Sammamish Balanced Land Use and Mobility Analysis

Draft Environmental Impact Statement | Volume II
Appendices
August 2021

Consultant Team
BERK Consulting
HWA Geo
The Watershed Company
Transportation Solutions, Inc.

Appendices

A Public Outreach
B Growth Targets
C BLUMA Traffic Analysis Report
D Sammamish Municipal Code Title 14A

A Public Outreach

801 228th Avenue SE ■ Sammamish, WA 98075 ■ phone: 425-295-0500 ■ fax: 295-295-0600 ■ web: www.sammamish.us

Transportation Concurrency Level of Service Standards Update EIS Scoping Summary

August 28, 2020

I. Introduction

The City of Sammamish is preparing an Environmental Impact Statement (EIS) to evaluate potential significant environmental impacts associated with possible changes to transportation level of service (LOS) standards and concurrency requirements. The proposal consists of related amendments to the Comprehensive Plan and Sammamish Municipal Code necessary to amend and implement the City's transportation LOS standards and concurrency management program. The legislative action, if taken, would apply to all areas within the City's boundaries.

Three alternatives are proposed, including the No Action Alternative. Principal features of each alternative are noted below:

Alternative 1 (No Action). Comprehensive Plan Glossary and Transportation Element amendments adopted in Ordinance No. 02018-464 and implementing Municipal Code amendments for intersection LOS standards and concurrency management program adopted in Ordinance No. 02018-465.

Alternative 2 (Proposed Action). Comprehensive Plan and implementing Municipal Code amendments to add LOS standards and concurrency requirements for key roadway corridors and segments. Proposed intersection standards would remain as described in the No Action Alternative.

Alternative 3. Alternative 3 includes two options that bracket the Alternative 2 LOS standards for the key roadway corridors and segments with more stringent (Option a) and less stringent (Option b) LOS standards. Alternative 3 is otherwise the same as Alternative 2.

II. EIS Review and Scoping

As described in WAC 197-11-400, the purpose of an EIS is to ensure that environmental information is available, in conjunction with other relevant materials and considerations, to public agencies to plan actions and make decisions. An EIS is an environmental disclosure document and is not a permit or engineering document. As described in the SEPA Rules, the purpose of an EIS is best served by short documents that are concise, clear, and supported by necessary environmental analysis.

Scoping is the process of identifying the elements of the environment to be evaluated in an EIS. Scoping is intended to help identify and narrow the issues to those that are significant. The scoping process includes a public comment period so that the public and agencies can comment on key issues and concerns. Following the comment period, the City considers all comments received and determines the scope of review for the environmental analysis (WAC 197-11-408).

The City of Sammamish issued a Determination of Significance (DS) / Scoping Notice for the Transportation Concurrency Level of Service Standards Update proposal on July 7, 2020 (Attachment 1) and made it available to the public through a variety of methods, including the following:

- *Notice to the Seattle Times, published on July 7, 2020*
- *Email notice to state and local agencies and to citizens who have requested to be notified, totaling 24 notices*
- *Mailed notice to state and local agencies and to citizens who have requested to be notified, totaling 26 notices*
- *Publication in the City's newsletter: delivered to 9,306 persons and viewed by an estimated 40 persons*
- *Announcement at City Council (July 7, 2020) and Planning Commission meetings (July 16, 2020)*
- *Connect Sammamish website notice, viewed an estimated 43 times*
- *Twitter and Facebook postings: 1,281 views on Twitter and 1,800 views on Facebook*

The Scoping Notice expressed the City's initial expectation that the EIS would consider potential impacts associated with water resources (water quality, stormwater), plants and animals (fish), land use, plans and policies, population and housing, and transportation.

Through the Scoping Notice, the City invited public and agency comment on that expectation and on the proposal, alternatives, and elements of the environment to be considered in the EIS. Comment was invited via email, postal mail, and JotForm, a web-based comment form. The 21-day scoping period was originally scheduled to close on July 28, 2020. However, because JotForm was unavailable for several hours between July 27, 2020 and July 28, 2020, the City extended the comment period to July 31, 2020. The City included notice of this extension on its project webpage on Connect Sammamish as well as a note on the JotForm page itself.

By the close of the scoping period, the City received a total of 69 comments, comprised of a combination of emails, letters and JotForm comments addressing a variety of issues and concerns. Comments are summarized in Section III (Table of Summarized Comments) in this document. All emails, letters and JotForm comments can be found at the Connect Sammamish website: *https://connect.sammamish.us/gmhb-remand*. A list of all commenters and topics addressed in their comments is included as Attachment 2.

As noted above, Section III consists of a summary of comments and responses, organized by topic. The responses identify topics raised by the commenters that are included in the EIS, what topics are not included and why, and respond to other questions raised in the comments. All comments provided through the scoping process may be considered, as appropriate, in EIS preparation and/or future planning efforts.

Comments that were reviewed and noted but did not result in a change to the scope of the EIS generally fall into the following categories:

- *Comments that expressed opinions, raised questions, or made general suggestions. In general, these comments did not address the scope of the EIS but are noted for information and, as appropriate, may be considered in EIS preparation or future planning efforts.*

- *Comments that suggested the expansion of the proposal to include changes to land use patterns, zoning designations, housing densities, housing types, or other additions. As described in the Scoping*

Notice and description of the proposal above, the proposal is focused on transportation level of service standards. Proposals for change to land use, housing and other issues are not included in the proposal, although impacts of the proposal on land use and housing will be considered in the EIS. In addition, changes to land use, housing or zoning designations may be identified as potential mitigation to impacts identified in the EIS.

- *Comments that identified issues that are already within the scope of the EIS. These are noted under the responses for each environmental topic in Section III.*

Following an analysis of scoping comments and available information, the City identified several new topics that should be included in the scope of the EIS. These are as listed below and have been added to the scope of the EIS.

- *Earth: Steep slope/landslide hazard*
- *Natural Environment: water quantity, tree canopy*
- *Land Use/Plans and Policies: transfer of development rights*
- *Transportation: evacuation routes, transportation related GHG emissions*

While the scope of the EIS is not expected to change substantially beyond the original and added scope identified above, the comments provided will be taken into account as appropriate in the course of EIS preparation.

Attachments

1. Determination of Significance/Scoping Notice
2. List of Commenters

III. Table of Summarized Comments

EIS Topic	Comments	Response
Alternatives	▪ Define proposal consistent with SEPA requirements. ▪ Describe proposal in terms of objectives. ▪ Proposal objectives should emphasize housing choices and affordability. ▪ Provide a range of alternatives to allow meaningful comparison of alternatives. ▪ Alternatives should include different V/C standards. ▪ LOS standards so restrictive no reasonable way to pass, contrary to WAC. ▪ Drop V/C standard and rely on intersection-based concurrency. ▪ Alternatives should not be limited to one citywide standard. ▪ Identify specific transportation projects necessary to meet identified LOS standards. ▪ Address concurrency issues for the northern section of East Lake Sammamish Parkway. ▪ Consider more cost-effective solutions to the City's goal. ▪ Concurrency regulations should include transit and rideshare service vehicles. ▪ No action alternative should be the preferred alternative. ▪ Consider alternative to alleviate long standing imbalances in housing supplies, economic supplies, and transportation systems within Sammamish by optimizing land uses (Enrich & Sustain platform). ▪ Emphasis should be placed on providing a range of housing choices and affordability. ▪ Consider down-zoning throughout the city to maintain limited growth.	*The description of alternatives will identify objectives of the proposal. The EIS will include three alternatives, including a No Action alternative; action alternatives will vary level of service standards to allow for meaningful comparison. Transportation projects required as a result of different level of service standards will be identified and no exemptions to concurrency requirements are assumed.* *As part of the alternatives description, the EIS will identify potential capital costs and funding sources associated with the projects that support each alternative. While the EIS will not evaluate cost implications or cost effectiveness as part of the environmental analysis, it is anticipated that this information will be reviewed and considered as part of the City decision-making process on the proposal.* *Concurrency is required for locally owned transportation arterial facilities. Sammamish does not own or control transit or rideshare service vehicles and does not require concurrency for these services.* *The No Action is included as one of the alternatives. All alternatives will receive comparable analysis and consideration.* *The proposal considered in the EIS is focused on citywide transportation level of service standards and concurrency requirements. Changes land use, zoning, or housing supplies are not proposed, but impacts of the proposal and alternatives on land use and housing will be considered in the analysis. In addition, changes to land use, housing or zoning designations may be identified as potential mitigation to impacts identified in the EIS.*

EIS Topic	Comments	Response
Determination of Significance (DS) and Environmental Checklist	▪ DS does not provide description of probable significant adverse impacts. ▪ DS should provide more specific description of alternatives. ▪ Comments on responses to Environmental Checklist, including responses to Air, Animals, Land/Shoreline Use, Housing.	*As required in WAC 197-11-360 and consistent with the form in WAC 197-11-980, the DS describes the main elements of the proposal, location of the proposal, and main areas identified for discussion in the EIS. For additional information about the proposal, an Environmental Checklist was attached.* *Comments provided on the Environmental Checklist will be addressed in the EIS.*
General EIS scope and analysis	▪ Fully evaluate No Action alternative. ▪ Gather relevant information about future city growth and needs to accommodate growth. ▪ Consider environmental impacts of roadway expansion. ▪ EIS should have broad scope. ▪ Consider environmental impacts on adjacent jurisdictions, including land capacity, housing, and transportation facilities.	*All alternatives, including the No Action alternative, will be fully evaluated based on relevant growth information based on data from local, regional, and state sources.* *The DS identifies the initial proposed scope for the EIS, which has been finalized through this EIS scoping process.* *The proposal does not include changes to land capacity or housing in Sammamish. If impacts to adjacent jurisdictions are identified as a result of the proposal and alternatives, these impacts and mitigating measures will be identified.* *The DS/scoping notice was sent to adjacent jurisdictions and notice of the Draft EIS will also be circulated to these jurisdictions for their review and comment.*
Communication and outreach	▪ How many comments were received? ▪ Information lacking; need more ways to inform public. ▪ Hold discussion of transportation concurrency and modeling in public forum. ▪ Provide outline of public participation process. ▪ Well informed citizen input is needed. ▪ Make more than usual effort to solicit public comment. ▪ Conduct survey to see what residents want; statistically valid survey has not been done.	*The City received a total of 69 comments from 53 individuals, groups, and agencies. Please see https://connect.sammamish.us/gmhb-remand for the full list of comments.* *Methods used to publicize the DS and scoping period included a variety of channels, as listed below. Where performance metrics for methods are available, they are noted below.* ▪ Notice to the Seattle Times, published on 07/07/20 ▪ Email notice to state and local agencies and to citizens who have requested to be notified, totaling 24 notices ▪ Mailed notice to state and local agencies and to citizens who have requested to be notified, totaling 26 notices

EIS Topic	Comments	Response
		▪ Publication in the City's newsletter: delivered to 9,306 persons, 40 total views ▪ Announcement at City Council (07/07/20) and Planning Commission meetings (07/16/20) ▪ Connect Sammamish website notice, 43 total views ▪ Twitter and Facebook postings: 1,281 views on Twitter and 1,800 views on Facebook *The City continually strives to find methods to provide timely information to residents in the formats they are comfortable with and welcomes suggestions for other methods.* *The next formal opportunity to comment on the EIS process will occur following issuance of the Draft EIS. Public comment is invited during a 30-day comment period. A public meeting will be held during the comment period to provide an overview of EIS findings, answer questions, and take comments.* *In addition to the EIS comment period, the Planning Commission will hold a public hearing on the staff recommendation that moves forward following environmental review. Following the public hearing, the Planning Commission will make a recommendation to City Council. The City Council will review the recommendation at a public meeting and hold a public hearing prior to making their decision.* *A survey is not proposed or required for the EIS process.*
Natural Environment	▪ Address water quantity. ▪ Consider stormwater. ▪ Consider downstream impacts of development and increased impervious surfaces on wetlands, watershed, landslide hazard and other water management issues. ▪ Include analysis of indirect impacts on orcas. ▪ Consider loss of native species.	*As proposed, the scope of the natural environmental analyses includes water quality and plants and animals, with an emphasis on fish habitat.* *Based on comments received, consideration of water quantity, potential impacts to steep or unstable slopes, and tree canopy will be added to the scope of the EIS.*

EIS Topic	Comments	Response
	▪ Consider CARA, wildlife habitat corridors ▪ Consider impacts of road widening to habitat, community fabric, traffic congestion. ▪ Analyze all existing fish passage barriers and a plan to replace these barriers, particularly when roadways need to be redeveloped/modified and/or when culverts need replacement. ▪ Analyze potential impacts to steep and unstable slopes. ▪ Consider tree canopy.	
Land Use	▪ Consider land use. ▪ Consider impacts on Town Center. ▪ Consider impacts of road widening to habitat, community fabric, traffic congestion. ▪ Evaluate whether alternatives support densities to efficiently provide transit service.	*As proposed, topics to be addressed in the land use analysis include land use patterns, mix of uses, land use compatibility, and land use targets. Potential land use impacts of the proposal on Town Center will be evaluated. The analysis will also consider the impacts of the proposal and alternatives on the feasibility of development in multifamily areas.* *The proposal does not include changes to land capacity or housing in Sammamish. However, impacts of the proposal and alternatives on land use and housing will be considered in the analysis. In addition, changes to land use, housing or zoning designations may be identified as potential mitigation to impacts identified in the EIS.*
Plans and Policies	▪ Concurrency and LOS should support the comprehensive plan, rather than the other way around. ▪ Consistency with goals of Growth Management Act. ▪ Ensure CP includes policies to mitigate impacts. ▪ Consistency with City's Housing Strategy Plan ▪ Consider impacts to Comprehensive Plan conservation and sustainability goals. ▪ Address impacts of policy and regulatory changes on adjacent jurisdictions.	*As proposed, the plans and policies analysis will address consistency of the proposal and alternatives with the Growth Management Act, Puget Sound Regional Council regional policy guidance, King County Countywide Planning Policies, Sammamish Comprehensive Plan, and other related city plans.*

EIS Topic	Comments	Response
Housing	▪ Impact on ability to produce housing ▪ Impacts on housing supply, variety, affordability, special needs housing, housing to serve all economic segments of the community. ▪ Evaluate impacts on multifamily housing options. ▪ Clearly state population assumptions. ▪ Compare the alternatives based on impacts to enable an array of housing choices that meet housing needs of low- and moderate-income households. ▪ Consider indirect impacts related to demolition and development of affordable housing. ▪ Include anti-displacement measures that will ensure development without displacement and identify innovative housing mitigation measures in case of demolition. ▪ Impacts on housing supply and demand in adjacent cities ▪ Conduct a housing and commercial business needs assessment. ▪ Align residential growth with transportation access. ▪ Consider all housing options. ▪ Look at broader set of options that allows long term residents to stay in community.	*As proposed, topics to be addressed in the housing analysis include housing inventory, types and mix, affordability, diverse housing types, housing targets and consistency with the City's Housing Strategy Plan and Housing Element. Potential indirect impacts of demolition and displacement will be included in the housing analysis.* *The proposal does not include changes to housing targets or capacity in Sammamish. If impacts to adjacent jurisdictions are identified as a result of the proposal and alternatives, impacts and mitigating measures will be identified.* *An assessment of housing will be conducted as noted above. An assessment of commercial business needs will not be conducted, although the land use analysis will address potential impacts to commercial areas as a result of the proposal and alternatives.* *The proposal and alternatives propose changes to the City's transportation level of service standards and concurrency regulations. Changes to residential densities, growth patterns and housing options are not proposed, but impacts of the proposal and alternatives on residential patterns and options will be considered in the analysis. In addition, changes to land use, housing or zoning designations may be identified as potential mitigation to impacts identified in the EIS.*
Transportation	▪ Describe drive-time impacts of each alternative compared to roadway construction. ▪ Impacts on walking, bicycling and transit ▪ Analyze transportation facilities needed to meet new concurrency standards. ▪ Consider evacuation routes from the City ▪ Analyze chokepoints outside of the City, including 202/Sahalee Way NE, SR 202, SR 202/244th Ave NE, East Lake Sammamish	*As proposed, the transportation analysis in the EIS will evaluate vehicular level of service, transit, bicycle and pedestrian movement, and freight mobility. The analysis will include a description of baseline conditions and plans, together with evaluation of impacts to each mode of travel for each alternative. Potential impacts on adjacent areas will also be considered. As part of the evaluation, the impact of lower traffic volumes, such as those experienced as a result of COVID-19 will be considered.*

EIS Topic	Comments	Response
	Parkway NE/Redmond Way, the 520 on-ramp, 228th Ave NE/SE 43rd Way, SE Issaquah Fall City Road/Issaquah Pine Lake Road SE, SE 56th St/NW Sammamish Road. ▪ Ensure capacity of roadways is adequate. ▪ Consider impacts of road widening to habitat, community fabric, traffic congestion. ▪ 2035 traffic volumes should account for impact of COVID on long-term travel patterns. ▪ Address capital facilities impacts outside of city, particularly improvements that would increase the segment/corridor capacity of city roadways upstream. ▪ Include analysis of regional statistics and projected LOS. ▪ Consider whether transportation amendments will induce demand and impacts of induced demand. Compare transportation usage by housing type. ▪ Account for vehicle and non-vehicle trips between adjacent Town Center TAZs. ▪ Add 35% reduction to ITE rates in mixed use settings for residential uses. ▪ Consider the Transportation Master Plan and Transportation Improvements Plan. ▪ Include level of service standards for transit routes required by RCW 36.70A.070(6(a)(ii)(B); consider impacts of the amendments on LOS standards. ▪ Include analysis on ensuring the reduction of parking minimums for housing near future and existing transit and bus rapid ride hubs. ▪ Evaluate cost implications of new LOS standards, including new roadways and long-term fiscal responsibilities.	*Based on comments received, consideration of potential impacts to evacuation routes from the City will be added to the scope of the EIS.* *Transportation model assumptions for different land use types, including a reduction for trips in mixed-use areas will be described in the EIS. The potential for induced demand will be considered.* *The EIS will consider relevant information from the City's draft Transportation Master Plan. However, the proposal and alternatives do not include, and the EIS does not analyze, future City action on the Transportation Master Plan.* *Transportation level of service standards are required for locally owned arterial transportation facilities. Sammamish does not own or control transit or rideshare service vehicles and does not have levels of service standards for these facilities. The EIS will identify applicable Sound Transit and King County Metro level of service standards applicable to the City.* *Changes to parking standards are not proposed and are not anticipated to be analyzed in the EIS. There are no bus rapid ride hubs in the City.* *As part of the alternatives description, the EIS will identify potential capital costs and funding associated with the projects that support each alternative. While the EIS will not evaluate cost implications as part of the environmental analysis, it is anticipated that this information will be reviewed and considered as part of the City decision-making process on the proposal.*

EIS Topic	Comments	Response
GHG Emissions	▪ Analyze potential impacts on GHG emissions	*Based on the comments received, transportation related GHG emissions will be considered in the EIS.*
Equity	▪ Disclose equity and affordability impacts of different LOS standards. ▪ Equity analysis of current City policies and impacts on affordability, including review of R1 zoning, and current housing stock. ▪ Equity analysis of proposal on housing choice and affordability.	*The EIS housing analysis will describe existing housing inventory and housing targets and evaluate potential impacts to housing diversity and affordability under each of the alternatives.*
Schools	▪ Evaluate assumed student generation factors based on Sammamish-specific data.	*The Draft EIS will be made available to the public schools in Sammamish for review and comment on the analysis.*
Transfer of Development Rights	▪ Consider impacts on ability to accommodate transfers of development rights, including Comprehensive Plan policies, interlocal agreement with King County, benefits of TDR. ▪ Consider TDR impacts of proposal on Town Center, including indirect impacts to agricultural/forest resource lands in the TDR program.	*Based on comments received, potential impacts to the City's TDR program, including consistency with Comprehensive Plan policies for transfer of development rights will be considered in the Plans and Policies analysis.*
Town Center	▪ Subjective V/C concurrency program will have irreversible unintended consequences to the city center. ▪ Concern that action is intended to stop growth and prevent Town Center development. ▪ Analyze how V/C LOS standards impact single family zoning and multifamily Town Center zoning. ▪ Update to Town Center EIS long overdue. ▪ Consider alternatives for Town Center Plan. ▪ Support complete revision to Town Center EIS or a new EIS. ▪ Hold developer accountable to the Town Center Plan.	*The EIS will consider potential impacts of the proposal on land use and housing in the City as a whole, including the Town Center. Potential mitigating measures will be discussed for identified impacts.*

EIS Topic	Comments	Response
	▪ Consider an alternative that supports the Town Center Plan. ▪ Revisit whether Town Center is in the best interest of the City. ▪ City's current plan has lack of information about Town Center. ▪ Enforce LEED silver or above for development in Town Center and all new public use buildings. ▪ Prioritize a denser Town Center over single-family sprawl.	
General comments and preferences	▪ EIS is expensive and ignores City's responsibility to be fiscally prudent. ▪ Support 2020 EIS. ▪ Should not waste time and money on arbitrary policies that no longer reflect the world. ▪ Recommend not changing the Comprehensive Plan with a very subjective V/C methodology. ▪ Support full scope of EIS as shown in proposal. ▪ Opposed to opening up entire Comprehensive Plan. ▪ COVID-19 gives City time to study housing supply and "optimally" set land use to serve community with and after pandemic effects. ▪ Impossible to know if city's concurrency system will result in improvements to the environment. ▪ Actions City could take to improve environment and fix traffic system: complete missing road connections, encourage east/west road connections; divert from being a bedroom community, create and utilize a TDR program; evaluate over supply of large single-family homes in the City. ▪ Need complete streets, variety of housing, more services and economy that serves needs of citizens. ▪ Capacity numbers heavily based on arbitrary policy subjectivity instead of expert objectivity.	*General comments expressed opinions, preferences, and ideas about planning for the future. These comments do not address the scope of the EIS but are noted here for information and, as appropriate, may be considered in EIS preparation.*

EIS Topic	Comments	Response
	▪ Prioritize a commitment to building a transit center and public transportation. ▪ TMP process did not analyze potential impacts of actions. ▪ Council should encourage housing diversity to support diverse population. ▪ Concentrate growth where best served by infrastructure, within walking distance of grocery stores and amenities. ▪ City has no real downtown, little local business ownership. ▪ Support public land use and multifamily housing over single family. ▪ Support parks and open space. ▪ Preserve and add park spaces and trees. ▪ Prioritize equitable housing policy. ▪ Prioritize equitable transit-oriented community development. ▪ Support action steps to a more sustainable and green city. ▪ Set an example for how communities can do their part for the environment. ▪ Eventually become carbon neutral or negative. ▪ Note 100% stormwater retention is most responsible approach for development. ▪ Meet the Growth Management Hearing Board's findings and doing the Environmental Impact Study as needed to scope and compete those activities. ▪ Update code to meet requirements of GMHB order.	

City of Sammamish Washington

Department of Community Development

801 228th Avenue SE ■ Sammamish, WA 98075 ■ phone: 425-295-0500 ■ fax: 295-295-0600 ■ web: www.sammamish.us

STATE ENVIRONMENTAL POLICY ACT (SEPA)
DETERMINATION OF SIGNIFICANCE AND
REQUEST FOR COMMENTS ON SCOPE OF ENVIRONMENTAL IMPACT STATEMENT

Publication Date: July 7, 2020

Lead agency
City of Sammamish

Agency Contact
Doug McIntyre, Transportation Planner
dmcintyre@sammamish.us
425-295-0628

Agency File Number
POL2020-00331

Description of proposal
The proposal is a set of amendments to the Comprehensive Plan and Municipal Code intended to address transportation level of service standards and capital facilities needs. Proposed amendments include (1) Comprehensive Plan amendments intended to adjust the City's transportation Level of Service Standards (LOS) and related concurrency program, and (2) related Municipal Code amendments that implement amended Comprehensive Plan policy guidance.

Comprehensive Plan amendments are anticipated to focus on the Transportation and Capital Facilities elements, but may include additional elements as needed to achieve internal plan consistency. Comprehensive Plan amendments will include updated policy guidance for LOS standards and updated background information to reflect the City's current transportation network, including maps and tables, concurrency program description, 6-Year Transportation Improvement Program, recommended 20-year transportation improvements, financing program, and other related information.

Municipal Code amendments are anticipated to be focused on Titles 14A and 21A SMC. Municipal Code amendments will amend LOS standards to reflect amended Comprehensive Plan guidance, delete outdated tables, correct definitions and Comprehensive Plan references, and other related actions.

Location
The focus for the proposed Comprehensive Plan and Municipal Code amendments is the entire City of Sammamish within municipal boundaries.

Proponent
City of Sammamish

EIS Required

The City of Sammamish has determined that this proposal is likely to have a significant adverse impact on the environment. An environmental impact statement (EIS) is required under RCW 43.21C.030 (2)(c) and will be prepared. An environmental checklist prepared for this proposal is available for review at Sammamish City Hall, Community Development Department, 801 228th Ave SE, Sammamish and at https://spaces.hightail.com/space/p7FVt67F34.

The lead agency has identified the following areas for discussion in the EIS: water resources (water quality, stormwater), plants and animals (fish), land use, plans and policies, population and housing, and transportation.

Alternatives considered in the EIS are anticipated to include no action, consisting of current policies and regulations, and two action alternatives that vary in approaches to adjusting LOS standards and concurrency management.

Scoping

Agencies, affected tribes, and members of the public are invited to comment on the scope of the EIS. You may comment on alternatives, mitigation measures, probable significant adverse impacts, and licenses or other approvals that may be required.

Provide written comments by July 28, 2020 at 5:00 pm. Electronic submittal is preferred. Direct comment to:

https://form.jotform.com/201746911320043
~or~
Transportation Level of Service & Capital Facilities
Environmental Impact Statement (EIS)
City of Sammamish
801 228th Ave SE
Sammamish, WA 98075
ATTN: EIS Scoping Comment
~or~
eis@sammamish.us
RE: EIS Scoping Comment

SEPA Responsible Official: David Pyle, Director
Department of Community Development

Signature David Pyle (electronic signature or name of signor is sufficient) Date July 7, 2020

Pursuant to SMC 20.15.130(4) there is no administrative appeal process for this action.

Publication Date: July 7, 2020

Attachment 2: List of Commenters

Name & Organization	Alternatives	DS/Checklist	EIS Scope/Analysis	Communications and Outreach	Natural Environment	Land Use	Plans and Policies	Housing	Transportation	GHG Emissions	Equity	Schools	Transfer of Development Riahts	Town Center	General Comments and Preferences
Baer, Nancy															●
Bird, Jan	●				●	●		●					●	●	
Bresko, Mike	●		●					●	●					●	●
Brooks, Eric	●					●		●							●
Cantor, Pauline				●	●			●		●					●
Darnell, Denise				●	●	●	●	●	●						●
Eastman, James				●	●	●	●	●	●		●		●	●	●
Gerend, Don	●	●				●	●	●	●						●
Gordon, Kate					●		●		●		●			●	●
Gygi, Ann	●	●	●			●	●	●	●				●		
STCA, LLC															
Herring, Karen	●				●	●									●
Horn, Jeremy	●			●		●	●							●	●
Hornish, Tom														●	●
Howe, Karen					●		●		●		●		●	●	●
Howe, Karen,					●		●	●	●		●		●	●	●
Sammamish Friends															
Huckabay, Kathleen		●					●	●	●					●	●
Keller, Bob	●						●	●	●					●	
Kimsey, Sarah						●		●	●		●			●	●
Kormos, Kaitlyn					●		●		●		●			●	●
Lawson, Brian															●
Lawson, Diane															●
Leavitt, Brian	●							●							●
Malaba, Patience	●	●	●			●	●	●	●		●				
Housing Development															
Consortium of Seattle-															
King County															
Mauzy, Charles	●							●	●						●
McKnight, Karen	●														●
Mineau, Paul	●				●										●

Name & Organization	Alternatives	DS/Checklist	EIS Scope/Analysis	Communications and Outreach	Natural Environment	Land Use	Plans and Policies	Housing	Transportation	GHG Emissions	Equity	Schools	Transfer of Development Riahts	Town Center	General Comments and Preferences
Mullor, Miki									●			●			
Murphy, Michael King County Water and Land Resources Division						●							●		
O'Farrell, Roisin	●		●	●	●	●									●
Pereyra, Wally					●									●	
Richburg, Julio	●				●			●							●
Seetharaman, Karthik					●	●			●						●
Sims, Kat MBAKS	●	●	●	●		●		●	●		●				●
Sogge, Deborah	●					●		●	●						●
Sogge, Deborah Sammamish Chamber of Commerce		●						●	●				●	●	●
Sogge, Kent	●					●		●	●					●	●
Steele, Lisa			●	●	●	●		●	●						
Steinbis, Sharon					●		●	●	●			●		●	●
Stever, Chandler	●							●							
Stever, Peyton	●				●	●		●	●						●
Stickney, Paul (1)	●		●			●		●	●						●
Stickney, Paul (2)	●					●		●	●						●
Stickney, Paul (3)	●					●		●	●						●
Stickney, Paul (4)	●		●			●		●	●						
Stickney, Paul (5)									●						●
Stickney, Paul (6)					●	●	●	●	●						●
Stickney, Paul (7)	●		●			●	●	●						●	●
Stickney, Paul (8)	●		●			●		●	●						●
Stickney, Paul (9)	●					●		●							●
Stickney, Paul (10)	●	●					●	●	●					●	●
Stickney, Paul (11)		●				●									
Stickney, Paul (12)		●				●									
Stuart, Cameron					●			●	●	●	●				●
Stuart, Pamela					●		●	●	●	●	●				●

Name & Organization	Alternatives	DS/Checklist	EIS Scope/Analysis	Communications and Outreach	Natural Environment	Land Use	Plans and Policies	Housing	Transportation	GHG Emissions	Equity	Schools	Transfer of Development Rights	Town Center	General Comments and Preferences
Thompson, Kathleen					●	●			●					●	●
Treen, Debbie			●	●	●	●	●	●	●						●
Trohimovich, Tim Futurewise					●	●	●	●	●	●					
Valderrama, Ramiro (1)	●							●							●
Valderrama, Ramiro, (2)					●				●		●			●	●
Valderrama, Sherrie					●				●		●			●	●
Vance, Tom							●	●	● ●					●	
Velasco, Maria					●			●	●						●
Walter, Karen Muckleshoot Indian Tribe Fisheries Division					●										
Whitten, Nancy	●			●		●			●					●	●
Wictor, Mary (1)	●				●	●		●	●				●	●	●
Wictor, Mary (2)	●				●	●		●							
Wictor, Mary (3)															●
Wictor, Mary (4)	●				●	●		●	●						●
Wictor, Mary (5)	●							●	●						●

City of Sammamish Washington

Department of Community Development

801 228th Avenue SE ■ Sammamish, WA 98075 ■ phone: 425-295-0500 ■ fax: 295-295-0600 ■ web: www.sammamish.us

REVISED SCOPING NOTICE

Publication Date: February 22, 2021

Lead agency
City of Sammamish

Agency Contacts
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Agency File Number
POL2020-00767 FKA POL2020-00331

Purpose
On July 7, 2020 the City of Sammamish issued a SEPA Determination of Significance and Scoping Notice and request for comments pursuant to WAC 197-11-408. This is an optional revised scoping notice pursuant to WAC 197-11-408(4) provided for informational purposes because additional alternatives are being considered which expand the scope of the EIS.

There is no additional comment period associated with this optional notification. However, the City of Sammamish values public participation and provides below information regarding how to get involved in this process.

Description of proposal
The proposal is a set of amendments to the Comprehensive Plan and Municipal Code intended to address transportation level of service standards and capital facilities needs and associated environmental impacts. Proposed amendments include (1) Comprehensive Plan amendments intended to adjust the City's transportation Level of Service Standards (LOS) and related concurrency program, and (2) related Municipal Code amendments that implement amended Comprehensive Plan policy guidance.

Comprehensive Plan amendments are anticipated to focus on the Transportation and Capital Facilities elements but may include additional elements as needed to achieve internal plan consistency. Comprehensive Plan amendments will include updated policy guidance for LOS standards and updated background information to reflect the City's current transportation network, including maps and tables, concurrency program description, 6-Year Transportation Improvement Program, recommended 20-year transportation improvements, financing program, and other related information.

Municipal Code amendments are anticipated to be focused on Titles 14A and 21A SMC. Municipal Code amendments will amend LOS standards to reflect amended Comprehensive Plan guidance, delete outdated tables, correct definitions and Comprehensive Plan references, and may include other related actions.

SEPA Threshold Determination

On July 7, 2020 a Determination of Significance (DS) and request for comments on the scope of the Environmental Impact Statement (EIS) was issued. No change to the DS is proposed, however additional alternatives are being considered in the EIS, as described below.

Location

The focus for the proposed Comprehensive Plan and Municipal Code amendments is the entire City of Sammamish within municipal boundaries.

Proponent

City of Sammamish

EIS Scope

The City of Sammamish has determined that this proposal may have a probable significant adverse environmental impact. An environmental impact statement (EIS) is required under RCW 43.21C.030 (2)(c) and will be prepared.

Based on the prior scoping process conducted for this proposal, the lead agency has identified the following areas for discussion in the EIS: earth (steep slopes, landslide hazards), water resources (water quantity and quality, stormwater), plants and animals (tree canopy, fish), land use, plans and policies, population and housing, transportation, including impacts on transportation-related greenhouse gas emissions and evacuation routes, and consideration of utilities (broadband access) to the scope of analysis.

Alternatives considered in the EIS are anticipated to include the following:

	Alternative	Potential Key Features
1	No Action	No changes to existing policies and regulations
2	Transportation Level of Service (LOS) Standards	• New LOS standards for intersections and key corridors and roadway segments • No changes land use assumptions • Changes to transportation infrastructure to meet new LOS standards.
3	Transportation LOS Standards with transportation-efficient land use patterns	• New LOS standards for intersections and key corridors and roadway segments • Transportation-efficient land use patterns consistent with the existing Comprehensive Plan • Changes to transportation infrastructure to meet new LOS standards
4	Transportation LOS Standards with transportation-efficient land use patterns and transportation network improvements	• New LOS standards for intersections and key corridors and roadway segments • Transportation-efficient land use patterns consistent with the existing Comprehensive Plan

		• Transportation infrastructure and management changes including network improvements for greater efficiency and to meet new LOS standards.

Scoping

Scoping is the process of identifying the elements of the environment to be evaluated in an EIS. Scoping is intended to help identify and narrow the issues to those that are significant. The scoping process includes a public comment period so that the public and agencies can comment on key issues and concerns. Following the comment period, the City considers all comments received and determines the scope of review for the environmental analysis (WAC 197-11-408(4)).

Comment Period

There is no comment period associated with this optional revised scoping notice, pursuant to WAC 197-11-408(4). The City of Sammamish previously issued a DS / Scoping Notice on July 7, 2020 and conducted a 24-day comment period. Following the comment period, the City prepared a scoping report that acknowledged comments received and identified potential changes to the scope of the EIS. These changes are included in the description of the areas for discussion in the EIS, above.

Public Participation

The community is encouraged to continue to participate in the EIS process. The issuance of the Draft EIS (DEIS), anticipated in May 2021 will commence a 30-day public comment period, which is the next opportunity for public input. Please refer to the tentative project timeline available on the project webpage located here: https://connect.sammamish.us/eis. Comments received during this comment period will be addressed in the Final EIS (FEIS). Additionally, prior to any legislative action by the City Council, a public hearing will be held.

COMMENTING ON THE EIS

Balanced Land Use and Mobility Analysis EIS

1. WHEN CAN I PROVIDE COMMENT?

The comment period for the Balanced Land Use and Mobility (BLUMA) EIS will commence following issuance of the Draft EIS. The Draft EIS is circulated so that the public and agencies can comment on the accuracy and content of the EIS before it is finalized.

The City will provide a 30-day comment period following issuance of the Draft EIS. During this period, written comment may be provided. Additional information on dates and how to provide comment will be included in the Draft EIS. Please note that there is no comment period following issuance of the Final EIS.

Based on the current schedule, the Draft EIS is scheduled to be issued in May of 2021. Issuance of the Draft EIS will be publicized. Upon issuance of the Draft EIS, the 30-day comment period will commence

2. WHAT WILL HAPPEN TO MY COMMENTS?

The City will consider all comments provided during the Draft EIS 30-day comment period. Comments may result in corrections, additions or clarification of information in the Draft EIS. The Final EIS will include all revisions made as a result of comments as well as specific responses to all comments. See Item #3 below regarding how to make appropriate comment on the Draft EIS.

3. HOW CAN I MAKE MY COMMENTS MOST EFFECTIVE?

The Washington State Department of Ecology has developed a Citizen's Guide to SEPA Review and Commenting https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-guidance/Review-commenting). The following are tips for commenting on an EIS.

- **Be clear, concise, and organized**. Decide what you need to say before you begin. Developing an outline, if you have a number of points, is a good idea to help you group your comments in a logical order. Jumping back and forth between several topics reduces the impact of your argument.
- **Be specific**. Saying that you are against a project will not have as much effect as saying why. It is always a good idea to give as much support as possible to your comments. Include as much factual information as possible. For instance, you can compare how things were, to how they are, to how you believe they will be in the future—and why. Referring to the Comprehensive Plan, development regulations, information on similar projects or situations, or other environmental laws and/or documents can also be helpful. It is important to be as accurate as possible.
- **Identify possible solutions**. After identifying your concern, whenever possible, suggest possible solutions. Suggestions on reasonable mitigation (conditions to avoid, minimize, or reduce adverse impacts) may also be helpful.

SEPA EIS PROCESS

Balanced Land Use and Mobility Analysis EIS

1. WHAT IS SEPA?

The State Environmental Policy Act (SEPA) is a state policy established in Chapter 43.21C of the Revised Code of Washington (RCW) that requires state and local agencies to consider the likely environmental consequences of governmental decisions, including decisions on land use, or regulatory changes. Implementing rules (often referred to as the SEPA Rules) are codified in Chapter 197-11 of the Washington Administrative Code (WAC) and in Title 20 "Environmental Policies and Procedures" of the Sammamish Municipal Code (SMC). The SEPA Rules provide detail for the environmental review process, including the EIS process.

2. WHAT IS AN EIS AND WHY IS IT BEING PREPARED?

An environmental impact statement, or EIS, is a document intended to assist decisionmakers by providing an impartial discussion of potential significant adverse environmental impacts, reasonable alternatives, and mitigation measures that would avoid or minimize adverse impacts associated with a proposed action. The BLUMA EIS is being prepared because the City has determined that the proposal has the potential to result in significant adverse impacts to the environment. More detail on the proposal and the alternatives being considered can be found in the Revised EIS Scoping Notice here: https://connect.sammamish.us/eis/news_feed/revised-eis-scoping-notice. Other information and future project updates can be found at the project webpage here: https://connect.sammamish.us/eis

3. WHAT IS THE DIFFERENCE BETWEEN A DRAFT EIS AND A FINAL EIS?

A Draft EIS provides the public and agency decision-makers with information on potential significant adverse environmental impacts of a proposal and alternatives and on mitigation measures to reduce impacts. A Final EIS includes all comments received on the Draft EIS and responses from the City; it may also include revisions to the Draft EIS based on comments received and new information learned.

4. HOW WILL I KNOW WHEN THE DRAFT EIS IS ISSUED AND WHERE WILL IT BE AVAILABLE?

The Draft EIS is tentatively scheduled to be issued in May 2021. Should the schedule change, updated information will be posted on the City's project web site (https://connect.sammamish.us/eis).

A notice of availability of the Draft EIS will be posted on the City's project webpage (https://connect.sammamish.us/eis), mailed to agencies, posted on the City's website, published in the Seattle Times, and emailed to the City's list of interested parties.

SEPA EIS PROCESS

Balanced Land Use and Mobility Analysis EIS

5. WHAT IS SCOPING?

Scoping is the process of identifying the elements of the environment to be evaluated in an EIS. Scoping is intended to help identify and narrow the issues to those that are significant. Scoping includes a public comment period so that the public and other agencies can comment on key issues and concerns. Following the comment period, the City considers all comments received and determines the scope of review for the environmental analysis.

The City of Sammamish previously issued a DS / Scoping Notice on July 7, 2020 and conducted a 24-day comment period. Following the comment period, the City prepared a scoping report that acknowledged comments received and identified potential changes to the scope of the EIS.

Unlike comment received during the Draft EIS phase of the process, comment received during the scoping phase of the EIS is received and processed with the purpose of helping guide the scope of future analysis to be undertaken with the EIS. The most effective point in the EIS process to review information related to the EIS and provide comment is during the 30-day Draft EIS comment period.

6. WHAT ARE THE ELEMENTS OF THE ENVIRONMENT? WHICH ONES WILL BE STUDIED IN THE EIS?

As defined in SEPA, potential elements of the environment that may be considered include both the natural environment (earth, air, water, plants and animals, energy and natural resources) and the built environment (environmental health, land and shoreline use, transportation, aesthetics, housing, public services and utilities). An EIS focuses on environmental impacts and is not required to evaluate all of the possible considerations and effects of a decision, such as economic competition and social policy analysis.

The BLUMA EIS will address: earth (steep slopes, landslide hazards), water resources (water quantity and quality, stormwater), plants and animals (tree canopy, fish), land use, plans and policies, population and housing, transportation, including impacts on transportation-related greenhouse gas emissions and evacuation routes, and consideration of utilities (broadband access) in the scope of analysis.

7. HOW ARE THE ALTERNATIVES DEFINED?

The lead agency (in this case the City of Sammamish) determines the alternatives based on its assessment of reasonable options that could feasibly attain the proposal's objectives. For the BLUMA EIS, the City has identified four alternatives (a "No Action" alternative and three action alternatives).

The first alternative ("No Action Alternative") assumes that the proposal is not adopted and the status quo is maintained. In this case, that means that the City's intersection level of service standards would comprise the concurrency program.

The three action alternatives each describe different approaches to the proposal of amendments to the Comprehensive Plan and Municipal Code intended to address transportation level of service standards and capital facilities needs and associated environmental impacts. More detail on the alternatives can be found in the City's revised scoping notice, issued on February 22, 2021.

It is important to note that alternatives represent a range of actions that could be taken by decisionmakers and are intended to help decisionmakers understand the implications associated with different options. Alternatives included in an EIS are not meant to constrain decisionmakers in their range of options to precisely what is studied in the EIS.

B Growth Targets

Memorandum

801 228th Avenue SE ■ Sammamish, WA 98075 ■ phone: 425-295-0500 ■ fax: 295-295-0600 ■ web: www.sammamish.us

Date: May 5, 2021

To: Dave Rudat, City Manager

From: Doug McIntyre, Transportation Planner, Department of Public Works; Lindsey Ozbolt, Project Manager – Long Range Planning, Department of Community Development; Jeff Elekes, Public Works Director; David Pyle, Community Development Director; Kellye Hilde, Community Development Deputy Director; Audrie Starsy, Public Works Deputy Director

Cc: Lisa Marshall, City Attorney; Peter Eglick, Outside Counsel

Re: Balanced Land Use and Mobility Analysis (BLUMA) EIS Data Discrepancy and Reconciliation

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Executive Summary

This memo clarifies an issue regarding growth figures used in the Balanced Land Use and Mobility Analysis (BLUMA) EIS analysis and the resulting impacts and revisions. The EIS consultant team uncovered a difference in growth figures for the EIS analysis when the numbers should have been identical. Through deeper analysis of the issue, it was determined that 885 new dwelling units through the year 2035 should be expected in the City of Sammamish. Therefore, the EIS analysis will be revised to use 885 dwelling units as the growth number in both the traffic modeling and the land use and housing analysis. An explanation of the 885 dwelling unit figure is provided below.

The impact of this is that the EIS analysis needs to be revised, resulting in a slight delay of the overall project; however, the analysis will now be consistent with the growth assumptions in the City's 2015 Comprehensive Plan, strengthening the overall EIS document.

Issue

During the background work done in the drafting phase of the BLUMA EIS process, analysis performed by the City's consultant team revealed different growth numbers and a discrepancy between data sources. These data sources and growth numbers are essential in the EIS and are used to analyze impacts to traffic, land use, and housing. The data sources and resultant growth numbers must be consistent to allow for cohesive analysis of impacts and modeling. The growth number used in the EIS traffic modeling was 4,640 new dwelling units or the 2006-2035 growth target adopted as part of the King County Countywide Planning Policies and referred to in the 2015 Comprehensive Plan.[1] The growth number used in the EIS land use and housing analysis was 885 new dwelling units or the remaining 2006-2035 growth target subtracting growth achieved from 2006 through 2019. This discrepancy was discovered in March 2021 as the team was working on the preliminary Draft EIS that was scheduled to be provided to City staff on March 26, 2021. Once the co-project managers were notified of the

[1] 2015 Comprehensive Plan, Land-Use Background Chapter, page LU.7.

discrepancy, work was halted to address the issue, determine which number was accurate, conduct further traffic modeling, and then chart a course for reconciliation in the EIS analysis.

The impact of using differing numbers results in an inconsistent analysis between the land use and housing analysis and the traffic modeling being conducted. The numbers must be the same so that the growth-related transportation capital projects resulting from the modeling correspond with the land use figures used in the housing analysis.

The EIS Project Team collectively determined that, for this EIS analysis, the remaining growth number in the 2006-2035 Comprehensive Plan planning horizon that was adopted by the City of Sammamish in 2015 should be used. This means that the growth assumed to occur for this EIS is the remaining unbuilt portion of the growth forecasted between 2006 and 2035, which is 885 dwelling units.

The issue arose out of a Scrivener's Error in the Comprehensive Plan. The 2015 Comprehensive Plan states that the City's "*growth targets adopted for the City of Sammamish are established for two time frames. The 2006-2031 growth targets were adopted as part of the King County CPP and then subsequently extended to the 2035 time horizon for use in the current planning process.*" As shown in Figure 1, Table LU-2 references these two timeframes and the associated growth targets.

	2006-2031 TARGETS	2015-2035 TARGETS
Housing	4,000 Housing Units	4,640 Housing Units
Jobs	1,800 Jobs	2,088 Jobs

Sources: King County, 2013; City of Sammamish, 2014.

Figure 1: Background Table LU-2, 2015 Comprehensive Plan

There has been some confusion related to the growth targets referenced in Table LU-2 and if the timespan for the 2015-2035 growth targets shown in Figure 1 needs to be updated to 2006-2035 to adequately account for the 4-year extension. To clear up any confusion, staff recommend that the timespan be updated as shown in red text in Figure 2.

	2006-2031 TARGETS	2006-2035 TARGETS
Housing	4,000 Housing Units	4,640 Housing Units
Jobs	1,800 Jobs	2,088 Jobs

Sources: King County, 2013; City of Sammamish, 2014.

Figure 2: Background Table LU-2 (proposed update), 2015 Comprehensive Plan

City staff is working with the legal team to correct the Scrivener's Error in the current Comprehensive Plan to provide clarity.

Data Used and Description of the 885 Dwelling Unit Figure

To explain the origin and reasoning behind 885 dwelling units now being used in the EIS analysis, staff have provided an overview of the current King County Countywide Planning Policies (CPP) growth target, the number of dwelling units added from 2006-2019, and the number of dwelling units that remain from

the City's 2006-2035 King County adopted CPP Growth Target.

Current King County CPP Growth Target (2006-2035)
Sammamish's King County adopted CPP growth target for 2006-2031 included 4,000 dwelling units.This growth target was extended by four additional years for the 2015 Comprehensive Plan's planning period, making the target 4,640 dwelling units for 2006-2035. This target was then adjusted in 2016 with the annexation of Klahanie, setting the current King County CPP dwelling unit target for Sammamish at 4,849 units for 2006-2035.

Dwelling units Added (2006-2019)
King County utilizes the Office of Financial Management (OFM) Postcensal Estimates of Housing Units to assess dwelling unit growth for jurisdictions. The 2006 OFM dwelling unit estimate for Sammamish was 18,196 units (adjusted for the 2019 geographic boundary) and the 2019 OFM estimate was 22,159 units. Therefore, 3,963 dwelling units were added between 2006 and 2019.

Remaining King County CPP Target (2019-2035)
Based on the above data from OFM, the City has added 3,963 dwelling units between 2006 and 2019, with 885 dwelling units remaining under the current target of 4,849 for the planning horizon of 2019-2035. Furthermore, as of March 2, 2021, the 885 dwelling unit figure is broken down as 689 dwelling units in the pipeline (i.e. in a stage of the permitting process) and 196 dwelling units are new and unaccounted for as of yet, but are expected to be built by 2035.

New Draft Growth Target (2019-2044)
The City of Sammamish was classified within the "Larger Cities" as part of the Puget Sound Regional Council's ("PSRC") Vision 2040. By definition, within Vision 2040, Larger Cities were expected to "become more important subregional job, service, housing, cultural, and housing centers". As such, PSRC's Vision 2040 assumed an expanded role for Larger Cities, including Sammamish, and as such this group of 18 cities was assigned 14% of the region's population growth and 12% of the region's employment growth. Under the Vision 2040 framework of growth management, the City of Sammamish was assigned a growth target in 2013 through King County CPP adoption of 4,000 housing units. This target was extended twice, once in 2015 and once again in 2016. The City's current formally adopted King County CPP growth target is 4,849 units as noted above.

Under PSRC's Vision 2050, the City of Sammamish is being placed in the category of "Cities and Towns" that are "not connected to high-capacity transit options" and "should become priority areas for future investments and growth at the local level." The 19 jurisdictions in the King County Cities and Towns group are expected to take 5% of King County's share of the region's population growth (13,985 housing units) and 4% of the employment growth (jobs).

The City of Sammamish has just concluded engagement with King County in the Cities and Towns Geography Growth Caucus with the last meeting held on March 10, 2021. The City's proposed 25-year growth target (King County CPP Growth Target for 2019-2044 planning horizon) of 700 housing units and 305 jobs was accepted by partner Cities in the Caucus. Within the Vision 2050 growth framework, the City is on track for King County CPP assignment of 700 housing units and 305 jobs as the City's 2019-2044 growth target. These draft growth targets are reflected in the draft CPPs published by King County for public review on April 5, 2021. This City anticipates that these will become the City's new growth targets to be used as the baseline in the 2025 Comprehensive Plan update.

***NOTE:** While these new draft CPP growth targets for the timeframe of 2019-2044 are important for consideration, they are not the current "officially adopted" growth targets of the County or the City. For this reason, although we have include this information within this memo, it is important to note that these numbers are provided only as a reference. The officially adopted growth target numbers being used in this EIS are the City's official 2006-2035 CPP growth targets and the City's 2015 adopted Comprehensive Plan growth target. The officially adopted growth target numbers are described in the preceding sections.

Conclusion

The City's Transportation Consultant, TSI, is currently revising the traffic model for the EIS analysis to reflect the 885 dwelling unit figure. This may result in slightly different transportation capital projects being identified as necessary for the three action alternatives in the EIS. This work is expected to take a month, as it includes the modeling, documentation, and project identification and definition. Once completed, the work will be shared with the rest of the EIS consultant team for their analysis. This work is expected to take approximately two months and includes revisions to the preliminary Draft EIS. Following this work, it will go to the City's EIS Project Team for review. A refined and updated schedule will be shared with the City Council once all schedule impacts are finalized.

C BLUMA Traffic Analysis Report

July 2021

Transportation Solutions
INNOVATIVE | PRACTICAL | EQUITABLE

SAMMAMISH 2035 TRAVEL DEMAND MODEL AND INTERSECTION LEVEL OF SERVICE MODEL UPDATE AND BLUMA TRAFFIC ANALYSIS
DRAFT REPORT

July 2021

Prepared for:
City of Sammamish

Prepared by:
Transportation Solutions, Inc.
16932 Woodinville-Redmond Road NE, Suite A206
Woodinville, WA 98072

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GLOSSARY

Travel demand model – A tool used by transportation engineers & planners to forecast future travel patterns and conditions.

Vehicle trip – A trip made by a motorized vehicle from an origin to a destination, usually assumed to be without stops. It may be associated with a more-than-one-person trip (for example, in a carpool). Vehicle trips are the units of travel in the Sammamish planning model.

Transportation Analysis Zone (TAZ) – The unit of geography used in most transportation planning models. TAZs include the socioeconomic data, including household and employment data, which are used as inputs to the trip generation procedure.

Trip generation – The first step in the travel forecasting process. Trip generation predicts the number of trips originating in or destined for a transportation analysis zone.

Trip distribution – The second step of the travel forecasting process. Trip distribution matches trip origins and destinations to develop a "trip table" or origin-destination matrix that displays the number of trips going from each origin to each destination.

Traffic assignment – The final step of the travel forecasting process. Traffic assignment concerns the selection of routes between origins and destinations in transportation networks. In general, traffic assignment assumes an equilibrium condition – in other words, travelers will strive to find the shortest (or least resistance) path from origin to destination, with network equilibrium occurring when no vehicle can decrease travel effort by shifting to a new path.

Home-Work (HW) and **Work-Home (WH)** trips – Trips between a person's home and place of employment for the purpose of working.

Home-Other (HO) and **Other-Home (OH)** trips – Trips between a person's home and other trip generator (not for the purposes of working); e.g. shopping trips.

Non-Home-Based (NHB) trips – Trips between two non-home trip generators; e.g. from a workplace to a shopping center.

Link – In travel demand modeling, a transportation network element which represents a street or roadway connecting two nodes (intersections).

Node – In travel demand modeling, a transportation network element which represents the intersection of two links (roadways) or the terminus of a link.

Turn – In travel demand modeling, a transportation network element which represents an allowed movement within a node (intersection).

Speed – As a travel demand modeling input, speed represents posted speed or free flow speed on a given network link (roadway).

Capacity – As a travel demand modeling input, capacity represents the practical limit of vehicles which can be served by a particular network element in a given unit of time. In general, as demand increases

relative to capacity on a given network element, delay increases and speed decreases. In the Sammamish travel demand model, capacity is expressed in units of vehicles per hour.

Calibration – The adjustment of constraints and other model parameters to make a model replicate observed data for a base (calibration) year or otherwise produce more reasonable results.

Validation – The application of the calibrated model and comparison of the results against observed data.

TFlowFuzzy – An origin-destination matrix correction procedure which is used to adjust a demand matrix so that its assignment results match observed traffic counts. Matrix correction is typically applied as a final refinement measure to a calibrated model.

AM peak hour – The highest four consecutive fifteen-minute volume intervals during the AM peak period of travel. AM peak hour generally corresponds to the period of rush hour traffic with commuters driving from home to work.

PM peak hour – The highest four consecutive fifteen-minute volume intervals during the PM peak period of travel. PM peak hour represents the continuous one-hour period when traffic volumes on local roadways are typically at their peak, and generally corresponds to the period of rush hour traffic with commuters returning home from work.

Level of Service (LOS) – A qualitative description of the operating performance of an element of transportation infrastructure such as a roadway or an intersection. LOS is typically expressed as a letter score from LOS A, representing free flow conditions with minimal delays, to LOS F, representing breakdown of flow or gridlock with high delays.

Major approach – At an intersection, the major approaches are generally those that have a higher functional classification and serve higher traffic volumes. At minor-road-only stop control intersections, traffic on major approaches is not required to stop.

Minor approach – At an intersection, the minor approaches are generally those that have a lower functional classification and serve lower traffic volumes. At minor-road-only stop control intersections, traffic on minor approaches is required to stop.

Highway Capacity Manual 6th Edition (HCM6) – A publication of the Transportation Research Board of the National Academies of Science. HCM6 contains concepts, guidelines, and computational procedures for computing the capacity and levels of service of various transportation facilities, including street segments and intersections.

National Cooperative Highway Research Program (NCHRP) Report 716: Travel Demand Forecasting: Parameters and Techniques – A publication of the Transportation Research Board of the National Academies of Science. NCHRP Report 716 provides nationally-accepted guidance on travel demand forecasting procedures and their applications.

Travel Model Validation and Reasonability Checking Manual Second Edition – A publication of the Federal Highway Administration under the Travel Model Improvement Program. The manual provides technical guidance to aid planning organizations in implementing state-of-the-practice and state-of-the-art modeling methods.

INTRODUCTION

This report documents the methods, assumptions, and results of the 2035 Sammamish travel demand model and Level of Service (LOS) model update. It summarizes the results of the 2035 street segment and intersection LOS analyses and identifies transportation improvement projects required to maintain minimum transportation LOS standards through 2035 for the four alternatives in the BLUMA DEIS.

The models described herein represent the most accurate planning-level traffic forecasting tools currently available for City of Sammamish streets. Future policy updates, including Comprehensive Plan, Capital Facilities Plan, and transportation impact fee rate updates, may adopt the updated travel demand model and LOS models by reference.

BACKGROUND

The City of Sammamish uses AM and PM peak hour travel demand models to calculate future travel demand forecasts for city streets and intersections based on funded Transportation Improvement Program (TIP) projects, permitted "pipeline" development, and long-range development forecasts. The current travel demand models are based on a 2016 base year and generate traffic forecasts for a 2035 horizon year. The models as used for the BLUMA DEIS are also used by the City of Sammamish for transportation concurrency management, Comprehensive Plan development, and other transportation planning and policy applications.

The Sammamish travel demand model was initially developed in 1999 in TModel software by Earth Tech Engineering (ETE). The model was converted to PTV Visum software after the merger of TModel with Visum and was maintained by David Evans and Associates (DEA) through 2020. In 2020, the model was updated and recalibrated in Visum by Transportation Solutions, Inc.

TRAVEL DEMAND MODEL 2016 BASE YEAR UPDATE

The Sammamish travel demand model incorporates the latest residential and employment inventories, development forecasts, transportation facility inventories, and planned transportation improvement projects in the City. Model inputs and parameters were calibrated using weekday PM peak hour traffic counts collected in 2016. This section describes the development and calibration of the 2016 model.

2016 Transportation Network Update

NETWORK ARCHITECTURE

The modeled street network was reviewed and updated to reflect 2016 roadway alignment, channelization, posted speeds, turn restrictions and intersection control. Street network characteristics were verified through field visits, satellite photography, online street-view photography, and discussion with City and consultant staff.

Links, nodes, and turns were modeled using inputs which have been adopted by other agencies throughout western Washington. Modeled link, node, and turn capacities are identified in **Tables 1**, **2**, and **3**. The network inputs balance precision with ease-of-maintenance and are appropriate for planning-level travel demand model applications. They are provided here for reference but do not directly impact the intersection and segment Level of Service analyses presented later in this document.

Table 1. Link Types and Attributes

Link Type	Description	# of Lanes (per direction)	Capacity (veh per hour)	Speed (mph)
1	Blocked	0	0	0
2	Freeway (60mph, 2ln per dir)	2	3800	60
3	Freeway (60mph, 3ln per dir)	3	5600	60
4	Freeway (60mph, 4ln per dir)	4	7600	60
11	Ramps (45mph, 1ln per dir)	1	1500	45
12	Ramps (45mph, 2ln per dir)	2	3000	45
14	Ramps (35mph, 1ln per dir)	1	1200	35
15	Ramps (35mph, 2ln per dir)	2	2400	35
17	Ramps (25mph, 1ln per dir)	1	1200	25
22	Non-freeway (55mph, 2ln)	1	1600	55
26	Freeway (55mph, 2ln per dir)	2	3800	55
27	Freeway (55mph, 3ln per dir)	3	5600	55
28	Freeway (55mph, 4ln per dir)	4	7600	55
32	Non-freeway (50mph, 2ln)	1	1600	50
33	Non-freeway (50mph, 3ln)	1	1700	50
35	Non-freeway (50mph, 4ln)	2	3000	50
42	Non-freeway (45mph, 2ln)	1	1350	45
43	Non-freeway (45mph, 3ln)	1	1500	45
44	Non-freeway (45mph, 4ln)	2	2700	45
45	Non-freeway (45mph, 5ln)	2	3000	45
52	Non-freeway (40mph, 2ln)	1	950	40
53	Non-freeway (40mph, 3ln)	1	1300	40
54	Non-freeway (40mph, 4ln)	2	1800	40
55	Non-freeway (40mph, 5ln)	2	2400	40
57	Non-freeway (40mph, 7ln)	3	4500	40
62	Non-freeway (35mph, 2ln)	1	900	35
63	Non-freeway (35mph, 3ln)	1	1250	35
64	Non-freeway (35mph, 4ln)	2	1700	35
65	Non-freeway (35mph, 5ln)	2	2200	35
72	Non-freeway (30mph, 2ln)	1	900	30
73	Non-freeway (30mph, 3ln)	1	1200	30
74	Non-freeway (30mph, 4ln)	2	1500	30
75	Non-freeway (30mph, 5ln)	2	2000	30
82	Non-freeway (25mph, 2ln)	1	600	25
83	Non-freeway (25mph, 3ln)	1	900	25
84	Non-freeway (25mph, 4ln)	2	1000	25
85	Non-freeway (25mph, 5ln)	2	1300	25
92	Non-freeway (20mph, 2ln)	1	350	20
93	Non-freeway (20mph, 3ln)	1	550	20

Table 2. Node Types and Attributes

Node Type	Description
1	Shape node (no delay)
5	Minor-approach-only stop control[1] (uses node delay)
10	All-way stop control (AWSC)
20	Roundabout, single-lane
25	Roundabout, dual-lane
31	Signal, 3 approaches, single LT all, single RT minor
32	Signal, 3 approaches, single LT all, dual RT minor
41	Signal, 4 approaches, single LT all, 1x1 unbalanced volumes
42	Signal, 4 approaches, single LT all, 1x1 balanced volumes
43	Signal, 4 approaches, single LT all, 2x1 unbalanced volumes
45	Signal, 4 approaches, single LT all, 2x2 unbalanced volumes
46	Signal, 4 approaches, single LT all, 2x2 balanced volumes
53	Signal, 3 approaches, dual LT on major only
54	Signal, 4 approaches, dual LT on major only
61	Signal, 3 approaches, dual LT on minor only, single RT minor
62	Signal, 3 approaches, dual LT on minor only, dual RT minor
73	Signal, 3 approaches, dual LT on all approaches
74	Signal, 4 approaches, dual LT on all approaches

[1]Minor approach stop control includes intersections having at least one approach (typically the lower-volume minor road) under the control of a stop sign and at least one approach not controlled by a stop sign.

Table 3. Turn Capacities and Initial Delays

Node Type	Turn Capacities (vehicles per hour)						Initial Turn Delay (seconds)					
	Major Approach			Minor Approach			Major Approach			Minor Approach		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
1	99999	99999	99999	99999	99999	99999	0	0	0	0	0	0
5[1]	99999	99999	99999	99999	99999	99999	0	0	0	10	10	5
10	250	450	250	250	450	250	15	15	15	15	15	15
20	800	800	800	800	800	800	5	5	5	5	5	5
25	1200	1200	1200	1200	1200	1200	5	5	5	5	5	5
31	350	2000	750	450	1000	750	12	5	8	12	5	8
32	350	2800	750	450	1000	1200	12	5	8	12	5	8
41	300	1500	450	230	380	380	12	5	8	12	5	8
42	250	800	450	230	600	380	12	5	8	12	5	8
43	500	2800	750	380	630	630	12	5	8	12	5	8
45	400	2800	1050	300	880	880	12	5	8	12	5	8
46	300	1200	500	250	1000	500	12	5	8	12	5	8
53	550	2000	750	450	1000	750	12	5	8	12	5	8
54	700	1500	500	300	1000	500	12	5	8	12	5	8
61	350	2000	750	700	1000	750	12	5	8	12	5	8
62	350	2000	750	700	1000	1200	12	5	8	12	5	8
73	550	2000	750	700	1000	750	12	5	8	12	5	8
74	550	1500	500	550	1000	500	12	5	8	12	5	8

[1] Turn delays for minor-approach-only stop control nodes are calculated in two steps. First, node delay is calculated by applying a volume-delay function to the volume-capacity ratio of the node. Second, turn delay is calculated as the sum of node delay and turn-specific delay (calculated with a turn-specific volume-delay function). Minor-approach-only stop control node delay only applies to turns from a stop-controlled approach. This approach allows node capacity and, by extension, link capacity to constrain minor-approach-only stop control turn capacity.

2016 Land Use Update

LAND USE ARCHITECTURE

Land use is represented in the travel demand model by geographic units called Transportation Analysis Zones (TAZs). The travel demand model includes a total of 262 internal TAZs and 13 external TAZs which represent traffic entering and exiting the City at major access points. TAZ boundaries are shown in **Figure 1**.

Travel demand model land use is represented in two residential categories and eight non-residential categories, as shown in **Table 4**. Residential land uses are expressed as single-family and multi-family dwelling units. Non-residential land use is expressed in terms of gross floor area (square feet), with the exceptions of park & ride lots (number of spaces) and active land (acres).

The 2016 model land use reflects a "snapshot" of development in and near Sammamish which was completed and occupied at the time of the April 2016 traffic count data collection.

Table 4. Land Use Categories and Units

Land Use Type	Land Use Category	Short Code	Units
Housing	Single-Family	SFDU	dwelling units (DU)
	Multi-Family	MFDU	dwelling units (DU)
Non-Residential	Retail	RETAIL	1,000 sq. ft (ksf)
	Office	OFFICE	1,000 sq. ft (ksf)
	Industrial	IND	1,000 sq. ft (ksf)
	Social Retail	SOCRET	1,000 sq. ft (ksf)
	Education & Churches	EDU	1,000 sq. ft (ksf)
	Medical/Dental	MEDENT	1,000 sq. ft (ksf)
	Active Land/Parks	PRK	acres
	Park & Ride	PNR	spaces

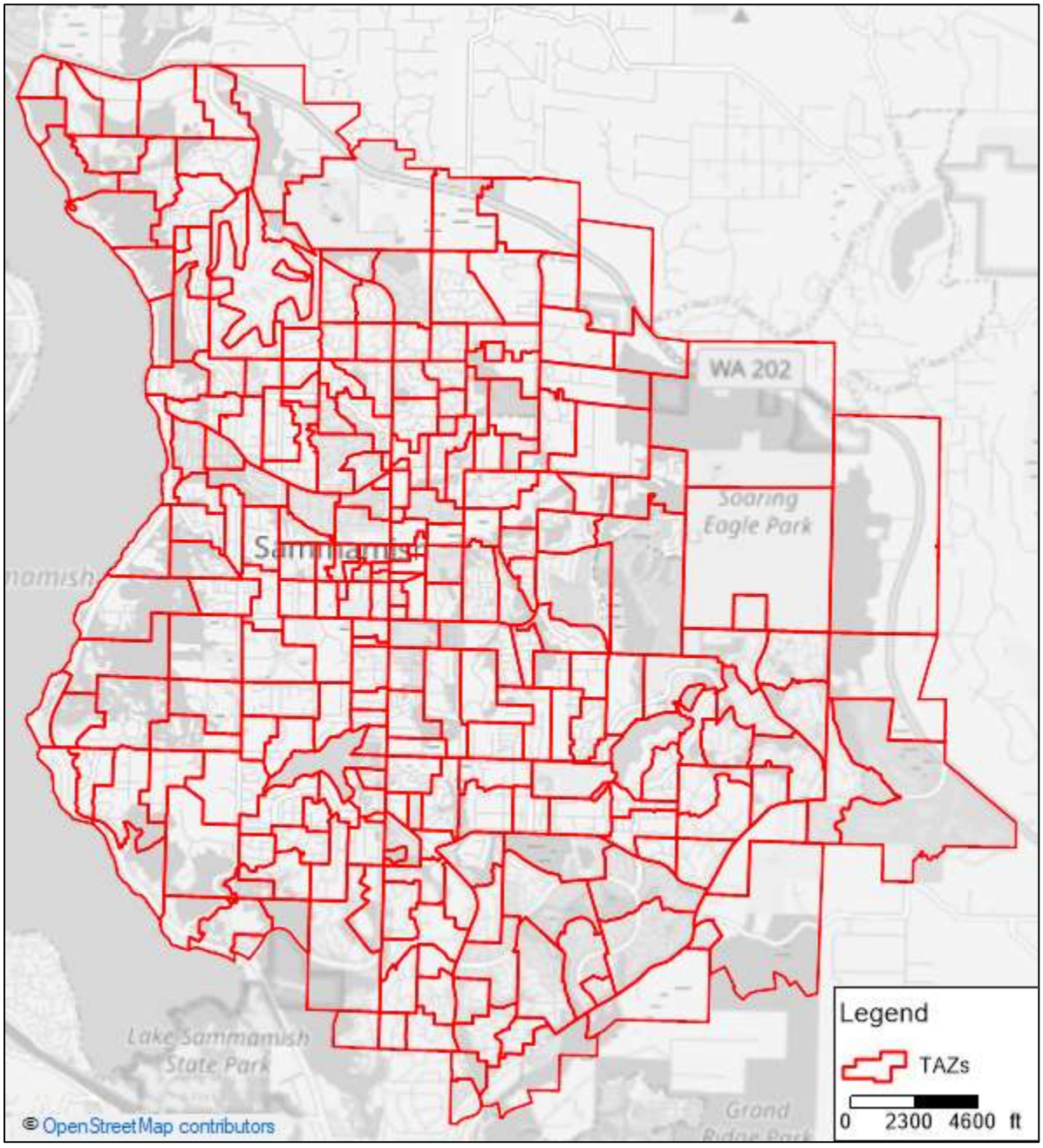


Figure 1. Internal Transportation Analysis Zones

Modeling Assumptions and Methodology

Trip Generation Rates

Modeled AM and PM peak hour trip generation rates were based upon data published in the Institute of Transportation Engineers *Trip Generation Manual 10th Edition* and calibrated to improve model accuracy relative to 2016 traffic counts. Trips were divided into five purposes: home-to-work (HW), work-to-home (WH), home-to-other (HO), other-to-home (OH), and non-home based (NHB) trips. Calibrated trip generation rates are identified in **Tables 5** and **6**. External trip generation was based on traffic counts.

Table 5. Calibrated AM Peak Hour Trip Generation Rates

Land Use Category	Units	HW-O	HW-D	WH-O	WH-D	HO-O	HO-D	OH-O	OH-D	NHB-O	NHB-D	Total
Single-Family (SFDU)	DU	0.207	0.000	0.000	0.009	0.276	0.000	0.000	0.163	0.011	0.000	0.67
Multi-Family (MFDU)	DU	0.142	0.000	0.000	0.003	0.175	0.000	0.000	0.074	0.010	0.008	0.41
Retail (RETAIL)	EMP	0.000	0.318	0.013	0.000	0.000	0.228	0.266	0.000	0.139	0.070	1.03
Financial, Insurance, Real Estate, and Services (FIRES)	EMP	0.000	0.226	0.000	0.000	0.000	0.645	0.142	0.000	0.022	0.241	1.28
Industrial	KSF	0.000	0.147	0.018	0.000	0.000	0.119	0.119	0.000	0.034	0.003	0.44
Social Retail	KSF	0.000	0.179	0.000	0.000	0.000	0.369	0.332	0.000	0.802	0.255	1.94
Education, Churches	KSF	0.000	0.755	0.143	0.000	0.000	1.173	1.173	0.000	0.456	0.018	3.72
Medical Dental	KSF	0.000	1.745	0.008	0.000	0.000	0.264	0.216	0.000	0.560	0.264	3.06
Outdoor Park	Acres	0.000	0.002	0.000	0.000	0.000	0.002	0.002	0.000	0.015	0.002	0.02
Park & Ride	Spaces	0.000	0.000	0.000	0.000	0.000	0.121	0.000	0.000	0.097	0.243	0.46

Table 6. Calibrated PM Peak Hour Trip Generation Rates

Land Use Category	Units	HW-O	HW-D	WH-O	WH-D	HO-O	HO-D	OH-O	OH-D	NHB-O	NHB-D	Total
Single-Family (SFDU)	DU	0.013	0.000	0.000	0.278	0.237	0.000	0.048	0.305	0.023	0.016	0.92
Multi-Family (MFDU)	DU	0.007	0.000	0.000	0.194	0.121	0.000	0.035	0.141	0.011	0.013	0.52
Retail (RETAIL)	EMP	0.000	0.094	0.294	0.000	0.000	0.960	0.834	0.000	0.806	0.820	3.81
Financial, Insurance, Real Estate, and Services (FIRES)	EMP	0.000	0.008	0.711	0.000	0.000	0.167	0.115	0.000	0.051	0.095	1.15
Industrial	KSF	0.000	0.012	0.236	0.000	0.000	0.047	0.041	0.000	0.044	0.018	0.40
Social Retail	KSF	0.000	0.057	0.022	0.000	0.000	0.252	0.738	0.000	0.415	0.826	2.31
Education, Churches	KSF	0.000	0.009	0.099	0.000	0.000	0.290	0.398	0.000	0.000	0.000	0.80
Medical Dental	KSF	0.000	0.000	0.954	0.000	0.000	0.956	0.820	0.000	0.223	0.515	3.46
Outdoor Park	Acres	0.000	0.000	0.000	0.000	0.000	0.034	0.044	0.000	0.011	0.021	0.11
Park & Ride	Spaces	0.000	0.000	0.000	0.000	0.000	0.130	0.000	0.000	0.214	0.086	0.43

Trip Distribution

Trips were distributed between TAZs using a gravity model, which is based on the principle that the attraction between two bodies is directly proportional to the bodies' masses and inversely proportional to the distance between the bodies. For the purposes of travel demand modeling, a TAZ's "mass" is represented by the number of trips generated by (produced by or attracted to) the TAZ, while the distance factor is represented by route travel time.

The gravity model calculates the attraction between any two TAZs using the following utility function:

$$f(U) = a * (U^b) * (e^{cU})$$

In the utility function, U is defined as travel time between zones. The parameters a, b, and c are calibration factors which influence the weight of travel time in the gravity model. The gravity parameters used in the 2016 model are shown in **Table 7** and were calibrated based on guidance from *NCHRP Report 716* (TRB 2012) to allow 2016 modeled volumes to match traffic count data.

Table 7. Trip Distribution Gravity Model Parameters

Trip Purpose	AM Model Parameter			PM Model Parameter		
	a	b	b	a	b	b
Home-Work (HW)	-2.7	1.3	1000	-2.7	1.1	2200
Work-Home (WH)	-2.7	1.3	1000	-2.7	1.1	2200
Home-Other (HO)	-3	5	800	-3	3.8	1800
Other-Home (OH)	-3	5	800	-3	3.8	1800
Non-Home Based (NHB)	-3	3.5	800	-3	3.3	1800

Traffic Assignment

Trips were assigned to the transportation network using an equilibrium assignment process which allocates vehicle trips between origins and destinations along the route with the lowest travel time. The assignment routine will update network travel time iteratively to reflect network congestion, re-assigning traffic until no vehicle can decrease its travel time by shifting to a new path. The travel time for each link and turn in the network are calculated based on volume-delay functions (VDFs) defined in the travel demand model. The VDFs used in this model were based on those used in other models used throughout western Washington.

Traffic Counts

The Sammamish travel demand and LOS models are based on the AM and PM peak hours of travel, defined as the highest four consecutive fifteen-minute volume intervals during the 6-9 AM and 4-7 PM peak periods, respectively. The AM and PM peak hours generally correspond to the period of rush hour traffic with commuters going to or returning home from work.

City of Sammamish collected 7-9 AM and 4:30-6:30 PM turning movement counts at 49 locations citywide in April and May 2016. Seven-day segment volume counts were also collected at 72 locations in and near Sammamish.

2016 Base Year Calibration

Travel demand model calibration consists of adjusting model procedures and formulas to allow the model to reflect local travel behavior for an observed condition. This may involve adjusting trip generation rates, trip distribution gravity model parameters, volume-delay functions, and other model parameters.

