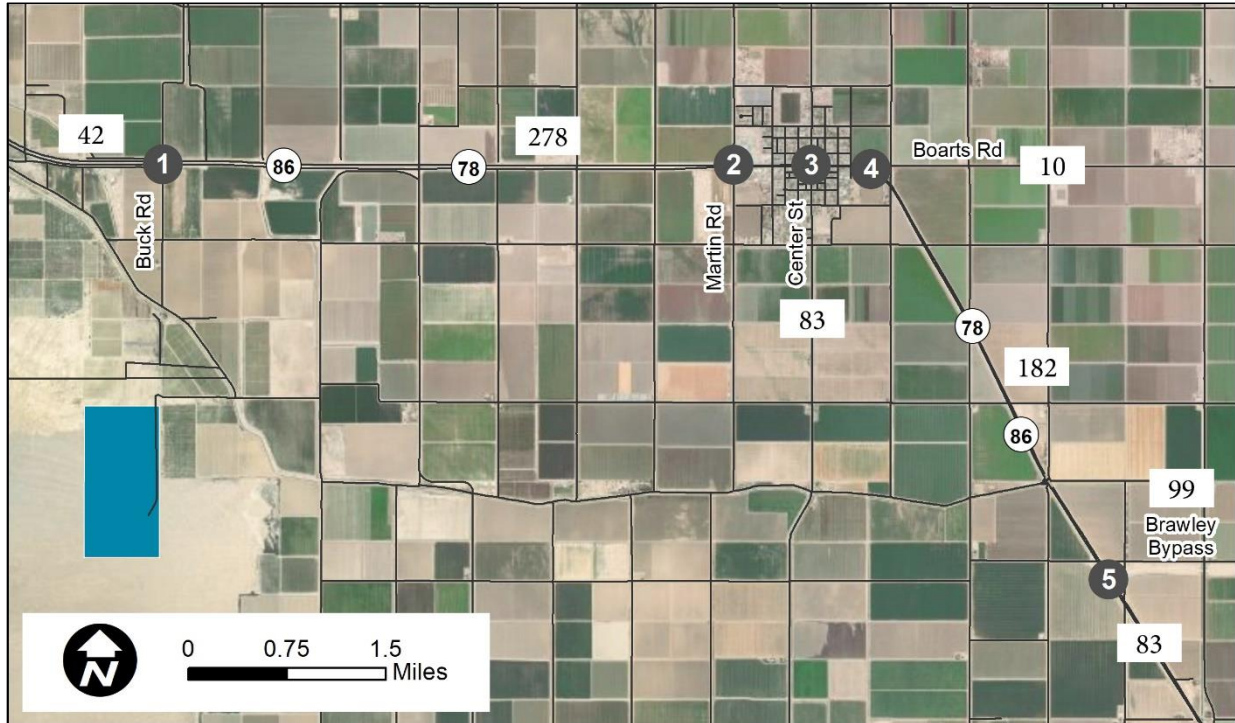
Figure 3.1. Intersection Geometrics



Traffic Volumes

Existing turning movement counts at the study intersections were conducted on Tuesday, December 20, 2021. The existing condition reflects those land uses that were built and occupied at the time of the traffic counts and represent a typical weekday commute period. Intersection turning movement counts are provided in Appendix A. Existing average daily traffic (ADT) segment counts were obtained from the Caltrans for the year 2019. The ADT and weekday a.m. and p.m. peak hour traffic volumes are shown on Figure 3.2.

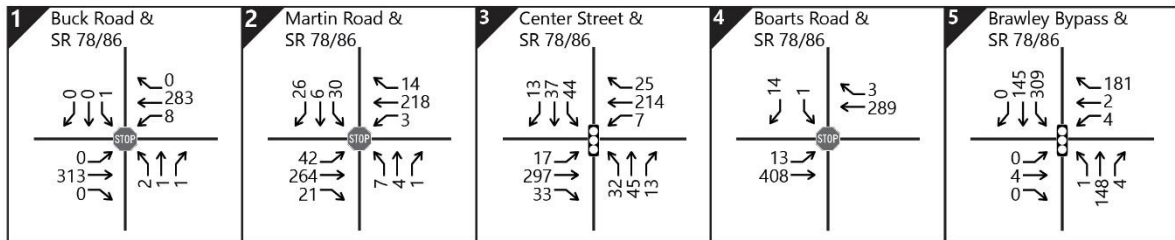
Figure 3.2. Existing Volumes



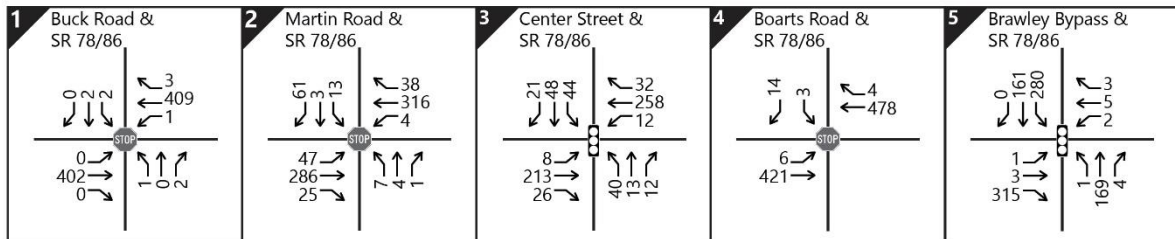
Existing Volumes

XXX Daily Volumes

AM



PM



Existing Year Conditions

This section documents the existing traffic conditions of study area segments and intersections.

Segments

Roadway segment analysis was conducted for the study area's specified segments. Using average daily traffic (ADT) counts, KOA was able to determine the existing level of service for the designated roadway segments. Table 3.1 displays these levels of service.

Table 3.1 Existing Year Conditions Roadway Segment Analysis

Roadway Segment	From/ To	Lanes/ Class	LOS E Capacity	Existing		
				ADT	V/C	LOS
SR-78/86	Buck Road to the north	Principal Arterial 4 Lane	57,000	12,400	0.22	A
SR-78/86	Buck Road to Martin Road	Principal Arterial 4 Lane	57,000	12,800	0.22	A
SR-78/86	Martin Road to Center Street	Principal Arterial 4 Lane	57,000	15,300	0.27	B
SR-78/86	Center St. to Boarts Road (CR-26)	Principal Arterial 4 Lane	57,000	16,400	0.29	B
SR-78/86	Boarts Road (CR-26) to Brawley Bypass	Principal Arterial 4 Lane	57,000	8,700	0.15	A
Center Street	Baughman Road to SR 78/86	Minor Collector 2	16,200	2,330	0.14	A

Intersections

An intersection LOS analysis was prepared for the existing condition and is summarized in Table 3.2 which indicates that there are two study area intersections. The total LOS is shown for signalized intersections. Individual conflicting turning movements impacted by the project are shown for stop controlled intersections. All of the intersections and intersection movements operate at LOS C or better. Detailed LOS worksheets are included in Appendix B.

Table 3.2: Existing Year Conditions Peak Hour Intersection Analysis

Signals:

#	Intersection	Existing Conditions				
		Control	Movement	Peak Hour	Delay	LOS
3	SR 78/86 & Center Street	Signal	All	AM	9.4	A
				PM	9.3	A
5	SR 86 and Brawley Bypass (SR 78)	Signal	All	AM	9.8	A
				PM	11	B

Stop Control:

Intersection	Peak Hour	NBL	LOS	WBL	LOS
SR 78/86 and Buck Road	AM	12.6	B	8	A
	PM	11.6	B	8.2	A
		NBL		WBL	
SR 78/86 and Martin Road	AM	13.8	B	7.9	A
	PM	15.9	C	8	A
		EBL		SWL	
SR 78/86 & Boarts Road	AM	7.9	B	13	B
	PM	8.5	C	15.7	C

Delay is in seconds/vehicle. LOS = Level of Service, NBL=Northbound Left Turn, WBL+ Westbound Left Turn, SWLT=Southwest Left Turn

4.0 Trip Generation/Trip Distribution

Project Trip Generation

The project trip generation consists of a construction phase and operations phase. Once constructed, the site will not require personnel to be present on-site and will not result in daily trip generation. For this reason, only the trip generation for the construction phase was analyzed.

The construction of the site is estimated to take 12-18 months and would begin in 2022. The number of on-site construction workers for the solar project facilities is not expected to exceed 100 workers at any one time. The number of on-site construction workers for the battery storage facility and the substation is not expected to exceed 50 workers at any one time. The trip generation was estimated if the construction phases were to overlap, so both are included. Delivery trucks are expected to follow the same routes as the construction workers. An estimated two trucks would arrive at the project site each day during the first few weeks of construction of the solar generating facility. Truck trips have been converted into passenger equivalent volumes (PCE) using a PCE factor of 2.5.

Work hours will be between the hours of 8:00 a.m. and 5:00 p.m. Monday through Saturday. The trips generated during the construction phase of construction are shown in Table 4.1.

Table 4.1 Construction Trip Generation – Construction Phase

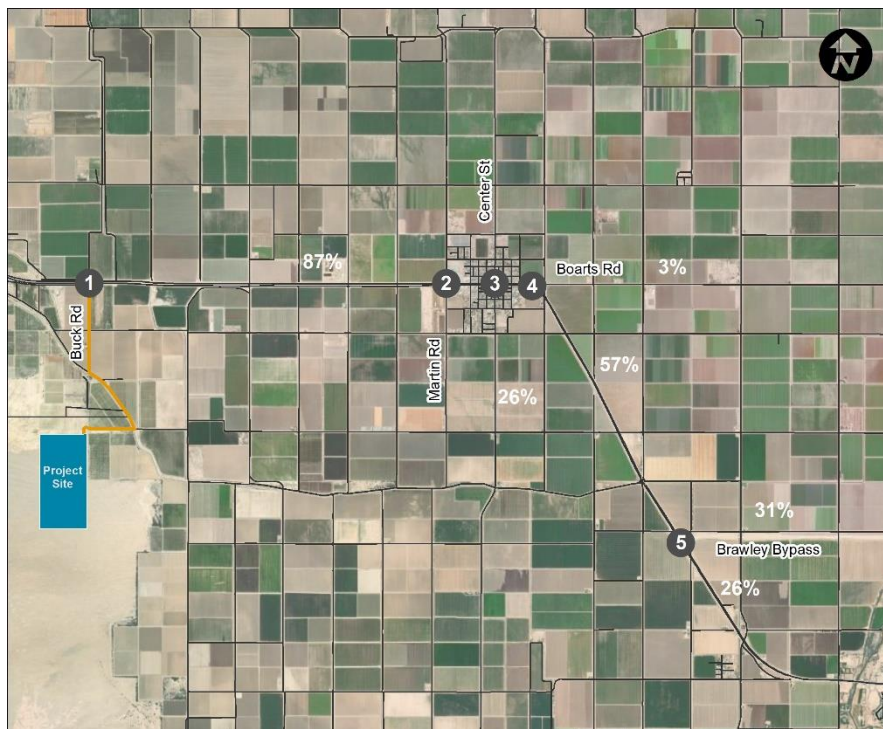
	Intensity	Unit	Daily Rate (1)	Daily Trips		AM Peak Hour			PM Peak Hour		
						Total	In	Out	Total	In	Out
Solar Construction Workers	100.0	Employee	2	200	Rate	1.00	100%	0%	1.00	0%	100%
					Trips	100	100	0	100	0	100
Battery Storage Workers	50.0	Employee	2	100	Rate	1.00	100%	0%	1.00	0%	100%
					Trips	50	50	0	50	0	50
Equipment Deliveries and Construction Truck Trips (PCE)	8.0	trucks	2.5	20	Rate	0.13	75%	25%	0.13	25%	75%
					Trips	3	2	1	3	1	2
Total				320	Trips	153	152	1	153	1	152

(1) 8 total truck trips per day with PCE of 2.5

Trip Distribution and Assignment

Trip distribution and assignment is the process of identifying the probable destinations, directions and traffic routes that project related traffic will likely affect. Trip distribution and assignment information can be estimated from observed traffic patterns, experience or through use of a computerized travel forecast model. Once the proposed developments trips have been estimated, they are assigned to the study area street network. The trip distribution was estimated based on using logical travel paths between the project and local origins. The trip distribution for the project-related trips is shown in Figure 4.1.

Figure 4.1 Trip Distribution

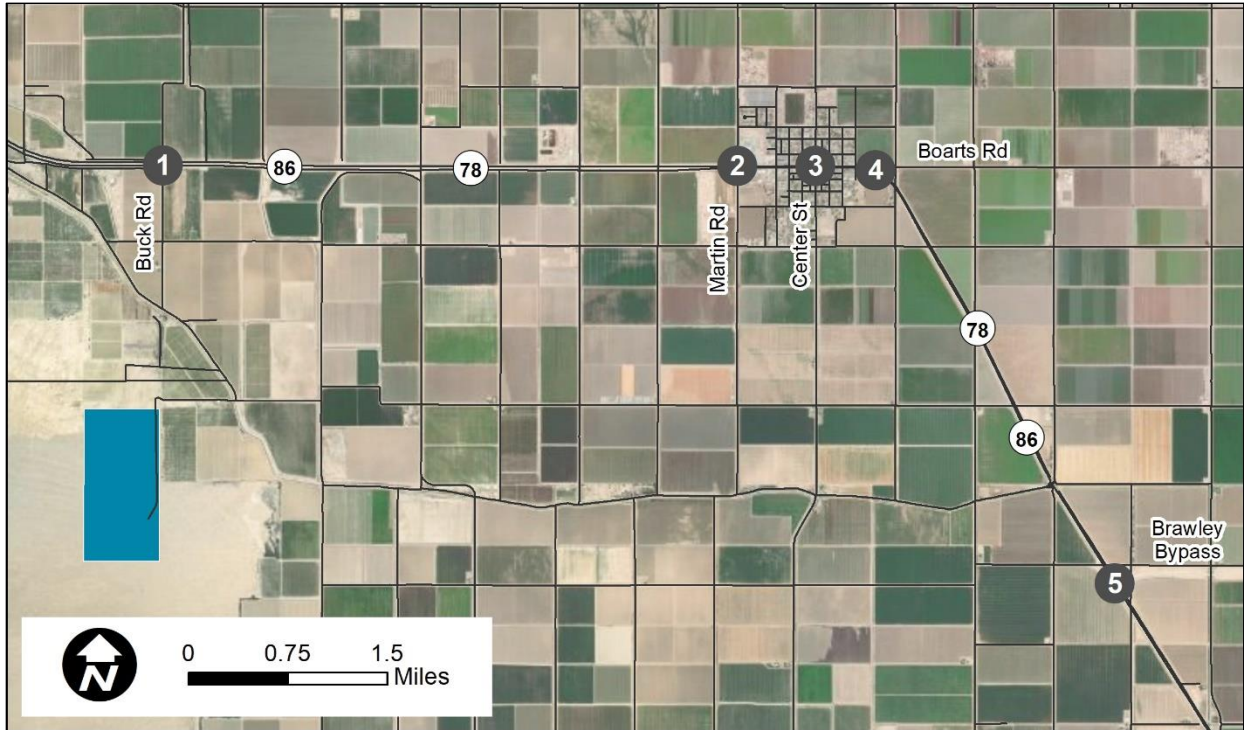


5.0 Construction Year Conditions

This section documents the analysis for the Project Completion Year conditions. This scenario considers the traffic conditions at the time that the proposed development is constructed by increasing the existing traffic counts by an ambient growth rate to reflect cumulative projects. Projected project only volumes are then added to create the 2023 Baseline with Project Scenario. An annual ambient growth of 1.8% was utilized to account for traffic growth between 2020 and 2023.

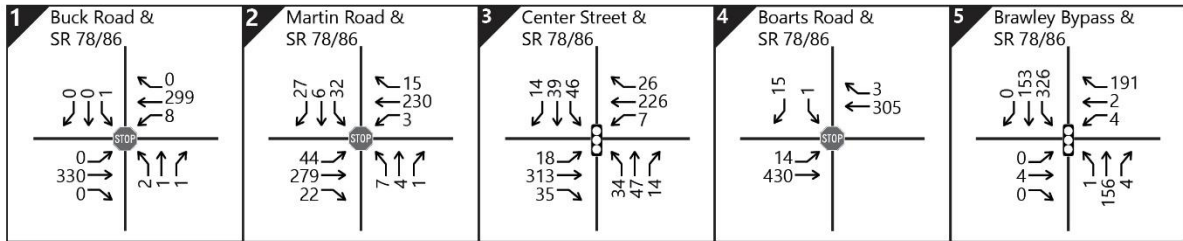
The growth rate is based on the California Economic Forecast *California County-Level Economic Forecast 2017-2050*, dated September 2017 documents an average annual growth factor of 1.8 percent from 2020 to 2025 for Imperial County. Year 2021 traffic data was obtained by factoring the 2019 traffic counts by the application of the 1.8 percent annual growth (5.4 percent for 2020-23). Figure 5.1 illustrates the Project Construction Year background volumes. Figure 5.2 shows the *Construction Year with Project* traffic volumes in the study area.

Figure 5.1 Construction Year Volumes



Near Term Volumes

AM



PM

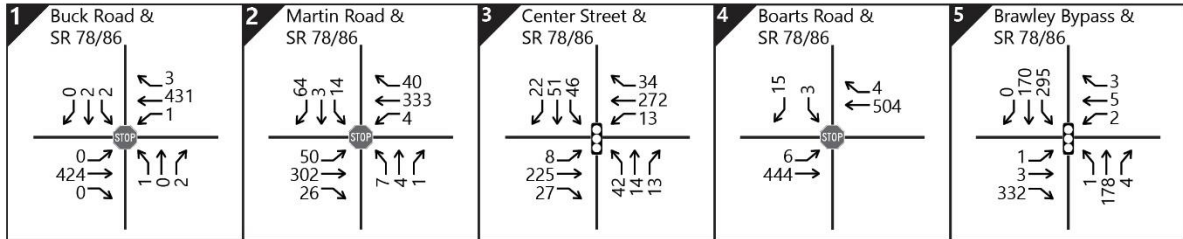
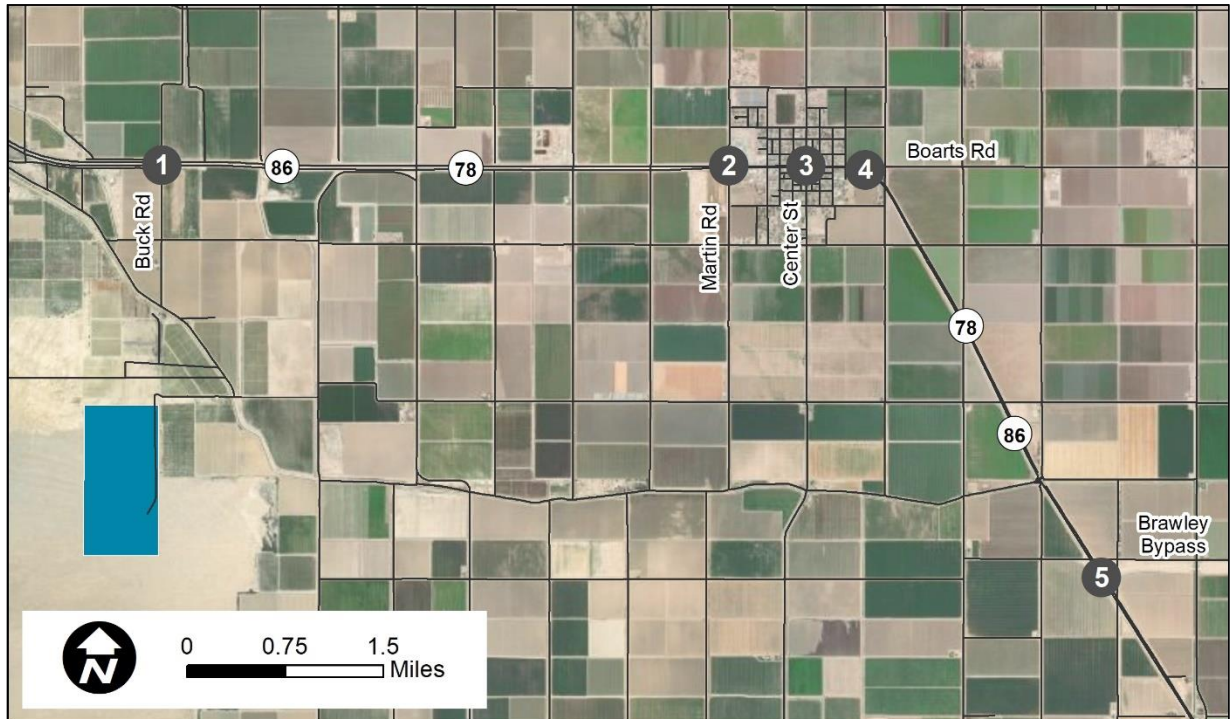
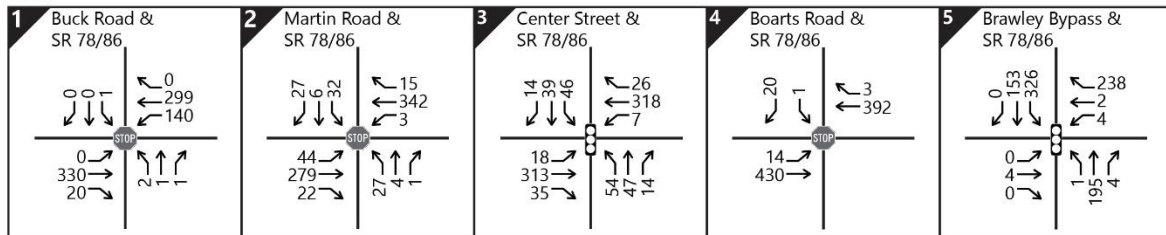


Figure 5.2 Construction Year Plus Project Year Volumes

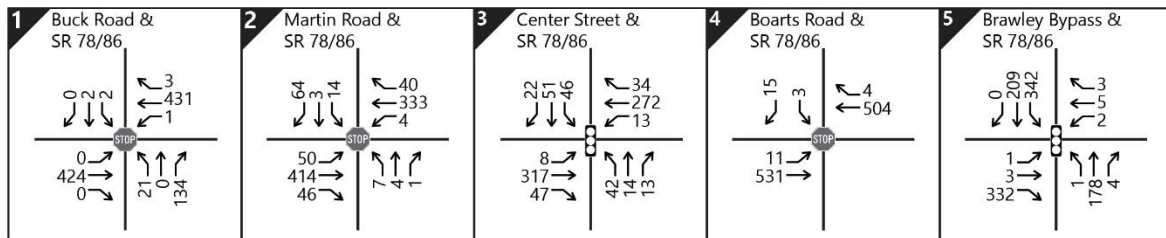


Near Term Plus Project Volumes

AM



PM



The following documents the construction year traffic conditions of study area segments and intersections with and without the project.

Segments

Roadway segment analysis was conducted for the study area's specified segments. Using average daily traffic (ADT) counts, KOA determined the opening year level of service for the designated roadway segments.

Summarized in Table 5.1 are Construction Year and Construction Year plus Project roadway segment average daily traffic volumes and their associated LOS on route segments without and with the project under the near term condition. All roadway segments would operate at LOS B or better with and without the project. Therefore, the project would not result in any significant impacts to any segments within the project study area under the construction year condition.

Table 5.1 Construction Year Roadway Segment Analysis

No.	Road Segment	Roadway Classification	LOS E Capacity	Project Volume	Existing Conditions			Existing + Project Conditions		
					ADT	V/C Ratio	LOS	ADT	V/C Ratio	LOS
SR 78										
1	Buck Road to north	Principal Art 4	57,000	42	12,400	0.22	A	12,442	0.22	A
2	Buck Road to Martin Road	Principal Art 4	57,000	278	12,800	0.22	A	13,078	0.23	A
3	Martin Road to Center Street	Principal Art 4	57,000	224	15,300	0.27	A	15,524	0.27	A
4	Center Street to Boarts Road	Principal Art 4	57,000	192	16,400	0.29	A	16,592	0.29	A
5	Boarts Road to Brawley Bypass	Principal Art 4	57,000	182	8,700	0.15	A	8,882	0.16	A
Center St	Baughman Road to SR 78/86	Minor Collector 2	16,200	42	2,330	0.14	A	2,372	0.15	A

Intersections

Table 5.2 summarizes the LOS at each intersection during the AM and PM peak hours under the construction year condition in 2022, without and with the project volumes. The estimated change in project delay associated with the project is also reported. All intersections would operate at a LOS C or better during both AM and PM peak hours with and without the project. Therefore, the project would not result in any significant impacts to any intersections within the project study area under the construction year condition. Detailed LOS worksheets for the Construction Year are included in Appendix C and for the Construction Year plus Project in Appendix D.

