Hansen Road Closure Study

Final Report

San Joaquin County

July 01, 2022

The Power of Commitment

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Printed date	7/1/2022 11:48:00 PM
Last saved date	July 01, 2022
File name	https://projects-northamerica.ghd.com/sites/uswest4/hansenroadclosurestu/ProjectDocs/12571422RPT001.docx
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Client name	San Joaquin County
Project name	Hansen Road Closure Study
Document title	Hansen Road Closure Study | Final Report
Revision version	Rev 5
Project number	12571422

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1. Introduction

The County of San Joaquin has contracted GHD to evaluate the potential short-term and long-term effects on traffic conditions with the closure of the Hansen Road overcrossing at Interstate 205 (I-205) located west of Tracy. This traffic study includes an evaluation of existing and forecasted conditions with and without the overcrossing closure including passenger vehicles and trucks/heavy vehicles in the area at key locations. The analysis approximates existing origin-destination travel patterns for traffic on the Hansen Road overcrossing and how the closure of the overcrossing is anticipated to redistribute traffic in the area. This study identifies if any operational or traffic calming improvements are needed at the study locations. GHD has also considered the planned improvements at the I-205 interchange and the widening of Mountain House Parkway/International Parkway south of I-205 that is currently under construction.

Interim Southbound Closure

The County implemented a “pilot project” with partial closure of Hansen Road on January 20, 2022. The partial closure was implemented for southbound traffic only from Von Sosten Road to Los Positas Way and across the Hansen Road overcrossing. Traffic volume and speed data was collected during the pilot project and is summarized in this study.

1.1 Setting & Background

The Hansen Road overcrossing provides access across I-205 and provides direct access to the warehousing and distribution facilities south of I-205 known as the Cordes Ranch area, and Hansen Road connects to Schulte Road on the southern end of the Cordes Ranch area. North of I-205, Hansen Road goes through a residential area known as the Lammersville community that is bounded by Von Sosten Road to the north, I-205 to the south, Mountain House Parkway to the west, and Byron Road to the east. There is also the Lammersville Elementary School in the northwest quadrant of the intersection of Hansen Road and Von Sosten Road. Hansen Road continues north connecting to Grant Line Road and terminates at Byron Road.

Hansen Road does have truck restrictions in place via signage, whereas commercial vehicles over 5 tons are prohibited between Von Sosten Road and the first warehouse building access road (Medline) just south of the overcrossing. This 5-ton restriction is lower than the 7-ton prohibition on unincorporated residential roadways indicated in County Ordinance 2413. Historically, there have been issues with compliance of the truck restrictions along Hansen Road, and south of the overcrossing there are currently security vehicles which are there to reroute large trucks from going north across the overcrossing. Residents of the community have voiced their concerns to the County of large truck traffic and cut-through traffic along Hansen Road to and from the Cordes Ranch development and the desire to close the overcrossing.

The Cordes Ranch development consists of two development phases, based on the Environmental Impact Report (EIR) that was approved in 2013. The EIR anticipated Phase 1 to be developed by year 2035 along with new roadway connections internal to the Project’s area that contribute to Tracy’s Transportation Master Plan. Specifically, Capital Parks Drive which connects Hansen Road to Mountain House Parkway, which has not been constructed however Promontory Parkway has been constructed and connects Hansen Road to International Parkway. The Phase 1 developments included 580 net acres of business park, which has been exceeded to date based on aerial imagery and discussion with the County, and 25 net acres of general commercial. Phase 2 of Cordes Ranch included buildout of the Specific Plan and additional new roadway connections including an east connection towards Lammers Road and a new connection north to Von Sosten Road east of Hansen Road (Pavilion Parkway), which have not been constructed, and would provide traffic relief for Hansen Road. With the rapid development of the Cordes Ranch area, the additional traffic related has also increased rapidly over the brief time and has resulted in an increase of cut-through traffic on Hansen Road and speeding issues through the Lammersville community. The EIR also identified that the adjacent residences on Hansen Road may be adversely affected by increased traffic from Cordes Ranch, therefore the Specific Plan included various traffic calming measures along Hansen Road, in which only three speed bumps currently exist.

2. Study Locations & Data Collection

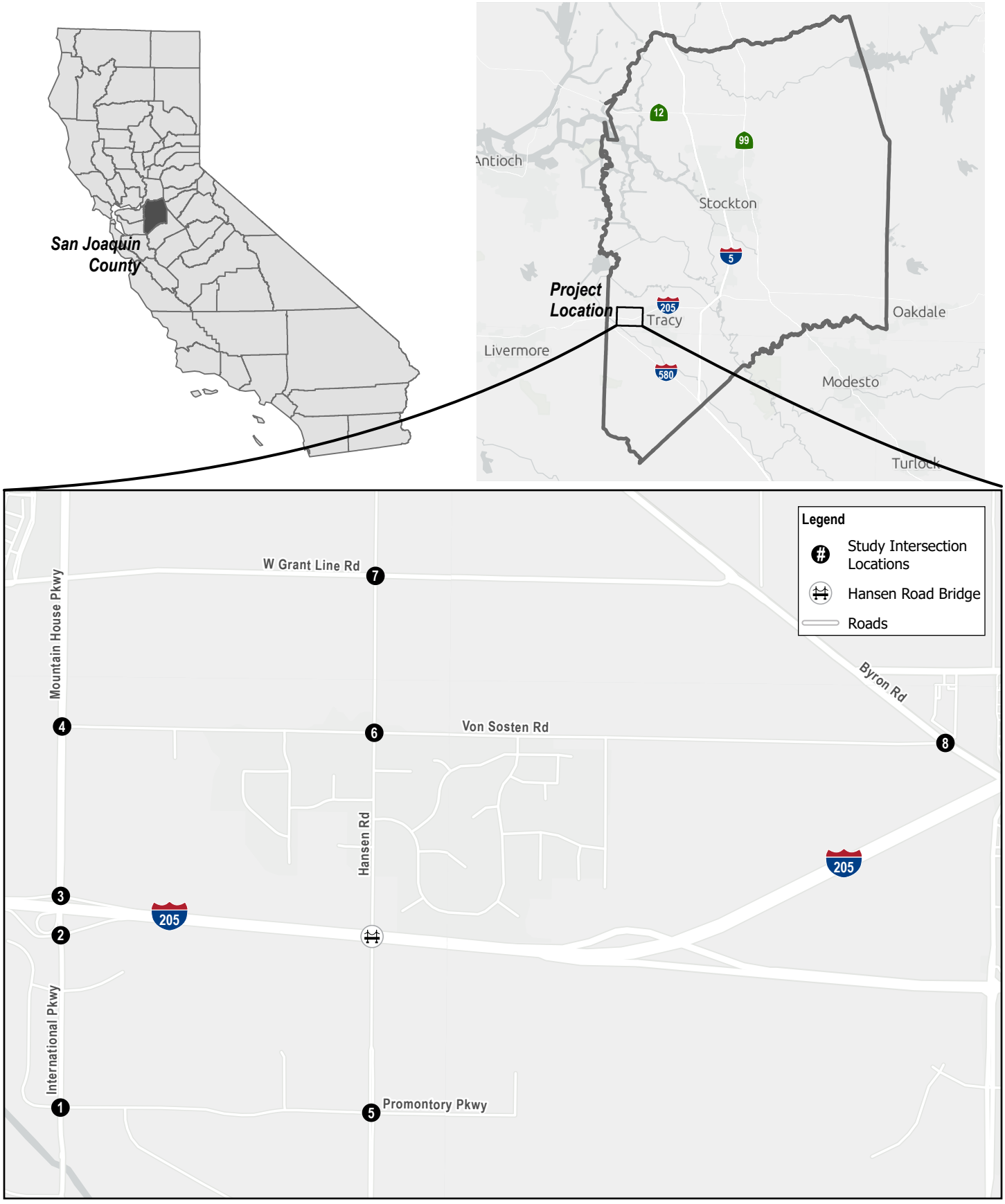
The study intersections analyzed within this study are listed below. Peak hour turning movement counts were collected at these intersections on Tuesday, January 11, 2022. These locations were evaluated for average weekday AM and PM peak hour operations under all analysis scenarios. The AM peak hour is defined as the one-hour of peak traffic flow (which is the highest total volume count over four consecutive 15-minute count periods) counted between 7:00 am and 9:00 am on a typical weekday. The PM peak hour is defined as the one hour of peak traffic flow counted between 4:00 pm and 6:00 pm on a typical weekday. Existing geometry, including lane usage, traffic controls, and storage capacity at the study locations, is determined based on available imagery from Google and coordination on any recent improvements with the County of San Joaquin and City of Tracy. GHD has noted that there is currently ongoing construction along Mountain House Parkway/International Parkway south of the I-205 Eastbound Ramps. The analysis considers a portion of the improvements to be in place at the intersection of the I-205 Eastbound Ramps with two lanes going through northbound and southbound.

1. International Parkway & Promontory Parkway
2. International Parkway / Mountain House Parkway & Interstate 205 Eastbound (EB) Ramps
3. Mountain House Parkway & Interstate 205 (I-205) Westbound (WB) Ramps
4. Mountain House Parkway & Von Sosten Road
5. Hansen Road & Promontory Parkway
6. Hansen Road & Von Sosten Road
7. Hansen Road & Grant Line Road
8. Byron Road & Von Sosten Road

Additionally, 24-hour (daily) roadway counts were collected on Tuesday, January 11, 2022, at the locations listed below, for the study roadway segments analyzed within this study.

1. Hansen Road, south of I-205 Overcrossing
2. Hansen Road, south of Von Sosten Road
3. Hansen Road, north of Von Sosten Road
4. Von Sosten Road, west of Byron Road
5. Von Sosten Road, east of Mountain House Parkway

Additional daily counts were also collected along Hansen Road and Von Sosten Road after the County implemented the pilot one-way along Hansen Road. The counts are included in Appendix A. Figure 2.1 presents the vicinity map and study locations.



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GHD

COUNTY OF SAN JOAQUIN
HANSEN ROAD
CLOSURE STUDY

Project No. **12571422**
Revision No. **-**
Date **Feb 2022**

Vicinity Map

FIGURE 2.1

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3. Technical Analysis Parameters & Methodologies

The following section outlines the analysis parameters and methodologies that were used in the transportation impact study to quantify potential project affects for the analysis scenarios.

3.1 Level of Service (LOS)

Traffic operations are quantified through the determination of "Level of Service" (LOS). LOS is a qualitative measure of traffic operating conditions, whereby a letter grade "A" through "F" is assigned to an intersection or roadway segment, representing progressively worsening traffic conditions. LOS "A" represents free-flow operating conditions and LOS "F" represents over-capacity conditions. LOS was calculated for all intersection control types using the methods documented in the Transportation Research Board's publication *Highway Capacity Manual, Sixth Edition, A Guide for Multimodal Mobility Analysis*, 2016 (HCM 6).

3.1.1 Roadway Operations

Roadway operations were determined based on the daily traffic volume of the study roadways and the functional classification standards and capacities presented in the San Joaquin County General Plan. Table 3.1 presents the LOS thresholds utilized to estimate operations on the study roadway segments. LOS for roadway segments is reported at "LOS C or better" for volumes at or below the thresholds identified below.

Table 3.1 Capacity Criteria for Roadways

Functional Classification	Right-of-Way	Lanes	Access Control	Capacity (Vehicles/Day)	On-Street Parking
Collector	60'	2	Intersections at grade; driveway access	14,000	Yes
Local Residential	50'	2	Intersections at grade; frequent driveways	5,000	Yes

Source: Table TM-2, Transportation and Mobility Section, Public Facilities and Services Element, San Joaquin County General Plan, December 2016.

3.1.2 Intersection Operations

The Synchro 10 (Trafficware) software program was used to implement the HCM 6 analysis methodologies. Synchro 10 has the capability to produce results based on HCM 2000, HCM 2010, HCM 6, or Synchro methodologies, and considers intersection signal timing and queuing constraints when calculating delay and queue lengths. Intersection LOS was calculated for all control types using the methods documented in HCM 6. For signalized and all-way stop-controlled (AWSC) intersections, an LOS determination is based on the calculated average delay for all approaches and movements. For two-way or side-street stop-controlled (TWSC) intersections, an LOS determination is based upon the calculated average delay for all movements of the worst-performing approach. The vehicular-based LOS criteria for different types of intersection controls are presented in Table 3.2. The Synchro reports for the intersection analyses are contained in Appendix B.

Table 3.2 Level of Service (LOS) Criteria for Intersections

Level of Service	Type of Flow	Delay	Maneuverability	Stopped Delay per Vehicle	
				Signalized	Un-signalized
A	Stable Flow	Very slight delay. Progression is very favorable, with most vehicles arriving during the green phase not stopping at all.	Turning movements are easily made, and nearly all drivers find freedom of operation.	≤10.0	≤10.0
B	Stable Flow	Good progression and/or short cycle lengths. More vehicles stop than for LOS A, causing higher levels of average delay.	Vehicle platoons are formed. Many drivers begin to feel somewhat restricted within groups of vehicles.	>10.0 and ≤20.0	>10.0 and ≤15.0
C	Stable Flow	Higher delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, although many still pass through the intersection without stopping.	Back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted	>20.0 and ≤35.0	>15.0 and ≤25.0
D	Approaching Unstable Flow	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume-to-capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	Maneuverability is severely limited during short periods due to temporary back-ups.	>35.0 and ≤55.0	>25.0 and ≤35.0
E	Unstable Flow	Generally considered to be the limit of acceptable delay. Indicative of poor progression, long cycle lengths, and high volume-to-capacity ratios. Individual cycle failures are frequent occurrences.	There are typically long queues of vehicles waiting upstream of the intersection.	>55.0 and ≤80.0	>35.0 and ≤50.0
F	Forced Flow	Generally considered to be unacceptable to most drivers. Often occurs with over saturation. May also occur at high volume-to-capacity ratios. There are many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors.	Jammed conditions. Back-ups from other locations restrict or prevent movement. Volumes may vary widely, depending principally on the downstream back-up conditions.	>80.0	>50.0

Source: Highway Capacity Manual, 6th Edition: A Guide for Multimodal Mobility Analysis. Transportation Research Board. 2016.

3.1.3 Level of Service Policies

San Joaquin County

The San Joaquin County General Plan Public Facilities and Service Element, 2016, specifies the following policy pertaining to the LOS standards for County-maintained roadways:

> **TM-3.1 Roadway Provision**
>
> *The County shall maintain Level of Service (LOS) standards consistent with the San Joaquin Council of Governments (SJCOG) Congestion Management Program (CMP) for State highways and designated County roadways and intersections of regional significance. Per the CMP, all designated CMP roadways and intersections shall operate at an LOS D or better except for roadways with "grandfathered" LOS. LOS for State highways shall be maintained in cooperation with Caltrans. The County LOS standards for intersections is LOS "D" or better on Minor Arterials and roadways of higher classification and LOS "C" or better on all other non-CMP designated County roadways and intersections. The County shall also maintain the following:*
>
> – *on State highways, LOS D or Caltrans standards whichever is stricter.*
> – *Within a city's sphere of influence, LOS D, or the city planned standards for that level of service.*
> – *On Mountain House Gateways, as defined in the Master Plan, LOS D, on all other Mountain House roads, LOS C.*
>
> *For State highways are designated as part of SJCOG's CMP, both the Caltrans and CMP LOS standards shall apply. Where roadways are designated as part of SJCOG's CMP, both the County and CMP LOS standards shall apply.*

City of Tracy

The City of Tracy General Plan Circulation Element, 2011, specifies the following polices pertaining to LOS standards for roadways and intersections within City jurisdiction:

> *P1. To the extent feasible, the City shall strive for LOS D on all streets and intersections, with the LOS standard for each facility to be defined in the Transportation Master Plan in accordance with the opportunities and constraints identified through the traffic projections and analysis performed for that Plan. The following exceptions to the LOS D standard may be allowed:*
>
> – LOS E or lower shall be allowed on streets and at intersections within one-quarter (1/4) mile of any freeway. This lower standard is intended to discourage inter-regional traffic from using Tracy streets.
> – LOS E or lower shall be allowed in the Downtown and Bowtie area of Tracy, in order to create a pedestrian-friendly urban design character and densities necessary to support transit, bicycling and walking.

All of the study roadways are within County jurisdiction, not part of the CMP, and have a Collector classification or lower, therefore the standard is **LOS C**. Intersections #2 and #3 are within Caltrans jurisdiction, Intersections #5 and #8 are within the City of Tracy or SOI, and Intersections #1 and #4 are part of the CMP network and along an arterial, therefore the applicable LOS standard for these locations is **LOS D** or better, and Intersections #6 and #7 are within the County (**LOS C**).

3.1.4 Traffic Signal Warrant Analysis

A supplemental traffic signal "warrant" analysis was completed if an unsignalized intersection operates or is projected to operate beyond the LOS threshold. The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the need for installation of a traffic signal at an otherwise unsignalized intersection. This study will employ the signal warrant criteria presented in the latest edition of the 2014 California Manual on Uniform Traffic Control Devices (2014 CA MUTCD, Revision 6). The signal warrant

criteria are based upon several factors including volume of vehicular and pedestrian traffic, frequency of accidents, location of school areas etc. The CA MUTCD indicates that the installation of a traffic signal should be considered if one or more of the signal warrants are met. The ultimate decision to signalize an intersection should be determined after careful analysis of all intersection and area characteristics. This traffic operations analysis will specifically utilize the Peak-Hour-Volume-based Warrant 3 as one representative type of traffic signal warrant analysis. Signal warrant analyses will only be conducted for non-signalized intersections which are projected to operate beyond the LOS threshold. The signal warrant analyses are contained in Appendix C.

3.1.5 Technical Analysis Parameters

Table 3.3 presents the technical parameters that were utilized for the evaluation of the study intersections for the analysis scenarios. All parameters not listed should be assumed as default values or calculated based on parameters listed.

Table 3.3 Technical Parameter Assumptions

Technical Parameter	Assumption
Roadway configuration/direction	North/south roadways: – Mountain House Parkway, Hansen Road, Byron Road – Promontory Parkway, I-205, Von Sosten Road, Grant Line Road
Intersection Peak Hour Factor (PHF)	Existing: Based on counts, intersection overall
Intersection Heavy Vehicle Percent (HV%)	Based on counts, intersection overall
Roadway Heavy Vehicle Percent (HV%)	Roadway counts included breakdown by vehicle classification per FHWA standards (see Figure below); HV% included Class 4 (Buses) and higher.

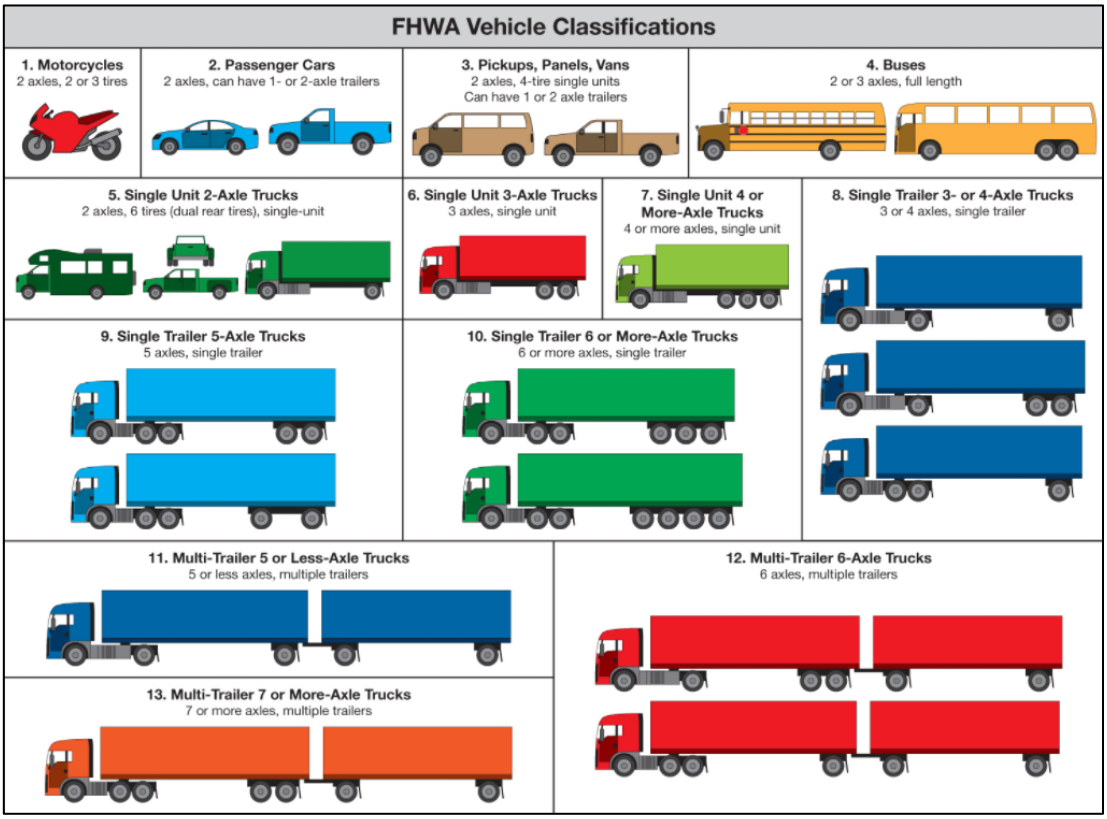


Figure 3.1 FHWA Vehicle Classifications

4. Existing Conditions

Existing conditions represent existing transportation facilities serving the area around the Hansen Road overcrossing, including lane geometrics, intersection control, and traffic volumes at the study locations. Existing conditions traffic operations are presented in this section. Tables 4.1 through 4.3 present the peak and daily volume information on the roadways where counts were collected. The morning peak hour is typically at 5:30 or 6:00 AM but in the afternoon, the peak hour time along Hansen Road and Von Sosten Road is more spread out between 1:30 and 3:30 PM. The intersection peak hour counts were not collected during these higher peak times; therefore, an adjustment factor is applied to the intersection volumes to account for this. See Section 4.1.1 for details on the adjustment factor. The percentage of heavy vehicles is relatively consistent during the peak hours compared to the daily volumes (3-4%), except for the 6% heavy vehicles on Von Sosten Road west of Byron Road. Over the day, approximately 40% of heavy vehicles along Hansen Road are locally generated within the Lammersville community, based on the number of heavy vehicles that do not continue south between Targowski Lane and the I-205 overcrossing.

Table 4.1 Roadway AM Peak Hour Volumes

Roadway		**AM Peak Hourly Volume**			
Count ID	Location	Time	Total Vol	HV Vol	HV%
001	Hansen Road, s/o I-205 Overcrossing	5:30 AM	259	9	3%
002	Hansen Road, s/o Von Sosten Road	5:30 AM	266	11	4%
003	Hansen Road, n/o Von Sosten Road	5:30 AM	123	5	4%
004	Von Sosten Road w/o Byron Road	6:00 AM	286	17	6%
005	Von Sosten Road e/o Mountain House Parkway	6:00 AM	172	6	3%

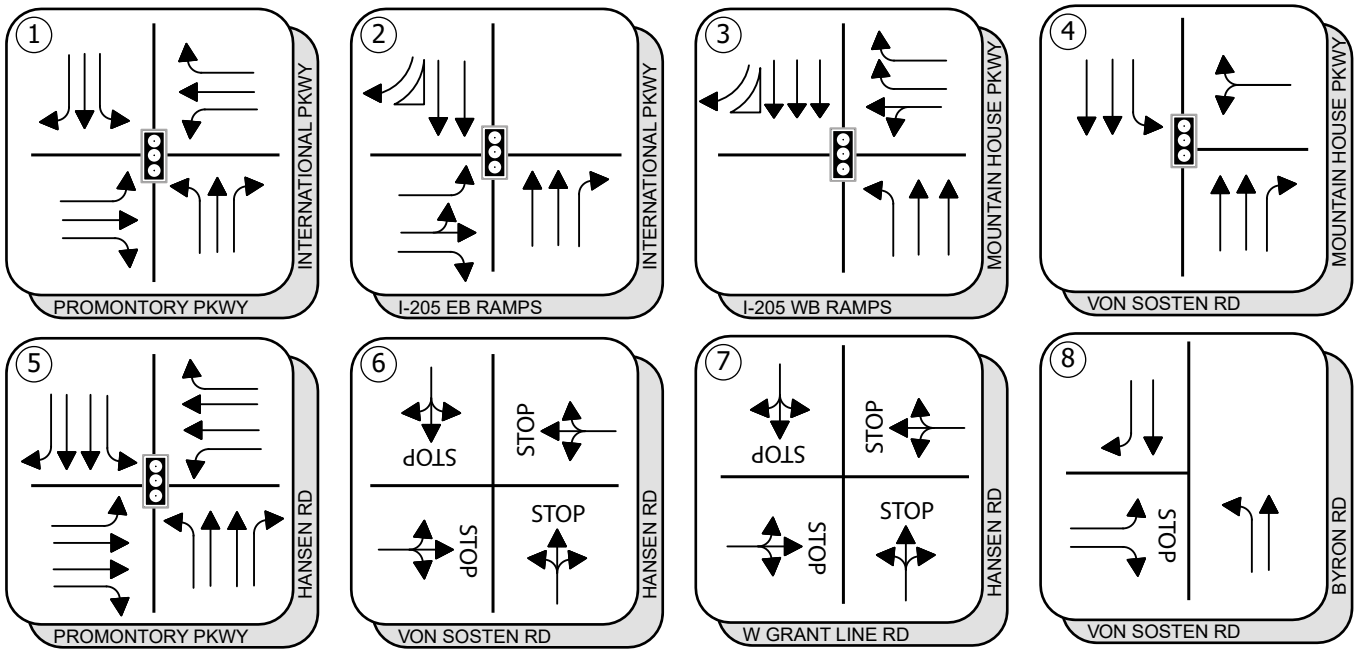
Table 4.2 Roadway PM Peak Hour Volumes

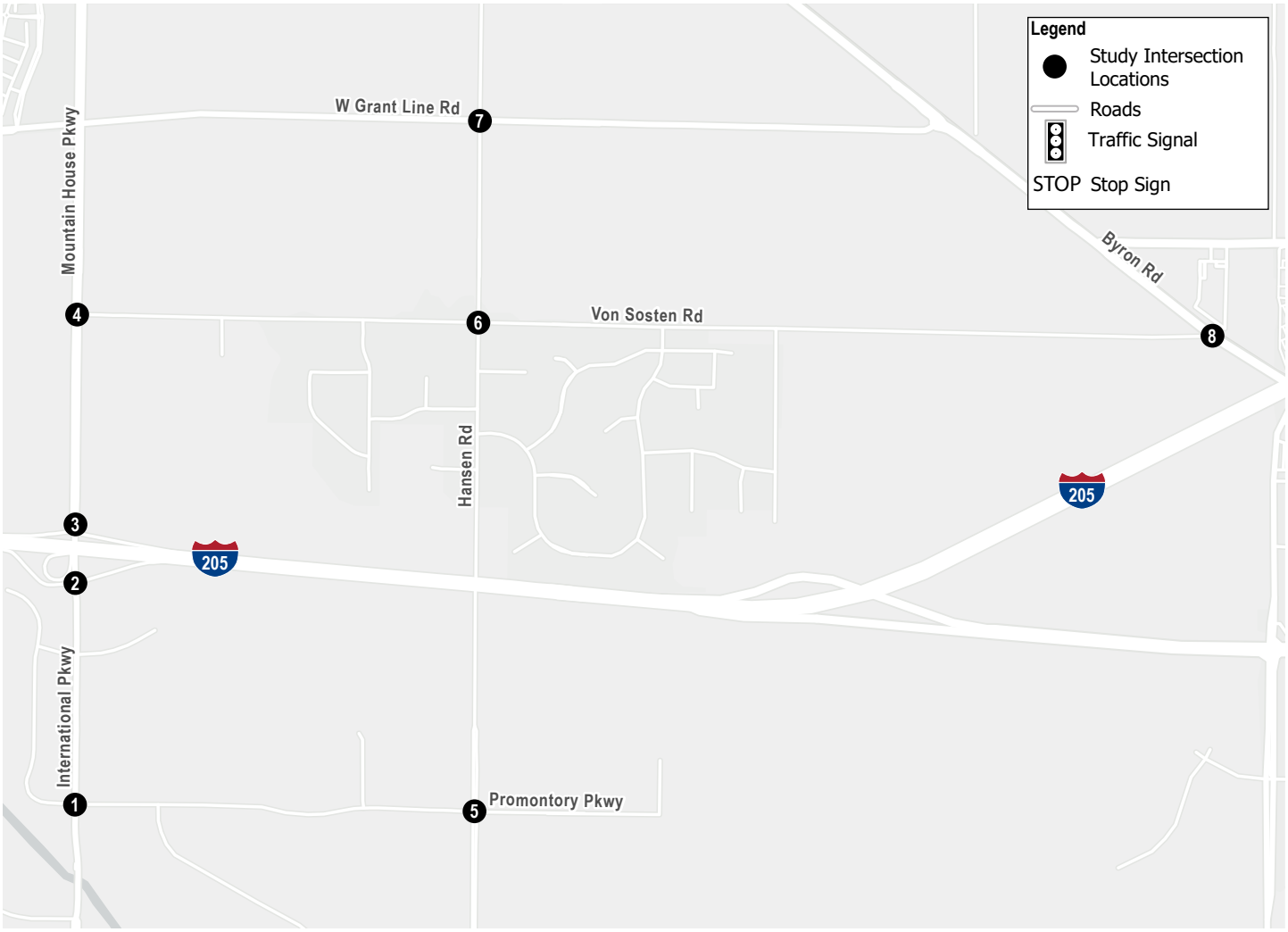
Roadway		**PM Peak Hourly Volume**			
Count ID	Location	Time	Total Vol	HV Vol	HV%
001	Hansen Road, s/o I-205 Overcrossing	1:30 PM	194	6	3%
002	Hansen Road, s/o Von Sosten Road	1:30 PM	223	8	4%
003	Hansen Road, n/o Von Sosten Road	2:45 PM	159	5	3%
004	Von Sosten Road w/o Byron Road	3:45 PM	225	3	1%
005	Von Sosten Road e/o Mountain House Parkway	3:30 PM	129	4	3%

Table 4.3 Roadway Daily Volumes

Roadway		**Daily Volume**		
Count ID	Location	Total Vol	HV Vol	HV%
001	Hansen Road, s/o I-205 Overcrossing	2,317	70	3%
002	Hansen Road, s/o Von Sosten Road	2,780	115	4%
003	Hansen Road, n/o Von Sosten Road	1,473	47	3%
004	Von Sosten Road w/o Byron Road	2,876	99	3%
005	Von Sosten Road e/o Mountain House Parkway	1,549	59	4%

Figure 4.1 presents the lane geometrics and traffic control present at the study intersections under Existing conditions. Figure 4.2 presents the peak hour volumes from the turning movement counts that were used to determine Existing conditions intersection LOS. Figure 4.3 presents the Existing Average Daily Traffic counts on the selected roadways.





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COUNTY OF SAN JOAQUIN
HANSEN ROAD CLOSURE STUDY

EXISTING LANE GEOMETRIES & TRAFFIC CONTROL

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FIGURE 4.1

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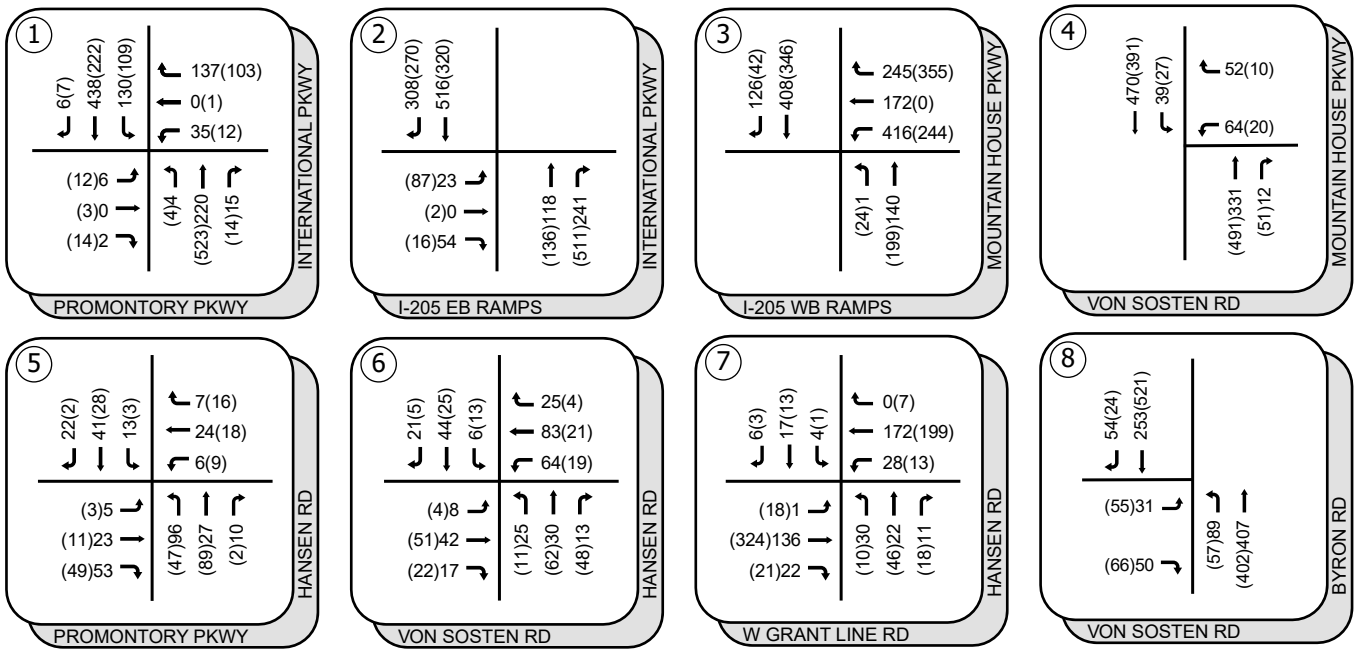
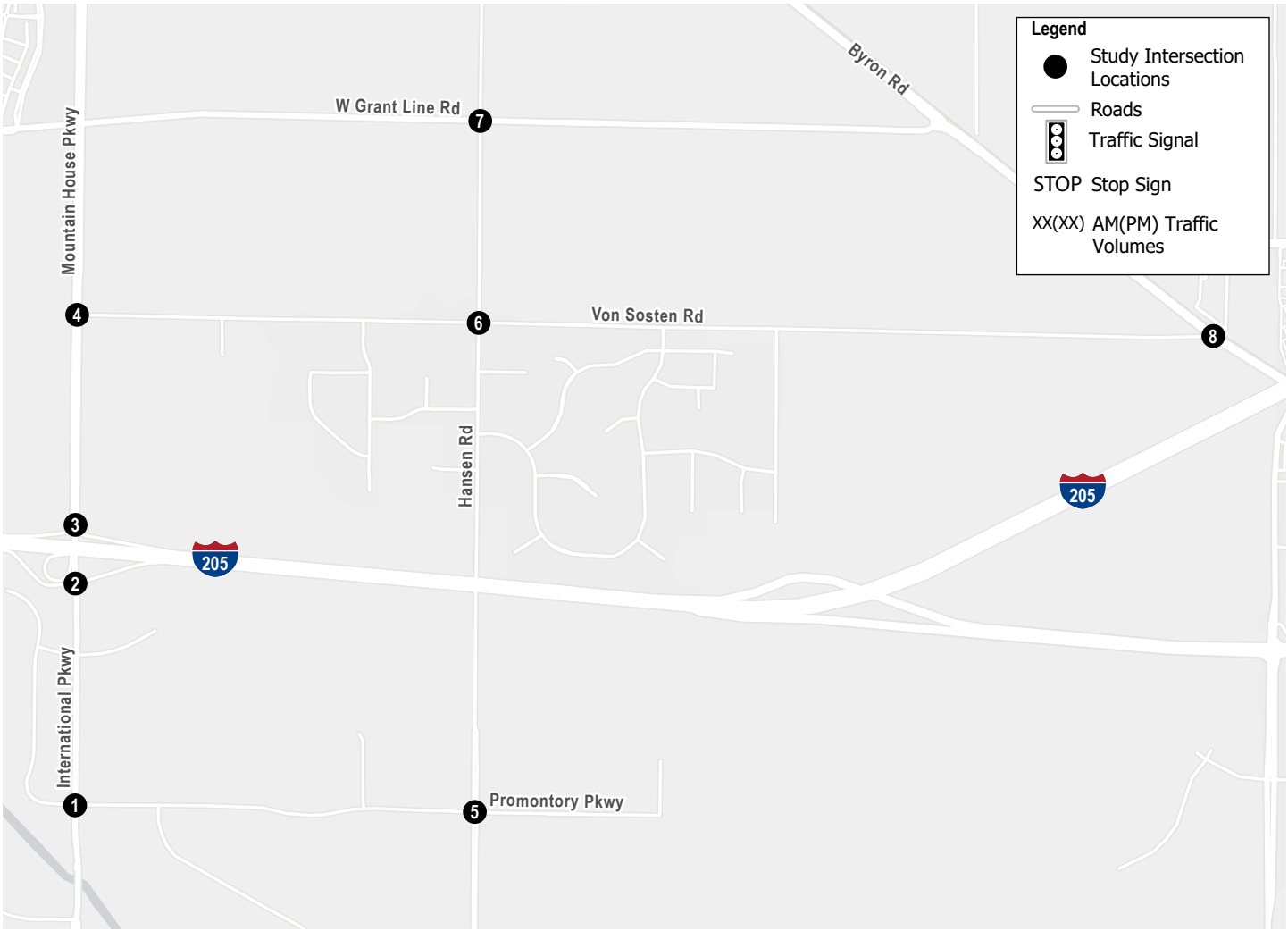
Created by: pthornton





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COUNTY OF SAN JOAQUIN
HANSEN ROAD CLOSURE STUDY

EXISTING PEAK HOUR TRAFFIC VOLUMES

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FIGURE 4.2

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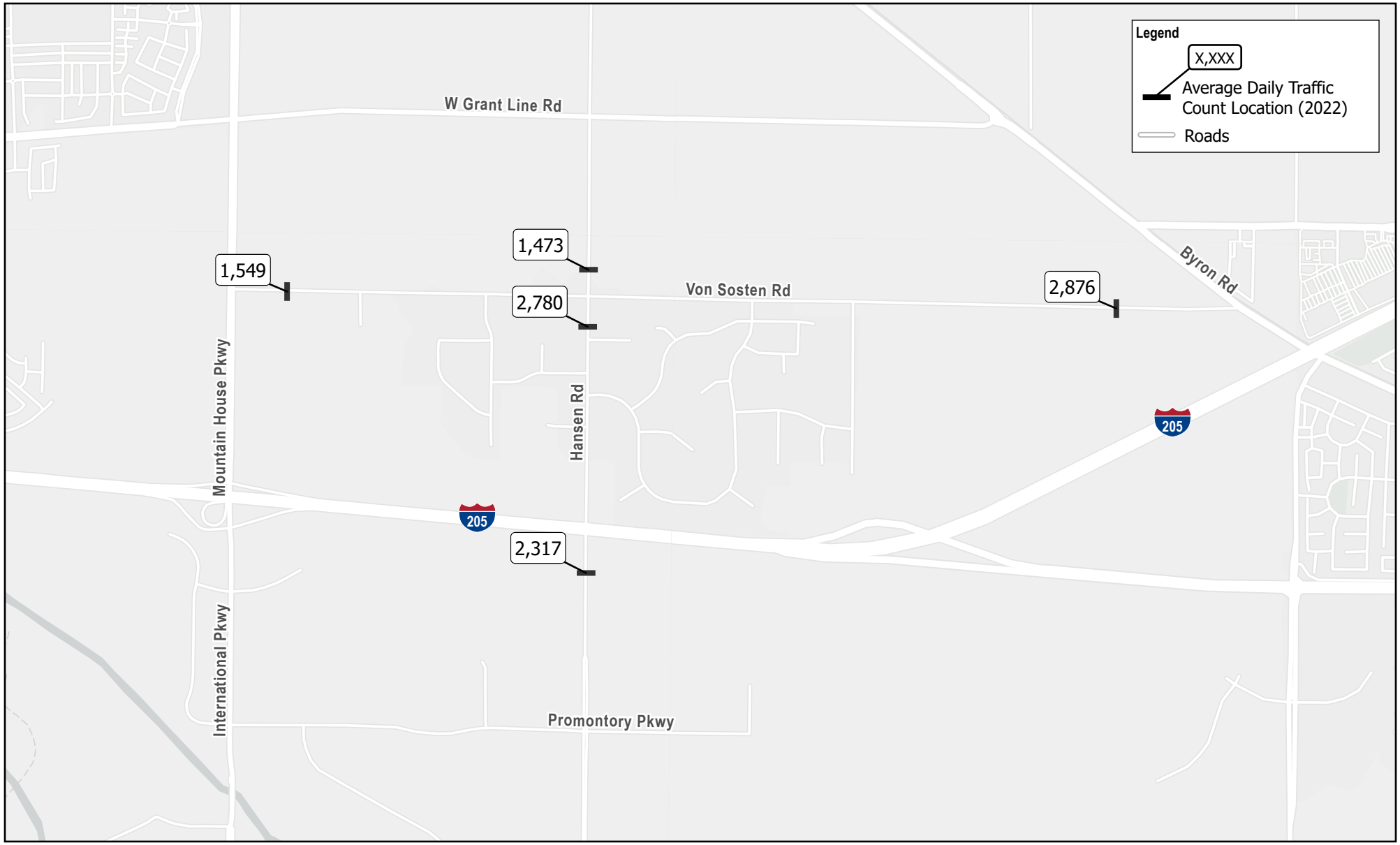

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COUNTY OF SAN JOAQUIN
HANSEN ROAD CLOSURE STUDY

EXISTING AVERAGE DAILY TRAFFIC

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FIGURE 4.3

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4.1 Roadway Volumes by Hour

Figure 4.4 and Figure 4.5 present the existing hourly automobile and heavy vehicle traffic volume totals along Hansen Road south of Von Sosten Road and south of the I-205 overcrossing, with the number of heavy vehicles identified and labeled separately. The graphs also include the total volume of all vehicles by direction represented by the lines.

Figure 4.4 Hourly Roadway Volumes – Hansen Road south of Von Sosten Road

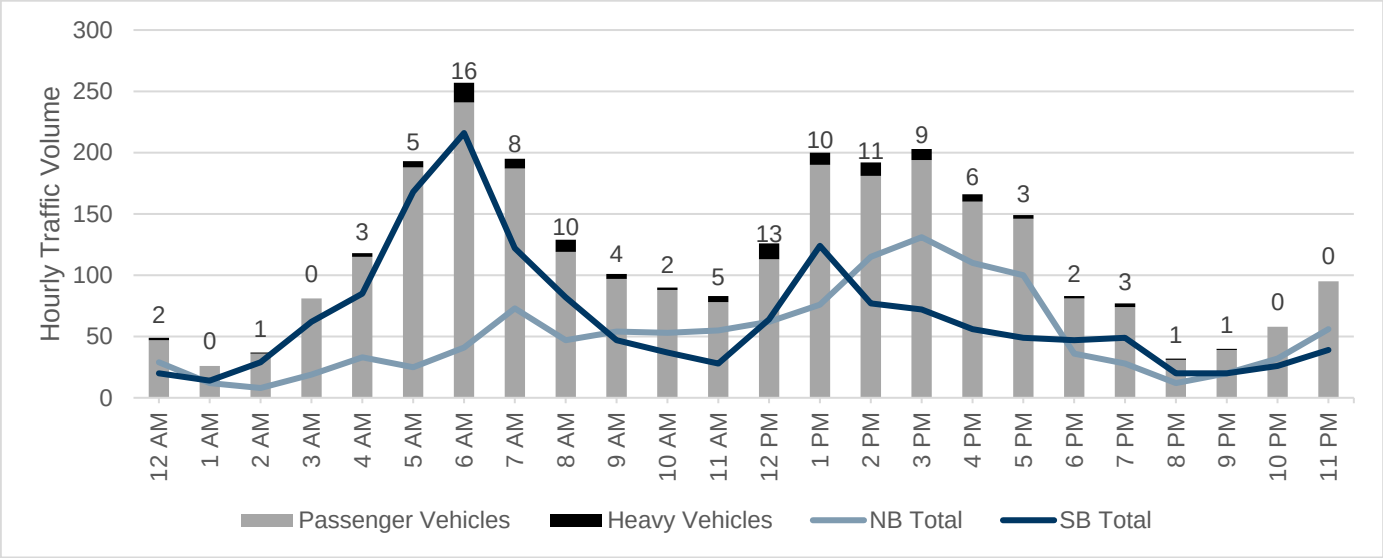
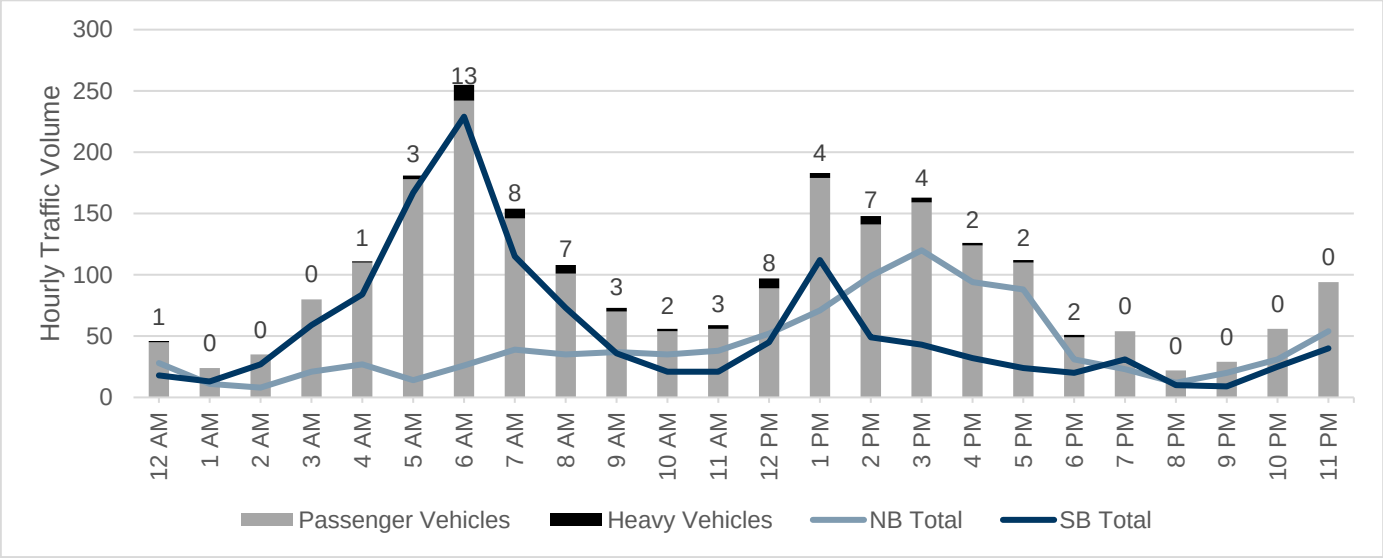


Figure 4.5 Hourly Roadway Volumes – Hansen Road south of I-205 Overcrossing



The majority of the heavy vehicles were Vehicle Class 5 (89% south of I-205 and 87% south of Von Sosten), which includes heavy pick-up trucks and delivery-type vehicles, some of which are locally generated. Based on the count on Hansen Road south of the I-205 overcrossing, there were only a total of 5 heavy trucks that were Class 6 or higher (3 axles or more) over the course of the day.

As presented in the graphs above, the AM peak hour has the highest number of heavy vehicles travelling southbound through Hansen Road, making up 5-6% of the total roadway traffic volume during that hour. In the middle of the day (12:00 pm) there was a lower amount of traffic volume in total, but the relative percentage of heavy vehicles is higher

with around 8-10% of the volume being truck traffic. The afternoon peak periods between 1:00-3:00 pm experienced heavy vehicle percentages ranging from 3-6% of the total traffic volume on Hansen Road.

4.1.1 Peak Hour Adjustment

As previously described, the AM and PM peak hours from the roadway count data show the highest peak hours around 5:30 am and between 1:30 and 3:30 pm. This does not coincide with the intersection turning movement count data, which were collected from 7:00-9:00 am and from 4:00-6:00 pm. Table 4.4 presents the volume comparison between the earlier peak hours (roadway peak) and the peak hour from the turning movement count (TMC), based on the traffic volume from the roadway count data. The table presents the adjustment factor for each location, or how much the roadway peak is higher than the intersection count peak, and the average adjustment factors for both AM and PM peak hours. The average factor for the AM peak does not include Hansen Road south of I-205 because it is an outlier in determining the average adjustment, and the TMC peak volumes for this location were based on the intersection of Hansen/Promontory. These average adjustment factors of 1.21 for the AM and 1.35 for the PM peak hours were applied to all study intersection volumes across all scenarios evaluated, to represent the approximate actual peak hours, and serve as a sensitivity test to conservatively identify improvement needs at locations which may have volume fluctuations. The intersection peak hour volume figures presented throughout this study represent the unadjusted volumes, however the intersection LOS analysis is presented for both unadjusted and adjusted peak hour volumes.

Table 4.4 Peak Hour Roadway Volumes and Adjustment Factor

	AM Peak Hours			PM Peak Hours		
Roadway Count Location	Roadway Peak	TMC[1] Peak	AM Factor	Roadway Peak	TMC Peak	PM Factor
Hansen, s/o I-205 Overpass	259	108	2.40	194	126	1.54
Hansen, s/o Von Sosten	266	195	1.36	223	166	1.34
Hansen, n/o Von Sosten	123	118	1.04	159	103	1.54
Von Sosten Rd w/o Byron Rd	286	233	1.23	225	202	1.11
Von Sosten Rd e/o Mountain House Pkwy	172	141	1.22	129	105	1.23
		Average:	**1.21**		Average:	**1.35**

1. TMC = turning movement count

4.2 Roadway Operations

Table 4.5 presents the total daily volume (sum of both directions of travel) and resulting LOS at study roadway segments under Existing conditions. As presented in Table 4.5, all study roadway segments operate at acceptable LOS under Exiting conditions.

Table 4.5 Roadway Level of Service – Existing Conditions

ID	Road Name	Location	Facility Type	Target LOS	NB/EB Volume	SB/WB Volume	Total Volume	LOS
1	Hansen Road	south of I-205 overcrossing	Local Residential	C	1,014	1,303	2,317	C or better
2	Hansen Road	south of Von Sosten Road	Local Residential	C	1,227	1,553	2,780	C or better
3	Hansen Road	north of Von Sosten Road	Collector	C	693	780	1,473	C or better

ID	Road Name	Location	Facility Type	Target LOS	NB/EB Volume	SB/WB Volume	Total Volume	LOS
4	Von Sosten Road	west of Byron Road	Collector	C	1,315	1,561	2,876	C or better
5	Von Sosten Road	east of Mountain House Parkway	Collector	C	755	794	1,549	C or better

Notes:
1. NB = northbound, EB = eastbound, SB = southbound, WB = westbound

4.3 Intersection Operations

Table 4.6 presents the total volumes and heavy vehicles (HV) entering each study intersection, with the associated peak hour factor (PHF) at the study locations.

Table 4.6 Intersection Peak Hour Volume Information

		AM Peak				PM Peak			
			Volumes				Volumes		
ID	Location	PHF	Total	HV	HV%	PHF	Total	HV	HV%
1	Mountain House Pkwy & Promontory Pkwy	0.86	994	315	32%	0.89	1,024	221	22%
2	Mountain House Pkwy & I-205 EB Ramps	0.89	1,220	302	25%	0.92	1,340	217	16%
3	Mountain House Pkwy & I-205 WB Ramps	0.88	1,464	194	13%	0.93	1,205	142	12%
4	Mountain House Pkwy & Von Sosten Rd	0.91	968	104	11%	0.99	990	65	7%
5	Hansen Rd & Promontory Pkwy	0.92	327	84	26%	0.85	277	36	13%
6	Hansen Rd & Von Sosten Rd	0.75	378	11	3%	0.94	285	9	3%
7	Hansen Rd & Grant Line Rd	0.79	449	11	2%	0.96	673	8	1%
8	Byron Rd & Von Sosten Rd	0.93	884	22	2%	0.94	1,125	23	2%

Table 4.7 presents the delay (in sec/veh) and resulting LOS at study intersections under Existing conditions.

Table 4.7 Intersection Level of Service – Existing Conditions

#	Intersection	Control Type[1,2]	Target LOS	AM Peak Hour				PM Peak Hour				Warrant Met?[5]
				Unadjusted		Adjusted		Unadjusted		Adjusted		
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	
1	Mountain House Pkwy & Promontory Pkwy	Signal	D	17.2	B	20.7	C	17.9	B	44.4	D	
2	Mountain House Pkwy & I-205 EB Ramps	Signal	D	4.1	A	4.3	A	5.8	A	6.4	A	
3	**Mountain House Pkwy & I-205 WB Ramps**	**Signal**	**D**	**85.2**	**F**	**133.4**	**F**	22.0	C	26.4	C	
4	Mountain House Pkwy & Von Sosten Rd	Signal	D	6.6	A	6.8	A	5.4	A	5.5	A	
5	Hansen Rd & Promontory Pkwy	Signal	D	18.4	B	18.6	B	14.5	B	14.7	B	
6	Hansen Rd & Von Sosten Rd	AWSC	C	8.7	A	9.4	A	7.7	A	8.2	A	
7	Hansen Rd & Grant Line Rd	AWSC	C	9.1	A	9.9	A	10.3	B	13.8	B	
8	**Byron Rd & Von Sosten Rd**	**TWSC**	**D**	14.0	B	17.0	C	19.7	C	**45.4**	**E**	Yes

Notes:
1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control; RNDBT = Roundabout
2. LOS = Delay based on worst minor street approach for TWSC intersections, and average of all approaches for AWSC, Signal, RNDBT
3. **Bold** = Unacceptable Conditions
4. Warrant = Based on California MUTCD Warrant 3

As presented in Table 4.7, under Existing conditions, Intersection #3 – Mountain House Parkway & I-205 Westbound Ramps operates at deficient LOS F during the AM peak hours, and Intersection #8 – Byron Road & Von Sosten Road operates at deficient LOS E during the PM peak hour. All other study intersections operate within the acceptable threshold during the AM and PM peak hours. Based on discussion with County staff, westbound I-205 during the AM peak hour is congested with vehicles traveling towards the Bay Area, and this interchange is just east of a big merge from I-580. Traffic counts at Intersection #3 show a large number of vehicles taking the westbound off-ramp and continuing straight through the intersection to the westbound on-ramp during the AM peak hour. Intersection #8 does meet the peak hour warrant for a traffic signal under PM peak adjusted volumes.

5. Trip Redistribution with Full Closure

This section identifies the methodologies, assumptions, and estimation of the redistribution of traffic on Hansen Road with the implementation of closing the Hansen Road overcrossing at I-205.

5.1 Methodology with Replica

GHD has applied alternative resources and tools to facilitate an accurate representation of origin-destination (O-D) data for the existing trips along the Hansen Road overcrossing. GHD utilized “big data” from Replica, which uses Location Based Services (LBS) in addition to census data and traffic count information to determine origin-destination data. Replica generates its data using advanced modeling tools that use a composite data source rather than just one data set. This method captures a holistic representation of real-world travel characteristics. Estimations include trips that are tracked from start to finish regardless of jurisdictional boundaries and can be differentiated by trip purpose, travel mode or vehicle type, and trip distance among other metrics. The data included in this evaluation is based on weekday trips from September to November of 2019, which is the latest data available. Note that this data is from before the COVID-19 pandemic, and prior to several truck traffic calming measures implemented by the County.

The Hansen Road overcrossing at I-205 was the point of analysis of traffic origin and destination patterns compiled down to the US Census Block Group level (the lowest level available). The number of trips to and from each block group origin and each block group destination were evaluated for each direction of Hansen Road overcrossing. The trips were also filtered based on vehicle type (mode) to determine the difference in O-D pairs between commercial freight vehicles and private automobiles, given the contrasting natures of the surrounding land uses: warehousing and distribution facilities south of I-205 and the residential community of Lammersville north of I-205.

5.2 Area Aggregation & Trip Distributions

The O-D data for trips at the Hansen Road overcrossing were downloaded and then mapped to the block groups in GIS in order to quickly associate a general direction for each block group based on their location relative to the Hansen Road overcrossing. Letter codes A – F were chosen to represent directions of travel (e.g., north, east, southwest etc.) and general areas of block groups that can be combined from which traffic is coming from or going to. The general areas are as follows:

- Area A: North, including portion of Mountain House and the portion of Lammersville that is west of Hansen Road
- Area B: West (i.e., portion of Mountain House, Ulmar or Bay Area)
- Area C: South or southwest
- Area D: Southeast and areas of Tracy south of Grant Line Road
- Area E: Areas of Tracy north of Grant Line Road and areas further away including Stockton, etc., and the portion of Lammersville that is east of Hansen Road
- Area F: Cordes Ranch warehouses/distribution facilities south of I-205

These letter codes or areas were used to aggregate the O-D data from each block group down to a level which can be applied over the study area. The O-D data by each direction of travel on Hansen Road was combined to develop Daily O-D matrices for Areas A – F, based on the O-D pairs for commercial vehicles (truck traffic) and private autos separately. The O-D matrices were converted from number of trips to a percentage of total traffic to identify the existing percentage trip distribution of traffic on Hansen Road, which is applied to the redistribution of traffic with the Hansen Road overcrossing closure scenario.

Due to the directionality of automobile traffic on Hansen Road not being evenly split between northbound and southbound during the peak hours, utilizing the O-D percentages based on total roadway volume would result in an imbalance between the two directions of travel. Approximately 75% of the traffic on Hansen Road overcrossing is

going southbound in the AM peak and then northbound in the PM peak. Therefore, O-D matrices that are based on each direction of travel (northbound and southbound Hansen Road) were also needed for the peak hour analysis. The peak hour directional O-D percentages were estimated by weighing the bi-directional O-D percentages based on the sum of percentages for each direction. In addition, the peak hour traffic redistribution also needed to consider the existing turning movement volumes as some turning movements to and from Hansen Road or Von Sosten Road were relatively small and may result in a negative value from applying the redistribution without balancing to existing counts. Therefore, the peak hour directional O-D percentages were also balanced with the existing counts and resulted in the northbound AM and PM peak O-D percentages having different values, and the southbound AM and PM peak O-D percentages being balanced with the same values.

Table 5.1 presents the O-D pairs for the truck traffic on the Hansen Road overcrossing which is applied to both daily and peak hour volumes. Table 5.2 presents the O-D pairs for private auto traffic on the Hansen Road overcrossing that is applied to the daily volumes. Note that some cells in these tables have cell values of zero because there is no traffic between those O-D pairs. Tables 5.3 through 5.5 present the directional O-D pairs for the peak hour analyses, only showing the origins and destinations which apply for their respective travel directions. The data presents that most trips travelling through Hansen Road are coming from or going to Areas E and F.

Table 5.1 Origin-Destination Matrix for Trucks (Daily and Peak Hour Volumes)

Origin – Destination pair	% of Trucks Daily
F - A	2%
F - B	5%
F - C	0%
F -D	0%
F - E	93%

Table 5.2 Origin-Destination Matrix for Private Automobiles (Daily volumes)

Origin – Destination pair	% of Auto Daily
A - D	2%
A - F	4%
B - F	1%
C - E	1%
D - A	**9%**
E - C	3%
E - F	50%
F - A	**4%**
F - E	**26%**

Table 5.3 Origin-Destination Matrix for Private Automobiles (Northbound AM Peak)

Origin - Destination	% of Auto Northbound AM
C to E	3%
D to A	12%
D to B	11%
F to A	11%
F to B	33%
F to E	30%

Table 5.4 Origin-Destination Matrix for Private Automobiles (Northbound PM Peak)

Origin - Destination	% of Auto Northbound PM
C to E	2%
D to A	13%
D to B	10%
F to A	31%
F to E	44%

Table 5.5 Origin-Destination Matrix for Private Automobiles (Southbound AM & PM Peaks)

Origin - Destination	% of Auto Southbound
A to D	3%
A to F	37%
B to F	2%
E to C	5%
E to F	53%

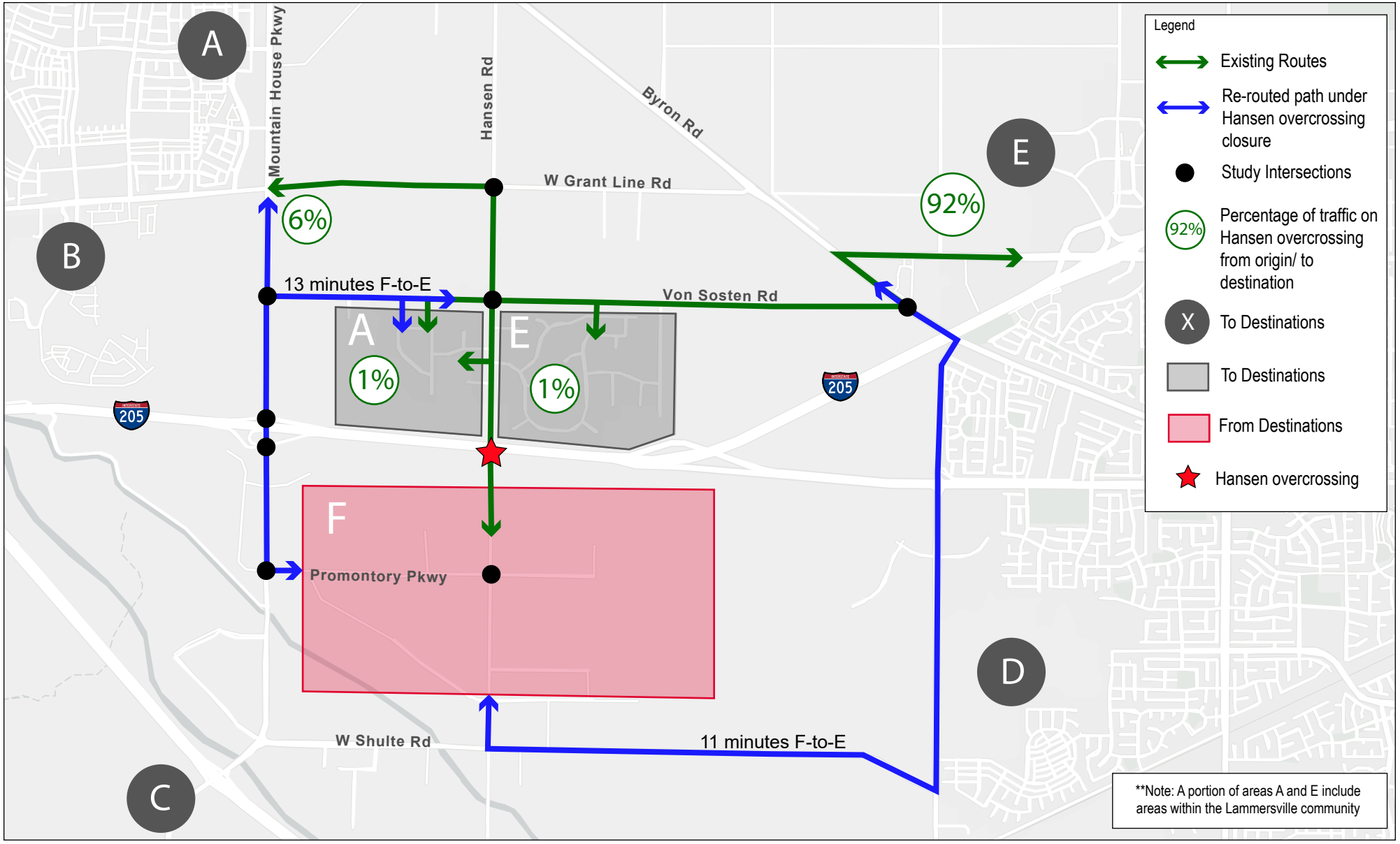
In Table 5.2, most of the daily O-D pairs have similar corresponding percentages (e.g., A to F is 4% and F to A to 4%), however there is a stark difference between areas E and F. Private auto trips from E to F is 50%, but from F to E is only 26% (which equates to 52% of the E to F distribution). Further investigation comparing against the traffic counts on Hansen Road overcrossing shows that 217 private auto vehicles are travelling southbound in the AM peak hour, but the return northbound in the PM peak hour is 118 vehicles, which is 54% of the southbound AM traffic. The traffic count data verifies that a portion of the southbound traffic on Hansen Road in the AM peak does not return northbound in the PM peak. This is likely due to congestion on I-205 which occurs in the AM peak going westbound, which creates a strong incentive for drivers to seek an alternate route (Hansen Road). In the PM peak hour, the Altamont Pass meters eastbound traffic on I-205 to some extent, so using I-205 causes less delay and less incentive to use Hansen Road. Therefore, this difference in O-D pairs seems reasonable.

The truck and peak hour matrices are presented in the following Figure 5.1 through Figure 5.4. These figures present the trip redistribution percentages, the existing route from each O-D pair along Hansen Road, and the rerouted paths for each O-D pair. Figures which show more than one route option also present the approximated travel time (based on Google Maps). Trips for multiple routes were redistributed utilizing an approximate 60/40 split because the difference in the approximate travel time is minimal however more vehicles would likely take the faster route. Since areas A and E include portions of the Lammersville community based on the limitations of the block group geographies, trips to and from those areas were approximated based on existing traffic data. Trips which pass through

the study intersection within Area F were redistributed and approximated based on the existing count data, as the exact origin or destination of the trips within Area F is unknown.

