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TECHNICAL MEMORANDUM #9

DATE: May 15, 2024

TO: Don Hardy | City of Canby

FROM: Reah Flisakowski, PE; Kevin Chewuk, PTP; Anders Hart; Eileen Chai | DKS Associates

SUBJECT: City of Canby Transportation System Plan Update
Future Multimodal Needs

Project #: 23023-000

This memorandum summarizes how the multimodal transportation system in Canby is expected to operate in the future. The condition of the future transportation system depends on the growth in population and employment, future travel patterns (e.g., choice of modes, routes, and frequency of trips), and community investment decisions. Growth in population and the number of jobs is forecasted based on trends and knowledge of the city and region. Future travel patterns are more difficult to predict as the community's investment decisions and the economy can have significant effect on choice of modes and routes. The assessment is used to identify the needs of the transportation system and reflect where it can better accommodate the desired activities of the community. Needs were determined based on a comprehensive multimodal existing conditions analysis and projecting future conditions through the planning horizon (2043) based on assumed growth in households and employment, and the City transportation standards.

METHODOLOGY FOR ESTIMATING FUTURE TRAVEL

The 2043 transportation conditions in Canby were forecasted based on trips that new growth will generate, assuming no new investments in infrastructure beyond what is funded for construction already. It describes where the transportation system will perform satisfactorily and areas of the network likely to be congested or in need of investments to function adequately in the future. Subsequent memos for the TSP update will explore potential solutions for addressing future transportation system needs.

BASELINE STREET NETWORK IMPROVEMENTS

The baseline condition reflects the street network performance assuming only transportation projects with secured funding will be built. Other identified projects that are not fully funded will be evaluated as potential solutions in subsequent memos for the TSP update to validate their need in the future.

The following motor vehicle capacity projects have been completed or have funding identified in the Canby Transportation Plan study area through 2043:

- Walnut Street Extension, which will extend S Walnut Street from SE 1st Avenue to OR 99E, with a new signalized intersection at OR 99E.
- The 4th Avenue Extension, which will extend S 4th Avenue from S Mulino Road to Sequoia Parkway.
- The N Pine Street/4th Avenue project, which will realign this intersection. Figure 1 below shows the preliminary schematic of the realignment.

FUTURE ESTIMATES OF MOTOR VEHICLE TRIPS

Future land use changes and growth in population, housing, and employment within the Canby urban growth boundary (UGB) will have a significant impact on the existing transportation system and will create new travel demands. These growth projections and how they translate to new trips on the transportation network are key elements of the future conditions and performance analysis.

The Canby travel demand model is the primary tool used to determine future traffic volumes in Canby. The Canby model forecasts travel changes in response to future land use and transportation scenarios. This model translates estimated land uses into motor vehicle trips and assigns them to the roadway network. It is an informational tool to assist with decision making, providing objective and quantitative information exploring the potential impacts of alternative transportation system investments.

FORECASTED POPULATION AND EMPLOYMENT GROWTH

Understanding the influence of area land uses on the transportation system is a key factor in transportation system planning. The amount of land that is to be developed, the types of land uses, and their proximity to each other have a direct relationship to expected demands on the transportation system.

The Canby model includes forecasted land uses for the Canby UGB. The land uses reflect the Comprehensive Plan and growth assumptions identified for the year 2043. Complete land use data sets were developed for both the 2023 base year and 2043 future year with input from city staff. The housing and employment forecasts used for this TSP analysis relied on two key sources:

- City of Canby Housing Needs Analysis[1], which provided the population forecast data by housing type. This analysis was based on population forecasts from the Portland State University Population Research Center.
- City of Canby Economic Opportunities Analysis[2], which provided job growth by employment sector.

[1] City of Canby Housing Needs Analysis, November 30, 2023.

[2] City of Canby Economic Opportunities Analysis, March 17, 2023 (Revised May 18, 2023), FCS Group.

A summary of the existing land use estimates and future projections for the entire Canby UGB from which traffic growth estimates were made is listed in Table 1 and households and employment growth are also shown in Figure 1 and Figure 2, respectively.

The base 2023 land use inventory approximated the number of existing households by unit type (i.e., single-family detached, single-family attached and multi-family units) using data from the City of Canby Housing Needs Analysis, and the amount of existing employment by sector (i.e., retail, service, industrial and other, and educational employment) using data from the City of Canby Economic Opportunities Analysis. The existing land use corresponds to a population of 18,655 residents, and approximately 7,189 households and 7,666 jobs.

The future 2043 land use projection is an estimate of the amount of each land use (household and employment) could reasonably accommodate given market conditions and current build-out of vacant or underdeveloped lands assuming Comprehensive Plan zoning. The projected land uses correspond to a year 2043 population projection of approximately 24,586 residents, and approximately 9,475 households (32 percent growth from 2023), and 10,397 jobs (36 percent growth from 2023).

As growth occurs to the year 2043, the demands on the city's transportation system will be influenced by changes in population, housing, and employment. These changes in travel demands will require better ways to manage the system, more choices for getting around, and targeted improvements to make the system safer and more efficient.

TABLE 1. CANBY UGB LAND USE SUMMARY

LAND USE / GROWTH CATEGORY	EXISTING 2023 QUANTITIES	TOTAL GROWTH 2023 TO 2043	FUTURE 2043 QUANTITIES
POPULATION*	18,655	5,931 (+32%)	24,586
HOUSEHOLD*			
SINGLE FAMILY DETACHED UNITS	4,907	1,167 (+24%)	6,074
SINGLE FAMILY ATTACHED UNITS	1,132	595 (+53%)	1,727
MULTI-FAMILY UNITS	1,150	524 (+46%)	1,674
TOTAL UNITS	***7,189***	***2,286 (+32%)***	***9,475***
EMPLOYMENT**			
RETAIL JOBS	807	157 (+19%)	964
SERVICE JOBS	2,301	703 (+31%)	3,004
INDUSTRIAL AND OTHER JOBS	4,012	1,846 (+46%)	5,858
EDUCATION JOBS	546	25 (+5%)	571
TOTAL JOBS	***7,666***	***2,731 (+36%)***	***10,397***

Source: * City of Canby Housing Needs Analysis; ** City of Canby Economic Opportunities Analysis

FIGURE 1. CANBY HOUSEHOLD GROWTH FROM 2023 TO 2043

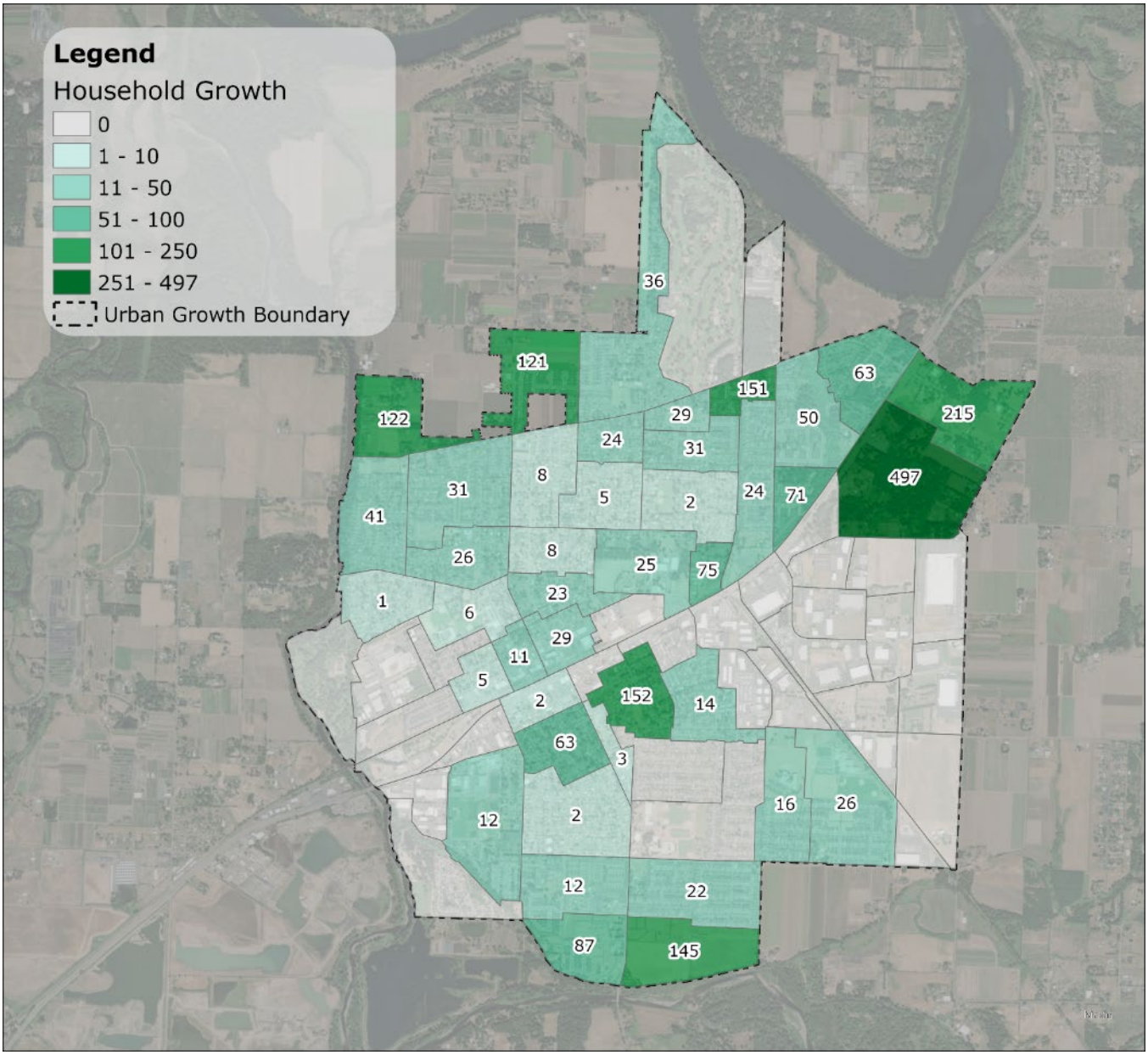
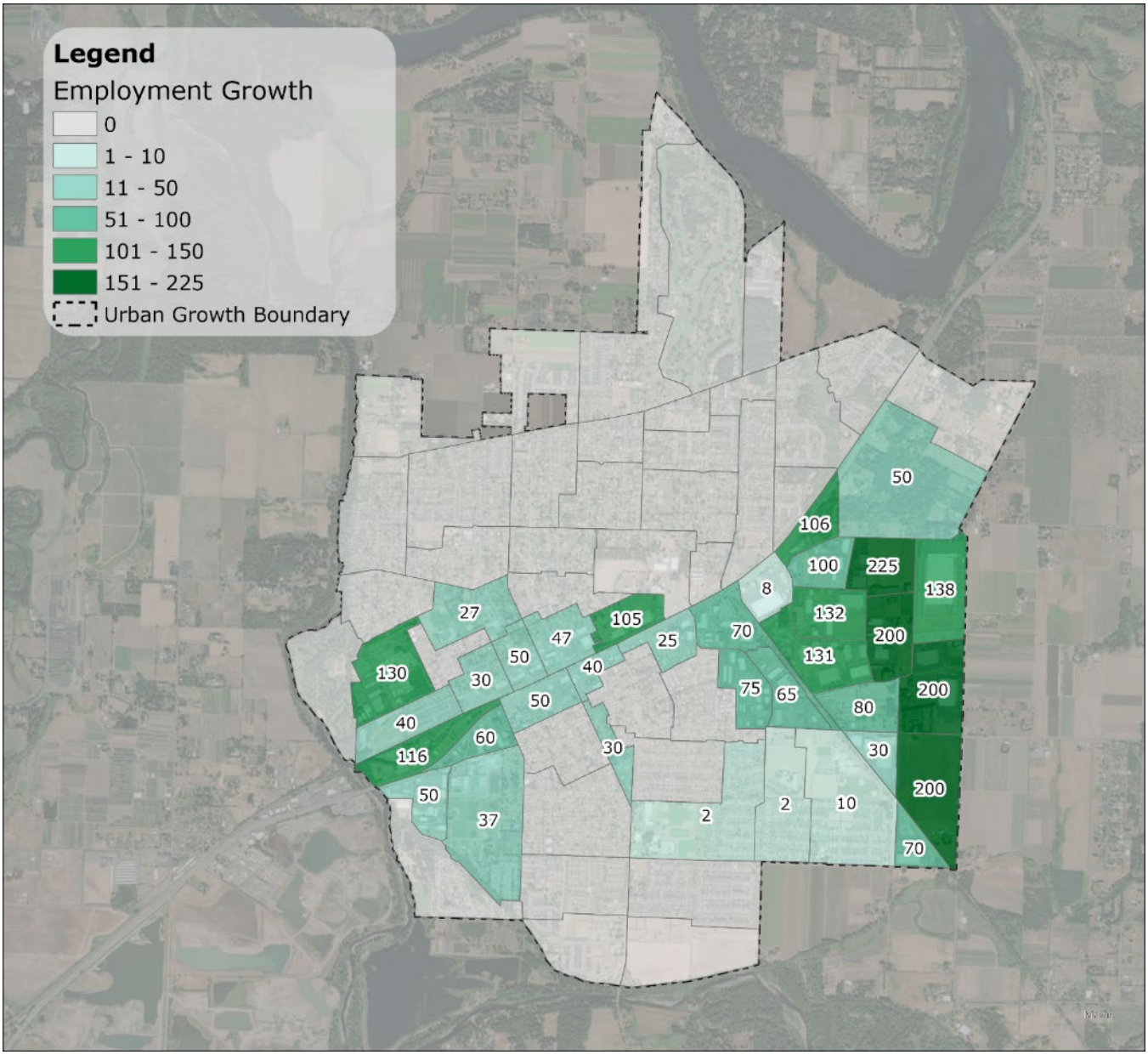


FIGURE 2. CANBY EMPLOYMENT GROWTH FROM 2023 TO 2043



TRAVEL DEMANDS AND CHARACTERISTICS

The number of people who choose to walk, bike, ride transit, or drive along with the distances they travel is important for assessing how well existing transportation facilities serve the needs of users. Available data on travel demand, travel mode choice, and trip length are used to better understand travel behavior in the community and inform the needs analysis for the transportation system. The data presented in this section derives from the US Census Bureau on commuting trips and the travel demand model used to forecast traffic volumes in Canby.

PM PEAK TRIPS

The increase in the number of residents and jobs in the Canby planning area increases the overall number of trips generated. Table 2 summarizes the total trips (i.e., drive alone, shared ride, transit, walk, and bike trips) during the p.m. peak hour of an average weekday in the Canby planning area for the years 2023 and 2043 based on US Census Data and the Canby travel demand model[3]. The transportation network in the planning area accommodates 12,213 trips during the p.m. peak hour of an average weekday as of 2023, and that number is estimated to increase by over 3,500 through 2043, to 15,889 trips if the land develops according to the land use assumptions during the p.m. peak hour of an average weekday. Of these trips, 1,889 were bike, walk, or transit trips in 2023, and that amount is expected to increase by nearly 600 through 2043, to 2,457 p.m. peak hour trips. Drive alone trips (i.e., single occupant vehicle) are expected to increase by nearly 3,000 through 2040 during the p.m. peak hour of an average weekday.

TABLE 2: AVERAGE WEEKDAY PM PEAK TRIPS IN CANBY PLANNING AREA

AVERAGE WEEKDAY TRIPS BY MODE (PM PEAK)	2023 TRIPS*	2043 TRIPS*	TRIP GROWTH (2023-2043)
DRIVE ALONE TRIPS (SOV)	9,349	12,164	+2,814
SHARED RIDE TRIPS	975	1,268	+294
TRANSIT TRIPS	378	491	+114
WALK TRIPS	1,259	1,638	+379
BIKE TRIPS	252	328	+76
TOTAL TRIPS	**12,213**	**15,889**	**+3,677**
TOTAL NON-SOV TRIPS	**2,864**	**3,726**	**+862**
TOTAL BIKE, WALK, TRANSIT TRIPS	**1,889**	**2,457**	**+569**

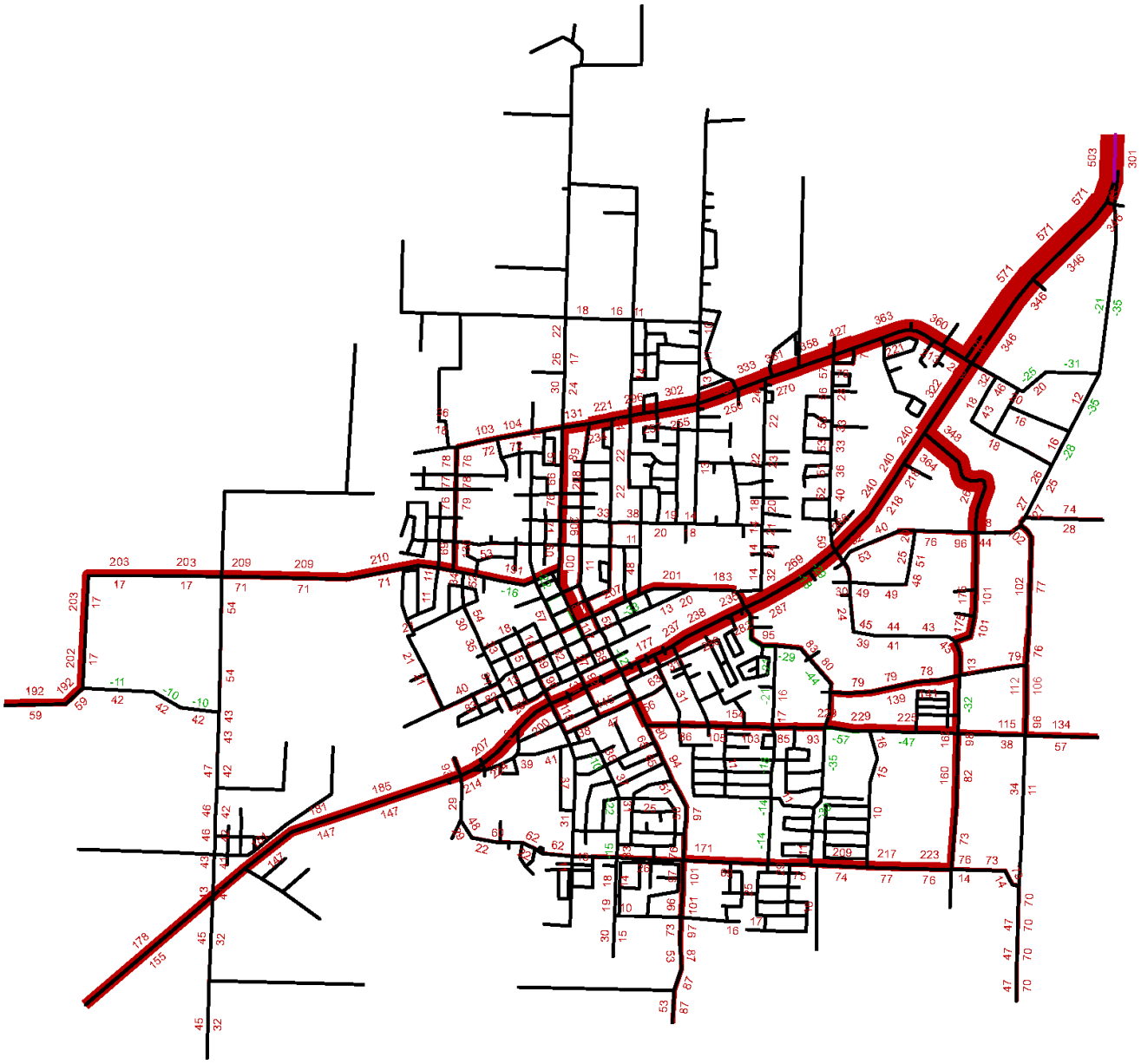
Source: Daily Household Travel Survey (ODOT, 2019) and the Canby travel demand model.
* This analysis assumes the mode split remains the same in the years 2023 and 2043.