Table 5.2 Construction Year Peak Hour Intersection Analysis

Signals:

#	Intersection	Control	Movement	Near Term Year Conditions			Near Term + Project Conditions				
				Peak Hour	Delay	LOS	Peak Hour	Delay	LOS	Change	Significant
1	SR 78/86 and Buck Road	SSS	WB	AM	13.3	B	AM	19.8	C	6.5	No
				PM	17.5	C	PM	18.9	C	1.4	No
2	SR 78/86 and Martin Road	All Stop	All	AM	14.3	B	AM	16.2	C	1.9	No
				PM	16.7	C	PM	19.2	C	2.5	No
3	SR 78/86 & Center Street	SSS	EB	AM	9.5	A	AM	9.7	A	0.2	No
				PM	9.4	A	PM	9.7	A	0.3	No
4	SR 78/86 & Boarts Road	Signal	All	AM	9.6	A	AM	9.9	A	0.3	No
				PM	11.2	B	PM	11.3	B	0.1	No
5	SR 86 and Brawley Bypass (SR 78)	Signal	All	AM	9.9	A	AM	10.1	B	0.2	No
				PM	11.3	B	PM	11.4	B	0.1	No

Stop Control:

Intersection	Peak Hour	Near Term Year				Near Term + Project			
		NBL	LOS	WBL	LOS	NBL	LOS	WBL	LOS
SR 78/86 and Buck Road	AM	12.9	B	8	A	18.1	C	8.5	A
	PM	11.8	B	8.3	A	12.5	B	8.3	A
		NBL		WBL		NBL		WBL	
SR 78/86 and Martin Road	AM	14.3	B	7.9	A	16.2	C	7.9	A
	PM	16.7	C	8	A	19.2	C	8.4	A
		EBL		SWL		EBL		SWL	
SR 78/86 & Boarts Road	AM	8	A	9.3	A	7.9	A	9.3	A
	PM	8.6	A	10.1	B	8.5	A	10	B

Delay is in seconds/vehicle. LOS = Level of Service, NBL=Northbound Left Turn, WBL+ Westbound Left Turn, SWLT=Southwest Left Turn

6.0 Circulation

The following section discusses the proposed project’s access and circulation characteristics.

Project Access and Circulation

Access to and from the site will be provided from the intersection of SR-78/86 at Buck Road. The access route will include Buck Road between SR 78/86 and Garvey Road, and Garvey Road between Buck Road to Andres Road. Vehicles will cross over the canal on Andre Road. The volumes associated with the development are such that peak hour volumes do not warrant the need for additional storage lanes or storage length for entrances along SR 78/86. Vehicle storage for vehicles exiting the property will be accommodated on Buck Road.



Access Route to Site

Parking

The existing parking demand for up to 150 vehicles and for construction equipment will be provided on site.

7.0 Impacts and Mitigation

This traffic impact analysis (TIA) has been prepared to identify the potential traffic impacts associated with constructing a solar photovoltaic (PV) energy generation project and utility-scale battery energy storage system (BESS).

The construction of the project is estimated to take 12 months and would begin in 2022. During the construction phase, at peak construction, for the time when both the PV and BESS project phases are being constructed at the same time, the project is anticipated to generate a maximum of 320 trip ends per day with 153 AM peak hour trips and 153 PM peak hour trips. Following construction, the project will not generate additional daily or peak hour trips beyond occasional maintenance. The project opening is anticipated to be 2023.

The project is not expected to create significant impacts at study intersections or study segments, therefore no mitigation measures are required. All study intersections and segments were found to operate at LOS C or better for all of the traffic scenarios analyzed.

APPENDIX A: TRAFFIC COUNT DATA

County of Imperial
 N/S: Buck Road
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 01_CIM_Buck_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- Total Volume

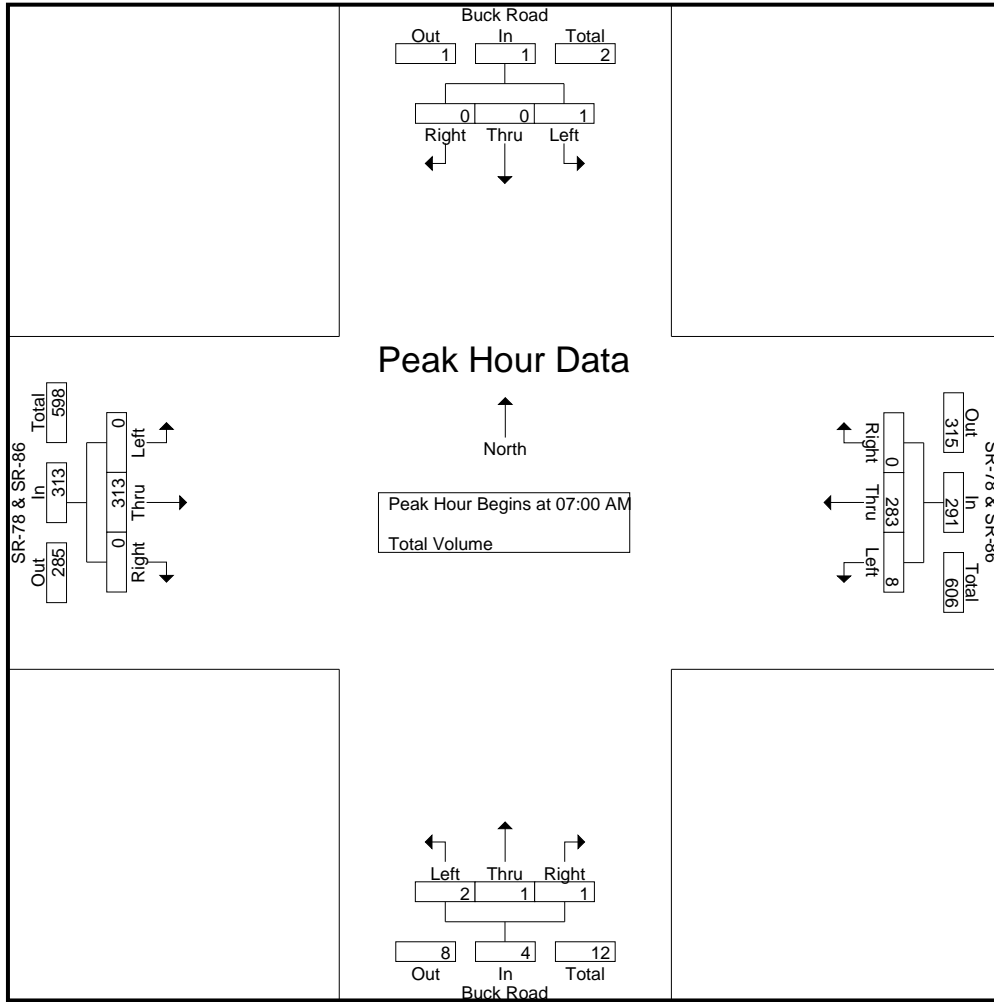
Start Time	Buck Road Southbound				SR-78 & SR-86 Westbound				Buck Road Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	5	67	0	72	1	0	1	2	0	72	0	72	146
07:15 AM	0	0	0	0	0	76	0	76	1	0	0	1	0	79	0	79	156
07:30 AM	1	0	0	1	1	71	0	72	0	0	0	0	0	79	0	79	152
07:45 AM	0	0	0	0	2	69	0	71	0	1	0	1	0	83	0	83	155
Total	1	0	0	1	8	283	0	291	2	1	1	4	0	313	0	313	609
08:00 AM	1	0	0	1	0	56	1	57	0	0	0	0	0	78	0	78	136
08:15 AM	1	0	0	1	1	67	0	68	0	0	1	1	0	86	0	86	156
08:30 AM	0	0	0	0	0	61	0	61	0	0	1	1	0	82	2	84	146
08:45 AM	0	1	0	1	1	77	2	80	0	0	0	0	0	87	0	87	168
Total	2	1	0	3	2	261	3	266	0	0	2	2	0	333	2	335	606
Grand Total	3	1	0	4	10	544	3	557	2	1	3	6	0	646	2	648	1215
Apprch %	75	25	0		1.8	97.7	0.5		33.3	16.7	50		0	99.7	0.3		
Total %	0.2	0.1	0	0.3	0.8	44.8	0.2	45.8	0.2	0.1	0.2	0.5	0	53.2	0.2	53.3	

Start Time	Buck Road Southbound				SR-78 & SR-86 Westbound				Buck Road Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	5	67	0	72	1	0	1	2	0	72	0	72	146
07:15 AM	0	0	0	0	0	76	0	76	1	0	0	1	0	79	0	79	156
07:30 AM	1	0	0	1	1	71	0	72	0	0	0	0	0	79	0	79	152
07:45 AM	0	0	0	0	2	69	0	71	0	1	0	1	0	83	0	83	155
Total Volume	1	0	0	1	8	283	0	291	2	1	1	4	0	313	0	313	609
% App. Total	100	0	0		2.7	97.3	0		50	25	25		0	100	0		
PHF	.250	.000	.000	.250	.400	.931	.000	.957	.500	.250	.250	.500	.000	.943	.000	.943	.976

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

County of Imperial
 N/S: Buck Road
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 01_CIM_Buck_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 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:

	07:30 AM				07:00 AM				07:00 AM				08:00 AM			
+0 mins.	1	0	0	1	5	67	0	72	1	0	1	2	0	78	0	78
+15 mins.	0	0	0	0	0	76	0	76	1	0	0	1	0	86	0	86
+30 mins.	1	0	0	1	1	71	0	72	0	0	0	0	0	82	2	84
+45 mins.	1	0	0	1	2	69	0	71	0	1	0	1	0	87	0	87
Total Volume	3	0	0	3	8	283	0	291	2	1	1	4	0	333	2	335
% App. Total	100	0	0	0	2.7	97.3	0	0	50	25	25	0	0	99.4	0.6	0
PHF	.750	.000	.000	.750	.400	.931	.000	.957	.500	.250	.250	.500	.000	.957	.250	.963

County of Imperial
 N/S: Buck Road
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 01_CIM_Buck_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- Total Volume

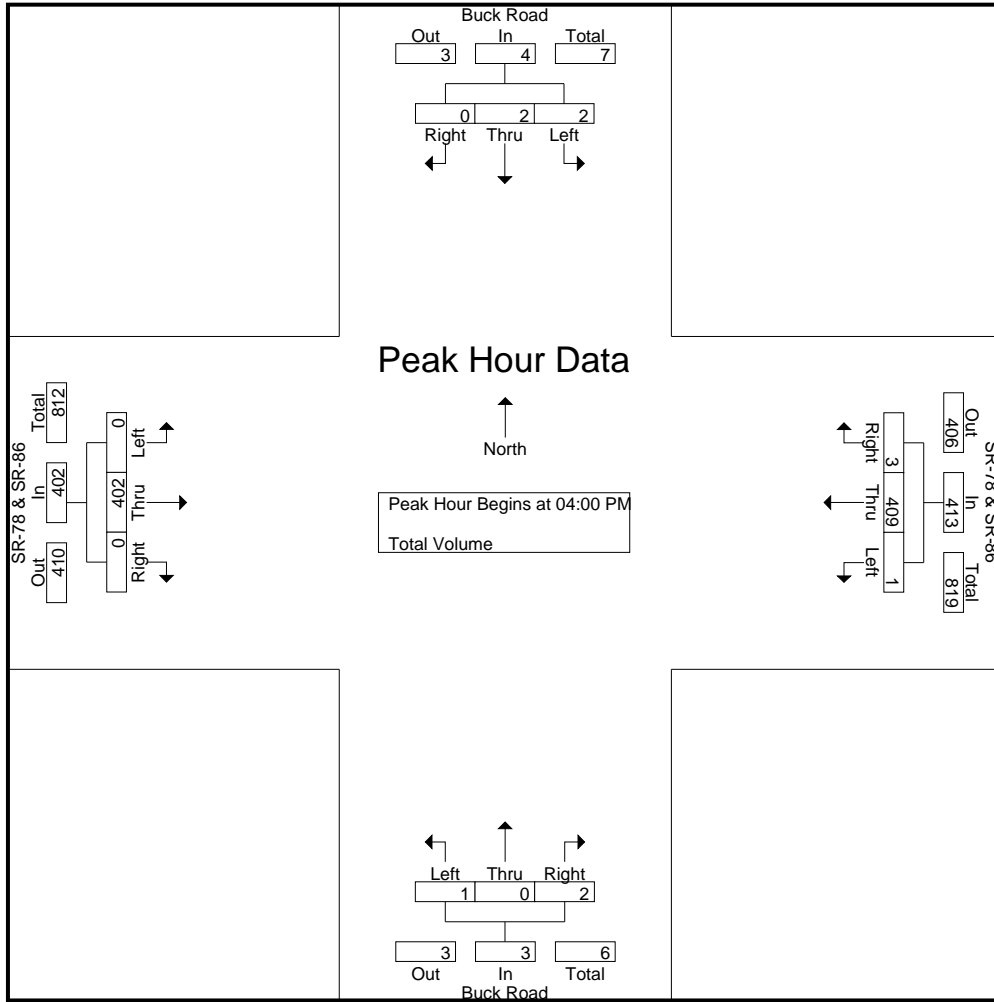
Start Time	Buck Road Southbound				SR-78 & SR-86 Westbound				Buck Road Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	0	0	1	1	80	0	81	0	0	1	1	0	110	0	110	193
04:15 PM	1	0	0	1	0	120	1	121	0	0	0	0	0	96	0	96	218
04:30 PM	0	0	0	0	0	89	1	90	1	0	1	2	0	91	0	91	183
04:45 PM	0	2	0	2	0	120	1	121	0	0	0	0	0	105	0	105	228
Total	2	2	0	4	1	409	3	413	1	0	2	3	0	402	0	402	822
05:00 PM	0	0	0	0	0	97	0	97	0	0	0	0	0	91	0	91	188
05:15 PM	0	0	0	0	1	77	1	79	0	0	1	1	0	99	1	100	180
05:30 PM	0	1	0	1	0	90	0	90	0	0	5	5	0	84	0	84	180
05:45 PM	0	1	0	1	0	77	0	77	0	0	3	3	0	70	0	70	151
Total	0	2	0	2	1	341	1	343	0	0	9	9	0	344	1	345	699
Grand Total	2	4	0	6	2	750	4	756	1	0	11	12	0	746	1	747	1521
Apprch %	33.3	66.7	0		0.3	99.2	0.5		8.3	0	91.7		0	99.9	0.1		
Total %	0.1	0.3	0	0.4	0.1	49.3	0.3	49.7	0.1	0	0.7	0.8	0	49	0.1	49.1	

Start Time	Buck Road Southbound				SR-78 & SR-86 Westbound				Buck Road Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	1	0	0	1	1	80	0	81	0	0	1	1	0	110	0	110	193
04:15 PM	1	0	0	1	0	120	1	121	0	0	0	0	0	96	0	96	218
04:30 PM	0	0	0	0	0	89	1	90	1	0	1	2	0	91	0	91	183
04:45 PM	0	2	0	2	0	120	1	121	0	0	0	0	0	105	0	105	228
Total Volume	2	2	0	4	1	409	3	413	1	0	2	3	0	402	0	402	822
% App. Total	50	50	0		0.2	99	0.7		33.3	0	66.7		0	100	0		
PHF	.500	.250	.000	.500	.250	.852	.750	.853	.250	.000	.500	.375	.000	.914	.000	.914	.901

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

County of Imperial
 N/S: Buck Road
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 01_CIM_Buck_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 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				05:00 PM				04:00 PM			
+0 mins.	1	0	0	1	0	120	1	121	0	0	0	0	0	110	0	110
+15 mins.	1	0	0	1	0	89	1	90	0	0	1	1	0	96	0	96
+30 mins.	0	0	0	0	0	120	1	121	0	0	5	5	0	91	0	91
+45 mins.	0	2	0	2	0	97	0	97	0	0	3	3	0	105	0	105
Total Volume	2	2	0	4	0	426	3	429	0	0	9	9	0	402	0	402
% App. Total	50	50	0		0	99.3	0.7		0	0	100		0	100	0	
PHF	.500	.250	.000	.500	.000	.888	.750	.886	.000	.000	.450	.450	.000	.914	.000	.914

County of Imperial
 N/S: Martin Road
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 02_CIM_Martin_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Martin Road Southbound				SR-78 & SR-86 Westbound				Martin Road Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	4	2	7	13	1	46	7	54	3	2	0	5	5	58	1	64	136
07:15 AM	6	2	13	21	0	50	1	51	1	0	0	1	9	66	1	76	149
07:30 AM	14	4	10	28	0	58	2	60	2	1	1	4	11	63	7	81	173
07:45 AM	5	2	6	13	1	51	2	54	3	3	1	7	4	68	2	74	148
Total	29	10	36	75	2	205	12	219	9	6	2	17	29	255	11	295	606
08:00 AM	5	1	1	7	0	38	1	39	1	2	0	3	9	59	5	73	122
08:15 AM	4	4	9	17	1	61	3	65	1	2	1	4	13	70	5	88	174
08:30 AM	13	1	9	23	2	46	2	50	2	0	0	2	9	61	7	77	152
08:45 AM	8	0	7	15	0	73	8	81	3	0	0	3	11	74	4	89	188
Total	30	6	26	62	3	218	14	235	7	4	1	12	42	264	21	327	636
Grand Total	59	16	62	137	5	423	26	454	16	10	3	29	71	519	32	622	1242
Apprch %	43.1	11.7	45.3		1.1	93.2	5.7		55.2	34.5	10.3		11.4	83.4	5.1		
Total %	4.8	1.3	5	11	0.4	34.1	2.1	36.6	1.3	0.8	0.2	2.3	5.7	41.8	2.6	50.1	

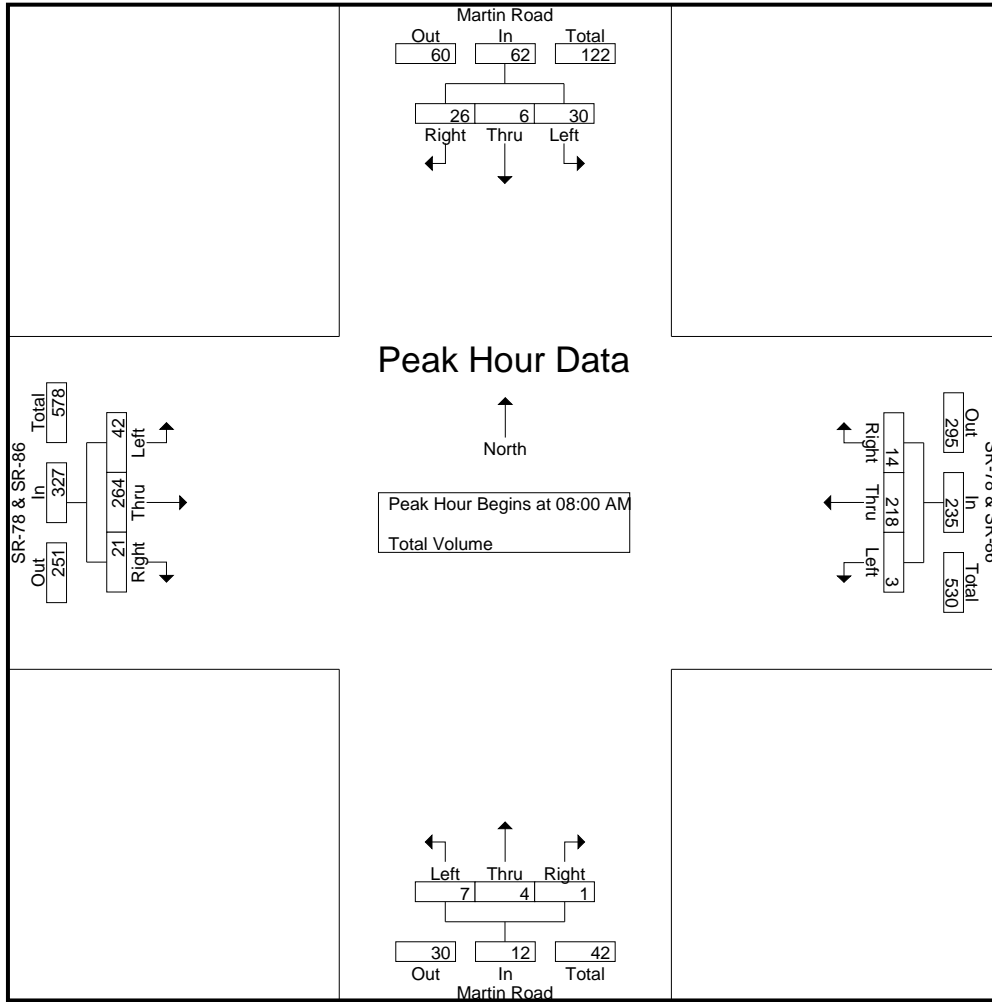
Start Time	Martin Road Southbound				SR-78 & SR-86 Westbound				Martin Road Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
08:00 AM	5	1	1	7	0	38	1	39	1	2	0	3	9	59	5	73	122
08:15 AM	4	4	9	17	1	61	3	65	1	2	1	4	13	70	5	88	174
08:30 AM	13	1	9	23	2	46	2	50	2	0	0	2	9	61	7	77	152
08:45 AM	8	0	7	15	0	73	8	81	3	0	0	3	11	74	4	89	188
Total Volume	30	6	26	62	3	218	14	235	7	4	1	12	42	264	21	327	636
% App. Total	48.4	9.7	41.9		1.3	92.8	6		58.3	33.3	8.3		12.8	80.7	6.4		
PHF	.577	.375	.722	.674	.375	.747	.438	.725	.583	.500	.250	.750	.808	.892	.750	.919	.846

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

Peak Hour for Entire Intersection Begins at 08:00 AM

County of Imperial
 N/S: Martin Road
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 02_CIM_Martin_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 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				08:00 AM				07:30 AM				08:00 AM			
+0 mins.	4	2	7	13	0	38	1	39	2	1	1	4	9	59	5	73
+15 mins.	6	2	13	21	1	61	3	65	3	3	1	7	13	70	5	88
+30 mins.	14	4	10	28	2	46	2	50	1	2	0	3	9	61	7	77
+45 mins.	5	2	6	13	0	73	8	81	1	2	1	4	11	74	4	89
Total Volume	29	10	36	75	3	218	14	235	7	8	3	18	42	264	21	327
% App. Total	38.7	13.3	48		1.3	92.8	6		38.9	44.4	16.7		12.8	80.7	6.4	
PHF	.518	.625	.692	.670	.375	.747	.438	.725	.583	.667	.750	.643	.808	.892	.750	.919

County of Imperial
 N/S: Martin Road
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 02_CIM_Martin_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Martin Road Southbound				SR-78 & SR-86 Westbound				Martin Road Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	4	0	12	16	1	59	7	67	1	1	0	2	5	89	4	98	183
04:15 PM	3	0	16	19	2	82	12	96	2	0	0	2	10	69	8	87	204
04:30 PM	4	2	11	17	1	78	9	88	2	1	0	3	12	71	6	89	197
04:45 PM	3	1	22	26	1	82	9	92	2	2	0	4	17	69	4	90	212
Total	14	3	61	78	5	301	37	343	7	4	0	11	44	298	22	364	796
05:00 PM	3	0	12	15	0	74	8	82	1	1	1	3	8	77	7	92	192
05:15 PM	6	0	17	23	1	59	12	72	1	1	0	2	6	76	5	87	184
05:30 PM	4	1	12	17	0	67	4	71	5	1	0	6	6	77	2	85	179
05:45 PM	6	0	14	20	2	79	7	88	2	0	0	2	12	59	6	77	187
Total	19	1	55	75	3	279	31	313	9	3	1	13	32	289	20	341	742
Grand Total	33	4	116	153	8	580	68	656	16	7	1	24	76	587	42	705	1538
Apprch %	21.6	2.6	75.8		1.2	88.4	10.4		66.7	29.2	4.2		10.8	83.3	6		
Total %	2.1	0.3	7.5	9.9	0.5	37.7	4.4	42.7	1	0.5	0.1	1.6	4.9	38.2	2.7	45.8	