Based on the O-D data downloaded from Replica, it is estimated that 100% of the commercial vehicle truck traffic on the Hansen Road overcrossing has its origin or destination in Area F, therefore only one figure is needed to show the O-D relationships. The origin and destination percentages shown in Figure 5.1 are the combined O-D pairs from Table 5.1. The subsequent figures presenting the private auto trips represent the percentage of trips originating from the respective areas for the peak hour analysis.

For automobile traffic on the Hansen Road overcrossing, an estimated 92% of the southbound traffic (non-trucks) is terminating in the Cordes Ranch Area (and includes the distribution areas southwest of Schulte Rd because of the block group geometry limitations), based on the data from Replica. That would equate to approximately 1,161 automobiles (1,303 ADT – 41 heavy vehicles southbound, then x 0.92), which equates to **75%** of the southbound traffic on Hansen Road south of Von Sosten (1,161 / 1,553) going to Area F.



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COUNTY OF SAN JOAQUIN
HANSEN ROAD
CLOSURE STUDY

TRUCK TRAFFIC ONLY - AREA F

Project No. **12571422**
Revision No. **-**
Date **Feb 2022**

FIGURE 5.1

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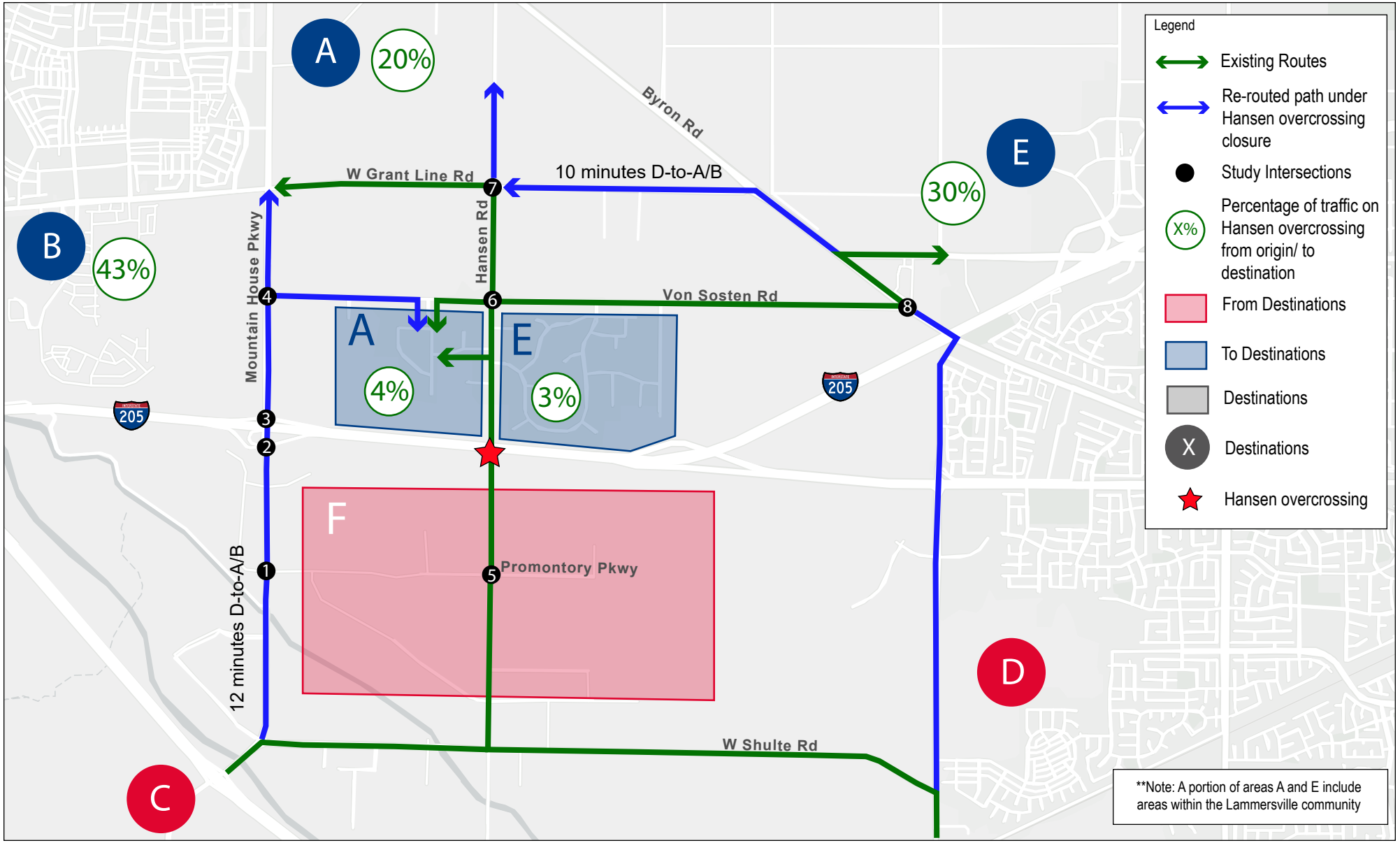

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COUNTY OF SAN JOAQUIN
HANSEN ROAD
CLOSURE STUDY

PRIVATE AUTO TRAFFIC BY DIRECTION NORTHBOUND AM

Project No. **12571422**
Revision No. **-**
Date **March 2022**

FIGURE 5.2

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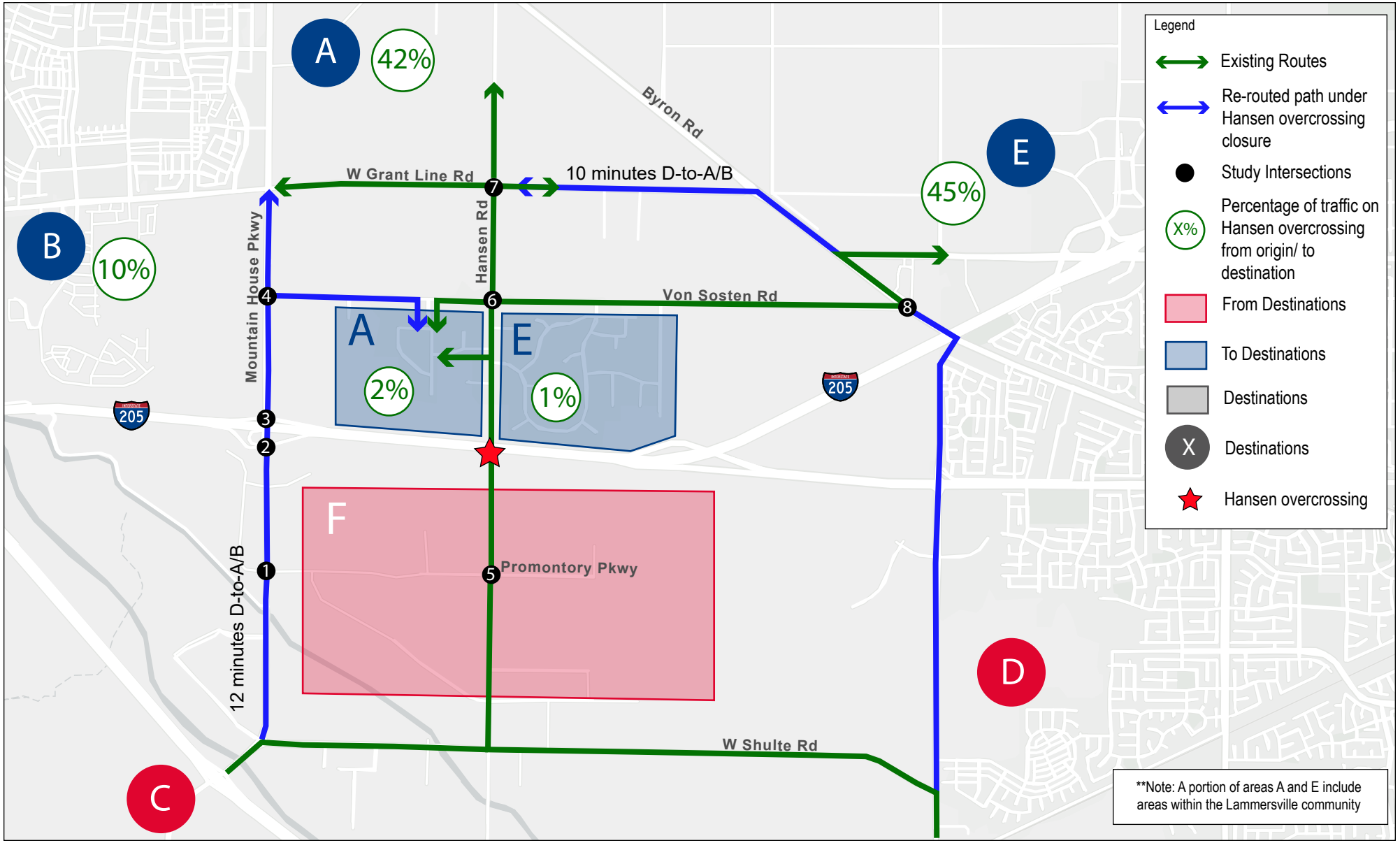

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COUNTY OF SAN JOAQUIN
HANSEN ROAD
CLOSURE STUDY

PRIVATE AUTO TRAFFIC BY DIRECTION NORTHBOUND PM

Project No. **12571422**
Revision No. **-**
Date **March 2022**

FIGURE 5.3

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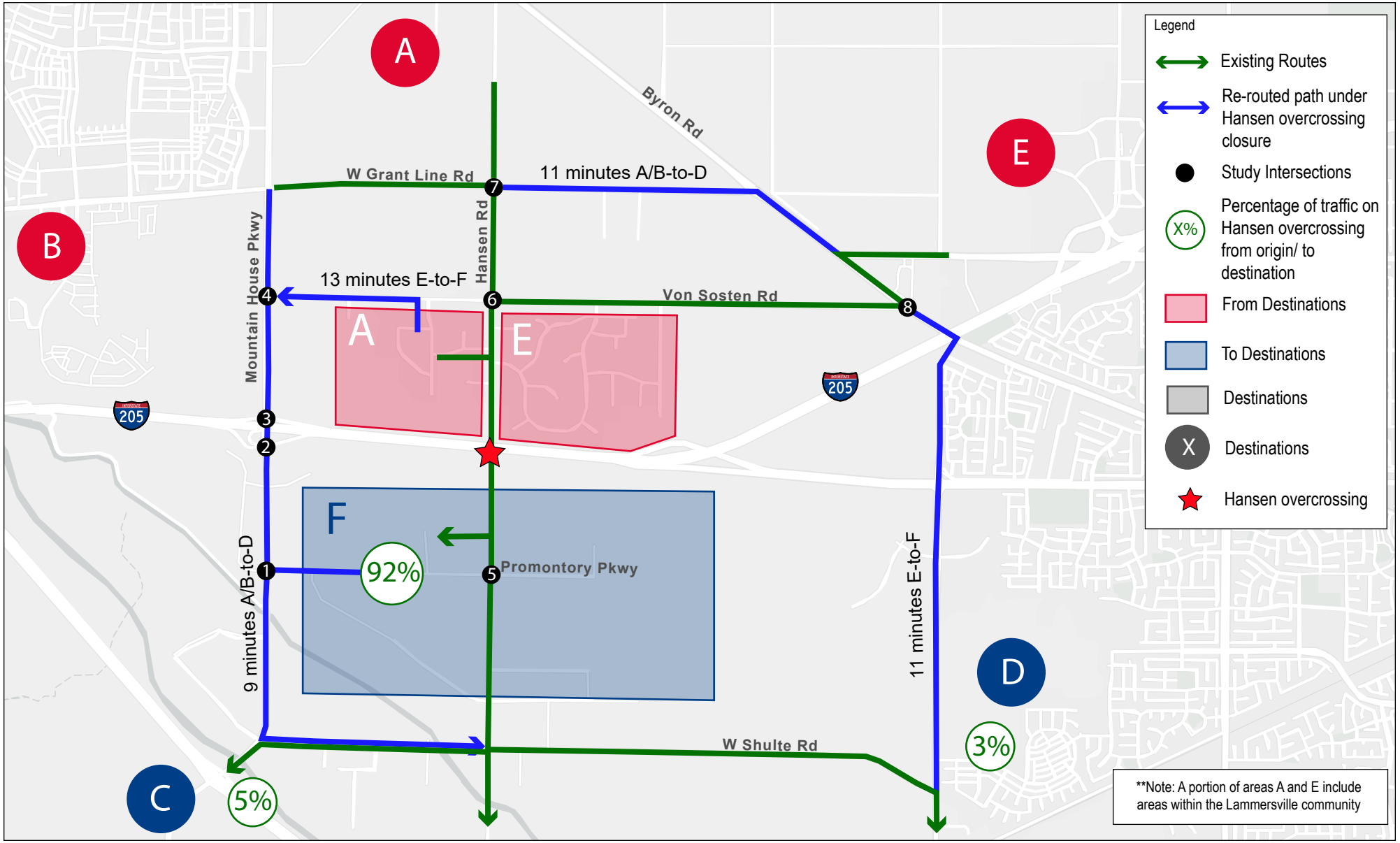

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COUNTY OF SAN JOAQUIN
HANSEN ROAD
CLOSURE STUDY

PRIVATE AUTO TRAFFIC BY DIRECTION SOUTHBOUND AM & PM

Project No. **12571422**
Revision No. **-**
Date **March 2022**

FIGURE 5.4

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Data source: Light Gray Base: San Joaquin County GIS/Planning, California State Parks, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDARoads: TIGER, 2021. Created by: pthornton

6. Existing with Full Closure Conditions

Existing with Full Closure conditions represent transportation facilities serving the study with the full closure of the Hansen Road overcrossing in place. As described previously in Chapter 5, instead of using the overcrossing, traffic would travel along Mountain House Parkway and Lammers Road to access the areas to the north and south of I- 205. The daily and peak hour trips which cross Hansen Road overcrossing under Existing conditions are redistributed through the study locations based on their O-D pairs previously described. The resulting traffic operations with the closure of the Hansen Road overcrossing and associated redistribution of traffic is presented below. Figure 6.1 presents the Existing with Full Closure average daily traffic volumes. Figure 6.2 presents the Existing with Full Closure peak hour volumes at the study intersections.

6.1 Roadway Operations

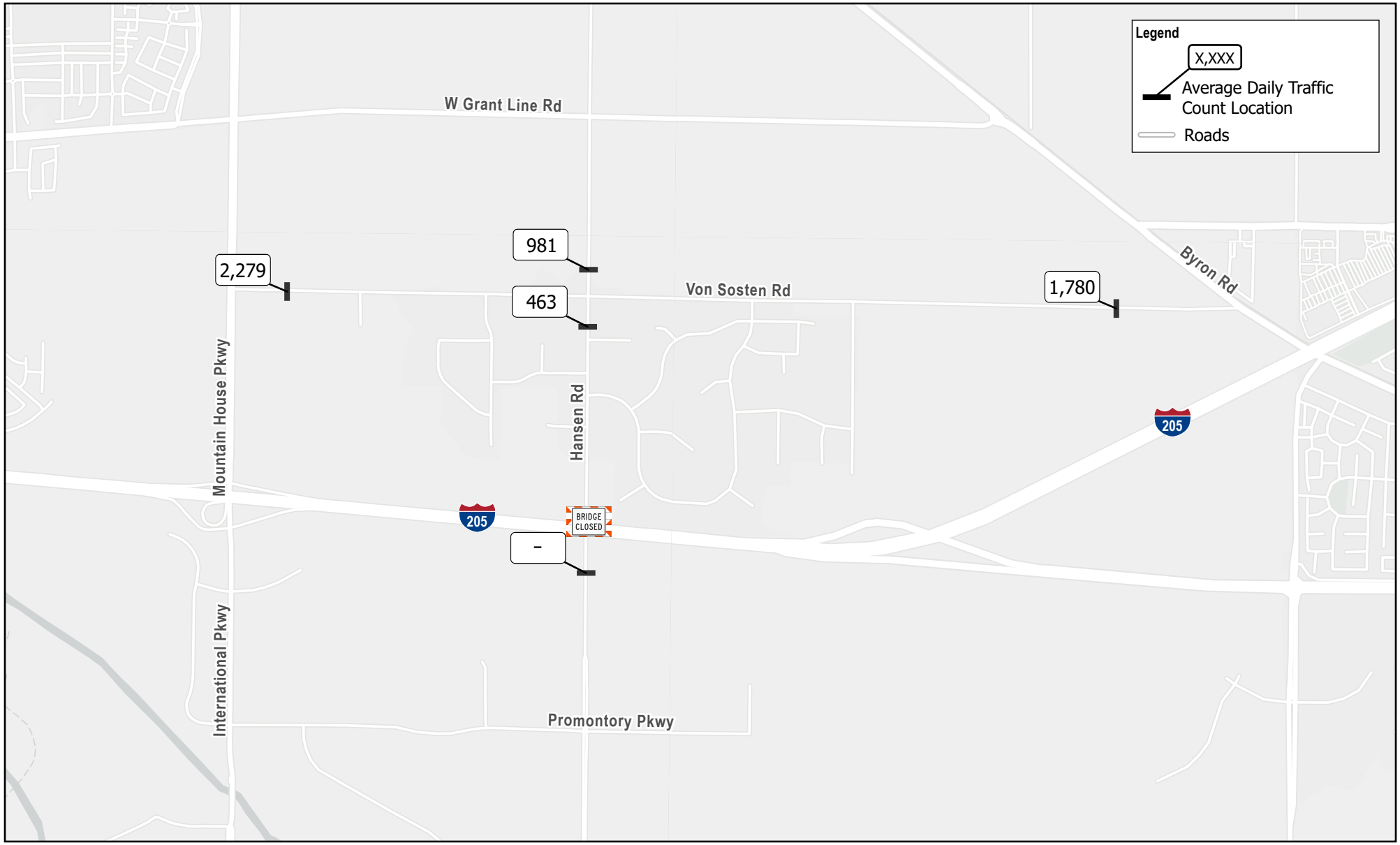
Table 6.1 presents the total daily volume (sum of both directions of travel) and resulting LOS at study roadway segments under Existing conditions with Full Closure. As presented in Table 6.1, all study roadway segments are projected to operate at acceptable LOS.

Table 6.1 Roadway Level of Service – Existing with Full Closure Conditions

ID	Road Name	Location	Facility Type	Existing Daily Volume			Redistributed			Existing with Closure			LOS	% Change		
				NB/EB	SB/WB	Total	NB/EB	SB/WB	Total	NB/EB	SB/WB	Total		NB/EB	SB/WB	Total
1	Hansen Road	south of I-205 overcrossing	Local Residential	1,014	1,303	**2,317**	(1,014)	(1,303)	**(2,317)**	-	**-**	**-**	C or better	-100%	-100%	-100%
2	Hansen Road	south of Von Sosten Road	Local Residential	1,227	1,553	**2,780**	(1,014)	(1,303)	**(2,317)**	213	250	**463**	C or better	-83%	-84%	-83%
3	Hansen Road	north of Von Sosten Road	Collector	693	780	**1,473**	(337)	(155)	**(492)**	356	625	**981**	C or better	-49%	-20%	-33%
4	Von Sosten Road	west of Byron Road	Collector	1,315	1,561	**2,876**	(406)	(689)	**(1,096)**	909	872	**1,780**	C or better	-31%	-44%	-38%
5	Von Sosten Road	east of Mountain House Parkway	Collector	755	794	**1,549**	271	460	**730**	1,026	1,254	**2,279**	C or better	36%	58%	47%

Notes:
1. NB = northbound, EB = eastbound, SB = southbound, WB = westbound

In summary, all study roadway segments are projected to continue to operate at LOS C or better with the Full Closure. Von Sosten Road east of Mountain House Parkway (and adjacent to the Elementary School) is anticipated to increase by 47% with the closure, and Von Sosten Road west of Byron Road is anticipated to decrease by 38%. This is largely due to the relatively high volume of cut-through traffic serving the Cordes Ranch area being rerouted via Lammers Road to the east and Mountain House Parkway to the west.



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COUNTY OF SAN JOAQUIN
HANSEN ROAD CLOSURE STUDY

EXISTING WITH FULL CLOSURE OF HANSEN ROAD OVERCROSSING AVERAGE DAILY TRAFFIC

Project No. **12571422**
Revision No. **-**
Date **March 2022**

FIGURE 6.1

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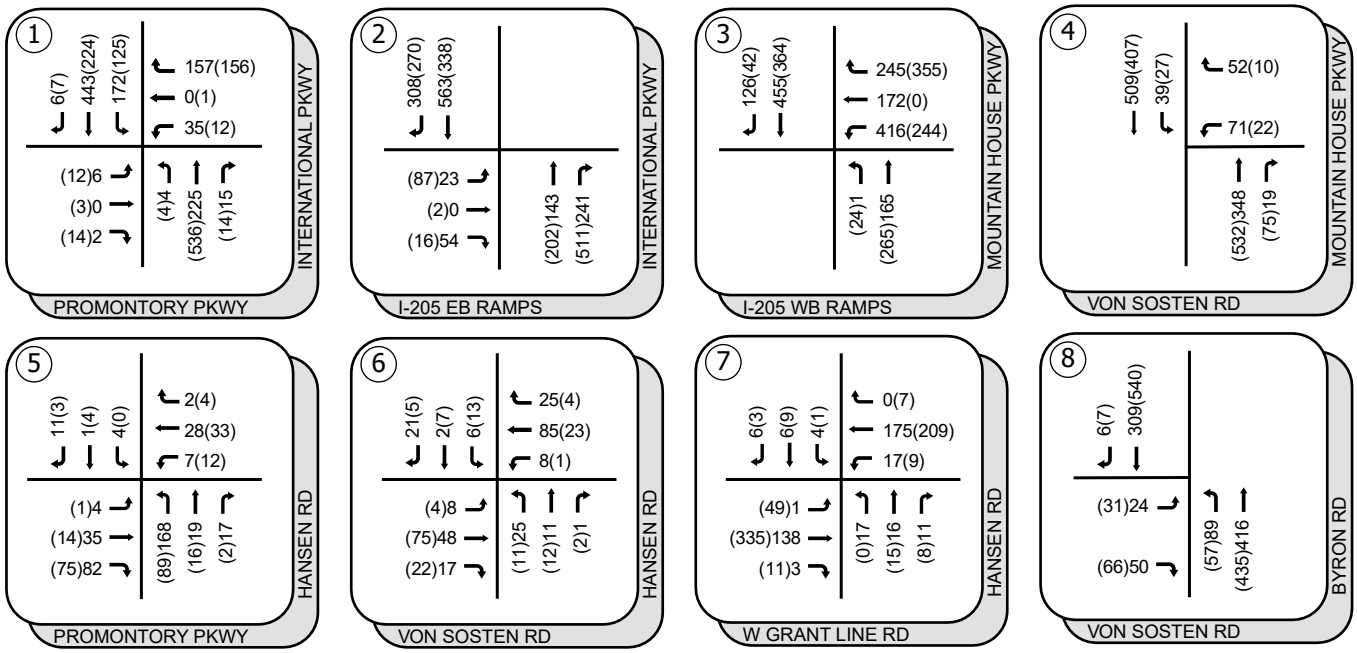

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COUNTY OF SAN JOAQUIN
HANSEN ROAD CLOSURE STUDY

EXISTING WITH FULL CLOSURE OF HANSEN ROAD OVERCROSSING PEAK HOUR TRAFFIC VOLUMES

Project No. **12571422**
Revision No. **-**
Date **March 2022**

FIGURE 6.2

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Created by: pthornton

6.2 Intersection Operations

Table 6.2 presents the delay (in sec/veh) and resulting LOS at study intersections under Existing with Full Closure conditions.

Table 6.2 Intersection Level of Service – Existing with Full Closure Conditions

#	Intersection	Control Type[1,2]	Target LOS	AM Peak Hour				PM Peak Hour			
				Unadjusted		Adjusted		Unadjusted		Adjusted	
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	**Mountain House Pkwy & Promontory Pkwy**	**Signal**	**D**	30.5	C	47.4	D	23.0	C	**63.2**	**E**
2	Mountain House Pkwy & I-205 EB Ramps	Signal	D	4.0	A	4.2	A	5.5	A	6.1	A
3	**Mountain House Pkwy & I-205 WB Ramps**	**Signal**	**D**	**81.9**	**F**	**131.7**	**F**	20.8	C	26.0	C
4	Mountain House Pkwy & Von Sosten Rd	Signal	D	6.6	A	6.9	A	5.4	A	5.5	A
5	Hansen Rd & Promontory Pkwy	Signal	D	17.7	B	17.9	B	13.9	B	15.5	B
6	Hansen Rd & Von Sosten Rd	AWSC	C	7.8	A	8.2	A	7.4	A	7.7	A
7	Hansen Rd & Grant Line Rd	AWSC	C	8.8	A	9.4	A	10.5	B	14.1	B
8	Byron Rd & Von Sosten Rd	TWSC	D	13.8	B	16.5	C	17.3	C	30.2	D

Notes:
1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control; RNDBT = Roundabout
2. LOS = Delay based on worst minor street approach for TWSC intersections, and average of all approaches for AWSC, Signal, RNDBT
3. **Bold** = Unacceptable Conditions

As presented in Table 6.2, under Existing with Full Closure conditions, Intersection #1 – Mountain House Parkway & Promontory Parkway is anticipated to operate at LOS E during the adjusted PM peak hour, and Intersection #3 – Mountain House Parkway & I-205 Westbound Ramps is anticipated to continue to operate at deficient LOS F during the AM peak hours. All other study intersections operate within the acceptable threshold during the AM and PM peak hours. The only significant change to the intersection operations due to the overcrossing closure compared to Existing Conditions is at Intersection #1. However, the current construction to widen Mountain House Parkway/International Parkway to two lanes in each direction and optimizing the signal timings will result in acceptable operations at this intersection. Additionally, a couple of intersections, including Intersection #3 and Intersection #8 experienced less delay because more traffic is being added to non-critical movements.

6.3 One-Way Closure

The County has implemented a pilot project in which Hansen Road southbound was partially closed between Von Sosten Road to Los Positas Way and across the Hansen Road overcrossing, with northbound travel permitted. The pilot project was implemented on January 20, 2022, with temporary barricades, signage, and striping, and the County collected traffic volume and speed data over a 5-week period with the one-way closure. Table 6.3 presents the summary of the collected traffic data pre-closure (January) and during the partial closure along the study roadways, including 85th percentile speeds for each direction of travel and the percent change compared to the pre-closure volumes. Some cells are blank because of errors in the data including if tubes were relocated, data loss, or outliers which were verified with recorded video footage by the County.

Table 6.3 *One-way Closure Volumes Detail*

Location		Dir.	Pre-Closure Jan. 2022	One-Way Closure Counts: Week 1 Jan. 24 - 28	Week 2 Jan 31 - Feb 4	Week 3 Feb 7 - 11	Week 4 Feb 14 - 18	Week 5 Feb 21 - 25	Average One-way Closure	Difference from Jan	% Change from Jan
1. Hansen near I205 overpass	Volume	NB	1,014	882	881	936	911	892	900	(114)	-11%
		SB	1,303	14	9	10	6	4	9	(1,294)	-99%
		TOT	**2,317**	**896**	**890**	**946**	**917**	**896**	**909**	**(1,408)**	**-61%**
	85% Speed	NB		50	48	48	53	53	50		
		SB		32	33	27	34	31	31		
2. Hansen S. of Von Sosten	Volume	NB	1,227	1,131	1,168	1,131	1,180	1,152	1,152	(75)	-6%
		SB	1,553	27	28	11	10	10	17	(1,536)	-99%
		TOT	**2,780**	**1,158**	**1,196**	**1,142**	**1,190**	**1,162**	**1,170**	**(1,610)**	**-58%**
	85% Speed	NB		32	34	34	35	34	34		
		SB		35	32	34	37	39	35		
3. Von Sosten E. of Hansen	Volume	EB	1,315		1,247	1,384	1,344	1,324	1,325	10	1%
		WB	1,561		968	1,062	1,025	952	1,002	(559)	-36%
		TOT	**2,876**		**2,215**	**2,446**	**2,370**	**2,276**	**2,327**	**(549)**	**-19%**
	85% Speed	EB			46	52	52	52	50		
		WB			44	41	40	41	41		
4. Von Sosten W. of Hansen	Volume	EB	755	663	644			782	696	(59)	-8%
		WB	794	1,208	1,202			1,306	1,239	445	56%
		TOT	**1,549**	**1,871**	**1,846**			**2,089**	**1,935**	**386**	**25%**
	85% Speed	EB		34	35			36	35		
		WB		33	32			41	35		

Since the data above represents one-way travel, it does not provide a direct comparison to the estimated traffic conditions with full closure of the overcrossing, however, the rerouting of southbound traffic can be compared against the westbound traffic at the intersection of Von Sosten Road and Hansen Road. The traffic data with the southbound partial closure presented the following:

- Westbound on Von Sosten Road east of Hansen Road,
  - a 36% decrease in traffic as compared to the January 2022 counts pre-closure
- Westbound on Von Sosten Road west of Hansen Road,
  - a 56% increase in traffic as compared to the January 2022 counts pre-closure

The estimated change in traffic volumes on Von Sosten Road (westbound only) with the full closure of the overcrossing is -44% east of Hansen Road and +58% west of Hansen Road (based on the January counts, per Table 6.1). This is relatively close to the change in westbound traffic with the partial closure. Therefore, the traffic data collected during the partial closure substantiates that the methodology for the full closure is reasonable and relatively accurate.

As shown in Table 6.3, Hansen Road northbound and southbound have 85th percentile speeds which exceed the speed limit of 35 mph. Northbound traffic coming from the I-205 overcrossing specifically has speeds of more than 50 mph, and the 85th percentile speed was 50 mph on average over the 5-week period.

7. Forecast Conditions

Forecast conditions represent the forecasted traffic volumes at the study locations ten years in the future. The forecasted conditions analysis utilizes existing geometries and intersection controls; no roadway or intersection improvements were assumed to be in place to assess the sensitivity of rerouted traffic, although the I-205 interchange improvements would likely be in place by then. Based on discussion with County staff, forecasts approximately ten years out was chosen as a reasonable time horizon for foreseeable and anticipated growth within the immediate vicinity including further development of the Cordes Ranch area. The study does not consider the City of Tracy's future Transportation Master Plan (TMP) roadway network improvements in place in order to capture the effect that the closure of the Hansen Road overcrossing has on the surrounding roadways without the TMP improvements, as those improvements have an unknown completion date. Ultimately, the cumulative buildout is expected to operate acceptably with the TMP network in place, as those roadways would serve to divert cut-through traffic on Hansen Road. The SJCOG regional travel demand model was reviewed, however lacks the necessary detail in the Project vicinity to determine appropriate growth. Additionally, the regional model significantly overestimates existing travel conditions along Hansen Road and Von Sosten Road. Therefore, the forecast volumes were determined using data collected from a variety of different sources. The County provided roadway ADT counts for Lammers Road and Schulte Road for the years 2013-2017. These counts were compared to determine a growth rate of 6.8% per year south of I-205. The county also provided ADT counts for Hansen Road and Von Sosten Road for 2019 which were compared to the ADT counts collected by GHD in 2022 which had a growth rate of 5.0% per year north of I-205. Lastly, the peak hour volumes from the 2011 Cordes Ranch EIR were compared to the 2022 peak hour volumes collected for this study, giving a growth rate of 2.5% per year at the I - 205 Ramps. Averaging all these growth rates together gives a growth rate of 4.8% per year for the study area, which was utilized to develop traffic forecasts approximately 10 years out. Forecast conditions traffic operations are presented in this section. Figure 7.1 presents the Forecast conditions average daily traffic volumes. Figure 7.2 presents the Forecast conditions peak hour volumes at the study intersections.

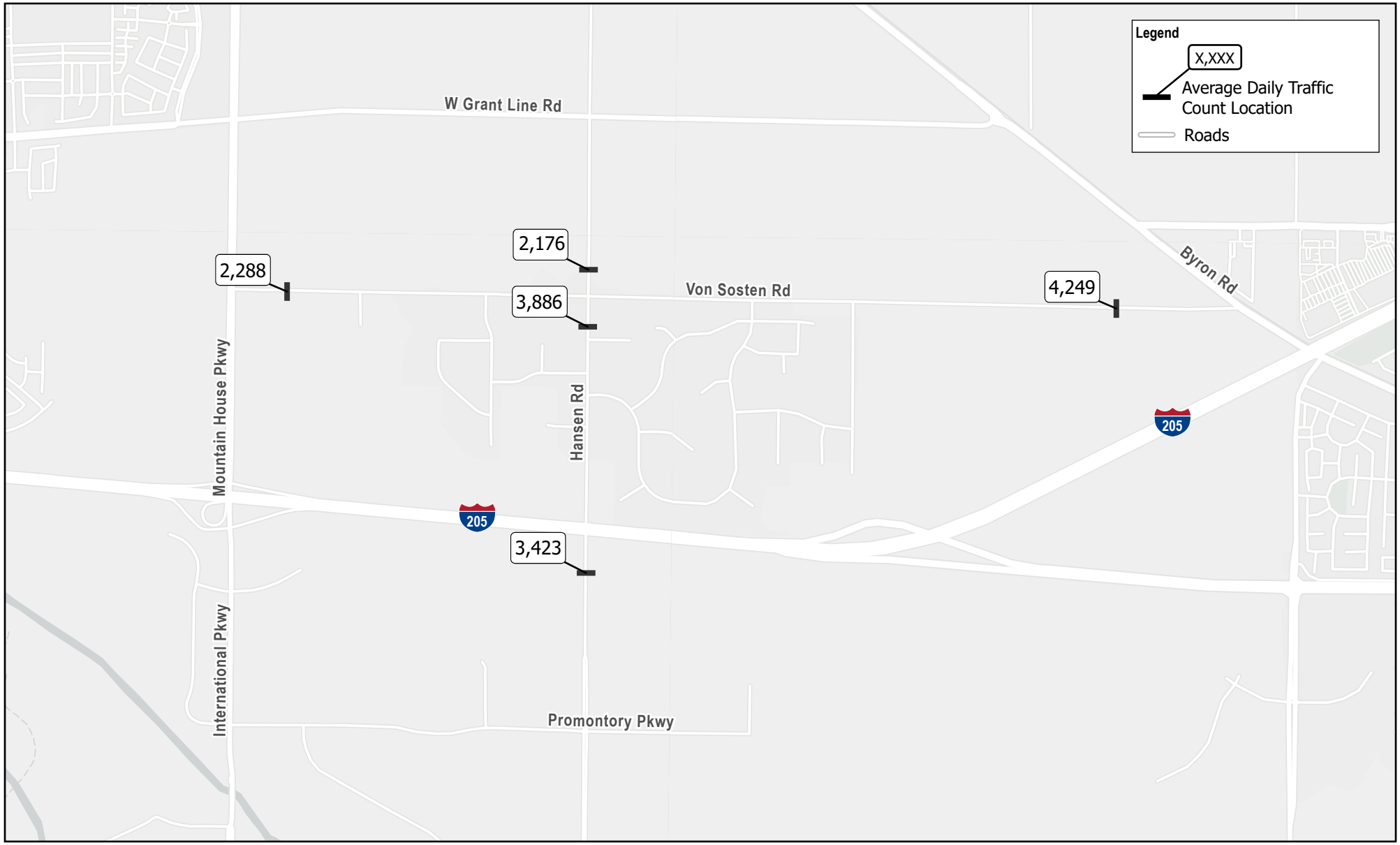
7.1 Roadway Operations

Table 7.1 presents the total daily volume (sum of both directions of travel) and resulting LOS at study roadway segments under Forecast conditions. As presented in Table 7.1, all study roadway segments operate at acceptable LOS under Forecast conditions.

Table 7.1 Roadway Level of Service – Forecast Conditions

#	Road Name	Location	Facility Type	Target LOS	NB/EB Volume	SB/WB Volume	Total Daily Volume	LOS
1	Hansen Road	south of I-205 overcrossing	Local Residential	C	1,498	1,925	3,423	C or better
2	Hansen Road	south of Von Sosten Road	Local Residential	C	1,711	2,175	3,886	C or better
3	Hansen Road	north of Von Sosten Road	Collector	C	1,024	1,152	2,176	C or better
4	Von Sosten Road	west of Byron Road	Collector	C	1,943	2,306	4,249	C or better
5	Von Sosten Road	east of Mountain House Parkway	Collector	C	1,115	1,173	2,288	C or better

Notes:
1. NB = northbound, EB = eastbound, SB = southbound, WB = westbound



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GHD

COUNTY OF SAN JOAQUIN
HANSEN ROAD CLOSURE STUDY

FORECASTED AVERAGE DAILY TRAFFIC

Project No. **12571422**
Revision No. **-**
Date **March 2022**

FIGURE 7.1

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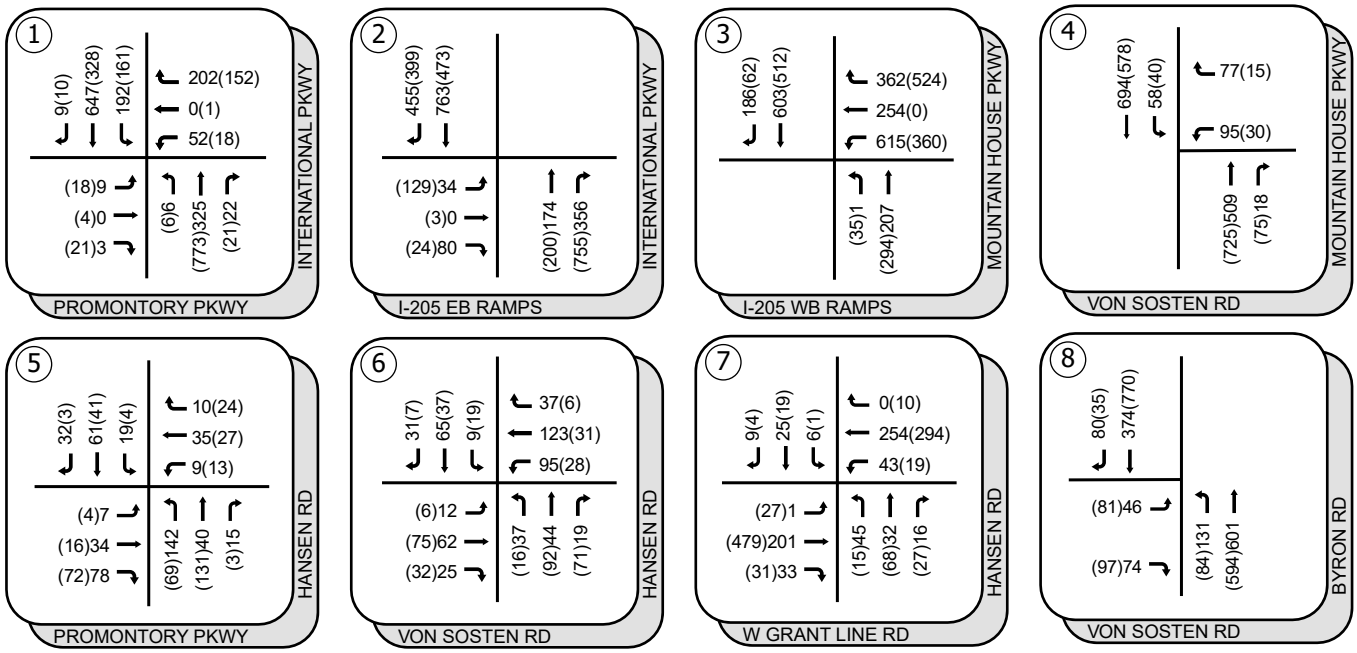
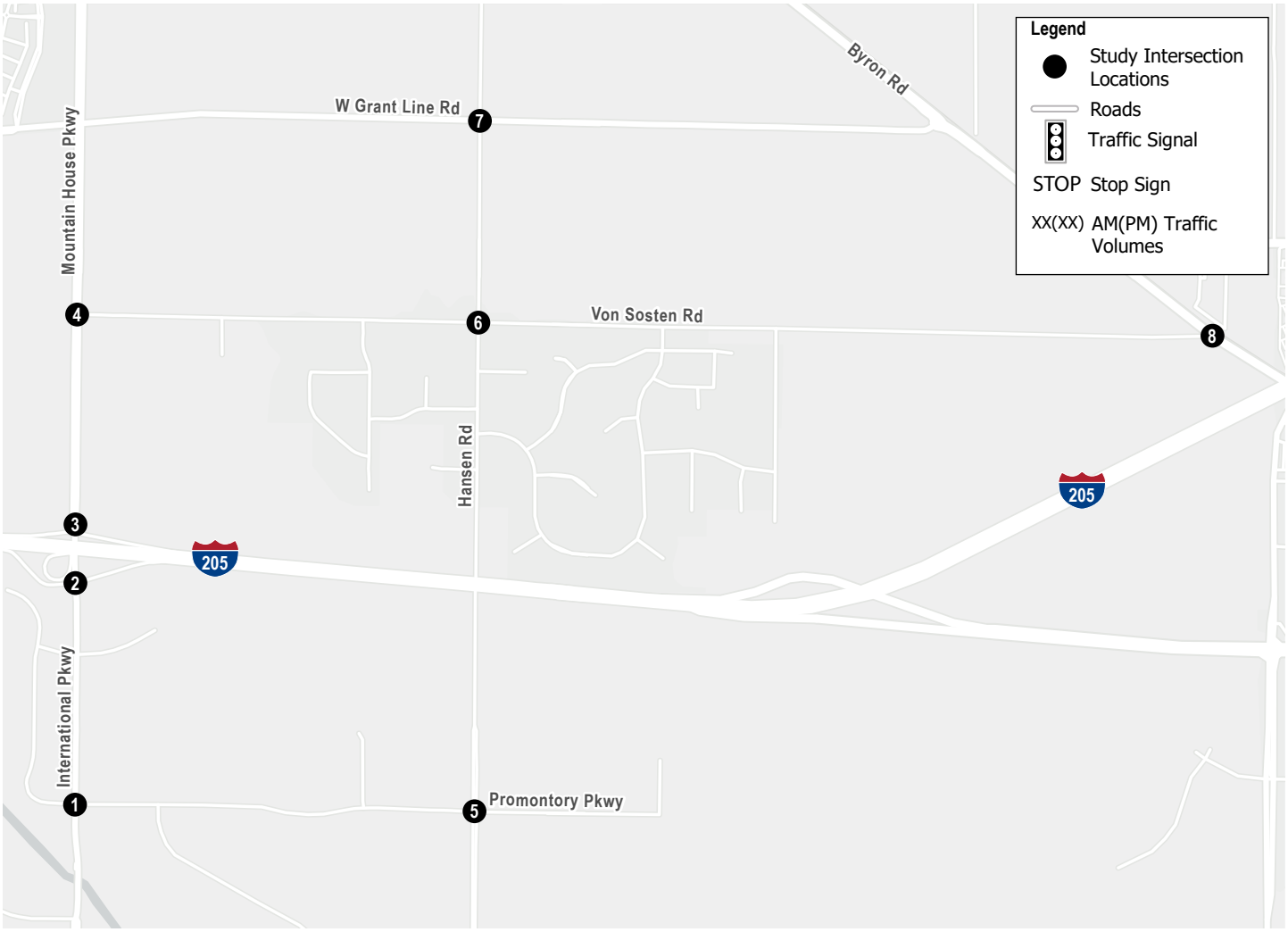
Data source: Light Gray Base: San Joaquin County GIS/Planning, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDARoads, TIGER, 2021; Counts: NDS, 2022.Created by: pthornton





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COUNTY OF SAN JOAQUIN
HANSEN ROAD CLOSURE STUDY

FORECASTED PEAK HOUR TRAFFIC VOLUMES

Project No. **12571422**
Revision No. **-**
Date **March 2022**

FIGURE 7.2

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Data source: Light Gray Base: San Joaquin County GIS/Planning, California State Parks, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc., METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA., Roads: TIGER, 2021. Counts: GHD, 2021.
Created by: pthornton

In summary, all study roadway segments are projected to continue to operate at LOS C or better with the Full Closure under forecasted conditions. Von Sosten Road east of Mountain House Parkway (and adjacent to the Elementary School) is anticipated to increase by 47% with the closure, and Von Sosten Road west of Byron Road is anticipated to decrease by 38%. This is largely due to the relatively high volume and anticipated growth of cut-through traffic serving the Cordes Ranch area being rerouted via Lammers Road to the east and Mountain House Parkway to the west.

7.2 Intersection Operations

Table 7.2 presents the delay (in sec/veh) and resulting LOS at study intersections under Forecast conditions.

Table 7.2 Intersection Level of Service – Forecast Conditions

#	Intersection	Control Type[1,2]	Target LOS	AM Peak Hour					PM Peak Hour				
				Unadjusted		Adjusted		Warrant Met?[5]	Unadjusted		Adjusted		Warrant Met?[5]
				Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS	
1	**Mountain House Pkwy & Promontory Pkwy**	**Signal**	**D**	44.4	D	**86.3**	**F**		**78.5**	**E**	**195.0**	**F**	
2	Mountain House Pkwy & I-205 EB Ramps	Signal	D	4.6	A	5.1	A		7.1	A	10.8	B	
3	**Mountain House Pkwy & I-205 WB Ramps**	**Signal**	**D**	**199.9**	**F**	**276.7**	**F**		27.6	C	41.0	D	
4	Mountain House Pkwy & Von Sosten Rd	Signal	D	7.2	A	7.8	A		5.5	A	5.8	A	
5	Hansen Rd & Promontory Pkwy	Signal	D	18.4	B	18.5	B		14.8	B	15.5	B	
6	Hansen Rd & Von Sosten Rd	AWSC	C	10.5	B	12.7	B		8.3	A	9.2	A	
7	**Hansen Rd & Grant Line Rd**	**AWSC**	**C**	11.4	B	14.5	B		16.2	C	**56.2**	**F**	No
8	**Byron Rd & Von Sosten Rd**	**TWSC**	**D**	24.1	C	**49.1**	**E**	Yes	**74.5**	**F**	**OVR**	**F**	Yes

Notes:
1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control; RNDBT = Roundabout
2. LOS = Delay based on worst minor street approach for TWSC intersections, and average of all approaches for AWSC, Signal, RNDBT
3. **Bold** = Unacceptable Conditions
4. OVR = Delay over 300 seconds
5. Warrant = Based on California MUTCD Warrant 3

As presented in Table 7.2, under Forecast conditions, Intersection #1 – Mountain House Parkway & Promontory Parkway is projected to worsen to LOS F during both AM and PM peak hours under forecasted base conditions, without further improvements, Intersection #3 – Mountain House Parkway & I-205 Westbound Ramps continues to operate at deficient LOS F during the AM peak hour, Intersection #7 – Hansen Road & Grant Line Road is projected to worsen to LOS F during the forecasted adjusted PM peak, and Intersection #8 – Byron Road & Von Sosten Road is projected to operate at deficient LOS E during the adjusted AM peak, and at LOS E and LOS F during the PM peak hours. All other study intersections operate within the acceptable threshold during the AM and PM peak hours. Intersection #8 meets the warrant for a traffic signal (peak hour volume warrant). Intersection #7 does not meet the peak hour warrant for a traffic signal, however Intersection #8 does meet the peak hour warrant for a traffic signal during both adjusted peak hours. For Intersection #1, the improvement to widen Mountain House Parkway/International Parkway to two lanes in each direction, which is currently under construction, and optimizing the signal timings will result in acceptable operations at this intersection.

8. Forecast with Full Closure Conditions

Forecast with Full Closure conditions represent transportation facilities serving the study area with the full closure of the Hansen Road overcrossing in place ten years in the future. The forecasted with closure scenario assumes the same traffic redistribution percentages as existing conditions but applied to the forecasted traffic volumes. The resulting traffic operations with the closure of the Hansen Road overcrossing and associated redistribution of traffic is presented below. Figure 6.1 presents the Forecast with Full Closure average daily traffic volumes. Figure 6.2 presents the Forecast with Full Closure peak hour volumes at the study intersections.

8.1 Roadway Operations

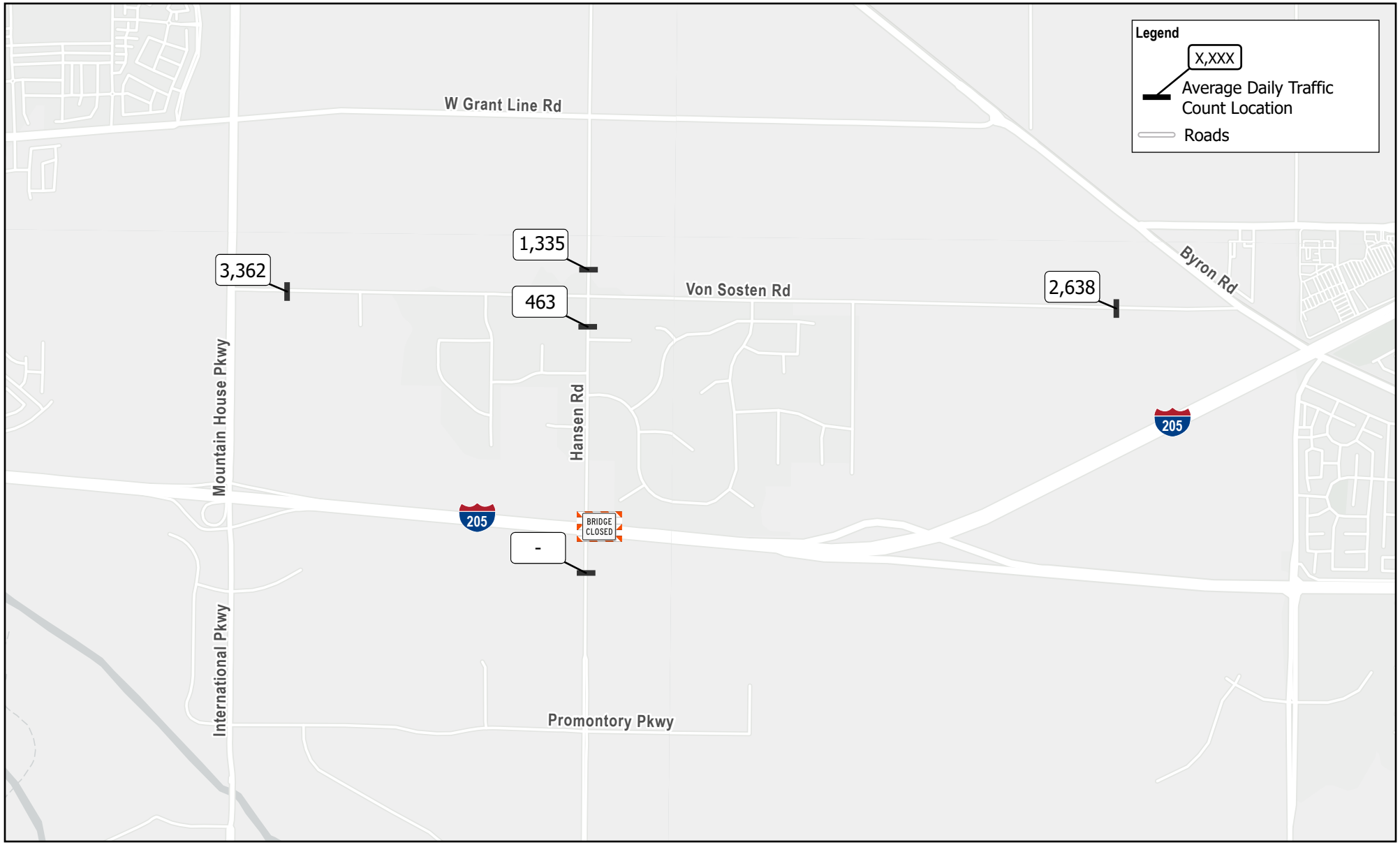
Table 8.1 presents the total daily volume (sum of both directions of travel) and resulting LOS at study roadway segments under Forecast with Full Closure conditions. As presented in Table 8.1, all study roadway segments are projected to operate at acceptable LOS.

Table 8.1 Roadway Level of Service – Forecast with Full Closure Conditions

ID	Road Name	Location	Facility Type	Forecasted Daily			Redistributed			Forecasted with Closure			LOS	% Change		
				NB/EB	SB/WB	Total	NB/EB	SB/WB	Total	NB/EB	SB/WB	Total		NB/EB	SB/WB	Total
1	Hansen Road	south of I-205 overcrossing	Local Residential	1,498	1,925	**3,423**	(1,498)	(1,925)	**(3,423)**	-	**-**	**-**	C or better	-100%	-100%	-100%
2	Hansen Road	south of Von Sosten Road	Local Residential	1,711	2,175	**3,886**	(1,498)	(1,925)	**(3,423)**	213	250	**463**	C or better	-88%	-89%	-88%
3	Hansen Road	north of Von Sosten Road	Collector	1,024	1,152	**2,176**	(657)	(184)	**(841)**	367	968	**1,335**	C or better	-64%	-16%	-39%
4	Von Sosten Road	west of Byron Road	Collector	1,943	2,306	**4,249**	(786)	(825)	**(1,611)**	1,157	1,481	**2,638**	C or better	-40%	-36%	-38%
5	Von Sosten Road	east of Mountain House	Collector	1,115	1,173	**2,288**	524	550	**1,074**	1,639	1,723	**3,362**	C or better	47%	47%	47%

Notes:
1. NB = northbound, EB = eastbound, SB = southbound, WB = westbound

In summary, all study roadway segments are projected to continue to operate at LOS C or better with the Full Closure in the forecasted scenario. Similar to the Existing with Closure conditions, Von Sosten Road east of Mountain House Parkway (and adjacent to the Elementary School) is anticipated to increase by 47%, and Von Sosten Road west of Byron Road is anticipated to decrease by 38%. This is largely due to the relatively high volume of cut-through traffic serving the Cordes Ranch area, that is anticipated to grow, being rerouted via Lammers Road to the east and Mountain House Parkway to the west.



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COUNTY OF SAN JOAQUIN
HANSEN ROAD CLOSURE STUDY

FORECASTED AVERAGE DAILY TRAFFIC WITH FULL CLOSURE OF HANSEN ROAD OVERCROSSING

Project No. **12571422**
Revision No. **-**
Date **March 2022**

FIGURE 8.1

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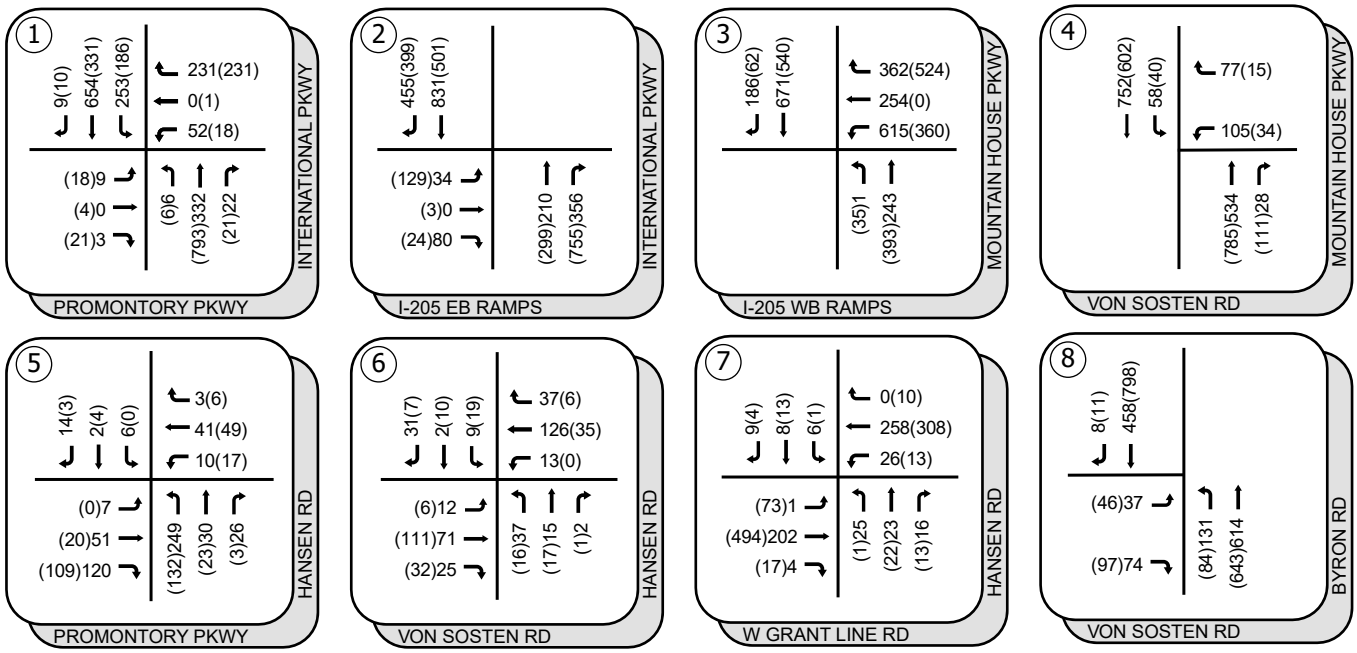

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COUNTY OF SAN JOAQUIN
HANSEN ROAD CLOSURE STUDY

FORECASTED WITH FULL CLOSURE OF HANSEN ROAD OVERCROSSING PEAK HOUR TRAFFIC VOLUMES

Project No. **12571422**
Revision No. **-**
Date **March 2022**

FIGURE 8.2

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Created by: pthornton

8.2 Intersection Operations

Table 8.2 presents the delay (in sec/veh) and resulting LOS at study intersections under Forecast with Full Closure conditions.

Table 8.2 Intersection Level of Service – Forecast with Full Closure Conditions

#	Intersection	Control Type[1,2]	Target LOS	AM Peak Hour					PM Peak Hour				
				Unadjusted		Adjusted		Warrant Met?[5]	Unadjusted		Adjusted		Warrant Met?[5]
				Delay	LOS	Delay	LOS		Delay	LOS	Delay	LOS	
1	**Mountain House Pkwy & Promontory Pkwy**	**Signal**	**D**	**82.1**	**F**	**146.2**	**F**		**106.6**	**F**	**255.2**	**F**	
2	Mountain House Pkwy & I-205 EB Ramps	Signal	D	4.4	A	4.9	A		6.7	A	10.1	B	
3	**Mountain House Pkwy & I-205 WB Ramps**	**Signal**	**D**	**191.0**	**F**	**264.2**	**F**		27.2	C	40.0	D	
4	Mountain House Pkwy & Von Sosten Rd	Signal	D	7.3	A	8.0	A		5.5	A	5.9	A	
5	Hansen Rd & Promontory Pkwy	Signal	D	19.0	B	23.7	C		14.8	B	15.8	B	
6	Hansen Rd & Von Sosten Rd	AWSC	C	8.7	A	9.2	A		7.8	A	8.2	A	
7	**Hansen Rd & Grant Line Rd**	**AWSC**	**C**	10.5	B	12.3	B		16.6	C	**52.4**	**F**	No
8	**Byron Rd & Von Sosten Rd**	**TWSC**	**D**	23.5	C	**44.2**	**E**	Yes	**41.3**	**E**	**259.8**	**F**	Yes

Notes:
1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control; RNDBT = Roundabout
2. LOS = Delay based on worst minor street approach for TWSC intersections, and average of all approaches for AWSC, Signal, RNDBT
3. **Bold** = Unacceptable Conditions
5. Warrant = Based on California MUTCD Warrant 3

As presented in Table 8.2, under Forecast with Full Closure conditions, Intersection #1 – Mountain House Parkway & Promontory Parkway continues to operate at deficient LOS F during the AM and PM peak hours, Intersection #3 – Mountain House Parkway & I-205 Westbound Ramps continues to operate at deficient LOS F during the AM peak hours, Intersection #7 – Hansen Road & Grant Line Road continues to operate at deficient LOS F, and Intersection #8 – Byron Road & Von Sosten Road continues to operate at deficient LOS F during the PM peak hour. All other study intersections operate within the acceptable threshold during the AM and PM peak hours. With the full closure of Hansen Road, several intersections, including Intersections #3, #7 and #8 experience less delay because more traffic is being added to non-critical movements or being shifted from critical movements. Intersection #7 does not meet the peak hour warrant for a traffic signal during the PM adjusted peak hour. Intersection #8 meets the peak hour warrant for a traffic signal. The only intersection with an unacceptable LOS that was either created or worsened by the closure of Hansen Road is Intersection #1. However, the current construction to widen Mountain House Parkway/International Parkway to two lanes in each direction and optimizing the signal timings will result in acceptable operations at this intersection.

9. Improvements

This section presents the proposed improvements for intersection #1 – Mountain House Parkway & Promontory Parkway, intersection #3 – Mountain House Parkway & I-205 Westbound Ramps, and intersection #8 – Byron Road & Von Sosten Road. The proposed improvements for intersections #3 and #8 are included but not a direct impact of the Hansen Road closure. These intersections are projected to operate poorly under forecasted conditions due to the forecasted growth in the area, not related to the closure of the Hansen Road overcrossing. The proposed improvements are as follows:

- Intersection #1 – Mountain House Parkway/International Parkway & Promontory Parkway: Widen the northbound and southbound approaches to provide two thru lanes for both approaches and departures, and optimize signal timings. This improvement is currently under construction.
- Intersection #3 – Mountain House Parkway & I-205 Westbound Ramps: Widen the westbound approach to provide the following improvements (consistent with the Cordes Ranch Specific Plan EIR Mitigation Measure TRANS-1, which is in interim improvement to the ultimate improvements identified for the proposed I-205 Interchange Improvement Project):
    - Two dedicated left turn lanes
    - A shared thru/right turn lane
- Intersection #7 – Hansen Road at Grant Line Road: Since the closure of Hansen Road would reduce delays at this intersection, improvements are not required as part of this project. GHD suggests the County consider future improvements to this intersection beyond this study.
- Intersection #8 – Byron Road at Von Sosten Road: Since the closure of Hansen Road would reduce delays at this intersection, improvements would not be required as part of this project. GHD suggests the County consider future improvements to this intersection beyond this study. Although not required as a mitigation measure for implementation of the Hansen Road closure, interim improvements at this intersection were evaluated, including adding a receiving lane to the north leg for the westbound left turn movement. This would provide some relief for the minor street approach but would not be the ultimate solution.

9.1 Intersection Operations

Under improved Existing with Full Closure conditions, the intersection of Mountain House Parkway at Promontory Parkway is projected to operate at LOS C with 22.6 sec/veh of delay in the adjusted PM peak hour. Table 9.1 presents the delay (in sec/veh) and resulting LOS at improved study intersections under Forecast with Full Closure conditions.

Table 9.1 Intersection Level of Service – Forecast with Full Closure Improvement Conditions

#	Intersection	Control Type[1,2]	Target LOS	AM Peak Hour				PM Peak Hour				Warrant Met?[5]
				Unadjusted		Adjusted		Unadjusted		Adjusted		
				Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	
1	Mountain House Pkwy & Promontory Pkwy	Signal	D	29.0	C	54.5	D	30.4	C	51.3	D	
3	Mountain House Pkwy & I-205 WB Ramps	Signal	D	24.1	C	31.5	C	24.6	C	32.5	C	
8	**Byron Rd & Von Sosten Rd**	**TWSC**	**D**	15.4	C	18.8	C	21.4	C	**43.8**	**E**	Yes

Notes:
1. AWSC = All Way Stop Control; TWSC = Two Way Stop Control; RNDBT = Roundabout
2. LOS = Delay based on worst minor street approach for TWSC intersections, and average of all approaches for AWSC, Signal, RNDBT
*3. **Bold** = Unacceptable Conditions*

As presented in Table 9.1, the proposed improvements bring the intersections to an acceptable LOS. No other improvements were deemed necessary for the proposed project.

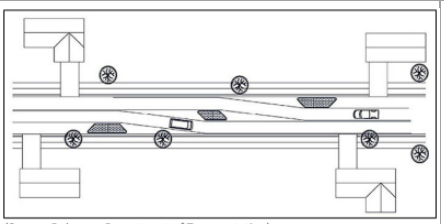
9.2 Traffic Calming Measures

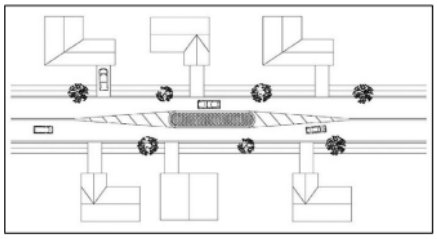
If the Hansen Road overcrossing remains open for two-way travel or if a partial closure is implemented with one-way travel across I-205, consideration should be given to install additional traffic calming measures that could control vehicle speeds and reduce cut-thru traffic by making the route less attractive relative to I-205 and alternate major roads. The City of Tracy is working with Prologis to implement traffic calming measures south of the overcrossing. GHD has evaluated some options for additional traffic calming measures along Hansen Road based on ITE Fact Sheets[1]. Since northbound traffic coming down the grade of the I-205 overcrossing has been shown to travel at excessive speed, it will be important to start slowing traffic prior to the landing of the overcrossing to ensure a safe transition to slower speeds along the Hansen Road neighborhood corridor. The County could implement vertical delineators on the centerline and/or horizontal delineators (lane markings) that introduce a lane-narrowing effect. The lane and shoulder width of Hansen Road and lack of curb/gutter or sidewalk contribute to a facility that feels comfortable driving at higher speeds. Therefore, whether two-way travel is preserved for this public roadway or a one-way conversion is pursued, traffic calming measures such as vertical delineators, optical speed bars, and speed humps are recommended on Hansen Road to slow traffic by creating a narrower environment or introducing a physical measure that vehicles would need to slow down to traverse comfortably. If the Hansen Road overcrossing is closed, GHD recommends the County implement traffic calming on Von Sosten near the elementary school, such as a raised crosswalk with Rectangular Rapid Flashing Beacons (RRFBs). The speed limit is 35 mph within the community along Hansen Road and adjacent to the elementary school.