Travel demand model validation consists of comparing the model's traffic assignment output to actual traffic counts, and sometimes other available survey data, to establish correlation between the base-year model and base-year survey data. A well-calibrated model, when populated with land use and street network data that existed at the time traffic counts were collected, will generate traffic volumes that closely correlate with traffic counts. Calibration errors should be minimal and evenly distributed to consider a model "validated" and therefore suitable for use in concurrency tests, planning, and design studies.

The 2016 model was calibrated according to best practices identified in *National Cooperative Highway Research Program Report 765: Analytical Travel Forecasting Approaches for Project-Level Planning and Design* (TRB 2014) and *Travel Model Validation and Reasonableness Checking Manual Second Edition* (FHWA 2010). Intersection turning movement counts were aggregated to obtain 312 AM peak hour and 296 PM peak hour segment volume counts, which were used as reference points for model calibration. The base year model traffic volumes were checked against the base year link volume counts and model inputs were calibrated to improve the correlation between the modeled volumes and traffic counts.

The most common statistical measures of travel demand model accuracy are the coefficient of determination (R^2) and the percent root-mean square error (%RMSE) statistics. The R^2 statistic can be interpreted as a "goodness of fit" statistic and measures the strength of the linear relationship between the calculated model volumes and observed (counted) traffic volumes. Percent RMSE measures the average error between the modeled and observed traffic volumes and can be calculated using the following formula:

$$\%\text{RMSE} = 100 \text{ x } \frac{\sqrt{\frac{\sum(\text{Assignment Errors})^2}{\text{Number of Links}}}}{\text{Average Count}}$$

R^2 and %RMSE measure the overall degree to which modeled volumes correspond to observed count data, where perfection would be 100 percent correlation of modeled volumes to counts ($R^2 = 1$) with no error (%RMSE = 0). There are no national standards for R^2 or %RMSE. However, the *Model Validation and Reasonableness Checking Manual* (FHWA 1997) provides suggested guidelines for model calibration including R^2 value of at least 0.88 and %RMSE less than or equal to 35%.

The 2016 calibrated model meets the suggested calibration guidelines identified by FHWA, as summarized in **Table 8**. The calibrated AM peak hour model has an R^2 statistic of 0.98 and 13% root-mean-squared error, while the calibrated PM peak hour model has an R^2 statistic of 0.99 and 11% root-mean-squared error. These results indicate a close correlation between traffic counts and modeled volumes. 96% of assigned AM peak hour volumes and 96% of assigned PM peak hour volumes fall within the recommended allowable error curves identified in NCHRP Report 765.

Table 8. Model Calibration Statistics

Calibration Statistic	FHWA Recommended Value	2016 AM Model Statistic	2016 PM Model Statistic
R^2	≥ 0.88	0.98	0.99
%RMSE	≤ 35%	13%	11%
%In[1]	≥ 75%	96%	96%

[1]%In represents the percent of assigned volumes within the NCHRP Report 765 recommended allowable error curves. The maximum value is 100 percent; the higher the value the more accurate the model.

Calibrated results are shown in **Figures 2** and **3,** with observed (counted) link volumes indicated on the X-axis and model-assigned link volumes on the Y-axis. Volumes are expressed in vehicles per hour. The "Tolerances" curves show the maximum allowable errors according to recommendations provided in *NCHRP Report 765* (TRB 2014). The linear "Regression" red line shows the best straight-line estimate of the modeled volume for any link. The "Target value" green line represents a "perfect fit" regression line, where the modeled volume would, on average, be exactly equal to the observed count.

Although the Sammamish model was well calibrated, there were still some minor differences between the 2016 raw model volumes and the base year 2016 counts. The minor differences were post-processed and assembled into a correction matrix. The correction matrix was incorporated in the total trip table and assigned into the roadway to obtain the post-processed model volumes. The 2016 post-processed model volumes were used as a baseline condition from which to compare future traffic volume growth for capacity and LOS analyses.

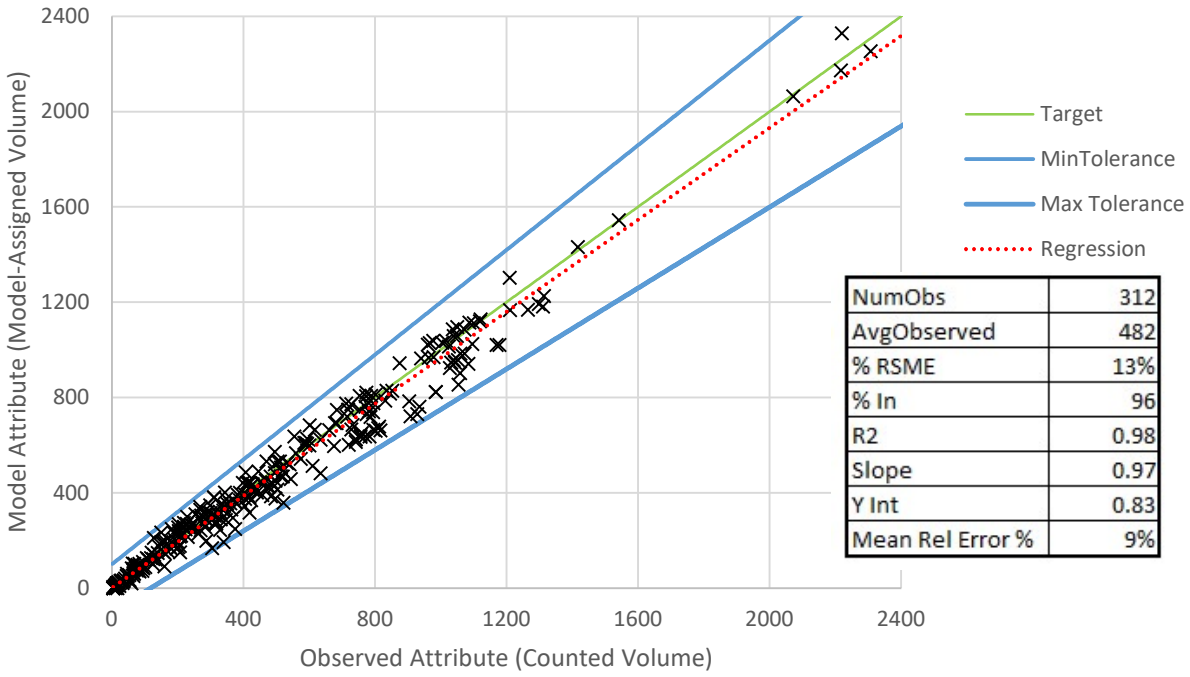


Figure 2. 2016 AM Peak Hour Model Calibration Statistics

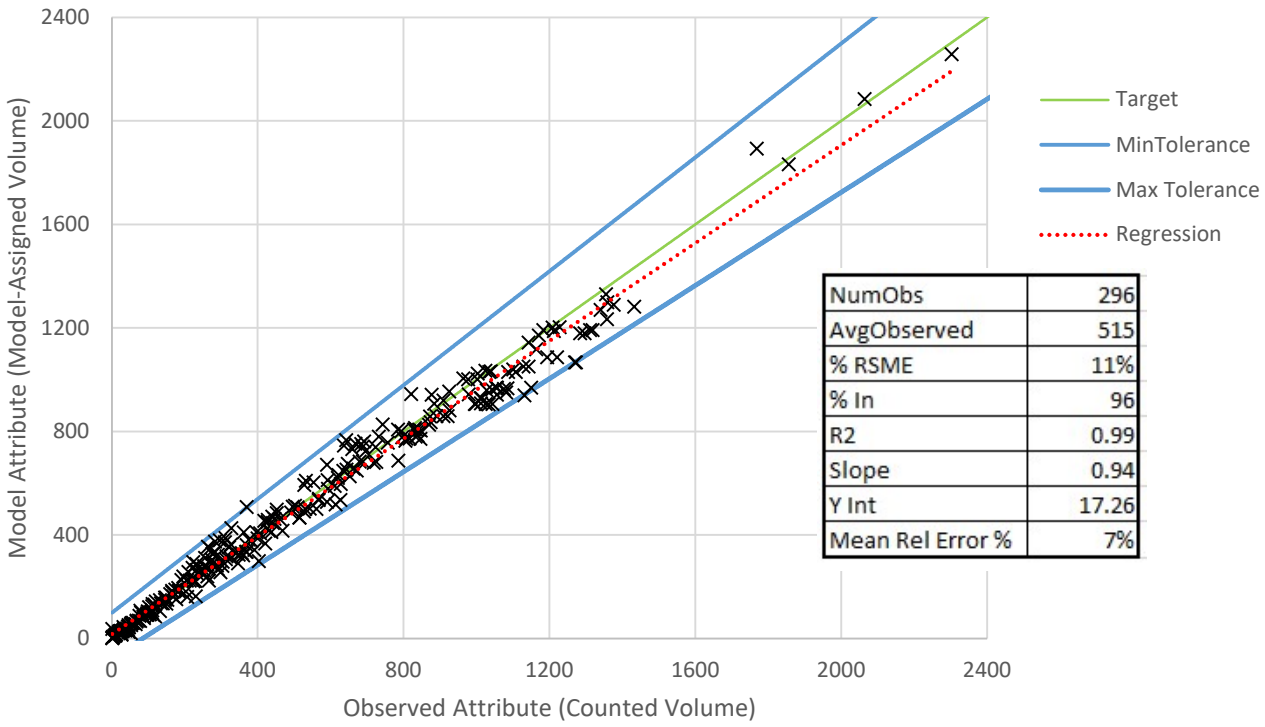


Figure 3. 2016 PM Peak Hour Model Calibration Statistics

2035 Scenario Development

The objective of the scenario-based long-range forecasting process is to identify any long-range transportation improvement projects which are necessary to maintain minimum LOS standards. Scenario testing also allows TIP projects to be evaluated against an independent list of LOS-necessary projects.

Baseline Assumptions

Transportation Network Improvements

In order to identify transportation capacity improvement projects which are driven by capacity deficiencies, the baseline model assumed no transportation capacity improvement projects would be built by 2035. The modeled transportation network was consistent with the street network as it existed in April 2021.

Development Forecasts

The Baseline 2035 development forecast incorporated pipeline permitted development identified in the Sammamish transportation concurrency management system in addition to remaining long-range development identified by City of Sammamish staff and consistent with the 2015-2035 forecast in the current Comprehensive Plan.

Pipeline development was modeled consistent with the March 30, 2021 Transportation Concurrency Test #25 for Rachel Carson Elementary School. Permitted development represents a total of 859 new AM peak hour trips and 545 new PM peak hour trips relative to the 2016 base year.

To calculate 2035 growth beyond permitted development, a long-range forecast of 224 new single-family dwelling units and 462,800 square feet of office and retail space were also added to the 2035 model. Long-range single-family residential growth was allocated throughout the City of Sammamish, with approximately half of the new units allocated to the north of Sammamish Town Center and half of the new units to the south. A total of 462,800 sf of office and retail growth was allocated to the Sammamish Town Center subarea with a split of approximately 70 percent retail, 15 percent general office, and 15 percent medical/dental office. This allocation is consistent with the existing "Sammamish Village" commercial development at the northwest corner of 228th Ave SE and SE 4th Street.

External trip growth was modeled consistent with regional growth forecasts identified in the previous Sammamish travel demand model update.

2035 Volume Post-Processing

After the 2035 travel demand model was updated with the land use and network assumptions described above, the 2035 travel demand forecast was calculated by running the trip generation, distribution, and assignment procedures of the calibrated 2016 model, including the application of the origin-destination correction matrix calculated during the calibration process to minimize model error.

To further minimize model error, post-processed 2035 volume forecasts were calculated as the sum of 2016 traffic counts and 2016-2035 modeled traffic growth. This method is consistent with guidance provided in *NCHRP Report 716: Analytical Travel Forecasting Approaches for Project-Level Planning and Design* (TRB 2014). The final 2035 post-processed volume forecasts were used to analyze intersection and segment operations.

2035 Alternatives

This analysis considered four 2035 alternatives with varying network, development, and Level of Service (LOS) policy assumptions. Each alternative was evaluated to determine the projects necessary to maintain minimum transportation LOS standards. The 2035 alternatives are summarized in **Table 9** and described in more detail below.

Table 9. 2035 Scenario Descriptions

	Alternative	Network Assumptions	Development Assumptions	Level of Service Standard
1	Baseline	Baseline	Baseline	Intersection LOS C-E
2	Baseline w/segment v/c	Baseline	Baseline	Intersection LOS C-E; segment v/c ≤ 1.4; corridor v/c ≤ 1.1
3	Adjusted Land Use and Travel Behavior	Baseline	Adjusted Land use and travel behavior	
4	Functional Classification Based	Complete Principal Arterial Network	Adjusted Land use and travel behavior	

Alternative 1 represented the baseline network and development assumptions described above and identified transportation infrastructure improvements required to maintain the existing City of Sammamish intersection LOS policy. It did not include a maximum segment or corridor volume-to-capacity (v/c) ratio standard.

Alternative 2 maintained the baseline network and development assumptions described above and added a segment v/c policy. Infrastructure improvements were based on a maximum v/c ratio of 1.4 for segments and 1.1 for corridors, in addition to the existing intersection LOS standard.

Alternative 3 considered the impact of reduced travel demand resulting from a shift in development and trip-making behavior. It maintained the intersection, segment, and corridor LOS standards of Alternative 2. Travel demand modifications in Alternative 3 included:

- Existing residential: Assume a global 15% work-from-home (WFH) shift. This includes 15% reduction in home-to-work and work-to-home, and non-home-based trips.
- New single-family residential: Assume the following for new growth:
    - 1/2 are typical single-family homes of 3,000 to 4,500 SF with 15% WFH and
    - 1/2 are small-scale single-family homes of under 1,000 SF with 15% WFH modeled using the ITE *Trip Generation Manual 9th Edition* residential townhome trip generation rates to reflect the smaller home size.
- New commercial: Assume 15% WFH applied to office growth.

Alternative 4 assumed the shift in development and trip-making behavior associated with Alternative 3 in addition to transportation network improvements that would complete the City's principal arterial network consistent with the regional functional classification system. Transportation improvement projects assumed in Alternative 4 incorporated connections to the regional transportation network and considered the ultimate completion of existing substandard principal arterials to current City Public Works Standards. Objectives included:

- Increase the capacity of principal arterials to direct the highest traffic volumes to the highest classified roadways: Sahalee Way, 228th Ave, and Issaquah-Pine Lake Rd.
- Remove bottlenecks on principal arterials regardless of jurisdiction to provide system continuity and encourage utilization of increased capacity on Sahalee Way and Issaquah-Pine Lake Rd.
- Control the travel demand on minor and collector arterials East Lake Sammamish Pkwy, 244th Ave NE, SE 24th St, and SE Klahanie Blvd to maintain the local access functions of lower classified roadways.

OPERATIONS ANALYSIS METHODS AND ASSUMPTIONS

Intersection Level of Service

DEFINITION

Level of service (LOS) is a qualitative description of the operating performance of an element of transportation infrastructure such as a roadway or an intersection. LOS is typically expressed as a letter score from LOS A, representing free flow conditions with minimal delays, to LOS F, representing breakdown flow with high delays.

Intersection LOS is based on the average delay experienced by a vehicle traveling through an intersection. Delay at a signalized intersection can be caused by waiting for the signal or waiting for the queue ahead to clear the signal. Delay at roundabouts and stop-controlled intersections is caused by waiting for a gap in traffic or waiting for a queue to clear the intersection or roundabout.

Table 10 identifies the amount of delay used to determine LOS for signalized, roundabout, and stop-controlled intersections. Delay is defined differently for signalized, roundabout, and all-way stop controlled intersections than for minor approach stop controlled intersections. For signalized, roundabout, and all-way stop controlled intersections, LOS thresholds are based upon average control delay for all vehicles entering the intersection. For minor-approach-only stop controlled intersections, delay is reported for the movement with the worst (highest) delay.

Table 10. Intersection Level of Service Thresholds

LOS	Signalized and Roundabout Delay (sec/veh)	Stop-Control Delay (sec/veh)
A	≤10	≤10
B	>10 – 20	>10 – 15
C	>20 – 35	>15 – 25
D	>35 – 55	>25 – 35
E	>55 – 80	>35 – 50
F	>80	>50

POLICY

The City of Sammamish has adopted tiered intersection LOS standards based on functional classification. Minimum LOS for intersections with Principal Arterials is LOS D. If LOS D cannot be achieved with three approach lanes per direction, a reduced LOS standard of LOS E applies. Minimum LOS standard C applies for intersections with Minor Arterial or Collector streets. For intersections of roadways with different functional classifications, the higher classification (i.e. lower standard) applies.

METHODOLOGY

Intersection LOS and delay were calculated for the 2035 AM and PM peak hour at 43 intersections in Sammamish. Traffic volume forecasts were exported from the 2035 travel demand models into the citywide intersection LOS models for LOS evaluation.

Delay for signalized and stop-controlled intersections was calculated in Synchro 10 software using Highway Capacity Manual 6th Edition (HCM6) methodology. Roundabout delay was calculated in Sidra

Intersection 8 software using the Sidra capacity model and signalized level of service thresholds, per WSDOT October 2019 "Sidra Policy Settings."

Peak Hour Factor (PHF) describes the peaking characteristics of the highest 15-minute interval traffic volume for a given peak hour. For the purposes of intersection LOS analysis, average intersection PHF identified in traffic counts was applied to each intersection.

Signalized intersection saturation flow rate, an input in the HCM6 signalized Level of Service (LOS) methodology, is defined as the flow rate which would occur at a signalized intersection approach given saturated conditions and no interruption due to signal phasing. The WSDOT "Synchro & SimTraffic Protocol – August 2018 " provides the following recommendations for saturation flow rate.

> *The preferred methodology for determining the appropriate value is to conduct a field study. However, when that is not available, or feasible, the recommended values are 1750 urban areas, 1900 for rural.*

Traffic Count Consultants, Inc. (TC2) under the direction of Transportation Solutions collected saturation flow data at six locations during the week of February 18, 2020. Saturation flow data was collected on school days.

Saturation flow data was analyzed using data collection methods described in the Institute of Transportation Engineers *Manual of Transportation Engineering Studies*. Results are summarized in **Table 11**.

Table 11. Sammamish Signalized Saturation Flow Rate

Intersection	Dir	Lane	Period	Sample Size (cycles)	Sat. Flow Rate (veh/hr/ln)
Sahalee Way & NE 37th Way	NB	Through	7-9 AM	-	*[1]
228th Ave NE & NE 8th St	NB	Inside-Through	7-9 AM	26	1,590
228th Ave NE & NE 8th St	EB	Through	4-6 PM	33	1,710
228th Ave SE & IPL Rd SE	SB	Through	7-9 AM	44	1,700
			4-6 PM	19	1,835
228th Ave SE & IPL Rd SE	SB	Left-Turn (2lns)	4-6 PM	18	1,680
AM Average				**70**	**1,660**
PM Average		*Through Lanes Only*		*52*	*1,755*
		w/ Left-Turn lanes		*70*	*1,735*
Overall Average				**140**	**1,700**

[1]Unable to collect saturation flow data due to rolling NB queue interrupting NB through lane

Saturation flow data collection was not possible at the intersection of Sahalee Way and NE 37th Way due to queue stacking from Sahalee Way at SR 202 impacting the intersection.

The overall average saturation flow rate of 1,700 vphpl is slightly lower than WSDOT policy of 1,750 vphpl for urban intersections and significantly lower than the software default ideal saturation flow rate of 1,900 vphpl for signalized intersections in previously used in Sammamish. Based on this analysis, a saturation flow rate of 1,750 vphpl was used for all City of Sammamish signalized intersections.

Street Segment Level of Service

Street segment Level of Service is based on the ratio of volume to operating capacity, or volume-to-capacity (v/c) ratio. City of Sammamish policy defines capacity using a modified *Highway Capacity Manual 6th Edition* (HCM6) methodology, which is described in the November 16, 2018 Fehr & Peers memorandum "Measuring Concurrency for Segments and Corridors: HCM 6th Edition, Modified," provided as **Appendix A**. The v/c level of service capacity methodology accounts for roadway characteristics including posted speed, number of lanes, left-turn lanes, median, right-turn lanes. It also incorporates capacity adjustments for the presence of Intelligent Transportation Systems (ITS) such as adaptive signal control and flashing yellow arrows (FYAs).

The City of Sammamish monitors segment LOS along 14 arterial corridors consisting of a total of 43 street segments, with a maximum allowable v/c ratio of 1.1 for corridors and 1.4 for segments. The v/c level of service capacity methodology used for segment LOS analysis is separate from and does not impact the link capacities used by the travel demand model.

Operational Analysis Results

The following section summarizes intersection and segment LOS results for each 2035 alternative.

Alternative 1: Baseline Intersection LOS

Intersection LOS deficiencies will occur at three City of Sammamish intersections and three WSDOT intersections on major access routes to Sammamish. LOS-deficient intersections are shown in **Table 12**.

Table 12. Alternative 1 Intersection LOS Deficiencies

ID	Location	LOS Standard	Control	2035 AM		2035 PM		Mitigation Project
				Delay	LOS	Delay	LOS	
5	SE 32nd Way & 244th Ave	C	TWSC	14.3	B	56.1	F	Convert to all-way stop
7	228th Ave & SE 40th St	D	TWSC	105	F	38.9	E	Add 228th SB accel. lane
37	Sahalee Way & NE 28th Way	D	TWSC	123	F	51.4	F	New signal
Outside Sammamish City Limits								
61	E Lk Samm.Pkwy & SR 202	E	Signal	164	F	178	F	None
63	Sahalee Way & SR 202	D	Signal	41.9	D	120	F	None
64	244th Ave NE & SR 202	D	Signal	28.1	C	79.5	E	None

SE 32nd Way & 244th Avenue E operates at LOS F in the PM peak hour. Mitigation may include converting the minor-approach stop-controlled intersection to all-way stop control, which would allow the intersection to operate at LOS C in the PM peak hour.

The intersection of 228th Avenue SE & SE 40th Street operates at LOS F in the AM peak hour and LOS E in the PM peak hour. Intersection LOS may be satisfied by adding a southbound acceleration lane on 228th Ave SE. The acceleration lane will reduce westbound left-turn delay, allowing the intersection to satisfy minimum LOS at LOS C in the AM and PM peak hours.

The intersection of Sahalee Way & NE 28th Way will operate at LOS F in the AM and PM peak hours. A traffic signal is recommended to maintain LOS at this location. The intersection will operate well at LOS A under signal control.

Intersection deficiencies outside city limits include the signalized intersections of East Lake Sammamish Parkway, Sahalee Way, and 244th Avenue NE along SR 202. No mitigation is identified for these locations.

Alternative 2: Baseline Intersection LOS and Segment V/C

Intersection Deficiencies

Intersection LOS deficiencies will occur at four City of Sammamish intersections and three WSDOT intersections on major access routes to Sammamish. LOS-deficient intersections are shown in **Table 13**.

Table 13. Alternative 2 Intersection LOS Deficiencies

ID	Location	LOS Standard	Control	2035 AM		2035 PM		Mitigation Project
				Delay	LOS	Delay	LOS	
1	Issaquah-Pine Lake Rd & SE 48th Street	D	Signal	95.0	F	45.8	D	Widen IPL Rd
5	SE 32nd Way & 244th Ave	C	TWSC	13.1	B	47.8	E	Convert to all-way stop
7	228th Ave & SE 40th St	D	TWSC	99.3	F	38.9	E	Add 228th SB accel. lane
37	Sahalee Way & NE 28th Way	D	TWSC	99.7	F	50.2	F	New signal
Outside Sammamish City Limits								
61	E Lk Samm.Pkwy & SR 202	E	Signal	164	F	180	F	None
63	Sahalee Way & SR 202	D	Signal	36.2	D	108	F	None
64	244th Ave NE & SR 202	D	Signal	22.7	C	68.6	E	None

Issaquah-Pine Lake Rd & SE 48th Street operates at LOS F in the AM peak hour. The recommended mitigation is to widen Issaquah-Pine Lake Rd to provide a second southbound through lane at the intersection. This improvement is consistent with the Issaquah-Pine Lake Rd widening project identified as a segment mitigation strategy in the following section. After widening, the intersection will operate at LOS A in the PM peak hour.

SE 32nd Way & 244th Avenue E operates at LOS E in the PM peak hour. Mitigation may include converting the minor-approach stop-controlled intersection to all-way stop control, which would allow the intersection to operate at LOS C in the PM peak hour.

The intersection of 228th Avenue SE & SE 40th Street operates at LOS F in the AM peak hour and LOS E in the PM peak hour. Intersection LOS may be satisfied by adding a southbound acceleration lane on 228th Ave SE. The acceleration lane will reduce westbound left-turn delay, allowing the intersection to satisfy minimum LOS at LOS C in the AM and PM peak hours.

The intersection of Sahalee Way & NE 28th Way will operate at LOS F in the AM and PM peak hours. A traffic signal is recommended to maintain LOS at this location. The intersection will operate well at LOS A under signal control.

Intersection deficiencies outside city limits include the signalized intersections of East Lake Sammamish Parkway, Sahalee Way, and 244th Avenue NE along SR 202. No mitigation is identified for these locations.

Segment and Corridor Deficiencies

Roadway LOS deficiencies will occur at six street segments and five street corridors within city limits. Segment and corridor deficiencies are summarized in **Table 14**. The mitigation projects identified in the table are required to maintain adopted v/c standards through 2035.

Table 14. Alternative 2 Segment and Corridor Deficiencies

ID	Name	Deficiency Type	Critical v/c		Mitigation Project
			AM	PM	
	East Lake Sammamish Parkway North Corridor	Corridor	1.36	1.44	
1	E Lk Sammamish Pkwy, City limits - 196th Ave NE (Weber Pl)	Segment	1.36	1.52	Widen to 4/5 lanes
2	E Lk Sammamish Pkwy, 196th Ave NE - NE 26th Pl	Segment	1.42	1.44	Widen to 4/5 lanes
	East Lake Sammamish Parkway South Corridor	Corridor	1.01	1.24	
8	E Lk Sammamish Pkwy, 212th Ave SE – South City Limit	Segment	1.17	1.45	Widen to 2/3 lanes
	Sahalee Way – 228th Ave North Corridor	Corridor	1.15	1.14	
9	Sahalee Way/228th Ave NE, City Limit – NE 37th Way	Corridor	1.20	1.12	Widen to 4/5 lanes
	Issaquah-Pine Lake Road Corridor	Corridor	1.55	1.69	
32	Issaquah-Pine Lk Rd, SE Klahanie Blvd – SE 46th St	Segment	2.02	2.10	Widen to 4/5 lanes
33	Issaquah-Pine Lk Rd, SE 46th St - SE 48th St	Segment	1.66	1.85	Widen to 4/5 lanes
	Duthie Hill Road Corridor	Corridor	1.16	1.39	
42	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – 266th Ave SE	Segment	1.31	1.43	Widen to 2/3 lanes
43	SE Duthie Hill Rd, 266th Ave SE – Trossachs Blvd SE	Corridor	1.16	1.39	Widen to 2/3 lanes

Two segments are anticipated to be near deficient status by 2035 but do not trigger LOS deficiencies. Issaquah-Fall City Rd from Klahanie Dr SE to SE Duthie Hill Rd (segment 40) will operate with a v/c ratio of 1.39 in the PM peak hour and would reach deficient status with six additional vehicles. Similarly, Issaquah-Pine Lake Rd from SE 32nd Way to Klahanie Blvd (segment 31 will operate with a v/c ratio of 1.40 in the PM peak hour and would reach deficient status with two additional vehicles. While these segments are not identified as deficiencies, these results are within the travel demand model margin of error.

Alternative 3: Adjusted Land Use and Travel Behavior

Intersection Deficiencies

Intersection LOS deficiencies will occur at three City of Sammamish intersections and two WSDOT intersections on major access routes to Sammamish. LOS-deficient intersections are shown in **Table 15**.

Table 15. Alternative 3 Intersection LOS Deficiencies

ID	Location	LOS Standard	Control	2035 AM		2035 PM		Mitigation Project
				Delay	LOS	Delay	LOS	
5	SE 32nd Way & 244th Ave	C	TWSC	12.7	B	33.9	D	Convert to all-way stop
7	228th Ave & SE 40th St	D	TWSC	53.3	F	38.9	E	Add 228th SB accel. lane
37	Sahalee Way & NE 28th Way	D	TWSC	51.4	F	42.3	E	New signal
Outside Sammamish City Limits								
61	E Lk Samm.Pkwy & SR 202	E	Signal	90.1	F	129	F	None
63	Sahalee Way & SR 202	D	Signal	26.9	C	61.6	E	None

SE 32nd Way & 244th Avenue E operates at LOS D in the PM peak hour and below the minimum LOS C standard. Mitigation may include converting the minor-approach stop-controlled intersection to all-way stop control, which would allow the intersection to operate at LOS B in the AM and PM peak hours.

The intersection of 228th Avenue SE & SE 40th Street operates at LOS F in the AM peak hour and LOS E in the PM peak hour. Intersection LOS may be satisfied by adding a southbound acceleration lane on 228th Ave SE. The acceleration lane will reduce westbound left-turn delay, allowing the intersection to satisfy minimum LOS at LOS C in the AM and PM peak hours.

The intersection of Sahalee Way & NE 28th Way will operate at LOS F in the AM peak hour and LOS E in the PM peak hour. A traffic signal is recommended to maintain LOS at this location. The intersection will operate well at LOS A under signal control.

Intersection deficiencies outside city limits include the signalized intersections of East Lake Sammamish Parkway and Sahalee Way along SR 202. No mitigation is identified for these locations.

Segment and Corridor Deficiencies

Roadway LOS deficiencies will occur at four street segments and three street corridors within city limits. Segment and corridor deficiencies are summarized in **Table 16**. The mitigation projects identified in the table are required to maintain adopted v/c standards through 2035.

Table 16. Alternative 3 Segment and Corridor Deficiencies

ID	Name	Deficiency Type	Critical v/c		Mitigation Project
			AM	PM	
	East Lake Sammamish Parkway North Corridor	Corridor	1.28	1.48	
1	E Lk Sammamish Pkwy, City limits - 196th Ave NE (Weber Pl)	Segment	1.34	1.66	Widen to 4/5 lanes
2	E Lk Sammamish Pkwy, 196th Ave NE - NE 26th Pl	Segment	1.42	1.57	Widen to 4/5 lanes
	Issaquah-Pine Lake Road Corridor	Corridor	1.40	1.53	
32	Issaquah-Pine Lk Rd, SE Klahanie Blvd – SE 46th St	Segment	1.80	1.86	Widen to 4/5 lanes
33	Issaquah-Pine Lk Rd, SE 46th St - SE 48th St	Segment	1.50	1.69	Widen to 4/5 lanes
	Duthie Hill Road Corridor	Corridor	1.10	1.26	
42	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – 266th Ave SE	Corridor	1.21	1.29	Widen to 2/3 lanes

Alternative 4: Functional Classification Approach

Intersection Deficiencies

Intersection LOS deficiencies will occur at two City of Sammamish intersections and two WSDOT intersections on major access routes to Sammamish. LOS-deficient intersections are shown in **Table 17**.

Table 17. Alternative 4 Intersection LOS Deficiencies

ID	Location	LOS Standard	Control	2035 AM		2035 PM		Mitigation Project
				Delay	LOS	Delay	LOS	
5	SE 32nd Way & 244th Ave	C	TWSC	12.4	B	69.1	F	Convert to all-way stop
37	Sahalee Way & NE 28th Way	D	TWSC	51.6	F	62.1	F	New signal
Outside Sammamish City Limits								
61	E Lk Samm.Pkwy & SR 202	E	Signal	99.8	F	146	F	None
63	Sahalee Way & SR 202	D	Signal	32.2	C	93.9	F	Add 2nd EB RT lane

SE 32nd Way & 244th Avenue E operates at LOS F in the PM peak period. Mitigation may include converting the minor-approach stop-controlled intersection to all-way stop control, which would allow the intersection to operate at LOS C in the PM peak hour.

The intersection of Sahalee Way & NE 28th Way will operate at LOS F in the AM and PM peak hours. A traffic signal is recommended to maintain LOS at this location. The intersection will operate well at LOS A under signal control.

To maintain the objective of improving mobility along key arterial routes, Alternative 4 considered mitigation options at the WSDOT intersection of SR 202 & Sahalee Way. The intersection will operate at

overall LOS F in the PM peak hour. The addition of a second eastbound right-turn lane from SR 202 to Sahalee Way will improve PM peak hour intersection LOS to LOS D.

Outside the city limit, the signalized intersection of SR 202 & East Lake Sammamish Parkway operates poorly at LOS F in both AM and PM peak hours. No mitigation is identified for this location.

Segment and Corridor Deficiencies

After the roadway improvement projects assumed in Alternative 4, one corridor deficiency will remain on Duthie Hill Road within city limits. No segment deficiencies are anticipated by 2035. The corridor deficiency and the associated improvement required to maintain maximum v/c standard are summarized in **Table 18**.

Table 18. Alternative 4 Segment and Corridor Deficiencies

ID	Name	Deficiency Type	Critical v/c		Mitigation Project
			AM	PM	
	Duthie Hill Road Corridor	Corridor	1.04	1.22	
42	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – 266th Ave SE	Corridor	1.11	1.26	

Results Summary

A summary of intersection, segment, and corridor deficiencies by alternative is provided in **Table 19**.

Table 19. City of Sammamish Level of Service Deficiencies by Alternative

2035 Alternative	Deficient Intersections	Deficient Segments	Deficient Corridors
Alternative 1	3	*	*
Alternative 2	4	6	5
Alternative 3	3	4	3
Alternative 4	3	0	1

*No segment or corridor v/c standard

IMPROVEMENT RECOMMENDATIONS

This section identifies transportation improvement projects which are recommended to maintain minimum LOS standards through 2035 in each alternative.

Intersection Improvements

Mitigation strategies were identified for each intersection LOS deficiency identified in the 2035 analysis horizon. Improvement recommendations are summarized in **Table 20**.

Table 20. 2035 Intersection Improvement Projects

ID	Segment	Existing Control	Alternative			
			1	2	3	4
1	Issaquah-Pine Lk Rd & SE 48th Street	Signal	n/a	Widen intersection	n/a	n/a
5	SE 32nd Way & 244th Ave E	TWSC	Convert to all-way stop	Convert to all-way stop	Convert to all-way stop	Convert to all-way stop
7	228th Ave SE & SE 40th Street	TWSC	Add 228th SB accel. lane	Add 228th SB accel. lane	Add 228th SB accel. lane	Segment Improvement provides accel. lane
37	NE 28th Way/223rd AVE NE & Sahalee Way NE	TWSC	New signal	New signal	New signal	New signal
63	Sahalee Way & SR 202	Signal	n/a	n/a	n/a	Add EB RT lane

The intersection of Issaquah-Pine Lake Road & SE 48th Street requires capacity improvements in Alternative 2 only. This is a result of the combination of increased demand along the Issaquah-Pine Lake Road corridor relative to Alternative 1 due to segment deficiency-related widening. The need for improvement is eliminated in Alternative 3 and 4 by to the adjusted land use and travel behavior assumption.

Capacity improvements are recommended at the intersection of Sahalee Way & SR 202 in Alternative 4 only. This recommendation, while not required by City LOS policy, is consistent with the Alternative 4 objective of improving mobility along principal arterial routes to Sammamish.

Segment and Corridor Improvements

Capacity improvement projects were identified for roadway segments and corridors which were anticipated to operate with v/c deficiencies by 2035. Improvement projects are summarized in **Table 21**.

Table 21 also identifies improvement projects which were assumed to be constructed as part of Alternative 4. These projects were not strictly driven by v/c deficiencies but rather assumed as part of a systemic functional classification-based improvement strategy in order to proactively improve mobility along key arterial routes throughout Sammamish. Alternative 4 also includes widening on segments of Sahalee Way and Issaquah-Pine Lake Rd which are outside city limits. All widened segments are identified in **Table 21**.

Table 21. 2035 Segment Improvement Projects

ID	Segment	Alternative 2	Alternative 3	Alternative 4
1	E Lk Sammamish Pkwy, City limits - 196th Ave NE (Weber Pl)	Widen to 4/5 lanes	Widen to 4/5 lanes	n/a
2	E Lk Sammamish Pkwy, 196th Ave NE - NE 26th Pl	Widen to 4/5 lanes	Widen to 2/3 lanes	n/a
8	E Lk Sammamish Pkwy, 212th Ave SE – South City Limit	Widen to 2/3 lanes	n/a	n/a
9	Sahalee Way/228th Ave NE, City Limit – NE 37th Way	Widen to 4/5 lanes	n/a	Widen to 4/5 lanes
9+*	Sahalee Way, City limit – SR 202	n/a	n/a	Widen to 4/5 lanes
10	Sahalee Way/228th Ave NE, NE 37th Way - NE 36th St	n/a	n/a	Widen to 4/5 lanes
11	Sahalee Way/228th Ave NE, NE 36th St - 223rd Ave NE	n/a	n/a	Widen to 4/5 lanes
12	Sahalee Way/228th Ave NE, 223rd Ave NE – NE 25th Way	n/a	n/a	Widen to 4/5 lanes
13	228th Ave, NE 25th Way – NE 12th Pl3	n/a	n/a	Widen to 4/5 lanes
14	228th Ave, NE 12th Pl – NE 8th St/Inglewood Hill Rd	n/a	n/a	Widen to 4/5 lanes
20	228th Ave, Issaquah Pine Lake Rd – SE 43rd Way	n/a	n/a	Widen to 4/5 lanes
30	Issaquah-Pine Lake Rd, 228th Ave SE – SE 32nd Way	n/a	n/a	Complete 4/5 lane section
31	Issaquah-Pine Lake Rd, SE 32nd Way - SE Klahanie Blvd	n/a	n/a	Widen to 4/5 lanes
32	Issaquah-Pine Lake Rd, SE Klahanie Blvd – SE 46th St	Widen to 4/5 lanes	Widen to 4/5 lanes	Widen to 4/5 lanes
33	Issaquah-Pine Lake Rd, SE 46th St - SE 48th St	Widen to 4/5 lanes	Widen to 4/5 lanes	Widen to 4/5 lanes
33+*	Issaquah-Pine Lake Rd, SE 48th St – Issaquah-Fall City Rd	n/a	n/a	Widen to 4/5 lanes
42	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – 266th Ave SE	Widen to 2/3 lanes	Widen to 2/3 lanes	Widen to 2/3 lanes
43	SE Duthie Hill Rd, 266th Ave SE – Trossachs Blvd SE	Widen to 2/3 lanes	n/a	n/a

*Segment is outside city limits

Appendix A. Street Segment Capacity Methodology

MEMORANDUM

Date: November 16, 2018

To: Cheryl Paston, City of Sammamish

From: Kendra Breiland and Bianca Popescu, Fehr & Peers

Subject: Measuring Concurrency for Segments and Corridors: HCM 6th Edition, Modified

SE17-0536

Over the past several months, we have worked with the staff and Council to update the City's concurrency program. The Council adopted a program based on AM and PM peak hour delay at intersections at the September 18th meeting. This system recognizes that intersections are the main pinch points in Sammamish's transportation system that cause congestion.

Several Councilmembers continued to be concerned about not including road capacities in the concurrency program; so at the October 22nd Council meeting, staff were provided direction to develop a methodology for evaluating segment and corridor performance, based on volume-to-capacity (V/C) ratios measured by direction during the AM and PM peak hours.[1] The methodology, as directed by Council, leverages the default values provided in the Highway Capacity Manual (HCM), 6th Edition[2], but also makes adjustments to better account for roadway characteristics like the presence of turn lanes and medians. At the November 13th Council meeting, staff were provided additional direction to incorporate capacity considerations for the presence of intelligent transportation systems (ITS), such as adaptive traffic signal controls, and flashing yellow arrows (FYAs). This updated methodology, which is described in more detail below, is referred to as "HCM Modified" for the remainder of this memo.

Using the HCM Modified methodology, staff evaluated how corridors and individual segments perform based on the V/C thresholds determined by Council during the November 13th meeting. These V/C thresholds apply to all segments and corridors along principal and minor arterials in the City except for the East Lake Sammamish Parkway corridors, which Council has excluded from concurrency:

[1] AM peak hour is 7-8AM on a Tuesday-Thursday; PM peak hour is 4:45-5:45PM on a Tuesday-Thursday.
[2] Att B: Table 16-16

- **Corridors:** V/C ratio cannot exceed 1
- **Individual segments:** V/C ratio cannot exceed 1.4

The analysis was performed using both 2016 count volumes as well as the 2024 forecast, which were developed using the City's pipeline model that considers growth in traffic expected by 2024 based on development applications received by the City, regional growth and implementation of the City's 2019-2024 Transportation Improvement Program. The results of this technical analysis for all segments and corridors in the City are included as **Attachment A** to this memo.

HCM MODIFIED METHODOLOGY

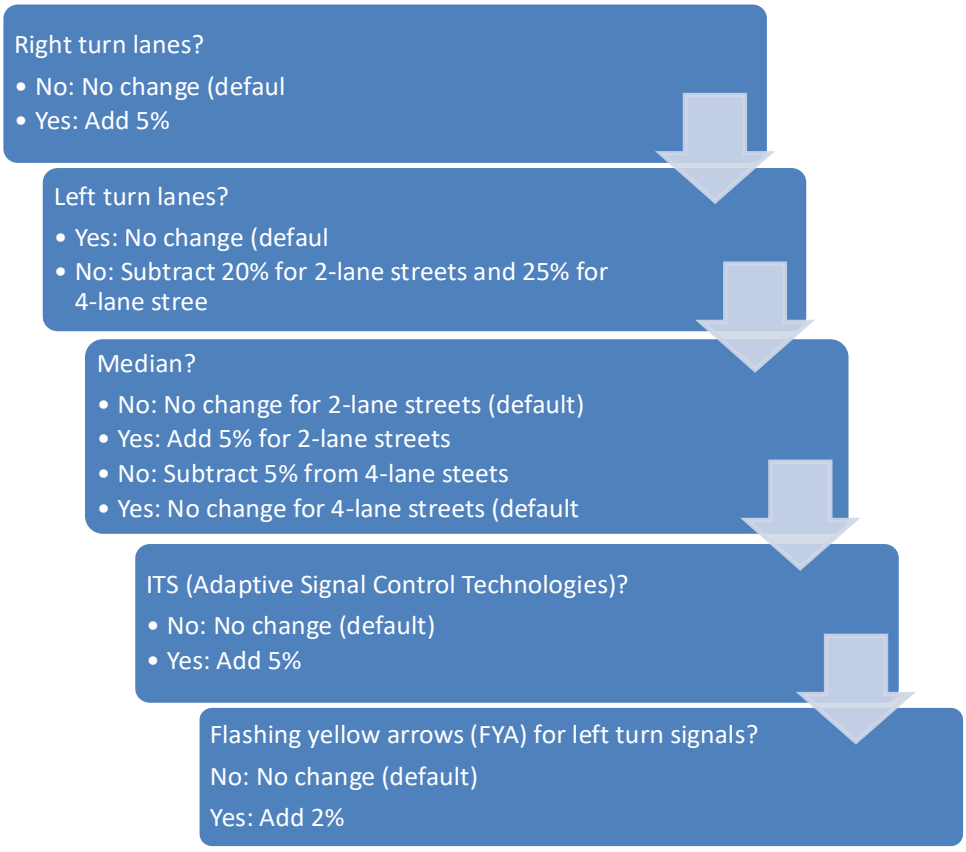
The HCM Modified methodology leverages Table 16-16 of the HCM, 6th Edition, which was presented to Council at the October 16th and 22nd meetings (see **Attachment B**). Identified advantages of leveraging data from Table 16-16 are that it is from the newest edition of the HCM and is fairly straightforward to implement. The generic nature of the capacities provided in Table 16-16, which consider few roadway characteristics that impact capacity, was identified as a shortcoming.

To address this shortcoming, Council directed staff to develop an HCM Modified methodology. This methodology includes the base capacities provided in Table 16-16 plus adjustments to account for the presence of turn lanes, medians, adaptive signal control (ITS), and flashing yellow arrows (FYA) for left turn signals. **Figure 1** below describes the HCM Modified methodology, which pivots from the default assumptions listed in Table 16-1 to adjust for individual roadway characteristics.

FIGURE 1: HCM MODIFIED A JUSTMENTS

The following steps were followed to determine a segment's capacity:

1. To determine the base HCM flow rate, use Attachment B: Table 16-16, K-Factor = 0.09, D-Factor=0.55 and assume that the 30 mph figures apply to all segments with poste speed limits less than 45 mph.
2. Using the flow chart below, determine which adjustments apply.



3. Add up and apply the total percentage reduction/addition, if any, to the base capacity to calculate the adjusted segment capacity.

The turn lane and median adjustments generally follow the guidance from the Florida Department of Transportation (FDOT) tables for similar facility types (see **Attachment C**). The

adaptive signal control and FYA adjustments reflect the improved capacity offered by these treatments. While no hard data exists on the appropriate capacity adjustment, other cities and the National Highway Administration have recognized that adaptive control can reduce delays and improve corridor travel times by up to 10%[3]. We have conservatively assigned a 5% capacity bump for segments and corridors, where adaptive signal control is in place. Similarly, there is no literature that definitively recommends a capacity increase for FYAs, however, FYAs allow for more efficient use of the roadway, including fewer delays for left turns and more efficient signal phasing. Similar to adaptive control, we provided a 2% capacity increase in locations featuring FYAs.

[3] https://www.fhwa.dot.gov/innovation/everydaycounts/edc-1 asct.cfm

ATTACHMENT A: 2016 AND 2024 CORRIDOR AND SEGMENT RESULTS

Figure 1: 2016 HCM Modified Methodology

	Segment*		AM Volume	PM Volume	Capacities	AM V/C	PM V/C	AM	PM
					2016 HCM Mod	2016 HCM Mod	2016 HCM Mod	Corridor ≤1.1 Segment ≤1.4	
	East Lake Sammamish Parkway North Corridor	**NB**				**1.52**	**0.78**	Fail	Pass
		SB				**0.44**	**1.55**	Pass	Fail
1	E Lk Sammamish Pkwy, City limits - 196th Ave NE (Weber Pl)[1]	NB	1,145	586	705	1.62	0.83	Fail	Pass
		SB	365	1,238		0.52	1.76	Pass	Fail
2	E Lk Sammamish Pkwy, 196th Ave NE - NE 26th Pl	NB	1,198	614	705	1.70	0.87	Fail	Pass
		SB	309	1,167		0.44	1.65	Pass	Fail
3	E Lk Sammamish Pkwy, NE 26th Pl - NE Inglewood Hill Rd	NB	1,202	623	969	1.24	0.64	Pass	Pass
		SB	358	1,209		0.37	1.25	Pass	Pass
	East Lake Sammamish Parkway Central Corridor	**NB**				**0.61**	**0.65**	Pass	Pass
		SB				**0.47**	**0.77**	Pass	Pass
4	E Lk Sammamish Pkwy, Inglewood Hill Rd – Louis Thompson Rd	NB	649	529	925	0.70	0.57	Pass	Pass
		SB	363	759		0.39	0.82	Pass	Pass
5	E Lk Sammamish Pkwy, Louis Thompson Rd NE – SE 8th St	NB	385	454	705	0.55	0.64	Pass	Pass
		SB	335	546		0.48	0.77	Pass	Pass
6	E Lk Sammamish Pkwy, SE 8th St – SE 24th Way	NB	345	523	705	0.49	0.74	Pass	Pass
		SB	378	494		0.54	0.70	Pass	Pass
	East Lake Sammamish Parkway South Corridor	**NB**				**0.53**	**1.02**	Pass	Pass
		SB				**0.87**	**0.80**	Pass	Pass
7	E Lk Sammamish Pkwy, SE 24th Way – 212th Ave SE	NB	331	545	705	0.47	0.77	Pass	Pass
		SB	450	545		0.64	0.77	Pass	Pass
8	E Lk Sammamish Pkwy, 212th Ave SE – South City Limit	NB	429	881	749	0.57	1.18	Pass	Pass
		SB	750	620		1.00	0.83	Pass	Pass
	Sahalee Way–228th Avenue North Corridor	**NB**				**1.12**	**0.67**	Fail	Pass
		SB				**0.56**	**1.03**	Pass	Pass
9	Sahalee Way/228th Ave NE, City Limit – NE 37th Way	NB	1,256	573	951	1.32	0.60	Pass	Pass
		SB	471	1,102		0.50	1.16	Pass	Pass
10	Sahalee Way/228th Ave NE, NE 37th Way - NE 36th St[2]	NB	1,043	547	906	1.15	0.60	Pass	Pass
		SB	474	989		0.52	1.09	Pass	Pass
11	Sahalee Way/228th Ave NE, NE 36th St - 223rd Ave NE[2]	NB	1,023	531	906	1.13	0.59	Pass	Pass
		SB	457	947		0.50	1.04	Pass	Pass
12	Sahalee Way/228th Ave NE, 223rd Ave NE – NE 25th Way	NB	950	545	906	1.05	0.60	Pass	Pass
		SB	450	840		0.50	0.93	Pass	Pass
13	228th Ave, NE 25th Way – NE 12th Pl[3]	NB	711	790	906	0.78	0.87	Pass	Pass
		SB	660	796		0.73	0.88	Pass	Pass
	228th Avenue Central Corridor	**NB**				**0.54**	**0.68**	Pass	Pass
		SB				**0.58**	**0.66**	Pass	Pass
14	228th Ave, NE 12th Pl – NE 8th St/Inglewood Hill Rd	NB	727	894	969	0.75	0.92	Pass	Pass
		SB	807	870		0.83	0.90	Pass	Pass
15	228th Ave, NE 8th St/Inglewood Hill Rd – Main St	NB	808	1,058	1,861	0.43	0.57	Pass	Pass
		SB	1,024	1,052		0.55	0.57	Pass	Pass
16	228th Ave, Main St - SE 8th St[4]	NB	923	1,085	1,861	0.50	0.58	Pass	Pass
		SB	820	1,148		0.44	0.62	Pass	Pass
17	228th Ave, SE 8th St – SE 10th St	NB	854	1,209	1,861	0.46	0.65	Pass	Pass
		SB	954	1,078		0.51	0.58	Pass	Pass
18	228th Ave, Se 10th St – SE 20th St	NB	1,086	1,303	1,861	0.58	0.70	Pass	Pass
		SB	1,087	1,233		0.58	0.66	Pass	Pass
	228th Avenue South Corridor	**NB**				**0.55**	**0.83**	Pass	Pass
		SB				**0.70**	**0.66**	Pass	Pass
19	228th Ave, SE 20th St – Issaquah Pine Lake Rd SE	NB	1,128	1,426	1,949	0.58	0.73	Pass	Pass
		SB	1,136	1,341		0.58	0.69	Pass	Pass
20	228th Ave, Issaquah Pine Lake Rd SE – SE 43rd Way	NB	454	953	969	0.47	0.98	Pass	Pass
		SB	827	565		0.85	0.58	Pass	Pass
	244th Avenue North Corridor	**NB**				**0.39**	**0.40**	Pass	Pass
		SB				**0.48**	**0.42**	Pass	Pass
21	244th Ave NE, NE 30th Pl - NE 20th St	NB	295	293	705	0.42	0.42	Pass	Pass
		SB	313	320		0.44	0.45	Pass	Pass
22	244th Ave NE, NE 20th St - NE 8th St	NB	320	334	705	0.45	0.47	Pass	Pass
		SB	467	350		0.66	0.50	Pass	Pass
23	244th Ave NE, NE 8th St – E Main St	NB	369	306	925	0.40	0.33	Pass	Pass
		SB	295	375		0.32	0.41	Pass	Pass
24	244th Ave NE/SE, E Main St - SE 8th St	NB	189	342	881	0.21	0.39	Pass	Pass
		SB	371	291		0.42	0.33	Pass	Pass
	NE Inglewood Hill Road Corridor	**EB**				**0.31**	**0.79**	Pass	Pass
		WB				**0.77**	**0.39**	Pass	Pass
25	NE Inglewood Hill Rd, E Lk Sammamish Pkwy – 216th Ave	EB	180	678	705	0.25	0.96	Pass	Pass
		WB	681	288		0.97	0.41	Pass	Pass
26	NE Inglewood Hill Rd, 216th Ave NE – 228th Ave NE[4]	EB	334	560	969	0.34	0.58	Pass	Pass
		WB	480	364		0.50	0.38	Pass	Pass

	NE 8th Street Corridor	**EB**				**0.35**	**0.52**	Pass	Pass
		WB				**0.46**	**0.34**	Pass	Pass
27	NE 8th St, 228th Ave NE – 235th Ave NE	EB	385	554	969	0.40	0.57	Pass	Pass
		WB	461	344		0.48	0.36	Pass	Pass
28	NE 8th St, 235th Ave NE – 244th Ave NE	EB	228	393	881	0.26	0.45	Pass	Pass
		WB	384	288		0.44	0.33	Pass	Pass
	SE 8th Street Corridor	**EB**				**0.28**	**0.40**	Pass	Pass
		WB				**0.63**	**0.32**	Pass	Pass
29	SE 8th St, 228th Ave SE – 244th Ave SE	EB	257	372	925	0.28	0.40	Pass	Pass
		WB	585	292		0.63	0.32	Pass	Pass
	Issaquah-Pine Lake Road Corridor	**EB/SB**				**0.97**	**0.83**	Pass	Pass
		WB/NB				**0.54**	**1.06**	Pass	Pass
30	Issaquah-Pine Lk Rd, 228th Ave SE - SE 32nd Way[2]	EB	467	802	969	0.48	0.83	Pass	Pass
		WB	589	613		0.61	0.63	Pass	Pass
31	Issaquah-Pine Lk Rd, SE 32nd Way - SE Klahanie Blvd	NB	505	747	881	0.57	0.85	Pass	Pass
		SB	610	754		0.69	0.86	Pass	Pass
32	Issaquah-Pine Lk Rd, SE Klahanie Blvd – SE 46th St	NB	391	990	881	0.44	1.12	Pass	Pass
		SB	979	742		1.11	0.84	Pass	Pass
33	Issaquah-Pine Lk Rd, SE 46th St - SE 48th St	NB	444	1,207	881	0.50	1.37	Pass	Pass
		SB	1,078	717		1.22	0.81	Pass	Pass
	SE 32nd Way/Street - Issaquah-Beaver Lake Road Corridor	**EB**				**0.25**	**0.56**	Pass	Pass
		WB				**0.46**	**0.41**	Pass	Pass
34	SE 32nd Way, Issaquah-Pine Lk Rd – 235th Place SE	EB	178	475	705	0.25	0.67	Pass	Pass
		WB	390	329		0.55	0.47	Pass	Pass
35	SE 32nd Way, 235th Place SE – 244th Ave SE	EB	173	381	705	0.25	0.54	Pass	Pass
		WB	285	264		0.40	0.37	Pass	Pass
36	SE 32nd Way, 244th Ave SE – E Beaver Lake Dr SE	EB	216	439	705	0.31	0.62	Pass	Pass
		WB	364	333		0.52	0.47	Pass	Pass
37	Issaquah-Beaver Lk Rd, E Beaver Lk Dr – SE Duthie Hill Rd	EB	171	282	881	0.19	0.32	Pass	Pass
		WB	257	285		0.29	0.32	Pass	Pass
	Issaquah-Fall City Road Corridor	**NB/EB**				**0.26**	**0.91**	Pass	Pass
		SB/WB				**0.94**	**0.54**	Pass	Pass
38	SE Issaquah-Fall City Rd, Issaquah-Pine Lk Rd – 245th Pl SE[6]	EB	532	1,271	1,772	0.30	0.72	Pass	Pass
		WB	1,186	744		0.67	0.42	Pass	Pass
39	SE Issaquah-Fall City Rd, 245th Ave SE - Klahanie Dr SE	EB	149	1,160	881	0.17	1.32	Pass	Pass
		WB	1,263	669		1.43	0.76	Fail	Pass
40	SE Issaquah-Fall City Rd, Klahanie Dr SE - SE Duthie Hill Rd	EB	237	746	881	0.27	0.85	Pass	Pass
		WB	653	488		0.74	0.55	Pass	Pass
41	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – SE Issaquah-Fall City Rd[6]	NB	203	521	881	0.23	0.59	Pass	Pass
		SB	599	264		0.68	0.30	Pass	Pass
	Duthie Hill Road Corridor	**NB/EB**				**0.32**	**0.93**	Pass	Pass
		SB/WB				**0.90**	**0.63**	Pass	Pass
42	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – 266th Ave SE	NB	254	769	725	0.35	1.06	Pass	Pass
		SB	745	520		1.03	0.72	Pass	Pass
43	SE Duthie Hill Rd, 266th Ave SE – Trossachs Blvd SE[6]	EB	262	713	906	0.29	0.79	Pass	Pass

Notes

Corridor V/C ratios are volume weighted.

* ELSP corridors are shown for information purposes only as they are excluded from concurrency.

[1] A portion of this segment is 30 MPH.

[2] PM Peak Hour in Sammamish is 4:45-5:45 PM. 15 minute segment count not available, 5-6PM used.

[3] A portion of this segment is 35 MPH.

[4] 2016 count was not available, 2017 count used.

[5] This segment transitions from a wider cross-section to two lanes, the narrower section

[6] Segment is partially outside of Sammamish City Limits.

2024 HCM Modified Methodology									
	Segment*		AM Volume	PM Volume	Capacities 2024 HCM Mod	AM V/C 2024 HCM Mod	PM V/C 2024 HCM Mod	AM Corridor ≤1.1 Segment ≤1.4	PM Corridor ≤1.1 Segment ≤1.4
	East Lake Sammamish Parkway North Corridor	NB				1.52	0.82	Fail	Pass
		SB				0.54	1.61	Pass	Fail
1	E Lk Sammamish Pkwy, City limits - 196th Ave NE (Weber Pl)[1]	NB	1,144	611	705	1.62	0.87	Fail	Pass
		SB	442	1,285		0.63	1.82	Pass	Fail
2	E Lk Sammamish Pkwy, 196th Ave NE - NE 26th Pl	NB	1,198	642	705	1.70	0.91	Fail	Pass
		SB	385	1,215		0.55	1.72	Pass	Fail
3	E Lk Sammamish Pkwy, NE 26th Pl - NE Inglewood Hill Rd	NB	1,201	653	969	1.24	0.67	Pass	Pass
		SB	433	1,258		0.45	1.30	Pass	Pass
	East Lake Sammamish Parkway Central Corridor	NB				0.63	0.67	Pass	Pass
		SB				0.50	0.78	Pass	Pass
4	E Lk Sammamish Pkwy, Inglewood Hill Rd – Louis Thompson Rd	NB	678	541	943	0.72	0.57	Pass	Pass
		SB	383	762		0.41	0.81	Pass	Pass
5	E Lk Sammamish Pkwy, Louis Thompson Rd NE – SE 8th St	NB	415	475	705	0.59	0.67	Pass	Pass
		SB	361	557		0.51	0.79	Pass	Pass
6	E Lk Sammamish Pkwy, SE 8th St – SE 24th Way	NB	374	541	705	0.53	0.77	Pass	Pass
		SB	404	501		0.57	0.71	Pass	Pass
	East Lake Sammamish Parkway South Corridor	NB				0.52	0.99	Pass	Pass
		SB				0.85	0.72	Pass	Pass
7	E Lk Sammamish Pkwy, SE 24th Way – 212th Ave SE	NB	362	567	881	0.41	0.64	Pass	Pass
		SB	487	546		0.55	0.62	Pass	Pass
8	E Lk Sammamish Pkwy, 212th Ave SE – South City Limit	NB	451	904	749	0.60	1.21	Pass	Pass
		SB	781	610		1.04	0.81	Pass	Pass
	Sahalee Way–228th Avenue North Corridor	NB				1.16	0.66	Fail	Pass
		SB				0.55	1.05	Pass	Pass
9	Sahalee Way/228th Ave NE, City Limit – NE 37th Way	NB	1,382	582	1,015	1.36	0.57	Pass	Pass
		SB	485	1,178		0.48	1.16	Pass	Pass
10	Sahalee Way/228th Ave NE, NE 37th Way - NE 36th St[2]	NB	1,164	571	969	1.20	0.59	Pass	Pass
		SB	495	1,071		0.51	1.11	Pass	Pass
11	Sahalee Way/228th Ave NE, NE 36th St - 223rd Ave NE[2]	NB	1,139	561	969	1.18	0.58	Pass	Pass
		SB	474	1,033		0.49	1.07	Pass	Pass
12	Sahalee Way/228th Ave NE, 223rd Ave NE – NE 25th Way	NB	1,047	585	969	1.08	0.60	Pass	Pass
		SB	470	911		0.49	0.94	Pass	Pass
13	228th Ave, NE 25th Way – NE 12th Pl[3]	NB	810	836	969	0.84	0.86	Pass	Pass
		SB	683	872		0.71	0.90	Pass	Pass
	228th Avenue Central Corridor	NB				0.58	0.71	Pass	Pass
		SB				0.59	0.70	Pass	Pass
14	228th Ave, NE 12th Pl – NE 8th St/Inglewood Hill Rd	NB	825	937	987	0.84	0.95	Pass	Pass
		SB	858	924		0.87	0.94	Pass	Pass
15	228th Ave, NE 8th St/Inglewood Hill Rd – Main St	NB	884	1,099	1,896	0.47	0.58	Pass	Pass
		SB	973	1,124		0.51	0.59	Pass	Pass
16	228th Ave, Main St - SE 8th St	NB	984	1,159	1,896	0.52	0.61	Pass	Pass
		SB	788	1,237		0.42	0.65	Pass	Pass
17	228th Ave, SE 8th St – SE 10th St	NB	948	1,344	1,896	0.50	0.71	Pass	Pass
		SB	1,032	1,249		0.54	0.66	Pass	Pass
18	228th Ave, Se 10th St – SE 20th St	NB	1,127	1,408	1,896	0.59	0.74	Pass	Pass
		SB	1,130	1,350		0.60	0.71	Pass	Pass
	228th Avenue South Corridor	NB				0.59	0.87	Pass	Pass
		SB				0.73	0.70	Pass	Pass
19	228th Ave, SE 20th St – Issaquah Pine Lake Rd SE[4]	NB	1,190	1,504	1,949	0.61	0.77	Pass	Pass
		SB	1,203	1,424		0.62	0.73	Pass	Pass
20	228th Ave, Issaquah Pine Lake Rd SE – SE 43rd Way	NB	526	997	969	0.54	1.03	Pass	Pass
		SB	861	608		0.89	0.63	Pass	Pass
	244th Avenue North Corridor	NB				0.35	0.39	Pass	Pass
		SB				0.43	0.40	Pass	Pass
21	244th Ave NE, NE 30th Pl - NE 20th St	NB	303	332	881	0.34	0.38	Pass	Pass
		SB	318	351		0.36	0.40	Pass	Pass
22	244th Ave NE, NE 20th St - NE 8th St	NB	330	374	881	0.37	0.42	Pass	Pass
		SB	474	382		0.54	0.43	Pass	Pass
23	244th Ave NE, NE 8th St – E Main St	NB	370	320	925	0.40	0.35	Pass	Pass
		SB	298	375		0.32	0.41	Pass	Pass
24	244th Ave NE/SE, E Main St - SE 8th St	NB	195	368	881	0.22	0.42	Pass	Pass
		SB	391	299		0.44	0.34	Pass	Pass
	NE Inglewood Hill Road Corridor	EB				0.28	0.83	Pass	Pass
		WB				0.74	0.39	Pass	Pass
25	NE Inglewood Hill Rd, E Lk Sammamish Pkwy – 216th Ave	EB	236	734	705	0.33	1.04	Pass	Pass
		WB	654	320		0.93	0.45	Pass	Pass
26	NE Inglewood Hill Rd, 216th Ave NE – 228th Ave NE	EB	227	554	1,013	0.22	0.55	Pass	Pass
		WB	479	335		0.47	0.33	Pass	Pass
	NE 8th Street Corridor	EB				0.32	0.52	Pass	Pass
		WB				0.44	0.36	Pass	Pass
27	NE 8th St, 228th Ave NE – 235th Ave NE	EB	375	585	1,013	0.37	0.58	Pass	Pass
		WB	470	373		0.46	0.37	Pass	Pass
28	NE 8th St, 235th Ave NE – 244th Ave NE	EB	230	415	925	0.25	0.45	Pass	Pass
		WB	385	316		0.42	0.34	Pass	Pass

	SE 8th Street Corridor	**EB**				**0.28**	**0.43**	Pass	Pass
		WB				**0.65**	**0.33**	Pass	Pass
29	SE 8th St, 228th Ave SE – 244th Ave SE	EB	256	396	925	0.28	0.43	Pass	Pass
		WB	600	304		0.65	0.33	Pass	Pass
	Issaquah-Pine Lake Road Corridor	**EB/SB**				**0.94**	**0.80**	Pass	Pass
		WB/NB				**0.50**	**1.02**	Pass	Pass
30	Issaquah-Pine Lk Rd, 228th Ave SE - SE 32nd Way[5]	EB	422	845	987	0.43	0.86	Pass	Pass
		WB	509	629		0.52	0.64	Pass	Pass
31	Issaquah-Pine Lk Rd, SE 32nd Way - SE Klahanie Blvd	NB	540	778	987	0.55	0.79	Pass	Pass
		SB	682	782		0.69	0.79	Pass	Pass
32	Issaquah-Pine Lk Rd, SE Klahanie Blvd – SE 46th St	NB	408	1,020	943	0.43	1.08	Pass	Pass
		SB	1,015	751		1.08	0.80	Pass	Pass
33	Issaquah-Pine Lk Rd, SE 46th St - SE 48th St	NB	456	1,236	943	0.48	1.31	Pass	Pass
		SB	1,107	723		1.17	0.77	Pass	Pass
	SE 32nd Way/Street - Issaquah-Beaver Lake Road Corridor	**EB**				**0.34**	**0.62**	Pass	Pass
		WB				**0.51**	**0.44**	Pass	Pass
34	SE 32nd Way, Issaquah-Pine Lk Rd – 235th Place SE	EB	255	524	749	0.34	0.70	Pass	Pass
		WB	458	363		0.61	0.49	Pass	Pass
35	SE 32nd Way, 235th Place SE – 244th Ave SE	EB	228	449	705	0.32	0.64	Pass	Pass
		WB	326	281		0.46	0.40	Pass	Pass
36	SE 32nd Way, 244th Ave SE – E Beaver Lake Dr SE	EB	286	479	705	0.41	0.68	Pass	Pass
		WB	401	365		0.57	0.52	Pass	Pass
37	Issaquah-Beaver Lk Rd, E Beaver Lk Dr – SE Duthie Hill Rd	EB	242	298	881	0.27	0.34	Pass	Pass
		WB	274	295		0.31	0.34	Pass	Pass
	Issaquah-Fall City Road Corridor	**NB/EB**				**0.25**	**0.83**	Pass	Pass
		SB/WB				**0.79**	**0.44**	Pass	Pass
38	SE Issaquah-Fall City Rd, Issaquah-Pine Lk Rd – 245th Pl SE[5]	EB	532	1,494	1,772	0.30	0.84	Pass	Pass
		WB	1,353	787		0.76	0.44	Pass	Pass
39	SE Issaquah-Fall City Rd, 245th Ave SE - Klahanie Dr SE	EB	147	1,385	1,861	0.08	0.74	Pass	Pass
		WB	1,430	721		0.77	0.39	Pass	Pass
40	SE Issaquah-Fall City Rd, Klahanie Dr SE - SE Duthie Hill Rd	EB	237	951	925	0.26	1.03	Pass	Pass
		WB	795	528		0.86	0.57	Pass	Pass
41	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – SE Issaquah-Fall City Rd[6]	NB	211	585	881	0.24	0.66	Pass	Pass
		SB	693	287		0.79	0.33	Pass	Pass
	Duthie Hill Road Corridor	**NB/EB**				**0.94**	**1.02**	Pass	Pass
		SB/WB				**0.96**	**0.66**	Pass	Pass
42	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – 266th Ave SE	NB	271	839	725	0.37	1.16	Pass	Pass
		SB	794	544		1.09	0.75	Pass	Pass
43	SE Duthie Hill Rd, 266th Ave SE – Trossachs Blvd SE[6]	EB	278	787	906	0.31	0.87	Pass	Pass
		WB	733	520		0.81	0.57	Pass	Pass

Notes

Corridor V/C ratios are volume weighted.

* ELSP corridors are shown for information purposes only as they are excluded from concurrency.

[1] A portion of this segment is 30 MPH.

[2] PM Peak Hour in Sammamish is 4:45-5:45 PM. 15 minute segment count not available, 5-6PM used.

[3] A portion of this segment is 35 MPH.

[4] 228th/IPLR: No FYA; 228th/SE 24th: No FYA during peak hours; 228th/SE 20th: FYA. Since the FYA is not in operation during peak hours for the majority of the major intersections, the segment overall doesn't experience increased capacity due to FYAs during peak hours.

[5] This segment transitions from a wider cross-section to two lanes, the narrower section was used.

[6] Segment is partially outside of Sammamish City Limits.

Attachment B: HCM, 6th Edition Table 16 [4]

K-Factor	D-Factor	Daily Service Volume by Lanes, LOS, and Speed (1,000 veh/day)											
		Two-Lane Streets				Four-Lane Streets				Six-Lane Streets			
		LOS B	LOS C	LOS D	LOS E	LOS B	LOS C	LOS D	LOS E	LOS B	LOS C	LOS D	LOS E
Posted Speed = 30 mi/h													
0.09	0.55	NA	1.7	11.8	17.8	NA	2.2	24.7	35.8	NA	2.6	38.7	54.0
	0.60	NA	1.6	10.8	16.4	NA	2.0	22.7	32.8	NA	2.4	35.6	49.5
0.10	0.55	NA	1.6	10.7	16.1	NA	2.0	22.3	32.2	NA	2.4	34.9	48.6
	0.60	NA	1.4	9.8	14.7	NA	1.8	20.4	29.5	NA	2.2	32.0	44.5
0.11	0.55	NA	1.4	9.7	14.6	NA	1.8	20.3	29.3	NA	2.1	31.7	44.1
	0.60	NA	1.3	8.9	13.4	NA	1.7	18.6	26.9	NA	2.0	29.1	40.5
Posted Speed = 45 mi/h													
0.09	0.55	NA	7.7	15.9	18.3	NA	16.5	33.6	36.8	NA	25.4	51.7	55.3
	0.60	NA	7.1	14.5	16.8	NA	15.1	30.8	33.7	NA	23.4	47.4	50.7
0.10	0.55	NA	7.0	14.3	16.5	NA	14.9	30.2	33.1	NA	23.0	46.5	49.7
	0.60	NA	6.4	13.1	15.1	NA	13.6	27.7	30.3	NA	21.0	42.7	45.6
0.11	0.55	NA	6.3	13.0	15.0	NA	13.5	27.5	30.1	NA	20.9	42.3	45.2
	0.60	NA	5.8	11.9	13.8	NA	12.4	25.2	27.6	NA	19.1	38.8	41.5

Notes: NA = not applicable; LOS cannot be achieved with the stated assumptions.
General assumptions include no roundabouts or all-way STOP-controlled intersections along the facility; coordinated, semiactuated traffic signals; Arrival Type 4; 120-s cycle time; protected left-turn phases; 0.45 weighted average *g/C* ratio; exclusive left-turn lanes with adequate queue storage provided at traffic signals; no exclusive right-turn lanes provided; no restrictive median; 2-mi facility length; 10% of traffic turns left and 10% turns right at each traffic signal; peak hour factor = 0.92; and base saturation flow rate = 1,900 pc/h/ln.
Additional assumptions for 30-mi/h facilities: signal spacing = 1,050 ft and 20 access points/mi.
Additional assumptions for 45-mi/h facilities: signal spacing = 1,500 ft and 10 access points/mi.

K-Factor = Proportion of the annual avg daily traffic occurring in the analysis period.
D-Factor = Density of vehicles/hr

For the purposes of these calculations, base HCM peak hour directional capacities are based on the number of lanes and the roadway's posted speed limit. If a roadway's posted speed limit is under 45 miles per hour, the capacities from the "Posted Speed = 30 mi/h" section of the table is used. If the roadway's posted speed limit is 45 miles per hour or greater, the "Posted Speed = 45 mi/h" section is applied. To translate daily two-way service volumes capacities to peak hour direction service volume capacities, the daily service volumes provided for K-Factor of 0.09 and D-Factor of 0.55 are applied and then multiplied by 0.09 (K-Factor) and 0.55 (D-Factor). However, because the hourly flow rates are based on lanes and posted vehicle speeds, there is very little difference in which K- and D-Factors are applied, so long as they are applied consistently.

[4] Highway Capacity Manual, 6th Edition Generalized Daily Service Volumes for Urban Street Facilities

For example, a two-way roadway with a posted speed of 30 miles per hour has the same hourly capacity no matter which K- and D-factor are applied:

17,800 vehicles per day * .09 K-Factor *.55 D-Factor = 881 vehicles per hour per direction.

16,400 vehicles per day * .09 K-Factor *.60 D-Factor = 885 vehicles per hour per direction.

16,100 vehicles per day * .10 K-Factor *.55 D-Factor = 886 vehicles per hour per direction.

14,700 vehicles per day * .10 K-Factor *.60 D-Factor = 882 vehicles per hour per direction.

14,600 vehicles per day * .11 K-Factor *.55 D-Factor = 883 vehicles per hour per direction.

13,400 vehicles per day * .11 K-Factor *.60 D-Factor = 884 vehicles per hour per direction.