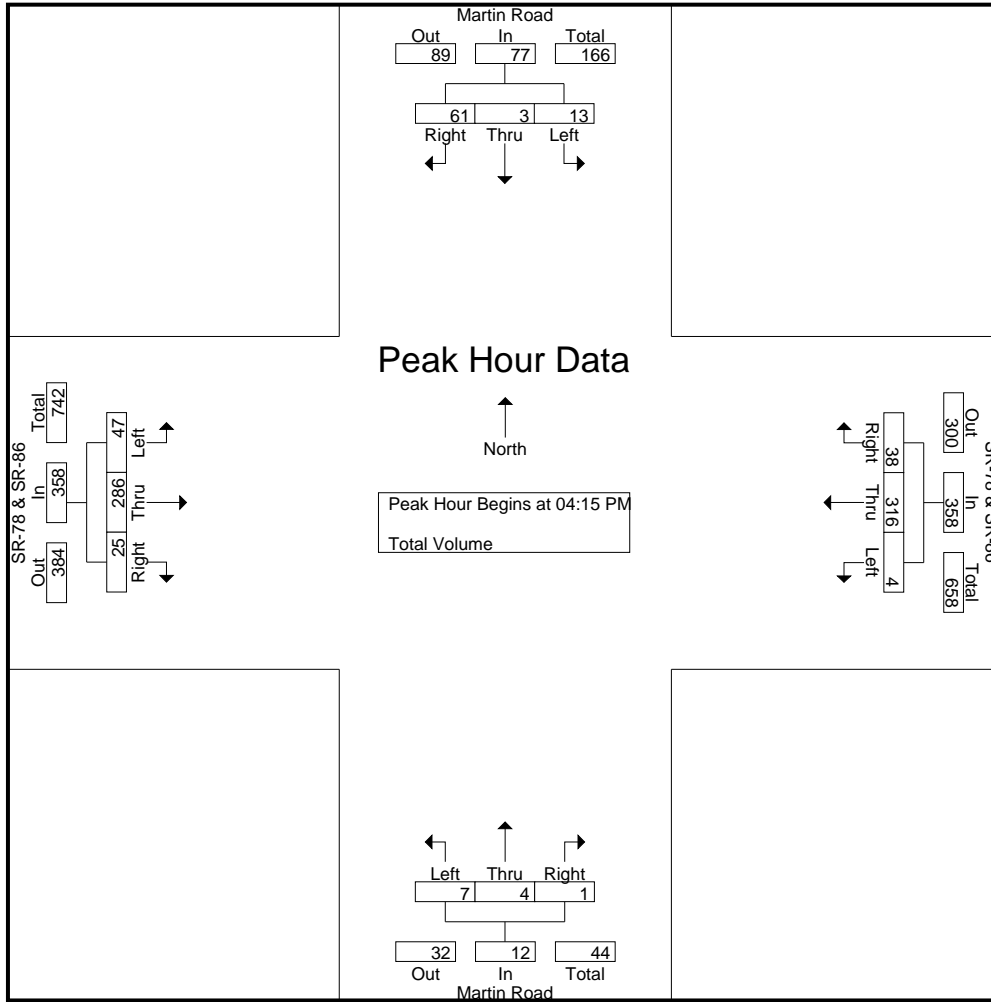
Start Time	Martin Road Southbound				SR-78 & SR-86 Westbound				Martin Road Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	3	0	16	19	2	82	12	96	2	0	0	2	10	69	8	87	204
04:30 PM	4	2	11	17	1	78	9	88	2	1	0	3	12	71	6	89	197
04:45 PM	3	1	22	26	1	82	9	92	2	2	0	4	17	69	4	90	212
05:00 PM	3	0	12	15	0	74	8	82	1	1	1	3	8	77	7	92	192
Total Volume	13	3	61	77	4	316	38	358	7	4	1	12	47	286	25	358	805
% App. Total	16.9	3.9	79.2		1.1	88.3	10.6		58.3	33.3	8.3		13.1	79.9	7		
PHF	.813	.375	.693	.740	.500	.963	.792	.932	.875	.500	.250	.750	.691	.929	.781	.973	.949

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

County of Imperial
 N/S: Martin Road
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 02_CIM_Martin_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 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				04:15 PM				04:45 PM				04:00 PM			
+0 mins.	4	2	11	17	2	82	12	96	2	2	0	4	5	89	4	98
+15 mins.	3	1	22	26	1	78	9	88	1	1	1	3	10	69	8	87
+30 mins.	3	0	12	15	1	82	9	92	1	1	0	2	12	71	6	89
+45 mins.	6	0	17	23	0	74	8	82	5	1	0	6	17	69	4	90
Total Volume	16	3	62	81	4	316	38	358	9	5	1	15	44	298	22	364
% App. Total	19.8	3.7	76.5		1.1	88.3	10.6		60	33.3	6.7		12.1	81.9	6	
PHF	.667	.375	.705	.779	.500	.963	.792	.932	.450	.625	.250	.625	.647	.837	.688	.929

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

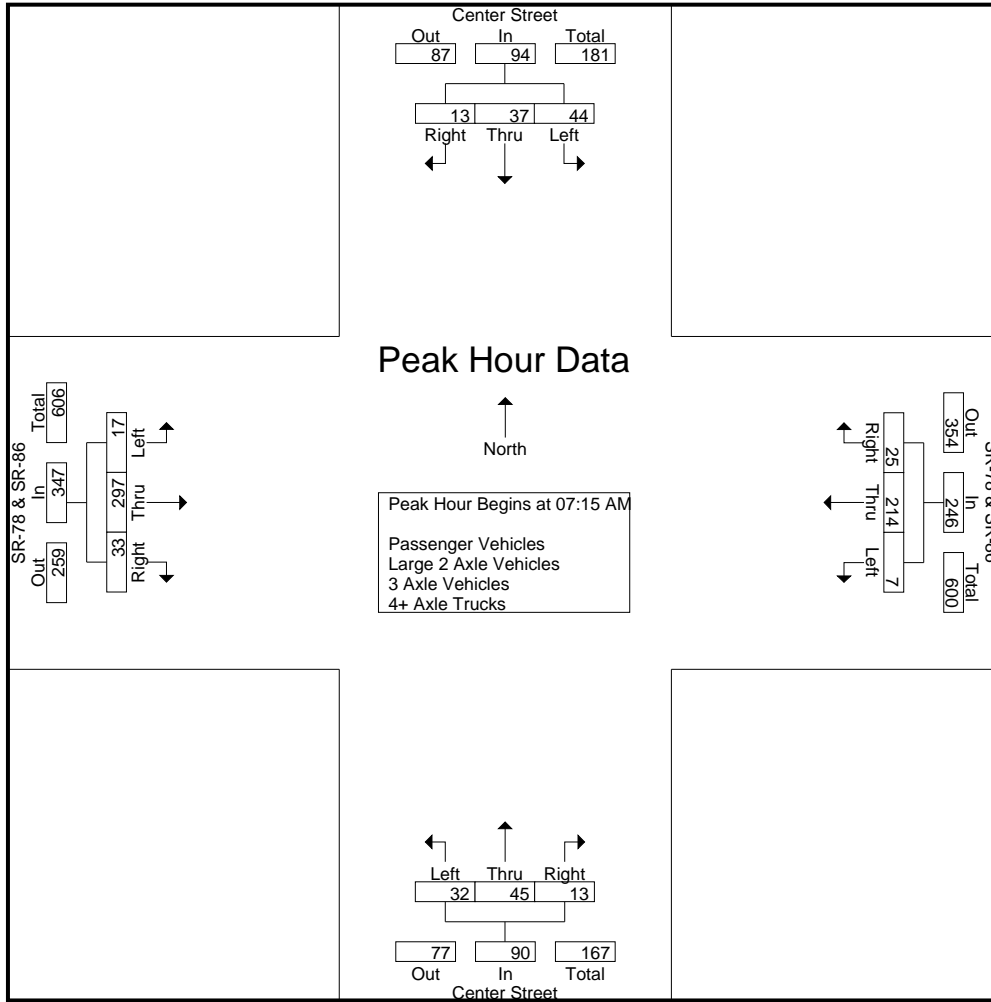
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	9	2	4	15	0	41	8	49	10	9	1	20	4	63	5	72	156
07:15 AM	4	4	2	10	0	56	6	62	4	16	2	22	5	76	7	88	182
07:30 AM	13	9	8	30	2	56	8	66	10	3	5	18	5	76	11	92	206
07:45 AM	18	16	2	36	1	52	4	57	8	14	4	26	4	79	10	93	212
Total	44	31	16	91	3	205	26	234	32	42	12	86	18	294	33	345	756
08:00 AM	9	8	1	18	4	50	7	61	10	12	2	24	3	66	5	74	177
08:15 AM	4	5	6	15	6	58	5	69	6	2	6	14	0	78	4	82	180
08:30 AM	5	5	2	12	0	66	3	69	9	7	4	20	4	71	7	82	183
08:45 AM	7	6	7	20	3	68	4	75	14	6	1	21	4	75	1	80	196
Total	25	24	16	65	13	242	19	274	39	27	13	79	11	290	17	318	736
Grand Total	69	55	32	156	16	447	45	508	71	69	25	165	29	584	50	663	1492
Apprch %	44.2	35.3	20.5		3.1	88	8.9		43	41.8	15.2		4.4	88.1	7.5		
Total %	4.6	3.7	2.1	10.5	1.1	30	3	34	4.8	4.6	1.7	11.1	1.9	39.1	3.4	44.4	
Passenger Vehicles	67	55	32	154	15	299	36	350	50	65	22	137	25	376	33	434	1075
% Passenger Vehicles	97.1	100	100	98.7	93.8	66.9	80	68.9	70.4	94.2	88	83	86.2	64.4	66	65.5	72.1
Large 2 Axle Vehicles	1	0	0	1	0	25	6	31	5	2	0	7	1	16	2	19	58
% Large 2 Axle Vehicles	1.4	0	0	0.6	0	5.6	13.3	6.1	7	2.9	0	4.2	3.4	2.7	4	2.9	3.9
3 Axle Vehicles	0	0	0	0	0	7	2	9	0	2	1	3	0	3	0	3	15
% 3 Axle Vehicles	0	0	0	0	0	1.6	4.4	1.8	0	2.9	4	1.8	0	0.5	0	0.5	1
4+ Axle Trucks	1	0	0	1	1	116	1	118	16	0	2	18	3	189	15	207	344
% 4+ Axle Trucks	1.4	0	0	0.6	6.2	26	2.2	23.2	22.5	0	8	10.9	10.3	32.4	30	31.2	23.1

Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	4	4	2	10	0	56	6	62	4	16	2	22	5	76	7	88	182
07:30 AM	13	9	8	30	2	56	8	66	10	3	5	18	5	76	11	92	206
07:45 AM	18	16	2	36	1	52	4	57	8	14	4	26	4	79	10	93	212
08:00 AM	9	8	1	18	4	50	7	61	10	12	2	24	3	66	5	74	177
Total Volume	44	37	13	94	7	214	25	246	32	45	13	90	17	297	33	347	777
% App. Total	46.8	39.4	13.8		2.8	87	10.2		35.6	50	14.4		4.9	85.6	9.5		
PHF	.611	.578	.406	.653	.438	.955	.781	.932	.800	.703	.650	.865	.850	.940	.750	.933	.916

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 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:

	07:30 AM				08:00 AM				07:15 AM				07:15 AM			
+0 mins.	13	9	8	30	4	50	7	61	4	16	2	22	5	76	7	88
+15 mins.	18	16	2	36	6	58	5	69	10	3	5	18	5	76	11	92
+30 mins.	9	8	1	18	0	66	3	69	8	14	4	26	4	79	10	93
+45 mins.	4	5	6	15	3	68	4	75	10	12	2	24	3	66	5	74
Total Volume	44	38	17	99	13	242	19	274	32	45	13	90	17	297	33	347
% App. Total	44.4	38.4	17.2		4.7	88.3	6.9		35.6	50	14.4		4.9	85.6	9.5	
PHF	.611	.594	.531	.688	.542	.890	.679	.913	.800	.703	.650	.865	.850	.940	.750	.933

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- Passenger Vehicles

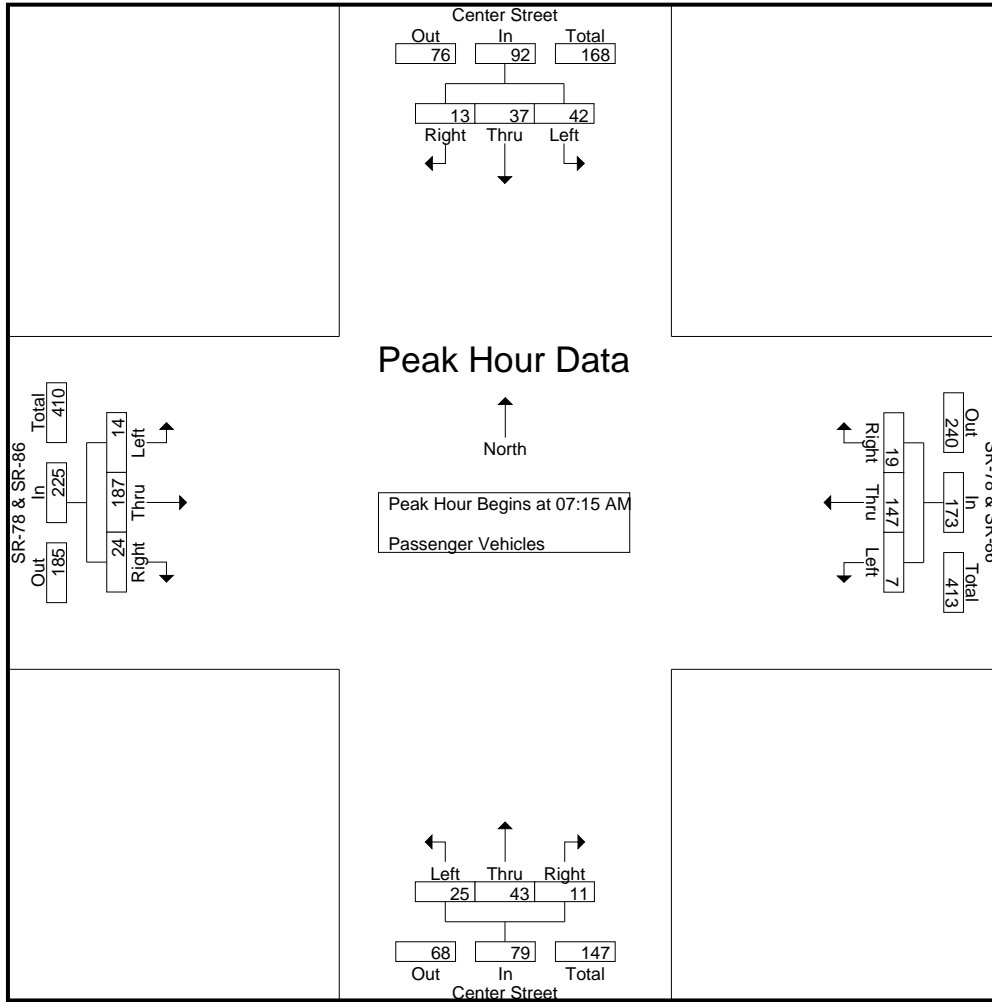
Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	9	2	4	15	0	26	6	32	4	9	0	13	3	33	0	36	96
07:15 AM	4	4	2	10	0	37	5	42	4	15	1	20	5	41	5	51	123
07:30 AM	12	9	8	29	2	33	5	40	8	3	5	16	3	54	9	66	151
07:45 AM	17	16	2	35	1	42	3	46	5	13	3	21	3	51	8	62	164
Total	42	31	16	89	3	138	19	160	21	40	9	70	14	179	22	215	534
08:00 AM	9	8	1	18	4	35	6	45	8	12	2	22	3	41	2	46	131
08:15 AM	4	5	6	15	5	40	5	50	3	2	6	11	0	50	4	54	130
08:30 AM	5	5	2	12	0	38	2	40	7	5	4	16	4	51	5	60	128
08:45 AM	7	6	7	20	3	48	4	55	11	6	1	18	4	55	0	59	152
Total	25	24	16	65	12	161	17	190	29	25	13	67	11	197	11	219	541
Grand Total	67	55	32	154	15	299	36	350	50	65	22	137	25	376	33	434	1075
Apprch %	43.5	35.7	20.8		4.3	85.4	10.3		36.5	47.4	16.1		5.8	86.6	7.6		
Total %	6.2	5.1	3	14.3	1.4	27.8	3.3	32.6	4.7	6	2	12.7	2.3	35	3.1	40.4	

Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	4	4	2	10	0	37	5	42	4	15	1	20	5	41	5	51	123
07:30 AM	12	9	8	29	2	33	5	40	8	3	5	16	3	54	9	66	151
07:45 AM	17	16	2	35	1	42	3	46	5	13	3	21	3	51	8	62	164
08:00 AM	9	8	1	18	4	35	6	45	8	12	2	22	3	41	2	46	131
Total Volume	42	37	13	92	7	147	19	173	25	43	11	79	14	187	24	225	569
% App. Total	45.7	40.2	14.1		4	85	11		31.6	54.4	13.9		6.2	83.1	10.7		
PHF	.618	.578	.406	.657	.438	.875	.792	.940	.781	.717	.550	.898	.700	.866	.667	.852	.867

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	4	4	2	10	0	37	5	42	4	15	1	20	5	41	5	51
+15 mins.	12	9	8	29	2	33	5	40	8	3	5	16	3	54	9	66
+30 mins.	17	16	2	35	1	42	3	46	5	13	3	21	3	51	8	62
+45 mins.	9	8	1	18	4	35	6	45	8	12	2	22	3	41	2	46
Total Volume	42	37	13	92	7	147	19	173	25	43	11	79	14	187	24	225
% App. Total	45.7	40.2	14.1		4	85	11		31.6	54.4	13.9		6.2	83.1	10.7	
PHF	.618	.578	.406	.657	.438	.875	.792	.940	.781	.717	.550	.898	.700	.866	.667	.852

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	4	2	6	2	0	0	2	0	2	1	3	11
07:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
07:30 AM	0	0	0	0	0	4	2	6	1	0	0	1	0	0	0	0	7
07:45 AM	1	0	0	1	0	3	1	4	1	1	0	2	1	2	0	3	10
Total	1	0	0	1	0	16	5	21	4	1	0	5	1	6	1	8	35
08:00 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	2	0	2	5
08:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	4	0	4	5
08:30 AM	0	0	0	0	0	7	0	7	0	1	0	1	0	2	0	2	10
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3
Total	0	0	0	0	0	9	1	10	1	1	0	2	0	10	1	11	23
Grand Total	1	0	0	1	0	25	6	31	5	2	0	7	1	16	2	19	58
Apprch %	100	0	0		0	80.6	19.4		71.4	28.6	0		5.3	84.2	10.5		
Total %	1.7	0	0	1.7	0	43.1	10.3	53.4	8.6	3.4	0	12.1	1.7	27.6	3.4	32.8	

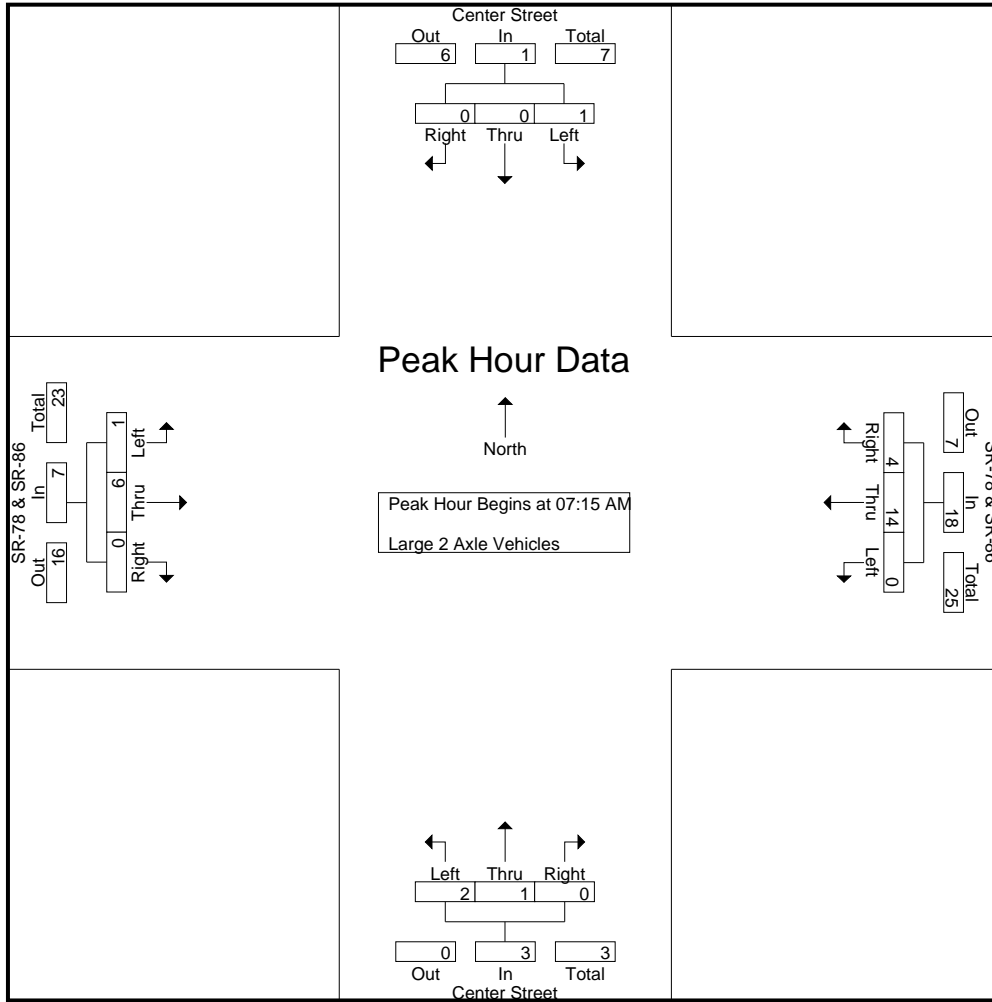
Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
07:30 AM	0	0	0	0	0	4	2	6	1	0	0	1	0	0	0	0	7
07:45 AM	1	0	0	1	0	3	1	4	1	1	0	2	1	2	0	3	10
08:00 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	2	0	2	5
Total Volume	1	0	0	1	0	14	4	18	2	1	0	3	1	6	0	7	29
% App. Total	100	0	0		0	77.8	22.2		66.7	33.3	0		14.3	85.7	0		
PHF	.250	.000	.000	.250	.000	.700	.500	.750	.500	.250	.000	.375	.250	.750	.000	.583	.725

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	4	2	6	1	0	0	1	0	0	0	0
+30 mins.	1	0	0	1	0	3	1	4	1	1	0	2	1	2	0	3
+45 mins.	0	0	0	0	0	2	1	3	0	0	0	0	0	2	0	2
Total Volume	1	0	0	1	0	14	4	18	2	1	0	3	1	6	0	7
% App. Total	100	0	0	0	0	77.8	22.2	0	66.7	33.3	0	0	14.3	85.7	0	0
PHF	.250	.000	.000	.250	.000	.700	.500	.750	.500	.250	.000	.375	.250	.750	.000	.583

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

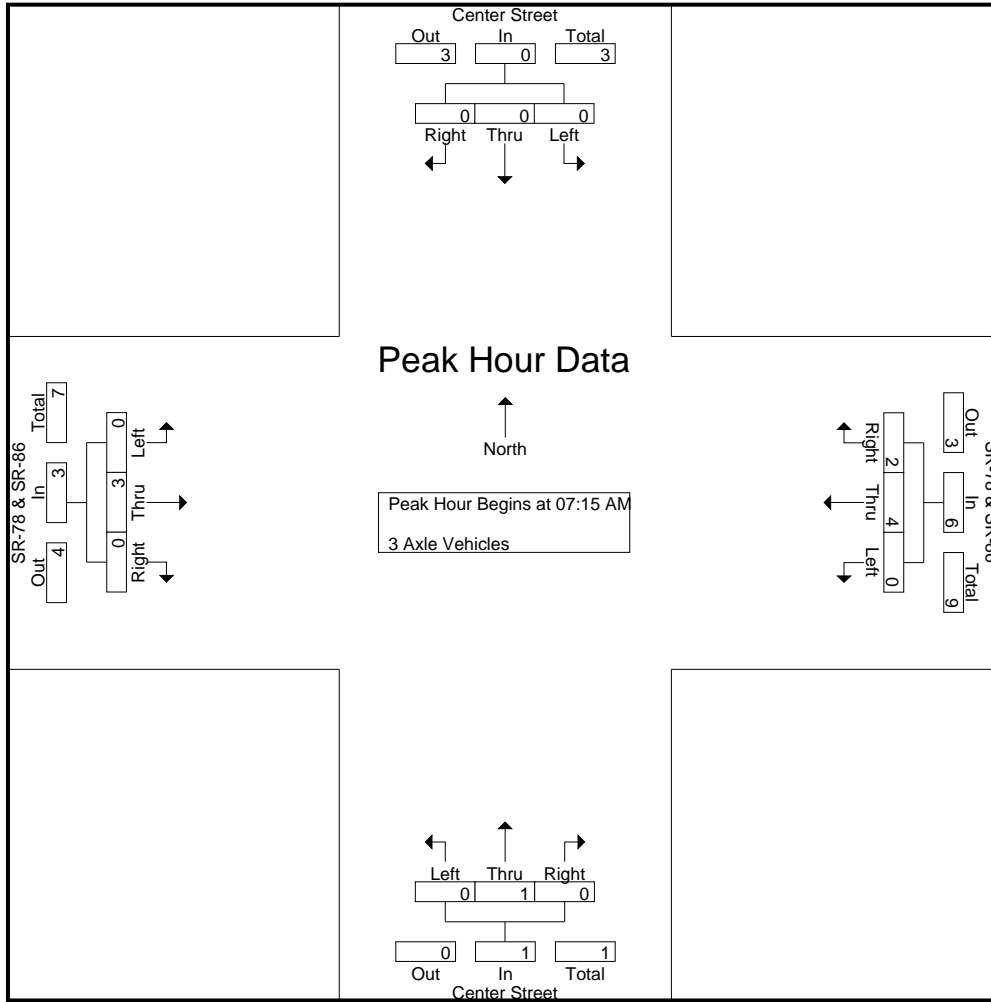
Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:00 AM	0	0	0	0	0	1	0	1	0	0	1	1	0	0	0	0	0	2
07:15 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	2	0	2	0	2
07:30 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	4	2	6	0	1	1	2	0	2	0	2	0	10
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
Total	0	0	0	0	0	3	0	3	0	1	0	1	0	1	0	1	0	5
Grand Total	0	0	0	0	0	7	2	9	0	2	1	3	0	3	0	3	0	15
Apprch %	0	0	0	0	0	77.8	22.2	0	0	66.7	33.3	0	0	100	0	0	0	0
Total %	0	0	0	0	0	46.7	13.3	60	0	13.3	6.7	20	0	20	0	20	0	0

Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total	
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total		
07:15 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	2	0	2	0	4
07:30 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	2
07:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	0	2
08:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	2
Total Volume	0	0	0	0	0	4	2	6	0	1	0	1	0	3	0	3	0	10
% App. Total	0	0	0	0	0	66.7	33.3	0	0	100	0	0	0	100	0	0	0	0
PHF	.000	.000	.000	.000	.000	.500	.500	.750	.000	.250	.000	.250	.000	.375	.000	.375	.000	.625

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 07:15 AM

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	1	1	0	1	0	1	0	2	0	2
+15 mins.	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
Total Volume	0	0	0	0	0	4	2	6	0	1	0	1	0	3	0	3
% App. Total	0	0	0	0	0	66.7	33.3		0	100	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.500	.500	.750	.000	.250	.000	.250	.000	.375	.000	.375

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	0	0	0	0	0	10	0	10	4	0	0	4	1	28	4	33	47
07:15 AM	0	0	0	0	0	14	0	14	0	0	1	1	0	31	2	33	48
07:30 AM	1	0	0	1	0	18	0	18	1	0	0	1	2	22	2	26	46
07:45 AM	0	0	0	0	0	5	0	5	2	0	1	3	0	26	2	28	36
Total	1	0	0	1	0	47	0	47	7	0	2	9	3	107	10	120	177
08:00 AM	0	0	0	0	0	12	0	12	2	0	0	2	0	22	3	25	39
08:15 AM	0	0	0	0	1	18	0	19	2	0	0	2	0	24	0	24	45
08:30 AM	0	0	0	0	0	21	1	22	2	0	0	2	0	18	2	20	44
08:45 AM	0	0	0	0	0	18	0	18	3	0	0	3	0	18	0	18	39
Total	0	0	0	0	1	69	1	71	9	0	0	9	0	82	5	87	167
Grand Total	1	0	0	1	1	116	1	118	16	0	2	18	3	189	15	207	344
Apprch %	100	0	0		0.8	98.3	0.8		88.9	0	11.1		1.4	91.3	7.2		
Total %	0.3	0	0	0.3	0.3	33.7	0.3	34.3	4.7	0	0.6	5.2	0.9	54.9	4.4	60.2	

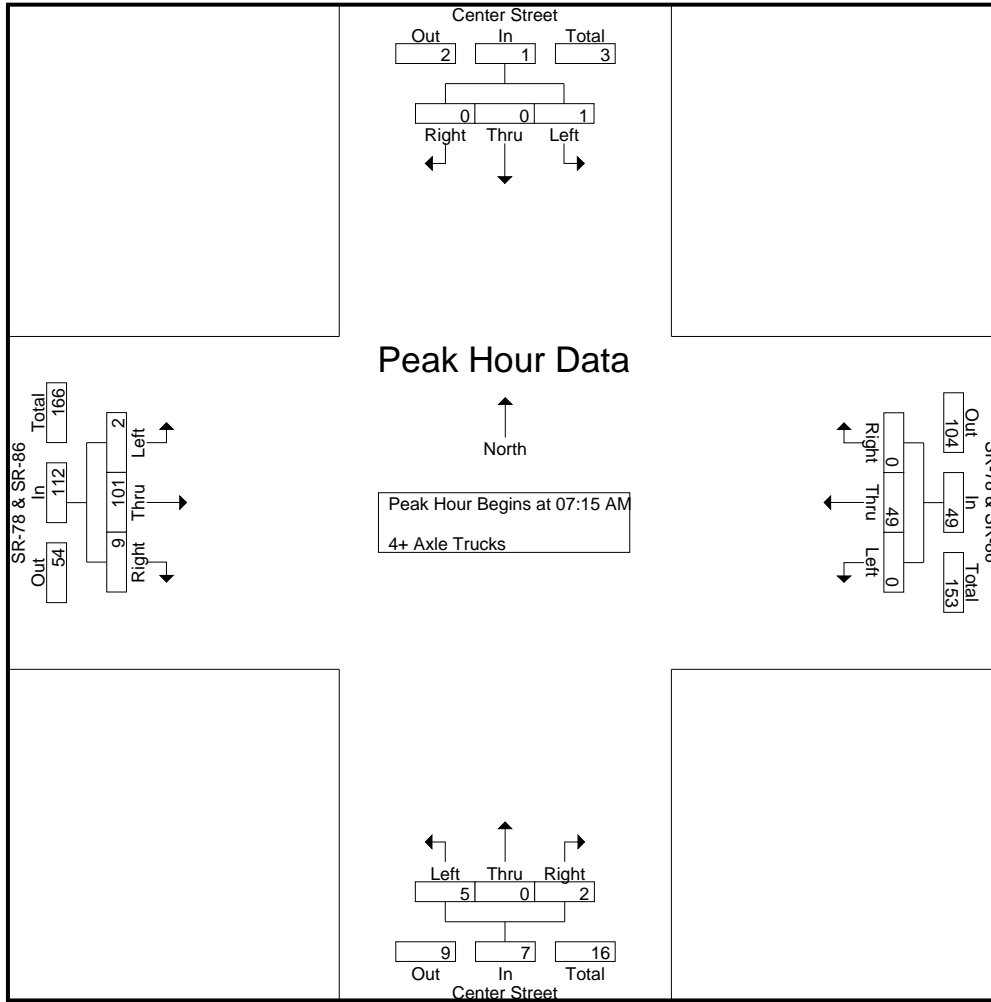
Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:15 AM	0	0	0	0	0	14	0	14	0	0	1	1	0	31	2	33	48
07:30 AM	1	0	0	1	0	18	0	18	1	0	0	1	2	22	2	26	46
07:45 AM	0	0	0	0	0	5	0	5	2	0	1	3	0	26	2	28	36
08:00 AM	0	0	0	0	0	12	0	12	2	0	0	2	0	22	3	25	39
Total Volume	1	0	0	1	0	49	0	49	5	0	2	7	2	101	9	112	169
% App. Total	100	0	0		0	100	0		71.4	0	28.6		1.8	90.2	8		
PHF	.250	.000	.000	.250	.000	.681	.000	.681	.625	.000	.500	.583	.250	.815	.750	.848	.880

Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 07:15 AM

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 2



Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	14	0	14	0	0	1	1	0	31	2	33
+15 mins.	1	0	0	1	0	18	0	18	1	0	0	1	2	22	2	26
+30 mins.	0	0	0	0	0	5	0	5	2	0	1	3	0	26	2	28
+45 mins.	0	0	0	0	0	12	0	12	2	0	0	2	0	22	3	25
Total Volume	1	0	0	1	0	49	0	49	5	0	2	7	2	101	9	112
% App. Total	100	0	0	0	0	100	0	0	71.4	0	28.6	0	1.8	90.2	8	0
PHF	.250	.000	.000	.250	.000	.681	.000	.681	.625	.000	.500	.583	.250	.815	.750	.848

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

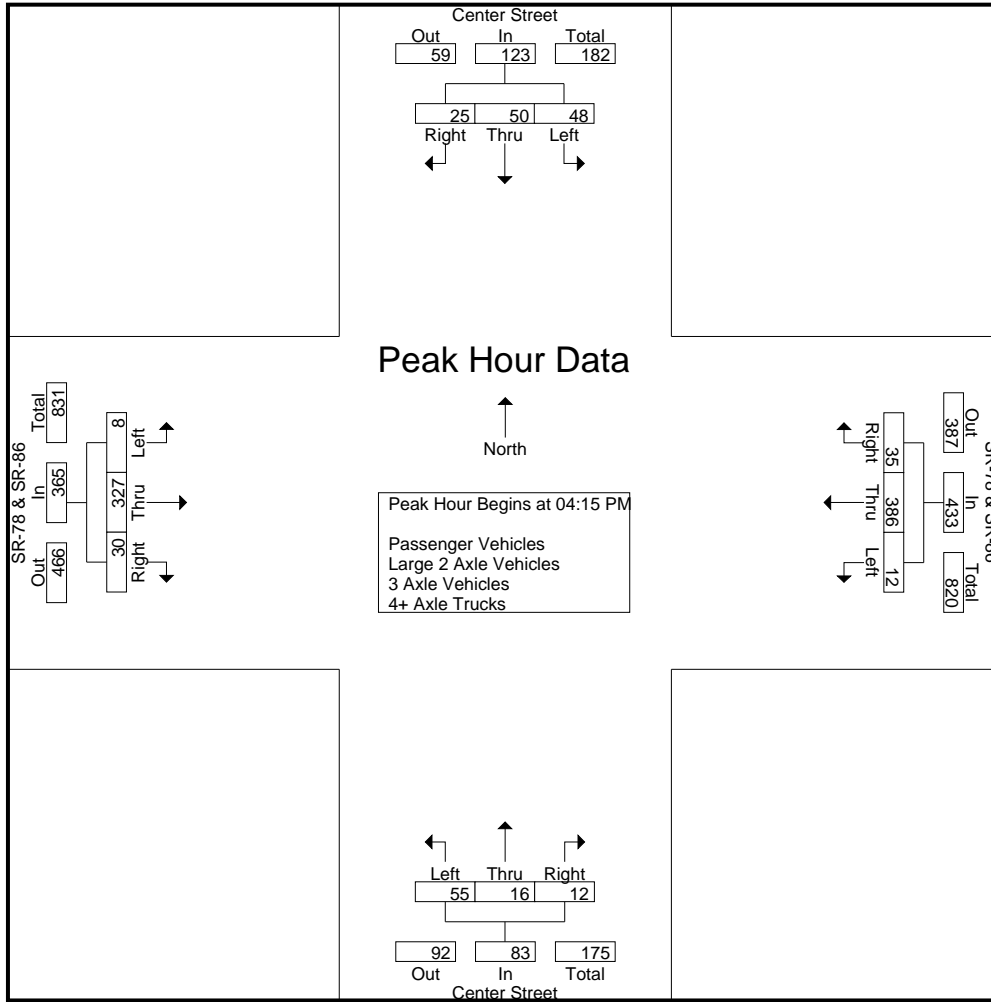
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	4	15	10	29	4	73	7	84	17	7	0	24	1	84	6	91	228
04:15 PM	16	14	11	41	3	92	8	103	15	6	3	24	2	86	8	96	264
04:30 PM	11	12	4	27	3	98	8	109	9	6	1	16	3	73	10	86	238
04:45 PM	11	13	6	30	4	102	11	117	16	2	4	22	1	89	6	96	265
Total	42	54	31	127	14	365	34	413	57	21	8	86	7	332	30	369	995
05:00 PM	10	11	4	25	2	94	8	104	15	2	4	21	2	79	6	87	237
05:15 PM	16	6	5	27	5	72	6	83	11	6	3	20	1	88	9	98	228
05:30 PM	7	3	10	20	2	79	6	87	12	7	1	20	4	86	7	97	224
05:45 PM	11	6	8	25	4	81	2	87	7	4	3	14	4	70	4	78	204
Total	44	26	27	97	13	326	22	361	45	19	11	75	11	323	26	360	893
Grand Total	86	80	58	224	27	691	56	774	102	40	19	161	18	655	56	729	1888
Apprch %	38.4	35.7	25.9		3.5	89.3	7.2		63.4	24.8	11.8		2.5	89.8	7.7		
Total %	4.6	4.2	3.1	11.9	1.4	36.6	3	41	5.4	2.1	1	8.5	1	34.7	3	38.6	
Passenger Vehicles	81	76	54	211	27	461	51	539	65	36	19	120	18	448	45	511	1381
% Passenger Vehicles	94.2	95	93.1	94.2	100	66.7	91.1	69.6	63.7	90	100	74.5	100	68.4	80.4	70.1	73.1
Large 2 Axle Vehicles	4	0	3	7	0	14	4	18	1	0	0	1	0	9	0	9	35
% Large 2 Axle Vehicles	4.7	0	5.2	3.1	0	2	7.1	2.3	1	0	0	0.6	0	1.4	0	1.2	1.9
3 Axle Vehicles	0	3	0	3	0	5	1	6	1	0	0	1	0	6	0	6	16
% 3 Axle Vehicles	0	3.8	0	1.3	0	0.7	1.8	0.8	1	0	0	0.6	0	0.9	0	0.8	0.8
4+ Axle Trucks	1	1	1	3	0	211	0	211	35	4	0	39	0	192	11	203	456
% 4+ Axle Trucks	1.2	1.2	1.7	1.3	0	30.5	0	27.3	34.3	10	0	24.2	0	29.3	19.6	27.8	24.2

Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:15 PM																	
04:15 PM	16	14	11	41	3	92	8	103	15	6	3	24	2	86	8	96	264
04:30 PM	11	12	4	27	3	98	8	109	9	6	1	16	3	73	10	86	238
04:45 PM	11	13	6	30	4	102	11	117	16	2	4	22	1	89	6	96	265
05:00 PM	10	11	4	25	2	94	8	104	15	2	4	21	2	79	6	87	237
Total Volume	48	50	25	123	12	386	35	433	55	16	12	83	8	327	30	365	1004
% App. Total	39	40.7	20.3		2.8	89.1	8.1		66.3	19.3	14.5		2.2	89.6	8.2		
PHF	.750	.893	.568	.750	.750	.946	.795	.925	.859	.667	.750	.865	.667	.919	.750	.951	.947

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 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				04:45 PM			
+0 mins.	4	15	10	29	3	92	8	103	17	7	0	24	1	89	6	96
+15 mins.	16	14	11	41	3	98	8	109	15	6	3	24	2	79	6	87
+30 mins.	11	12	4	27	4	102	11	117	9	6	1	16	1	88	9	98
+45 mins.	11	13	6	30	2	94	8	104	16	2	4	22	4	86	7	97
Total Volume	42	54	31	127	12	386	35	433	57	21	8	86	8	342	28	378
% App. Total	33.1	42.5	24.4		2.8	89.1	8.1		66.3	24.4	9.3		2.1	90.5	7.4	
PHF	.656	.900	.705	.774	.750	.946	.795	.925	.838	.750	.500	.896	.500	.961	.778	.964

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- Passenger Vehicles

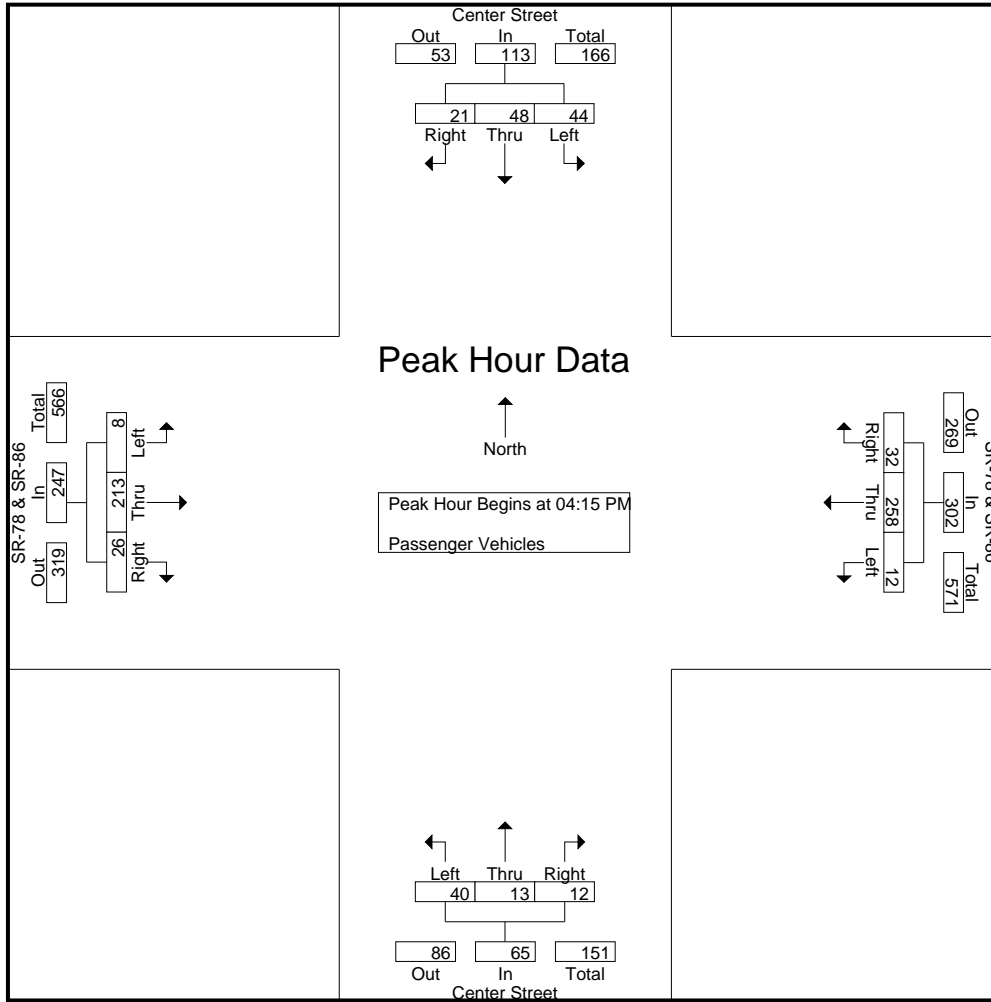
Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	4	15	10	29	4	48	7	59	8	6	0	14	1	56	6	63	165
04:15 PM	15	13	7	35	3	61	7	71	10	6	3	19	2	63	7	72	197
04:30 PM	10	12	4	26	3	68	7	78	8	4	1	13	3	43	8	54	171
04:45 PM	10	13	6	29	4	64	11	79	12	2	4	18	1	57	6	64	190
Total	39	53	27	119	14	241	32	287	38	18	8	64	7	219	27	253	723
05:00 PM	9	10	4	23	2	65	7	74	10	1	4	15	2	50	5	57	169
05:15 PM	16	4	5	25	5	47	4	56	5	6	3	14	1	64	5	70	165
05:30 PM	6	3	10	19	2	56	6	64	9	7	1	17	4	63	5	72	172
05:45 PM	11	6	8	25	4	52	2	58	3	4	3	10	4	52	3	59	152
Total	42	23	27	92	13	220	19	252	27	18	11	56	11	229	18	258	658
Grand Total	81	76	54	211	27	461	51	539	65	36	19	120	18	448	45	511	1381
Apprch %	38.4	36	25.6		5	85.5	9.5		54.2	30	15.8		3.5	87.7	8.8		
Total %	5.9	5.5	3.9	15.3	2	33.4	3.7	39	4.7	2.6	1.4	8.7	1.3	32.4	3.3	37	

Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	15	13	7	35	3	61	7	71	10	6	3	19	2	63	7	72	197
04:30 PM	10	12	4	26	3	68	7	78	8	4	1	13	3	43	8	54	171
04:45 PM	10	13	6	29	4	64	11	79	12	2	4	18	1	57	6	64	190
05:00 PM	9	10	4	23	2	65	7	74	10	1	4	15	2	50	5	57	169
Total Volume	44	48	21	113	12	258	32	302	40	13	12	65	8	213	26	247	727
% App. Total	38.9	42.5	18.6		4	85.4	10.6		61.5	20	18.5		3.2	86.2	10.5		
PHF	.733	.923	.750	.807	.750	.949	.727	.956	.833	.542	.750	.855	.667	.845	.813	.858	.923

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:15 PM

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	15	13	7	35	3	61	7	71	10	6	3	19	2	63	7	72
+15 mins.	10	12	4	26	3	68	7	78	8	4	1	13	3	43	8	54
+30 mins.	10	13	6	29	4	64	11	79	12	2	4	18	1	57	6	64
+45 mins.	9	10	4	23	2	65	7	74	10	1	4	15	2	50	5	57
Total Volume	44	48	21	113	12	258	32	302	40	13	12	65	8	213	26	247
% App. Total	38.9	42.5	18.6		4	85.4	10.6		61.5	20	18.5		3.2	86.2	10.5	
PHF	.733	.923	.750	.807	.750	.949	.727	.956	.833	.542	.750	.855	.667	.845	.813	.858

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- Large 2 Axle Vehicles

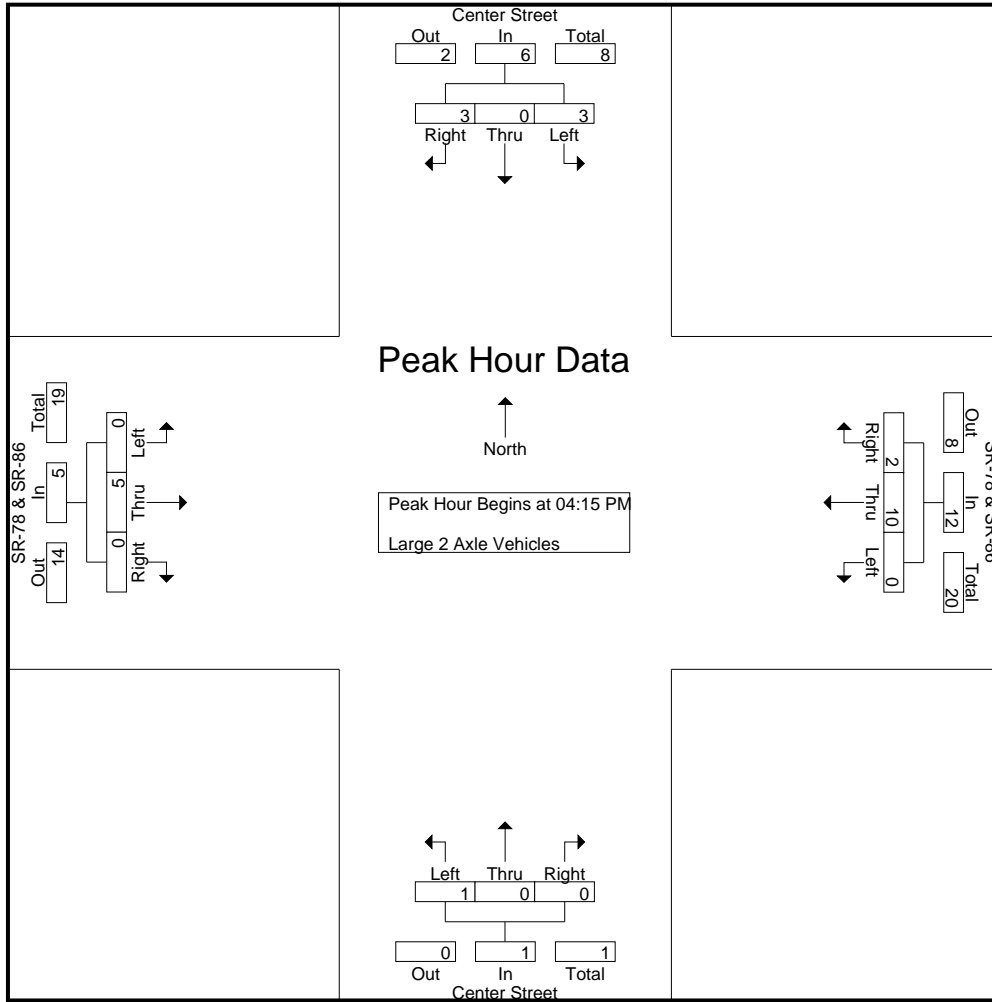
Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	2	0	2	5
04:15 PM	1	0	3	4	0	4	0	4	1	0	0	1	0	1	0	1	10
04:30 PM	1	0	0	1	0	3	1	4	0	0	0	0	0	2	0	2	7
04:45 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
Total	3	0	3	6	0	11	1	12	1	0	0	1	0	6	0	6	25
05:00 PM	0	0	0	0	0	2	1	3	0	0	0	0	0	1	0	1	4
05:15 PM	0	0	0	0	0	0	2	2	0	0	0	0	0	1	0	1	3
05:30 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	1	0	3	3	6	0	0	0	0	0	3	0	3	10
Grand Total	4	0	3	7	0	14	4	18	1	0	0	1	0	9	0	9	35
Apprch %	57.1	0	42.9		0	77.8	22.2		100	0	0		0	100	0		
Total %	11.4	0	8.6	20	0	40	11.4	51.4	2.9	0	0	2.9	0	25.7	0	25.7	

Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	1	0	3	4	0	4	0	4	1	0	0	1	0	1	0	1	10
04:30 PM	1	0	0	1	0	3	1	4	0	0	0	0	0	2	0	2	7
04:45 PM	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1	3
05:00 PM	0	0	0	0	0	2	1	3	0	0	0	0	0	1	0	1	4
Total Volume	3	0	3	6	0	10	2	12	1	0	0	1	0	5	0	5	24
% App. Total	50	0	50		0	83.3	16.7		100	0	0		0	100	0		
PHF	.750	.000	.250	.375	.000	.625	.500	.750	.250	.000	.000	.250	.000	.625	.000	.625	.600

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Entire Intersection Begins at 04:15 PM

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	1	0	3	4	0	4	0	4	1	0	0	1	0	1	0	1
+15 mins.	1	0	0	1	0	3	1	4	0	0	0	0	0	2	0	2
+30 mins.	1	0	0	1	0	1	0	1	0	0	0	0	0	1	0	1
+45 mins.	0	0	0	0	0	2	1	3	0	0	0	0	0	1	0	1
Total Volume	3	0	3	6	0	10	2	12	1	0	0	1	0	5	0	5
% App. Total	50	0	50		0	83.3	16.7		100	0	0		0	100	0	
PHF	.750	.000	.250	.375	.000	.625	.500	.750	.250	.000	.000	.250	.000	.625	.000	.625