Table 9.2 Recommended Traffic Calming Measures

Traffic Calming Measure	Example	Effect / Use	Implementation
Phase 1 (Near-term) Measures			
Vertical Delineators (Quick-Kurb)		– Narrows lane – Physical measure which channelizes traffic – Modular and durable	– Recommended to be placed on north side of overcrossing – Can further narrow lane with edge markings
Optical Speed Bars		– Bars are designed to be closer together further along – Creates a perceived speed – Improves safety – Ideal for rural areas	– Recommended to be placed on Hansen Road, north of overcrossing – Can implement on Von Sosten as well

[1] https://www.ite.org/technical-resources/traffic-calming/traffic-calming-measures/

Traffic Calming Measure	Example	Effect / Use	Implementation
Dynamic Speed Feedback Signs		– Uses radar to display vehicle's speed – Can be used to activate a warning sign – Ideal for location where there is a speed limit reduction	– Recommended to be placed on Hansen Road, north of overcrossing after vertical delineators and in between speed humps
Speed Humps		– Speeds typically increase in between them – Increases traffic diversion – Consideration for emergency vehicles, buses, bicycles, and wide shoulder	– Placement of 300-500 ft apart – Three already in place – Additional placement along Hansen Road recommended
Rectangular Rapid Flashing Beacons (RRFB)		– Alerts drivers of crosswalk by increasing visibility – Alerts drivers to slow down and yield to pedestrians (day or night) – Push-button activated	– On Von Sosten near school – Can be done in conjunction with a Raised Crosswalk
Raised Crosswalk		– Similar to speed humps or speed tables – Creates physical differentiation from travel way – Less speed delay than a speed hump	– On Von Sosten near school – Can be implemented with colored and/or textured pavers – May divert larger trucks
Phase 2 (Long-term) measures			
Chicanes or Lateral Shifts	 (Source: Delaware Department of Transportation)	– Narrows the road and lane width by creating physical barriers – Would physically restrict trucks – Would likely need street lighting	– Potential to implement with delineators instead of concrete – Would need further analysis for potential location

Traffic Calming Measure	Example	Effect / Use	Implementation
Median Island	 (Source: Delaware Department of Transportation)	– Narrows travel lane with physical barrier – Would likely need street lighting – Would need to consider driveway access	– Would need further analysis for potential location
All-way Stop Control*		– *Stop control is not a traffic calming device, however, would slow vehicles passing through intersection – Needs warrant analysis	– Tsirelas Drive would be an ideal mid-point location as it functions as a collector to the local community

10. Summary & Conclusion

This traffic study included an evaluation of existing and forecasted conditions with and without the Hansen Road overcrossing closure at I-205 including passenger vehicles and trucks/heavy vehicles in the area at key locations. The analysis approximated origin-destination travel patterns for traffic on the Hansen Road overcrossing and how the closure of the overcrossing is expected to redistribute traffic in the area under existing and forecasted conditions. Improvements are identified at the study locations if needed based on anticipated traffic operations. Below is the summary of the findings of this study.

Environmental Implications

Should the closure require a CEQA document, a transportation assessment will be required that demonstrates the extent to which vehicle miles traveled (VMT) may be increased in the study area. Closure of the Hansen Road overcrossing is anticipated to increase VMT without the construction of more of the Tracy Transportation Master Plan network. This VMT analysis is not part of this study.

Existing Conditions

Traffic count data were taken at eight study intersections and five study roadways in the area, before the County implemented the pilot one-way closure along Hansen Road. Existing traffic data presented that the peak hour was not represented within the intersection turning movement counts, therefore adjustment factors were applied to the intersection volumes for the analysis to represent the higher peaks. Existing traffic operations present that all roadways and intersections operate at acceptable LOS, except for the intersections of Mountain House Parkway at the I-205 Westbound Ramps, which operates at LOS F in the AM peak hour, and at Byron Road at Von Sosten Road in the adjusted PM peak hour. Approximately 75% of the traffic on Hansen Road overcrossing is going southbound in the AM peak and then northbound in the PM peak. Based on the daily roadway count on Hansen Road south of the I-205 overcrossing, there were a total of 5 heavy trucks that were Class 6 or higher (3 axles or more) over the course of the day.

Existing with Closure Conditions

With the closure of the Hansen Road overcrossing, most of the traffic is anticipated to be rerouted along Mountain House Parkway and Lammers Road, based on the O-D data for traffic currently on Hansen Road that was derived from Replica and existing counts. Based on the analysis, traffic currently on Hansen Road is either going to or from the Cordes Ranch area, the Lammersville community, or cutting through both areas to bypass other routes that may be slower (i.e., I-205). With the closure of the Hansen Road overcrossing the redistribution of traffic is anticipated to result in a reduction of traffic turning to and from Hansen Road and Von Sosten Road. The O-D data also presented that most of the traffic, including truck traffic, is coming from or going to the east (City of Tracy) and going to or coming from the Cordes Ranch area (Area F). Based on Google Maps routing, with the closure of the overcrossing, it is faster to get to Area F via Lammers Way instead of via Von Sosten Road. All roadways and intersections are anticipated to operate at acceptable LOS with the full closure, except for the intersections of Mountain House Parkway at Promontory Parkway, which is projected to worsen to LOS E conditions with the closure, and at the intersection of Mountain House Parkway at the I-205 Westbound Ramps, which will continue to operate at LOS F in the AM peak hour as compared to Existing conditions. The redistribution of traffic going through Byron Road, Lammers Road, and Mountain House Parkway resulted in traffic operations which improved at a couple of locations including the I-205 Westbound ramps and Byron Road at Von Sosten Road due to traffic being rerouted to non-critical movements. The improvement along International Parkway/Mountain House Parkway to widen to four lanes is currently under construction and will mitigate the projected deficiency, with the closure of Hansen Road, at the Promontory Parkway intersection to LOS C conditions.

Forecasted Conditions

Forecasted traffic volumes approximately 10 years out were derived utilizing a 4.8% per year linear growth rate based on historical count data in the area which represents anticipated growth of the Cordes Ranch area. Forecasted traffic operations presented the following intersections would operate deficiently:

- Intersection #1 – Mountain House Parkway & Promontory Parkway
  - Delays in adjusted AM peak hour (LOS F), and both unadjusted (LOS E) and adjusted PM peak hours (LOS F)
- Intersection #3 – Mountain House Parkway & I-205 Westbound Ramps
  - Severe delays in AM peak hour (continues to be LOS F)
- Intersection #7 – Hansen Road & Grant Line Road
  - LOS F in the adjusted PM peak hour (AWSC does not meet peak hour signal warrant)
- Intersection #8 – Byron Road & Von Sosten Road
  - Side street delay with stop control operates at LOS E in the adjusted AM peak, and LOS F during both adjusted and unadjusted PM peak hours (from LOS C and E in existing)

Forecasted with Closure Conditions & Operational Improvements

The forecasted with closure scenario assumes the same traffic redistribution percentages as existing conditions but applied to the forecasted traffic volumes. Forecasted with Closure traffic operations presented the following intersections would operate poorly, and the proposed improvement is identified:

- Intersection #1 – Mountain House Parkway & Promontory Parkway
  - LOS F in the AM and PM peak hours
  - Closing the Hansen Road overcrossing increases delays, and results in the unadjusted AM peak hour to go from LOS D to LOS F.
  - Widening Mountain House Parkway / International Parkway to two lanes in each direction would result in LOS C/D operations. This improvement is currently under construction and no further improvements would be necessary beyond signal timing optimization.
- Intersection #3 – Mountain House Parkway & I-205 Westbound Ramps
  - LOS F in the AM peak hour, but slightly less delay compared to Forecasted conditions with the closure.
  - Widening the ramp to provide two left turning lanes would provide LOS C operations, however this is not a direct impact of closing the Hansen Road overcrossing as it currently operates at LOS F.
- Intersection #7 – Hansen Road & Grant Line Road
  - LOS F in the adjusted PM peak hour (AWSC does not meet peak hour signal warrant)
  - This is not a direct impact from implementing the closure, and the closure is anticipated to reduce delays at this intersection. Therefore, improvements would not be required as part of the Hansen Road closure. The County may consider future improvements to this intersection beyond this study.
- Intersection #8 – Byron Road at Von Sosten Road
  - LOS E in the unadjusted PM peak hour, which is an improvement from LOS F under Forecasted conditions
  - LOS E and F in the adjusted AM and PM peak hours, but with less delay than Forecasted conditions
  - This intersection does meet the peak hour warrant for a traffic signal.
  - This is not a direct impact from implementing the closure, therefore improvements would not be required as part of the Hansen Road closure. The County may consider future improvements to this intersection beyond this study. Widening to provide a receiving lane for left-turning traffic from Von

Sosten to Byron Road could be an interim improvement that would provide LOS C operations during the unadjusted peak hour.

In summary, although the parallel roadways of Mountain House Parkway and Lammers Road are projected to continue to operate at LOS C or better based on daily capacity with the Full Closure, if the Hansen Road overcrossing is closed then some of the traffic will shift to Von Sosten Road, resulting in a significant increase in traffic next to the elementary school. Von Sosten Road west of Hansen Road (adjacent to the Elementary School) is anticipated to increase by 47% with the closure, and Von Sosten Road east of Hansen Road is anticipated to decrease by 38%. This is largely due to the relatively high volume of cut-through traffic serving the Cordes Ranch area being rerouted via Lammers Road to the east, and Mountain House Parkway/International Parkway to the west. Improvements identified for the full closure would also apply for the one-way closure.

Traffic Calming Recommendations

The County has implemented some traffic calming measures along Hansen Road in the attempt to slow speeding and reduce cut-through traffic. Although the County has installed a couple speed humps along Hansen Road between Von Sosten Road and Wakefield Court, elevated travel speeds and cut-thru traffic issues remain. Closing the Hansen Road overcrossing would eliminate cut-thru traffic along Hansen Road. However, the closure would need to go through an Environmental process/document (CEQA) which could identify unmitigable impacts related to VMT if alternate routes to Hansen Road increase mileage per vehicle. If the overcrossing is closed, GHD recommends consideration of traffic calming measures on Von Sosten Road near the school. If the overcrossing remains open for two-way travel or if a partial closure is implemented with one-way travel across I-205, the County should consider additional traffic calming measures along Hansen Road though the Lammersville residential community to significantly slow speeding vehicles and reduce cut-thru traffic.

Near-term measures on Hansen Road (without full closure):

- Vertical delineators with mountable curb on the overcrossing (northbound entry)
- Traverse (optical) speed bars
- Speed feedback sign (with or without data recorded)
- Additional speed humps or speed cushions
- Narrow travel lane (10 feet); if one-way then additional physical measures

Near-term measures on Von Sosten Road (with or without closure):

- RRFB with Raised Crosswalk for pedestrian crossing at elementary school
- Speed feedback signs


GHD

Appendices

Appendix A

Traffic Count Data

Prepared by National Data & Surveying Services

CLASSIFICATION

Hansen Rd S/O I-205 Overpass

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_001n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	22	5	0	1	0	0	0	0	0	0	0	0	28
1:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
2:00	0	5	3	0	0	0	0	0	0	0	0	0	0	8
3:00	0	18	3	0	0	0	0	0	0	0	0	0	0	21
4:00	0	23	4	0	0	0	0	0	0	0	0	0	0	27
5:00	0	12	2	0	0	0	0	0	0	0	0	0	0	14
6:00	0	22	3	1	0	0	0	0	0	0	0	0	0	26
7:00	0	27	10	0	2	0	0	0	0	0	0	0	0	39
8:00	0	24	6	0	5	0	0	0	0	0	0	0	0	35
9:00	0	33	3	0	1	0	0	0	0	0	0	0	0	37
10:00	0	24	9	0	2	0	0	0	0	0	0	0	0	35
11:00	0	25	11	0	2	0	0	0	0	0	0	0	0	38
12:00 PM	0	36	12	0	3	1	0	0	0	0	0	0	0	52
13:00	1	54	14	0	2	0	0	0	0	0	0	0	0	71
14:00	0	72	24	0	3	0	0	0	0	0	0	0	0	99
15:00	0	100	18	0	2	0	0	0	0	0	0	0	0	120
16:00	0	80	12	0	1	0	0	1	0	0	0	0	0	94
17:00	0	69	18	0	1	0	0	0	0	0	0	0	0	88
18:00	0	27	3	0	1	0	0	0	0	0	0	0	0	31
19:00	0	19	4	0	0	0	0	0	0	0	0	0	0	23
20:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
21:00	0	15	5	0	0	0	0	0	0	0	0	0	0	20
22:00	0	30	1	0	0	0	0	0	0	0	0	0	0	31
23:00	0	46	8	0	0	0	0	0	0	0	0	0	0	54
Totals	1	805	179	1	26	1		1						1014
% of Totals	0%	79%	18%	0%	3%	0%		0%						100%

AM Volumes	0	245	60	1	13	0	0	0	0	0	0	0	0	319
% AM		24%	6%	0%	1%									31%
AM Peak Hour		9:00	11:00	6:00	8:00									7:00
Volume		33	11	1	5									39
PM Volumes	1	560	119	0	13	1	0	1	0	0	0	0	0	695
% PM	0%	55%	12%		1%	0%		0%						69%
PM Peak Hour	13:00	15:00	14:00		12:00	12:00		16:00						15:00
Volume	1	100	24		3	1		1						120

Directional Peak Periods All Classes	AM 7-9 Volume		%	NOON 12-2 Volume		%	PM 4-6 Volume		%	Off Peak Volumes Volume		%
	74	⟷	7%	123	⟷	12%	182	⟷	18%	635	⟷	63%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Hansen Rd S/O I-205 Overpass

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_001s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	18	0	0	0	0	0	0	0	0	0	0	0	18
1:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
2:00	0	22	5	0	0	0	0	0	0	0	0	0	0	27
3:00	0	58	1	0	0	0	0	0	0	0	0	0	0	59
4:00	0	72	11	0	1	0	0	0	0	0	0	0	0	84
5:00	0	138	26	0	3	0	0	0	0	0	0	0	0	167
6:00	0	176	41	1	11	0	0	0	0	0	0	0	0	229
7:00	0	81	28	0	6	0	0	0	0	0	0	0	0	115
8:00	0	63	8	0	2	0	0	0	0	0	0	0	0	73
9:00	0	28	6	0	2	0	0	0	0	0	0	0	0	36
10:00	0	13	8	0	0	0	0	0	0	0	0	0	0	21
11:00	0	12	8	0	1	0	0	0	0	0	0	0	0	21
12:00 PM	0	34	7	0	3	0	0	1	0	0	0	0	0	45
13:00	0	93	17	0	1	1	0	0	0	0	0	0	0	112
14:00	0	36	9	1	3	0	0	0	0	0	0	0	0	49
15:00	0	36	5	0	1	1	0	0	0	0	0	0	0	43
16:00	0	29	3	0	0	0	0	0	0	0	0	0	0	32
17:00	0	20	3	0	1	0	0	0	0	0	0	0	0	24
18:00	0	13	6	0	1	0	0	0	0	0	0	0	0	20
19:00	0	30	1	0	0	0	0	0	0	0	0	0	0	31
20:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
21:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
22:00	0	23	2	0	0	0	0	0	0	0	0	0	0	25
23:00	0	35	5	0	0	0	0	0	0	0	0	0	0	40
Totals		1061	201	2	36	2		1						1303
% of Totals		81%	15%	0%	3%	0%		0%						100%

AM Volumes	0	694	142	1	26	0	0	0	0	0	0	0	0	863
% AM		53%	11%	0%	2%									66%
AM Peak Hour		6:00	6:00	6:00	6:00									6:00
Volume		176	41	1	11									229
PM Volumes	0	367	59	1	10	2	0	1	0	0	0	0	0	440
% PM		28%	5%	0%	1%	0%		0%						34%
PM Peak Hour		13:00	13:00	14:00	12:00	13:00		12:00						13:00
Volume		93	17	1	3	1		1						112

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	188		14%	157		12%	56		4%	902		69%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by National Data & Surveying Services

CLASSIFICATION

Hansen Rd S/O I-205 Overpass

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_001

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	40	5	0	1	0	0	0	0	0	0	0	0	46
1:00	0	23	1	0	0	0	0	0	0	0	0	0	0	24
2:00	0	27	8	0	0	0	0	0	0	0	0	0	0	35
3:00	0	76	4	0	0	0	0	0	0	0	0	0	0	80
4:00	0	95	15	0	1	0	0	0	0	0	0	0	0	111
5:00	0	150	28	0	3	0	0	0	0	0	0	0	0	181
6:00	0	198	44	2	11	0	0	0	0	0	0	0	0	255
7:00	0	108	38	0	8	0	0	0	0	0	0	0	0	154
8:00	0	87	14	0	7	0	0	0	0	0	0	0	0	108
9:00	0	61	9	0	3	0	0	0	0	0	0	0	0	73
10:00	0	37	17	0	2	0	0	0	0	0	0	0	0	56
11:00	0	37	19	0	3	0	0	0	0	0	0	0	0	59
12:00 PM	0	70	19	0	6	1	0	1	0	0	0	0	0	97
13:00	1	147	31	0	3	1	0	0	0	0	0	0	0	183
14:00	0	108	33	1	6	0	0	0	0	0	0	0	0	148
15:00	0	136	23	0	3	1	0	0	0	0	0	0	0	163
16:00	0	109	15	0	1	0	0	1	0	0	0	0	0	126
17:00	0	89	21	0	2	0	0	0	0	0	0	0	0	112
18:00	0	40	9	0	2	0	0	0	0	0	0	0	0	51
19:00	0	49	5	0	0	0	0	0	0	0	0	0	0	54
20:00	0	22	0	0	0	0	0	0	0	0	0	0	0	22
21:00	0	23	6	0	0	0	0	0	0	0	0	0	0	29
22:00	0	53	3	0	0	0	0	0	0	0	0	0	0	56
23:00	0	81	13	0	0	0	0	0	0	0	0	0	0	94
Totals	1	1866	380	3	62	3		2						2317
% of Totals	0%	81%	16%	0%	3%	0%		0%						100%

AM Volumes	0	939	202	2	39	0	0	0	0	0	0	0	0	1182
% AM		41%	9%	0%	2%									51%
AM Peak Hour		6:00	6:00	6:00	6:00									6:00
Volume		198	44	2	11									255
PM Volumes	1	927	178	1	23	3	0	2	0	0	0	0	0	1135
% PM	0%	40%	8%	0%	1%	0%		0%						49%
PM Peak Hour	13:00	13:00	14:00	14:00	12:00	12:00		12:00						13:00
Volume	1	147	33	1	6	1		1						183

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	262		11%	280		12%	238		10%	1537		66%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
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9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

VOLUME

Hansen Rd S/O I-205 Overpass

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_001

DAILY TOTALS	NB	SB	EB	WB	Total
	1,014	1,303	0	0	2,317

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	9		2		0	0	11		12:00	18		5		0	0	23	
0:15	7		6		0	0	13		12:15	6		9		0	0	15	
0:30	7		2		0	0	9		12:30	16		9		0	0	25	
0:45	5	28	8	18	0	0	13	46	12:45	12	52	22	45	0	0	34	97
1:00	3		4		0	0	7		13:00	6		15		0	0	21	
1:15	2		2		0	0	4		13:15	11		24		0	0	35	
1:30	4		3		0	0	7		13:30	31		37		0	0	68	
1:45	2	11	4	13	0	0	6	24	13:45	23	71	36	112	0	0	59	183
2:00	2		3		0	0	5		14:00	11		13		0	0	24	
2:15	4		4		0	0	8		14:15	26		17		0	0	43	
2:30	1		7		0	0	8		14:30	38		11		0	0	49	
2:45	1	8	13	27	0	0	14	35	14:45	24	99	8	49	0	0	32	148
3:00	4		6		0	0	10		15:00	34		6		0	0	40	
3:15	11		10		0	0	21		15:15	19		10		0	0	29	
3:30	4		11		0	0	15		15:30	48		12		0	0	60	
3:45	2	21	32	59	0	0	34	80	15:45	19	120	15	43	0	0	34	163
4:00	13		13		0	0	26		16:00	26		7		0	0	33	
4:15	5		19		0	0	24		16:15	15		9		0	0	24	
4:30	7		31		0	0	38		16:30	30		8		0	0	38	
4:45	2	27	21	84	0	0	23	111	16:45	23	94	8	32	0	0	31	126
5:00	4		20		0	0	24		17:00	31		12		0	0	43	
5:15	4		27		0	0	31		17:15	17		5		0	0	22	
5:30	2		61		0	0	63		17:30	26		2		0	0	28	
5:45	4	14	59	167	0	0	63	181	17:45	14	88	5	24	0	0	19	112
6:00	9		65		0	0	74		18:00	10		3		0	0	13	
6:15	5		54		0	0	59		18:15	0		7		0	0	7	
6:30	6		45		0	0	51		18:30	12		6		0	0	18	
6:45	6	26	65	229	0	0	71	255	18:45	9	31	4	20	0	0	13	51
7:00	16		31		0	0	47		19:00	12		7		0	0	19	
7:15	6		32		0	0	38		19:15	6		11		0	0	17	
7:30	7		27		0	0	34		19:30	2		9		0	0	11	
7:45	10	39	25	115	0	0	35	154	19:45	3	23	4	31	0	0	7	54
8:00	11		19		0	0	30		20:00	4		3		0	0	7	
8:15	8		18		0	0	26		20:15	4		2		0	0	6	
8:30	7		17		0	0	24		20:30	2		1		0	0	3	
8:45	9	35	19	73	0	0	28	108	20:45	2	12	4	10	0	0	6	22
9:00	5		9		0	0	14		21:00	2		0		0	0	2	
9:15	7		9		0	0	16		21:15	6		3		0	0	9	
9:30	10		6		0	0	16		21:30	6		4		0	0	10	
9:45	15	37	12	36	0	0	27	73	21:45	6	20	2	9	0	0	8	29
10:00	11		5		0	0	16		22:00	2		5		0	0	7	
10:15	10		4		0	0	14		22:15	7		3		0	0	10	
10:30	4		3		0	0	7		22:30	14		7		0	0	21	
10:45	10	35	9	21	0	0	19	56	22:45	8	31	10	25	0	0	18	56
11:00	10		3		0	0	13		23:00	10		17		0	0	27	
11:15	12		10		0	0	22		23:15	17		10		0	0	27	
11:30	6		4		0	0	10		23:30	20		9		0	0	29	
11:45	10	38	4	21	0	0	14	59	23:45	7	54	4	40	0	0	11	94
TOTALS		319		863				1182	TOTALS		695		440				1135
SPLIT %		27.0%		73.0%				51.0%	SPLIT %		61.2%		38.8%				49.0%

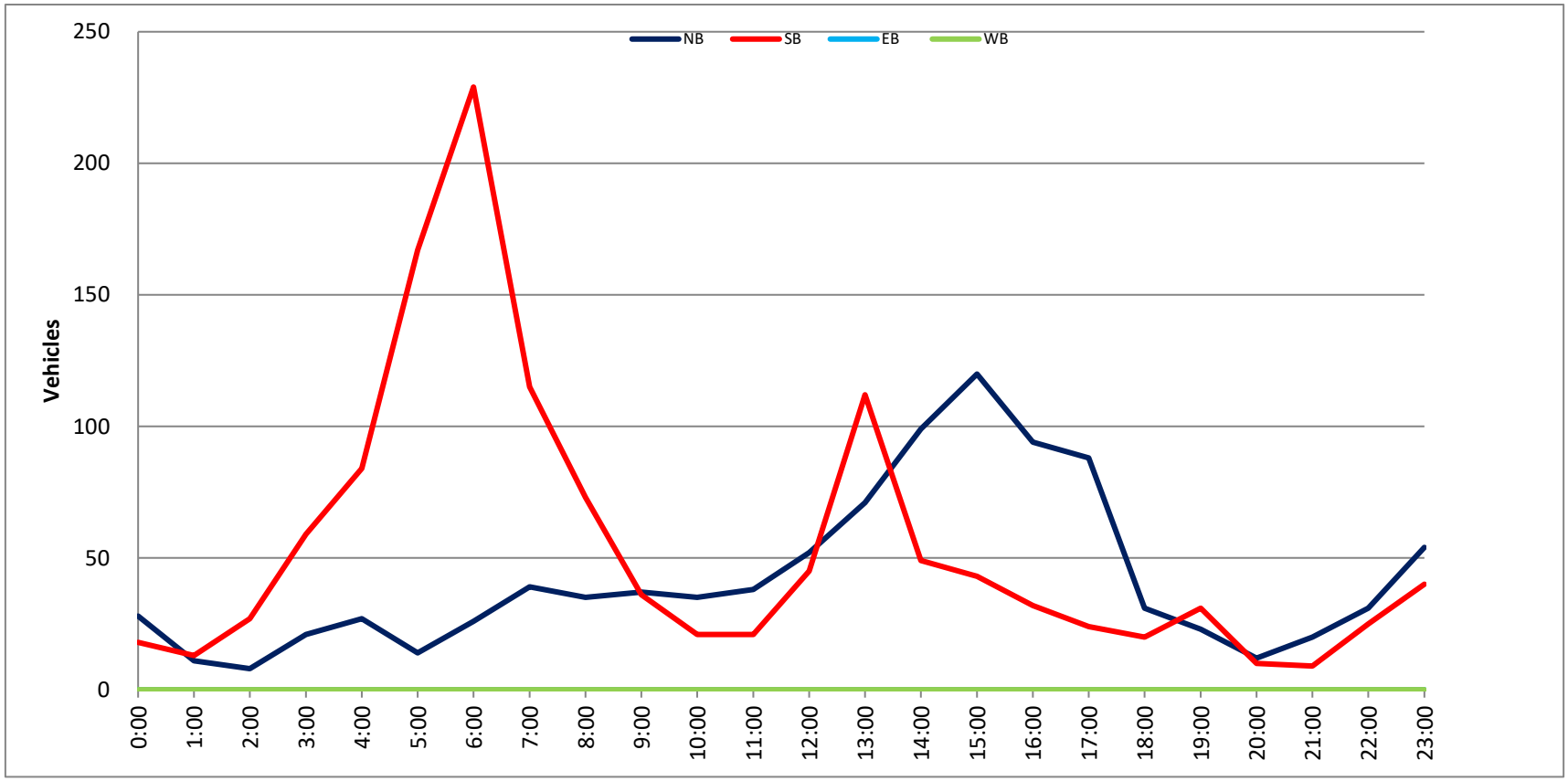
DAILY TOTALS	NB	SB	EB	WB	Total
	1,014	1,303	0	0	2,317

AM Peak Hour	11:45	5:30			5:30	PM Peak Hour	14:45	13:00			13:30
AM Pk Volume	50	239			259	PM Pk Volume	125	112			194
Pk Hr Factor	0.694	0.919			0.875	Pk Hr Factor	0.651	0.757			0.713
7 - 9 Volume	74	188	0	0	262	4 - 6 Volume	182	56	0	0	238
7 - 9 Peak Hour	7:00	7:00			7:00	4 - 6 Peak Hour	16:30	16:15			16:15
7 - 9 Pk Volume	39	115	0	0	154	4 - 6 Pk Volume	101	37	0	0	136
Pk Hr Factor	0.609	0.898	0.000	0.000	0.819	Pk Hr Factor	0.815	0.771	0.000	0.000	0.791

Prepared by NDS/ATD

Project #: CA22_090003_001 **City:** Tracy

Location: Hansen Rd S/O I-205 Overpass **Date:** 1/11/2022



Prepared by National Data & Surveying Services

CLASSIFICATION

Hansen Rd Bet. Von Sosten Rd & Targowski Ln

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_002n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	23	4	0	2	0	0	0	0	0	0	0	0	29
1:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
2:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
3:00	0	13	6	0	0	0	0	0	0	0	0	0	0	19
4:00	0	26	5	0	2	0	0	0	0	0	0	0	0	33
5:00	0	19	6	0	0	0	0	0	0	0	0	0	0	25
6:00	0	31	6	1	3	0	0	0	0	0	0	0	0	41
7:00	0	50	20	0	3	0	0	0	0	0	0	0	0	73
8:00	0	34	9	0	4	0	0	0	0	0	0	0	0	47
9:00	0	45	7	0	2	0	0	0	0	0	0	0	0	54
10:00	0	28	24	0	1	0	0	0	0	0	0	0	0	53
11:00	0	29	23	0	3	0	0	0	0	0	0	0	0	55
12:00 PM	0	39	16	0	5	0	0	0	2	0	0	0	0	62
13:00	0	56	15	0	4	1	0	0	0	0	0	0	0	76
14:00	0	82	29	1	3	0	0	0	0	0	0	0	0	115
15:00	0	101	27	0	3	0	0	0	0	0	0	0	0	131
16:00	2	84	20	0	4	0	0	0	0	0	0	0	0	110
17:00	0	75	24	0	1	0	0	0	0	0	0	0	0	100
18:00	1	28	7	0	0	0	0	0	0	0	0	0	0	36
19:00	0	22	5	0	1	0	0	0	0	0	0	0	0	28
20:00	0	11	0	0	1	0	0	0	0	0	0	0	0	12
21:00	0	13	7	0	0	0	0	0	0	0	0	0	0	20
22:00	0	31	1	0	0	0	0	0	0	0	0	0	0	32
23:00	1	45	10	0	0	0	0	0	0	0	0	0	0	56
Totals	**4**	**902**	**274**	**2**	**42**	**1**			**2**					**1227**
% of Totals	0%	74%	22%	0%	3%	0%			0%					100%

AM Volumes	0	315	113	1	20	0	0	0	0	0	0	0	0	449
% AM		26%	9%	0%	2%									37%
AM Peak Hour		7:00	10:00	6:00	8:00									7:00
Volume		50	24	1	4									73
PM Volumes	4	587	161	1	22	1	0	0	2	0	0	0	0	778
% PM	0%	48%	13%	0%	2%	0%			0%					63%
PM Peak Hour	16:00	15:00	14:00	14:00	12:00	13:00			12:00					15:00
Volume	2	101	29	1	5	1			2					131

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	120		10%	138		11%	210		17%	759		62%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Hansen Rd Bet. Von Sosten Rd & Targowski Ln

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_002s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	18	2	0	0	0	0	0	0	0	0	0	0	20
1:00	0	14	0	0	0	0	0	0	0	0	0	0	0	14
2:00	0	24	4	0	1	0	0	0	0	0	0	0	0	29
3:00	0	59	3	0	0	0	0	0	0	0	0	0	0	62
4:00	0	72	12	0	1	0	0	0	0	0	0	0	0	85
5:00	0	136	27	0	4	1	0	0	0	0	0	0	0	168
6:00	0	165	39	1	10	1	0	0	0	0	0	0	0	216
7:00	0	83	34	0	5	0	0	0	0	0	0	0	0	122
8:00	0	68	8	0	5	0	0	1	0	0	0	0	0	82
9:00	0	33	12	0	1	1	0	0	0	0	0	0	0	47
10:00	0	18	18	0	1	0	0	0	0	0	0	0	0	37
11:00	0	18	8	0	2	0	0	0	0	0	0	0	0	28
12:00 PM	0	49	9	0	5	0	0	0	1	0	0	0	0	64
13:00	0	94	25	0	5	0	0	0	0	0	0	0	0	124
14:00	1	49	20	2	4	1	0	0	0	0	0	0	0	77
15:00	0	53	13	0	5	1	0	0	0	0	0	0	0	72
16:00	0	47	7	0	2	0	0	0	0	0	0	0	0	56
17:00	1	38	8	0	2	0	0	0	0	0	0	0	0	49
18:00	0	32	13	0	2	0	0	0	0	0	0	0	0	47
19:00	0	44	3	0	2	0	0	0	0	0	0	0	0	49
20:00	1	16	3	0	0	0	0	0	0	0	0	0	0	20
21:00	0	15	4	0	1	0	0	0	0	0	0	0	0	20
22:00	0	23	3	0	0	0	0	0	0	0	0	0	0	26
23:00	0	35	4	0	0	0	0	0	0	0	0	0	0	39
Totals	3	1203	279	3	58	5		1	1					1553
% of Totals	0%	77%	18%	0%	4%	0%		0%	0%					100%

AM Volumes	0	708	167	1	30	3	0	1	0	0	0	0	0	910
% AM		46%	11%	0%	2%	0%		0%						59%
AM Peak Hour		6:00	6:00	6:00	6:00	5:00		8:00						6:00
Volume		165	39	1	10	1		1						216
PM Volumes	3	495	112	2	28	2	0	0	1	0	0	0	0	643
% PM	0%	32%	7%	0%	2%	0%			0%					41%
PM Peak Hour	14:00	13:00	13:00	14:00	12:00	14:00			12:00					13:00
Volume	1	94	25	2	5	1			1					124

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	204		13%	188		12%	105		7%	1056		68%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Hansen Rd Bet. Von Sosten Rd & Targowski Ln

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_002

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	41	6	0	2	0	0	0	0	0	0	0	0	49
1:00	0	25	1	0	0	0	0	0	0	0	0	0	0	26
2:00	0	30	6	0	1	0	0	0	0	0	0	0	0	37
3:00	0	72	9	0	0	0	0	0	0	0	0	0	0	81
4:00	0	98	17	0	3	0	0	0	0	0	0	0	0	118
5:00	0	155	33	0	4	1	0	0	0	0	0	0	0	193
6:00	0	196	45	2	13	1	0	0	0	0	0	0	0	257
7:00	0	133	54	0	8	0	0	0	0	0	0	0	0	195
8:00	0	102	17	0	9	0	0	1	0	0	0	0	0	129
9:00	0	78	19	0	3	1	0	0	0	0	0	0	0	101
10:00	0	46	42	0	2	0	0	0	0	0	0	0	0	90
11:00	0	47	31	0	5	0	0	0	0	0	0	0	0	83
12:00 PM	0	88	25	0	10	0	0	0	3	0	0	0	0	126
13:00	0	150	40	0	9	1	0	0	0	0	0	0	0	200
14:00	1	131	49	3	7	1	0	0	0	0	0	0	0	192
15:00	0	154	40	0	8	1	0	0	0	0	0	0	0	203
16:00	2	131	27	0	6	0	0	0	0	0	0	0	0	166
17:00	1	113	32	0	3	0	0	0	0	0	0	0	0	149
18:00	1	60	20	0	2	0	0	0	0	0	0	0	0	83
19:00	0	66	8	0	3	0	0	0	0	0	0	0	0	77
20:00	1	27	3	0	1	0	0	0	0	0	0	0	0	32
21:00	0	28	11	0	1	0	0	0	0	0	0	0	0	40
22:00	0	54	4	0	0	0	0	0	0	0	0	0	0	58
23:00	1	80	14	0	0	0	0	0	0	0	0	0	0	95
Totals	7	2105	553	5	100	6		1	3					2780
% of Totals	0%	76%	20%	0%	4%	0%		0%	0%					100%

AM Volumes	0	1023	280	2	50	3	0	1	0	0	0	0	0	1359
% AM		37%	10%	0%	2%	0%		0%						49%
AM Peak Hour		6:00	7:00	6:00	6:00	5:00		8:00						6:00
Volume		196	54	2	13	1		1						257
PM Volumes	7	1082	273	3	50	3	0	0	3	0	0	0	0	1421
% PM	0%	39%	10%	0%	2%	0%			0%					51%
PM Peak Hour	16:00	15:00	14:00	14:00	12:00	13:00			12:00					15:00
Volume	2	154	49	3	10	1			3					203

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	324		12%	326		12%	315		11%	1815		65%

Classification Definitions

1	Motorcycles	4	Buses	7	> =4-Axle Single Units	10	>=6-Axle Single Trailers	13	>=7-Axle Multi-Trailers
2	Passenger Cars	5	2-Axle, 6-Tire Single Units	8	<=4-Axle Single Trailers	11	<=5-Axle Multi-Trailers		
3	2-Axle, 4-Tire Single Units	6	3-Axle Single Units	9	5-Axle Single Trailers	12	6-Axle Multi-Trailers		

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Hansen Rd Bet. Von Sosten Rd & Targowski Ln

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_002

DAILY TOTALS	NB	SB	EB	WB	Total
	1,227	1,553	0	0	2,780

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	10		3		0	0	13		12:00	18		10		0	0	28	
0:15	7		6		0	0	13		12:15	6		15		0	0	21	
0:30	7		3		0	0	10		12:30	21		13		0	0	34	
0:45	5	29	8	20	0	0	13	49	12:45	17	62	26	64	0	0	43	126
1:00	5		4		0	0	9		13:00	12		18		0	0	30	
1:15	2		2		0	0	4		13:15	11		28		0	0	39	
1:30	4		6		0	0	10		13:30	32		41		0	0	73	
1:45	1	12	2	14	0	0	3	26	13:45	21	76	37	124	0	0	58	200
2:00	3		3		0	0	6		14:00	20		24		0	0	44	
2:15	3		5		0	0	8		14:15	27		21		0	0	48	
2:30	1		5		0	0	6		14:30	40		16		0	0	56	
2:45	1	8	16	29	0	0	17	37	14:45	28	115	16	77	0	0	44	192
3:00	4		5		0	0	9		15:00	40		15		0	0	55	
3:15	8		11		0	0	19		15:15	19		13		0	0	32	
3:30	5		14		0	0	19		15:30	50		18		0	0	68	
3:45	2	19	32	62	0	0	34	81	15:45	22	131	26	72	0	0	48	203
4:00	17		15		0	0	32		16:00	27		12		0	0	39	
4:15	7		18		0	0	25		16:15	19		13		0	0	32	
4:30	7		36		0	0	43		16:30	36		16		0	0	52	
4:45	2	33	16	85	0	0	18	118	16:45	28	110	15	56	0	0	43	166
5:00	9		20		0	0	29		17:00	35		17		0	0	52	
5:15	6		26		0	0	32		17:15	21		11		0	0	32	
5:30	4		59		0	0	63		17:30	27		12		0	0	39	
5:45	6	25	63	168	0	0	69	193	17:45	17	100	9	49	0	0	26	149
6:00	11		58		0	0	69		18:00	13		14		0	0	27	
6:15	8		57		0	0	65		18:15	2		13		0	0	15	
6:30	10		40		0	0	50		18:30	13		9		0	0	22	
6:45	12	41	61	216	0	0	73	257	18:45	8	36	11	47	0	0	19	83
7:00	20		29		0	0	49		19:00	12		15		0	0	27	
7:15	10		33		0	0	43		19:15	8		17		0	0	25	
7:30	16		31		0	0	47		19:30	3		11		0	0	14	
7:45	27	73	29	122	0	0	56	195	19:45	5	28	6	49	0	0	11	77
8:00	13		29		0	0	42		20:00	4		5		0	0	9	
8:15	14		18		0	0	32		20:15	5		4		0	0	9	
8:30	10		19		0	0	29		20:30	2		2		0	0	4	
8:45	10	47	16	82	0	0	26	129	20:45	1	12	9	20	0	0	10	32
9:00	5		12		0	0	17		21:00	2		5		0	0	7	
9:15	14		8		0	0	22		21:15	4		4		0	0	8	
9:30	14		12		0	0	26		21:30	8		5		0	0	13	
9:45	21	54	15	47	0	0	36	101	21:45	6	20	6	20	0	0	12	40
10:00	17		9		0	0	26		22:00	4		6		0	0	10	
10:15	16		6		0	0	22		22:15	5		3		0	0	8	
10:30	7		6		0	0	13		22:30	14		7		0	0	21	
10:45	13	53	16	37	0	0	29	90	22:45	9	32	10	26	0	0	19	58
11:00	13		6		0	0	19		23:00	9		18		0	0	27	
11:15	14		7		0	0	21		23:15	19		11		0	0	30	
11:30	13		7		0	0	20		23:30	20		8		0	0	28	
11:45	15	55	8	28	0	0	23	83	23:45	8	56	2	39	0	0	10	95
TOTALS		449		910				**1359**	**TOTALS**		778		643				**1421**
SPLIT %		33.0%		67.0%				**48.9%**	**SPLIT %**		54.8%		45.2%				**51.1%**

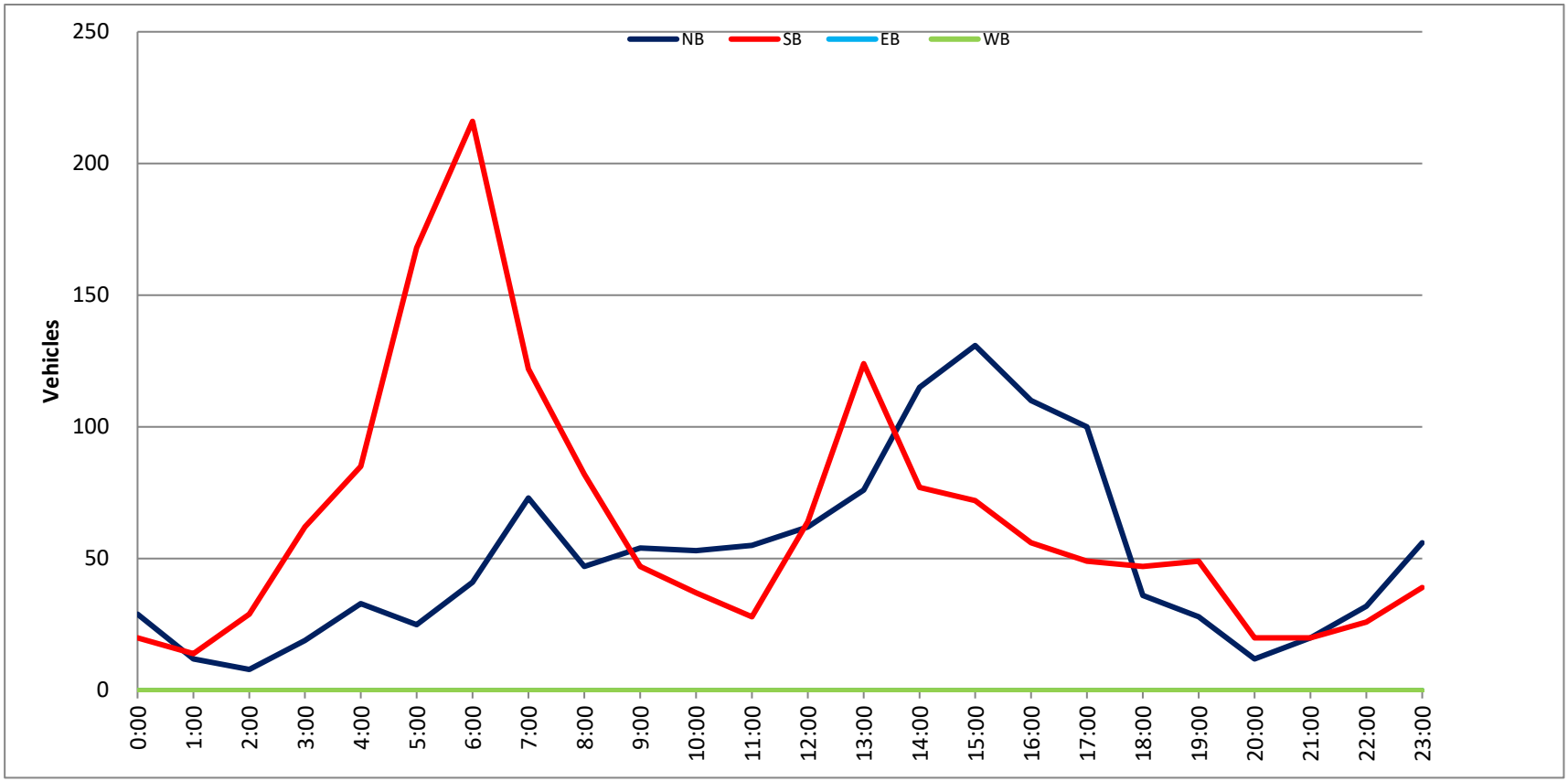
DAILY TOTALS	NB	SB	EB	WB	Total
	1,227	1,553	0	0	2,780

AM Peak Hour	7:00	5:30			**5:30**	**PM Peak Hour**	14:45	13:15			**13:30**
AM Pk Volume	73	237			**266**	**PM Pk Volume**	137	130			**223**
Pk Hr Factor	0.676	0.940			**0.964**	**Pk Hr Factor**	0.685	0.793			**0.764**
7 - 9 Volume	120	204	0	0	**324**	**4 - 6 Volume**	210	105	0	0	**315**
7 - 9 Peak Hour	7:00	7:00			**7:00**	**4 - 6 Peak Hour**	16:30	16:15			**16:15**
7 - 9 Pk Volume	73	122	0	0	**195**	**4 - 6 Pk Volume**	120	61	0	0	**179**
Pk Hr Factor	0.676	0.924	0.000	0.000	**0.871**	**Pk Hr Factor**	0.833	0.897	0.000	0.000	**0.861**

Prepared by NDS/ATD

Project #: CA22_090003_002 **City:** Tracy

Location: Hansen Rd Bet. Von Sosten Rd & Targowski **Date:** 1/11/2022



Prepared by National Data & Surveying Services

CLASSIFICATION

Hansen Rd N/O Von Sosten Rd

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_003n

North Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	6	2	0	0	0	0	0	0	0	0	0	0	8
1:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
2:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
3:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
4:00	0	15	3	0	0	0	0	0	0	0	0	0	0	18
5:00	0	11	5	0	1	0	0	0	0	0	0	0	0	17
6:00	0	16	4	1	1	0	0	0	0	0	0	0	0	22
7:00	0	38	13	1	2	0	0	0	0	0	0	0	0	54
8:00	0	30	6	0	0	0	0	0	0	0	0	0	0	36
9:00	0	19	2	0	1	0	0	0	0	0	0	0	0	22
10:00	0	14	3	0	0	0	0	0	0	0	0	0	0	17
11:00	0	14	5	0	0	0	0	0	0	0	0	0	0	19
12:00 PM	0	16	8	0	2	0	0	0	0	0	0	0	0	26
13:00	0	21	8	0	2	0	0	0	0	0	0	0	0	31
14:00	0	55	21	1	1	0	0	0	0	0	0	0	0	78
15:00	0	82	17	0	2	0	0	0	0	0	0	0	0	101
16:00	0	54	8	0	0	0	0	0	0	0	0	0	0	62
17:00	0	53	12	0	0	0	0	1	0	0	0	0	0	66
18:00	0	14	5	0	0	0	0	0	0	0	0	0	0	19
19:00	0	12	3	0	0	0	0	0	0	0	0	0	0	15
20:00	0	6	1	0	1	0	0	0	0	0	0	0	0	8
21:00	0	10	4	0	0	0	0	0	0	0	0	0	0	14
22:00	0	15	2	0	0	0	0	0	0	0	0	0	0	17
23:00	1	21	3	0	0	0	0	0	0	0	0	0	0	25
Totals	**1**	**539**	**136**	**3**	**13**			**1**						**693**
% of Totals	0%	78%	20%	0%	2%			0%						100%

AM Volumes	0	180	44	2	5	0	0	0	0	0	0	0	0	231
% AM		26%	6%	0%	1%									33%
AM Peak Hour		7:00	7:00	6:00	7:00									7:00
Volume		38	13	1	2									54
PM Volumes	1	359	92	1	8	0	0	1	0	0	0	0	0	462
% PM	0%	52%	13%	0%	1%			0%						67%
PM Peak Hour	23:00	15:00	14:00	14:00	12:00			17:00						15:00
Volume	1	82	21	1	2			1						101

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	90		13%	57		8%	128		18%	418		60%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Hansen Rd N/O Von Sosten Rd

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_003s

South Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	4	2	0	0	0	0	0	0	0	0	0	0	6
1:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
2:00	0	5	6	0	0	0	0	0	0	0	0	0	0	11
3:00	0	13	2	0	0	0	0	0	0	0	0	0	0	15
4:00	0	29	7	0	0	0	0	0	0	0	0	0	0	36
5:00	0	63	15	0	2	0	0	0	0	0	0	0	0	80
6:00	0	76	17	0	2	0	0	0	0	0	0	0	0	95
7:00	0	53	9	0	1	1	0	0	0	0	0	0	0	64
8:00	0	34	7	0	1	0	0	0	0	0	0	0	0	42
9:00	0	21	7	0	1	0	0	0	0	0	0	0	0	29
10:00	0	6	6	0	1	0	0	0	0	0	0	0	0	13
11:00	0	7	4	0	1	0	0	0	0	0	0	0	0	12
12:00 PM	0	26	7	0	1	0	0	0	0	0	0	0	0	34
13:00	0	38	15	0	3	0	0	1	0	0	0	0	0	57
14:00	1	35	17	2	3	1	0	0	0	0	0	0	0	59
15:00	0	39	6	0	3	0	0	0	0	0	0	0	0	48
16:00	0	33	6	0	2	0	0	0	0	0	0	0	0	41
17:00	0	28	9	0	2	0	0	0	0	0	0	0	0	39
18:00	1	17	10	0	1	0	0	0	0	0	0	0	0	29
19:00	0	19	4	0	0	0	0	0	0	0	0	0	0	23
20:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
21:00	0	4	1	0	1	0	0	0	0	0	0	0	0	6
22:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
23:00	0	14	2	0	0	0	0	0	0	0	0	0	0	16
Totals	2	586	162	2	25	2		1						780
% of Totals	0%	75%	21%	0%	3%	0%		0%						100%

AM Volumes	0	317	83	0	9	1	0	0	0	0	0	0	0	410
% AM		41%	11%		1%	0%								53%
AM Peak Hour		6:00	6:00		5:00	7:00								6:00
Volume		76	17		2	1								95
PM Volumes	2	269	79	2	16	1	0	1	0	0	0	0	0	370
% PM	0%	34%	10%	0%	2%	0%		0%						47%
PM Peak Hour	14:00	15:00	14:00	14:00	13:00	14:00		13:00						14:00
Volume	1	39	17	2	3	1		1						59

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	106		14%	91		12%	80		10%	503		64%

Classification Definitions

1 Motorcycles
2 Passenger Cars
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4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Hansen Rd N/O Von Sosten Rd

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_003

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	10	4	0	0	0	0	0	0	0	0	0	0	14
1:00	0	12	1	0	0	0	0	0	0	0	0	0	0	13
2:00	0	8	6	0	0	0	0	0	0	0	0	0	0	14
3:00	0	21	3	0	0	0	0	0	0	0	0	0	0	24
4:00	0	44	10	0	0	0	0	0	0	0	0	0	0	54
5:00	0	74	20	0	3	0	0	0	0	0	0	0	0	97
6:00	0	92	21	1	3	0	0	0	0	0	0	0	0	117
7:00	0	91	22	1	3	1	0	0	0	0	0	0	0	118
8:00	0	64	13	0	1	0	0	0	0	0	0	0	0	78
9:00	0	40	9	0	2	0	0	0	0	0	0	0	0	51
10:00	0	20	9	0	1	0	0	0	0	0	0	0	0	30
11:00	0	21	9	0	1	0	0	0	0	0	0	0	0	31
12:00 PM	0	42	15	0	3	0	0	0	0	0	0	0	0	60
13:00	0	59	23	0	5	0	0	1	0	0	0	0	0	88
14:00	1	90	38	3	4	1	0	0	0	0	0	0	0	137
15:00	0	121	23	0	5	0	0	0	0	0	0	0	0	149
16:00	0	87	14	0	2	0	0	0	0	0	0	0	0	103
17:00	0	81	21	0	2	0	0	1	0	0	0	0	0	105
18:00	1	31	15	0	1	0	0	0	0	0	0	0	0	48
19:00	0	31	7	0	0	0	0	0	0	0	0	0	0	38
20:00	0	14	2	0	1	0	0	0	0	0	0	0	0	17
21:00	0	14	5	0	1	0	0	0	0	0	0	0	0	20
22:00	0	23	3	0	0	0	0	0	0	0	0	0	0	26
23:00	1	35	5	0	0	0	0	0	0	0	0	0	0	41
Totals	3	1125	298	5	38	2		2						1473
% of Totals	0%	76%	20%	0%	3%	0%		0%						100%

AM Volumes	0	497	127	2	14	1	0	0	0	0	0	0	0	641
% AM		34%	9%	0%	1%	0%								44%
AM Peak Hour		6:00	7:00	6:00	5:00	7:00								7:00
Volume		92	22	1	3	1								118
PM Volumes	3	628	171	3	24	1	0	2	0	0	0	0	0	832
% PM	0%	43%	12%	0%	2%	0%		0%						56%
PM Peak Hour	14:00	15:00	14:00	14:00	13:00	14:00		13:00						15:00
Volume	1	121	38	3	5	1		1						149

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	196		13%	148		10%	208		14%	921		63%

Classification Definitions

1 Motorcycles
2 Passenger Cars
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8 <=4-Axle Single Trailers
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10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Hansen Rd N/O Von Sosten Rd

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_003

DAILY TOTALS	NB	SB	EB	WB	Total
	693	780	0	0	1,473

AM Period	NB		SB		EB	WB	TOTAL		PM Period	NB		SB		EB	WB	TOTAL	
0:00	2		0		0	0	2		12:00	9		5		0	0	14	
0:15	2		3		0	0	5		12:15	3		6		0	0	9	
0:30	3		1		0	0	4		12:30	7		8		0	0	15	
0:45	1	8	2	6	0	0	3	14	12:45	7	26	15	34	0	0	22	60
1:00	2		2		0	0	4		13:00	5		5		0	0	10	
1:15	1		1		0	0	2		13:15	4		18		0	0	22	
1:30	3		3		0	0	6		13:30	12		20		0	0	32	
1:45	0	6	1	7	0	0	1	13	13:45	10	31	14	57	0	0	24	88
2:00	0		1		0	0	1		14:00	12		18		0	0	30	
2:15	2		2		0	0	4		14:15	15		14		0	0	29	
2:30	0		4		0	0	4		14:30	26		14		0	0	40	
2:45	1	3	4	11	0	0	5	14	14:45	25	78	13	59	0	0	38	137
3:00	0		3		0	0	3		15:00	33		11		0	0	44	
3:15	7		3		0	0	10		15:15	13		7		0	0	20	
3:30	2		2		0	0	4		15:30	40		17		0	0	57	
3:45	0	9	7	15	0	0	7	24	15:45	15	101	13	48	0	0	28	149
4:00	8		5		0	0	13		16:00	21		15		0	0	36	
4:15	4		7		0	0	11		16:15	11		9		0	0	20	
4:30	3		14		0	0	17		16:30	13		7		0	0	20	
4:45	3	18	10	36	0	0	13	54	16:45	17	62	10	41	0	0	27	103
5:00	6		9		0	0	15		17:00	24		15		0	0	39	
5:15	6		12		0	0	18		17:15	17		8		0	0	25	
5:30	2		22		0	0	24		17:30	11		10		0	0	21	
5:45	3	17	37	80	0	0	40	97	17:45	14	66	6	39	0	0	20	105
6:00	4		25		0	0	29		18:00	8		12		0	0	20	
6:15	3		27		0	0	30		18:15	1		8		0	0	9	
6:30	6		16		0	0	22		18:30	6		6		0	0	12	
6:45	9	22	27	95	0	0	36	117	18:45	4	19	3	29	0	0	7	48
7:00	6		16		0	0	22		19:00	4		8		0	0	12	
7:15	12		10		0	0	22		19:15	4		4		0	0	8	
7:30	17		21		0	0	38		19:30	3		7		0	0	10	
7:45	19	54	17	64	0	0	36	118	19:45	4	15	4	23	0	0	8	38
8:00	11		15		0	0	26		20:00	3		0		0	0	3	
8:15	7		12		0	0	19		20:15	4		2		0	0	6	
8:30	8		9		0	0	17		20:30	1		0		0	0	1	
8:45	10	36	6	42	0	0	16	78	20:45	0	8	7	9	0	0	7	17
9:00	4		5		0	0	9		21:00	5		3		0	0	8	
9:15	3		8		0	0	11		21:15	4		0		0	0	4	
9:30	3		9		0	0	12		21:30	3		1		0	0	4	
9:45	12	22	7	29	0	0	19	51	21:45	2	14	2	6	0	0	4	20
10:00	8		5		0	0	13		22:00	3		0		0	0	3	
10:15	5		1		0	0	6		22:15	2		2		0	0	4	
10:30	1		5		0	0	6		22:30	6		3		0	0	9	
10:45	3	17	2	13	0	0	5	30	22:45	6	17	4	9	0	0	10	26
11:00	5		3		0	0	8		23:00	3		7		0	0	10	
11:15	5		4		0	0	9		23:15	11		4		0	0	15	
11:30	3		1		0	0	4		23:30	9		3		0	0	12	
11:45	6	19	4	12	0	0	10	31	23:45	2	25	2	16	0	0	4	41
TOTALS		231		410				**641**	**TOTALS**		462		370				**832**
SPLIT %		36.0%		64.0%				**43.5%**	**SPLIT %**		55.5%		44.5%				**56.5%**

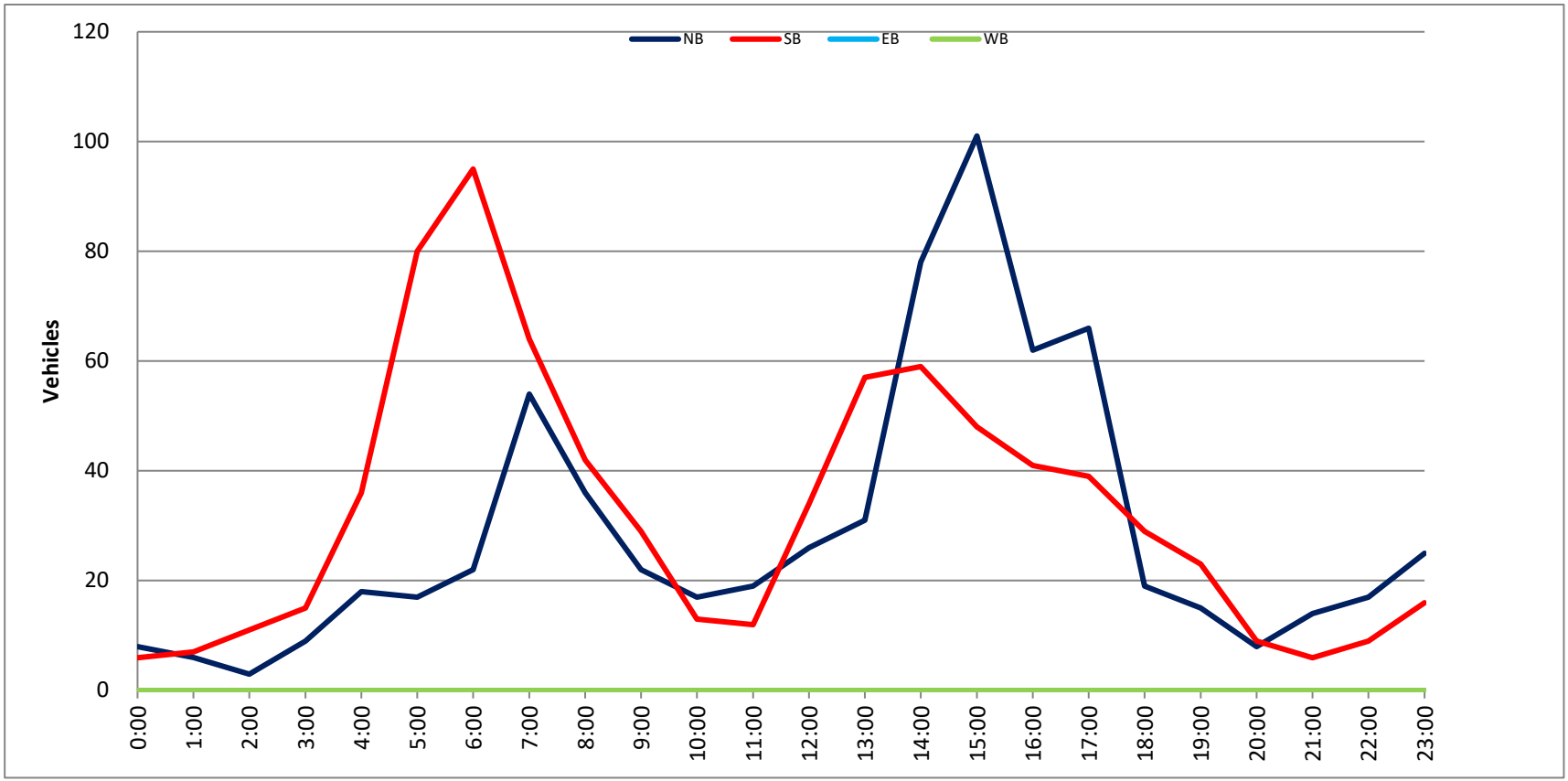
DAILY TOTALS	NB	SB	EB	WB	Total
	693	780	0	0	1,473

AM Peak Hour	7:15	5:30				**5:30**	**PM Peak Hour**	14:45	13:15				**14:45**
AM Pk Volume	59	111				**123**	**PM Pk Volume**	111	70				**159**
Pk Hr Factor	0.776	0.750				**0.769**	**Pk Hr Factor**	0.694	0.875				**0.697**
7 - 9 Volume	90	106	0	0		**196**	**4 - 6 Volume**	128	80	0	0		**208**
7 - 9 Peak Hour	7:15	7:30				**7:15**	**4 - 6 Peak Hour**	16:30	16:45				**16:45**
7 - 9 Pk Volume	59	65	0	0		**122**	**4 - 6 Pk Volume**	71	43	0	0		**112**
Pk Hr Factor	0.776	0.774	0.000	0.000		**0.803**	**Pk Hr Factor**	0.740	0.717	0.000	0.000		**0.718**

Prepared by NDS/ATD

Project #: CA22_090003_003 **City:** Tracy

Location: Hansen Rd N/O Von Sosten Rd **Date:** 1/11/2022



Prepared by National Data & Surveying Services

CLASSIFICATION

Von Sosten Rd W/O Byron Rd

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_004e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	17	4	0	0	0	0	0	0	0	0	0	0	21
1:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
2:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
3:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
4:00	0	18	3	0	0	0	0	0	0	0	0	0	0	21
5:00	1	15	4	0	0	0	0	0	1	0	0	0	0	21
6:00	0	24	1	0	1	0	0	0	1	0	0	0	0	27
7:00	0	56	10	0	4	0	0	0	0	0	0	0	0	70
8:00	0	48	13	0	1	0	0	0	0	0	0	0	0	62
9:00	0	50	17	0	3	0	0	0	0	0	0	0	0	70
10:00	1	49	22	0	2	0	0	0	0	0	0	0	0	74
11:00	0	53	22	0	2	0	0	0	0	0	0	0	0	77
12:00 PM	0	54	20	0	4	0	0	0	0	0	0	0	0	78
13:00	1	74	14	1	2	0	0	0	0	0	0	0	0	92
14:00	0	76	18	0	7	0	0	0	0	0	0	0	0	101
15:00	0	124	17	0	0	0	0	0	0	0	0	0	0	141
16:00	1	107	15	0	2	0	0	1	0	0	0	0	0	126
17:00	0	72	23	0	3	0	0	1	0	0	0	0	0	99
18:00	1	62	8	0	1	0	0	0	0	0	0	0	0	72
19:00	0	31	6	0	2	0	0	0	0	0	0	0	0	39
20:00	0	19	5	0	0	0	0	0	0	0	0	0	0	24
21:00	0	24	2	0	1	0	0	0	0	0	0	0	0	27
22:00	0	15	1	0	0	0	0	0	0	0	0	0	0	16
23:00	0	28	1	0	0	0	0	0	0	0	0	0	0	29
Totals	**5**	**1042**	**228**	**1**	**35**			**2**	**2**					**1315**
% of Totals	0%	79%	17%	0%	3%			0%	0%					100%

AM Volumes	2	356	98	0	13	0	0	0	2	0	0	0	0	471
% AM	0%	27%	7%		1%				0%					36%
AM Peak Hour	5:00	7:00	10:00		7:00				5:00					11:00
Volume	1	56	22		4				1					77
PM Volumes	3	686	130	1	22	0	0	2	0	0	0	0	0	844
% PM	0%	52%	10%	0%	2%			0%						64%
PM Peak Hour	13:00	15:00	17:00	13:00	14:00			16:00						15:00
Volume	1	124	23	1	7			1						141

Directional Peak Periods	**AM 7-9**			**NOON 12-2**			**PM 4-6**			**Off Peak Volumes**		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	132		10%	170		13%	225		17%	788		60%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Von Sosten Rd W/O Byron Rd