[3] Mode shares are based on the travel mode shares for the state of Oregon in the Report "Personal Travel in Oregon, A Snapshot of Daily Household Tavel Patterns", ODOT, 2019. The mode shares were applied to the estimates of p.m. peak motor vehicle trips from Canby's travel demand model for the years 2023 and 2043.

Figure 3 below shows the increment of raw model traffic growth between 2023 and 2043 for the design hour. Overall, OR 99E, N Territorial Road, the new Walnut Street Extension (described in a subsequent section), and S 13th Avenue are expected to see some of the highest increases in traffic volumes through 2043.

While the travel demand forecast tools were calibrated to local conditions and volumes, raw volumes from the tools are not used for capacity analysis. Rather, motor vehicle turn movement volume forecasts were developed using post-processing methods consistent with the ODOT APM V2. The post-processing methodology involves estimating trip growth at the intersection approach level (i.e., volume differences between base and future forecast tools), scaling the growth by the number of forecast years (i.e., total forecast years divided by difference in forecast tool years), and adding these volumes to existing traffic counts.

FIGURE 3: RAW MODEL TRAFFIC GROWTH IN THE P.M. PEAK HOUR (2023-2043)



WHERE TRANSPORTATION IMPROVEMENTS MAY BE NEEDED

Review of the expected growth throughout the city and existing gaps and deficiencies of the transportation system identified the following locations as possible candidates for improvements.

STREET NETWORK PERFORMANCE ASSESSMENT

An increase in motor vehicle travel leads to an increase in congestion. Travel activity, as reflected by p.m. peak hour motor vehicle trips beginning or ending in Candy, is expected to increase significantly through 2043. Through trips (i.e., trips that neither begin nor end in Canby) are also expected to increase through 2043 and are generally representative of increased growth in statewide travel and in neighboring cities.

Study intersection operations were analyzed in the same manner as was done for existing conditions[4]. Forecasted intersection capacity and level of service were compared to applicable agency mobility standards to identify where significant congestion is likely to occur. Table 3 shows study intersection operations based on 2043 forecasted volumes, and the Appendix includes detailed Highway Capacity Manual reports for each intersection. Bold red text indicates intersections with v/c ratios or LOS ratings over their respective mobility targets. Several study intersections are expected to exceed their mobility during the 2043 weekday p.m. peak hour based on the operations presented in Table 3 and shown in Figure 4. These include the OR 99E/Ivy Street (v/c: 1.13) and OR 99E/Pine Street (v/c: 1.21) intersections. Two stop-controlled intersections are expected to exceed their LOS mobility targets on the minor approach. There are NE Territorial Road/N Redwood Street and S Township Road/Ivy Street, both of which are anticipated to experience LOS E on their minor approaches. The intersections at Knights Bridge Road/N Holly Street and Knights Bridge Road/N Cedar Street are expected to operate right at the LOS D mobility target on the minor approach as well.

[4] Technical Memorandum #7: Existing Multimodal Conditions, October 16, 2013

TABLE 3. PM PEAK HOUR 2043 TRAFFIC OPERATIONS AT STUDY INTERSECTIONS

INTERSECTION	CONTROL	MOBILITY TARGET	V/C	LOS	DELAY (SEC)
OR 99E & BERG PKWY	Signal	0.90	0.71	C	32
OR 99E & ELM ST	Signal	0.90	0.87	C	31
OR 99E & GRANT ST	Signal	1.0 (STA)	0.70	B	11
OR 99E & IVY ST	Signal	1.0 (STA)	**1.13**	E	72
OR 99E & PINE ST	Signal	0.90	**1.21**	D	44
OR 99E & SEQUOIA PKWY	Signal	0.90	0.86	D	42
OR 99E & TERRITORIAL RD	Signal	0.85	0.83	C	23
KNIGHTS BRIDGE RD & N BIRCH ST	Two-way Stop	LOS D	0.55/0.46	A/C	10/23
KNIGHTS BRIDGE RD & N CEDAR ST	Two-way Stop	LOS D	0.28/0.45	A/D	9/26
KNIGHTS BRIDGE RD & N HOLLY ST	Two-way Stop	LOS D	0.26/0.58	A/D	8/30
NW 3RD AVE & N CEDAR ST	Two-way Stop	LOS D	0.04/0.22	A/B	7/11
NW 1ST AVE & N GRANT ST[1]	Two-way Stop	LOS D	0.14/0.14	A/B	8/14
NW 1ST AVE & N IVY ST[1]	Two-way Stop	LOS D	0.12/0.29	A/C	9/21
NE 3RD AVE & NE 4TH AVE	Two-way Stop	LOS D	0.00/0.02	A/B	0/12
NE 4TH AVE & N PINE ST	Two-way Stop	LOS D	0.13/0.31	A/C	9/19
NE TERRITORIAL RD & N HOLLY ST	All-way Stop	LOS D	0.52	B	14
NE TERRITORIAL RD & N REDWOOD ST	Two-way Stop	LOS D	0.36/0.54	**A/E**	9/47
SE 2ND AVE & S IVY ST	Two-way Stop	LOS D	0.37/0.40	A/C	9/19
S TOWNSHIP RD & S IVY ST	Two-way Stop	LOS D	0.28/0.41	**A/E**	9/45
SE 13TH AVE & S IVY ST	Signal	LOS D	0.68	B	15
SE 4TH AVE & S REDWOOD ST	Two-way Stop	LOS D	0.08/0.20	A/B	8/11
S TOWNSHIP RD & S REDWOOD ST	All-way Stop	LOS D	0.51	B	13
SEQUOIA PKWY & HAZEL DELL WAY	Signal	LOS D	0.57	C	34
SE 1ST AVE & S WALNUT ST	Two-way Stop	LOS D	0.13/0.50	A/C	8/19

INTERSECTION	CONTROL	MOBILITY TARGET	V/C	LOS	DELAY (SEC)
SE 1ST AVE & S MULINO RD	Two-way Stop	LOS D	0.19/0.24	A/B	8/12
SE 4TH AVE & S WALNUT RD	All-way Stop	LOS D	0.24	B	12
S TOWNSHIP RD & SEQUOIA PKWY	All-way Stop	LOS D	0.67	C	16
S TOWNSHIP RD & S MULINO ST	All-way Stop	LOS D	0.46	B	13
SE 13TH AVE & S MULINO RD	All-way Stop	LOS D	0.22	A	9
SE 13TH AVE & SEQUOIA PKWY	All-way Stop	LOS D	0.38	B	11
OR 99E & WALNUT ST*	Signal	LOS D	0.70	B	19

*New Intersection

[1] This is a three-way stop controlled but is assumed to be a two-way stop to provide HCM analysis results. It should be noted this assumption results in higher side street delay.

STREET NETWORK CONGESTION

This assessment identified locations on the roadway network that operate with some level of congestion based on the forecasted 2043 conditions. These are locations where motorists may experience delays during the p.m. peak hour travel. This baseline provides a metric for assessing the impacts of new developments on the transportation system.

Figures 4 displays the result of the street network and study intersection congestion analysis for the p.m. peak hour in 2043. The link congestion data is from the travel demand model used to forecast future volumes and represents raw model volumes (not post-processed volumes). As shown, OR 99E is expected to experience medium to heavy congestion through Canby in the p.m. peak hour in 2043, with link-level v/c ratios over 0.75. Other street segments that experience congestion are Ivy Street between OR 99E and Township Road, Sequoia Parkway between SE 1st Avenue and SE Hazeldell Way, and NE Territorial Road between N Pine Street and N Redwood Street.

Table 4 summarizes the number and percentage of lane-miles in Canby experiencing congestion in 2023 and 2043. For this analysis, the following two thresholds were considered:

- **Severe congestion,** defined as streets and intersections operating with a v/c ratio over 0.99 during the p.m. peak hour.
- **Congestion,** defined as streets operating with a v/c ratio between 0.90 and 0.99 during the p.m. peak hour.

Under existing conditions, about 0.3 percent of Canby's street network experiences congestion during the p.m. peak hour. In 2043, about 2.5 percent of the network is expected to experience moderate or severe congestion, largely along OR 99E, as discussed above.

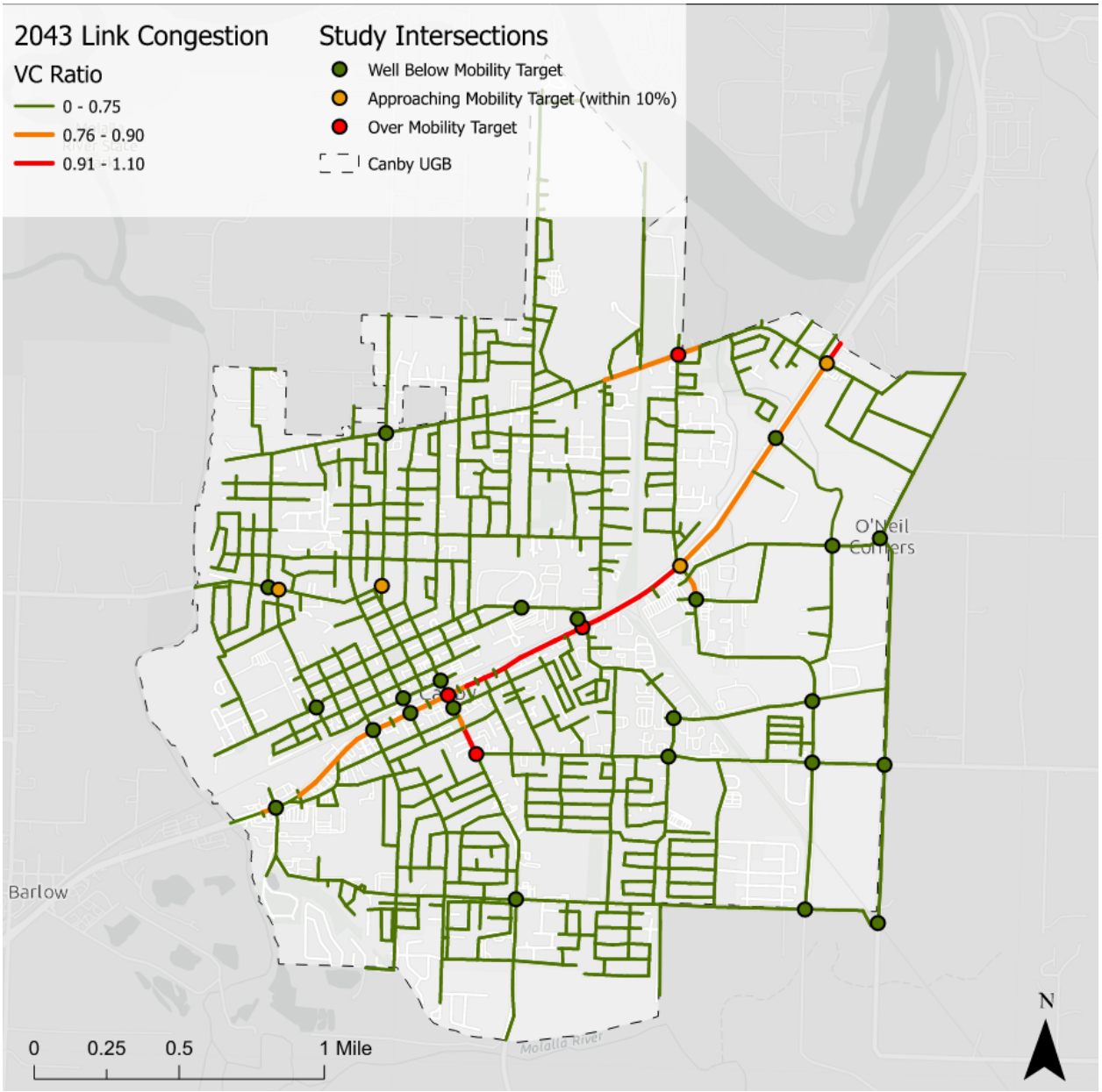
TABLE 4: VEHICLE CONGESTION IN CANBY PLANNING AREA

PM PEAK CONGESTED VEHICLE LANE MILES	2023 Base Year		2043 HORIZON YEAR	
	TOTAL MILES	SHARE OF TOTAL FACILITY MILES	TOTAL MILES	SHARE OF TOTAL FACILITY MILES
TOTAL LANE MILES*	**155.04**	**100%**	**155.85**	**100%**
TOTAL CONGESTED LANE MILES	**0.54**	**0.3%**	**3.96**	**2.5%**
SEVERELY CONGESTED MILES (>0.99)	**0.00**	**0%**	**3.34**	**2.1%**
CONGESTED MILES (0.90 <= V/C <= 0.99)	**0.54**	**0.3%**	**0.62**	**0.4%**

Source: Canby Travel Demand Model (base year: 2023, future year: 2043). The mileage calculation is based on the length of the modeled network link associated with the point of congestion. It does not include the length of the queuing that may occur as a result of the congested link.

Notes: *Total lanes miles include the length of all street segments, multiplied by the number of lanes.

FIGURE 4: 2043 LINK AND STUDY INTERSECTION CONGESTION IN THE P.M. PEAK HOUR



FUTURE WALKING, BIKING, AND TRANSIT NETWORK ASSESSMENT

Methodology for determining future needs for walking, biking, and transit in Canby begins with an assessment of who is walking, biking, and taking transit now and where they are traveling. Technical Memorandum #7 (Existing Multimodal Conditions) answers these questions for pedestrians, bicyclists and transit riders and details existing conditions of the infrastructure.

The existing facilities were then compared to major growth areas of the city, and in proximity to key destinations, such as schools, parks, transit stops, shopping and employment. A review of the city shows that the walking and biking infrastructure is inadequate in some anticipated major growth areas, which mostly consist of rural unimproved streets today, and near some key destinations, which have the potential to attract significant walking and biking trips. The inadequate walking and biking infrastructure further hinders transit riders, as these users typically utilize these facilities at the beginning and end of their trip.

METHODOLOGY TO ADDRESS DEFICIENCIES

A list of potential pedestrian and bicycle network improvement projects will be developed in Technical Memorandum #9 based on streets with pedestrian deficiencies. A street is considered deficient for walking if it meets one or more of the following conditions:

- Arterial or collector street without pedestrian facilities, and/or without bicycle facilities or adjacent corridor with bicycle facilities.
- "Poor" qualitative pedestrian and/or bicycle assessment rating.
- Qualitative pedestrian and/or bicycle assessment rating less than "good" in close proximity to parks, schools, transit stops, or other important destinations.

KEY NETWORK NEEDS

Findings s from the evaluation of the existing and future no-build transportation system are summarized below. These recommendations provide guidance to help establish areas of focus for future investments to build upon the positive attributes and address the shortcomings of the baseline transportation system.

PEDESTRIAN NETWORK NEEDS

- Develop a citywide low-stress walking network that maximizes safety and access to amenities.
- Increase low-stress pedestrian facility miles, while decreasing extreme or high-stress miles through new or enhanced existing facilities.
- Install ADA compliant pedestrian curb ramps at intersections.
- Evaluate potential protected crossing opportunities along major streets, including OR 99E and collectors.
- Review locations of pedestrian collisions for potential improvements while also focusing on high-risk locations that have not yet experienced crashes.

BICYCLE NETWORK NEEDS

- Develop a citywide low-stress bicycle network that provides accessibility to destinations and enhances safety for all users.
- Increase low-stress bicycle facility miles, while decreasing Extreme or High stress miles through new or enhanced existing facilities.
- Evaluate potential protected crossing opportunities along OR 99E and collectors.
- Review locations of bicycle collisions and evaluate other high-risk locations for safety improvements.

TRANSIT NETWORK NEEDS

- Increase the completeness of pedestrian and bicycle facilities near transit stops.
- Evaluate potential enhanced crossing opportunities on OR 99E near existing transit stops.
- Consider potential alignments for transit expansion and ensure network designs that can adequately serve it.
- Focus on opportunities to improve transit stop amenities (e.g., shelters, benches).