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- 3 Axle Vehicles

Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	1	0	1	0	3	1	4	1	0	0	1	0	0	0	0	6
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	1	0	1	0	4	1	5	1	0	0	1	0	1	0	1	8
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
05:15 PM	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	2
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	2	0	2	0	1	0	1	0	0	0	0	0	5	0	5	8
Grand Total	0	3	0	3	0	5	1	6	1	0	0	1	0	6	0	6	16
Apprch %	0	100	0		0	83.3	16.7		100	0	0		0	100	0		
Total %	0	18.8	0	18.8	0	31.2	6.2	37.5	6.2	0	0	6.2	0	37.5	0	37.5	

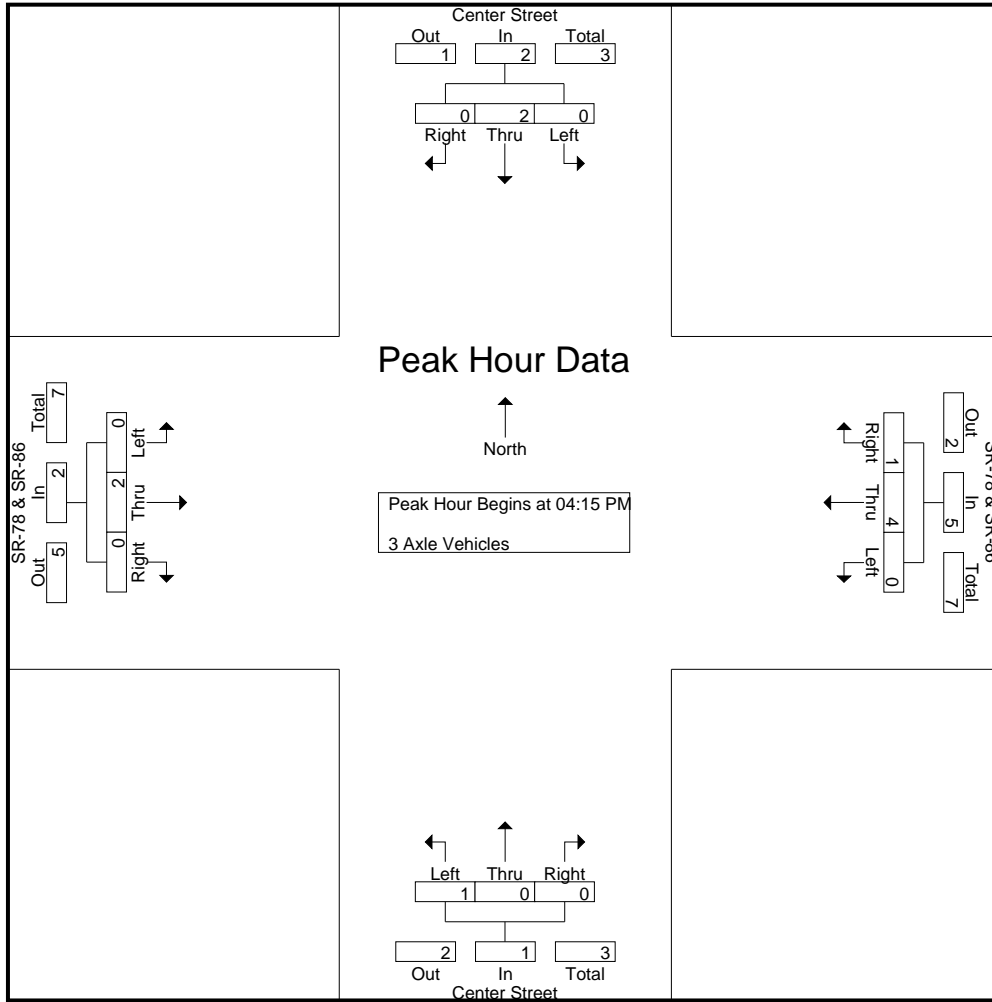
Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	1	0	1	0	3	1	4	1	0	0	1	0	0	0	0	6
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1	2
Total Volume	0	2	0	2	0	4	1	5	1	0	0	1	0	2	0	2	10
% App. Total	0	100	0		0	80	20		100	0	0		0	100	0		
PHF	.000	.500	.000	.500	.000	.333	.250	.313	.250	.000	.000	.250	.000	.500	.000	.500	.417

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	1	0	1	0	3	1	4	1	0	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	1
Total Volume	0	2	0	2	0	4	1	5	1	0	0	1	0	2	0	2
% App. Total	0	100	0	0	0	80	20	100	100	0	0	0	0	100	0	0
PHF	.000	.500	.000	.500	.000	.333	.250	.313	.250	.000	.000	.250	.000	.500	.000	.500

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- 4+ Axle Trucks

Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	0	0	0	0	0	22	0	22	9	1	0	10	0	26	0	26	58
04:15 PM	0	0	1	1	0	24	0	24	3	0	0	3	0	22	1	23	51
04:30 PM	0	0	0	0	0	27	0	27	1	2	0	3	0	28	2	30	60
04:45 PM	0	0	0	0	0	36	0	36	4	0	0	4	0	30	0	30	70
Total	0	0	1	1	0	109	0	109	17	3	0	20	0	106	3	109	239
05:00 PM	1	0	0	1	0	27	0	27	5	1	0	6	0	27	1	28	62
05:15 PM	0	1	0	1	0	24	0	24	6	0	0	6	0	23	4	27	58
05:30 PM	0	0	0	0	0	22	0	22	3	0	0	3	0	19	2	21	46
05:45 PM	0	0	0	0	0	29	0	29	4	0	0	4	0	17	1	18	51
Total	1	1	0	2	0	102	0	102	18	1	0	19	0	86	8	94	217
Grand Total	1	1	1	3	0	211	0	211	35	4	0	39	0	192	11	203	456
Apprch %	33.3	33.3	33.3		0	100	0		89.7	10.3	0		0	94.6	5.4		
Total %	0.2	0.2	0.2	0.7	0	46.3	0	46.3	7.7	0.9	0	8.6	0	42.1	2.4	44.5	

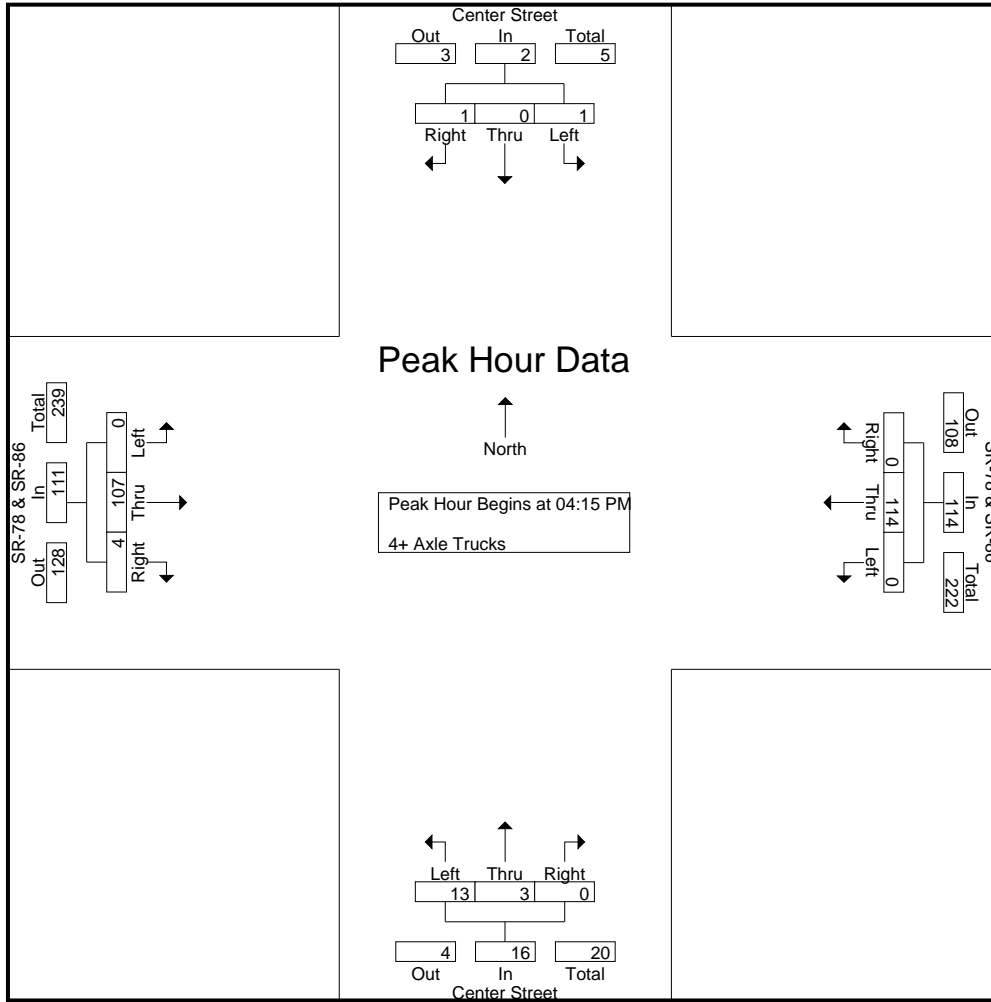
Start Time	Center Street Southbound				SR-78 & SR-86 Westbound				Center Street Northbound				SR-78 & SR-86 Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:15 PM	0	0	1	1	0	24	0	24	3	0	0	3	0	22	1	23	51
04:30 PM	0	0	0	0	0	27	0	27	1	2	0	3	0	28	2	30	60
04:45 PM	0	0	0	0	0	36	0	36	4	0	0	4	0	30	0	30	70
05:00 PM	1	0	0	1	0	27	0	27	5	1	0	6	0	27	1	28	62
Total Volume	1	0	1	2	0	114	0	114	13	3	0	16	0	107	4	111	243
% App. Total	50	0	50		0	100	0		81.2	18.8	0		0	96.4	3.6		
PHF	.250	.000	.250	.500	.000	.792	.000	.792	.650	.375	.000	.667	.000	.892	.500	.925	.868

Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 04:15 PM

County of Imperial
 N/S: Center Street (S-30)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 03_CIM_Center_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 2



Peak Hour Analysis From 04:15 PM to 05:00 PM - Peak 1 of 1
 Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				04:15 PM				04:15 PM			
+0 mins.	0	0	1	1	0	24	0	24	3	0	0	3	0	22	1	23
+15 mins.	0	0	0	0	0	27	0	27	1	2	0	3	0	28	2	30
+30 mins.	0	0	0	0	0	36	0	36	4	0	0	4	0	30	0	30
+45 mins.	1	0	0	1	0	27	0	27	5	1	0	6	0	27	1	28
Total Volume	1	0	1	2	0	114	0	114	13	3	0	16	0	107	4	111
% App. Total	50	0	50		0	100	0		81.2	18.8	0		0	96.4	3.6	
PHF	.250	.000	.250	.500	.000	.792	.000	.792	.650	.375	.000	.667	.000	.892	.500	.925

County of Imperial
 N/S: Boarts Road (S-26)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 04_CIM_Boarts_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Boarts Road Southbound			SR-78 & SR-86 Westbound			SR-78 & SR-86 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:00 AM	0	6	6	60	1	61	3	85	88	155
07:15 AM	0	1	1	55	0	55	2	89	91	147
07:30 AM	0	3	3	76	1	77	2	98	100	180
07:45 AM	0	3	3	76	1	77	2	124	126	206
Total	0	13	13	267	3	270	9	396	405	688
08:00 AM	1	4	5	64	1	65	5	93	98	168
08:15 AM	0	4	4	73	0	73	4	93	97	174
08:30 AM	0	3	3	74	2	76	9	83	92	171
08:45 AM	0	3	3	77	0	77	0	97	97	177
Total	1	14	15	288	3	291	18	366	384	690
Grand Total	1	27	28	555	6	561	27	762	789	1378
Apprch %	3.6	96.4		98.9	1.1		3.4	96.6		
Total %	0.1	2	2	40.3	0.4	40.7	2	55.3	57.3	

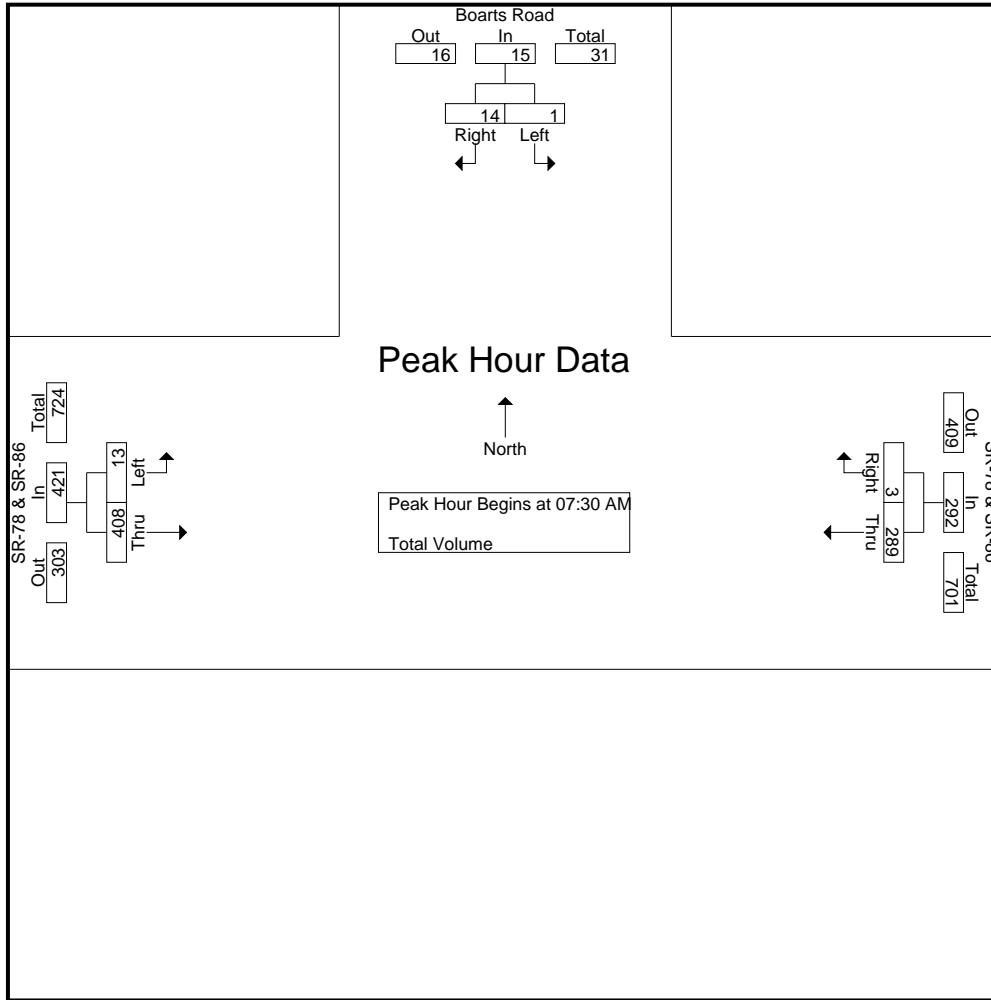
Start Time	Boarts Road Southbound			SR-78 & SR-86 Westbound			SR-78 & SR-86 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
07:30 AM	0	3	3	76	1	77	2	98	100	180
07:45 AM	0	3	3	76	1	77	2	124	126	206
08:00 AM	1	4	5	64	1	65	5	93	98	168
08:15 AM	0	4	4	73	0	73	4	93	97	174
Total Volume	1	14	15	289	3	292	13	408	421	728
% App. Total	6.7	93.3		99	1		3.1	96.9		
PHF	.250	.875	.750	.951	.750	.948	.650	.823	.835	.883

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

County of Imperial
 N/S: Boarts Road (S-26)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 04_CIM_Boarts_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 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:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	0	3	3	76	1	77	2	98	100
+15 mins.	0	3	3	76	1	77	2	124	126
+30 mins.	1	4	5	64	1	65	5	93	98
+45 mins.	0	4	4	73	0	73	4	93	97
Total Volume	1	14	15	289	3	292	13	408	421
% App. Total	6.7	93.3		99	1		3.1	96.9	
PHF	.250	.875	.750	.951	.750	.948	.650	.823	.835

County of Imperial
 N/S: Boarts Road (S-26)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 04_CIM_Boarts_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

Groups Printed- Total Volume

Start Time	Boarts Road Southbound			SR-78 & SR-86 Westbound			SR-78 & SR-86 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:00 PM	1	1	2	95	0	95	1	105	106	203
04:15 PM	1	5	6	114	0	114	2	114	116	236
04:30 PM	1	4	5	133	1	134	1	105	106	245
04:45 PM	1	3	4	118	1	119	2	108	110	233
Total	4	13	17	460	2	462	6	432	438	917
05:00 PM	0	2	2	113	2	115	1	94	95	212
05:15 PM	1	2	3	88	0	88	3	108	111	202
05:30 PM	0	1	1	105	1	106	1	106	107	214
05:45 PM	0	2	2	95	1	96	0	94	94	192
Total	1	7	8	401	4	405	5	402	407	820
Grand Total	5	20	25	861	6	867	11	834	845	1737
Apprch %	20	80		99.3	0.7		1.3	98.7		
Total %	0.3	1.2	1.4	49.6	0.3	49.9	0.6	48	48.6	

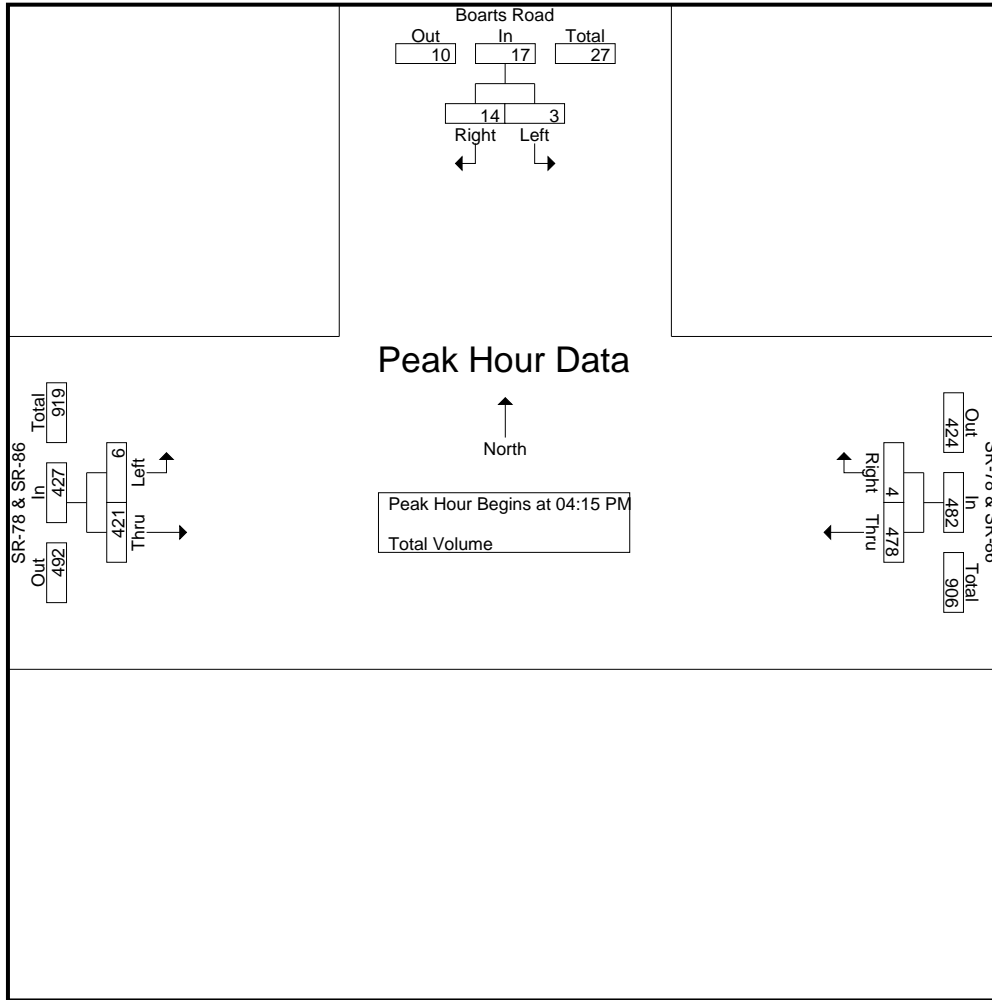
Start Time	Boarts Road Southbound			SR-78 & SR-86 Westbound			SR-78 & SR-86 Eastbound			Int. Total
	Left	Right	App. Total	Thru	Right	App. Total	Left	Thru	App. Total	
04:15 PM	1	5	6	114	0	114	2	114	116	236
04:30 PM	1	4	5	133	1	134	1	105	106	245
04:45 PM	1	3	4	118	1	119	2	108	110	233
05:00 PM	0	2	2	113	2	115	1	94	95	212
Total Volume	3	14	17	478	4	482	6	421	427	926
% App. Total	17.6	82.4		99.2	0.8		1.4	98.6		
PHF	.750	.700	.708	.898	.500	.899	.750	.923	.920	.945

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

County of Imperial
 N/S: Boarts Road (S-26)
 E/W: SR-78 & SR-86
 Weather: Clear

File Name : 04_CIM_Boarts_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 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		
+0 mins.	1	1	2	114	0	114	1	105	106
+15 mins.	1	5	6	133	1	134	2	114	116
+30 mins.	1	4	5	118	1	119	1	105	106
+45 mins.	1	3	4	113	2	115	2	108	110
Total Volume	4	13	17	478	4	482	6	432	438
% App. Total	23.5	76.5		99.2	0.8		1.4	98.6	
PHF	1.000	.650	.708	.898	.500	.899	.750	.947	.944

County of Imperial
 N/S: SR-78 & SR-86
 E/W: Fredericks Road/SR-78
 Weather: Clear

File Name : 05_CIM_SR-86_SR-78 AM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

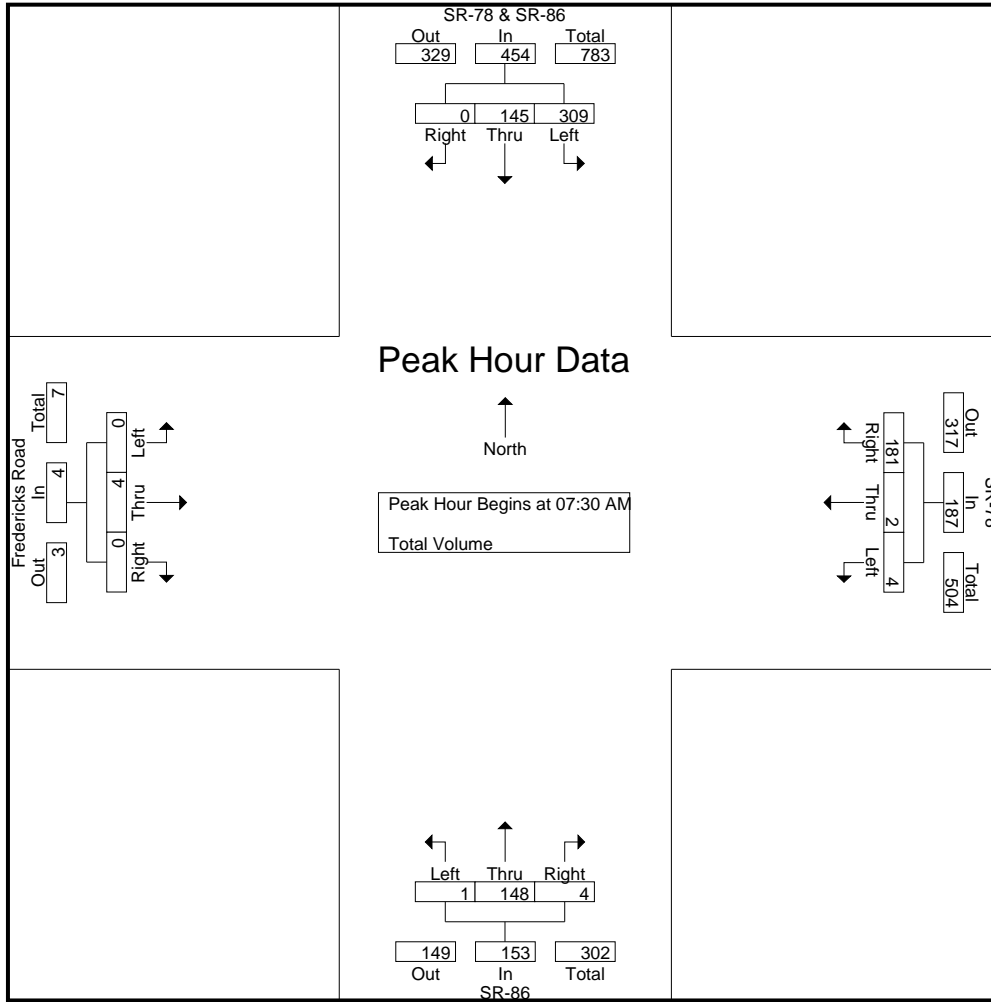
Groups Printed- Total Volume

Start Time	SR-78 & SR-86 Southbound				SR-78 Westbound				SR-86 Northbound				Fredericks Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:00 AM	65	30	0	95	2	0	36	38	0	27	1	28	0	1	0	1	162
07:15 AM	62	26	0	88	1	2	33	36	2	30	1	33	0	2	0	2	159
07:30 AM	88	29	0	117	1	1	41	43	0	46	0	46	0	1	0	1	207
07:45 AM	81	43	0	124	0	0	44	44	0	38	2	40	0	1	0	1	209
Total	296	128	0	424	4	3	154	161	2	141	4	147	0	5	0	5	737
08:00 AM	66	35	0	101	1	0	48	49	0	31	0	31	0	2	0	2	183
08:15 AM	74	38	0	112	2	1	48	51	1	33	2	36	0	0	0	0	199
08:30 AM	58	33	0	91	2	6	55	63	2	35	0	37	0	1	0	1	192
08:45 AM	54	40	0	94	2	0	52	54	0	25	1	26	0	1	0	1	175
Total	252	146	0	398	7	7	203	217	3	124	3	130	0	4	0	4	749
Grand Total	548	274	0	822	11	10	357	378	5	265	7	277	0	9	0	9	1486
Apprch %	66.7	33.3	0		2.9	2.6	94.4		1.8	95.7	2.5		0	100	0		
Total %	36.9	18.4	0	55.3	0.7	0.7	24	25.4	0.3	17.8	0.5	18.6	0	0.6	0	0.6	