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_004w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	7	0	0	0	0	0	0	0	0	0	0	0	7
1:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
2:00	0	13	1	0	0	0	0	0	0	0	0	0	0	14
3:00	0	33	2	0	0	0	0	0	0	0	0	0	0	35
4:00	0	60	13	0	1	0	0	0	0	0	0	0	0	74
5:00	0	109	30	0	3	0	0	0	0	0	0	0	0	142
6:00	0	193	51	1	14	0	0	0	0	0	0	0	0	259
7:00	0	121	36	0	6	0	0	0	0	0	0	0	0	163
8:00	0	59	9	0	2	0	0	0	1	0	0	0	0	71
9:00	0	35	11	0	4	0	0	0	0	0	0	0	0	50
10:00	0	30	13	0	3	0	0	0	0	0	0	0	0	46
11:00	0	37	13	0	1	0	0	0	0	0	0	0	0	51
12:00 PM	0	52	11	0	6	0	0	0	0	0	0	0	0	69
13:00	0	47	23	0	3	0	0	0	0	0	0	0	0	73
14:00	0	51	11	0	2	0	0	0	0	0	0	0	0	64
15:00	1	56	7	0	5	0	0	0	0	0	0	0	0	69
16:00	0	62	13	0	0	0	0	0	1	0	0	0	0	76
17:00	0	52	8	0	1	0	0	0	0	0	0	0	0	61
18:00	0	46	6	0	1	0	0	0	0	0	0	0	0	53
19:00	0	50	5	0	2	0	0	0	0	0	0	0	0	57
20:00	1	32	3	0	1	0	0	0	0	0	0	0	0	37
21:00	0	28	3	0	0	0	0	0	0	0	0	0	0	31
22:00	0	23	5	0	0	0	0	0	0	0	0	0	0	28
23:00	0	22	1	0	0	0	0	1	0	0	0	0	0	24
Totals	2	1225	275	1	55			1	2					1561
% of Totals	0%	78%	18%	0%	4%			0%	0%					100%

AM Volumes	0	704	179	1	34	0	0	0	1	0	0	0	0	919
% AM		45%	11%	0%	2%				0%					59%
AM Peak Hour		6:00	6:00	6:00	6:00				8:00					6:00
Volume		193	51	1	14				1					259
PM Volumes	2	521	96	0	21	0	0	1	1	0	0	0	0	642
% PM	0%	33%	6%		1%			0%	0%					41%
PM Peak Hour	15:00	16:00	13:00		12:00			23:00	16:00					16:00
Volume	1	62	23		6			1	1					76

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	234		15%	142		9%	137		9%	1048		67%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Von Sosten Rd W/O Byron Rd

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_004

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	24	4	0	0	0	0	0	0	0	0	0	0	28
1:00	0	17	1	0	0	0	0	0	0	0	0	0	0	18
2:00	0	19	1	0	0	0	0	0	0	0	0	0	0	20
3:00	0	43	3	0	0	0	0	0	0	0	0	0	0	46
4:00	0	78	16	0	1	0	0	0	0	0	0	0	0	95
5:00	1	124	34	0	3	0	0	0	1	0	0	0	0	163
6:00	0	217	52	1	15	0	0	0	1	0	0	0	0	286
7:00	0	177	46	0	10	0	0	0	0	0	0	0	0	233
8:00	0	107	22	0	3	0	0	0	1	0	0	0	0	133
9:00	0	85	28	0	7	0	0	0	0	0	0	0	0	120
10:00	1	79	35	0	5	0	0	0	0	0	0	0	0	120
11:00	0	90	35	0	3	0	0	0	0	0	0	0	0	128
12:00 PM	0	106	31	0	10	0	0	0	0	0	0	0	0	147
13:00	1	121	37	1	5	0	0	0	0	0	0	0	0	165
14:00	0	127	29	0	9	0	0	0	0	0	0	0	0	165
15:00	1	180	24	0	5	0	0	0	0	0	0	0	0	210
16:00	1	169	28	0	2	0	0	1	1	0	0	0	0	202
17:00	0	124	31	0	4	0	0	1	0	0	0	0	0	160
18:00	1	108	14	0	2	0	0	0	0	0	0	0	0	125
19:00	0	81	11	0	4	0	0	0	0	0	0	0	0	96
20:00	1	51	8	0	1	0	0	0	0	0	0	0	0	61
21:00	0	52	5	0	1	0	0	0	0	0	0	0	0	58
22:00	0	38	6	0	0	0	0	0	0	0	0	0	0	44
23:00	0	50	2	0	0	0	0	1	0	0	0	0	0	53
Totals	7	2267	503	2	90			3	4					2876
% of Totals	0%	79%	17%	0%	3%			0%	0%					100%

AM Volumes	2	1060	277	1	47	0	0	0	3	0	0	0	0	1390
% AM	0%	37%	10%	0%	2%				0%					48%
AM Peak Hour	5:00	6:00	6:00	6:00	6:00				5:00					6:00
Volume	1	217	52	1	15				1					286
PM Volumes	5	1207	226	1	43	0	0	3	1	0	0	0	0	1486
% PM	0%	42%	8%	0%	1%			0%	0%					52%
PM Peak Hour	13:00	15:00	13:00	13:00	12:00			16:00	16:00					15:00
Volume	1	180	37	1	10			1	1					210

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	366		13%	312		11%	362		13%	1836		64%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Von Sosten Rd W/O Byron Rd

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_004

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,315	1,561	2,876

AM Period	NB	SB	EB		WB		TOTAL		PM Period	NB	SB	EB		WB		TOTAL	
0:00	0	0	4		2		6		12:00	0	0	18		17		35	
0:15	0	0	8		1		9		12:15	0	0	16		20		36	
0:30	0	0	3		1		4		12:30	0	0	17		16		33	
0:45	0	0	6	21	3	7	9	28	12:45	0	0	27	78	16	69	43	147
1:00	0	0	2		1		3		13:00	0	0	16		16		32	
1:15	0	0	3		3		6		13:15	0	0	15		11		26	
1:30	0	0	3		1		4		13:30	0	0	40		21		61	
1:45	0	0	3	11	2	7	5	18	13:45	0	0	21	92	25	73	46	165
2:00	0	0	3		0		3		14:00	0	0	22		18		40	
2:15	0	0	2		3		5		14:15	0	0	25		13		38	
2:30	0	0	1		2		3		14:30	0	0	31		19		50	
2:45	0	0	0	6	9	14	9	20	14:45	0	0	23	101	14	64	37	165
3:00	0	0	3		1		4		15:00	0	0	40		13		53	
3:15	0	0	3		9		12		15:15	0	0	28		19		47	
3:30	0	0	5		12		17		15:30	0	0	29		21		50	
3:45	0	0	0	11	13	35	13	46	15:45	0	0	44	141	16	69	60	210
4:00	0	0	6		6		12		16:00	0	0	34		18		52	
4:15	0	0	5		16		21		16:15	0	0	39		17		56	
4:30	0	0	4		31		35		16:30	0	0	39		18		57	
4:45	0	0	6	21	21	74	27	95	16:45	0	0	14	126	23	76	37	202
5:00	0	0	1		19		20		17:00	0	0	29		15		44	
5:15	0	0	7		28		35		17:15	0	0	21		21		42	
5:30	0	0	8		60		68		17:30	0	0	34		15		49	
5:45	0	0	5	21	35	142	40	163	17:45	0	0	15	99	10	61	25	160
6:00	0	0	7		62		69		18:00	0	0	21		14		35	
6:15	0	0	7		66		73		18:15	0	0	16		17		33	
6:30	0	0	7		72		79		18:30	0	0	20		12		32	
6:45	0	0	6	27	59	259	65	286	18:45	0	0	15	72	10	53	25	125
7:00	0	0	16		42		58		19:00	0	0	11		17		28	
7:15	0	0	13		44		57		19:15	0	0	11		13		24	
7:30	0	0	13		35		48		19:30	0	0	8		18		26	
7:45	0	0	28	70	42	163	70	233	19:45	0	0	9	39	9	57	18	96
8:00	0	0	22		25		47		20:00	0	0	10		12		22	
8:15	0	0	14		20		34		20:15	0	0	5		11		16	
8:30	0	0	16		10		26		20:30	0	0	4		8		12	
8:45	0	0	10	62	16	71	26	133	20:45	0	0	5	24	6	37	11	61
9:00	0	0	11		14		25		21:00	0	0	12		12		24	
9:15	0	0	14		9		23		21:15	0	0	6		6		12	
9:30	0	0	18		15		33		21:30	0	0	5		10		15	
9:45	0	0	27	70	12	50	39	120	21:45	0	0	4	27	3	31	7	58
10:00	0	0	22		10		32		22:00	0	0	2		4		6	
10:15	0	0	19		12		31		22:15	0	0	3		5		8	
10:30	0	0	15		9		24		22:30	0	0	10		9		19	
10:45	0	0	18	74	15	46	33	120	22:45	0	0	1	16	10	28	11	44
11:00	0	0	18		11		29		23:00	0	0	4		11		15	
11:15	0	0	19		11		30		23:15	0	0	5		5		10	
11:30	0	0	19		15		34		23:30	0	0	13		6		19	
11:45	0	0	21	77	14	51	35	128	23:45	0	0	7	29	2	24	9	53
TOTALS				471		919		**1390**	**TOTALS**				844		642		**1486**
SPLIT %				33.9%		66.1%		**48.3%**	**SPLIT %**				56.8%		43.2%		**51.7%**

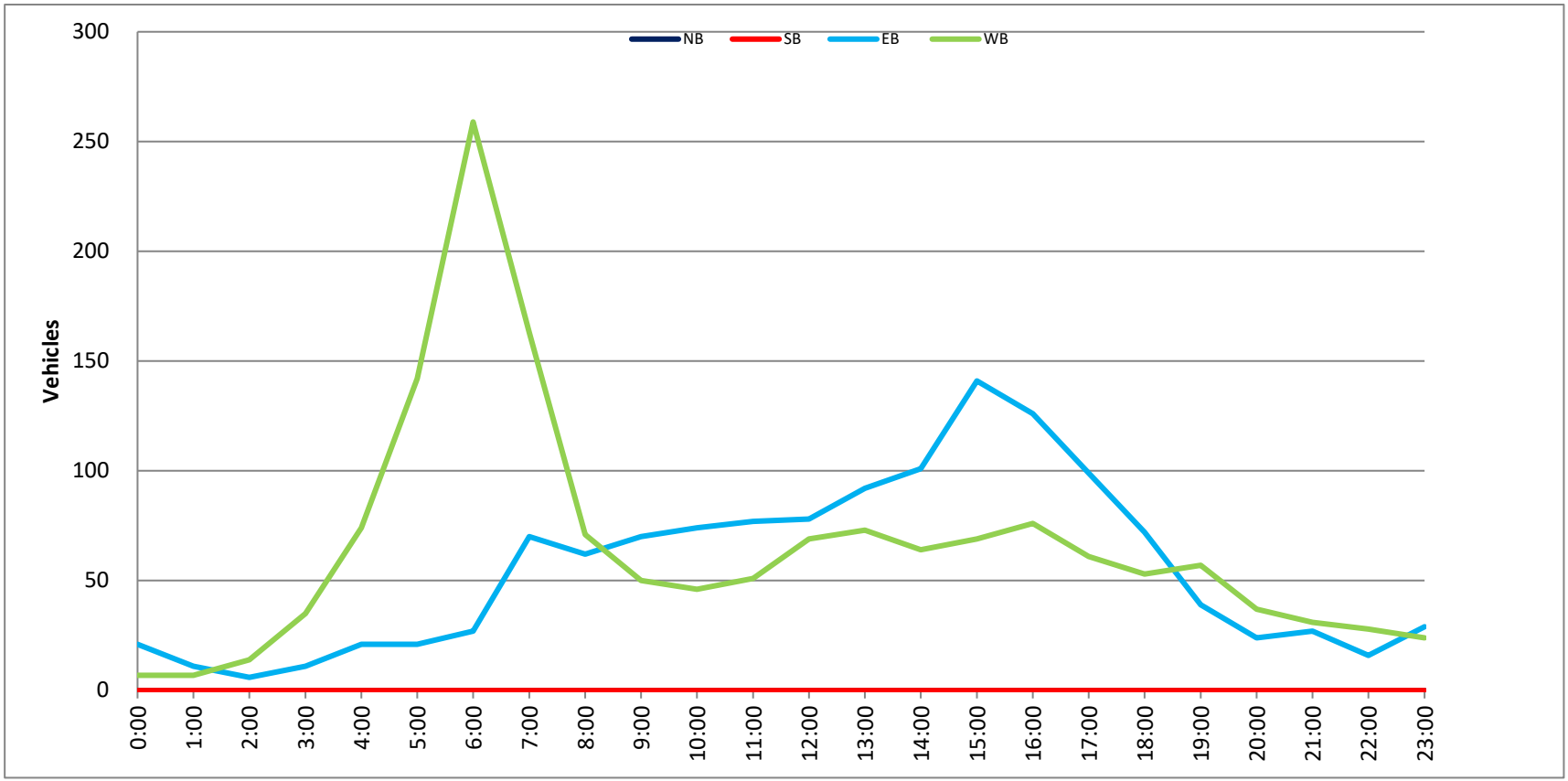
DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	1,315	1,561	2,876

AM Peak Hour			9:30		6:00		**6:00**		**PM Peak Hour**			15:45		13:30		**15:45**	
AM Pk Volume			86		259		**286**		**PM Pk Volume**			156		77		**225**	
Pk Hr Factor			0.796		0.899		**0.905**		**Pk Hr Factor**			0.886		0.770		**0.938**	
7 - 9 Volume	0	0	132		234		**366**		**4 - 6 Volume**	0	0	225		137		**362**	
7 - 9 Peak Hour			7:45		7:00		**7:00**		**4 - 6 Peak Hour**			16:00		16:30		**16:00**	
7 - 9 Pk Volume	0	0	80		163		**233**		**4 - 6 Pk Volume**	0	0	126		77		**202**	
Pk Hr Factor	0.000	0.000	0.714		0.926		**0.832**		**Pk Hr Factor**	0.000	0.000	0.808		0.837		**0.886**	

Prepared by NDS/ATD

Project #: CA22_090003_004 **City:** Tracy

Location: Von Sosten Rd W/O Byron Rd **Date:** 1/11/2022



Prepared by National Data & Surveying Services

CLASSIFICATION

Von Sosten Rd E/O Mountain House Pkwy

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_005e

East Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	9	0	0	0	0	0	0	0	0	0	0	0	9
1:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
2:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
3:00	0	15	1	0	0	0	0	0	0	0	0	0	0	16
4:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
5:00	0	6	0	0	0	1	0	0	0	0	0	0	0	7
6:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
7:00	0	28	4	1	1	0	0	0	0	0	0	0	0	34
8:00	1	30	5	0	0	0	0	0	0	0	0	0	0	36
9:00	0	17	5	1	2	1	0	0	0	0	0	0	0	26
10:00	0	10	9	0	0	0	0	0	0	0	0	0	0	19
11:00	0	25	3	0	3	0	0	0	1	0	1	0	0	33
12:00 PM	0	28	11	0	2	0	0	0	1	0	1	0	0	43
13:00	0	69	14	0	2	1	0	0	0	0	0	0	0	86
14:00	2	47	12	1	1	0	0	0	0	0	0	0	0	63
15:00	0	78	11	0	2	1	0	0	0	0	0	0	0	92
16:00	0	62	12	0	1	1	0	0	0	0	0	0	0	76
17:00	0	39	13	0	2	0	0	1	0	0	0	0	0	55
18:00	0	38	6	0	2	0	0	0	0	0	0	0	0	46
19:00	0	27	7	0	1	0	0	0	0	0	0	0	0	35
20:00	1	13	1	0	0	0	0	0	0	0	0	0	0	15
21:00	0	13	2	0	0	0	0	0	0	0	0	0	0	15
22:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
23:00	0	7	3	0	0	0	0	0	0	0	0	0	0	10
Totals	4	598	121	3	19	5		1	2		2			755
% of Totals	1%	79%	16%	0%	3%	1%		0%	0%		0%			100%

AM Volumes	1	170	29	2	6	2	0	0	1	0	1	0	0	212
% AM	0%	23%	4%	0%	1%	0%			0%		0%			28%
AM Peak Hour	8:00	8:00	10:00	7:00	11:00	5:00			11:00		11:00			8:00
Volume	1	30	9	1	3	1			1		1			36
PM Volumes	3	428	92	1	13	3	0	1	1	0	1	0	0	543
% PM	0%	57%	12%	0%	2%	0%		0%	0%		0%			72%
PM Peak Hour	14:00	15:00	13:00	14:00	12:00	13:00		17:00	12:00		12:00			15:00
Volume	2	78	14	1	2	1		1	1		1			92

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	70		9%	129		17%	131		17%	425		56%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Von Sosten Rd E/O Mountain House Pkwy

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_005w

West Bound

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total
0:00 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	2
1:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
2:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
3:00	0	5	3	0	0	0	0	0	0	0	0	0	0	8
4:00	0	31	14	0	1	0	0	0	0	0	0	0	0	46
5:00	0	54	18	0	1	0	0	0	0	0	0	0	0	73
6:00	0	123	32	0	6	0	0	0	0	0	0	0	0	161
7:00	0	79	25	0	3	0	0	0	0	0	0	0	0	107
8:00	0	42	8	0	2	0	0	0	1	0	0	0	0	53
9:00	0	29	2	0	0	0	0	0	0	0	0	0	0	31
10:00	0	18	9	1	0	0	0	0	0	0	0	0	0	28
11:00	0	10	8	0	1	0	0	0	0	0	1	0	0	20
12:00 PM	0	19	7	0	1	0	0	0	1	0	0	0	0	28
13:00	0	21	7	0	1	0	0	0	0	0	1	0	0	30
14:00	0	30	7	0	1	0	0	0	0	0	0	0	0	38
15:00	0	30	3	0	1	0	0	0	0	0	0	0	0	34
16:00	0	21	8	0	0	0	0	0	0	0	0	0	0	29
17:00	0	14	1	0	2	0	0	0	0	0	0	0	0	17
18:00	0	9	8	0	1	0	0	0	0	0	0	0	0	18
19:00	0	20	0	0	0	0	0	0	0	0	0	0	0	20
20:00	0	16	1	0	0	0	0	0	0	0	0	0	0	17
21:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
22:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
23:00	0	8	1	0	0	0	0	0	1	0	0	0	0	10
Totals		602	165	1	21				3		2			794
% of Totals		76%	21%	0%	3%				0%		0%			100%

AM Volumes	0	396	121	1	14	0	0	0	1	0	1	0	0	534
% AM		50%	15%	0%	2%				0%		0%			67%
AM Peak Hour		6:00	6:00	10:00	6:00				8:00		11:00			6:00
Volume		123	32	1	6				1		1			161
PM Volumes	0	206	44	0	7	0	0	0	2	0	1	0	0	260
% PM		26%	6%		1%				0%		0%			33%
PM Peak Hour		14:00	16:00		17:00				12:00		13:00			14:00
Volume		30	8		2				1		1			38

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	↔	%	Volume	↔	%	Volume	↔	%	Volume	↔	%
	160		20%	58		7%	46		6%	530		67%

Classification Definitions

1 Motorcycles
2 Passenger Cars
3 2-Axle, 4-Tire Single Units
4 Buses
5 2-Axle, 6-Tire Single Units
6 3-Axle Single Units
7 > =4-Axle Single Units
8 <=4-Axle Single Trailers
9 5-Axle Single Trailers
10 >=6-Axle Single Trailers
11 <=5-Axle Multi-Trailers
12 6-Axle Multi-Trailers
13 >=7-Axle Multi-Trailers

Prepared by National Data & Surveying Services

CLASSIFICATION

Von Sosten Rd E/O Mountain House Pkwy

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_005

Summary

Time	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12	# 13	Total	HV
0:00 AM	0	10	1	0	0	0	0	0	0	0	0	0	0	11	0
1:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9	0
2:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6	0
3:00	0	20	4	0	0	0	0	0	0	0	0	0	0	24	0
4:00	0	42	14	0	1	0	0	0	0	0	0	0	0	57	1
5:00	0	60	18	0	1	1	0	0	0	0	0	0	0	80	2
6:00	0	133	33	0	6	0	0	0	0	0	0	0	0	172	6
7:00	0	107	29	1	4	0	0	0	0	0	0	0	0	141	5
8:00	1	72	13	0	2	0	0	0	1	0	0	0	0	89	3
9:00	0	46	7	1	2	1	0	0	0	0	0	0	0	57	4
10:00	0	28	18	1	0	0	0	0	0	0	0	0	0	47	1
11:00	0	35	11	0	4	0	0	0	1	0	2	0	0	53	7
12:00 PM	0	47	18	0	3	0	0	0	2	0	1	0	0	71	6
13:00	0	90	21	0	3	1	0	0	0	0	1	0	0	116	5
14:00	2	77	19	1	2	0	0	0	0	0	0	0	0	101	3
15:00	0	108	14	0	3	1	0	0	0	0	0	0	0	126	4
16:00	0	83	20	0	1	1	0	0	0	0	0	0	0	105	2
17:00	0	53	14	0	4	0	0	1	0	0	0	0	0	72	5
18:00	0	47	14	0	3	0	0	0	0	0	0	0	0	64	3
19:00	0	47	7	0	1	0	0	0	0	0	0	0	0	55	1
20:00	1	29	2	0	0	0	0	0	0	0	0	0	0	32	0
21:00	0	24	2	0	0	0	0	0	0	0	0	0	0	26	0
22:00	0	14	1	0	0	0	0	0	0	0	0	0	0	15	0
23:00	0	15	4	0	0	0	0	0	1	0	0	0	0	20	1
Totals	4	1200	286	4	40	5		1	5		4			1549	59
% of Totals	0%	77%	18%	0%	3%	0%		0%	0%		0%			100%	

GHD N

AM Volumes	1	566	150	3	20	2	0	0	2	0	2	0	0	746
% AM	0%	37%	10%	0%	1%	0%			0%		0%			48%
AM Peak Hour	8:00	6:00	6:00	7:00	6:00	5:00			8:00		11:00			6:00
Volume	1	133	33	1	6	1			1		2			172
PM Volumes	3	634	136	1	20	3	0	1	3	0	2	0	0	803
% PM	0%	41%	9%	0%	1%	0%		0%	0%		0%			52%
PM Peak Hour	14:00	15:00	13:00	14:00	17:00	13:00		17:00	12:00		12:00			15:00
Volume	2	108	21	1	4	1		1	2		1			126

Directional Peak Periods	AM 7-9			NOON 12-2			PM 4-6			Off Peak Volumes		
All Classes	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%	Volume	⟷	%
	230		15%	187		12%	177		11%	955		62%

Classification Definitions

1 Motorcycles	**4** Buses	**7** > =4-Axle Single Units	**10** >=6-Axle Single Trailers	**13** >=7-Axle Multi-Trailers
2 Passenger Cars	**5** 2-Axle, 6-Tire Single Units	**8** <=4-Axle Single Trailers	**11** <=5-Axle Multi-Trailers	
3 2-Axle, 4-Tire Single Units	**6** 3-Axle Single Units	**9** 5-Axle Single Trailers	**12** 6-Axle Multi-Trailers	

Prepared by NDS/ATD

Prepared by National Data & Surveying Services

VOLUME

Von Sosten Rd E/O Mountain House Pkwy

Day: Tuesday
Date: 1/11/2022

City: Tracy
Project #: CA22_090003_005

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	755	794	1,549

AM Period	NB		SB		EB		WB		TOTAL	
0:00	0		0		0		1		1	
0:15	0		0		3		0		3	
0:30	0		0		2		0		2	
0:45	0		0		4	9	1	2	5	11
1:00	0		0		1		1		2	
1:15	0		0		2		1		3	
1:30	0		0		2		0		2	
1:45	0		0		2	7	0	2	2	9
2:00	0		0		1		0		1	
2:15	0		0		0		1		1	
2:30	0		0		1		0		1	
2:45	0		0		1	3	2	3	3	6
3:00	0		0		1		0		1	
3:15	0		0		2		2		4	
3:30	0		0		4		2		6	
3:45	0		0		9	16	4	8	13	24
4:00	0		0		5		6		11	
4:15	0		0		1		7		8	
4:30	0		0		4		16		20	
4:45	0		0		1	11	17	46	18	57
5:00	0		0		1		12		13	
5:15	0		0		2		20		22	
5:30	0		0		2		21		23	
5:45	0		0		2	7	20	73	22	80
6:00	0		0		1		28		29	
6:15	0		0		1		41		42	
6:30	0		0		3		51		54	
6:45	0		0		6	11	41	161	47	172
7:00	0		0		3		25		28	
7:15	0		0		4		22		26	
7:30	0		0		10		31		41	
7:45	0		0		17	34	29	107	46	141
8:00	0		0		14		22		36	
8:15	0		0		4		14		18	
8:30	0		0		10		8		18	
8:45	0		0		8	36	9	53	17	89
9:00	0		0		6		7		13	
9:15	0		0		1		8		9	
9:30	0		0		10		7		17	
9:45	0		0		9	26	9	31	18	57
10:00	0		0		5		7		12	
10:15	0		0		6		4		10	
10:30	0		0		6		9		15	
10:45	0		0		2	19	8	28	10	47
11:00	0		0		6		3		9	
11:15	0		0		8		7		15	
11:30	0		0		10		6		16	
11:45	0		0		9	33	4	20	13	53
TOTALS						212		534		**746**
SPLIT %						28.4%		71.6%		**48.2%**

PM Period	NB		SB		EB		WB		TOTAL	
12:00	0		0		8		8		16	
12:15	0		0		12		6		18	
12:30	0		0		7		10		17	
12:45	0		0		16	43	4	28	20	71
13:00	0		0		13		4		17	
13:15	0		0		20		4		24	
13:30	0		0		29		7		36	
13:45	0		0		24	86	15	30	39	116
14:00	0		0		15		12		27	
14:15	0		0		10		8		18	
14:30	0		0		20		10		30	
14:45	0		0		18	63	8	38	26	101
15:00	0		0		24		12		36	
15:15	0		0		9		8		17	
15:30	0		0		23		8		31	
15:45	0		0		36	92	6	34	42	126
16:00	0		0		19		6		25	
16:15	0		0		23		8		31	
16:30	0		0		19		10		29	
16:45	0		0		15	76	5	29	20	105
17:00	0		0		14		5		19	
17:15	0		0		12		2		14	
17:30	0		0		18		5		23	
17:45	0		0		11	55	5	17	16	72
18:00	0		0		13		6		19	
18:15	0		0		11		6		17	
18:30	0		0		12		4		16	
18:45	0		0		10	46	2	18	12	64
19:00	0		0		12		5		17	
19:15	0		0		9		7		16	
19:30	0		0		9		6		15	
19:45	0		0		5	35	2	20	7	55
20:00	0		0		4		5		9	
20:15	0		0		1		5		6	
20:30	0		0		5		5		10	
20:45	0		0		5	15	2	17	7	32
21:00	0		0		5		4		9	
21:15	0		0		4		3		7	
21:30	0		0		3		4		7	
21:45	0		0		3	15	0	11	3	26
22:00	0		0		3		2		5	
22:15	0		0		1		0		1	
22:30	0		0		0		5		5	
22:45	0		0		3	7	1	8	4	15
23:00	0		0		3		3		6	
23:15	0		0		3		3		6	
23:30	0		0		2		3		5	
23:45	0		0		2	10	1	10	3	20
TOTALS						543		260		**803**
SPLIT %						67.6%		32.4%		**51.8%**

DAILY TOTALS	NB	SB	EB	WB	Total
	0	0	755	794	1,549

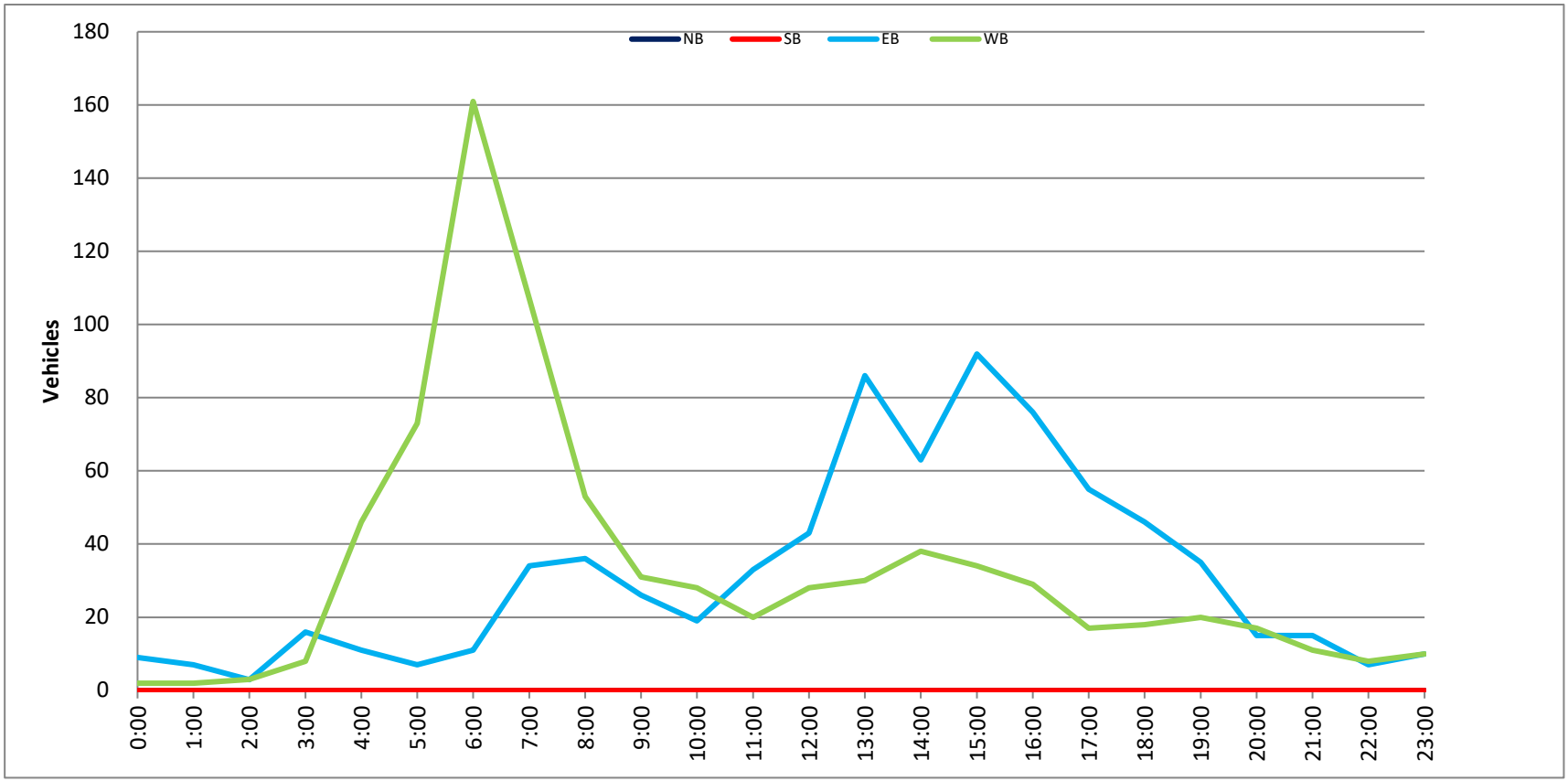
AM Peak Hour			7:15	6:00	**6:00**
AM Pk Volume			45	161	**172**
Pk Hr Factor			0.662	0.789	**0.796**
7 - 9 Volume	0	0	70	160	**230**
7 - 9 Peak Hour			7:15	7:00	**7:15**
7 - 9 Pk Volume	0	0	45	107	**149**
Pk Hr Factor	0.000	0.000	0.662	0.863	**0.810**

PM Peak Hour			15:30	13:45	**15:30**
PM Pk Volume			101	45	**129**
Pk Hr Factor			0.701	0.750	**0.768**
4 - 6 Volume	0	0	131	46	**177**
4 - 6 Peak Hour			16:00	16:00	**16:00**
4 - 6 Pk Volume	0	0	76	29	**105**
Pk Hr Factor	0.000	0.000	0.826	0.725	**0.847**

Prepared by NDS/ATD

Project #: CA22_090003_005 **City:** Tracy

Location: Von Sosten Rd E/O Mountain House Pkwy **Date:** 1/11/2022



Prepared by National Data & Surveying Services

Byron Rd & Van Sosten Rd

Peak Hour Turning Movement Count

ID: 22-090004-001
City: Tracy

Day: Tuesday
Date: 1/11/2022

PEAK HOURS

AM	07:15 AM - 08:15 AM
NOON	NONE
PM	04:00 PM - 05:00 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (Byron Rd)

AM	54	253	0	0	438	AM
NOON	0	0	0	0	0	NOON
PM	24	521	0	0	457	PM

EASTBOUND (Van Sosten Rd)

AM	NOON	PM	
143	0	81	
0	0	0	0
31	0	55	0
0	0	0	0
50	0	66	0

WESTBOUND (Van Sosten Rd)

PM	NOON	AM	
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	0
0	0	0	

NORTHBOUND (Byron Rd)

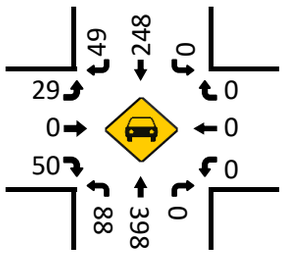
PM	587	0	57	402	0	PM
NOON	0	0	0	0	0	NOON
AM	303	0	89	407	0	AM

CONTROL

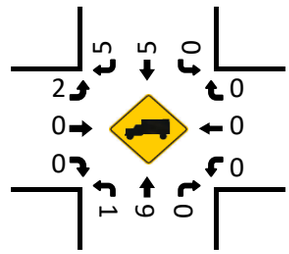
1-Way Stop(EB)

TEV	884	0	1125
	AM	NOON	PM
PHF	0.93		0.94

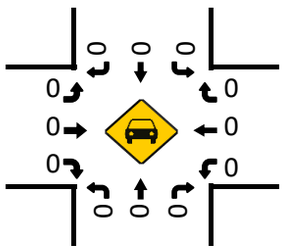
Cars (AM)



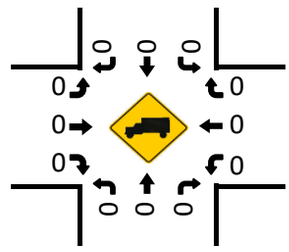
HT (AM)



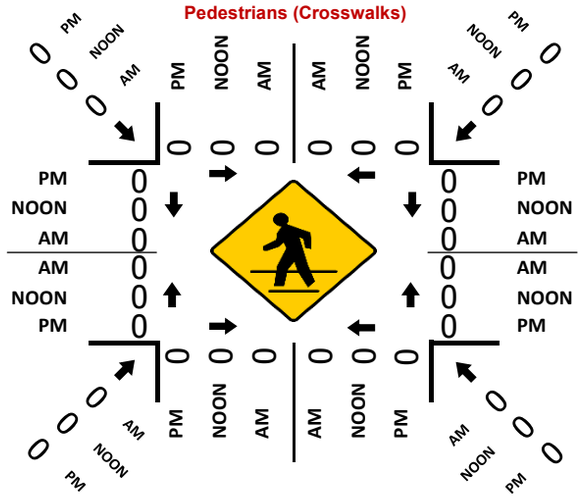
Cars (NOON)



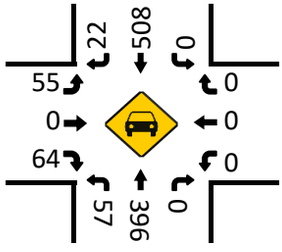
HT (NOON)



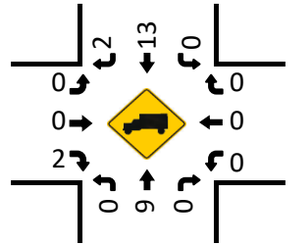
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

Hansen Rd & Van Sosten Rd

Peak Hour Turning Movement Count

ID: 22-090004-002
City: Tracy

Day: Tuesday
Date: 1/11/2022

PEAK HOURS

AM: 07:15 AM - 08:15 AM
NOON: NONE
PM: 04:15 PM - 05:15 PM

COUNT PERIODS

AM: 7:00 AM - 09:00 AM
NOON: NONE
PM: 4:00 PM - 06:00 PM

CONTROL: 4 Way Stop

	AM	NOON	PM
TEV	378	0	285
PHF	0.75		0.94

SOUTHBOUND (Hansen Rd)

AM	21	44	6	0	63	AM
NOON	0	0	0	0	0	NOON
PM	5	25	13	0	70	PM

EASTBOUND (Van Sosten Rd)

AM	NOON	PM	
129	0	37	
0	0	0	0
8	0	4	0
42	0	51	0
17	0	22	0

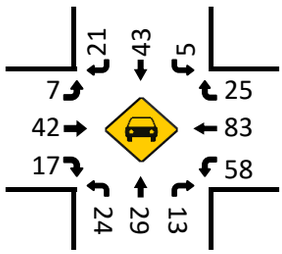
WESTBOUND (Van Sosten Rd)

PM	NOON	AM	
4	0	25	0
21	0	83	0
19	0	64	0
0	0	0	0
112	0	61	

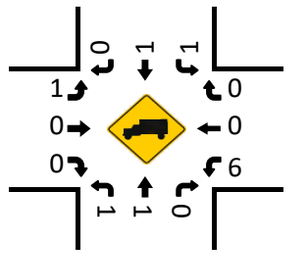
NORTHBOUND (Hansen Rd)

PM	66	0	11	62	48	PM
NOON	0	0	0	0	0	NOON
AM	125	0	25	30	13	AM

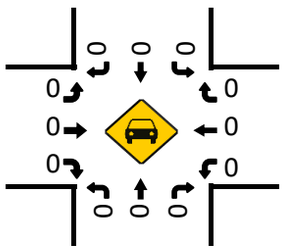
Cars (AM)



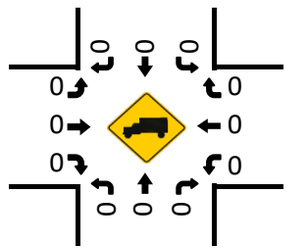
HT (AM)



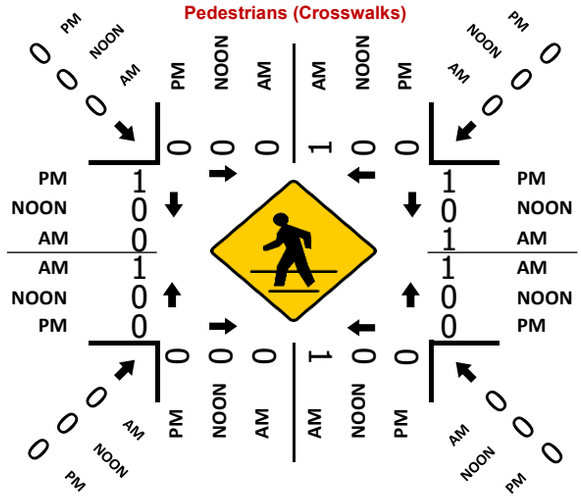
Cars (NOON)



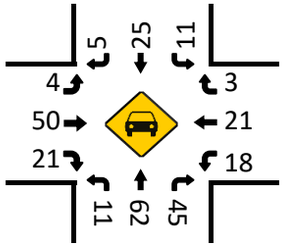
HT (NOON)



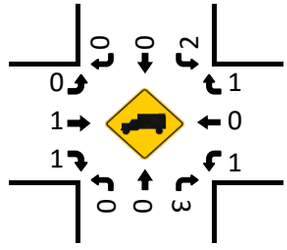
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

Hansen Rd & Grant Line Rd

Peak Hour Turning Movement Count

ID: 22-090004-003
City: Tracy

Day: Tuesday
Date: 1/11/2022

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (Hansen Rd)

AM	6	17	4	0	23	AM
NOON	0	0	0	0	0	NOON
PM	3	13	1	0	71	PM

EASTBOUND (Grant Line Rd)

AM	NOON	PM	
208	0	212	⇦
0	0	0	↶ 0
1	0	18	↱ 0
136	0	324	→ 0
22	0	21	↴ 0

WESTBOUND (Grant Line Rd)

PM	NOON	AM	
7	0	0	0 ↰
199	0	172	0 ←
13	0	28	0 ↶
0	0	0	0 ↰
343	0	151	⇨

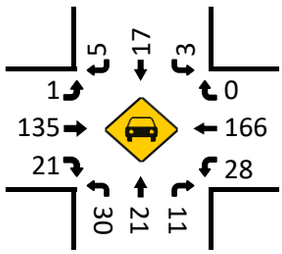
NORTHBOUND (Hansen Rd)

PM	47	0	10	46	18	PM
NOON	0	0	0	0	0	NOON
AM	67	0	30	22	11	AM

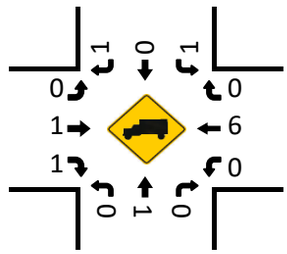
CONTROL: 4 Way Stop

TEV	449 AM	0 NOON	673 PM
PHF	0.79		0.96

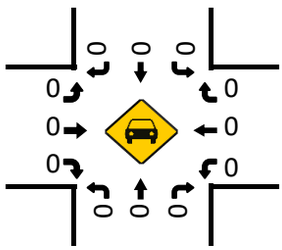
Cars (AM)



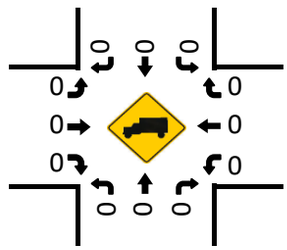
HT (AM)



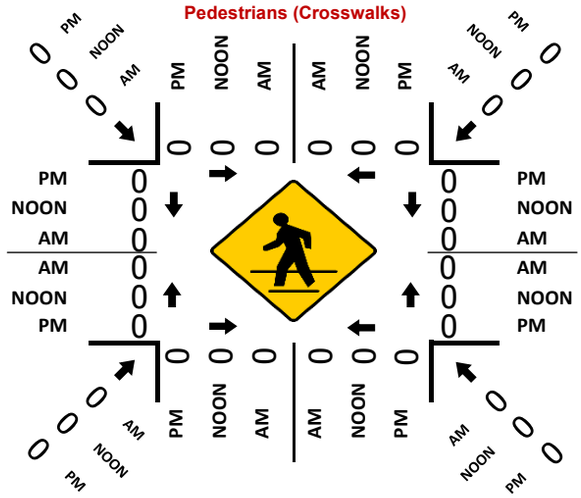
Cars (NOON)



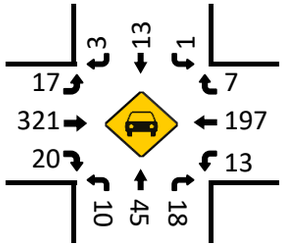
HT (NOON)



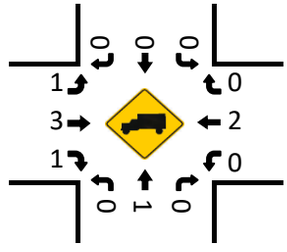
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

Hansen Rd & Promontory Pkwy

Peak Hour Turning Movement Count

ID: 22-090004-004
City: Tracy

Day: Tuesday
Date: 1/11/2022

PEAK HOURS

AM	08:00 AM - 09:00 AM
NOON	NONE
PM	04:30 PM - 05:30 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (Hansen Rd)

AM	22	41	13	0	39	AM
NOON	0	0	0	0	0	NOON
PM	2	28	3	0	108	PM

EASTBOUND (Promontory Pkwy)

AM	NOON	PM	
142	0	67	⇦
0	0	0	↶ 0
5	0	3	↱ 0
23	0	11	→ 0
53	0	49	↷ 0
AM	NOON	PM	

WESTBOUND (Promontory Pkwy)

PM	NOON	AM	
16	0	7	↷ 0
18	0	24	← 0
9	0	6	↰ 0
0	0	0	↶ 0
16	0	46	⇨
PM	NOON	AM	

NORTHBOUND (Hansen Rd)

PM	86	0	47	89	2	PM
NOON	0	0	0	0	0	NOON
AM	100	0	96	27	10	AM

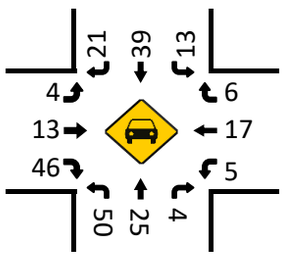
↶ 0	↰ 0	↑ 0	↱ 0	⇩

CONTROL

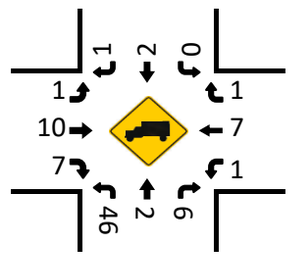
Signalized

TEV	327 AM	0 NOON	277 PM
PHF	0.92		0.85

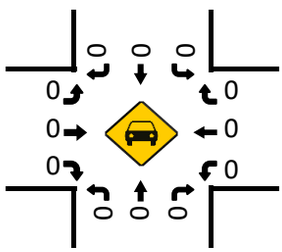
Cars (AM)



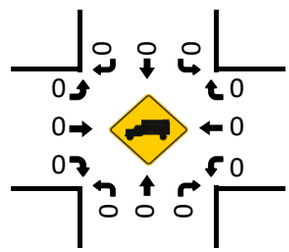
HT (AM)



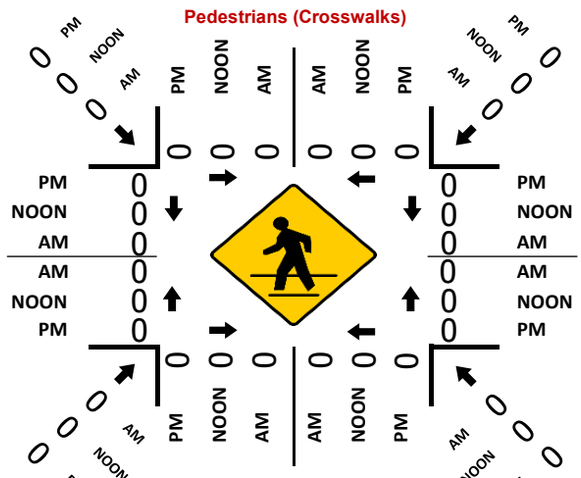
Cars (NOON)



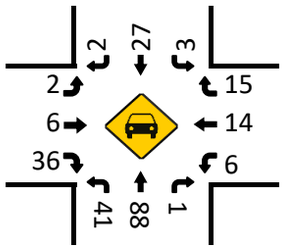
HT (NOON)



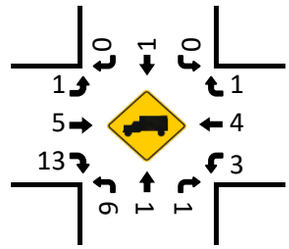
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

International Pkwy & Promontory Pkwy

Peak Hour Turning Movement Count

ID: 22-090004-005
City: Tracy

Day: Tuesday
Date: 1/11/2022

PEAK HOURS	COUNT PERIODS
07:00 AM - 08:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

CONTROL: Signalized

	AM	NOON	PM
TEV	994	0	1024
PHF	0.86		0.89

SOUTHBOUND (International Pkwy)

	AM	NOON	PM
Left	6	0	7
Through	438	0	222
Right	130	0	109
U-Turn	1	0	0
Total	364	0	638

WESTBOUND (Promontory Pkwy)

	PM	NOON	AM
Left	103	0	137
Through	1	0	0
Right	12	0	35
U-Turn	0	0	0
Total	126	0	145

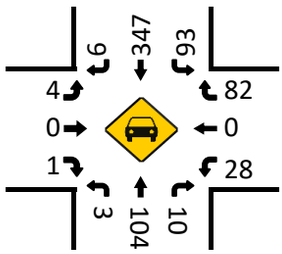
EASTBOUND (Promontory Pkwy)

	AM	NOON	PM
Left	10	0	11
Through	0	0	0
Right	6	0	12
U-Turn	0	0	3
Total	2	0	14

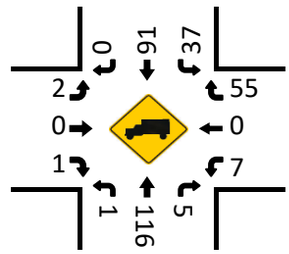
NORTHBOUND (International Pkwy)

	PM	NOON	AM
Left	249	1	3
Through	0	0	0
Right	475	0	4
U-Turn	523	0	220
Total	14	0	15

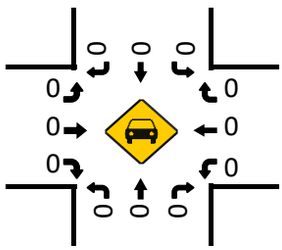
Cars (AM)



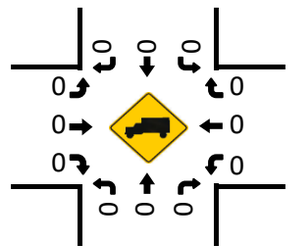
HT (AM)



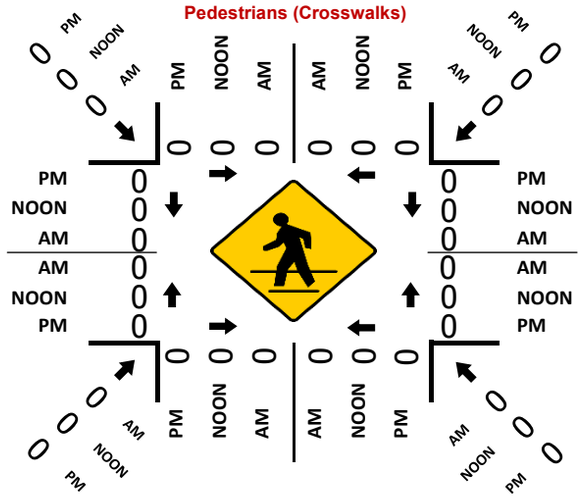
Cars (NOON)



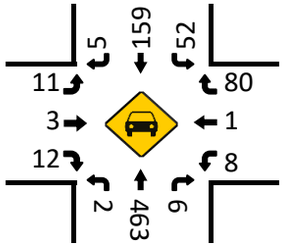
HT (NOON)



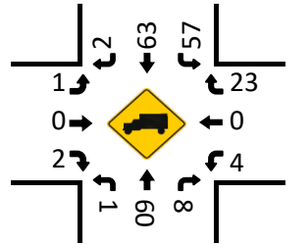
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

International Pkwy & I-205 EB Ramps

Peak Hour Turning Movement Count

ID: 22-090004-006
City: Tracy

Day: Tuesday
Date: 1/11/2022

PEAK HOURS

AM	07:30 AM - 08:30 AM
NOON	NONE
PM	04:45 PM - 05:45 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND (International Pkwy)

AM	308	492	0	0	139	AM
NOON	0	0	0	0	0	NOON
PM	270	320	0	0	221	PM

EASTBOUND (I-205 EB Ramps)

AM	NOON	PM	
308	0	270	⇦
0	0	0	↶ 0
23	0	86	↱ 0
0	0	2	→ 0
48	0	16	↴ 0
AM	NOON	PM	

WESTBOUND (I-205 EB Ramps)

PM	NOON	AM	
0	0	0	0 ↰
0	0	0	0 ←
0	0	0	0 ↶
0	0	0	0 ↰
513	0	233	⇨
PM	NOON	AM	

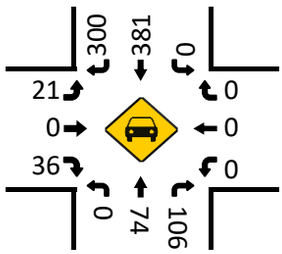
CONTROL: Signalized

TEV	1220 AM	0 NOON	1340 PM
PHF	0.89		0.92

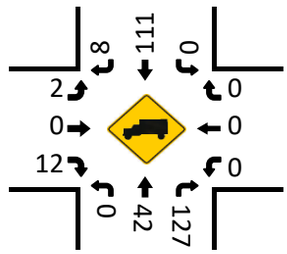
NORTHBOUND (International Pkwy)

PM	336	0	0	135	511	PM
NOON	0	0	0	0	0	NOON
AM	540	0	0	116	233	AM

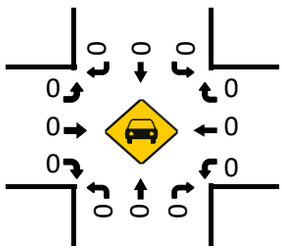
Cars (AM)



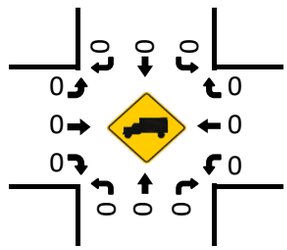
HT (AM)



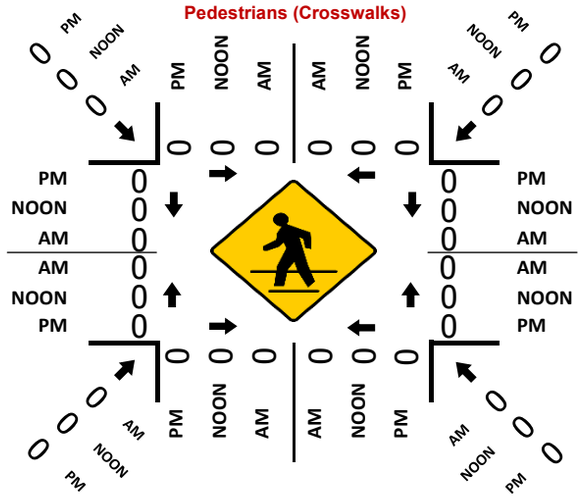
Cars (NOON)



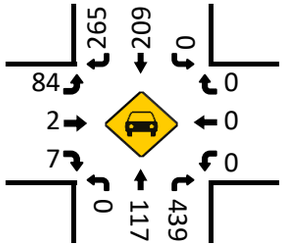
HT (NOON)



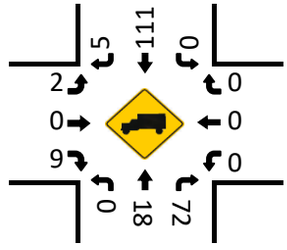
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

International Pkwy & I-205 WB Ramps

Peak Hour Turning Movement Count

ID: 22-090004-007
City: Tracy

Day: Tuesday
Date: 1/11/2022

PEAK HOURS	COUNT PERIODS
07:00 AM - 08:00 AM	7:00 AM - 09:00 AM
NONE	NONE
04:45 PM - 05:45 PM	4:00 PM - 06:00 PM

SOUTHBOUND (International Pkwy)

AM	126	364	0	0	385	AM
NOON	0	0	0	0	0	NOON
PM	42	342	0	0	554	PM

EASTBOUND (I-205 WB Ramps)

AM	NOON	PM
299	0	63
0	0	0
0	0	0
0	0	0
0	0	0
AM	NOON	PM

WESTBOUND (I-205 WB Ramps)

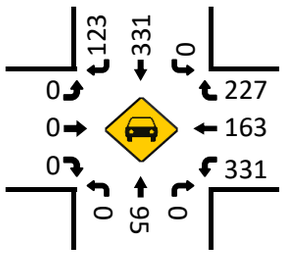
PM	NOON	AM
355	0	245
0	0	172
243	0	416
0	0	0
0	0	0
PM	NOON	AM

NORTHBOUND (International Pkwy)

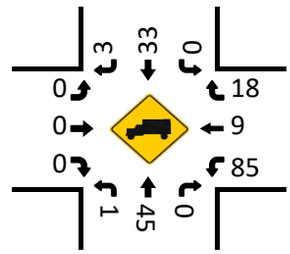
PM	588	3	21	199	0	PM
NOON	0	0	0	0	0	NOON
AM	780	0	1	140	0	AM

CONTROL			
Signalized			
TEV	1464 AM	0 NOON	1205 PM
PHF	0.88		0.93

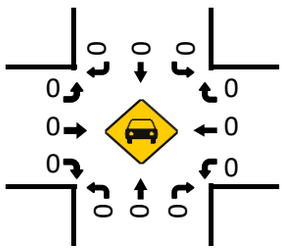
Cars (AM)



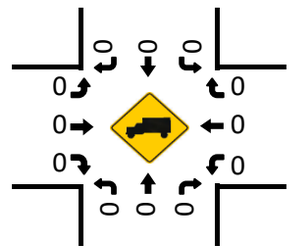
HT (AM)



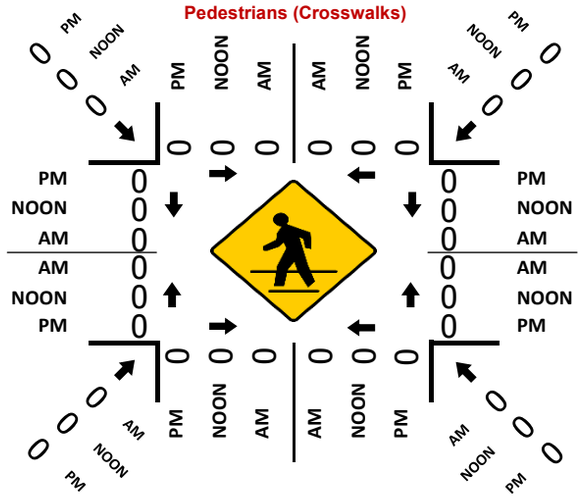
Cars (NOON)



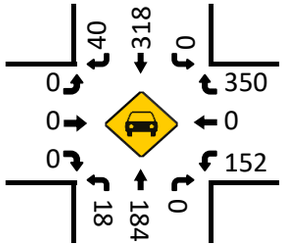
HT (NOON)



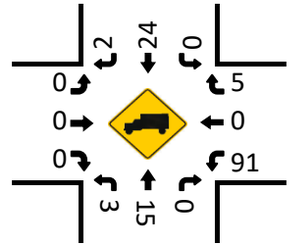
Pedestrians (Crosswalks)



Cars (PM)



HT (PM)



Prepared by National Data & Surveying Services

Mountain House Pkwy & Von Sosten Rd

Peak Hour Turning Movement Count

ID: 22-090004-008
City: Tracy

Day: Tuesday
Date: 1/11/2022

PEAK HOURS

AM	07:15 AM - 08:15 AM
NOON	NONE
PM	04:15 PM - 05:15 PM

COUNT PERIODS

AM	7:00 AM - 09:00 AM
NOON	NONE
PM	4:00 PM - 06:00 PM

SOUTHBOUND — Mountain House Pkwy

AM	0	470	39	0	383	AM
NOON	0	0	0	0	0	NOON
PM	0	391	27	0	501	PM

EASTBOUND — Von Sosten Rd

AM	NOON	PM
0	0	0
0	0	0
0	0	0
0	0	0
0	0	0

AM NOON PM

WESTBOUND — Von Sosten Rd

PM	NOON	AM
10	0	52
0	0	0
20	0	64
0	0	0
78	0	51

PM NOON AM

CONTROL

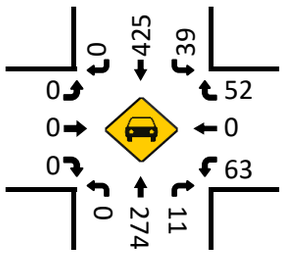
Signalized

TEV	968	0	990
	AM	NOON	PM
PHF	0.91		0.99

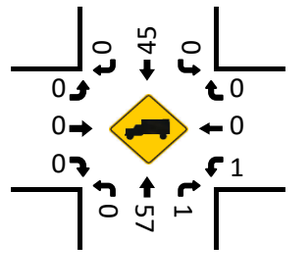
NORTHBOUND — Mountain House Pkwy

PM	411	0	0	491	51	PM
NOON	0	0	0	0	0	NOON
AM	534	0	0	331	12	AM

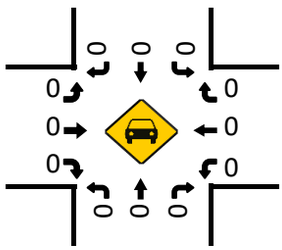
Cars (AM)



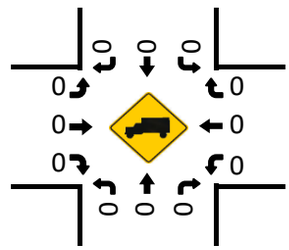
HT (AM)



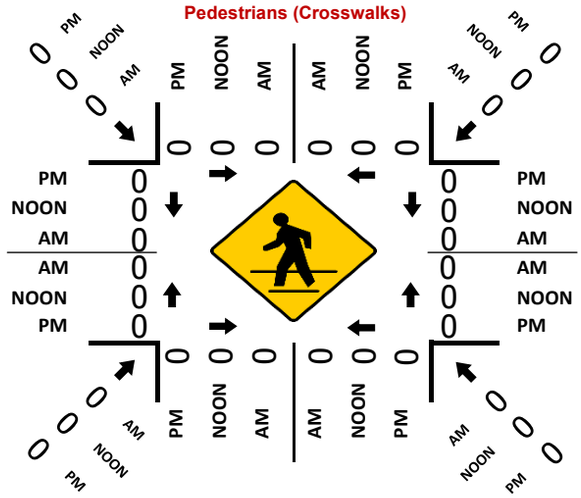
Cars (NOON)



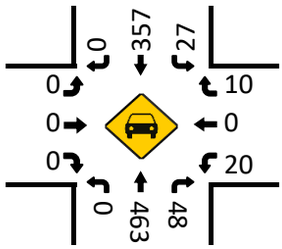
HT (NOON)



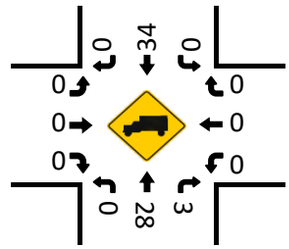
Pedestrians (Crosswalks)



Cars (PM)

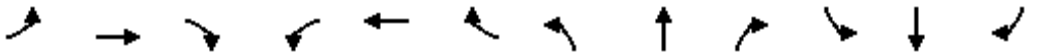


HT (PM)



Appendix B

Synchro Reports



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	0	2	35	0	137	4	220	15	130	438	6
Future Volume (veh/h)	6	0	2	35	0	137	4	220	15	130	438	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426
Adj Flow Rate, veh/h	7	0	2	41	0	0	5	256	17	151	509	7
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	32	32	32	32	32	32	32	32	32	32	32	32
Cap, veh/h	63	23	20	55	15	13	9	740	627	178	917	778
Arrive On Green	0.05	0.00	0.02	0.04	0.00	0.00	0.01	0.52	0.52	0.13	0.64	0.64
Sat Flow, veh/h	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Grp Volume(v), veh/h	7	0	2	41	0	0	5	256	17	151	509	7
Grp Sat Flow(s),veh/h/ln	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Q Serve(g_s), s	0.3	0.0	0.1	1.9	0.0	0.0	0.2	6.6	0.4	6.8	12.4	0.1
Cycle Q Clear(g_c), s	0.3	0.0	0.1	1.9	0.0	0.0	0.2	6.6	0.4	6.8	12.4	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	63	23	20	55	15	13	9	740	627	178	917	778
V/C Ratio(X)	0.11	0.00	0.10	0.74	0.00	0.00	0.55	0.35	0.03	0.85	0.55	0.01
Avail Cap(c_a), veh/h	216	658	558	216	658	558	216	740	627	216	917	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	0.0	30.4	29.8	0.0	0.0	31.1	8.9	7.4	26.7	6.2	4.0
Incr Delay (d2), s/veh	0.8	0.0	2.2	17.6	0.0	0.0	43.9	1.3	0.1	22.4	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.8	0.0	0.0	0.2	1.8	0.1	3.1	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.5	0.0	32.7	47.4	0.0	0.0	75.0	10.1	7.4	49.1	8.6	4.0
LnGrp LOS	C	A	C	D	A	A	E	B	A	D	A	A
Approach Vol, veh/h		9			41			278			667	
Approach Delay, s/veh		30.2			47.4			11.1			17.7	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	46.2	6.6	5.6	12.2	38.4	6.9	5.3
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.2	14.4	3.9	2.1	8.8	8.6	2.3	0.0
Green Ext Time (p_c), s	0.0	2.9	0.0	0.0	0.0	1.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	0	54	0	0	0	0	118	241	0	516	308
Future Volume (veh/h)	23	0	54	0	0	0	0	118	241	0	516	308
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1530	1530	1530				0	1530	1530	0	1530	1530
Adj Flow Rate, veh/h	26	0	61				0	133	271	0	580	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	25	25	25				0	25	25	0	25	25
Cap, veh/h	249	0	111				0	2265	1010	0	2265	
Arrive On Green	0.09	0.00	0.09				0.00	0.78	0.78	0.00	1.00	0.00
Sat Flow, veh/h	2913	0	1296				0	2983	1296	0	2983	1296
Grp Volume(v), veh/h	26	0	61				0	133	271	0	580	0
Grp Sat Flow(s),veh/h/ln	1457	0	1296				0	1453	1296	0	1453	1296
Q Serve(g_s), s	0.7	0.0	3.6				0.0	0.8	4.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	3.6				0.0	0.8	4.7	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	249	0	111				0	2265	1010	0	2265	
V/C Ratio(X)	0.10	0.00	0.55				0.00	0.06	0.27	0.00	0.26	
Avail Cap(c_a), veh/h	725	0	322				0	2265	1010	0	2265	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.79	0.00
Uniform Delay (d), s/veh	33.8	0.0	35.1				0.0	2.0	2.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	4.2				0.0	0.0	0.7	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.2				0.0	0.1	0.6	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	0.0	39.3				0.0	2.1	3.1	0.0	0.2	0.0
LnGrp LOS	C	A	D				A	A	A	A	A	
Approach Vol, veh/h		87						404			580	A
Approach Delay, s/veh		37.7						2.8			0.2	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	68.1	11.9	68.1
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	6.7	5.6	2.0
Green Ext Time (p_c), s	1.8	0.2	4.1