VEHICLE NETWORK NEEDS

- Decrease the amount of congested lane miles through strategic vehicle network improvements, and investments in non-driving modes (e.g., expanded transit service and active transportation investments).
- Explore projects at intersections along arterial streets that are expected to be severely congested.
- Explore improvements along OR 99E to address identified high-crash locations and other high-risk streets and intersections.
- Improve connectivity of streets in the City through implementation of recommended transportation facility and access spacing standards.
- Assess opportunities to support electric vehicle adoption and use (i.e., public and private charging infrastructure).

ADDITIONAL SAFETY NEEDS

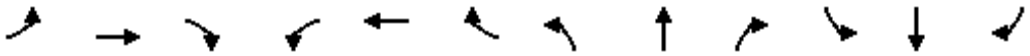
- The OR 99E/Ivy Street and NW 3rd Avenue/N Cedar Street intersections experienced higher-than-expected crash rates between 2017 and 2021. On the segment level, the section of OR 99E between Elm Street and Pine Street experienced a higher-than-expected crash rate during that period. These hotspots would benefit from safety improvements. As traffic volumes increase, rear-end and angle crashes may be expected to increase in frequency.
- There were nine pedestrian-involved crashes and eight bicycle-involved crashes between 2017 and 2021, and these figures are likely to increase as the City's population increases. Building out Canby's low-stress walking and biking networks will enhance safety and help prevent future crashes involving vulnerable road users, including people walking and biking.
- Assess railroad crossings for multimodal safety enhancements.
- Addressing the impacts of evolving vehicle technologies (i.e., autonomous and connected vehicles (CAVs), city fleet safety upgrades) and proactively identifying high-risk characteristics of the street network, including at locations that have not yet experienced crashes.

APPENDIX

CONTENTS

SECTION 1: EXISTING CONDITIONS SYNCHRO REPORTS

P.M. PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	35	24	183	28	94	22	869	166	65	908	90
Future Volume (veh/h)	71	35	24	183	28	94	22	869	166	65	908	90
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		0.99	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	1736	1709	1750	1695	1750	1695	1695	1682	1736	1709	1709	1750
Adj Flow Rate, veh/h	77	38	13	199	30	51	24	945	0	71	987	27
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, %	1	3	0	4	0	4	4	5	1	3	3	0
Cap, veh/h	257	239	82	282	113	192	250	2099		89	1763	48
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.15	0.66	0.00	0.05	0.55	0.54
Sat Flow, veh/h	1326	1217	416	1330	576	980	1615	3195	1471	1628	3228	88
Grp Volume(v), veh/h	77	0	51	199	0	81	24	945	0	71	496	518
Grp Sat Flow(s),veh/h/ln	1326	0	1633	1330	0	1556	1615	1598	1471	1628	1624	1693
Q Serve(g_s), s	6.8	0.0	3.4	19.0	0.0	5.7	1.7	18.7	0.0	5.6	26.0	26.0
Cycle Q Clear(g_c), s	12.5	0.0	3.4	22.3	0.0	5.7	1.7	18.7	0.0	5.6	26.0	26.0
Prop In Lane	1.00		0.25	1.00		0.63	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	257	0	320	282	0	305	250	2099		89	887	925
V/C Ratio(X)	0.30	0.00	0.16	0.71	0.00	0.27	0.10	0.45		0.80	0.56	0.56
Avail Cap(c_a), veh/h	364	0	452	389	0	431	250	2099		200	887	925
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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	0.0	43.4	52.6	0.0	44.3	47.1	10.9	0.0	60.7	19.3	19.3
Incr Delay (d2), s/veh	0.5	0.0	0.2	2.7	0.0	0.3	0.1	0.7	0.0	9.6	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	1.4	6.6	0.0	2.3	0.7	6.1	0.0	2.5	10.1	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	50.1	0.0	43.5	55.3	0.0	44.7	47.2	11.6	0.0	70.3	21.8	21.7
LnGrp LOS	D	A	D	E	A	D	D	B		E	C	C
Approach Vol, veh/h		128			280			969			1085	
Approach Delay, s/veh		47.5			52.2			12.4			25.0	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.5	75.0		29.5	11.1	89.4		29.5				
Change Period (Y+Rc), s	5.4	* 4.5		4.0	4.0	* 5.4		4.0				
Max Green Setting (Gmax), s	11.0	* 71		36.0	16.0	* 65		36.0				
Max Q Clear Time (g_c+I1), s	3.7	28.0		24.3	7.6	20.7		14.5				
Green Ext Time (p_c), s	0.0	25.5		0.9	0.1	16.0		0.3				

Intersection Summary		
HCM 6th Ctrl Delay		24.3
HCM 6th LOS		C

Notes

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

Unsignalized Delay for [NBR] 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)	89	65	136	38	64	90	100	948	29	77	1062	79
Future Volume (veh/h)	89	65	136	38	64	90	100	948	29	77	1062	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	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	1736	1750	1736	1750	1723	1709	1750	1695	1750	1750	1695	1736
Adj Flow Rate, veh/h	97	71	80	41	70	51	109	1030	31	84	1154	83
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, %	1	0	1	0	2	3	0	4	0	0	4	1
Cap, veh/h	118	103	116	51	90	65	348	1621	49	250	1505	108
Arrive On Green	0.07	0.14	0.14	0.03	0.10	0.10	0.05	0.51	0.50	0.06	0.99	0.98
Sat Flow, veh/h	1654	743	838	1667	918	669	1667	3193	96	1667	3047	219
Grp Volume(v), veh/h	97	0	151	41	0	121	109	520	541	84	609	628
Grp Sat Flow(s),veh/h/ln	1654	0	1581	1667	0	1586	1667	1611	1678	1667	1611	1656
Q Serve(g_s), s	7.5	0.0	11.8	3.2	0.0	9.7	4.2	30.5	30.5	0.0	2.5	2.7
Cycle Q Clear(g_c), s	7.5	0.0	11.8	3.2	0.0	9.7	4.2	30.5	30.5	0.0	2.5	2.7
Prop In Lane	1.00		0.53	1.00		0.42	1.00		0.06	1.00		0.13
Lane Grp Cap(c), veh/h	118	0	219	51	0	155	348	818	852	250	795	818
V/C Ratio(X)	0.82	0.00	0.69	0.80	0.00	0.78	0.31	0.64	0.64	0.34	0.77	0.77
Avail Cap(c_a), veh/h	178	0	341	128	0	293	424	818	852	329	795	818
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.83	0.83	0.83
Uniform Delay (d), s/veh	59.6	0.0	53.4	62.6	0.0	57.3	14.9	23.3	23.3	36.5	0.4	0.5
Incr Delay (d2), s/veh	10.3	0.0	1.5	10.0	0.0	3.2	0.2	3.8	3.6	0.2	5.8	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	4.8	1.5	0.0	4.1	1.6	12.1	12.6	2.1	1.5	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	69.9	0.0	54.8	72.6	0.0	60.4	15.1	27.0	26.9	36.8	6.3	6.2
LnGrp LOS	E	A	D	E	A	E	B	C	C	D	A	A
Approach Vol, veh/h		248			162			1170			1321	
Approach Delay, s/veh		60.7			63.5			25.8			8.2	
Approach LOS		E			E			C			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	68.2	13.3	16.7	8.3	70.0	8.0	22.0
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.5	* 4.5	4.0	4.0
Max Green Setting (Gmax), s	12.6	63.5	14.0	24.0	10.0	* 66	10.0	28.0
Max Q Clear Time (g_c+I1), s	6.2	4.7	9.5	11.7	2.0	32.5	5.2	13.8
Green Ext Time (p_c), s	0.0	6.7	0.0	0.2	0.0	5.1	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	22.9
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.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	92	48	73	25	13	19	52	1041	34	21	1120	44
Future Volume (veh/h)	92	48	73	25	13	19	52	1041	34	21	1120	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		1.00	1.00		0.98
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	1709	1750	1750	1750	1750	1750	1750	1695	1627	1614	1695	1723
Adj Flow Rate, veh/h	98	51	39	27	14	9	55	1107	35	22	1191	46
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
Percent Heavy Veh, %	3	0	0	0	0	0	0	4	9	10	4	2
Cap, veh/h	118	84	64	87	70	45	660	1618	51	633	1604	62
Arrive On Green	0.07	0.09	0.09	0.05	0.07	0.07	0.45	1.00	1.00	0.45	1.00	1.00
Sat Flow, veh/h	1628	913	698	1667	977	628	1667	3187	101	1537	3159	122
Grp Volume(v), veh/h	98	0	90	27	0	23	55	559	583	22	607	630
Grp Sat Flow(s),veh/h/ln	1628	0	1611	1667	0	1605	1667	1611	1677	1537	1611	1670
Q Serve(g_s), s	7.7	0.0	7.0	2.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.7	0.0	7.0	2.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.43	1.00		0.39	1.00		0.06	1.00		0.07
Lane Grp Cap(c), veh/h	118	0	148	87	0	115	660	818	851	633	818	848
V/C Ratio(X)	0.83	0.00	0.61	0.31	0.00	0.20	0.08	0.68	0.68	0.03	0.74	0.74
Avail Cap(c_a), veh/h	138	0	322	141	0	321	660	818	851	633	818	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.81	0.81	0.81	0.65	0.65	0.65
Uniform Delay (d), s/veh	59.5	0.0	56.8	59.3	0.0	56.8	3.7	0.0	0.0	3.5	0.0	0.0
Incr Delay (d2), s/veh	25.9	0.0	1.5	0.7	0.0	0.3	0.0	3.8	3.6	0.0	4.0	3.9
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	4.1	0.0	2.9	0.9	0.0	0.7	0.3	0.9	0.9	0.1	0.9	0.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	85.3	0.0	58.2	60.1	0.0	57.1	3.7	3.8	3.6	3.5	4.0	3.9
LnGrp LOS	F	A	E	E	A	E	A	A	A	A	A	A
Approach Vol, veh/h		188			50			1197			1259	
Approach Delay, s/veh		72.4			58.7			3.7			3.9	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	33.2	70.0	13.4	13.3	33.2	70.0	10.8	16.0
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	11.6	65.5	11.0	26.0	11.0	65.5	11.0	26.0
Max Q Clear Time (g_c+I1), s	12.0	2.0	9.7	3.8	2.0	2.0	4.0	9.0
Green Ext Time (p_c), s	0.0	6.6	0.0	0.0	0.0	5.8	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	9.6
HCM 6th LOS	A

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)	110	156	75	131	176	79	80	934	138	142	979	94
Future Volume (veh/h)	110	156	75	131	176	79	80	934	138	142	979	94
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.98	1.00		0.98
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	1709	1723	1695	1736	1709	1736	1723	1709	1682	1736	1709	1723
Adj Flow Rate, veh/h	116	164	64	138	185	70	84	983	138	149	1031	94
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	4	1	3	1	2	3	5	1	3	2
Cap, veh/h	141	198	77	161	210	80	394	1584	222	306	1340	122
Arrive On Green	0.09	0.17	0.17	0.10	0.18	0.18	0.16	0.56	0.55	0.05	0.45	0.44
Sat Flow, veh/h	1628	1164	454	1654	1167	441	1641	2850	400	1654	3002	274
Grp Volume(v), veh/h	116	0	228	138	0	255	84	560	561	149	557	568
Grp Sat Flow(s),veh/h/ln	1628	0	1618	1654	0	1608	1641	1624	1627	1654	1624	1652
Q Serve(g_s), s	9.1	0.0	17.7	10.7	0.0	20.1	0.0	30.4	30.5	5.1	37.6	37.7
Cycle Q Clear(g_c), s	9.1	0.0	17.7	10.7	0.0	20.1	0.0	30.4	30.5	5.1	37.6	37.7
Prop In Lane	1.00		0.28	1.00		0.27	1.00		0.25	1.00		0.17
Lane Grp Cap(c), veh/h	141	0	275	161	0	290	394	902	904	306	724	737
V/C Ratio(X)	0.82	0.00	0.83	0.86	0.00	0.88	0.21	0.62	0.62	0.49	0.77	0.77
Avail Cap(c_a), veh/h	238	0	311	242	0	309	394	902	904	369	724	737
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	0.85	0.85	0.85	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.4	0.0	52.1	57.8	0.0	51.9	36.9	19.6	19.7	16.1	30.4	30.4
Incr Delay (d2), s/veh	4.4	0.0	13.7	12.1	0.0	22.0	0.1	2.7	2.7	0.4	7.7	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	8.2	5.0	0.0	9.9	2.2	11.7	11.8	1.9	15.9	16.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	62.8	0.0	65.9	69.9	0.0	73.9	37.0	22.3	22.4	16.6	38.1	38.0
LnGrp LOS	E	A	E	E	A	E	D	C	C	B	D	D
Approach Vol, veh/h		344			393			1205			1274	
Approach Delay, s/veh		64.8			72.5			23.4			35.5	
Approach LOS		E			E			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	62.0	15.3	27.4	11.1	76.2	16.6	26.1
Change Period (Y+Rc), s	4.5	* 4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	12.8	* 58	19.0	25.0	12.0	57.5	19.0	25.0
Max Q Clear Time (g_c+I1), s	12.7	39.7	11.1	22.1	7.1	32.5	12.7	19.7
Green Ext Time (p_c), s	0.0	4.9	0.0	0.2	0.0	5.4	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	38.6
HCM 6th LOS	D

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	39	68	65	70	65	75	1048	62	76	1190	135
Future Volume (veh/h)	75	39	68	65	70	65	75	1048	62	76	1190	135
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		0.97	1.00		0.97
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	1750	1750	1709	1709	1709	1668	1736	1695	1641	1709	1695	1695
Adj Flow Rate, veh/h	82	42	19	71	76	0	82	1139	65	83	1293	147
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	3	3	3	6	1	4	8	3	4	4
Cap, veh/h	183	84	288	111	103		381	1713	98	440	1611	182
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.00	0.15	0.55	0.55	0.15	0.55	0.55
Sat Flow, veh/h	686	421	1444	352	518	1414	1654	3092	176	1628	2908	329
Grp Volume(v), veh/h	124	0	19	147	0	0	82	593	611	83	713	727
Grp Sat Flow(s),veh/h/ln	1107	0	1444	870	0	1414	1654	1611	1658	1628	1611	1626
Q Serve(g_s), s	0.0	0.0	1.4	10.0	0.0	0.0	0.0	33.8	33.9	0.0	46.1	46.9
Cycle Q Clear(g_c), s	13.3	0.0	1.4	23.4	0.0	0.0	0.0	33.8	33.9	0.0	46.1	46.9
Prop In Lane	0.66		1.00	0.48		1.00	1.00		0.11	1.00		0.20
Lane Grp Cap(c), veh/h	267	0	288	215	0		381	892	918	440	892	901
V/C Ratio(X)	0.46	0.00	0.07	0.68	0.00		0.21	0.66	0.67	0.19	0.80	0.81
Avail Cap(c_a), veh/h	324	0	344	273	0		381	892	918	440	892	901
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	46.7	0.0	42.2	54.2	0.0	0.0	35.9	20.5	20.5	24.5	23.2	23.4
Incr Delay (d2), s/veh	2.7	0.0	0.2	8.6	0.0	0.0	0.2	3.9	3.8	0.1	7.4	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	0.5	5.3	0.0	0.0	2.2	13.2	13.6	1.7	18.5	19.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	49.4	0.0	42.4	62.9	0.0	0.0	36.1	24.4	24.3	24.6	30.7	31.1
LnGrp LOS	D	A	D	E	A		D	C	C	C	C	C
Approach Vol, veh/h		143			147			1286			1523	
Approach Delay, s/veh		48.5			62.9			25.1			30.5	
Approach LOS		D			E			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	24.1	76.0		29.9	24.1	76.0		29.9
Change Period (Y+Rc), s	4.0	4.5		4.0	4.0	4.5		4.0
Max Green Setting (Gmax), s	15.0	71.5		31.0	15.0	71.5		31.0
Max Q Clear Time (g_c+I1), s	12.3	48.9		25.4	2.0	35.9		15.3
Green Ext Time (p_c), s	0.1	17.3		0.6	0.1	19.7		1.1

Intersection Summary	
HCM 6th Ctrl Delay	30.6
HCM 6th LOS	C

Notes

Unsignalized Delay for [WBR] 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)	6	60	47	310	80	79	81	827	118	141	992	24
Future Volume (veh/h)	6	60	47	310	80	79	81	827	118	141	992	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.97
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	1750	1723	1750	1723	1750	1750	1750	1695	1682	1709	1709	1695
Adj Flow Rate, veh/h	6	63	26	326	84	21	85	871	63	148	1044	24
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	0	2	0	0	0	4	5	3	3	4
Cap, veh/h	112	78	32	409	225	190	105	1338	589	415	2004	46
Arrive On Green	0.07	0.07	0.07	0.13	0.13	0.13	0.06	0.42	0.42	0.26	0.62	0.61
Sat Flow, veh/h	1667	1155	477	3183	1750	1476	1667	3221	1419	1628	3242	75
Grp Volume(v), veh/h	6	0	89	326	84	21	85	871	63	148	523	545
Grp Sat Flow(s),veh/h/ln	1667	0	1632	1591	1750	1476	1667	1611	1419	1628	1624	1693
Q Serve(g_s), s	0.4	0.0	7.0	12.9	5.7	1.6	6.5	28.2	3.5	9.7	23.6	23.6
Cycle Q Clear(g_c), s	0.4	0.0	7.0	12.9	5.7	1.6	6.5	28.2	3.5	9.7	23.6	23.6
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	112	0	110	409	225	190	105	1338	589	415	1004	1047
V/C Ratio(X)	0.05	0.00	0.81	0.80	0.37	0.11	0.81	0.65	0.11	0.36	0.52	0.52
Avail Cap(c_a), veh/h	141	0	138	857	471	397	179	1338	589	415	1004	1047
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	0.81	0.81	0.81	1.00	1.00	1.00	0.88	0.88	0.88
Uniform Delay (d), s/veh	56.7	0.0	59.8	55.0	51.9	50.1	60.1	30.4	23.2	39.7	14.0	14.0
Incr Delay (d2), s/veh	0.1	0.0	21.4	1.8	0.5	0.1	8.7	2.5	0.4	0.3	1.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.6	5.3	2.6	0.6	3.0	11.2	1.2	3.8	8.4	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.9	0.0	81.2	56.8	52.4	50.2	68.8	32.9	23.6	40.0	15.7	15.6
LnGrp LOS	E	A	F	E	D	D	E	C	C	D	B	B
Approach Vol, veh/h		95			431			1019			1216	
Approach Delay, s/veh		79.7			55.6			35.3			18.6	
Approach LOS		E			E			D			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	84.4		20.7	38.6	58.0		12.8
Change Period (Y+Rc), s	4.0	* 5.4		4.0	5.4	* 4.5		4.0
Max Green Setting (Gmax), s	4.0	* 53		35.0	14.0	* 54		11.0
Max Q Clear Time (g_c+I1), s	8.5	25.6		14.9	11.7	30.2		9.0
Green Ext Time (p_c), s	0.0	15.0		1.2	0.0	12.6		0.1