Start Time	SR-78 & SR-86 Southbound				SR-78 Westbound				SR-86 Northbound				Fredericks Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
07:30 AM	88	29	0	117	1	1	41	43	0	46	0	46	0	1	0	1	207
07:45 AM	81	43	0	124	0	0	44	44	0	38	2	40	0	1	0	1	209
08:00 AM	66	35	0	101	1	0	48	49	0	31	0	31	0	2	0	2	183
08:15 AM	74	38	0	112	2	1	48	51	1	33	2	36	0	0	0	0	199
Total Volume	309	145	0	454	4	2	181	187	1	148	4	153	0	4	0	4	798
% App. Total	68.1	31.9	0		2.1	1.1	96.8		0.7	96.7	2.6		0	100	0		
PHF	.878	.843	.000	.915	.500	.500	.943	.917	.250	.804	.500	.832	.000	.500	.000	.500	.955

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



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

	07:30 AM				08:00 AM				07:30 AM				07:15 AM			
+0 mins.	88	29	0	117	1	0	48	49	0	46	0	46	0	2	0	2
+15 mins.	81	43	0	124	2	1	48	51	0	38	2	40	0	1	0	1
+30 mins.	66	35	0	101	2	6	55	63	0	31	0	31	0	1	0	1
+45 mins.	74	38	0	112	2	0	52	54	1	33	2	36	0	2	0	2
Total Volume	309	145	0	454	7	7	203	217	1	148	4	153	0	6	0	6
% App. Total	68.1	31.9	0		3.2	3.2	93.5		0.7	96.7	2.6		0	100	0	
PHF	.878	.843	.000	.915	.875	.292	.923	.861	.250	.804	.500	.832	.000	.750	.000	.750

County of Imperial
 N/S: SR-78 & SR-86
 E/W: Fredericks Road/SR-78
 Weather: Clear

File Name : 05_CIM_SR-86_SR-78 PM
 Site Code : 04121755
 Start Date : 12/15/2021
 Page No : 1

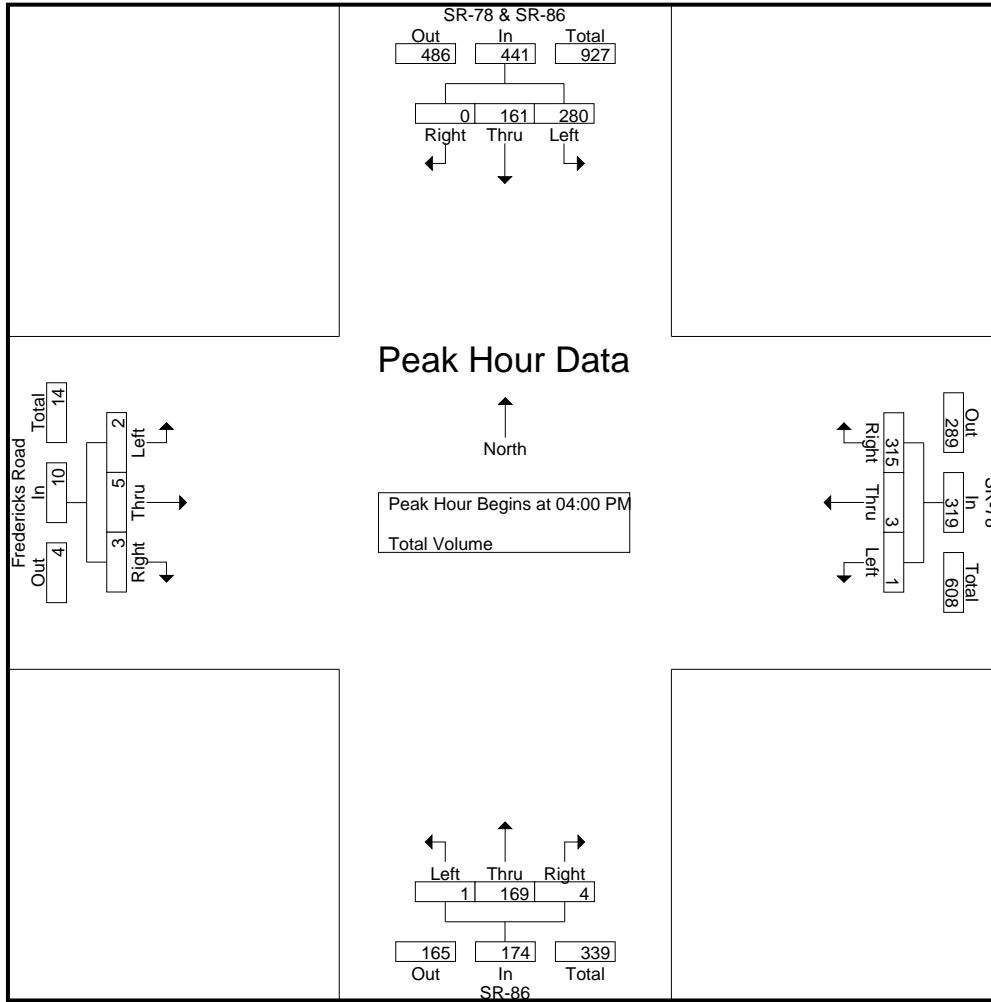
Groups Printed- Total Volume

Start Time	SR-78 & SR-86 Southbound				SR-78 Westbound				SR-86 Northbound				Fredericks Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	81	29	0	110	0	2	69	71	0	37	3	40	0	3	2	5	226
04:15 PM	63	48	0	111	1	1	84	86	1	33	1	35	0	1	0	1	233
04:30 PM	72	40	0	112	0	0	78	78	0	56	0	56	2	0	0	2	248
04:45 PM	64	44	0	108	0	0	84	84	0	43	0	43	0	1	1	2	237
Total	280	161	0	441	1	3	315	319	1	169	4	174	2	5	3	10	944
05:00 PM	82	27	0	109	0	0	79	79	0	23	2	25	2	2	1	5	218
05:15 PM	56	41	0	97	1	2	68	71	0	28	0	28	1	1	2	4	200
05:30 PM	69	54	1	124	0	1	78	79	1	35	0	36	0	2	1	3	242
05:45 PM	55	42	0	97	0	1	71	72	0	24	1	25	0	0	0	0	194
Total	262	164	1	427	1	4	296	301	1	110	3	114	3	5	4	12	854
Grand Total	542	325	1	868	2	7	611	620	2	279	7	288	5	10	7	22	1798
Apprch %	62.4	37.4	0.1		0.3	1.1	98.5		0.7	96.9	2.4		22.7	45.5	31.8		
Total %	30.1	18.1	0.1	48.3	0.1	0.4	34	34.5	0.1	15.5	0.4	16	0.3	0.6	0.4	1.2	

Start Time	SR-78 & SR-86 Southbound				SR-78 Westbound				SR-86 Northbound				Fredericks Road Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
04:00 PM	81	29	0	110	0	2	69	71	0	37	3	40	0	3	2	5	226
04:15 PM	63	48	0	111	1	1	84	86	1	33	1	35	0	1	0	1	233
04:30 PM	72	40	0	112	0	0	78	78	0	56	0	56	2	0	0	2	248
04:45 PM	64	44	0	108	0	0	84	84	0	43	0	43	0	1	1	2	237
Total Volume	280	161	0	441	1	3	315	319	1	169	4	174	2	5	3	10	944
% App. Total	63.5	36.5	0		0.3	0.9	98.7		0.6	97.1	2.3		20	50	30		
PHF	.864	.839	.000	.984	.250	.375	.938	.927	.250	.754	.333	.777	.250	.417	.375	.500	.952

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



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				04:45 PM			
+0 mins.	81	29	0	110	1	1	84	86	0	37	3	40	0	1	1	2
+15 mins.	63	48	0	111	0	0	78	78	1	33	1	35	2	2	1	5
+30 mins.	72	40	0	112	0	0	84	84	0	56	0	56	1	1	2	4
+45 mins.	64	44	0	108	0	0	79	79	0	43	0	43	0	2	1	3
Total Volume	280	161	0	441	1	1	325	327	1	169	4	174	3	6	5	14
% App. Total	63.5	36.5	0		0.3	0.3	99.4		0.6	97.1	2.3		21.4	42.9	35.7	
PHF	.864	.839	.000	.984	.250	.250	.967	.951	.250	.754	.333	.777	.375	.750	.625	.700

APPENDIX B : EXISTING YEAR CONDITIONS ANALYSIS WORKSHEETS

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗		↔			↖	↗
Traffic Vol, veh/h	0	313	0	8	283	0	2	1	1	1	0	0
Future Vol, veh/h	0	313	0	8	283	0	2	1	1	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	0	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	340	0	9	308	0	2	1	1	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	308	0	0	340	0	0	512	666	170	497	666	154
Stage 1	-	-	-	-	-	-	340	340	-	326	326	-
Stage 2	-	-	-	-	-	-	172	326	-	171	340	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1249	-	-	1216	-	-	445	379	844	456	379	864
Stage 1	-	-	-	-	-	-	648	638	-	661	647	-
Stage 2	-	-	-	-	-	-	813	647	-	814	638	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1249	-	-	1216	-	-	442	376	844	452	376	864
Mov Cap-2 Maneuver	-	-	-	-	-	-	442	376	-	452	376	-
Stage 1	-	-	-	-	-	-	648	638	-	661	642	-
Stage 2	-	-	-	-	-	-	807	642	-	812	638	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			12.6			13		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	478	1249	-	-	1216	-	-	452	-
HCM Lane V/C Ratio	0.009	-	-	-	0.007	-	-	0.002	-
HCM Control Delay (s)	12.6	0	-	-	8	-	-	13	0
HCM Lane LOS	B	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0	-

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗		↔			↖	↗
Traffic Vol, veh/h	0	402	0	1	409	3	1	0	2	2	2	0
Future Vol, veh/h	0	402	0	1	409	3	1	0	2	2	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	0	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	437	0	1	445	3	1	0	2	2	2	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	448	0	0	437	0	0	663	887	219	666	884	223
Stage 1	-	-	-	-	-	-	437	437	-	447	447	-
Stage 2	-	-	-	-	-	-	226	450	-	219	437	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1109	-	-	1119	-	-	347	282	785	345	283	780
Stage 1	-	-	-	-	-	-	568	578	-	560	572	-
Stage 2	-	-	-	-	-	-	756	570	-	763	578	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1109	-	-	1119	-	-	345	282	785	344	283	780
Mov Cap-2 Maneuver	-	-	-	-	-	-	345	282	-	344	283	-
Stage 1	-	-	-	-	-	-	568	578	-	560	571	-
Stage 2	-	-	-	-	-	-	752	569	-	761	578	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			11.6			16.7		
HCM LOS							B			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	551	1109	-	-	1119	-	-	311	-
HCM Lane V/C Ratio	0.006	-	-	-	0.001	-	-	0.014	-
HCM Control Delay (s)	11.6	0	-	-	8.2	-	-	16.7	0
HCM Lane LOS	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0	-

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑			↔			↔	
Traffic Vol, veh/h	42	264	21	3	218	14	7	4	1	30	6	26
Future Vol, veh/h	42	264	21	3	218	14	7	4	1	30	6	26
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	46	287	23	3	237	15	8	4	1	33	7	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	252	0	0	310	0	0	507	637	144	489	653	126
Stage 1	-	-	-	-	-	-	379	379	-	251	251	-
Stage 2	-	-	-	-	-	-	128	258	-	238	402	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1310	-	-	1247	-	-	449	393	877	462	385	901
Stage 1	-	-	-	-	-	-	615	613	-	731	698	-
Stage 2	-	-	-	-	-	-	862	693	-	744	599	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1310	-	-	1247	-	-	417	378	877	444	371	901
Mov Cap-2 Maneuver	-	-	-	-	-	-	417	378	-	444	371	-
Stage 1	-	-	-	-	-	-	593	592	-	705	697	-
Stage 2	-	-	-	-	-	-	825	692	-	712	578	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0.1			13.8			12.4		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	421	1310	-	-	1247	-	-	551
HCM Lane V/C Ratio	0.031	0.035	-	-	0.003	-	-	0.122
HCM Control Delay (s)	13.8	7.8	-	-	7.9	-	-	12.4
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.4

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑			↔			↔	
Traffic Vol, veh/h	47	286	25	4	316	38	7	4	1	13	3	61
Future Vol, veh/h	47	286	25	4	316	38	7	4	1	13	3	61
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	311	27	4	343	41	8	4	1	14	3	66

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	384	0	0	338	0	0	594	805	156	632	812	192
Stage 1	-	-	-	-	-	-	413	413	-	372	372	-
Stage 2	-	-	-	-	-	-	181	392	-	260	440	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1171	-	-	1218	-	-	389	315	862	365	312	817
Stage 1	-	-	-	-	-	-	587	592	-	621	617	-
Stage 2	-	-	-	-	-	-	803	605	-	722	576	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1171	-	-	1218	-	-	342	300	862	348	297	817
Mov Cap-2 Maneuver	-	-	-	-	-	-	342	300	-	348	297	-
Stage 1	-	-	-	-	-	-	561	566	-	594	615	-
Stage 2	-	-	-	-	-	-	732	603	-	684	551	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.1			0.1			15.9			11.6		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	343	1171	-	-	1218	-	-	631
HCM Lane V/C Ratio	0.038	0.044	-	-	0.004	-	-	0.133
HCM Control Delay (s)	15.9	8.2	-	-	8	-	-	11.6
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.5

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	297	33	7	214	25	32	45	13	44	37	13
Future Volume (veh/h)	17	297	33	7	214	25	32	45	13	44	37	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	18	323	36	8	233	27	35	49	14	48	40	14
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	555	1290	143	500	1285	147	675	560	160	666	529	185
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	9.7	9.8	9.8	10.2	9.3	9.3	9.0	0.0	8.6	9.2	0.0	8.6
Ln Grp LOS	A	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		377			268			98			102	
Approach Delay, s/veh		9.8			9.3			8.8			8.9	
Approach LOS		A			A			A			A	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			6.0		6.0		6.0		6.0			
Phs Duration (G+Y+Rc), s			22.5		22.5		22.5		22.5			
Change Period (Y+Rc), s			4.5		4.5		4.5		4.5			
Max Green (Gmax), s			18.0		18.0		18.0		18.0			
Max Allow Headway (MAH), s			4.8		5.2		4.7		5.3			
Max Q Clear (g_c+I1), s			3.6		5.0		4.0		5.3			
Green Ext Time (g_e), s			0.3		1.7		0.3		1.2			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.00		0.00		0.00		0.00			
Left-Turn Movement Data												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1350		1119		1339		1022			
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			1399		3226		1324		3213			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			400		357		463		368			
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment			L		L		L		L			

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Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	35	0	18	0	48	0	8
Grp Sat Flow (s), veh/h/ln	0	1350	0	1119	0	1339	0	1022
Q Serve Time (g_s), s	0.0	0.7	0.0	0.5	0.0	1.0	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	1.6	0.0	2.6	0.0	2.0	0.0	3.3
Perm LT Sat Flow (s_l), veh/h/ln	0	1350	0	1119	0	1339	0	1022
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	17.2	0.0	15.9	0.0	17.0	0.0	15.0
Perm LT Q Serve Time (g_ps), s	0.0	0.7	0.0	0.5	0.0	1.0	0.0	0.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	675	0	555	0	666	0	500
V/C Ratio (X)	0.00	0.05	0.00	0.03	0.00	0.07	0.00	0.02
Avail Cap (c_a), veh/h	0	675	0	555	0	666	0	500
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.8	0.0	9.6	0.0	9.0	0.0	10.1
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.1	0.0	0.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.0	0.0	9.7	0.0	9.2	0.0	10.2
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.1	0.0	0.3	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	177	0	0	0	128
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	3.0	0.0	0.0	0.0	2.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.0	0.0	0.0	0.0	2.1
Lane Grp Cap (c), veh/h	0	0	0	711	0	0	0	711
V/C Ratio (X)	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.18
Avail Cap (c_a), veh/h	0	0	0	711	0	0	0	711
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.0	0.0	0.0	0.0	8.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.8	0.0	0.0	0.0	9.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	63	0	182	0	54	0	132
Grp Sat Flow (s), veh/h/ln	0	1798	0	1806	0	1787	0	1804
Q Serve Time (g_s), s	0.0	1.0	0.0	3.0	0.0	0.8	0.0	2.1
Cycle Q Clear Time (g_c), s	0.0	1.0	0.0	3.0	0.0	0.8	0.0	2.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.22	0.00	0.20	0.00	0.26	0.00	0.20
Lane Grp Cap (c), veh/h	0	719	0	722	0	715	0	722
V/C Ratio (X)	0.00	0.09	0.00	0.25	0.00	0.08	0.00	0.18
Avail Cap (c_a), veh/h	0	719	0	722	0	715	0	722
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.4	0.0	9.0	0.0	8.4	0.0	8.7
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.8	0.0	0.2	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.6	0.0	9.8	0.0	8.6	0.0	9.3
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.9	0.0	0.3	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	1.1	0.0	0.3	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.04	0.00	0.02	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	9.4
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	213	26	12	258	32	40	13	12	44	48	21
Future Volume (veh/h)	8	213	26	12	258	32	40	13	12	44	48	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	232	28	13	280	35	43	14	13	48	52	23
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	524	1279	153	555	1273	158	655	357	331	700	492	217
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	9.9	9.3	9.3	9.6	9.6	9.6	9.3	0.0	8.3	8.8	0.0	8.8
Ln Grp LOS	A	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		269			328			70			123	
Approach Delay, s/veh		9.3			9.6			8.9			8.8	
Approach LOS		A			A			A			A	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			6.0		6.0		6.0		6.0			
Phs Duration (G+Y+Rc), s			22.5		22.5		22.5		22.5			
Change Period (Y+Rc), s			4.5		4.5		4.5		4.5			
Max Green (Gmax), s			18.0		18.0		18.0		18.0			
Max Allow Headway (MAH), s			4.5		5.3		4.7		5.2			
Max Q Clear (g_c+I1), s			4.1		4.9		3.4		4.6			
Green Ext Time (g_e), s			0.2		1.2		0.4		1.5			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.00		0.00		0.00		0.00			
Left-Turn Movement Data												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1325		1065		1383		1119			
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			892		3197		1229		3182			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			829		382		544		394			
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment			L		L		L		L			

HCM 6th Signalized Intersection Capacity Analysis
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Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	43	0	9	0	48	0	13
Grp Sat Flow (s), veh/h/ln	0	1325	0	1065	0	1383	0	1119
Q Serve Time (g_s), s	0.0	0.9	0.0	0.3	0.0	1.0	0.0	0.3
Cycle Q Clear Time (g_c), s	0.0	2.1	0.0	2.9	0.0	1.4	0.0	2.5
Perm LT Sat Flow (s_l), veh/h/ln	0	1325	0	1065	0	1383	0	1119
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	16.8	0.0	15.4	0.0	17.6	0.0	15.9
Perm LT Q Serve Time (g_ps), s	0.0	0.9	0.0	0.3	0.0	1.0	0.0	0.3
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	655	0	524	0	700	0	555
V/C Ratio (X)	0.00	0.07	0.00	0.02	0.00	0.07	0.00	0.02
Avail Cap (c_a), veh/h	0	655	0	524	0	700	0	555
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.1	0.0	9.8	0.0	8.7	0.0	9.5
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.3	0.0	9.9	0.0	8.8	0.0	9.6
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	0.1	0.0	0.3	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	128	0	0	0	155
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	2.1	0.0	0.0	0.0	2.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.1	0.0	0.0	0.0	2.6
Lane Grp Cap (c), veh/h	0	0	0	711	0	0	0	711
V/C Ratio (X)	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.22
Avail Cap (c_a), veh/h	0	0	0	711	0	0	0	711
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.7	0.0	0.0	0.0	8.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.3	0.0	0.0	0.0	9.6
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.9
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	27	0	132	0	75	0	160
Grp Sat Flow (s), veh/h/ln	0	1721	0	1802	0	1773	0	1799
Q Serve Time (g_s), s	0.0	0.4	0.0	2.1	0.0	1.2	0.0	2.6
Cycle Q Clear Time (g_c), s	0.0	0.4	0.0	2.1	0.0	1.2	0.0	2.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.48	0.00	0.21	0.00	0.31	0.00	0.22
Lane Grp Cap (c), veh/h	0	688	0	721	0	709	0	720
V/C Ratio (X)	0.00	0.04	0.00	0.18	0.00	0.11	0.00	0.22
Avail Cap (c_a), veh/h	0	688	0	721	0	709	0	720
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.2	0.0	8.7	0.0	8.5	0.0	8.9
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.6	0.0	0.3	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.3	0.0	9.3	0.0	8.8	0.0	9.6
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.7	0.0	0.4	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.1	0.0	0.8	0.0	0.4	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.03	0.00	0.03	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations	↘	↗↗	↗↗	↗	↘	↗
Traffic Vol, veh/h	13	408	289	3	1	14
Future Vol, veh/h	13	408	289	3	1	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	14	443	314	3	1	15

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	317	0	-	0	564 157
Stage 1	-	-	-	-	314 -
Stage 2	-	-	-	-	250 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	1240	-	-	-	456 861
Stage 1	-	-	-	-	714 -
Stage 2	-	-	-	-	768 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1240	-	-	-	451 861
Mov Cap-2 Maneuver	-	-	-	-	451 -
Stage 1	-	-	-	-	706 -
Stage 2	-	-	-	-	768 -

Approach	EB	WB	SW
HCM Control Delay, s	0.2	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBRSWLn1SWLn2	
Capacity (veh/h)	1240	-	-	-	451 861
HCM Lane V/C Ratio	0.011	-	-	-	0.002 0.018
HCM Control Delay (s)	7.9	-	-	-	13 9.3
HCM Lane LOS	A	-	-	-	B A
HCM 95th %tile Q(veh)	0	-	-	-	0 0.1

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations	↘	↑↑	↑↑	↗	↘	↗
Traffic Vol, veh/h	6	421	478	4	3	14
Future Vol, veh/h	6	421	478	4	3	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	458	520	4	3	15

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	524	0	-	0	763
Stage 1	-	-	-	-	520
Stage 2	-	-	-	-	243
Critical Hdwy	4.14	-	-	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	2.22	-	-	-	3.52
Pot Cap-1 Maneuver	1039	-	-	-	341
Stage 1	-	-	-	-	561
Stage 2	-	-	-	-	775
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1039	-	-	-	339
Mov Cap-2 Maneuver	-	-	-	-	339
Stage 1	-	-	-	-	557
Stage 2	-	-	-	-	775

Approach	EB	WB	SW
HCM Control Delay, s	0.1	0	11
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1039	-	-	-	339	739
HCM Lane V/C Ratio	0.006	-	-	-	0.01	0.021
HCM Control Delay (s)	8.5	-	-	-	15.7	10
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0	-	-	-	0	0.1

HCM 6th Signalized Intersection Capacity Analysis
 21: CA- 78/86 & Brawley Bypass

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	4	0	4	2	181	1	148	4	309	145	0
Future Volume (veh/h)	0	4	0	4	2	181	1	148	4	309	145	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	4	0	4	2	0	1	161	4	336	158	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	160	748	0	723	748		617	1421	634	1200	1421	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.40	0.00	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	8.1	0.0	8.2	8.1	0.0	8.9	8.6	8.1	10.9	8.6	0.0
Ln Grp LOS	A	A	A	A	A		A	A	A	B	A	A
Approach Vol, veh/h		4			6			166			494	
Approach Delay, s/veh		8.1			8.2			8.6			10.2	
Approach LOS		A			A			A			B	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			5.0		6.0		5.0		5.0			
Phs Duration (G+Y+Rc), s			22.5		22.5		22.5		22.5			
Change Period (Y+Rc), s			4.5		4.5		4.5		4.5			
Max Green (Gmax), s			18.0		18.0		18.0		18.0			
Max Allow Headway (MAH), s			5.2		5.2		4.6		4.3			
Max Q Clear (g_c+I1), s			3.3		2.1		8.0		2.1			
Green Ext Time (g_e), s			0.8		0.0		1.8		0.0			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.00		0.00		0.00		0.00			
Left-Turn Movement Data												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1228		1415		2368		1412			
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			3554		1870		3554		1870			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1585		0		1585		1585			
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment			L		L		L		L			