Intersection Summary	
HCM 6th Ctrl Delay	4.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	416	172	245	1	140	0	0	408	126
Future Volume (veh/h)	0	0	0	416	172	245	1	140	0	0	408	126
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1707	1707	1707	1707	1707	0	0	1707	1707
Adj Flow Rate, veh/h				473	195	278	1	159	0	0	464	0
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				13	13	13	13	13	0	0	13	13
Cap, veh/h				365	150	796	366	1817	0	0	1299	
Arrive On Green				0.31	0.31	0.31	0.45	1.00	0.00	0.00	0.28	0.00
Sat Flow, veh/h				1168	481	2547	1626	3329	0	0	4815	1447
Grp Volume(v), veh/h				668	0	278	1	159	0	0	464	0
Grp Sat Flow(s),veh/h/ln				1649	0	1273	1626	1622	0	0	1554	1447
Q Serve(g_s), s				25.0	0.0	6.7	0.0	0.0	0.0	0.0	6.4	0.0
Cycle Q Clear(g_c), s				25.0	0.0	6.7	0.0	0.0	0.0	0.0	6.4	0.0
Prop In Lane				0.71		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				515	0	796	366	1817	0	0	1299	
V/C Ratio(X)				1.30	0.00	0.35	0.00	0.09	0.00	0.00	0.36	
Avail Cap(c_a), veh/h				515	0	796	366	1817	0	0	1299	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.5	0.0	21.2	17.1	0.0	0.0	0.0	23.1	0.0
Incr Delay (d2), s/veh				147.2	0.0	0.3	0.0	0.1	0.0	0.0	0.8	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				30.3	0.0	2.0	0.0	0.0	0.0	0.0	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				174.7	0.0	21.5	17.1	0.1	0.0	0.0	23.9	0.0
LnGrp LOS				F	A	C	B	A	A	A	C	
Approach Vol, veh/h					946			160			464	A
Approach Delay, s/veh					129.7			0.2			23.9	
Approach LOS					F			A			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	50.5		22.5	28.0		29.5
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	2.0		2.0	8.4		27.0
Green Ext Time (p_c), s	1.0		0.0	2.4		0.0

Intersection Summary		
HCM 6th Ctrl Delay		85.2
HCM 6th LOS		F

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	64	52	331	12	39	470
Future Volume (veh/h)	64	52	331	12	39	470
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	70	57	364	13	43	516
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	157	139	890	397	69	1635
Arrive On Green	0.09	0.09	0.27	0.27	0.04	0.50
Sat Flow, veh/h	1654	1472	3387	1472	1654	3387
Grp Volume(v), veh/h	70	57	364	13	43	516
Grp Sat Flow(s),veh/h/ln	1654	1472	1650	1472	1654	1650
Q Serve(g_s), s	1.0	0.9	2.2	0.2	0.6	2.3
Cycle Q Clear(g_c), s	1.0	0.9	2.2	0.2	0.6	2.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	157	139	890	397	69	1635
V/C Ratio(X)	0.45	0.41	0.41	0.03	0.63	0.32
Avail Cap(c_a), veh/h	1627	1448	6087	2715	1627	6087
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.4	10.4	7.3	6.6	11.5	3.7
Incr Delay (d2), s/veh	0.7	0.7	0.3	0.0	9.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.3	0.0	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.2	11.1	7.6	6.6	20.6	3.8
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	127		377			559
Approach Delay, s/veh	11.2		7.6			5.1
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.5	12.1				17.6	6.8
Change Period (Y+Rc), s	4.5	5.5				5.5	4.5
Max Green Setting (Gmax), s	24.0	45.0				45.0	24.0
Max Q Clear Time (g_c+I1), s	2.6	4.2				4.3	3.0
Green Ext Time (p_c), s	0.1	2.4				3.5	0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	23	53	6	24	7	96	27	10	13	41	22
Future Volume (veh/h)	5	23	53	6	24	7	96	27	10	13	41	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515
Adj Flow Rate, veh/h	5	25	58	7	26	8	104	29	11	14	45	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, %	26	26	26	26	26	26	26	26	26	26	26	26
Cap, veh/h	10	557	248	14	564	252	129	770	343	26	564	252
Arrive On Green	0.01	0.19	0.19	0.01	0.20	0.20	0.09	0.27	0.27	0.02	0.20	0.20
Sat Flow, veh/h	1443	2878	1284	1443	2878	1284	1443	2878	1284	1443	2878	1284
Grp Volume(v), veh/h	5	25	58	7	26	8	104	29	11	14	45	24
Grp Sat Flow(s),veh/h/ln	1443	1439	1284	1443	1439	1284	1443	1439	1284	1443	1439	1284
Q Serve(g_s), s	0.1	0.3	1.4	0.2	0.3	0.2	2.6	0.3	0.2	0.3	0.5	0.6
Cycle Q Clear(g_c), s	0.1	0.3	1.4	0.2	0.3	0.2	2.6	0.3	0.2	0.3	0.5	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	10	557	248	14	564	252	129	770	343	26	564	252
V/C Ratio(X)	0.51	0.04	0.23	0.52	0.05	0.03	0.80	0.04	0.03	0.54	0.08	0.10
Avail Cap(c_a), veh/h	798	3182	1419	798	3182	1419	798	3182	1419	798	3182	1419
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	11.9	12.3	17.8	11.8	11.8	16.2	9.8	9.8	17.6	11.9	11.9
Incr Delay (d2), s/veh	35.9	0.0	0.5	27.3	0.0	0.1	11.0	0.0	0.0	15.9	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.3	0.2	0.1	0.0	1.0	0.1	0.0	0.2	0.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.8	11.9	12.8	45.1	11.8	11.8	27.2	9.8	9.8	33.5	11.9	12.1
LnGrp LOS	D	B	B	D	B	B	C	A	A	C	B	B
Approach Vol, veh/h		88			41			144			83	
Approach Delay, s/veh		14.9			17.5			22.3			15.6	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.3	11.7	4.7	15.5	4.2	11.8	7.2	12.9
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	20.0	* 40	20.0	40.0	20.0	* 40	20.0	40.0
Max Q Clear Time (g_c+I1), s	2.2	3.4	2.3	2.3	2.1	2.3	4.6	2.6
Green Ext Time (p_c), s	0.0	0.3	0.0	0.2	0.0	0.1	0.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	18.4
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	42	17	64	83	25	25	30	13	6	44	21
Future Vol, veh/h	8	42	17	64	83	25	25	30	13	6	44	21
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	56	23	85	111	33	33	40	17	8	59	28
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	9.3	8.4	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	37%	12%	37%	8%
Vol Thru, %	44%	63%	48%	62%
Vol Right, %	19%	25%	15%	30%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	68	67	172	71
LT Vol	25	8	64	6
Through Vol	30	42	83	44
RT Vol	13	17	25	21
Lane Flow Rate	91	89	229	95
Geometry Grp	1	1	1	1
Degree of Util (X)	0.12	0.112	0.285	0.122
Departure Headway (Hd)	4.759	4.525	4.481	4.637
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	753	791	803	772
Service Time	2.792	2.558	2.509	2.67
HCM Lane V/C Ratio	0.121	0.113	0.285	0.123
HCM Control Delay	8.4	8.1	9.3	8.3
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.4	1.2	0.4

Intersection	
Intersection Delay, s/veh	9.1
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	136	22	28	172	0	30	22	11	4	17	6
Future Vol, veh/h	1	136	22	28	172	0	30	22	11	4	17	6
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	172	28	35	218	0	38	28	14	5	22	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.9	9.5	8.6	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	48%	1%	14%	15%
Vol Thru, %	35%	86%	86%	63%
Vol Right, %	17%	14%	0%	22%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	159	200	27
LT Vol	30	1	28	4
Through Vol	22	136	172	17
RT Vol	11	22	0	6
Lane Flow Rate	80	201	253	34
Geometry Grp	1	1	1	1
Degree of Util (X)	0.11	0.247	0.314	0.047
Departure Headway (Hd)	4.985	4.415	4.465	4.96
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	718	813	805	720
Service Time	3.025	2.441	2.49	3.002
HCM Lane V/C Ratio	0.111	0.247	0.314	0.047
HCM Control Delay	8.6	8.9	9.5	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	1	1.3	0.1

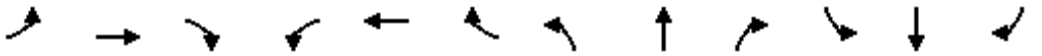
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	50	89	407	253	54
Future Vol, veh/h	31	50	89	407	253	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	54	96	438	272	58

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	931	301	330	0	-	0
Stage 1	301	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	296	739	1229	-	-	-
Stage 1	751	-	-	-	-	-
Stage 2	531	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	273	739	1229	-	-	-
Mov Cap-2 Maneuver	273	-	-	-	-	-
Stage 1	692	-	-	-	-	-
Stage 2	531	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14	1.5	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1229	-	273	739	-	-
HCM Lane V/C Ratio	0.078	-	0.122	0.073	-	-
HCM Control Delay (s)	8.2	-	20	10.3	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.4	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	3	14	12	1	103	4	523	14	109	222	7
Future Volume (veh/h)	12	3	14	12	1	103	4	523	14	109	222	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574
Adj Flow Rate, veh/h	13	3	16	13	1	0	4	588	16	122	249	8
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	22	22	22	22	22	22	22	22	22	22	22	22
Cap, veh/h	65	119	101	24	77	65	8	814	689	149	962	815
Arrive On Green	0.04	0.08	0.08	0.02	0.05	0.00	0.01	0.52	0.52	0.10	0.61	0.61
Sat Flow, veh/h	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Grp Volume(v), veh/h	13	3	16	13	1	0	4	588	16	122	249	8
Grp Sat Flow(s),veh/h/ln	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Q Serve(g_s), s	0.5	0.1	0.7	0.5	0.0	0.0	0.2	18.2	0.4	5.0	4.6	0.1
Cycle Q Clear(g_c), s	0.5	0.1	0.7	0.5	0.0	0.0	0.2	18.2	0.4	5.0	4.6	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	65	119	101	24	77	65	8	814	689	149	962	815
V/C Ratio(X)	0.20	0.03	0.16	0.54	0.01	0.00	0.50	0.72	0.02	0.82	0.26	0.01
Avail Cap(c_a), veh/h	238	724	613	238	724	613	238	814	689	238	962	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	27.0	27.3	30.8	28.6	0.0	31.3	11.7	7.4	27.8	5.7	4.8
Incr Delay (d2), s/veh	1.5	0.1	0.7	17.2	0.1	0.0	40.6	5.5	0.1	11.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	0.3	0.0	0.0	0.1	5.8	0.1	2.1	1.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.6	27.1	28.0	48.0	28.6	0.0	71.8	17.3	7.5	39.2	6.3	4.8
LnGrp LOS	C	C	C	D	C	A	E	B	A	D	A	A
Approach Vol, veh/h		32			14			608			379	
Approach Delay, s/veh		29.0			46.6			17.4			16.9	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.3	44.3	5.0	9.4	10.3	38.4	6.7	7.7
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.2	6.6	2.5	2.7	7.0	20.2	2.5	2.0
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.1	2.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.9
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	2	16	0	0	0	0	136	511	0	320	270
Future Volume (veh/h)	87	2	16	0	0	0	0	136	511	0	320	270
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	0	1663	1663
Adj Flow Rate, veh/h	96	0	17				0	148	418	0	348	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	16	16	16				0	16	16	0	16	16
Cap, veh/h	291	0	129				0	2443	1089	0	2443	
Arrive On Green	0.09	0.00	0.09				0.00	0.77	0.77	0.00	0.77	0.00
Sat Flow, veh/h	3167	0	1409				0	3243	1409	0	3243	1409
Grp Volume(v), veh/h	96	0	17				0	148	418	0	348	0
Grp Sat Flow(s),veh/h/ln	1584	0	1409				0	1580	1409	0	1580	1409
Q Serve(g_s), s	2.3	0.0	0.9				0.0	0.9	7.7	0.0	2.2	0.0
Cycle Q Clear(g_c), s	2.3	0.0	0.9				0.0	0.9	7.7	0.0	2.2	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	291	0	129				0	2443	1089	0	2443	
V/C Ratio(X)	0.33	0.00	0.13				0.00	0.06	0.38	0.00	0.14	
Avail Cap(c_a), veh/h	788	0	351				0	2443	1089	0	2443	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.85	0.00
Uniform Delay (d), s/veh	34.0	0.0	33.4				0.0	2.2	2.9	0.0	2.3	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.5				0.0	0.0	1.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.3				0.0	0.1	1.2	0.0	0.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	33.8				0.0	2.2	4.0	0.0	2.4	0.0
LnGrp LOS	C	A	C				A	A	A	A	A	
Approach Vol, veh/h		113						566			348	A
Approach Delay, s/veh		34.5						3.5			2.4	
Approach LOS		C						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.5	12.5	67.5
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	9.7	4.3	4.2
Green Ext Time (p_c), s	2.5	0.3	2.2

Intersection Summary	
HCM 6th Ctrl Delay	6.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	244	0	355	24	199	0	0	346	42
Future Volume (veh/h)	0	0	0	244	0	355	24	199	0	0	346	42
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1722	1722	1722	1722	1722	0	0	1722	1722
Adj Flow Rate, veh/h				262	0	382	26	214	0	0	372	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				12	12	12	12	12	0	0	12	12
Cap, veh/h				340	0	532	369	2177	0	0	1806	
Arrive On Green				0.21	0.00	0.21	0.45	1.00	0.00	0.00	0.38	0.00
Sat Flow, veh/h				1640	0	2569	1640	3358	0	0	4856	1459
Grp Volume(v), veh/h				262	0	382	26	214	0	0	372	0
Grp Sat Flow(s),veh/h/ln				1640	0	1284	1640	1636	0	0	1567	1459
Q Serve(g_s), s				12.1	0.0	11.1	0.7	0.0	0.0	0.0	4.2	0.0
Cycle Q Clear(g_c), s				12.1	0.0	11.1	0.7	0.0	0.0	0.0	4.2	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				340	0	532	369	2177	0	0	1806	
V/C Ratio(X)				0.77	0.00	0.72	0.07	0.10	0.00	0.00	0.21	
Avail Cap(c_a), veh/h				513	0	803	369	2177	0	0	1806	
HCM Platoon Ratio				1.00	1.00	1.00	2.00	2.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				29.9	0.0	29.5	17.2	0.0	0.0	0.0	16.5	0.0
Incr Delay (d2), s/veh				4.0	0.0	1.8	0.4	0.1	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.0	0.0	3.4	0.3	0.0	0.0	0.0	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				34.0	0.0	31.4	17.6	0.1	0.0	0.0	16.7	0.0
LnGrp LOS				C	A	C	B	A	A	A	B	
Approach Vol, veh/h					644			240			372	A
Approach Delay, s/veh					32.4			2.0			16.7	
Approach LOS					C			A			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	58.9		22.5	36.4		21.1
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	2.0		2.7	6.2		14.1
Green Ext Time (p_c), s	1.3		0.0	2.0		2.5

Intersection Summary	
HCM 6th Ctrl Delay	22.0
HCM 6th LOS	C

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	10	491	51	27	391
Future Volume (veh/h)	20	10	491	51	27	391
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	20	10	496	52	27	395
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	52	46	1157	516	47	1890
Arrive On Green	0.03	0.03	0.34	0.34	0.03	0.55
Sat Flow, veh/h	1711	1522	3503	1522	1711	3503
Grp Volume(v), veh/h	20	10	496	52	27	395
Grp Sat Flow(s),veh/h/ln	1711	1522	1706	1522	1711	1706
Q Serve(g_s), s	0.3	0.2	2.7	0.6	0.4	1.4
Cycle Q Clear(g_c), s	0.3	0.2	2.7	0.6	0.4	1.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	52	46	1157	516	47	1890
V/C Ratio(X)	0.39	0.22	0.43	0.10	0.57	0.21
Avail Cap(c_a), veh/h	1708	1520	6390	2850	1708	6390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.4	11.4	6.1	5.4	11.5	2.7
Incr Delay (d2), s/veh	1.8	0.9	0.3	0.1	10.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.3	0.1	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.2	12.2	6.4	5.5	22.2	2.8
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	30		548			422
Approach Delay, s/veh	12.9		6.3			4.0
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.2	13.6			18.8	5.2
Change Period (Y+Rc), s	4.5	5.5			5.5	4.5
Max Green Setting (Gmax), s	24.0	45.0			45.0	24.0
Max Q Clear Time (g_c+I1), s	2.4	4.7			3.4	2.3
Green Ext Time (p_c), s	0.0	3.4			2.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	11	49	9	18	16	47	89	2	3	28	2
Future Volume (veh/h)	3	11	49	9	18	16	47	89	2	3	28	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707
Adj Flow Rate, veh/h	4	13	58	11	21	19	55	105	2	4	33	2
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	13	13	13	13	13	13	13	13	13	13	13	13
Cap, veh/h	9	635	283	24	664	296	96	867	387	9	694	310
Arrive On Green	0.01	0.20	0.20	0.01	0.20	0.20	0.06	0.27	0.27	0.01	0.21	0.21
Sat Flow, veh/h	1626	3244	1447	1626	3244	1447	1626	3244	1447	1626	3244	1447
Grp Volume(v), veh/h	4	13	58	11	21	19	55	105	2	4	33	2
Grp Sat Flow(s),veh/h/ln	1626	1622	1447	1626	1622	1447	1626	1622	1447	1626	1622	1447
Q Serve(g_s), s	0.1	0.1	1.2	0.2	0.2	0.4	1.2	0.9	0.0	0.1	0.3	0.0
Cycle Q Clear(g_c), s	0.1	0.1	1.2	0.2	0.2	0.4	1.2	0.9	0.0	0.1	0.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	9	635	283	24	664	296	96	867	387	9	694	310
V/C Ratio(X)	0.45	0.02	0.20	0.47	0.03	0.06	0.57	0.12	0.01	0.45	0.05	0.01
Avail Cap(c_a), veh/h	909	3627	1618	909	3627	1618	909	3627	1618	909	3627	1618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.7	11.6	12.1	17.5	11.4	11.5	16.4	9.9	9.6	17.7	11.2	11.1
Incr Delay (d2), s/veh	32.0	0.0	0.4	13.7	0.0	0.1	5.3	0.1	0.0	32.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.3	0.2	0.1	0.1	0.5	0.2	0.0	0.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.8	11.6	12.4	31.2	11.4	11.6	21.7	10.0	9.6	49.8	11.2	11.1
LnGrp LOS	D	B	B	C	B	B	C	A	A	D	B	B
Approach Vol, veh/h		75			51			162			39	
Approach Delay, s/veh		14.3			15.7			14.0			15.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	11.7	4.2	15.4	4.2	12.0	6.1	13.5
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	20.0	* 40	20.0	40.0	20.0	* 40	20.0	40.0
Max Q Clear Time (g_c+I1), s	2.2	3.2	2.1	2.9	2.1	2.4	3.2	2.3
Green Ext Time (p_c), s	0.0	0.2	0.0	0.6	0.0	0.1	0.1	0.1

Intersection Summary	
HCM 6th Ctrl Delay	14.5
HCM 6th LOS	B

Notes

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	51	22	19	21	4	11	62	48	13	25	5
Future Vol, veh/h	4	51	22	19	21	4	11	62	48	13	25	5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	54	23	20	22	4	12	66	51	14	27	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	7.7	7.8	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	5%	43%	30%
Vol Thru, %	51%	66%	48%	58%
Vol Right, %	40%	29%	9%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	121	77	44	43
LT Vol	11	4	19	13
Through Vol	62	51	21	25
RT Vol	48	22	4	5
Lane Flow Rate	129	82	47	46
Geometry Grp	1	1	1	1
Degree of Util (X)	0.143	0.094	0.058	0.054
Departure Headway (Hd)	3.99	4.128	4.451	4.266
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	886	854	809	825
Service Time	2.074	2.224	2.451	2.365
HCM Lane V/C Ratio	0.146	0.096	0.058	0.056
HCM Control Delay	7.8	7.7	7.7	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.5	0.3	0.2	0.2

Intersection	
Intersection Delay, s/veh	10.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	324	21	13	199	7	10	46	18	1	13	3
Future Vol, veh/h	18	324	21	13	199	7	10	46	18	1	13	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	338	22	14	207	7	10	48	19	1	14	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.2	9.5	8.9	8.5
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	5%	6%	6%
Vol Thru, %	62%	89%	91%	76%
Vol Right, %	24%	6%	3%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	74	363	219	17
LT Vol	10	18	13	1
Through Vol	46	324	199	13
RT Vol	18	21	7	3
Lane Flow Rate	77	378	228	18
Geometry Grp	1	1	1	1
Degree of Util (X)	0.111	0.463	0.29	0.026
Departure Headway (Hd)	5.18	4.406	4.574	5.306
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	689	817	785	671
Service Time	3.231	2.435	2.608	3.365
HCM Lane V/C Ratio	0.112	0.463	0.29	0.027
HCM Control Delay	8.9	11.2	9.5	8.5
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.4	2.5	1.2	0.1

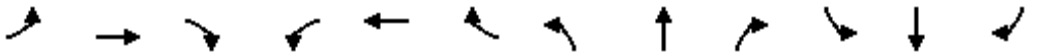
Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	55	66	57	402	521	24
Future Vol, veh/h	55	66	57	402	521	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	59	70	61	428	554	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1117	567	580	0	-	0
Stage 1	567	-	-	-	-	-
Stage 2	550	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	229	523	994	-	-	-
Stage 1	568	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	215	523	994	-	-	-
Mov Cap-2 Maneuver	215	-	-	-	-	-
Stage 1	533	-	-	-	-	-
Stage 2	578	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.7	1.1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	994	-	215	523	-	-
HCM Lane V/C Ratio	0.061	-	0.272	0.134	-	-
HCM Control Delay (s)	8.9	-	27.9	12.9	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.1	0.5	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	0	2	35	0	137	4	220	15	130	438	6
Future Volume (veh/h)	6	0	2	35	0	137	4	220	15	130	438	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426
Adj Flow Rate, veh/h	8	0	3	49	0	0	6	310	21	183	616	8
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	32	32	32	32	32	32	32	32	32	32	32	32
Cap, veh/h	69	28	23	61	20	17	11	713	604	208	920	780
Arrive On Green	0.05	0.00	0.02	0.05	0.00	0.00	0.01	0.50	0.50	0.15	0.65	0.65
Sat Flow, veh/h	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Grp Volume(v), veh/h	8	0	3	49	0	0	6	310	21	183	616	8
Grp Sat Flow(s),veh/h/ln	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Q Serve(g_s), s	0.4	0.0	0.2	2.3	0.0	0.0	0.3	9.1	0.6	8.6	17.6	0.2
Cycle Q Clear(g_c), s	0.4	0.0	0.2	2.3	0.0	0.0	0.3	9.1	0.6	8.6	17.6	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	28	23	61	20	17	11	713	604	208	920	780
V/C Ratio(X)	0.12	0.00	0.13	0.80	0.00	0.00	0.56	0.43	0.03	0.88	0.67	0.01
Avail Cap(c_a), veh/h	208	634	537	208	634	537	208	713	604	208	920	780
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	0.0	31.4	30.8	0.0	0.0	32.2	10.4	8.3	27.0	7.2	4.1
Incr Delay (d2), s/veh	0.7	0.0	2.4	20.6	0.0	0.0	38.6	1.9	0.1	32.0	3.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.1	1.1	0.0	0.0	0.2	2.6	0.1	4.3	4.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	0.0	33.9	51.5	0.0	0.0	70.8	12.3	8.4	59.0	11.1	4.2
LnGrp LOS	C	A	C	D	A	A	E	B	A	E	B	A
Approach Vol, veh/h		11			49			337			807	
Approach Delay, s/veh		31.3			51.5			13.1			21.9	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	47.9	6.9	5.9	14.0	38.4	7.3	5.5
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.3	19.6	4.3	2.2	10.6	11.1	2.4	0.0
Green Ext Time (p_c), s	0.0	3.2	0.0	0.0	0.0	1.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.7
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	0	54	0	0	0	0	118	241	0	516	308
Future Volume (veh/h)	23	0	54	0	0	0	0	118	241	0	516	308
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1530	1530	1530				0	1530	1530	0	1530	1530
Adj Flow Rate, veh/h	31	0	73				0	160	328	0	702	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	25	25	25				0	25	25	0	25	25
Cap, veh/h	262	0	117				0	2252	1004	0	2252	
Arrive On Green	0.09	0.00	0.09				0.00	0.77	0.77	0.00	1.00	0.00
Sat Flow, veh/h	2913	0	1296				0	2983	1296	0	2983	1296
Grp Volume(v), veh/h	31	0	73				0	160	328	0	702	0
Grp Sat Flow(s),veh/h/ln	1457	0	1296				0	1453	1296	0	1453	1296
Q Serve(g_s), s	0.8	0.0	4.3				0.0	1.0	6.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	4.3				0.0	1.0	6.1	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	262	0	117				0	2252	1004	0	2252	
V/C Ratio(X)	0.12	0.00	0.63				0.00	0.07	0.33	0.00	0.31	
Avail Cap(c_a), veh/h	725	0	322				0	2252	1004	0	2252	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.97	0.00
Uniform Delay (d), s/veh	33.5	0.0	35.1				0.0	2.1	2.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	2.0				0.0	0.1	0.9	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.4				0.0	0.1	0.9	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.5	0.0	37.1				0.0	2.2	3.6	0.0	0.4	0.0
LnGrp LOS	C	A	D				A	A	A	A	A	
Approach Vol, veh/h		104						488			702	A
Approach Delay, s/veh		36.1						3.1			0.4	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.7	12.3	67.7
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	8.1	6.3	2.0
Green Ext Time (p_c), s	3.5	0.1	7.7

Intersection Summary	
HCM 6th Ctrl Delay	4.3
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	416	172	245	1	140	0	0	408	126
Future Volume (veh/h)	0	0	0	416	172	245	1	140	0	0	408	126
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1707	1707	1707	1707	1707	0	0	1707	1707
Adj Flow Rate, veh/h				572	236	337	1	192	0	0	561	0
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				13	13	13	13	13	0	0	13	13
Cap, veh/h				365	151	796	4	1817	0	0	2338	
Arrive On Green				0.31	0.31	0.31	0.00	0.18	0.00	0.00	0.50	0.00
Sat Flow, veh/h				1167	482	2547	1626	3329	0	0	4815	1447
Grp Volume(v), veh/h				808	0	337	1	192	0	0	561	0
Grp Sat Flow(s),veh/h/ln				1649	0	1273	1626	1622	0	0	1554	1447
Q Serve(g_s), s				25.0	0.0	8.4	0.0	3.9	0.0	0.0	5.5	0.0
Cycle Q Clear(g_c), s				25.0	0.0	8.4	0.0	3.9	0.0	0.0	5.5	0.0
Prop In Lane				0.71		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				515	0	796	4	1817	0	0	2338	
V/C Ratio(X)				1.57	0.00	0.42	0.28	0.11	0.00	0.00	0.24	
Avail Cap(c_a), veh/h				515	0	796	366	1817	0	0	2338	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.5	0.0	21.8	39.9	16.0	0.0	0.0	11.3	0.0
Incr Delay (d2), s/veh				264.9	0.0	0.2	51.9	0.1	0.0	0.0	0.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				47.2	0.0	2.4	0.1	1.3	0.0	0.0	1.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				292.4	0.0	22.0	91.8	16.1	0.0	0.0	11.5	0.0
LnGrp LOS				F	A	C	F	B	A	A	B	
Approach Vol, veh/h					1145			193			561	A
Approach Delay, s/veh					212.8			16.5			11.5	
Approach LOS					F			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	50.5		4.7	45.8		29.5
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	5.9		2.0	7.5		27.0
Green Ext Time (p_c), s	1.7		0.0	4.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	133.4
HCM 6th LOS	F

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	64	52	331	12	39	470
Future Volume (veh/h)	64	52	331	12	39	470
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	85	69	440	16	52	625
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	172	153	982	438	80	1660
Arrive On Green	0.10	0.10	0.30	0.30	0.05	0.50
Sat Flow, veh/h	1654	1472	3387	1472	1654	3387
Grp Volume(v), veh/h	85	69	440	16	52	625
Grp Sat Flow(s),veh/h/ln	1654	1472	1650	1472	1654	1650
Q Serve(g_s), s	1.2	1.1	2.8	0.2	0.8	3.0
Cycle Q Clear(g_c), s	1.2	1.1	2.8	0.2	0.8	3.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	172	153	982	438	80	1660
V/C Ratio(X)	0.49	0.45	0.45	0.04	0.65	0.38
Avail Cap(c_a), veh/h	1495	1330	4408	1966	1040	4408
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.8	10.7	7.2	6.4	11.9	3.9
Incr Delay (d2), s/veh	0.8	0.8	0.3	0.0	8.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.3	0.4	0.0	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.6	11.5	7.6	6.4	20.5	4.0
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	154		456			677
Approach Delay, s/veh	11.5		7.5			5.3
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.2	13.1				18.3	7.2
Change Period (Y+Rc), s	4.0	5.5				5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0				34.0	23.0
Max Q Clear Time (g_c+I1), s	2.8	4.8				5.0	3.2
Green Ext Time (p_c), s	0.1	2.8				4.2	0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	23	53	6	24	7	96	27	10	13	41	22
Future Volume (veh/h)	5	23	53	6	24	7	96	27	10	13	41	22
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515
Adj Flow Rate, veh/h	7	30	70	8	32	9	126	36	13	17	54	29
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, %	26	26	26	26	26	26	26	26	26	26	26	26
Cap, veh/h	14	533	238	15	537	239	152	844	376	31	602	269
Arrive On Green	0.01	0.19	0.19	0.01	0.19	0.19	0.11	0.29	0.29	0.02	0.21	0.21
Sat Flow, veh/h	1443	2878	1284	1443	2878	1284	1443	2878	1284	1443	2878	1284
Grp Volume(v), veh/h	7	30	70	8	32	9	126	36	13	17	54	29
Grp Sat Flow(s),veh/h/ln	1443	1439	1284	1443	1439	1284	1443	1439	1284	1443	1439	1284
Q Serve(g_s), s	0.2	0.3	1.8	0.2	0.3	0.2	3.2	0.3	0.3	0.4	0.6	0.7
Cycle Q Clear(g_c), s	0.2	0.3	1.8	0.2	0.3	0.2	3.2	0.3	0.3	0.4	0.6	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	14	533	238	15	537	239	152	844	376	31	602	269
V/C Ratio(X)	0.52	0.06	0.29	0.52	0.06	0.04	0.83	0.04	0.03	0.54	0.09	0.11
Avail Cap(c_a), veh/h	611	2687	1199	611	2687	1199	611	2603	1161	611	2603	1161
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	12.7	13.3	18.6	12.7	12.6	16.6	9.6	9.5	18.3	12.0	12.1
Incr Delay (d2), s/veh	27.4	0.0	0.7	24.6	0.0	0.1	10.7	0.0	0.0	14.0	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.4	0.2	0.1	0.0	1.3	0.1	0.1	0.2	0.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.0	12.7	14.0	43.2	12.7	12.7	27.3	9.6	9.6	32.3	12.1	12.3
LnGrp LOS	D	B	B	D	B	B	C	A	A	C	B	B
Approach Vol, veh/h		107			49			175			100	
Approach Delay, s/veh		15.7			17.7			22.3			15.6	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	11.7	4.8	16.9	4.4	11.7	8.0	13.7
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.2	3.8	2.4	2.3	2.2	2.3	5.2	2.7
Green Ext Time (p_c), s	0.0	0.4	0.0	0.2	0.0	0.2	0.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	18.6
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	42	17	64	83	25	25	30	13	6	44	21
Future Vol, veh/h	8	42	17	64	83	25	25	30	13	6	44	21
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	13	68	27	103	134	40	40	48	21	10	71	34
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	10.2	8.9	8.8
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	37%	12%	37%	8%
Vol Thru, %	44%	63%	48%	62%
Vol Right, %	19%	25%	15%	30%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	68	67	172	71
LT Vol	25	8	64	6
Through Vol	30	42	83	44
RT Vol	13	17	25	21
Lane Flow Rate	110	108	277	115
Geometry Grp	1	1	1	1
Degree of Util (X)	0.151	0.141	0.356	0.154
Departure Headway (Hd)	4.963	4.703	4.617	4.839
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	719	759	777	738
Service Time	3.018	2.755	2.659	2.895
HCM Lane V/C Ratio	0.153	0.142	0.356	0.156
HCM Control Delay	8.9	8.5	10.2	8.8
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.5	0.5	1.6	0.5

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	136	22	28	172	0	30	22	11	4	17	6
Future Vol, veh/h	1	136	22	28	172	0	30	22	11	4	17	6
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	208	34	43	263	0	46	34	17	6	26	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.6	10.6	9.1	8.6
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	48%	1%	14%	15%
Vol Thru, %	35%	86%	86%	63%
Vol Right, %	17%	14%	0%	22%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	63	159	200	27
LT Vol	30	1	28	4
Through Vol	22	136	172	17
RT Vol	11	22	0	6
Lane Flow Rate	96	244	306	41
Geometry Grp	1	1	1	1
Degree of Util (X)	0.14	0.308	0.391	0.06
Departure Headway (Hd)	5.225	4.558	4.594	5.222
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	682	787	781	681
Service Time	3.287	2.601	2.634	3.292
HCM Lane V/C Ratio	0.141	0.31	0.392	0.06
HCM Control Delay	9.1	9.6	10.6	8.6
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.5	1.3	1.9	0.2

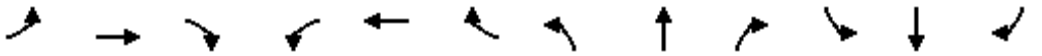
Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	50	89	407	253	54
Future Vol, veh/h	31	50	89	407	253	54
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	65	116	530	329	70

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1126	364	399	0	-	0
Stage 1	364	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	227	681	1160	-	-	-
Stage 1	703	-	-	-	-	-
Stage 2	461	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	204	681	1160	-	-	-
Mov Cap-2 Maneuver	204	-	-	-	-	-
Stage 1	633	-	-	-	-	-
Stage 2	461	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17	1.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1160	-	204	681	-	-
HCM Lane V/C Ratio	0.1	-	0.198	0.096	-	-
HCM Control Delay (s)	8.4	-	26.9	10.8	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.7	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	3	14	12	1	103	4	523	14	109	222	7
Future Volume (veh/h)	12	3	14	12	1	103	4	523	14	109	222	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574
Adj Flow Rate, veh/h	18	5	21	18	2	0	6	793	21	165	337	11
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	22	22	22	22	22	22	22	22	22	22	22	22
Cap, veh/h	76	141	120	32	94	80	12	762	646	197	957	811
Arrive On Green	0.05	0.09	0.09	0.02	0.06	0.00	0.01	0.48	0.48	0.13	0.61	0.61
Sat Flow, veh/h	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Grp Volume(v), veh/h	18	5	21	18	2	0	6	793	21	165	337	11
Grp Sat Flow(s),veh/h/ln	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Q Serve(g_s), s	0.8	0.2	1.0	0.8	0.1	0.0	0.3	32.6	0.6	7.2	7.2	0.2
Cycle Q Clear(g_c), s	0.8	0.2	1.0	0.8	0.1	0.0	0.3	32.6	0.6	7.2	7.2	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	76	141	120	32	94	80	12	762	646	197	957	811
V/C Ratio(X)	0.24	0.04	0.18	0.57	0.02	0.00	0.51	1.04	0.03	0.84	0.35	0.01
Avail Cap(c_a), veh/h	223	678	575	223	678	575	223	762	646	223	957	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.7	28.0	28.3	32.6	29.8	0.0	33.3	17.4	9.1	28.5	6.6	5.2
Incr Delay (d2), s/veh	1.6	0.1	0.7	14.8	0.1	0.0	29.9	43.5	0.1	21.7	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.3	0.4	0.0	0.0	0.2	18.2	0.2	3.5	1.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.2	28.1	29.0	47.4	29.9	0.0	63.2	60.9	9.2	50.2	7.6	5.3
LnGrp LOS	C	C	C	D	C	A	E	F	A	D	A	A
Approach Vol, veh/h		44			20			820			513	
Approach Delay, s/veh		30.2			45.7			59.6			21.3	
Approach LOS		C			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	46.7	5.4	10.6	12.8	38.4	7.4	8.6
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.3	9.2	2.8	3.0	9.2	34.6	2.8	2.1
Green Ext Time (p_c), s	0.0	1.9	0.0	0.1	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	44.4
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	2	16	0	0	0	0	136	511	0	320	270
Future Volume (veh/h)	87	2	16	0	0	0	0	136	511	0	320	270
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	0	1663	1663
Adj Flow Rate, veh/h	130	0	23				0	200	565	0	470	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	16	16	16				0	16	16	0	16	16
Cap, veh/h	306	0	136				0	2428	1083	0	2428	
Arrive On Green	0.10	0.00	0.10				0.00	0.77	0.77	0.00	1.00	0.00
Sat Flow, veh/h	3167	0	1409				0	3243	1409	0	3243	1409
Grp Volume(v), veh/h	130	0	23				0	200	565	0	470	0
Grp Sat Flow(s),veh/h/ln	1584	0	1409				0	1580	1409	0	1580	1409
Q Serve(g_s), s	3.1	0.0	1.2				0.0	1.3	12.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	0.0	1.2				0.0	1.3	12.4	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	306	0	136				0	2428	1083	0	2428	
V/C Ratio(X)	0.42	0.00	0.17				0.00	0.08	0.52	0.00	0.19	
Avail Cap(c_a), veh/h	788	0	351				0	2428	1083	0	2428	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.76	0.00
Uniform Delay (d), s/veh	34.0	0.0	33.2				0.0	2.3	3.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.6				0.0	0.1	1.8	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.4				0.0	0.2	2.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	0.0	33.8				0.0	2.4	5.4	0.0	0.1	0.0
LnGrp LOS	C	A	C				A	A	A	A	A	
Approach Vol, veh/h		153						765			470	A
Approach Delay, s/veh		34.8						4.6			0.1	
Approach LOS		C						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.2	12.8	67.2
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	14.4	5.1	2.0
Green Ext Time (p_c), s	3.6	0.4	3.2

Intersection Summary	
HCM 6th Ctrl Delay	6.4
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	244	0	355	24	199	0	0	346	42
Future Volume (veh/h)	0	0	0	244	0	355	24	199	0	0	346	42
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1722	1722	1722	1722	1722	0	0	1722	1722
Adj Flow Rate, veh/h				354	0	515	35	289	0	0	502	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				12	12	12	12	12	0	0	12	12
Cap, veh/h				427	0	669	369	2002	0	0	1555	
Arrive On Green				0.26	0.00	0.26	0.07	0.20	0.00	0.00	0.33	0.00
Sat Flow, veh/h				1640	0	2569	1640	3358	0	0	4856	1459
Grp Volume(v), veh/h				354	0	515	35	289	0	0	502	0
Grp Sat Flow(s),veh/h/ln				1640	0	1284	1640	1636	0	0	1567	1459
Q Serve(g_s), s				16.3	0.0	14.8	1.6	5.8	0.0	0.0	6.4	0.0
Cycle Q Clear(g_c), s				16.3	0.0	14.8	1.6	5.8	0.0	0.0	6.4	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				427	0	669	369	2002	0	0	1555	
V/C Ratio(X)				0.83	0.00	0.77	0.09	0.14	0.00	0.00	0.32	
Avail Cap(c_a), veh/h				513	0	803	369	2002	0	0	1555	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.9	0.0	27.4	29.4	14.7	0.0	0.0	20.1	0.0
Incr Delay (d2), s/veh				9.3	0.0	3.8	0.5	0.2	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.2	0.0	4.7	0.6	1.9	0.0	0.0	2.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				37.2	0.0	31.1	29.9	14.9	0.0	0.0	20.6	0.0
LnGrp LOS				D	A	C	C	B	A	A	C	
Approach Vol, veh/h					869			324			502	A
Approach Delay, s/veh					33.6			16.5			20.6	
Approach LOS					C			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	54.7		22.5	32.2		25.3
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	7.8		3.6	8.4		18.3
Green Ext Time (p_c), s	1.8		0.0	2.6		2.6

Intersection Summary	
HCM 6th Ctrl Delay	26.5
HCM 6th LOS	C

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	10	491	51	27	391
Future Volume (veh/h)	20	10	491	51	27	391
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	27	14	670	70	37	533
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	67	60	1361	607	62	1997
Arrive On Green	0.04	0.04	0.40	0.40	0.04	0.59
Sat Flow, veh/h	1711	1522	3503	1522	1711	3503
Grp Volume(v), veh/h	27	14	670	70	37	533
Grp Sat Flow(s),veh/h/ln	1711	1522	1706	1522	1711	1706
Q Serve(g_s), s	0.4	0.2	3.9	0.8	0.6	2.0
Cycle Q Clear(g_c), s	0.4	0.2	3.9	0.8	0.6	2.0
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	67	60	1361	607	62	1997
V/C Ratio(X)	0.40	0.23	0.49	0.12	0.60	0.27
Avail Cap(c_a), veh/h	1478	1315	4359	1944	1028	4359
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.5	12.4	6.0	5.0	12.6	2.7
Incr Delay (d2), s/veh	1.4	0.7	0.3	0.1	9.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.4	0.1	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.9	13.1	6.3	5.1	21.7	2.8
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	41		740			570
Approach Delay, s/veh	13.6		6.2			4.0
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.0	16.1				21.1	5.5
Change Period (Y+Rc), s	4.0	5.5				5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0				34.0	23.0
Max Q Clear Time (g_c+I1), s	2.6	5.9				4.0	2.4
Green Ext Time (p_c), s	0.0	4.7				3.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	11	49	9	18	16	47	89	2	3	28	2
Future Volume (veh/h)	3	11	49	9	18	16	47	89	2	3	28	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707
Adj Flow Rate, veh/h	5	17	78	14	29	25	75	141	3	5	44	3
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	13	13	13	13	13	13	13	13	13	13	13	13
Cap, veh/h	11	604	269	29	641	286	117	964	430	11	751	335
Arrive On Green	0.01	0.19	0.19	0.02	0.20	0.20	0.07	0.30	0.30	0.01	0.23	0.23
Sat Flow, veh/h	1626	3244	1447	1626	3244	1447	1626	3244	1447	1626	3244	1447
Grp Volume(v), veh/h	5	17	78	14	29	25	75	141	3	5	44	3
Grp Sat Flow(s),veh/h/ln	1626	1622	1447	1626	1622	1447	1626	1622	1447	1626	1622	1447
Q Serve(g_s), s	0.1	0.2	1.7	0.3	0.3	0.5	1.7	1.2	0.1	0.1	0.4	0.1
Cycle Q Clear(g_c), s	0.1	0.2	1.7	0.3	0.3	0.5	1.7	1.2	0.1	0.1	0.4	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	11	604	269	29	641	286	117	964	430	11	751	335
V/C Ratio(X)	0.45	0.03	0.29	0.48	0.05	0.09	0.64	0.15	0.01	0.45	0.06	0.01
Avail Cap(c_a), veh/h	692	3045	1358	692	3045	1358	692	2950	1316	692	2950	1316
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	12.5	13.2	18.3	12.2	12.3	17.0	9.7	9.3	18.6	11.3	11.1
Incr Delay (d2), s/veh	26.6	0.0	0.6	11.5	0.0	0.1	5.7	0.1	0.0	26.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.5	0.2	0.1	0.1	0.7	0.3	0.0	0.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.2	12.5	13.8	29.7	12.2	12.5	22.6	9.8	9.3	45.2	11.3	11.1
LnGrp LOS	D	B	B	C	B	B	C	A	A	D	B	B
Approach Vol, veh/h		100			68			219			52	
Approach Delay, s/veh		15.1			15.9			14.2			14.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	11.7	4.3	17.0	4.3	12.1	6.7	14.5
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.3	3.7	2.1	3.2	2.1	2.5	3.7	2.4
Green Ext Time (p_c), s	0.0	0.3	0.0	0.8	0.0	0.2	0.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	51	22	19	21	4	11	62	48	13	25	5
Future Vol, veh/h	4	51	22	19	21	4	11	62	48	13	25	5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	6	73	32	27	30	6	16	89	69	19	36	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.1	8.1	8.3	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	5%	43%	30%
Vol Thru, %	51%	66%	48%	58%
Vol Right, %	40%	29%	9%	12%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	121	77	44	43
LT Vol	11	4	19	13
Through Vol	62	51	21	25
RT Vol	48	22	4	5
Lane Flow Rate	174	111	63	62
Geometry Grp	1	1	1	1
Degree of Util (X)	0.203	0.135	0.081	0.078
Departure Headway (Hd)	4.203	4.389	4.632	4.528
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	857	818	775	792
Service Time	2.219	2.408	2.654	2.548
HCM Lane V/C Ratio	0.203	0.136	0.081	0.078
HCM Control Delay	8.3	8.1	8.1	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.8	0.5	0.3	0.3

Intersection	
Intersection Delay, s/veh	13.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	324	21	13	199	7	10	46	18	1	13	3
Future Vol, veh/h	18	324	21	13	199	7	10	46	18	1	13	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	25	456	30	18	280	10	14	65	25	1	18	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	16.2	11.4	9.9	9.3
HCM LOS	C	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	5%	6%	6%
Vol Thru, %	62%	89%	91%	76%
Vol Right, %	24%	6%	3%	18%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	74	363	219	17
LT Vol	10	18	13	1
Through Vol	46	324	199	13
RT Vol	18	21	7	3
Lane Flow Rate	104	510	308	24
Geometry Grp	1	1	1	1
Degree of Util (X)	0.167	0.656	0.415	0.04
Departure Headway (Hd)	5.786	4.625	4.855	6.006
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	623	776	733	599
Service Time	3.787	2.696	2.938	4.011
HCM Lane V/C Ratio	0.167	0.657	0.42	0.04
HCM Control Delay	9.9	16.2	11.4	9.3
HCM Lane LOS	A	C	B	A
HCM 95th-tile Q	0.6	5	2	0.1

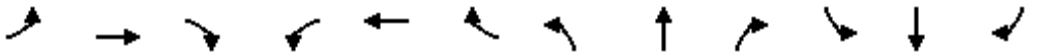
Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	55	66	57	402	521	24
Future Vol, veh/h	55	66	57	402	521	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	79	95	82	577	748	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1506	765	782	0	-	0
Stage 1	765	-	-	-	-	-
Stage 2	741	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	133	403	836	-	-	-
Stage 1	459	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	120	403	836	-	-	-
Mov Cap-2 Maneuver	120	-	-	-	-	-
Stage 1	414	-	-	-	-	-
Stage 2	471	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	45.4	1.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	836	-	120	403	-	-
HCM Lane V/C Ratio	0.098	-	0.658	0.235	-	-
HCM Control Delay (s)	9.8	-	79.8	16.7	-	-
HCM Lane LOS	A	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	3.5	0.9	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	0	2	35	0	157	4	225	15	172	443	6
Future Volume (veh/h)	6	0	2	35	0	157	4	225	15	172	443	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426
Adj Flow Rate, veh/h	7	0	2	41	0	24	5	262	17	200	515	7
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	32	32	32	32	32	32	32	32	32	32	32	32
Cap, veh/h	61	112	95	54	104	89	9	672	570	196	869	736
Arrive On Green	0.04	0.00	0.08	0.04	0.00	0.07	0.01	0.47	0.47	0.14	0.61	0.61
Sat Flow, veh/h	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Grp Volume(v), veh/h	7	0	2	41	0	24	5	262	17	200	515	7
Grp Sat Flow(s),veh/h/ln	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Q Serve(g_s), s	0.3	0.0	0.1	2.1	0.0	1.3	0.3	8.2	0.5	10.0	15.3	0.2
Cycle Q Clear(g_c), s	0.3	0.0	0.1	2.1	0.0	1.3	0.3	8.2	0.5	10.0	15.3	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	61	112	95	54	104	89	9	672	570	196	869	736
V/C Ratio(X)	0.12	0.00	0.02	0.77	0.00	0.27	0.56	0.39	0.03	1.02	0.59	0.01
Avail Cap(c_a), veh/h	196	598	507	196	598	507	196	672	570	196	869	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	29.4	32.9	0.0	30.3	34.2	11.8	9.8	29.6	8.3	5.3
Incr Delay (d2), s/veh	0.8	0.0	0.1	20.0	0.0	1.6	44.3	1.7	0.1	69.1	3.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.9	0.0	0.4	0.2	2.4	0.1	6.7	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	0.0	29.5	52.9	0.0	31.9	78.6	13.5	9.9	98.7	11.2	5.3
LnGrp LOS	C	A	C	D	A	C	E	B	A	F	B	A
Approach Vol, veh/h		9			65			284			722	
Approach Delay, s/veh		31.9			45.2			14.5			35.4	
Approach LOS		C			D			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	47.9	6.7	10.0	14.0	38.4	7.1	9.7
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.3	17.3	4.1	2.1	12.0	10.2	2.3	3.3
Green Ext Time (p_c), s	0.0	2.7	0.0	0.0	0.0	1.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.5
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	0	54	0	0	0	0	143	241	0	563	308
Future Volume (veh/h)	23	0	54	0	0	0	0	143	241	0	563	308
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1530	1530	1530				0	1530	1530	0	1530	1530
Adj Flow Rate, veh/h	26	0	61				0	161	271	0	633	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	25	25	25				0	25	25	0	25	25
Cap, veh/h	249	0	111				0	2265	1010	0	2265	
Arrive On Green	0.09	0.00	0.09				0.00	0.78	0.78	0.00	1.00	0.00
Sat Flow, veh/h	2913	0	1296				0	2983	1296	0	2983	1296
Grp Volume(v), veh/h	26	0	61				0	161	271	0	633	0
Grp Sat Flow(s),veh/h/ln	1457	0	1296				0	1453	1296	0	1453	1296
Q Serve(g_s), s	0.7	0.0	3.6				0.0	1.0	4.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.7	0.0	3.6				0.0	1.0	4.7	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	249	0	111				0	2265	1010	0	2265	
V/C Ratio(X)	0.10	0.00	0.55				0.00	0.07	0.27	0.00	0.28	
Avail Cap(c_a), veh/h	725	0	322				0	2265	1010	0	2265	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.76	0.00
Uniform Delay (d), s/veh	33.8	0.0	35.1				0.0	2.1	2.5	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	4.2				0.0	0.1	0.7	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	1.2				0.0	0.1	0.6	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	0.0	39.3				0.0	2.1	3.1	0.0	0.2	0.0
LnGrp LOS	C	A	D				A	A	A	A	A	
Approach Vol, veh/h		87						432			633	A
Approach Delay, s/veh		37.7						2.7			0.2	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	68.1	11.9	68.1
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	6.7	5.6	2.0
Green Ext Time (p_c), s	2.0	0.2	4.5

Intersection Summary	
HCM 6th Ctrl Delay	4.0
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	416	172	245	1	165	0	0	455	126
Future Volume (veh/h)	0	0	0	416	172	245	1	165	0	0	455	126
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1707	1707	1707	1707	1707	0	0	1707	1707
Adj Flow Rate, veh/h				473	195	278	1	188	0	0	517	0
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				13	13	13	13	13	0	0	13	13
Cap, veh/h				365	150	796	366	1817	0	0	1299	
Arrive On Green				0.31	0.31	0.31	0.07	0.18	0.00	0.00	0.28	0.00
Sat Flow, veh/h				1168	481	2547	1626	3329	0	0	4815	1447
Grp Volume(v), veh/h				668	0	278	1	188	0	0	517	0
Grp Sat Flow(s),veh/h/ln				1649	0	1273	1626	1622	0	0	1554	1447
Q Serve(g_s), s				25.0	0.0	6.7	0.0	3.9	0.0	0.0	7.2	0.0
Cycle Q Clear(g_c), s				25.0	0.0	6.7	0.0	3.9	0.0	0.0	7.2	0.0
Prop In Lane				0.71		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				515	0	796	366	1817	0	0	1299	
V/C Ratio(X)				1.30	0.00	0.35	0.00	0.10	0.00	0.00	0.40	
Avail Cap(c_a), veh/h				515	0	796	366	1817	0	0	1299	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.5	0.0	21.2	28.7	15.9	0.0	0.0	23.4	0.0
Incr Delay (d2), s/veh				147.2	0.0	0.3	0.0	0.1	0.0	0.0	0.9	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				30.3	0.0	2.0	0.0	1.2	0.0	0.0	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				174.7	0.0	21.5	28.7	16.0	0.0	0.0	24.3	0.0
LnGrp LOS				F	A	C	C	B	A	A	C	
Approach Vol, veh/h					946			189			517	A
Approach Delay, s/veh					129.7			16.1			24.3	
Approach LOS					F			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	50.5		22.5	28.0		29.5
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	5.9		2.0	9.2		27.0
Green Ext Time (p_c), s	1.1		0.0	2.6		0.0

Intersection Summary		
HCM 6th Ctrl Delay	83.7	
HCM 6th LOS	F	

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	71	52	348	19	39	509
Future Volume (veh/h)	71	52	348	19	39	509
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	78	57	382	21	43	559
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	163	145	919	410	69	1604
Arrive On Green	0.10	0.10	0.28	0.28	0.04	0.49
Sat Flow, veh/h	1654	1472	3387	1472	1654	3387
Grp Volume(v), veh/h	78	57	382	21	43	559
Grp Sat Flow(s),veh/h/ln	1654	1472	1650	1472	1654	1650
Q Serve(g_s), s	1.1	0.9	2.3	0.3	0.6	2.5
Cycle Q Clear(g_c), s	1.1	0.9	2.3	0.3	0.6	2.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	163	145	919	410	69	1604
V/C Ratio(X)	0.48	0.39	0.42	0.05	0.63	0.35
Avail Cap(c_a), veh/h	1580	1406	4658	2078	1099	4658
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.3	10.2	7.1	6.4	11.4	3.8
Incr Delay (d2), s/veh	0.8	0.6	0.3	0.1	9.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.2	0.3	0.0	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.1	10.8	7.4	6.4	20.4	4.0
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	135		403			602
Approach Delay, s/veh	11.0		7.3			5.1
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.0	12.2				17.2	6.9
Change Period (Y+Rc), s	4.0	5.5				5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0				34.0	23.0
Max Q Clear Time (g_c+I1), s	2.6	4.3				4.5	3.1
Green Ext Time (p_c), s	0.0	2.4				3.7	0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	35	82	7	28	2	168	19	17	4	1	11
Future Volume (veh/h)	4	35	82	7	28	2	168	19	17	4	1	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515
Adj Flow Rate, veh/h	4	38	89	8	30	2	183	21	18	4	1	12
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, %	26	26	26	26	26	26	26	26	26	26	26	26
Cap, veh/h	8	563	251	15	578	258	227	780	348	8	343	153
Arrive On Green	0.01	0.20	0.20	0.01	0.20	0.20	0.16	0.27	0.27	0.01	0.12	0.12
Sat Flow, veh/h	1443	2878	1284	1443	2878	1284	1443	2878	1284	1443	2878	1284
Grp Volume(v), veh/h	4	38	89	8	30	2	183	21	18	4	1	12
Grp Sat Flow(s),veh/h/ln	1443	1439	1284	1443	1439	1284	1443	1439	1284	1443	1439	1284
Q Serve(g_s), s	0.1	0.4	2.1	0.2	0.3	0.0	4.4	0.2	0.4	0.1	0.0	0.3
Cycle Q Clear(g_c), s	0.1	0.4	2.1	0.2	0.3	0.0	4.4	0.2	0.4	0.1	0.0	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	8	563	251	15	578	258	227	780	348	8	343	153
V/C Ratio(X)	0.51	0.07	0.35	0.52	0.05	0.01	0.81	0.03	0.05	0.51	0.00	0.08
Avail Cap(c_a), veh/h	645	2840	1267	645	2840	1267	645	2752	1227	645	2752	1227
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.7	11.7	12.4	17.6	11.5	11.4	14.6	9.6	9.6	17.7	13.9	14.0
Incr Delay (d2), s/veh	43.0	0.0	0.8	24.5	0.0	0.0	6.7	0.0	0.1	43.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.5	0.2	0.1	0.0	1.4	0.0	0.1	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	60.7	11.8	13.3	42.1	11.6	11.4	21.3	9.6	9.7	60.7	13.9	14.2
LnGrp LOS	E	B	B	D	B	B	C	A	A	E	B	B
Approach Vol, veh/h		131			40			222			17	
Approach Delay, s/veh		14.3			17.7			19.2			25.1	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	11.7	4.2	15.5	4.2	11.9	9.6	10.1
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.2	4.1	2.1	2.4	2.1	2.3	6.4	2.3
Green Ext Time (p_c), s	0.0	0.5	0.0	0.1	0.0	0.1	0.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.7
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	48	17	8	85	25	25	11	1	6	2	21
Future Vol, veh/h	8	48	17	8	85	25	25	11	1	6	2	21
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	64	23	11	113	33	33	15	1	8	3	28
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.7	8	8	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	68%	11%	7%	21%
Vol Thru, %	30%	66%	72%	7%
Vol Right, %	3%	23%	21%	72%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	73	118	29
LT Vol	25	8	8	6
Through Vol	11	48	85	2
RT Vol	1	17	25	21
Lane Flow Rate	49	97	157	39
Geometry Grp	1	1	1	1
Degree of Util (X)	0.064	0.111	0.178	0.045
Departure Headway (Hd)	4.666	4.106	4.065	4.169
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	772	858	870	864
Service Time	2.668	2.202	2.147	2.171
HCM Lane V/C Ratio	0.063	0.113	0.18	0.045
HCM Control Delay	8	7.7	8	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.4	0.6	0.1

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	138	3	17	175	0	17	16	11	4	6	6
Future Vol, veh/h	1	138	3	17	175	0	17	16	11	4	6	6
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	175	4	22	222	0	22	20	14	5	8	8
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.6	9.1	8.2	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	39%	1%	9%	25%
Vol Thru, %	36%	97%	91%	38%
Vol Right, %	25%	2%	0%	38%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	44	142	192	16
LT Vol	17	1	17	4
Through Vol	16	138	175	6
RT Vol	11	3	0	6
Lane Flow Rate	56	180	243	20
Geometry Grp	1	1	1	1
Degree of Util (X)	0.075	0.218	0.292	0.027
Departure Headway (Hd)	4.821	4.359	4.325	4.769
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	744	825	834	751
Service Time	2.847	2.378	2.342	2.797
HCM Lane V/C Ratio	0.075	0.218	0.291	0.027
HCM Control Delay	8.2	8.6	9.1	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.8	1.2	0.1

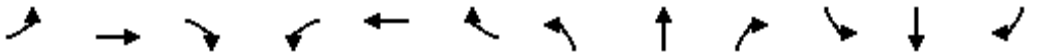
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	50	89	416	309	6
Future Vol, veh/h	24	50	89	416	309	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	26	54	96	447	332	6

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	974	335	338	0	-	0
Stage 1	335	-	-	-	-	-
Stage 2	639	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	279	707	1221	-	-	-
Stage 1	725	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	257	707	1221	-	-	-
Mov Cap-2 Maneuver	257	-	-	-	-	-
Stage 1	668	-	-	-	-	-
Stage 2	526	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.8	1.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1221	-	257	707	-	-
HCM Lane V/C Ratio	0.078	-	0.1	0.076	-	-
HCM Control Delay (s)	8.2	-	20.6	10.5	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.3	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	3	14	12	1	156	4	536	14	125	224	7
Future Volume (veh/h)	12	3	14	12	1	156	4	536	14	125	224	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574
Adj Flow Rate, veh/h	13	3	16	13	1	59	4	602	16	140	252	8
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	22	22	22	22	22	22	22	22	22	22	22	22
Cap, veh/h	63	176	149	24	135	114	8	764	647	169	933	791
Arrive On Green	0.04	0.11	0.11	0.02	0.09	0.09	0.01	0.49	0.49	0.11	0.59	0.59
Sat Flow, veh/h	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Grp Volume(v), veh/h	13	3	16	13	1	59	4	602	16	140	252	8
Grp Sat Flow(s),veh/h/ln	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Q Serve(g_s), s	0.6	0.1	0.7	0.6	0.0	2.8	0.2	21.4	0.4	6.1	5.2	0.2
Cycle Q Clear(g_c), s	0.6	0.1	0.7	0.6	0.0	2.8	0.2	21.4	0.4	6.1	5.2	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	63	176	149	24	135	114	8	764	647	169	933	791
V/C Ratio(X)	0.21	0.02	0.11	0.54	0.01	0.52	0.50	0.79	0.02	0.83	0.27	0.01
Avail Cap(c_a), veh/h	223	679	576	223	679	576	223	764	647	223	933	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	26.6	26.8	32.8	28.1	29.4	33.3	14.4	9.0	29.1	6.6	5.6
Incr Delay (d2), s/veh	1.6	0.0	0.3	17.6	0.0	3.6	40.8	8.1	0.1	17.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.2	0.3	0.0	1.0	0.2	7.6	0.1	2.8	1.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.7	26.6	27.1	50.4	28.1	33.0	74.1	22.5	9.1	46.3	7.3	5.6
LnGrp LOS	C	C	C	D	C	C	E	C	A	D	A	A
Approach Vol, veh/h		32			73			622			400	
Approach Delay, s/veh		29.3			36.0			22.5			21.0	
Approach LOS		C			D			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	45.6	5.1	12.1	11.6	38.4	6.8	10.3
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.2	7.2	2.6	2.7	8.1	23.4	2.6	4.8
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.1	2.5	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	23.0
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	2	16	0	0	0	0	202	511	0	338	270
Future Volume (veh/h)	87	2	16	0	0	0	0	202	511	0	338	270
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	0	1663	1663
Adj Flow Rate, veh/h	96	0	17				0	220	418	0	367	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	16	16	16				0	16	16	0	16	16
Cap, veh/h	291	0	129				0	2443	1089	0	2443	
Arrive On Green	0.09	0.00	0.09				0.00	0.77	0.77	0.00	1.00	0.00
Sat Flow, veh/h	3167	0	1409				0	3243	1409	0	3243	1409
Grp Volume(v), veh/h	96	0	17				0	220	418	0	367	0
Grp Sat Flow(s),veh/h/ln	1584	0	1409				0	1580	1409	0	1580	1409
Q Serve(g_s), s	2.3	0.0	0.9				0.0	1.4	7.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	2.3	0.0	0.9				0.0	1.4	7.7	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	291	0	129				0	2443	1089	0	2443	
V/C Ratio(X)	0.33	0.00	0.13				0.00	0.09	0.38	0.00	0.15	
Avail Cap(c_a), veh/h	788	0	351				0	2443	1089	0	2443	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.84	0.00
Uniform Delay (d), s/veh	34.0	0.0	33.4				0.0	2.2	2.9	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	0.5				0.0	0.1	1.0	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.3				0.0	0.2	1.2	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.7	0.0	33.8				0.0	2.3	4.0	0.0	0.1	0.0
LnGrp LOS	C	A	C				A	A	A	A	A	
Approach Vol, veh/h		113						638			367	A
Approach Delay, s/veh		34.5						3.4			0.1	
Approach LOS		C						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.5	12.5	67.5
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	9.7	4.3	2.0
Green Ext Time (p_c), s	3.0	0.3	2.4

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	244	0	355	24	265	0	0	364	42
Future Volume (veh/h)	0	0	0	244	0	355	24	265	0	0	364	42
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1722	1722	1722	1722	1722	0	0	1722	1722
Adj Flow Rate, veh/h				262	0	382	26	285	0	0	391	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				12	12	12	12	12	0	0	12	12
Cap, veh/h				340	0	532	369	2177	0	0	1806	
Arrive On Green				0.21	0.00	0.21	0.07	0.22	0.00	0.00	0.38	0.00
Sat Flow, veh/h				1640	0	2569	1640	3358	0	0	4856	1459
Grp Volume(v), veh/h				262	0	382	26	285	0	0	391	0
Grp Sat Flow(s),veh/h/ln				1640	0	1284	1640	1636	0	0	1567	1459
Q Serve(g_s), s				12.1	0.0	11.1	1.2	5.6	0.0	0.0	4.5	0.0
Cycle Q Clear(g_c), s				12.1	0.0	11.1	1.2	5.6	0.0	0.0	4.5	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				340	0	532	369	2177	0	0	1806	
V/C Ratio(X)				0.77	0.00	0.72	0.07	0.13	0.00	0.00	0.22	
Avail Cap(c_a), veh/h				513	0	803	369	2177	0	0	1806	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				29.9	0.0	29.5	29.2	12.6	0.0	0.0	16.5	0.0
Incr Delay (d2), s/veh				4.0	0.0	1.8	0.4	0.1	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.0	0.0	3.4	0.5	1.7	0.0	0.0	1.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				34.0	0.0	31.4	29.6	12.8	0.0	0.0	16.8	0.0
LnGrp LOS				C	A	C	C	B	A	A	B	
Approach Vol, veh/h					644			311			391	A
Approach Delay, s/veh					32.4			14.2			16.8	
Approach LOS					C			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	58.9		22.5	36.4		21.1
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	7.6		3.2	6.5		14.1
Green Ext Time (p_c), s	1.8		0.0	2.1		2.5