ATTACHMENT C: OT PEAK DIRECTIONAL VOLUMES FOR URBANIZED AREAS

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	830	880	**
2	Divided	*	1,910	2,000	**
3	Divided	*	2,940	3,020	**
4	Divided	*	3,970	4,040	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	370	750	800
2	Divided	*	730	1,630	1,700
3	Divided	*	1,170	2,520	2,560
4	Divided	*	1,610	3,390	3,420

Non-State Signalized Roadway Adjustments
(Alter corresponding state volumes by the indicated percent.)
Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
1	Divided	Yes	No	+5%
1	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment
Multiply the corresponding directional volumes in this table by 1.2

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Appendix B. 2035 Mitigated Intersection LOS Results Summary

Alternative 1 Mitigated Intersection Levels of Service

ID	Name	Control	LOS Std	AM Peak Hr		PM Peak Hr	
				Delay	LOS	Delay	LOS
1	Issaquah-Pine Lk Rd & SE 48th St	SIGNAL	D	34.4	C	21.8	C
2	228th Ave SE & NE 12th Pl	SIGNAL	D	8.5	A	10.1	B
3	Klahanie Dr SE & SE Issaquah-Fall City Rd	RAB	D	9.1	A	11.3	B
4	244th Ave SE & SE 24th St	TWSC	C	15.9	C	20.5	C
5	SE 32nd Way & 244th Ave E	AWSC	C	13.6	B	16.7	C
6	Issaquah-Pine Lk Rd & SE 32nd Way	RAB	D	6.4	A	21.9	C
7	228th Ave SE & SE 40th Street	TWSC	D	23.4	C	24.9	C
8	SE Klahanie Blvd & 256th Ave SE	AWSC	C	19.4	C	10.4	B
9	Issaquah-Fall City Rd & Pacific Cascade MS	RAB	D	10.5	B	7.9	A
10	Sahalee Way NE & NE 36th Ln	TWSC	D	19.2	C	19.4	C
11	242nd Ave. NE & NE 8th Street	SIGNAL	C	33.1	C	11.7	B
12	228th Ave SE & SE 8th St	SIGNAL	D	18.1	B	19.1	B
13	228th Ave SE & NE 19th Dr	TWSC	D	28.7	D	26.0	D
14	Inglewood Hill Rd & 216th Ave NE	RAB	C	7.0	A	6.5	A
15	228th Ave SE & NE Inglewood Hill Rd	SIGNAL	D	30.6	C	30.8	C
16	228th Ave SE & NE 4th Street	SIGNAL	E	33.0	C	19.5	B
17	228th Ave SE & SE 4th Street	SIGNAL	E	28.4	C	72.5	E
18	212th Ave. SE & SE 8th St	TWSC	C	14.9	B	15.0	C
19	228th Ave SE & SE 16th Pl	SIGNAL	D	11.9	B	12.1	B
20	E Lk Sammamish Pkwy & 212th Way SE	SIGNAL	C	5.9	A	4.5	A
21	E Lk Sammamish Pkwy & SE 24th Wy	TWSC	C	14.9	B	18.7	C
22	212th Ave SE & SE 20th Street	AWSC	C	10.1	B	12.6	B
23	E Lk Sammamish Pkwy & Louis Thompson Rd	SIGNAL	C	10.7	B	11.2	B
24	E Lk Sammamish Pkwy & Inglewood Hill	SIGNAL	C	21.0	C	17.0	B
25	Sahalee Way NE & NE 37th Way	SIGNAL	D	12.6	B	16.8	B
26	NE 8th Street & 244th Ave. NE	RAB	C	4.9	A	4.3	A
27	228th Ave SE & SE 20th Street	SIGNAL	D	12.8	B	19.3	B
28	228th Ave SE & SE 24th St	SIGNAL	E	42.4	D	44.1	D
29	228th Ave SE & Issaquah-Pine Lk Rd	SIGNAL	E	55.2	E	57.1	E
30	Issaquah-Pine Lk Rd & Klahanie Blvd	SIGNAL	D	46.1	D	24.5	C
31	Duthie Hill Rd & Issaquah Beaver Lake Rd	SIGNAL	D	25.3	C	26.3	C
32	256th Ave SE & Issaquah Beaver Lake Rd	RAB	C	5.7	A	5.9	A
33	228th Ave SE & NE 14th St	TWSC	D	22.1	C	27.2	D
34	228th Ave SE & NE 25th Way	SIGNAL	D	18.4	B	11.5	B
35	Issaquah-Pine Lk Rd & SE 42nd St	SIGNAL	D	9.0	A	7.4	A
36	Issaquah-Pine Lk Rd & 230th Ln SE	SIGNAL	D	39.6	D	13.4	B
37	Sahalee Way NE & NE 28th Way	SIGNAL	D	9.0	A	4.9	A
38	Issaquah-Pine Lk Rd & SE 47th Way	SIGNAL	D	18.2	B	28.7	C
39	233rd Ave NE & NE 8th Street	RAB	C	5.5	A	5.6	A

ID	Name	Control	LOS Std	AM Peak Hr		PM Peak Hr	
				Delay	LOS	Delay	LOS
40	228th Ave SE & E Main Street	SIGNAL	D	3.2	A	3.5	A
41	244th Ave NE & E Main Dr	RAB	C	5.4	A	5.1	A
42	Duthie Hill Rd & Trossachs Blvd SE	SIGNAL	D	31.8	C	17.9	B
43	228th Ave SE & Skyline HS	SIGNAL	D	18.1	B	11.5	B
Outside City of Sammamish							
61	E Lk Sammamish Pkwy & SR 202	SIGNAL	E	164.1	F	178.2	F
62	E Lk Sammamish Pkwy & SE 43rd Way	RAB	D	7.0	A	6.4	A
63	Sahalee Way NE & SR 202	SIGNAL	D	41.9	D	119.5	F
64	244th Ave. NE & SR 202	SIGNAL	D	28.1	C	79.5	E
65	Duthie Hill Rd & SR 202	SIGNAL	D	10.9	B	30.8	C
169	192nd Dr. NE & SR 202	SIGNAL	E	26.4	C	8.7	A
234	Issaquah-Pine Lk Rd & Issaquah Fall City Rd	SIGNAL	D	25.8	C	44.1	D

Alternative 2 Mitigated Intersection Levels of Service

ID	Name	Control	LOS Std	AM Peak Hr		PM Peak Hr	
				Delay	LOS	Delay	LOS
1	Issaquah-Pine Lk Rd & SE 48th St	SIGNAL	D	8.1	A	43.3	D
2	228th Ave SE & NE 12th Pl	SIGNAL	D	8.8	A	10.1	B
3	Klahanie Dr SE & SE Issaquah-Fall City Rd	RAB	D	8.0	A	10.0	A
4	244th Ave SE & SE 24th St	TWSC	C	14.7	B	20.3	C
5	SE 32nd Way & 244th Ave E	AWSC	C	12.7	B	15.6	C
6	Issaquah-Pine Lk Rd & SE 32nd Way	RAB	D	7.7	A	31.6	C
7	228th Ave SE & SE 40th Street	TWSC	D	22.9	C	24.9	C
8	SE Klahanie Blvd & 256th Ave SE	AWSC	C	19.5	C	10.4	B
9	Issaquah-Fall City Rd & Pacific Cascade MS	RAB	D	8.6	A	6.9	A
10	Sahalee Way NE & NE 36th Ln	TWSC	D	18.5	C	19.1	C
11	242nd Ave. NE & NE 8th Street	SIGNAL	C	33.5	C	11.7	B
12	228th Ave SE & SE 8th St	SIGNAL	D	18.3	B	19.8	B
13	228th Ave SE & NE 19th Dr	TWSC	D	26.2	D	25.7	D
14	Inglewood Hill Rd & 216th Ave NE	RAB	C	7.2	A	6.5	A
15	228th Ave SE & NE Inglewood Hill Rd	SIGNAL	D	31.9	C	32.4	C
16	228th Ave SE & NE 4th Street	SIGNAL	E	31.3	C	20.4	C
17	228th Ave SE & SE 4th Street	SIGNAL	E	27.1	C	73.7	E
18	212th Ave. SE & SE 8th St	TWSC	C	17.8	C	15.2	C
19	228th Ave SE & SE 16th Pl	SIGNAL	D	11.5	B	12.7	B
20	E Lk Sammamish Pkwy & 212th Way SE	SIGNAL	C	6.4	A	4.2	A
21	E Lk Sammamish Pkwy & SE 24th Wy	TWSC	C	14.7	B	17.8	C
22	212th Ave SE & SE 20th Street	AWSC	C	10.8	B	14.4	B
23	E Lk Sammamish Pkwy & Louis Thompson Rd	SIGNAL	C	11.9	B	11.1	B
24	E Lk Sammamish Pkwy & Inglewood Hill	SIGNAL	C	28.9	C	17.7	B
25	Sahalee Way NE & NE 37th Way	SIGNAL	D	11.7	B	15.7	B
26	NE 8th Street & 244th Ave. NE	RAB	C	4.7	A	4.3	A
27	228th Ave SE & SE 20th Street	SIGNAL	D	13.4	B	20.3	C
28	228th Ave SE & SE 24th St	SIGNAL	E	46.3	D	41.6	D
29	228th Ave SE & Issaquah-Pine Lk Rd	SIGNAL	E	59.5	E	58.0	E
30	Issaquah-Pine Lk Rd & Klahanie Blvd	SIGNAL	D	48.4	D	38.6	D
31	Duthie Hill Rd & Issaquah Beaver Lake Rd	SIGNAL	D	21.6	C	19.7	B
32	256th Ave SE & Issaquah Beaver Lake Rd	RAB	C	5.6	A	5.7	A
33	228th Ave SE & NE 14th St	TWSC	D	21.1	C	26.7	D
34	228th Ave SE & NE 25th Way	SIGNAL	D	17.1	B	11.2	B
35	Issaquah-Pine Lk Rd & SE 42nd St	SIGNAL	D	13.2	B	7.4	A
36	Issaquah-Pine Lk Rd & 230th Ln SE	SIGNAL	D	40.6	D	13.8	B
37	Sahalee Way NE & NE 28th Way	SIGNAL	D	8.3	A	4.9	A
38	Issaquah-Pine Lk Rd & SE 47th Way	SIGNAL	D	4.3	A	4.5	A
39	233rd Ave NE & NE 8th Street	RAB	C	5.6	A	5.6	A

ID	Name	Control	LOS Std	AM Peak Hr		PM Peak Hr	
				Delay	LOS	Delay	LOS
40	228th Ave SE & E Main Street	SIGNAL	D	3.2	A	3.5	A
41	244th Ave NE & E Main Dr	RAB	C	5.5	A	5.1	A
42	Duthie Hill Rd & Trossachs Blvd SE	SIGNAL	D	29.2	C	15.4	B
43	228th Ave SE & Skyline HS	SIGNAL	D	18.0	B	12.0	B
Outside City of Sammamish							
61	E Lk Sammamish Pkwy & SR 202	SIGNAL	E	164.1	F	180.3	F
62	E Lk Sammamish Pkwy & SE 43rd Way	RAB	D	6.9	A	7.6	A
63	Sahalee Way NE & SR 202	SIGNAL	D	36.2	D	107.9	F
64	244th Ave. NE & SR 202	SIGNAL	D	22.7	C	68.6	E
65	Duthie Hill Rd & SR 202	SIGNAL	D	9.9	A	29.3	C
169	192nd Dr. NE & SR 202	SIGNAL	E	19.3	B	7.4	A
234	Issaquah-Pine Lk Rd & Issaquah Fall City Rd	SIGNAL	D	27.6	C	45.9	D

Alternative 3 Mitigated Intersection Levels of Service

ID	Name	Control	LOS Std	AM Peak Hr		PM Peak Hr	
				Delay	LOS	Delay	LOS
1	Issaquah-Pine Lk Rd & SE 48th St	SIGNAL	D	42.6	D	25.1	C
2	228th Ave SE & NE 12th Pl	SIGNAL	D	7.6	A	9.5	A
3	Klahanie Dr SE & SE Issaquah-Fall City Rd	RAB	D	6.7	A	8.8	A
4	244th Ave SE & SE 24th St	TWSC	C	14.1	B	20.2	C
5	SE 32nd Way & 244th Ave E	AWSC	C	12.2	B	14.0	B
6	Issaquah-Pine Lk Rd & SE 32nd Way	RAB	D	6.5	A	14.3	B
7	228th Ave SE & SE 40th Street	TWSC	D	19.6	C	24.9	C
8	SE Klahanie Blvd & 256th Ave SE	AWSC	C	18.6	C	10.4	B
9	Issaquah-Fall City Rd & Pacific Cascade MS	RAB	D	6.9	A	6.4	A
10	Sahalee Way NE & NE 36th Ln	TWSC	D	15.7	C	17.4	C
11	242nd Ave. NE & NE 8th Street	SIGNAL	C	33.5	C	11.7	B
12	228th Ave SE & SE 8th St	SIGNAL	D	16.4	B	18.6	B
13	228th Ave SE & NE 19th Dr	TWSC	D	22.9	C	23.4	C
14	Inglewood Hill Rd & 216th Ave NE	RAB	C	6.6	A	6.3	A
15	228th Ave SE & NE Inglewood Hill Rd	SIGNAL	D	28.8	C	29.9	C
16	228th Ave SE & NE 4th Street	SIGNAL	E	24.5	C	19.2	B
17	228th Ave SE & SE 4th Street	SIGNAL	E	24.8	C	63.4	E
18	212th Ave. SE & SE 8th St	TWSC	C	14.7	B	13.6	B
19	228th Ave SE & SE 16th Pl	SIGNAL	D	11.2	B	11.4	B
20	E Lk Sammamish Pkwy & 212th Way SE	SIGNAL	C	4.8	A	4.2	A
21	E Lk Sammamish Pkwy & SE 24th Wy	TWSC	C	12.9	B	16.2	C
22	212th Ave SE & SE 20th Street	AWSC	C	9.8	A	11.6	B
23	E Lk Sammamish Pkwy & Louis Thompson Rd	SIGNAL	C	9.9	A	8.8	A
24	E Lk Sammamish Pkwy & Inglewood Hill	SIGNAL	C	15.8	B	15.7	B
25	Sahalee Way NE & NE 37th Way	SIGNAL	D	10.0	B	9.5	A
26	NE 8th Street & 244th Ave. NE	RAB	C	4.7	A	4.3	A
27	228th Ave SE & SE 20th Street	SIGNAL	D	11.6	B	17.5	B
28	228th Ave SE & SE 24th St	SIGNAL	E	41.4	D	39.6	D
29	228th Ave SE & Issaquah-Pine Lk Rd	SIGNAL	E	47.3	D	52.1	D
30	Issaquah-Pine Lk Rd & Klahanie Blvd	SIGNAL	D	38.7	D	25.9	C
31	Duthie Hill Rd & Issaquah Beaver Lake Rd	SIGNAL	D	18.3	B	17.6	B
32	256th Ave SE & Issaquah Beaver Lake Rd	RAB	C	5.5	A	5.3	A
33	228th Ave SE & NE 14th St	TWSC	D	19.7	C	23.9	C
34	228th Ave SE & NE 25th Way	SIGNAL	D	14.0	B	10.7	B
35	Issaquah-Pine Lk Rd & SE 42nd St	SIGNAL	D	9.8	A	7.4	A
36	Issaquah-Pine Lk Rd & 230th Ln SE	SIGNAL	D	39.8	D	13.4	B
37	Sahalee Way NE & NE 28th Way	SIGNAL	D	6.9	A	4.8	A
38	Issaquah-Pine Lk Rd & SE 47th Way	SIGNAL	D	3.7	A	4.1	A
39	233rd Ave NE & NE 8th Street	RAB	C	5.5	A	5.6	A

ID	Name	Control	LOS Std	AM Peak Hr		PM Peak Hr	
				Delay	LOS	Delay	LOS
40	228th Ave SE & E Main Street	SIGNAL	D	3.2	A	3.5	A
41	244th Ave NE & E Main Dr	RAB	C	5.4	A	5.1	A
42	Duthie Hill Rd & Trossachs Blvd SE	SIGNAL	D	22.8	C	12.8	B
43	228th Ave SE & Skyline HS	SIGNAL	D	18.0	B	11.1	B
Outside City of Sammamish							
61	E Lk Sammamish Pkwy & SR 202	SIGNAL	E	90.1	F	128.5	F
62	E Lk Sammamish Pkwy & SE 43rd Way	RAB	D	6.0	A	4.9	A
63	Sahalee Way NE & SR 202	SIGNAL	D	26.9	C	61.6	E
64	244th Ave. NE & SR 202	SIGNAL	D	14.0	B	52.1	D
65	Duthie Hill Rd & SR 202	SIGNAL	D	7.7	A	24.6	C
169	192nd Dr. NE & SR 202	SIGNAL	E	5.4	A	5.1	A
234	Issaquah-Pine Lk Rd & Issaquah Fall City Rd	SIGNAL	D	23.9	C	36.8	D

Alternative 4 Mitigated Intersection Levels of Service

ID	Name	Control	LOS Std	AM Peak Hr		PM Peak Hr	
				Delay	LOS	Delay	LOS
1	Issaquah-Pine Lk Rd & SE 48th St	SIGNAL	D	6.9	A	8.0	A
2	228th Ave SE & NE 12th Pl	SIGNAL	D	6.5	A	8.6	A
3	Klahanie Dr SE & SE Issaquah-Fall City Rd	RAB	D	6.0	A	7.7	A
4	244th Ave SE & SE 24th St	TWSC	C	15.2	C	18.3	C
5	SE 32nd Way & 244th Ave E	AWSC	C	12.4	B	15.1	C
6	Issaquah-Pine Lk Rd & SE 32nd Way	RAB	D	7.2	A	6.5	A
7	228th Ave SE & SE 40th Street	TWSC	D	13.7	B	16.7	C
8	SE Klahanie Blvd & 256th Ave SE	AWSC	C	17.5	C	10.4	B
9	Issaquah-Fall City Rd & Pacific Cascade MS	RAB	D	5.9	A	5.8	A
10	Sahalee Way NE & NE 36th Ln	TWSC	D	14.5	B	25.8	D
11	242nd Ave. NE & NE 8th Street	SIGNAL	C	32.9	C	11.6	B
12	228th Ave SE & SE 8th St	SIGNAL	D	19.8	B	22.2	C
13	228th Ave SE & NE 19th Dr	TWSC	D	23.3	C	25.5	D
14	Inglewood Hill Rd & 216th Ave NE	RAB	C	6.2	A	6.0	A
15	228th Ave SE & NE Inglewood Hill Rd	SIGNAL	D	35.5	D	42.5	D
16	228th Ave SE & NE 4th Street	SIGNAL	E	31.5	C	23.0	C
17	228th Ave SE & SE 4th Street	SIGNAL	E	35.2	D	47.3	D
18	212th Ave. SE & SE 8th St	TWSC	C	12.7	B	12.3	B
19	228th Ave SE & SE 16th Pl	SIGNAL	D	13.3	B	14.5	B
20	E Lk Sammamish Pkwy & 212th Way SE	SIGNAL	C	4.3	A	3.9	A
21	E Lk Sammamish Pkwy & SE 24th Wy	TWSC	C	12.5	B	13.7	B
22	212th Ave SE & SE 20th Street	AWSC	C	9.0	A	10.6	B
23	E Lk Sammamish Pkwy & Louis Thompson Rd	SIGNAL	C	7.6	A	6.8	A
24	E Lk Sammamish Pkwy & Inglewood Hill	SIGNAL	C	10.9	B	13.1	B
25	Sahalee Way NE & NE 37th Way	SIGNAL	D	9.3	A	9.9	A
26	NE 8th Street & 244th Ave. NE	RAB	C	4.7	A	4.3	A
27	228th Ave SE & SE 20th Street	SIGNAL	D	12.4	B	16.8	B
28	228th Ave SE & SE 24th St	SIGNAL	E	49.1	D	50.7	D
29	228th Ave SE & Issaquah-Pine Lk Rd	SIGNAL	E	29.0	C	62.0	E
30	Issaquah-Pine Lk Rd & Klahanie Blvd	SIGNAL	D	31.9	C	20.2	C
31	Duthie Hill Rd & Issaquah Beaver Lake Rd	SIGNAL	D	14.1	B	15.5	B
32	256th Ave SE & Issaquah Beaver Lake Rd	RAB	C	5.4	A	5.2	A
33	228th Ave SE & NE 14th St	TWSC	D	20.7	C	21.2	C
34	228th Ave SE & NE 25th Way	SIGNAL	D	10.3	B	9.2	A
35	Issaquah-Pine Lk Rd & SE 42nd St	SIGNAL	D	6.0	A	6.0	A
36	Issaquah-Pine Lk Rd & 230th Ln SE	SIGNAL	D	41.9	D	14.1	B
37	Sahalee Way NE & NE 28th Way	SIGNAL	D	5.0	A	3.8	A
38	Issaquah-Pine Lk Rd & SE 47th Way	SIGNAL	D	6.3	A	5.1	A
39	233rd Ave NE & NE 8th Street	RAB	C	5.5	A	5.7	A

ID	Name	Control	LOS Std	AM Peak Hr		PM Peak Hr	
				Delay	LOS	Delay	LOS
40	228th Ave SE & E Main Street	SIGNAL	D	3.2	A	3.5	A
41	244th Ave NE & E Main Dr	RAB	C	5.4	A	5.1	A
42	Duthie Hill Rd & Trossachs Blvd SE	SIGNAL	D	19.2	B	12.1	B
43	228th Ave SE & Skyline HS	SIGNAL	D	20.0	C	13.6	B
Outside City of Sammamish							
61	E Lk Sammamish Pkwy & SR 202	SIGNAL	E	99.8	F	145.6	F
62	E Lk Sammamish Pkwy & SE 43rd Way	RAB	D	6.4	A	4.4	A
63	Sahalee Way NE & SR 202	SIGNAL	D	31.9	C	35.5	D
64	244th Ave. NE & SR 202	SIGNAL	D	14.5	B	43.4	D
65	Duthie Hill Rd & SR 202	SIGNAL	D	8.3	A	22.8	C
169	192nd Dr. NE & SR 202	SIGNAL	E	9.8	A	8.0	A
234	Issaquah-Pine Lk Rd & Issaquah Fall City Rd	SIGNAL	D	22.3	C	52.0	D

Appendix C. 2035 Mitigated Intersection LOS Reports

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	27	132	61	705	1324	12
Future Volume (veh/h)	27	132	61	705	1324	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
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	1840	1840	1745	1745	1717	1717
Adj Flow Rate, veh/h	29	67	66	766	1439	13
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	3	3	2	2
Cap, veh/h	109	97	115	1543	1388	13
Arrive On Green	0.06	0.06	0.04	0.88	0.82	0.82
Sat Flow, veh/h	1752	1559	1662	1745	1699	15
Grp Volume(v), veh/h	29	67	66	766	0	1452
Grp Sat Flow(s),veh/h/ln	1752	1559	1662	1745	0	1714
Q Serve(g_s), s	2.4	6.3	1.4	13.5	0.0	122.0
Cycle Q Clear(g_c), s	2.4	6.3	1.4	13.5	0.0	122.0
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	109	97	115	1543	0	1401
V/C Ratio(X)	0.27	0.69	0.57	0.50	0.00	1.04
Avail Cap(c_a), veh/h	258	230	115	1543	0	1401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	66.8	68.6	54.8	1.8	0.0	13.6
Incr Delay (d2), s/veh	0.5	3.3	4.4	0.9	0.0	34.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	9.3	4.0	4.8	0.0	60.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	67.2	71.9	59.3	2.7	0.0	47.6
LnGrp LOS	E	E	E	A	A	F
Approach Vol, veh/h	96			832	1452	
Approach Delay, s/veh	70.5			7.2	47.6	
Approach LOS	E			A	D	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		136.0		13.3	10.0	126.0
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		131.0		21.0	5.0	121.0
Max Q Clear Time (g_c+I1), s		15.5		8.3	3.4	124.0
Green Ext Time (p_c), s		16.3		0.1	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay		34.4
HCM 6th LOS		C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	38	97	63	755	740	6
Future Volume (veh/h)	38	97	63	755	740	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
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	1954	1954	1723	1723	1723	1723
Adj Flow Rate, veh/h	41	104	68	812	796	6
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	2	2	2	2
Cap, veh/h	258	192	429	1221	918	728
Arrive On Green	0.14	0.12	0.11	0.71	0.53	0.51
Sat Flow, veh/h	1861	1656	1641	1723	1723	1427
Grp Volume(v), veh/h	41	104	68	812	796	6
Grp Sat Flow(s),veh/h/ln	1861	1656	1641	1723	1723	1427
Q Serve(g_s), s	0.9	2.6	0.6	11.6	17.9	0.1
Cycle Q Clear(g_c), s	0.9	2.6	0.6	11.6	17.9	0.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	258	192	429	1221	918	728
V/C Ratio(X)	0.16	0.54	0.16	0.66	0.87	0.01
Avail Cap(c_a), veh/h	1127	966	509	1786	1399	1127
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	18.6	7.2	3.6	9.0	5.4
Incr Delay (d2), s/veh	0.1	0.9	0.1	0.2	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	1.7	0.3	1.5	8.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.0	19.5	7.3	3.8	11.6	5.4
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	145			880	802	
Approach Delay, s/veh	18.8			4.1	11.5	
Approach LOS	B			A	B	

Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	34.6			7.8	26.8	10.0
Change Period (Y+Rc), s	5.0			5.0	5.0	5.8
Max Green Setting (Gmax), s	44.2			5.0	34.2	25.0
Max Q Clear Time (g_c+I1), s	13.6			2.6	19.9	4.6
Green Ext Time (p_c), s	2.1			0.0	1.9	0.3

Intersection Summary	
HCM 6th Ctrl Delay	8.5
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	0	33	98	133	84	0	198	0	157	0	0	0
Future Vol, veh/h	0	33	98	133	84	0	198	0	157	0	0	0
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	105	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	0	0	0
Mvmt Flow	0	38	111	151	95	0	225	0	178	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	99	0	0	149	0	0	491	495	95	585	550	99
Stage 1	-	-	-	-	-	-	94	94	-	401	401	-
Stage 2	-	-	-	-	-	-	397	401	-	184	149	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1488	-	-	1432	-	-	488	476	962	425	446	962
Stage 1	-	-	-	-	-	-	913	817	-	630	604	-
Stage 2	-	-	-	-	-	-	629	601	-	822	778	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1483	-	-	1432	-	-	447	422	961	315	395	959
Mov Cap-2 Maneuver	-	-	-	-	-	-	447	422	-	315	395	-
Stage 1	-	-	-	-	-	-	913	817	-	628	535	-
Stage 2	-	-	-	-	-	-	559	532	-	669	778	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.8	15.9	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	447	961	1483	-	-	1432	-	-	-
HCM Lane V/C Ratio	0.503	0.186	-	-	-	0.106	-	-	-
HCM Control Delay (s)	20.9	9.6	0	-	-	7.8	0	-	0
HCM Lane LOS	C	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	2.8	0.7	0	-	-	0.4	-	-	-

Intersection	
Intersection Delay, s/veh	13.6
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	49	154	184	257	125	140
Future Vol, veh/h	49	154	184	257	125	140
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	7	7	4	4	1	1
Mvmt Flow	54	169	202	282	137	154
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	11.5	16.2	10.9
HCM LOS	B	C	B

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	24%	0%	100%	0%
Vol Thru, %	76%	42%	0%	0%
Vol Right, %	0%	58%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	203	441	125	140
LT Vol	49	0	125	0
Through Vol	154	184	0	0
RT Vol	0	257	0	140
Lane Flow Rate	223	485	137	154
Geometry Grp	2	2	7	7
Degree of Util (X)	0.344	0.648	0.259	0.238
Departure Headway (Hd)	5.549	4.817	6.781	5.563
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	647	756	530	645
Service Time	3.585	2.817	4.519	3.301
HCM Lane V/C Ratio	0.345	0.642	0.258	0.239
HCM Control Delay	11.5	16.2	11.9	10
HCM Lane LOS	B	C	B	A
HCM 95th-tile Q	1.5	4.8	1	0.9

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	42	55	507	22	19	1032
Future Vol, veh/h	42	55	507	22	19	1032
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	-	-	-	125	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	6	6	4	4	2	2
Mvmt Flow	47	61	563	24	21	1147

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1764	575	0	0	587	0
Stage 1	575	-	-	-	-	-
Stage 2	1189	-	-	-	-	-
Critical Hdwy	7.06	6.56	-	-	4.12	-
Critical Hdwy Stg 1	6.06	-	-	-	-	-
Critical Hdwy Stg 2	6.06	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.218	-
Pot Cap-1 Maneuver	67	486	-	-	988	-
Stage 1	504	-	-	-	-	-
Stage 2	233	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	66	486	-	-	988	-
Mov Cap-2 Maneuver	202	-	-	-	-	-
Stage 1	504	-	-	-	-	-
Stage 2	228	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.4	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	302	988	-
HCM Lane V/C Ratio	-	-	0.357	0.021	-
HCM Control Delay (s)	-	-	23.4	8.7	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.6	0.1	-

Intersection	
Intersection Delay, s/veh	19.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	84	159	0	5	280	97	4	31	13	187	1	157
Future Vol, veh/h	84	159	0	5	280	97	4	31	13	187	1	157
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	100	189	0	6	333	115	5	37	15	223	1	187
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	13	29	11.9	14.4
HCM LOS	B	D	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	8%	100%	0%	100%	0%	100%	0%
Vol Thru, %	65%	0%	100%	0%	74%	0%	1%
Vol Right, %	27%	0%	0%	0%	26%	0%	99%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	48	84	159	5	377	187	158
LT Vol	4	84	0	5	0	187	0
Through Vol	31	0	159	0	280	0	1
RT Vol	13	0	0	0	97	0	157
Lane Flow Rate	57	100	189	6	449	223	188
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.123	0.206	0.362	0.012	0.791	0.463	0.328
Departure Headway (Hd)	7.744	7.404	6.892	7.155	6.461	7.494	6.275
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	464	486	524	503	565	483	577
Service Time	5.77	5.128	4.615	4.855	4.161	5.194	3.975
HCM Lane V/C Ratio	0.123	0.206	0.361	0.012	0.795	0.462	0.326
HCM Control Delay	11.9	12	13.5	9.9	29.3	16.5	12
HCM Lane LOS	B	B	B	A	D	C	B
HCM 95th-tile Q	0.4	0.8	1.6	0	7.5	2.4	1.4

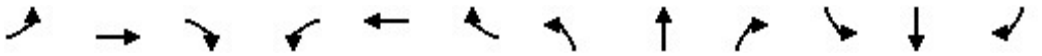
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	58	0	15	0	0	0	13	975	2	5	463	17
Future Vol, veh/h	58	0	15	0	0	0	13	975	2	5	463	17
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	0	110	-	-	110	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-4	-	-	0	-	-	0	-	-	1	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	4	4	4	0	0	0	2	2	2	4	4	4
Mvmt Flow	63	0	16	0	0	0	14	1060	2	5	503	18

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1611	1613	512	-	-	1062	521	0	0	1063	0	0
Stage 1	522	522	-	-	-	-	-	-	-	-	-	-
Stage 2	1089	1091	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	6.34	5.74	5.84	-	-	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	5.34	4.74	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.34	4.74	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	-	-	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	119	147	591	0	0	274	1045	-	-	648	-	-
Stage 1	600	593	-	0	0	-	-	-	-	-	-	-
Stage 2	330	368	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	117	144	591	-	-	274	1045	-	-	648	-	-
Mov Cap-2 Maneuver	283	312	-	-	-	-	-	-	-	-	-	-
Stage 1	592	588	-	-	-	-	-	-	-	-	-	-
Stage 2	326	363	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.2	0	0.1	0.1
HCM LOS	C	A		

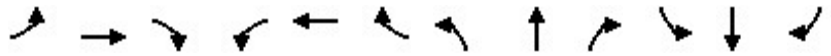
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1045	-	-	283	591	-	648	-	-
HCM Lane V/C Ratio	0.014	-	-	0.223	0.028	-	0.008	-	-
HCM Control Delay (s)	8.5	-	-	21.3	11.3	0	10.6	-	-
HCM Lane LOS	A	-	-	C	B	A	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.1	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	255	144	3	4	282	161	17	52	14	107	7	278
Future Volume (veh/h)	255	144	3	4	282	161	17	52	14	107	7	278
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	0.99		0.97	1.00		0.96	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	1682	1682	1682	1695	1695	1695	1695	1695	1695	1695	1695	1695
Adj Flow Rate, veh/h	304	171	4	5	336	192	20	62	17	127	8	331
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	4	4	4
Cap, veh/h	357	815	19	543	368	210	53	243	67	174	9	371
Arrive On Green	0.15	0.50	0.50	0.02	0.37	0.37	0.03	0.19	0.19	0.11	0.27	0.27
Sat Flow, veh/h	1602	1636	38	1615	998	570	1615	1267	347	1615	34	1390
Grp Volume(v), veh/h	304	0	175	5	0	528	20	0	79	127	0	339
Grp Sat Flow(s),veh/h/ln	1602	0	1674	1615	0	1568	1615	0	1614	1615	0	1423
Q Serve(g_s), s	9.7	0.0	5.3	0.2	0.0	28.8	1.1	0.0	3.7	6.8	0.0	20.6
Cycle Q Clear(g_c), s	9.7	0.0	5.3	0.2	0.0	28.8	1.1	0.0	3.7	6.8	0.0	20.6
Prop In Lane	1.00		0.02	1.00		0.36	1.00		0.22	1.00		0.98
Lane Grp Cap(c), veh/h	357	0	834	543	0	578	53	0	309	174	0	380
V/C Ratio(X)	0.85	0.00	0.21	0.01	0.00	0.91	0.38	0.00	0.26	0.73	0.00	0.89
Avail Cap(c_a), veh/h	526	0	1384	624	0	1007	108	0	323	269	0	428
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	18.4	0.0	12.6	17.0	0.0	27.0	42.6	0.0	30.9	38.8	0.0	31.7
Incr Delay (d2), s/veh	6.0	0.0	0.0	0.0	0.0	3.7	6.1	0.0	0.2	8.0	0.0	17.9
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(95%),veh/ln	6.7	0.0	3.3	0.1	0.0	16.0	0.9	0.0	2.6	5.6	0.0	13.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.4	0.0	12.7	17.0	0.0	30.8	48.7	0.0	31.0	46.8	0.0	49.6
LnGrp LOS	C	A	B	B	A	C	D	A	C	D	A	D
Approach Vol, veh/h		479			533			99			466	
Approach Delay, s/veh		20.1			30.6			34.6			48.9	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	37.4	13.7	21.2	5.9	49.1	7.0	28.0
Change Period (Y+Rc), s	5.3	5.3	5.0	5.0	5.3	5.3	5.0	5.0
Max Green Setting (Gmax), s	21.7	56.7	14.0	17.0	5.1	73.3	5.0	26.0
Max Q Clear Time (g_c+I1), s	11.7	30.8	8.8	5.7	2.2	7.3	3.1	22.6
Green Ext Time (p_c), s	0.5	1.3	0.2	0.1	0.0	0.4	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	33.1
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	8	19	286	26	354	61	937	128	97	902	77
Future Volume (veh/h)	42	8	19	286	26	354	61	937	128	97	902	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1715	1715	1715	1809	1809	1809	1795	1795	1795	1715	1715	1715
Adj Flow Rate, veh/h	46	9	21	311	28	0	66	1018	0	105	980	84
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	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	546	95	430	524	35		385	1304		397	1209	104
Arrive On Green	0.33	0.33	0.30	0.32	0.32	0.00	0.12	0.38	0.00	0.12	0.40	0.36
Sat Flow, veh/h	1259	284	1447	1248	112	1533	1709	3500	0	1633	3027	259
Grp Volume(v), veh/h	55	0	21	339	0	0	66	1018	0	105	527	537
Grp Sat Flow(s),veh/h/ln	1543	0	1447	1360	0	1533	1709	1705	0	1633	1629	1657
Q Serve(g_s), s	0.0	0.0	0.5	11.3	0.0	0.0	0.0	13.9	0.0	0.0	15.3	15.3
Cycle Q Clear(g_c), s	1.2	0.0	0.5	12.5	0.0	0.0	0.0	13.9	0.0	0.0	15.3	15.3
Prop In Lane	0.84		1.00	0.92		1.00	1.00		0.00	1.00		0.16
Lane Grp Cap(c), veh/h	641	0	430	559	0		385	1304		397	651	662
V/C Ratio(X)	0.09	0.00	0.05	0.61	0.00		0.17	0.78		0.26	0.81	0.81
Avail Cap(c_a), veh/h	1530	0	1337	677	0		445	1478		427	706	718
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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	0.0	13.3	17.3	0.0	0.0	18.8	14.4	0.0	18.7	14.1	14.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.1	2.1	0.0	0.1	5.9	5.8
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(95%),veh/ln	0.7	0.0	0.3	5.9	0.0	0.0	1.1	8.0	0.0	1.8	9.2	9.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.2	0.0	13.3	17.7	0.0	0.0	18.9	16.5	0.0	18.9	20.0	20.1
LnGrp LOS	B	A	B	B	A		B	B		B	C	C
Approach Vol, veh/h		76			339	A		1084	A		1169	
Approach Delay, s/veh		12.5			17.7			16.6			20.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	23.3		19.7	9.1	24.2		19.7
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.0	20.0		19.0	5.0	20.0		48.0
Max Q Clear Time (g_c+I1), s	2.0	15.9		14.5	2.0	17.3		3.2
Green Ext Time (p_c), s	0.0	1.3		0.3	0.0	0.9		0.2

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	62	79	760	33	19	585
Future Vol, veh/h	62	79	760	33	19	585
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	220	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	67	86	826	36	21	636

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1523	844	0	0	862	0
Stage 1	844	-	-	-	-	-
Stage 2	679	-	-	-	-	-
Critical Hdwy	6.61	6.31	-	-	4.12	-
Critical Hdwy Stg 1	5.61	-	-	-	-	-
Critical Hdwy Stg 2	5.61	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	120	356	-	-	780	-
Stage 1	404	-	-	-	-	-
Stage 2	487	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	117	356	-	-	780	-
Mov Cap-2 Maneuver	252	-	-	-	-	-
Stage 1	404	-	-	-	-	-
Stage 2	473	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	28.7	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	301	780	-
HCM Lane V/C Ratio	-	-	0.509	0.026	-
HCM Control Delay (s)	-	-	28.7	9.7	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	2.7	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	178	308	223	184	156	285	609	108	137	654	75
Future Volume (veh/h)	50	178	308	223	184	156	285	609	108	137	654	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		0.98	1.00		0.97	1.00		0.96
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	1709	1709	1709	1709	1709	1723	1723	1723	1701	1701	1701
Adj Flow Rate, veh/h	55	196	0	245	202	171	313	669	119	151	719	82
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
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	376	301		426	431	628	338	830	147	314	839	96
Arrive On Green	0.08	0.18	0.00	0.15	0.25	0.25	0.21	0.30	0.30	0.19	0.29	0.27
Sat Flow, veh/h	1628	1709	1448	1628	1709	1412	1641	2760	490	1620	2910	332
Grp Volume(v), veh/h	55	196	0	245	202	171	313	396	392	151	399	402
Grp Sat Flow(s),veh/h/ln	1628	1709	1448	1628	1709	1412	1641	1637	1614	1620	1616	1626
Q Serve(g_s), s	1.8	7.3	0.0	7.8	6.8	0.9	12.7	15.2	15.2	5.6	15.9	15.9
Cycle Q Clear(g_c), s	1.8	7.3	0.0	7.8	6.8	0.9	12.7	15.2	15.2	5.6	15.9	15.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.30	1.00		0.20
Lane Grp Cap(c), veh/h	376	301		426	431	628	338	492	485	314	466	469
V/C Ratio(X)	0.15	0.65		0.57	0.47	0.27	0.93	0.81	0.81	0.48	0.86	0.86
Avail Cap(c_a), veh/h	418	488		426	563	738	338	568	560	314	466	469
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	26.1	0.0	17.6	21.6	4.2	26.5	21.9	22.0	24.4	22.8	23.0
Incr Delay (d2), s/veh	0.1	0.9	0.0	1.2	0.3	0.1	30.2	6.3	6.4	0.4	13.9	14.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	5.1	0.0	5.0	4.6	1.0	11.9	10.2	10.2	3.7	11.7	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.7	27.0	0.0	18.8	21.9	4.2	56.7	28.2	28.4	24.8	36.8	37.0
LnGrp LOS	B	C		B	C	A	E	C	C	C	D	D
Approach Vol, veh/h		251	A		618			1101			952	
Approach Delay, s/veh		25.4			15.8			36.4			35.0	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.2	23.4	8.2	20.1	17.0	22.6	13.0	15.4
Change Period (Y+Rc), s	5.0	5.3	5.0	5.4	5.0	5.3	5.0	* 5.4
Max Green Setting (Gmax), s	8.6	21.3	5.0	20.0	12.0	17.3	8.0	* 17
Max Q Clear Time (g_c+I1), s	17.6	17.2	3.8	8.8	14.7	17.9	9.8	9.3
Green Ext Time (p_c), s	0.0	0.9	0.0	0.7	0.0	0.0	0.0	0.2

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

Notes

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

Unsignalized Delay for [EBR] 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)	29	17	25	154	4	221	8	786	240	378	759	20
Future Volume (veh/h)	29	17	25	154	4	221	8	786	240	378	759	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.99	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	1723	1723	1723	1750	1750	1750	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	34	20	29	181	5	260	9	925	282	445	893	24
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	0	0	0	2	2	2	2	2	2
Cap, veh/h	89	53	47	317	7	419	555	1040	316	581	1043	28
Arrive On Green	0.30	0.30	0.29	0.30	0.30	0.29	0.28	0.42	0.41	0.18	0.32	0.31
Sat Flow, veh/h	118	175	157	805	22	1443	1641	2465	749	3183	3254	87
Grp Volume(v), veh/h	83	0	0	186	0	260	9	613	594	445	449	468
Grp Sat Flow(s),veh/h/ln	450	0	0	827	0	1443	1641	1637	1578	1591	1637	1705
Q Serve(g_s), s	2.2	0.0	0.0	0.0	0.0	14.8	0.0	32.8	33.1	12.6	24.4	24.4
Cycle Q Clear(g_c), s	24.5	0.0	0.0	22.3	0.0	14.8	0.0	32.8	33.1	12.6	24.4	24.4
Prop In Lane	0.41		0.35	0.97		1.00	1.00		0.47	1.00		0.05
Lane Grp Cap(c), veh/h	189	0	0	324	0	419	555	690	666	581	525	546
V/C Ratio(X)	0.44	0.00	0.00	0.57	0.00	0.62	0.02	0.89	0.89	0.77	0.86	0.86
Avail Cap(c_a), veh/h	279	0	0	417	0	517	555	915	882	772	1191	1240
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	0.0	31.0	0.0	29.1	23.2	25.3	25.7	36.8	30.2	30.2
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.6	0.0	0.6	0.0	7.1	7.7	2.2	1.6	1.5
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(95%),veh/ln	3.4	0.0	0.0	7.2	0.0	8.9	0.3	19.2	19.0	8.6	14.4	14.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.3	0.0	0.0	31.6	0.0	29.7	23.2	32.5	33.4	39.0	31.8	31.7
LnGrp LOS	C	A	A	C	A	C	C	C	C	D	C	C
Approach Vol, veh/h		83			446			1216			1362	
Approach Delay, s/veh		30.3			30.5			32.8			34.1	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.3	43.0		31.6	29.9	33.4		31.6
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	21.3	51.0		33.0	5.0	67.0		33.0
Max Q Clear Time (g_c+I1), s	14.6	35.1		24.3	2.0	26.4		26.5
Green Ext Time (p_c), s	0.7	2.9		0.9	0.0	2.1		0.1

Intersection Summary	
HCM 6th Ctrl Delay	33.0
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	68	235	61	23	97	244	867	217	139	763	175
Future Volume (veh/h)	133	68	235	61	23	97	244	867	217	139	763	175
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		0.99	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	1948	1948	1948	1736	1736	1736	1809	1809	1809	1723	1723	1723
Adj Flow Rate, veh/h	151	77	267	69	26	110	277	985	247	158	867	199
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, %	4	4	4	1	1	1	1	1	1	2	2	2
Cap, veh/h	572	107	372	359	76	322	304	1138	502	368	982	225
Arrive On Green	0.11	0.28	0.28	0.09	0.26	0.22	0.11	0.33	0.33	0.15	0.37	0.36
Sat Flow, veh/h	1856	382	1323	1654	289	1222	1723	3436	1517	1641	2632	604
Grp Volume(v), veh/h	151	0	344	69	0	136	277	985	247	158	539	527
Grp Sat Flow(s),veh/h/ln	1856	0	1705	1654	0	1510	1723	1718	1517	1641	1637	1600
Q Serve(g_s), s	3.5	0.0	12.0	1.9	0.0	5.0	5.8	17.8	5.7	0.4	20.3	20.4
Cycle Q Clear(g_c), s	3.5	0.0	12.0	1.9	0.0	5.0	5.8	17.8	5.7	0.4	20.3	20.4
Prop In Lane	1.00		0.78	1.00		0.81	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	572	0	479	359	0	399	304	1138	502	368	610	597
V/C Ratio(X)	0.26	0.00	0.72	0.19	0.00	0.34	0.91	0.87	0.49	0.43	0.88	0.88
Avail Cap(c_a), veh/h	572	0	748	388	0	663	304	1144	505	373	619	605
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	13.4	0.0	21.4	15.4	0.0	20.7	27.7	20.7	7.7	23.9	19.4	19.6
Incr Delay (d2), s/veh	0.2	0.0	0.8	0.3	0.0	0.5	29.3	6.8	0.3	0.3	13.5	13.8
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(95%),veh/ln	2.5	0.0	8.2	1.2	0.0	3.2	10.6	11.9	4.8	3.6	14.0	13.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.6	0.0	22.2	15.7	0.0	21.2	57.0	27.5	8.0	24.2	32.8	33.4
LnGrp LOS	B	A	C	B	A	C	E	C	A	C	C	C
Approach Vol, veh/h		495			205			1509			1224	
Approach Delay, s/veh		19.6			19.4			29.7			32.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	24.9	8.0	20.4	10.0	27.6	6.9	21.6
Change Period (Y+Rc), s	5.0	5.0	4.0	6.0	5.0	5.0	4.0	6.0
Max Green Setting (Gmax), s	8.0	20.0	4.0	26.0	5.0	23.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	7.8	19.8	5.5	7.0	7.8	22.4	3.9	14.0
Green Ext Time (p_c), s	0.1	0.1	0.0	0.7	0.0	0.3	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	28.4
HCM 6th LOS	C

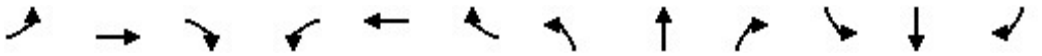
Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	10	6	73	4	42	9	173	81	89	92	1
Future Vol, veh/h	6	10	6	73	4	42	9	173	81	89	92	1
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
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	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	3	3	3	1	1	1	2	2	2
Mvmt Flow	6	11	6	78	4	45	10	186	87	96	99	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	567	586	101	550	543	230	101	0	0	273	0	0
Stage 1	293	293	-	250	250	-	-	-	-	-	-	-
Stage 2	274	293	-	300	293	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.13	6.53	6.23	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.527	4.027	3.327	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	437	425	960	444	445	807	1498	-	-	1290	-	-
Stage 1	719	674	-	752	698	-	-	-	-	-	-	-
Stage 2	736	674	-	707	668	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	382	388	959	403	406	807	1497	-	-	1290	-	-
Mov Cap-2 Maneuver	382	388	-	403	406	-	-	-	-	-	-	-
Stage 1	713	620	-	746	692	-	-	-	-	-	-	-
Stage 2	685	669	-	636	615	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	14.9	0.3	3.9
HCM LOS	B	B		

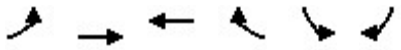
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1497	-	-	461	490	1290	-	-
HCM Lane V/C Ratio	0.006	-	-	0.051	0.261	0.074	-	-
HCM Control Delay (s)	7.4	0	-	13.2	14.9	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	1	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	0	37	8	0	8	4	1201	14	8	1168	4
Future Volume (veh/h)	11	0	37	8	0	8	4	1201	14	8	1168	4
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		0.99	1.00		0.97	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	1723	1723	1723	1726	1726	1726	1723	1723	1723	1767	1767	1767
Adj Flow Rate, veh/h	12	0	42	9	0	9	5	1365	16	9	1327	5
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, %	2	2	2	7	7	7	2	2	2	4	4	4
Cap, veh/h	451	0	197	417	0	193	375	1689	20	333	1673	6
Arrive On Green	0.07	0.00	0.09	0.07	0.00	0.09	0.10	0.51	0.47	0.07	0.49	0.45
Sat Flow, veh/h	1641	0	1452	1644	0	1454	1641	3312	39	1683	3431	13
Grp Volume(v), veh/h	12	0	42	9	0	9	5	674	707	9	649	683
Grp Sat Flow(s),veh/h/ln	1641	0	1452	1644	0	1454	1641	1637	1714	1683	1679	1765
Q Serve(g_s), s	0.3	0.0	1.3	0.2	0.0	0.3	0.0	16.5	16.5	0.0	15.5	15.5
Cycle Q Clear(g_c), s	0.3	0.0	1.3	0.2	0.0	0.3	0.0	16.5	16.5	0.0	15.5	15.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.02	1.00		0.01
Lane Grp Cap(c), veh/h	451	0	197	417	0	193	375	834	874	333	819	861
V/C Ratio(X)	0.03	0.00	0.21	0.02	0.00	0.05	0.01	0.81	0.81	0.03	0.79	0.79
Avail Cap(c_a), veh/h	567	0	877	538	0	878	490	1159	1214	488	1189	1249
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	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	14.3	0.0	19.4	14.6	0.0	19.0	13.3	9.8	9.8	15.0	10.3	10.3
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.0	0.0	0.0	2.0	2.0	0.0	1.4	1.3
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(95%),veh/ln	0.2	0.0	0.7	0.1	0.0	0.2	0.1	7.5	7.7	0.1	7.3	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.3	0.0	19.6	14.7	0.0	19.1	13.3	11.9	11.8	15.0	11.6	11.6
LnGrp LOS	B	A	B	B	A	B	B	B	B	B	B	B
Approach Vol, veh/h		54			18			1386			1341	
Approach Delay, s/veh		18.4			16.9			11.8			11.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	27.5	4.6	9.4	7.6	26.4	4.5	9.5
Change Period (Y+Rc), s	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	31.0	4.0	26.0	5.0	31.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.0	18.5	2.3	2.3	2.0	17.5	2.2	3.3
Green Ext Time (p_c), s	0.0	3.0	0.0	0.0	0.0	2.9	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	580	441	88	285	14
Future Volume (veh/h)	5	580	441	88	285	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	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	1736	1736	1682	1682	1750	1750
Adj Flow Rate, veh/h	5	624	474	95	306	15
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	5	5	0	0
Cap, veh/h	131	857	836	1158	514	25
Arrive On Green	0.50	0.50	0.50	0.50	0.33	0.27
Sat Flow, veh/h	6	1725	1682	1392	1575	77
Grp Volume(v), veh/h	629	0	474	95	322	0
Grp Sat Flow(s),veh/h/ln	1731	0	1682	1392	1657	0
Q Serve(g_s), s	0.0	0.0	5.6	0.4	4.6	0.0
Cycle Q Clear(g_c), s	8.1	0.0	5.6	0.4	4.6	0.0
Prop In Lane	0.01			1.00	0.95	0.05
Lane Grp Cap(c), veh/h	988	0	836	1158	541	0
V/C Ratio(X)	0.64	0.00	0.57	0.08	0.59	0.00
Avail Cap(c_a), veh/h	3017	0	2817	2798	1900	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.6	0.0	5.0	0.5	8.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	1.1	0.2	1.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.9	0.0	5.2	0.5	8.4	0.0
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h		629	569		322	
Approach Delay, s/veh		5.9	4.4		8.4	
Approach LOS		A	A		A	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	16.6			16.6	11.8
Change Period (Y+Rc), s	5.0			5.0	5.0
Max Green Setting (Gmax), s	45.0			45.0	30.0
Max Q Clear Time (g_c+I1), s	10.1			7.6	6.6
Green Ext Time (p_c), s	1.5			1.3	0.7

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

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	15	414	19	7	499
Future Vol, veh/h	31	15	414	19	7	499
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, %	-6	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	7	7	2	2
Mvmt Flow	34	17	460	21	8	554

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1041	471	0	0	481	0
Stage 1	471	-	-	-	-	-
Stage 2	570	-	-	-	-	-
Critical Hdwy	5.22	5.62	-	-	4.12	-
Critical Hdwy Stg 1	4.22	-	-	-	-	-
Critical Hdwy Stg 2	4.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	360	641	-	-	1082	-
Stage 1	735	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	356	641	-	-	1082	-
Mov Cap-2 Maneuver	356	-	-	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	676	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.9	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	416	1082	-
HCM Lane V/C Ratio	-	-	0.123	0.007	-
HCM Control Delay (s)	-	-	14.9	8.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	9	19	45	50	44	132	49	125	46	56	129	8
Future Vol, veh/h	9	19	45	50	44	132	49	125	46	56	129	8
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
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	1	1	1
Mvmt Flow	10	21	49	54	48	143	53	136	50	61	140	9
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9.1	10.1	10.3	10.1
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	73%	0%	30%	0%	25%	0%	94%
Vol Right, %	0%	27%	0%	70%	0%	75%	0%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	171	9	64	50	176	56	137
LT Vol	49	0	9	0	50	0	56	0
Through Vol	0	125	0	19	0	44	0	129
RT Vol	0	46	0	45	0	132	0	8
Lane Flow Rate	53	186	10	70	54	191	61	149
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.092	0.286	0.018	0.109	0.097	0.286	0.106	0.236
Departure Headway (Hd)	6.233	5.538	6.662	5.657	6.42	5.384	6.249	5.702
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	576	651	538	634	561	671	575	631
Service Time	3.958	3.263	4.393	3.388	4.12	3.084	3.973	3.426
HCM Lane V/C Ratio	0.092	0.286	0.019	0.11	0.096	0.285	0.106	0.236
HCM Control Delay	9.6	10.5	9.5	9.1	9.8	10.2	9.7	10.2
HCM Lane LOS	A	B	A	A	A	B	A	B
HCM 95th-tile Q	0.3	1.2	0.1	0.4	0.3	1.2	0.4	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	18	272	434	20	34	412
Future Volume (veh/h)	18	272	434	20	34	412
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	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	1750	1750	1682	1682	1709	1709
Adj Flow Rate, veh/h	19	289	462	21	36	438
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	5	5	3	3
Cap, veh/h	445	396	578	26	108	907
Arrive On Green	0.27	0.27	0.36	0.36	0.07	0.53
Sat Flow, veh/h	1667	1483	1594	72	1628	1709
Grp Volume(v), veh/h	19	289	0	483	36	438
Grp Sat Flow(s),veh/h/ln	1667	1483	0	1667	1628	1709
Q Serve(g_s), s	0.3	7.0	0.0	10.3	0.8	6.4
Cycle Q Clear(g_c), s	0.3	7.0	0.0	10.3	0.8	6.4
Prop In Lane	1.00	1.00		0.04	1.00	
Lane Grp Cap(c), veh/h	445	396	0	605	108	907
V/C Ratio(X)	0.04	0.73	0.00	0.80	0.33	0.48
Avail Cap(c_a), veh/h	1519	1352	0	1519	1484	1558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.7	13.2	0.0	11.3	17.6	5.8
Incr Delay (d2), s/veh	0.0	1.0	0.0	0.9	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	3.7	0.0	5.0	0.5	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.8	14.2	0.0	12.2	18.3	6.0
LnGrp LOS	B	B	A	B	B	A
Approach Vol, veh/h	308		483			474
Approach Delay, s/veh	14.0		12.2			6.9
Approach LOS	B		B			A

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	25.0		6.6	18.3	14.5
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s	35.0		35.0	35.0	35.0
Max Q Clear Time (g_c+I1), s	8.4		2.8	12.3	9.0
Green Ext Time (p_c), s	0.9		0.1	1.1	0.9

Intersection Summary	
HCM 6th Ctrl Delay	10.7
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	124	275	165	600	618	57
Future Volume (veh/h)	124	275	165	600	618	57
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1660	1660	1954	1954	1636	1636
Adj Flow Rate, veh/h	136	302	181	659	679	63
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	5	5	1	1	2	2
Cap, veh/h	544	932	271	814	766	681
Arrive On Green	0.17	0.17	0.15	0.42	0.49	0.49
Sat Flow, veh/h	3237	1395	1861	1954	1558	1386
Grp Volume(v), veh/h	136	302	181	659	679	63
Grp Sat Flow(s),veh/h/ln	1577	1395	1861	1954	1558	1386
Q Serve(g_s), s	2.8	7.1	7.0	22.6	29.9	1.8
Cycle Q Clear(g_c), s	2.8	7.1	7.0	22.6	29.9	1.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	544	932	271	814	766	681
V/C Ratio(X)	0.25	0.32	0.67	0.81	0.89	0.09
Avail Cap(c_a), veh/h	1126	1189	398	1308	1135	1010
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	5.5	30.8	19.6	17.5	10.3
Incr Delay (d2), s/veh	0.2	0.2	2.8	2.0	6.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	13.4	5.8	14.7	15.8	3.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.5	5.7	33.7	21.6	23.5	10.4
LnGrp LOS	C	A	C	C	C	B
Approach Vol, veh/h	438			840	742	
Approach Delay, s/veh	12.5			24.2	22.4	
Approach LOS	B			C	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		35.2		40.9	18.6	16.7
Change Period (Y+Rc), s		5.5		5.5	9.5	5.5
Max Green Setting (Gmax), s		49.0		53.5	14.3	25.2
Max Q Clear Time (g_c+I1), s		24.6		31.9	9.0	9.1
Green Ext Time (p_c), s		3.0		3.5	0.3	1.8

Intersection Summary		
HCM 6th Ctrl Delay		21.0
HCM 6th LOS		C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	294	101	60	950	406	96
Future Volume (veh/h)	294	101	60	950	406	96
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	1728	1728	1954	1954	1500	1500
Adj Flow Rate, veh/h	320	110	65	1033	441	104
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	1	1	4	4
Cap, veh/h	443	394	410	1210	592	890
Arrive On Green	0.27	0.27	0.13	0.62	0.39	0.39
Sat Flow, veh/h	1646	1465	1861	1954	1500	1270
Grp Volume(v), veh/h	320	110	65	1033	441	104
Grp Sat Flow(s),veh/h/ln	1646	1465	1861	1954	1500	1270
Q Serve(g_s), s	9.5	3.2	0.0	23.0	13.6	1.4
Cycle Q Clear(g_c), s	9.5	3.2	0.0	23.0	13.6	1.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	443	394	410	1210	592	890
V/C Ratio(X)	0.72	0.28	0.16	0.85	0.75	0.12
Avail Cap(c_a), veh/h	946	842	410	3007	2031	2108
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.9	15.6	19.9	8.3	14.0	2.6
Incr Delay (d2), s/veh	0.8	0.1	0.1	1.4	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	6.1	1.8	1.1	8.9	6.6	1.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.7	15.7	20.0	9.6	15.4	2.7
LnGrp LOS	B	B	B	A	B	A
Approach Vol, veh/h	430			1098	545	
Approach Delay, s/veh	17.9			10.3	13.0	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	36.4		12.1	24.3	17.5
Change Period (Y+Rc), s	7.0		7.0	* 7	5.0
Max Green Setting (Gmax), s	79.0		5.0	* 69	29.0
Max Q Clear Time (g_c+I1), s	25.0		2.0	15.6	11.5
Green Ext Time (p_c), s	4.4		0.0	1.6	1.0

Intersection Summary	
HCM 6th Ctrl Delay	12.6
HCM 6th LOS	B

Notes

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

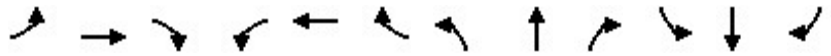
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	0	93	2	1	2	164	1119	7	2	1174	55
Future Volume (veh/h)	63	0	93	2	1	2	164	1119	7	2	1174	55
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	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	1709	1709	1709	1709	1709	1709	1709	1709	1709	1831	1831	1831
Adj Flow Rate, veh/h	70	0	103	2	1	2	182	1243	8	2	1304	61
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, %	3	3	3	3	3	3	3	3	3	2	2	2
Cap, veh/h	423	0	122	162	20	40	418	1949	13	277	1594	74
Arrive On Green	0.10	0.00	0.14	0.00	0.04	0.04	0.14	0.59	0.53	0.00	0.47	0.43
Sat Flow, veh/h	1628	0	1429	1628	509	1017	1628	3307	21	1744	3384	158
Grp Volume(v), veh/h	70	0	103	2	0	3	182	610	641	2	670	695
Grp Sat Flow(s),veh/h/ln	1628	0	1429	1628	0	1526	1628	1624	1705	1744	1739	1802
Q Serve(g_s), s	1.8	0.0	3.6	0.1	0.0	0.1	2.3	12.8	12.8	0.0	17.1	17.2
Cycle Q Clear(g_c), s	1.8	0.0	3.6	0.1	0.0	0.1	2.3	12.8	12.8	0.0	17.1	17.2
Prop In Lane	1.00		1.00	1.00		0.67	1.00		0.01	1.00		0.09
Lane Grp Cap(c), veh/h	423	0	122	162	0	59	418	957	1004	277	819	849
V/C Ratio(X)	0.17	0.00	0.84	0.01	0.00	0.05	0.44	0.64	0.64	0.01	0.82	0.82
Avail Cap(c_a), veh/h	469	0	662	285	0	705	536	988	1037	408	958	992
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	16.2	0.0	22.0	23.8	0.0	24.0	9.3	7.0	7.0	9.3	11.8	11.9
Incr Delay (d2), s/veh	0.2	0.0	5.8	0.0	0.0	0.1	0.7	1.3	1.3	0.0	4.2	4.1
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(95%),veh/ln	1.1	0.0	2.2	0.0	0.0	0.1	1.4	5.2	5.4	0.0	9.5	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.4	0.0	27.8	23.9	0.0	24.1	10.0	8.3	8.3	9.3	16.0	16.0
LnGrp LOS	B	A	C	C	A	C	B	A	A	A	B	B
Approach Vol, veh/h		173			5			1433			1367	
Approach Delay, s/veh		23.2			24.0			8.5			16.0	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.1	33.5	4.1	10.0	10.2	27.4	6.5	7.6
Change Period (Y+Rc), s	4.0	6.0	4.0	* 5.6	5.6	6.0	4.0	5.6
Max Green Setting (Gmax), s	4.0	28.5	4.0	* 24	8.4	25.5	4.0	23.9
Max Q Clear Time (g_c+I1), s	2.0	14.8	2.1	5.6	4.3	19.2	3.8	2.1
Green Ext Time (p_c), s	0.0	4.8	0.0	0.1	0.2	2.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.8
HCM 6th LOS	B

Notes

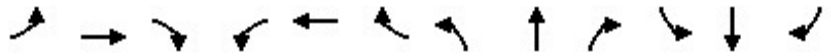
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	3	5	160	3	322	2	1062	65	107	1182	4
Future Volume (veh/h)	2	3	5	160	3	322	2	1062	65	107	1182	4
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		0.98	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	1750	1750	1736	1736	1736	1709	1709	1709	1723	1723	1723
Adj Flow Rate, veh/h	2	3	5	176	3	354	2	1167	71	118	1299	4
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
Percent Heavy Veh, %	0	0	0	1	1	1	3	3	3	2	2	2
Cap, veh/h	56	84	117	467	8	413	228	1300	993	261	1319	4
Arrive On Green	0.08	0.08	0.08	0.29	0.29	0.29	0.08	0.40	0.40	0.09	0.39	0.38
Sat Flow, veh/h	686	1029	1429	1627	28	1437	1628	3247	1413	1641	3347	10
Grp Volume(v), veh/h	5	0	5	179	0	354	2	1167	71	118	635	668
Grp Sat Flow(s),veh/h/ln	1716	0	1429	1655	0	1437	1628	1624	1413	1641	1637	1721
Q Serve(g_s), s	0.2	0.0	0.3	7.4	0.0	19.9	0.0	28.8	1.4	0.0	32.8	32.8
Cycle Q Clear(g_c), s	0.2	0.0	0.3	7.4	0.0	19.9	0.0	28.8	1.4	0.0	32.8	32.8
Prop In Lane	0.40		1.00	0.98		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	141	0	117	475	0	413	228	1300	993	261	645	678
V/C Ratio(X)	0.04	0.00	0.04	0.38	0.00	0.86	0.01	0.90	0.07	0.45	0.98	0.98
Avail Cap(c_a), veh/h	602	0	501	490	0	425	243	1318	1001	267	645	678
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	36.1	0.0	36.1	24.4	0.0	28.8	34.7	24.0	4.2	34.7	25.6	25.6
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.2	0.0	14.8	0.0	8.1	0.0	0.5	31.3	30.5
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(95%),veh/ln	0.2	0.0	0.2	5.2	0.0	13.1	0.1	16.7	1.4	3.9	23.6	24.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.2	0.0	36.2	24.5	0.0	43.6	34.8	32.1	4.2	35.2	56.9	56.1
LnGrp LOS	D	A	D	C	A	D	C	C	A	D	E	E
Approach Vol, veh/h		10			533			1240			1421	
Approach Delay, s/veh		36.2			37.2			30.5			54.8	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	37.2		27.5	10.2	37.7		10.0
Change Period (Y+Rc), s	6.0	6.0		5.3	6.0	6.0		6.0
Max Green Setting (Gmax), s	5.0	31.7		23.0	5.0	31.7		27.0
Max Q Clear Time (g_c+I1), s	2.0	30.8		21.9	2.0	34.8		2.3
Green Ext Time (p_c), s	0.0	0.5		0.2	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	42.4
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	99	38	232	102	556	25	508	117	469	829	42
Future Volume (veh/h)	64	99	38	232	102	556	25	508	117	469	829	42
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		0.97	1.00		0.97	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	1695	1695	1695	1781	1781	1781	1668	1668	1668	1695	1695	1695
Adj Flow Rate, veh/h	69	106	41	249	0	671	27	546	126	504	891	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
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	4	4	4
Cap, veh/h	86	189	73	267	0	781	38	1185	513	584	874	704
Arrive On Green	0.05	0.16	0.16	0.16	0.00	0.27	0.02	0.37	0.37	0.19	0.52	0.49
Sat Flow, veh/h	1615	1161	449	1696	0	2932	1589	3169	1371	3132	1695	1431
Grp Volume(v), veh/h	69	0	147	249	0	671	27	546	126	504	891	45
Grp Sat Flow(s),veh/h/ln	1615	0	1611	1696	0	1466	1589	1585	1371	1566	1695	1431
Q Serve(g_s), s	5.4	0.0	10.7	18.4	0.0	27.6	2.1	16.5	8.0	19.8	65.3	2.1
Cycle Q Clear(g_c), s	5.4	0.0	10.7	18.4	0.0	27.6	2.1	16.5	8.0	19.8	65.3	2.1
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	86	0	262	267	0	781	38	1185	513	584	874	704
V/C Ratio(X)	0.80	0.00	0.56	0.93	0.00	0.86	0.70	0.46	0.25	0.86	1.02	0.06
Avail Cap(c_a), veh/h	156	0	407	267	0	919	63	1234	534	584	874	704
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	59.3	0.0	48.9	52.7	0.0	44.2	61.3	30.0	27.3	50.0	30.7	16.9
Incr Delay (d2), s/veh	6.5	0.0	0.7	37.3	0.0	6.4	8.3	0.1	0.1	12.2	35.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	0.0	7.7	15.8	0.0	15.9	1.7	10.4	4.7	13.5	44.0	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.8	0.0	49.6	90.0	0.0	50.6	69.7	30.1	27.4	62.1	66.0	16.9
LnGrp LOS	E	A	D	F	A	D	E	C	C	E	F	B
Approach Vol, veh/h		216			920			699			1440	
Approach Delay, s/veh		54.8			61.3			31.1			63.1	
Approach LOS		D			E			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	50.4	12.4	36.8	9.1	68.3	23.0	26.3
Change Period (Y+Rc), s	6.0	6.0	5.7	5.7	6.0	6.0	5.7	5.7
Max Green Setting (Gmax), s	21.0	46.3	12.2	37.1	5.0	62.3	17.3	32.0
Max Q Clear Time (g_c+I1), s	21.8	18.5	7.4	29.6	4.1	67.3	20.4	12.7
Green Ext Time (p_c), s	0.0	1.8	0.0	1.6	0.0	0.0	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	55.2
HCM 6th LOS	E

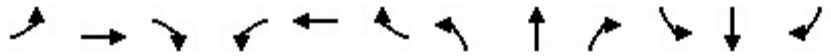
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	60	140	247	100	85	84	602	29	39	814	73
Future Volume (veh/h)	27	60	140	247	100	85	84	602	29	39	814	73
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		0.99	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	1695	1695	1695	1736	1736	1736	1709	1709	1709	1767	1767	1767
Adj Flow Rate, veh/h	28	62	146	257	104	89	88	627	30	41	848	76
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, %	4	4	4	1	1	1	3	3	3	4	4	4
Cap, veh/h	68	143	291	343	275	235	154	695	586	419	878	79
Arrive On Green	0.32	0.32	0.31	0.32	0.32	0.31	0.06	0.41	0.41	0.20	0.55	0.54
Sat Flow, veh/h	114	447	911	1182	861	737	1628	1709	1443	1683	1594	143
Grp Volume(v), veh/h	236	0	0	257	0	193	88	627	30	41	0	924
Grp Sat Flow(s),veh/h/ln	1473	0	0	1182	0	1598	1628	1709	1443	1683	0	1737
Q Serve(g_s), s	2.6	0.0	0.0	20.6	0.0	12.1	2.2	44.3	1.6	0.0	0.0	65.8
Cycle Q Clear(g_c), s	16.3	0.0	0.0	36.9	0.0	12.1	2.2	44.3	1.6	0.0	0.0	65.8
Prop In Lane	0.12		0.62	1.00		0.46	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	501	0	0	343	0	510	154	695	586	419	0	957
V/C Ratio(X)	0.47	0.00	0.00	0.75	0.00	0.38	0.57	0.90	0.05	0.10	0.00	0.97
Avail Cap(c_a), veh/h	511	0	0	351	0	521	157	942	795	419	0	958
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.6	0.0	0.0	46.0	0.0	34.2	57.2	35.8	23.2	40.0	0.0	27.9
Incr Delay (d2), s/veh	0.7	0.0	0.0	7.5	0.0	0.2	2.9	9.4	0.0	0.0	0.0	21.3
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(95%),veh/ln	10.3	0.0	0.0	13.6	0.0	8.4	5.1	27.1	1.0	1.9	0.0	40.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.3	0.0	0.0	53.5	0.0	34.3	60.1	45.3	23.2	40.1	0.0	49.1
LnGrp LOS	D	A	A	D	A	C	E	D	C	D	A	D
Approach Vol, veh/h		236			450			745			965	
Approach Delay, s/veh		36.3			45.3			46.1			48.7	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	89.4	55.4		44.1	10.8	73.9		44.1
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.6	68.0		40.0	5.0	68.0		40.0
Max Q Clear Time (g_c+I1), s	12.0	46.3		38.9	4.2	67.8		18.3
Green Ext Time (p_c), s	0.0	3.1		0.2	0.0	0.1		1.0

Intersection Summary		
HCM 6th Ctrl Delay	46.1	
HCM 6th LOS	D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	0	231	0	0	1	141	429	1	0	673	212
Future Volume (veh/h)	107	0	231	0	0	1	141	429	1	0	673	212
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1581	1581	1581	1750	1750	1750	1912	1912	1912	1736	1736	1736
Adj Flow Rate, veh/h	118	0	122	0	0	1	155	471	1	0	740	233
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
Percent Heavy Veh, %	6	6	6	0	0	0	4	4	4	1	1	1
Cap, veh/h	214	0	146	0	0	9	268	1379	3	2	771	243
Arrive On Green	0.06	0.00	0.12	0.00	0.00	0.01	0.08	0.72	0.71	0.00	0.61	0.61
Sat Flow, veh/h	1506	0	1340	0	0	1483	1821	1907	4	1654	1266	399
Grp Volume(v), veh/h	118	0	122	0	0	1	155	0	472	0	0	973
Grp Sat Flow(s),veh/h/ln	1506	0	1340	0	0	1483	1821	0	1911	1654	0	1665
Q Serve(g_s), s	5.0	0.0	6.9	0.0	0.0	0.1	2.1	0.0	7.0	0.0	0.0	42.6
Cycle Q Clear(g_c), s	5.0	0.0	6.9	0.0	0.0	0.1	2.1	0.0	7.0	0.0	0.0	42.6
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.00	1.00		0.24
Lane Grp Cap(c), veh/h	214	0	146	0	0	9	268	0	1382	2	0	1014
V/C Ratio(X)	0.55	0.00	0.83	0.00	0.00	0.11	0.58	0.00	0.34	0.00	0.00	0.96
Avail Cap(c_a), veh/h	214	0	294	0	0	191	366	0	1382	107	0	1031
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	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	33.3	0.0	0.0	38.3	18.6	0.0	3.9	0.0	0.0	14.2
Incr Delay (d2), s/veh	3.0	0.0	4.6	0.0	0.0	11.5	2.8	0.0	0.2	0.0	0.0	19.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.0	0.0	4.2	0.0	0.0	0.1	3.3	0.0	3.4	0.0	0.0	24.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.7	0.0	38.0	0.0	0.0	49.8	21.4	0.0	4.2	0.0	0.0	33.3
LnGrp LOS	D	A	D	A	A	D	C	A	A	A	A	C
Approach Vol, veh/h		240			1			627			973	
Approach Delay, s/veh		37.4			49.8			8.4			33.3	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	62.0		15.5	8.8	53.2	8.0	7.5
Change Period (Y+Rc), s	7.0	7.0		7.0	4.0	* 7	4.0	* 7
Max Green Setting (Gmax), s	5.0	47.0		17.0	9.0	* 47	4.0	* 10
Max Q Clear Time (g_c+I1), s	10.0	9.0		8.9	4.1	44.6	7.0	2.1
Green Ext Time (p_c), s	0.0	3.3		0.2	0.3	1.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	25.3
HCM 6th LOS	C

Notes

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

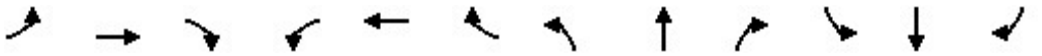
Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	33	748	44	24	691
Future Vol, veh/h	60	33	748	44	24	691
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	75	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	65	36	813	48	26	751

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1641	837	0	0	861	0
Stage 1	837	-	-	-	-	-
Stage 2	804	-	-	-	-	-
Critical Hdwy	6.61	6.31	-	-	4.12	-
Critical Hdwy Stg 1	5.61	-	-	-	-	-
Critical Hdwy Stg 2	5.61	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	101	360	-	-	781	-
Stage 1	407	-	-	-	-	-
Stage 2	423	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	98	360	-	-	781	-
Mov Cap-2 Maneuver	289	-	-	-	-	-
Stage 1	407	-	-	-	-	-
Stage 2	409	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.1	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	311	781	-
HCM Lane V/C Ratio	-	-	0.325	0.033	-
HCM Control Delay (s)	-	-	22.1	9.8	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	3	36	81	5	150	12	797	35	33	468	1
Future Volume (veh/h)	50	3	36	81	5	150	12	797	35	33	468	1
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	0.99		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	1736	1736	1723	1723	1723	1736	1736	1736	1682	1682	1682
Adj Flow Rate, veh/h	54	3	39	88	5	163	13	866	38	36	509	1
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	1	1	2	2	2	1	1	1	5	5	5
Cap, veh/h	220	29	113	170	23	212	582	948	42	213	608	1
Arrive On Green	0.23	0.23	0.21	0.23	0.23	0.21	0.28	0.57	0.55	0.07	0.36	0.34
Sat Flow, veh/h	604	131	502	435	101	938	1654	1651	72	1602	1678	3
Grp Volume(v), veh/h	96	0	0	256	0	0	13	0	904	36	0	510
Grp Sat Flow(s),veh/h/ln	1237	0	0	1474	0	0	1654	0	1723	1602	0	1681
Q Serve(g_s), s	0.0	0.0	0.0	6.7	0.0	0.0	0.0	0.0	31.6	0.0	0.0	18.7
Cycle Q Clear(g_c), s	4.1	0.0	0.0	10.8	0.0	0.0	0.0	0.0	31.6	0.0	0.0	18.7
Prop In Lane	0.56		0.41	0.34		0.64	1.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h	363	0	0	404	0	0	582	0	990	213	0	609
V/C Ratio(X)	0.26	0.00	0.00	0.63	0.00	0.00	0.02	0.00	0.91	0.17	0.00	0.84
Avail Cap(c_a), veh/h	496	0	0	549	0	0	909	0	2487	870	0	2426
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.8	0.0	0.0	24.5	0.0	0.0	17.0	0.0	12.8	29.3	0.0	19.6
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.6	0.0	0.0	0.0	0.0	1.5	0.1	0.0	1.2
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(95%),veh/ln	2.2	0.0	0.0	6.5	0.0	0.0	0.2	0.0	14.2	0.9	0.0	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.9	0.0	0.0	25.1	0.0	0.0	17.0	0.0	14.3	29.4	0.0	20.8
LnGrp LOS	C	A	A	C	A	A	B	A	B	C	A	C
Approach Vol, veh/h		96			256			917			546	
Approach Delay, s/veh		21.9			25.1			14.4			21.4	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.4	41.6		18.2	21.7	27.4		18.2				
Change Period (Y+Rc), s	5.0	5.6		5.0	5.0	5.6		5.0				
Max Green Setting (Gmax), s	30.0	94.4		20.0	30.0	94.4		20.0				
Max Q Clear Time (g_c+I1), s	2.0	33.6		12.8	2.0	20.7		6.1				
Green Ext Time (p_c), s	0.0	2.4		0.4	0.0	1.1		0.2				