HCM 6th Signalized Intersection Capacity Analysis

21: CA- 78/86 & Brawley Bypass

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Lanes in Grp	0	1	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1	0	0	0	336	0	4
Grp Sat Flow (s), veh/h/ln	0	1228	0	1415	0	1184	0	1412
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	1.3	0.0	0.0	0.0	6.0	0.0	0.1
Perm LT Sat Flow (s_l), veh/h/ln	0	1228	0	1415	0	1184	0	1412
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	0.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	16.7	0.0	0.0	0.0	16.7	0.0	17.9
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.7	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	617	0	160	0	1200	0	723
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.01
Avail Cap (c_a), veh/h	0	617	0	160	0	1200	0	723
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	0.0	0.0	10.4	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.9	0.0	0.0	0.0	10.9	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.14	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	161	0	4	0	158	0	2
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	1.3	0.0	0.1	0.0	1.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.3	0.0	0.1	0.0	1.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1421	0	748	0	1421	0	748
V/C Ratio (X)	0.00	0.11	0.00	0.01	0.00	0.11	0.00	0.00
Avail Cap (c_a), veh/h	0	1421	0	748	0	1421	0	748
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.5	0.0	8.1	0.0	8.5	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.6	0.0	8.1	0.0	8.6	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HCM 6th Signalized Intersection Capacity Analysis

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	4	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	0	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	634	0	0	0	634	0	634
V/C Ratio (X)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	634	0	0	0	634	0	634
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Capacity Analysis
 21: CA- 78/86 & Brawley Bypass

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	3	315	2	5	3	1	169	4	280	161	0
Future Volume (veh/h)	1	3	315	2	5	3	1	169	4	280	161	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	3	342	2	5	0	1	184	4	304	175	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	722	6	629	402	748		606	1421	634	1172	1421	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	8.2	0.0	13.7	13.3	8.1	0.0	9.0	8.7	8.1	10.9	8.7	0.0
Ln Grp LOS	A	A	B	B	A		A	A	A	B	A	A
Approach Vol, veh/h		346			7			189			479	
Approach Delay, s/veh		13.7			9.6			8.7			10.1	
Approach LOS		B			A			A			B	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			5.0		6.0		5.0		5.0		5.0	
Phs Duration (G+Y+Rc), s			22.5		22.5		22.5		22.5		22.5	
Change Period (Y+Rc), s			4.5		4.5		4.5		4.5		4.5	
Max Green (Gmax), s			18.0		18.0		18.0		18.0		18.0	
Max Allow Headway (MAH), s			5.2		5.6		4.7		5.1		5.1	
Max Q Clear (g_c+I1), s			3.5		9.5		7.8		9.6		9.6	
Green Ext Time (g_e), s			0.9		1.4		1.8		0.0		0.0	
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00		1.00	
Prob of Max Out (p_x)			0.00		0.00		0.00		0.00		0.00	
Left-Turn Movement Data												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1210		1411		2319		1036			
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			3554		14		3554		1870			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1585		1573		1585		1585			
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment			L		L		L		L			

HCM 6th Signalized Intersection Capacity Analysis

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Lanes in Grp	0	1	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1	0	1	0	304	0	2
Grp Sat Flow (s), veh/h/ln	0	1210	0	1411	0	1160	0	1036
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	1.4	0.0	0.1	0.0	5.8	0.0	7.6
Perm LT Sat Flow (s_l), veh/h/ln	0	1210	0	1411	0	1160	0	1036
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	16.6	0.0	17.9	0.0	16.5	0.0	10.5
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	606	0	722	0	1172	0	402
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00
Avail Cap (c_a), veh/h	0	606	0	722	0	1172	0	402
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.0	0.0	8.1	0.0	10.4	0.0	13.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.0	0.0	8.2	0.0	10.9	0.0	13.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.12	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	184	0	0	0	175	0	5
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	1.5	0.0	0.0	0.0	1.4	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	1.5	0.0	0.0	0.0	1.4	0.0	0.1
Lane Grp Cap (c), veh/h	0	1421	0	0	0	1421	0	748
V/C Ratio (X)	0.00	0.13	0.00	0.00	0.00	0.12	0.00	0.01
Avail Cap (c_a), veh/h	0	1421	0	0	0	1421	0	748
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.5	0.0	0.0	0.0	8.5	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.7	0.0	0.0	0.0	8.7	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	345	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1587	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.1	0.0	7.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	7.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.99	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	634	0	635	0	634	0	634
V/C Ratio (X)	0.00	0.01	0.00	0.54	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	634	0	635	0	634	0	634
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	10.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.3	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.1	0.0	13.7	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.36	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

APPENDIX C : NEAR TERM PROJECT ANALYSIS WORKSHEETS

Intersection												
Int Delay, s/veh	0.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗		↔			↖	↗
Traffic Vol, veh/h	0	330	0	8	299	0	2	1	1	1	0	0
Future Vol, veh/h	0	330	0	8	299	0	2	1	1	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	0	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	359	0	9	325	0	2	1	1	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	325	0	0	359	0	0	540	702	180	523	702	163
Stage 1	-	-	-	-	-	-	359	359	-	343	343	-
Stage 2	-	-	-	-	-	-	181	343	-	180	359	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1231	-	-	1196	-	-	425	361	832	437	361	853
Stage 1	-	-	-	-	-	-	632	626	-	646	636	-
Stage 2	-	-	-	-	-	-	803	636	-	804	626	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1231	-	-	1196	-	-	422	358	832	433	358	853
Mov Cap-2 Maneuver	-	-	-	-	-	-	422	358	-	433	358	-
Stage 1	-	-	-	-	-	-	632	626	-	646	631	-
Stage 2	-	-	-	-	-	-	797	631	-	802	626	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0.2			12.9			13.3		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	458	1231	-	-	1196	-	-	433	-
HCM Lane V/C Ratio	0.009	-	-	-	0.007	-	-	0.003	-
HCM Control Delay (s)	12.9	0	-	-	8	-	-	13.3	0
HCM Lane LOS	B	A	-	-	A	-	-	B	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0	-

Intersection												
Int Delay, s/veh	0.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗		↔			↖	↗
Traffic Vol, veh/h	0	424	0	1	431	3	1	0	2	2	2	0
Future Vol, veh/h	0	424	0	1	431	3	1	0	2	2	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	0	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	461	0	1	468	3	1	0	2	2	2	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	471	0	0	461	0	0	698	934	231	701	931	234
Stage 1	-	-	-	-	-	-	461	461	-	470	470	-
Stage 2	-	-	-	-	-	-	237	473	-	231	461	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1087	-	-	1096	-	-	327	264	771	325	265	768
Stage 1	-	-	-	-	-	-	550	564	-	543	558	-
Stage 2	-	-	-	-	-	-	745	557	-	751	564	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1087	-	-	1096	-	-	325	264	771	324	265	768
Mov Cap-2 Maneuver	-	-	-	-	-	-	325	264	-	324	265	-
Stage 1	-	-	-	-	-	-	550	564	-	543	557	-
Stage 2	-	-	-	-	-	-	741	556	-	749	564	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			11.8			17.5		
HCM LOS							B			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	529	1087	-	-	1096	-	-	292	-
HCM Lane V/C Ratio	0.006	-	-	-	0.001	-	-	0.015	-
HCM Control Delay (s)	11.8	0	-	-	8.3	-	-	17.5	0
HCM Lane LOS	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0	-

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑			↔			↔	
Traffic Vol, veh/h	44	279	22	3	230	15	7	4	1	32	6	27
Future Vol, veh/h	44	279	22	3	230	15	7	4	1	32	6	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	303	24	3	250	16	8	4	1	35	7	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	266	0	0	327	0	0	534	671	152	514	687	133
Stage 1	-	-	-	-	-	-	399	399	-	264	264	-
Stage 2	-	-	-	-	-	-	135	272	-	250	423	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1295	-	-	1229	-	-	429	376	867	443	368	892
Stage 1	-	-	-	-	-	-	598	601	-	718	689	-
Stage 2	-	-	-	-	-	-	854	683	-	732	586	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1295	-	-	1229	-	-	397	361	867	425	354	892
Mov Cap-2 Maneuver	-	-	-	-	-	-	397	361	-	425	354	-
Stage 1	-	-	-	-	-	-	576	579	-	691	688	-
Stage 2	-	-	-	-	-	-	816	682	-	699	564	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0.1			14.3			12.8		
HCM LOS							B			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	402	1295	-	-	1229	-	-	531
HCM Lane V/C Ratio	0.032	0.037	-	-	0.003	-	-	0.133
HCM Control Delay (s)	14.3	7.9	-	-	7.9	-	-	12.8
HCM Lane LOS	B	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.5

Intersection												
Int Delay, s/veh	1.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑			↔			↔	
Traffic Vol, veh/h	50	302	26	4	333	40	7	4	1	14	3	64
Future Vol, veh/h	50	302	26	4	333	40	7	4	1	14	3	64
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	54	328	28	4	362	43	8	4	1	15	3	70

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	405	0	0	356	0	0	627	849	164	666	856	203
Stage 1	-	-	-	-	-	-	436	436	-	392	392	-
Stage 2	-	-	-	-	-	-	191	413	-	274	464	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1150	-	-	1199	-	-	368	296	852	345	294	804
Stage 1	-	-	-	-	-	-	569	578	-	604	605	-
Stage 2	-	-	-	-	-	-	792	592	-	709	562	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1150	-	-	1199	-	-	321	281	852	327	279	804
Mov Cap-2 Maneuver	-	-	-	-	-	-	321	281	-	327	279	-
Stage 1	-	-	-	-	-	-	542	551	-	576	603	-
Stage 2	-	-	-	-	-	-	717	590	-	670	536	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1.1			0.1			16.7			11.9		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	322	1150	-	-	1199	-	-	608
HCM Lane V/C Ratio	0.041	0.047	-	-	0.004	-	-	0.145
HCM Control Delay (s)	16.7	8.3	-	-	8	-	-	11.9
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-	-	0.5

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	313	35	7	226	26	34	47	14	46	39	14
Future Volume (veh/h)	18	313	35	7	226	26	34	47	14	46	39	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	340	38	8	246	28	37	51	15	50	42	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	547	1290	143	490	1288	145	672	555	163	664	526	188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	9.8	9.9	10.0	10.3	9.4	9.4	9.0	0.0	8.7	9.3	0.0	8.6
Ln Grp LOS	A	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		398			282			103			107	
Approach Delay, s/veh		9.9			9.4			8.8			8.9	
Approach LOS		A			A			A			A	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			6.0		6.0		6.0		6.0			
Phs Duration (G+Y+Rc), s			22.5		22.5		22.5		22.5			
Change Period (Y+Rc), s			4.5		4.5		4.5		4.5			
Max Green (Gmax), s			18.0		18.0		18.0		18.0			
Max Allow Headway (MAH), s			4.8		5.2		4.7		5.3			
Max Q Clear (g_c+I1), s			3.7		5.2		4.1		5.4			
Green Ext Time (g_e), s			0.3		1.8		0.3		1.2			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.00		0.00		0.00		0.00			
Left-Turn Movement Data												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1346		1105		1335		1005			
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			1388		3225		1316		3219			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			408		358		470		363			
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment			L		L		L		L			

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Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	37	0	20	0	50	0	8
Grp Sat Flow (s), veh/h/ln	0	1346	0	1105	0	1335	0	1005
Q Serve Time (g_s), s	0.0	0.8	0.0	0.5	0.0	1.1	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	1.7	0.0	2.8	0.0	2.1	0.0	3.4
Perm LT Sat Flow (s_l), veh/h/ln	0	1346	0	1105	0	1335	0	1005
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	17.1	0.0	15.7	0.0	17.0	0.0	14.8
Perm LT Q Serve Time (g_ps), s	0.0	0.8	0.0	0.5	0.0	1.1	0.0	0.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	672	0	547	0	664	0	490
V/C Ratio (X)	0.00	0.06	0.00	0.04	0.00	0.08	0.00	0.02
Avail Cap (c_a), veh/h	0	672	0	547	0	664	0	490
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	9.7	0.0	9.1	0.0	10.2
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.0	0.0	9.8	0.0	9.3	0.0	10.3
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.1	0.0	0.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.1	0.0	0.3	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	186	0	0	0	135
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	3.2	0.0	0.0	0.0	2.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.2	0.0	0.0	0.0	2.2
Lane Grp Cap (c), veh/h	0	0	0	711	0	0	0	711
V/C Ratio (X)	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.19
Avail Cap (c_a), veh/h	0	0	0	711	0	0	0	711
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.0	0.0	0.0	0.0	8.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.9	0.0	0.0	0.0	9.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	66	0	192	0	57	0	139
Grp Sat Flow (s), veh/h/ln	0	1797	0	1806	0	1786	0	1805
Q Serve Time (g_s), s	0.0	1.0	0.0	3.2	0.0	0.9	0.0	2.3
Cycle Q Clear Time (g_c), s	0.0	1.0	0.0	3.2	0.0	0.9	0.0	2.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.23	0.00	0.20	0.00	0.26	0.00	0.20
Lane Grp Cap (c), veh/h	0	719	0	722	0	714	0	722
V/C Ratio (X)	0.00	0.09	0.00	0.27	0.00	0.08	0.00	0.19
Avail Cap (c_a), veh/h	0	719	0	722	0	714	0	722
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.4	0.0	9.1	0.0	8.4	0.0	8.8
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.9	0.0	0.2	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.7	0.0	10.0	0.0	8.6	0.0	9.4
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	1.0	0.0	0.3	0.0	0.7
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	1.2	0.0	0.3	0.0	0.8
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.05	0.00	0.02	0.00	0.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

HCM 6th Signalized Intersection Capacity Analysis
 11: Center Street & CA- 78/86

01/04/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	225	27	13	272	34	42	14	13	46	51	22
Future Volume (veh/h)	8	225	27	13	272	34	42	14	13	46	51	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	245	29	14	296	37	46	15	14	50	55	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	514	1282	150	547	1273	158	651	356	332	698	494	215
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	10.0	9.4	9.4	9.7	9.7	9.7	9.4	0.0	8.4	8.9	0.0	8.8
Ln Grp LOS	B	A	A	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		283			347			75			129	
Approach Delay, s/veh		9.4			9.7			9.0			8.8	
Approach LOS		A			A			A			A	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			6.0		6.0		6.0		6.0			
Phs Duration (G+Y+Rc), s			22.5		22.5		22.5		22.5			
Change Period (Y+Rc), s			4.5		4.5		4.5		4.5			
Max Green (Gmax), s			18.0		18.0		18.0		18.0			
Max Allow Headway (MAH), s			4.5		5.3		4.8		5.2			
Max Q Clear (g_c+I1), s			4.3		5.1		3.5		4.8			
Green Ext Time (g_e), s			0.2		1.2		0.4		1.6			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.00		0.00		0.00		0.00			
Left-Turn Movement Data												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1320		1047		1381		1105			
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			890		3204		1235		3182			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			831		375		539		394			
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment			L		L		L		L			

HCM 6th Signalized Intersection Capacity Analysis
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Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	46	0	9	0	50	0	14
Grp Sat Flow (s), veh/h/ln	0	1320	0	1047	0	1381	0	1105
Q Serve Time (g_s), s	0.0	1.0	0.0	0.3	0.0	1.0	0.0	0.4
Cycle Q Clear Time (g_c), s	0.0	2.3	0.0	3.1	0.0	1.5	0.0	2.6
Perm LT Sat Flow (s_l), veh/h/ln	0	1320	0	1047	0	1381	0	1105
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	16.7	0.0	15.2	0.0	17.5	0.0	15.7
Perm LT Q Serve Time (g_ps), s	0.0	1.0	0.0	0.3	0.0	1.0	0.0	0.4
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	651	0	514	0	698	0	547
V/C Ratio (X)	0.00	0.07	0.00	0.02	0.00	0.07	0.00	0.03
Avail Cap (c_a), veh/h	0	651	0	514	0	698	0	547
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.2	0.0	10.0	0.0	8.7	0.0	9.6
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.4	0.0	10.0	0.0	8.9	0.0	9.7
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	0.1	0.0	0.3	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	135	0	0	0	164
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	2.2	0.0	0.0	0.0	2.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	2.2	0.0	0.0	0.0	2.7
Lane Grp Cap (c), veh/h	0	0	0	711	0	0	0	711
V/C Ratio (X)	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.23
Avail Cap (c_a), veh/h	0	0	0	711	0	0	0	711
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.8	0.0	0.0	0.0	8.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.4	0.0	0.0	0.0	9.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1

HCM 6th Signalized Intersection Capacity Analysis
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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.8	0.0	0.0	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	29	0	139	0	79	0	169
Grp Sat Flow (s), veh/h/ln	0	1721	0	1803	0	1773	0	1799
Q Serve Time (g_s), s	0.0	0.5	0.0	2.3	0.0	1.3	0.0	2.8
Cycle Q Clear Time (g_c), s	0.0	0.5	0.0	2.3	0.0	1.3	0.0	2.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.48	0.00	0.21	0.00	0.30	0.00	0.22
Lane Grp Cap (c), veh/h	0	688	0	721	0	709	0	720
V/C Ratio (X)	0.00	0.04	0.00	0.19	0.00	0.11	0.00	0.23
Avail Cap (c_a), veh/h	0	688	0	721	0	709	0	720
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.2	0.0	8.8	0.0	8.5	0.0	8.9
Incr Delay (d2), s/veh	0.0	0.1	0.0	0.6	0.0	0.3	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.4	0.0	9.4	0.0	8.8	0.0	9.7
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	0.7	0.0	0.4	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	0.8	0.0	0.4	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.03	0.00	0.03	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	9.4
HCM 6th LOS	A

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations	↘	↑↑	↑↑	↗	↘	↗
Traffic Vol, veh/h	14	430	305	3	1	15
Future Vol, veh/h	14	430	305	3	1	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	467	332	3	1	16

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	335	0	-	0	596
Stage 1	-	-	-	-	332
Stage 2	-	-	-	-	264
Critical Hdwy	4.14	-	-	-	6.84
Critical Hdwy Stg 1	-	-	-	-	5.84
Critical Hdwy Stg 2	-	-	-	-	5.84
Follow-up Hdwy	2.22	-	-	-	3.52
Pot Cap-1 Maneuver	1221	-	-	-	435
Stage 1	-	-	-	-	699
Stage 2	-	-	-	-	756
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1221	-	-	-	430
Mov Cap-2 Maneuver	-	-	-	-	430
Stage 1	-	-	-	-	691
Stage 2	-	-	-	-	756

Approach	EB	WB	SW
HCM Control Delay, s	0.3	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBRSWLn1	SWLn2
Capacity (veh/h)	1221	-	-	-	430
HCM Lane V/C Ratio	0.012	-	-	-	0.003
HCM Control Delay (s)	8	-	-	-	13.4
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	0

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations	↘	↑↑	↑↑	↗	↘	↗
Traffic Vol, veh/h	6	444	504	4	3	15
Future Vol, veh/h	6	444	504	4	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	483	548	4	3	16

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	552	0	-	0	804 274
Stage 1	-	-	-	-	548 -
Stage 2	-	-	-	-	256 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	1014	-	-	-	321 724
Stage 1	-	-	-	-	543 -
Stage 2	-	-	-	-	763 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1014	-	-	-	319 724
Mov Cap-2 Maneuver	-	-	-	-	319 -
Stage 1	-	-	-	-	539 -
Stage 2	-	-	-	-	763 -

Approach	EB	WB	SW
HCM Control Delay, s	0.1	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBRSWLn1SWLn2	
Capacity (veh/h)	1014	-	-	-	319 724
HCM Lane V/C Ratio	0.006	-	-	-	0.01 0.023
HCM Control Delay (s)	8.6	-	-	-	16.4 10.1
HCM Lane LOS	A	-	-	-	C B
HCM 95th %tile Q(veh)	0	-	-	-	0 0.1

HCM 6th Signalized Intersection Capacity Analysis
 21: CA- 78/86 & Brawley Bypass

01/04/2022

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	4	0	4	2	191	1	156	4	326	153	0
Future Volume (veh/h)	0	4	0	4	2	191	1	156	4	326	153	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	4	0	4	2	0	1	170	4	354	166	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	160	748	0	723	748		612	1421	634	1189	1421	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.40	0.00	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	8.1	0.0	8.2	8.1	0.0	8.9	8.7	8.1	11.2	8.7	0.0
Ln Grp LOS	A	A	A	A	A		A	A	A	B	A	A
Approach Vol, veh/h		4			6			175			520	
Approach Delay, s/veh		8.1			8.2			8.7			10.4	
Approach LOS		A			A			A			B	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			5.0		6.0		5.0		5.0			
Phs Duration (G+Y+Rc), s			22.5		22.5		22.5		22.5			
Change Period (Y+Rc), s			4.5		4.5		4.5		4.5			
Max Green (Gmax), s			18.0		18.0		18.0		18.0			
Max Allow Headway (MAH), s			5.2		5.2		4.6		4.3			
Max Q Clear (g_c+I1), s			3.4		2.1		8.4		2.1			
Green Ext Time (g_e), s			0.8		0.0		1.9		0.0			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.00		0.00		0.00		0.00			
Left-Turn Movement Data												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1220		1415		2349		1412			
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			3554		1870		3554		1870			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1585		0		1585		1585			
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment			L		L		L		L			

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Lanes in Grp	0	1	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1	0	0	0	354	0	4
Grp Sat Flow (s), veh/h/ln	0	1220	0	1415	0	1174	0	1412
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	1.3	0.0	0.0	0.0	6.4	0.0	0.1
Perm LT Sat Flow (s_l), veh/h/ln	0	1220	0	1415	0	1174	0	1412
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	0.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	16.7	0.0	0.0	0.0	16.6	0.0	17.9
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	612	0	160	0	1189	0	723
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.01
Avail Cap (c_a), veh/h	0	612	0	160	0	1189	0	723
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	0.0	0.0	10.5	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.9	0.0	0.0	0.0	11.2	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data

Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	170	0	4	0	166	0	2
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	1.4	0.0	0.1	0.0	1.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.4	0.0	0.1	0.0	1.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1421	0	748	0	1421	0	748
V/C Ratio (X)	0.00	0.12	0.00	0.01	0.00	0.12	0.00	0.00
Avail Cap (c_a), veh/h	0	1421	0	748	0	1421	0	748
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.5	0.0	8.1	0.0	8.5	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.7	0.0	8.1	0.0	8.7	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	0.0	0.0	0.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	4	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	0	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	634	0	0	0	634	0	634
V/C Ratio (X)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	634	0	0	0	634	0	634
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	9.9
HCM 6th LOS	A

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	3	332	2	5	3	1	178	4	295	170	0
Future Volume (veh/h)	1	3	332	2	5	3	1	178	4	295	170	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	3	361	2	5	0	1	193	4	321	185	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	722	5	630	385	748		600	1421	634	1161	1421	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	8.2	0.0	14.2	13.7	8.1	0.0	9.0	8.8	8.1	11.1	8.7	0.0
Ln Grp LOS	A	A	B	B	A		A	A	A	B	A	A
Approach Vol, veh/h		365			7			198			506	
Approach Delay, s/veh		14.2			9.7			8.8			10.2	
Approach LOS		B			A			A			B	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			5.0		6.0		5.0		5.0		5.0	
Phs Duration (G+Y+Rc), s			22.5		22.5		22.5		22.5		22.5	
Change Period (Y+Rc), s			4.5		4.5		4.5		4.5		4.5	
Max Green (Gmax), s			18.0		18.0		18.0		18.0		18.0	
Max Allow Headway (MAH), s			5.2		5.6		4.7		5.1		5.1	
Max Q Clear (g_c+I1), s			3.6		10.0		8.2		10.1		10.1	
Green Ext Time (g_e), s			0.9		1.5		1.9		0.0		0.0	
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00		1.00	
Prob of Max Out (p_x)			0.00		0.00		0.00		0.00		0.00	
Left-Turn Movement Data												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1199		1411		2300		1018			
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			3554		13		3554		1870			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1585		1574		1585		1585			
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment			L		L		L		L			

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Lanes in Grp	0	1	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1	0	1	0	321	0	2
Grp Sat Flow (s), veh/h/ln	0	1199	0	1411	0	1150	0	1018
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	1.5	0.0	0.1	0.0	6.2	0.0	8.1
Perm LT Sat Flow (s_l), veh/h/ln	0	1199	0	1411	0	1150	0	1018
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	16.5	0.0	17.9	0.0	16.4	0.0	10.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	4.6	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	600	0	722	0	1161	0	385
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.01
Avail Cap (c_a), veh/h	0	600	0	722	0	1161	0	385
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.0	0.0	8.1	0.0	10.5	0.0	13.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.0	0.0	8.2	0.0	11.1	0.0	13.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	193	0	0	0	185	0	5
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	1.6	0.0	0.0	0.0	1.5	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	1.6	0.0	0.0	0.0	1.5	0.0	0.1
Lane Grp Cap (c), veh/h	0	1421	0	0	0	1421	0	748
V/C Ratio (X)	0.00	0.14	0.00	0.00	0.00	0.13	0.00	0.01
Avail Cap (c_a), veh/h	0	1421	0	0	0	1421	0	748
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.6	0.0	0.0	0.0	8.5	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.8	0.0	0.0	0.0	8.7	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.5	0.0	0.0	0.0	0.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