Intersection Summary	
HCM 6th Ctrl Delay	32.7
HCM 6th LOS	C

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	22	12	13	25	15	12	878	13	8	1157	291
Future Volume (veh/h)	217	22	12	13	25	15	12	878	13	8	1157	291
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		0.98	1.00		1.00	1.00		0.98
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	1736	1627	1409	1750	1695	1654	1750	1695	1750	1750	1682	1750
Adj Flow Rate, veh/h	226	23	4	14	26	10	12	915	13	8	1205	303
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
Percent Heavy Veh, %	1	9	25	0	4	7	0	4	0	0	5	0
Cap, veh/h	409	272	47	220	79	30	20	1442	20	222	1805	819
Arrive On Green	0.15	0.20	0.20	0.02	0.07	0.06	0.01	0.44	0.42	0.13	0.56	0.56
Sat Flow, veh/h	1654	1350	235	1667	1160	446	1667	3252	46	1667	3195	1450
Grp Volume(v), veh/h	226	0	27	14	0	36	12	453	475	8	1205	303
Grp Sat Flow(s),veh/h/ln	1654	0	1585	1667	0	1606	1667	1611	1687	1667	1598	1450
Q Serve(g_s), s	9.4	0.0	1.1	0.6	0.0	1.7	0.6	17.2	17.2	0.3	20.8	2.7
Cycle Q Clear(g_c), s	9.4	0.0	1.1	0.6	0.0	1.7	0.6	17.2	17.2	0.3	20.8	2.7
Prop In Lane	1.00		0.15	1.00		0.28	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	409	0	319	220	0	110	20	714	748	222	1805	819
V/C Ratio(X)	0.55	0.00	0.08	0.06	0.00	0.33	0.61	0.63	0.63	0.04	0.67	0.37
Avail Cap(c_a), veh/h	532	0	421	292	0	162	126	1100	1152	222	2101	954
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	26.1	0.0	25.7	33.2	0.0	35.2	38.9	17.0	17.1	29.9	12.0	0.9
Incr Delay (d2), s/veh	0.9	0.0	0.1	0.1	0.0	1.3	17.6	2.4	2.3	0.0	1.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	0.4	0.2	0.0	0.7	0.3	6.0	6.2	0.1	6.1	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.0	0.0	25.8	33.3	0.0	36.5	56.5	19.5	19.4	29.9	13.3	1.6
LnGrp LOS	C	A	C	C	A	D	E	B	B	C	B	A
Approach Vol, veh/h		253			50			940			1516	
Approach Delay, s/veh		26.9			35.6			19.9			11.0	
Approach LOS		C			D			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	48.7	16.1	9.4	14.5	39.1	5.6	19.9
Change Period (Y+Rc), s	4.0	6.0	4.5	4.5	4.0	6.0	4.5	4.5
Max Green Setting (Gmax), s	6.9	50.0	17.5	7.5	4.0	52.0	4.5	20.5
Max Q Clear Time (g_c+I1), s	2.6	22.8	11.4	3.7	2.3	19.2	2.6	3.1
Green Ext Time (p_c), s	0.0	19.8	0.2	0.0	0.0	13.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	16.0
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	157	412	236	31	14	79
Future Vol, veh/h	157	412	236	31	14	79
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	3	1	0	0	1
Mvmt Flow	183	479	274	36	16	92

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	311	0	-	0	1138	293
Stage 1	-	-	-	-	293	-
Stage 2	-	-	-	-	845	-
Critical Hdwy	4.1	-	-	-	6.4	6.21
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.309
Pot Cap-1 Maneuver	1261	-	-	-	225	749
Stage 1	-	-	-	-	762	-
Stage 2	-	-	-	-	425	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1260	-	-	-	180	748
Mov Cap-2 Maneuver	-	-	-	-	180	-
Stage 1	-	-	-	-	610	-
Stage 2	-	-	-	-	425	-

Approach	EB	WB	SB
HCM Control Delay, s	2.3	0	14
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1260	-	-	-	507
HCM Lane V/C Ratio	0.145	-	-	-	0.213
HCM Control Delay (s)	8.3	0	-	-	14
HCM Lane LOS	A	A	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.8

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	355	71	16	199	68	17
Future Vol, veh/h	355	71	16	199	68	17
Conflicting Peds, #/hr	0	3	3	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	3	1	6	1	2	0
Mvmt Flow	403	81	18	226	77	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	487	0	709	449
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	262	-
Critical Hdwy	-	-	4.16	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.254	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	1056	-	401	614
Stage 1	-	-	-	-	644	-
Stage 2	-	-	-	-	782	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1053	-	392	611
Mov Cap-2 Maneuver	-	-	-	-	392	-
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	766	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	16
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	422	-	-	1053	-
HCM Lane V/C Ratio	0.229	-	-	0.017	-
HCM Control Delay (s)	16	-	-	8.5	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	0.9	-	-	0.1	-

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	179	27	62	75	101	106
Future Vol, veh/h	179	27	62	75	101	106
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	4	2	1	1	2
Mvmt Flow	199	30	69	83	112	118

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	395	174	233	0	-	0
Stage 1	174	-	-	-	-	-
Stage 2	221	-	-	-	-	-
Critical Hdwy	6.42	6.24	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.336	2.218	-	-	-
Pot Cap-1 Maneuver	610	864	1335	-	-	-
Stage 1	856	-	-	-	-	-
Stage 2	816	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	573	862	1331	-	-	-
Mov Cap-2 Maneuver	573	-	-	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	814	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.7	3.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1331	-	599	-	-
HCM Lane V/C Ratio	0.052	-	0.382	-	-
HCM Control Delay (s)	7.9	0	14.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	1.8	-	-

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	11	47	13	11	25	1	27	22	58	1	3	15
Future Vol, veh/h	11	47	13	11	25	1	27	22	58	1	3	15
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	0	0	0	0	8	100	0	4	0	0	33	0
Mvmt Flow	14	62	17	14	33	1	36	29	76	1	4	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	34	0	0	80	0	0	174	162	72	213	170	34
Stage 1	-	-	-	-	-	-	100	100	-	62	62	-
Stage 2	-	-	-	-	-	-	74	62	-	151	108	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.54	6.2	7.1	6.83	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.54	-	6.1	5.83	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.54	-	6.1	5.83	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.036	3.3	3.5	4.297	3.3
Pot Cap-1 Maneuver	1591	-	-	1531	-	-	793	727	996	748	670	1045
Stage 1	-	-	-	-	-	-	911	808	-	954	786	-
Stage 2	-	-	-	-	-	-	940	839	-	856	750	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1591	-	-	1530	-	-	763	713	995	660	657	1045
Mov Cap-2 Maneuver	-	-	-	-	-	-	763	713	-	660	657	-
Stage 1	-	-	-	-	-	-	902	800	-	945	779	-
Stage 2	-	-	-	-	-	-	909	831	-	755	743	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	2.2	10	9
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	859	1591	-	-	1530	-	-	930
HCM Lane V/C Ratio	0.164	0.009	-	-	0.009	-	-	0.027
HCM Control Delay (s)	10	7.3	0	-	7.4	0	-	9
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0.6	0	-	-	0	-	-	0.1

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	7	172	6	14	83	12	4	9	16	25	21	7
Future Vol, veh/h	7	172	6	14	83	12	4	9	16	25	21	7
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	2	0	0	3	0	0	0	6	0	0	0
Mvmt Flow	8	191	7	16	92	13	4	10	18	28	23	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	8.5	8	7.6	8.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	14%	4%	13%	47%
Vol Thru, %	31%	93%	76%	40%
Vol Right, %	55%	3%	11%	13%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	185	109	53
LT Vol	4	7	14	25
Through Vol	9	172	83	21
RT Vol	16	6	12	7
Lane Flow Rate	32	206	121	59
Geometry Grp	1	1	1	1
Degree of Util (X)	0.039	0.236	0.144	0.076
Departure Headway (Hd)	4.385	4.14	4.286	4.668
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	820	853	841	771
Service Time	2.394	2.239	2.292	2.677
HCM Lane V/C Ratio	0.039	0.242	0.144	0.077
HCM Control Delay	7.6	8.5	8	8.1
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.9	0.5	0.2

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	251	12	26	241	83	6	6	33	57	9	10
Future Vol, veh/h	6	251	12	26	241	83	6	6	33	57	9	10
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, %	50	2	0	0	3	7	0	0	0	4	0	0
Mvmt Flow	6	267	13	28	256	88	6	6	35	61	10	11
Number of Lanes	0	2	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	9.9	11.7	8.6	9.5
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	13%	5%	0%	7%	75%
Vol Thru, %	13%	95%	91%	69%	12%
Vol Right, %	73%	0%	9%	24%	13%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	45	132	138	350	76
LT Vol	6	6	0	26	57
Through Vol	6	126	126	241	9
RT Vol	33	0	12	83	10
Lane Flow Rate	48	140	146	372	81
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.068	0.234	0.208	0.472	0.126
Departure Headway (Hd)	5.126	6.019	5.112	4.559	5.612
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	691	595	698	786	634
Service Time	3.212	3.778	2.871	2.609	3.691
HCM Lane V/C Ratio	0.069	0.235	0.209	0.473	0.128
HCM Control Delay	8.6	10.6	9.2	11.7	9.5
HCM Lane LOS	A	B	A	B	A
HCM 95th-tile Q	0.2	0.9	0.8	2.6	0.4

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑	↰	↱
Traffic Vol, veh/h	0	0	0	180	5	98
Future Vol, veh/h	0	0	0	180	5	98
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	3	0	0
Mvmt Flow	0	0	0	222	6	121

Major/Minor	Major2		Minor1	
Conflicting Flow All	-	-	222	-
Stage 1	-	-	0	-
Stage 2	-	-	222	-
Critical Hdwy	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.4	-
Follow-up Hdwy	-	-	3.5	-
Pot Cap-1 Maneuver	0	-	771	0
Stage 1	0	-	-	0
Stage 2	0	-	820	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	771	-
Mov Cap-2 Maneuver	-	-	771	-
Stage 1	-	-	-	-
Stage 2	-	-	820	-

Approach	WB	NB
HCM Control Delay, s	0	9.7
HCM LOS		A

Minor Lane/Major Mvmt	NBLn1	NBLn2	WBT
Capacity (veh/h)	771	-	-
HCM Lane V/C Ratio	0.008	-	-
HCM Control Delay (s)	9.7	0	-
HCM Lane LOS	A	A	-
HCM 95th %tile Q(veh)	0	-	-

Intersection	
Int Delay, s/veh	8.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	17	100	82	11	0	173	0	107	0	0	0
Future Vol, veh/h	0	17	100	82	11	0	173	0	107	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	89	89	89	89	92	89	92	89	92	92	92
Heavy Vehicles, %	2	0	0	0	0	2	4	2	2	2	2	2
Mvmt Flow	0	19	112	92	12	0	194	0	120	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	509	1	515	449	-	1	0	0	-	-	0
Stage 1	-	1	-	448	448	-	-	-	-	-	-	-
Stage 2	-	508	-	67	1	-	-	-	-	-	-	-
Critical Hdwy	-	6.5	6.2	7.1	6.5	-	4.14	-	-	-	-	-
Critical Hdwy Stg 1	-	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	-	4	3.3	3.5	4	-	2.236	-	-	-	-	-
Pot Cap-1 Maneuver	0	470	1090	474	508	0	1609	-	-	0	-	0
Stage 1	0	899	-	594	576	0	-	-	-	0	-	0
Stage 2	0	542	-	948	899	0	-	-	-	0	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	-	408	1090	369	441	-	1609	-	-	-	-	-
Mov Cap-2 Maneuver	-	408	-	369	441	-	-	-	-	-	-	-
Stage 1	-	899	-	516	501	-	-	-	-	-	-	-
Stage 2	-	471	-	832	899	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.8	18.2	4.7	0
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBT
Capacity (veh/h)	1609	-	-	877	376	-
HCM Lane V/C Ratio	0.121	-	-	0.15	0.278	-
HCM Control Delay (s)	7.5	0	-	9.8	18.2	-
HCM Lane LOS	A	A	-	A	C	-
HCM 95th %tile Q(veh)	0.4	-	-	0.5	1.1	-

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	112	2	120	79	31	5	39	159	34	60	8
Future Vol, veh/h	11	112	2	120	79	31	5	39	159	34	60	8
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	1	0	1	1	0	0	3	2	3	0	0
Mvmt Flow	12	123	2	132	87	34	5	43	175	37	66	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	9.3	10.6	9.4	9.3
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	2%	9%	52%	33%
Vol Thru, %	19%	90%	34%	59%
Vol Right, %	78%	2%	13%	8%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	203	125	230	102
LT Vol	5	11	120	34
Through Vol	39	112	79	60
RT Vol	159	2	31	8
Lane Flow Rate	223	137	253	112
Geometry Grp	1	1	1	1
Degree of Util (X)	0.282	0.192	0.344	0.162
Departure Headway (Hd)	4.544	5.026	4.905	5.207
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	783	706	725	681
Service Time	2.618	3.115	2.985	3.295
HCM Lane V/C Ratio	0.285	0.194	0.349	0.164
HCM Control Delay	9.4	9.3	10.6	9.3
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	1.2	0.7	1.5	0.6

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	2	239	95	31	299	1	101	0	17	1	0	1
Future Vol, veh/h	2	239	95	31	299	1	101	0	17	1	0	1
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	2	1	0	1	0	1	0	6	0	0	0
Mvmt Flow	2	254	101	33	318	1	107	0	18	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	319	0	0	356	0	0	695	695	309	706	745	319
Stage 1	-	-	-	-	-	-	310	310	-	385	385	-
Stage 2	-	-	-	-	-	-	385	385	-	321	360	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.11	6.5	6.26	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.509	4	3.354	3.5	4	3.3
Pot Cap-1 Maneuver	1252	-	-	1214	-	-	358	368	722	353	345	726
Stage 1	-	-	-	-	-	-	702	663	-	642	614	-
Stage 2	-	-	-	-	-	-	640	614	-	695	630	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1252	-	-	1213	-	-	348	355	719	334	333	726
Mov Cap-2 Maneuver	-	-	-	-	-	-	348	355	-	334	333	-
Stage 1	-	-	-	-	-	-	700	661	-	641	594	-
Stage 2	-	-	-	-	-	-	618	594	-	674	628	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.8	19.3	12.9
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	376	1252	-	-	1213	-	-	458
HCM Lane V/C Ratio	0.334	0.002	-	-	0.027	-	-	0.005
HCM Control Delay (s)	19.3	7.9	0	-	8.1	0	-	12.9
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.4	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	428	323	78	63	63
Future Vol, veh/h	8	428	323	78	63	63
Conflicting Peds, #/hr	6	0	0	6	3	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	1	3	1	2	5
Mvmt Flow	9	460	347	84	68	68

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	437	0	-	0	876	395
Stage 1	-	-	-	-	395	-
Stage 2	-	-	-	-	481	-
Critical Hdwy	4.1	-	-	-	6.42	6.25
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.2	-	-	-	3.518	3.345
Pot Cap-1 Maneuver	1134	-	-	-	319	648
Stage 1	-	-	-	-	681	-
Stage 2	-	-	-	-	622	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1128	-	-	-	313	644
Mov Cap-2 Maneuver	-	-	-	-	436	-
Stage 1	-	-	-	-	671	-
Stage 2	-	-	-	-	618	-

Approach	EB	WB	SB
HCM Control Delay, s	0.2	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1128	-	-	-	520
HCM Lane V/C Ratio	0.008	-	-	-	0.261
HCM Control Delay (s)	8.2	-	-	-	14.3
HCM Lane LOS	A	-	-	-	B
HCM 95th %tile Q(veh)	0	-	-	-	1

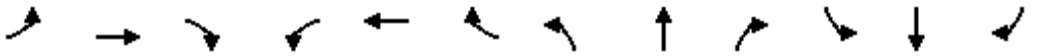
Intersection	
Int Delay, s/veh	3.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	41	168	256	31	168	371
Future Vol, veh/h	41	168	256	31	168	371
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	200	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	2	3	3	1	3
Mvmt Flow	43	177	269	33	177	391