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

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	66	42	704	818	18
Future Volume (veh/h)	16	66	42	704	818	18
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	1614	1614	1723	1723	1695	1695
Adj Flow Rate, veh/h	17	72	46	765	889	20
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	2	2	4	4
Cap, veh/h	177	157	340	1276	1008	23
Arrive On Green	0.11	0.11	0.06	0.74	0.61	0.61
Sat Flow, veh/h	1537	1367	1641	1723	1652	37
Grp Volume(v), veh/h	17	72	46	765	0	909
Grp Sat Flow(s),veh/h/ln	1537	1367	1641	1723	0	1689
Q Serve(g_s), s	0.5	2.4	0.4	10.1	0.0	22.1
Cycle Q Clear(g_c), s	0.5	2.4	0.4	10.1	0.0	22.1
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	177	157	340	1276	0	1030
V/C Ratio(X)	0.10	0.46	0.14	0.60	0.00	0.88
Avail Cap(c_a), veh/h	538	479	413	1826	0	1512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.2	20.1	8.5	2.9	0.0	8.0
Incr Delay (d2), s/veh	0.2	2.1	0.2	0.5	0.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	1.4	0.4	1.2	0.0	9.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.5	22.2	8.7	3.4	0.0	12.5
LnGrp LOS	B	C	A	A	A	B
Approach Vol, veh/h	89			811	909	
Approach Delay, s/veh	21.6			3.7	12.5	
Approach LOS	C			A	B	

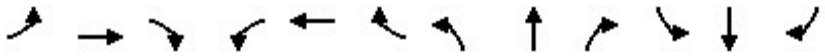
Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	9.1	6.3	33.1		39.5
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	16.0	4.0	42.5		50.5
Max Q Clear Time (g_c+I1), s	4.4	2.4	24.1		12.1
Green Ext Time (p_c), s	0.2	0.0	4.6		3.9

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	5	62	33	15	28	84	666	43	5	556	82
Future Volume (veh/h)	88	5	62	33	15	28	84	666	43	5	556	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.90	1.00		0.99	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	1690	1690	1690	1695	1695	1695	1704	1704	1704	1662	1662	1662
Adj Flow Rate, veh/h	104	6	73	39	18	33	99	784	51	6	654	96
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	4	4	4	4	4	4	3	3	3	9	9	9
Cap, veh/h	85	2	566	85	24	578	229	971	63	222	842	123
Arrive On Green	0.44	0.44	0.44	0.45	0.44	0.45	0.05	0.31	0.31	0.06	0.31	0.29
Sat Flow, veh/h	0	5	1300	26	54	1292	1623	3083	201	1583	2758	404
Grp Volume(v), veh/h	110	0	73	57	0	33	99	411	424	6	374	376
Grp Sat Flow(s),veh/h/ln	5	0	1300	80	0	1292	1623	1618	1665	1583	1579	1584
Q Serve(g_s), s	0.0	0.0	2.8	1.0	0.0	1.2	0.0	19.3	19.3	0.0	17.8	17.9
Cycle Q Clear(g_c), s	36.0	0.0	2.8	37.0	0.0	1.2	0.0	19.3	19.3	0.0	17.8	17.9
Prop In Lane	0.95		1.00	0.68		1.00	1.00		0.12	1.00		0.26
Lane Grp Cap(c), veh/h	87	0	566	109	0	578	229	509	524	222	482	484
V/C Ratio(X)	1.26	0.00	0.13	0.52	0.00	0.06	0.43	0.81	0.81	0.03	0.78	0.78
Avail Cap(c_a), veh/h	87	0	566	109	0	578	298	919	946	247	840	842
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	40.4	0.0	14.0	29.5	0.0	13.0	35.3	26.0	26.0	31.7	26.2	26.3
Incr Delay (d2), s/veh	183.2	0.0	0.0	4.4	0.0	0.0	0.5	3.1	3.0	0.0	2.7	2.7
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(95%),veh/ln	11.1	0.0	1.4	2.3	0.0	0.6	3.4	11.9	12.1	0.2	10.9	11.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	223.6	0.0	14.0	34.0	0.0	13.0	35.8	29.1	29.1	31.8	28.9	29.1
LnGrp LOS	F	A	B	C	A	B	D	C	C	C	C	C
Approach Vol, veh/h		183			90			934			756	
Approach Delay, s/veh		140.0			26.3			29.8			29.0	
Approach LOS		F			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.5	30.3		42.0	9.7	31.0		42.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	8.5	43.0		36.0	5.0	46.0		36.0
Max Q Clear Time (g_c+I1), s	12.0	19.9		39.0	2.0	21.3		38.0
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	3.6		0.0

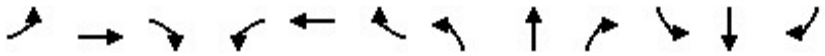
Intersection Summary		
HCM 6th Ctrl Delay		39.6
HCM 6th LOS		D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	487	22	4	987	7	63	0	6	13	0	13
Future Volume (veh/h)	5	487	22	4	987	7	63	0	6	13	0	13
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	0.98		0.95	0.98		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	1926	1926	1926	1541	1541	1541	1809	1809	1809	1709	1709	1709
Adj Flow Rate, veh/h	5	535	24	4	1085	8	69	0	7	14	0	14
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
Percent Heavy Veh, %	3	3	3	1	1	1	1	1	1	3	3	3
Cap, veh/h	213	1388	62	617	1159	9	256	5	15	147	23	83
Arrive On Green	0.76	0.76	0.76	0.76	0.76	0.76	0.11	0.00	0.11	0.11	0.00	0.11
Sat Flow, veh/h	577	1829	82	761	1527	11	1293	46	136	534	201	734
Grp Volume(v), veh/h	5	0	559	4	0	1093	76	0	0	28	0	0
Grp Sat Flow(s),veh/h/ln	577	0	1911	761	0	1539	1475	0	0	1469	0	0
Q Serve(g_s), s	0.5	0.0	6.2	0.1	0.0	36.8	1.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	37.3	0.0	6.2	6.3	0.0	36.8	2.9	0.0	0.0	1.0	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.01	0.91		0.09	0.50		0.50
Lane Grp Cap(c), veh/h	213	0	1451	617	0	1168	276	0	0	252	0	0
V/C Ratio(X)	0.02	0.00	0.39	0.01	0.00	0.94	0.28	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	598	0	2728	1126	0	2197	644	0	0	608	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	21.8	0.0	2.6	3.6	0.0	6.2	25.8	0.0	0.0	25.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.0	4.2	0.5	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	1.3	0.0	0.0	8.1	1.8	0.0	0.0	0.7	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.8	0.0	2.7	3.6	0.0	10.5	26.3	0.0	0.0	25.2	0.0	0.0
LnGrp LOS	C	A	A	A	A	B	C	A	A	C	A	A
Approach Vol, veh/h		564			1097			76			28	
Approach Delay, s/veh		2.9			10.5			26.3			25.2	
Approach LOS		A			B			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	11.0	51.3	11.0	51.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	88.0	22.0	88.0
Max Q Clear Time (g_c+I1), s	4.9	39.3	3.0	38.8
Green Ext Time (p_c), s	0.2	2.5	0.0	7.5

Intersection Summary	
HCM 6th Ctrl Delay	9.0
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	14	128	0	10	4	688	35	5	1203	0
Future Volume (veh/h)	3	0	14	128	0	10	4	688	35	5	1203	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1967	1967	1967	1701	1701	1701	1717	1717	1717	1759	1759	1759
Adj Flow Rate, veh/h	3	0	15	139	0	0	4	748	38	5	1308	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	2	2	2	2	2	2
Cap, veh/h	317	0	227	246	0		137	1273	65	492	1382	0
Arrive On Green	0.14	0.00	0.14	0.14	0.00	0.00	0.79	0.79	0.79	0.79	0.79	0.00
Sat Flow, veh/h	1604	0	1643	1284	0	1442	419	1620	82	703	1759	0
Grp Volume(v), veh/h	3	0	15	139	0	0	4	0	786	5	1308	0
Grp Sat Flow(s),veh/h/ln	1604	0	1643	1284	0	1442	419	0	1702	703	1759	0
Q Serve(g_s), s	0.0	0.0	0.8	10.4	0.0	0.0	0.8	0.0	19.3	0.3	65.2	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.8	11.2	0.0	0.0	66.1	0.0	19.3	19.6	65.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.05	1.00		0.00
Lane Grp Cap(c), veh/h	317	0	227	246	0		137	0	1338	492	1382	0
V/C Ratio(X)	0.01	0.00	0.07	0.57	0.00		0.03	0.00	0.59	0.01	0.95	0.00
Avail Cap(c_a), veh/h	432	0	345	344	0		152	0	1396	516	1442	0
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	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.0	0.0	39.3	44.2	0.0	0.0	37.0	0.0	4.5	8.4	9.4	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.8	0.0	0.0	0.2	0.0	1.0	0.0	13.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.6	6.4	0.0	0.0	0.2	0.0	8.6	0.1	28.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.0	0.0	39.4	45.0	0.0	0.0	37.2	0.0	5.5	8.4	22.7	0.0
LnGrp LOS	D	A	D	D	A		D	A	A	A	C	A
Approach Vol, veh/h		18			139	A		790			1313	
Approach Delay, s/veh		39.3			45.0			5.6			22.7	
Approach LOS		D			D			A			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	86.4	18.5	86.4	18.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	85.0	21.0	85.0	21.0
Max Q Clear Time (g_c+I1), s	68.1	2.8	67.2	13.2
Green Ext Time (p_c), s	7.3	0.0	14.2	0.2

Intersection Summary	
HCM 6th Ctrl Delay	18.2
HCM 6th LOS	B

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	3	1045	4	6	1071
Future Volume (veh/h)	1	3	1045	4	6	1071
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98		0.98	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	1750	1750	1903	1903	1723	1723
Adj Flow Rate, veh/h	1	3	1174	4	7	1203
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	30	89	2001	7	476	2391
Arrive On Green	0.10	0.06	0.54	0.50	0.09	0.73
Sat Flow, veh/h	309	926	3792	13	1641	3359
Grp Volume(v), veh/h	5	0	574	604	7	1203
Grp Sat Flow(s),veh/h/ln	1544	0	1808	1901	1641	1637
Q Serve(g_s), s	0.1	0.0	6.2	6.2	0.0	4.5
Cycle Q Clear(g_c), s	0.1	0.0	6.2	6.2	0.0	4.5
Prop In Lane	0.20	0.60		0.01	1.00	
Lane Grp Cap(c), veh/h	149	0	979	1029	476	2391
V/C Ratio(X)	0.03	0.00	0.59	0.59	0.01	0.50
Avail Cap(c_a), veh/h	960	0	5313	5585	846	10975
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	0.0	4.5	4.5	7.9	1.7
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.6	0.6	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.2	0.0	4.7	4.7	7.9	1.7
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	5		1178			1210
Approach Delay, s/veh	12.2		4.7			1.8
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.5	18.7			24.1	4.8
Change Period (Y+Rc), s	5.2	5.2			5.2	4.0
Max Green Setting (Gmax), s	6.8	82.8			94.8	16.0
Max Q Clear Time (g_c+I1), s	2.0	8.2			6.5	2.1
Green Ext Time (p_c), s	0.0	5.3			6.6	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.2
HCM 6th LOS	A

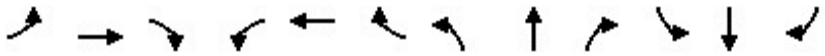
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	314	12	1	378	26	24	3	5	83	2	484
Future Volume (veh/h)	176	314	12	1	378	26	24	3	5	83	2	484
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1682	1682	1682	1736	1736	1736	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	189	338	13	1	406	28	26	3	5	89	2	520
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
Percent Heavy Veh, %	5	5	5	1	1	1	2	2	2	2	2	2
Cap, veh/h	382	651	25	366	485	33	126	202	337	636	2	507
Arrive On Green	0.12	0.40	0.39	0.00	0.30	0.30	0.35	0.35	0.35	0.37	0.35	0.37
Sat Flow, veh/h	1602	1609	62	1654	1606	111	880	580	966	1404	6	1451
Grp Volume(v), veh/h	189	0	351	1	0	434	26	0	8	89	0	522
Grp Sat Flow(s),veh/h/ln	1602	0	1671	1654	0	1716	880	0	1546	1404	0	1457
Q Serve(g_s), s	4.1	0.0	9.1	0.0	0.0	13.5	0.0	0.0	0.2	2.5	0.0	20.0
Cycle Q Clear(g_c), s	4.1	0.0	9.1	0.0	0.0	13.5	20.0	0.0	0.2	2.7	0.0	20.0
Prop In Lane	1.00		0.04	1.00		0.06	1.00		0.63	1.00		1.00
Lane Grp Cap(c), veh/h	382	0	676	366	0	519	126	0	540	636	0	509
V/C Ratio(X)	0.49	0.00	0.52	0.00	0.00	0.84	0.21	0.00	0.01	0.14	0.00	1.03
Avail Cap(c_a), veh/h	495	0	904	652	0	929	126	0	540	636	0	509
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	12.2	0.0	12.9	14.7	0.0	18.7	28.6	0.0	12.2	12.4	0.0	18.1
Incr Delay (d2), s/veh	0.4	0.0	0.2	0.0	0.0	1.4	0.3	0.0	0.0	0.0	0.0	46.7
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(95%),veh/ln	2.0	0.0	4.8	0.0	0.0	8.1	0.6	0.0	0.1	1.3	0.0	18.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.5	0.0	13.1	14.7	0.0	20.1	28.9	0.0	12.2	12.4	0.0	64.8
LnGrp LOS	B	A	B	B	A	C	C	A	B	B	A	F
Approach Vol, veh/h		540			435			34			611	
Approach Delay, s/veh		12.9			20.1			25.0			57.2	
Approach LOS		B			C			C			E	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	27.2		25.0	11.0	21.3		25.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	30.0		20.0	10.0	30.0		20.0				
Max Q Clear Time (g_c+I1), s	2.0	11.1		22.0	6.1	15.5		22.0				
Green Ext Time (p_c), s	0.0	0.6		0.0	0.1	0.8		0.0				

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	0	7	198	14	46	48	922	236	46	944	15
Future Volume (veh/h)	11	0	7	198	14	46	48	922	236	46	944	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.90	0.91		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1709	1709	1709	1654	1654	1654	1709	1709	1709	1723	1723	1723
Adj Flow Rate, veh/h	13	0	8	228	16	0	55	1060	0	53	1085	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	7	7	7	3	3	3	2	2	2
Cap, veh/h	616	0	482	532	30		304	1315		320	1346	
Arrive On Green	0.37	0.00	0.34	0.37	0.37	0.00	0.08	0.40	0.00	0.09	0.41	0.00
Sat Flow, veh/h	1292	0	1308	1159	81	1402	1628	3333	0	1641	3359	0
Grp Volume(v), veh/h	13	0	8	244	0	0	55	1060	0	53	1085	0
Grp Sat Flow(s),veh/h/ln	1292	0	1308	1241	0	1402	1628	1624	0	1641	1637	0
Q Serve(g_s), s	0.0	0.0	0.3	10.2	0.0	0.0	0.0	19.1	0.0	0.0	19.3	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.3	10.4	0.0	0.0	0.0	19.1	0.0	0.0	19.3	0.0
Prop In Lane	1.00		1.00	0.93		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	616	0	482	562	0		304	1315		320	1346	
V/C Ratio(X)	0.02	0.00	0.02	0.43	0.00		0.18	0.81		0.17	0.81	
Avail Cap(c_a), veh/h	783	0	651	725	0		336	1960		369	2124	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.3	0.0	13.9	16.6	0.0	0.0	23.9	17.4	0.0	23.1	17.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.3	0.9	0.0	0.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	0.1	5.1	0.0	0.0	1.3	10.2	0.0	1.2	10.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.3	0.0	14.0	17.1	0.0	0.0	24.2	18.3	0.0	23.2	17.7	0.0
LnGrp LOS	B	A	B	B	A		C	B		C	B	
Approach Vol, veh/h		21			244	A		1115	A		1138	A
Approach Delay, s/veh		13.6			17.1			18.6			18.0	
Approach LOS		B			B			B			B	

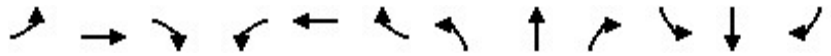
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	29.8		27.4	8.6	30.3		27.4
Change Period (Y+Rc), s	5.9	5.9		6.0	5.9	* 5.9		6.0
Max Green Setting (Gmax), s	5.1	37.1		30.0	4.0	* 40		30.0
Max Q Clear Time (g_c+I1), s	2.0	21.1		12.4	2.0	21.3		2.4
Green Ext Time (p_c), s	0.0	2.8		1.0	0.0	3.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.1
HCM 6th LOS	B

Notes

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	752	334	36	2339	79	988	118	25	88	140	363
Future Volume (veh/h)	206	752	334	36	2339	79	988	118	25	88	140	363
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		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1682	1682	1682	1723	1723	1723	1795	1795	1795	1709	1709	1709
Adj Flow Rate, veh/h	215	783	348	38	2802	95	998	323	0	92	146	0
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, %	5	5	5	2	2	2	2	2	2	3	3	3
Cap, veh/h	185	1665	1027	67	2060	69	746	392		175	183	
Arrive On Green	0.12	0.52	0.52	0.04	0.44	0.43	0.22	0.22	0.00	0.11	0.11	0.00
Sat Flow, veh/h	1602	3195	1391	1641	4672	157	3419	1795	0	1628	1709	1448
Grp Volume(v), veh/h	215	783	348	38	1870	1027	998	323	0	92	146	0
Grp Sat Flow(s),veh/h/ln	1602	1598	1391	1641	1568	1694	1709	1795	0	1628	1709	1448
Q Serve(g_s), s	19.0	25.6	14.7	3.7	72.7	72.7	36.0	28.3	0.0	8.8	13.7	0.0
Cycle Q Clear(g_c), s	19.0	25.6	14.7	3.7	72.7	72.7	36.0	28.3	0.0	8.8	13.7	0.0
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	1665	1027	67	1382	747	746	392		175	183	
V/C Ratio(X)	1.16	0.47	0.34	0.56	1.35	1.38	1.34	0.82		0.53	0.80	
Avail Cap(c_a), veh/h	185	1665	1027	169	1382	747	746	392		227	238	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	72.9	25.0	7.8	77.6	46.1	46.1	64.4	61.4	0.0	69.6	71.8	0.0
Incr Delay (d2), s/veh	117.7	0.4	0.3	7.2	163.6	177.2	160.7	15.5	0.0	6.6	21.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	21.2	15.0	13.9	3.1	87.3	98.3	47.9	20.7	0.0	7.2	11.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	190.6	25.4	8.1	84.8	209.7	223.3	225.2	76.9	0.0	76.3	93.2	0.0
LnGrp LOS	F	C	A	F	F	F	F	E		E	F	
Approach Vol, veh/h		1346			2935			1321	A		238	A
Approach Delay, s/veh		47.3			212.8			188.9			86.7	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	91.4		22.7	23.0	78.2		41.0
Change Period (Y+Rc), s	5.0	7.5		6.0	5.0	* 7.5		6.0
Max Green Setting (Gmax), s	15.8	73.5		22.0	18.0	* 71		35.0
Max Q Clear Time (g_c+I1), s	5.7	27.6		15.7	21.0	74.7		38.0
Green Ext Time (p_c), s	0.0	12.9		0.9	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	164.1
HCM 6th LOS	F

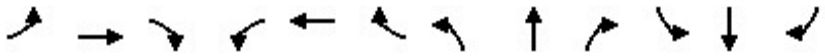
Notes

User approved volume balancing among the lanes for turning movement.

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

User approved changes to right turn type.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	432	372	72	1126	0	1196	0	124	1	0	0
Future Volume (veh/h)	0	432	372	72	1126	0	1196	0	124	1	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1695	1695	1695	1709	1709	1709	1809	1809	1809	1709	1709	1709
Adj Flow Rate, veh/h	0	483	416	88	1378	0	1527	0	158	1	0	0
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, %	4	4	4	3	3	3	1	1	1	3	3	3
Cap, veh/h	66	544	1080	104	1399	0	1610	0	716	17	0	0
Arrive On Green	0.00	0.32	0.30	0.06	0.43	0.00	0.47	0.00	0.47	0.01	0.00	0.00
Sat Flow, veh/h	387	1695	1437	1628	3333	0	3445	0	1533	1628	0	0
Grp Volume(v), veh/h	0	483	416	88	1378	0	1527	0	158	1	0	0
Grp Sat Flow(s),veh/h/ln	387	1695	1437	1628	1624	0	1723	0	1533	1628	0	0
Q Serve(g_s), s	0.0	29.5	11.1	5.8	45.8	0.0	46.3	0.0	6.7	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	29.5	11.1	5.8	45.8	0.0	46.3	0.0	6.7	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	66	544	1080	104	1399	0	1610	0	716	17	0	0
V/C Ratio(X)	0.00	0.89	0.39	0.84	0.99	0.00	0.95	0.00	0.22	0.06	0.00	0.00
Avail Cap(c_a), veh/h	66	544	1080	104	1399	0	1610	0	716	254	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	35.2	4.7	50.5	30.7	0.0	27.8	0.0	17.3	53.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	16.4	0.2	43.2	20.5	0.0	12.3	0.0	0.2	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	20.5	16.0	6.5	28.4	0.0	27.7	0.0	4.1	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	51.6	5.0	93.7	51.2	0.0	40.1	0.0	17.4	55.0	0.0	0.0
LnGrp LOS	A	D	A	F	D	A	D	A	B	D	A	A
Approach Vol, veh/h		899			1466			1685			1	
Approach Delay, s/veh		30.0			53.8			38.0			55.0	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	2	4	5	6	8
Phs Duration (G+Y+Rc), s	51.0	54.0	12.0	39.0	4.1
Change Period (Y+Rc), s	7.0	6.0	6.0	7.0	4.0
Max Green Setting (Gmax), s	44.0	48.0	6.0	32.0	16.0
Max Q Clear Time (g_c+I1), s	47.8	48.3	7.8	31.5	2.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	41.9
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	296	182	173	796	223	80
Future Volume (veh/h)	296	182	173	796	223	80
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	1608	1608	1682	1682	1674	1674
Adj Flow Rate, veh/h	308	190	216	995	256	92
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	10	10	5	5	4	4
Cap, veh/h	709	601	208	1106	350	291
Arrive On Green	0.44	0.44	0.13	0.66	0.22	0.21
Sat Flow, veh/h	1608	1363	1602	1682	1594	1418
Grp Volume(v), veh/h	308	190	216	995	256	92
Grp Sat Flow(s),veh/h/ln	1608	1363	1602	1682	1594	1418
Q Serve(g_s), s	9.2	6.3	9.0	34.3	10.3	3.8
Cycle Q Clear(g_c), s	9.2	6.3	9.0	34.3	10.3	3.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	709	601	208	1106	350	291
V/C Ratio(X)	0.43	0.32	1.04	0.90	0.73	0.32
Avail Cap(c_a), veh/h	801	679	208	1202	622	533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.4	12.6	30.1	9.9	25.1	23.4
Incr Delay (d2), s/veh	0.9	0.6	72.5	9.8	2.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.6	3.2	12.1	17.1	6.9	2.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.3	13.2	102.6	19.7	27.3	23.8
LnGrp LOS	B	B	F	B	C	C
Approach Vol, veh/h	498			1211	348	
Approach Delay, s/veh	13.9			34.5	26.4	
Approach LOS	B			C	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	15.0	35.5				50.5	18.7
Change Period (Y+Rc), s	7.0	7.0				7.0	5.5
Max Green Setting (Gmax), s	8.0	32.5				47.5	25.0
Max Q Clear Time (g_c+I1), s	11.0	11.2				36.3	12.3
Green Ext Time (p_c), s	0.0	4.3				7.2	0.9

Intersection Summary	
HCM 6th Ctrl Delay	28.1
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	205	320	161	339	288	127
Future Volume (veh/h)	205	320	161	339	288	127
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	1690	1690	1689	1689	1701	1701
Adj Flow Rate, veh/h	230	360	181	381	324	143
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	4	4	7	7	0	0
Cap, veh/h	677	574	443	677	410	181
Arrive On Green	0.40	0.40	0.40	0.40	0.38	0.38
Sat Flow, veh/h	1690	1432	810	1689	1072	473
Grp Volume(v), veh/h	230	360	181	381	468	0
Grp Sat Flow(s),veh/h/ln	1690	1432	810	1689	1549	0
Q Serve(g_s), s	3.5	7.4	7.4	6.4	9.9	0.0
Cycle Q Clear(g_c), s	3.5	7.4	10.8	6.4	9.9	0.0
Prop In Lane		1.00	1.00		0.69	0.31
Lane Grp Cap(c), veh/h	677	574	443	677	593	0
V/C Ratio(X)	0.34	0.63	0.41	0.56	0.79	0.00
Avail Cap(c_a), veh/h	779	660	492	779	840	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	7.7	8.9	11.4	8.6	10.1	0.0
Incr Delay (d2), s/veh	0.3	1.5	0.6	0.7	3.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	3.1	1.8	3.0	4.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	8.0	10.4	12.0	9.3	13.4	0.0
LnGrp LOS	A	B	B	A	B	A
Approach Vol, veh/h	590			562	468	
Approach Delay, s/veh	9.4			10.2	13.4	
Approach LOS	A			B	B	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	18.1	18.8	18.8
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	19.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	11.9	9.4	12.8
Green Ext Time (p_c), s	1.3	1.5	0.9

Intersection Summary	
HCM 6th Ctrl Delay	10.9
HCM 6th LOS	B

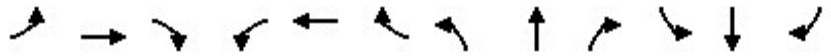
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	842	24	8	2743	111	23
Future Volume (veh/h)	842	24	8	2743	111	23
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	1753	1753	1701	1701	1881	1881
Adj Flow Rate, veh/h	877	20	8	2857	116	12
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	2	2	1	1
Cap, veh/h	2747	1225	24	2802	164	146
Arrive On Green	0.82	0.82	0.01	0.87	0.09	0.09
Sat Flow, veh/h	3419	1486	1620	3317	1791	1594
Grp Volume(v), veh/h	877	20	8	2857	116	12
Grp Sat Flow(s),veh/h/ln	1666	1486	1620	1616	1791	1594
Q Serve(g_s), s	9.0	0.3	0.7	125.0	9.1	1.0
Cycle Q Clear(g_c), s	9.0	0.3	0.7	125.0	9.1	1.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2747	1225	24	2802	164	146
V/C Ratio(X)	0.32	0.02	0.34	1.02	0.71	0.08
Avail Cap(c_a), veh/h	2747	1225	56	2802	236	210
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	3.0	2.2	70.4	9.6	63.6	60.0
Incr Delay (d2), s/veh	0.1	0.0	8.3	22.2	5.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	0.1	0.6	42.1	7.8	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.1	2.3	78.6	31.7	69.2	60.2
LnGrp LOS	A	A	E	F	E	E
Approach Vol, veh/h	897			2865	128	
Approach Delay, s/veh	3.1			31.9	68.3	
Approach LOS	A			C	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	16.2	6.1	121.9		128.0
Change Period (Y+Rc), s	5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	4.0	114.0		123.0
Max Q Clear Time (g_c+I1), s	11.1	2.7	11.0		127.0
Green Ext Time (p_c), s	0.2	0.0	4.9		0.0

Intersection Summary	
HCM 6th Ctrl Delay	26.4
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	287	7	744	876	37	2	560	507	27	722	746
Future Volume (veh/h)	161	287	7	744	876	37	2	560	507	27	722	746
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	1641	1641	1641	1759	1759	1759	1762	1762	1762	1674	1674	1674
Adj Flow Rate, veh/h	169	302	7	783	922	39	2	589	0	28	760	0
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, %	8	8	8	2	2	2	7	7	7	2	2	2
Cap, veh/h	243	418	10	999	1181	50	175	998		251	1016	
Arrive On Green	0.08	0.13	0.13	0.31	0.36	0.36	0.00	0.30	0.00	0.02	0.32	0.00
Sat Flow, veh/h	3032	3114	72	3249	3264	138	1678	3348	1493	1594	3264	0
Grp Volume(v), veh/h	169	151	158	783	472	489	2	589	0	28	760	0
Grp Sat Flow(s),veh/h/ln	1516	1559	1628	1625	1671	1731	1678	1674	1493	1594	1590	0
Q Serve(g_s), s	4.1	7.1	7.1	16.7	19.1	19.1	0.1	11.4	0.0	0.9	16.3	0.0
Cycle Q Clear(g_c), s	4.1	7.1	7.1	16.7	19.1	19.1	0.1	11.4	0.0	0.9	16.3	0.0
Prop In Lane	1.00		0.04	1.00		0.08	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	243	209	218	999	604	626	175	998		251	1016	
V/C Ratio(X)	0.70	0.72	0.72	0.78	0.78	0.78	0.01	0.59		0.11	0.75	
Avail Cap(c_a), veh/h	359	348	364	1559	977	1013	259	2833		300	2696	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.1	31.6	31.6	24.0	21.6	21.6	20.1	22.7	0.0	18.7	23.2	0.0
Incr Delay (d2), s/veh	3.6	4.6	4.5	1.4	2.2	2.2	0.0	0.6	0.0	0.2	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	5.0	5.3	10.2	11.6	11.9	0.0	7.7	0.0	0.6	9.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.7	36.2	36.1	25.4	23.8	23.8	20.1	23.3	0.0	18.9	24.3	0.0
LnGrp LOS	D	D	D	C	C	C	C	C		B	C	
Approach Vol, veh/h		478			1744			591	A		788	A
Approach Delay, s/veh		36.7			24.5			23.3			24.1	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	14.7	4.7	28.8	10.6	32.0	6.3	27.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	3.5	17.0	4.0	64.5	9.0	44.5	4.1	64.4
Max Q Clear Time (g_c+I1), s	8.7	9.1	2.1	18.3	6.1	21.1	2.9	13.4
Green Ext Time (p_c), s	2.9	1.0	0.0	6.0	0.1	6.4	0.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	25.8
HCM 6th LOS	C

Notes

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

MOVEMENT SUMMARY

Site: 3 [3 - SE Issaquah Fall City Rd & Klahanie Dr SE]

2035 AM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Klahanie Dr SE												
3	L2	2	0.0	0.005	4.4	LOS A	0.0	0.4	0.48	0.34	0.48	33.9
8	T1	1	0.0	0.005	4.4	LOS A	0.0	0.4	0.48	0.34	0.48	33.9
18	R2	1	0.0	0.005	4.4	LOS A	0.0	0.4	0.48	0.34	0.48	33.0
Approach		4	0.0	0.005	4.4	LOS A	0.0	0.4	0.48	0.34	0.48	33.6
NorthEast: SE Issaquah Fall City Rd												
1	L2	1	1.0	0.437	7.7	LOS A	2.5	63.7	0.46	0.33	0.46	33.6
6	T1	978	1.0	0.437	7.6	LOS A	2.6	64.3	0.45	0.32	0.45	33.7
16	R2	58	1.0	0.437	7.4	LOS A	2.6	64.3	0.45	0.32	0.45	32.8
Approach		1037	1.0	0.437	7.6	LOS A	2.6	64.3	0.45	0.32	0.45	33.6
NorthWest: Klahanie Dr SE												
7	L2	111	1.0	0.210	9.7	LOS A	0.8	20.0	0.63	0.63	0.63	30.4
4	T1	1	1.0	0.210	9.7	LOS A	0.8	20.0	0.63	0.63	0.63	30.4
14	R2	615	1.0	0.683	15.6	LOS B	6.6	167.3	0.79	1.02	1.46	29.0
Approach		727	1.0	0.683	14.7	LOS B	6.6	167.3	0.77	0.96	1.33	29.2
SouthWest: SE Issaquah Fall City Rd												
5	L2	229	5.0	0.308	5.9	LOS A	1.7	44.2	0.30	0.17	0.30	32.8
2	T1	526	5.0	0.308	5.7	LOS A	1.7	44.5	0.30	0.16	0.30	34.1
12	R2	1	5.0	0.308	5.7	LOS A	1.7	44.5	0.30	0.16	0.30	33.5
Approach		757	5.0	0.308	5.8	LOS A	1.7	44.5	0.30	0.16	0.30	33.7
All Vehicles		2525	2.2	0.683	9.1	LOS A	6.6	167.3	0.50	0.46	0.66	32.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 6 [6 - Issaquah-Pine LK Rd and SE 32nd Way]

2035 AM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Issaquah-Pine Lk Rd NB												
3x	L2	1	2.0	0.675	10.2	LOS B	7.5	190.3	0.45	0.32	0.45	32.4
8x	T1	863	2.0	0.675	2.4	LOS A	7.5	190.3	0.45	0.32	0.45	29.3
18x	R2	136	2.0	0.675	2.9	LOS A	7.5	190.3	0.45	0.32	0.45	28.5
Approach		1000	2.0	0.675	2.5	LOS A	7.5	190.3	0.45	0.32	0.45	29.1
NorthEast: SE 32nd Way WB												
1x	L2	197	3.0	0.715	21.5	LOS C	8.7	223.5	1.00	1.27	1.55	25.0
6x	T1	1	3.0	0.715	18.4	LOS B	8.7	223.5	1.00	1.27	1.55	26.9
16x	R2	289	3.0	0.715	16.6	LOS B	8.7	223.5	1.00	1.27	1.55	24.2
Approach		487	3.0	0.715	18.6	LOS B	8.7	223.5	1.00	1.27	1.55	24.5
NorthWest: Issaquah-Pine Lk Rd SB												
7x	L2	77	2.0	0.631	8.5	LOS A	6.1	154.1	0.66	0.43	0.66	29.0
4x	T1	702	2.0	0.631	3.2	LOS A	6.1	154.1	0.66	0.43	0.66	28.7
14x	R2	2	2.0	0.631	5.4	LOS A	6.1	154.1	0.66	0.43	0.66	30.8
Approach		781	2.0	0.631	3.7	LOS A	6.1	154.1	0.66	0.43	0.66	28.7
SouthWest: Drive Way Access EB												
5x	L2	2	0.0	0.010	15.4	LOS B	0.1	1.7	0.83	0.65	0.83	33.7
2x	T1	1	0.0	0.010	9.8	LOS A	0.1	1.7	0.83	0.65	0.83	33.6
12x	R2	3	0.0	0.010	9.7	LOS A	0.1	1.7	0.83	0.65	0.83	32.8
Approach		6	0.0	0.010	11.6	LOS B	0.1	1.7	0.83	0.65	0.83	33.2
All Vehicles		2275	2.2	0.715	6.4	LOS A	8.7	223.5	0.64	0.56	0.76	27.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 9 [9 - SE Issaquah Fall City Rd & 247th Pl SE]

2035 AM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Pacific Crest Middle School Drwy												
3	L2	188	13.0	0.306	8.4	LOS A	1.1	30.8	0.52	0.52	0.52	30.7
8	T1	30	13.0	0.306	8.4	LOS A	1.1	30.8	0.52	0.52	0.52	30.9
18	R2	12	13.0	0.306	8.4	LOS A	1.1	30.8	0.52	0.52	0.52	30.2
Approach		230	13.0	0.306	8.4	LOS A	1.1	30.8	0.52	0.52	0.52	30.7
NorthEast: SE Issaquah Fall City Rd												
1	L2	45	1.0	0.711	15.2	LOS B	10.0	252.1	0.65	0.68	1.00	29.9
6	T1	1449	1.0	0.711	14.9	LOS B	10.0	252.1	0.64	0.66	0.98	30.1
16	R2	4	1.0	0.711	14.7	LOS B	9.9	248.7	0.64	0.65	0.96	29.5
Approach		1499	1.0	0.711	14.9	LOS B	10.0	252.1	0.64	0.66	0.98	30.1
NorthWest: 247th Pl SE												
7	L2	13	4.0	0.135	11.6	LOS B	0.6	14.6	0.76	0.76	0.76	30.8
4	T1	38	4.0	0.135	11.6	LOS B	0.6	14.6	0.76	0.76	0.76	30.9
14	R2	141	4.0	0.251	9.9	LOS A	1.2	31.9	0.79	0.79	0.79	31.1
Approach		192	4.0	0.251	10.3	LOS B	1.2	31.9	0.78	0.78	0.78	31.1
SouthWest: SE Issaquah Fall CIty Rd												
5	L2	16	3.0	0.222	4.6	LOS A	1.1	27.3	0.24	0.11	0.24	34.7
2	T1	613	3.0	0.222	4.4	LOS A	1.1	27.8	0.23	0.11	0.23	35.0
12	R2	214	3.0	0.132	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	36.5
Approach		844	3.0	0.222	3.3	LOS A	1.1	27.8	0.17	0.08	0.17	35.3
All Vehicles		2765	2.8	0.711	10.5	LOS B	10.0	252.1	0.50	0.48	0.68	31.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 14 [14 - 216th Ave and NE Inglewood Hill Rd]

2035 AM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 216th Ave (NB)												
3	L2	103	1.0	0.190	11.0	LOS B	1.1	26.7	0.61	0.72	0.61	31.4
8	T1	30	1.0	0.190	5.9	LOS A	1.1	26.7	0.61	0.72	0.61	31.3
18	R2	45	1.0	0.190	6.0	LOS A	1.1	26.7	0.61	0.72	0.61	30.6
Approach		179	1.0	0.190	8.9	LOS A	1.1	26.7	0.61	0.72	0.61	31.2
East: NE Inglewood Hill Rd												
1	L2	11	2.0	0.524	9.6	LOS A	3.9	99.2	0.51	0.50	0.51	32.7
6	T1	470	2.0	0.524	4.4	LOS A	3.9	99.2	0.51	0.50	0.51	32.6
16	R2	149	2.0	0.524	4.5	LOS A	3.9	99.2	0.51	0.50	0.51	31.8
Approach		630	2.0	0.524	4.6	LOS A	3.9	99.2	0.51	0.50	0.51	32.4
North: 216th Ave (SB)												
7	L2	230	1.0	0.549	13.4	LOS B	4.6	117.1	0.80	0.90	0.92	30.7
4	T1	30	1.0	0.549	8.2	LOS A	4.6	117.1	0.80	0.90	0.92	30.6
14	R2	235	1.0	0.549	8.3	LOS A	4.6	117.1	0.80	0.90	0.92	29.9
Approach		496	1.0	0.549	10.7	LOS B	4.6	117.1	0.80	0.90	0.92	30.3
West: NE Inglewood Hill Rd												
5	L2	49	2.0	0.350	9.8	LOS A	2.3	57.8	0.53	0.55	0.53	32.5
2	T1	273	2.0	0.350	4.6	LOS A	2.3	57.8	0.53	0.55	0.53	32.3
12	R2	64	2.0	0.350	4.7	LOS A	2.3	57.8	0.53	0.55	0.53	31.5
Approach		387	2.0	0.350	5.3	LOS A	2.3	57.8	0.53	0.55	0.53	32.2
All Vehicles		1691	1.6	0.549	7.0	LOS A	4.6	117.1	0.61	0.65	0.64	31.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 26 [26 - NE 8th St and 244th Ave]

2035 AM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	205	1.0	0.440	6.9	LOS A	3.0	75.7	0.51	0.51	0.51	24.4
8	T1	286	1.0	0.440	2.7	LOS A	3.0	75.7	0.51	0.51	0.51	24.2
18	R2	7	1.0	0.440	3.2	LOS A	3.0	75.7	0.51	0.51	0.51	23.7
Approach		499	1.0	0.440	4.4	LOS A	3.0	75.7	0.51	0.51	0.51	24.3
East: NE 8th St (WB)												
1	L2	7	2.0	0.074	9.0	LOS A	0.4	10.2	0.65	0.62	0.65	24.3
6	T1	23	2.0	0.074	4.8	LOS A	0.4	10.2	0.65	0.62	0.65	24.1
16	R2	27	2.0	0.074	5.3	LOS A	0.4	10.2	0.65	0.62	0.65	23.6
Approach		58	2.0	0.074	5.6	LOS A	0.4	10.2	0.65	0.62	0.65	23.9
North: 244th Ave (SB)												
7	L2	7	2.0	0.578	7.3	LOS A	4.5	114.0	0.60	0.50	0.60	24.6
4	T1	381	2.0	0.578	3.2	LOS A	4.5	114.0	0.60	0.50	0.60	24.4
14	R2	254	2.0	0.578	3.6	LOS A	4.5	114.0	0.60	0.50	0.60	23.9
Approach		643	2.0	0.578	3.4	LOS A	4.5	114.0	0.60	0.50	0.60	24.2
West: NE 8th St (EB)												
5	L2	189	3.0	0.302	10.3	LOS B	1.8	46.3	0.59	0.72	0.59	31.0
2	T1	16	3.0	0.302	5.8	LOS A	1.8	46.3	0.59	0.72	0.59	31.1
12	R2	84	3.0	0.302	5.8	LOS A	1.8	46.3	0.59	0.72	0.59	30.4
Approach		289	3.0	0.302	8.7	LOS A	1.8	46.3	0.59	0.72	0.59	30.8
All Vehicles		1489	1.9	0.578	4.9	LOS A	4.5	114.0	0.57	0.55	0.57	25.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 32 [32 - Issaquah Beaver Lake Rd & 256th Ave]

2035 AM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 256th Ave												
3	L2	165	2.0	0.200	5.0	LOS A	1.0	26.2	0.42	0.29	0.42	32.8
8	T1	26	2.0	0.200	5.0	LOS A	1.0	26.2	0.42	0.29	0.42	32.9
18	R2	37	2.0	0.200	5.0	LOS A	1.0	26.2	0.42	0.29	0.42	32.1
Approach		229	2.0	0.200	5.0	LOS A	1.0	26.2	0.42	0.29	0.42	32.7
East: Issaquah Beaver Lake Rd												
1	L2	62	4.0	0.347	6.5	LOS A	2.1	53.3	0.44	0.30	0.44	33.4
6	T1	315	4.0	0.347	6.5	LOS A	2.1	53.3	0.44	0.30	0.44	33.5
16	R2	24	4.0	0.347	6.5	LOS A	2.1	53.3	0.44	0.30	0.44	32.6
Approach		401	4.0	0.347	6.5	LOS A	2.1	53.3	0.44	0.30	0.44	33.4
North: 256th Ave												
7	L2	44	0.0	0.118	4.9	LOS A	0.6	15.8	0.58	0.45	0.58	33.8
4	T1	48	0.0	0.118	4.9	LOS A	0.6	15.8	0.58	0.45	0.58	33.8
14	R2	21	0.0	0.118	4.9	LOS A	0.6	15.8	0.58	0.45	0.58	32.9
Approach		113	0.0	0.118	4.9	LOS A	0.6	15.8	0.58	0.45	0.58	33.6
West: Issaquah Beaver Lake Rd												
5	L2	20	4.0	0.289	5.6	LOS A	1.6	41.6	0.35	0.21	0.35	34.1
2	T1	202	4.0	0.289	5.6	LOS A	1.6	41.6	0.35	0.21	0.35	34.1
12	R2	127	4.0	0.289	5.6	LOS A	1.6	41.6	0.35	0.21	0.35	33.3
Approach		349	4.0	0.289	5.6	LOS A	1.6	41.6	0.35	0.21	0.35	33.8
All Vehicles		1092	3.2	0.347	5.7	LOS A	2.1	53.3	0.42	0.28	0.42	33.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 39 [39 - 233rd Ave NE & NE 8th Street]

2035 AM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 233rd Ave (NB)												
3	L2	38	6.0	0.175	7.7	LOS A	0.9	24.6	0.55	0.62	0.55	25.0
8	T1	23	6.0	0.175	6.8	LOS A	0.9	24.6	0.55	0.62	0.55	29.3
18	R2	98	6.0	0.175	4.0	LOS A	0.9	24.6	0.55	0.62	0.55	24.4
Approach		159	6.0	0.175	5.3	LOS A	0.9	24.6	0.55	0.62	0.55	25.1
East: NE 8th St (WB)												
1	L2	174	1.0	0.573	6.2	LOS A	5.0	124.9	0.38	0.39	0.38	25.0
6	T1	488	1.0	0.573	2.0	LOS A	5.0	124.9	0.38	0.39	0.38	24.8
16	R2	66	1.0	0.573	5.0	LOS A	5.0	124.9	0.38	0.39	0.38	28.8
Approach		729	1.0	0.573	3.3	LOS A	5.0	124.9	0.38	0.39	0.38	25.2
North: 233rd Ave NE												
7	L2	78	0.0	0.364	13.4	LOS B	2.3	58.4	0.76	0.83	0.76	33.8
4	T1	140	0.0	0.364	9.0	LOS A	2.3	58.4	0.76	0.83	0.76	33.9
14	R2	73	0.0	0.364	8.7	LOS A	2.3	58.4	0.76	0.83	0.76	33.1
Approach		291	0.0	0.364	10.1	LOS B	2.3	58.4	0.76	0.83	0.76	33.7
West: NE 8th St (EB)												
5	L2	13	4.0	0.443	11.6	LOS B	2.8	73.5	0.63	0.67	0.63	33.1
2	T1	326	4.0	0.443	6.2	LOS A	2.8	73.5	0.63	0.67	0.63	31.8
12	R2	91	4.0	0.443	6.1	LOS A	2.8	73.5	0.63	0.67	0.63	31.1
Approach		429	4.0	0.443	6.3	LOS A	2.8	73.5	0.63	0.67	0.63	31.7
All Vehicles		1608	2.1	0.573	5.5	LOS A	5.0	124.9	0.53	0.57	0.53	28.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 41 [41 - 244th Ave NE & E Main Dr]

2035 AM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	9	1.0	0.138	8.5	LOS A	0.6	16.3	0.24	0.44	0.24	32.7
8	T1	134	1.0	0.138	4.1	LOS A	0.6	16.3	0.24	0.44	0.24	32.7
18	R2	30	1.0	0.138	4.0	LOS A	0.6	16.3	0.24	0.44	0.24	32.0
Approach		174	1.0	0.138	4.3	LOS A	0.6	16.3	0.24	0.44	0.24	32.6
East: E Main Dr (WB)												
1	L2	90	1.0	0.167	8.9	LOS A	0.8	20.1	0.34	0.59	0.34	31.9
6	T1	1	1.0	0.167	4.5	LOS A	0.8	20.1	0.34	0.59	0.34	31.9
16	R2	107	1.0	0.167	4.5	LOS A	0.8	20.1	0.34	0.59	0.34	31.2
Approach		198	1.0	0.167	6.5	LOS A	0.8	20.1	0.34	0.59	0.34	31.5
North: 244th Ave (SB)												
7	L2	49	3.0	0.306	8.7	LOS A	1.7	44.5	0.29	0.47	0.29	32.4
4	T1	311	3.0	0.306	4.2	LOS A	1.7	44.5	0.29	0.47	0.29	32.4
14	R2	16	3.0	0.306	4.2	LOS A	1.7	44.5	0.29	0.47	0.29	31.7
Approach		377	3.0	0.306	4.8	LOS A	1.7	44.5	0.29	0.47	0.29	32.4
West: E Main Dr (EB)												
5	L2	45	2.0	0.064	10.1	LOS B	0.3	7.8	0.50	0.66	0.50	31.1
2	T1	1	2.0	0.064	5.7	LOS A	0.3	7.8	0.50	0.66	0.50	31.1
12	R2	16	2.0	0.064	5.6	LOS A	0.3	7.8	0.50	0.66	0.50	30.4
Approach		62	2.0	0.064	8.8	LOS A	0.3	7.8	0.50	0.66	0.50	30.9
All Vehicles		810	2.0	0.306	5.4	LOS A	1.7	44.5	0.31	0.51	0.31	32.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 62 [62 - E Lk Sammamish Pk Way and SE 43rd Way]

2035 AM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: E Lk Sammamish Pk Way WB												
8x	T1	568	5.0	0.355	1.4	LOS A	2.9	75.0	0.12	0.19	0.12	30.2
18x	R2	537	5.0	0.337	1.9	LOS A	0.0	0.0	0.00	0.29	0.00	29.5
Approach		1105	5.0	0.355	1.6	LOS A	2.9	75.0	0.06	0.24	0.06	29.9
NorthEast: SE 43rd Way SB												
1x	L2	1149	1.0	0.545	11.7	LOS B	4.7	119.3	0.76	0.87	0.87	27.2
16x	R2	12	1.0	0.545	6.4	LOS A	4.7	119.3	0.76	0.84	0.84	26.4
Approach		1161	1.0	0.545	11.7	LOS B	4.7	119.3	0.76	0.87	0.87	27.2
NorthWest: E Lk Sammamish Pk Way EB												
7x	L2	14	1.0	0.660	13.8	LOS B	4.5	112.8	0.85	1.00	1.14	28.3
4x	T1	892	1.0	0.660	7.3	LOS A	4.9	122.8	0.86	1.00	1.13	28.2
Approach		907	1.0	0.660	7.4	LOS A	4.9	122.8	0.86	1.00	1.13	28.2
All Vehicles		3173	2.4	0.660	7.0	LOS A	4.9	122.8	0.55	0.69	0.66	28.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	26	100	173	1429	886	60
Future Volume (veh/h)	26	100	173	1429	886	60
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	1895	1895	1772	1772	1731	1731
Adj Flow Rate, veh/h	27	51	178	1473	913	62
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	97	86	215	1557	1149	78
Arrive On Green	0.05	0.05	0.13	0.88	0.72	0.72
Sat Flow, veh/h	1805	1606	1688	1772	1603	109
Grp Volume(v), veh/h	27	51	178	1473	0	975
Grp Sat Flow(s),veh/h/ln	1805	1606	1688	1772	0	1711
Q Serve(g_s), s	1.7	3.7	12.1	70.4	0.0	44.1
Cycle Q Clear(g_c), s	1.7	3.7	12.1	70.4	0.0	44.1
Prop In Lane	1.00	1.00	1.00			0.06
Lane Grp Cap(c), veh/h	97	86	215	1557	0	1227
V/C Ratio(X)	0.28	0.59	0.83	0.95	0.00	0.79
Avail Cap(c_a), veh/h	337	300	215	1597	0	1266
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.5	54.4	50.1	5.2	0.0	11.0
Incr Delay (d2), s/veh	0.6	2.4	21.4	12.8	0.0	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	0.1	10.5	19.3	0.0	22.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	54.1	56.8	71.4	18.0	0.0	15.8
LnGrp LOS	D	E	E	B	A	B
Approach Vol, veh/h	78			1651	975	
Approach Delay, s/veh	55.9			23.8	15.8	
Approach LOS	E			C	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		107.3		10.3	19.0	88.3
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		105.0		21.0	14.0	86.0
Max Q Clear Time (g_c+I1), s		72.4		5.7	14.1	46.1
Green Ext Time (p_c), s		29.9		0.1	0.0	20.2

Intersection Summary	
HCM 6th Ctrl Delay	21.8
HCM 6th LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	35	71	138	832	897	64
Future Volume (veh/h)	35	71	138	832	897	64
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	1967	1967	1723	1723	1736	1736
Adj Flow Rate, veh/h	37	75	145	876	944	67
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	1	1
Cap, veh/h	196	146	221	1346	1036	851
Arrive On Green	0.10	0.09	0.13	0.78	0.60	0.58
Sat Flow, veh/h	1874	1667	1641	1723	1736	1468
Grp Volume(v), veh/h	37	75	145	876	944	67
Grp Sat Flow(s),veh/h/ln	1874	1667	1641	1723	1736	1468
Q Serve(g_s), s	1.1	2.6	5.0	13.5	28.6	1.2
Cycle Q Clear(g_c), s	1.1	2.6	5.0	13.5	28.6	1.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	196	146	221	1346	1036	851
V/C Ratio(X)	0.19	0.51	0.66	0.65	0.91	0.08
Avail Cap(c_a), veh/h	850	728	221	2206	1902	1583
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.3	25.9	24.5	2.9	10.6	5.5
Incr Delay (d2), s/veh	0.2	1.0	5.6	0.2	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.8	1.8	3.8	1.8	12.4	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	24.5	27.0	30.1	3.1	12.0	5.5
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	112			1021	1011	
Approach Delay, s/veh	26.2			6.9	11.6	
Approach LOS	C			A	B	

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	49.5		11.0	38.5	10.0
Change Period (Y+Rc), s	5.0		5.0	5.0	5.8
Max Green Setting (Gmax), s	74.2		6.0	63.2	25.0
Max Q Clear Time (g_c+I1), s	15.5		7.0	30.6	4.6
Green Ext Time (p_c), s	2.4		0.0	2.9	0.2

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

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	0	128	256	125	67	0	184	0	147	0	0	1
Future Vol, veh/h	0	128	256	125	67	0	184	0	147	0	0	1
Conflicting Peds, #/hr	0	0	6	6	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	-	-	-	-	-	-	-	-	105	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	0	-	-	0	-
Peak Hour Factor	95	91	91	91	91	95	91	95	91	95	95	95
Heavy Vehicles, %	0	0	0	1	1	0	0	0	0	0	0	0
Mvmt Flow	0	141	281	137	74	0	202	0	162	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	74	0	0	428	0	0	637	636	288	711	776	74
Stage 1	-	-	-	-	-	-	288	288	-	348	348	-
Stage 2	-	-	-	-	-	-	349	348	-	363	428	-
Critical Hdwy	4.1	-	-	4.11	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1538	-	-	1137	-	-	393	398	756	351	331	993
Stage 1	-	-	-	-	-	-	724	677	-	672	638	-
Stage 2	-	-	-	-	-	-	671	638	-	660	588	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1538	-	-	1132	-	-	353	346	753	249	288	993
Mov Cap-2 Maneuver	-	-	-	-	-	-	353	346	-	249	288	-
Stage 1	-	-	-	-	-	-	720	674	-	672	558	-
Stage 2	-	-	-	-	-	-	586	558	-	518	585	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.6	20.5	8.6
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	353	753	1538	-	-	1132	-	-	993
HCM Lane V/C Ratio	0.573	0.215	-	-	-	0.121	-	-	0.001
HCM Control Delay (s)	28	11.1	0	-	-	8.6	0	-	8.6
HCM Lane LOS	D	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	3.4	0.8	0	-	-	0.4	-	-	0

Intersection	
Intersection Delay, s/veh	16.7
Intersection LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	134	216	203	214	261	76
Future Vol, veh/h	134	216	203	214	261	76
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	138	223	209	221	269	78
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	16.6	17.4	15.9
HCM LOS	C	C	C

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	38%	0%	100%	0%
Vol Thru, %	62%	49%	0%	0%
Vol Right, %	0%	51%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	350	417	261	76
LT Vol	134	0	261	0
Through Vol	216	203	0	0
RT Vol	0	214	0	76
Lane Flow Rate	361	430	269	78
Geometry Grp	2	2	7	7
Degree of Util (X)	0.58	0.637	0.531	0.128
Departure Headway (Hd)	5.785	5.334	7.103	5.881
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	621	675	506	607
Service Time	3.848	3.394	4.863	3.64
HCM Lane V/C Ratio	0.581	0.637	0.532	0.129
HCM Control Delay	16.6	17.4	17.7	9.5
HCM Lane LOS	C	C	C	A
HCM 95th-tile Q	3.7	4.6	3.1	0.4

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	27	1058	37	35	492
Future Vol, veh/h	8	27	1058	37	35	492
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	-	-	-	125	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	9	29	1138	40	38	529

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1763	1158	0	0	1178	0
Stage 1	1158	-	-	-	-	-
Stage 2	605	-	-	-	-	-
Critical Hdwy	7	6.5	-	-	4.11	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.209	-
Pot Cap-1 Maneuver	70	219	-	-	596	-
Stage 1	249	-	-	-	-	-
Stage 2	496	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	66	219	-	-	596	-
Mov Cap-2 Maneuver	214	-	-	-	-	-
Stage 1	249	-	-	-	-	-
Stage 2	464	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.9	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	218	596	-
HCM Lane V/C Ratio	-	-	0.173	0.063	-
HCM Control Delay (s)	-	-	24.9	11.4	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.6	0.2	-

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	67	108	3	7	119	154	3	6	2	144	2	100
Future Vol, veh/h	67	108	3	7	119	154	3	6	2	144	2	100
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	70	113	3	7	124	160	3	6	2	150	2	104
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	9.6	11.2	9.3	10.2
HCM LOS	A	B	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	27%	100%	0%	100%	0%	100%	0%
Vol Thru, %	55%	0%	97%	0%	44%	0%	2%
Vol Right, %	18%	0%	3%	0%	56%	0%	98%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	67	111	7	273	144	102
LT Vol	3	67	0	7	0	144	0
Through Vol	6	0	108	0	119	0	2
RT Vol	2	0	3	0	154	0	100
Lane Flow Rate	11	70	116	7	284	150	106
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.02	0.118	0.178	0.012	0.402	0.259	0.148
Departure Headway (Hd)	6.19	6.073	5.549	5.99	5.087	6.224	5.03
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	582	586	641	594	702	573	704
Service Time	4.19	3.857	3.333	3.763	2.86	4.015	2.82
HCM Lane V/C Ratio	0.019	0.119	0.181	0.012	0.405	0.262	0.151
HCM Control Delay	9.3	9.7	9.5	8.8	11.3	11.2	8.7
HCM Lane LOS	A	A	A	A	B	B	A
HCM 95th-tile Q	0.1	0.4	0.6	0	1.9	1	0.5

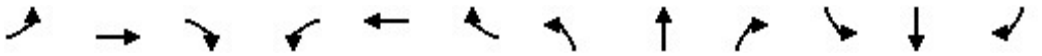
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	0	11	1	0	0	25	517	1	0	989	56
Future Vol, veh/h	34	0	11	1	0	0	25	517	1	0	989	56
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	250	-	-	-	-	0	110	-	-	110	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-4	-	-	0	-	-	0	-	-	1	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	36	0	12	1	0	0	27	550	1	0	1052	60

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1687	1687	1082	1693	-	551	1112	0	0	551	0	0
Stage 1	1082	1082	-	605	-	-	-	-	-	-	-	-
Stage 2	605	605	-	1088	-	-	-	-	-	-	-	-
Critical Hdwy	6.3	5.7	5.8	7.1	-	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	5.3	4.7	-	6.1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.3	4.7	-	6.1	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	-	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	109	138	301	74	0	538	628	-	-	1024	-	-
Stage 1	338	377	-	488	0	-	-	-	-	-	-	-
Stage 2	558	561	-	264	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	105	132	301	69	-	538	628	-	-	1024	-	-
Mov Cap-2 Maneuver	276	315	-	69	-	-	-	-	-	-	-	-
Stage 1	323	377	-	467	-	-	-	-	-	-	-	-
Stage 2	534	537	-	254	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.4	0	0.5	0
HCM LOS	C	A		

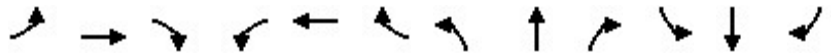
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	628	-	-	276	301	-	1024	-	-
HCM Lane V/C Ratio	0.042	-	-	0.131	0.039	-	-	-	-
HCM Control Delay (s)	11	-	-	20	17.4	0	0	-	-
HCM Lane LOS	B	-	-	C	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	401	8	11	358	20	10	1	4	21	0	48
Future Volume (veh/h)	60	401	8	11	358	20	10	1	4	21	0	48
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		0.99	1.00		0.97	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	1750	1750	1750	1750	1750	1750	1750	1750	1736	1736	1736
Adj Flow Rate, veh/h	67	451	9	12	402	22	11	1	4	24	0	54
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	1	1	1
Cap, veh/h	447	646	13	402	538	29	67	28	112	92	0	157
Arrive On Green	0.09	0.38	0.38	0.04	0.33	0.33	0.04	0.09	0.09	0.06	0.00	0.11
Sat Flow, veh/h	1667	1708	34	1667	1643	90	1667	298	1192	1654	0	1438
Grp Volume(v), veh/h	67	0	460	12	0	424	11	0	5	24	0	54
Grp Sat Flow(s),veh/h/ln	1667	0	1742	1667	0	1733	1667	0	1490	1654	0	1438
Q Serve(g_s), s	0.9	0.0	8.6	0.2	0.0	8.4	0.2	0.0	0.1	0.5	0.0	1.3
Cycle Q Clear(g_c), s	0.9	0.0	8.6	0.2	0.0	8.4	0.2	0.0	0.1	0.5	0.0	1.3
Prop In Lane	1.00		0.02	1.00		0.05	1.00		0.80	1.00		1.00
Lane Grp Cap(c), veh/h	447	0	659	402	0	567	67	0	141	92	0	157
V/C Ratio(X)	0.15	0.00	0.70	0.03	0.00	0.75	0.16	0.00	0.04	0.26	0.00	0.34
Avail Cap(c_a), veh/h	2053	0	2970	1012	0	1830	1124	0	812	1116	0	783
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	7.7	0.0	10.1	8.3	0.0	11.5	17.9	0.0	15.9	17.5	0.0	15.9
Incr Delay (d2), s/veh	0.1	0.0	0.5	0.0	0.0	0.7	1.6	0.0	0.0	2.1	0.0	0.5
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(95%),veh/ln	0.4	0.0	4.1	0.1	0.0	4.3	0.2	0.0	0.1	0.4	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.8	0.0	10.6	8.3	0.0	12.3	19.5	0.0	15.9	19.6	0.0	16.4
LnGrp LOS	A	A	B	A	A	B	B	A	B	B	A	B
Approach Vol, veh/h		527			436			16			78	
Approach Delay, s/veh		10.3			12.2			18.4			17.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	16.9	6.1	7.6	5.9	18.9	5.6	8.2
Change Period (Y+Rc), s	5.3	5.3	5.0	5.0	5.3	5.3	5.0	5.0
Max Green Setting (Gmax), s	39.7	39.7	25.0	20.0	14.7	64.7	25.0	20.0
Max Q Clear Time (g_c+I1), s	2.9	10.4	2.5	2.1	2.2	10.6	2.2	3.3
Green Ext Time (p_c), s	0.1	0.9	0.1	0.0	0.0	1.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	45	57	202	25	177	109	1111	290	194	1083	92
Future Volume (veh/h)	111	45	57	202	25	177	109	1111	290	194	1083	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		1.00	1.00		1.00	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	1715	1715	1715	1809	1809	1809	1809	1809	1809	1728	1728	1728
Adj Flow Rate, veh/h	116	47	59	210	26	0	114	1157	0	202	1128	96
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	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	396	140	336	331	26		232	1467		244	1376	117
Arrive On Green	0.27	0.27	0.23	0.25	0.25	0.00	0.13	0.43	0.00	0.15	0.45	0.41
Sat Flow, veh/h	1050	518	1431	824	102	1533	1723	3527	0	1646	3060	260
Grp Volume(v), veh/h	163	0	59	236	0	0	114	1157	0	202	605	619
Grp Sat Flow(s),veh/h/ln	1568	0	1431	925	0	1533	1723	1718	0	1646	1642	1678
Q Serve(g_s), s	0.0	0.0	1.8	9.4	0.0	0.0	3.4	16.1	0.0	6.6	17.8	17.9
Cycle Q Clear(g_c), s	4.6	0.0	1.8	14.0	0.0	0.0	3.4	16.1	0.0	6.6	17.8	17.9
Prop In Lane	0.71		1.00	0.89		1.00	1.00		0.00	1.00		0.16
Lane Grp Cap(c), veh/h	536	0	336	357	0		232	1467		244	738	755
V/C Ratio(X)	0.30	0.00	0.18	0.66	0.00		0.49	0.79		0.83	0.82	0.82
Avail Cap(c_a), veh/h	1298	0	1086	357	0		249	1863		244	890	910
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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.4	0.0	16.9	23.0	0.0	0.0	22.2	13.7	0.0	22.9	13.3	13.4
Incr Delay (d2), s/veh	0.3	0.0	0.2	4.5	0.0	0.0	0.6	1.4	0.0	19.2	4.3	4.3
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(95%),veh/ln	2.7	0.0	1.0	5.7	0.0	0.0	2.3	8.7	0.0	6.4	9.7	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.7	0.0	17.1	27.5	0.0	0.0	22.8	15.1	0.0	42.1	17.6	17.7
LnGrp LOS	B	A	B	C	A		C	B		D	B	B
Approach Vol, veh/h		222			236	A		1271	A		1426	
Approach Delay, s/veh		16.8			27.5			15.8			21.1	
Approach LOS		B			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.7	26.6		17.0	10.5	27.9		17.0
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.6	27.0		12.0	5.0	27.0		41.0
Max Q Clear Time (g_c+I1), s	8.6	18.1		16.0	5.4	19.9		6.6
Green Ext Time (p_c), s	0.0	2.5		0.0	0.0	2.0		0.9

Intersection Summary	
HCM 6th Ctrl Delay	19.1
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	51	28	636	79	61	872
Future Vol, veh/h	51	28	636	79	61	872
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	220	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	1	1	2	2	1	1
Mvmt Flow	53	29	656	81	63	899

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1723	699	0	0	738	0
Stage 1	698	-	-	-	-	-
Stage 2	1025	-	-	-	-	-
Critical Hdwy	6.61	6.31	-	-	4.11	-
Critical Hdwy Stg 1	5.61	-	-	-	-	-
Critical Hdwy Stg 2	5.61	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	90	433	-	-	873	-
Stage 1	477	-	-	-	-	-
Stage 2	328	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	83	432	-	-	872	-
Mov Cap-2 Maneuver	205	-	-	-	-	-
Stage 1	477	-	-	-	-	-
Stage 2	304	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	252	872	-
HCM Lane V/C Ratio	-	-	0.323	0.072	-
HCM Control Delay (s)	-	-	26	9.4	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	1.3	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	258	321	211	131	128	250	727	229	195	753	50
Future Volume (veh/h)	118	258	321	211	131	128	250	727	229	195	753	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		1.00	0.99		0.96	1.00		0.96	1.00		0.96
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	1750	1750	1750	1750	1736	1736	1736	1715	1715	1715
Adj Flow Rate, veh/h	123	269	0	220	136	133	260	757	239	203	784	52
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, %	0	0	0	0	0	0	1	1	1	1	1	1
Cap, veh/h	427	354		358	427	595	364	870	275	279	950	63
Arrive On Green	0.09	0.20	0.00	0.12	0.24	0.24	0.22	0.36	0.35	0.17	0.31	0.29
Sat Flow, veh/h	1667	1750	1483	1667	1750	1429	1654	2438	770	1633	3090	205
Grp Volume(v), veh/h	123	269	0	220	136	133	260	512	484	203	413	423
Grp Sat Flow(s),veh/h/ln	1667	1750	1483	1667	1750	1429	1654	1650	1558	1633	1629	1666
Q Serve(g_s), s	4.6	11.8	0.0	8.0	5.2	0.8	11.8	23.6	23.6	9.6	19.2	19.2
Cycle Q Clear(g_c), s	4.6	11.8	0.0	8.0	5.2	0.8	11.8	23.6	23.6	9.6	19.2	19.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.49	1.00		0.12
Lane Grp Cap(c), veh/h	427	354		358	427	595	364	588	556	279	501	512
V/C Ratio(X)	0.29	0.76		0.62	0.32	0.22	0.72	0.87	0.87	0.73	0.82	0.83
Avail Cap(c_a), veh/h	427	417		358	490	646	914	640	605	943	672	688
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	30.6	0.0	21.3	25.2	6.5	29.4	24.4	24.5	32.0	26.1	26.2
Incr Delay (d2), s/veh	0.1	5.3	0.0	2.3	0.2	0.1	1.0	10.9	11.5	1.4	4.6	4.6
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(95%),veh/ln	3.1	9.0	0.0	5.7	3.7	1.4	8.1	15.5	15.0	6.7	12.1	12.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.4	35.9	0.0	23.6	25.4	6.6	30.4	35.4	36.0	33.3	30.8	30.8
LnGrp LOS	C	D		C	C	A	C	D	D	C	C	C
Approach Vol, veh/h		392	A		489			1256			1039	
Approach Delay, s/veh		31.7			19.5			34.6			31.3	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	32.0	10.0	22.5	20.9	28.0	13.0	19.5
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	11.9	29.3	5.0	20.4	43.0	31.3	8.0	17.4
Max Q Clear Time (g_c+I1), s	11.6	25.6	6.6	7.2	13.8	21.2	10.0	13.8
Green Ext Time (p_c), s	0.4	1.1	0.0	0.5	0.6	1.6	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] 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)	9	1	17	87	5	76	20	1115	69	397	934	8
Future Volume (veh/h)	9	1	17	87	5	76	20	1115	69	397	934	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.96	1.00		0.99	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	1736	1736	1736	1736	1736	1723	1723	1723	1736	1736	1736
Adj Flow Rate, veh/h	9	1	18	90	5	78	21	1149	71	409	963	8
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	166	49	219	448	21	308	527	1412	87	437	1252	10
Arrive On Green	0.24	0.24	0.22	0.24	0.24	0.22	0.21	0.45	0.43	0.14	0.37	0.35
Sat Flow, veh/h	308	205	924	1314	89	1413	1641	3129	193	3208	3352	28
Grp Volume(v), veh/h	28	0	0	95	0	78	21	600	620	409	474	497
Grp Sat Flow(s),veh/h/ln	1437	0	0	1403	0	1413	1641	1637	1686	1604	1650	1731
Q Serve(g_s), s	0.0	0.0	0.0	2.0	0.0	2.3	0.0	16.3	16.4	6.5	13.0	13.0
Cycle Q Clear(g_c), s	0.7	0.0	0.0	2.7	0.0	2.3	0.0	16.3	16.4	6.5	13.0	13.0
Prop In Lane	0.32		0.64	0.95		1.00	1.00		0.11	1.00		0.02
Lane Grp Cap(c), veh/h	434	0	0	470	0	308	527	738	761	437	616	646
V/C Ratio(X)	0.06	0.00	0.00	0.20	0.00	0.25	0.04	0.81	0.81	0.94	0.77	0.77
Avail Cap(c_a), veh/h	890	0	0	924	0	770	527	1115	1149	437	1124	1179
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.5	0.0	0.0	15.9	0.0	16.6	13.9	12.2	12.3	22.0	14.1	14.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.2	0.0	1.6	1.6	27.2	0.8	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(95%),veh/ln	0.4	0.0	0.0	1.5	0.0	1.3	0.3	8.4	8.6	6.9	7.2	7.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.5	0.0	0.0	16.0	0.0	16.8	14.0	13.8	13.8	49.2	14.9	14.9
LnGrp LOS	B	A	A	B	A	B	B	B	B	D	B	B
Approach Vol, veh/h		28			173			1241			1380	
Approach Delay, s/veh		15.5			16.4			13.8			25.1	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	26.2		15.2	14.0	22.2		15.2
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	33.0		27.0	5.0	33.0		27.0
Max Q Clear Time (g_c+I1), s	8.5	18.4		4.7	2.0	15.0		2.7
Green Ext Time (p_c), s	0.0	2.8		0.4	0.0	2.1		0.0

Intersection Summary		
HCM 6th Ctrl Delay	19.5	
HCM 6th LOS	B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	287	13	414	66	16	63	352	996	50	54	878	308
Future Volume (veh/h)	287	13	414	66	16	63	352	996	50	54	878	308
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	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	2004	2004	2004	1709	1709	1709	1809	1809	1809	1750	1750	1750
Adj Flow Rate, veh/h	299	14	431	69	17	66	367	1038	0	56	915	321
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, %	0	0	0	3	3	3	1	1	1	0	0	0
Cap, veh/h	715	16	488	216	87	337	264	1174		232	822	287
Arrive On Green	0.10	0.30	0.34	0.04	0.29	0.29	0.10	0.34	0.00	0.07	0.34	0.33
Sat Flow, veh/h	1908	53	1638	1628	304	1179	1723	3436	1533	1667	2396	836
Grp Volume(v), veh/h	299	0	445	69	0	83	367	1038	0	56	633	603
Grp Sat Flow(s),veh/h/ln	1908	0	1691	1628	0	1482	1723	1718	1533	1667	1663	1570
Q Serve(g_s), s	7.0	0.0	18.1	2.2	0.0	3.1	7.0	20.8	0.0	0.0	25.0	25.0
Cycle Q Clear(g_c), s	7.0	0.0	18.1	2.2	0.0	3.1	7.0	20.8	0.0	0.0	25.0	25.0
Prop In Lane	1.00		0.97	1.00		0.80	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	715	0	504	216	0	424	264	1174		232	570	539
V/C Ratio(X)	0.42	0.00	0.88	0.32	0.00	0.20	1.39	0.88		0.24	1.11	1.12
Avail Cap(c_a), veh/h	715	0	604	235	0	529	264	1179		232	570	539
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	13.5	0.0	22.9	19.3	0.0	19.7	31.6	22.6	0.0	31.2	23.9	24.2
Incr Delay (d2), s/veh	0.4	0.0	11.4	0.8	0.0	0.2	196.5	8.2	0.0	0.2	71.6	75.6
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(95%),veh/ln	5.5	0.0	12.9	1.5	0.0	1.9	29.1	13.8	0.0	1.6	29.4	29.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.9	0.0	34.3	20.2	0.0	19.9	228.1	30.8	0.0	31.4	95.5	99.8
LnGrp LOS	B	A	C	C	A	B	F	C		C	F	F
Approach Vol, veh/h		744			152			1405	A		1292	
Approach Delay, s/veh		26.1			20.0			82.3			94.7	
Approach LOS		C			C			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	27.9	8.0	26.9	10.0	28.0	7.1	27.7
Change Period (Y+Rc), s	5.0	5.0	4.0	6.0	5.0	5.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	23.0	4.0	26.0	5.0	23.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	12.0	22.8	9.0	5.1	9.0	27.0	4.2	20.1
Green Ext Time (p_c), s	0.0	0.1	0.0	0.4	0.0	0.0	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	72.5
HCM 6th LOS	E

Notes

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

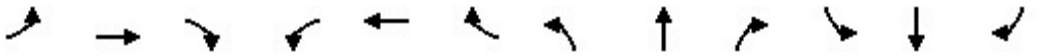
Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	5	7	62	3	62	6	93	164	72	204	4
Future Vol, veh/h	1	5	7	62	3	62	6	93	164	72	204	4
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	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	0	0	0
Mvmt Flow	1	6	8	71	3	71	7	107	189	83	234	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	656	713	237	626	621	202	239	0	0	296	0	0
Stage 1	403	403	-	216	216	-	-	-	-	-	-	-
Stage 2	253	310	-	410	405	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.11	6.51	6.21	4.11	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.509	4.009	3.309	2.209	-	-	2.2	-	-
Pot Cap-1 Maneuver	382	360	807	398	405	841	1334	-	-	1277	-	-
Stage 1	628	603	-	789	726	-	-	-	-	-	-	-
Stage 2	756	663	-	621	600	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	326	331	807	365	372	841	1334	-	-	1277	-	-
Mov Cap-2 Maneuver	326	331	-	365	372	-	-	-	-	-	-	-
Stage 1	624	558	-	784	722	-	-	-	-	-	-	-
Stage 2	685	659	-	563	555	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.7	15	0.2	2.1
HCM LOS	B	C		