Intersection Summary	
HCM 6th Ctrl Delay	23.7
HCM 6th LOS	C

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	22	10	532	75	27	407
Future Volume (veh/h)	22	10	532	75	27	407
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	22	10	537	76	27	411
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	55	49	1221	545	47	1883
Arrive On Green	0.03	0.03	0.36	0.36	0.03	0.55
Sat Flow, veh/h	1711	1522	3503	1522	1711	3503
Grp Volume(v), veh/h	22	10	537	76	27	411
Grp Sat Flow(s),veh/h/ln	1711	1522	1706	1522	1711	1706
Q Serve(g_s), s	0.3	0.2	2.9	0.8	0.4	1.5
Cycle Q Clear(g_c), s	0.3	0.2	2.9	0.8	0.4	1.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	55	49	1221	545	47	1883
V/C Ratio(X)	0.40	0.21	0.44	0.14	0.57	0.22
Avail Cap(c_a), veh/h	1638	1457	4830	2154	1139	4830
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.4	11.3	5.9	5.2	11.5	2.7
Incr Delay (d2), s/veh	1.8	0.8	0.2	0.1	10.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.3	0.1	0.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.2	12.1	6.1	5.3	22.2	2.8
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	32		613			438
Approach Delay, s/veh	12.8		6.0			4.0
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	4.7	14.1				18.8	5.3
Change Period (Y+Rc), s	4.0	5.5				5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0				34.0	23.0
Max Q Clear Time (g_c+I1), s	2.4	4.9				3.5	2.3
Green Ext Time (p_c), s	0.0	3.7				2.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	14	75	12	33	4	89	16	2	0	4	3
Future Volume (veh/h)	1	14	75	12	33	4	89	16	2	0	4	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707
Adj Flow Rate, veh/h	1	16	88	14	39	5	105	19	2	0	5	4
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	13	13	13	13	13	13	13	13	13	13	13	13
Cap, veh/h	5	724	323	30	779	347	155	961	429	5	238	106
Arrive On Green	0.00	0.22	0.22	0.02	0.24	0.24	0.10	0.30	0.30	0.00	0.07	0.07
Sat Flow, veh/h	1626	3244	1447	1626	3244	1447	1626	3244	1447	1626	3244	1447
Grp Volume(v), veh/h	1	16	88	14	39	5	105	19	2	0	5	4
Grp Sat Flow(s),veh/h/ln	1626	1622	1447	1626	1622	1447	1626	1622	1447	1626	1622	1447
Q Serve(g_s), s	0.0	0.1	1.6	0.3	0.3	0.1	2.0	0.1	0.0	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.1	1.6	0.3	0.3	0.1	2.0	0.1	0.0	0.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	724	323	30	779	347	155	961	429	5	238	106
V/C Ratio(X)	0.19	0.02	0.27	0.47	0.05	0.01	0.68	0.02	0.00	0.00	0.02	0.04
Avail Cap(c_a), veh/h	829	3650	1628	829	3650	1628	829	3536	1577	829	3536	1577
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	15.6	9.5	10.1	15.2	9.2	9.1	13.7	7.8	7.8	0.0	13.5	13.5
Incr Delay (d2), s/veh	17.1	0.0	0.5	11.1	0.0	0.0	5.0	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.3	0.2	0.1	0.0	0.7	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.8	9.5	10.5	26.3	9.2	9.1	18.8	7.8	7.8	0.0	13.5	13.7
LnGrp LOS	C	A	B	C	A	A	B	A	A	A	B	B
Approach Vol, veh/h		105			58			126			9	
Approach Delay, s/veh		10.6			13.3			16.9			13.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	11.7	0.0	15.1	4.0	12.2	7.0	8.1
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.3	3.6	0.0	2.1	2.0	2.3	4.0	2.1
Green Ext Time (p_c), s	0.0	0.3	0.0	0.1	0.0	0.2	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.9
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	7.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	75	22	1	23	4	11	12	2	13	7	5
Future Vol, veh/h	4	75	22	1	23	4	11	12	2	13	7	5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	80	23	1	24	4	12	13	2	14	7	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.5	7.2	7.4	7.4
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	44%	4%	4%	52%
Vol Thru, %	48%	74%	82%	28%
Vol Right, %	8%	22%	14%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	25	101	28	25
LT Vol	11	4	1	13
Through Vol	12	75	23	7
RT Vol	2	22	4	5
Lane Flow Rate	27	107	30	27
Geometry Grp	1	1	1	1
Degree of Util (X)	0.031	0.118	0.033	0.031
Departure Headway (Hd)	4.25	3.944	4.048	4.194
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	835	907	880	846
Service Time	2.312	1.977	2.095	2.256
HCM Lane V/C Ratio	0.032	0.118	0.034	0.032
HCM Control Delay	7.4	7.5	7.2	7.4
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.4	0.1	0.1

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	49	335	11	9	209	7	0	15	8	1	9	3
Future Vol, veh/h	49	335	11	9	209	7	0	15	8	1	9	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	51	349	11	9	218	7	0	16	8	1	9	3
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.4	9.2	8.4	8.4
HCM LOS	B	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	12%	4%	8%
Vol Thru, %	65%	85%	93%	69%
Vol Right, %	35%	3%	3%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	395	225	13
LT Vol	0	49	9	1
Through Vol	15	335	209	9
RT Vol	8	11	7	3
Lane Flow Rate	24	411	234	14
Geometry Grp	1	1	1	1
Degree of Util (X)	0.034	0.491	0.288	0.02
Departure Headway (Hd)	5.14	4.294	4.43	5.244
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	696	843	813	682
Service Time	3.178	2.294	2.449	3.283
HCM Lane V/C Ratio	0.034	0.488	0.288	0.021
HCM Control Delay	8.4	11.4	9.2	8.4
HCM Lane LOS	A	B	A	A
HCM 95th-tile Q	0.1	2.8	1.2	0.1

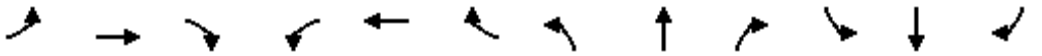
Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	66	57	435	540	7
Future Vol, veh/h	31	66	57	435	540	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	33	70	61	463	574	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1163	578	581	0	-	0
Stage 1	578	-	-	-	-	-
Stage 2	585	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	215	516	993	-	-	-
Stage 1	561	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	202	516	993	-	-	-
Mov Cap-2 Maneuver	202	-	-	-	-	-
Stage 1	527	-	-	-	-	-
Stage 2	557	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.3	1	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	993	-	202	516	-	-
HCM Lane V/C Ratio	0.061	-	0.163	0.136	-	-
HCM Control Delay (s)	8.9	-	26.3	13.1	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.6	0.5	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	0	2	35	0	157	4	225	15	172	443	6
Future Volume (veh/h)	6	0	2	35	0	157	4	225	15	172	443	6
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426
Adj Flow Rate, veh/h	8	0	3	49	0	28	6	317	21	242	623	8
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	32	32	32	32	32	32	32	32	32	32	32	32
Cap, veh/h	67	120	102	60	113	95	11	664	563	194	857	726
Arrive On Green	0.05	0.00	0.08	0.04	0.00	0.08	0.01	0.47	0.47	0.14	0.60	0.60
Sat Flow, veh/h	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Grp Volume(v), veh/h	8	0	3	49	0	28	6	317	21	242	623	8
Grp Sat Flow(s),veh/h/ln	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Q Serve(g_s), s	0.4	0.0	0.2	2.5	0.0	1.5	0.3	10.7	0.7	10.0	21.7	0.2
Cycle Q Clear(g_c), s	0.4	0.0	0.2	2.5	0.0	1.5	0.3	10.7	0.7	10.0	21.7	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	67	120	102	60	113	95	11	664	563	194	857	726
V/C Ratio(X)	0.12	0.00	0.03	0.82	0.00	0.29	0.56	0.48	0.04	1.25	0.73	0.01
Avail Cap(c_a), veh/h	194	591	501	194	591	501	194	664	563	194	857	726
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	0.0	29.4	33.2	0.0	30.4	34.6	12.8	10.2	30.0	9.9	5.6
Incr Delay (d2), s/veh	0.8	0.0	0.1	23.4	0.0	1.7	39.0	2.4	0.1	146.6	5.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	1.2	0.0	0.5	0.2	3.2	0.2	10.9	5.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	0.0	29.5	56.5	0.0	32.1	73.6	15.3	10.3	176.6	15.3	5.6
LnGrp LOS	C	A	C	E	A	C	E	B	B	F	B	A
Approach Vol, veh/h		11			77			344			873	
Approach Delay, s/veh		31.8			47.6			16.0			59.9	
Approach LOS		C			D			B			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	47.8	7.1	10.5	14.0	38.4	7.4	10.1
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.3	23.7	4.5	2.2	12.0	12.7	2.4	3.5
Green Ext Time (p_c), s	0.0	2.6	0.0	0.0	0.0	1.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.4
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	0	54	0	0	0	0	143	241	0	563	308
Future Volume (veh/h)	23	0	54	0	0	0	0	143	241	0	563	308
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1530	1530	1530				0	1530	1530	0	1530	1530
Adj Flow Rate, veh/h	31	0	73				0	194	328	0	765	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	25	25	25				0	25	25	0	25	25
Cap, veh/h	262	0	117				0	2252	1004	0	2252	
Arrive On Green	0.09	0.00	0.09				0.00	0.77	0.77	0.00	1.00	0.00
Sat Flow, veh/h	2913	0	1296				0	2983	1296	0	2983	1296
Grp Volume(v), veh/h	31	0	73				0	194	328	0	765	0
Grp Sat Flow(s),veh/h/ln	1457	0	1296				0	1453	1296	0	1453	1296
Q Serve(g_s), s	0.8	0.0	4.3				0.0	1.3	6.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.8	0.0	4.3				0.0	1.3	6.1	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	262	0	117				0	2252	1004	0	2252	
V/C Ratio(X)	0.12	0.00	0.63				0.00	0.09	0.33	0.00	0.34	
Avail Cap(c_a), veh/h	725	0	322				0	2252	1004	0	2252	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.71	0.00
Uniform Delay (d), s/veh	33.5	0.0	35.1				0.0	2.2	2.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	5.4				0.0	0.1	0.9	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.5				0.0	0.2	0.9	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.7	0.0	40.5				0.0	2.2	3.6	0.0	0.3	0.0
LnGrp LOS	C	A	D				A	A	A	A	A	
Approach Vol, veh/h		104						522			765	A
Approach Delay, s/veh		38.4						3.1			0.3	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.7	12.3	67.7
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	8.1	6.3	2.0
Green Ext Time (p_c), s	2.4	0.2	5.7

Intersection Summary	
HCM 6th Ctrl Delay	4.2
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	416	172	245	1	165	0	0	455	126
Future Volume (veh/h)	0	0	0	416	172	245	1	165	0	0	455	126
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1707	1707	1707	1707	1707	0	0	1707	1707
Adj Flow Rate, veh/h				572	236	337	1	227	0	0	626	0
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				13	13	13	13	13	0	0	13	13
Cap, veh/h				365	151	796	366	1817	0	0	1299	
Arrive On Green				0.31	0.31	0.31	0.07	0.18	0.00	0.00	0.28	0.00
Sat Flow, veh/h				1167	482	2547	1626	3329	0	0	4815	1447
Grp Volume(v), veh/h				808	0	337	1	227	0	0	626	0
Grp Sat Flow(s),veh/h/ln				1649	0	1273	1626	1622	0	0	1554	1447
Q Serve(g_s), s				25.0	0.0	8.4	0.0	4.7	0.0	0.0	9.0	0.0
Cycle Q Clear(g_c), s				25.0	0.0	8.4	0.0	4.7	0.0	0.0	9.0	0.0
Prop In Lane				0.71		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				515	0	796	366	1817	0	0	1299	
V/C Ratio(X)				1.57	0.00	0.42	0.00	0.12	0.00	0.00	0.48	
Avail Cap(c_a), veh/h				515	0	796	366	1817	0	0	1299	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.5	0.0	21.8	28.7	16.3	0.0	0.0	24.0	0.0
Incr Delay (d2), s/veh				264.9	0.0	0.4	0.0	0.1	0.0	0.0	1.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				47.2	0.0	2.4	0.0	1.5	0.0	0.0	3.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				292.4	0.0	22.1	28.7	16.4	0.0	0.0	25.3	0.0
LnGrp LOS				F	A	C	C	B	A	A	C	
Approach Vol, veh/h					1145			228			626	A
Approach Delay, s/veh					212.9			16.4			25.3	
Approach LOS					F			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	50.5		22.5	28.0		29.5
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	6.7		2.0	11.0		27.0
Green Ext Time (p_c), s	1.4		0.0	3.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	131.7
HCM 6th LOS	F

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	71	52	348	19	39	509
Future Volume (veh/h)	71	52	348	19	39	509
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	94	69	463	25	52	677
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	176	157	1011	451	80	1678
Arrive On Green	0.11	0.11	0.31	0.31	0.05	0.51
Sat Flow, veh/h	1654	1472	3387	1472	1654	3387
Grp Volume(v), veh/h	94	69	463	25	52	677
Grp Sat Flow(s),veh/h/ln	1654	1472	1650	1472	1654	1650
Q Serve(g_s), s	1.4	1.1	2.9	0.3	0.8	3.3
Cycle Q Clear(g_c), s	1.4	1.1	2.9	0.3	0.8	3.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	176	157	1011	451	80	1678
V/C Ratio(X)	0.53	0.44	0.46	0.06	0.65	0.40
Avail Cap(c_a), veh/h	1465	1304	4321	1927	1019	4321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.0	10.9	7.3	6.4	12.1	3.9
Incr Delay (d2), s/veh	0.9	0.7	0.3	0.1	8.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.3	0.4	0.0	0.4	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.9	11.6	7.6	6.4	20.8	4.1
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	163		488			729
Approach Delay, s/veh	11.8		7.5			5.3
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.3	13.5				18.7	7.3
Change Period (Y+Rc), s	4.0	5.5				5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0				34.0	23.0
Max Q Clear Time (g_c+I1), s	2.8	4.9				5.3	3.4
Green Ext Time (p_c), s	0.1	3.0				4.6	0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	35	82	7	28	2	168	19	17	4	1	11
Future Volume (veh/h)	4	35	82	7	28	2	168	19	17	4	1	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515
Adj Flow Rate, veh/h	5	46	108	9	37	3	221	25	22	5	1	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, %	26	26	26	26	26	26	26	26	26	26	26	26
Cap, veh/h	10	526	235	17	541	241	273	908	405	10	383	171
Arrive On Green	0.01	0.18	0.18	0.01	0.19	0.19	0.19	0.32	0.32	0.01	0.13	0.13
Sat Flow, veh/h	1443	2878	1284	1443	2878	1284	1443	2878	1284	1443	2878	1284
Grp Volume(v), veh/h	5	46	108	9	37	3	221	25	22	5	1	14
Grp Sat Flow(s),veh/h/ln	1443	1439	1284	1443	1439	1284	1443	1439	1284	1443	1439	1284
Q Serve(g_s), s	0.1	0.5	2.9	0.2	0.4	0.1	5.6	0.2	0.5	0.1	0.0	0.4
Cycle Q Clear(g_c), s	0.1	0.5	2.9	0.2	0.4	0.1	5.6	0.2	0.5	0.1	0.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	10	526	235	17	541	241	273	908	405	10	383	171
V/C Ratio(X)	0.51	0.09	0.46	0.52	0.07	0.01	0.81	0.03	0.05	0.51	0.00	0.08
Avail Cap(c_a), veh/h	603	2653	1183	603	2653	1183	603	2570	1146	603	2570	1146
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	13.0	14.0	18.8	12.8	12.7	14.9	9.1	9.1	19.0	14.4	14.5
Incr Delay (d2), s/veh	36.0	0.1	1.4	22.5	0.1	0.0	5.7	0.0	0.1	36.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.7	0.2	0.1	0.0	1.8	0.0	0.1	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.0	13.1	15.4	41.3	12.8	12.7	20.6	9.1	9.2	55.0	14.4	14.8
LnGrp LOS	D	B	B	D	B	B	C	A	A	D	B	B
Approach Vol, veh/h		159			49			268			20	
Approach Delay, s/veh		15.9			18.1			18.6			24.8	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	11.7	4.3	17.9	4.3	11.9	11.2	10.9
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.2	4.9	2.1	2.5	2.1	2.4	7.6	2.4
Green Ext Time (p_c), s	0.0	0.6	0.0	0.2	0.0	0.2	0.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.9
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	8	48	17	8	85	25	25	11	1	6	2	21
Future Vol, veh/h	8	48	17	8	85	25	25	11	1	6	2	21
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	13	77	27	13	137	40	40	18	2	10	3	34
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8	8.4	8.2	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	68%	11%	7%	21%
Vol Thru, %	30%	66%	72%	7%
Vol Right, %	3%	23%	21%	72%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	37	73	118	29
LT Vol	25	8	8	6
Through Vol	11	48	85	2
RT Vol	1	17	25	21
Lane Flow Rate	60	118	190	47
Geometry Grp	1	1	1	1
Degree of Util (X)	0.08	0.14	0.223	0.056
Departure Headway (Hd)	4.799	4.282	4.226	4.307
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	748	840	855	833
Service Time	2.818	2.296	2.226	2.327
HCM Lane V/C Ratio	0.08	0.14	0.222	0.056
HCM Control Delay	8.2	8	8.4	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.5	0.9	0.2

Intersection	
Intersection Delay, s/veh	9.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	138	3	17	175	0	17	16	11	4	6	6
Future Vol, veh/h	1	138	3	17	175	0	17	16	11	4	6	6
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	211	5	26	268	0	26	25	17	6	9	9
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.1	9.9	8.6	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	39%	1%	9%	25%
Vol Thru, %	36%	97%	91%	38%
Vol Right, %	25%	2%	0%	38%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	44	142	192	16
LT Vol	17	1	17	4
Through Vol	16	138	175	6
RT Vol	11	3	0	6
Lane Flow Rate	67	217	294	25
Geometry Grp	1	1	1	1
Degree of Util (X)	0.094	0.27	0.361	0.034
Departure Headway (Hd)	5.032	4.469	4.418	4.996
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	711	805	815	715
Service Time	3.071	2.493	2.441	3.04
HCM Lane V/C Ratio	0.094	0.27	0.361	0.035
HCM Control Delay	8.6	9.1	9.9	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	1.1	1.7	0.1

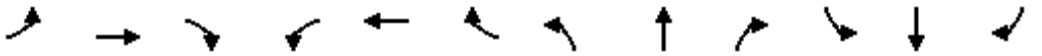
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	50	89	416	309	6
Future Vol, veh/h	24	50	89	416	309	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	65	116	541	402	8

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1179	406	410	0	-	0
Stage 1	406	-	-	-	-	-
Stage 2	773	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	211	645	1149	-	-	-
Stage 1	673	-	-	-	-	-
Stage 2	455	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	190	645	1149	-	-	-
Mov Cap-2 Maneuver	190	-	-	-	-	-
Stage 1	605	-	-	-	-	-
Stage 2	455	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.5	1.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1149	-	190	645	-	-
HCM Lane V/C Ratio	0.101	-	0.164	0.101	-	-
HCM Control Delay (s)	8.5	-	27.6	11.2	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.6	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	3	14	12	1	156	4	536	14	125	224	7
Future Volume (veh/h)	12	3	14	12	1	156	4	536	14	125	224	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574
Adj Flow Rate, veh/h	18	5	21	18	2	81	6	813	21	190	340	11
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	22	22	22	22	22	22	22	22	22	22	22	22
Cap, veh/h	75	188	159	32	143	121	12	723	613	211	933	790
Arrive On Green	0.05	0.12	0.12	0.02	0.09	0.09	0.01	0.46	0.46	0.14	0.59	0.59
Sat Flow, veh/h	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Grp Volume(v), veh/h	18	5	21	18	2	81	6	813	21	190	340	11
Grp Sat Flow(s),veh/h/ln	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Q Serve(g_s), s	0.8	0.2	1.0	0.8	0.1	4.2	0.3	32.6	0.6	8.8	8.0	0.2
Cycle Q Clear(g_c), s	0.8	0.2	1.0	0.8	0.1	4.2	0.3	32.6	0.6	8.8	8.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	188	159	32	143	121	12	723	613	211	933	790
V/C Ratio(X)	0.24	0.03	0.13	0.57	0.01	0.67	0.51	1.12	0.03	0.90	0.36	0.01
Avail Cap(c_a), veh/h	211	643	545	211	643	545	211	723	613	211	933	790
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	27.6	28.0	34.4	29.4	31.2	35.1	19.2	10.5	30.0	7.5	5.9
Incr Delay (d2), s/veh	1.7	0.1	0.4	15.2	0.0	6.3	30.1	73.1	0.1	35.8	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.3	0.4	0.0	1.5	0.2	24.2	0.2	5.0	2.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	27.7	28.3	49.6	29.4	37.5	65.2	92.3	10.6	65.8	8.6	6.0
LnGrp LOS	C	C	C	D	C	D	E	F	B	E	A	A
Approach Vol, veh/h		44			101			840			541	
Approach Delay, s/veh		30.6			39.5			90.1			28.6	
Approach LOS		C			D			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	47.8	5.5	13.1	14.0	38.4	7.5	11.0
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.3	10.0	2.8	3.0	10.8	34.6	2.8	6.2
Green Ext Time (p_c), s	0.0	1.9	0.0	0.1	0.0	0.0	0.0	0.2

Intersection Summary			
HCM 6th Ctrl Delay		63.2	
HCM 6th LOS		E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	2	16	0	0	0	0	202	511	0	338	270
Future Volume (veh/h)	87	2	16	0	0	0	0	202	511	0	338	270
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	0	1663	1663
Adj Flow Rate, veh/h	130	0	23				0	296	565	0	496	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	16	16	16				0	16	16	0	16	16
Cap, veh/h	306	0	136				0	2428	1083	0	2428	
Arrive On Green	0.10	0.00	0.10				0.00	0.77	0.77	0.00	1.00	0.00
Sat Flow, veh/h	3167	0	1409				0	3243	1409	0	3243	1409
Grp Volume(v), veh/h	130	0	23				0	296	565	0	496	0
Grp Sat Flow(s),veh/h/ln	1584	0	1409				0	1580	1409	0	1580	1409
Q Serve(g_s), s	3.1	0.0	1.2				0.0	1.9	12.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	0.0	1.2				0.0	1.9	12.4	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	306	0	136				0	2428	1083	0	2428	
V/C Ratio(X)	0.42	0.00	0.17				0.00	0.12	0.52	0.00	0.20	
Avail Cap(c_a), veh/h	788	0	351				0	2428	1083	0	2428	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.75	0.00
Uniform Delay (d), s/veh	34.0	0.0	33.2				0.0	2.4	3.6	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	0.6				0.0	0.1	1.8	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.4				0.0	0.3	2.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	0.0	33.8				0.0	2.5	5.4	0.0	0.1	0.0
LnGrp LOS	C	A	C				A	A	A	A	A	
Approach Vol, veh/h		153						861			496	A
Approach Delay, s/veh		34.8						4.4			0.1	
Approach LOS		C						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.2	12.8	67.2
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	14.4	5.1	2.0
Green Ext Time (p_c), s	4.3	0.4	3.4

Intersection Summary	
HCM 6th Ctrl Delay	6.1
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	244	0	355	24	265	0	0	364	42
Future Volume (veh/h)	0	0	0	244	0	355	24	265	0	0	364	42
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1722	1722	1722	1722	1722	0	0	1722	1722
Adj Flow Rate, veh/h				354	0	515	35	385	0	0	528	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				12	12	12	12	12	0	0	12	12
Cap, veh/h				427	0	669	369	2002	0	0	1555	
Arrive On Green				0.26	0.00	0.26	0.07	0.20	0.00	0.00	0.33	0.00
Sat Flow, veh/h				1640	0	2569	1640	3358	0	0	4856	1459
Grp Volume(v), veh/h				354	0	515	35	385	0	0	528	0
Grp Sat Flow(s),veh/h/ln				1640	0	1284	1640	1636	0	0	1567	1459
Q Serve(g_s), s				16.3	0.0	14.8	1.6	7.8	0.0	0.0	6.8	0.0
Cycle Q Clear(g_c), s				16.3	0.0	14.8	1.6	7.8	0.0	0.0	6.8	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				427	0	669	369	2002	0	0	1555	
V/C Ratio(X)				0.83	0.00	0.77	0.09	0.19	0.00	0.00	0.34	
Avail Cap(c_a), veh/h				513	0	803	369	2002	0	0	1555	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.9	0.0	27.4	29.4	15.5	0.0	0.0	20.2	0.0
Incr Delay (d2), s/veh				9.3	0.0	3.8	0.5	0.2	0.0	0.0	0.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.2	0.0	4.7	0.6	2.7	0.0	0.0	2.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				37.2	0.0	31.1	29.9	15.7	0.0	0.0	20.8	0.0
LnGrp LOS				D	A	C	C	B	A	A	C	
Approach Vol, veh/h					869			420			528	A
Approach Delay, s/veh					33.6			16.9			20.8	
Approach LOS					C			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	54.7		22.5	32.2		25.3
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	9.8		3.6	8.8		18.3
Green Ext Time (p_c), s	2.4		0.0	2.7		2.6

Intersection Summary	
HCM 6th Ctrl Delay	26.0
HCM 6th LOS	C

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	22	10	532	75	27	407
Future Volume (veh/h)	22	10	532	75	27	407
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	30	14	725	102	37	555
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	71	63	1428	637	61	2042
Arrive On Green	0.04	0.04	0.42	0.42	0.04	0.60
Sat Flow, veh/h	1711	1522	3503	1522	1711	3503
Grp Volume(v), veh/h	30	14	725	102	37	555
Grp Sat Flow(s),veh/h/ln	1711	1522	1706	1522	1711	1706
Q Serve(g_s), s	0.5	0.2	4.4	1.2	0.6	2.2
Cycle Q Clear(g_c), s	0.5	0.2	4.4	1.2	0.6	2.2
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	71	63	1428	637	61	2042
V/C Ratio(X)	0.42	0.22	0.51	0.16	0.60	0.27
Avail Cap(c_a), veh/h	1417	1261	4180	1864	986	4180
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	12.9	6.0	5.0	13.2	2.7
Incr Delay (d2), s/veh	1.5	0.7	0.3	0.1	9.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.5	0.1	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.5	13.5	6.2	5.1	22.4	2.7
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	44		827			592
Approach Delay, s/veh	14.2		6.1			4.0
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.0	17.1			22.1	5.7
Change Period (Y+Rc), s	4.0	5.5			5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0			34.0	23.0
Max Q Clear Time (g_c+I1), s	2.5	6.4			4.2	2.5
Green Ext Time (p_c), s	0.0	5.3			3.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	14	75	12	33	4	89	16	2	0	4	3
Future Volume (veh/h)	1	14	75	12	33	4	89	16	2	0	4	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707
Adj Flow Rate, veh/h	2	22	119	19	52	6	141	25	3	0	6	5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	13	13	13	13	13	13	13	13	13	13	13	13
Cap, veh/h	5	689	307	39	759	339	180	1048	468	5	296	132
Arrive On Green	0.00	0.21	0.21	0.02	0.23	0.23	0.11	0.32	0.32	0.00	0.09	0.09
Sat Flow, veh/h	1626	3244	1447	1626	3244	1447	1626	3244	1447	1626	3244	1447
Grp Volume(v), veh/h	2	22	119	19	52	6	141	25	3	0	6	5
Grp Sat Flow(s),veh/h/ln	1626	1622	1447	1626	1622	1447	1626	1622	1447	1626	1622	1447
Q Serve(g_s), s	0.0	0.2	2.3	0.4	0.4	0.1	2.8	0.2	0.0	0.0	0.1	0.1
Cycle Q Clear(g_c), s	0.0	0.2	2.3	0.4	0.4	0.1	2.8	0.2	0.0	0.0	0.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	689	307	39	759	339	180	1048	468	5	296	132
V/C Ratio(X)	0.41	0.03	0.39	0.48	0.07	0.02	0.78	0.02	0.01	0.00	0.02	0.04
Avail Cap(c_a), veh/h	790	3476	1550	790	3476	1550	790	3368	1502	790	3368	1502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	10.3	11.1	15.9	9.8	9.7	14.3	7.6	7.6	0.0	13.6	13.7
Incr Delay (d2), s/veh	45.8	0.0	0.8	8.9	0.0	0.0	7.3	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.5	0.2	0.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.2	10.3	11.9	24.7	9.9	9.7	21.6	7.6	7.6	0.0	13.7	13.8
LnGrp LOS	E	B	B	C	A	A	C	A	A	A	B	B
Approach Vol, veh/h		143			77			169			11	
Approach Delay, s/veh		12.4			13.5			19.3			13.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	11.7	0.0	16.4	4.1	12.4	7.6	8.8
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.4	4.3	0.0	2.2	2.0	2.4	4.8	2.1
Green Ext Time (p_c), s	0.0	0.5	0.0	0.1	0.0	0.3	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	7.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	75	22	1	23	4	11	12	2	13	7	5
Future Vol, veh/h	4	75	22	1	23	4	11	12	2	13	7	5
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	6	108	32	1	33	6	16	17	3	19	10	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.8	7.4	7.6	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	44%	4%	4%	52%
Vol Thru, %	48%	74%	82%	28%
Vol Right, %	8%	22%	14%	20%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	25	101	28	25
LT Vol	11	4	1	13
Through Vol	12	75	23	7
RT Vol	2	22	4	5
Lane Flow Rate	36	145	40	36
Geometry Grp	1	1	1	1
Degree of Util (X)	0.043	0.161	0.046	0.043
Departure Headway (Hd)	4.341	3.984	4.108	4.284
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	813	895	862	823
Service Time	2.432	2.035	2.18	2.376
HCM Lane V/C Ratio	0.044	0.162	0.046	0.044
HCM Control Delay	7.6	7.8	7.4	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.6	0.1	0.1

Intersection	
Intersection Delay, s/veh	14.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	49	335	11	9	209	7	0	15	8	1	9	3
Future Vol, veh/h	49	335	11	9	209	7	0	15	8	1	9	3
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	69	471	15	13	294	10	0	21	11	1	13	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	16.4	10.8	9	9
HCM LOS	C	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	12%	4%	8%
Vol Thru, %	65%	85%	93%	69%
Vol Right, %	35%	3%	3%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	23	395	225	13
LT Vol	0	49	9	1
Through Vol	15	335	209	9
RT Vol	8	11	7	3
Lane Flow Rate	32	555	316	18
Geometry Grp	1	1	1	1
Degree of Util (X)	0.051	0.682	0.407	0.029
Departure Headway (Hd)	5.642	4.422	4.636	5.759
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	631	817	775	618
Service Time	3.711	2.452	2.672	3.832
HCM Lane V/C Ratio	0.051	0.679	0.408	0.029
HCM Control Delay	9	16.4	10.8	9
HCM Lane LOS	A	C	B	A
HCM 95th-tile Q	0.2	5.5	2	0.1

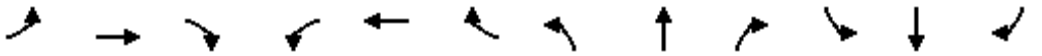
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	66	57	435	540	7
Future Vol, veh/h	31	66	57	435	540	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	95	82	625	776	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1570	781	786	0	-	0
Stage 1	781	-	-	-	-	-
Stage 2	789	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	122	395	833	-	-	-
Stage 1	451	-	-	-	-	-
Stage 2	448	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	110	395	833	-	-	-
Mov Cap-2 Maneuver	110	-	-	-	-	-
Stage 1	407	-	-	-	-	-
Stage 2	448	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.2	1.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	833	-	110	395	-	-
HCM Lane V/C Ratio	0.098	-	0.405	0.24	-	-
HCM Control Delay (s)	9.8	-	58.4	17	-	-
HCM Lane LOS	A	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	1.7	0.9	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	3	52	0	202	6	325	22	192	647	9
Future Volume (veh/h)	9	0	3	52	0	202	6	325	22	192	647	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426
Adj Flow Rate, veh/h	10	0	3	60	0	76	7	378	26	223	752	10
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	32	32	32	32	32	32	32	32	32	32	32	32
Cap, veh/h	73	135	115	68	131	111	12	651	552	190	838	710
Arrive On Green	0.05	0.00	0.10	0.05	0.00	0.09	0.01	0.46	0.46	0.14	0.59	0.59
Sat Flow, veh/h	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Grp Volume(v), veh/h	10	0	3	60	0	76	7	378	26	223	752	10
Grp Sat Flow(s),veh/h/ln	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Q Serve(g_s), s	0.5	0.0	0.2	3.1	0.0	4.4	0.4	14.0	0.9	10.0	32.8	0.2
Cycle Q Clear(g_c), s	0.5	0.0	0.2	3.1	0.0	4.4	0.4	14.0	0.9	10.0	32.8	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	135	115	68	131	111	12	651	552	190	838	710
V/C Ratio(X)	0.14	0.00	0.03	0.88	0.00	0.68	0.57	0.58	0.05	1.17	0.90	0.01
Avail Cap(c_a), veh/h	190	579	491	190	579	491	190	651	552	190	838	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	0.0	29.3	33.7	0.0	31.4	35.2	14.3	10.8	30.7	12.8	6.1
Incr Delay (d2), s/veh	0.9	0.0	0.1	27.1	0.0	7.2	35.1	3.8	0.2	119.3	14.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	1.5	0.0	1.4	0.2	4.4	0.2	9.3	10.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.1	0.0	29.4	60.8	0.0	38.7	70.3	18.1	10.9	150.0	27.2	6.2
LnGrp LOS	C	A	C	E	A	D	E	B	B	F	C	A
Approach Vol, veh/h		13			136			411			985	
Approach Delay, s/veh		32.2			48.4			18.5			54.8	
Approach LOS		C			D			B			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	47.8	7.6	11.4	14.0	38.4	7.8	11.2
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.4	34.8	5.1	2.2	12.0	16.0	2.5	6.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	44.4
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	0	80	0	0	0	0	174	356	0	763	455
Future Volume (veh/h)	34	0	80	0	0	0	0	174	356	0	763	455
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1530	1530	1530				0	1530	1530	0	1530	1530
Adj Flow Rate, veh/h	38	0	90				0	196	400	0	857	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	25	25	25				0	25	25	0	25	25
Cap, veh/h	274	0	122				0	2240	999	0	2240	
Arrive On Green	0.09	0.00	0.09				0.00	0.77	0.77	0.00	1.00	0.00
Sat Flow, veh/h	2913	0	1296				0	2983	1296	0	2983	1296
Grp Volume(v), veh/h	38	0	90				0	196	400	0	857	0
Grp Sat Flow(s),veh/h/ln	1457	0	1296				0	1453	1296	0	1453	1296
Q Serve(g_s), s	1.0	0.0	5.4				0.0	1.3	8.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	0.0	5.4				0.0	1.3	8.2	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	274	0	122				0	2240	999	0	2240	
V/C Ratio(X)	0.14	0.00	0.74				0.00	0.09	0.40	0.00	0.38	
Avail Cap(c_a), veh/h	725	0	322				0	2240	999	0	2240	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.95	0.00
Uniform Delay (d), s/veh	33.3	0.0	35.3				0.0	2.3	3.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	3.2				0.0	0.1	1.2	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.8				0.0	0.2	1.2	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.3	0.0	38.5				0.0	2.3	4.2	0.0	0.5	0.0
LnGrp LOS	C	A	D				A	A	A	A	A	
Approach Vol, veh/h		128						596			857	A
Approach Delay, s/veh		37.0						3.6			0.5	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.4	12.6	67.4
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	10.2	7.4	2.0
Green Ext Time (p_c), s	4.4	0.1	10.0

Intersection Summary	
HCM 6th Ctrl Delay	4.6
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	615	254	362	1	207	0	0	603	186
Future Volume (veh/h)	0	0	0	615	254	362	1	207	0	0	603	186
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1707	1707	1707	1707	1707	0	0	1707	1707
Adj Flow Rate, veh/h				699	289	411	1	235	0	0	685	0
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				13	13	13	13	13	0	0	13	13
Cap, veh/h				365	151	796	4	1817	0	0	2338	
Arrive On Green				0.31	0.31	0.31	0.00	0.18	0.00	0.00	0.50	0.00
Sat Flow, veh/h				1167	482	2547	1626	3329	0	0	4815	1447
Grp Volume(v), veh/h				988	0	411	1	235	0	0	685	0
Grp Sat Flow(s),veh/h/ln				1649	0	1273	1626	1622	0	0	1554	1447
Q Serve(g_s), s				25.0	0.0	10.6	0.0	4.8	0.0	0.0	6.9	0.0
Cycle Q Clear(g_c), s				25.0	0.0	10.6	0.0	4.8	0.0	0.0	6.9	0.0
Prop In Lane				0.71		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				515	0	796	4	1817	0	0	2338	
V/C Ratio(X)				1.92	0.00	0.52	0.28	0.13	0.00	0.00	0.29	
Avail Cap(c_a), veh/h				515	0	796	366	1817	0	0	2338	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.5	0.0	22.5	39.9	16.3	0.0	0.0	11.7	0.0
Incr Delay (d2), s/veh				419.9	0.0	0.4	51.9	0.1	0.0	0.0	0.3	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				69.4	0.0	3.1	0.1	1.6	0.0	0.0	2.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				447.4	0.0	22.9	91.8	16.5	0.0	0.0	12.0	0.0
LnGrp LOS				F	A	C	F	B	A	A	B	
Approach Vol, veh/h					1399			236			685	A
Approach Delay, s/veh					322.7			16.8			12.0	
Approach LOS					F			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	50.5		4.7	45.8		29.5
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	6.8		2.0	8.9		27.0
Green Ext Time (p_c), s	2.1		0.0	4.7		0.0

Intersection Summary		
HCM 6th Ctrl Delay	199.9	
HCM 6th LOS	F	

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	95	77	509	18	58	694
Future Volume (veh/h)	95	77	509	18	58	694
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	104	85	559	20	64	763
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	181	161	1113	496	93	1766
Arrive On Green	0.11	0.11	0.34	0.34	0.06	0.54
Sat Flow, veh/h	1654	1472	3387	1472	1654	3387
Grp Volume(v), veh/h	104	85	559	20	64	763
Grp Sat Flow(s),veh/h/ln	1654	1472	1650	1472	1654	1650
Q Serve(g_s), s	1.7	1.5	3.8	0.3	1.1	3.9
Cycle Q Clear(g_c), s	1.7	1.5	3.8	0.3	1.1	3.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	181	161	1113	496	93	1766
V/C Ratio(X)	0.57	0.53	0.50	0.04	0.69	0.43
Avail Cap(c_a), veh/h	1351	1202	3985	1777	940	3985
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	11.8	7.4	6.3	13.1	4.0
Incr Delay (d2), s/veh	1.1	1.0	0.4	0.0	8.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.4	0.6	0.0	0.5	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.0	12.8	7.8	6.3	21.9	4.1
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	189		579			827
Approach Delay, s/veh	12.9		7.7			5.5
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.6	15.0			20.6	7.6
Change Period (Y+Rc), s	4.0	5.5			5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0			34.0	23.0
Max Q Clear Time (g_c+I1), s	3.1	5.8			5.9	3.7
Green Ext Time (p_c), s	0.1	3.7			5.3	0.3

Intersection Summary	
HCM 6th Ctrl Delay	7.2
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	34	78	9	35	10	142	40	15	19	61	32
Future Volume (veh/h)	7	34	78	9	35	10	142	40	15	19	61	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515
Adj Flow Rate, veh/h	8	37	85	10	38	11	154	43	16	21	66	35
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, %	26	26	26	26	26	26	26	26	26	26	26	26
Cap, veh/h	15	505	225	19	512	228	189	927	414	38	624	278
Arrive On Green	0.01	0.18	0.18	0.01	0.18	0.18	0.13	0.32	0.32	0.03	0.22	0.22
Sat Flow, veh/h	1443	2878	1284	1443	2878	1284	1443	2878	1284	1443	2878	1284
Grp Volume(v), veh/h	8	37	85	10	38	11	154	43	16	21	66	35
Grp Sat Flow(s),veh/h/ln	1443	1439	1284	1443	1439	1284	1443	1439	1284	1443	1439	1284
Q Serve(g_s), s	0.2	0.4	2.3	0.3	0.4	0.3	4.1	0.4	0.3	0.6	0.7	0.9
Cycle Q Clear(g_c), s	0.2	0.4	2.3	0.3	0.4	0.3	4.1	0.4	0.3	0.6	0.7	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	505	225	19	512	228	189	927	414	38	624	278
V/C Ratio(X)	0.52	0.07	0.38	0.53	0.07	0.05	0.81	0.05	0.04	0.56	0.11	0.13
Avail Cap(c_a), veh/h	578	2544	1135	578	2544	1135	578	2465	1100	578	2465	1100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	13.8	14.5	19.6	13.7	13.6	16.9	9.3	9.3	19.2	12.5	12.6
Incr Delay (d2), s/veh	24.8	0.1	1.0	20.8	0.1	0.1	8.1	0.0	0.0	12.4	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.6	0.2	0.1	0.1	1.5	0.1	0.1	0.3	0.2	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.4	13.8	15.6	40.4	13.7	13.7	25.0	9.3	9.3	31.6	12.6	12.8
LnGrp LOS	D	B	B	D	B	B	C	A	A	C	B	B
Approach Vol, veh/h		130			59			213			122	
Approach Delay, s/veh		16.9			18.2			20.7			15.9	
Approach LOS		B			B			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	11.7	5.0	18.7	4.4	11.8	9.2	14.5
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.3	4.3	2.6	2.4	2.2	2.4	6.1	2.9
Green Ext Time (p_c), s	0.0	0.5	0.0	0.2	0.0	0.2	0.3	0.4

Intersection Summary	
HCM 6th Ctrl Delay	18.3
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	62	25	95	123	37	37	44	19	9	65	31
Future Vol, veh/h	12	62	25	95	123	37	37	44	19	9	65	31
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	83	33	127	164	49	49	59	25	12	87	41
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.1	11.8	9.6	9.5
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	37%	12%	37%	9%
Vol Thru, %	44%	63%	48%	62%
Vol Right, %	19%	25%	15%	30%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	99	255	105
LT Vol	37	12	95	9
Through Vol	44	62	123	65
RT Vol	19	25	37	31
Lane Flow Rate	133	132	340	140
Geometry Grp	1	1	1	1
Degree of Util (X)	0.194	0.181	0.453	0.199
Departure Headway (Hd)	5.24	4.946	4.797	5.114
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	677	717	745	693
Service Time	3.334	3.038	2.871	3.206
HCM Lane V/C Ratio	0.196	0.184	0.456	0.202
HCM Control Delay	9.6	9.1	11.8	9.5
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.7	0.7	2.4	0.7

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	201	33	43	254	0	45	32	16	6	25	9
Future Vol, veh/h	1	201	33	43	254	0	45	32	16	6	25	9
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	254	42	54	322	0	57	41	20	8	32	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.9	12.6	9.9	9.2
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	48%	0%	14%	15%
Vol Thru, %	34%	86%	86%	62%
Vol Right, %	17%	14%	0%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	93	235	297	40
LT Vol	45	1	43	6
Through Vol	32	201	254	25
RT Vol	16	33	0	9
Lane Flow Rate	118	297	376	51
Geometry Grp	1	1	1	1
Degree of Util (X)	0.185	0.393	0.498	0.08
Departure Headway (Hd)	5.649	4.753	4.77	5.694
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	639	750	748	632
Service Time	3.652	2.839	2.851	3.7
HCM Lane V/C Ratio	0.185	0.396	0.503	0.081
HCM Control Delay	9.9	10.9	12.6	9.2
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.7	1.9	2.8	0.3

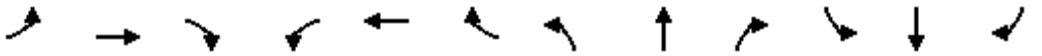
Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	46	74	131	601	374	80
Future Vol, veh/h	46	74	131	601	374	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	80	141	646	402	86

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1373	445	488	0	-	0
Stage 1	445	-	-	-	-	-
Stage 2	928	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	161	613	1075	-	-	-
Stage 1	646	-	-	-	-	-
Stage 2	385	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	140	613	1075	-	-	-
Mov Cap-2 Maneuver	140	-	-	-	-	-
Stage 1	561	-	-	-	-	-
Stage 2	385	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.1	1.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1075	-	140	613	-	-
HCM Lane V/C Ratio	0.131	-	0.353	0.13	-	-
HCM Control Delay (s)	8.9	-	44.1	11.7	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.5	-	1.5	0.4	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	4	21	18	1	152	6	773	21	161	328	10
Future Volume (veh/h)	18	4	21	18	1	152	6	773	21	161	328	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574
Adj Flow Rate, veh/h	20	4	24	20	1	55	7	869	24	181	369	11
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	22	22	22	22	22	22	22	22	22	22	22	22
Cap, veh/h	78	181	154	34	136	115	14	725	614	212	933	791
Arrive On Green	0.05	0.12	0.12	0.02	0.09	0.09	0.01	0.46	0.46	0.14	0.59	0.59
Sat Flow, veh/h	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Grp Volume(v), veh/h	20	4	24	20	1	55	7	869	24	181	369	11
Grp Sat Flow(s),veh/h/ln	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Q Serve(g_s), s	0.9	0.2	1.1	0.9	0.0	2.8	0.3	32.6	0.7	8.3	8.8	0.2
Cycle Q Clear(g_c), s	0.9	0.2	1.1	0.9	0.0	2.8	0.3	32.6	0.7	8.3	8.8	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	181	154	34	136	115	14	725	614	212	933	791
V/C Ratio(X)	0.26	0.02	0.16	0.58	0.01	0.48	0.51	1.20	0.04	0.85	0.40	0.01
Avail Cap(c_a), veh/h	212	645	547	212	645	547	212	725	614	212	933	791
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	27.8	28.2	34.2	29.6	30.8	34.9	19.1	10.5	29.7	7.7	5.9
Incr Delay (d2), s/veh	1.7	0.0	0.5	14.5	0.0	3.1	26.9	102.5	0.1	27.2	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.4	0.5	0.0	1.0	0.2	30.1	0.2	4.3	2.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.9	27.8	28.7	48.8	29.6	33.9	61.8	121.6	10.6	56.9	8.9	5.9
LnGrp LOS	C	C	C	D	C	C	E	F	B	E	A	A
Approach Vol, veh/h		48			76			900			561	
Approach Delay, s/veh		30.8			37.8			118.2			24.4	
Approach LOS		C			D			F			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	47.8	5.6	12.8	14.0	38.4	7.7	10.7
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.3	10.8	2.9	3.1	10.3	34.6	2.9	4.8
Green Ext Time (p_c), s	0.0	2.0	0.0	0.1	0.0	0.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	78.5
HCM 6th LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	3	24	0	0	0	0	200	755	0	473	399
Future Volume (veh/h)	129	3	24	0	0	0	0	200	755	0	473	399
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	0	1663	1663
Adj Flow Rate, veh/h	142	0	26				0	217	684	0	514	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	16	16	16				0	16	16	0	16	16
Cap, veh/h	309	0	138				0	2425	1081	0	2425	
Arrive On Green	0.10	0.00	0.10				0.00	0.77	0.77	0.00	1.00	0.00
Sat Flow, veh/h	3167	0	1409				0	3243	1409	0	3243	1409
Grp Volume(v), veh/h	142	0	26				0	217	684	0	514	0
Grp Sat Flow(s),veh/h/ln	1584	0	1409				0	1580	1409	0	1580	1409
Q Serve(g_s), s	3.4	0.0	1.4				0.0	1.4	17.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.4	0.0	1.4				0.0	1.4	17.6	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	309	0	138				0	2425	1081	0	2425	
V/C Ratio(X)	0.46	0.00	0.19				0.00	0.09	0.63	0.00	0.21	
Avail Cap(c_a), veh/h	788	0	351				0	2425	1081	0	2425	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.74	0.00
Uniform Delay (d), s/veh	34.1	0.0	33.2				0.0	2.3	4.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.7				0.0	0.1	2.8	0.0	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.5				0.0	0.2	3.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	0.0	33.8				0.0	2.4	7.0	0.0	0.1	0.0
LnGrp LOS	D	A	C				A	A	A	A	A	
Approach Vol, veh/h		168						901			514	A
Approach Delay, s/veh		35.0						5.9			0.1	
Approach LOS		C						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.1	12.9	67.1
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	19.6	5.4	2.0
Green Ext Time (p_c), s	4.3	0.4	3.5

Intersection Summary	
HCM 6th Ctrl Delay	7.1
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	360	0	524	35	294	0	0	512	62
Future Volume (veh/h)	0	0	0	360	0	524	35	294	0	0	512	62
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1722	1722	1722	1722	1722	0	0	1722	1722
Adj Flow Rate, veh/h				387	0	563	38	316	0	0	551	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				12	12	12	12	12	0	0	12	12
Cap, veh/h				454	0	712	369	1948	0	0	1477	
Arrive On Green				0.28	0.00	0.28	0.07	0.20	0.00	0.00	0.31	0.00
Sat Flow, veh/h				1640	0	2569	1640	3358	0	0	4856	1459
Grp Volume(v), veh/h				387	0	563	38	316	0	0	551	0
Grp Sat Flow(s),veh/h/ln				1640	0	1284	1640	1636	0	0	1567	1459
Q Serve(g_s), s				17.9	0.0	16.2	1.7	6.4	0.0	0.0	7.3	0.0
Cycle Q Clear(g_c), s				17.9	0.0	16.2	1.7	6.4	0.0	0.0	7.3	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				454	0	712	369	1948	0	0	1477	
V/C Ratio(X)				0.85	0.00	0.79	0.10	0.16	0.00	0.00	0.37	
Avail Cap(c_a), veh/h				513	0	803	369	1948	0	0	1477	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.4	0.0	26.8	29.5	15.6	0.0	0.0	21.3	0.0
Incr Delay (d2), s/veh				11.9	0.0	4.8	0.6	0.2	0.0	0.0	0.7	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.2	0.0	5.2	0.7	2.2	0.0	0.0	2.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				39.2	0.0	31.6	30.1	15.8	0.0	0.0	22.0	0.0
LnGrp LOS				D	A	C	C	B	A	A	C	
Approach Vol, veh/h					950			354			551	A
Approach Delay, s/veh					34.7			17.3			22.0	
Approach LOS					C			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	53.3		22.5	30.8		26.7
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	8.4		3.7	9.3		19.9
Green Ext Time (p_c), s	2.0		0.0	2.8		2.3

Intersection Summary	
HCM 6th Ctrl Delay	27.6
HCM 6th LOS	C

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	15	725	75	40	578
Future Volume (veh/h)	30	15	725	75	40	578
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	30	15	732	76	40	584
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	72	64	1426	636	65	2045
Arrive On Green	0.04	0.04	0.42	0.42	0.04	0.60
Sat Flow, veh/h	1711	1522	3503	1522	1711	3503
Grp Volume(v), veh/h	30	15	732	76	40	584
Grp Sat Flow(s),veh/h/ln	1711	1522	1706	1522	1711	1706
Q Serve(g_s), s	0.5	0.3	4.4	0.9	0.6	2.3
Cycle Q Clear(g_c), s	0.5	0.3	4.4	0.9	0.6	2.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	72	64	1426	636	65	2045
V/C Ratio(X)	0.42	0.23	0.51	0.12	0.61	0.29
Avail Cap(c_a), veh/h	1410	1255	4159	1855	981	4159
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	12.9	6.0	5.0	13.2	2.7
Incr Delay (d2), s/veh	1.4	0.7	0.3	0.1	8.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.5	0.1	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.4	13.6	6.3	5.1	22.1	2.8
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	45		808			624
Approach Delay, s/veh	14.2		6.2			4.0
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.1	17.2			22.2	5.7
Change Period (Y+Rc), s	4.0	5.5			5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0			34.0	23.0
Max Q Clear Time (g_c+I1), s	2.5	6.4			4.3	2.5
Green Ext Time (p_c), s	0.0	5.2			3.8	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	16	72	13	27	24	69	131	3	4	41	3
Future Volume (veh/h)	4	16	72	13	27	24	69	131	3	4	41	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707
Adj Flow Rate, veh/h	5	19	85	15	32	28	81	154	4	5	48	4
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	13	13	13	13	13	13	13	13	13	13	13	13
Cap, veh/h	11	596	266	31	637	284	123	987	440	11	764	341
Arrive On Green	0.01	0.18	0.18	0.02	0.20	0.20	0.08	0.30	0.30	0.01	0.24	0.24
Sat Flow, veh/h	1626	3244	1447	1626	3244	1447	1626	3244	1447	1626	3244	1447
Grp Volume(v), veh/h	5	19	85	15	32	28	81	154	4	5	48	4
Grp Sat Flow(s),veh/h/ln	1626	1622	1447	1626	1622	1447	1626	1622	1447	1626	1622	1447
Q Serve(g_s), s	0.1	0.2	1.9	0.3	0.3	0.6	1.8	1.3	0.1	0.1	0.4	0.1
Cycle Q Clear(g_c), s	0.1	0.2	1.9	0.3	0.3	0.6	1.8	1.3	0.1	0.1	0.4	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	11	596	266	31	637	284	123	987	440	11	764	341
V/C Ratio(X)	0.45	0.03	0.32	0.48	0.05	0.10	0.66	0.16	0.01	0.45	0.06	0.01
Avail Cap(c_a), veh/h	683	3007	1341	683	3007	1341	683	2913	1299	683	2913	1299
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.8	12.8	13.5	18.5	12.4	12.5	17.1	9.7	9.2	18.8	11.3	11.2
Incr Delay (d2), s/veh	26.6	0.0	0.7	10.9	0.0	0.1	5.9	0.1	0.0	26.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.5	0.2	0.1	0.2	0.7	0.3	0.0	0.1	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.4	12.8	14.2	29.4	12.5	12.7	23.0	9.7	9.2	45.4	11.3	11.2
LnGrp LOS	D	B	B	C	B	B	C	A	A	D	B	B
Approach Vol, veh/h		109			75			239			57	
Approach Delay, s/veh		15.4			15.9			14.2			14.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	11.7	4.3	17.4	4.3	12.2	6.9	14.8
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.3	3.9	2.1	3.3	2.1	2.6	3.8	2.4
Green Ext Time (p_c), s	0.0	0.4	0.0	0.9	0.0	0.2	0.1	0.2

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	75	32	28	31	6	16	92	71	19	37	7
Future Vol, veh/h	6	75	32	28	31	6	16	92	71	19	37	7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	6	80	34	30	33	6	17	98	76	20	39	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.3	8.2	8.5	8
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	5%	43%	30%
Vol Thru, %	51%	66%	48%	59%
Vol Right, %	40%	28%	9%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	179	113	65	63
LT Vol	16	6	28	19
Through Vol	92	75	31	37
RT Vol	71	32	6	7
Lane Flow Rate	190	120	69	67
Geometry Grp	1	1	1	1
Degree of Util (X)	0.225	0.149	0.09	0.085
Departure Headway (Hd)	4.25	4.45	4.696	4.592
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	845	807	763	781
Service Time	2.27	2.474	2.724	2.618
HCM Lane V/C Ratio	0.225	0.149	0.09	0.086
HCM Control Delay	8.5	8.3	8.2	8
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.9	0.5	0.3	0.3

Intersection	
Intersection Delay, s/veh	16.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	479	31	19	294	10	15	68	27	1	19	4
Future Vol, veh/h	27	479	31	19	294	10	15	68	27	1	19	4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	499	32	20	306	10	16	71	28	1	20	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	19.8	12.6	10.4	9.6
HCM LOS	C	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	5%	6%	4%
Vol Thru, %	62%	89%	91%	79%
Vol Right, %	25%	6%	3%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	110	537	323	24
LT Vol	15	27	19	1
Through Vol	68	479	294	19
RT Vol	27	31	10	4
Lane Flow Rate	115	559	336	25
Geometry Grp	1	1	1	1
Degree of Util (X)	0.191	0.732	0.474	0.043
Departure Headway (Hd)	5.993	4.711	5.07	6.263
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	600	755	717	573
Service Time	4.009	2.809	3.07	4.288
HCM Lane V/C Ratio	0.192	0.74	0.469	0.044
HCM Control Delay	10.4	19.8	12.6	9.6
HCM Lane LOS	B	C	B	A
HCM 95th-tile Q	0.7	6.5	2.6	0.1

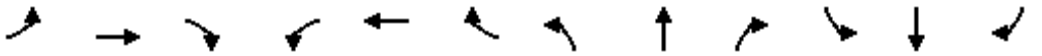
Intersection	
Int Delay, s/veh	8.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	81	97	84	594	770	35
Future Vol, veh/h	81	97	84	594	770	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	103	89	632	819	37

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1648	838	856	0	-	0
Stage 1	838	-	-	-	-	-
Stage 2	810	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	109	366	784	-	-	-
Stage 1	424	-	-	-	-	-
Stage 2	438	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	97	366	784	-	-	-
Mov Cap-2 Maneuver	97	-	-	-	-	-
Stage 1	376	-	-	-	-	-
Stage 2	438	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	74.5	1.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	784	-	97	366	-	-
HCM Lane V/C Ratio	0.114	-	0.888	0.282	-	-
HCM Control Delay (s)	10.2	-	141.4	18.7	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.4	-	5	1.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	3	52	0	202	6	325	22	192	647	9
Future Volume (veh/h)	9	0	3	52	0	202	6	325	22	192	647	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426
Adj Flow Rate, veh/h	13	0	4	73	0	91	8	457	31	270	910	13
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	32	32	32	32	32	32	32	32	32	32	32	32
Cap, veh/h	78	136	115	85	143	122	14	641	544	187	823	698
Arrive On Green	0.06	0.00	0.10	0.06	0.00	0.10	0.01	0.45	0.45	0.14	0.58	0.58
Sat Flow, veh/h	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Grp Volume(v), veh/h	13	0	4	73	0	91	8	457	31	270	910	13
Grp Sat Flow(s),veh/h/ln	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Q Serve(g_s), s	0.7	0.0	0.2	3.9	0.0	5.3	0.4	18.8	1.0	10.0	41.9	0.3
Cycle Q Clear(g_c), s	0.7	0.0	0.2	3.9	0.0	5.3	0.4	18.8	1.0	10.0	41.9	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	136	115	85	143	122	14	641	544	187	823	698
V/C Ratio(X)	0.17	0.00	0.03	0.86	0.00	0.75	0.57	0.71	0.06	1.44	1.11	0.02
Avail Cap(c_a), veh/h	187	571	483	187	571	483	187	641	544	187	823	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	29.7	33.6	0.0	31.7	35.7	16.1	11.3	31.2	15.3	6.5
Incr Delay (d2), s/veh	1.0	0.0	0.1	20.7	0.0	8.8	32.2	6.6	0.2	226.0	64.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	1.7	0.0	1.8	0.3	6.2	0.3	14.8	24.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.5	0.0	29.9	54.3	0.0	40.5	67.9	22.8	11.5	257.3	79.5	6.6
LnGrp LOS	C	A	C	D	A	D	E	C	B	F	F	A
Approach Vol, veh/h		17			164			496			1193	
Approach Delay, s/veh		32.6			46.7			22.8			119.0	
Approach LOS		C			D			C			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	47.7	8.5	11.5	14.0	38.4	8.2	11.9
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.4	43.9	5.9	2.2	12.0	20.8	2.7	7.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.1	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	86.3
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	0	80	0	0	0	0	174	356	0	763	455
Future Volume (veh/h)	34	0	80	0	0	0	0	174	356	0	763	455
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1530	1530	1530				0	1530	1530	0	1530	1530
Adj Flow Rate, veh/h	46	0	109				0	237	484	0	1037	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	25	25	25				0	25	25	0	25	25
Cap, veh/h	306	0	136				0	2208	985	0	2208	
Arrive On Green	0.11	0.00	0.11				0.00	0.76	0.76	0.00	1.00	0.00
Sat Flow, veh/h	2913	0	1296				0	2983	1296	0	2983	1296
Grp Volume(v), veh/h	46	0	109				0	237	484	0	1037	0
Grp Sat Flow(s),veh/h/ln	1457	0	1296				0	1453	1296	0	1453	1296
Q Serve(g_s), s	1.1	0.0	6.6				0.0	1.7	11.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	0.0	6.6				0.0	1.7	11.4	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	306	0	136				0	2208	985	0	2208	
V/C Ratio(X)	0.15	0.00	0.80				0.00	0.11	0.49	0.00	0.47	
Avail Cap(c_a), veh/h	725	0	322				0	2208	985	0	2208	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.93	0.00
Uniform Delay (d), s/veh	32.6	0.0	35.0				0.0	2.5	3.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	4.1				0.0	0.1	1.8	0.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	2.2				0.0	0.3	1.9	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	0.0	39.0				0.0	2.6	5.4	0.0	0.7	0.0
LnGrp LOS	C	A	D				A	A	A	A	A	
Approach Vol, veh/h		155						721			1037	A
Approach Delay, s/veh		37.1						4.5			0.7	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	66.5	13.5	66.5
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	13.4	8.6	2.0
Green Ext Time (p_c), s	5.5	0.1	13.2

Intersection Summary	
HCM 6th Ctrl Delay	5.1
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	615	254	362	1	207	0	0	603	186
Future Volume (veh/h)	0	0	0	615	254	362	1	207	0	0	603	186
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1707	1707	1707	1707	1707	0	0	1707	1707
Adj Flow Rate, veh/h				846	349	498	1	285	0	0	829	0
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				13	13	13	13	13	0	0	13	13
Cap, veh/h				365	150	796	4	1817	0	0	2338	
Arrive On Green				0.31	0.31	0.31	0.00	0.18	0.00	0.00	0.50	0.00
Sat Flow, veh/h				1167	482	2547	1626	3329	0	0	4815	1447
Grp Volume(v), veh/h				1195	0	498	1	285	0	0	829	0
Grp Sat Flow(s),veh/h/ln				1649	0	1273	1626	1622	0	0	1554	1447
Q Serve(g_s), s				25.0	0.0	13.4	0.0	5.9	0.0	0.0	8.6	0.0
Cycle Q Clear(g_c), s				25.0	0.0	13.4	0.0	5.9	0.0	0.0	8.6	0.0
Prop In Lane				0.71		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				515	0	796	4	1817	0	0	2338	
V/C Ratio(X)				2.32	0.00	0.63	0.28	0.16	0.00	0.00	0.35	
Avail Cap(c_a), veh/h				515	0	796	366	1817	0	0	2338	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.5	0.0	23.5	39.9	16.8	0.0	0.0	12.1	0.0
Incr Delay (d2), s/veh				599.6	0.0	1.3	51.9	0.2	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				95.1	0.0	4.0	0.1	2.0	0.0	0.0	2.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				627.1	0.0	24.8	91.8	16.9	0.0	0.0	12.5	0.0
LnGrp LOS				F	A	C	F	B	A	A	B	
Approach Vol, veh/h					1693			286			829	A
Approach Delay, s/veh					450.0			17.2			12.5	
Approach LOS					F			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	50.5		4.7	45.8		29.5
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	7.9		2.0	10.6		27.0
Green Ext Time (p_c), s	2.6		0.0	5.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	276.7
HCM 6th LOS	F

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	95	77	509	18	58	694
Future Volume (veh/h)	95	77	509	18	58	694
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	126	102	677	24	77	923
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	208	185	1222	545	103	1844
Arrive On Green	0.13	0.13	0.37	0.37	0.06	0.56
Sat Flow, veh/h	1654	1472	3387	1472	1654	3387
Grp Volume(v), veh/h	126	102	677	24	77	923
Grp Sat Flow(s),veh/h/ln	1654	1472	1650	1472	1654	1650
Q Serve(g_s), s	2.3	2.1	5.1	0.3	1.5	5.4
Cycle Q Clear(g_c), s	2.3	2.1	5.1	0.3	1.5	5.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	208	185	1222	545	103	1844
V/C Ratio(X)	0.61	0.55	0.55	0.04	0.75	0.50
Avail Cap(c_a), veh/h	1201	1069	3542	1580	836	3542
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	13.0	7.9	6.4	14.6	4.3
Incr Delay (d2), s/veh	1.1	1.0	0.4	0.0	10.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.6	0.9	0.1	0.7	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.2	14.0	8.3	6.4	25.0	4.5
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	228		701			1000
Approach Delay, s/veh	14.1		8.2			6.1
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.0	17.2			23.2	8.5
Change Period (Y+Rc), s	4.0	5.5			5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0			34.0	23.0
Max Q Clear Time (g_c+I1), s	3.5	7.1			7.4	4.3
Green Ext Time (p_c), s	0.1	4.6			6.6	0.3

Intersection Summary	
HCM 6th Ctrl Delay	7.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	34	78	9	35	10	142	40	15	19	61	32
Future Volume (veh/h)	7	34	78	9	35	10	142	40	15	19	61	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515
Adj Flow Rate, veh/h	9	45	103	12	46	13	187	53	20	25	80	42
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, %	26	26	26	26	26	26	26	26	26	26	26	26
Cap, veh/h	17	478	213	22	489	218	231	1005	448	43	631	281
Arrive On Green	0.01	0.17	0.17	0.02	0.17	0.17	0.16	0.35	0.35	0.03	0.22	0.22
Sat Flow, veh/h	1443	2878	1284	1443	2878	1284	1443	2878	1284	1443	2878	1284
Grp Volume(v), veh/h	9	45	103	12	46	13	187	53	20	25	80	42
Grp Sat Flow(s),veh/h/ln	1443	1439	1284	1443	1439	1284	1443	1439	1284	1443	1439	1284
Q Serve(g_s), s	0.3	0.6	3.1	0.3	0.6	0.4	5.3	0.5	0.4	0.7	0.9	1.1
Cycle Q Clear(g_c), s	0.3	0.6	3.1	0.3	0.6	0.4	5.3	0.5	0.4	0.7	0.9	1.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	17	478	213	22	489	218	231	1005	448	43	631	281
V/C Ratio(X)	0.53	0.09	0.48	0.53	0.09	0.06	0.81	0.05	0.04	0.58	0.13	0.15
Avail Cap(c_a), veh/h	548	2411	1076	548	2411	1076	548	2336	1042	548	2336	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	14.9	15.9	20.6	14.8	14.7	17.1	9.1	9.1	20.2	13.2	13.3
Incr Delay (d2), s/veh	22.8	0.1	1.7	18.3	0.1	0.1	6.7	0.0	0.0	11.5	0.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	0.8	0.2	0.2	0.1	1.8	0.1	0.1	0.3	0.2	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.5	15.0	17.6	38.9	14.8	14.8	23.8	9.1	9.1	31.6	13.3	13.5
LnGrp LOS	D	B	B	D	B	B	C	A	A	C	B	B
Approach Vol, veh/h		157			71			260			147	
Approach Delay, s/veh		18.3			18.9			19.7			16.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	11.7	5.3	20.5	4.5	11.9	10.7	15.0
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.3	5.1	2.7	2.5	2.3	2.6	7.3	3.1
Green Ext Time (p_c), s	0.0	0.6	0.0	0.3	0.0	0.3	0.3	0.6