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1031	286	0	0	302	0
Stage 1	286	-	-	-	-	-
Stage 2	745	-	-	-	-	-
Critical Hdwy	6.45	6.22	-	-	4.11	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	255	753	-	-	1265	-
Stage 1	756	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	219	753	-	-	1265	-
Mov Cap-2 Maneuver	323	-	-	-	-	-
Stage 1	756	-	-	-	-	-
Stage 2	399	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	2.6
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	323	753	1265	-
HCM Lane V/C Ratio	-	-	0.134	0.235	0.14	-
HCM Control Delay (s)	-	-	17.9	11.2	8.3	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.9	0.5	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	143	95	120	133	35	57	203	67	33	228	28
Future Volume (veh/h)	23	143	95	120	133	35	57	203	67	33	228	28
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
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	1750	1736	1682	1736	1723	1709	1682	1723	1750	1750	1709	1654
Adj Flow Rate, veh/h	26	162	78	136	151	29	65	231	62	38	259	32
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	1	5	1	2	3	5	2	0	0	3	7
Cap, veh/h	484	347	167	426	442	85	429	412	111	429	444	55
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.05	0.32	0.30	0.04	0.30	0.28
Sat Flow, veh/h	1222	1098	529	1148	1397	268	1602	1301	349	1667	1487	184
Grp Volume(v), veh/h	26	0	240	136	0	180	65	0	293	38	0	291
Grp Sat Flow(s),veh/h/ln	1222	0	1627	1148	0	1665	1602	0	1650	1667	0	1671
Q Serve(g_s), s	0.6	0.0	4.3	3.9	0.0	3.0	1.0	0.0	5.3	0.6	0.0	5.3
Cycle Q Clear(g_c), s	3.6	0.0	4.3	8.2	0.0	3.0	1.0	0.0	5.3	0.6	0.0	5.3
Prop In Lane	1.00		0.32	1.00		0.16	1.00		0.21	1.00		0.11
Lane Grp Cap(c), veh/h	484	0	514	426	0	526	429	0	522	429	0	499
V/C Ratio(X)	0.05	0.00	0.47	0.32	0.00	0.34	0.15	0.00	0.56	0.09	0.00	0.58
Avail Cap(c_a), veh/h	1113	0	1351	1017	0	1383	1010	0	1621	1062	0	1642
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.8	0.0	9.9	13.2	0.0	9.5	8.7	0.0	10.3	8.9	0.0	10.8
Incr Delay (d2), s/veh	0.0	0.0	0.5	0.3	0.0	0.3	0.1	0.0	1.4	0.1	0.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.2	0.8	0.0	0.8	0.2	0.0	1.5	0.2	0.0	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	10.9	0.0	10.4	13.5	0.0	9.8	8.8	0.0	11.7	8.9	0.0	12.4
LnGrp LOS	B	A	B	B	A	A	A	A	B	A	A	B
Approach Vol, veh/h		266			316			358			329	
Approach Delay, s/veh		10.4			11.4			11.2			12.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.9	14.8		15.4	5.3	15.4		15.4				
Change Period (Y+Rc), s	4.0	4.5		4.0	4.0	4.5		4.0				
Max Green Setting (Gmax), s	15.0	35.0		30.0	15.0	35.0		30.0				
Max Q Clear Time (g_c+I1), s	3.0	7.3		10.2	2.6	7.3		6.3				
Green Ext Time (p_c), s	0.1	2.9		1.2	0.0	2.6		1.2				

Intersection Summary			
HCM 6th Ctrl Delay		11.3	
HCM 6th LOS		B	

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	4	2	14	31	2	32	5	52	10	23	77	3
Future Vol, veh/h	4	2	14	31	2	32	5	52	10	23	77	3
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	1	1	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	6	0	3	0	8	10	9	5	0
Mvmt Flow	5	2	16	36	2	37	6	60	12	27	90	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	247	234	95	234	229	67	96	0	0	73	0	0
Stage 1	149	149	-	79	79	-	-	-	-	-	-	-
Stage 2	98	85	-	155	150	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.16	6.5	6.23	4.1	-	-	4.19	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.16	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.16	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.554	4	3.327	2.2	-	-	2.281	-	-
Pot Cap-1 Maneuver	711	670	967	712	674	994	1510	-	-	1483	-	-
Stage 1	858	778	-	920	833	-	-	-	-	-	-	-
Stage 2	913	828	-	838	777	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	668	652	964	685	656	993	1506	-	-	1482	-	-
Mov Cap-2 Maneuver	668	652	-	685	656	-	-	-	-	-	-	-
Stage 1	852	761	-	915	829	-	-	-	-	-	-	-
Stage 2	873	824	-	806	760	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.4	9.9	0.6	1.7
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1506	-	-	848	807	1482	-	-
HCM Lane V/C Ratio	0.004	-	-	0.027	0.094	0.018	-	-
HCM Control Delay (s)	7.4	0	-	9.4	9.9	7.5	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.3	0.1	-	-

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	101	15	20	111	26	6	21	4	35	50	37
Future Vol, veh/h	20	101	15	20	111	26	6	21	4	35	50	37
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	5	2	0	5	4	6	0	5	0	6	0	3
Mvmt Flow	22	109	16	22	119	28	6	23	4	38	54	40
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	8.7	8	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	19%	15%	13%	29%
Vol Thru, %	68%	74%	71%	41%
Vol Right, %	13%	11%	17%	30%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	31	136	157	122
LT Vol	6	20	20	35
Through Vol	21	101	111	50
RT Vol	4	15	26	37
Lane Flow Rate	33	146	169	131
Geometry Grp	1	1	1	1
Degree of Util (X)	0.044	0.184	0.21	0.169
Departure Headway (Hd)	4.746	4.531	4.471	4.639
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	753	793	804	773
Service Time	2.783	2.557	2.495	2.669
HCM Lane V/C Ratio	0.044	0.184	0.21	0.169
HCM Control Delay	8	8.6	8.7	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.1	0.7	0.8	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	101	80	33	58	100	12	267	28	122	12	33	125
Future Volume (veh/h)	101	80	33	58	100	12	267	28	122	12	33	125
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		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1627	1750	1750	1695	1750	1736	1695	1723	1750	1750	1723
Adj Flow Rate, veh/h	115	91	28	66	114	11	303	32	70	14	38	70
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	11	9	0	0	4	0	1	4	2	0	0	2
Cap, veh/h	751	956	1138	827	869	84	377	114	250	207	49	89
Arrive On Green	0.05	0.59	0.59	0.03	0.57	0.57	0.18	0.25	0.25	0.02	0.09	0.09
Sat Flow, veh/h	1524	1627	1481	1667	1522	147	1654	465	1018	1667	549	1012
Grp Volume(v), veh/h	115	91	28	66	0	125	303	0	102	14	0	108
Grp Sat Flow(s),veh/h/ln	1524	1627	1481	1667	0	1669	1654	0	1483	1667	0	1561
Q Serve(g_s), s	4.4	3.4	0.6	2.3	0.0	4.9	22.5	0.0	7.8	1.1	0.0	9.5
Cycle Q Clear(g_c), s	4.4	3.4	0.6	2.3	0.0	4.9	22.5	0.0	7.8	1.1	0.0	9.5
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.69	1.00		0.65
Lane Grp Cap(c), veh/h	751	956	1138	827	0	953	377	0	364	207	0	138
V/C Ratio(X)	0.15	0.10	0.02	0.08	0.00	0.13	0.80	0.00	0.28	0.07	0.00	0.78
Avail Cap(c_a), veh/h	790	956	1138	898	0	953	551	0	657	286	0	357
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)	0.79	0.79	0.79	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.1	12.6	3.8	11.7	0.0	13.9	44.6	0.0	42.8	55.6	0.0	62.5
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.0	0.0	0.3	5.4	0.0	0.4	0.1	0.0	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.3	0.2	0.9	0.0	2.0	9.8	0.0	2.9	0.5	0.0	4.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.2	12.8	3.9	11.7	0.0	14.2	50.1	0.0	43.2	55.8	0.0	71.8
LnGrp LOS	B	B	A	B	A	B	D	A	D	E	A	E
Approach Vol, veh/h		234			191			405			122	
Approach Delay, s/veh		10.9			13.3			48.3			69.9	
Approach LOS		B			B			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	86.3	7.4	38.3	10.4	84.0	29.3	16.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	42.0	10.0	62.0	10.0	42.0	40.0	32.0
Max Q Clear Time (g_c+I1), s	4.3	5.4	3.1	9.8	6.4	6.9	24.5	11.5
Green Ext Time (p_c), s	0.1	0.6	0.0	0.7	0.1	0.8	0.8	0.5

Intersection Summary	
HCM 6th Ctrl Delay	34.9
HCM 6th LOS	C

Notes

User approved changes to right turn type.

Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	76	1	9	67	1	16
Future Vol, veh/h	76	1	9	67	1	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	16	0	11	8	0	0
Mvmt Flow	85	1	10	75	1	18

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	86	0	181	86
Stage 1	-	-	-	-	86	-
Stage 2	-	-	-	-	95	-
Critical Hdwy	-	-	4.21	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.299	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1455	-	813	978
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	934	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1455	-	807	978
Mov Cap-2 Maneuver	-	-	-	-	807	-
Stage 1	-	-	-	-	942	-
Stage 2	-	-	-	-	927	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	966	-	-	1455	-
HCM Lane V/C Ratio	0.02	-	-	0.007	-
HCM Control Delay (s)	8.8	-	-	7.5	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	4.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	49	76	16	97	69
Future Vol, veh/h	7	49	76	16	97	69
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	5	0	4	6
Mvmt Flow	8	56	87	18	111	79

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	397	96	0	0	105	0
Stage 1	96	-	-	-	-	-
Stage 2	301	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	612	966	-	-	1474	-
Stage 1	933	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	564	966	-	-	1474	-
Mov Cap-2 Maneuver	564	-	-	-	-	-
Stage 1	933	-	-	-	-	-
Stage 2	695	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.4	0	4.5
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	887	1474	-
HCM Lane V/C Ratio	-	-	0.073	0.076	-
HCM Control Delay (s)	-	-	9.4	7.6	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.2	-

Intersection	
Intersection Delay, s/veh	9.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	0	18	0	0	0	3	102	1	0	231	42
Future Vol, veh/h	20	0	18	0	0	0	3	102	1	0	231	42
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	10	0	0	0	0	0	33	0	0	0	2	7
Mvmt Flow	23	0	20	0	0	0	3	116	1	0	263	48
Number of Lanes	0	1	1	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	8.5	0	8.5	10.3
HCM LOS	A	-	A	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	0%	0%	0%
Vol Thru, %	0%	99%	0%	0%	100%	100%	85%
Vol Right, %	0%	1%	0%	100%	0%	0%	15%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	103	20	18	0	0	273
LT Vol	3	0	20	0	0	0	0
Through Vol	0	102	0	0	0	0	231
RT Vol	0	1	0	18	0	0	42
Lane Flow Rate	3	117	23	20	0	0	310
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.006	0.158	0.039	0.027	0	0	0.393
Departure Headway (Hd)	5.918	4.845	6.202	4.823	5.609	4.634	4.56
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	608	743	580	746	0	0	779
Service Time	3.624	2.552	3.91	2.531	3.621	2.423	2.349
HCM Lane V/C Ratio	0.005	0.157	0.04	0.027	0	0	0.398
HCM Control Delay	8.7	8.5	9.2	7.7	8.6	7.4	10.3
HCM Lane LOS	A	A	A	A	N	N	B
HCM 95th-tile Q	0	0.6	0.1	0.1	0	0	1.9

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	25	103	7	44	111	24	6	57	38	81	135	33
Future Vol, veh/h	25	103	7	44	111	24	6	57	38	81	135	33
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	2	0	2	4	4	0	2	3	2	1	3
Mvmt Flow	27	113	8	48	122	26	7	63	42	89	148	36
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	9.6	10.1	9.3	10.1
HCM LOS	A	B	A	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	19%	25%	100%	0%
Vol Thru, %	0%	60%	76%	62%	0%	80%
Vol Right, %	0%	40%	5%	13%	0%	20%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	95	135	179	81	168
LT Vol	6	0	25	44	81	0
Through Vol	0	57	103	111	0	135
RT Vol	0	38	7	24	0	33
Lane Flow Rate	7	104	148	197	89	185
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.012	0.161	0.212	0.277	0.149	0.275
Departure Headway (Hd)	6.313	5.557	5.149	5.078	6.031	5.37
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	570	649	688	700	589	661
Service Time	4.013	3.257	3.244	3.166	3.826	3.164
HCM Lane V/C Ratio	0.012	0.16	0.215	0.281	0.151	0.28
HCM Control Delay	9.1	9.3	9.6	10.1	9.9	10.2
HCM Lane LOS	A	A	A	B	A	B
HCM 95th-tile Q	0	0.6	0.8	1.1	0.5	1.1

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	23	150	49	16	117	14	19	27	13	11	60	43
Future Vol, veh/h	23	150	49	16	117	14	19	27	13	11	60	43
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	1	0	0	4	0	5	4	0	9	0	5
Mvmt Flow	25	165	54	18	129	15	21	30	14	12	66	47
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	9.4	8.9	8.6	8.9
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	10%	11%	10%
Vol Thru, %	46%	68%	80%	53%
Vol Right, %	22%	22%	10%	38%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	59	222	147	114
LT Vol	19	23	16	11
Through Vol	27	150	117	60
RT Vol	13	49	14	43
Lane Flow Rate	65	244	162	125
Geometry Grp	1	1	1	1
Degree of Util (X)	0.09	0.301	0.207	0.169
Departure Headway (Hd)	5.005	4.446	4.609	4.85
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	713	807	777	737
Service Time	3.058	2.483	2.651	2.898
HCM Lane V/C Ratio	0.091	0.302	0.208	0.17
HCM Control Delay	8.6	9.4	8.9	8.9
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.3	1.3	0.8	0.6

Intersection	
Intersection Delay, s/veh	7.8
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	72	42	35	71	54
Future Vol, veh/h	24	72	42	35	71	54
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	0	5	6	3	0
Mvmt Flow	28	83	48	40	82	62
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	7.6	8	7.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	55%	25%	0%
Vol Thru, %	45%	0%	57%
Vol Right, %	0%	75%	43%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	77	96	125
LT Vol	42	24	0
Through Vol	35	0	71
RT Vol	0	72	54
Lane Flow Rate	89	110	144
Geometry Grp	1	1	1
Degree of Util (X)	0.108	0.123	0.158
Departure Headway (Hd)	4.4	4.006	3.954
Convergence, Y/N	Yes	Yes	Yes
Cap	805	900	895
Service Time	2.477	2.006	2.029
HCM Lane V/C Ratio	0.111	0.122	0.161
HCM Control Delay	8	7.6	7.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.4	0.4	0.6

Intersection	
Intersection Delay, s/veh	8.4
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	77	70	6	3	83	12	0	1	2	25	3	156
Future Vol, veh/h	77	70	6	3	83	12	0	1	2	25	3	156
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, %	1	0	0	0	1	0	0	0	0	0	0	1
Mvmt Flow	80	73	6	3	86	13	0	1	2	26	3	163
Number of Lanes	0	1	0	0	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	8.7	8.1	7.5	8.3
HCM LOS	A	A	A	A

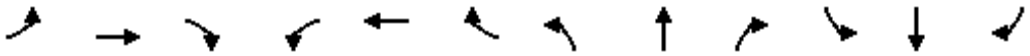
Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	50%	3%	100%	0%
Vol Thru, %	33%	46%	85%	0%	2%
Vol Right, %	67%	4%	12%	0%	98%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	3	153	98	25	159
LT Vol	0	77	3	25	0
Through Vol	1	70	83	0	3
RT Vol	2	6	12	0	156
Lane Flow Rate	3	159	102	26	166
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.004	0.202	0.127	0.041	0.203
Departure Headway (Hd)	4.43	4.556	4.463	5.614	4.421
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	807	789	804	639	813
Service Time	2.463	2.578	2.486	3.336	2.143
HCM Lane V/C Ratio	0.004	0.202	0.127	0.041	0.204
HCM Control Delay	7.5	8.7	8.1	8.6	8.3
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0	0.8	0.4	0.1	0.8

SECTION 2: FUTURE (2043) CONDITIONS SYNCHRO REPORTS

P.M. PEAK HOUR

HCM 6th Signalized Intersection Summary
1: OR 99E & SW Berg Pkwy

03/14/2024



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	60	40	230	40	110	35	1100	175	120	1080	145
Future Volume (veh/h)	130	60	40	230	40	110	35	1100	175	120	1080	145
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		0.99	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	1736	1709	1750	1695	1750	1695	1695	1682	1736	1709	1709	1750
Adj Flow Rate, veh/h	141	65	21	250	43	60	38	1196	0	130	1174	151
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, %	1	3	0	4	0	4	4	5	1	3	3	0
Cap, veh/h	318	315	102	330	167	233	156	1787		153	1581	203
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.10	0.56	0.00	0.09	0.55	0.54
Sat Flow, veh/h	1300	1237	400	1289	655	915	1615	3195	1471	1628	2895	371
Grp Volume(v), veh/h	141	0	86	250	0	103	38	1196	0	130	657	668
Grp Sat Flow(s),veh/h/ln	1300	0	1637	1289	0	1570	1615	1598	1471	1628	1624	1642
Q Serve(g_s), s	12.6	0.0	5.4	24.6	0.0	6.8	2.8	34.3	0.0	10.2	40.1	40.5
Cycle Q Clear(g_c), s	19.4	0.0	5.4	30.0	0.0	6.8	2.8	34.3	0.0	10.2	40.1	40.5
Prop In Lane	1.00		0.24	1.00		0.58	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	318	0	416	330	0	400	156	1787		153	887	897
V/C Ratio(X)	0.44	0.00	0.21	0.76	0.00	0.26	0.24	0.67		0.85	0.74	0.74
Avail Cap(c_a), veh/h	397	0	516	409	0	495	156	1787		200	887	897
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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	0.0	38.1	49.9	0.0	38.7	54.4	20.2	0.0	58.0	22.5	22.6
Incr Delay (d2), s/veh	0.7	0.0	0.2	5.6	0.0	0.3	0.5	2.0	0.0	20.0	5.5	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	2.2	8.5	0.0	2.7	1.2	12.3	0.0	5.0	16.0	16.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.1	0.0	38.3	55.6	0.0	38.9	54.9	22.2	0.0	78.0	28.0	28.2
LnGrp LOS	D	A	D	E	A	D	D	C		E	C	C
Approach Vol, veh/h		227			353			1234			1455	
Approach Delay, s/veh		43.8			50.7			23.2			32.6	
Approach LOS		D			D			C			C	