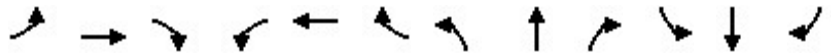
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1334	-	-	484	505	1277	-	-
HCM Lane V/C Ratio	0.005	-	-	0.031	0.289	0.065	-	-
HCM Control Delay (s)	7.7	0	-	12.7	15	8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	1.2	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	0	14	8	0	9	11	1581	2	9	1430	16
Future Volume (veh/h)	17	0	14	8	0	9	11	1581	2	9	1430	16
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		0.99	1.00		0.99	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	1709	1709	1709	1712	1712	1712	1736	1736	1736	1809	1809	1809
Adj Flow Rate, veh/h	18	0	14	8	0	9	11	1630	2	9	1474	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	8	8	8	1	1	1	1	1	1
Cap, veh/h	389	0	162	382	0	149	378	1927	2	287	1799	20
Arrive On Green	0.07	0.00	0.08	0.06	0.00	0.07	0.12	0.57	0.53	0.07	0.52	0.48
Sat Flow, veh/h	1628	0	1439	1630	0	1441	1654	3381	4	1723	3482	38
Grp Volume(v), veh/h	18	0	14	8	0	9	11	795	837	9	727	763
Grp Sat Flow(s),veh/h/ln	1628	0	1439	1630	0	1441	1654	1650	1736	1723	1718	1801
Q Serve(g_s), s	0.5	0.0	0.5	0.2	0.0	0.3	0.0	21.6	21.6	0.0	19.1	19.1
Cycle Q Clear(g_c), s	0.5	0.0	0.5	0.2	0.0	0.3	0.0	21.6	21.6	0.0	19.1	19.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		0.02
Lane Grp Cap(c), veh/h	389	0	162	382	0	149	378	940	989	287	888	931
V/C Ratio(X)	0.05	0.00	0.09	0.02	0.00	0.06	0.03	0.85	0.85	0.03	0.82	0.82
Avail Cap(c_a), veh/h	481	0	775	489	0	776	425	1348	1419	427	1404	1472
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	17.2	0.0	22.3	18.3	0.0	22.7	15.7	9.6	9.6	18.5	10.9	10.9
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.0	0.1	0.0	2.5	2.4	0.0	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	0.0	0.3	0.1	0.0	0.2	0.2	9.2	9.6	0.1	8.9	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.3	0.0	22.4	18.3	0.0	22.7	15.7	12.1	12.0	18.5	11.9	11.9
LnGrp LOS	B	A	C	B	A	C	B	B	B	B	B	B
Approach Vol, veh/h		32			17			1643			1499	
Approach Delay, s/veh		19.5			20.7			12.1			12.0	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	33.7	4.9	8.6	9.5	30.8	4.5	9.1
Change Period (Y+Rc), s	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	41.0	4.0	26.0	5.0	41.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.0	23.6	2.5	2.3	2.0	21.1	2.2	2.5
Green Ext Time (p_c), s	0.0	4.1	0.0	0.0	0.0	3.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	640	0	3	718	311	0	0	0	125	0	28
Future Volume (veh/h)	13	640	0	3	718	311	0	0	0	125	0	28
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1736	1736	1736				1750	1750	1750
Adj Flow Rate, veh/h	14	688	0	3	772	334				134	0	30
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	1	1	1				0	0	0
Cap, veh/h	144	1049	0	133	1085	921				180	0	40
Arrive On Green	0.63	0.63	0.00	0.53	0.63	0.63				0.23	0.00	0.17
Sat Flow, veh/h	14	1676	0	1	1733	1471				1332	0	298
Grp Volume(v), veh/h	702	0	0	775	0	334				164	0	0
Grp Sat Flow(s),veh/h/ln	1690	0	0	1735	0	1471				1630	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	3.0				2.6	0.0	0.0
Cycle Q Clear(g_c), s	7.0	0.0	0.0	9.5	0.0	3.0				2.6	0.0	0.0
Prop In Lane	0.02		0.00	0.00		1.00				0.82		0.18
Lane Grp Cap(c), veh/h	1193	0	0	1060	0	921				220	0	0
V/C Ratio(X)	0.59	0.00	0.00	0.73	0.00	0.36				0.74	0.00	0.00
Avail Cap(c_a), veh/h	3030	0	0	2990	0	2566				957	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.2	0.0	0.0	3.7	0.0	2.5				10.2	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.1				4.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.0	1.2	0.0	0.0				1.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.4	0.0	0.0	4.1	0.0	2.6				15.1	0.0	0.0
LnGrp LOS	A	A	A	A	A	A				B	A	A
Approach Vol, veh/h		702			1109						164	
Approach Delay, s/veh		3.4			3.6						15.1	
Approach LOS		A			A						B	

Timer - Assigned Phs		2		4		6
Phs Duration (G+Y+Rc), s		19.6		7.7		19.6
Change Period (Y+Rc), s		5.0		4.0		5.0
Max Green Setting (Gmax), s		45.0		16.0		45.0
Max Q Clear Time (g_c+I1), s		9.0		4.6		11.5
Green Ext Time (p_c), s		1.8		0.6		3.0

Intersection Summary		
HCM 6th Ctrl Delay		4.5
HCM 6th LOS		A

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	6	611	34	9	606
Future Vol, veh/h	20	6	611	34	9	606
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, %	-6	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	1	1	1	1
Mvmt Flow	22	6	657	37	10	652

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1348	676	0	0	694	0
Stage 1	676	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Critical Hdwy	5.22	5.62	-	-	4.11	-
Critical Hdwy Stg 1	4.22	-	-	-	-	-
Critical Hdwy Stg 2	4.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	261	507	-	-	906	-
Stage 1	633	-	-	-	-	-
Stage 2	635	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	257	507	-	-	906	-
Mov Cap-2 Maneuver	257	-	-	-	-	-
Stage 1	633	-	-	-	-	-
Stage 2	624	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.7	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	290	906	-
HCM Lane V/C Ratio	-	-	0.096	0.011	-
HCM Control Delay (s)	-	-	18.7	9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Intersection Delay, s/veh	12.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	30	16	44	161	59	76	166	69	142	119	7
Future Vol, veh/h	7	30	16	44	161	59	76	166	69	142	119	7
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	8	35	19	51	187	69	88	193	80	165	138	8
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	10.3	13.6	12.9	11.8
HCM LOS	B	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	71%	0%	65%	0%	73%	0%	94%
Vol Right, %	0%	29%	0%	35%	0%	27%	0%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	76	235	7	46	44	220	142	126
LT Vol	76	0	7	0	44	0	142	0
Through Vol	0	166	0	30	0	161	0	119
RT Vol	0	69	0	16	0	59	0	7
Lane Flow Rate	88	273	8	53	51	256	165	147
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.164	0.453	0.017	0.1	0.1	0.449	0.309	0.252
Departure Headway (Hd)	6.688	5.972	7.517	6.757	7.013	6.314	6.742	6.195
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	536	601	474	527	510	568	532	577
Service Time	4.443	3.727	5.294	4.533	4.767	4.069	4.5	3.953
HCM Lane V/C Ratio	0.164	0.454	0.017	0.101	0.1	0.451	0.31	0.255
HCM Control Delay	10.8	13.6	10.4	10.3	10.6	14.2	12.5	11
HCM Lane LOS	B	B	B	B	B	B	B	B
HCM 95th-tile Q	0.6	2.3	0.1	0.3	0.3	2.3	1.3	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	26	73	565	34	237	582
Future Volume (veh/h)	26	73	565	34	237	582
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	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	1723	1723	1736	1736	1736	1736
Adj Flow Rate, veh/h	28	78	608	37	255	626
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	1	1	1	1
Cap, veh/h	167	148	706	43	338	1262
Arrive On Green	0.10	0.10	0.44	0.44	0.20	0.73
Sat Flow, veh/h	1641	1460	1617	98	1654	1736
Grp Volume(v), veh/h	28	78	0	645	255	626
Grp Sat Flow(s),veh/h/ln	1641	1460	0	1716	1654	1736
Q Serve(g_s), s	0.7	2.4	0.0	15.8	6.8	7.2
Cycle Q Clear(g_c), s	0.7	2.4	0.0	15.8	6.8	7.2
Prop In Lane	1.00	1.00		0.06	1.00	
Lane Grp Cap(c), veh/h	167	148	0	749	338	1262
V/C Ratio(X)	0.17	0.53	0.00	0.86	0.76	0.50
Avail Cap(c_a), veh/h	915	814	0	1693	390	1714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	19.9	0.0	11.8	17.4	2.7
Incr Delay (d2), s/veh	0.2	1.1	0.0	1.2	5.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	1.4	0.0	8.1	4.9	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.3	20.9	0.0	13.0	23.1	2.8
LnGrp LOS	B	C	A	B	C	A
Approach Vol, veh/h	106		645			881
Approach Delay, s/veh	20.5		13.0			8.7
Approach LOS	C		B			A

Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	37.9			13.5	24.4	8.7
Change Period (Y+Rc), s	5.0			5.0	5.0	5.0
Max Green Setting (Gmax), s	45.0			10.0	45.0	25.0
Max Q Clear Time (g_c+I1), s	9.2			8.8	17.8	4.4
Green Ext Time (p_c), s	1.5			0.1	1.5	0.2

Intersection Summary	
HCM 6th Ctrl Delay	11.2
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	696	578	92	280	441	201
Future Volume (veh/h)	696	578	92	280	441	201
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	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	1715	1715	1954	1954	1650	1650
Adj Flow Rate, veh/h	733	608	97	295	464	212
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1092	998	181	1055	565	502
Arrive On Green	0.34	0.34	0.10	0.54	0.36	0.36
Sat Flow, veh/h	3344	1420	1861	1954	1571	1398
Grp Volume(v), veh/h	733	608	97	295	464	212
Grp Sat Flow(s),veh/h/ln	1629	1420	1861	1954	1571	1398
Q Serve(g_s), s	13.4	15.9	3.5	5.7	18.7	8.0
Cycle Q Clear(g_c), s	13.4	15.9	3.5	5.7	18.7	8.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1092	998	181	1055	565	502
V/C Ratio(X)	0.67	0.61	0.54	0.28	0.82	0.42
Avail Cap(c_a), veh/h	1217	1053	428	1390	756	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	5.7	29.9	8.7	20.3	16.8
Incr Delay (d2), s/veh	1.3	0.9	2.5	0.1	5.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.4	22.1	2.9	3.7	11.3	11.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.1	6.6	32.4	8.8	25.7	17.4
LnGrp LOS	C	A	C	A	C	B
Approach Vol, veh/h	1341			392	676	
Approach Delay, s/veh	14.5			14.6	23.1	
Approach LOS	B			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		41.1		28.5	14.3	26.8
Change Period (Y+Rc), s		5.5		5.5	9.5	5.5
Max Green Setting (Gmax), s		47.5		31.5	14.0	24.0
Max Q Clear Time (g_c+I1), s		7.7		20.7	5.5	17.9
Green Ext Time (p_c), s		1.2		2.3	0.2	3.4

Intersection Summary		
HCM 6th Ctrl Delay	17.0	
HCM 6th LOS	B	

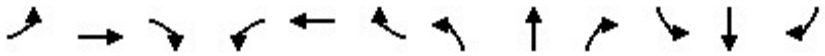
Notes

User approved changes to right turn type.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	97	47	93	499	999	289
Future Volume (veh/h)	97	47	93	499	999	289
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	1715	1715	1940	1940	1541	1541
Adj Flow Rate, veh/h	101	49	97	520	1041	283
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	2	2	1	1
Cap, veh/h	171	152	145	1649	1104	1101
Arrive On Green	0.10	0.10	0.08	0.85	0.72	0.72
Sat Flow, veh/h	1633	1453	1847	1940	1541	1306
Grp Volume(v), veh/h	101	49	97	520	1041	283
Grp Sat Flow(s),veh/h/ln	1633	1453	1847	1940	1541	1306
Q Serve(g_s), s	5.3	2.8	4.6	4.9	52.8	3.9
Cycle Q Clear(g_c), s	5.3	2.8	4.6	4.9	52.8	3.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	171	152	145	1649	1104	1101
V/C Ratio(X)	0.59	0.32	0.67	0.32	0.94	0.26
Avail Cap(c_a), veh/h	457	406	145	1975	1362	1320
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	37.1	40.1	1.4	11.1	1.4
Incr Delay (d2), s/veh	1.2	0.4	9.4	0.1	11.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.9	1.8	4.2	0.3	21.0	2.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	39.4	37.5	49.4	1.4	22.4	1.5
LnGrp LOS	D	D	D	A	C	A
Approach Vol, veh/h	150			617	1324	
Approach Delay, s/veh	38.8			9.0	18.0	
Approach LOS	D			A	B	

Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	77.0			10.0	67.0	12.4
Change Period (Y+Rc), s	5.0			5.0	7.0	5.0
Max Green Setting (Gmax), s	87.0			5.0	75.0	23.0
Max Q Clear Time (g_c+I1), s	6.9			6.6	54.8	7.3
Green Ext Time (p_c), s	1.5			0.0	5.2	0.3

Intersection Summary		
HCM 6th Ctrl Delay		16.8
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	0	168	15	1	18	106	1508	2	5	1373	84
Future Volume (veh/h)	72	0	168	15	1	18	106	1508	2	5	1373	84
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		0.99	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	1736	1736	1736	1709	1709	1709	1736	1736	1736	1845	1845	1845
Adj Flow Rate, veh/h	74	0	173	15	1	19	109	1555	2	5	1415	87
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	454	0	213	173	8	157	325	1952	3	181	1647	101
Arrive On Green	0.09	0.00	0.19	0.01	0.11	0.11	0.11	0.58	0.53	0.01	0.49	0.46
Sat Flow, veh/h	1654	0	1446	1628	73	1380	1654	3381	4	1757	3348	205
Grp Volume(v), veh/h	74	0	173	15	0	20	109	759	798	5	738	764
Grp Sat Flow(s),veh/h/ln	1654	0	1446	1628	0	1452	1654	1650	1735	1757	1753	1800
Q Serve(g_s), s	2.2	0.0	7.5	0.5	0.0	0.8	1.7	23.4	23.4	0.1	24.0	24.4
Cycle Q Clear(g_c), s	2.2	0.0	7.5	0.5	0.0	0.8	1.7	23.4	23.4	0.1	24.0	24.4
Prop In Lane	1.00		1.00	1.00		0.95	1.00		0.00	1.00		0.11
Lane Grp Cap(c), veh/h	454	0	213	173	0	165	325	953	1002	181	862	886
V/C Ratio(X)	0.16	0.00	0.81	0.09	0.00	0.12	0.33	0.80	0.80	0.03	0.86	0.86
Avail Cap(c_a), veh/h	477	0	532	250	0	534	430	953	1002	280	904	928
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	18.1	0.0	25.6	25.1	0.0	25.9	12.3	10.7	10.7	12.3	14.5	14.7
Incr Delay (d2), s/veh	0.2	0.0	2.9	0.2	0.0	0.1	0.6	4.8	4.6	0.1	7.9	8.1
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(95%),veh/ln	1.4	0.0	4.4	0.4	0.0	0.5	1.2	11.7	12.2	0.1	14.4	15.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.2	0.0	28.4	25.3	0.0	26.0	12.9	15.5	15.3	12.4	22.4	22.8
LnGrp LOS	B	A	C	C	A	C	B	B	B	B	C	C
Approach Vol, veh/h		247			35			1666			1507	
Approach Delay, s/veh		25.4			25.7			15.3			22.6	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.3	40.5	7.1	13.0	9.9	35.0	4.9	15.2
Change Period (Y+Rc), s	4.0	6.0	4.0	5.6	5.6	6.0	4.0	5.6
Max Green Setting (Gmax), s	4.6	33.5	4.0	23.9	8.4	30.5	4.0	23.9
Max Q Clear Time (g_c+I1), s	2.1	25.4	4.2	2.8	3.7	26.4	2.5	9.5
Green Ext Time (p_c), s	0.0	4.5	0.0	0.0	0.1	2.6	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

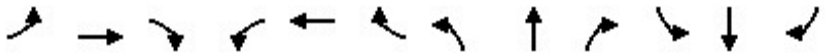
Notes

User approved ignoring U-Turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	7	27	76	13	238	14	1359	192	293	1255	23
Future Volume (veh/h)	19	7	27	76	13	238	14	1359	192	293	1255	23
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		0.98	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	1750	1750	1750	1750	1736	1736	1736	1736	1736	1736
Adj Flow Rate, veh/h	20	7	28	79	14	248	15	1416	200	305	1307	24
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, %	0	0	0	0	0	0	1	1	1	1	1	1
Cap, veh/h	82	29	96	282	50	292	423	1524	964	362	1418	26
Arrive On Green	0.07	0.07	0.07	0.20	0.20	0.20	0.21	0.46	0.46	0.18	0.43	0.42
Sat Flow, veh/h	1250	438	1469	1426	253	1479	1654	3299	1438	1654	3312	61
Grp Volume(v), veh/h	27	0	28	93	0	248	15	1416	200	305	651	680
Grp Sat Flow(s),veh/h/ln	1688	0	1469	1679	0	1479	1654	1650	1438	1654	1650	1724
Q Serve(g_s), s	1.9	0.0	2.2	5.8	0.0	19.9	0.0	49.7	6.6	16.6	45.7	45.8
Cycle Q Clear(g_c), s	1.9	0.0	2.2	5.8	0.0	19.9	0.0	49.7	6.6	16.6	45.7	45.8
Prop In Lane	0.74		1.00	0.85		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	110	0	96	332	0	292	423	1524	964	362	706	738
V/C Ratio(X)	0.25	0.00	0.29	0.28	0.00	0.85	0.04	0.93	0.21	0.84	0.92	0.92
Avail Cap(c_a), veh/h	412	0	359	346	0	305	423	1577	986	392	855	894
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	54.5	0.0	54.7	41.8	0.0	47.5	36.0	31.1	8.0	46.5	33.2	33.2
Incr Delay (d2), s/veh	0.4	0.0	0.6	0.2	0.0	17.9	0.0	9.6	0.0	13.3	12.3	12.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	0.0	1.5	4.4	0.0	13.7	0.6	27.8	6.2	15.2	26.8	27.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.0	0.0	55.3	42.0	0.0	65.4	36.0	40.8	8.0	59.8	45.5	45.2
LnGrp LOS	D	A	E	D	A	E	D	D	A	E	D	D
Approach Vol, veh/h		55			341			1631			1636	
Approach Delay, s/veh		55.1			59.0			36.7			48.0	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	34.8	59.8		27.3	28.9	55.6		11.0
Change Period (Y+Rc), s	6.0	6.0		5.3	6.0	5.0		6.0
Max Green Setting (Gmax), s	21.8	55.7		23.0	16.0	61.7		27.0
Max Q Clear Time (g_c+I1), s	18.6	51.7		21.9	2.0	47.8		4.2
Green Ext Time (p_c), s	0.2	2.1		0.1	0.0	2.8		0.1

Intersection Summary		
HCM 6th Ctrl Delay		44.1
HCM 6th LOS		D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	197	32	115	161	597	27	856	224	647	546	40
Future Volume (veh/h)	69	197	32	115	161	597	27	856	224	647	546	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		0.99	1.00		0.97	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	1736	1736	1736	1809	1809	1809	1736	1736	1736	1736	1736	1736
Adj Flow Rate, veh/h	72	205	33	120	508	395	28	892	233	674	569	42
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	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	90	353	57	184	490	447	43	1043	451	630	804	632
Arrive On Green	0.05	0.24	0.24	0.11	0.27	0.29	0.03	0.32	0.32	0.20	0.46	0.44
Sat Flow, veh/h	1654	1455	234	1723	1809	1517	1654	3299	1427	3208	1736	1450
Grp Volume(v), veh/h	72	0	238	120	508	395	28	892	233	674	569	42
Grp Sat Flow(s),veh/h/ln	1654	0	1690	1723	1809	1517	1654	1650	1427	1604	1736	1450
Q Serve(g_s), s	4.7	0.0	13.7	7.4	29.8	27.3	1.8	27.9	14.7	21.6	28.8	1.9
Cycle Q Clear(g_c), s	4.7	0.0	13.7	7.4	29.8	27.3	1.8	27.9	14.7	21.6	28.8	1.9
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	90	0	410	184	490	447	43	1043	451	630	804	632
V/C Ratio(X)	0.80	0.00	0.58	0.65	1.04	0.88	0.65	0.86	0.52	1.07	0.71	0.07
Avail Cap(c_a), veh/h	185	0	492	199	490	447	75	1155	499	630	829	653
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	0.0	36.7	47.2	40.1	37.0	53.1	35.2	30.7	44.2	23.6	18.0
Incr Delay (d2), s/veh	5.9	0.0	0.5	4.8	50.5	18.0	5.9	5.5	0.3	56.0	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	0.0	9.5	6.1	27.6	17.8	1.5	17.3	8.7	20.0	17.4	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	57.3	0.0	37.2	52.0	90.6	55.0	59.0	40.7	31.1	100.2	25.9	18.1
LnGrp LOS	E	A	D	D	F	D	E	D	C	F	C	B
Approach Vol, veh/h		310			1023			1153			1285	
Approach Delay, s/veh		41.9			72.3			39.2			64.6	
Approach LOS		D			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	37.8	11.7	35.5	8.9	53.9	14.8	32.4
Change Period (Y+Rc), s	6.0	6.0	5.7	5.7	6.0	6.0	5.7	5.7
Max Green Setting (Gmax), s	19.0	35.5	12.3	29.8	5.0	49.5	10.1	32.0
Max Q Clear Time (g_c+I1), s	23.6	29.9	6.7	31.8	3.8	30.8	9.4	15.7
Green Ext Time (p_c), s	0.0	1.9	0.0	0.0	0.0	1.3	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	57.1
HCM 6th LOS	E

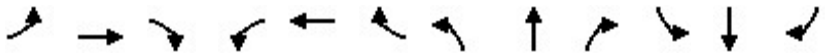
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	31	27	110	23	68	40	1001	155	146	826	15
Future Volume (veh/h)	21	31	27	110	23	68	40	1001	155	146	826	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	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	1750	1750	1750	1723	1723	1723	1736	1736	1736	1809	1809	1809
Adj Flow Rate, veh/h	23	34	29	120	25	74	43	1088	168	159	898	16
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	0	2	2	2	1	1	1	1	1	1
Cap, veh/h	81	103	70	254	56	166	435	1184	981	231	1022	18
Arrive On Green	0.15	0.15	0.14	0.15	0.15	0.14	0.19	0.68	0.68	0.08	0.58	0.56
Sat Flow, veh/h	239	697	476	1329	380	1125	1654	1736	1439	1723	1771	32
Grp Volume(v), veh/h	86	0	0	120	0	99	43	1088	168	159	0	914
Grp Sat Flow(s),veh/h/ln	1413	0	0	1329	0	1505	1654	1736	1439	1723	0	1803
Q Serve(g_s), s	0.2	0.0	0.0	3.4	0.0	6.0	0.0	53.1	4.2	3.4	0.0	43.3
Cycle Q Clear(g_c), s	6.2	0.0	0.0	9.6	0.0	6.0	0.0	53.1	4.2	3.4	0.0	43.3
Prop In Lane	0.27		0.34	1.00		0.75	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	254	0	0	254	0	222	435	1184	981	231	0	1040
V/C Ratio(X)	0.34	0.00	0.00	0.47	0.00	0.45	0.10	0.92	0.17	0.69	0.00	0.88
Avail Cap(c_a), veh/h	381	0	0	366	0	348	435	1570	1301	231	0	1630
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	38.4	0.0	0.0	40.5	0.0	39.1	28.0	13.5	5.7	42.4	0.0	18.1
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.5	0.0	0.5	0.0	7.4	0.1	7.0	0.0	4.5
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(95%),veh/ln	3.5	0.0	0.0	5.1	0.0	4.1	1.4	26.2	2.0	7.4	0.0	24.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.2	0.0	0.0	41.0	0.0	39.6	28.0	20.9	5.8	49.4	0.0	22.6
LnGrp LOS	D	A	A	D	A	D	C	C	A	D	A	C
Approach Vol, veh/h		86			219			1299			1073	
Approach Delay, s/veh		39.2			40.4			19.2			26.6	
Approach LOS		D			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.0	70.9		17.7	21.4	60.4		17.7
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.0	87.0		21.0	5.0	87.0		21.0
Max Q Clear Time (g_c+I1), s	5.4	55.1		11.6	2.0	45.3		8.2
Green Ext Time (p_c), s	0.0	9.8		0.4	0.0	9.1		0.2

Intersection Summary		
HCM 6th Ctrl Delay	24.5	
HCM 6th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	0	95	0	1	0	203	844	0	0	576	175
Future Volume (veh/h)	229	0	95	0	1	0	203	844	0	0	576	175
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1750	1750	1750	1967	1967	1967	1750	1750	1750
Adj Flow Rate, veh/h	241	0	49	0	1	0	214	888	0	0	606	184
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	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	278	0	227	0	135	0	277	1382	0	2	674	205
Arrive On Green	0.05	0.00	0.17	0.00	0.08	0.00	0.15	0.70	0.00	0.00	0.52	0.52
Sat Flow, veh/h	1584	0	1409	0	1750	0	1874	1967	0	1667	1288	391
Grp Volume(v), veh/h	241	0	49	0	1	0	214	888	0	0	0	790
Grp Sat Flow(s),veh/h/ln	1584	0	1409	0	1750	0	1874	1967	0	1667	0	1680
Q Serve(g_s), s	5.0	0.0	2.9	0.0	0.1	0.0	10.5	23.3	0.0	0.0	0.0	40.3
Cycle Q Clear(g_c), s	5.0	0.0	2.9	0.0	0.1	0.0	10.5	23.3	0.0	0.0	0.0	40.3
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.00	1.00		0.23
Lane Grp Cap(c), veh/h	278	0	227	0	135	0	277	1382	0	2	0	879
V/C Ratio(X)	0.87	0.00	0.22	0.00	0.01	0.00	0.77	0.64	0.00	0.00	0.00	0.90
Avail Cap(c_a), veh/h	278	0	370	0	477	0	413	1651	0	87	0	1216
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	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	41.2	0.0	34.3	0.0	40.6	0.0	39.1	7.7	0.0	0.0	0.0	20.4
Incr Delay (d2), s/veh	24.1	0.0	0.2	0.0	0.0	0.0	6.9	0.8	0.0	0.0	0.0	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.1	0.0	1.7	0.0	0.0	0.0	9.0	12.7	0.0	0.0	0.0	22.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	65.3	0.0	34.5	0.0	40.7	0.0	46.0	8.5	0.0	0.0	0.0	28.4
LnGrp LOS	E	A	C	A	D	A	D	A	A	A	A	C
Approach Vol, veh/h		290			1			1102			790	
Approach Delay, s/veh		60.1			40.7			15.8			28.4	
Approach LOS		E			D			B			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	73.0		22.3	17.1	55.9	8.0	14.3
Change Period (Y+Rc), s	7.0	7.0		7.0	4.0	* 7	4.0	* 7
Max Green Setting (Gmax), s	5.0	79.0		25.0	20.0	* 68	4.0	* 26
Max Q Clear Time (g_c+I1), s	10.0	25.3		4.9	12.5	42.3	7.0	2.1
Green Ext Time (p_c), s	0.0	8.9		0.1	0.7	6.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	26.3
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	1.6

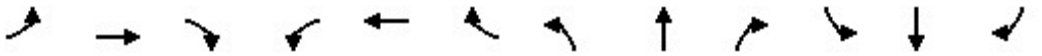
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	73	20	757	111	49	888
Future Vol, veh/h	73	20	757	111	49	888
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	75	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	2	2	1	1
Mvmt Flow	76	21	789	116	51	925

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1875	847	0	0	905	0
Stage 1	847	-	-	-	-	-
Stage 2	1028	-	-	-	-	-
Critical Hdwy	6.6	6.3	-	-	4.11	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.209	-
Pot Cap-1 Maneuver	~ 72	356	-	-	756	-
Stage 1	404	-	-	-	-	-
Stage 2	329	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 67	356	-	-	756	-
Mov Cap-2 Maneuver	239	-	-	-	-	-
Stage 1	404	-	-	-	-	-
Stage 2	307	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27.2	0	0.5
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	257	756	-
HCM Lane V/C Ratio	-	-	0.377	0.068	-
HCM Control Delay (s)	-	-	27.2	10.1	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	1.7	0.2	-

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	5	36	80	6	41	38	498	112	151	787	6
Future Volume (veh/h)	18	5	36	80	6	41	38	498	112	151	787	6
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	0.99		0.99	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	1750	1750	1750	1750	1750	1750	1723	1723	1723	1736	1736	1736
Adj Flow Rate, veh/h	19	5	38	84	6	43	40	524	118	159	828	6
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	0	0	0	0	0	2	2	2	1	1	1
Cap, veh/h	162	35	147	274	11	74	336	638	144	506	961	7
Arrive On Green	0.15	0.15	0.13	0.15	0.15	0.13	0.09	0.47	0.44	0.18	0.56	0.52
Sat Flow, veh/h	377	228	958	932	71	479	1641	1355	305	1654	1722	12
Grp Volume(v), veh/h	62	0	0	133	0	0	40	0	642	159	0	834
Grp Sat Flow(s),veh/h/ln	1563	0	0	1482	0	0	1641	0	1660	1654	0	1734
Q Serve(g_s), s	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	15.1	0.0	0.0	18.4
Cycle Q Clear(g_c), s	1.6	0.0	0.0	3.6	0.0	0.0	0.0	0.0	15.1	0.0	0.0	18.4
Prop In Lane	0.31		0.61	0.63		0.32	1.00		0.18	1.00		0.01
Lane Grp Cap(c), veh/h	345	0	0	358	0	0	336	0	782	506	0	968
V/C Ratio(X)	0.18	0.00	0.00	0.37	0.00	0.00	0.12	0.00	0.82	0.31	0.00	0.86
Avail Cap(c_a), veh/h	1157	0	0	1150	0	0	1358	0	2102	1392	0	2196
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.1	0.0	0.0	17.7	0.0	0.0	17.8	0.0	10.4	14.7	0.0	8.5
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.8	0.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	0.0	2.0	0.0	0.0	0.6	0.0	6.6	2.0	0.0	6.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.2	0.0	0.0	18.0	0.0	0.0	17.9	0.0	11.2	14.9	0.0	9.4
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		62			133			682			993	
Approach Delay, s/veh		17.2			18.0			11.6			10.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.9	24.2		9.9	7.0	28.1		9.9				
Change Period (Y+Rc), s	5.0	5.6		5.0	5.0	5.6		5.0				
Max Green Setting (Gmax), s	30.0	54.4		30.0	30.0	54.4		30.0				
Max Q Clear Time (g_c+I1), s	2.0	17.1		5.6	2.0	20.4		3.6				
Green Ext Time (p_c), s	0.3	1.5		0.3	0.1	2.1		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		11.5	
HCM 6th LOS		B	

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	33	23	799	662	26
Future Volume (veh/h)	21	33	23	799	662	26
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	1695	1695	1736	1736	1736	1736
Adj Flow Rate, veh/h	23	35	25	859	712	28
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	1	1	1	1
Cap, veh/h	213	189	399	1142	876	34
Arrive On Green	0.13	0.13	0.05	0.66	0.53	0.53
Sat Flow, veh/h	1615	1437	1654	1736	1659	65
Grp Volume(v), veh/h	23	35	25	859	0	740
Grp Sat Flow(s),veh/h/ln	1615	1437	1654	1736	0	1725
Q Serve(g_s), s	0.5	0.8	0.2	12.7	0.0	13.5
Cycle Q Clear(g_c), s	0.5	0.8	0.2	12.7	0.0	13.5
Prop In Lane	1.00	1.00	1.00			0.04
Lane Grp Cap(c), veh/h	213	189	399	1142	0	910
V/C Ratio(X)	0.11	0.18	0.06	0.75	0.00	0.81
Avail Cap(c_a), veh/h	765	681	533	2241	0	1862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.5	14.7	5.9	4.4	0.0	7.4
Incr Delay (d2), s/veh	0.2	0.5	0.1	1.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	0.4	0.1	2.1	0.0	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	15.1	6.0	5.4	0.0	9.2
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	58			884	740	
Approach Delay, s/veh	15.0			5.4	9.2	
Approach LOS	B			A	A	

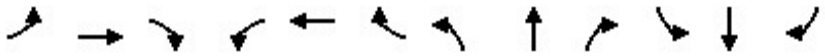
Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	9.0	4.9	24.0		29.0
Change Period (Y+Rc), s	5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	4.0	40.0		48.0
Max Q Clear Time (g_c+I1), s	2.8	2.2	15.5		14.7
Green Ext Time (p_c), s	0.1	0.0	3.6		4.7

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	2	44	101	2	19	71	876	73	39	973	47
Future Volume (veh/h)	26	2	44	101	2	19	71	876	73	39	973	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.99		0.97	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	1750	1750	1750	1750	1723	1723	1723	1736	1736	1736
Adj Flow Rate, veh/h	27	2	46	105	2	20	74	912	76	41	1014	49
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Cap, veh/h	143	32	119	347	5	232	328	1275	106	433	1429	69
Arrive On Green	0.14	0.14	0.14	0.16	0.14	0.16	0.06	0.42	0.42	0.11	0.45	0.43
Sat Flow, veh/h	303	228	842	1432	36	1436	1641	3050	254	1654	3198	155
Grp Volume(v), veh/h	75	0	0	107	0	20	74	489	499	41	523	540
Grp Sat Flow(s),veh/h/ln	1372	0	0	1468	0	1436	1641	1637	1667	1654	1650	1703
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.6	0.0	12.1	12.1	0.0	12.6	12.6
Cycle Q Clear(g_c), s	2.9	0.0	0.0	2.9	0.0	0.6	0.0	12.1	12.1	0.0	12.6	12.6
Prop In Lane	0.36		0.61	0.98		1.00	1.00		0.15	1.00		0.09
Lane Grp Cap(c), veh/h	293	0	0	383	0	232	328	684	697	433	737	761
V/C Ratio(X)	0.26	0.00	0.00	0.28	0.00	0.09	0.23	0.72	0.72	0.09	0.71	0.71
Avail Cap(c_a), veh/h	883	0	0	944	0	822	389	1439	1466	448	1450	1497
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.0	0.0	0.0	18.8	0.0	17.4	18.0	11.8	11.8	13.5	11.0	11.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.2	0.1	1.4	1.4	0.0	1.3	1.2
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(95%),veh/ln	1.2	0.0	0.0	1.7	0.0	0.3	1.2	6.5	6.6	0.5	6.5	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.1	0.0	0.0	19.2	0.0	17.6	18.1	13.2	13.2	13.5	12.2	12.2
LnGrp LOS	B	A	A	B	A	B	B	B	B	B	B	B
Approach Vol, veh/h		75			127			1062			1104	
Approach Delay, s/veh		19.1			19.0			13.5			12.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.2	26.8		12.9	10.6	25.4		12.9
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	5.6	42.0		27.0	5.0	42.0		27.0
Max Q Clear Time (g_c+I1), s	2.0	14.6		4.9	2.0	14.1		4.9
Green Ext Time (p_c), s	0.0	5.0		0.6	0.0	4.5		0.2

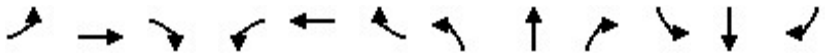
Intersection Summary		
HCM 6th Ctrl Delay		13.4
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	943	84	6	520	12	18	0	12	14	3	7
Future Volume (veh/h)	17	943	84	6	520	12	18	0	12	14	3	7
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		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1954	1954	1954	1527	1527	1527	1781	1781	1781	1641	1641	1641
Adj Flow Rate, veh/h	18	982	88	6	542	12	19	0	12	15	3	7
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	1	1	2	2	2	3	3	3	8	8	8
Cap, veh/h	692	1211	108	338	1022	23	246	0	53	237	15	36
Arrive On Green	0.69	0.69	0.69	0.69	0.69	0.69	0.09	0.00	0.09	0.09	0.09	0.09
Sat Flow, veh/h	969	1763	158	468	1488	33	927	0	586	850	170	397
Grp Volume(v), veh/h	18	0	1070	6	0	554	31	0	0	25	0	0
Grp Sat Flow(s),veh/h/ln	969	0	1921	468	0	1521	1513	0	0	1417	0	0
Q Serve(g_s), s	0.3	0.0	14.1	0.3	0.0	6.4	0.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.8	0.0	14.1	14.5	0.0	6.4	0.6	0.0	0.0	0.5	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.02	0.61		0.39	0.60		0.28
Lane Grp Cap(c), veh/h	692	0	1319	338	0	1045	299	0	0	289	0	0
V/C Ratio(X)	0.03	0.00	0.81	0.02	0.00	0.53	0.10	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	2431	0	4767	1177	0	3775	1109	0	0	1048	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.4	0.0	4.0	9.1	0.0	2.8	15.1	0.0	0.0	15.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.2	0.0	0.0	0.4	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.8	0.0	0.0	0.2	0.4	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.5	0.0	5.2	9.1	0.0	3.2	15.3	0.0	0.0	15.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		1088			560			31			25	
Approach Delay, s/veh		5.2			3.3			15.3			15.2	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	7.2	28.6	7.2	28.6
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	88.0	22.0	88.0
Max Q Clear Time (g_c+I1), s	2.6	16.1	2.5	16.5
Green Ext Time (p_c), s	0.1	7.5	0.0	2.5

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	6	73	0	11	12	1185	192	6	965	4
Future Volume (veh/h)	5	0	6	73	0	11	12	1185	192	6	965	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1967	1967	1967	1701	1701	1701	1731	1731	1731	1772	1772	1772
Adj Flow Rate, veh/h	5	0	6	78	0	0	13	1274	206	6	1038	4
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
Percent Heavy Veh, %	0	0	0	0	0	0	1	1	1	1	1	1
Cap, veh/h	218	0	137	180	0		403	1221	197	70	1482	6
Arrive On Green	0.08	0.00	0.08	0.08	0.00	0.00	0.84	0.84	0.84	0.84	0.84	0.84
Sat Flow, veh/h	1619	0	1667	1336	0	1442	544	1454	235	367	1764	7
Grp Volume(v), veh/h	5	0	6	78	0	0	13	0	1480	6	0	1042
Grp Sat Flow(s),veh/h/ln	1619	0	1667	1336	0	1442	544	0	1689	367	0	1771
Q Serve(g_s), s	0.0	0.0	0.3	5.6	0.0	0.0	1.0	0.0	86.0	0.0	0.0	23.4
Cycle Q Clear(g_c), s	0.3	0.0	0.3	5.9	0.0	0.0	24.4	0.0	86.0	86.0	0.0	23.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.00
Lane Grp Cap(c), veh/h	218	0	137	180	0		403	0	1418	70	0	1488
V/C Ratio(X)	0.02	0.00	0.04	0.43	0.00		0.03	0.00	1.04	0.09	0.00	0.70
Avail Cap(c_a), veh/h	417	0	342	365	0		403	0	1418	70	0	1488
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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.3	0.0	43.3	46.0	0.0	0.0	7.9	0.0	8.2	51.2	0.0	3.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.1	0.0	36.1	1.1	0.0	1.9
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(95%),veh/ln	0.2	0.0	0.3	3.6	0.0	0.0	0.2	0.0	36.9	0.3	0.0	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.3	0.0	43.4	46.7	0.0	0.0	8.0	0.0	44.3	52.3	0.0	5.1
LnGrp LOS	D	A	D	D	A		A	A	F	D	A	A
Approach Vol, veh/h		11			78	A		1493			1048	
Approach Delay, s/veh		43.3			46.7			44.0			5.3	
Approach LOS		D			D			D			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	90.0	12.4	90.0	12.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	85.0	20.0	85.0	21.0
Max Q Clear Time (g_c+I1), s	88.0	2.3	88.0	7.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	28.7
HCM 6th LOS	C

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	10	1	1315	6	3	1195
Future Volume (veh/h)	10	1	1315	6	3	1195
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.96		0.98	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	1750	1750	1917	1917	1736	1736
Adj Flow Rate, veh/h	10	1	1370	6	3	1245
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	144	14	2156	9	118	2448
Arrive On Green	0.11	0.08	0.58	0.54	0.07	0.74
Sat Flow, veh/h	1364	136	3815	16	1654	3386
Grp Volume(v), veh/h	12	0	671	705	3	1245
Grp Sat Flow(s),veh/h/ln	1637	0	1821	1914	1654	1650
Q Serve(g_s), s	0.2	0.0	8.0	8.1	0.1	5.1
Cycle Q Clear(g_c), s	0.2	0.0	8.0	8.1	0.1	5.1
Prop In Lane	0.83	0.08		0.01	1.00	
Lane Grp Cap(c), veh/h	173	0	1056	1109	118	2448
V/C Ratio(X)	0.07	0.00	0.64	0.64	0.03	0.51
Avail Cap(c_a), veh/h	898	0	4772	5014	403	9748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	0.0	4.6	4.6	14.2	1.8
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	1.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.4	0.0	4.8	4.8	14.2	1.8
LnGrp LOS	B	A	A	A	B	A
Approach Vol, veh/h	12		1376			1248
Approach Delay, s/veh	13.4		4.8			1.8
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.3	22.0			27.4	5.5
Change Period (Y+Rc), s	5.2	5.2			5.2	4.0
Max Green Setting (Gmax), s	5.8	83.8			94.8	16.0
Max Q Clear Time (g_c+I1), s	2.1	10.1			7.1	2.2
Green Ext Time (p_c), s	0.0	6.8			7.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

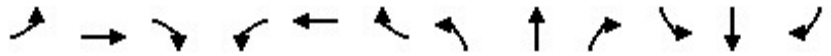
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	408	564	30	3	431	59	15	1	3	26	2	270
Future Volume (veh/h)	408	564	30	3	431	59	15	1	3	26	2	270
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Adj Flow Rate, veh/h	421	581	31	3	444	61	15	1	3	27	2	278
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	526	860	46	334	510	70	181	88	263	475	2	335
Arrive On Green	0.21	0.52	0.50	0.00	0.34	0.34	0.23	0.23	0.23	0.24	0.23	0.24
Sat Flow, veh/h	1667	1646	88	1667	1506	207	1117	385	1156	1435	11	1474
Grp Volume(v), veh/h	421	0	612	3	0	505	15	0	4	27	0	280
Grp Sat Flow(s),veh/h/ln	1667	0	1734	1667	0	1713	1117	0	1542	1435	0	1485
Q Serve(g_s), s	8.1	0.0	14.8	0.1	0.0	15.7	0.7	0.0	0.1	0.8	0.0	10.2
Cycle Q Clear(g_c), s	8.1	0.0	14.8	0.1	0.0	15.7	10.9	0.0	0.1	0.9	0.0	10.2
Prop In Lane	1.00		0.05	1.00		0.12	1.00		0.75	1.00		0.99
Lane Grp Cap(c), veh/h	526	0	906	334	0	580	181	0	350	475	0	337
V/C Ratio(X)	0.80	0.00	0.68	0.01	0.00	0.87	0.08	0.00	0.01	0.06	0.00	0.83
Avail Cap(c_a), veh/h	740	0	1098	474	0	693	320	0	542	654	0	522
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	10.5	0.0	10.0	13.1	0.0	17.6	26.1	0.0	17.0	16.6	0.0	20.4
Incr Delay (d2), s/veh	2.8	0.0	0.8	0.0	0.0	9.1	0.1	0.0	0.0	0.0	0.0	3.6
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(95%),veh/ln	3.8	0.0	7.1	0.0	0.0	10.6	0.3	0.0	0.1	0.5	0.0	6.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	0.0	10.8	13.1	0.0	26.7	26.2	0.0	17.0	16.6	0.0	24.1
LnGrp LOS	B	A	B	B	A	C	C	A	B	B	A	C
Approach Vol, veh/h		1033			508			19			307	
Approach Delay, s/veh		11.8			26.6			24.2			23.4	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	33.7		17.9	15.7	23.2		17.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	35.0		20.0	18.0	22.0		20.0
Max Q Clear Time (g_c+I1), s	2.1	16.8		12.9	10.1	17.7		12.2
Green Ext Time (p_c), s	0.0	1.2		0.0	0.6	0.5		0.8

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



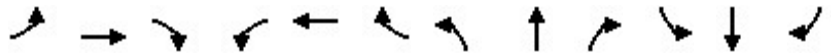
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	0	6	118	1	24	13	1466	122	12	1316	11
Future Volume (veh/h)	13	0	6	118	1	24	13	1466	122	12	1316	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1736	1736	1736	1709	1709	1709	1736	1736	1736	1736	1736	1736
Adj Flow Rate, veh/h	14	0	6	123	1	0	14	1527	0	12	1371	0
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	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	430	0	273	398	2		395	1836		313	1699	
Arrive On Green	0.19	0.00	0.15	0.19	0.19	0.00	0.12	0.56	0.00	0.07	0.52	0.00
Sat Flow, veh/h	1415	0	1451	1349	11	1448	1654	3386	0	1654	3386	0
Grp Volume(v), veh/h	14	0	6	124	0	0	14	1527	0	12	1371	0
Grp Sat Flow(s),veh/h/ln	1415	0	1451	1360	0	1448	1654	1650	0	1654	1650	0
Q Serve(g_s), s	0.0	0.0	0.2	4.0	0.0	0.0	0.0	19.0	0.0	0.0	17.1	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.2	4.2	0.0	0.0	0.0	19.0	0.0	0.0	17.1	0.0
Prop In Lane	1.00		1.00	0.99		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	430	0	273	401	0		395	1836		313	1699	
V/C Ratio(X)	0.03	0.00	0.02	0.31	0.00		0.04	0.83		0.04	0.81	
Avail Cap(c_a), veh/h	990	0	847	949	0		471	2259		457	2259	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.5	0.0	17.2	18.1	0.0	0.0	13.9	9.1	0.0	16.2	10.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.9	0.0	0.0	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	0.1	2.2	0.0	0.0	0.2	7.9	0.0	0.2	7.6	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.5	0.0	17.3	18.6	0.0	0.0	13.9	11.0	0.0	16.2	11.2	0.0
LnGrp LOS	B	A	B	B	A		B	B		B	B	
Approach Vol, veh/h		20			124	A		1541	A		1383	A
Approach Delay, s/veh		16.8			18.6			11.0			11.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	30.6		12.4	8.7	28.6		12.4
Change Period (Y+Rc), s	5.9	5.9		6.0	5.9	5.9		6.0
Max Green Setting (Gmax), s	5.1	31.1		26.0	5.1	31.1		26.0
Max Q Clear Time (g_c+I1), s	2.0	21.0		6.2	2.0	19.1		2.3
Green Ext Time (p_c), s	0.0	3.8		0.4	0.0	3.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	1810	849	196	1163	161	437	275	68	285	329	93
Future Volume (veh/h)	113	1810	849	196	1163	161	437	275	68	285	329	93
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	1736	1736	1709	1709	1709	1809	1809	1809	1736	1736	1736
Adj Flow Rate, veh/h	137	2194	1029	208	1233	171	463	292	0	345	399	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	172	1492	836	254	2052	285	462	242		222	233	
Arrive On Green	0.10	0.45	0.45	0.16	0.50	0.49	0.13	0.13	0.00	0.13	0.13	0.00
Sat Flow, veh/h	1654	3299	1435	1628	4128	572	3445	1809	0	1654	1736	1471
Grp Volume(v), veh/h	137	2194	1029	208	929	475	463	292	0	345	399	0
Grp Sat Flow(s),veh/h/ln	1654	1650	1435	1628	1555	1590	1723	1809	0	1654	1736	1471
Q Serve(g_s), s	12.1	67.5	66.5	18.5	32.0	32.1	20.0	20.0	0.0	20.0	20.0	0.0
Cycle Q Clear(g_c), s	12.1	67.5	66.5	18.5	32.0	32.1	20.0	20.0	0.0	20.0	20.0	0.0
Prop In Lane	1.00		1.00	1.00		0.36	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	1492	836	254	1546	790	462	242		222	233	
V/C Ratio(X)	0.80	1.47	1.23	0.82	0.60	0.60	1.00	1.20		1.56	1.71	
Avail Cap(c_a), veh/h	631	1492	836	589	1546	790	462	242		222	233	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.3	40.9	27.2	61.0	26.9	27.1	64.6	64.6	0.0	64.6	64.6	0.0
Incr Delay (d2), s/veh	8.1	215.5	114.1	6.5	0.9	1.7	42.6	124.5	0.0	271.6	339.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.3	107.8	82.3	12.7	17.6	18.2	17.0	26.4	0.0	39.1	47.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.4	256.4	141.3	67.4	27.8	28.7	107.3	189.2	0.0	336.2	404.0	0.0
LnGrp LOS	E	F	F	E	C	C	F	F		F	F	
Approach Vol, veh/h		3360			1612			755	A		744	A
Approach Delay, s/veh		213.6			33.2			139.0			372.6	
Approach LOS		F			C			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	26.3	73.0		25.0	19.6	79.7		25.0
Change Period (Y+Rc), s	5.0	7.5		6.0	5.0	* 7.5		6.0
Max Green Setting (Gmax), s	52.6	65.5		19.0	56.0	* 62		19.0
Max Q Clear Time (g_c+I1), s	20.5	69.5		22.0	14.1	34.1		22.0
Green Ext Time (p_c), s	0.8	0.0		0.0	0.5	13.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	178.2
HCM 6th LOS	F

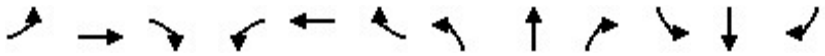
Notes

User approved volume balancing among the lanes for turning movement.

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

User approved changes to right turn type.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1228	1242	35	531	0	511	0	89	1	0	2
Future Volume (veh/h)	0	1228	1242	35	531	0	511	0	89	1	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1736	1736	1736	1723	1723	1723	1795	1795	1795	1750	1750	1750
Adj Flow Rate, veh/h	0	1437	1453	37	565	0	598	0	104	1	0	2
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, %	1	1	1	2	2	2	2	2	2	0	0	0
Cap, veh/h	58	1051	1175	61	2234	0	771	0	343	6	0	12
Arrive On Green	0.00	0.61	0.59	0.04	0.68	0.00	0.23	0.00	0.23	0.01	0.00	0.01
Sat Flow, veh/h	852	1736	1471	1641	3359	0	3419	0	1521	513	0	1026
Grp Volume(v), veh/h	0	1437	1453	37	565	0	598	0	104	3	0	0
Grp Sat Flow(s),veh/h/ln	852	1736	1471	1641	1637	0	1709	0	1521	1540	0	0
Q Serve(g_s), s	0.0	75.0	73.0	2.8	8.2	0.0	20.4	0.0	7.0	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	75.0	73.0	2.8	8.2	0.0	20.4	0.0	7.0	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.33		0.67
Lane Grp Cap(c), veh/h	58	1051	1175	61	2234	0	771	0	343	17	0	0
V/C Ratio(X)	0.00	1.37	1.24	0.61	0.25	0.00	0.78	0.00	0.30	0.17	0.00	0.00
Avail Cap(c_a), veh/h	58	1051	1175	79	2271	0	1020	0	454	211	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	24.5	9.9	58.8	7.6	0.0	45.0	0.0	39.9	60.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	171.7	114.0	9.4	0.1	0.0	2.8	0.0	0.5	4.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	115.8	103.9	2.3	4.8	0.0	13.6	0.0	4.8	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	196.1	123.9	68.2	7.6	0.0	47.8	0.0	40.4	65.4	0.0	0.0
LnGrp LOS	A	F	F	E	A	A	D	A	D	E	A	A
Approach Vol, veh/h		2890			602			702			3	
Approach Delay, s/veh		159.8			11.3			46.7			65.4	
Approach LOS		F			B			D			E	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	88.6		31.0	9.6	79.0		4.4					
Change Period (Y+Rc), s	7.0		6.0	6.0	7.0		4.0					
Max Green Setting (Gmax), s	83.0		34.0	5.0	72.0		16.0					
Max Q Clear Time (g_c+I1), s	10.2		22.4	4.8	77.0		2.2					
Green Ext Time (p_c), s	2.8		2.6	0.0	0.0		0.0					

Intersection Summary		
HCM 6th Ctrl Delay	119.5	
HCM 6th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1049	232	123	478	191	224
Future Volume (veh/h)	1049	232	123	478	191	224
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	1731	1731	1709	1709	1701	1701
Adj Flow Rate, veh/h	1283	284	131	509	224	262
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	3	3	2	2
Cap, veh/h	1140	966	90	1291	302	258
Arrive On Green	0.66	0.66	0.06	0.76	0.19	0.18
Sat Flow, veh/h	1731	1467	1628	1709	1620	1442
Grp Volume(v), veh/h	1283	284	131	509	224	262
Grp Sat Flow(s),veh/h/ln	1731	1467	1628	1709	1620	1442
Q Serve(g_s), s	95.5	11.9	8.0	15.1	18.9	26.0
Cycle Q Clear(g_c), s	95.5	11.9	8.0	15.1	18.9	26.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1140	966	90	1291	302	258
V/C Ratio(X)	1.13	0.29	1.46	0.39	0.74	1.01
Avail Cap(c_a), veh/h	1140	966	90	1291	302	258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	10.5	68.5	6.2	55.7	59.5
Incr Delay (d2), s/veh	68.2	0.2	257.5	0.2	9.5	59.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	76.9	6.8	16.4	8.6	13.3	19.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	92.9	10.6	326.0	6.4	65.2	119.0
LnGrp LOS	F	B	F	A	E	F
Approach Vol, veh/h	1567			640	486	
Approach Delay, s/veh	78.0			71.8	94.2	
Approach LOS	E			E	F	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	44.0	100.5			114.5	30.5
Change Period (Y+Rc), s	7.0	7.0			7.0	5.5
Max Green Setting (Gmax), s	37.0	93.5			107.5	25.0
Max Q Clear Time (g_c+I1), s	10.0	97.5			17.1	28.0
Green Ext Time (p_c), s	0.0	0.0			2.2	0.0

Intersection Summary		
HCM 6th Ctrl Delay	79.5	
HCM 6th LOS	E	

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	510	384	154	255	408	214
Future Volume (veh/h)	510	384	154	255	408	214
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	0.98
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	1717	1717	1759	1759	1701	1701
Adj Flow Rate, veh/h	554	417	167	277	443	233
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	713	604	184	730	467	246
Arrive On Green	0.41	0.41	0.41	0.41	0.47	0.47
Sat Flow, veh/h	1717	1455	591	1759	993	522
Grp Volume(v), veh/h	554	417	167	277	677	0
Grp Sat Flow(s),veh/h/ln	1717	1455	591	1759	1517	0
Q Serve(g_s), s	19.5	16.4	9.5	7.6	29.8	0.0
Cycle Q Clear(g_c), s	19.5	16.4	29.0	7.6	29.8	0.0
Prop In Lane		1.00	1.00		0.65	0.34
Lane Grp Cap(c), veh/h	713	604	184	730	714	0
V/C Ratio(X)	0.78	0.69	0.91	0.38	0.95	0.00
Avail Cap(c_a), veh/h	713	604	184	730	716	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.7	16.8	32.6	14.2	17.7	0.0
Incr Delay (d2), s/veh	5.4	3.3	41.8	0.3	21.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.4	9.2	8.5	5.0	19.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.1	20.1	74.4	14.5	39.5	0.0
LnGrp LOS	C	C	E	B	D	A
Approach Vol, veh/h	971			444	677	
Approach Delay, s/veh	21.8			37.1	39.5	
Approach LOS	C			D	D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	36.9	33.0	33.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	32.0	28.0	28.0
Max Q Clear Time (g_c+I1), s	31.8	21.5	31.0
Green Ext Time (p_c), s	0.1	2.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	30.8
HCM 6th LOS	C

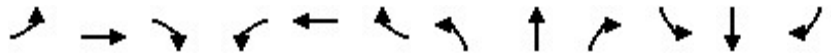
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2466	83	13	1109	54	13
Future Volume (veh/h)	2466	83	13	1109	54	13
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	1809	1809	1687	1687	1895	1895
Adj Flow Rate, veh/h	2623	57	14	1180	57	8
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	3	3	0	0
Cap, veh/h	2872	1281	33	2854	107	96
Arrive On Green	0.84	0.84	0.02	0.89	0.06	0.06
Sat Flow, veh/h	3527	1533	1607	3290	1805	1606
Grp Volume(v), veh/h	2623	57	14	1180	57	8
Grp Sat Flow(s),veh/h/ln	1718	1533	1607	1603	1805	1606
Q Serve(g_s), s	63.1	0.8	1.0	7.6	3.7	0.6
Cycle Q Clear(g_c), s	63.1	0.8	1.0	7.6	3.7	0.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2872	1281	33	2854	107	96
V/C Ratio(X)	0.91	0.04	0.42	0.41	0.53	0.08
Avail Cap(c_a), veh/h	3373	1505	67	3389	273	243
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.8	1.7	57.6	1.1	54.4	53.0
Incr Delay (d2), s/veh	3.9	0.0	8.1	0.1	4.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	20.7	0.3	0.9	1.0	3.2	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.7	1.7	65.7	1.2	58.5	53.3
LnGrp LOS	B	A	E	A	E	D
Approach Vol, veh/h	2680			1194	65	
Approach Delay, s/veh	10.5			2.0	57.8	
Approach LOS	B			A	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	10.1	6.5	102.6		109.1
Change Period (Y+Rc), s	5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	16.0	4.0	115.0		124.0
Max Q Clear Time (g_c+I1), s	5.7	3.0	65.1		9.6
Green Ext Time (p_c), s	0.1	0.0	32.5		7.3

Intersection Summary	
HCM 6th Ctrl Delay	8.7
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	717	840	21	583	513	47	21	921	981	27	674	318
Future Volume (veh/h)	717	840	21	583	513	47	21	921	981	27	674	318
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		0.99	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	1750	1750	1750	1772	1772	1772	1845	1845	1845	1688	1688	1688
Adj Flow Rate, veh/h	771	903	23	627	552	51	23	990	0	29	725	0
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
Percent Heavy Veh, %	0	0	0	1	1	1	1	1	1	1	1	1
Cap, veh/h	910	992	25	781	799	74	56	1113		56	1028	
Arrive On Green	0.28	0.30	0.29	0.24	0.26	0.25	0.03	0.32	0.00	0.04	0.32	0.00
Sat Flow, veh/h	3233	3311	84	3275	3115	287	1757	3505	1563	1607	3291	0
Grp Volume(v), veh/h	771	453	473	627	298	305	23	990	0	29	725	0
Grp Sat Flow(s),veh/h/ln	1617	1663	1733	1637	1684	1718	1757	1753	1563	1607	1603	0
Q Serve(g_s), s	24.7	28.8	28.8	19.8	17.5	17.6	1.4	29.5	0.0	1.9	21.8	0.0
Cycle Q Clear(g_c), s	24.7	28.8	28.8	19.8	17.5	17.6	1.4	29.5	0.0	1.9	21.8	0.0
Prop In Lane	1.00		0.05	1.00		0.17	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	910	498	519	781	432	441	56	1113		56	1028	
V/C Ratio(X)	0.85	0.91	0.91	0.80	0.69	0.69	0.41	0.89		0.51	0.71	
Avail Cap(c_a), veh/h	1107	507	529	1253	581	593	88	1181		81	1081	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.2	37.0	37.0	39.4	36.9	36.9	52.1	35.6	0.0	52.1	32.7	0.0
Incr Delay (d2), s/veh	5.3	20.4	19.7	2.0	2.1	2.2	4.7	8.3	0.0	7.1	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	15.4	20.4	21.0	12.7	11.8	12.0	1.2	19.5	0.0	1.6	13.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.5	57.4	56.8	41.4	39.0	39.1	56.8	43.9	0.0	59.1	34.7	0.0
LnGrp LOS	D	E	E	D	D	D	E	D		E	C	
Approach Vol, veh/h		1697			1230			1013	A		754	A
Approach Delay, s/veh		50.5			40.2			44.2			35.7	
Approach LOS		D			D			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	39.2	35.9	6.5	38.2	33.9	31.2	6.8	37.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	32.0	4.0	35.5	36.1	36.4	4.0	35.5
Max Q Clear Time (g_c+I1), s	21.8	30.8	3.4	23.8	26.7	19.6	3.9	31.5
Green Ext Time (p_c), s	2.9	0.5	0.0	2.7	2.7	2.2	0.0	1.9

Intersection Summary	
HCM 6th Ctrl Delay	44.1
HCM 6th LOS	D

Notes

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

MOVEMENT SUMMARY

Site: 3 [3 - SE Issaquah Fall Clty Rd & Klahanie Dr SE]

2035 PM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Klahanie Dr SE												
3	L2	2	0.0	0.008	7.4	LOS A	0.0	0.8	0.71	0.58	0.71	32.2
8	T1	1	0.0	0.008	7.4	LOS A	0.0	0.8	0.71	0.58	0.71	32.3
18	R2	1	0.0	0.008	7.4	LOS A	0.0	0.8	0.71	0.58	0.71	31.5
Approach		4	0.0	0.008	7.4	LOS A	0.0	0.8	0.71	0.58	0.71	32.1
NorthEast: SE Issaquah Fall City Rd												
1	L2	1	1.0	0.485	11.9	LOS B	3.8	95.6	0.80	0.86	1.00	31.3
6	T1	670	1.0	0.485	11.4	LOS B	3.9	98.5	0.80	0.84	0.98	31.6
16	R2	80	1.0	0.485	10.9	LOS B	3.9	98.5	0.80	0.83	0.97	31.0
Approach		752	1.0	0.485	11.4	LOS B	3.9	98.5	0.80	0.84	0.98	31.5
NorthWest: Klahanie Dr SE												
7	L2	116	0.0	0.199	8.6	LOS A	0.8	20.1	0.60	0.60	0.60	30.7
4	T1	2	0.0	0.199	8.6	LOS A	0.8	20.1	0.60	0.60	0.60	30.7
14	R2	401	0.0	0.427	8.8	LOS A	2.5	63.1	0.65	0.67	0.76	31.7
Approach		520	0.0	0.427	8.8	LOS A	2.5	63.1	0.64	0.66	0.72	31.5
SouthWest: SE Issauqah Fall City Rd												
5	L2	718	0.0	0.680	12.2	LOS B	6.4	160.8	0.51	0.30	0.51	29.6
2	T1	1009	0.0	0.680	11.9	LOS B	6.5	161.6	0.51	0.30	0.51	31.1
12	R2	2	0.0	0.680	11.9	LOS B	6.5	161.6	0.51	0.30	0.51	30.6
Approach		1729	0.0	0.680	12.0	LOS B	6.5	161.6	0.51	0.30	0.51	30.5
All Vehicles		3004	0.3	0.680	11.3	LOS B	6.5	161.6	0.61	0.50	0.66	30.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 6 [6 - Issaquah-Pine LK Rd and SE 32nd Way]

2035 PM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Issaquah-Pine Lk Rd NB												
3x	L2	1	1.0	0.988	27.7	LOS C	35.6	897.3	1.00	1.23	1.70	26.5
8x	T1	941	1.0	0.988	19.8	LOS B	35.6	897.3	1.00	1.23	1.70	24.4
18x	R2	206	1.0	0.988	20.3	LOS C	35.6	897.3	1.00	1.23	1.70	23.8
Approach		1149	1.0	0.988	19.9	LOS B	35.6	897.3	1.00	1.23	1.70	24.3
NorthEast: SE 32nd Way WB												
1x	L2	162	1.0	0.684	22.8	LOS C	7.7	194.2	1.00	1.20	1.41	24.5
6x	T1	1	1.0	0.684	19.7	LOS B	7.7	194.2	1.00	1.20	1.41	26.4
16x	R2	176	1.0	0.684	18.0	LOS B	7.7	194.2	1.00	1.20	1.41	23.8
Approach		338	1.0	0.684	20.3	LOS C	7.7	194.2	1.00	1.20	1.41	24.1
NorthWest: Issaquah-Pine Lk Rd SB												
7x	L2	231	1.0	1.015	28.4	LOS C	47.1	1186.9	1.00	1.16	1.64	23.6
4x	T1	1014	1.0	1.015	23.1	LOS C	47.1	1186.9	1.00	1.16	1.64	23.4
14x	R2	5	1.0	1.015	25.3	LOS C	47.1	1186.9	1.00	1.16	1.64	24.8
Approach		1250	1.0	1.015	24.1	LOS C	47.1	1186.9	1.00	1.16	1.64	23.4
SouthWest: Drive Way Access EB												
5x	L2	3	0.0	0.028	27.9	LOS C	0.2	5.5	1.00	0.77	1.00	28.1
2x	T1	1	0.0	0.028	22.3	LOS C	0.2	5.5	1.00	0.77	1.00	28.1
12x	R2	2	0.0	0.028	22.3	LOS C	0.2	5.5	1.00	0.77	1.00	27.5
Approach		6	0.0	0.028	25.1	LOS C	0.2	5.5	1.00	0.77	1.00	27.9
All Vehicles		2744	1.0	1.015	21.9	LOS C	47.1	1186.9	1.00	1.19	1.64	23.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 9 [9 - SE Issaquah Fall City Rd & 247th Pl SE]

2035 PM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Pacific Crest Middle School Drwy												
3	L2	32	2.0	0.083	7.3	LOS A	0.3	8.1	0.67	0.67	0.67	32.0
8	T1	5	2.0	0.083	7.3	LOS A	0.3	8.1	0.67	0.67	0.67	32.0
18	R2	10	2.0	0.083	7.3	LOS A	0.3	8.1	0.67	0.67	0.67	31.2
Approach		47	2.0	0.083	7.3	LOS A	0.3	8.1	0.67	0.67	0.67	31.8
NorthEast: SE Issaquah Fall City Rd												
1	L2	12	2.0	0.426	7.2	LOS A	2.4	60.5	0.34	0.21	0.34	33.8
6	T1	1014	2.0	0.426	7.1	LOS A	2.4	60.8	0.34	0.20	0.34	33.9
16	R2	45	2.0	0.426	7.0	LOS A	2.4	60.8	0.33	0.20	0.33	32.9
Approach		1072	2.0	0.426	7.1	LOS A	2.4	60.8	0.34	0.20	0.34	33.8
NorthWest: 247th Pl SE												
7	L2	27	2.0	0.058	5.9	LOS A	0.2	5.3	0.57	0.53	0.57	32.7
4	T1	12	2.0	0.058	5.9	LOS A	0.2	5.3	0.57	0.53	0.57	32.7
14	R2	70	2.0	0.079	4.8	LOS A	0.3	7.8	0.57	0.51	0.57	33.7
Approach		109	2.0	0.079	5.2	LOS A	0.3	7.8	0.57	0.52	0.57	33.3
SouthWest: SE Issaquah Fall City Rd												
5	L2	104	2.0	0.588	9.1	LOS A	4.8	121.5	0.27	0.11	0.27	32.6
2	T1	1662	2.0	0.588	8.7	LOS A	4.8	122.1	0.26	0.11	0.26	33.0
12	R2	70	2.0	0.043	2.5	LOS A	0.2	4.3	0.08	0.02	0.08	35.0
Approach		1836	2.0	0.588	8.5	LOS A	4.8	122.1	0.25	0.10	0.25	33.0
All Vehicles		3065	2.0	0.588	7.9	LOS A	4.8	122.1	0.30	0.16	0.30	33.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 14 [14 - 216th Ave and NE Inglewood Hill Rd]

2035 PM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 216th Ave (NB)												
3	L2	124	2.0	0.282	12.7	LOS B	1.8	46.4	0.77	0.83	0.77	30.8
8	T1	61	2.0	0.282	7.5	LOS A	1.8	46.4	0.77	0.83	0.77	30.7
18	R2	31	2.0	0.282	7.6	LOS A	1.8	46.4	0.77	0.83	0.77	29.9
Approach		216	2.0	0.282	10.5	LOS B	1.8	46.4	0.77	0.83	0.77	30.6
East: NE Inglewood Hill Rd												
1	L2	29	1.0	0.400	10.2	LOS B	2.5	64.1	0.56	0.60	0.56	32.6
6	T1	207	1.0	0.400	5.0	LOS A	2.5	64.1	0.56	0.60	0.56	32.5
16	R2	201	1.0	0.400	5.1	LOS A	2.5	64.1	0.56	0.60	0.56	31.6
Approach		438	1.0	0.400	5.4	LOS A	2.5	64.1	0.56	0.60	0.56	32.1
North: 216th Ave (SB)												
7	L2	122	1.0	0.214	10.0	LOS A	1.2	29.1	0.50	0.65	0.50	31.9
4	T1	44	1.0	0.214	4.8	LOS A	1.2	29.1	0.50	0.65	0.50	31.8
14	R2	64	1.0	0.214	4.9	LOS A	1.2	29.1	0.50	0.65	0.50	31.0
Approach		231	1.0	0.214	7.6	LOS A	1.2	29.1	0.50	0.65	0.50	31.6
West: NE Inglewood Hill Rd												
5	L2	147	0.0	0.623	9.8	LOS A	5.3	132.7	0.59	0.56	0.59	32.3
2	T1	476	0.0	0.623	4.7	LOS A	5.3	132.7	0.59	0.56	0.59	32.1
12	R2	138	0.0	0.623	4.8	LOS A	5.3	132.7	0.59	0.56	0.59	31.3
Approach		761	0.0	0.623	5.7	LOS A	5.3	132.7	0.59	0.56	0.59	32.0
All Vehicles		1645	0.7	0.623	6.5	LOS A	5.3	132.7	0.59	0.62	0.59	31.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 26 [26 - NE 8th St and 244th Ave]

2035 PM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	100	0.0	0.265	6.8	LOS A	1.5	37.2	0.46	0.45	0.46	24.7
8	T1	196	0.0	0.265	2.3	LOS A	1.5	37.2	0.46	0.45	0.46	24.5
18	R2	6	0.0	0.265	2.9	LOS A	1.5	37.2	0.46	0.45	0.46	24.0
Approach		302	0.0	0.265	3.8	LOS A	1.5	37.2	0.46	0.45	0.46	24.5
East: NE 8th St (WB)												
1	L2	4	0.0	0.053	7.7	LOS A	0.3	6.6	0.53	0.50	0.53	24.8
6	T1	21	0.0	0.053	3.3	LOS A	0.3	6.6	0.53	0.50	0.53	24.6
16	R2	26	0.0	0.053	3.8	LOS A	0.3	6.6	0.53	0.50	0.53	24.1
Approach		51	0.0	0.053	3.9	LOS A	0.3	6.6	0.53	0.50	0.53	24.3
North: 244th Ave (SB)												
7	L2	11	0.0	0.387	6.2	LOS A	2.4	61.2	0.35	0.34	0.35	25.2
4	T1	189	0.0	0.387	1.8	LOS A	2.4	61.2	0.35	0.34	0.35	24.9
14	R2	291	0.0	0.387	2.3	LOS A	2.4	61.2	0.35	0.34	0.35	24.3
Approach		491	0.0	0.387	2.2	LOS A	2.4	61.2	0.35	0.34	0.35	24.6
West: NE 8th St (EB)												
5	L2	236	0.0	0.399	9.3	LOS A	2.5	62.6	0.45	0.61	0.45	31.9
2	T1	23	0.0	0.399	4.6	LOS A	2.5	62.6	0.45	0.61	0.45	31.8
12	R2	219	0.0	0.399	4.6	LOS A	2.5	62.6	0.45	0.61	0.45	31.1
Approach		479	0.0	0.399	6.9	LOS A	2.5	62.6	0.45	0.61	0.45	31.5
All Vehicles		1322	0.0	0.399	4.3	LOS A	2.5	62.6	0.42	0.47	0.42	26.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 32 [32 - Issaquah Beaver Lake Rd & 256th Ave SE]

2035 PM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 256th Ave SE												
3	L2	134	0.0	0.218	5.2	LOS A	1.2	29.4	0.50	0.37	0.50	33.6
8	T1	48	0.0	0.218	5.2	LOS A	1.2	29.4	0.50	0.37	0.50	33.5
18	R2	60	0.0	0.218	5.2	LOS A	1.2	29.4	0.50	0.37	0.50	32.6
Approach		241	0.0	0.218	5.2	LOS A	1.2	29.4	0.50	0.37	0.50	33.3
East: Issaquah Beaver Lake Rd												
1	L2	65	0.0	0.337	6.1	LOS A	2.0	50.6	0.44	0.29	0.44	34.3
6	T1	289	0.0	0.337	6.1	LOS A	2.0	50.6	0.44	0.29	0.44	34.2
16	R2	60	0.0	0.337	6.1	LOS A	2.0	50.6	0.44	0.29	0.44	33.3
Approach		414	0.0	0.337	6.1	LOS A	2.0	50.6	0.44	0.29	0.44	34.1
North: 256th Ave SE												
7	L2	51	0.0	0.109	4.5	LOS A	0.6	14.3	0.53	0.39	0.53	34.3
4	T1	34	0.0	0.109	4.5	LOS A	0.6	14.3	0.53	0.39	0.53	34.2
14	R2	28	0.0	0.109	4.5	LOS A	0.6	14.3	0.53	0.39	0.53	33.2
Approach		113	0.0	0.109	4.5	LOS A	0.6	14.3	0.53	0.39	0.53	34.0
West: Issaquah Beaver Lake Rd												
5	L2	39	0.0	0.380	6.4	LOS A	2.3	58.5	0.37	0.22	0.37	34.4
2	T1	290	0.0	0.380	6.4	LOS A	2.3	58.5	0.37	0.22	0.37	34.3
12	R2	164	0.0	0.380	6.4	LOS A	2.3	58.5	0.37	0.22	0.37	33.3
Approach		493	0.0	0.380	6.4	LOS A	2.3	58.5	0.37	0.22	0.37	34.0
All Vehicles		1262	0.0	0.380	5.9	LOS A	2.3	58.5	0.43	0.29	0.43	33.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 39 [39 - 233rd Ave NE & NE 8th Street]

2035 PM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	54	1.0	0.197	8.8	LOS A	1.2	29.0	0.68	0.74	0.68	25.2
8	T1	55	1.0	0.197	8.1	LOS A	1.2	29.0	0.68	0.74	0.68	29.7
18	R2	48	1.0	0.197	5.4	LOS A	1.2	29.0	0.68	0.74	0.68	24.6
Approach		157	1.0	0.197	7.5	LOS A	1.2	29.0	0.68	0.74	0.68	26.5
East: NE 8th St (WB)												
1	L2	109	1.0	0.425	6.7	LOS A	2.7	68.9	0.46	0.48	0.46	24.6
6	T1	348	1.0	0.425	2.9	LOS A	2.7	68.9	0.46	0.48	0.46	24.5
16	R2	29	1.0	0.425	5.7	LOS A	2.7	68.9	0.46	0.48	0.46	28.3
Approach		485	1.0	0.425	3.9	LOS A	2.7	68.9	0.46	0.48	0.46	24.7
North: RoadName												
7	L2	21	0.0	0.156	11.3	LOS B	0.8	21.0	0.58	0.69	0.58	34.6
4	T1	52	0.0	0.156	7.3	LOS A	0.8	21.0	0.58	0.69	0.58	34.7
14	R2	68	0.0	0.156	7.0	LOS A	0.8	21.0	0.58	0.69	0.58	34.0
Approach		141	0.0	0.156	7.7	LOS A	0.8	21.0	0.58	0.69	0.58	34.4
West: NE 8th St (EB)												
5	L2	79	1.0	0.603	10.3	LOS B	4.8	120.2	0.55	0.59	0.55	33.1
2	T1	517	1.0	0.603	5.4	LOS A	4.8	120.2	0.55	0.59	0.55	31.9
12	R2	100	1.0	0.603	5.3	LOS A	4.8	120.2	0.55	0.59	0.55	31.2
Approach		696	1.0	0.603	6.0	LOS A	4.8	120.2	0.55	0.59	0.55	31.9
All Vehicles		1480	0.9	0.603	5.6	LOS A	4.8	120.2	0.53	0.58	0.53	28.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 41 [41 - 244th Ave NE & E Main Dr]