Intersection Summary	
HCM 6th Ctrl Delay	18.5
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	12.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	62	25	95	123	37	37	44	19	9	65	31
Future Vol, veh/h	12	62	25	95	123	37	37	44	19	9	65	31
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	19	100	40	153	198	60	60	71	31	15	105	50
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10.2	15.3	10.8	10.7
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	37%	12%	37%	9%
Vol Thru, %	44%	63%	48%	62%
Vol Right, %	19%	25%	15%	30%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	99	255	105
LT Vol	37	12	95	9
Through Vol	44	62	123	65
RT Vol	19	25	37	31
Lane Flow Rate	161	160	411	169
Geometry Grp	1	1	1	1
Degree of Util (X)	0.257	0.24	0.588	0.264
Departure Headway (Hd)	5.737	5.41	5.146	5.607
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	624	661	699	639
Service Time	3.788	3.458	3.183	3.656
HCM Lane V/C Ratio	0.258	0.242	0.588	0.264
HCM Control Delay	10.8	10.2	15.3	10.7
HCM Lane LOS	B	B	C	B
HCM 95th-tile Q	1	0.9	3.9	1.1

Intersection	
Intersection Delay, s/veh	14.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	201	33	43	254	0	45	32	16	6	25	9
Future Vol, veh/h	1	201	33	43	254	0	45	32	16	6	25	9
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	308	51	66	389	0	69	49	25	9	38	14
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13.5	17	11.1	10
HCM LOS	B	C	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	48%	0%	14%	15%
Vol Thru, %	34%	86%	86%	62%
Vol Right, %	17%	14%	0%	23%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	93	235	297	40
LT Vol	45	1	43	6
Through Vol	32	201	254	25
RT Vol	16	33	0	9
Lane Flow Rate	142	360	455	61
Geometry Grp	1	1	1	1
Degree of Util (X)	0.241	0.512	0.645	0.106
Departure Headway (Hd)	6.093	5.124	5.107	6.207
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	588	702	705	575
Service Time	4.143	3.163	3.143	4.266
HCM Lane V/C Ratio	0.241	0.513	0.645	0.106
HCM Control Delay	11.1	13.5	17	10
HCM Lane LOS	B	B	C	A
HCM 95th-tile Q	0.9	2.9	4.7	0.4

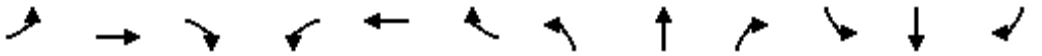
Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	46	74	131	601	374	80
Future Vol, veh/h	46	74	131	601	374	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	60	96	170	782	487	104

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1661	539	591	0	-	0
Stage 1	539	-	-	-	-	-
Stage 2	1122	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	107	542	985	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	311	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	88	542	985	-	-	-
Mov Cap-2 Maneuver	88	-	-	-	-	-
Stage 1	484	-	-	-	-	-
Stage 2	311	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	49.1	1.7	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	985	-	88	542	-	-
HCM Lane V/C Ratio	0.173	-	0.68	0.178	-	-
HCM Control Delay (s)	9.4	-	107	13.1	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.6	-	3.3	0.6	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	4	21	18	1	152	6	773	21	161	328	10
Future Volume (veh/h)	18	4	21	18	1	152	6	773	21	161	328	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574
Adj Flow Rate, veh/h	27	6	32	27	2	75	9	1173	32	244	498	15
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	22	22	22	22	22	22	22	22	22	22	22	22
Cap, veh/h	88	191	162	43	144	122	17	715	606	209	916	776
Arrive On Green	0.06	0.12	0.12	0.03	0.09	0.09	0.01	0.45	0.45	0.14	0.58	0.58
Sat Flow, veh/h	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Grp Volume(v), veh/h	27	6	32	27	2	75	9	1173	32	244	498	15
Grp Sat Flow(s),veh/h/ln	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Q Serve(g_s), s	1.2	0.2	1.6	1.3	0.1	3.9	0.4	32.6	1.0	10.0	13.9	0.3
Cycle Q Clear(g_c), s	1.2	0.2	1.6	1.3	0.1	3.9	0.4	32.6	1.0	10.0	13.9	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	88	191	162	43	144	122	17	715	606	209	916	776
V/C Ratio(X)	0.31	0.03	0.20	0.62	0.01	0.61	0.52	1.64	0.05	1.17	0.54	0.02
Avail Cap(c_a), veh/h	209	636	539	209	636	539	209	715	606	209	916	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	27.8	28.4	34.5	29.6	31.4	35.3	19.6	11.0	30.9	9.2	6.3
Incr Delay (d2), s/veh	2.0	0.1	0.6	13.6	0.0	4.9	22.6	294.8	0.2	115.2	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.5	0.6	0.0	1.4	0.3	68.1	0.3	10.0	4.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.4	27.9	29.0	48.1	29.7	36.3	57.9	314.4	11.1	146.1	11.5	6.4
LnGrp LOS	C	C	C	D	C	D	E	F	B	F	B	A
Approach Vol, veh/h		65			104			1214			757	
Approach Delay, s/veh		31.1			39.2			304.5			54.8	
Approach LOS		C			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	47.6	6.1	13.3	14.0	38.4	8.2	11.2
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.4	15.9	3.3	3.6	12.0	34.6	3.2	5.9
Green Ext Time (p_c), s	0.0	2.7	0.0	0.1	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	195.0
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	3	24	0	0	0	0	200	755	0	473	399
Future Volume (veh/h)	129	3	24	0	0	0	0	200	755	0	473	399
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	0	1663	1663
Adj Flow Rate, veh/h	192	0	35				0	293	923	0	694	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	16	16	16				0	16	16	0	16	16
Cap, veh/h	315	0	140				0	2419	1079	0	2419	
Arrive On Green	0.10	0.00	0.10				0.00	0.77	0.77	0.00	1.00	0.00
Sat Flow, veh/h	3167	0	1409				0	3243	1409	0	3243	1409
Grp Volume(v), veh/h	192	0	35				0	293	923	0	694	0
Grp Sat Flow(s),veh/h/ln	1584	0	1409				0	1580	1409	0	1580	1409
Q Serve(g_s), s	4.6	0.0	1.8				0.0	1.9	35.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.6	0.0	1.8				0.0	1.9	35.6	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	315	0	140				0	2419	1079	0	2419	
V/C Ratio(X)	0.61	0.00	0.25				0.00	0.12	0.86	0.00	0.29	
Avail Cap(c_a), veh/h	788	0	351				0	2419	1079	0	2419	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.65	0.00
Uniform Delay (d), s/veh	34.5	0.0	33.3				0.0	2.4	6.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.9				0.0	0.1	8.7	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.7				0.0	0.3	7.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	0.0	34.2				0.0	2.5	15.1	0.0	0.2	0.0
LnGrp LOS	D	A	C				A	A	B	A	A	
Approach Vol, veh/h		227						1216			694	A
Approach Delay, s/veh		36.1						12.1			0.2	
Approach LOS		D						B			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.0	13.0	67.0
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	37.6	6.6	2.0
Green Ext Time (p_c), s	4.8	0.6	5.0

Intersection Summary	
HCM 6th Ctrl Delay	10.8
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	360	0	524	35	294	0	0	512	62
Future Volume (veh/h)	0	0	0	360	0	524	35	294	0	0	512	62
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1722	1722	1722	1722	1722	0	0	1722	1722
Adj Flow Rate, veh/h				523	0	761	51	427	0	0	743	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				12	12	12	12	12	0	0	12	12
Cap, veh/h				513	0	803	369	1832	0	0	1311	
Arrive On Green				0.31	0.00	0.31	0.07	0.18	0.00	0.00	0.28	0.00
Sat Flow, veh/h				1640	0	2569	1640	3358	0	0	4856	1459
Grp Volume(v), veh/h				523	0	761	51	427	0	0	743	0
Grp Sat Flow(s),veh/h/ln				1640	0	1284	1640	1636	0	0	1567	1459
Q Serve(g_s), s				25.0	0.0	23.2	2.3	8.9	0.0	0.0	10.8	0.0
Cycle Q Clear(g_c), s				25.0	0.0	23.2	2.3	8.9	0.0	0.0	10.8	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				513	0	803	369	1832	0	0	1311	
V/C Ratio(X)				1.02	0.00	0.95	0.14	0.23	0.00	0.00	0.57	
Avail Cap(c_a), veh/h				513	0	803	369	1832	0	0	1311	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.5	0.0	26.9	29.8	18.0	0.0	0.0	24.7	0.0
Incr Delay (d2), s/veh				45.0	0.0	20.2	0.8	0.3	0.0	0.0	1.8	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.6	0.0	8.9	0.9	3.3	0.0	0.0	3.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				72.5	0.0	47.0	30.5	18.3	0.0	0.0	26.5	0.0
LnGrp LOS				F	A	D	C	B	A	A	C	
Approach Vol, veh/h					1284			478			743	A
Approach Delay, s/veh					57.4			19.6			26.5	
Approach LOS					E			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	50.5		22.5	28.0		29.5
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	10.9		4.3	12.8		27.0
Green Ext Time (p_c), s	2.7		0.1	3.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	41.0
HCM 6th LOS	D

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	15	725	75	40	578
Future Volume (veh/h)	30	15	725	75	40	578
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	41	20	989	102	55	788
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	88	79	1663	742	82	2229
Arrive On Green	0.05	0.05	0.49	0.49	0.05	0.65
Sat Flow, veh/h	1711	1522	3503	1522	1711	3503
Grp Volume(v), veh/h	41	20	989	102	55	788
Grp Sat Flow(s),veh/h/ln	1711	1522	1706	1522	1711	1706
Q Serve(g_s), s	0.8	0.4	7.1	1.2	1.1	3.5
Cycle Q Clear(g_c), s	0.8	0.4	7.1	1.2	1.1	3.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	88	79	1663	742	82	2229
V/C Ratio(X)	0.46	0.25	0.59	0.14	0.67	0.35
Avail Cap(c_a), veh/h	1162	1034	3428	1529	809	3428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.6	15.4	6.3	4.8	15.9	2.6
Incr Delay (d2), s/veh	1.4	0.6	0.3	0.1	9.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.9	0.2	0.5	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.0	16.1	6.6	4.9	25.1	2.7
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	61		1091			843
Approach Delay, s/veh	16.7		6.4			4.2
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.6	22.0				27.6	6.2
Change Period (Y+Rc), s	4.0	5.5				5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0				34.0	23.0
Max Q Clear Time (g_c+I1), s	3.1	9.1				5.5	2.8
Green Ext Time (p_c), s	0.1	7.4				5.5	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	16	72	13	27	24	69	131	3	4	41	3
Future Volume (veh/h)	4	16	72	13	27	24	69	131	3	4	41	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707
Adj Flow Rate, veh/h	6	25	114	21	43	38	110	208	5	6	65	5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	13	13	13	13	13	13	13	13	13	13	13	13
Cap, veh/h	13	573	256	42	631	282	144	1046	466	13	785	350
Arrive On Green	0.01	0.18	0.18	0.03	0.19	0.19	0.09	0.32	0.32	0.01	0.24	0.24
Sat Flow, veh/h	1626	3244	1447	1626	3244	1447	1626	3244	1447	1626	3244	1447
Grp Volume(v), veh/h	6	25	114	21	43	38	110	208	5	6	65	5
Grp Sat Flow(s),veh/h/ln	1626	1622	1447	1626	1622	1447	1626	1622	1447	1626	1622	1447
Q Serve(g_s), s	0.1	0.3	2.8	0.5	0.4	0.9	2.6	1.8	0.1	0.1	0.6	0.1
Cycle Q Clear(g_c), s	0.1	0.3	2.8	0.5	0.4	0.9	2.6	1.8	0.1	0.1	0.6	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	13	573	256	42	631	282	144	1046	466	13	785	350
V/C Ratio(X)	0.46	0.04	0.45	0.50	0.07	0.13	0.76	0.20	0.01	0.46	0.08	0.01
Avail Cap(c_a), veh/h	657	2890	1289	657	2890	1289	657	2800	1249	657	2800	1249
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	13.5	14.6	19.0	13.0	13.2	17.7	9.7	9.1	19.6	11.6	11.4
Incr Delay (d2), s/veh	22.9	0.0	1.2	8.7	0.0	0.2	8.1	0.1	0.0	22.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.1	0.8	0.3	0.1	0.2	1.1	0.4	0.0	0.1	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.4	13.6	15.8	27.7	13.1	13.4	25.8	9.8	9.1	42.4	11.7	11.4
LnGrp LOS	D	B	B	C	B	B	C	A	A	D	B	B
Approach Vol, veh/h		145			102			323			76	
Approach Delay, s/veh		16.5			16.2			15.2			14.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	11.7	4.3	18.6	4.3	12.4	7.5	15.4
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.5	4.8	2.1	3.8	2.1	2.9	4.6	2.6
Green Ext Time (p_c), s	0.0	0.5	0.0	1.2	0.0	0.3	0.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	15.5
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	75	32	28	31	6	16	92	71	19	37	7
Future Vol, veh/h	6	75	32	28	31	6	16	92	71	19	37	7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	108	46	40	45	9	23	132	102	27	53	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9	8.8	9.6	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	9%	5%	43%	30%
Vol Thru, %	51%	66%	48%	59%
Vol Right, %	40%	28%	9%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	179	113	65	63
LT Vol	16	6	28	19
Through Vol	92	75	31	37
RT Vol	71	32	6	7
Lane Flow Rate	257	162	93	90
Geometry Grp	1	1	1	1
Degree of Util (X)	0.319	0.213	0.129	0.122
Departure Headway (Hd)	4.462	4.716	4.99	4.863
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	802	758	715	734
Service Time	2.504	2.765	3.046	2.918
HCM Lane V/C Ratio	0.32	0.214	0.13	0.123
HCM Control Delay	9.6	9	8.8	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.4	0.8	0.4	0.4

Intersection	
Intersection Delay, s/veh	56.2
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	27	479	31	19	294	10	15	68	27	1	19	4
Future Vol, veh/h	27	479	31	19	294	10	15	68	27	1	19	4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	674	44	27	413	14	21	96	38	1	27	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	88.6	20.4	12.7	11
HCM LOS	F	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	5%	6%	4%
Vol Thru, %	62%	89%	91%	79%
Vol Right, %	25%	6%	3%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	110	537	323	24
LT Vol	15	27	19	1
Through Vol	68	479	294	19
RT Vol	27	31	10	4
Lane Flow Rate	155	755	454	34
Geometry Grp	1	1	1	1
Degree of Util (X)	0.284	1.106	0.689	0.067
Departure Headway (Hd)	6.961	5.274	5.713	7.499
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	520	695	636	481
Service Time	4.961	3.276	3.713	5.499
HCM Lane V/C Ratio	0.298	1.086	0.714	0.071
HCM Control Delay	12.7	88.6	20.4	11
HCM Lane LOS	B	F	C	B
HCM 95th-tile Q	1.2	21.9	5.4	0.2

Intersection	
Int Delay, s/veh	58.9

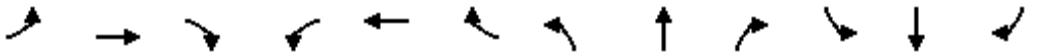
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	81	97	84	594	770	35
Future Vol, veh/h	81	97	84	594	770	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	116	139	121	853	1106	50

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2226	1131	1156	0	-	0
Stage 1	1131	-	-	-	-	-
Stage 2	1095	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 47	248	604	-	-	-
Stage 1	308	-	-	-	-	-
Stage 2	321	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 38	248	604	-	-	-
Mov Cap-2 Maneuver	~ 38	-	-	-	-	-
Stage 1	246	-	-	-	-	-
Stage 2	321	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s$	543.9	1.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	604	-	38	248	-	-
HCM Lane V/C Ratio	0.2	-	3.061	0.562	-	-
HCM Control Delay (s)	12.4	-	$ 1151.4	36.6	-	-
HCM Lane LOS	B	-	F	E	-	-
HCM 95th %tile Q(veh)	0.7	-	13.1	3.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	3	52	0	231	6	332	22	253	654	9
Future Volume (veh/h)	9	0	3	52	0	231	6	332	22	253	654	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426
Adj Flow Rate, veh/h	10	0	3	60	0	110	7	386	26	294	760	10
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	32	32	32	32	32	32	32	32	32	32	32	32
Cap, veh/h	72	169	143	69	166	140	12	633	537	185	814	690
Arrive On Green	0.05	0.00	0.12	0.05	0.00	0.12	0.01	0.44	0.44	0.14	0.57	0.57
Sat Flow, veh/h	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Grp Volume(v), veh/h	10	0	3	60	0	110	7	386	26	294	760	10
Grp Sat Flow(s),veh/h/ln	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Q Serve(g_s), s	0.5	0.0	0.2	3.2	0.0	6.5	0.4	15.1	0.9	10.0	35.9	0.3
Cycle Q Clear(g_c), s	0.5	0.0	0.2	3.2	0.0	6.5	0.4	15.1	0.9	10.0	35.9	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	72	169	143	69	166	140	12	633	537	185	814	690
V/C Ratio(X)	0.14	0.00	0.02	0.87	0.00	0.78	0.57	0.61	0.05	1.59	0.93	0.01
Avail Cap(c_a), veh/h	185	563	477	185	563	477	185	633	537	185	814	690
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	0.0	28.6	34.6	0.0	31.5	36.2	15.6	11.6	31.7	14.4	6.8
Incr Delay (d2), s/veh	0.9	0.0	0.1	26.7	0.0	9.1	35.3	4.3	0.2	289.3	18.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	1.5	0.0	2.2	0.2	4.9	0.2	17.9	12.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	0.0	28.7	61.3	0.0	40.7	71.5	19.9	11.8	321.0	33.4	6.8
LnGrp LOS	C	A	C	E	A	D	E	B	B	F	C	A
Approach Vol, veh/h		13			170			419			1064	
Approach Delay, s/veh		32.8			47.9			20.2			112.6	
Approach LOS		C			D			C			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	47.7	7.7	13.3	14.0	38.4	7.9	13.1
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.4	37.9	5.2	2.2	12.0	17.1	2.5	8.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	82.1
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	0	80	0	0	0	0	210	356	0	831	455
Future Volume (veh/h)	34	0	80	0	0	0	0	210	356	0	831	455
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1530	1530	1530				0	1530	1530	0	1530	1530
Adj Flow Rate, veh/h	38	0	90				0	236	400	0	934	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	25	25	25				0	25	25	0	25	25
Cap, veh/h	274	0	122				0	2240	999	0	2240	
Arrive On Green	0.09	0.00	0.09				0.00	0.77	0.77	0.00	1.00	0.00
Sat Flow, veh/h	2913	0	1296				0	2983	1296	0	2983	1296
Grp Volume(v), veh/h	38	0	90				0	236	400	0	934	0
Grp Sat Flow(s),veh/h/ln	1457	0	1296				0	1453	1296	0	1453	1296
Q Serve(g_s), s	1.0	0.0	5.4				0.0	1.6	8.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.0	0.0	5.4				0.0	1.6	8.2	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	274	0	122				0	2240	999	0	2240	
V/C Ratio(X)	0.14	0.00	0.74				0.00	0.11	0.40	0.00	0.42	
Avail Cap(c_a), veh/h	725	0	322				0	2240	999	0	2240	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.94	0.00
Uniform Delay (d), s/veh	33.3	0.0	35.3				0.0	2.3	3.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	3.2				0.0	0.1	1.2	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	1.8				0.0	0.2	1.2	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.3	0.0	38.5				0.0	2.4	4.2	0.0	0.5	0.0
LnGrp LOS	C	A	D				A	A	A	A	A	
Approach Vol, veh/h		128						636			934	A
Approach Delay, s/veh		37.0						3.5			0.5	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.4	12.6	67.4
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	10.2	7.4	2.0
Green Ext Time (p_c), s	4.8	0.1	11.3

Intersection Summary	
HCM 6th Ctrl Delay	4.4
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	615	254	362	1	243	0	0	671	186
Future Volume (veh/h)	0	0	0	615	254	362	1	243	0	0	671	186
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1707	1707	1707	1707	1707	0	0	1707	1707
Adj Flow Rate, veh/h				699	289	411	1	276	0	0	762	0
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				13	13	13	13	13	0	0	13	13
Cap, veh/h				365	151	796	4	1817	0	0	2338	
Arrive On Green				0.31	0.31	0.31	0.00	0.18	0.00	0.00	0.50	0.00
Sat Flow, veh/h				1167	482	2547	1626	3329	0	0	4815	1447
Grp Volume(v), veh/h				988	0	411	1	276	0	0	762	0
Grp Sat Flow(s),veh/h/ln				1649	0	1273	1626	1622	0	0	1554	1447
Q Serve(g_s), s				25.0	0.0	10.6	0.0	5.7	0.0	0.0	7.8	0.0
Cycle Q Clear(g_c), s				25.0	0.0	10.6	0.0	5.7	0.0	0.0	7.8	0.0
Prop In Lane				0.71		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				515	0	796	4	1817	0	0	2338	
V/C Ratio(X)				1.92	0.00	0.52	0.28	0.15	0.00	0.00	0.33	
Avail Cap(c_a), veh/h				515	0	796	366	1817	0	0	2338	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.5	0.0	22.5	39.9	16.7	0.0	0.0	11.9	0.0
Incr Delay (d2), s/veh				419.9	0.0	0.4	51.9	0.2	0.0	0.0	0.4	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				69.4	0.0	3.1	0.1	1.9	0.0	0.0	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				447.4	0.0	22.9	91.8	16.9	0.0	0.0	12.3	0.0
LnGrp LOS				F	A	C	F	B	A	A	B	
Approach Vol, veh/h					1399			277			762	A
Approach Delay, s/veh					322.7			17.1			12.3	
Approach LOS					F			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	50.5		4.7	45.8		29.5
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	7.7		2.0	9.8		27.0
Green Ext Time (p_c), s	2.5		0.0	5.1		0.0

Intersection Summary		
HCM 6th Ctrl Delay	191.0	
HCM 6th LOS	F	

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	105	77	534	28	58	752
Future Volume (veh/h)	105	77	534	28	58	752
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	115	85	587	31	64	826
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	191	170	1142	509	92	1781
Arrive On Green	0.12	0.12	0.35	0.35	0.06	0.54
Sat Flow, veh/h	1654	1472	3387	1472	1654	3387
Grp Volume(v), veh/h	115	85	587	31	64	826
Grp Sat Flow(s),veh/h/ln	1654	1472	1650	1472	1654	1650
Q Serve(g_s), s	1.9	1.6	4.1	0.4	1.1	4.5
Cycle Q Clear(g_c), s	1.9	1.6	4.1	0.4	1.1	4.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	191	170	1142	509	92	1781
V/C Ratio(X)	0.60	0.50	0.51	0.06	0.70	0.46
Avail Cap(c_a), veh/h	1312	1168	3870	1726	913	3870
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	12.0	7.5	6.3	13.5	4.1
Incr Delay (d2), s/veh	1.1	0.8	0.4	0.0	9.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.4	0.7	0.1	0.5	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.3	12.9	7.9	6.4	22.5	4.3
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	200		618			890
Approach Delay, s/veh	13.1		7.8			5.6
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.6	15.5				21.1	7.8
Change Period (Y+Rc), s	4.0	5.5				5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0				34.0	23.0
Max Q Clear Time (g_c+I1), s	3.1	6.1				6.5	3.9
Green Ext Time (p_c), s	0.1	3.9				5.8	0.3

Intersection Summary	
HCM 6th Ctrl Delay	7.3
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	51	120	10	41	3	249	30	26	6	2	14
Future Volume (veh/h)	7	51	120	10	41	3	249	30	26	6	2	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515
Adj Flow Rate, veh/h	8	55	130	11	45	3	271	33	28	7	2	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, %	26	26	26	26	26	26	26	26	26	26	26	26
Cap, veh/h	15	481	215	21	492	219	327	1057	472	13	432	192
Arrive On Green	0.01	0.17	0.17	0.01	0.17	0.17	0.23	0.37	0.37	0.01	0.15	0.15
Sat Flow, veh/h	1443	2878	1284	1443	2878	1284	1443	2878	1284	1443	2878	1284
Grp Volume(v), veh/h	8	55	130	11	45	3	271	33	28	7	2	15
Grp Sat Flow(s),veh/h/ln	1443	1439	1284	1443	1439	1284	1443	1439	1284	1443	1439	1284
Q Serve(g_s), s	0.2	0.7	3.9	0.3	0.6	0.1	7.5	0.3	0.6	0.2	0.0	0.4
Cycle Q Clear(g_c), s	0.2	0.7	3.9	0.3	0.6	0.1	7.5	0.3	0.6	0.2	0.0	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	15	481	215	21	492	219	327	1057	472	13	432	192
V/C Ratio(X)	0.52	0.11	0.61	0.53	0.09	0.01	0.83	0.03	0.06	0.52	0.00	0.08
Avail Cap(c_a), veh/h	551	2426	1082	551	2426	1082	551	2350	1048	551	2350	1048
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	14.8	16.2	20.5	14.6	14.4	15.4	8.5	8.6	20.7	15.1	15.3
Incr Delay (d2), s/veh	24.9	0.1	2.7	19.5	0.1	0.0	5.4	0.0	0.1	27.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.2	1.0	0.2	0.2	0.0	2.3	0.1	0.1	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.5	14.9	18.9	40.0	14.7	14.5	20.8	8.5	8.6	48.3	15.1	15.5
LnGrp LOS	D	B	B	D	B	B	C	A	A	D	B	B
Approach Vol, veh/h		193			59			332			24	
Approach Delay, s/veh		18.9			19.4			18.5			25.0	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	11.7	4.4	21.2	4.4	11.9	13.5	12.1
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.3	5.9	2.2	2.6	2.2	2.6	9.5	2.4
Green Ext Time (p_c), s	0.0	0.8	0.0	0.2	0.0	0.2	0.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.0
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	71	25	13	126	37	37	15	2	9	2	31
Future Vol, veh/h	12	71	25	13	126	37	37	15	2	9	2	31
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	16	95	33	17	168	49	49	20	3	12	3	41
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	9	8.6	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	69%	11%	7%	21%
Vol Thru, %	28%	66%	72%	5%
Vol Right, %	4%	23%	21%	74%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	54	108	176	42
LT Vol	37	12	13	9
Through Vol	15	71	126	2
RT Vol	2	25	37	31
Lane Flow Rate	72	144	235	56
Geometry Grp	1	1	1	1
Degree of Util (X)	0.099	0.176	0.281	0.07
Departure Headway (Hd)	4.972	4.392	4.305	4.484
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	721	816	835	798
Service Time	3.004	2.417	2.326	2.516
HCM Lane V/C Ratio	0.1	0.176	0.281	0.07
HCM Control Delay	8.6	8.4	9	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	0.6	1.2	0.2

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	202	4	26	258	0	25	23	16	6	8	9
Future Vol, veh/h	1	202	4	26	258	0	25	23	16	6	8	9
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	256	5	33	327	0	32	29	20	8	10	11
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	10	11.3	9.1	8.6
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	39%	0%	9%	26%
Vol Thru, %	36%	98%	91%	35%
Vol Right, %	25%	2%	0%	39%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	64	207	284	23
LT Vol	25	1	26	6
Through Vol	23	202	258	8
RT Vol	16	4	0	9
Lane Flow Rate	81	262	359	29
Geometry Grp	1	1	1	1
Degree of Util (X)	0.119	0.335	0.453	0.043
Departure Headway (Hd)	5.294	4.606	4.532	5.275
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	673	778	794	674
Service Time	3.358	2.649	2.571	3.346
HCM Lane V/C Ratio	0.12	0.337	0.452	0.043
HCM Control Delay	9.1	10	11.3	8.6
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.4	1.5	2.4	0.1

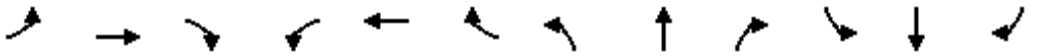
Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	37	74	131	614	458	8
Future Vol, veh/h	37	74	131	614	458	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	80	141	660	492	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1439	497	501	0	-	0
Stage 1	497	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	146	573	1063	-	-	-
Stage 1	611	-	-	-	-	-
Stage 2	379	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	127	573	1063	-	-	-
Mov Cap-2 Maneuver	127	-	-	-	-	-
Stage 1	530	-	-	-	-	-
Stage 2	379	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.5	1.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1063	-	127	573	-	-
HCM Lane V/C Ratio	0.133	-	0.313	0.139	-	-
HCM Control Delay (s)	8.9	-	45.8	12.3	-	-
HCM Lane LOS	A	-	E	B	-	-
HCM 95th %tile Q(veh)	0.5	-	1.2	0.5	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	4	21	18	1	231	6	793	21	186	331	10
Future Volume (veh/h)	18	4	21	18	1	231	6	793	21	186	331	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574
Adj Flow Rate, veh/h	20	4	24	20	1	144	7	891	24	209	372	11
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	22	22	22	22	22	22	22	22	22	22	22	22
Cap, veh/h	76	255	216	34	212	179	14	686	581	200	882	747
Arrive On Green	0.05	0.16	0.16	0.02	0.13	0.13	0.01	0.44	0.44	0.13	0.56	0.56
Sat Flow, veh/h	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Grp Volume(v), veh/h	20	4	24	20	1	144	7	891	24	209	372	11
Grp Sat Flow(s),veh/h/ln	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Q Serve(g_s), s	1.0	0.2	1.1	1.0	0.0	7.8	0.3	32.6	0.8	10.0	10.2	0.3
Cycle Q Clear(g_c), s	1.0	0.2	1.1	1.0	0.0	7.8	0.3	32.6	0.8	10.0	10.2	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	76	255	216	34	212	179	14	686	581	200	882	747
V/C Ratio(X)	0.26	0.02	0.11	0.59	0.00	0.80	0.52	1.30	0.04	1.04	0.42	0.01
Avail Cap(c_a), veh/h	200	610	517	200	610	517	200	686	581	200	882	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	26.3	26.7	36.2	28.1	31.4	36.9	21.1	12.1	32.4	9.5	7.3
Incr Delay (d2), s/veh	1.8	0.0	0.2	15.0	0.0	8.1	27.2	145.4	0.1	75.5	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.4	0.5	0.0	2.8	0.2	37.6	0.2	7.5	3.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.0	26.4	27.0	51.2	28.1	39.5	64.1	166.5	12.3	107.9	11.0	7.3
LnGrp LOS	D	C	C	D	C	D	E	F	B	F	B	A
Approach Vol, veh/h		48			165			922			592	
Approach Delay, s/veh		30.7			40.9			161.7			45.1	
Approach LOS		C			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	47.7	5.7	16.7	14.0	38.4	7.8	14.7
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.3	12.2	3.0	3.1	12.0	34.6	3.0	9.8
Green Ext Time (p_c), s	0.0	2.0	0.0	0.1	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	106.6
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	3	24	0	0	0	0	299	755	0	501	399
Future Volume (veh/h)	129	3	24	0	0	0	0	299	755	0	501	399
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	0	1663	1663
Adj Flow Rate, veh/h	142	0	26				0	325	684	0	545	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	16	16	16				0	16	16	0	16	16
Cap, veh/h	309	0	138				0	2425	1081	0	2425	
Arrive On Green	0.10	0.00	0.10				0.00	0.77	0.77	0.00	1.00	0.00
Sat Flow, veh/h	3167	0	1409				0	3243	1409	0	3243	1409
Grp Volume(v), veh/h	142	0	26				0	325	684	0	545	0
Grp Sat Flow(s),veh/h/ln	1584	0	1409				0	1580	1409	0	1580	1409
Q Serve(g_s), s	3.4	0.0	1.4				0.0	2.1	17.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.4	0.0	1.4				0.0	2.1	17.6	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	309	0	138				0	2425	1081	0	2425	
V/C Ratio(X)	0.46	0.00	0.19				0.00	0.13	0.63	0.00	0.22	
Avail Cap(c_a), veh/h	788	0	351				0	2425	1081	0	2425	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.72	0.00
Uniform Delay (d), s/veh	34.1	0.0	33.2				0.0	2.4	4.2	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.7				0.0	0.1	2.8	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	0.5				0.0	0.3	3.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.2	0.0	33.8				0.0	2.5	7.0	0.0	0.2	0.0
LnGrp LOS	D	A	C				A	A	A	A	A	
Approach Vol, veh/h		168						1009			545	A
Approach Delay, s/veh		35.0						5.6			0.2	
Approach LOS		C						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.1	12.9	67.1
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	19.6	5.4	2.0
Green Ext Time (p_c), s	5.2	0.4	3.7

Intersection Summary	
HCM 6th Ctrl Delay	6.7
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	360	0	524	35	393	0	0	540	62
Future Volume (veh/h)	0	0	0	360	0	524	35	393	0	0	540	62
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1722	1722	1722	1722	1722	0	0	1722	1722
Adj Flow Rate, veh/h				387	0	563	38	423	0	0	581	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				12	12	12	12	12	0	0	12	12
Cap, veh/h				454	0	712	369	1948	0	0	1477	
Arrive On Green				0.28	0.00	0.28	0.07	0.20	0.00	0.00	0.31	0.00
Sat Flow, veh/h				1640	0	2569	1640	3358	0	0	4856	1459
Grp Volume(v), veh/h				387	0	563	38	423	0	0	581	0
Grp Sat Flow(s),veh/h/ln				1640	0	1284	1640	1636	0	0	1567	1459
Q Serve(g_s), s				17.9	0.0	16.2	1.7	8.7	0.0	0.0	7.7	0.0
Cycle Q Clear(g_c), s				17.9	0.0	16.2	1.7	8.7	0.0	0.0	7.7	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				454	0	712	369	1948	0	0	1477	
V/C Ratio(X)				0.85	0.00	0.79	0.10	0.22	0.00	0.00	0.39	
Avail Cap(c_a), veh/h				513	0	803	369	1948	0	0	1477	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.4	0.0	26.8	29.5	16.5	0.0	0.0	21.5	0.0
Incr Delay (d2), s/veh				11.9	0.0	4.8	0.6	0.3	0.0	0.0	0.8	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.2	0.0	5.2	0.7	3.1	0.0	0.0	2.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				39.2	0.0	31.6	30.1	16.7	0.0	0.0	22.3	0.0
LnGrp LOS				D	A	C	C	B	A	A	C	
Approach Vol, veh/h					950			461			581	A
Approach Delay, s/veh					34.7			17.8			22.3	
Approach LOS					C			B			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	53.3		22.5	30.8		26.7
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	10.7		3.7	9.7		19.9
Green Ext Time (p_c), s	2.7		0.0	2.9		2.3

Intersection Summary	
HCM 6th Ctrl Delay	27.2
HCM 6th LOS	C

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	34	15	785	111	40	602
Future Volume (veh/h)	34	15	785	111	40	602
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	34	15	793	112	40	608
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	77	68	1496	667	65	2093
Arrive On Green	0.04	0.04	0.44	0.44	0.04	0.61
Sat Flow, veh/h	1711	1522	3503	1522	1711	3503
Grp Volume(v), veh/h	34	15	793	112	40	608
Grp Sat Flow(s),veh/h/ln	1711	1522	1706	1522	1711	1706
Q Serve(g_s), s	0.6	0.3	5.0	1.3	0.7	2.5
Cycle Q Clear(g_c), s	0.6	0.3	5.0	1.3	0.7	2.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	77	68	1496	667	65	2093
V/C Ratio(X)	0.44	0.22	0.53	0.17	0.62	0.29
Avail Cap(c_a), veh/h	1345	1197	3968	1770	936	3968
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	13.5	6.0	5.0	13.9	2.7
Incr Delay (d2), s/veh	1.5	0.6	0.3	0.1	9.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.1	0.6	0.1	0.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.1	14.1	6.3	5.1	23.0	2.7
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	49		905			648
Approach Delay, s/veh	14.8		6.2			4.0
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.1	18.3				23.4	5.8
Change Period (Y+Rc), s	4.0	5.5				5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0				34.0	23.0
Max Q Clear Time (g_c+I1), s	2.7	7.0				4.5	2.6
Green Ext Time (p_c), s	0.0	5.9				4.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	5.5
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	20	109	17	49	6	132	23	3	0	4	3
Future Volume (veh/h)	0	20	109	17	49	6	132	23	3	0	4	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707
Adj Flow Rate, veh/h	0	24	128	20	58	7	155	27	4	0	5	4
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	13	13	13	13	13	13	13	13	13	13	13	13
Cap, veh/h	5	676	302	41	1145	511	199	1084	484	5	301	134
Arrive On Green	0.00	0.21	0.21	0.03	0.35	0.35	0.12	0.33	0.33	0.00	0.09	0.09
Sat Flow, veh/h	1626	3244	1447	1626	3244	1447	1626	3244	1447	1626	3244	1447
Grp Volume(v), veh/h	0	24	128	20	58	7	155	27	4	0	5	4
Grp Sat Flow(s),veh/h/ln	1626	1622	1447	1626	1622	1447	1626	1622	1447	1626	1622	1447
Q Serve(g_s), s	0.0	0.2	2.6	0.4	0.4	0.1	3.1	0.2	0.1	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.0	0.2	2.6	0.4	0.4	0.1	3.1	0.2	0.1	0.0	0.0	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	5	676	302	41	1145	511	199	1084	484	5	301	134
V/C Ratio(X)	0.00	0.04	0.42	0.49	0.05	0.01	0.78	0.02	0.01	0.00	0.02	0.03
Avail Cap(c_a), veh/h	775	3411	1521	775	3411	1521	775	3304	1474	775	3304	1474
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.6	11.5	16.1	7.2	7.1	14.3	7.5	7.5	0.0	13.8	13.9
Incr Delay (d2), s/veh	0.0	0.0	0.9	8.6	0.0	0.0	6.5	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	0.6	0.2	0.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	10.6	12.5	24.7	7.2	7.1	20.7	7.5	7.5	0.0	13.9	13.9
LnGrp LOS	A	B	B	C	A	A	C	A	A	A	B	B
Approach Vol, veh/h		152			85			186			9	
Approach Delay, s/veh		12.2			11.3			18.5			13.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	11.7	0.0	17.0	0.0	16.6	8.1	8.9
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.4	4.6	0.0	2.2	0.0	2.4	5.1	2.1
Green Ext Time (p_c), s	0.0	0.5	0.0	0.1	0.0	0.3	0.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	111	32	0	35	6	16	17	1	19	10	7
Future Vol, veh/h	6	111	32	0	35	6	16	17	1	19	10	7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	6	118	34	0	37	6	17	18	1	20	11	7
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.9	7.4	7.7	7.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	47%	4%	0%	53%
Vol Thru, %	50%	74%	85%	28%
Vol Right, %	3%	21%	15%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	149	41	36
LT Vol	16	6	0	19
Through Vol	17	111	35	10
RT Vol	1	32	6	7
Lane Flow Rate	36	159	44	38
Geometry Grp	1	1	1	1
Degree of Util (X)	0.045	0.176	0.05	0.047
Departure Headway (Hd)	4.509	3.992	4.113	4.418
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	799	891	859	815
Service Time	2.509	2.053	2.196	2.419
HCM Lane V/C Ratio	0.045	0.178	0.051	0.047
HCM Control Delay	7.7	7.9	7.4	7.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.6	0.2	0.1

Intersection	
Intersection Delay, s/veh	16.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	73	494	17	13	308	10	1	22	13	1	13	4
Future Vol, veh/h	73	494	17	13	308	10	1	22	13	1	13	4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	76	515	18	14	321	10	1	23	14	1	14	4
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	20.1	11.6	9.3	9.2
HCM LOS	C	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	12%	4%	6%
Vol Thru, %	61%	85%	93%	72%
Vol Right, %	36%	3%	3%	22%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	584	331	18
LT Vol	1	73	13	1
Through Vol	22	494	308	13
RT Vol	13	17	10	4
Lane Flow Rate	38	608	345	19
Geometry Grp	1	1	1	1
Degree of Util (X)	0.061	0.757	0.452	0.031
Departure Headway (Hd)	5.816	4.477	4.718	5.95
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	610	809	762	596
Service Time	3.905	2.516	2.765	4.046
HCM Lane V/C Ratio	0.062	0.752	0.453	0.032
HCM Control Delay	9.3	20.1	11.6	9.2
HCM Lane LOS	A	C	B	A
HCM 95th-tile Q	0.2	7.2	2.4	0.1

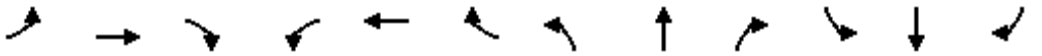
Intersection	
Int Delay, s/veh	4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	46	97	84	643	798	11
Future Vol, veh/h	46	97	84	643	798	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	103	89	684	849	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1717	855	861	0	-	0
Stage 1	855	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	99	358	781	-	-	-
Stage 1	417	-	-	-	-	-
Stage 2	414	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	88	358	781	-	-	-
Mov Cap-2 Maneuver	88	-	-	-	-	-
Stage 1	369	-	-	-	-	-
Stage 2	414	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	41.3	1.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	781	-	88	358	-	-
HCM Lane V/C Ratio	0.114	-	0.556	0.288	-	-
HCM Control Delay (s)	10.2	-	88.2	19.1	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.4	-	2.5	1.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	3	52	0	231	6	332	22	253	654	9
Future Volume (veh/h)	9	0	3	52	0	231	6	332	22	253	654	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426
Adj Flow Rate, veh/h	13	0	4	73	0	132	8	467	31	356	920	13
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	32	32	32	32	32	32	32	32	32	32	32	32
Cap, veh/h	76	184	156	85	193	164	14	616	522	180	790	670
Arrive On Green	0.06	0.00	0.13	0.06	0.00	0.14	0.01	0.43	0.43	0.13	0.55	0.55
Sat Flow, veh/h	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Grp Volume(v), veh/h	13	0	4	73	0	132	8	467	31	356	920	13
Grp Sat Flow(s),veh/h/ln	1358	1426	1208	1358	1426	1208	1358	1426	1208	1358	1426	1208
Q Serve(g_s), s	0.7	0.0	0.2	4.0	0.0	8.0	0.4	20.9	1.1	10.0	41.8	0.4
Cycle Q Clear(g_c), s	0.7	0.0	0.2	4.0	0.0	8.0	0.4	20.9	1.1	10.0	41.8	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	76	184	156	85	193	164	14	616	522	180	790	670
V/C Ratio(X)	0.17	0.00	0.03	0.85	0.00	0.81	0.58	0.76	0.06	1.98	1.16	0.02
Avail Cap(c_a), veh/h	180	548	464	180	548	464	180	616	522	180	790	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	0.0	28.7	35.0	0.0	31.7	37.2	18.1	12.5	32.7	16.8	7.6
Incr Delay (d2), s/veh	1.0	0.0	0.1	20.4	0.0	8.9	32.5	8.5	0.2	459.8	87.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	1.8	0.0	2.6	0.3	7.3	0.3	26.0	29.5	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	0.0	28.8	55.4	0.0	40.6	69.7	26.6	12.7	492.6	104.4	7.6
LnGrp LOS	C	A	C	E	A	D	E	C	B	F	F	A
Approach Vol, veh/h		17			205			506			1289	
Approach Delay, s/veh		33.5			45.9			26.4			210.6	
Approach LOS		C			D			C			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	47.6	8.8	14.3	14.0	38.4	8.2	14.8
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.4	43.8	6.0	2.2	12.0	22.9	2.7	10.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	146.2
HCM 6th LOS	F

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	0	80	0	0	0	0	210	356	0	831	455
Future Volume (veh/h)	34	0	80	0	0	0	0	210	356	0	831	455
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1530	1530	1530				0	1530	1530	0	1530	1530
Adj Flow Rate, veh/h	46	0	109				0	286	484	0	1130	0
Peak Hour Factor	0.89	0.89	0.89				0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	25	25	25				0	25	25	0	25	25
Cap, veh/h	306	0	136				0	2208	985	0	2208	
Arrive On Green	0.11	0.00	0.11				0.00	0.76	0.76	0.00	1.00	0.00
Sat Flow, veh/h	2913	0	1296				0	2983	1296	0	2983	1296
Grp Volume(v), veh/h	46	0	109				0	286	484	0	1130	0
Grp Sat Flow(s),veh/h/ln	1457	0	1296				0	1453	1296	0	1453	1296
Q Serve(g_s), s	1.1	0.0	6.6				0.0	2.1	11.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.1	0.0	6.6				0.0	2.1	11.4	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	306	0	136				0	2208	985	0	2208	
V/C Ratio(X)	0.15	0.00	0.80				0.00	0.13	0.49	0.00	0.51	
Avail Cap(c_a), veh/h	725	0	322				0	2208	985	0	2208	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.91	0.00
Uniform Delay (d), s/veh	32.6	0.0	35.0				0.0	2.6	3.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	4.1				0.0	0.1	1.8	0.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	2.2				0.0	0.3	1.9	0.0	0.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	0.0	39.0				0.0	2.7	5.4	0.0	0.8	0.0
LnGrp LOS	C	A	D				A	A	A	A	A	
Approach Vol, veh/h		155						770			1130	A
Approach Delay, s/veh		37.1						4.4			0.8	
Approach LOS		D						A			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	66.5	13.5	66.5
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	13.4	8.6	2.0
Green Ext Time (p_c), s	6.1	0.1	15.0

Intersection Summary	
HCM 6th Ctrl Delay	4.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	615	254	362	1	243	0	0	671	186
Future Volume (veh/h)	0	0	0	615	254	362	1	243	0	0	671	186
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1707	1707	1707	1707	1707	0	0	1707	1707
Adj Flow Rate, veh/h				846	349	498	1	334	0	0	923	0
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				13	13	13	13	13	0	0	13	13
Cap, veh/h				365	150	796	4	1817	0	0	2338	
Arrive On Green				0.31	0.31	0.31	0.00	0.18	0.00	0.00	0.50	0.00
Sat Flow, veh/h				1167	482	2547	1626	3329	0	0	4815	1447
Grp Volume(v), veh/h				1195	0	498	1	334	0	0	923	0
Grp Sat Flow(s),veh/h/ln				1649	0	1273	1626	1622	0	0	1554	1447
Q Serve(g_s), s				25.0	0.0	13.4	0.0	7.0	0.0	0.0	9.8	0.0
Cycle Q Clear(g_c), s				25.0	0.0	13.4	0.0	7.0	0.0	0.0	9.8	0.0
Prop In Lane				0.71		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				515	0	796	4	1817	0	0	2338	
V/C Ratio(X)				2.32	0.00	0.63	0.28	0.18	0.00	0.00	0.39	
Avail Cap(c_a), veh/h				515	0	796	366	1817	0	0	2338	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.5	0.0	23.5	39.9	17.2	0.0	0.0	12.4	0.0
Incr Delay (d2), s/veh				599.6	0.0	1.3	51.9	0.2	0.0	0.0	0.5	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				95.1	0.0	4.0	0.1	2.4	0.0	0.0	3.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				627.1	0.0	24.8	91.8	17.4	0.0	0.0	12.9	0.0
LnGrp LOS				F	A	C	F	B	A	A	B	
Approach Vol, veh/h					1693			335			923	A
Approach Delay, s/veh					450.0			17.6			12.9	
Approach LOS					F			B			B	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	50.5		4.7	45.8		29.5
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	9.0		2.0	11.8		27.0
Green Ext Time (p_c), s	3.0		0.0	5.4		0.0

Intersection Summary	
HCM 6th Ctrl Delay	264.2
HCM 6th LOS	F

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	105	77	534	28	58	752
Future Volume (veh/h)	105	77	534	28	58	752
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1737	1737	1737	1737	1737	1737
Adj Flow Rate, veh/h	140	102	710	37	77	1000
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	222	198	1251	558	102	1854
Arrive On Green	0.13	0.13	0.38	0.38	0.06	0.56
Sat Flow, veh/h	1654	1472	3387	1472	1654	3387
Grp Volume(v), veh/h	140	102	710	37	77	1000
Grp Sat Flow(s),veh/h/ln	1654	1472	1650	1472	1654	1650
Q Serve(g_s), s	2.6	2.1	5.6	0.5	1.5	6.3
Cycle Q Clear(g_c), s	2.6	2.1	5.6	0.5	1.5	6.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	222	198	1251	558	102	1854
V/C Ratio(X)	0.63	0.52	0.57	0.07	0.76	0.54
Avail Cap(c_a), veh/h	1156	1028	3408	1520	804	3408
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.5	13.3	8.1	6.5	15.2	4.5
Incr Delay (d2), s/veh	1.1	0.8	0.4	0.0	10.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.6	1.0	0.1	0.7	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.6	14.0	8.5	6.6	26.1	4.8
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	242		747			1077
Approach Delay, s/veh	14.3		8.4			6.3
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	6.0	18.0			24.0	8.9
Change Period (Y+Rc), s	4.0	5.5			5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0			34.0	23.0
Max Q Clear Time (g_c+I1), s	3.5	7.6			8.3	4.6
Green Ext Time (p_c), s	0.1	4.9			7.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	8.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	51	120	10	41	3	249	30	26	6	2	14
Future Volume (veh/h)	7	51	120	10	41	3	249	30	26	6	2	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515	1515
Adj Flow Rate, veh/h	9	67	158	13	54	4	327	39	34	8	3	18
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, %	26	26	26	26	26	26	26	26	26	26	26	26
Cap, veh/h	17	509	227	24	523	233	379	1172	523	15	448	200
Arrive On Green	0.01	0.18	0.18	0.02	0.18	0.18	0.26	0.41	0.41	0.01	0.16	0.16
Sat Flow, veh/h	1443	2878	1284	1443	2878	1284	1443	2878	1284	1443	2878	1284
Grp Volume(v), veh/h	9	67	158	13	54	4	327	39	34	8	3	18
Grp Sat Flow(s),veh/h/ln	1443	1439	1284	1443	1439	1284	1443	1439	1284	1443	1439	1284
Q Serve(g_s), s	0.3	0.9	5.5	0.4	0.7	0.1	10.3	0.4	0.8	0.3	0.0	0.6
Cycle Q Clear(g_c), s	0.3	0.9	5.5	0.4	0.7	0.1	10.3	0.4	0.8	0.3	0.0	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	17	509	227	24	523	233	379	1172	523	15	448	200
V/C Ratio(X)	0.53	0.13	0.70	0.54	0.10	0.02	0.86	0.03	0.07	0.53	0.01	0.09
Avail Cap(c_a), veh/h	485	2133	951	485	2133	951	485	2067	922	485	2067	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	16.5	18.4	23.2	16.2	16.0	16.8	8.5	8.6	23.4	17.0	17.2
Incr Delay (d2), s/veh	23.2	0.1	3.8	17.8	0.1	0.0	12.3	0.0	0.1	25.4	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.3	1.6	0.2	0.2	0.0	3.9	0.1	0.2	0.2	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.6	16.6	22.2	41.0	16.3	16.0	29.1	8.5	8.6	48.8	17.0	17.4
LnGrp LOS	D	B	C	D	B	B	C	A	A	D	B	B
Approach Vol, veh/h		234			71			400			29	
Approach Delay, s/veh		21.5			20.8			25.3			26.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.8	13.1	4.5	25.2	4.6	13.4	16.5	13.2
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.4	7.5	2.3	2.8	2.3	2.7	12.3	2.6
Green Ext Time (p_c), s	0.0	0.9	0.0	0.3	0.0	0.3	0.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	23.7
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	12	71	25	13	126	37	37	15	2	9	2	31
Future Vol, veh/h	12	71	25	13	126	37	37	15	2	9	2	31
Peak Hour Factor	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	19	115	40	21	203	60	60	24	3	15	3	50
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.8	9.8	9	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	69%	11%	7%	21%
Vol Thru, %	28%	66%	72%	5%
Vol Right, %	4%	23%	21%	74%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	54	108	176	42
LT Vol	37	12	13	9
Through Vol	15	71	126	2
RT Vol	2	25	37	31
Lane Flow Rate	87	174	284	68
Geometry Grp	1	1	1	1
Degree of Util (X)	0.125	0.219	0.349	0.088
Departure Headway (Hd)	5.18	4.535	4.423	4.7
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	690	791	812	759
Service Time	3.23	2.57	2.454	2.752
HCM Lane V/C Ratio	0.126	0.22	0.35	0.09
HCM Control Delay	9	8.8	9.8	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.4	0.8	1.6	0.3

Intersection	
Intersection Delay, s/veh	12.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	202	4	26	258	0	25	23	16	6	8	9
Future Vol, veh/h	1	202	4	26	258	0	25	23	16	6	8	9
Peak Hour Factor	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79	0.79
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	309	6	40	395	0	38	35	25	9	12	14
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	11.3	13.8	9.8	9.1
HCM LOS	B	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	39%	0%	9%	26%
Vol Thru, %	36%	98%	91%	35%
Vol Right, %	25%	2%	0%	39%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	64	207	284	23
LT Vol	25	1	26	6
Through Vol	23	202	258	8
RT Vol	16	4	0	9
Lane Flow Rate	98	317	435	35
Geometry Grp	1	1	1	1
Degree of Util (X)	0.156	0.421	0.566	0.056
Departure Headway (Hd)	5.714	4.785	4.685	5.747
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	631	745	766	626
Service Time	3.715	2.861	2.755	3.751
HCM Lane V/C Ratio	0.155	0.426	0.568	0.056
HCM Control Delay	9.8	11.3	13.8	9.1
HCM Lane LOS	A	B	B	A
HCM 95th-tile Q	0.5	2.1	3.6	0.2

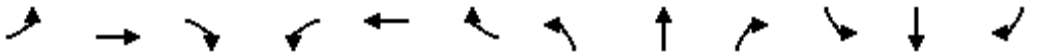
Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	37	74	131	614	458	8
Future Vol, veh/h	37	74	131	614	458	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	96	170	799	596	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1740	601	606	0	-	0
Stage 1	601	-	-	-	-	-
Stage 2	1139	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	96	500	972	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	305	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	79	500	972	-	-	-
Mov Cap-2 Maneuver	79	-	-	-	-	-
Stage 1	451	-	-	-	-	-
Stage 2	305	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	44.2	1.7	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	972	-	79	500	-	-
HCM Lane V/C Ratio	0.175	-	0.609	0.193	-	-
HCM Control Delay (s)	9.5	-	104.9	13.9	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	0.6	-	2.7	0.7	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	4	21	18	1	231	6	793	21	186	331	10
Future Volume (veh/h)	18	4	21	18	1	231	6	793	21	186	331	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574
Adj Flow Rate, veh/h	27	6	32	27	2	194	9	1203	32	282	502	15
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	22	22	22	22	22	22	22	22	22	22	22	22
Cap, veh/h	82	313	266	42	272	230	17	650	551	190	831	705
Arrive On Green	0.05	0.20	0.20	0.03	0.17	0.17	0.01	0.41	0.41	0.13	0.53	0.53
Sat Flow, veh/h	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Grp Volume(v), veh/h	27	6	32	27	2	194	9	1203	32	282	502	15
Grp Sat Flow(s),veh/h/ln	1499	1574	1334	1499	1574	1334	1499	1574	1334	1499	1574	1334
Q Serve(g_s), s	1.4	0.2	1.6	1.4	0.1	11.1	0.5	32.6	1.1	10.0	17.4	0.4
Cycle Q Clear(g_c), s	1.4	0.2	1.6	1.4	0.1	11.1	0.5	32.6	1.1	10.0	17.4	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	82	313	266	42	272	230	17	650	551	190	831	705
V/C Ratio(X)	0.33	0.02	0.12	0.64	0.01	0.84	0.53	1.85	0.06	1.49	0.60	0.02
Avail Cap(c_a), veh/h	190	578	490	190	578	490	190	650	551	190	831	705
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.9	25.4	25.9	38.0	27.1	31.6	38.8	23.2	13.9	34.5	12.9	8.9
Incr Delay (d2), s/veh	2.3	0.0	0.2	14.7	0.0	8.1	23.2	389.0	0.2	244.4	3.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.1	0.5	0.7	0.0	3.9	0.3	80.5	0.4	16.3	5.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	38.2	25.4	26.1	52.7	27.1	39.8	62.0	412.1	14.1	278.8	16.1	8.9
LnGrp LOS	D	C	C	D	C	D	E	F	B	F	B	A
Approach Vol, veh/h		65			223			1244			799	
Approach Delay, s/veh		31.1			41.2			399.4			108.7	
Approach LOS		C			D			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	47.5	6.2	20.3	14.0	38.4	8.3	18.2
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.5	19.4	3.4	3.6	12.0	34.6	3.4	13.1
Green Ext Time (p_c), s	0.0	2.5	0.0	0.1	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	255.2
HCM 6th LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	3	24	0	0	0	0	299	755	0	501	399
Future Volume (veh/h)	129	3	24	0	0	0	0	299	755	0	501	399
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No						No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663				0	1663	1663	0	1663	1663
Adj Flow Rate, veh/h	192	0	35				0	439	923	0	735	0
Peak Hour Factor	0.92	0.92	0.92				0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	16	16	16				0	16	16	0	16	16
Cap, veh/h	315	0	140				0	2419	1079	0	2419	
Arrive On Green	0.10	0.00	0.10				0.00	0.77	0.77	0.00	1.00	0.00
Sat Flow, veh/h	3167	0	1409				0	3243	1409	0	3243	1409
Grp Volume(v), veh/h	192	0	35				0	439	923	0	735	0
Grp Sat Flow(s),veh/h/ln	1584	0	1409				0	1580	1409	0	1580	1409
Q Serve(g_s), s	4.6	0.0	1.8				0.0	3.0	35.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.6	0.0	1.8				0.0	3.0	35.6	0.0	0.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	315	0	140				0	2419	1079	0	2419	
V/C Ratio(X)	0.61	0.00	0.25				0.00	0.18	0.86	0.00	0.30	
Avail Cap(c_a), veh/h	788	0	351				0	2419	1079	0	2419	
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	1.00	0.00	0.64	0.00
Uniform Delay (d), s/veh	34.5	0.0	33.3				0.0	2.6	6.4	0.0	0.0	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.9				0.0	0.2	8.7	0.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	0.7				0.0	0.5	7.0	0.0	0.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	0.0	34.2				0.0	2.7	15.1	0.0	0.2	0.0
LnGrp LOS	D	A	C				A	A	B	A	A	
Approach Vol, veh/h		227						1362			735	A
Approach Delay, s/veh		36.1						11.1			0.2	
Approach LOS		D						B			A	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	67.0	13.0	67.0
Change Period (Y+Rc), s	5.7	5.1	5.7
Max Green Setting (Gmax), s	49.3	19.9	49.3
Max Q Clear Time (g_c+I1), s	37.6	6.6	2.0
Green Ext Time (p_c), s	5.5	0.6	5.4

Intersection Summary	
HCM 6th Ctrl Delay	10.1
HCM 6th LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	360	0	524	35	393	0	0	540	62
Future Volume (veh/h)	0	0	0	360	0	524	35	393	0	0	540	62
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1722	1722	1722	1722	1722	0	0	1722	1722
Adj Flow Rate, veh/h				523	0	761	51	570	0	0	784	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				12	12	12	12	12	0	0	12	12
Cap, veh/h				513	0	803	369	1832	0	0	1311	
Arrive On Green				0.31	0.00	0.31	0.07	0.18	0.00	0.00	0.28	0.00
Sat Flow, veh/h				1640	0	2569	1640	3358	0	0	4856	1459
Grp Volume(v), veh/h				523	0	761	51	570	0	0	784	0
Grp Sat Flow(s),veh/h/ln				1640	0	1284	1640	1636	0	0	1567	1459
Q Serve(g_s), s				25.0	0.0	23.2	2.3	12.1	0.0	0.0	11.5	0.0
Cycle Q Clear(g_c), s				25.0	0.0	23.2	2.3	12.1	0.0	0.0	11.5	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				513	0	803	369	1832	0	0	1311	
V/C Ratio(X)				1.02	0.00	0.95	0.14	0.31	0.00	0.00	0.60	
Avail Cap(c_a), veh/h				513	0	803	369	1832	0	0	1311	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.98	0.98	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				27.5	0.0	26.9	29.8	19.3	0.0	0.0	25.0	0.0
Incr Delay (d2), s/veh				45.0	0.0	20.2	0.8	0.4	0.0	0.0	2.0	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.6	0.0	8.9	0.9	5.0	0.0	0.0	4.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				72.5	0.0	47.0	30.5	19.7	0.0	0.0	27.0	0.0
LnGrp LOS				F	A	D	C	B	A	A	C	
Approach Vol, veh/h					1284			621			784	A
Approach Delay, s/veh					57.4			20.6			27.0	
Approach LOS					E			C			C	

Timer - Assigned Phs	2		5	6		8
Phs Duration (G+Y+Rc), s	50.5		22.5	28.0		29.5
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5
Max Green Setting (Gmax), s	44.8		18.0	22.3		25.0
Max Q Clear Time (g_c+I1), s	14.1		4.3	13.5		27.0
Green Ext Time (p_c), s	3.8		0.1	3.2		0.0

Intersection Summary	
HCM 6th Ctrl Delay	40.0
HCM 6th LOS	D

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	34	15	785	111	40	602
Future Volume (veh/h)	34	15	785	111	40	602
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1796	1796	1796	1796	1796	1796
Adj Flow Rate, veh/h	46	20	1070	151	55	821
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	7	7	7	7	7	7
Cap, veh/h	92	82	1739	776	80	2279
Arrive On Green	0.05	0.05	0.51	0.51	0.05	0.67
Sat Flow, veh/h	1711	1522	3503	1522	1711	3503
Grp Volume(v), veh/h	46	20	1070	151	55	821
Grp Sat Flow(s),veh/h/ln	1711	1522	1706	1522	1711	1706
Q Serve(g_s), s	0.9	0.5	8.0	1.9	1.1	3.8
Cycle Q Clear(g_c), s	0.9	0.5	8.0	1.9	1.1	3.8
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	92	82	1739	776	80	2279
V/C Ratio(X)	0.50	0.24	0.62	0.19	0.68	0.36
Avail Cap(c_a), veh/h	1095	975	3231	1441	762	3231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	16.3	6.3	4.8	16.9	2.6
Incr Delay (d2), s/veh	1.6	0.6	0.4	0.1	9.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	1.1	0.2	0.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.1	16.9	6.7	4.9	26.6	2.7
LnGrp LOS	B	B	A	A	C	A
Approach Vol, veh/h	66		1221			876
Approach Delay, s/veh	17.7		6.4			4.2
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.7	23.8				29.5	6.4
Change Period (Y+Rc), s	4.0	5.5				5.5	4.5
Max Green Setting (Gmax), s	16.0	34.0				34.0	23.0
Max Q Clear Time (g_c+I1), s	3.1	10.0				5.8	2.9
Green Ext Time (p_c), s	0.1	8.3				5.7	0.1

Intersection Summary	
HCM 6th Ctrl Delay	5.9
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	20	109	17	49	6	132	23	3	0	4	3
Future Volume (veh/h)	0	20	109	17	49	6	132	23	3	0	4	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707	1707
Adj Flow Rate, veh/h	0	32	173	27	78	10	210	37	5	0	6	5
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	13	13	13	13	13	13	13	13	13	13	13	13
Cap, veh/h	4	612	273	53	1068	477	270	1257	561	4	368	164
Arrive On Green	0.00	0.19	0.19	0.03	0.33	0.33	0.17	0.39	0.39	0.00	0.11	0.11
Sat Flow, veh/h	1626	3244	1447	1626	3244	1447	1626	3244	1447	1626	3244	1447
Grp Volume(v), veh/h	0	32	173	27	78	10	210	37	5	0	6	5
Grp Sat Flow(s),veh/h/ln	1626	1622	1447	1626	1622	1447	1626	1622	1447	1626	1622	1447
Q Serve(g_s), s	0.0	0.3	4.1	0.6	0.6	0.2	4.6	0.3	0.1	0.0	0.1	0.1
Cycle Q Clear(g_c), s	0.0	0.3	4.1	0.6	0.6	0.2	4.6	0.3	0.1	0.0	0.1	0.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	4	612	273	53	1068	477	270	1257	561	4	368	164
V/C Ratio(X)	0.00	0.05	0.63	0.51	0.07	0.02	0.78	0.03	0.01	0.00	0.02	0.03
Avail Cap(c_a), veh/h	702	3088	1377	702	3088	1377	702	2992	1334	702	2992	1334
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	12.3	13.9	17.6	8.5	8.4	14.8	7.0	7.0	0.0	14.6	14.6
Incr Delay (d2), s/veh	0.0	0.0	2.4	7.3	0.0	0.0	4.8	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.1	1.1	0.3	0.2	0.0	1.6	0.1	0.0	0.0	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	12.4	16.3	24.9	8.6	8.4	19.6	7.0	7.0	0.0	14.6	14.7
LnGrp LOS	A	B	B	C	A	A	B	A	A	A	B	B
Approach Vol, veh/h		205			115			252			11	
Approach Delay, s/veh		15.7			12.4			17.5			14.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.2	11.7	0.0	20.2	0.0	16.9	10.2	10.0
Change Period (Y+Rc), s	4.0	* 4.7	4.0	5.8	4.0	* 4.7	4.0	5.8
Max Green Setting (Gmax), s	16.0	* 35	16.0	34.2	16.0	* 35	16.0	34.2
Max Q Clear Time (g_c+I1), s	2.6	6.1	0.0	2.3	0.0	2.6	6.6	2.1
Green Ext Time (p_c), s	0.0	0.8	0.0	0.2	0.0	0.5	0.4	0.0