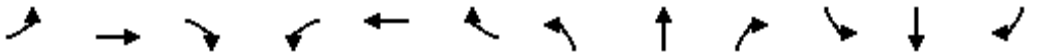
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.9	75.0		37.1	16.2	76.7		37.1				
Change Period (Y+Rc), s	5.4	* 4.5		4.0	4.0	* 5.4		4.0				
Max Green Setting (Gmax), s	6.0	* 71		41.0	16.0	* 60		41.0				
Max Q Clear Time (g_c+I1), s	4.8	42.5		32.0	12.2	36.3		21.4				
Green Ext Time (p_c), s	0.0	23.5		1.1	0.1	15.0		0.6				

Intersection Summary		
HCM 6th Ctrl Delay	31.8	
HCM 6th LOS	C	

Notes

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

Unsignalized Delay for [NBR] 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)	145	90	155	60	105	135	130	1285	40	105	1215	120
Future Volume (veh/h)	145	90	155	60	105	135	130	1285	40	105	1215	120
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	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	1736	1750	1736	1750	1723	1709	1750	1695	1750	1750	1695	1736
Adj Flow Rate, veh/h	158	98	117	65	114	107	141	1397	42	114	1321	123
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, %	1	0	1	0	2	3	0	4	0	0	4	1
Cap, veh/h	178	156	186	81	128	120	339	1670	50	184	1536	142
Arrive On Green	0.11	0.22	0.22	0.05	0.16	0.16	0.06	0.52	0.52	0.09	1.00	1.00
Sat Flow, veh/h	1654	720	859	1667	810	760	1667	3193	96	1667	2980	276
Grp Volume(v), veh/h	158	0	215	65	0	221	141	704	735	114	712	732
Grp Sat Flow(s),veh/h/ln	1654	0	1579	1667	0	1570	1667	1611	1678	1667	1611	1645
Q Serve(g_s), s	12.3	0.0	16.0	5.0	0.0	17.9	5.2	48.1	48.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.3	0.0	16.0	5.0	0.0	17.9	5.2	48.1	48.3	0.0	0.0	0.0
Prop In Lane	1.00		0.54	1.00		0.48	1.00		0.06	1.00		0.17
Lane Grp Cap(c), veh/h	178	0	342	81	0	248	339	842	878	184	830	848
V/C Ratio(X)	0.89	0.00	0.63	0.80	0.00	0.89	0.42	0.84	0.84	0.62	0.86	0.86
Avail Cap(c_a), veh/h	178	0	377	103	0	302	350	842	878	201	830	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.64	0.64	0.64
Uniform Delay (d), s/veh	57.2	0.0	46.2	61.2	0.0	53.7	13.3	26.3	26.3	52.1	0.0	0.0
Incr Delay (d2), s/veh	36.6	0.0	1.9	22.8	0.0	21.1	0.3	9.6	9.4	2.1	7.5	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	0.0	6.6	2.7	0.0	8.6	2.0	19.9	20.7	3.5	1.7	1.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	93.8	0.0	48.0	84.0	0.0	74.8	13.6	35.9	35.7	54.2	7.5	7.6
LnGrp LOS	F	A	D	F	A	E	B	D	D	D	A	A
Approach Vol, veh/h		373			286			1580			1558	
Approach Delay, s/veh		67.4			76.9			33.8			11.0	
Approach LOS		E			E			C			B	

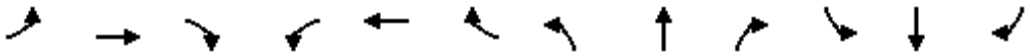
Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	71.0	18.0	24.5	10.2	72.0	10.3	32.2
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.5	* 4.5	4.0	4.0
Max Green Setting (Gmax), s	8.0	66.5	14.0	25.0	7.0	* 68	8.0	31.0
Max Q Clear Time (g_c+I1), s	7.2	2.0	14.3	19.9	2.0	50.3	7.0	18.0
Green Ext Time (p_c), s	0.0	8.8	0.0	0.2	0.0	6.6	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	31.0
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.



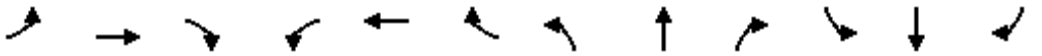
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	40	90	45	25	70	75	1445	45	25	1305	130
Future Volume (veh/h)	100	40	90	45	25	70	75	1445	45	25	1305	130
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		1.00	1.00		0.98
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	1709	1750	1750	1750	1750	1750	1750	1695	1627	1614	1695	1723
Adj Flow Rate, veh/h	106	43	48	48	27	37	80	1537	47	27	1388	135
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
Percent Heavy Veh, %	3	0	0	0	0	0	0	4	9	10	4	2
Cap, veh/h	127	70	78	112	54	74	538	1743	53	481	1594	154
Arrive On Green	0.08	0.09	0.09	0.07	0.08	0.08	0.36	1.00	1.00	0.34	1.00	1.00
Sat Flow, veh/h	1628	748	835	1667	653	895	1667	3191	97	1537	2960	286
Grp Volume(v), veh/h	106	0	91	48	0	64	80	774	810	27	751	772
Grp Sat Flow(s),veh/h/ln	1628	0	1584	1667	0	1548	1667	1611	1678	1537	1611	1636
Q Serve(g_s), s	8.4	0.0	7.2	3.6	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.4	0.0	7.2	3.6	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.53	1.00		0.58	1.00		0.06	1.00		0.17
Lane Grp Cap(c), veh/h	127	0	148	112	0	128	538	880	916	481	867	881
V/C Ratio(X)	0.84	0.00	0.61	0.43	0.00	0.50	0.15	0.88	0.88	0.06	0.87	0.88
Avail Cap(c_a), veh/h	138	0	365	115	0	333	538	880	916	481	867	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	0.45	0.45	0.45	0.37	0.37	0.37
Uniform Delay (d), s/veh	59.1	0.0	56.7	58.3	0.0	57.1	5.1	0.0	0.0	4.6	0.0	0.0
Incr Delay (d2), s/veh	29.7	0.0	1.5	1.0	0.0	1.1	0.0	6.1	6.0	0.0	4.6	4.9
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	4.5	0.0	3.0	1.6	0.0	2.1	0.6	1.5	1.5	0.2	1.1	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	88.8	0.0	58.2	59.2	0.0	58.2	5.2	6.1	6.0	4.6	4.6	4.9
LnGrp LOS	F	A	E	E	A	E	A	A	A	A	A	A
Approach Vol, veh/h		197			112			1664			1550	
Approach Delay, s/veh		74.7			58.6			6.0			4.8	
Approach LOS		E			E			A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.1	74.0	14.1	14.7	26.1	75.0	12.7	16.2
Change Period (Y+Rc), s	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	5.0	69.5	11.0	28.0	4.0	70.5	9.0	30.0
Max Q Clear Time (g_c+I1), s	2.0	2.0	10.4	7.1	2.0	2.0	5.6	9.2
Green Ext Time (p_c), s	0.0	9.8	0.0	0.1	0.0	10.5	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	11.0
HCM 6th LOS	B

Notes

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



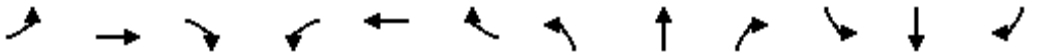
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	155	110	155	180	210	100	1255	260	185	1195	175
Future Volume (veh/h)	205	155	110	155	180	210	100	1255	260	185	1195	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.98	1.00		0.98
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	1709	1723	1695	1736	1709	1736	1723	1709	1682	1736	1709	1723
Adj Flow Rate, veh/h	216	163	94	163	189	187	105	1321	259	195	1258	175
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	2	4	1	3	1	2	3	5	1	3	2
Cap, veh/h	188	184	106	233	161	159	167	1310	253	170	1450	200
Arrive On Green	0.12	0.18	0.18	0.14	0.21	0.21	0.04	0.48	0.48	0.07	0.51	0.50
Sat Flow, veh/h	1628	1009	582	1654	773	765	1641	2703	522	1654	2856	395
Grp Volume(v), veh/h	216	0	257	163	0	376	105	786	794	195	712	721
Grp Sat Flow(s),veh/h/ln	1628	0	1590	1654	0	1537	1641	1624	1601	1654	1624	1627
Q Serve(g_s), s	15.0	0.0	20.5	12.2	0.0	27.0	0.3	62.8	63.0	9.0	50.0	51.0
Cycle Q Clear(g_c), s	15.0	0.0	20.5	12.2	0.0	27.0	0.3	62.8	63.0	9.0	50.0	51.0
Prop In Lane	1.00		0.37	1.00		0.50	1.00		0.33	1.00		0.24
Lane Grp Cap(c), veh/h	188	0	290	233	0	319	167	787	776	170	824	826
V/C Ratio(X)	1.15	0.00	0.89	0.70	0.00	1.18	0.63	1.00	1.02	1.15	0.86	0.87
Avail Cap(c_a), veh/h	188	0	318	233	0	319	173	787	776	170	824	826
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	0.63	0.63	0.63	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.5	0.0	51.9	53.2	0.0	51.5	56.7	33.5	33.6	40.0	28.1	28.4
Incr Delay (d2), s/veh	111.9	0.0	22.0	7.6	0.0	107.6	3.2	25.1	31.8	114.4	11.6	12.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	0.0	9.9	5.6	0.0	19.9	3.5	29.1	30.2	7.9	21.2	21.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	169.4	0.0	73.9	60.8	0.0	159.1	59.9	58.6	65.4	154.4	39.7	40.7
LnGrp LOS	F	A	E	E	A	F	E	E	F	F	D	D
Approach Vol, veh/h		473			539			1685			1628	
Approach Delay, s/veh		117.5			129.4			61.8			53.8	
Approach LOS		F			F			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	70.0	19.0	31.0	13.0	67.0	22.3	27.7
Change Period (Y+Rc), s	4.5	* 4.5	4.0	4.0	4.0	4.5	4.0	4.0
Max Green Setting (Gmax), s	6.0	* 66	15.0	27.0	9.0	62.5	16.0	26.0
Max Q Clear Time (g_c+I1), s	2.3	53.0	17.0	29.0	11.0	65.0	14.2	22.5
Green Ext Time (p_c), s	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	73.3
HCM 6th LOS	E

Notes

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



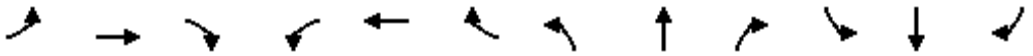
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	1460	65	95	1570	280	80	115	85	95	80	70
Future Volume (veh/h)	100	1460	65	95	1570	280	80	115	85	95	80	70
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	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	1736	1695	1641	1709	1695	1695	1709	1709	1668	1750	1750	1709
Adj Flow Rate, veh/h	109	1587	69	103	1707	292	87	125	0	103	87	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, %	1	4	8	3	4	4	3	3	6	0	0	3
Cap, veh/h	119	1957	85	212	1759	291	74	77		162	116	333
Arrive On Green	0.04	0.62	0.62	0.05	0.64	0.63	0.23	0.23	0.00	0.23	0.23	0.23
Sat Flow, veh/h	1654	3141	136	1628	2755	456	153	336	1414	519	504	1445
Grp Volume(v), veh/h	109	810	846	103	974	1025	212	0	0	190	0	18
Grp Sat Flow(s),veh/h/ln	1654	1611	1667	1628	1611	1600	488	0	1414	1023	0	1445
Q Serve(g_s), s	4.2	49.6	50.5	0.0	71.9	83.0	7.4	0.0	0.0	0.0	0.0	1.3
Cycle Q Clear(g_c), s	4.2	49.6	50.5	0.0	71.9	83.0	30.0	0.0	0.0	22.6	0.0	1.3
Prop In Lane	1.00		0.08	1.00		0.28	0.41		1.00	0.54		1.00
Lane Grp Cap(c), veh/h	119	1004	1039	212	1028	1021	152	0		279	0	333
V/C Ratio(X)	0.92	0.81	0.81	0.49	0.95	1.00	1.40	0.00		0.68	0.00	0.05
Avail Cap(c_a), veh/h	119	1004	1039	212	1028	1021	152	0		279	0	333
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	61.0	18.6	18.8	48.1	21.5	23.6	57.8	0.0	0.0	46.8	0.0	38.9
Incr Delay (d2), s/veh	56.5	7.0	7.0	1.1	17.9	29.0	213.5	0.0	0.0	8.6	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	5.3	19.0	20.0	3.3	29.6	36.4	14.1	0.0	0.0	6.5	0.0	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	117.5	25.5	25.8	49.2	39.4	52.6	271.3	0.0	0.0	55.4	0.0	39.1
LnGrp LOS	F	C	C	D	D	F	F	A		E	A	D
Approach Vol, veh/h		1765			2102			212			208	
Approach Delay, s/veh		31.3			46.3			271.3			53.9	
Approach LOS		C			D			F			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	87.0		34.0	11.0	85.0		34.0				
Change Period (Y+Rc), s	4.0	4.5		4.0	4.0	4.5		4.0				
Max Green Setting (Gmax), s	5.0	82.5		30.0	7.0	80.5		30.0				
Max Q Clear Time (g_c+I1), s	6.2	85.0		32.0	2.0	52.5		24.6				
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	23.0		0.8				

Intersection Summary												
HCM 6th Ctrl Delay			51.6									
HCM 6th LOS			D									

Notes

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



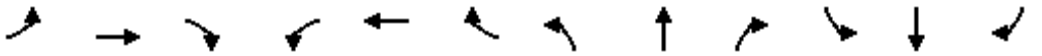
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	90	95	375	105	125	105	1160	250	180	1495	50
Future Volume (veh/h)	10	90	95	375	105	125	105	1160	250	180	1495	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.97
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	1750	1723	1750	1723	1750	1750	1750	1695	1682	1709	1709	1695
Adj Flow Rate, veh/h	11	95	72	395	111	33	111	1221	111	189	1574	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	0	2	0	0	0	4	5	3	3	4
Cap, veh/h	141	77	58	479	263	222	268	1671	737	200	1529	49
Arrive On Green	0.08	0.08	0.08	0.15	0.15	0.15	0.16	0.52	0.52	0.25	0.95	0.93
Sat Flow, veh/h	1667	906	687	3183	1750	1477	1667	3221	1420	1628	3207	104
Grp Volume(v), veh/h	11	0	167	395	111	33	111	1221	111	189	795	830
Grp Sat Flow(s),veh/h/ln	1667	0	1593	1591	1750	1477	1667	1611	1420	1628	1624	1687
Q Serve(g_s), s	0.8	0.0	11.0	15.6	7.5	2.5	7.8	38.2	5.3	14.8	62.0	62.0
Cycle Q Clear(g_c), s	0.8	0.0	11.0	15.6	7.5	2.5	7.8	38.2	5.3	14.8	62.0	62.0
Prop In Lane	1.00		0.43	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	141	0	135	479	263	222	268	1671	737	200	774	805
V/C Ratio(X)	0.08	0.00	1.24	0.82	0.42	0.15	0.41	0.73	0.15	0.94	1.03	1.03
Avail Cap(c_a), veh/h	141	0	135	808	444	375	268	1671	737	200	774	805
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00
Upstream Filter(I)	1.00	0.00	1.00	0.80	0.80	0.80	1.00	1.00	1.00	0.68	0.68	0.68
Uniform Delay (d), s/veh	54.8	0.0	59.5	53.6	50.1	48.0	49.0	24.2	16.3	48.6	3.0	3.1
Incr Delay (d2), s/veh	0.1	0.0	155.3	1.8	0.5	0.1	0.6	2.9	0.4	37.3	33.5	34.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	10.3	6.4	3.4	1.0	3.3	14.7	1.8	7.1	8.3	8.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.0	0.0	214.8	55.4	50.6	48.1	49.6	27.1	16.8	85.8	36.5	37.9
LnGrp LOS	D	A	F	E	D	D	D	C	B	F	F	F
Approach Vol, veh/h		178			539			1443			1814	
Approach Delay, s/veh		205.0			54.0			28.0			42.3	
Approach LOS		F			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	25.4	66.0		23.6	20.0	71.4		15.0				
Change Period (Y+Rc), s	* 4.5	* 5.4		4.0	4.0	4.5		4.0				
Max Green Setting (Gmax), s	* 8	* 61		33.0	16.0	53.5		11.0				
Max Q Clear Time (g_c+I1), s	9.8	64.0		17.6	16.8	40.2		13.0				
Green Ext Time (p_c), s	0.0	0.0		1.4	0.0	10.8		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		46.0	
HCM 6th LOS		D	