2035 PM Alternative 1
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	8	0.0	0.223	8.6	LOS A	1.1	27.8	0.28	0.45	0.28	32.7
8	T1	230	0.0	0.223	4.2	LOS A	1.1	27.8	0.28	0.45	0.28	32.7
18	R2	43	0.0	0.223	4.2	LOS A	1.1	27.8	0.28	0.45	0.28	32.0
Approach		281	0.0	0.223	4.3	LOS A	1.1	27.8	0.28	0.45	0.28	32.6
East: E Main Dr (WB)												
1	L2	46	0.0	0.103	9.1	LOS A	0.5	12.1	0.38	0.59	0.38	31.9
6	T1	3	0.0	0.103	4.7	LOS A	0.5	12.1	0.38	0.59	0.38	32.0
16	R2	69	0.0	0.103	4.7	LOS A	0.5	12.1	0.38	0.59	0.38	31.3
Approach		118	0.0	0.103	6.4	LOS A	0.5	12.1	0.38	0.59	0.38	31.5
North: 244th Ave (SB)												
7	L2	99	0.0	0.305	8.4	LOS A	1.8	43.9	0.21	0.47	0.21	32.4
4	T1	259	0.0	0.305	4.0	LOS A	1.8	43.9	0.21	0.47	0.21	32.5
14	R2	43	0.0	0.305	3.9	LOS A	1.8	43.9	0.21	0.47	0.21	31.7
Approach		401	0.0	0.305	5.0	LOS A	1.8	43.9	0.21	0.47	0.21	32.4
West: E Main Dr (EB)												
5	L2	18	0.0	0.029	9.6	LOS A	0.1	3.3	0.45	0.61	0.45	31.4
2	T1	3	0.0	0.029	5.2	LOS A	0.1	3.3	0.45	0.61	0.45	31.4
12	R2	9	0.0	0.029	5.2	LOS A	0.1	3.3	0.45	0.61	0.45	30.7
Approach		30	0.0	0.029	7.9	LOS A	0.1	3.3	0.45	0.61	0.45	31.2
All Vehicles		830	0.0	0.305	5.1	LOS A	1.8	43.9	0.27	0.49	0.27	32.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 62 [62 - E Lk Sammamish Pk Way and SE 43nd Way]

2035 PM Alternative 1
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: E Lk Sammamish Pk Way WB												
8x	T1	1099	2.0	0.629	1.6	LOS A	7.4	186.8	0.27	0.21	0.27	29.9
18x	R2	1128	2.0	0.687	2.0	LOS A	0.0	0.0	0.00	0.29	0.00	29.4
Approach		2227	2.0	0.687	1.8	LOS A	7.4	186.8	0.14	0.25	0.14	29.6
NorthEast: SE 43rd Way SB												
1x	L2	688	1.0	0.575	23.5	LOS C	6.8	170.7	1.00	1.18	1.43	23.9
16x	R2	23	1.0	0.575	17.3	LOS B	6.8	170.7	1.00	1.16	1.41	23.5
Approach		710	1.0	0.575	23.3	LOS C	6.8	170.7	1.00	1.18	1.43	23.9
NorthWest: E Lk Sammamish Pk Way EB												
7x	L2	35	2.0	0.471	10.0	LOS B	2.8	70.5	0.71	0.64	0.78	29.1
4x	T1	777	2.0	0.471	4.0	LOS A	2.9	73.2	0.71	0.58	0.77	28.8
Approach		813	2.0	0.471	4.2	LOS A	2.9	73.2	0.71	0.58	0.77	28.8
All Vehicles		3750	1.8	0.687	6.4	LOS A	7.4	186.8	0.42	0.50	0.52	28.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	32	120	60	759	1555	26
Future Volume (veh/h)	32	120	60	759	1555	26
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
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	1840	1840	1745	1745	1717	1717
Adj Flow Rate, veh/h	35	54	65	825	1690	28
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	3	3	2	2
Cap, veh/h	107	200	324	1482	2422	40
Arrive On Green	0.06	0.06	0.07	0.85	0.74	0.74
Sat Flow, veh/h	1752	1559	1662	1745	3369	54
Grp Volume(v), veh/h	35	54	65	825	838	880
Grp Sat Flow(s),veh/h/ln	1752	1559	1662	1745	1631	1706
Q Serve(g_s), s	1.7	2.8	0.6	12.1	24.8	25.0
Cycle Q Clear(g_c), s	1.7	2.8	0.6	12.1	24.8	25.0
Prop In Lane	1.00	1.00	1.00			0.03
Lane Grp Cap(c), veh/h	107	200	324	1482	1204	1259
V/C Ratio(X)	0.33	0.27	0.20	0.56	0.70	0.70
Avail Cap(c_a), veh/h	431	488	361	1756	1423	1488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	35.2	6.6	1.9	6.3	6.4
Incr Delay (d2), s/veh	0.7	0.3	0.1	1.2	2.8	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	0.0	0.7	2.7	11.1	11.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	40.9	35.5	6.8	3.1	9.1	9.0
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	89			890	1718	
Approach Delay, s/veh	37.6			3.4	9.1	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		80.0		9.5	10.0	70.0
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		89.0		21.0	7.0	77.0
Max Q Clear Time (g_c+I1), s		14.1		4.8	2.6	27.0
Green Ext Time (p_c), s		18.2		0.1	0.0	38.0

Intersection Summary	
HCM 6th Ctrl Delay	8.1
HCM 6th LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	108	63	709	736	6
Future Volume (veh/h)	37	108	63	709	736	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
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	1954	1954	1723	1723	1723	1723
Adj Flow Rate, veh/h	40	116	68	762	791	6
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	2	2	2	2
Cap, veh/h	271	205	425	1212	912	724
Arrive On Green	0.15	0.12	0.11	0.70	0.53	0.51
Sat Flow, veh/h	1861	1656	1641	1723	1723	1427
Grp Volume(v), veh/h	40	116	68	762	791	6
Grp Sat Flow(s),veh/h/ln	1861	1656	1641	1723	1723	1427
Q Serve(g_s), s	0.8	3.0	0.6	10.6	18.0	0.1
Cycle Q Clear(g_c), s	0.8	3.0	0.6	10.6	18.0	0.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	271	205	425	1212	912	724
V/C Ratio(X)	0.15	0.57	0.16	0.63	0.87	0.01
Avail Cap(c_a), veh/h	1113	954	502	1764	1382	1113
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.8	18.6	7.3	3.6	9.2	5.5
Incr Delay (d2), s/veh	0.1	0.9	0.1	0.2	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	2.0	0.3	1.6	8.3	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.9	19.6	7.4	3.8	11.9	5.5
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	156			830	797	
Approach Delay, s/veh	18.9			4.1	11.8	
Approach LOS	B			A	B	

Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	34.8			7.9	26.9	10.4
Change Period (Y+Rc), s	5.0			5.0	5.0	5.8
Max Green Setting (Gmax), s	44.2			5.0	34.2	25.0
Max Q Clear Time (g_c+I1), s	12.6			2.6	20.0	5.0
Green Ext Time (p_c), s	1.9			0.0	1.9	0.3

Intersection Summary		
HCM 6th Ctrl Delay		8.8
HCM 6th LOS		A

Intersection	
Int Delay, s/veh	9.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	0	32	58	118	84	0	203	0	147	0	0	0
Future Vol, veh/h	0	32	58	118	84	0	203	0	147	0	0	0
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	105	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	0	0	0
Mvmt Flow	0	36	66	134	95	0	231	0	167	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	99	0	0	102	0	0	432	436	70	521	469	99
Stage 1	-	-	-	-	-	-	69	69	-	367	367	-
Stage 2	-	-	-	-	-	-	363	367	-	154	102	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1488	-	-	1490	-	-	534	514	993	469	495	962
Stage 1	-	-	-	-	-	-	941	837	-	657	626	-
Stage 2	-	-	-	-	-	-	656	622	-	853	815	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1483	-	-	1490	-	-	495	464	992	360	446	959
Mov Cap-2 Maneuver	-	-	-	-	-	-	495	464	-	360	446	-
Stage 1	-	-	-	-	-	-	941	837	-	655	565	-
Stage 2	-	-	-	-	-	-	594	561	-	709	815	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.5	14.7	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	495	992	1483	-	-	1490	-	-	-
HCM Lane V/C Ratio	0.466	0.168	-	-	-	0.09	-	-	-
HCM Control Delay (s)	18.5	9.4	0	-	-	7.7	0	-	0
HCM Lane LOS	C	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	2.4	0.6	0	-	-	0.3	-	-	-

Intersection	
Intersection Delay, s/veh	12.7
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	43	137	191	259	88	118
Future Vol, veh/h	43	137	191	259	88	118
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	7	7	4	4	1	1
Mvmt Flow	47	151	210	285	97	130
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	10.6	14.7	10.1
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	24%	0%	100%	0%
Vol Thru, %	76%	42%	0%	0%
Vol Right, %	0%	58%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	180	450	88	118
LT Vol	43	0	88	0
Through Vol	137	191	0	0
RT Vol	0	259	0	118
Lane Flow Rate	198	495	97	130
Geometry Grp	2	2	7	7
Degree of Util (X)	0.294	0.617	0.179	0.197
Departure Headway (Hd)	5.342	4.494	6.679	5.462
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	676	796	540	660
Service Time	3.342	2.574	4.388	3.171
HCM Lane V/C Ratio	0.293	0.622	0.18	0.197
HCM Control Delay	10.6	14.7	10.8	9.5
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	1.2	4.3	0.6	0.7

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	40	57	514	27	23	1012
Future Vol, veh/h	40	57	514	27	23	1012
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	-	-	-	125	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	6	6	4	4	2	2
Mvmt Flow	44	63	571	30	26	1124

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1762	586	0	0	601	0
Stage 1	586	-	-	-	-	-
Stage 2	1176	-	-	-	-	-
Critical Hdwy	7.06	6.56	-	-	4.12	-
Critical Hdwy Stg 1	6.06	-	-	-	-	-
Critical Hdwy Stg 2	6.06	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.218	-
Pot Cap-1 Maneuver	67	479	-	-	976	-
Stage 1	497	-	-	-	-	-
Stage 2	237	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	65	479	-	-	976	-
Mov Cap-2 Maneuver	204	-	-	-	-	-
Stage 1	497	-	-	-	-	-
Stage 2	231	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.9	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	308	976	-
HCM Lane V/C Ratio	-	-	0.35	0.026	-
HCM Control Delay (s)	-	-	22.9	8.8	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.5	0.1	-

Intersection	
Intersection Delay, s/veh	19.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	81	143	0	5	280	97	4	28	14	187	1	185
Future Vol, veh/h	81	143	0	5	280	97	4	28	14	187	1	185
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	96	170	0	6	333	115	5	33	17	223	1	220
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	12.6	29.4	11.7	14.4
HCM LOS	B	D	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	9%	100%	0%	100%	0%	100%	0%
Vol Thru, %	61%	0%	100%	0%	74%	0%	1%
Vol Right, %	30%	0%	0%	0%	26%	0%	99%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	46	81	143	5	377	187	186
LT Vol	4	81	0	5	0	187	0
Through Vol	28	0	143	0	280	0	1
RT Vol	14	0	0	0	97	0	185
Lane Flow Rate	55	96	170	6	449	223	221
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.117	0.2	0.329	0.012	0.795	0.454	0.376
Departure Headway (Hd)	7.714	7.475	6.963	7.068	6.375	7.442	6.223
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	467	483	519	503	565	488	582
Service Time	5.728	5.175	4.663	4.861	4.167	5.142	3.923
HCM Lane V/C Ratio	0.118	0.199	0.328	0.012	0.795	0.457	0.38
HCM Control Delay	11.7	12	13	9.9	29.7	16.2	12.6
HCM Lane LOS	B	B	B	A	D	C	B
HCM 95th-tile Q	0.4	0.7	1.4	0	7.6	2.3	1.7

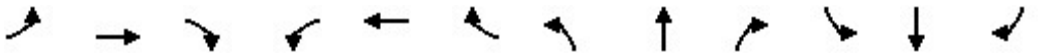
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	57	0	15	0	0	0	13	931	2	5	460	18
Future Vol, veh/h	57	0	15	0	0	0	13	931	2	5	460	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	0	110	-	-	110	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-4	-	-	0	-	-	0	-	-	1	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	4	4	4	0	0	0	2	2	2	4	4	4
Mvmt Flow	62	0	16	0	0	0	14	1012	2	5	500	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1561	1563	510	-	-	1014	520	0	0	1015	0	0
Stage 1	520	520	-	-	-	-	-	-	-	-	-	-
Stage 2	1041	1043	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	6.34	5.74	5.84	-	-	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	5.34	4.74	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.34	4.74	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	-	-	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	127	156	592	0	0	292	1046	-	-	676	-	-
Stage 1	601	594	-	0	0	-	-	-	-	-	-	-
Stage 2	347	383	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	125	153	592	-	-	292	1046	-	-	675	-	-
Mov Cap-2 Maneuver	295	324	-	-	-	-	-	-	-	-	-	-
Stage 1	593	590	-	-	-	-	-	-	-	-	-	-
Stage 2	342	378	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	18.5	0	0.1	0.1
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1046	-	-	295	592	-	675	-	-
HCM Lane V/C Ratio	0.014	-	-	0.21	0.028	-	0.008	-	-
HCM Control Delay (s)	8.5	-	-	20.4	11.3	0	10.4	-	-
HCM Lane LOS	A	-	-	C	B	A	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.8	0.1	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	255	124	3	4	283	161	17	52	13	100	8	285
Future Volume (veh/h)	255	124	3	4	283	161	17	52	13	100	8	285
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	0.99		0.97	1.00		0.96	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	1682	1682	1682	1695	1695	1695	1695	1695	1695	1695	1695	1695
Adj Flow Rate, veh/h	304	148	4	5	337	192	20	62	15	119	10	339
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	4	4	4
Cap, veh/h	354	812	22	549	368	210	52	265	64	166	11	378
Arrive On Green	0.15	0.50	0.50	0.02	0.37	0.37	0.03	0.20	0.20	0.10	0.27	0.27
Sat Flow, veh/h	1602	1629	44	1615	999	569	1615	1306	316	1615	41	1384
Grp Volume(v), veh/h	304	0	152	5	0	529	20	0	77	119	0	349
Grp Sat Flow(s),veh/h/ln	1602	0	1673	1615	0	1569	1615	0	1622	1615	0	1425
Q Serve(g_s), s	10.1	0.0	4.7	0.2	0.0	29.8	1.1	0.0	3.7	6.6	0.0	21.9
Cycle Q Clear(g_c), s	10.1	0.0	4.7	0.2	0.0	29.8	1.1	0.0	3.7	6.6	0.0	21.9
Prop In Lane	1.00		0.03	1.00		0.36	1.00		0.19	1.00		0.97
Lane Grp Cap(c), veh/h	354	0	834	549	0	578	52	0	329	166	0	389
V/C Ratio(X)	0.86	0.00	0.18	0.01	0.00	0.92	0.38	0.00	0.23	0.72	0.00	0.90
Avail Cap(c_a), veh/h	578	0	1484	627	0	1043	104	0	329	296	0	445
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	19.2	0.0	12.8	17.6	0.0	27.9	44.0	0.0	31.0	40.4	0.0	32.5
Incr Delay (d2), s/veh	3.7	0.0	0.0	0.0	0.0	2.9	6.4	0.0	0.1	8.1	0.0	17.7
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(95%),veh/ln	6.7	0.0	3.0	0.1	0.0	16.4	1.0	0.0	2.6	5.4	0.0	14.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.9	0.0	12.9	17.6	0.0	30.9	50.4	0.0	31.1	48.4	0.0	50.2
LnGrp LOS	C	A	B	B	A	C	D	A	C	D	A	D
Approach Vol, veh/h		456			534			97			468	
Approach Delay, s/veh		19.6			30.8			35.1			49.7	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	38.5	13.5	22.8	5.9	50.6	7.0	29.3
Change Period (Y+Rc), s	5.3	5.3	5.0	5.0	5.3	5.3	5.0	5.0
Max Green Setting (Gmax), s	25.7	60.7	16.0	17.0	5.1	81.3	5.0	28.0
Max Q Clear Time (g_c+I1), s	12.1	31.8	8.6	5.7	2.2	6.7	3.1	23.9
Green Ext Time (p_c), s	0.6	1.3	0.3	0.1	0.0	0.3	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	33.5
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	8	19	295	27	358	61	913	127	96	890	77
Future Volume (veh/h)	42	8	19	295	27	358	61	913	127	96	890	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1715	1715	1715	1809	1809	1809	1795	1795	1795	1715	1715	1715
Adj Flow Rate, veh/h	46	9	21	321	29	0	66	992	0	104	967	84
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	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	553	97	439	531	36		381	1280		401	1195	104
Arrive On Green	0.34	0.34	0.30	0.32	0.32	0.00	0.11	0.38	0.00	0.13	0.40	0.36
Sat Flow, veh/h	1261	283	1447	1250	113	1533	1709	3500	0	1633	3023	263
Grp Volume(v), veh/h	55	0	21	350	0	0	66	992	0	104	521	530
Grp Sat Flow(s),veh/h/ln	1544	0	1447	1363	0	1533	1709	1705	0	1633	1629	1656
Q Serve(g_s), s	0.0	0.0	0.5	11.7	0.0	0.0	0.0	13.7	0.0	0.0	15.2	15.3
Cycle Q Clear(g_c), s	1.2	0.0	0.5	13.0	0.0	0.0	0.0	13.7	0.0	0.0	15.2	15.3
Prop In Lane	0.84		1.00	0.92		1.00	1.00		0.00	1.00		0.16
Lane Grp Cap(c), veh/h	649	0	439	568	0		381	1280		401	644	655
V/C Ratio(X)	0.08	0.00	0.05	0.62	0.00		0.17	0.78		0.26	0.81	0.81
Avail Cap(c_a), veh/h	1518	0	1325	671	0		440	1466		425	700	712
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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.0	0.0	13.2	17.3	0.0	0.0	19.1	14.7	0.0	18.7	14.4	14.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.1	1.9	0.0	0.1	5.9	5.8
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(95%),veh/ln	0.7	0.0	0.3	6.2	0.0	0.0	1.2	8.0	0.0	1.8	9.2	9.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.1	0.0	13.2	17.9	0.0	0.0	19.2	16.7	0.0	18.8	20.2	20.3
LnGrp LOS	B	A	B	B	A		B	B		B	C	C
Approach Vol, veh/h		76			350	A		1058	A		1155	
Approach Delay, s/veh		12.4			17.9			16.8			20.1	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.2	23.1		20.2	9.1	24.2		20.2
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.0	20.0		19.0	5.0	20.0		48.0
Max Q Clear Time (g_c+I1), s	2.0	15.7		15.0	2.0	17.3		3.2
Green Ext Time (p_c), s	0.0	1.4		0.3	0.0	0.9		0.2

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

Notes

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

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	61	78	717	35	19	580
Future Vol, veh/h	61	78	717	35	19	580
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	220	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	66	85	779	38	21	630

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1471	798	0	0	817	0
Stage 1	798	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Critical Hdwy	6.61	6.31	-	-	4.12	-
Critical Hdwy Stg 1	5.61	-	-	-	-	-
Critical Hdwy Stg 2	5.61	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	130	379	-	-	811	-
Stage 1	426	-	-	-	-	-
Stage 2	490	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	126	379	-	-	811	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	426	-	-	-	-	-
Stage 2	477	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.2	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	318	811	-
HCM Lane V/C Ratio	-	-	0.475	0.025	-
HCM Control Delay (s)	-	-	26.2	9.6	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	2.4	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	169	307	225	205	156	303	565	110	138	660	75
Future Volume (veh/h)	50	169	307	225	205	156	303	565	110	138	660	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		0.97	1.00		0.96	1.00		0.96
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	1709	1709	1709	1709	1709	1723	1723	1723	1701	1701	1701
Adj Flow Rate, veh/h	55	186	0	247	225	171	333	621	121	152	725	82
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
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	356	292		430	423	642	340	786	153	337	845	96
Arrive On Green	0.08	0.17	0.00	0.15	0.25	0.24	0.21	0.29	0.29	0.21	0.29	0.27
Sat Flow, veh/h	1628	1709	1448	1628	1709	1412	1641	2714	528	1620	2913	329
Grp Volume(v), veh/h	55	186	0	247	225	171	333	374	368	152	402	405
Grp Sat Flow(s),veh/h/ln	1628	1709	1448	1628	1709	1412	1641	1637	1605	1620	1616	1626
Q Serve(g_s), s	1.8	6.8	0.0	7.9	7.7	0.9	13.6	14.2	14.3	5.5	15.9	15.9
Cycle Q Clear(g_c), s	1.8	6.8	0.0	7.9	7.7	0.9	13.6	14.2	14.3	5.5	15.9	15.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		0.20
Lane Grp Cap(c), veh/h	356	292		430	423	642	340	474	465	337	469	472
V/C Ratio(X)	0.15	0.64		0.57	0.53	0.27	0.98	0.79	0.79	0.45	0.86	0.86
Avail Cap(c_a), veh/h	399	491		430	567	761	340	572	561	337	469	472
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	26.1	0.0	17.6	22.0	3.9	26.6	22.1	22.2	23.4	22.6	22.8
Incr Delay (d2), s/veh	0.1	0.9	0.0	1.2	0.4	0.1	42.9	4.9	5.1	0.4	13.9	14.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	4.8	0.0	5.0	5.2	0.9	13.9	9.5	9.4	3.6	11.7	11.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.9	26.9	0.0	18.9	22.4	4.0	69.5	27.0	27.3	23.7	36.6	36.8
LnGrp LOS	B	C		B	C	A	E	C	C	C	D	D
Approach Vol, veh/h		241	A		643			1075			959	
Approach Delay, s/veh		25.3			16.1			40.3			34.6	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	22.6	8.2	19.7	17.0	22.6	13.0	14.9
Change Period (Y+Rc), s	5.0	5.3	5.0	5.4	5.0	5.3	5.0	* 5.4
Max Green Setting (Gmax), s	8.0	21.3	5.0	20.0	12.0	17.3	8.0	* 17
Max Q Clear Time (g_c+I1), s	11.5	16.3	3.8	9.7	15.6	17.9	9.9	8.8
Green Ext Time (p_c), s	0.0	1.0	0.0	0.7	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	31.9
HCM 6th LOS	C

Notes

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

Unsignalized Delay for [EBR] 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)	28	17	25	154	4	221	8	762	240	378	765	20
Future Volume (veh/h)	28	17	25	154	4	221	8	762	240	378	765	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.99	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	1723	1723	1723	1750	1750	1750	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	33	20	29	181	5	260	9	896	282	445	900	24
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	0	0	0	2	2	2	2	2	2
Cap, veh/h	89	54	48	320	7	420	544	1015	319	587	1056	28
Arrive On Green	0.30	0.30	0.29	0.30	0.30	0.29	0.28	0.42	0.40	0.18	0.32	0.31
Sat Flow, veh/h	112	179	160	802	22	1443	1641	2444	767	3183	3255	87
Grp Volume(v), veh/h	82	0	0	186	0	260	9	599	579	445	453	471
Grp Sat Flow(s),veh/h/ln	452	0	0	824	0	1443	1641	1637	1574	1591	1637	1705
Q Serve(g_s), s	1.8	0.0	0.0	0.0	0.0	14.2	0.0	30.9	31.1	12.1	23.6	23.6
Cycle Q Clear(g_c), s	23.6	0.0	0.0	21.8	0.0	14.2	0.0	30.9	31.1	12.1	23.6	23.6
Prop In Lane	0.40		0.35	0.97		1.00	1.00		0.49	1.00		0.05
Lane Grp Cap(c), veh/h	192	0	0	326	0	420	544	680	654	587	531	553
V/C Ratio(X)	0.43	0.00	0.00	0.57	0.00	0.62	0.02	0.88	0.89	0.76	0.85	0.85
Avail Cap(c_a), veh/h	299	0	0	437	0	537	544	949	913	801	1236	1287
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	0.0	0.0	29.9	0.0	28.0	22.9	24.7	24.9	35.3	28.8	28.9
Incr Delay (d2), s/veh	0.6	0.0	0.0	0.6	0.0	0.6	0.0	5.7	6.2	1.7	1.5	1.5
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(95%),veh/ln	2.4	0.0	0.0	6.9	0.0	8.6	0.2	17.9	17.6	8.2	13.9	14.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	28.2	0.0	0.0	30.5	0.0	28.6	22.9	30.4	31.1	37.1	30.4	30.3
LnGrp LOS	C	A	A	C	A	C	C	C	C	D	C	C
Approach Vol, veh/h		82			446			1187			1369	
Approach Delay, s/veh		28.2			29.4			30.7			32.5	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.9	41.0		30.6	28.2	32.7		30.6
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	21.0	51.0		33.0	5.0	67.0		33.0
Max Q Clear Time (g_c+I1), s	14.1	33.1		23.8	2.0	25.6		25.6
Green Ext Time (p_c), s	0.8	2.9		0.9	0.0	2.1		0.1

Intersection Summary		
HCM 6th Ctrl Delay	31.3	
HCM 6th LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	67	216	61	23	97	245	845	217	139	768	175
Future Volume (veh/h)	132	67	216	61	23	97	245	845	217	139	768	175
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		0.99	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	1948	1948	1948	1736	1736	1736	1809	1809	1809	1723	1723	1723
Adj Flow Rate, veh/h	150	76	245	69	26	110	278	960	247	158	873	199
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, %	4	4	4	1	1	1	1	1	1	2	2	2
Cap, veh/h	560	109	351	368	73	307	309	1135	501	384	995	227
Arrive On Green	0.11	0.27	0.27	0.09	0.25	0.21	0.11	0.33	0.33	0.16	0.38	0.36
Sat Flow, veh/h	1856	404	1304	1654	289	1221	1723	3436	1516	1641	2636	601
Grp Volume(v), veh/h	150	0	321	69	0	136	278	960	247	158	542	530
Grp Sat Flow(s),veh/h/ln	1856	0	1708	1654	0	1510	1723	1718	1516	1641	1637	1600
Q Serve(g_s), s	3.5	0.0	10.9	1.9	0.0	5.0	5.6	16.8	5.5	0.2	19.9	20.0
Cycle Q Clear(g_c), s	3.5	0.0	10.9	1.9	0.0	5.0	5.6	16.8	5.5	0.2	19.9	20.0
Prop In Lane	1.00		0.76	1.00		0.81	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	560	0	460	368	0	380	309	1135	501	384	617	604
V/C Ratio(X)	0.27	0.00	0.70	0.19	0.00	0.36	0.90	0.85	0.49	0.41	0.88	0.88
Avail Cap(c_a), veh/h	560	0	766	397	0	677	309	1169	516	384	633	619
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	13.5	0.0	21.2	15.4	0.0	21.0	26.9	20.1	7.4	22.9	18.7	18.9
Incr Delay (d2), s/veh	0.3	0.0	0.7	0.2	0.0	0.6	26.5	5.4	0.3	0.3	12.5	12.8
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(95%),veh/ln	2.5	0.0	7.6	1.2	0.0	3.2	10.2	11.1	4.7	3.5	13.5	13.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	0.0	22.0	15.6	0.0	21.5	53.4	25.6	7.7	23.2	31.3	31.8
LnGrp LOS	B	A	C	B	A	C	D	C	A	C	C	C
Approach Vol, veh/h		471			205			1485			1230	
Approach Delay, s/veh		19.3			19.6			27.8			30.4	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	24.4	8.0	19.3	10.0	27.4	6.8	20.4
Change Period (Y+Rc), s	5.0	5.0	4.0	6.0	5.0	5.0	4.0	6.0
Max Green Setting (Gmax), s	8.0	20.0	4.0	26.0	5.0	23.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	12.2	18.8	5.5	7.0	7.6	22.0	3.9	12.9
Green Ext Time (p_c), s	0.1	0.6	0.0	0.7	0.0	0.4	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	27.1
HCM 6th LOS	C

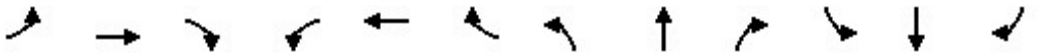
Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	10	7	94	5	43	9	227	80	89	98	1
Future Vol, veh/h	5	10	7	94	5	43	9	227	80	89	98	1
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
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	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	3	3	3	1	1	1	2	2	2
Mvmt Flow	5	11	8	101	5	46	10	244	86	96	105	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	632	649	107	614	606	287	107	0	0	330	0	0
Stage 1	299	299	-	307	307	-	-	-	-	-	-	-
Stage 2	333	350	-	307	299	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.13	6.53	6.23	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.527	4.027	3.327	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	396	391	953	403	410	750	1490	-	-	1229	-	-
Stage 1	714	670	-	701	659	-	-	-	-	-	-	-
Stage 2	685	636	-	701	664	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	342	355	952	364	373	750	1489	-	-	1229	-	-
Mov Cap-2 Maneuver	342	355	-	364	373	-	-	-	-	-	-	-
Stage 1	708	614	-	695	654	-	-	-	-	-	-	-
Stage 2	632	631	-	627	608	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.7	17.8	0.2	3.9
HCM LOS	B	C		

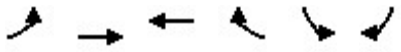
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1489	-	-	439	432	1229	-	-
HCM Lane V/C Ratio	0.006	-	-	0.054	0.353	0.078	-	-
HCM Control Delay (s)	7.4	0	-	13.7	17.8	8.2	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	1.6	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	0	38	8	0	8	4	1175	14	8	1168	4
Future Volume (veh/h)	11	0	38	8	0	8	4	1175	14	8	1168	4
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		0.99	1.00		0.97	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	1723	1723	1723	1726	1726	1726	1723	1723	1723	1767	1767	1767
Adj Flow Rate, veh/h	12	0	43	9	0	9	5	1335	16	9	1327	5
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, %	2	2	2	7	7	7	2	2	2	4	4	4
Cap, veh/h	457	0	200	422	0	196	367	1666	20	342	1679	6
Arrive On Green	0.08	0.00	0.10	0.07	0.00	0.09	0.09	0.50	0.46	0.08	0.49	0.45
Sat Flow, veh/h	1641	0	1452	1644	0	1454	1641	3311	40	1683	3431	13
Grp Volume(v), veh/h	12	0	43	9	0	9	5	660	691	9	649	683
Grp Sat Flow(s),veh/h/ln	1641	0	1452	1644	0	1454	1641	1637	1714	1683	1679	1765
Q Serve(g_s), s	0.3	0.0	1.3	0.2	0.0	0.3	0.0	15.9	15.9	0.0	15.2	15.3
Cycle Q Clear(g_c), s	0.3	0.0	1.3	0.2	0.0	0.3	0.0	15.9	15.9	0.0	15.2	15.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.02	1.00		0.01
Lane Grp Cap(c), veh/h	457	0	200	422	0	196	367	824	863	342	821	864
V/C Ratio(X)	0.03	0.00	0.22	0.02	0.00	0.05	0.01	0.80	0.80	0.03	0.79	0.79
Avail Cap(c_a), veh/h	575	0	889	545	0	891	498	1175	1231	500	1206	1267
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	14.0	0.0	19.1	14.3	0.0	18.7	13.3	9.8	9.8	14.4	10.1	10.1
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.0	0.0	0.0	1.7	1.6	0.0	1.2	1.2
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(95%),veh/ln	0.2	0.0	0.7	0.1	0.0	0.2	0.1	7.1	7.4	0.1	6.9	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.0	0.0	19.3	14.3	0.0	18.7	13.3	11.4	11.4	14.4	11.3	11.3
LnGrp LOS	B	A	B	B	A	B	B	B	B	B	B	B
Approach Vol, veh/h		55			18			1356			1341	
Approach Delay, s/veh		18.1			16.5			11.4			11.3	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	26.8	4.6	9.4	7.2	26.2	4.4	9.5
Change Period (Y+Rc), s	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	31.0	4.0	26.0	5.0	31.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.0	17.9	2.3	2.3	2.0	17.3	2.2	3.3
Green Ext Time (p_c), s	0.0	2.9	0.0	0.0	0.0	2.9	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.5
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	577	434	91	322	14
Future Volume (veh/h)	2	577	434	91	322	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	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	1736	1736	1682	1682	1750	1750
Adj Flow Rate, veh/h	2	620	467	98	346	15
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	5	5	0	0
Cap, veh/h	122	842	817	1171	550	24
Arrive On Green	0.49	0.49	0.49	0.49	0.35	0.30
Sat Flow, veh/h	2	1732	1682	1392	1585	69
Grp Volume(v), veh/h	622	0	467	98	362	0
Grp Sat Flow(s),veh/h/ln	1734	0	1682	1392	1658	0
Q Serve(g_s), s	0.0	0.0	5.9	0.4	5.5	0.0
Cycle Q Clear(g_c), s	8.6	0.0	5.9	0.4	5.5	0.0
Prop In Lane	0.00			1.00	0.96	0.04
Lane Grp Cap(c), veh/h	963	0	817	1171	576	0
V/C Ratio(X)	0.65	0.00	0.57	0.08	0.63	0.00
Avail Cap(c_a), veh/h	2868	0	2668	2703	1800	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.2	0.0	5.5	0.4	8.2	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.2	0.0	1.5	0.2	2.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.4	0.0	5.7	0.5	8.6	0.0
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h		622	565		362	
Approach Delay, s/veh		6.4	4.8		8.6	
Approach LOS		A	A		A	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	17.1			17.1	12.9
Change Period (Y+Rc), s	5.0			5.0	5.0
Max Green Setting (Gmax), s	45.0			45.0	30.0
Max Q Clear Time (g_c+I1), s	10.6			7.9	7.5
Green Ext Time (p_c), s	1.5			1.3	0.8

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

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	16	405	27	8	493
Future Vol, veh/h	31	16	405	27	8	493
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, %	-6	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	7	7	2	2
Mvmt Flow	34	18	450	30	9	548

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1031	465	0	0	480	0
Stage 1	465	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Critical Hdwy	5.22	5.62	-	-	4.12	-
Critical Hdwy Stg 1	4.22	-	-	-	-	-
Critical Hdwy Stg 2	4.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	364	646	-	-	1082	-
Stage 1	738	-	-	-	-	-
Stage 2	686	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	360	646	-	-	1082	-
Mov Cap-2 Maneuver	360	-	-	-	-	-
Stage 1	738	-	-	-	-	-
Stage 2	678	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	14.7	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	424	1082	-
HCM Lane V/C Ratio	-	-	0.123	0.008	-
HCM Control Delay (s)	-	-	14.7	8.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0	-

Intersection	
Intersection Delay, s/veh	10.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	17	48	51	44	189	48	122	44	61	151	8
Future Vol, veh/h	7	17	48	51	44	189	48	122	44	61	151	8
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
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	1	1	1
Mvmt Flow	8	18	52	55	48	205	52	133	48	66	164	9
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9.3	11.2	10.7	10.7
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	73%	0%	26%	0%	19%	0%	95%
Vol Right, %	0%	27%	0%	74%	0%	81%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	48	166	7	65	51	233	61	159
LT Vol	48	0	7	0	51	0	61	0
Through Vol	0	122	0	17	0	44	0	151
RT Vol	0	44	0	48	0	189	0	8
Lane Flow Rate	52	180	8	71	55	253	66	173
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.094	0.29	0.015	0.115	0.1	0.381	0.119	0.283
Departure Headway (Hd)	6.472	5.778	6.868	5.835	6.496	5.416	6.439	5.898
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	554	623	521	614	552	664	557	610
Service Time	4.208	3.514	4.611	3.577	4.23	3.15	4.175	3.634
HCM Lane V/C Ratio	0.094	0.289	0.015	0.116	0.1	0.381	0.118	0.284
HCM Control Delay	9.9	10.9	9.7	9.3	10	11.5	10	11
HCM Lane LOS	A	B	A	A	A	B	A	B
HCM 95th-tile Q	0.3	1.2	0	0.4	0.3	1.8	0.4	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	17	325	426	20	38	408
Future Volume (veh/h)	17	325	426	20	38	408
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	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	1750	1750	1682	1682	1709	1709
Adj Flow Rate, veh/h	18	346	453	21	40	434
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	5	5	3	3
Cap, veh/h	504	449	560	26	110	875
Arrive On Green	0.30	0.30	0.35	0.35	0.07	0.51
Sat Flow, veh/h	1667	1483	1593	74	1628	1709
Grp Volume(v), veh/h	18	346	0	474	40	434
Grp Sat Flow(s),veh/h/ln	1667	1483	0	1666	1628	1709
Q Serve(g_s), s	0.3	9.1	0.0	11.1	1.0	7.2
Cycle Q Clear(g_c), s	0.3	9.1	0.0	11.1	1.0	7.2
Prop In Lane	1.00	1.00		0.04	1.00	
Lane Grp Cap(c), veh/h	504	449	0	586	110	875
V/C Ratio(X)	0.04	0.77	0.00	0.81	0.36	0.50
Avail Cap(c_a), veh/h	1394	1240	0	1393	1361	1429
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.6	13.7	0.0	12.7	19.2	6.9
Incr Delay (d2), s/veh	0.0	1.1	0.0	1.0	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	4.9	0.0	5.8	0.6	2.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.6	14.7	0.0	13.7	19.9	7.0
LnGrp LOS	B	B	A	B	B	A
Approach Vol, veh/h	364		474			474
Approach Delay, s/veh	14.5		13.7			8.1
Approach LOS	B		B			A

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	26.0		6.9	19.1	17.0
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s	35.0		35.0	35.0	35.0
Max Q Clear Time (g_c+I1), s	9.2		3.0	13.1	11.1
Green Ext Time (p_c), s	0.9		0.1	1.0	1.0

Intersection Summary	
HCM 6th Ctrl Delay	11.9
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	115	282	158	643	672	50
Future Volume (veh/h)	115	282	158	643	672	50
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1660	1660	1954	1954	1636	1636
Adj Flow Rate, veh/h	126	310	174	707	738	55
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	5	5	1	1	2	2
Cap, veh/h	616	995	249	801	801	712
Arrive On Green	0.20	0.20	0.13	0.41	0.51	0.51
Sat Flow, veh/h	3237	1396	1861	1954	1558	1386
Grp Volume(v), veh/h	126	310	174	707	738	55
Grp Sat Flow(s),veh/h/ln	1577	1396	1861	1954	1558	1386
Q Serve(g_s), s	3.1	7.7	8.2	30.8	40.3	1.9
Cycle Q Clear(g_c), s	3.1	7.7	8.2	30.8	40.3	1.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	616	995	249	801	801	712
V/C Ratio(X)	0.20	0.31	0.70	0.88	0.92	0.08
Avail Cap(c_a), veh/h	930	1135	329	1081	938	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	5.0	38.2	25.1	20.7	11.3
Incr Delay (d2), s/veh	0.2	0.2	4.3	6.8	12.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.1	7.1	21.1	22.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	31.3	5.2	42.4	32.0	33.6	11.4
LnGrp LOS	C	A	D	C	C	B
Approach Vol, veh/h	436			881	793	
Approach Delay, s/veh	12.7			34.0	32.1	
Approach LOS	B			C	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		41.3		50.9	19.8	21.5
Change Period (Y+Rc), s		5.5		5.5	9.5	5.5
Max Green Setting (Gmax), s		49.0		53.5	14.3	25.2
Max Q Clear Time (g_c+I1), s		32.8		42.3	10.2	9.7
Green Ext Time (p_c), s		3.0		3.0	0.2	1.8

Intersection Summary		
HCM 6th Ctrl Delay	28.9	
HCM 6th LOS	C	

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	295	90	61	905	415	98
Future Volume (veh/h)	295	90	61	905	415	98
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	1728	1728	1954	1954	1500	1500
Adj Flow Rate, veh/h	321	98	66	984	451	107
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	1	1	4	4
Cap, veh/h	452	402	361	1185	612	917
Arrive On Green	0.27	0.27	0.10	0.61	0.41	0.41
Sat Flow, veh/h	1646	1465	1861	1954	1500	1270
Grp Volume(v), veh/h	321	98	66	984	451	107
Grp Sat Flow(s),veh/h/ln	1646	1465	1861	1954	1500	1270
Q Serve(g_s), s	8.9	2.6	0.0	20.1	12.8	1.3
Cycle Q Clear(g_c), s	8.9	2.6	0.0	20.1	12.8	1.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	452	402	361	1185	612	917
V/C Ratio(X)	0.71	0.24	0.18	0.83	0.74	0.12
Avail Cap(c_a), veh/h	1013	901	434	3219	2174	2239
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	14.2	20.0	7.9	12.6	2.1
Incr Delay (d2), s/veh	0.8	0.1	0.1	1.2	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.6	1.4	1.1	7.7	5.9	1.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	17.3	14.3	20.1	9.0	13.9	2.2
LnGrp LOS	B	B	C	A	B	A
Approach Vol, veh/h	419			1050	558	
Approach Delay, s/veh	16.6			9.7	11.7	
Approach LOS	B			A	B	

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	33.6		10.0	23.5	16.8
Change Period (Y+Rc), s	7.0		7.0	* 7	5.0
Max Green Setting (Gmax), s	79.0		5.0	* 69	29.0
Max Q Clear Time (g_c+I1), s	22.1		2.0	14.8	10.9
Green Ext Time (p_c), s	4.0		0.0	1.7	1.0

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

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)	62	0	95	2	1	2	221	1093	7	2	1173	56
Future Volume (veh/h)	62	0	95	2	1	2	221	1093	7	2	1173	56
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		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	1709	1709	1709	1709	1709	1709	1709	1709	1709	1831	1831	1831
Adj Flow Rate, veh/h	69	0	106	2	1	2	246	1214	8	2	1303	62
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, %	3	3	3	3	3	3	3	3	3	2	2	2
Cap, veh/h	417	0	127	159	22	44	429	1973	13	287	1577	75
Arrive On Green	0.10	0.00	0.14	0.00	0.04	0.04	0.15	0.60	0.54	0.00	0.47	0.43
Sat Flow, veh/h	1628	0	1429	1628	509	1017	1628	3306	22	1744	3381	161
Grp Volume(v), veh/h	69	0	106	2	0	3	246	596	626	2	670	695
Grp Sat Flow(s),veh/h/ln	1628	0	1429	1628	0	1526	1628	1624	1705	1744	1739	1802
Q Serve(g_s), s	1.8	0.0	3.9	0.1	0.0	0.1	3.4	12.5	12.5	0.0	17.9	18.0
Cycle Q Clear(g_c), s	1.8	0.0	3.9	0.1	0.0	0.1	3.4	12.5	12.5	0.0	17.9	18.0
Prop In Lane	1.00		1.00	1.00		0.67	1.00		0.01	1.00		0.09
Lane Grp Cap(c), veh/h	417	0	127	159	0	65	429	969	1017	287	812	841
V/C Ratio(X)	0.17	0.00	0.84	0.01	0.00	0.05	0.57	0.62	0.62	0.01	0.83	0.83
Avail Cap(c_a), veh/h	461	0	641	277	0	682	518	969	1017	414	927	960
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	16.8	0.0	22.7	24.4	0.0	24.5	9.9	6.9	6.9	9.5	12.4	12.5
Incr Delay (d2), s/veh	0.2	0.0	5.5	0.0	0.0	0.1	1.2	1.2	1.1	0.0	4.8	4.8
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(95%),veh/ln	1.1	0.0	2.4	0.0	0.0	0.1	2.1	5.1	5.3	0.0	10.1	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.0	0.0	28.2	24.5	0.0	24.7	11.1	8.0	8.0	9.5	17.2	17.2
LnGrp LOS	B	A	C	C	A	C	B	A	A	A	B	B
Approach Vol, veh/h		175			5			1468			1367	
Approach Delay, s/veh		23.8			24.6			8.5			17.2	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.1	34.9	4.1	10.3	11.1	27.9	6.6	7.9
Change Period (Y+Rc), s	4.0	6.0	4.0	* 5.6	5.6	6.0	4.0	5.6
Max Green Setting (Gmax), s	4.0	28.5	4.0	* 24	8.4	25.5	4.0	23.9
Max Q Clear Time (g_c+I1), s	2.0	14.5	2.1	5.9	5.4	20.0	3.8	2.1
Green Ext Time (p_c), s	0.0	4.7	0.0	0.1	0.3	2.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.4
HCM 6th LOS	B

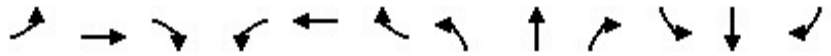
Notes

* 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)	2	3	5	180	3	327	2	1090	65	87	1204	4
Future Volume (veh/h)	2	3	5	180	3	327	2	1090	65	87	1204	4
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		0.98	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	1750	1750	1736	1736	1736	1709	1709	1709	1723	1723	1723
Adj Flow Rate, veh/h	2	3	5	198	3	359	2	1198	71	96	1323	4
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
Percent Heavy Veh, %	0	0	0	1	1	1	3	3	3	2	2	2
Cap, veh/h	56	84	117	471	7	415	230	1308	999	250	1310	4
Arrive On Green	0.08	0.08	0.08	0.29	0.29	0.29	0.09	0.40	0.40	0.09	0.39	0.38
Sat Flow, veh/h	686	1029	1429	1630	25	1437	1628	3247	1413	1641	3347	10
Grp Volume(v), veh/h	5	0	5	201	0	359	2	1198	71	96	647	680
Grp Sat Flow(s),veh/h/ln	1716	0	1429	1655	0	1437	1628	1624	1413	1641	1637	1721
Q Serve(g_s), s	0.2	0.0	0.3	8.5	0.0	20.4	0.0	30.1	1.4	0.0	33.7	33.7
Cycle Q Clear(g_c), s	0.2	0.0	0.3	8.5	0.0	20.4	0.0	30.1	1.4	0.0	33.7	33.7
Prop In Lane	0.40		1.00	0.99		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	140	0	117	478	0	415	230	1308	999	250	640	673
V/C Ratio(X)	0.04	0.00	0.04	0.42	0.00	0.86	0.01	0.92	0.07	0.38	1.01	1.01
Avail Cap(c_a), veh/h	598	0	498	486	0	422	240	1308	999	259	640	673
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	36.4	0.0	36.4	24.8	0.0	29.0	35.2	24.3	4.1	35.3	26.2	26.2
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.2	0.0	15.9	0.0	10.0	0.0	0.4	38.1	37.3
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(95%),veh/ln	0.2	0.0	0.2	6.0	0.0	13.5	0.1	17.7	1.4	3.2	25.6	26.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	0.0	36.5	25.0	0.0	45.0	35.2	34.3	4.1	35.7	64.3	63.5
LnGrp LOS	D	A	D	C	A	D	D	C	A	D	F	F
Approach Vol, veh/h		10			560			1271			1423	
Approach Delay, s/veh		36.5			37.8			32.6			62.0	
Approach LOS		D			D			C			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.5	37.7		27.9	10.5	37.7		10.0
Change Period (Y+Rc), s	6.0	6.0		5.3	6.0	6.0		6.0
Max Green Setting (Gmax), s	5.0	31.7		23.0	5.0	31.7		27.0
Max Q Clear Time (g_c+I1), s	2.0	32.1		22.4	2.0	35.7		2.3
Green Ext Time (p_c), s	0.0	0.0		0.1	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	46.3
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	105	37	240	99	586	25	509	123	525	805	42
Future Volume (veh/h)	63	105	37	240	99	586	25	509	123	525	805	42
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		0.97	1.00		0.97	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	1695	1695	1695	1781	1781	1781	1668	1668	1668	1695	1695	1695
Adj Flow Rate, veh/h	68	113	40	258	0	701	27	547	132	565	866	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
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	4	4	4
Cap, veh/h	85	205	73	263	0	806	38	1172	507	577	864	696
Arrive On Green	0.05	0.17	0.17	0.16	0.00	0.27	0.02	0.37	0.37	0.18	0.51	0.49
Sat Flow, veh/h	1615	1193	422	1696	0	2933	1589	3169	1371	3132	1695	1431
Grp Volume(v), veh/h	68	0	153	258	0	701	27	547	132	565	866	45
Grp Sat Flow(s),veh/h/ln	1615	0	1616	1696	0	1466	1589	1585	1371	1566	1695	1431
Q Serve(g_s), s	5.3	0.0	11.1	19.4	0.0	29.2	2.2	16.8	8.6	23.0	65.3	2.1
Cycle Q Clear(g_c), s	5.3	0.0	11.1	19.4	0.0	29.2	2.2	16.8	8.6	23.0	65.3	2.1
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	85	0	278	263	0	806	38	1172	507	577	864	696
V/C Ratio(X)	0.80	0.00	0.55	0.98	0.00	0.87	0.71	0.47	0.26	0.98	1.00	0.06
Avail Cap(c_a), veh/h	154	0	404	263	0	909	62	1220	528	577	864	696
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	60.0	0.0	48.5	53.9	0.0	44.3	62.1	30.7	28.1	52.0	31.4	17.4
Incr Delay (d2), s/veh	6.5	0.0	0.6	49.3	0.0	7.6	8.5	0.1	0.1	31.9	31.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	0.0	8.0	17.4	0.0	16.8	1.7	10.6	5.1	17.0	42.2	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	66.6	0.0	49.2	103.2	0.0	51.9	70.5	30.8	28.2	83.9	62.5	17.5
LnGrp LOS	E	A	D	F	A	D	E	C	C	F	F	B
Approach Vol, veh/h		221			959			706			1476	
Approach Delay, s/veh		54.5			65.7			31.9			69.3	
Approach LOS		D			E			C			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.0	50.4	12.4	38.3	9.1	68.3	23.0	27.7
Change Period (Y+Rc), s	6.0	6.0	5.7	5.7	6.0	6.0	5.7	5.7
Max Green Setting (Gmax), s	21.0	46.3	12.2	37.1	5.0	62.3	17.3	32.0
Max Q Clear Time (g_c+I1), s	25.0	18.8	7.3	31.2	4.2	67.3	21.4	13.1
Green Ext Time (p_c), s	0.0	1.8	0.0	1.4	0.0	0.0	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	59.5
HCM 6th LOS	E

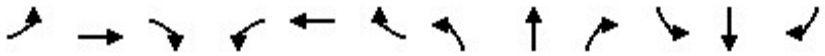
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	40	169	382	86	59	101	655	49	31	946	71
Future Volume (veh/h)	18	40	169	382	86	59	101	655	49	31	946	71
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		0.98
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	1695	1695	1695	1736	1736	1736	1709	1709	1709	1767	1767	1767
Adj Flow Rate, veh/h	19	42	176	398	90	61	105	682	51	32	985	74
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, %	4	4	4	1	1	1	3	3	3	4	4	4
Cap, veh/h	71	108	368	427	325	220	94	755	637	273	947	71
Arrive On Green	0.34	0.34	0.32	0.34	0.34	0.32	0.44	0.44	0.44	0.10	0.58	0.56
Sat Flow, veh/h	59	319	1090	1169	963	653	529	1709	1443	1683	1620	122
Grp Volume(v), veh/h	237	0	0	398	0	151	105	682	51	32	0	1059
Grp Sat Flow(s),veh/h/ln	1468	0	0	1169	0	1616	529	1709	1443	1683	0	1742
Q Serve(g_s), s	0.0	0.0	0.0	16.3	0.0	5.3	0.0	28.6	1.6	0.0	0.0	45.0
Cycle Q Clear(g_c), s	9.7	0.0	0.0	26.0	0.0	5.3	34.0	28.6	1.6	0.0	0.0	45.0
Prop In Lane	0.08		0.74	1.00		0.40	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	546	0	0	427	0	546	94	755	637	273	0	1018
V/C Ratio(X)	0.43	0.00	0.00	0.93	0.00	0.28	1.12	0.90	0.08	0.12	0.00	1.04
Avail Cap(c_a), veh/h	546	0	0	427	0	546	94	755	637	273	0	1018
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.4	0.0	0.0	28.9	0.0	18.8	38.5	20.0	12.4	30.9	0.0	16.1
Incr Delay (d2), s/veh	0.5	0.0	0.0	26.9	0.0	0.1	130.1	14.3	0.1	0.1	0.0	39.2
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(95%),veh/ln	6.1	0.0	0.0	16.0	0.0	3.5	9.2	18.9	0.9	0.9	0.0	34.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.0	0.0	0.0	55.8	0.0	18.9	168.6	34.3	12.5	31.0	0.0	55.3
LnGrp LOS	C	A	A	E	A	B	F	C	B	C	A	F
Approach Vol, veh/h		237			549			838			1091	
Approach Delay, s/veh		21.0			45.6			49.8			54.6	
Approach LOS		C			D			D			D	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	11.0	37.0		29.0		48.0		29.0				
Change Period (Y+Rc), s	6.0	6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s	5.0	31.0		24.0		42.0		24.0				
Max Q Clear Time (g_c+I1), s	12.0	36.0		28.0		47.0		11.7				
Green Ext Time (p_c), s	0.0	0.0		0.0		0.0		0.8				

Intersection Summary		
HCM 6th Ctrl Delay	48.4	
HCM 6th LOS	D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	0	145	0	0	1	140	394	1	0	625	223
Future Volume (veh/h)	105	0	145	0	0	1	140	394	1	0	625	223
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1581	1581	1581	1750	1750	1750	1912	1912	1912	1736	1736	1736
Adj Flow Rate, veh/h	115	0	27	0	0	1	154	433	1	0	687	245
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
Percent Heavy Veh, %	6	6	6	0	0	0	4	4	4	1	1	1
Cap, veh/h	216	0	146	0	0	4	295	1369	3	2	734	262
Arrive On Green	0.07	0.00	0.12	0.00	0.00	0.00	0.08	0.72	0.70	0.00	0.60	0.60
Sat Flow, veh/h	1506	0	1340	0	0	1483	1821	1907	4	1654	1222	436
Grp Volume(v), veh/h	115	0	27	0	0	1	154	0	434	0	0	932
Grp Sat Flow(s),veh/h/ln	1506	0	1340	0	0	1483	1821	0	1911	1654	0	1658
Q Serve(g_s), s	5.0	0.0	1.4	0.0	0.0	0.1	2.1	0.0	6.2	0.0	0.0	38.5
Cycle Q Clear(g_c), s	5.0	0.0	1.4	0.0	0.0	0.1	2.1	0.0	6.2	0.0	0.0	38.5
Prop In Lane	1.00		1.00	0.00		1.00	1.00		0.00	1.00		0.26
Lane Grp Cap(c), veh/h	216	0	146	0	0	4	295	0	1372	2	0	996
V/C Ratio(X)	0.53	0.00	0.18	0.00	0.00	0.25	0.52	0.00	0.32	0.00	0.00	0.94
Avail Cap(c_a), veh/h	216	0	303	0	0	197	397	0	1372	110	0	1059
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	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	30.0	0.0	0.0	37.4	17.1	0.0	3.9	0.0	0.0	13.7
Incr Delay (d2), s/veh	2.5	0.0	0.2	0.0	0.0	56.8	2.0	0.0	0.2	0.0	0.0	14.6
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(95%),veh/ln	3.7	0.0	0.8	0.0	0.0	0.1	3.1	0.0	2.9	0.0	0.0	21.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	0.0	30.2	0.0	0.0	94.2	19.1	0.0	4.1	0.0	0.0	28.3
LnGrp LOS	D	A	C	A	A	F	B	A	A	A	A	C
Approach Vol, veh/h		142			1			588			932	
Approach Delay, s/veh		34.1			94.2			8.0			28.3	
Approach LOS		C			F			A			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	60.0		15.2	8.8	51.2	8.0	7.2
Change Period (Y+Rc), s	7.0	7.0		7.0	4.0	* 7	4.0	* 7
Max Green Setting (Gmax), s	5.0	47.0		17.0	9.0	* 47	4.0	* 10
Max Q Clear Time (g_c+I1), s	10.0	8.2		3.4	4.1	40.5	7.0	2.1
Green Ext Time (p_c), s	0.0	3.0		0.0	0.3	3.6	0.0	0.0

Intersection Summary		
HCM 6th Ctrl Delay		21.6
HCM 6th LOS		C

Notes

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

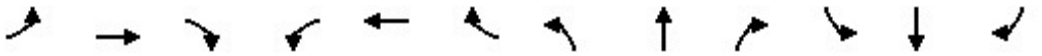
Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	61	33	704	42	25	686
Future Vol, veh/h	61	33	704	42	25	686
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	75	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	66	36	765	46	27	746

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1589	788	0	0	811	0
Stage 1	788	-	-	-	-	-
Stage 2	801	-	-	-	-	-
Critical Hdwy	6.61	6.31	-	-	4.12	-
Critical Hdwy Stg 1	5.61	-	-	-	-	-
Critical Hdwy Stg 2	5.61	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	109	384	-	-	815	-
Stage 1	431	-	-	-	-	-
Stage 2	424	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	105	384	-	-	815	-
Mov Cap-2 Maneuver	299	-	-	-	-	-
Stage 1	431	-	-	-	-	-
Stage 2	410	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.1	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	324	815	-
HCM Lane V/C Ratio	-	-	0.315	0.033	-
HCM Control Delay (s)	-	-	21.1	9.6	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.3	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	3	35	82	5	150	11	754	34	33	463	1
Future Volume (veh/h)	50	3	35	82	5	150	11	754	34	33	463	1
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	0.99		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	1736	1736	1723	1723	1723	1736	1736	1736	1682	1682	1682
Adj Flow Rate, veh/h	54	3	38	89	5	163	12	820	37	36	503	1
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	1	1	2	2	2	1	1	1	5	5	5
Cap, veh/h	236	32	117	179	24	216	560	912	41	228	611	1
Arrive On Green	0.23	0.23	0.22	0.23	0.23	0.22	0.26	0.55	0.53	0.07	0.36	0.34
Sat Flow, veh/h	623	136	506	433	103	931	1654	1648	74	1602	1678	3
Grp Volume(v), veh/h	95	0	0	257	0	0	12	0	857	36	0	504
Grp Sat Flow(s),veh/h/ln	1265	0	0	1467	0	0	1654	0	1723	1602	0	1681
Q Serve(g_s), s	0.0	0.0	0.0	6.4	0.0	0.0	0.0	0.0	27.4	0.0	0.0	16.8
Cycle Q Clear(g_c), s	3.6	0.0	0.0	10.0	0.0	0.0	0.0	0.0	27.4	0.0	0.0	16.8
Prop In Lane	0.57		0.40	0.35		0.63	1.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h	384	0	0	419	0	0	560	0	953	228	0	612
V/C Ratio(X)	0.25	0.00	0.00	0.61	0.00	0.00	0.02	0.00	0.90	0.16	0.00	0.82
Avail Cap(c_a), veh/h	547	0	0	595	0	0	988	0	2704	946	0	2638
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.7	0.0	0.0	22.2	0.0	0.0	16.4	0.0	12.3	26.7	0.0	17.8
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.5	0.0	0.0	0.0	0.0	1.3	0.1	0.0	1.1
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(95%),veh/ln	1.9	0.0	0.0	5.8	0.0	0.0	0.2	0.0	12.4	0.8	0.0	9.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	0.0	0.0	22.8	0.0	0.0	16.4	0.0	13.6	26.9	0.0	18.9
LnGrp LOS	B	A	A	C	A	A	B	A	B	C	A	B
Approach Vol, veh/h		95			257			869			540	
Approach Delay, s/veh		19.8			22.8			13.7			19.5	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.3	37.2		17.3	19.0	25.5		17.3				
Change Period (Y+Rc), s	5.0	5.6		5.0	5.0	5.6		5.0				
Max Green Setting (Gmax), s	30.0	94.4		20.0	30.0	94.4		20.0				
Max Q Clear Time (g_c+I1), s	2.0	29.4		12.0	2.0	18.8		5.6				
Green Ext Time (p_c), s	0.0	2.2		0.4	0.0	1.1		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		17.1	
HCM 6th LOS		B	

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	80	34	730	926	14
Future Volume (veh/h)	16	80	34	730	926	14
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	1614	1614	1723	1723	1695	1695
Adj Flow Rate, veh/h	17	87	37	793	1007	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	2	2	4	4
Cap, veh/h	178	159	272	1313	1088	16
Arrive On Green	0.12	0.12	0.05	0.76	0.65	0.65
Sat Flow, veh/h	1537	1367	1641	1723	1666	25
Grp Volume(v), veh/h	17	87	37	793	0	1022
Grp Sat Flow(s),veh/h/ln	1537	1367	1641	1723	0	1691
Q Serve(g_s), s	0.6	3.5	0.4	11.7	0.0	30.5
Cycle Q Clear(g_c), s	0.6	3.5	0.4	11.7	0.0	30.5
Prop In Lane	1.00	1.00	1.00			0.01
Lane Grp Cap(c), veh/h	178	159	272	1313	0	1104
V/C Ratio(X)	0.10	0.55	0.14	0.60	0.00	0.93
Avail Cap(c_a), veh/h	454	404	335	1542	0	1278
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.7	24.0	11.9	3.0	0.0	8.8
Incr Delay (d2), s/veh	0.2	2.9	0.2	0.5	0.0	10.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	2.1	0.5	2.2	0.0	14.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.0	26.9	12.1	3.5	0.0	19.3
LnGrp LOS	C	C	B	A	A	B
Approach Vol, veh/h	104			830	1022	
Approach Delay, s/veh	26.3			3.9	19.3	
Approach LOS	C			A	B	

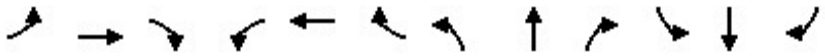
Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	10.2	6.3	41.1		47.4
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	16.0	4.0	42.5		50.5
Max Q Clear Time (g_c+I1), s	5.5	2.4	32.5		13.7
Green Ext Time (p_c), s	0.2	0.0	4.1		4.2

Intersection Summary	
HCM 6th Ctrl Delay	13.2
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	5	62	34	15	27	84	703	43	5	626	82
Future Volume (veh/h)	88	5	62	34	15	27	84	703	43	5	626	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.90	1.00		0.99	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	1690	1690	1690	1695	1695	1695	1704	1704	1704	1662	1662	1662
Adj Flow Rate, veh/h	104	6	73	40	18	32	99	827	51	6	736	96
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	4	4	4	4	4	4	3	3	3	9	9	9
Cap, veh/h	82	2	547	82	22	558	218	1006	62	236	914	119
Arrive On Green	0.42	0.42	0.42	0.43	0.42	0.43	0.05	0.33	0.33	0.07	0.33	0.31
Sat Flow, veh/h	0	5	1296	26	53	1288	1623	3095	191	1583	2805	366
Grp Volume(v), veh/h	110	0	73	58	0	32	99	432	446	6	414	418
Grp Sat Flow(s),veh/h/ln	5	0	1296	79	0	1288	1623	1618	1667	1583	1579	1592
Q Serve(g_s), s	0.0	0.0	2.9	1.0	0.0	1.2	0.0	21.0	21.0	0.0	20.5	20.5
Cycle Q Clear(g_c), s	36.0	0.0	2.9	37.0	0.0	1.2	0.0	21.0	21.0	0.0	20.5	20.5
Prop In Lane	0.95		1.00	0.69		1.00	1.00		0.11	1.00		0.23
Lane Grp Cap(c), veh/h	84	0	547	106	0	558	218	526	542	236	515	519
V/C Ratio(X)	1.30	0.00	0.13	0.55	0.00	0.06	0.45	0.82	0.82	0.03	0.80	0.81
Avail Cap(c_a), veh/h	84	0	547	106	0	558	284	891	918	244	814	821
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	41.7	0.0	15.1	31.7	0.0	14.0	36.8	26.5	26.5	31.5	26.3	26.4
Incr Delay (d2), s/veh	199.5	0.0	0.0	5.9	0.0	0.0	0.5	3.3	3.2	0.0	3.2	3.2
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(95%),veh/ln	11.5	0.0	1.5	2.4	0.0	0.6	3.5	12.7	13.0	0.2	12.2	12.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	241.2	0.0	15.2	37.6	0.0	14.1	37.3	29.8	29.7	31.6	29.5	29.6
LnGrp LOS	F	A	B	D	A	B	D	C	C	C	C	C
Approach Vol, veh/h		183			90			977			838	
Approach Delay, s/veh		151.0			29.2			30.5			29.6	
Approach LOS		F			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.5	32.8		42.0	10.6	32.8		42.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	8.6	43.0		36.0	5.0	46.0		36.0
Max Q Clear Time (g_c+I1), s	12.0	22.5		39.0	2.0	23.0		38.0
Green Ext Time (p_c), s	0.0	3.5		0.0	0.0	3.7		0.0

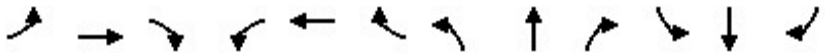
Intersection Summary	
HCM 6th Ctrl Delay	40.6
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	482	22	4	944	6	61	0	6	13	0	13
Future Volume (veh/h)	5	482	22	4	944	6	61	0	6	13	0	13
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	0.98		0.95	0.98		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	1926	1926	1926	1541	1541	1541	1809	1809	1809	1709	1709	1709
Adj Flow Rate, veh/h	5	530	24	4	1037	7	67	0	7	14	0	14
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
Percent Heavy Veh, %	3	3	3	1	1	1	1	1	1	3	3	3
Cap, veh/h	238	1345	61	610	1124	8	278	6	17	160	25	87
Arrive On Green	0.74	0.74	0.74	0.74	0.74	0.74	0.12	0.00	0.12	0.12	0.00	0.12
Sat Flow, veh/h	604	1828	83	764	1529	10	1285	51	140	518	211	729
Grp Volume(v), veh/h	5	0	554	4	0	1044	74	0	0	28	0	0
Grp Sat Flow(s),veh/h/ln	604	0	1911	764	0	1539	1475	0	0	1459	0	0
Q Serve(g_s), s	0.4	0.0	5.9	0.1	0.0	30.7	1.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	31.1	0.0	5.9	6.1	0.0	30.7	2.5	0.0	0.0	0.9	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.01	0.91		0.09	0.50		0.50
Lane Grp Cap(c), veh/h	238	0	1406	610	0	1132	300	0	0	272	0	0
V/C Ratio(X)	0.02	0.00	0.39	0.01	0.00	0.92	0.25	0.00	0.00	0.10	0.00	0.00
Avail Cap(c_a), veh/h	770	0	3088	1283	0	2486	729	0	0	687	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.8	0.0	2.7	3.8	0.0	6.0	22.4	0.0	0.0	21.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.0	3.7	0.4	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	1.1	0.0	0.0	6.3	1.5	0.0	0.0	0.6	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.8	0.0	2.9	3.8	0.0	9.7	22.8	0.0	0.0	21.9	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	C	A	A	C	A	A
Approach Vol, veh/h		559			1048			74			28	
Approach Delay, s/veh		3.0			9.6			22.8			21.9	
Approach LOS		A			A			C			C	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	10.6	44.5	10.6	44.5
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	88.0	22.0	88.0
Max Q Clear Time (g_c+I1), s	4.5	33.1	2.9	32.7
Green Ext Time (p_c), s	0.2	2.5	0.0	6.8

Intersection Summary	
HCM 6th Ctrl Delay	8.3
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	0	13	77	0	44	3	747	37	9	1501	0
Future Volume (veh/h)	4	0	13	77	0	44	3	747	37	9	1501	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1967	1967	1967	1701	1701	1701	1717	1717	1717	1759	1759	1759
Adj Flow Rate, veh/h	4	0	14	84	0	0	3	812	40	10	1632	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	2	2	2	2	2	2
Cap, veh/h	287	0	166	236	0		283	2464	121	573	2601	0
Arrive On Green	0.10	0.00	0.10	0.10	0.00	0.00	0.78	0.78	0.78	0.78	0.78	0.00
Sat Flow, veh/h	1606	0	1647	1262	0	1442	307	3165	156	661	3429	0
Grp Volume(v), veh/h	4	0	14	84	0	0	3	419	433	10	1632	0
Grp Sat Flow(s),veh/h/ln	1606	0	1647	1262	0	1442	307	1631	1689	661	1671	0
Q Serve(g_s), s	0.0	0.0	0.5	3.9	0.0	0.0	0.3	5.1	5.1	0.3	14.0	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.5	4.4	0.0	0.0	14.3	5.1	5.1	5.4	14.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.09	1.00		0.00
Lane Grp Cap(c), veh/h	287	0	166	236	0		283	1270	1315	573	2601	0
V/C Ratio(X)	0.01	0.00	0.08	0.36	0.00		0.01	0.33	0.33	0.02	0.63	0.00
Avail Cap(c_a), veh/h	659	0	547	552	0		442	2117	2192	916	4336	0
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	0.00
Uniform Delay (d), s/veh	26.9	0.0	27.0	29.0	0.0	0.0	6.3	2.2	2.2	3.0	3.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.3	0.3	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.4	2.3	0.0	0.0	0.0	1.2	1.2	0.1	3.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.9	0.0	27.1	29.4	0.0	0.0	6.3	2.5	2.5	3.0	3.7	0.0
LnGrp LOS	C	A	C	C	A		A	A	A	A	A	A
Approach Vol, veh/h		18			84	A		855			1642	
Approach Delay, s/veh		27.1			29.4			2.5			3.7	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	55.6	10.7	55.6	10.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	85.0	21.0	85.0	21.0
Max Q Clear Time (g_c+I1), s	16.3	2.5	16.0	6.4
Green Ext Time (p_c), s	10.4	0.0	34.6	0.1

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

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	3	1021	4	6	1078
Future Volume (veh/h)	1	3	1021	4	6	1078
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98		0.98	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	1750	1750	1903	1903	1723	1723
Adj Flow Rate, veh/h	1	3	1147	4	7	1211
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	30	90	1979	7	482	2380
Arrive On Green	0.10	0.06	0.54	0.49	0.09	0.73
Sat Flow, veh/h	309	926	3791	13	1641	3359
Grp Volume(v), veh/h	5	0	561	590	7	1211
Grp Sat Flow(s),veh/h/ln	1544	0	1808	1901	1641	1637
Q Serve(g_s), s	0.1	0.0	6.0	6.0	0.0	4.6
Cycle Q Clear(g_c), s	0.1	0.0	6.0	6.0	0.0	4.6
Prop In Lane	0.20	0.60		0.01	1.00	
Lane Grp Cap(c), veh/h	151	0	968	1018	482	2380
V/C Ratio(X)	0.03	0.00	0.58	0.58	0.01	0.51
Avail Cap(c_a), veh/h	974	0	5389	5665	858	11132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	0.0	4.5	4.5	7.8	1.7
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.6	0.6	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.0	0.0	4.7	4.7	7.8	1.7
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	5		1151			1218
Approach Delay, s/veh	12.0		4.7			1.8
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.5	18.3			23.7	4.8
Change Period (Y+Rc), s	5.2	5.2			5.2	4.0
Max Green Setting (Gmax), s	6.8	82.8			94.8	16.0
Max Q Clear Time (g_c+I1), s	2.0	8.0			6.6	2.1
Green Ext Time (p_c), s	0.0	5.1			6.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.2
HCM 6th LOS	A

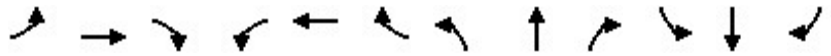
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	284	11	1	348	30	24	3	5	86	2	481
Future Volume (veh/h)	172	284	11	1	348	30	24	3	5	86	2	481
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1682	1682	1682	1736	1736	1736	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	185	305	12	1	374	32	26	3	5	92	2	517
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
Percent Heavy Veh, %	5	5	5	1	1	1	2	2	2	2	2	2
Cap, veh/h	388	628	25	378	454	39	131	207	345	651	2	519
Arrive On Green	0.12	0.39	0.37	0.00	0.29	0.29	0.36	0.36	0.36	0.38	0.36	0.38
Sat Flow, veh/h	1602	1607	63	1654	1577	135	882	580	966	1404	6	1451
Grp Volume(v), veh/h	185	0	317	1	0	406	26	0	8	92	0	519
Grp Sat Flow(s),veh/h/ln	1602	0	1670	1654	0	1712	882	0	1546	1404	0	1457
Q Serve(g_s), s	4.0	0.0	8.0	0.0	0.0	12.4	0.1	0.0	0.2	2.5	0.0	19.9
Cycle Q Clear(g_c), s	4.0	0.0	8.0	0.0	0.0	12.4	20.0	0.0	0.2	2.7	0.0	19.9
Prop In Lane	1.00		0.04	1.00		0.08	1.00		0.63	1.00		1.00
Lane Grp Cap(c), veh/h	388	0	653	378	0	493	131	0	553	651	0	521
V/C Ratio(X)	0.48	0.00	0.49	0.00	0.00	0.82	0.20	0.00	0.01	0.14	0.00	1.00
Avail Cap(c_a), veh/h	507	0	926	671	0	949	131	0	553	651	0	521
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	12.0	0.0	12.8	14.9	0.0	18.6	28.0	0.0	11.6	11.8	0.0	17.4
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.0	0.0	1.3	0.3	0.0	0.0	0.0	0.0	38.4
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(95%),veh/ln	2.0	0.0	4.2	0.0	0.0	7.5	0.6	0.0	0.1	1.3	0.0	16.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.3	0.0	13.0	14.9	0.0	19.9	28.2	0.0	11.6	11.8	0.0	55.8
LnGrp LOS	B	A	B	B	A	B	C	A	B	B	A	E
Approach Vol, veh/h		502			407			34			611	
Approach Delay, s/veh		12.8			19.9			24.3			49.2	
Approach LOS		B			B			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	25.9		25.0	10.8	20.1		25.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.0	30.0		20.0	10.0	30.0		20.0				
Max Q Clear Time (g_c+I1), s	2.0	10.0		22.0	6.0	14.4		21.9				
Green Ext Time (p_c), s	0.0	0.6		0.0	0.1	0.7		0.0				

Intersection Summary	
HCM 6th Ctrl Delay	29.2
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	0	7	200	14	46	47	897	235	46	942	15
Future Volume (veh/h)	11	0	7	200	14	46	47	897	235	46	942	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.90	0.91		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1709	1709	1709	1654	1654	1654	1709	1709	1709	1723	1723	1723
Adj Flow Rate, veh/h	13	0	8	230	16	0	54	1031	0	53	1083	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	7	7	7	3	3	3	2	2	2
Cap, veh/h	619	0	485	535	30		297	1288		331	1346	
Arrive On Green	0.37	0.00	0.34	0.37	0.37	0.00	0.08	0.40	0.00	0.10	0.41	0.00
Sat Flow, veh/h	1292	0	1309	1160	81	1402	1628	3333	0	1641	3359	0
Grp Volume(v), veh/h	13	0	8	246	0	0	54	1031	0	53	1083	0
Grp Sat Flow(s),veh/h/ln	1292	0	1309	1241	0	1402	1628	1624	0	1641	1637	0
Q Serve(g_s), s	0.0	0.0	0.3	10.2	0.0	0.0	0.0	18.5	0.0	0.0	19.2	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.3	10.5	0.0	0.0	0.0	18.5	0.0	0.0	19.2	0.0
Prop In Lane	1.00		1.00	0.93		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	619	0	485	565	0		297	1288		331	1346	
V/C Ratio(X)	0.02	0.00	0.02	0.44	0.00		0.18	0.80		0.16	0.80	
Avail Cap(c_a), veh/h	787	0	655	729	0		334	1971		372	2135	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.2	0.0	13.8	16.5	0.0	0.0	24.3	17.6	0.0	22.6	17.1	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.3	0.7	0.0	0.1	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	0.1	5.1	0.0	0.0	1.3	9.9	0.0	1.2	10.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	0.0	13.8	17.0	0.0	0.0	24.6	18.3	0.0	22.7	17.6	0.0
LnGrp LOS	B	A	B	B	A		C	B		C	B	
Approach Vol, veh/h		21			246	A		1085	A		1136	A
Approach Delay, s/veh		13.4			17.0			18.6			17.8	
Approach LOS		B			B			B			B	

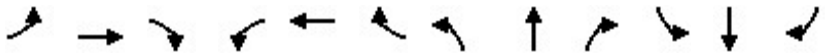
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	29.2		27.4	8.4	30.1		27.4
Change Period (Y+Rc), s	5.9	5.9		6.0	5.9	* 5.9		6.0
Max Green Setting (Gmax), s	5.1	37.1		30.0	4.0	* 40		30.0
Max Q Clear Time (g_c+I1), s	2.0	20.5		12.5	2.0	21.2		2.4
Green Ext Time (p_c), s	0.0	2.8		1.0	0.0	3.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	756	330	35	2328	75	998	122	21	83	143	363
Future Volume (veh/h)	207	756	330	35	2328	75	998	122	21	83	143	363
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		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1682	1682	1682	1723	1723	1723	1795	1795	1795	1709	1709	1709
Adj Flow Rate, veh/h	216	788	344	36	2789	90	1008	330	0	86	149	0
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, %	5	5	5	2	2	2	2	2	2	3	3	3
Cap, veh/h	184	1667	1028	65	2061	66	745	391		177	186	
Arrive On Green	0.12	0.52	0.52	0.04	0.44	0.43	0.22	0.22	0.00	0.11	0.11	0.00
Sat Flow, veh/h	1602	3195	1391	1641	4681	150	3419	1795	0	1628	1709	1448
Grp Volume(v), veh/h	216	788	344	36	1859	1020	1008	330	0	86	149	0
Grp Sat Flow(s),veh/h/ln	1602	1598	1391	1641	1568	1695	1709	1795	0	1628	1709	1448
Q Serve(g_s), s	19.0	25.8	14.5	3.6	72.7	72.7	36.0	29.1	0.0	8.2	14.1	0.0
Cycle Q Clear(g_c), s	19.0	25.8	14.5	3.6	72.7	72.7	36.0	29.1	0.0	8.2	14.1	0.0
Prop In Lane	1.00		1.00	1.00		0.09	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	1667	1028	65	1380	746	745	391		177	186	
V/C Ratio(X)	1.17	0.47	0.33	0.56	1.35	1.37	1.35	0.84		0.49	0.80	
Avail Cap(c_a), veh/h	184	1667	1028	169	1380	746	745	391		227	238	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	73.1	25.1	7.8	77.9	46.2	46.3	64.6	61.9	0.0	69.3	71.9	0.0
Incr Delay (d2), s/veh	120.3	0.4	0.3	7.2	160.9	173.8	167.4	17.4	0.0	5.6	22.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	21.4	15.1	13.7	2.9	86.4	97.1	49.0	21.4	0.0	6.6	11.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	193.4	25.4	8.1	85.1	207.1	220.1	232.0	79.2	0.0	74.9	93.9	0.0
LnGrp LOS	F	C	A	F	F	F	F	E		E	F	
Approach Vol, veh/h		1348			2915			1338	A		235	A
Approach Delay, s/veh		47.9			210.1			194.3			86.9	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	91.7		22.9	23.0	78.2		41.0
Change Period (Y+Rc), s	5.0	7.5		6.0	5.0	* 7.5		6.0
Max Green Setting (Gmax), s	15.0	73.5		22.0	18.0	* 71		35.0
Max Q Clear Time (g_c+I1), s	5.6	27.8		16.1	21.0	74.7		38.0
Green Ext Time (p_c), s	0.0	12.9		0.9	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	164.1
HCM 6th LOS	F

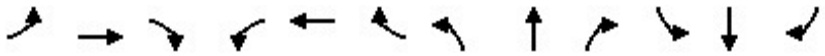
Notes

User approved volume balancing among the lanes for turning movement.