HCM 6th Signalized Intersection Capacity Analysis

21: CA- 78/86 & Brawley Bypass

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.0	0.0	0.0	0.5	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	364	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1587	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.1	0.0	8.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	8.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.99	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	634	0	635	0	634	0	634
V/C Ratio (X)	0.00	0.01	0.00	0.57	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	634	0	635	0	634	0	634
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	10.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.1	0.0	14.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	11.3
HCM 6th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

APPENDIX D : NEAR TERM WITH PROJECT ANALYSIS WORKSHEETS

Intersection												
Int Delay, s/veh	1.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑	↗		↔			↖	↗
Traffic Vol, veh/h	0	330	20	140	299	0	2	1	1	1	0	0
Future Vol, veh/h	0	330	20	140	299	0	2	1	1	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	0	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	359	22	152	325	0	2	1	1	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	325	0	0	381	0	0	826	988	180	809	1010	163
Stage 1	-	-	-	-	-	-	359	359	-	629	629	-
Stage 2	-	-	-	-	-	-	467	629	-	180	381	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1231	-	-	1174	-	-	264	246	832	272	238	853
Stage 1	-	-	-	-	-	-	632	626	-	437	474	-
Stage 2	-	-	-	-	-	-	545	474	-	804	612	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1231	-	-	1174	-	-	238	214	832	244	207	853
Mov Cap-2 Maneuver	-	-	-	-	-	-	238	214	-	244	207	-
Stage 1	-	-	-	-	-	-	632	626	-	437	413	-
Stage 2	-	-	-	-	-	-	474	413	-	802	612	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			2.7			18.1			19.8		
HCM LOS							C			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	280	1231	-	-	1174	-	-	244	-
HCM Lane V/C Ratio	0.016	-	-	-	0.13	-	-	0.004	-
HCM Control Delay (s)	18.1	0	-	-	8.5	-	-	19.8	0
HCM Lane LOS		C	A	-	A	-	-	C	A
HCM 95th %tile Q(veh)		0	0	-	0.4	-	-	0	-

Intersection												
Int Delay, s/veh	2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↗	↗	↘	↗	↗		↔			↘	↗
Traffic Vol, veh/h	0	424	0	1	431	3	21	0	134	2	2	0
Future Vol, veh/h	0	424	0	1	431	3	21	0	134	2	2	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	0	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	461	0	1	468	3	23	0	146	2	2	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	471	0	0	461	0	0	698	934	231	701	931	234
Stage 1	-	-	-	-	-	-	461	461	-	470	470	-
Stage 2	-	-	-	-	-	-	237	473	-	231	461	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1087	-	-	1096	-	-	327	264	771	325	265	768
Stage 1	-	-	-	-	-	-	550	564	-	543	558	-
Stage 2	-	-	-	-	-	-	745	557	-	751	564	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1087	-	-	1096	-	-	325	264	771	264	265	768
Mov Cap-2 Maneuver	-	-	-	-	-	-	325	264	-	264	265	-
Stage 1	-	-	-	-	-	-	550	564	-	543	557	-
Stage 2	-	-	-	-	-	-	741	556	-	609	564	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0			0			12.5			18.9		
HCM LOS							B			C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	650	1087	-	-	1096	-	-	264	-
HCM Lane V/C Ratio	0.259	-	-	-	0.001	-	-	0.016	-
HCM Control Delay (s)	12.5	0	-	-	8.3	-	-	18.9	0
HCM Lane LOS	B	A	-	-	A	-	-	C	A
HCM 95th %tile Q(veh)	1	0	-	-	0	-	-	0.1	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑			↔			↔	
Traffic Vol, veh/h	44	279	22	3	342	15	27	4	1	32	6	27
Future Vol, veh/h	44	279	22	3	342	15	27	4	1	32	6	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	48	303	24	3	372	16	29	4	1	35	7	29

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	388	0	0	327	0	0	595	793	152	636	809	194
Stage 1	-	-	-	-	-	-	399	399	-	386	386	-
Stage 2	-	-	-	-	-	-	196	394	-	250	423	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1167	-	-	1229	-	-	388	320	867	363	313	815
Stage 1	-	-	-	-	-	-	598	601	-	609	609	-
Stage 2	-	-	-	-	-	-	787	604	-	732	586	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1167	-	-	1229	-	-	356	306	867	347	300	815
Mov Cap-2 Maneuver	-	-	-	-	-	-	356	306	-	347	300	-
Stage 1	-	-	-	-	-	-	573	576	-	584	608	-
Stage 2	-	-	-	-	-	-	749	603	-	696	562	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	1			0.1			16.2			14.6		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	355	1167	-	-	1229	-	-	447
HCM Lane V/C Ratio	0.098	0.041	-	-	0.003	-	-	0.158
HCM Control Delay (s)	16.2	8.2	-	-	7.9	-	-	14.6
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.3	0.1	-	-	0	-	-	0.6

Intersection												
Int Delay, s/veh	1.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↘	↑↑	↗	↘	↑↑			↔			↔	
Traffic Vol, veh/h	50	414	46	4	333	40	7	4	1	14	3	64
Future Vol, veh/h	50	414	46	4	333	40	7	4	1	14	3	64
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	0	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	54	450	50	4	362	43	8	4	1	15	3	70

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	405	0	0	500	0	0	749	971	225	727	1000	203
Stage 1	-	-	-	-	-	-	558	558	-	392	392	-
Stage 2	-	-	-	-	-	-	191	413	-	335	608	-
Critical Hdwy	4.14	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.22	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	1150	-	-	1060	-	-	300	251	778	312	242	804
Stage 1	-	-	-	-	-	-	482	510	-	604	605	-
Stage 2	-	-	-	-	-	-	792	592	-	653	484	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	1150	-	-	1060	-	-	261	238	778	295	230	804
Mov Cap-2 Maneuver	-	-	-	-	-	-	261	238	-	295	230	-
Stage 1	-	-	-	-	-	-	459	486	-	576	603	-
Stage 2	-	-	-	-	-	-	717	590	-	616	461	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	0.8			0.1			19.2			12.3		
HCM LOS							C			B		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	267	1150	-	-	1060	-	-	578
HCM Lane V/C Ratio	0.049	0.047	-	-	0.004	-	-	0.152
HCM Control Delay (s)	19.2	8.3	-	-	8.4	-	-	12.3
HCM Lane LOS	C	A	-	-	A	-	-	B
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-	-	0.5

HCM 6th Signalized Intersection Capacity Analysis
 11: Center Street & CA- 78/86

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	313	35	7	318	26	54	47	14	46	39	14
Future Volume (veh/h)	18	313	35	7	318	26	54	47	14	46	39	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	20	340	38	8	346	28	59	51	15	50	42	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	493	1290	143	490	1332	107	672	555	163	664	526	188
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	10.5	9.9	10.0	10.3	9.9	9.9	9.3	0.0	8.7	9.3	0.0	8.6
Ln Grp LOS	B	A	A	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		398			382			125			107	
Approach Delay, s/veh		10.0			9.9			9.0			8.9	
Approach LOS		A			A			A			A	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			6.0		6.0		6.0		6.0			
Phs Duration (G+Y+Rc), s			22.5		22.5		22.5		22.5			
Change Period (Y+Rc), s			4.5		4.5		4.5		4.5			
Max Green (Gmax), s			18.0		18.0		18.0		18.0			
Max Allow Headway (MAH), s			4.6		5.3		4.7		5.3			
Max Q Clear (g_c+I1), s			4.2		5.8		4.1		5.4			
Green Ext Time (g_e), s			0.4		1.8		0.3		1.8			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.00		0.00		0.00		0.00			
Left-Turn Movement Data												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1346		1009		1335		1005			
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			1388		3225		1316		3331			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			408		358		470		268			
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment			L		L		L		L			

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Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	59	0	20	0	50	0	8
Grp Sat Flow (s), veh/h/ln	0	1346	0	1009	0	1335	0	1005
Q Serve Time (g_s), s	0.0	1.3	0.0	0.6	0.0	1.1	0.0	0.2
Cycle Q Clear Time (g_c), s	0.0	2.2	0.0	3.8	0.0	2.1	0.0	3.4
Perm LT Sat Flow (s_l), veh/h/ln	0	1346	0	1009	0	1335	0	1005
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	17.1	0.0	14.9	0.0	17.0	0.0	14.8
Perm LT Q Serve Time (g_ps), s	0.0	1.3	0.0	0.6	0.0	1.1	0.0	0.2
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	672	0	493	0	664	0	490
V/C Ratio (X)	0.00	0.09	0.00	0.04	0.00	0.08	0.00	0.02
Avail Cap (c_a), veh/h	0	672	0	493	0	664	0	490
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.0	0.0	10.3	0.0	9.1	0.0	10.2
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.2	0.0	0.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.3	0.0	10.5	0.0	9.3	0.0	10.3
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	0.1	0.0	0.3	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	0.1	0.0	0.3	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.01	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	186	0	0	0	184
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	3.2	0.0	0.0	0.0	3.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.2	0.0	0.0	0.0	3.1
Lane Grp Cap (c), veh/h	0	0	0	711	0	0	0	711
V/C Ratio (X)	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.26
Avail Cap (c_a), veh/h	0	0	0	711	0	0	0	711
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.0	0.0	0.0	0.0	9.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	9.9	0.0	0.0	0.0	9.9
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	1.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	66	0	192	0	57	0	190
Grp Sat Flow (s), veh/h/ln	0	1797	0	1806	0	1786	0	1822
Q Serve Time (g_s), s	0.0	1.0	0.0	3.2	0.0	0.9	0.0	3.1
Cycle Q Clear Time (g_c), s	0.0	1.0	0.0	3.2	0.0	0.9	0.0	3.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.23	0.00	0.20	0.00	0.26	0.00	0.15
Lane Grp Cap (c), veh/h	0	719	0	722	0	714	0	729
V/C Ratio (X)	0.00	0.09	0.00	0.27	0.00	0.08	0.00	0.26
Avail Cap (c_a), veh/h	0	719	0	722	0	714	0	729
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.4	0.0	9.1	0.0	8.4	0.0	9.0
Incr Delay (d2), s/veh	0.0	0.3	0.0	0.9	0.0	0.2	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.7	0.0	10.0	0.0	8.6	0.0	9.9
1st-Term Q (Q1), veh/ln	0.0	0.3	0.0	1.0	0.0	0.3	0.0	1.0
2nd-Term Q (Q2), veh/ln	0.0	0.1	0.0	0.2	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.4	0.0	1.2	0.0	0.3	0.0	1.2
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.05	0.00	0.02	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	317	47	13	272	34	42	14	13	46	51	22
Future Volume (veh/h)	8	317	47	13	272	34	42	14	13	46	51	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	9	345	51	14	296	37	46	15	14	50	55	24
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	514	1244	182	481	1273	158	651	356	332	698	494	215
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Unsig. Movement Delay												
Ln Grp Delay, s/veh	10.0	10.1	10.1	10.5	9.7	9.7	9.4	0.0	8.4	8.9	0.0	8.8
Ln Grp LOS	B	B	B	B	A	A	A	A	A	A	A	A
Approach Vol, veh/h		405			347			75			129	
Approach Delay, s/veh		10.1			9.7			9.0			8.8	
Approach LOS		B			A			A			A	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			6.0		6.0		6.0		6.0			
Phs Duration (G+Y+Rc), s			22.5		22.5		22.5		22.5			
Change Period (Y+Rc), s			4.5		4.5		4.5		4.5			
Max Green (Gmax), s			18.0		18.0		18.0		18.0			
Max Allow Headway (MAH), s			4.5		5.3		4.8		5.3			
Max Q Clear (g_c+I1), s			4.3		5.4		3.5		5.8			
Green Ext Time (g_e), s			0.2		1.9		0.4		1.5			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.00		0.00		0.00		0.00			
Left-Turn Movement Data												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1320		1047		1381		988			
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			890		3110		1235		3182			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			831		456		539		394			
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment			L		L		L		L			

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Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	46	0	9	0	50	0	14
Grp Sat Flow (s), veh/h/ln	0	1320	0	1047	0	1381	0	988
Q Serve Time (g_s), s	0.0	1.0	0.0	0.3	0.0	1.0	0.0	0.4
Cycle Q Clear Time (g_c), s	0.0	2.3	0.0	3.1	0.0	1.5	0.0	3.8
Perm LT Sat Flow (s_l), veh/h/ln	0	1320	0	1047	0	1381	0	988
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	16.7	0.0	15.2	0.0	17.5	0.0	14.6
Perm LT Q Serve Time (g_ps), s	0.0	1.0	0.0	0.3	0.0	1.0	0.0	0.4
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	651	0	514	0	698	0	481
V/C Ratio (X)	0.00	0.07	0.00	0.02	0.00	0.07	0.00	0.03
Avail Cap (c_a), veh/h	0	651	0	514	0	698	0	481
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.2	0.0	10.0	0.0	8.7	0.0	10.4
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.1	0.0	0.2	0.0	0.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.4	0.0	10.0	0.0	8.9	0.0	10.5
1st-Term Q (Q1), veh/ln	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.3	0.0	0.1	0.0	0.3	0.0	0.1
%ile Storage Ratio (RQ%)	0.00	0.02	0.00	0.00	0.00	0.02	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	196	0	0	0	164
Grp Sat Flow (s), veh/h/ln	0	0	0	1777	0	0	0	1777
Q Serve Time (g_s), s	0.0	0.0	0.0	3.3	0.0	0.0	0.0	2.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	3.3	0.0	0.0	0.0	2.7
Lane Grp Cap (c), veh/h	0	0	0	711	0	0	0	711
V/C Ratio (X)	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.23
Avail Cap (c_a), veh/h	0	0	0	711	0	0	0	711
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	9.1	0.0	0.0	0.0	8.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	10.1	0.0	0.0	0.0	9.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.1

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	1.2	0.0	0.0	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		T+R		T+R		T+R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	29	0	200	0	79	0	169
Grp Sat Flow (s), veh/h/ln	0	1721	0	1788	0	1773	0	1799
Q Serve Time (g_s), s	0.0	0.5	0.0	3.4	0.0	1.3	0.0	2.8
Cycle Q Clear Time (g_c), s	0.0	0.5	0.0	3.4	0.0	1.3	0.0	2.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.48	0.00	0.25	0.00	0.30	0.00	0.22
Lane Grp Cap (c), veh/h	0	688	0	715	0	709	0	720
V/C Ratio (X)	0.00	0.04	0.00	0.28	0.00	0.11	0.00	0.23
Avail Cap (c_a), veh/h	0	688	0	715	0	709	0	720
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.2	0.0	9.1	0.0	8.5	0.0	8.9
Incr Delay (d2), s/veh	0.0	0.1	0.0	1.0	0.0	0.3	0.0	0.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.4	0.0	10.1	0.0	8.8	0.0	9.7
1st-Term Q (Q1), veh/ln	0.0	0.1	0.0	1.0	0.0	0.4	0.0	0.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.2	0.0	0.1	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.2	0.0	1.2	0.0	0.4	0.0	1.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.05	0.00	0.03	0.00	0.04
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	9.7
HCM 6th LOS	A

Intersection

Int Delay, s/veh 0.4

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations	↘	↑↑	↑↑	↗	↘	↗
Traffic Vol, veh/h	14	430	392	3	1	20
Future Vol, veh/h	14	430	392	3	1	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	15	467	426	3	1	22

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	429	0	0
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	4.14	-	-
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	2.22	-	-
Pot Cap-1 Maneuver	1127	-	-
Stage 1	-	-	-
Stage 2	-	-	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1127	-	-
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	SW
HCM Control Delay, s	0.3	0	9.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBRSWLn1SWLn2
Capacity (veh/h)	1127	-	-	-
HCM Lane V/C Ratio	0.014	-	-	-
HCM Control Delay (s)	8.2	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations	↘	↑↑	↑↑	↗	↘	↗
Traffic Vol, veh/h	11	531	504	4	3	15
Future Vol, veh/h	11	531	504	4	3	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	577	548	4	3	16
























Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	552	0	-	0	861 274
Stage 1	-	-	-	-	548 -
Stage 2	-	-	-	-	313 -
Critical Hdwy	4.14	-	-	-	6.84 6.94
Critical Hdwy Stg 1	-	-	-	-	5.84 -
Critical Hdwy Stg 2	-	-	-	-	5.84 -
Follow-up Hdwy	2.22	-	-	-	3.52 3.32
Pot Cap-1 Maneuver	1014	-	-	-	295 724
Stage 1	-	-	-	-	543 -
Stage 2	-	-	-	-	715 -
Platoon blocked, %		-	-	-	
Mov Cap-1 Maneuver	1014	-	-	-	291 724
Mov Cap-2 Maneuver	-	-	-	-	291 -
Stage 1	-	-	-	-	536 -
Stage 2	-	-	-	-	715 -

Approach	EB	WB	SW
HCM Control Delay, s	0.2	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBRSWLn1SWLn2	
Capacity (veh/h)	1014	-	-	-	291 724
HCM Lane V/C Ratio	0.012	-	-	-	0.011 0.023
HCM Control Delay (s)	8.6	-	-	-	17.5 10.1
HCM Lane LOS	A	-	-	-	C B
HCM 95th %tile Q(veh)	0	-	-	-	0 0.1

HCM 6th Signalized Intersection Capacity Analysis
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	4	0	4	2	238	1	195	4	326	153	0
Future Volume (veh/h)	0	4	0	4	2	238	1	195	4	326	153	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	0	4	0	4	2	0	1	212	4	354	166	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	160	748	0	723	748		612	1421	634	1138	1421	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.00	0.40	0.00	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	0.0	8.1	0.0	8.2	8.1	0.0	8.9	8.8	8.1	11.6	8.7	0.0
Ln Grp LOS	A	A	A	A	A		A	A	A	B	A	A
Approach Vol, veh/h		4			6			217			520	
Approach Delay, s/veh		8.1			8.2			8.8			10.6	
Approach LOS		A			A			A			B	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			5.0		6.0		5.0		5.0			
Phs Duration (G+Y+Rc), s			22.5		22.5		22.5		22.5			
Change Period (Y+Rc), s			4.5		4.5		4.5		4.5			
Max Green (Gmax), s			18.0		18.0		18.0		18.0			
Max Allow Headway (MAH), s			5.2		5.2		4.7		4.3			
Max Q Clear (g_c+I1), s			3.7		2.1		9.0		2.1			
Green Ext Time (g_e), s			1.1		0.0		1.9		0.0			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.00		0.00		0.00		0.00			
Left-Turn Movement Data												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1220		1415		2261		1412			
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			3554		1870		3554		1870			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1585		0		1585		1585			
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment			L		L		L		L			

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Lanes in Grp	0	1	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1	0	0	0	354	0	4
Grp Sat Flow (s), veh/h/ln	0	1220	0	1415	0	1130	0	1412
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	1.3	0.0	0.0	0.0	7.0	0.0	0.1
Perm LT Sat Flow (s_l), veh/h/ln	0	1220	0	1415	0	1130	0	1412
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	0.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	16.7	0.0	0.0	0.0	16.3	0.0	17.9
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	5.3	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	612	0	160	0	1138	0	723
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.31	0.00	0.01
Avail Cap (c_a), veh/h	0	612	0	160	0	1138	0	723
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.9	0.0	0.0	0.0	10.9	0.0	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.9	0.0	0.0	0.0	11.6	0.0	8.2
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T		T		T		T
Lanes in Grp	0	2	0	1	0	2	0	1
Grp Vol (v), veh/h	0	212	0	4	0	166	0	2
Grp Sat Flow (s), veh/h/ln	0	1777	0	1870	0	1777	0	1870
Q Serve Time (g_s), s	0.0	1.7	0.0	0.1	0.0	1.3	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	1.7	0.0	0.1	0.0	1.3	0.0	0.0
Lane Grp Cap (c), veh/h	0	1421	0	748	0	1421	0	748
V/C Ratio (X)	0.00	0.15	0.00	0.01	0.00	0.12	0.00	0.00
Avail Cap (c_a), veh/h	0	1421	0	748	0	1421	0	748
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.6	0.0	8.1	0.0	8.5	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.8	0.0	8.1	0.0	8.7	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.5	0.0	0.0	0.0	0.4	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.6	0.0	0.0	0.0	0.4	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R				R		R
Lanes in Grp	0	1	0	0	0	1	0	1
Grp Vol (v), veh/h	0	4	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	0	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	634	0	0	0	634	0	634
V/C Ratio (X)	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	634	0	0	0	634	0	634
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.1	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.

HCM 6th Signalized Intersection Capacity Analysis
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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	3	332	2	5	3	1	178	4	342	209	0
Future Volume (veh/h)	1	3	332	2	5	3	1	178	4	342	209	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Lanes Open During Work Zone												
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1	3	361	2	5	0	1	193	4	372	227	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	722	5	630	385	748		574	1421	634	1161	1421	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.00	0.40	0.40	0.40	0.40	0.40	0.00
Unsig. Movement Delay												
Ln Grp Delay, s/veh	8.2	0.0	14.2	13.7	8.1	0.0	9.3	8.8	8.1	11.5	8.9	0.0
Ln Grp LOS	A	A	B	B	A		A	A	A	B	A	A
Approach Vol, veh/h		365			7			198			599	
Approach Delay, s/veh		14.2			9.7			8.8			10.5	
Approach LOS		B			A			A			B	
Timer:		1	2	3	4	5	6	7	8			
Assigned Phs			2		4		6		8			
Case No			5.0		6.0		5.0		5.0			
Phs Duration (G+Y+Rc), s			22.5		22.5		22.5		22.5			
Change Period (Y+Rc), s			4.5		4.5		4.5		4.5			
Max Green (Gmax), s			18.0		18.0		18.0		18.0			
Max Allow Headway (MAH), s			5.2		5.6		4.7		5.1			
Max Q Clear (g_c+I1), s			3.9		10.0		9.1		10.1			
Green Ext Time (g_e), s			0.9		1.5		2.2		0.0			
Prob of Phs Call (p_c)			1.00		1.00		1.00		1.00			
Prob of Max Out (p_x)			0.00		0.00		0.00		0.00			
Left-Turn Movement Data												
Assigned Mvmt			5		7		1		3			
Mvmt Sat Flow, veh/h			1154		1411		2300		1018			
Through Movement Data												
Assigned Mvmt			2		4		6		8			
Mvmt Sat Flow, veh/h			3554		13		3554		1870			
Right-Turn Movement Data												
Assigned Mvmt			12		14		16		18			
Mvmt Sat Flow, veh/h			1585		1574		1585		1585			
Left Lane Group Data												
Assigned Mvmt		0	5	0	7	0	1	0	3			
Lane Assignment			L		L		L		L			

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Lanes in Grp	0	1	0	1	0	2	0	1
Grp Vol (v), veh/h	0	1	0	1	0	372	0	2
Grp Sat Flow (s), veh/h/ln	0	1154	0	1411	0	1150	0	1018
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	5.5	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	1.9	0.0	0.1	0.0	7.1	0.0	8.1
Perm LT Sat Flow (s_l), veh/h/ln	0	1154	0	1411	0	1150	0	1018
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	18.0	0.0	18.0	0.0	18.0	0.0	18.0
Perm LT Serve Time (g_u), s	0.0	16.2	0.0	17.9	0.0	16.4	0.0	10.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	5.5	0.0	0.1
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	574	0	722	0	1161	0	385
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.32	0.00	0.01
Avail Cap (c_a), veh/h	0	574	0	722	0	1161	0	385
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	9.3	0.0	8.1	0.0	10.8	0.0	13.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.7	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.3	0.0	8.2	0.0	11.5	0.0	13.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	1.2	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.16	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Middle Lane Group Data

Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment		T				T		T
Lanes in Grp	0	2	0	0	0	2	0	1
Grp Vol (v), veh/h	0	193	0	0	0	227	0	5
Grp Sat Flow (s), veh/h/ln	0	1777	0	0	0	1777	0	1870
Q Serve Time (g_s), s	0.0	1.6	0.0	0.0	0.0	1.8	0.0	0.1
Cycle Q Clear Time (g_c), s	0.0	1.6	0.0	0.0	0.0	1.8	0.0	0.1
Lane Grp Cap (c), veh/h	0	1421	0	0	0	1421	0	748
V/C Ratio (X)	0.00	0.14	0.00	0.00	0.00	0.16	0.00	0.01
Avail Cap (c_a), veh/h	0	1421	0	0	0	1421	0	748
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	8.6	0.0	0.0	0.0	8.7	0.0	8.1
Incr Delay (d2), s/veh	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.8	0.0	0.0	0.0	8.9	0.0	8.1
1st-Term Q (Q1), veh/ln	0.0	0.5	0.0	0.0	0.0	0.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.5	0.0	0.0	0.0	0.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Right Lane Group Data

Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		R		T+R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	4	0	364	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1585	0	1587	0	1585	0	1585
Q Serve Time (g_s), s	0.0	0.1	0.0	8.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.1	0.0	8.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	1.00	0.00	0.99	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	634	0	635	0	634	0	634
V/C Ratio (X)	0.00	0.01	0.00	0.57	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	634	0	635	0	634	0	634
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	8.1	0.0	10.5	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.7	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	8.1	0.0	14.2	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.38	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary

HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B

Notes

Unsignalized Delay for [WBR] is excluded from calculations of the approach delay and intersection delay.