Notes

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



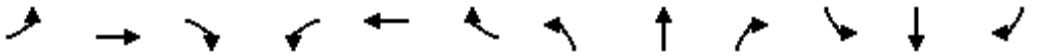
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	255	60	20	15	50	15	20	1260	30	15	1675	340
Future Volume (veh/h)	255	60	20	15	50	15	20	1260	30	15	1675	340
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.98
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	1736	1627	1409	1750	1695	1654	1750	1695	1750	1750	1682	1750
Adj Flow Rate, veh/h	266	62	11	16	52	8	21	1312	30	16	1745	239
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
Percent Heavy Veh, %	1	9	25	0	4	7	0	4	0	0	5	0
Cap, veh/h	346	270	48	147	73	11	51	2090	48	23	1986	902
Arrive On Green	0.16	0.20	0.20	0.01	0.05	0.05	0.03	0.65	0.64	0.01	0.62	0.62
Sat Flow, veh/h	1654	1345	239	1667	1430	220	1667	3219	74	1667	3195	1451
Grp Volume(v), veh/h	266	0	73	16	0	60	21	656	686	16	1745	239
Grp Sat Flow(s),veh/h/ln	1654	0	1584	1667	0	1650	1667	1611	1682	1667	1598	1451
Q Serve(g_s), s	19.2	0.0	5.0	1.2	0.0	4.7	1.6	31.3	31.4	1.2	59.2	3.4
Cycle Q Clear(g_c), s	19.2	0.0	5.0	1.2	0.0	4.7	1.6	31.3	31.4	1.2	59.2	3.4
Prop In Lane	1.00		0.15	1.00		0.13	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	346	0	318	147	0	84	51	1046	1092	23	1986	902
V/C Ratio(X)	0.77	0.00	0.23	0.11	0.00	0.71	0.41	0.63	0.63	0.71	0.88	0.27
Avail Cap(c_a), veh/h	346	0	318	182	0	102	51	1046	1092	64	1986	902
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	0.76	0.76	0.76	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	0.0	43.5	57.4	0.0	60.7	61.9	13.5	13.5	63.9	20.5	1.4
Incr Delay (d2), s/veh	9.2	0.0	0.1	0.1	0.0	12.0	1.5	2.2	2.1	14.2	5.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	0.0	2.0	0.5	0.0	2.2	0.7	10.7	11.2	0.6	21.0	2.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.4	0.0	43.7	57.6	0.0	72.7	63.4	15.7	15.6	78.1	26.4	2.1
LnGrp LOS	E	A	D	E	A	E	E	B	B	E	C	A
Approach Vol, veh/h		339			76			1363			2000	
Approach Delay, s/veh		52.9			69.5			16.4			23.9	
Approach LOS		D			E			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	84.8	25.2	10.6	5.8	88.4	5.8	30.1
Change Period (Y+Rc), s	* 5.4	* 5.4	4.0	4.0	4.0	* 5.4	4.0	4.0
Max Green Setting (Gmax), s	* 4	* 79	21.2	8.0	5.0	* 78	4.5	24.7
Max Q Clear Time (g_c+I1), s	3.6	61.2	21.2	6.7	3.2	33.4	3.2	7.0
Green Ext Time (p_c), s	0.0	9.5	0.0	0.0	0.0	6.5	0.0	0.1

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

Notes

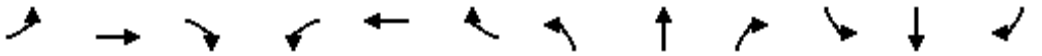
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	160	95	175	210	55	75	270	90	45	285	40
Future Volume (veh/h)	95	160	95	175	210	55	75	270	90	45	285	40
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
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	1750	1736	1682	1736	1723	1709	1682	1723	1750	1750	1709	1654
Adj Flow Rate, veh/h	108	182	78	199	239	48	85	307	87	51	324	38
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	1	5	1	2	3	5	2	0	0	3	7
Cap, veh/h	413	421	180	431	509	102	367	434	123	341	484	57
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.06	0.34	0.33	0.04	0.32	0.31
Sat Flow, veh/h	1109	1144	490	1127	1385	278	1602	1283	364	1667	1497	176
Grp Volume(v), veh/h	108	0	260	199	0	287	85	0	394	51	0	362
Grp Sat Flow(s),veh/h/ln	1109	0	1635	1127	0	1664	1602	0	1647	1667	0	1672
Q Serve(g_s), s	3.9	0.0	5.7	7.7	0.0	6.3	1.7	0.0	9.9	1.0	0.0	8.9
Cycle Q Clear(g_c), s	10.2	0.0	5.7	13.3	0.0	6.3	1.7	0.0	9.9	1.0	0.0	8.9
Prop In Lane	1.00		0.30	1.00		0.17	1.00		0.22	1.00		0.10
Lane Grp Cap(c), veh/h	413	0	601	431	0	611	367	0	558	341	0	540
V/C Ratio(X)	0.26	0.00	0.43	0.46	0.00	0.47	0.23	0.00	0.71	0.15	0.00	0.67
Avail Cap(c_a), veh/h	916	0	1343	943	0	1366	479	0	1300	412	0	1250
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.4	0.0	11.3	16.3	0.0	11.5	10.9	0.0	13.7	11.2	0.0	13.9
Incr Delay (d2), s/veh	0.2	0.0	0.4	0.6	0.0	0.4	0.2	0.0	2.5	0.1	0.0	2.2
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	0.9	0.0	1.8	1.8	0.0	2.0	0.5	0.0	3.2	0.3	0.0	3.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	0.0	11.7	16.9	0.0	11.9	11.1	0.0	16.2	11.3	0.0	16.1
LnGrp LOS	B	A	B	B	A	B	B	A	B	B	A	B
Approach Vol, veh/h		368			486			479			413	
Approach Delay, s/veh		12.8			13.9			15.3			15.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	19.3		21.5	6.0	20.1		21.5				
Change Period (Y+Rc), s	4.0	4.5		4.0	4.0	4.5		4.0				
Max Green Setting (Gmax), s	6.0	35.0		39.0	4.0	37.0		39.0				
Max Q Clear Time (g_c+I1), s	3.7	10.9		15.3	3.0	11.9		12.2				
Green Ext Time (p_c), s	0.0	3.6		2.1	0.0	3.6		1.7				

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	100	40	75	150	20	290	35	130	15	35	165
Future Volume (veh/h)	150	100	40	75	150	20	290	35	130	15	35	165
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		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1600	1627	1750	1750	1695	1750	1736	1695	1723	1750	1750	1723
Adj Flow Rate, veh/h	167	111	31	83	167	19	322	39	72	17	39	91
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	11	9	0	0	4	0	1	4	2	0	0	2
Cap, veh/h	674	910	1106	777	792	90	388	138	255	231	48	112
Arrive On Green	0.06	0.56	0.56	0.04	0.53	0.53	0.19	0.26	0.26	0.03	0.10	0.10
Sat Flow, veh/h	1524	1627	1480	1667	1494	170	1654	525	969	1667	465	1084
Grp Volume(v), veh/h	167	111	31	83	0	186	322	0	111	17	0	130
Grp Sat Flow(s),veh/h/ln	1524	1627	1480	1667	0	1664	1654	0	1494	1667	0	1549
Q Serve(g_s), s	6.7	4.5	0.8	3.2	0.0	8.3	23.5	0.0	8.3	1.3	0.0	11.5
Cycle Q Clear(g_c), s	6.7	4.5	0.8	3.2	0.0	8.3	23.5	0.0	8.3	1.3	0.0	11.5
Prop In Lane	1.00		1.00	1.00		0.10	1.00		0.65	1.00		0.70
Lane Grp Cap(c), veh/h	674	910	1106	777	0	882	388	0	393	231	0	159
V/C Ratio(X)	0.25	0.12	0.03	0.11	0.00	0.21	0.83	0.00	0.28	0.07	0.00	0.82
Avail Cap(c_a), veh/h	804	910	1106	813	0	882	515	0	640	280	0	343
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)	0.74	0.74	0.74	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	14.6	4.6	13.9	0.0	17.4	42.8	0.0	41.1	53.5	0.0	61.5
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.1	0.0	0.5	8.4	0.0	0.4	0.1	0.0	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	1.8	0.2	1.2	0.0	3.4	10.5	0.0	3.1	0.5	0.0	5.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.6	14.8	4.6	13.9	0.0	17.9	51.2	0.0	41.5	53.6	0.0	71.2
LnGrp LOS	B	B	A	B	A	B	D	A	D	D	A	E
Approach Vol, veh/h		309			269			433			147	
Approach Delay, s/veh		12.6			16.7			48.7			69.1	
Approach LOS		B			B			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	82.3	7.9	40.8	13.1	78.2	30.3	18.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	48.0	8.0	60.0	21.0	35.0	37.0	31.0
Max Q Clear Time (g_c+I1), s	5.2	6.5	3.3	10.3	8.7	10.3	25.5	13.5
Green Ext Time (p_c), s	0.0	0.8	0.0	0.7	0.4	1.1	0.8	0.6

Intersection Summary	
HCM 6th Ctrl Delay	34.2
HCM 6th LOS	C

Notes

User approved changes to right turn type.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	180	180	1130	165	165	1545
Future Volume (veh/h)	180	180	1130	165	165	1545
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	1709	1709	1709	1709	1709	1709
Adj Flow Rate, veh/h	196	49	1228	129	179	1679
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	222	198	2099	936	203	2604
Arrive On Green	0.14	0.14	0.65	0.65	0.12	0.80
Sat Flow, veh/h	1628	1448	3333	1448	1628	3333
Grp Volume(v), veh/h	196	49	1228	129	179	1679
Grp Sat Flow(s),veh/h/ln	1628	1448	1624	1448	1628	1624
Q Serve(g_s), s	15.4	3.9	28.0	4.5	14.1	27.6
Cycle Q Clear(g_c), s	15.4	3.9	28.0	4.5	14.1	27.6
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	222	198	2099	936	203	2604
V/C Ratio(X)	0.88	0.25	0.59	0.14	0.88	0.64
Avail Cap(c_a), veh/h	413	368	2099	936	313	2604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.39	0.39	0.48	0.48
Uniform Delay (d), s/veh	55.1	50.1	13.1	8.9	55.9	5.3
Incr Delay (d2), s/veh	7.0	0.4	0.5	0.1	7.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	3.3	9.2	1.3	6.0	6.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	62.1	50.5	13.5	9.0	63.1	5.9
LnGrp LOS	E	D	B	A	E	A
Approach Vol, veh/h	245		1357			1858
Approach Delay, s/veh	59.8		13.1			11.4
Approach LOS	E		B			B

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		108.2		21.8	20.2	88.0
Change Period (Y+Rc), s		* 5.4		4.0	4.0	* 5.4
Max Green Setting (Gmax), s		* 88		33.0	25.0	* 59
Max Q Clear Time (g_c+I1), s		29.6		17.4	16.1	30.0
Green Ext Time (p_c), s		42.6		0.4	0.2	19.7

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

Notes

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

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	265	425	390	60	15	140
Future Vol, veh/h	265	425	390	60	15	140
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	3	1	0	0	1
Mvmt Flow	294	472	433	67	17	156

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	501	0	-	0	1528	468
Stage 1	-	-	-	-	468	-
Stage 2	-	-	-	-	1060	-
Critical Hdwy	4.1	-	-	-	6.4	6.21
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.2	-	-	-	3.5	3.309
Pot Cap-1 Maneuver	1074	-	-	-	131	597
Stage 1	-	-	-	-	634	-
Stage 2	-	-	-	-	336	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1073	-	-	-	82	596
Mov Cap-2 Maneuver	-	-	-	-	82	-
Stage 1	-	-	-	-	398	-
Stage 2	-	-	-	-	336	-

Approach	EB	WB	SB
HCM Control Delay, s	3.7	0	22.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1073	-	-	-	371
HCM Lane V/C Ratio	0.274	-	-	-	0.464
HCM Control Delay (s)	9.6	0	-	-	22.8
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	1.1	-	-	-	2.4

Intersection	
Int Delay, s/veh	3.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	360	80	45	350	100	25
Future Vol, veh/h	360	80	45	350	100	25
Conflicting Peds, #/hr	0	3	3	0	0	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	3	1	6	1	2	0
Mvmt Flow	400	89	50	389	111	28

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	492	0	937	450
Stage 1	-	-	-	-	448	-
Stage 2	-	-	-	-	489	-
Critical Hdwy	-	-	4.16	-	6.42	6.2
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.254	-	3.518	3.3
Pot Cap-1 Maneuver	-	-	1051	-	294	613
Stage 1	-	-	-	-	644	-
Stage 2	-	-	-	-	616	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1048	-	275	610
Mov Cap-2 Maneuver	-	-	-	-	275	-
Stage 1	-	-	-	-	642	-
Stage 2	-	-	-	-	578	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	25.8
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	309	-	-	1048	-
HCM Lane V/C Ratio	0.449	-	-	0.048	-
HCM Control Delay (s)	25.8	-	-	8.6	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	2.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	9.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	140	30	205	125	105	135
Future Vol, veh/h	140	30	205	125	105	135
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	4	2	1	1	2
Mvmt Flow	156	33	228	139	117	150

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	790	195	270	0	-	0
Stage 1	195	-	-	-	-	-
Stage 2	595	-	-	-	-	-
Critical Hdwy	6.42	6.24	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.336	2.218	-	-	-
Pot Cap-1 Maneuver	359	841	1293	-	-	-
Stage 1	838	-	-	-	-	-
Stage 2	551	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	288	839	1289	-	-	-
Mov Cap-2 Maneuver	288	-	-	-	-	-
Stage 1	675	-	-	-	-	-
Stage 2	549	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	30.2	5.2	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1289	-	326	-	-
HCM Lane V/C Ratio	0.177	-	0.579	-	-
HCM Control Delay (s)	8.4	0	30.2	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0.6	-	3.4	-	-

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	15	60	20	30	30	5	25	35	105	5	15	15
Future Vol, veh/h	15	60	20	30	30	5	25	35	105	5	15	15
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	0	8	100	0	4	0	0	33	0
Mvmt Flow	17	67	22	33	33	6	28	39	117	6	17	17

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	39	0	0	90	0	0	232	218	79	292	226	36
Stage 1	-	-	-	-	-	-	113	113	-	102	102	-
Stage 2	-	-	-	-	-	-	119	105	-	190	124	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.54	6.2	7.1	6.83	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.54	-	6.1	5.83	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.54	-	6.1	5.83	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4.036	3.3	3.5	4.297	3.3
Pot Cap-1 Maneuver	1584	-	-	1518	-	-	727	677	987	664	623	1042
Stage 1	-	-	-	-	-	-	897	798	-	909	754	-
Stage 2	-	-	-	-	-	-	890	804	-	816	737	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1584	-	-	1517	-	-	682	654	986	545	602	1042
Mov Cap-2 Maneuver	-	-	-	-	-	-	682	654	-	545	602	-
Stage 1	-	-	-	-	-	-	886	788	-	899	737	-
Stage 2	-	-	-	-	-	-	837	786	-	676	728	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.2	3.4	10.5	10.3
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	839	1584	-	-	1517	-	-	722
HCM Lane V/C Ratio	0.219	0.011	-	-	0.022	-	-	0.054
HCM Control Delay (s)	10.5	7.3	0	-	7.4	0	-	10.3
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	-	0.2

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	15	185	10	25	160	45	5	20	20	25	25	10
Future Vol, veh/h	15	185	10	25	160	45	5	20	20	25	25	10
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	0	2	0	0	3	0	0	0	6	0	0	0
Mvmt Flow	17	206	11	28	178	50	6	22	22	28	28	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	9.3	9.3	8.2	8.6
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	7%	11%	42%
Vol Thru, %	44%	88%	70%	42%
Vol Right, %	44%	5%	20%	17%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	45	210	230	60
LT Vol	5	15	25	25
Through Vol	20	185	160	25
RT Vol	20	10	45	10
Lane Flow Rate	50	233	256	67
Geometry Grp	1	1	1	1
Degree of Util (X)	0.067	0.288	0.309	0.093
Departure Headway (Hd)	4.825	4.446	4.347	5.026
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	740	807	825	711
Service Time	2.871	2.476	2.375	3.071
HCM Lane V/C Ratio	0.068	0.289	0.31	0.094
HCM Control Delay	8.2	9.3	9.3	8.6
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0.2	1.2	1.3	0.3

Intersection	
Intersection Delay, s/veh	14.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	345	15	15	370	70	20	15	65	60	10	20
Future Vol, veh/h	10	345	15	15	370	70	20	15	65	60	10	20
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, %	50	2	0	0	3	7	0	0	0	4	0	0
Mvmt Flow	11	367	16	16	394	74	21	16	69	64	11	21
Number of Lanes	0	2	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	11.9	18.6	10.3	10.8
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	20%	5%	0%	3%	67%
Vol Thru, %	15%	95%	92%	81%	11%
Vol Right, %	65%	0%	8%	15%	22%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	100	183	188	455	90
LT Vol	20	10	0	15	60
Through Vol	15	173	173	370	10
RT Vol	65	0	15	70	20
Lane Flow Rate	106	194	199	484	96
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.176	0.354	0.313	0.686	0.17
Departure Headway (Hd)	5.943	6.558	5.647	5.1	6.379
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	602	549	636	707	561
Service Time	3.999	4.298	3.387	3.135	4.437
HCM Lane V/C Ratio	0.176	0.353	0.313	0.685	0.171
HCM Control Delay	10.3	12.9	11	18.6	10.8
HCM Lane LOS	B	B	B	C	B
HCM 95th-tile Q	0.6	1.6	1.3	5.5	0.6

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations				↑	↰	↱
Traffic Vol, veh/h	0	0	0	435	10	105
Future Vol, veh/h	0	0	0	435	10	105
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	1	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	3	0	0
Mvmt Flow	0	0	0	483	11	117

Major/Minor	Major2		Minor1	
Conflicting Flow All	-	-	483	-
Stage 1	-	-	0	-
Stage 2	-	-	483	-
Critical Hdwy	-	-	6.4	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.4	-
Follow-up Hdwy	-	-	3.5	-
Pot Cap-1 Maneuver	0	-	546	0
Stage 1	0	-	-	0
Stage 2	0	-	625	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	546	-
Mov Cap-2 Maneuver	-	-	546	-
Stage 1	-	-	-	-
Stage 2	-	-	625	-