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

User approved changes to right turn type.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	424	383	72	1078	0	1148	0	128	1	0	0
Future Volume (veh/h)	0	424	383	72	1078	0	1148	0	128	1	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1695	1695	1695	1709	1709	1709	1809	1809	1809	1709	1709	1709
Adj Flow Rate, veh/h	0	474	428	88	1319	0	1466	0	163	1	0	0
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, %	4	4	4	3	3	3	1	1	1	3	3	3
Cap, veh/h	66	548	1077	105	1409	0	1597	0	711	17	0	0
Arrive On Green	0.00	0.32	0.30	0.06	0.43	0.00	0.46	0.00	0.46	0.01	0.00	0.00
Sat Flow, veh/h	410	1695	1437	1628	3333	0	3445	0	1533	1628	0	0
Grp Volume(v), veh/h	0	474	428	88	1319	0	1466	0	163	1	0	0
Grp Sat Flow(s),veh/h/ln	410	1695	1437	1628	1624	0	1723	0	1533	1628	0	0
Q Serve(g_s), s	0.0	28.5	11.5	5.8	42.0	0.0	43.0	0.0	6.9	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	28.5	11.5	5.8	42.0	0.0	43.0	0.0	6.9	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	66	548	1077	105	1409	0	1597	0	711	17	0	0
V/C Ratio(X)	0.00	0.87	0.40	0.84	0.94	0.00	0.92	0.00	0.23	0.06	0.00	0.00
Avail Cap(c_a), veh/h	67	548	1077	105	1409	0	1622	0	722	255	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	34.5	4.8	50.1	29.2	0.0	27.1	0.0	17.4	53.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	13.6	0.2	41.6	11.9	0.0	8.7	0.0	0.2	1.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	19.4	16.4	6.4	24.7	0.0	25.3	0.0	4.2	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	48.1	5.1	91.7	41.2	0.0	35.8	0.0	17.6	54.5	0.0	0.0
LnGrp LOS	A	D	A	F	D	A	D	A	B	D	A	A
Approach Vol, veh/h		902			1407			1629			1	
Approach Delay, s/veh		27.7			44.3			34.0			54.5	
Approach LOS		C			D			C			D	

Timer - Assigned Phs	2	4	5	6	8
Phs Duration (G+Y+Rc), s	51.0	53.2	12.0	39.0	4.1
Change Period (Y+Rc), s	7.0	6.0	6.0	7.0	4.0
Max Green Setting (Gmax), s	44.0	48.0	6.0	32.0	16.0
Max Q Clear Time (g_c+I1), s	44.0	45.0	7.8	30.5	2.1
Green Ext Time (p_c), s	0.0	2.2	0.0	0.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	36.2
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	281	184	175	776	187	77
Future Volume (veh/h)	281	184	175	776	187	77
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	1608	1608	1682	1682	1674	1674
Adj Flow Rate, veh/h	293	192	219	970	214	88
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	10	10	5	5	4	4
Cap, veh/h	691	585	228	1121	318	260
Arrive On Green	0.43	0.43	0.14	0.67	0.20	0.18
Sat Flow, veh/h	1608	1363	1602	1682	1594	1418
Grp Volume(v), veh/h	293	192	219	970	214	88
Grp Sat Flow(s),veh/h/ln	1608	1363	1602	1682	1594	1418
Q Serve(g_s), s	8.0	5.9	8.6	28.8	7.9	3.4
Cycle Q Clear(g_c), s	8.0	5.9	8.6	28.8	7.9	3.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	691	585	228	1121	318	260
V/C Ratio(X)	0.42	0.33	0.96	0.87	0.67	0.34
Avail Cap(c_a), veh/h	877	743	228	1315	680	583
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.6	12.0	27.0	8.3	23.4	22.5
Incr Delay (d2), s/veh	0.9	0.7	48.7	6.7	1.9	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.8	3.0	10.2	13.2	5.2	2.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.5	12.7	75.6	15.0	25.3	23.1
LnGrp LOS	B	B	E	B	C	C
Approach Vol, veh/h	485			1189	302	
Approach Delay, s/veh	13.2			26.2	24.6	
Approach LOS	B			C	C	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	15.0	32.2				47.2	16.1
Change Period (Y+Rc), s	7.0	7.0				7.0	5.5
Max Green Setting (Gmax), s	8.0	32.5				47.5	25.0
Max Q Clear Time (g_c+I1), s	10.6	10.0				30.8	9.9
Green Ext Time (p_c), s	0.0	4.3				9.4	0.8

Intersection Summary	
HCM 6th Ctrl Delay	22.7
HCM 6th LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	207	299	158	342	264	125
Future Volume (veh/h)	207	299	158	342	264	125
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	1690	1690	1689	1689	1701	1701
Adj Flow Rate, veh/h	233	336	178	384	297	140
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	4	4	7	7	0	0
Cap, veh/h	680	577	458	680	388	183
Arrive On Green	0.40	0.40	0.40	0.40	0.37	0.37
Sat Flow, veh/h	1690	1432	826	1689	1048	494
Grp Volume(v), veh/h	233	336	178	384	438	0
Grp Sat Flow(s),veh/h/ln	1690	1432	826	1689	1546	0
Q Serve(g_s), s	3.4	6.4	6.7	6.2	8.8	0.0
Cycle Q Clear(g_c), s	3.4	6.4	10.1	6.2	8.8	0.0
Prop In Lane		1.00	1.00		0.68	0.32
Lane Grp Cap(c), veh/h	680	577	458	680	572	0
V/C Ratio(X)	0.34	0.58	0.39	0.56	0.77	0.00
Avail Cap(c_a), veh/h	817	692	525	816	879	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	7.3	8.2	10.8	8.1	9.7	0.0
Incr Delay (d2), s/veh	0.3	0.9	0.5	0.7	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	2.4	1.6	2.7	4.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	7.6	9.1	11.3	8.9	11.9	0.0
LnGrp LOS	A	A	B	A	B	A
Approach Vol, veh/h	569			562	438	
Approach Delay, s/veh	8.5			9.6	11.9	
Approach LOS	A			A	B	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	17.0	18.2	18.2
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	19.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	10.8	8.4	12.1
Green Ext Time (p_c), s	1.3	1.6	1.1

Intersection Summary	
HCM 6th Ctrl Delay	9.9
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	847	24	8	2648	111	23
Future Volume (veh/h)	847	24	8	2648	111	23
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	1753	1753	1701	1701	1881	1881
Adj Flow Rate, veh/h	882	20	8	2758	116	12
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	2	2	1	1
Cap, veh/h	2745	1224	24	2800	164	146
Arrive On Green	0.82	0.82	0.01	0.87	0.09	0.09
Sat Flow, veh/h	3419	1486	1620	3317	1791	1594
Grp Volume(v), veh/h	882	20	8	2758	116	12
Grp Sat Flow(s),veh/h/ln	1666	1486	1620	1616	1791	1594
Q Serve(g_s), s	9.1	0.3	0.7	111.3	9.0	1.0
Cycle Q Clear(g_c), s	9.1	0.3	0.7	111.3	9.0	1.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2745	1224	24	2800	164	146
V/C Ratio(X)	0.32	0.02	0.34	0.98	0.71	0.08
Avail Cap(c_a), veh/h	2745	1224	57	2820	238	211
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	3.0	2.2	69.9	8.7	63.2	59.5
Incr Delay (d2), s/veh	0.1	0.0	8.2	13.5	5.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.3	0.1	0.6	34.5	7.8	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.1	2.3	78.1	22.2	68.7	59.8
LnGrp LOS	A	A	E	C	E	E
Approach Vol, veh/h	902			2766	128	
Approach Delay, s/veh	3.1			22.4	67.8	
Approach LOS	A			C	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	16.1	6.1	121.0		127.1
Change Period (Y+Rc), s	5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	4.0	114.0		123.0
Max Q Clear Time (g_c+I1), s	11.0	2.7	11.1		113.3
Green Ext Time (p_c), s	0.2	0.0	4.9		8.8

Intersection Summary	
HCM 6th Ctrl Delay	19.3
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	272	7	623	822	39	2	582	486	56	843	800
Future Volume (veh/h)	176	272	7	623	822	39	2	582	486	56	843	800
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	1641	1641	1641	1759	1759	1759	1762	1762	1762	1674	1674	1674
Adj Flow Rate, veh/h	185	286	7	656	865	41	2	613	0	59	887	0
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, %	8	8	8	2	2	2	7	7	7	2	2	2
Cap, veh/h	254	390	10	957	1091	52	163	1093		282	1146	
Arrive On Green	0.08	0.13	0.13	0.29	0.34	0.34	0.00	0.33	0.00	0.04	0.36	0.00
Sat Flow, veh/h	3032	3110	76	3249	3245	154	1678	3348	1493	1594	3264	0
Grp Volume(v), veh/h	185	143	150	656	445	461	2	613	0	59	887	0
Grp Sat Flow(s),veh/h/ln	1516	1559	1627	1625	1671	1728	1678	1674	1493	1594	1590	0
Q Serve(g_s), s	4.9	7.3	7.4	14.8	20.0	20.0	0.1	12.5	0.0	2.0	20.5	0.0
Cycle Q Clear(g_c), s	4.9	7.3	7.4	14.8	20.0	20.0	0.1	12.5	0.0	2.0	20.5	0.0
Prop In Lane	1.00		0.05	1.00		0.09	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	254	196	204	957	562	581	163	1093		282	1146	
V/C Ratio(X)	0.73	0.73	0.73	0.69	0.79	0.79	0.01	0.56		0.21	0.77	
Avail Cap(c_a), veh/h	329	320	334	1432	897	928	240	2603		304	2476	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.0	34.9	34.9	25.8	24.9	24.9	20.6	23.0	0.0	18.3	23.5	0.0
Incr Delay (d2), s/veh	5.7	5.2	5.0	0.9	2.6	2.5	0.0	0.5	0.0	0.4	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.5	5.3	5.6	9.4	12.4	12.7	0.0	8.3	0.0	1.3	11.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.7	40.1	39.9	26.7	27.4	27.4	20.6	23.5	0.0	18.7	24.6	0.0
LnGrp LOS	D	D	D	C	C	C	C	C		B	C	
Approach Vol, veh/h		478			1562			615	A		946	A
Approach Delay, s/veh		41.0			27.1			23.4			24.3	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	38.9	14.9	4.7	34.4	11.4	32.4	7.5	31.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	36.5	17.0	4.0	64.5	9.0	44.5	4.1	64.4
Max Q Clear Time (g_c+I1), s	16.8	9.4	2.1	22.5	6.9	22.0	4.0	14.5
Green Ext Time (p_c), s	2.4	0.9	0.0	7.4	0.1	5.9	0.0	4.7

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

Notes

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

MOVEMENT SUMMARY

Site: 3 [3 - SE Issaquah Fall City Rd & Klahanie Dr SE]

2035 AM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Klahanie Dr SE												
3	L2	2	0.0	0.005	4.3	LOS A	0.0	0.4	0.47	0.32	0.47	33.9
8	T1	1	0.0	0.005	4.3	LOS A	0.0	0.4	0.47	0.32	0.47	33.9
18	R2	1	0.0	0.005	4.3	LOS A	0.0	0.4	0.47	0.32	0.47	33.0
Approach		4	0.0	0.005	4.3	LOS A	0.0	0.4	0.47	0.32	0.47	33.7
NorthEast: SE Issaquah Fall City Rd												
1	L2	1	1.0	0.371	6.8	LOS A	2.0	50.2	0.42	0.29	0.42	34.1
6	T1	826	1.0	0.371	6.7	LOS A	2.0	50.7	0.41	0.29	0.41	34.1
16	R2	58	1.0	0.371	6.5	LOS A	2.0	50.7	0.41	0.28	0.41	33.2
Approach		885	1.0	0.371	6.7	LOS A	2.0	50.7	0.41	0.29	0.41	34.1
NorthWest: Klahanie Dr SE												
7	L2	111	1.0	0.198	9.0	LOS A	0.7	18.5	0.59	0.59	0.59	30.7
4	T1	1	1.0	0.198	9.0	LOS A	0.7	18.5	0.59	0.59	0.59	30.7
14	R2	593	1.0	0.617	12.7	LOS B	5.4	135.4	0.73	0.90	1.21	30.2
Approach		705	1.0	0.617	12.1	LOS B	5.4	135.4	0.70	0.85	1.11	30.2
SouthWest: SE Issaquah Fall City Rd												
5	L2	223	5.0	0.286	5.6	LOS A	1.5	39.6	0.29	0.16	0.29	32.8
2	T1	478	5.0	0.286	5.5	LOS A	1.5	39.9	0.29	0.16	0.29	34.2
12	R2	1	5.0	0.286	5.5	LOS A	1.5	39.9	0.29	0.15	0.29	33.6
Approach		702	5.0	0.286	5.5	LOS A	1.5	39.9	0.29	0.16	0.29	33.8
All Vehicles		2297	2.2	0.617	8.0	LOS A	5.4	135.4	0.47	0.42	0.59	32.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 6 [6 - Issaquah-Pine LK Rd and SE 32nd Way]

2035 AM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Issaquah-Pine Lk Rd NB												
3x	L2	1	2.0	0.691	10.2	LOS B	8.2	208.4	0.46	0.31	0.46	32.3
8x	T1	895	2.0	0.691	2.4	LOS A	8.2	208.4	0.46	0.31	0.46	29.2
18x	R2	137	2.0	0.691	2.9	LOS A	8.2	208.4	0.46	0.31	0.46	28.5
Approach		1033	2.0	0.691	2.5	LOS A	8.2	208.4	0.46	0.31	0.46	29.1
NorthEast: SE 32nd Way WB												
1x	L2	216	3.0	0.788	26.5	LOS C	11.2	288.0	1.00	1.38	1.80	23.7
6x	T1	1	3.0	0.788	23.4	LOS C	11.2	288.0	1.00	1.38	1.80	25.4
16x	R2	298	3.0	0.788	21.6	LOS C	11.2	288.0	1.00	1.38	1.80	22.9
Approach		515	3.0	0.788	23.7	LOS C	11.2	288.0	1.00	1.38	1.80	23.2
NorthWest: Issaquah-Pine Lk Rd SB												
7x	L2	71	2.0	0.707	9.2	LOS A	8.0	203.5	0.75	0.53	0.78	28.8
4x	T1	787	2.0	0.707	3.9	LOS A	8.0	203.5	0.75	0.53	0.78	28.5
14x	R2	2	2.0	0.707	6.1	LOS A	8.0	203.5	0.75	0.53	0.78	30.6
Approach		860	2.0	0.707	4.4	LOS A	8.0	203.5	0.75	0.53	0.78	28.5
SouthWest: Drive Way Access EB												
5x	L2	2	0.0	0.013	16.9	LOS B	0.1	2.2	0.89	0.68	0.89	32.9
2x	T1	1	0.0	0.013	11.3	LOS B	0.1	2.2	0.89	0.68	0.89	32.9
12x	R2	3	0.0	0.013	11.3	LOS B	0.1	2.2	0.89	0.68	0.89	32.0
Approach		6	0.0	0.013	13.2	LOS B	0.1	2.2	0.89	0.68	0.89	32.5
All Vehicles		2414	2.2	0.788	7.7	LOS A	11.2	288.0	0.68	0.62	0.86	27.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 9 [9 - SE Issaquah Fall City Rd & 247th Pl SE]

2035 AM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Pacific Crest Middle School Drwy												
3	L2	188	13.0	0.296	8.1	LOS A	1.1	29.4	0.50	0.50	0.50	30.9
8	T1	30	13.0	0.296	8.1	LOS A	1.1	29.4	0.50	0.50	0.50	31.1
18	R2	12	13.0	0.296	8.1	LOS A	1.1	29.4	0.50	0.50	0.50	30.3
Approach		230	13.0	0.296	8.1	LOS A	1.1	29.4	0.50	0.50	0.50	30.9
NorthEast: SE Issaquah Fall City Rd												
1	L2	4	1.0	0.627	12.3	LOS B	5.7	142.4	0.58	0.51	0.71	31.2
6	T1	1316	1.0	0.627	12.1	LOS B	5.7	142.4	0.57	0.50	0.69	31.3
16	R2	3	1.0	0.627	11.9	LOS B	5.4	136.8	0.57	0.48	0.68	30.6
Approach		1324	1.0	0.627	12.1	LOS B	5.7	142.4	0.57	0.50	0.69	31.3
NorthWest: 247th Pl SE												
7	L2	8	4.0	0.094	9.3	LOS A	0.4	9.9	0.71	0.71	0.71	32.0
4	T1	35	4.0	0.094	9.3	LOS A	0.4	9.9	0.71	0.71	0.71	32.1
14	R2	90	4.0	0.142	7.4	LOS A	0.7	16.9	0.73	0.73	0.73	32.2
Approach		133	4.0	0.142	8.0	LOS A	0.7	16.9	0.72	0.72	0.72	32.2
SouthWest: SE Issaquah Fall CIty Rd												
5	L2	15	3.0	0.198	4.2	LOS A	1.0	26.0	0.17	0.06	0.17	34.8
2	T1	565	3.0	0.198	4.1	LOS A	1.0	26.7	0.17	0.06	0.17	35.1
12	R2	214	3.0	0.132	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	36.5
Approach		795	3.0	0.198	3.0	LOS A	1.0	26.7	0.12	0.04	0.12	35.5
All Vehicles		2481	2.9	0.627	8.6	LOS A	5.7	142.4	0.43	0.36	0.49	32.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 14 [14 - 216th Ave and NE Inglewood Hill Rd]

2035 AM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 216th Ave (NB)												
3	L2	104	1.0	0.187	10.9	LOS B	1.0	26.2	0.60	0.71	0.60	31.5
8	T1	29	1.0	0.187	5.7	LOS A	1.0	26.2	0.60	0.71	0.60	31.4
18	R2	44	1.0	0.187	5.8	LOS A	1.0	26.2	0.60	0.71	0.60	30.6
Approach		178	1.0	0.187	8.8	LOS A	1.0	26.2	0.60	0.71	0.60	31.2
East: NE Inglewood Hill Rd												
1	L2	11	2.0	0.555	9.6	LOS A	4.3	110.1	0.52	0.51	0.52	32.7
6	T1	510	2.0	0.555	4.5	LOS A	4.3	110.1	0.52	0.51	0.52	32.6
16	R2	149	2.0	0.555	4.6	LOS A	4.3	110.1	0.52	0.51	0.52	31.7
Approach		671	2.0	0.555	4.6	LOS A	4.3	110.1	0.52	0.51	0.52	32.4
North: 216th Ave (SB)												
7	L2	229	1.0	0.572	14.2	LOS B	5.1	129.3	0.83	0.95	1.00	30.4
4	T1	31	1.0	0.572	9.1	LOS A	5.1	129.3	0.83	0.95	1.00	30.3
14	R2	236	1.0	0.572	9.2	LOS A	5.1	129.3	0.83	0.95	1.00	29.6
Approach		497	1.0	0.572	11.5	LOS B	5.1	129.3	0.83	0.95	1.00	30.0
West: NE Inglewood Hill Rd												
5	L2	45	2.0	0.334	9.7	LOS A	2.2	54.8	0.53	0.54	0.53	32.5
2	T1	260	2.0	0.334	4.6	LOS A	2.2	54.8	0.53	0.54	0.53	32.4
12	R2	64	2.0	0.334	4.7	LOS A	2.2	54.8	0.53	0.54	0.53	31.5
Approach		369	2.0	0.334	5.2	LOS A	2.2	54.8	0.53	0.54	0.53	32.2
All Vehicles		1713	1.6	0.572	7.2	LOS A	5.1	129.3	0.62	0.66	0.67	31.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 26 [26 - NE 8th St and 244th Ave]

2035 AM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	204	1.0	0.413	6.6	LOS A	2.7	69.3	0.46	0.48	0.46	24.4
8	T1	269	1.0	0.413	2.5	LOS A	2.7	69.3	0.46	0.48	0.46	24.2
18	R2	7	1.0	0.413	3.0	LOS A	2.7	69.3	0.46	0.48	0.46	23.8
Approach		480	1.0	0.413	4.3	LOS A	2.7	69.3	0.46	0.48	0.46	24.3
East: NE 8th St (WB)												
1	L2	7	2.0	0.070	8.6	LOS A	0.4	9.4	0.62	0.60	0.62	24.4
6	T1	23	2.0	0.070	4.5	LOS A	0.4	9.4	0.62	0.60	0.62	24.2
16	R2	27	2.0	0.070	4.9	LOS A	0.4	9.4	0.62	0.60	0.62	23.7
Approach		58	2.0	0.070	5.2	LOS A	0.4	9.4	0.62	0.60	0.62	24.0
North: 244th Ave (SB)												
7	L2	7	2.0	0.579	7.3	LOS A	4.5	113.1	0.60	0.50	0.60	24.6
4	T1	383	2.0	0.579	3.2	LOS A	4.5	113.1	0.60	0.50	0.60	24.4
14	R2	256	2.0	0.579	3.6	LOS A	4.5	113.1	0.60	0.50	0.60	23.9
Approach		646	2.0	0.579	3.4	LOS A	4.5	113.1	0.60	0.50	0.60	24.2
West: NE 8th St (EB)												
5	L2	158	3.0	0.265	10.2	LOS B	1.5	39.4	0.58	0.71	0.58	31.1
2	T1	16	3.0	0.265	5.8	LOS A	1.5	39.4	0.58	0.71	0.58	31.1
12	R2	79	3.0	0.265	5.7	LOS A	1.5	39.4	0.58	0.71	0.58	30.5
Approach		253	3.0	0.265	8.5	LOS A	1.5	39.4	0.58	0.71	0.58	30.9
All Vehicles		1437	1.8	0.579	4.7	LOS A	4.5	113.1	0.55	0.54	0.55	25.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 32 [32 - Issaquah Beaver Lake Rd & 256th Ave]

2035 AM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 256th Ave												
3	L2	165	2.0	0.187	4.6	LOS A	0.9	23.7	0.34	0.20	0.34	33.0
8	T1	27	2.0	0.187	4.6	LOS A	0.9	23.7	0.34	0.20	0.34	33.1
18	R2	35	2.0	0.187	4.6	LOS A	0.9	23.7	0.34	0.20	0.34	32.2
Approach		227	2.0	0.187	4.6	LOS A	0.9	23.7	0.34	0.20	0.34	32.9
East: Issaquah Beaver Lake Rd												
1	L2	68	4.0	0.358	6.6	LOS A	2.1	54.5	0.44	0.30	0.44	33.3
6	T1	323	4.0	0.358	6.6	LOS A	2.1	54.5	0.44	0.30	0.44	33.4
16	R2	23	4.0	0.358	6.6	LOS A	2.1	54.5	0.44	0.30	0.44	32.5
Approach		414	4.0	0.358	6.6	LOS A	2.1	54.5	0.44	0.30	0.44	33.3
North: 256th Ave												
7	L2	42	0.0	0.119	4.9	LOS A	0.6	16.1	0.59	0.46	0.59	33.8
4	T1	49	0.0	0.119	4.9	LOS A	0.6	16.1	0.59	0.46	0.59	33.8
14	R2	22	0.0	0.119	4.9	LOS A	0.6	16.1	0.59	0.46	0.59	33.0
Approach		113	0.0	0.119	4.9	LOS A	0.6	16.1	0.59	0.46	0.59	33.6
West: Issaquah Beaver Lake Rd												
5	L2	23	4.0	0.239	5.1	LOS A	1.3	32.7	0.34	0.20	0.34	34.3
2	T1	114	4.0	0.239	5.1	LOS A	1.3	32.7	0.34	0.20	0.34	34.3
12	R2	151	4.0	0.239	5.1	LOS A	1.3	32.7	0.34	0.20	0.34	33.4
Approach		288	4.0	0.239	5.1	LOS A	1.3	32.7	0.34	0.20	0.34	33.9
All Vehicles		1043	3.1	0.358	5.6	LOS A	2.1	54.5	0.41	0.27	0.41	33.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 39 [39 - 233rd Ave NE & NE 8th Street]

2035 AM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 233rd Ave (NB)												
3	L2	50	6.0	0.174	7.7	LOS A	0.9	24.3	0.55	0.62	0.55	25.0
8	T1	23	6.0	0.174	6.7	LOS A	0.9	24.3	0.55	0.62	0.55	29.2
18	R2	86	6.0	0.174	4.0	LOS A	0.9	24.3	0.55	0.62	0.55	24.3
Approach		159	6.0	0.174	5.5	LOS A	0.9	24.3	0.55	0.62	0.55	25.1
East: NE 8th St (WB)												
1	L2	176	1.0	0.590	6.3	LOS A	5.2	131.6	0.42	0.40	0.42	25.0
6	T1	502	1.0	0.590	2.2	LOS A	5.2	131.6	0.42	0.40	0.42	24.8
16	R2	66	1.0	0.590	5.1	LOS A	5.2	131.6	0.42	0.40	0.42	28.7
Approach		744	1.0	0.590	3.4	LOS A	5.2	131.6	0.42	0.40	0.42	25.1
North: 233rd Ave NE												
7	L2	78	0.0	0.376	13.7	LOS B	2.5	61.6	0.78	0.85	0.78	33.6
4	T1	140	0.0	0.376	9.2	LOS A	2.5	61.6	0.78	0.85	0.78	33.7
14	R2	73	0.0	0.376	9.0	LOS A	2.5	61.6	0.78	0.85	0.78	33.0
Approach		291	0.0	0.376	10.4	LOS B	2.5	61.6	0.78	0.85	0.78	33.5
West: NE 8th St (EB)												
5	L2	12	4.0	0.434	11.5	LOS B	2.8	71.7	0.63	0.67	0.63	33.1
2	T1	319	4.0	0.434	6.1	LOS A	2.8	71.7	0.63	0.67	0.63	31.8
12	R2	90	4.0	0.434	6.1	LOS A	2.8	71.7	0.63	0.67	0.63	31.1
Approach		420	4.0	0.434	6.3	LOS A	2.8	71.7	0.63	0.67	0.63	31.7
All Vehicles		1614	2.1	0.590	5.6	LOS A	5.2	131.6	0.55	0.57	0.55	27.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 41 [41 - 244th Ave NE & E Main Dr]

2035 AM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	9	1.0	0.162	8.5	LOS A	0.8	19.7	0.24	0.44	0.24	32.7
8	T1	166	1.0	0.162	4.1	LOS A	0.8	19.7	0.24	0.44	0.24	32.7
18	R2	30	1.0	0.162	4.1	LOS A	0.8	19.7	0.24	0.44	0.24	32.0
Approach		205	1.0	0.162	4.3	LOS A	0.8	19.7	0.24	0.44	0.24	32.6
East: E Main Dr (WB)												
1	L2	95	1.0	0.188	9.1	LOS A	0.9	23.2	0.37	0.60	0.37	31.8
6	T1	1	1.0	0.188	4.7	LOS A	0.9	23.2	0.37	0.60	0.37	31.9
16	R2	121	1.0	0.188	4.6	LOS A	0.9	23.2	0.37	0.60	0.37	31.2
Approach		217	1.0	0.188	6.6	LOS A	0.9	23.2	0.37	0.60	0.37	31.5
North: 244th Ave (SB)												
7	L2	49	3.0	0.311	8.7	LOS A	1.8	45.8	0.30	0.47	0.30	32.4
4	T1	315	3.0	0.311	4.3	LOS A	1.8	45.8	0.30	0.47	0.30	32.4
14	R2	16	3.0	0.311	4.2	LOS A	1.8	45.8	0.30	0.47	0.30	31.7
Approach		380	3.0	0.311	4.8	LOS A	1.8	45.8	0.30	0.47	0.30	32.4
West: E Main Dr (EB)												
5	L2	46	2.0	0.068	10.1	LOS B	0.3	8.4	0.51	0.67	0.51	31.1
2	T1	1	2.0	0.068	5.7	LOS A	0.3	8.4	0.51	0.67	0.51	31.1
12	R2	18	2.0	0.068	5.7	LOS A	0.3	8.4	0.51	0.67	0.51	30.4
Approach		66	2.0	0.068	8.8	LOS A	0.3	8.4	0.51	0.67	0.51	30.9
All Vehicles		868	2.0	0.311	5.5	LOS A	1.8	45.8	0.32	0.51	0.32	32.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 62 [62 - E Lk Sammamish Pk Way and SE 43rd Way]

2035 AM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: E Lk Sammamish Pk Way WB												
8x	T1	562	5.0	0.353	1.4	LOS A	2.8	74.0	0.15	0.19	0.15	30.2
18x	R2	543	5.0	0.341	1.9	LOS A	0.0	0.0	0.00	0.29	0.00	29.5
Approach		1105	5.0	0.353	1.7	LOS A	2.8	74.0	0.08	0.24	0.08	29.8
NorthEast: SE 43rd Way SB												
1x	L2	1121	1.0	0.532	11.5	LOS B	4.5	113.1	0.76	0.86	0.85	27.3
16x	R2	12	1.0	0.532	6.1	LOS A	4.5	113.1	0.75	0.83	0.82	26.5
Approach		1133	1.0	0.532	11.4	LOS B	4.5	113.1	0.76	0.86	0.85	27.3
NorthWest: E Lk Sammamish Pk Way EB												
7x	L2	21	1.0	0.673	13.8	LOS B	4.7	117.3	0.85	1.01	1.15	28.3
4x	T1	923	1.0	0.673	7.4	LOS A	5.1	127.5	0.86	1.01	1.14	28.2
Approach		943	1.0	0.673	7.5	LOS A	5.1	127.5	0.86	1.01	1.14	28.2
All Vehicles		3182	2.4	0.673	6.9	LOS A	5.1	127.5	0.55	0.69	0.67	28.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	40	93	147	1689	990	71
Future Volume (veh/h)	40	93	147	1689	990	71
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	1895	1895	1772	1772	1731	1731
Adj Flow Rate, veh/h	41	44	152	1741	1021	73
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	85	258	192	1574	2308	165
Arrive On Green	0.05	0.05	0.11	0.89	0.74	0.74
Sat Flow, veh/h	1805	1606	1688	1772	3199	223
Grp Volume(v), veh/h	41	44	152	1741	539	555
Grp Sat Flow(s),veh/h/ln	1805	1606	1688	1772	1644	1691
Q Serve(g_s), s	2.7	2.9	10.8	109.0	15.5	15.5
Cycle Q Clear(g_c), s	2.7	2.9	10.8	109.0	15.5	15.5
Prop In Lane	1.00	1.00	1.00			0.13
Lane Grp Cap(c), veh/h	85	258	192	1574	1219	1254
V/C Ratio(X)	0.48	0.17	0.79	1.11	0.44	0.44
Avail Cap(c_a), veh/h	338	484	344	1574	1219	1254
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	44.5	53.0	6.9	6.1	6.1
Incr Delay (d2), s/veh	1.6	0.1	2.8	57.7	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	5.0	8.2	49.5	8.5	8.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	58.6	44.6	55.7	64.6	7.0	7.0
LnGrp LOS	E	D	E	F	A	A
Approach Vol, veh/h	85			1893	1094	
Approach Delay, s/veh	51.4			63.8	7.0	
Approach LOS	D			E	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		113.0		9.8	18.0	95.0
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		108.0		22.0	24.0	79.0
Max Q Clear Time (g_c+I1), s		111.0		4.9	12.8	17.5
Green Ext Time (p_c), s		0.0		0.1	0.2	21.7

Intersection Summary		
HCM 6th Ctrl Delay	43.3	
HCM 6th LOS	D	

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	35	81	138	829	873	64
Future Volume (veh/h)	35	81	138	829	873	64
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	1967	1967	1723	1723	1736	1736
Adj Flow Rate, veh/h	37	85	145	873	919	67
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	1	1
Cap, veh/h	206	154	226	1332	1014	832
Arrive On Green	0.11	0.09	0.14	0.77	0.58	0.57
Sat Flow, veh/h	1874	1667	1641	1723	1736	1468
Grp Volume(v), veh/h	37	85	145	873	919	67
Grp Sat Flow(s),veh/h/ln	1874	1667	1641	1723	1736	1468
Q Serve(g_s), s	1.0	2.8	4.9	13.5	27.2	1.2
Cycle Q Clear(g_c), s	1.0	2.8	4.9	13.5	27.2	1.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	206	154	226	1332	1014	832
V/C Ratio(X)	0.18	0.55	0.64	0.66	0.91	0.08
Avail Cap(c_a), veh/h	870	746	226	2258	1947	1621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.5	25.2	23.7	3.0	10.7	5.7
Incr Delay (d2), s/veh	0.2	1.1	4.8	0.2	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.8	2.0	3.6	1.9	11.9	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	23.7	26.4	28.5	3.2	12.0	5.7
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	122			1018	986	
Approach Delay, s/veh	25.5			6.8	11.6	
Approach LOS	C			A	B	

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	48.0		11.0	37.0	10.2
Change Period (Y+Rc), s	5.0		5.0	5.0	5.8
Max Green Setting (Gmax), s	74.2		6.0	63.2	25.0
Max Q Clear Time (g_c+I1), s	15.5		6.9	29.2	4.8
Green Ext Time (p_c), s	2.4		0.0	2.8	0.3

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

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	0	128	264	129	65	0	175	0	144	0	0	1
Future Vol, veh/h	0	128	264	129	65	0	175	0	144	0	0	1
Conflicting Peds, #/hr	0	0	6	6	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	-	-	-	-	-	-	-	-	105	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	0	-	-	0	-
Peak Hour Factor	95	91	91	91	91	95	91	95	91	95	95	95
Heavy Vehicles, %	0	0	0	1	1	0	0	0	0	0	0	0
Mvmt Flow	0	141	290	142	71	0	192	0	158	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	71	0	0	437	0	0	648	647	292	720	792	71
Stage 1	-	-	-	-	-	-	292	292	-	355	355	-
Stage 2	-	-	-	-	-	-	356	355	-	365	437	-
Critical Hdwy	4.1	-	-	4.11	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1542	-	-	1128	-	-	386	392	752	346	324	997
Stage 1	-	-	-	-	-	-	720	675	-	666	633	-
Stage 2	-	-	-	-	-	-	666	633	-	658	583	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1542	-	-	1123	-	-	345	339	749	245	280	997
Mov Cap-2 Maneuver	-	-	-	-	-	-	345	339	-	245	280	-
Stage 1	-	-	-	-	-	-	716	672	-	666	549	-
Stage 2	-	-	-	-	-	-	577	549	-	519	580	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.8	20.3	8.6
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	345	749	1542	-	-	1123	-	-	997
HCM Lane V/C Ratio	0.557	0.211	-	-	-	0.126	-	-	0.001
HCM Control Delay (s)	27.8	11.1	0	-	-	8.7	0	-	8.6
HCM Lane LOS	D	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	3.2	0.8	0	-	-	0.4	-	-	0

Intersection	
Intersection Delay, s/veh	15.6
Intersection LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	133	218	161	199	271	80
Future Vol, veh/h	133	218	161	199	271	80
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	137	225	166	205	279	82
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	16.3	14.7	15.7
HCM LOS	C	B	C

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	38%	0%	100%	0%
Vol Thru, %	62%	45%	0%	0%
Vol Right, %	0%	55%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	351	360	271	80
LT Vol	133	0	271	0
Through Vol	218	161	0	0
RT Vol	0	199	0	80
Lane Flow Rate	362	371	279	82
Geometry Grp	2	2	7	7
Degree of Util (X)	0.575	0.549	0.54	0.132
Departure Headway (Hd)	5.716	5.329	6.964	5.743
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	630	675	517	623
Service Time	3.771	3.385	4.716	3.495
HCM Lane V/C Ratio	0.575	0.55	0.54	0.132
HCM Control Delay	16.3	14.7	17.6	9.4
HCM Lane LOS	C	B	C	A
HCM 95th-tile Q	3.7	3.4	3.2	0.5

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	27	1058	37	35	492
Future Vol, veh/h	8	27	1058	37	35	492
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	-	-	-	125	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	9	29	1138	40	38	529

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1763	1158	0	0	1178	0
Stage 1	1158	-	-	-	-	-
Stage 2	605	-	-	-	-	-
Critical Hdwy	7	6.5	-	-	4.11	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.209	-
Pot Cap-1 Maneuver	70	219	-	-	596	-
Stage 1	249	-	-	-	-	-
Stage 2	496	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	66	219	-	-	596	-
Mov Cap-2 Maneuver	214	-	-	-	-	-
Stage 1	249	-	-	-	-	-
Stage 2	464	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.9	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	218	596	-
HCM Lane V/C Ratio	-	-	0.173	0.063	-
HCM Control Delay (s)	-	-	24.9	11.4	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.6	0.2	-

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	67	108	3	7	119	154	3	6	2	144	2	100
Future Vol, veh/h	67	108	3	7	119	154	3	6	2	144	2	100
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	70	113	3	7	124	160	3	6	2	150	2	104
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	9.6	11.2	9.3	10.2
HCM LOS	A	B	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	27%	100%	0%	100%	0%	100%	0%
Vol Thru, %	55%	0%	97%	0%	44%	0%	2%
Vol Right, %	18%	0%	3%	0%	56%	0%	98%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	67	111	7	273	144	102
LT Vol	3	67	0	7	0	144	0
Through Vol	6	0	108	0	119	0	2
RT Vol	2	0	3	0	154	0	100
Lane Flow Rate	11	70	116	7	284	150	106
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.02	0.118	0.178	0.012	0.402	0.259	0.148
Departure Headway (Hd)	6.19	6.073	5.549	5.99	5.087	6.224	5.03
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	582	586	641	594	702	573	704
Service Time	4.19	3.857	3.333	3.763	2.86	4.015	2.82
HCM Lane V/C Ratio	0.019	0.119	0.181	0.012	0.405	0.262	0.151
HCM Control Delay	9.3	9.7	9.5	8.8	11.3	11.2	8.7
HCM Lane LOS	A	A	A	A	B	B	A
HCM 95th-tile Q	0.1	0.4	0.6	0	1.9	1	0.5

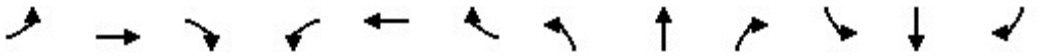
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	0	11	1	0	0	24	528	1	0	976	51
Future Vol, veh/h	34	0	11	1	0	0	24	528	1	0	976	51
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	250	-	-	-	-	0	110	-	-	110	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-4	-	-	0	-	-	0	-	-	1	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	36	0	12	1	0	0	26	562	1	0	1038	54

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1680	1680	1065	1686	-	563	1092	0	0	563	0	0
Stage 1	1065	1065	-	615	-	-	-	-	-	-	-	-
Stage 2	615	615	-	1071	-	-	-	-	-	-	-	-
Critical Hdwy	6.3	5.7	5.8	7.1	-	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	5.3	4.7	-	6.1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.3	4.7	-	6.1	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	-	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	110	139	307	75	0	530	639	-	-	1013	-	-
Stage 1	344	382	-	482	0	-	-	-	-	-	-	-
Stage 2	553	557	-	270	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	107	133	307	70	-	530	639	-	-	1013	-	-
Mov Cap-2 Maneuver	281	317	-	70	-	-	-	-	-	-	-	-
Stage 1	330	382	-	462	-	-	-	-	-	-	-	-
Stage 2	530	534	-	260	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.1	0	0.5	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	639	-	-	281	307	-	1013	-	-
HCM Lane V/C Ratio	0.04	-	-	0.129	0.038	-	-	-	-
HCM Control Delay (s)	10.9	-	-	19.7	17.2	0	0	-	-
HCM Lane LOS	B	-	-	C	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	395	8	7	345	20	10	1	5	22	0	47
Future Volume (veh/h)	60	395	8	7	345	20	10	1	5	22	0	47
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		0.99	1.00		0.97	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	1750	1750	1750	1750	1750	1750	1750	1750	1736	1736	1736
Adj Flow Rate, veh/h	67	444	9	8	388	22	11	1	6	25	0	53
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	1	1	1
Cap, veh/h	452	643	13	399	526	30	68	20	121	94	0	160
Arrive On Green	0.09	0.38	0.38	0.04	0.32	0.32	0.04	0.10	0.10	0.06	0.00	0.11
Sat Flow, veh/h	1667	1708	35	1667	1639	93	1667	211	1264	1654	0	1438
Grp Volume(v), veh/h	67	0	453	8	0	410	11	0	7	25	0	53
Grp Sat Flow(s),veh/h/ln	1667	0	1742	1667	0	1732	1667	0	1474	1654	0	1438
Q Serve(g_s), s	0.9	0.0	8.4	0.1	0.0	8.0	0.2	0.0	0.2	0.6	0.0	1.3
Cycle Q Clear(g_c), s	0.9	0.0	8.4	0.1	0.0	8.0	0.2	0.0	0.2	0.6	0.0	1.3
Prop In Lane	1.00		0.02	1.00		0.05	1.00		0.86	1.00		1.00
Lane Grp Cap(c), veh/h	452	0	656	399	0	555	68	0	141	94	0	160
V/C Ratio(X)	0.15	0.00	0.69	0.02	0.00	0.74	0.16	0.00	0.05	0.27	0.00	0.33
Avail Cap(c_a), veh/h	2073	0	2996	1023	0	1846	1134	0	810	1126	0	790
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	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	7.8	0.0	10.0	8.4	0.0	11.6	17.7	0.0	15.7	17.3	0.0	15.7
Incr Delay (d2), s/veh	0.1	0.0	0.5	0.0	0.0	0.7	1.6	0.0	0.1	2.1	0.0	0.4
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(95%),veh/ln	0.4	0.0	4.0	0.1	0.0	4.2	0.2	0.0	0.1	0.4	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.8	0.0	10.5	8.4	0.0	12.3	19.3	0.0	15.8	19.4	0.0	16.1
LnGrp LOS	A	A	B	A	A	B	B	A	B	B	A	B
Approach Vol, veh/h		520			418			18			78	
Approach Delay, s/veh		10.2			12.2			17.9			17.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	16.5	6.2	7.6	5.7	18.7	5.6	8.3
Change Period (Y+Rc), s	5.3	5.3	5.0	5.0	5.3	5.3	5.0	5.0
Max Green Setting (Gmax), s	39.7	39.7	25.0	20.0	14.7	64.7	25.0	20.0
Max Q Clear Time (g_c+I1), s	2.9	10.0	2.6	2.2	2.1	10.4	2.2	3.3
Green Ext Time (p_c), s	0.1	0.9	0.1	0.0	0.0	1.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	46	58	201	25	175	109	1146	291	195	1114	92
Future Volume (veh/h)	109	46	58	201	25	175	109	1146	291	195	1114	92
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		1.00	1.00		1.00	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	1715	1715	1715	1809	1809	1809	1809	1809	1809	1728	1728	1728
Adj Flow Rate, veh/h	114	48	60	209	26	0	114	1194	0	203	1160	96
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	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	386	142	331	325	25		231	1494		241	1400	116
Arrive On Green	0.27	0.27	0.23	0.25	0.25	0.00	0.13	0.43	0.00	0.15	0.46	0.42
Sat Flow, veh/h	1037	533	1431	817	102	1533	1723	3527	0	1646	3068	254
Grp Volume(v), veh/h	162	0	60	235	0	0	114	1194	0	203	620	636
Grp Sat Flow(s),veh/h/ln	1570	0	1431	919	0	1533	1723	1718	0	1646	1642	1680
Q Serve(g_s), s	0.0	0.0	1.9	9.4	0.0	0.0	3.4	16.9	0.0	6.7	18.5	18.6
Cycle Q Clear(g_c), s	4.6	0.0	1.9	14.0	0.0	0.0	3.4	16.9	0.0	6.7	18.5	18.6
Prop In Lane	0.70		1.00	0.89		1.00	1.00		0.00	1.00		0.15
Lane Grp Cap(c), veh/h	529	0	331	350	0		231	1494		241	749	766
V/C Ratio(X)	0.31	0.00	0.18	0.67	0.00		0.49	0.80		0.84	0.83	0.83
Avail Cap(c_a), veh/h	1281	0	1070	350	0		246	1837		241	878	898
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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	17.3	23.5	0.0	0.0	22.5	13.7	0.0	23.3	13.3	13.5
Incr Delay (d2), s/veh	0.3	0.0	0.3	4.9	0.0	0.0	0.6	1.7	0.0	21.5	5.0	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	0.0	1.0	5.9	0.0	0.0	2.3	9.2	0.0	6.7	10.2	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.1	0.0	17.6	28.4	0.0	0.0	23.1	15.4	0.0	44.8	18.3	18.5
LnGrp LOS	B	A	B	C	A		C	B		D	B	B
Approach Vol, veh/h		222			235	A		1308	A		1459	
Approach Delay, s/veh		17.2			28.4			16.1			22.1	
Approach LOS		B			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.7	27.4		17.0	10.5	28.6		17.0
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.6	27.0		12.0	5.0	27.0		41.0
Max Q Clear Time (g_c+I1), s	8.7	18.9		16.0	5.4	20.6		6.6
Green Ext Time (p_c), s	0.0	2.5		0.0	0.0	2.0		0.9

Intersection Summary	
HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	1.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	51	28	642	78	62	849
Future Vol, veh/h	51	28	642	78	62	849
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	220	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	1	1	2	2	1	1
Mvmt Flow	53	29	662	80	64	875

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1706	704	0	0	743	0
Stage 1	703	-	-	-	-	-
Stage 2	1003	-	-	-	-	-
Critical Hdwy	6.61	6.31	-	-	4.11	-
Critical Hdwy Stg 1	5.61	-	-	-	-	-
Critical Hdwy Stg 2	5.61	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	92	430	-	-	869	-
Stage 1	474	-	-	-	-	-
Stage 2	337	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	85	429	-	-	868	-
Mov Cap-2 Maneuver	208	-	-	-	-	-
Stage 1	474	-	-	-	-	-
Stage 2	312	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.7	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	254	868	-
HCM Lane V/C Ratio	-	-	0.321	0.074	-
HCM Control Delay (s)	-	-	25.7	9.5	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	1.3	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	246	337	209	127	125	246	761	232	207	732	47
Future Volume (veh/h)	86	246	337	209	127	125	246	761	232	207	732	47
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		1.00	0.99		0.96	1.00		0.96	1.00		0.95
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	1750	1750	1750	1750	1736	1736	1736	1715	1715	1715
Adj Flow Rate, veh/h	90	256	0	218	132	130	256	793	242	216	762	49
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, %	0	0	0	0	0	0	1	1	1	1	1	1
Cap, veh/h	413	341		351	417	597	401	894	273	290	925	59
Arrive On Green	0.08	0.19	0.00	0.12	0.24	0.23	0.24	0.36	0.36	0.18	0.30	0.28
Sat Flow, veh/h	1667	1750	1483	1667	1750	1429	1654	2461	751	1633	3097	199
Grp Volume(v), veh/h	90	256	0	218	132	130	256	531	504	216	401	410
Grp Sat Flow(s),veh/h/ln	1667	1750	1483	1667	1750	1429	1654	1650	1562	1633	1629	1668
Q Serve(g_s), s	3.4	11.5	0.0	8.3	5.2	0.8	11.6	25.2	25.2	10.4	19.1	19.1
Cycle Q Clear(g_c), s	3.4	11.5	0.0	8.3	5.2	0.8	11.6	25.2	25.2	10.4	19.1	19.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.48	1.00		0.12
Lane Grp Cap(c), veh/h	413	341		351	417	597	401	599	568	290	487	498
V/C Ratio(X)	0.22	0.75		0.62	0.32	0.22	0.64	0.89	0.89	0.74	0.82	0.82
Avail Cap(c_a), veh/h	418	407		351	479	648	893	625	592	921	657	672
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.1	31.6	0.0	22.3	26.1	6.8	28.3	24.9	25.0	32.5	27.2	27.3
Incr Delay (d2), s/veh	0.1	4.8	0.0	2.5	0.2	0.1	0.6	13.4	14.1	1.4	4.6	4.5
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(95%),veh/ln	2.3	8.8	0.0	5.9	3.8	1.5	7.9	16.9	16.3	7.3	12.1	12.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.2	36.5	0.0	24.8	26.3	6.9	28.9	38.3	39.1	33.9	31.8	31.8
LnGrp LOS	C	D		C	C	A	C	D	D	C	C	C
Approach Vol, veh/h		346	A		480			1291			1027	
Approach Delay, s/veh		33.0			20.4			36.8			32.2	
Approach LOS		C			C			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	33.3	9.8	22.5	23.2	27.9	13.0	19.2
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	45.0	29.3	5.0	20.4	43.0	31.3	8.0	17.4
Max Q Clear Time (g_c+I1), s	12.4	27.2	5.4	7.2	13.6	21.1	10.3	13.5
Green Ext Time (p_c), s	0.5	0.7	0.0	0.5	0.5	1.5	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	32.4
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] 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)	9	1	17	87	5	76	20	1146	68	397	944	8
Future Volume (veh/h)	9	1	17	87	5	76	20	1146	68	397	944	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.96	1.00		0.99	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	1736	1736	1736	1736	1736	1723	1723	1723	1736	1736	1736
Adj Flow Rate, veh/h	9	1	18	90	5	78	21	1181	70	409	973	8
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	164	48	218	444	21	306	526	1438	85	429	1256	10
Arrive On Green	0.24	0.24	0.22	0.24	0.24	0.22	0.22	0.46	0.44	0.13	0.37	0.36
Sat Flow, veh/h	309	204	924	1314	89	1413	1641	3138	186	3208	3353	28
Grp Volume(v), veh/h	28	0	0	95	0	78	21	615	636	409	479	502
Grp Sat Flow(s),veh/h/ln	1437	0	0	1403	0	1413	1641	1637	1687	1604	1650	1731
Q Serve(g_s), s	0.0	0.0	0.0	2.0	0.0	2.4	0.0	17.1	17.1	6.6	13.4	13.4
Cycle Q Clear(g_c), s	0.8	0.0	0.0	2.8	0.0	2.4	0.0	17.1	17.1	6.6	13.4	13.4
Prop In Lane	0.32		0.64	0.95		1.00	1.00		0.11	1.00		0.02
Lane Grp Cap(c), veh/h	430	0	0	465	0	306	526	750	773	429	618	648
V/C Ratio(X)	0.07	0.00	0.00	0.20	0.00	0.25	0.04	0.82	0.82	0.95	0.77	0.77
Avail Cap(c_a), veh/h	875	0	0	907	0	756	526	1095	1129	429	1104	1158
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.8	0.0	0.0	16.3	0.0	17.0	14.4	12.3	12.4	22.5	14.4	14.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.2	0.0	2.1	2.0	31.2	0.8	0.8
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(95%),veh/ln	0.4	0.0	0.0	1.6	0.0	1.3	0.3	8.8	9.1	7.3	7.5	7.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.8	0.0	0.0	16.4	0.0	17.1	14.4	14.4	14.4	53.7	15.2	15.2
LnGrp LOS	B	A	A	B	A	B	B	B	B	D	B	B
Approach Vol, veh/h		28			173			1272			1390	
Approach Delay, s/veh		15.8			16.7			14.4			26.5	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	27.0		15.3	14.4	22.6		15.3
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	33.0		27.0	5.0	33.0		27.0
Max Q Clear Time (g_c+I1), s	8.6	19.1		4.8	2.0	15.4		2.8
Green Ext Time (p_c), s	0.0	2.8		0.4	0.0	2.1		0.0

Intersection Summary		
HCM 6th Ctrl Delay	20.4	
HCM 6th LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	285	13	417	66	16	63	350	1030	50	54	906	290
Future Volume (veh/h)	285	13	417	66	16	63	350	1030	50	54	906	290
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	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	2004	2004	2004	1709	1709	1709	1809	1809	1809	1750	1750	1750
Adj Flow Rate, veh/h	297	14	434	69	17	66	365	1073	0	56	944	302
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, %	0	0	0	3	3	3	1	1	1	0	0	0
Cap, veh/h	717	16	491	215	87	339	264	1177		222	843	268
Arrive On Green	0.10	0.30	0.34	0.04	0.29	0.29	0.10	0.34	0.00	0.07	0.34	0.33
Sat Flow, veh/h	1908	53	1639	1628	304	1179	1723	3436	1533	1667	2461	783
Grp Volume(v), veh/h	297	0	448	69	0	83	365	1073	0	56	636	610
Grp Sat Flow(s),veh/h/ln	1908	0	1691	1628	0	1482	1723	1718	1533	1667	1663	1582
Q Serve(g_s), s	7.0	0.0	18.3	2.2	0.0	3.1	7.0	21.8	0.0	0.0	25.0	25.0
Cycle Q Clear(g_c), s	7.0	0.0	18.3	2.2	0.0	3.1	7.0	21.8	0.0	0.0	25.0	25.0
Prop In Lane	1.00		0.97	1.00		0.80	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	717	0	507	215	0	426	264	1177		222	569	542
V/C Ratio(X)	0.41	0.00	0.88	0.32	0.00	0.19	1.38	0.91		0.25	1.12	1.13
Avail Cap(c_a), veh/h	717	0	602	234	0	528	264	1177		222	569	542
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	13.5	0.0	22.9	19.3	0.0	19.6	31.7	22.9	0.0	31.6	24.0	24.2
Incr Delay (d2), s/veh	0.4	0.0	11.7	0.9	0.0	0.2	194.5	10.7	0.0	0.2	74.2	78.2
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(95%),veh/ln	5.5	0.0	13.0	1.5	0.0	1.9	28.8	14.9	0.0	1.6	30.1	29.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.8	0.0	34.6	20.2	0.0	19.8	226.2	33.7	0.0	31.8	98.2	102.4
LnGrp LOS	B	A	C	C	A	B	F	C		C	F	F
Approach Vol, veh/h		745			152			1438	A		1302	
Approach Delay, s/veh		26.3			20.0			82.5			97.3	
Approach LOS		C			B			F			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	28.0	8.0	27.0	10.0	28.0	7.1	27.9
Change Period (Y+Rc), s	5.0	5.0	4.0	6.0	5.0	5.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	23.0	4.0	26.0	5.0	23.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.0	23.8	9.0	5.1	9.0	27.0	4.2	20.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	73.7
HCM 6th LOS	E

Notes

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

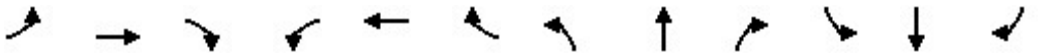
Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	5	7	61	3	61	6	93	164	72	216	4
Future Vol, veh/h	1	5	7	61	3	61	6	93	164	72	216	4
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	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	0	0	0
Mvmt Flow	1	6	8	70	3	70	7	107	189	83	248	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	669	727	251	640	635	202	253	0	0	296	0	0
Stage 1	417	417	-	216	216	-	-	-	-	-	-	-
Stage 2	252	310	-	424	419	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.11	6.51	6.21	4.11	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.509	4.009	3.309	2.209	-	-	2.2	-	-
Pot Cap-1 Maneuver	374	353	793	390	397	841	1318	-	-	1277	-	-
Stage 1	617	595	-	789	726	-	-	-	-	-	-	-
Stage 2	757	663	-	610	592	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	319	324	793	357	364	841	1318	-	-	1277	-	-
Mov Cap-2 Maneuver	319	324	-	357	364	-	-	-	-	-	-	-
Stage 1	613	550	-	783	721	-	-	-	-	-	-	-
Stage 2	686	658	-	552	547	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.8	15.2	0.2	2
HCM LOS	B	C		

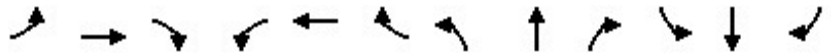
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1318	-	-	475	497	1277	-	-
HCM Lane V/C Ratio	0.005	-	-	0.031	0.289	0.065	-	-
HCM Control Delay (s)	7.7	0	-	12.8	15.2	8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	1.2	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	0	14	8	0	9	11	1618	2	9	1460	16
Future Volume (veh/h)	17	0	14	8	0	9	11	1618	2	9	1460	16
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	0.99		0.99	1.00		0.99	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	1709	1709	1709	1712	1712	1712	1736	1736	1736	1809	1809	1809
Adj Flow Rate, veh/h	18	0	14	8	0	9	11	1668	2	9	1505	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	8	8	8	1	1	1	1	1	1
Cap, veh/h	382	0	160	375	0	147	374	1954	2	280	1821	19
Arrive On Green	0.07	0.00	0.08	0.06	0.00	0.07	0.12	0.58	0.54	0.07	0.52	0.49
Sat Flow, veh/h	1628	0	1439	1630	0	1441	1654	3381	4	1723	3483	37
Grp Volume(v), veh/h	18	0	14	8	0	9	11	814	856	9	742	779
Grp Sat Flow(s),veh/h/ln	1628	0	1439	1630	0	1441	1654	1650	1736	1723	1718	1802
Q Serve(g_s), s	0.5	0.0	0.5	0.2	0.0	0.3	0.0	22.6	22.6	0.0	20.0	20.0
Cycle Q Clear(g_c), s	0.5	0.0	0.5	0.2	0.0	0.3	0.0	22.6	22.6	0.0	20.0	20.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		0.02
Lane Grp Cap(c), veh/h	382	0	160	375	0	147	374	954	1003	280	898	942
V/C Ratio(X)	0.05	0.00	0.09	0.02	0.00	0.06	0.03	0.85	0.85	0.03	0.83	0.83
Avail Cap(c_a), veh/h	472	0	758	480	0	759	413	1318	1387	416	1373	1439
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	17.8	0.0	22.9	18.9	0.0	23.2	16.3	9.7	9.7	19.2	11.0	11.1
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.0	0.0	0.1	0.0	3.1	3.0	0.0	1.4	1.4
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(95%),veh/ln	0.3	0.0	0.3	0.1	0.0	0.2	0.2	9.8	10.2	0.2	9.4	9.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.8	0.0	23.0	18.9	0.0	23.3	16.3	12.8	12.6	19.2	12.5	12.5
LnGrp LOS	B	A	C	B	A	C	B	B	B	B	B	B
Approach Vol, veh/h		32			17			1681			1530	
Approach Delay, s/veh		20.1			21.2			12.7			12.5	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	34.8	5.0	8.6	9.7	31.8	4.5	9.1
Change Period (Y+Rc), s	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	41.0	4.0	26.0	5.0	41.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.0	24.6	2.5	2.3	2.0	22.0	2.2	2.5
Green Ext Time (p_c), s	0.0	4.2	0.0	0.0	0.0	3.8	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.7
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	644	0	3	699	406	0	0	0	134	0	8
Future Volume (veh/h)	5	644	0	3	699	406	0	0	0	134	0	8
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1736	1736	1736				1750	1750	1750
Adj Flow Rate, veh/h	5	692	0	3	752	437				144	0	9
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	1	1	1				0	0	0
Cap, veh/h	141	1073	0	138	1090	925				193	0	12
Arrive On Green	0.63	0.63	0.00	0.53	0.63	0.63				0.22	0.00	0.16
Sat Flow, veh/h	4	1707	0	1	1733	1471				1557	0	97
Grp Volume(v), veh/h	697	0	0	755	0	437				153	0	0
Grp Sat Flow(s),veh/h/ln	1711	0	0	1735	0	1471				1655	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	4.1				2.3	0.0	0.0
Cycle Q Clear(g_c), s	6.6	0.0	0.0	8.7	0.0	4.1				2.3	0.0	0.0
Prop In Lane	0.01		0.00	0.00		1.00				0.94		0.06
Lane Grp Cap(c), veh/h	1214	0	0	1063	0	925				205	0	0
V/C Ratio(X)	0.57	0.00	0.00	0.71	0.00	0.47				0.75	0.00	0.00
Avail Cap(c_a), veh/h	3204	0	0	3097	0	2658				1007	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.0	0.0	0.0	3.4	0.0	2.6				9.9	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	0.1				5.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.0	0.9	0.0	0.1				1.5	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.2	0.0	0.0	3.8	0.0	2.7				15.2	0.0	0.0
LnGrp LOS	A	A	A	A	A	A				B	A	A
Approach Vol, veh/h		697			1192						153	
Approach Delay, s/veh		3.2			3.4						15.2	
Approach LOS		A			A						B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	19.0	7.3	19.0
Change Period (Y+Rc), s	5.0	4.0	5.0
Max Green Setting (Gmax), s	45.0	16.0	45.0
Max Q Clear Time (g_c+I1), s	8.6	4.3	10.7
Green Ext Time (p_c), s	1.8	0.6	3.3

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

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	7	570	33	11	600
Future Vol, veh/h	19	7	570	33	11	600
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, %	-6	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	1	1	1	1
Mvmt Flow	20	8	613	35	12	645

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1300	631	0	0	648	0
Stage 1	631	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Critical Hdwy	5.22	5.62	-	-	4.11	-
Critical Hdwy Stg 1	4.22	-	-	-	-	-
Critical Hdwy Stg 2	4.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	274	534	-	-	943	-
Stage 1	654	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	269	534	-	-	943	-
Mov Cap-2 Maneuver	269	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	623	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	17.8	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	310	943	-
HCM Lane V/C Ratio	-	-	0.09	0.013	-
HCM Control Delay (s)	-	-	17.8	8.9	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Intersection Delay, s/veh	14.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	29	16	40	161	60	77	167	152	155	118	7
Future Vol, veh/h	7	29	16	40	161	60	77	167	152	155	118	7
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	8	34	19	47	187	70	90	194	177	180	137	8
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	10.7	14.4	16.2	12.5
HCM LOS	B	B	C	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	52%	0%	64%	0%	73%	0%	94%
Vol Right, %	0%	48%	0%	36%	0%	27%	0%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	77	319	7	45	40	221	155	125
LT Vol	77	0	7	0	40	0	155	0
Through Vol	0	167	0	29	0	161	0	118
RT Vol	0	152	0	16	0	60	0	7
Lane Flow Rate	90	371	8	52	47	257	180	145
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.168	0.609	0.018	0.103	0.094	0.47	0.346	0.257
Departure Headway (Hd)	6.755	5.909	7.854	7.086	7.29	6.588	6.918	6.37
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	529	608	453	502	490	545	517	561
Service Time	4.523	3.677	5.653	4.884	5.063	4.36	4.694	4.145
HCM Lane V/C Ratio	0.17	0.61	0.018	0.104	0.096	0.472	0.348	0.258
HCM Control Delay	10.9	17.5	10.8	10.7	10.8	15.1	13.3	11.4
HCM Lane LOS	B	C	B	B	B	C	B	B
HCM 95th-tile Q	0.6	4.1	0.1	0.3	0.3	2.5	1.5	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	22	76	522	32	253	581
Future Volume (veh/h)	22	76	522	32	253	581
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	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	1723	1723	1736	1736	1736	1736
Adj Flow Rate, veh/h	24	82	561	34	272	625
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	1	1	1	1
Cap, veh/h	171	152	665	40	358	1245
Arrive On Green	0.10	0.10	0.41	0.41	0.22	0.72
Sat Flow, veh/h	1641	1460	1618	98	1654	1736
Grp Volume(v), veh/h	24	82	0	595	272	625
Grp Sat Flow(s),veh/h/ln	1641	1460	0	1716	1654	1736
Q Serve(g_s), s	0.6	2.4	0.0	14.0	6.9	7.1
Cycle Q Clear(g_c), s	0.6	2.4	0.0	14.0	6.9	7.1
Prop In Lane	1.00	1.00		0.06	1.00	
Lane Grp Cap(c), veh/h	171	152	0	705	358	1245
V/C Ratio(X)	0.14	0.54	0.00	0.84	0.76	0.50
Avail Cap(c_a), veh/h	954	849	0	1766	407	1787
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	19.0	0.0	11.9	16.4	2.8
Incr Delay (d2), s/veh	0.1	1.1	0.0	1.1	5.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	1.4	0.0	7.3	4.9	0.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.3	20.1	0.0	13.0	22.3	2.9
LnGrp LOS	B	C	A	B	C	A
Approach Vol, veh/h	106		595			897
Approach Delay, s/veh	19.7		13.0			8.8
Approach LOS	B		B			A

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	36.0		13.7	22.4	8.7
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s	45.0		10.0	45.0	25.0
Max Q Clear Time (g_c+I1), s	9.1		8.9	16.0	4.4
Green Ext Time (p_c), s	1.5		0.1	1.4	0.2

Intersection Summary	
HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	769	599	86	271	450	153
Future Volume (veh/h)	769	599	86	271	450	153
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	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	1715	1715	1954	1954	1650	1650
Adj Flow Rate, veh/h	809	631	91	285	474	161
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1108	1009	172	1053	569	506
Arrive On Green	0.34	0.34	0.09	0.54	0.36	0.36
Sat Flow, veh/h	3344	1420	1861	1954	1571	1398
Grp Volume(v), veh/h	809	631	91	285	474	161
Grp Sat Flow(s),veh/h/ln	1629	1420	1861	1954	1571	1398
Q Serve(g_s), s	15.4	16.8	3.3	5.6	19.5	5.9
Cycle Q Clear(g_c), s	15.4	16.8	3.3	5.6	19.5	5.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1108	1009	172	1053	569	506
V/C Ratio(X)	0.73	0.63	0.53	0.27	0.83	0.32
Avail Cap(c_a), veh/h	1200	1049	422	1370	746	664
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	5.6	30.6	8.8	20.6	16.2
Incr Delay (d2), s/veh	2.1	1.1	2.5	0.1	6.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.5	23.0	2.7	3.6	11.8	9.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.6	6.7	33.1	8.9	26.8	16.6
LnGrp LOS	C	A	C	A	C	B
Approach Vol, veh/h	1440			376	635	
Approach Delay, s/veh	15.6			14.8	24.2	
Approach LOS	B			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		41.5		29.0	14.0	27.5
Change Period (Y+Rc), s		5.5		5.5	9.5	5.5
Max Green Setting (Gmax), s		47.5		31.5	14.0	24.0
Max Q Clear Time (g_c+I1), s		7.6		21.5	5.3	18.8
Green Ext Time (p_c), s		1.1		2.1	0.1	3.2

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

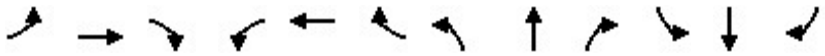
Notes

User approved changes to right turn type.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	101	47	92	511	980	292
Future Volume (veh/h)	101	47	92	511	980	292
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	1715	1715	1940	1940	1541	1541
Adj Flow Rate, veh/h	105	49	96	532	1021	286
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	2	2	1	1
Cap, veh/h	177	158	150	1639	1088	1095
Arrive On Green	0.11	0.11	0.08	0.85	0.71	0.71
Sat Flow, veh/h	1633	1453	1847	1940	1541	1306
Grp Volume(v), veh/h	105	49	96	532	1021	286
Grp Sat Flow(s),veh/h/ln	1633	1453	1847	1940	1541	1306
Q Serve(g_s), s	5.3	2.7	4.4	5.1	49.9	3.9
Cycle Q Clear(g_c), s	5.3	2.7	4.4	5.1	49.9	3.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	177	158	150	1639	1088	1095
V/C Ratio(X)	0.59	0.31	0.64	0.32	0.94	0.26
Avail Cap(c_a), veh/h	472	420	150	2041	1408	1365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	35.6	38.5	1.4	11.1	1.5
Incr Delay (d2), s/veh	1.2	0.4	7.1	0.1	9.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.9	1.7	3.9	0.3	19.6	2.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	37.9	36.0	45.6	1.5	21.0	1.5
LnGrp LOS	D	D	D	A	C	A
Approach Vol, veh/h	154			628	1307	
Approach Delay, s/veh	37.3			8.3	16.7	
Approach LOS	D			A	B	

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	74.1		10.0	64.1	12.4
Change Period (Y+Rc), s	5.0		5.0	7.0	5.0
Max Green Setting (Gmax), s	87.0		5.0	75.0	23.0
Max Q Clear Time (g_c+I1), s	7.1		6.4	51.9	7.3
Green Ext Time (p_c), s	1.6		0.0	5.2	0.3

Intersection Summary	
HCM 6th Ctrl Delay	15.7
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	0	179	15	1	18	105	1463	2	5	1407	80
Future Volume (veh/h)	154	0	179	15	1	18	105	1463	2	5	1407	80
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		0.99	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	1736	1736	1736	1709	1709	1709	1736	1736	1736	1845	1845	1845
Adj Flow Rate, veh/h	159	0	185	15	1	19	108	1508	2	5	1451	82
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	464	0	226	172	8	152	313	1942	3	187	1652	93
Arrive On Green	0.10	0.00	0.20	0.01	0.11	0.11	0.10	0.57	0.53	0.01	0.49	0.46
Sat Flow, veh/h	1654	0	1446	1628	73	1379	1654	3380	4	1757	3367	190
Grp Volume(v), veh/h	159	0	185	15	0	20	108	736	774	5	753	780
Grp Sat Flow(s),veh/h/ln	1654	0	1446	1628	0	1452	1654	1650	1735	1757	1753	1804
Q Serve(g_s), s	5.1	0.0	8.2	0.5	0.0	0.8	1.8	22.8	22.8	0.1	25.5	25.9
Cycle Q Clear(g_c), s	5.1	0.0	8.2	0.5	0.0	0.8	1.8	22.8	22.8	0.1	25.5	25.9
Prop In Lane	1.00		1.00	1.00		0.95	1.00		0.00	1.00		0.11
Lane Grp Cap(c), veh/h	464	0	226	172	0	160	313	948	997	187	860	885
V/C Ratio(X)	0.34	0.00	0.82	0.09	0.00	0.12	0.34	0.78	0.78	0.03	0.87	0.88
Avail Cap(c_a), veh/h	464	0	520	246	0	522	414	948	997	283	883	908
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	19.2	0.0	25.9	25.9	0.0	26.7	13.0	10.9	10.9	12.3	15.1	15.3
Incr Delay (d2), s/veh	0.4	0.0	2.8	0.2	0.0	0.1	0.7	4.1	3.9	0.1	9.6	9.9
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(95%),veh/ln	3.3	0.0	4.8	0.4	0.0	0.5	1.3	11.5	11.9	0.1	15.5	16.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.6	0.0	28.7	26.1	0.0	26.8	13.7	15.0	14.8	12.4	24.7	25.2
LnGrp LOS	B	A	C	C	A	C	B	B	B	B	C	C
Approach Vol, veh/h		344			35			1618			1538	
Approach Delay, s/veh		24.5			26.5			14.8			24.9	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.4	41.2	8.0	13.0	9.9	35.7	5.0	16.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.6	5.6	6.0	4.0	5.6
Max Green Setting (Gmax), s	4.6	33.5	4.0	23.9	8.4	30.5	4.0	23.9
Max Q Clear Time (g_c+I1), s	2.1	24.8	7.1	2.8	3.8	27.9	2.5	10.2
Green Ext Time (p_c), s	0.0	4.6	0.0	0.0	0.1	1.8	0.0	0.6

Intersection Summary	
HCM 6th Ctrl Delay	20.3
HCM 6th LOS	C

Notes

User approved ignoring U-Turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	7	27	75	13	244	14	1306	196	302	1291	23
Future Volume (veh/h)	19	7	27	75	13	244	14	1306	196	302	1291	23
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		0.98	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	1750	1750	1750	1750	1736	1736	1736	1736	1736	1736
Adj Flow Rate, veh/h	20	7	28	78	14	254	15	1360	204	315	1345	24
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, %	0	0	0	0	0	0	1	1	1	1	1	1
Cap, veh/h	84	29	98	289	52	300	398	1494	958	374	1460	26
Arrive On Green	0.07	0.07	0.07	0.20	0.20	0.20	0.19	0.45	0.45	0.18	0.44	0.43
Sat Flow, veh/h	1250	438	1470	1423	255	1479	1654	3299	1438	1654	3314	59
Grp Volume(v), veh/h	27	0	28	92	0	254	15	1360	204	315	669	700
Grp Sat Flow(s),veh/h/ln	1688	0	1470	1679	0	1479	1654	1650	1438	1654	1650	1724
Q Serve(g_s), s	1.8	0.0	2.2	5.5	0.0	19.6	0.0	45.6	6.6	15.7	45.3	45.4
Cycle Q Clear(g_c), s	1.8	0.0	2.2	5.5	0.0	19.6	0.0	45.6	6.6	15.7	45.3	45.4
Prop In Lane	0.74		1.00	0.85		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	113	0	98	341	0	300	398	1494	958	374	727	760
V/C Ratio(X)	0.24	0.00	0.28	0.27	0.00	0.85	0.04	0.91	0.21	0.84	0.92	0.92
Avail Cap(c_a), veh/h	426	0	371	358	0	315	398	1630	1018	416	885	924
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	52.6	0.0	52.7	39.9	0.0	45.6	34.6	30.2	7.9	44.4	31.3	31.3
Incr Delay (d2), s/veh	0.4	0.0	0.6	0.2	0.0	17.1	0.0	7.2	0.0	12.1	11.9	11.6
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(95%),veh/ln	1.4	0.0	1.5	4.2	0.0	13.5	0.6	25.3	6.2	15.0	26.4	27.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	53.0	0.0	53.3	40.1	0.0	62.7	34.6	37.4	8.0	56.6	43.1	42.9
LnGrp LOS	D	A	D	D	A	E	C	D	A	E	D	D
Approach Vol, veh/h		55			346			1579			1684	
Approach Delay, s/veh		53.1			56.7			33.6			45.6	
Approach LOS		D			E			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	34.0	56.8		27.1	25.4	55.3		10.9
Change Period (Y+Rc), s	6.0	6.0		5.3	6.0	5.0		6.0
Max Green Setting (Gmax), s	21.0	55.7		23.0	16.0	61.7		27.0
Max Q Clear Time (g_c+I1), s	17.7	47.6		21.6	2.0	47.4		4.2
Green Ext Time (p_c), s	0.2	3.2		0.2	0.0	2.9		0.1