Intersection Summary	
HCM 6th Ctrl Delay	15.8
HCM 6th LOS	B

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	111	32	0	35	6	16	17	1	19	10	7
Future Vol, veh/h	6	111	32	0	35	6	16	17	1	19	10	7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	9	159	46	0	50	9	23	24	1	27	14	10
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.5	7.7	8	7.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	47%	4%	0%	53%
Vol Thru, %	50%	74%	85%	28%
Vol Right, %	3%	21%	15%	19%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	34	149	41	36
LT Vol	16	6	0	19
Through Vol	17	111	35	10
RT Vol	1	32	6	7
Lane Flow Rate	49	214	59	52
Geometry Grp	1	1	1	1
Degree of Util (X)	0.064	0.241	0.071	0.066
Departure Headway (Hd)	4.687	4.049	4.322	4.597
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	768	871	832	783
Service Time	2.693	2.145	2.33	2.603
HCM Lane V/C Ratio	0.064	0.246	0.071	0.066
HCM Control Delay	8	8.5	7.7	7.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	0.9	0.2	0.2

Intersection	
Intersection Delay, s/veh	52.4
Intersection LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	73	494	17	13	308	10	1	22	13	1	13	4
Future Vol, veh/h	73	494	17	13	308	10	1	22	13	1	13	4
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	103	695	24	18	433	14	1	31	18	1	18	6
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	76.3	17.1	10.4	10.2
HCM LOS	F	C	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	12%	4%	6%
Vol Thru, %	61%	85%	93%	72%
Vol Right, %	36%	3%	3%	22%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	36	584	331	18
LT Vol	1	73	13	1
Through Vol	22	494	308	13
RT Vol	13	17	10	4
Lane Flow Rate	51	821	465	25
Geometry Grp	1	1	1	1
Degree of Util (X)	0.09	1.077	0.647	0.046
Departure Headway (Hd)	6.72	4.72	5.152	6.91
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	537	764	708	521
Service Time	4.72	2.785	3.152	4.91
HCM Lane V/C Ratio	0.095	1.075	0.657	0.048
HCM Control Delay	10.4	76.3	17.1	10.2
HCM Lane LOS	B	F	C	B
HCM 95th-tile Q	0.3	21.4	4.8	0.1

Intersection	
Int Delay, s/veh	22.7

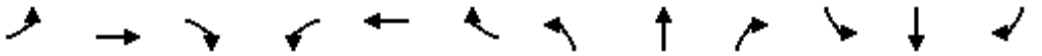
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	46	97	84	643	798	11
Future Vol, veh/h	46	97	84	643	798	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	139	121	923	1146	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2319	1154	1162	0	-	0
Stage 1	1154	-	-	-	-	-
Stage 2	1165	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 41	240	601	-	-	-
Stage 1	300	-	-	-	-	-
Stage 2	297	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 33	240	601	-	-	-
Mov Cap-2 Maneuver	~ 33	-	-	-	-	-
Stage 1	240	-	-	-	-	-
Stage 2	297	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	259.8	1.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	601	-	33	240	-	-
HCM Lane V/C Ratio	0.201	-	2.002	0.58	-	-
HCM Control Delay (s)	12.5	-	$ 725.7	38.9	-	-
HCM Lane LOS	B	-	F	E	-	-
HCM 95th %tile Q(veh)	0.7	-	7.5	3.3	-	-

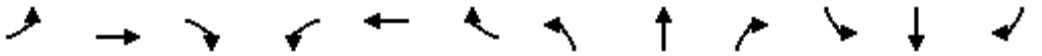
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	3	14	12	1	156	4	536	14	125	224	7
Future Volume (veh/h)	12	3	14	12	1	156	4	536	14	125	224	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574
Adj Flow Rate, veh/h	18	5	21	18	2	81	6	813	21	190	340	11
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	22	22	22	22	22	22	22	22	22	22	22	22
Cap, veh/h	75	188	159	32	143	121	12	1374	613	211	933	790
Arrive On Green	0.05	0.12	0.12	0.02	0.09	0.09	0.01	0.46	0.46	0.14	0.59	0.59
Sat Flow, veh/h	1499	1574	1334	1499	1574	1334	1499	2991	1334	1499	1574	1334
Grp Volume(v), veh/h	18	5	21	18	2	81	6	813	21	190	340	11
Grp Sat Flow(s),veh/h/ln	1499	1574	1334	1499	1574	1334	1499	1495	1334	1499	1574	1334
Q Serve(g_s), s	0.8	0.2	1.0	0.8	0.1	4.2	0.3	14.3	0.6	8.8	8.0	0.2
Cycle Q Clear(g_c), s	0.8	0.2	1.0	0.8	0.1	4.2	0.3	14.3	0.6	8.8	8.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	188	159	32	143	121	12	1374	613	211	933	790
V/C Ratio(X)	0.24	0.03	0.13	0.57	0.01	0.67	0.51	0.59	0.03	0.90	0.36	0.01
Avail Cap(c_a), veh/h	211	643	545	211	643	545	211	1374	613	211	933	790
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	27.6	28.0	34.4	29.4	31.2	35.1	14.2	10.5	30.0	7.5	5.9
Incr Delay (d2), s/veh	1.7	0.1	0.4	15.2	0.0	6.3	30.1	1.9	0.1	35.8	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.1	0.3	0.4	0.0	1.5	0.2	4.3	0.2	5.0	2.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.1	27.7	28.3	49.6	29.4	37.5	65.2	16.1	10.6	65.8	8.6	6.0
LnGrp LOS	C	C	C	D	C	D	E	B	B	E	A	A
Approach Vol, veh/h		44			101			840			541	
Approach Delay, s/veh		30.6			39.5			16.3			28.6	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.6	47.8	5.5	13.1	14.0	38.4	7.5	11.0
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.3	10.0	2.8	3.0	10.8	16.3	2.8	6.2
Green Ext Time (p_c), s	0.0	1.9	0.0	0.1	0.0	4.9	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	22.6
HCM 6th LOS	C



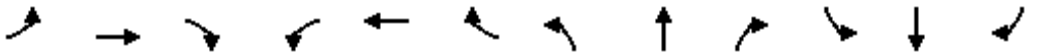
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	3	52	0	231	6	332	22	253	654	9
Future Volume (veh/h)	9	0	3	52	0	231	6	332	22	253	654	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426
Adj Flow Rate, veh/h	10	0	3	60	0	110	7	386	26	294	760	10
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	32	32	32	32	32	32	32	32	32	32	32	32
Cap, veh/h	88	196	166	78	186	157	13	599	267	279	1131	504
Arrive On Green	0.06	0.00	0.14	0.06	0.00	0.13	0.01	0.22	0.22	0.21	0.42	0.42
Sat Flow, veh/h	1358	1426	1208	1358	1426	1208	1358	2709	1208	1358	2709	1208
Grp Volume(v), veh/h	10	0	3	60	0	110	7	386	26	294	760	10
Grp Sat Flow(s),veh/h/ln	1358	1426	1208	1358	1426	1208	1358	1354	1208	1358	1354	1208
Q Serve(g_s), s	0.3	0.0	0.1	2.1	0.0	4.2	0.2	6.3	0.8	10.0	11.0	0.2
Cycle Q Clear(g_c), s	0.3	0.0	0.1	2.1	0.0	4.2	0.2	6.3	0.8	10.0	11.0	0.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	88	196	166	78	186	157	13	599	267	279	1131	504
V/C Ratio(X)	0.11	0.00	0.02	0.77	0.00	0.70	0.56	0.64	0.10	1.05	0.67	0.02
Avail Cap(c_a), veh/h	279	851	721	279	851	721	279	1817	811	279	1817	811
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.4	0.0	18.1	22.6	0.0	20.2	24.0	17.2	15.1	19.3	11.5	8.3
Incr Delay (d2), s/veh	0.6	0.0	0.0	14.9	0.0	5.5	33.1	1.2	0.2	68.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	0.9	0.0	1.3	0.2	1.7	0.2	7.8	2.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.0	0.0	18.2	37.5	0.0	25.8	57.1	18.4	15.2	87.5	12.2	8.3
LnGrp LOS	C	A	B	D	A	C	E	B	B	F	B	A
Approach Vol, veh/h		13			170			419			1064	
Approach Delay, s/veh		21.1			29.9			18.8			32.9	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	26.1	6.8	11.3	14.0	16.5	7.1	10.9
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.2	13.0	4.1	2.1	12.0	8.3	2.3	6.2
Green Ext Time (p_c), s	0.0	4.9	0.0	0.0	0.0	2.4	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	29.0
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	615	254	362	1	243	0	0	671	186
Future Volume (veh/h)	0	0	0	615	254	362	1	243	0	0	671	186
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1707	1707	1707	1707	1707	0	0	1707	1707
Adj Flow Rate, veh/h				699	289	411	1	276	0	0	762	0
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				13	13	13	13	13	0	0	13	13
Cap, veh/h				1536	311	442	4	1250	0	0	1524	
Arrive On Green				0.49	0.49	0.49	0.00	0.13	0.00	0.00	0.33	0.00
Sat Flow, veh/h				3155	638	907	1626	3329	0	0	4815	1447
Grp Volume(v), veh/h				699	0	700	1	276	0	0	762	0
Grp Sat Flow(s),veh/h/ln				1577	0	1544	1626	1622	0	0	1554	1447
Q Serve(g_s), s				11.7	0.0	34.0	0.0	6.1	0.0	0.0	10.5	0.0
Cycle Q Clear(g_c), s				11.7	0.0	34.0	0.0	6.1	0.0	0.0	10.5	0.0
Prop In Lane				1.00		0.59	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1536	0	752	4	1250	0	0	1524	
V/C Ratio(X)				0.45	0.00	0.93	0.28	0.22	0.00	0.00	0.50	
Avail Cap(c_a), veh/h				1636	0	801	163	1250	0	0	1524	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				13.5	0.0	19.3	39.9	24.1	0.0	0.0	21.7	0.0
Incr Delay (d2), s/veh				0.1	0.0	16.4	51.9	0.4	0.0	0.0	1.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.9	0.0	14.3	0.1	2.3	0.0	0.0	3.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				13.6	0.0	35.7	91.8	24.5	0.0	0.0	22.8	0.0
LnGrp LOS				B	A	D	F	C	A	A	C	
Approach Vol, veh/h					1399			277			762	A
Approach Delay, s/veh					24.7			24.8			22.8	
Approach LOS					C			C			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		36.5			4.7	31.9		43.5				
Change Period (Y+Rc), s		5.7			4.5	5.7		4.5				
Max Green Setting (Gmax), s		28.3			8.0	15.8		41.5				
Max Q Clear Time (g_c+I1), s		8.1			2.0	12.5		36.0				
Green Ext Time (p_c), s		2.1			0.0	1.8		2.9				

Intersection Summary												
HCM 6th Ctrl Delay			24.1									
HCM 6th LOS			C									

Notes

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

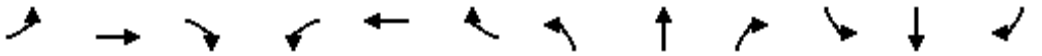
Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	37	74	131	614	458	8
Future Vol, veh/h	37	74	131	614	458	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	80	141	660	492	9

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1439	497	501	0	-	0
Stage 1	497	-	-	-	-	-
Stage 2	942	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	146	573	1063	-	-	-
Stage 1	611	-	-	-	-	-
Stage 2	379	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	127	573	1063	-	-	-
Mov Cap-2 Maneuver	257	-	-	-	-	-
Stage 1	530	-	-	-	-	-
Stage 2	379	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.4	1.6	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1063	-	257	573	-	-
HCM Lane V/C Ratio	0.133	-	0.155	0.139	-	-
HCM Control Delay (s)	8.9	-	21.6	12.3	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.5	-	0.5	0.5	-	-



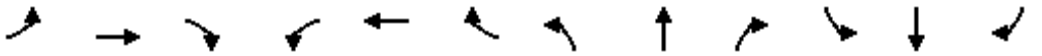
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	4	21	18	1	231	6	793	21	186	331	10
Future Volume (veh/h)	18	4	21	18	1	231	6	793	21	186	331	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574
Adj Flow Rate, veh/h	20	4	24	20	1	144	7	891	24	209	372	11
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	22	22	22	22	22	22	22	22	22	22	22	22
Cap, veh/h	76	255	216	34	212	179	14	1303	581	200	1675	747
Arrive On Green	0.05	0.16	0.16	0.02	0.13	0.13	0.01	0.44	0.44	0.13	0.56	0.56
Sat Flow, veh/h	1499	1574	1334	1499	1574	1334	1499	2991	1334	1499	2991	1334
Grp Volume(v), veh/h	20	4	24	20	1	144	7	891	24	209	372	11
Grp Sat Flow(s),veh/h/ln	1499	1574	1334	1499	1574	1334	1499	1495	1334	1499	1495	1334
Q Serve(g_s), s	1.0	0.2	1.1	1.0	0.0	7.8	0.3	17.9	0.8	10.0	4.7	0.3
Cycle Q Clear(g_c), s	1.0	0.2	1.1	1.0	0.0	7.8	0.3	17.9	0.8	10.0	4.7	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	76	255	216	34	212	179	14	1303	581	200	1675	747
V/C Ratio(X)	0.26	0.02	0.11	0.59	0.00	0.80	0.52	0.68	0.04	1.04	0.22	0.01
Avail Cap(c_a), veh/h	200	610	517	200	610	517	200	1303	581	200	1675	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	26.3	26.7	36.2	28.1	31.4	36.9	17.0	12.1	32.4	8.3	7.3
Incr Delay (d2), s/veh	1.8	0.0	0.2	15.0	0.0	8.1	27.2	2.9	0.1	75.5	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.1	0.4	0.5	0.0	2.8	0.2	5.7	0.2	7.5	1.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.0	26.4	27.0	51.2	28.1	39.5	64.1	19.9	12.3	107.9	8.6	7.3
LnGrp LOS	D	C	C	D	C	D	E	B	B	F	A	A
Approach Vol, veh/h		48			165			922			592	
Approach Delay, s/veh		30.7			40.9			20.0			43.6	
Approach LOS		C			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	47.7	5.7	16.7	14.0	38.4	7.8	14.7
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	10.0	32.6	10.0	29.0	10.0	32.6	10.0	29.0
Max Q Clear Time (g_c+I1), s	2.3	6.7	3.0	3.1	12.0	19.9	3.0	9.8
Green Ext Time (p_c), s	0.0	2.3	0.0	0.1	0.0	4.7	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	30.4
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	360	0	524	35	393	0	0	540	62
Future Volume (veh/h)	0	0	0	360	0	524	35	393	0	0	540	62
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1722	1722	1722	1722	1722	0	0	1722	1722
Adj Flow Rate, veh/h				387	0	563	38	423	0	0	581	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				12	12	12	12	12	0	0	12	12
Cap, veh/h				1388	0	636	164	1428	0	0	1317	
Arrive On Green				0.44	0.00	0.44	0.03	0.14	0.00	0.00	0.28	0.00
Sat Flow, veh/h				3182	0	1459	1640	3358	0	0	4856	1459
Grp Volume(v), veh/h				387	0	563	38	423	0	0	581	0
Grp Sat Flow(s),veh/h/ln				1591	0	1459	1640	1636	0	0	1567	1459
Q Serve(g_s), s				6.2	0.0	28.3	1.8	9.2	0.0	0.0	8.1	0.0
Cycle Q Clear(g_c), s				6.2	0.0	28.3	1.8	9.2	0.0	0.0	8.1	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1388	0	636	164	1428	0	0	1317	
V/C Ratio(X)				0.28	0.00	0.88	0.23	0.30	0.00	0.00	0.44	
Avail Cap(c_a), veh/h				1690	0	775	164	1428	0	0	1317	
HCM Platoon Ratio				1.00	1.00	1.00	0.33	0.33	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.99	0.99	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				14.5	0.0	20.7	35.7	23.3	0.0	0.0	23.6	0.0
Incr Delay (d2), s/veh				0.1	0.0	10.3	3.2	0.5	0.0	0.0	1.1	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.1	0.0	10.7	0.8	3.7	0.0	0.0	2.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				14.6	0.0	31.0	38.9	23.8	0.0	0.0	24.7	0.0
LnGrp LOS				B	A	C	D	C	A	A	C	
Approach Vol, veh/h					950			461			581	A
Approach Delay, s/veh					24.3			25.0			24.7	
Approach LOS					C			C			C	

Timer - Assigned Phs		2			5	6		8				
Phs Duration (G+Y+Rc), s		40.6			12.5	28.1		39.4				
Change Period (Y+Rc), s		5.7			4.5	5.7		4.5				
Max Green Setting (Gmax), s		27.3			8.0	14.8		42.5				
Max Q Clear Time (g_c+I1), s		11.2			3.8	10.1		30.3				
Green Ext Time (p_c), s		2.2			0.0	1.5		4.6				

Intersection Summary												
HCM 6th Ctrl Delay			24.6									
HCM 6th LOS			C									

Notes

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

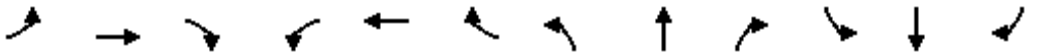
Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	46	97	84	643	798	11
Future Vol, veh/h	46	97	84	643	798	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	49	103	89	684	849	12

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1717	855	861	0	-	0
Stage 1	855	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	99	358	781	-	-	-
Stage 1	417	-	-	-	-	-
Stage 2	414	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	88	358	781	-	-	-
Mov Cap-2 Maneuver	218	-	-	-	-	-
Stage 1	369	-	-	-	-	-
Stage 2	414	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.4	1.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	781	-	218	358	-	-
HCM Lane V/C Ratio	0.114	-	0.224	0.288	-	-
HCM Control Delay (s)	10.2	-	26.2	19.1	-	-
HCM Lane LOS	B	-	D	C	-	-
HCM 95th %tile Q(veh)	0.4	-	0.8	1.2	-	-



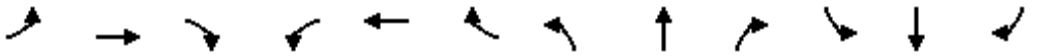
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	0	3	52	0	231	6	332	22	253	654	9
Future Volume (veh/h)	9	0	3	52	0	231	6	332	22	253	654	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426	1426
Adj Flow Rate, veh/h	13	0	4	73	0	132	8	467	31	356	920	13
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	32	32	32	32	32	32	32	32	32	32	32	32
Cap, veh/h	84	184	156	84	184	156	14	635	283	397	1399	624
Arrive On Green	0.06	0.00	0.13	0.06	0.00	0.13	0.01	0.23	0.23	0.29	0.52	0.52
Sat Flow, veh/h	1358	1426	1208	1358	1426	1208	1358	2709	1208	1358	2709	1208
Grp Volume(v), veh/h	13	0	4	73	0	132	8	467	31	356	920	13
Grp Sat Flow(s),veh/h/ln	1358	1426	1208	1358	1426	1208	1358	1354	1208	1358	1354	1208
Q Serve(g_s), s	0.6	0.0	0.2	3.5	0.0	7.0	0.4	10.4	1.3	16.4	16.2	0.3
Cycle Q Clear(g_c), s	0.6	0.0	0.2	3.5	0.0	7.0	0.4	10.4	1.3	16.4	16.2	0.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	84	184	156	84	184	156	14	635	283	397	1399	624
V/C Ratio(X)	0.16	0.00	0.03	0.87	0.00	0.85	0.57	0.74	0.11	0.90	0.66	0.02
Avail Cap(c_a), veh/h	104	184	156	125	184	156	104	1340	598	542	2213	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	0.0	24.8	30.3	0.0	27.7	32.1	23.1	19.6	22.1	11.5	7.7
Incr Delay (d2), s/veh	0.9	0.0	0.1	32.5	0.0	32.8	31.5	1.7	0.2	14.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.1	1.8	0.0	3.3	0.2	3.0	0.4	6.0	3.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	0.0	24.8	62.8	0.0	60.6	63.6	24.7	19.8	36.1	12.1	7.7
LnGrp LOS	C	A	C	E	A	E	E	C	B	D	B	A
Approach Vol, veh/h		17			205			506			1289	
Approach Delay, s/veh		28.6			61.3			25.1			18.6	
Approach LOS		C			E			C			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	39.4	8.0	13.0	23.0	21.1	8.0	13.0
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	5.0	53.2	6.0	7.4	26.0	32.2	5.0	8.4
Max Q Clear Time (g_c+I1), s	2.4	18.2	5.5	2.2	18.4	12.4	2.6	9.0
Green Ext Time (p_c), s	0.0	7.2	0.0	0.0	0.7	2.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	24.7
HCM 6th LOS	C

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	615	254	362	1	243	0	0	671	186
Future Volume (veh/h)	0	0	0	615	254	362	1	243	0	0	671	186
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1707	1707	1707	1707	1707	0	0	1707	1707
Adj Flow Rate, veh/h				846	349	498	1	334	0	0	923	0
Peak Hour Factor				0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %				13	13	13	13	13	0	0	13	13
Cap, veh/h				1751	353	504	4	1113	0	0	1379	
Arrive On Green				0.56	0.56	0.56	0.00	0.34	0.00	0.00	0.30	0.00
Sat Flow, veh/h				3155	636	908	1626	3329	0	0	4815	1447
Grp Volume(v), veh/h				846	0	847	1	334	0	0	923	0
Grp Sat Flow(s),veh/h/ln				1577	0	1544	1626	1622	0	0	1554	1447
Q Serve(g_s), s				16.3	0.0	54.1	0.1	7.5	0.0	0.0	17.4	0.0
Cycle Q Clear(g_c), s				16.3	0.0	54.1	0.1	7.5	0.0	0.0	17.4	0.0
Prop In Lane				1.00		0.59	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1751	0	857	4	1113	0	0	1379	
V/C Ratio(X)				0.48	0.00	0.99	0.28	0.30	0.00	0.00	0.67	
Avail Cap(c_a), veh/h				1751	0	857	130	1113	0	0	1379	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				13.5	0.0	21.9	49.8	24.1	0.0	0.0	30.9	0.0
Incr Delay (d2), s/veh				0.1	0.0	27.8	52.2	0.7	0.0	0.0	2.6	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.5	0.0	24.4	0.1	2.8	0.0	0.0	6.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				13.7	0.0	49.7	102.0	24.8	0.0	0.0	33.5	0.0
LnGrp LOS				B	A	D	F	C	A	A	C	
Approach Vol, veh/h					1693			335			923	A
Approach Delay, s/veh					31.7			25.0			33.5	
Approach LOS					C			C			C	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	40.0		4.7	35.3		60.0						
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5						
Max Green Setting (Gmax), s	34.3		8.0	21.8		55.5						
Max Q Clear Time (g_c+I1), s	9.5		2.1	19.4		56.1						
Green Ext Time (p_c), s	2.8		0.0	1.6		0.0						

Intersection Summary		
HCM 6th Ctrl Delay		31.5
HCM 6th LOS		C

Notes

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

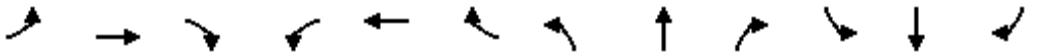
Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	37	74	131	614	458	8
Future Vol, veh/h	37	74	131	614	458	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	48	96	170	799	596	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1740	601	606	0	-	0
Stage 1	601	-	-	-	-	-
Stage 2	1139	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	96	500	972	-	-	-
Stage 1	547	-	-	-	-	-
Stage 2	305	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	79	500	972	-	-	-
Mov Cap-2 Maneuver	200	-	-	-	-	-
Stage 1	451	-	-	-	-	-
Stage 2	305	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.8	1.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	972	-	200	500	-	-
HCM Lane V/C Ratio	0.175	-	0.241	0.193	-	-
HCM Control Delay (s)	9.5	-	28.6	13.9	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.6	-	0.9	0.7	-	-



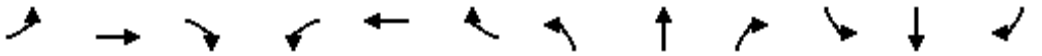
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	4	21	18	1	231	6	793	21	186	331	10
Future Volume (veh/h)	18	4	21	18	1	231	6	793	21	186	331	10
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574	1574
Adj Flow Rate, veh/h	27	6	32	27	2	194	9	1203	32	282	502	15
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	22	22	22	22	22	22	22	22	22	22	22	22
Cap, veh/h	75	205	174	41	169	143	17	1337	596	285	1871	835
Arrive On Green	0.05	0.13	0.13	0.03	0.11	0.11	0.01	0.45	0.45	0.19	0.63	0.63
Sat Flow, veh/h	1499	1574	1334	1499	1574	1334	1499	2991	1334	1499	2991	1334
Grp Volume(v), veh/h	27	6	32	27	2	194	9	1203	32	282	502	15
Grp Sat Flow(s),veh/h/ln	1499	1574	1334	1499	1574	1334	1499	1495	1334	1499	1495	1334
Q Serve(g_s), s	1.6	0.3	1.9	1.6	0.1	9.6	0.5	33.3	1.2	16.8	6.8	0.4
Cycle Q Clear(g_c), s	1.6	0.3	1.9	1.6	0.1	9.6	0.5	33.3	1.2	16.8	6.8	0.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	205	174	41	169	143	17	1337	596	285	1871	835
V/C Ratio(X)	0.36	0.03	0.18	0.66	0.01	1.36	0.54	0.90	0.05	0.99	0.27	0.02
Avail Cap(c_a), veh/h	84	205	174	101	169	143	84	1337	596	285	1871	835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	34.0	34.7	43.1	35.7	39.9	44.0	22.9	14.0	36.2	7.5	6.3
Incr Delay (d2), s/veh	2.9	0.1	0.5	16.6	0.0	198.7	24.0	9.9	0.2	50.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.1	0.6	0.8	0.0	11.0	0.3	12.1	0.4	9.8	1.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	44.0	34.0	35.2	59.7	35.7	238.7	68.0	32.8	14.2	86.7	7.9	6.4
LnGrp LOS	D	C	D	E	D	F	E	C	B	F	A	A
Approach Vol, veh/h		65			223			1244			799	
Approach Delay, s/veh		38.7			215.2			32.6			35.7	
Approach LOS		D			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	61.8	6.4	16.2	21.0	45.8	8.5	14.2
Change Period (Y+Rc), s	4.0	5.8	4.0	4.6	4.0	5.8	4.0	4.6
Max Green Setting (Gmax), s	5.0	52.0	6.0	8.6	17.0	40.0	5.0	9.6
Max Q Clear Time (g_c+I1), s	2.5	8.8	3.6	3.9	18.8	35.3	3.6	11.6
Green Ext Time (p_c), s	0.0	3.5	0.0	0.0	0.0	3.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	51.3
HCM 6th LOS	D

Notes

User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	360	0	524	35	393	0	0	540	62
Future Volume (veh/h)	0	0	0	360	0	524	35	393	0	0	540	62
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach					No			No			No	
Adj Sat Flow, veh/h/ln				1722	1722	1722	1722	1722	0	0	1722	1722
Adj Flow Rate, veh/h				523	0	761	51	570	0	0	784	0
Peak Hour Factor				0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %				12	12	12	12	12	0	0	12	12
Cap, veh/h				1723	0	790	146	1129	0	0	970	
Arrive On Green				0.54	0.00	0.54	0.09	0.35	0.00	0.00	0.21	0.00
Sat Flow, veh/h				3182	0	1459	1640	3358	0	0	4856	1459
Grp Volume(v), veh/h				523	0	761	51	570	0	0	784	0
Grp Sat Flow(s),veh/h/ln				1591	0	1459	1640	1636	0	0	1567	1459
Q Serve(g_s), s				8.1	0.0	45.0	2.6	12.4	0.0	0.0	14.3	0.0
Cycle Q Clear(g_c), s				8.1	0.0	45.0	2.6	12.4	0.0	0.0	14.3	0.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				1723	0	790	146	1129	0	0	970	
V/C Ratio(X)				0.30	0.00	0.96	0.35	0.50	0.00	0.00	0.81	
Avail Cap(c_a), veh/h				1750	0	803	146	1129	0	0	970	
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	0.98	0.98	0.00	0.00	1.00	0.00
Uniform Delay (d), s/veh				11.3	0.0	19.8	38.6	23.4	0.0	0.0	34.0	0.0
Incr Delay (d2), s/veh				0.1	0.0	22.9	6.4	1.6	0.0	0.0	7.2	0.0
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.7	0.0	18.7	1.3	4.7	0.0	0.0	5.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh				11.4	0.0	42.7	44.9	24.9	0.0	0.0	41.2	0.0
LnGrp LOS				B	A	D	D	C	A	A	D	
Approach Vol, veh/h					1284			621			784	A
Approach Delay, s/veh					29.9			26.6			41.2	
Approach LOS					C			C			D	

Timer - Assigned Phs	2		5	6		8						
Phs Duration (G+Y+Rc), s	36.8		12.5	24.3		53.2						
Change Period (Y+Rc), s	5.7		4.5	5.7		4.5						
Max Green Setting (Gmax), s	30.3		8.0	17.8		49.5						
Max Q Clear Time (g_c+I1), s	14.4		4.6	16.3		47.0						
Green Ext Time (p_c), s	3.1		0.0	0.7		1.8						

Intersection Summary		
HCM 6th Ctrl Delay		32.5
HCM 6th LOS		C

Notes

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

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	46	97	84	643	798	11
Future Vol, veh/h	46	97	84	643	798	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	30	265	-	-	-
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	66	139	121	923	1146	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2319	1154	1162	0	-	0
Stage 1	1154	-	-	-	-	-
Stage 2	1165	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 41	240	601	-	-	-
Stage 1	300	-	-	-	-	-
Stage 2	297	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 33	240	601	-	-	-
Mov Cap-2 Maneuver	136	-	-	-	-	-
Stage 1	240	-	-	-	-	-
Stage 2	297	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	43.8	1.4	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	601	-	136	240	-	-
HCM Lane V/C Ratio	0.201	-	0.486	0.58	-	-
HCM Control Delay (s)	12.5	-	54.2	38.9	-	-
HCM Lane LOS	B	-	F	E	-	-
HCM 95th %tile Q(veh)	0.7	-	2.3	3.3	-	-

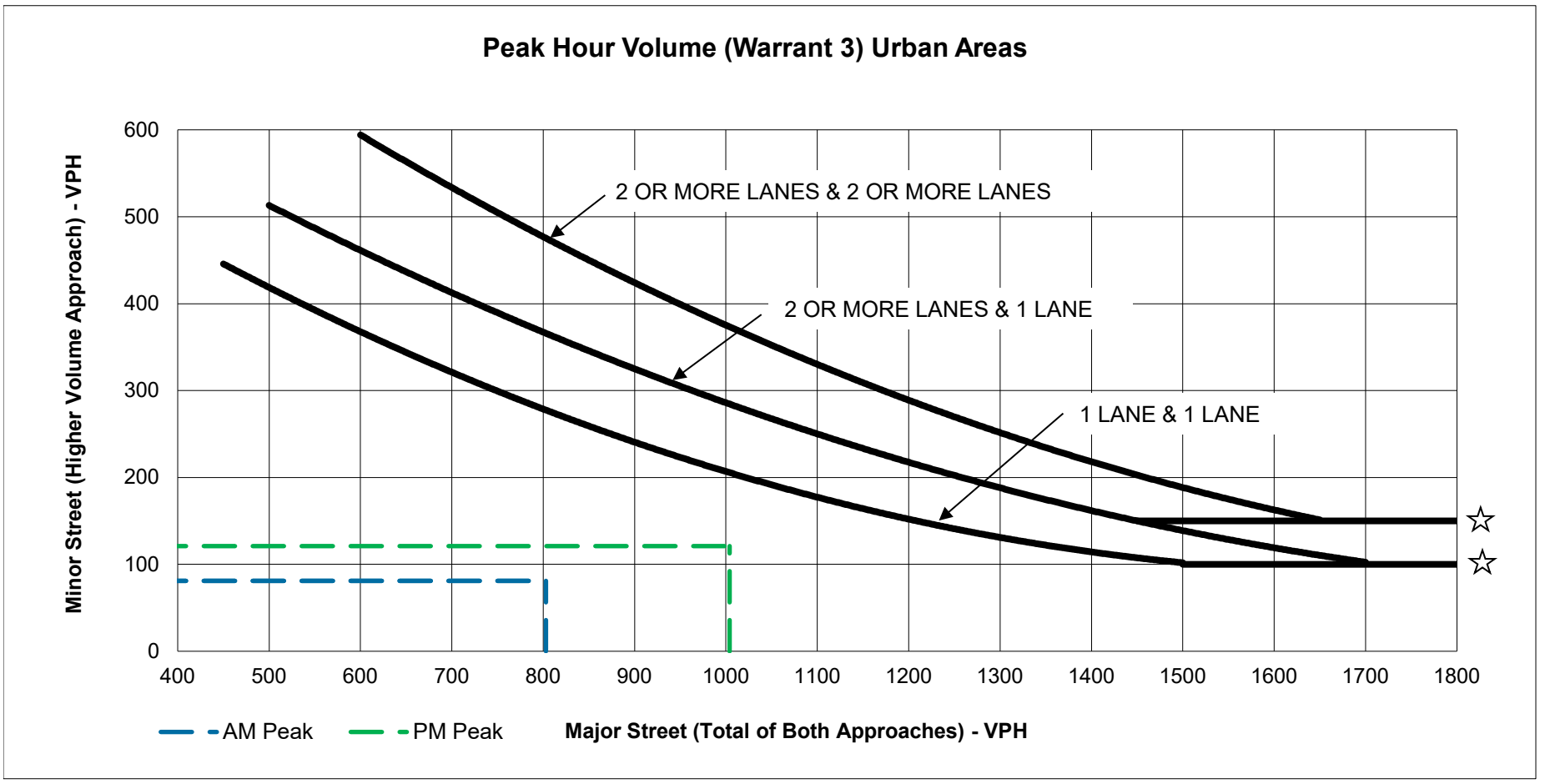
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Appendix C

Traffic Signal Warrant Worksheets

Both 1 Lane Approaches		2 or more Lane and One Lane Approaches		Both 2 or more Lane Approaches	
Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach
500	420	500	505	500	N/A
600	360	600	460	600	590
700	325	700	420	700	540
800	285	800	360	800	475
900	245	900	325	900	425
1000	200	1000	285	1000	370
1100	175	1100	250	1100	340
1200	150	1200	220	1200	285
1300	130	1300	190	1300	250
1400	120	1400	155	1400	220
1500	100	1500	145	1500	180
1600	100	1600	120	1600	170
1700	100	1700	100	1650	150
1800	100	1800	100	1800	150

** Note: Values in Table are approximate, actual curves based upon 2nd order polynomial equation*



☆ NOTE:

150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Existing (AM/PM)		
		Number of Lanes
Major Approach	Byron Road	1
Minor Approach	Von Sosten	1
	AM Peak	PM Peak
Major St. Volume:	803	1,004
Minor St. Volume:	81	121
Warrant Met?:	No	No

Both 1 Lane Approaches		2 or more Lane and One Lane Approaches		Both 2 or more Lane Approaches	
Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach
500	420	500	505	500	N/A
600	360	600	460	600	590
700	325	700	420	700	540
800	285	800	360	800	475
900	245	900	325	900	425
1000	200	1000	285	1000	370
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1400	120	1400	155	1400	220
1500	100	1500	145	1500	180
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1700	100	1700	100	1650	150
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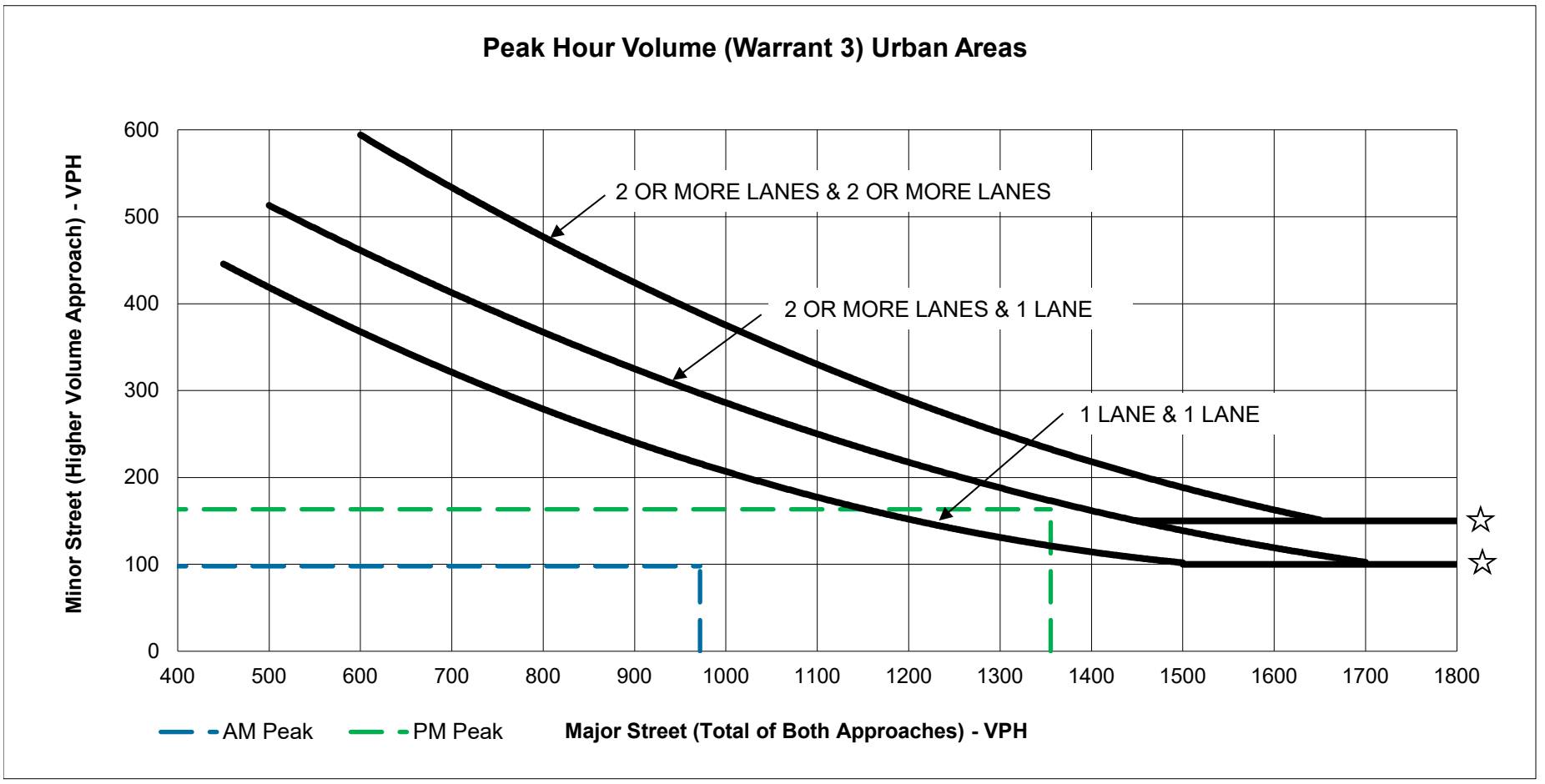

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Existing Adjusted (AM/PM)		
		Number of Lanes
Major Approach	Byron Road	1
Minor Approach	Von Sosten	1
	AM Peak	PM Peak
Major St. Volume:	972	1,355
Minor St. Volume:	98	163
Warrant Met?:	No	Yes

Both 1 Lane Approaches		2 or more Lane and One Lane Approaches		Both 2 or more Lane Approaches	
Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach
500	420	500	505	500	N/A
600	360	600	460	600	590
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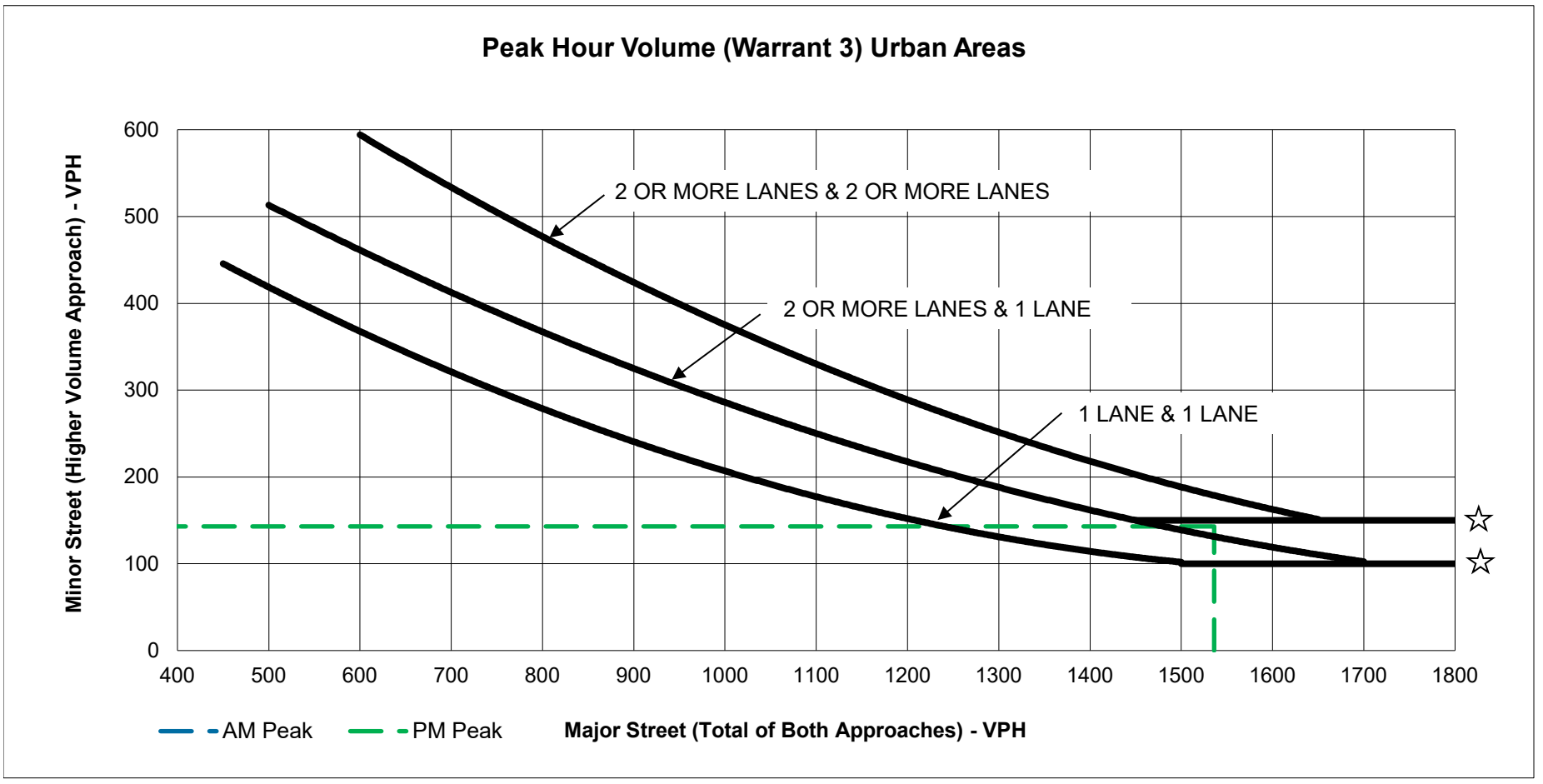

☆ NOTE:
150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Forecast (PM)		
		Number of Lanes
Major Approach	Byron Road	1
Minor Approach	Von Sosten	1
	AM Peak	PM Peak
Major St. Volume:	-	1,536
Minor St. Volume:	-	143
Warrant Met?:	-	Yes

Both 1 Lane Approaches		2 or more Lane and One Lane Approaches		Both 2 or more Lane Approaches	
Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach
500	420	500	505	500	N/A
600	360	600	460	600	590
700	325	700	420	700	540
800	285	800	360	800	475
900	245	900	325	900	425
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1700	100	1700	100	1650	150
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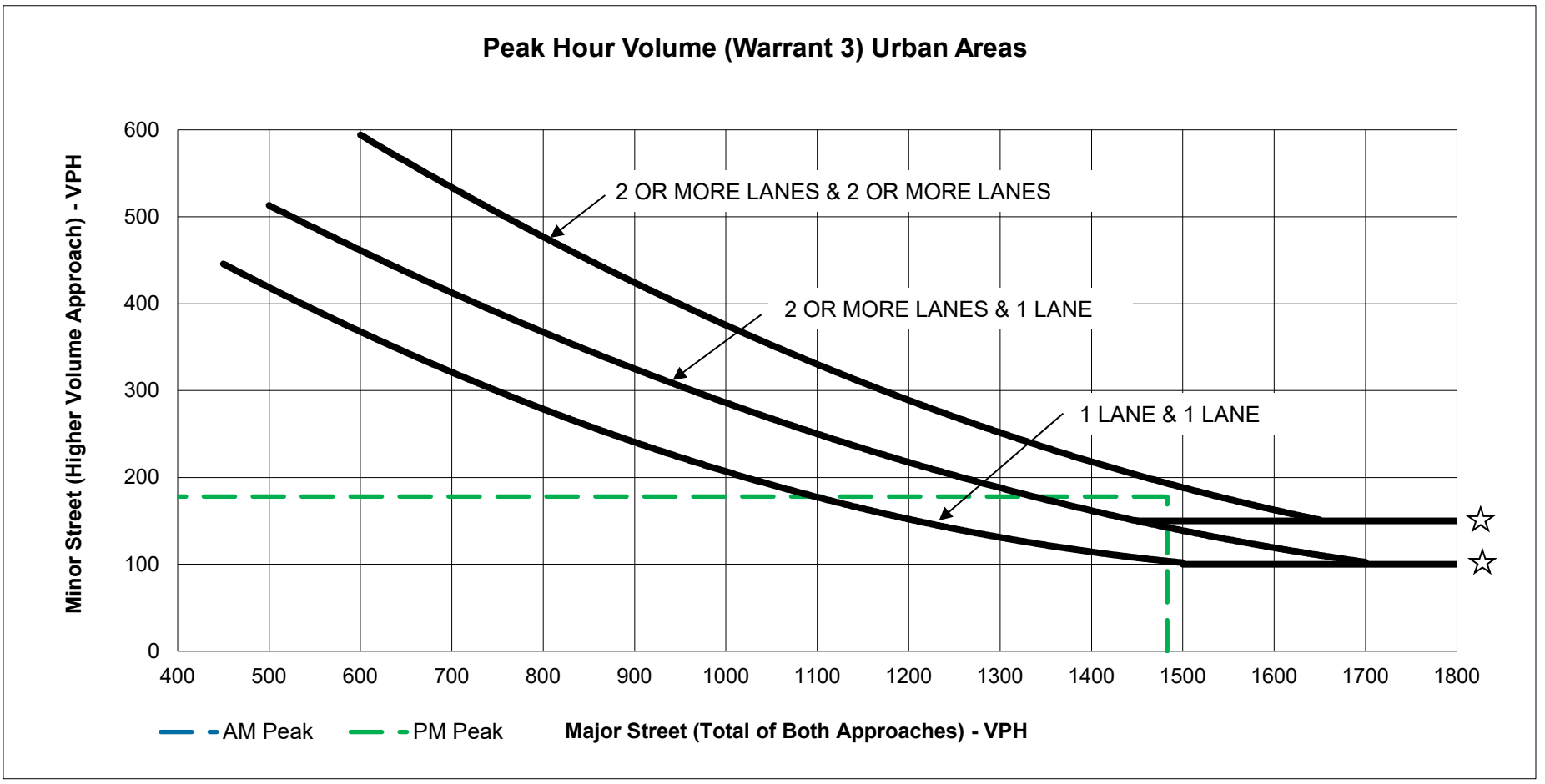

☆ NOTE:
150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Forecast with Closure (PM)		
		Number of Lanes
Major Approach	Byron Road	1
Minor Approach	Von Sosten	1
	AM Peak	PM Peak
Major St. Volume:	-	1,483
Minor St. Volume:	-	178
Warrant Met?:	-	Yes

Both 1 Lane Approaches		2 or more Lane and One Lane Approaches		Both 2 or more Lane Approaches	
Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach
500	420	500	505	500	N/A
600	360	600	460	600	590
700	325	700	420	700	540
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900	245	900	325	900	425
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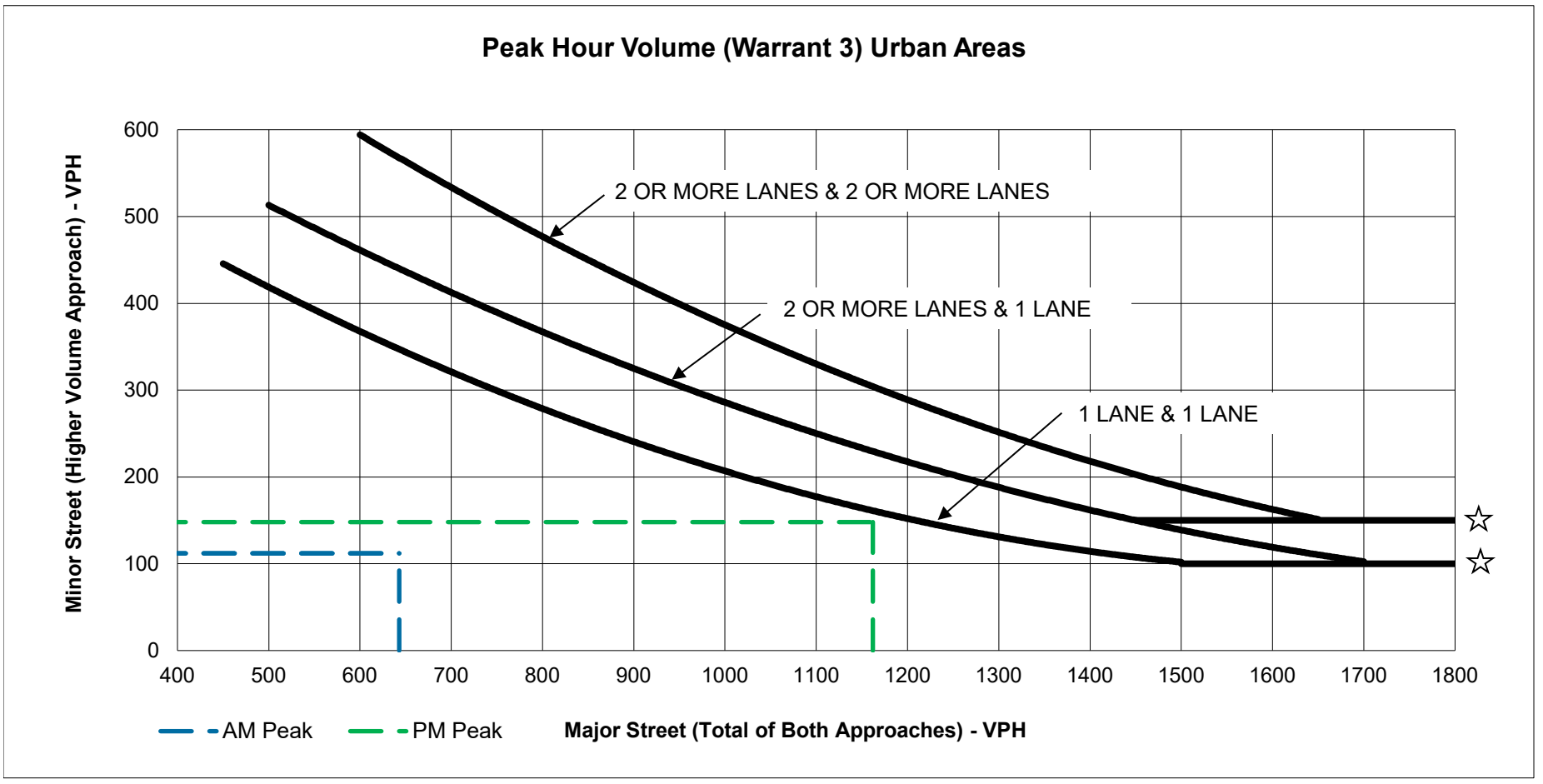

☆ NOTE:
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Forecast Adjusted (AM/PM)		
		Number of Lanes
Major Approach	Grant Line Road	1
Minor Approach	Hansen Road	1
	AM Peak	PM Peak
Major St. Volume:	643	1,162
Minor St. Volume:	112	148
Warrant Met?:	No	No

Both 1 Lane Approaches		2 or more Lane and One Lane Approaches		Both 2 or more Lane Approaches	
Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach
500	420	500	505	500	N/A
600	360	600	460	600	590
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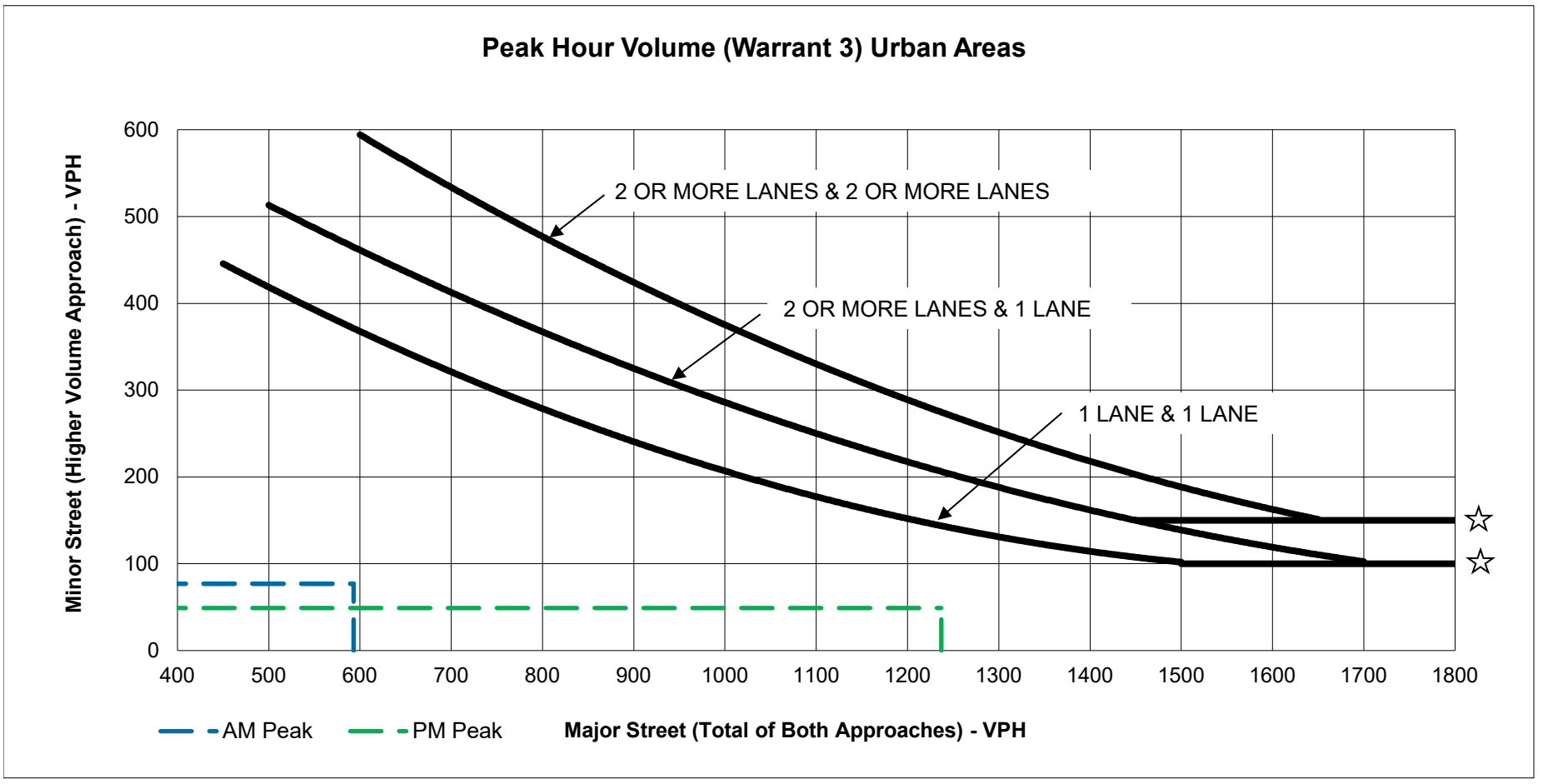

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Forecast with Closure Adjusted (AM/PM)		
		Number of Lanes
Major Approach	Grant Line Road	1
Minor Approach	Hansen Road	1
	AM Peak	PM Peak
Major St. Volume:	593	1,237
Minor St. Volume:	77	49
Warrant Met?:	No	No

Both 1 Lane Approaches		2 or more Lane and One Lane Approaches		Both 2 or more Lane Approaches	
Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach
500	420	500	505	500	N/A
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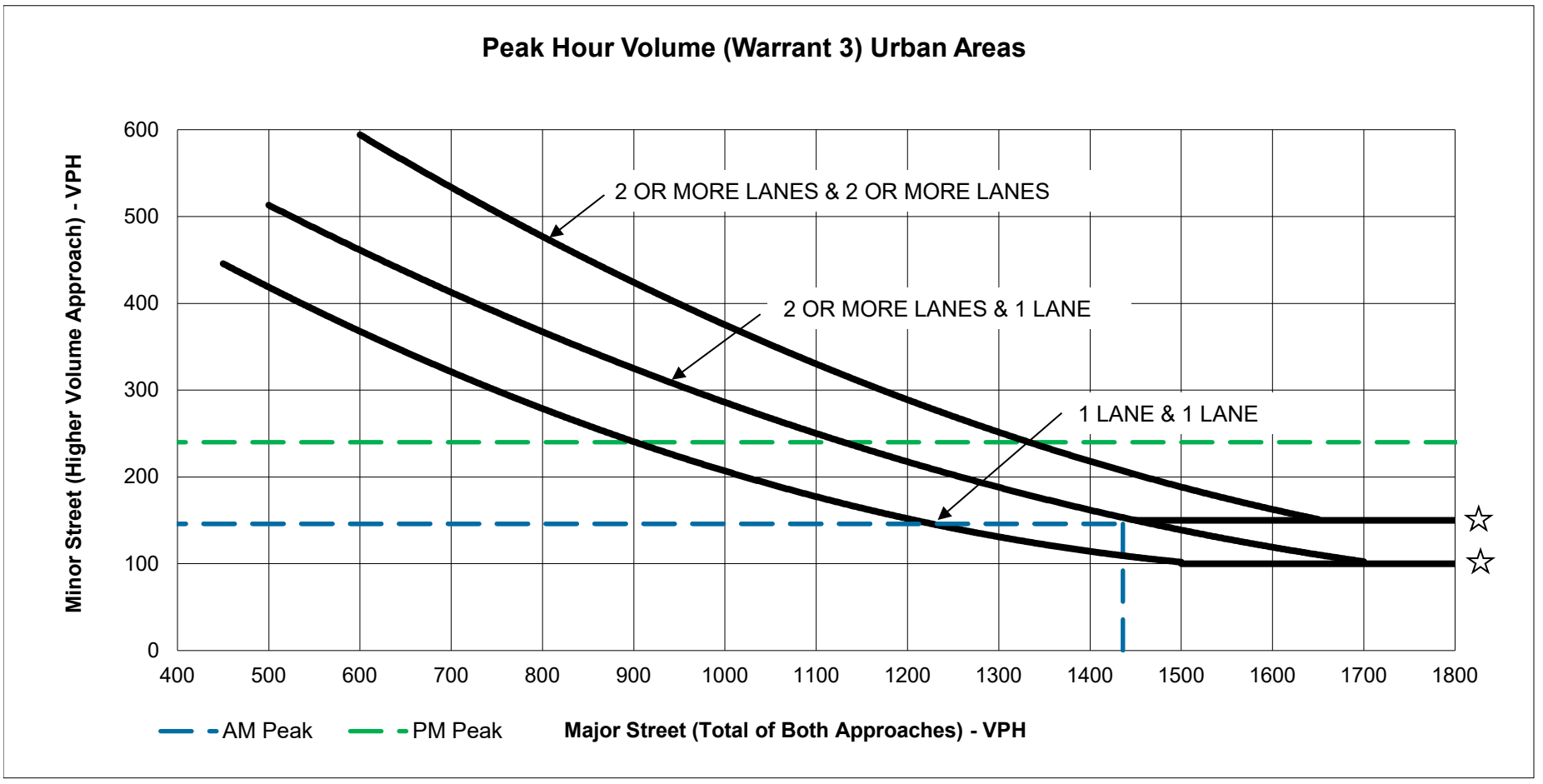

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Forecast Adjusted (AM/PM)		
		Number of Lanes
Major Approach	Byron Road	1
Minor Approach	Von Sosten	1
	AM Peak	PM Peak
Major St. Volume:	1,436	2,002
Minor St. Volume:	146	240
Warrant Met?:	Yes	Yes

Both 1 Lane Approaches		2 or more Lane and One Lane Approaches		Both 2 or more Lane Approaches	
Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach	Major Street Total of Both Approaches	Minor Street High Volume Approach
500	420	500	505	500	N/A
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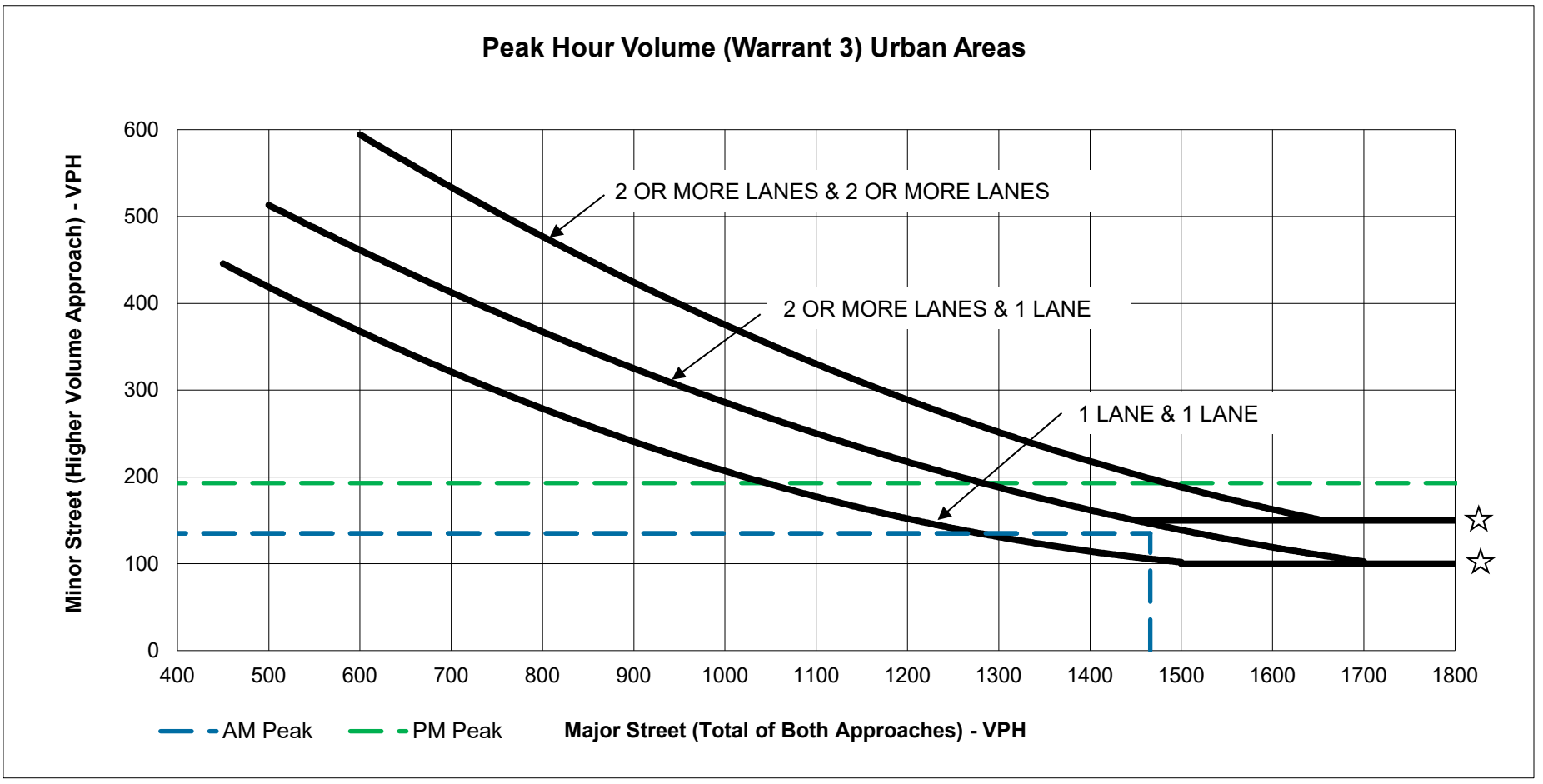

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Forecast with Closure Adjusted(AM/PM)		
		Number of Lanes
Major Approach	Byron Road	1
Minor Approach	Von Sosten	1
	AM Peak	PM Peak
Major St. Volume:	1,466	2,073
Minor St. Volume:	135	193
Warrant Met?:	Yes	Yes