Approach	WB	NB
HCM Control Delay, s	0	11.7
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	NBLn2	WBT
Capacity (veh/h)	546	-	-
HCM Lane V/C Ratio	0.02	-	-
HCM Control Delay (s)	11.7	0	-
HCM Lane LOS	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	85	0	25	0	365	130	25	160	0
Future Vol, veh/h	0	0	0	85	0	25	0	365	130	25	160	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	90	90	90	90	92	90	92	90	92	92	92
Heavy Vehicles, %	2	0	0	0	0	2	4	2	2	2	2	2
Mvmt Flow	0	0	0	94	0	27	0	397	144	27	174	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	769	-	697	697	469	-	0	0	541	0	0
Stage 1	-	228	-	469	469	-	-	-	-	-	-	-
Stage 2	-	541	-	228	228	-	-	-	-	-	-	-
Critical Hdwy	-	6.5	-	7.1	6.5	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	-	4	-	3.5	4	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	334	0	358	367	594	0	-	-	1028	-	0
Stage 1	0	719	0	579	564	-	0	-	-	-	-	0
Stage 2	0	524	0	779	719	-	0	-	-	-	-	0
Platoon blocked, %								-	-		-	
Mov Cap-1 Maneuver	-	324	-	350	356	594	-	-	-	1028	-	-
Mov Cap-2 Maneuver	-	324	-	350	356	-	-	-	-	-	-	-
Stage 1	-	698	-	579	564	-	-	-	-	-	-	-
Stage 2	-	524	-	756	698	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	18.6	0	1.2
HCM LOS	A	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	-	385	1028	-
HCM Lane V/C Ratio	-	-	-	0.316	0.026	-
HCM Control Delay (s)	-	-	0	18.6	8.6	0
HCM Lane LOS	-	-	A	C	A	A
HCM 95th %tile Q(veh)	-	-	-	1.3	0.1	-

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	50	5	120	160	40	15	65	210	50	75	15
Future Vol, veh/h	15	50	5	120	160	40	15	65	210	50	75	15
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	1	0	1	1	0	0	3	2	3	0	0
Mvmt Flow	16	55	5	132	176	44	16	71	231	55	82	16
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	13.9	11.7	10.5
HCM LOS	A	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	5%	21%	38%	36%
Vol Thru, %	22%	71%	50%	54%
Vol Right, %	72%	7%	12%	11%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	290	70	320	140
LT Vol	15	15	120	50
Through Vol	65	50	160	75
RT Vol	210	5	40	15
Lane Flow Rate	319	77	352	154
Geometry Grp	1	1	1	1
Degree of Util (X)	0.436	0.123	0.516	0.241
Departure Headway (Hd)	4.922	5.736	5.285	5.633
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	730	623	682	637
Service Time	2.961	3.788	3.323	3.679
HCM Lane V/C Ratio	0.437	0.124	0.516	0.242
HCM Control Delay	11.7	9.6	13.9	10.5
HCM Lane LOS	B	A	B	B
HCM 95th-tile Q	2.2	0.4	3	0.9

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	480	135	35	510	5	70	0	20	5	0	5
Future Vol, veh/h	5	480	135	35	510	5	70	0	20	5	0	5
Conflicting Peds, #/hr	0	0	1	1	0	0	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	2	1	0	1	0	1	0	6	0	0	0
Mvmt Flow	5	511	144	37	543	5	74	0	21	5	0	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	548	0	0	656	0	0	1216	1216	587	1227	1286	546
Stage 1	-	-	-	-	-	-	594	594	-	620	620	-
Stage 2	-	-	-	-	-	-	622	622	-	607	666	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.11	6.5	6.26	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.11	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.11	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.509	4	3.354	3.5	4	3.3
Pot Cap-1 Maneuver	1032	-	-	941	-	-	159	183	502	157	166	541
Stage 1	-	-	-	-	-	-	493	496	-	479	483	-
Stage 2	-	-	-	-	-	-	476	482	-	487	460	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1032	-	-	940	-	-	149	171	500	143	155	541
Mov Cap-2 Maneuver	-	-	-	-	-	-	149	171	-	143	155	-
Stage 1	-	-	-	-	-	-	489	492	-	475	455	-
Stage 2	-	-	-	-	-	-	444	455	-	461	456	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.6	47	21.7
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	177	1032	-	-	940	-	-	226
HCM Lane V/C Ratio	0.541	0.005	-	-	0.04	-	-	0.047
HCM Control Delay (s)	47	8.5	0	-	9	0	-	21.7
HCM Lane LOS	E	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	2.8	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	10	590	450	80	65	95
Future Vol, veh/h	10	590	450	80	65	95
Conflicting Peds, #/hr	6	0	0	6	3	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	1	3	1	2	5
Mvmt Flow	11	634	484	86	70	102

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	576	0	-	0	1192	533
Stage 1	-	-	-	-	533	-
Stage 2	-	-	-	-	659	-
Critical Hdwy	4.1	-	-	-	6.42	6.25
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.2	-	-	-	3.518	3.345
Pot Cap-1 Maneuver	1007	-	-	-	207	541
Stage 1	-	-	-	-	588	-
Stage 2	-	-	-	-	515	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1001	-	-	-	202	538
Mov Cap-2 Maneuver	-	-	-	-	339	-
Stage 1	-	-	-	-	578	-
Stage 2	-	-	-	-	512	-

Approach	EB	WB	SB
HCM Control Delay, s	0.1	0	18.6
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1001	-	-	-	434
HCM Lane V/C Ratio	0.011	-	-	-	0.396
HCM Control Delay (s)	8.6	-	-	-	18.6
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0	-	-	-	1.9

Intersection	
Int Delay, s/veh	5.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	265	330	35	220	445
Future Vol, veh/h	50	265	330	35	220	445
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	200	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	5	2	3	3	1	3
Mvmt Flow	53	279	347	37	232	468

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1298	366	0	0	384	0
Stage 1	366	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Critical Hdwy	6.45	6.22	-	-	4.11	-
Critical Hdwy Stg 1	5.45	-	-	-	-	-
Critical Hdwy Stg 2	5.45	-	-	-	-	-
Follow-up Hdwy	3.545	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	176	679	-	-	1180	-
Stage 1	695	-	-	-	-	-
Stage 2	379	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	141	679	-	-	1180	-
Mov Cap-2 Maneuver	141	-	-	-	-	-
Stage 1	695	-	-	-	-	-
Stage 2	304	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.8	0	2.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	141	679	1180	-
HCM Lane V/C Ratio	-	-	0.373	0.411	0.196	-
HCM Control Delay (s)	-	-	45	13.9	8.8	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1.6	2	0.7	-

Intersection	
Int Delay, s/veh	4.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	10	15	60	5	65	10	90	70	25	80	5
Future Vol, veh/h	5	10	15	60	5	65	10	90	70	25	80	5
Conflicting Peds, #/hr	0	0	0	0	0	0	3	0	1	1	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	0	0	0	6	0	3	0	8	10	9	5	0
Mvmt Flow	6	11	17	67	6	72	11	100	78	28	89	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	351	352	95	324	316	140	98	0	0	179	0	0
Stage 1	151	151	-	162	162	-	-	-	-	-	-	-
Stage 2	200	201	-	162	154	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.16	6.5	6.23	4.1	-	-	4.19	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.16	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.16	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.554	4	3.327	2.2	-	-	2.281	-	-
Pot Cap-1 Maneuver	608	576	967	621	603	905	1508	-	-	1355	-	-
Stage 1	856	776	-	831	768	-	-	-	-	-	-	-
Stage 2	806	739	-	831	774	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	541	556	964	587	582	904	1504	-	-	1354	-	-
Mov Cap-2 Maneuver	541	556	-	587	582	-	-	-	-	-	-	-
Stage 1	847	757	-	824	761	-	-	-	-	-	-	-
Stage 2	730	732	-	787	755	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.4	11.3	0.4	1.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1504	-	-	701	712	1354	-	-
HCM Lane V/C Ratio	0.007	-	-	0.048	0.203	0.021	-	-
HCM Control Delay (s)	7.4	0	-	10.4	11.3	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.8	0.1	-	-

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	140	20	20	245	90	10	50	5	45	65	45
Future Vol, veh/h	30	140	20	20	245	90	10	50	5	45	65	45
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	5	2	0	5	4	6	0	5	0	6	0	3
Mvmt Flow	32	151	22	22	263	97	11	54	5	48	70	48
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	10.3	12.6	9.4	10.3
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	15%	16%	6%	29%
Vol Thru, %	77%	74%	69%	42%
Vol Right, %	8%	11%	25%	29%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	65	190	355	155
LT Vol	10	30	20	45
Through Vol	50	140	245	65
RT Vol	5	20	90	45
Lane Flow Rate	70	204	382	167
Geometry Grp	1	1	1	1
Degree of Util (X)	0.11	0.293	0.502	0.253
Departure Headway (Hd)	5.656	5.157	4.834	5.472
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	635	701	752	658
Service Time	3.675	3.157	2.834	3.488
HCM Lane V/C Ratio	0.11	0.291	0.508	0.254
HCM Control Delay	9.4	10.3	12.6	10.3
HCM Lane LOS	A	B	B	B
HCM 95th-tile Q	0.4	1.2	2.8	1

Intersection	
Int Delay, s/veh	10

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	90	85	5	10	45	85	5	75	5	95	75	60
Future Vol, veh/h	90	85	5	10	45	85	5	75	5	95	75	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	16	0	11	8	2	0	2	0	2	2	2
Mvmt Flow	100	94	6	11	50	94	6	83	6	106	83	67

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	144	0	0	100	0	0	491	463	97	461	419	97
Stage 1	-	-	-	-	-	-	297	297	-	119	119	-
Stage 2	-	-	-	-	-	-	194	166	-	342	300	-
Critical Hdwy	4.12	-	-	4.21	-	-	7.1	6.52	6.2	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.299	-	-	3.5	4.018	3.3	3.518	4.018	3.318
Pot Cap-1 Maneuver	1438	-	-	1438	-	-	491	496	965	511	525	959
Stage 1	-	-	-	-	-	-	716	668	-	885	797	-
Stage 2	-	-	-	-	-	-	812	761	-	673	666	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1438	-	-	1438	-	-	372	456	965	410	482	959
Mov Cap-2 Maneuver	-	-	-	-	-	-	372	456	-	410	482	-
Stage 1	-	-	-	-	-	-	663	619	-	820	791	-
Stage 2	-	-	-	-	-	-	671	755	-	536	617	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.8	0.5	14.7	18.9
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	464	1438	-	-	1438	-	-	511
HCM Lane V/C Ratio	0.204	0.07	-	-	0.008	-	-	0.5
HCM Control Delay (s)	14.7	7.7	0	-	7.5	0	-	18.9
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.8	0.2	-	-	0	-	-	2.8

Intersection	
Int Delay, s/veh	5.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	45	100	80	45	160	105
Future Vol, veh/h	45	100	80	45	160	105
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	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	5	0	4	6
Mvmt Flow	50	111	89	50	178	117

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	587	114	0	0	139	0
Stage 1	114	-	-	-	-	-
Stage 2	473	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	475	944	-	-	1432	-
Stage 1	916	-	-	-	-	-
Stage 2	631	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	412	944	-	-	1432	-
Mov Cap-2 Maneuver	412	-	-	-	-	-
Stage 1	916	-	-	-	-	-
Stage 2	547	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12	0	4.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	674	1432	-
HCM Lane V/C Ratio	-	-	0.239	0.124	-
HCM Control Delay (s)	-	-	12	7.9	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.9	0.4	-

Intersection	
Intersection Delay, s/veh	16
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	90	20	30	40	20	30	5	125	5	20	335	90
Future Vol, veh/h	90	20	30	40	20	30	5	125	5	20	335	90
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles, %	10	0	0	0	0	0	33	0	0	0	2	7
Mvmt Flow	100	22	33	44	22	33	6	139	6	22	372	100
Number of Lanes	0	1	1	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	2
HCM Control Delay	11.3	11	10.6	20.2
HCM LOS	B	B	B	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	82%	0%	44%	100%	0%
Vol Thru, %	0%	96%	18%	0%	22%	0%	79%
Vol Right, %	0%	4%	0%	100%	33%	0%	21%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	5	130	110	30	90	20	425
LT Vol	5	0	90	0	40	20	0
Through Vol	0	125	20	0	20	0	335
RT Vol	0	5	0	30	30	0	90
Lane Flow Rate	6	144	122	33	100	22	472
Geometry Grp	7	7	7	7	6	7	7
Degree of Util (X)	0.011	0.239	0.239	0.053	0.181	0.037	0.715
Departure Headway (Hd)	7.072	5.967	7.051	5.754	6.508	6.072	5.452
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	506	601	510	622	551	590	666
Service Time	4.812	3.707	4.795	3.497	4.556	3.801	3.18
HCM Lane V/C Ratio	0.012	0.24	0.239	0.053	0.181	0.037	0.709
HCM Control Delay	9.9	10.6	12	8.8	11	9	20.7
HCM Lane LOS	A	B	B	A	B	A	C
HCM 95th-tile Q	0	0.9	0.9	0.2	0.7	0.1	6

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	55	115	10	15	235	10	15	70	90	60	285	60
Future Vol, veh/h	55	115	10	15	235	10	15	70	90	60	285	60
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	2	0	2	4	4	0	2	3	2	1	3
Mvmt Flow	60	126	11	16	258	11	16	77	99	66	313	66
Number of Lanes	0	1	0	0	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	1	1
HCM Control Delay	13.2	15.6	12.2	19.7
HCM LOS	B	C	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	100%	0%	31%	6%	100%	0%
Vol Thru, %	0%	44%	64%	90%	0%	83%
Vol Right, %	0%	56%	6%	4%	0%	17%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	15	160	180	260	60	345
LT Vol	15	0	55	15	60	0
Through Vol	0	70	115	235	0	285
RT Vol	0	90	10	10	0	60
Lane Flow Rate	16	176	198	286	66	379
Geometry Grp	7	7	2	2	7	7
Degree of Util (X)	0.034	0.32	0.359	0.501	0.129	0.673
Departure Headway (Hd)	7.444	6.562	6.53	6.308	7.045	6.392
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes
Cap	480	547	550	571	512	569
Service Time	5.197	4.315	4.58	4.354	4.745	4.092
HCM Lane V/C Ratio	0.033	0.322	0.36	0.501	0.129	0.666
HCM Control Delay	10.5	12.4	13.2	15.6	10.8	21.2
HCM Lane LOS	B	B	B	C	B	C
HCM 95th-tile Q	0.1	1.4	1.6	2.8	0.4	5.1

Intersection	
Intersection Delay, s/veh	12.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	50	180	35	25	195	60	30	50	15	30	160	35
Future Vol, veh/h	50	180	35	25	195	60	30	50	15	30	160	35
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	0	1	0	0	4	0	5	4	0	9	0	5
Mvmt Flow	55	198	38	27	214	66	33	55	16	33	176	38
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	12.6	12.7	10.4	12.6
HCM LOS	B	B	B	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	32%	19%	9%	13%
Vol Thru, %	53%	68%	70%	71%
Vol Right, %	16%	13%	21%	16%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	95	265	280	225
LT Vol	30	50	25	30
Through Vol	50	180	195	160
RT Vol	15	35	60	35
Lane Flow Rate	104	291	308	247
Geometry Grp	1	1	1	1
Degree of Util (X)	0.176	0.437	0.454	0.397
Departure Headway (Hd)	6.054	5.399	5.311	5.787
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	590	664	677	621
Service Time	4.124	3.455	3.365	3.846
HCM Lane V/C Ratio	0.176	0.438	0.455	0.398
HCM Control Delay	10.4	12.6	12.7	12.6
HCM Lane LOS	B	B	B	B
HCM 95th-tile Q	0.6	2.2	2.4	1.9

Intersection	
Intersection Delay, s/veh	8.7
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	95	80	65	95	125
Future Vol, veh/h	25	95	80	65	95	125
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Heavy Vehicles, %	0	0	5	6	3	0
Mvmt Flow	29	109	92	75	109	144
Number of Lanes	1	0	0	1	1	0

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	1	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	1	1	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	1
HCM Control Delay	8.3	9	8.8
HCM LOS	A	A	A

Lane	NBLn1	EBLn1	SBLn1
Vol Left, %	55%	21%	0%
Vol Thru, %	45%	0%	43%
Vol Right, %	0%	79%	57%
Sign Control	Stop	Stop	Stop
Traffic Vol by Lane	145	120	220
LT Vol	80	25	0
Through Vol	65	0	95
RT Vol	0	95	125
Lane Flow Rate	167	138	253
Geometry Grp	1	1	1
Degree of Util (X)	0.216	0.168	0.289
Departure Headway (Hd)	4.664	4.38	4.113
Convergence, Y/N	Yes	Yes	Yes
Cap	770	819	875
Service Time	2.689	2.407	2.135
HCM Lane V/C Ratio	0.217	0.168	0.289
HCM Control Delay	9	8.3	8.8
HCM Lane LOS	A	A	A
HCM 95th-tile Q	0.8	0.6	1.2

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	140	80	10	5	205	15	0	5	5	30	5	260
Future Vol, veh/h	140	80	10	5	205	15	0	5	5	30	5	260
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, %	1	0	0	0	1	0	0	0	0	0	0	1
Mvmt Flow	146	83	10	5	214	16	0	5	5	31	5	271
Number of Lanes	0	1	0	0	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	10.8	10.4	8.5	10.6
HCM LOS	B	B	A	B

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	0%	61%	2%	100%	0%
Vol Thru, %	50%	35%	91%	0%	2%
Vol Right, %	50%	4%	7%	0%	98%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	10	230	225	30	265
LT Vol	0	140	5	30	0
Through Vol	5	80	205	0	5
RT Vol	5	10	15	0	260
Lane Flow Rate	10	240	234	31	276
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.016	0.339	0.323	0.054	0.381
Departure Headway (Hd)	5.433	5.09	4.958	6.166	4.966
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	663	700	717	576	718
Service Time	3.433	3.177	3.044	3.951	2.75
HCM Lane V/C Ratio	0.015	0.343	0.326	0.054	0.384
HCM Control Delay	8.5	10.8	10.4	9.3	10.8
HCM Lane LOS	A	B	B	A	B
HCM 95th-tile Q	0	1.5	1.4	0.2	1.8