Intersection Summary	
HCM 6th Ctrl Delay	41.6
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	68	206	30	126	148	608	26	799	229	681	541	40
Future Volume (veh/h)	68	206	30	126	148	608	26	799	229	681	541	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		0.99	1.00		0.97	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	1736	1736	1736	1809	1809	1809	1736	1736	1736	1736	1736	1736
Adj Flow Rate, veh/h	71	215	31	131	513	394	27	832	239	709	564	42
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	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	89	356	51	196	500	456	43	1002	433	643	789	619
Arrive On Green	0.05	0.24	0.24	0.11	0.28	0.30	0.03	0.30	0.30	0.20	0.45	0.43
Sat Flow, veh/h	1654	1480	213	1723	1809	1517	1654	3299	1426	3208	1736	1450
Grp Volume(v), veh/h	71	0	246	131	513	394	27	832	239	709	564	42
Grp Sat Flow(s),veh/h/ln	1654	0	1694	1723	1809	1517	1654	1650	1426	1604	1736	1450
Q Serve(g_s), s	4.6	0.0	13.9	7.9	29.8	26.4	1.7	25.3	15.1	21.6	28.3	1.8
Cycle Q Clear(g_c), s	4.6	0.0	13.9	7.9	29.8	26.4	1.7	25.3	15.1	21.6	28.3	1.8
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	89	0	408	196	500	456	43	1002	433	643	789	619
V/C Ratio(X)	0.80	0.00	0.60	0.67	1.03	0.86	0.63	0.83	0.55	1.10	0.71	0.07
Avail Cap(c_a), veh/h	189	0	503	203	500	456	77	1179	510	643	846	666
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	0.0	36.3	45.8	39.0	35.6	52.0	34.9	31.4	43.1	23.7	18.2
Incr Delay (d2), s/veh	5.9	0.0	0.5	6.2	46.9	15.0	5.7	3.8	0.4	66.9	2.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	9.6	6.6	27.0	16.9	1.4	15.7	8.9	21.6	17.1	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.3	0.0	36.9	51.9	85.9	50.6	57.7	38.7	31.8	110.0	25.9	18.3
LnGrp LOS	E	A	D	D	F	D	E	D	C	F	C	B
Approach Vol, veh/h		317			1038			1098			1315	
Approach Delay, s/veh		41.2			68.2			37.7			71.0	
Approach LOS		D			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	35.7	11.5	35.5	8.8	52.0	15.4	31.6
Change Period (Y+Rc), s	6.0	6.0	5.7	5.7	6.0	6.0	5.7	5.7
Max Green Setting (Gmax), s	19.0	35.5	12.3	29.8	5.0	49.5	10.1	32.0
Max Q Clear Time (g_c+I1), s	23.6	27.3	6.6	31.8	3.7	30.3	9.9	15.9
Green Ext Time (p_c), s	0.0	2.2	0.0	0.0	0.0	1.3	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	58.0
HCM 6th LOS	E

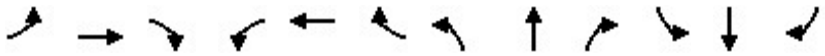
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	22	40	144	15	31	53	1159	365	74	951	11
Future Volume (veh/h)	16	22	40	144	15	31	53	1159	365	74	951	11
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	0.99		0.99	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	1750	1750	1750	1723	1723	1723	1736	1736	1736	1809	1809	1809
Adj Flow Rate, veh/h	17	24	43	157	16	34	58	1260	397	80	1034	12
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	2	2	2	1	1	1	1	1	1
Cap, veh/h	65	87	125	255	77	164	336	1234	1023	162	1116	13
Arrive On Green	0.16	0.16	0.15	0.16	0.16	0.15	0.15	0.71	0.71	0.06	0.63	0.61
Sat Flow, veh/h	198	555	790	1324	489	1039	1654	1736	1439	1723	1784	21
Grp Volume(v), veh/h	84	0	0	157	0	50	58	1260	397	80	0	1046
Grp Sat Flow(s),veh/h/ln	1543	0	0	1324	0	1528	1654	1736	1439	1723	0	1805
Q Serve(g_s), s	0.0	0.0	0.0	9.5	0.0	3.6	0.0	90.0	14.0	1.4	0.0	65.4
Cycle Q Clear(g_c), s	6.0	0.0	0.0	15.5	0.0	3.6	0.0	90.0	14.0	1.4	0.0	65.4
Prop In Lane	0.20		0.51	1.00		0.68	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	277	0	0	255	0	241	336	1234	1023	162	0	1129
V/C Ratio(X)	0.30	0.00	0.00	0.61	0.00	0.21	0.17	1.02	0.39	0.50	0.00	0.93
Avail Cap(c_a), veh/h	314	0	0	287	0	278	336	1234	1023	166	0	1282
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	47.7	0.0	0.0	51.8	0.0	46.8	43.3	18.3	7.3	56.0	0.0	21.1
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.8	0.0	0.2	0.1	31.1	0.2	0.9	0.0	11.2
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(95%),veh/ln	4.4	0.0	0.0	8.6	0.0	2.5	2.8	52.4	7.1	4.4	0.0	37.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.3	0.0	0.0	53.6	0.0	46.9	43.4	49.5	7.6	56.9	0.0	32.3
LnGrp LOS	D	A	A	D	A	D	D	F	A	E	A	C
Approach Vol, veh/h		84			207			1715			1126	
Approach Delay, s/veh		48.3			52.0			39.6			34.1	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	93.0		23.0	21.5	82.2		23.0				
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0				
Max Green Setting (Gmax), s	5.0	87.0		21.0	5.0	87.0		21.0				
Max Q Clear Time (g_c+I1), s	3.4	92.0		17.5	2.0	67.4		8.0				
Green Ext Time (p_c), s	0.0	0.0		0.2	0.1	8.9		0.2				

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	237	0	89	0	1	0	114	825	0	0	516	181
Future Volume (veh/h)	237	0	89	0	1	0	114	825	0	0	516	181
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1750	1750	1750	1967	1967	1967	1750	1750	1750
Adj Flow Rate, veh/h	249	0	43	0	1	0	120	868	0	0	543	191
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	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	323	0	259	0	139	0	186	1272	0	2	628	221
Arrive On Green	0.07	0.00	0.20	0.00	0.08	0.00	0.10	0.65	0.00	0.00	0.51	0.51
Sat Flow, veh/h	1584	0	1409	0	1750	0	1874	1967	0	1667	1237	435
Grp Volume(v), veh/h	249	0	43	0	1	0	120	868	0	0	0	734
Grp Sat Flow(s),veh/h/ln	1584	0	1409	0	1750	0	1874	1967	0	1667	0	1672
Q Serve(g_s), s	5.0	0.0	1.9	0.0	0.0	0.0	4.7	21.4	0.0	0.0	0.0	29.5
Cycle Q Clear(g_c), s	5.0	0.0	1.9	0.0	0.0	0.0	4.7	21.4	0.0	0.0	0.0	29.5
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.00	1.00		0.26
Lane Grp Cap(c), veh/h	323	0	259	0	139	0	186	1272	0	2	0	849
V/C Ratio(X)	0.77	0.00	0.17	0.00	0.01	0.00	0.65	0.68	0.00	0.00	0.00	0.86
Avail Cap(c_a), veh/h	323	0	460	0	594	0	514	2056	0	109	0	1507
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	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	25.9	0.0	32.5	0.0	33.2	8.6	0.0	0.0	0.0	16.5
Incr Delay (d2), s/veh	10.8	0.0	0.1	0.0	0.0	0.0	5.2	0.9	0.0	0.0	0.0	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(95%),veh/ln	5.8	0.0	1.1	0.0	0.0	0.0	4.2	11.6	0.0	0.0	0.0	15.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	42.5	0.0	26.0	0.0	32.5	0.0	38.4	9.5	0.0	0.0	0.0	20.4
LnGrp LOS	D	A	C	A	C	A	D	A	A	A	A	C
Approach Vol, veh/h		292			1			988			734	
Approach Delay, s/veh		40.1			32.5			13.0			20.4	
Approach LOS		D			C			B			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	55.5		21.1	10.6	44.9	8.0	13.1
Change Period (Y+Rc), s	7.0	7.0		7.0	4.0	* 7	4.0	* 7
Max Green Setting (Gmax), s	5.0	79.0		25.0	20.0	* 68	4.0	* 26
Max Q Clear Time (g_c+I1), s	10.0	23.4		3.9	6.7	31.5	7.0	2.0
Green Ext Time (p_c), s	0.0	8.5		0.1	0.4	6.4	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	19.7
HCM 6th LOS	B

Notes

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

Intersection	
Int Delay, s/veh	1.6

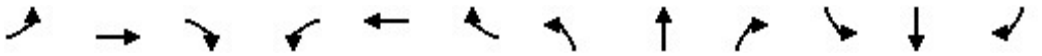
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	73	20	755	110	50	865
Future Vol, veh/h	73	20	755	110	50	865
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	75	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	2	2	1	1
Mvmt Flow	76	21	786	115	52	901

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1850	844	0	0	901	0
Stage 1	844	-	-	-	-	-
Stage 2	1006	-	-	-	-	-
Critical Hdwy	6.6	6.3	-	-	4.11	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.209	-
Pot Cap-1 Maneuver	~ 75	358	-	-	758	-
Stage 1	406	-	-	-	-	-
Stage 2	337	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 70	358	-	-	758	-
Mov Cap-2 Maneuver	243	-	-	-	-	-
Stage 1	406	-	-	-	-	-
Stage 2	313	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.7	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	261	758	-
HCM Lane V/C Ratio	-	-	0.371	0.069	-
HCM Control Delay (s)	-	-	26.7	10.1	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q(veh)	-	-	1.6	0.2	-

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	5	36	80	6	41	38	504	112	152	766	6
Future Volume (veh/h)	18	5	36	80	6	41	38	504	112	152	766	6
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	0.99		0.99	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	1750	1750	1750	1750	1750	1750	1723	1723	1723	1736	1736	1736
Adj Flow Rate, veh/h	19	5	38	84	6	43	40	531	118	160	806	6
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	0	0	0	0	0	2	2	2	1	1	1
Cap, veh/h	167	35	149	280	10	74	357	649	144	505	945	7
Arrive On Green	0.16	0.16	0.13	0.16	0.16	0.13	0.09	0.48	0.44	0.16	0.55	0.51
Sat Flow, veh/h	380	225	958	936	67	479	1641	1358	302	1654	1721	13
Grp Volume(v), veh/h	62	0	0	133	0	0	40	0	649	160	0	812
Grp Sat Flow(s),veh/h/ln	1563	0	0	1481	0	0	1641	0	1660	1654	0	1734
Q Serve(g_s), s	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	14.7	0.0	0.0	17.3
Cycle Q Clear(g_c), s	1.5	0.0	0.0	3.5	0.0	0.0	0.0	0.0	14.7	0.0	0.0	17.3
Prop In Lane	0.31		0.61	0.63		0.32	1.00		0.18	1.00		0.01
Lane Grp Cap(c), veh/h	350	0	0	364	0	0	357	0	793	505	0	952
V/C Ratio(X)	0.18	0.00	0.00	0.36	0.00	0.00	0.11	0.00	0.82	0.32	0.00	0.85
Avail Cap(c_a), veh/h	1193	0	0	1186	0	0	1413	0	2168	1451	0	2265
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	0.0	17.1	0.0	0.0	16.5	0.0	9.9	14.4	0.0	8.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.8	0.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	0.0	1.9	0.0	0.0	0.5	0.0	6.1	2.0	0.0	6.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.6	0.0	0.0	17.4	0.0	0.0	16.6	0.0	10.7	14.6	0.0	9.2
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		62			133			689			972	
Approach Delay, s/veh		16.6			17.4			11.1			10.1	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	23.8		9.8	6.9	27.0		9.8				
Change Period (Y+Rc), s	5.0	5.6		5.0	5.0	5.6		5.0				
Max Green Setting (Gmax), s	30.0	54.4		30.0	30.0	54.4		30.0				
Max Q Clear Time (g_c+I1), s	2.0	16.7		5.5	2.0	19.3		3.5				
Green Ext Time (p_c), s	0.3	1.6		0.3	0.1	2.0		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		11.2	
HCM 6th LOS		B	

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	33	23	799	662	26
Future Volume (veh/h)	21	33	23	799	662	26
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	1695	1695	1736	1736	1736	1736
Adj Flow Rate, veh/h	23	35	25	859	712	28
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	1	1	1	1
Cap, veh/h	213	189	399	1142	876	34
Arrive On Green	0.13	0.13	0.05	0.66	0.53	0.53
Sat Flow, veh/h	1615	1437	1654	1736	1659	65
Grp Volume(v), veh/h	23	35	25	859	0	740
Grp Sat Flow(s),veh/h/ln	1615	1437	1654	1736	0	1725
Q Serve(g_s), s	0.5	0.8	0.2	12.7	0.0	13.5
Cycle Q Clear(g_c), s	0.5	0.8	0.2	12.7	0.0	13.5
Prop In Lane	1.00	1.00	1.00			0.04
Lane Grp Cap(c), veh/h	213	189	399	1142	0	910
V/C Ratio(X)	0.11	0.18	0.06	0.75	0.00	0.81
Avail Cap(c_a), veh/h	765	681	533	2241	0	1862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.5	14.7	5.9	4.4	0.0	7.4
Incr Delay (d2), s/veh	0.2	0.5	0.1	1.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	0.4	0.1	2.1	0.0	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	15.1	6.0	5.4	0.0	9.2
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	58			884	740	
Approach Delay, s/veh	15.0			5.4	9.2	
Approach LOS	B			A	A	

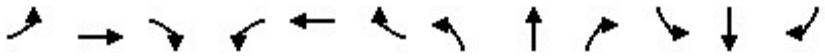
Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	9.0	4.9	24.0		29.0
Change Period (Y+Rc), s	5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	4.0	40.0		48.0
Max Q Clear Time (g_c+I1), s	2.8	2.2	15.5		14.7
Green Ext Time (p_c), s	0.1	0.0	3.6		4.7

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	2	45	101	2	19	72	889	73	39	1026	46
Future Volume (veh/h)	25	2	45	101	2	19	72	889	73	39	1026	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.99		0.97	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	1750	1750	1750	1750	1723	1723	1723	1736	1736	1736
Adj Flow Rate, veh/h	26	2	47	105	2	20	75	926	76	41	1069	48
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Cap, veh/h	137	31	120	342	5	229	313	1278	105	442	1472	66
Arrive On Green	0.14	0.14	0.14	0.16	0.14	0.16	0.06	0.42	0.42	0.12	0.46	0.44
Sat Flow, veh/h	289	225	863	1432	36	1436	1641	3054	251	1654	3211	144
Grp Volume(v), veh/h	75	0	0	107	0	20	75	496	506	41	549	568
Grp Sat Flow(s),veh/h/ln	1377	0	0	1468	0	1436	1641	1637	1668	1654	1650	1705
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.6	0.0	12.8	12.8	0.0	13.6	13.6
Cycle Q Clear(g_c), s	3.0	0.0	0.0	2.9	0.0	0.6	0.0	12.8	12.8	0.0	13.6	13.6
Prop In Lane	0.35		0.63	0.98		1.00	1.00		0.15	1.00		0.08
Lane Grp Cap(c), veh/h	288	0	0	376	0	229	313	685	698	442	756	782
V/C Ratio(X)	0.26	0.00	0.00	0.28	0.00	0.09	0.24	0.72	0.72	0.09	0.73	0.73
Avail Cap(c_a), veh/h	857	0	0	916	0	798	370	1396	1423	442	1407	1455
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	0.0	19.5	0.0	18.1	19.3	12.2	12.2	13.7	11.1	11.1
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.2	0.1	1.5	1.5	0.0	1.3	1.3
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(95%),veh/ln	1.3	0.0	0.0	1.8	0.0	0.3	1.3	7.0	7.1	0.6	7.1	7.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	0.0	0.0	19.9	0.0	18.2	19.4	13.7	13.7	13.7	12.4	12.4
LnGrp LOS	B	A	A	B	A	B	B	B	B	B	B	B
Approach Vol, veh/h		75			127			1077			1158	
Approach Delay, s/veh		19.8			19.6			14.1			12.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	28.1		13.0	11.3	26.1		13.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	5.3	42.0		27.0	5.0	42.0		27.0
Max Q Clear Time (g_c+I1), s	2.0	15.6		4.9	2.0	14.8		5.0
Green Ext Time (p_c), s	0.0	5.3		0.6	0.0	4.6		0.2

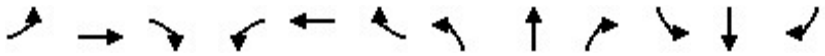
Intersection Summary		
HCM 6th Ctrl Delay		13.8
HCM 6th LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	923	83	6	526	12	21	0	12	14	3	7
Future Volume (veh/h)	17	923	83	6	526	12	21	0	12	14	3	7
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		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1954	1954	1954	1527	1527	1527	1781	1781	1781	1641	1641	1641
Adj Flow Rate, veh/h	18	961	86	6	548	12	22	0	12	15	3	7
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	1	1	2	2	2	3	3	3	8	8	8
Cap, veh/h	677	1194	107	345	1008	22	261	0	50	245	16	37
Arrive On Green	0.68	0.68	0.68	0.68	0.68	0.68	0.09	0.00	0.09	0.09	0.09	0.09
Sat Flow, veh/h	963	1763	158	478	1489	33	977	0	533	852	170	398
Grp Volume(v), veh/h	18	0	1047	6	0	560	34	0	0	25	0	0
Grp Sat Flow(s),veh/h/ln	963	0	1921	478	0	1522	1510	0	0	1420	0	0
Q Serve(g_s), s	0.3	0.0	13.5	0.3	0.0	6.6	0.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.9	0.0	13.5	13.8	0.0	6.6	0.7	0.0	0.0	0.5	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.02	0.65		0.35	0.60		0.28
Lane Grp Cap(c), veh/h	677	0	1301	345	0	1030	311	0	0	298	0	0
V/C Ratio(X)	0.03	0.00	0.80	0.02	0.00	0.54	0.11	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	2479	0	4895	1239	0	3877	1141	0	0	1076	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.6	0.0	4.0	8.9	0.0	2.9	14.6	0.0	0.0	14.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.2	0.0	0.0	0.4	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.8	0.0	0.0	0.2	0.4	0.0	0.0	0.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	4.7	0.0	5.2	8.9	0.0	3.3	14.8	0.0	0.0	14.7	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		1065			566			34			25	
Approach Delay, s/veh		5.2			3.4			14.8			14.7	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	7.3	27.7	7.3	27.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	22.0	88.0	22.0	88.0
Max Q Clear Time (g_c+I1), s	2.7	15.5	2.5	15.8
Green Ext Time (p_c), s	0.1	7.1	0.0	2.6

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	0	5	73	0	30	10	1548	103	46	1081	5
Future Volume (veh/h)	7	0	5	73	0	30	10	1548	103	46	1081	5
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1967	1967	1967	1701	1701	1701	1731	1731	1731	1772	1772	1772
Adj Flow Rate, veh/h	8	0	5	78	0	0	11	1665	111	49	1162	5
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
Percent Heavy Veh, %	0	0	0	0	0	0	1	1	1	1	1	1
Cap, veh/h	253	0	144	215	0		439	2517	166	258	2764	12
Arrive On Green	0.09	0.00	0.09	0.09	0.00	0.00	0.80	0.80	0.80	0.80	0.80	0.80
Sat Flow, veh/h	1619	0	1667	1349	0	1442	483	3131	207	276	3439	15
Grp Volume(v), veh/h	8	0	5	78	0	0	11	868	908	49	569	598
Grp Sat Flow(s),veh/h/ln	1619	0	1667	1349	0	1442	483	1644	1694	276	1684	1770
Q Serve(g_s), s	0.0	0.0	0.2	3.9	0.0	0.0	0.5	15.9	16.5	6.6	7.3	7.3
Cycle Q Clear(g_c), s	0.3	0.0	0.2	4.1	0.0	0.0	7.8	15.9	16.5	23.1	7.3	7.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		0.01
Lane Grp Cap(c), veh/h	253	0	144	215	0		439	1322	1361	258	1353	1422
V/C Ratio(X)	0.03	0.00	0.03	0.36	0.00		0.03	0.66	0.67	0.19	0.42	0.42
Avail Cap(c_a), veh/h	582	0	482	517	0		623	1947	2005	363	1994	2095
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	30.5	0.0	30.4	32.3	0.0	0.0	3.3	3.0	3.0	7.9	2.1	2.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.2	1.2	0.8	0.4	0.4
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(95%),veh/ln	0.2	0.0	0.1	2.4	0.0	0.0	0.1	3.6	3.8	0.7	1.6	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	0.0	30.5	32.7	0.0	0.0	3.3	4.2	4.2	8.6	2.6	2.5
LnGrp LOS	C	A	C	C	A		A	A	A	A	A	A
Approach Vol, veh/h		13			78	A		1787			1216	
Approach Delay, s/veh		30.5			32.7			4.2			2.8	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	62.4	10.3	62.4	10.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	85.0	20.0	85.0	21.0
Max Q Clear Time (g_c+I1), s	18.5	2.3	25.1	6.1
Green Ext Time (p_c), s	38.9	0.0	20.3	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.5
HCM 6th LOS	A

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	10	1	1346	6	3	1205
Future Volume (veh/h)	10	1	1346	6	3	1205
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.96		0.98	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	1750	1750	1917	1917	1736	1736
Adj Flow Rate, veh/h	10	1	1402	6	3	1255
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	142	14	2182	9	116	2462
Arrive On Green	0.10	0.07	0.59	0.55	0.07	0.75
Sat Flow, veh/h	1364	136	3815	16	1654	3386
Grp Volume(v), veh/h	12	0	686	722	3	1255
Grp Sat Flow(s),veh/h/ln	1637	0	1821	1914	1654	1650
Q Serve(g_s), s	0.2	0.0	8.4	8.4	0.1	5.2
Cycle Q Clear(g_c), s	0.2	0.0	8.4	8.4	0.1	5.2
Prop In Lane	0.83	0.08		0.01	1.00	
Lane Grp Cap(c), veh/h	171	0	1069	1123	116	2462
V/C Ratio(X)	0.07	0.00	0.64	0.64	0.03	0.51
Avail Cap(c_a), veh/h	881	0	4682	4920	395	9565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.6	0.0	4.6	4.6	14.5	1.7
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	1.1	1.2	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.7	0.0	4.8	4.8	14.5	1.8
LnGrp LOS	B	A	A	A	B	A
Approach Vol, veh/h	12		1408			1258
Approach Delay, s/veh	13.7		4.8			1.8
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.3	22.6			28.0	5.5
Change Period (Y+Rc), s	5.2	5.2			5.2	4.0
Max Green Setting (Gmax), s	5.8	83.8			94.8	16.0
Max Q Clear Time (g_c+I1), s	2.1	10.4			7.2	2.2
Green Ext Time (p_c), s	0.0	7.1			7.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

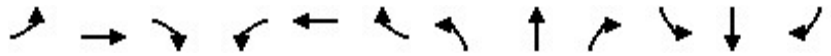
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	555	30	3	383	57	15	1	3	29	2	267
Future Volume (veh/h)	410	555	30	3	383	57	15	1	3	29	2	267
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Adj Flow Rate, veh/h	423	572	31	3	395	59	15	1	3	30	2	275
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	556	834	45	328	468	70	192	88	264	485	2	336
Arrive On Green	0.21	0.51	0.49	0.00	0.31	0.31	0.23	0.23	0.23	0.25	0.23	0.25
Sat Flow, veh/h	1667	1645	89	1667	1488	222	1120	385	1156	1435	11	1474
Grp Volume(v), veh/h	423	0	603	3	0	454	15	0	4	30	0	277
Grp Sat Flow(s),veh/h/ln	1667	0	1734	1667	0	1710	1120	0	1542	1435	0	1485
Q Serve(g_s), s	7.9	0.0	14.1	0.1	0.0	13.3	0.7	0.0	0.1	0.9	0.0	9.4
Cycle Q Clear(g_c), s	7.9	0.0	14.1	0.1	0.0	13.3	10.1	0.0	0.1	1.0	0.0	9.4
Prop In Lane	1.00		0.05	1.00		0.13	1.00		0.75	1.00		0.99
Lane Grp Cap(c), veh/h	556	0	879	328	0	538	192	0	352	485	0	338
V/C Ratio(X)	0.76	0.00	0.69	0.01	0.00	0.84	0.08	0.00	0.01	0.06	0.00	0.82
Avail Cap(c_a), veh/h	789	0	1164	476	0	734	355	0	575	693	0	554
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	9.8	0.0	10.0	13.3	0.0	17.1	24.4	0.0	16.0	15.6	0.0	19.2
Incr Delay (d2), s/veh	1.5	0.0	0.5	0.0	0.0	5.0	0.1	0.0	0.0	0.0	0.0	1.9
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(95%),veh/ln	3.4	0.0	6.5	0.0	0.0	8.5	0.3	0.0	0.1	0.5	0.0	5.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.3	0.0	10.5	13.3	0.0	22.1	24.5	0.0	16.0	15.6	0.0	21.0
LnGrp LOS	B	A	B	B	A	C	C	A	B	B	A	C
Approach Vol, veh/h		1026			457			19			307	
Approach Delay, s/veh		10.8			22.1			22.7			20.5	
Approach LOS		B			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	31.2		17.2	15.5	20.9		17.2
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	5.3	35.0		20.0	18.0	22.0		20.0
Max Q Clear Time (g_c+I1), s	2.1	16.1		12.1	9.9	15.3		11.4
Green Ext Time (p_c), s	0.0	1.2		0.0	0.6	0.6		0.9

Intersection Summary	
HCM 6th Ctrl Delay	15.4
HCM 6th LOS	B



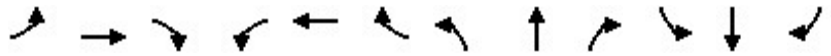
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	0	6	119	1	24	13	1503	123	12	1346	11
Future Volume (veh/h)	13	0	6	119	1	24	13	1503	123	12	1346	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1736	1736	1736	1709	1709	1709	1736	1736	1736	1736	1736	1736
Adj Flow Rate, veh/h	14	0	6	124	1	0	14	1566	0	12	1402	0
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	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	426	0	272	394	2		387	1857		303	1717	
Arrive On Green	0.19	0.00	0.15	0.19	0.19	0.00	0.11	0.56	0.00	0.07	0.52	0.00
Sat Flow, veh/h	1415	0	1451	1349	11	1448	1654	3386	0	1654	3386	0
Grp Volume(v), veh/h	14	0	6	125	0	0	14	1566	0	12	1402	0
Grp Sat Flow(s),veh/h/ln	1415	0	1451	1359	0	1448	1654	1650	0	1654	1650	0
Q Serve(g_s), s	0.0	0.0	0.2	4.1	0.0	0.0	0.0	20.1	0.0	0.0	18.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.2	4.3	0.0	0.0	0.0	20.1	0.0	0.0	18.0	0.0
Prop In Lane	1.00		1.00	0.99		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	426	0	272	396	0		387	1857		303	1717	
V/C Ratio(X)	0.03	0.00	0.02	0.32	0.00		0.04	0.84		0.04	0.82	
Avail Cap(c_a), veh/h	967	0	827	926	0		457	2205		443	2205	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.9	0.0	17.7	18.6	0.0	0.0	14.5	9.2	0.0	17.0	10.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	2.4	0.0	0.0	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	0.1	2.3	0.0	0.0	0.2	8.5	0.0	0.2	8.1	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.0	0.0	17.7	19.1	0.0	0.0	14.6	11.6	0.0	17.0	11.7	0.0
LnGrp LOS	B	A	B	B	A		B	B		B	B	
Approach Vol, veh/h		20			125	A		1580	A		1414	A
Approach Delay, s/veh		17.2			19.1			11.6			11.7	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	31.6		12.6	8.8	29.5		12.6
Change Period (Y+Rc), s	5.9	5.9		6.0	5.9	5.9		6.0
Max Green Setting (Gmax), s	5.1	31.1		26.0	5.1	31.1		26.0
Max Q Clear Time (g_c+I1), s	2.0	22.1		6.3	2.0	20.0		2.4
Green Ext Time (p_c), s	0.0	3.7		0.4	0.0	3.5		0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.0
HCM 6th LOS	B

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	1785	875	195	1169	162	431	275	63	236	378	93
Future Volume (veh/h)	113	1785	875	195	1169	162	431	275	63	236	378	93
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	1736	1736	1709	1709	1709	1809	1809	1809	1736	1736	1736
Adj Flow Rate, veh/h	137	2164	1061	207	1240	172	457	292	0	286	458	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	172	1493	837	253	2051	284	462	243		222	233	
Arrive On Green	0.10	0.45	0.45	0.16	0.50	0.49	0.13	0.13	0.00	0.13	0.13	0.00
Sat Flow, veh/h	1654	3299	1435	1628	4128	572	3445	1809	0	1654	1736	1471
Grp Volume(v), veh/h	137	2164	1061	207	934	478	457	292	0	286	458	0
Grp Sat Flow(s),veh/h/ln	1654	1650	1435	1628	1555	1590	1723	1809	0	1654	1736	1471
Q Serve(g_s), s	12.1	67.5	66.5	18.4	32.2	32.3	19.8	20.0	0.0	20.0	20.0	0.0
Cycle Q Clear(g_c), s	12.1	67.5	66.5	18.4	32.2	32.3	19.8	20.0	0.0	20.0	20.0	0.0
Prop In Lane	1.00		1.00	1.00		0.36	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	1493	837	253	1546	790	462	243		222	233	
V/C Ratio(X)	0.80	1.45	1.27	0.82	0.60	0.60	0.99	1.20		1.29	1.97	
Avail Cap(c_a), veh/h	632	1493	837	589	1546	790	462	243		222	233	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.3	40.8	27.1	61.0	27.0	27.1	64.5	64.6	0.0	64.6	64.6	0.0
Incr Delay (d2), s/veh	8.1	206.1	129.9	6.5	0.9	1.7	39.1	124.2	0.0	159.9	450.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.3	104.5	88.6	12.7	17.7	18.4	16.5	26.4	0.0	28.0	59.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.3	246.9	157.0	67.4	27.9	28.9	103.6	188.8	0.0	224.5	515.0	0.0
LnGrp LOS	E	F	F	E	C	C	F	F		F	F	
Approach Vol, veh/h		3362			1619			749	A		744	A
Approach Delay, s/veh		211.5			33.2			136.8			403.3	
Approach LOS		F			C			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	26.2	73.0		25.0	19.5	79.6		25.0
Change Period (Y+Rc), s	5.0	7.5		6.0	5.0	* 7.5		6.0
Max Green Setting (Gmax), s	52.6	65.5		19.0	56.0	* 62		19.0
Max Q Clear Time (g_c+I1), s	20.4	69.5		22.0	14.1	34.3		22.0
Green Ext Time (p_c), s	0.8	0.0		0.0	0.5	13.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	180.3
HCM 6th LOS	F

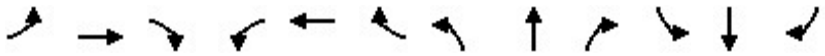
Notes

User approved volume balancing among the lanes for turning movement.

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

User approved changes to right turn type.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1172	1220	40	539	0	520	0	92	1	0	2
Future Volume (veh/h)	0	1172	1220	40	539	0	520	0	92	1	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1736	1736	1736	1723	1723	1723	1795	1795	1795	1750	1750	1750
Adj Flow Rate, veh/h	0	1371	1428	43	573	0	609	0	108	1	0	2
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, %	1	1	1	2	2	2	2	2	2	0	0	0
Cap, veh/h	58	1042	1172	66	2228	0	780	0	347	6	0	11
Arrive On Green	0.00	0.60	0.58	0.04	0.68	0.00	0.23	0.00	0.23	0.01	0.00	0.01
Sat Flow, veh/h	846	1736	1471	1641	3359	0	3419	0	1521	513	0	1026
Grp Volume(v), veh/h	0	1371	1428	43	573	0	609	0	108	3	0	0
Grp Sat Flow(s),veh/h/ln	846	1736	1471	1641	1637	0	1709	0	1521	1540	0	0
Q Serve(g_s), s	0.0	75.0	73.0	3.2	8.5	0.0	20.9	0.0	7.4	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	75.0	73.0	3.2	8.5	0.0	20.9	0.0	7.4	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.33		0.67
Lane Grp Cap(c), veh/h	58	1042	1172	66	2228	0	780	0	347	17	0	0
V/C Ratio(X)	0.00	1.32	1.22	0.65	0.26	0.00	0.78	0.00	0.31	0.17	0.00	0.00
Avail Cap(c_a), veh/h	58	1042	1172	79	2253	0	1012	0	450	209	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	25.0	10.0	59.1	7.7	0.0	45.3	0.0	40.1	61.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	148.9	106.3	13.3	0.1	0.0	3.0	0.0	0.5	4.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	104.0	99.8	2.8	5.0	0.0	13.9	0.0	5.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	173.9	116.3	72.4	7.8	0.0	48.3	0.0	40.6	65.9	0.0	0.0
LnGrp LOS	A	F	F	E	A	A	D	A	D	E	A	A
Approach Vol, veh/h		2799			616			717			3	
Approach Delay, s/veh		144.5			12.3			47.1			65.9	
Approach LOS		F			B			D			E	

Timer - Assigned Phs		2		4	5	6		8				
Phs Duration (G+Y+Rc), s		89.1		31.5	10.1	79.0		4.4				
Change Period (Y+Rc), s		7.0		6.0	6.0	7.0		4.0				
Max Green Setting (Gmax), s		83.0		34.0	5.0	72.0		16.0				
Max Q Clear Time (g_c+I1), s		10.5		22.9	5.2	77.0		2.2				
Green Ext Time (p_c), s		2.8		2.6	0.0	0.0		0.0				

Intersection Summary		
HCM 6th Ctrl Delay	107.9	
HCM 6th LOS	F	

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	994	217	119	475	187	227
Future Volume (veh/h)	994	217	119	475	187	227
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	1731	1731	1709	1709	1701	1701
Adj Flow Rate, veh/h	1216	265	127	505	219	266
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	3	3	2	2
Cap, veh/h	1140	966	90	1291	302	258
Arrive On Green	0.66	0.66	0.06	0.76	0.19	0.18
Sat Flow, veh/h	1731	1467	1628	1709	1620	1442
Grp Volume(v), veh/h	1216	265	127	505	219	266
Grp Sat Flow(s),veh/h/ln	1731	1467	1628	1709	1620	1442
Q Serve(g_s), s	95.5	10.9	8.0	14.9	18.4	26.0
Cycle Q Clear(g_c), s	95.5	10.9	8.0	14.9	18.4	26.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1140	966	90	1291	302	258
V/C Ratio(X)	1.07	0.27	1.41	0.39	0.73	1.03
Avail Cap(c_a), veh/h	1140	966	90	1291	302	258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.8	10.3	68.5	6.2	55.5	59.5
Incr Delay (d2), s/veh	46.3	0.2	239.6	0.2	8.4	63.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	65.5	6.3	15.7	8.5	12.9	20.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	71.1	10.5	308.1	6.4	64.0	123.2
LnGrp LOS	F	B	F	A	E	F
Approach Vol, veh/h	1481			632	485	
Approach Delay, s/veh	60.2			67.0	96.5	
Approach LOS	E			E	F	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	44.0	100.5			114.5	30.5
Change Period (Y+Rc), s	7.0	7.0			7.0	5.5
Max Green Setting (Gmax), s	37.0	93.5			107.5	25.0
Max Q Clear Time (g_c+I1), s	10.0	97.5			16.9	28.0
Green Ext Time (p_c), s	0.0	0.0			2.2	0.0

Intersection Summary		
HCM 6th Ctrl Delay	68.6	
HCM 6th LOS	E	

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	505	334	153	255	398	219
Future Volume (veh/h)	505	334	153	255	398	219
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	0.98
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	1717	1717	1759	1759	1701	1701
Adj Flow Rate, veh/h	549	363	166	277	433	238
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	715	606	192	732	458	252
Arrive On Green	0.42	0.42	0.42	0.42	0.47	0.47
Sat Flow, veh/h	1717	1455	625	1759	976	537
Grp Volume(v), veh/h	549	363	166	277	672	0
Grp Sat Flow(s),veh/h/ln	1717	1455	625	1759	1515	0
Q Serve(g_s), s	19.1	13.5	9.9	7.6	29.5	0.0
Cycle Q Clear(g_c), s	19.1	13.5	29.0	7.6	29.5	0.0
Prop In Lane		1.00	1.00		0.64	0.35
Lane Grp Cap(c), veh/h	715	606	192	732	711	0
V/C Ratio(X)	0.77	0.60	0.87	0.38	0.95	0.00
Avail Cap(c_a), veh/h	715	606	192	732	717	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	17.5	15.8	32.2	14.1	17.7	0.0
Incr Delay (d2), s/veh	5.1	1.6	31.3	0.3	21.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.1	7.6	7.8	5.0	18.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	22.5	17.5	63.6	14.4	38.9	0.0
LnGrp LOS	C	B	E	B	D	A
Approach Vol, veh/h	912			443	672	
Approach Delay, s/veh	20.5			32.8	38.9	
Approach LOS	C			C	D	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	36.7	33.0	33.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	32.0	28.0	28.0
Max Q Clear Time (g_c+I1), s	31.5	21.1	31.0
Green Ext Time (p_c), s	0.2	2.5	0.0

Intersection Summary	
HCM 6th Ctrl Delay	29.3
HCM 6th LOS	C

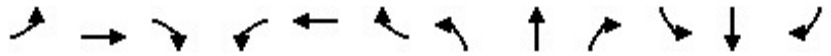
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2386	82	13	1123	54	13
Future Volume (veh/h)	2386	82	13	1123	54	13
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	1809	1809	1687	1687	1895	1895
Adj Flow Rate, veh/h	2538	56	14	1195	57	8
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	3	3	0	0
Cap, veh/h	2843	1268	35	2837	110	98
Arrive On Green	0.83	0.83	0.02	0.89	0.06	0.06
Sat Flow, veh/h	3527	1533	1607	3290	1805	1606
Grp Volume(v), veh/h	2538	56	14	1195	57	8
Grp Sat Flow(s),veh/h/ln	1718	1533	1607	1603	1805	1606
Q Serve(g_s), s	54.1	0.7	1.0	7.6	3.4	0.5
Cycle Q Clear(g_c), s	54.1	0.7	1.0	7.6	3.4	0.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2843	1268	35	2837	110	98
V/C Ratio(X)	0.89	0.04	0.40	0.42	0.52	0.08
Avail Cap(c_a), veh/h	3623	1616	72	3640	293	260
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.3	1.7	53.6	1.2	50.5	49.2
Incr Delay (d2), s/veh	2.6	0.0	7.3	0.1	3.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	7.5	0.2	0.8	0.8	2.9	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.0	1.7	60.9	1.3	54.3	49.5
LnGrp LOS	A	A	E	A	D	D
Approach Vol, veh/h	2594			1209	65	
Approach Delay, s/veh	8.8			2.0	53.7	
Approach LOS	A			A	D	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	9.8	6.4	94.8		101.2
Change Period (Y+Rc), s	5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	16.0	4.0	115.0		124.0
Max Q Clear Time (g_c+I1), s	5.4	3.0	56.1		9.6
Green Ext Time (p_c), s	0.1	0.0	33.7		7.5

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	774	783	20	533	475	49	21	1087	815	29	725	356
Future Volume (veh/h)	774	783	20	533	475	49	21	1087	815	29	725	356
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		0.99	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	1750	1750	1750	1772	1772	1772	1845	1845	1845	1688	1688	1688
Adj Flow Rate, veh/h	832	842	22	573	511	53	23	1169	0	31	780	0
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
Percent Heavy Veh, %	0	0	0	1	1	1	1	1	1	1	1	1
Cap, veh/h	968	954	25	727	649	67	57	1199		59	1110	
Arrive On Green	0.30	0.29	0.28	0.22	0.21	0.21	0.03	0.34	0.00	0.04	0.35	0.00
Sat Flow, veh/h	3233	3308	86	3275	3077	318	1757	3505	1563	1607	3291	0
Grp Volume(v), veh/h	832	423	441	573	279	285	23	1169	0	31	780	0
Grp Sat Flow(s),veh/h/ln	1617	1663	1732	1637	1684	1711	1757	1753	1563	1607	1603	0
Q Serve(g_s), s	26.2	26.3	26.3	17.8	16.9	17.1	1.4	35.6	0.0	2.0	22.7	0.0
Cycle Q Clear(g_c), s	26.2	26.3	26.3	17.8	16.9	17.1	1.4	35.6	0.0	2.0	22.7	0.0
Prop In Lane	1.00		0.05	1.00		0.19	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	968	479	499	727	355	361	57	1199		59	1110	
V/C Ratio(X)	0.86	0.88	0.88	0.79	0.79	0.79	0.41	0.97		0.53	0.70	
Avail Cap(c_a), veh/h	1124	515	537	1272	590	600	89	1199		82	1110	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.7	36.7	36.8	39.7	40.4	40.5	51.3	35.1	0.0	51.2	30.5	0.0
Incr Delay (d2), s/veh	6.1	15.7	15.2	1.9	3.9	3.9	4.6	20.1	0.0	7.2	2.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	16.3	18.2	18.8	11.6	11.7	11.9	1.2	24.9	0.0	1.7	13.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	41.8	52.4	51.9	41.6	44.2	44.4	55.9	55.2	0.0	58.3	32.5	0.0
LnGrp LOS	D	D	D	D	D	D	E	E		E	C	
Approach Vol, veh/h		1696			1137			1192	A		811	A
Approach Delay, s/veh		47.1			42.9			55.2			33.5	
Approach LOS		D			D			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.0	34.2	6.5	40.5	35.4	25.8	7.0	40.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	32.0	4.0	35.5	36.1	36.4	4.0	35.5
Max Q Clear Time (g_c+I1), s	19.8	28.3	3.4	24.7	28.2	19.1	4.0	37.6
Green Ext Time (p_c), s	2.7	1.4	0.0	2.9	2.6	2.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	45.9
HCM 6th LOS	D

Notes

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

MOVEMENT SUMMARY

Site: 3 [3 - SE Issaquah Fall Clty Rd & Klahanie Dr SE]

2035 PM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Klahanie Dr SE												
3	L2	2	0.0	0.008	6.7	LOS A	0.0	0.7	0.67	0.54	0.67	32.5
8	T1	1	0.0	0.008	6.7	LOS A	0.0	0.7	0.67	0.54	0.67	32.6
18	R2	1	0.0	0.008	6.7	LOS A	0.0	0.7	0.67	0.54	0.67	31.8
Approach		4	0.0	0.008	6.7	LOS A	0.0	0.7	0.67	0.54	0.67	32.4
NorthEast: SE Issaquah Fall City Rd												
1	L2	1	1.0	0.421	10.3	LOS B	2.8	71.4	0.76	0.76	0.84	32.0
6	T1	593	1.0	0.421	10.0	LOS A	2.9	72.7	0.76	0.74	0.82	32.2
16	R2	76	1.0	0.421	9.5	LOS A	2.9	72.7	0.76	0.73	0.81	31.6
Approach		670	1.0	0.421	9.9	LOS A	2.9	72.7	0.76	0.74	0.82	32.2
NorthWest: Klahanie Dr SE												
7	L2	119	0.0	0.189	7.9	LOS A	0.8	19.0	0.57	0.55	0.57	31.0
4	T1	2	0.0	0.189	7.9	LOS A	0.8	19.0	0.57	0.55	0.57	31.0
14	R2	395	0.0	0.401	8.1	LOS A	2.1	53.1	0.61	0.58	0.63	32.0
Approach		515	0.0	0.401	8.1	LOS A	2.1	53.1	0.60	0.58	0.62	31.8
SouthWest: SE Issauqah Fall City Rd												
5	L2	707	0.0	0.626	10.7	LOS B	5.3	132.5	0.46	0.27	0.46	30.0
2	T1	882	0.0	0.626	10.5	LOS B	5.3	133.0	0.46	0.27	0.46	31.9
12	R2	2	0.0	0.626	10.5	LOS B	5.3	133.0	0.46	0.27	0.46	31.2
Approach		1592	0.0	0.626	10.6	LOS B	5.3	133.0	0.46	0.27	0.46	31.0
All Vehicles		2781	0.2	0.626	10.0	LOS A	5.3	133.0	0.56	0.44	0.58	31.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 6 [6 - Issaquah-Pine LK Rd and SE 32nd Way]

2035 PM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Issaquah-Pine Lk Rd NB												
3x	L2	1	1.0	1.036	40.4	LOS D	48.2	1214.3	1.00	1.55	2.16	23.0
8x	T1	935	1.0	1.036	32.6	LOS C	48.2	1214.3	1.00	1.55	2.16	21.4
18x	R2	273	1.0	1.036	33.1	LOS C	48.2	1214.3	1.00	1.55	2.16	21.0
Approach		1210	1.0	1.036	32.7	LOS C	48.2	1214.3	1.00	1.55	2.16	21.3
NorthEast: SE 32nd Way WB												
1x	L2	150	1.0	0.658	20.4	LOS C	7.2	181.1	1.00	1.17	1.35	25.3
6x	T1	1	1.0	0.658	17.3	LOS B	7.2	181.1	1.00	1.17	1.35	27.3
16x	R2	196	1.0	0.658	15.5	LOS B	7.2	181.1	1.00	1.17	1.35	24.5
Approach		347	1.0	0.658	17.6	LOS B	7.2	181.1	1.00	1.17	1.35	24.8
NorthWest: Issaquah-Pine Lk Rd SB												
7x	L2	233	1.0	1.048	38.6	LOS D	58.3	1469.7	1.00	1.35	1.89	21.3
4x	T1	1066	1.0	1.048	33.3	LOS C	58.3	1469.7	1.00	1.35	1.89	21.1
14x	R2	5	1.0	1.048	35.5	LOS D	58.3	1469.7	1.00	1.35	1.89	22.3
Approach		1304	1.0	1.048	34.3	LOS C	58.3	1469.7	1.00	1.35	1.89	21.2
SouthWest: Drive Way Access EB												
5x	L2	3	0.0	0.028	28.2	LOS C	0.2	5.6	1.00	0.77	1.00	28.0
2x	T1	1	0.0	0.028	22.6	LOS C	0.2	5.6	1.00	0.77	1.00	28.0
12x	R2	2	0.0	0.028	22.6	LOS C	0.2	5.6	1.00	0.77	1.00	27.4
Approach		6	0.0	0.028	25.4	LOS C	0.2	5.6	1.00	0.77	1.00	27.8
All Vehicles		2867	1.0	1.048	31.6	LOS C	58.3	1469.7	1.00	1.41	1.94	21.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 9 [9 - SE Issaquah Fall City Rd & 247th Pl SE]

2035 PM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Pacific Crest Middle School Drwy												
3	L2	32	2.0	0.075	6.6	LOS A	0.3	7.0	0.63	0.63	0.63	32.4
8	T1	5	2.0	0.075	6.6	LOS A	0.3	7.0	0.63	0.63	0.63	32.4
18	R2	10	2.0	0.075	6.6	LOS A	0.3	7.0	0.63	0.63	0.63	31.5
Approach		47	2.0	0.075	6.6	LOS A	0.3	7.0	0.63	0.63	0.63	32.2
NorthEast: SE Issaquah Fall City Rd												
1	L2	12	2.0	0.375	6.3	LOS A	2.1	52.8	0.23	0.11	0.23	34.2
6	T1	928	2.0	0.375	6.3	LOS A	2.1	53.0	0.23	0.11	0.23	34.3
16	R2	47	2.0	0.375	6.2	LOS A	2.1	53.0	0.23	0.11	0.23	33.3
Approach		988	2.0	0.375	6.2	LOS A	2.1	53.0	0.23	0.11	0.23	34.3
NorthWest: 247th Pl SE												
7	L2	28	2.0	0.055	5.5	LOS A	0.2	4.9	0.54	0.49	0.54	32.8
4	T1	12	2.0	0.055	5.5	LOS A	0.2	4.9	0.54	0.49	0.54	32.9
14	R2	70	2.0	0.075	4.5	LOS A	0.3	7.0	0.53	0.47	0.53	33.9
Approach		110	2.0	0.075	4.9	LOS A	0.3	7.0	0.53	0.48	0.53	33.5
SouthWest: SE Issaquah Fall City Rd												
5	L2	34	2.0	0.522	7.9	LOS A	3.7	95.2	0.24	0.10	0.24	33.4
2	T1	1534	2.0	0.522	7.6	LOS A	3.8	95.9	0.23	0.10	0.23	33.6
12	R2	70	2.0	0.043	2.5	LOS A	0.2	4.3	0.08	0.02	0.08	35.0
Approach		1638	2.0	0.522	7.4	LOS A	3.8	95.9	0.23	0.09	0.23	33.7
All Vehicles		2784	2.0	0.522	6.9	LOS A	3.8	95.9	0.25	0.12	0.25	33.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 14 [14 - 216th Ave and NE Inglewood Hill Rd]

2035 PM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 216th Ave (NB)												
3	L2	125	2.0	0.288	12.7	LOS B	1.9	47.7	0.77	0.83	0.77	30.8
8	T1	61	2.0	0.288	7.5	LOS A	1.9	47.7	0.77	0.83	0.77	30.7
18	R2	33	2.0	0.288	7.6	LOS A	1.9	47.7	0.77	0.83	0.77	29.9
Approach		219	2.0	0.288	10.5	LOS B	1.9	47.7	0.77	0.83	0.77	30.6
East: NE Inglewood Hill Rd												
1	L2	29	1.0	0.394	10.2	LOS B	2.5	62.8	0.56	0.60	0.56	32.6
6	T1	201	1.0	0.394	5.0	LOS A	2.5	62.8	0.56	0.60	0.56	32.5
16	R2	200	1.0	0.394	5.1	LOS A	2.5	62.8	0.56	0.60	0.56	31.6
Approach		431	1.0	0.394	5.4	LOS A	2.5	62.8	0.56	0.60	0.56	32.1
North: 216th Ave (SB)												
7	L2	122	1.0	0.202	9.9	LOS A	1.1	27.2	0.49	0.65	0.49	31.8
4	T1	43	1.0	0.202	4.8	LOS A	1.1	27.2	0.49	0.65	0.49	31.7
14	R2	54	1.0	0.202	4.9	LOS A	1.1	27.2	0.49	0.65	0.49	30.9
Approach		219	1.0	0.202	7.7	LOS A	1.1	27.2	0.49	0.65	0.49	31.6
West: NE Inglewood Hill Rd												
5	L2	147	0.0	0.642	9.9	LOS A	5.6	140.7	0.60	0.57	0.60	32.2
2	T1	478	0.0	0.642	4.7	LOS A	5.6	140.7	0.60	0.57	0.60	32.1
12	R2	160	0.0	0.642	4.8	LOS A	5.6	140.7	0.60	0.57	0.60	31.3
Approach		785	0.0	0.642	5.7	LOS A	5.6	140.7	0.60	0.57	0.60	32.0
All Vehicles		1654	0.7	0.642	6.5	LOS A	5.6	140.7	0.60	0.62	0.60	31.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 26 [26 - NE 8th St and 244th Ave]

2035 PM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	96	0.0	0.266	6.7	LOS A	1.5	37.2	0.45	0.44	0.45	24.7
8	T1	202	0.0	0.266	2.3	LOS A	1.5	37.2	0.45	0.44	0.45	24.5
18	R2	6	0.0	0.266	2.9	LOS A	1.5	37.2	0.45	0.44	0.45	24.0
Approach		304	0.0	0.266	3.7	LOS A	1.5	37.2	0.45	0.44	0.45	24.6
East: NE 8th St (WB)												
1	L2	4	0.0	0.053	7.7	LOS A	0.3	6.6	0.53	0.50	0.53	24.8
6	T1	21	0.0	0.053	3.2	LOS A	0.3	6.6	0.53	0.50	0.53	24.6
16	R2	26	0.0	0.053	3.8	LOS A	0.3	6.6	0.53	0.50	0.53	24.1
Approach		51	0.0	0.053	3.9	LOS A	0.3	6.6	0.53	0.50	0.53	24.3
North: 244th Ave (SB)												
7	L2	11	0.0	0.371	6.2	LOS A	2.3	57.4	0.34	0.33	0.34	25.2
4	T1	184	0.0	0.371	1.7	LOS A	2.3	57.4	0.34	0.33	0.34	24.9
14	R2	277	0.0	0.371	2.3	LOS A	2.3	57.4	0.34	0.33	0.34	24.4
Approach		471	0.0	0.371	2.2	LOS A	2.3	57.4	0.34	0.33	0.34	24.6
West: NE 8th St (EB)												
5	L2	230	0.0	0.393	9.3	LOS A	2.4	61.1	0.44	0.61	0.44	31.9
2	T1	23	0.0	0.393	4.5	LOS A	2.4	61.1	0.44	0.61	0.44	31.8
12	R2	220	0.0	0.393	4.5	LOS A	2.4	61.1	0.44	0.61	0.44	31.1
Approach		473	0.0	0.393	6.9	LOS A	2.4	61.1	0.44	0.61	0.44	31.5
All Vehicles		1300	0.0	0.393	4.3	LOS A	2.4	61.1	0.41	0.47	0.41	26.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 32 [32 - Issaquah Beaver Lake Rd & 256th Ave SE]

2035 PM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 256th Ave SE												
3	L2	162	0.0	0.243	5.5	LOS A	1.3	33.6	0.51	0.38	0.51	33.4
8	T1	46	0.0	0.243	5.5	LOS A	1.3	33.6	0.51	0.38	0.51	33.3
18	R2	63	0.0	0.243	5.5	LOS A	1.3	33.6	0.51	0.38	0.51	32.4
Approach		271	0.0	0.243	5.5	LOS A	1.3	33.6	0.51	0.38	0.51	33.1
East: Issaquah Beaver Lake Rd												
1	L2	66	0.0	0.268	5.4	LOS A	1.5	38.2	0.43	0.29	0.43	34.6
6	T1	198	0.0	0.268	5.4	LOS A	1.5	38.2	0.43	0.29	0.43	34.4
16	R2	61	0.0	0.268	5.4	LOS A	1.5	38.2	0.43	0.29	0.43	33.5
Approach		325	0.0	0.268	5.4	LOS A	1.5	38.2	0.43	0.29	0.43	34.3
North: 256th Ave SE												
7	L2	47	0.0	0.100	4.2	LOS A	0.5	12.5	0.49	0.34	0.49	34.5
4	T1	33	0.0	0.100	4.2	LOS A	0.5	12.5	0.49	0.34	0.49	34.4
14	R2	29	0.0	0.100	4.2	LOS A	0.5	12.5	0.49	0.34	0.49	33.4
Approach		109	0.0	0.100	4.2	LOS A	0.5	12.5	0.49	0.34	0.49	34.2
West: Issaquah Beaver Lake Rd												
5	L2	39	0.0	0.387	6.4	LOS A	2.4	59.6	0.36	0.21	0.36	34.4
2	T1	296	0.0	0.387	6.4	LOS A	2.4	59.6	0.36	0.21	0.36	34.3
12	R2	171	0.0	0.387	6.4	LOS A	2.4	59.6	0.36	0.21	0.36	33.3
Approach		505	0.0	0.387	6.4	LOS A	2.4	59.6	0.36	0.21	0.36	33.9
All Vehicles		1210	0.0	0.387	5.7	LOS A	2.4	59.6	0.43	0.28	0.43	33.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 39 [39 - 233rd Ave NE & NE 8th Street]

2035 PM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	54	1.0	0.197	8.8	LOS A	1.1	29.0	0.68	0.74	0.68	25.2
8	T1	55	1.0	0.197	8.1	LOS A	1.1	29.0	0.68	0.74	0.68	29.7
18	R2	48	1.0	0.197	5.4	LOS A	1.1	29.0	0.68	0.74	0.68	24.6
Approach		157	1.0	0.197	7.5	LOS A	1.1	29.0	0.68	0.74	0.68	26.5
East: NE 8th St (WB)												
1	L2	106	1.0	0.414	6.7	LOS A	2.6	66.3	0.45	0.47	0.45	24.6
6	T1	337	1.0	0.414	2.9	LOS A	2.6	66.3	0.45	0.47	0.45	24.5
16	R2	29	1.0	0.414	5.7	LOS A	2.6	66.3	0.45	0.47	0.45	28.4
Approach		472	1.0	0.414	3.9	LOS A	2.6	66.3	0.45	0.47	0.45	24.7
North: RoadName												
7	L2	21	0.0	0.155	11.2	LOS B	0.8	20.6	0.57	0.69	0.57	34.6
4	T1	52	0.0	0.155	7.2	LOS A	0.8	20.6	0.57	0.69	0.57	34.8
14	R2	68	0.0	0.155	6.9	LOS A	0.8	20.6	0.57	0.69	0.57	34.0
Approach		141	0.0	0.155	7.7	LOS A	0.8	20.6	0.57	0.69	0.57	34.4
West: NE 8th St (EB)												
5	L2	79	1.0	0.603	10.3	LOS B	4.8	120.5	0.54	0.58	0.54	33.2
2	T1	517	1.0	0.603	5.4	LOS A	4.8	120.5	0.54	0.58	0.54	31.9
12	R2	102	1.0	0.603	5.3	LOS A	4.8	120.5	0.54	0.58	0.54	31.2
Approach		698	1.0	0.603	5.9	LOS A	4.8	120.5	0.54	0.58	0.54	31.9
All Vehicles		1469	0.9	0.603	5.6	LOS A	4.8	120.5	0.53	0.58	0.53	28.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 41 [41 - 244th Ave NE & E Main Dr]

2035 PM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	8	0.0	0.224	8.6	LOS A	1.1	27.9	0.28	0.45	0.28	32.7
8	T1	231	0.0	0.224	4.2	LOS A	1.1	27.9	0.28	0.45	0.28	32.7
18	R2	43	0.0	0.224	4.2	LOS A	1.1	27.9	0.28	0.45	0.28	32.0
Approach		282	0.0	0.224	4.3	LOS A	1.1	27.9	0.28	0.45	0.28	32.6
East: E Main Dr (WB)												
1	L2	45	0.0	0.102	9.1	LOS A	0.5	12.0	0.38	0.59	0.38	32.0
6	T1	3	0.0	0.102	4.7	LOS A	0.5	12.0	0.38	0.59	0.38	32.0
16	R2	69	0.0	0.102	4.7	LOS A	0.5	12.0	0.38	0.59	0.38	31.3
Approach		117	0.0	0.102	6.4	LOS A	0.5	12.0	0.38	0.59	0.38	31.6
North: 244th Ave (SB)												
7	L2	99	0.0	0.301	8.4	LOS A	1.7	43.2	0.21	0.47	0.21	32.4
4	T1	255	0.0	0.301	4.0	LOS A	1.7	43.2	0.21	0.47	0.21	32.5
14	R2	43	0.0	0.301	3.9	LOS A	1.7	43.2	0.21	0.47	0.21	31.7
Approach		397	0.0	0.301	5.1	LOS A	1.7	43.2	0.21	0.47	0.21	32.4
West: E Main Dr (EB)												
5	L2	18	0.0	0.029	9.6	LOS A	0.1	3.3	0.44	0.61	0.44	31.4
2	T1	3	0.0	0.029	5.2	LOS A	0.1	3.3	0.44	0.61	0.44	31.4
12	R2	9	0.0	0.029	5.2	LOS A	0.1	3.3	0.44	0.61	0.44	30.7
Approach		30	0.0	0.029	7.9	LOS A	0.1	3.3	0.44	0.61	0.44	31.2
All Vehicles		826	0.0	0.301	5.1	LOS A	1.7	43.2	0.26	0.49	0.26	32.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 62 [62 - E Lk Sammamish Pk Way and SE 43nd Way]

2035 PM Alternative 2
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: E Lk Sammamish Pk Way WB												
8x	T1	1154	2.0	0.668	1.7	LOS A	8.4	213.7	0.33	0.22	0.33	29.7
18x	R2	1073	2.0	0.654	2.0	LOS A	0.0	0.0	0.00	0.29	0.00	29.4
Approach		2227	2.0	0.668	1.8	LOS A	8.4	213.7	0.17	0.26	0.17	29.6
NorthEast: SE 43rd Way SB												
1x	L2	682	1.0	0.644	29.9	LOS C	8.8	221.5	1.00	1.29	1.64	22.5
16x	R2	35	1.0	0.644	23.3	LOS C	8.8	221.5	1.00	1.29	1.63	22.2
Approach		718	1.0	0.644	29.6	LOS C	8.8	221.5	1.00	1.29	1.64	22.5
NorthWest: E Lk Sammamish Pk Way EB												
7x	L2	44	2.0	0.477	10.0	LOS B	2.8	71.9	0.71	0.65	0.79	29.1
4x	T1	782	2.0	0.477	4.0	LOS A	2.9	74.6	0.71	0.58	0.77	28.8
Approach		826	2.0	0.477	4.3	LOS A	2.9	74.6	0.71	0.59	0.78	28.8
All Vehicles		3771	1.8	0.668	7.6	LOS A	8.8	221.5	0.45	0.53	0.58	27.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	34	96	63	757	1417	25
Future Volume (veh/h)	34	96	63	757	1417	25
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
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	1840	1840	1745	1745	1717	1717
Adj Flow Rate, veh/h	37	28	68	823	1540	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	3	3	2	2
Cap, veh/h	73	135	129	1568	1414	1173
Arrive On Green	0.04	0.04	0.04	0.90	0.82	0.82
Sat Flow, veh/h	1752	1559	1662	1745	1717	1424
Grp Volume(v), veh/h	37	28	68	823	1540	27
Grp Sat Flow(s),veh/h/ln	1752	1559	1662	1745	1717	1424
Q Serve(g_s), s	2.8	2.2	0.9	12.1	110.0	0.5
Cycle Q Clear(g_c), s	2.8	2.2	0.9	12.1	110.0	0.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	73	135	129	1568	1414	1173
V/C Ratio(X)	0.51	0.21	0.53	0.52	1.09	0.02
Avail Cap(c_a), veh/h	289	327	129	1568	1414	1173
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.7	56.7	48.7	1.3	11.8	2.1
Incr Delay (d2), s/veh	2.0	0.3	2.1	1.0	51.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.3	3.6	3.6	2.6	64.3	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	64.7	57.0	50.7	2.3	63.7	2.1
LnGrp LOS	E	E	D	A	F	A
Approach Vol, veh/h	65			891	1567	
Approach Delay, s/veh	61.4			6.0	62.7	
Approach LOS	E			A	E	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		124.0		9.6	10.0	114.0
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		119.0		21.0	5.0	109.0
Max Q Clear Time (g_c+I1), s		14.1		4.8	2.9	112.0
Green Ext Time (p_c), s		18.8		0.1	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	42.6
HCM 6th LOS	D

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	33	88	57	712	710	8
Future Volume (veh/h)	33	88	57	712	710	8
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
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	1954	1954	1723	1723	1723	1723
Adj Flow Rate, veh/h	35	95	61	766	763	9
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	2	2	2	2
Cap, veh/h	261	193	444	1204	895	708
Arrive On Green	0.14	0.12	0.11	0.70	0.52	0.50
Sat Flow, veh/h	1861	1656	1641	1723	1723	1427
Grp Volume(v), veh/h	35	95	61	766	763	9
Grp Sat Flow(s),veh/h/ln	1861	1656	1641	1723	1723	1427
Q Serve(g_s), s	0.7	2.3	0.5	10.2	16.1	0.1
Cycle Q Clear(g_c), s	0.7	2.3	0.5	10.2	16.1	0.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	261	193	444	1204	895	708
V/C Ratio(X)	0.13	0.49	0.14	0.64	0.85	0.01
Avail Cap(c_a), veh/h	1191	1020	539	1886	1478	1190
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	17.5	6.6	3.4	8.7	5.4
Incr Delay (d2), s/veh	0.1	0.7	0.1	0.2	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.5	1.5	0.2	1.2	6.8	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.0	18.2	6.6	3.7	10.0	5.4
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	130			827	772	
Approach Delay, s/veh	17.6			3.9	9.9	
Approach LOS	B			A	A	

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	32.5		7.6	24.9	9.7
Change Period (Y+Rc), s	5.0		5.0	5.0	5.8
Max Green Setting (Gmax), s	44.2		5.0	34.2	25.0
Max Q Clear Time (g_c+I1), s	12.2		2.5	18.1	4.3
Green Ext Time (p_c), s	1.9		0.0	1.8	0.3

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	9.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	0	27	52	103	70	0	227	0	157	0	0	0
Future Vol, veh/h	0	27	52	103	70	0	227	0	157	0	0	0
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	105	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	0	0	0
Mvmt Flow	0	31	59	117	80	0	258	0	178	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	84	0	0	90	0	0	375	379	62	469	408	84
Stage 1	-	-	-	-	-	-	61	61	-	318	318	-
Stage 2	-	-	-	-	-	-	314	318	-	151	90	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1506	-	-	1505	-	-	582	553	1003	508	536	981
Stage 1	-	-	-	-	-	-	950	844	-	698	657	-
Stage 2	-	-	-	-	-	-	697	654	-	856	824	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1501	-	-	1505	-	-	546	507	1002	390	491	978
Mov Cap-2 Maneuver	-	-	-	-	-	-	546	507	-	390	491	-
Stage 1	-	-	-	-	-	-	950	844	-	696	602	-
Stage 2	-	-	-	-	-	-	641	599	-	703	824	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.5	14.1	0
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	546	1002	1501	-	-	1505	-	-	-
HCM Lane V/C Ratio	0.472	0.178	-	-	-	0.078	-	-	-
HCM Control Delay (s)	17.4	9.4	0	-	-	7.6	0	-	0
HCM Lane LOS	C	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	2.5	0.6	0	-	-	0.3	-	-	-

Intersection	
Intersection Delay, s/veh	12.2
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	56	130	169	280	69	113
Future Vol, veh/h	56	130	169	280	69	113
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	7	7	4	4	1	1
Mvmt Flow	62	143	186	308	76	124
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	10.4	14	9.8
HCM LOS	B	B	A

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	30%	0%	100%	0%
Vol Thru, %	70%	38%	0%	0%
Vol Right, %	0%	62%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	186	449	69	113
LT Vol	56	0	69	0
Through Vol	130	169	0	0
RT Vol	0	280	0	113
Lane Flow Rate	204	493	76	124
Geometry Grp	2	2	7	7
Degree of Util (X)	0.293	0.603	0.14	0.188
Departure Headway (Hd)	5.163	4.398	6.662	5.445
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	689	814	541	663
Service Time	3.253	2.463	4.362	3.145
HCM Lane V/C Ratio	0.296	0.606	0.14	0.187
HCM Control Delay	10.4	14	10.4	9.4
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	1.2	4.1	0.5	0.7

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	60	485	25	22	935
Future Vol, veh/h	34	60	485	25	22	935
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	-	-	-	125	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	6	6	4	4	2	2
Mvmt Flow	38	67	539	28	24	1039

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1640	553	0	0	567	0
Stage 1	553	-	-	-	-	-
Stage 2	1087	-	-	-	-	-
Critical Hdwy	7.06	6.56	-	-	4.12	-
Critical Hdwy Stg 1	6.06	-	-	-	-	-
Critical Hdwy Stg 2	6.06	-	-	-	-	-
Follow-up Hdwy	3.554	3.354	-	-	2.218	-
Pot Cap-1 Maneuver	82	501	-	-	1005	-
Stage 1	518	-	-	-	-	-
Stage 2	265	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	80	501	-	-	1005	-
Mov Cap-2 Maneuver	228	-	-	-	-	-
Stage 1	518	-	-	-	-	-
Stage 2	259	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.6	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	350	1005	-
HCM Lane V/C Ratio	-	-	0.298	0.024	-
HCM Control Delay (s)	-	-	19.6	8.7	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.2	0.1	-

Intersection	
Intersection Delay, s/veh	18.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	74	104	0	5	280	97	4	34	9	186	1	179
Future Vol, veh/h	74	104	0	5	280	97	4	34	9	186	1	179
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	88	124	0	6	333	115	5	40	11	221	1	213
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	11.7	27.4	11.5	13.8
HCM LOS	B	D	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	9%	100%	0%	100%	0%	100%	0%
Vol Thru, %	72%	0%	100%	0%	74%	0%	1%
Vol Right, %	19%	0%	0%	0%	26%	0%	99%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	47	74	104	5	377	186	180
LT Vol	4	74	0	5	0	186	0
Through Vol	34	0	104	0	280	0	1
RT Vol	9	0	0	0	97	0	179
Lane Flow Rate	56	88	124	6	449	221	214
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.117	0.179	0.234	0.011	0.777	0.441	0.355
Departure Headway (Hd)	7.519	7.306	6.795	6.922	6.23	7.176	5.962
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	480	488	525	515	579	498	598
Service Time	5.519	5.102	4.589	4.698	4.006	4.96	3.744
HCM Lane V/C Ratio	0.117	0.18	0.236	0.012	0.775	0.444	0.358
HCM Control Delay	11.5	11.7	11.7	9.8	27.6	15.6	12
HCM Lane LOS	B	B	B	A	D	C	B
HCM 95th-tile Q	0.4	0.6	0.9	0	7.2	2.2	1.6

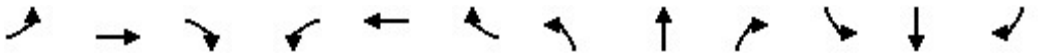
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	0	15	0	0	0	12	819	2	5	482	18
Future Vol, veh/h	37	0	15	0	0	0	12	819	2	5	482	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	0	110	-	-	110	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-4	-	-	0	-	-	0	-	-	1	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	4	4	4	0	0	0	2	2	2	4	4	4
Mvmt Flow	40	0	16	0	0	0	13	890	2	5	524	20

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1461	1463	534	-	-	892	544	0	0	893	0	0
Stage 1	544	544	-	-	-	-	-	-	-	-	-	-
Stage 2	917	919	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	6.34	5.74	5.84	-	-	6.2	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	5.34	4.74	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.34	4.74	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	-	-	3.3	2.218	-	-	2.236	-	-
Pot Cap-1 Maneuver	146	176	575	0	0	344	1025	-	-	751	-	-
Stage 1	586	582	-	0	0	-	-	-	-	-	-	-
Stage 2	396	426	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	144	172	575	-	-	344	1025	-	-	750	-	-
Mov Cap-2 Maneuver	328	352	-	-	-	-	-	-	-	-	-	-
Stage 1	578	578	-	-	-	-	-	-	-	-	-	-
Stage 2	391	420	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.7	0	0.1	0.1
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1025	-	-	328	575	-	750	-	-
HCM Lane V/C Ratio	0.013	-	-	0.123	0.028	-	0.007	-	-
HCM Control Delay (s)	8.6	-	-	17.5	11.4	0	9.8	-	-
HCM Lane LOS	A	-	-	C	B	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.1	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	237	117	3	4	287	171	17	48	12	104	7	277
Future Volume (veh/h)	237	117	3	4	287	171	17	48	12	104	7	277
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	0.99		0.97	1.00		0.96	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	1682	1682	1682	1695	1695	1695	1695	1695	1695	1695	1695	1695
Adj Flow Rate, veh/h	282	139	4	5	342	204	20	57	14	124	8	330
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	4	4	4
Cap, veh/h	340	812	23	570	373	222	53	251	62	171	9	370
Arrive On Green	0.14	0.50	0.50	0.02	0.38	0.38	0.03	0.19	0.19	0.11	0.27	0.27
Sat Flow, veh/h	1602	1626	47	1615	981	585	1615	1301	320	1615	34	1390
Grp Volume(v), veh/h	282	0	143	5	0	546	20	0	71	124	0	338
Grp Sat Flow(s),veh/h/ln	1602	0	1673	1615	0	1565	1615	0	1621	1615	0	1423
Q Serve(g_s), s	8.9	0.0	4.2	0.2	0.0	30.0	1.1	0.0	3.3	6.7	0.0	20.7
Cycle Q Clear(g_c), s	8.9	0.0	4.2	0.2	0.0	30.0	1.1	0.0	3.3	6.7	0.0	20.7
Prop In Lane	1.00		0.03	1.00		0.37	1.00		0.20	1.00		0.98
Lane Grp Cap(c), veh/h	340	0	836	570	0	595	53	0	313	171	0	379
V/C Ratio(X)	0.83	0.00	0.17	0.01	0.00	0.92	0.38	0.00	0.23	0.72	0.00	0.89
Avail Cap(c_a), veh/h	540	0	1355	650	0	964	107	0	322	286	0	441
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	18.7	0.0	12.4	16.4	0.0	26.7	42.8	0.0	30.8	39.1	0.0	31.9
Incr Delay (d2), s/veh	3.0	0.0	0.0	0.0	0.0	5.9	6.2	0.0	0.1	7.9	0.0	16.6
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(95%),veh/ln	5.7	0.0	2.7	0.1	0.0	17.0	1.0	0.0	2.4	5.5	0.0	13.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	0.0	12.4	16.5	0.0	32.5	49.0	0.0	30.9	47.1	0.0	48.5
LnGrp LOS	C	A	B	B	A	C	D	A	C	D	A	D
Approach Vol, veh/h		425			551			91			462	
Approach Delay, s/veh		18.6			32.4			34.9			48.1	
Approach LOS		B			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	38.7	13.6	21.5	5.9	49.5	7.0	28.1
Change Period (Y+Rc), s	5.3	5.3	5.0	5.0	5.3	5.3	5.0	5.0
Max Green Setting (Gmax), s	22.7	54.7	15.0	17.0	5.1	72.3	5.0	27.0
Max Q Clear Time (g_c+I1), s	10.9	32.0	8.7	5.3	2.2	6.2	3.1	22.7
Green Ext Time (p_c), s	0.5	1.4	0.3	0.1	0.0	0.3	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	33.5
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	7	19	272	23	338	64	908	128	96	861	77
Future Volume (veh/h)	41	7	19	272	23	338	64	908	128	96	861	77
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1715	1715	1715	1809	1809	1809	1795	1795	1795	1715	1715	1715
Adj Flow Rate, veh/h	45	8	21	296	25	0	70	987	0	104	936	84
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	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	548	86	415	521	32		411	1300		414	1191	107
Arrive On Green	0.33	0.33	0.29	0.31	0.31	0.00	0.12	0.38	0.00	0.13	0.40	0.36
Sat Flow, veh/h	1279	264	1447	1253	106	1533	1709	3500	0	1633	3013	270
Grp Volume(v), veh/h	53	0	21	321	0	0	70	987	0	104	506	514
Grp Sat Flow(s),veh/h/ln	1543	0	1447	1359	0	1533	1709	1705	0	1633	1629	1655
Q Serve(g_s), s	0.0	0.0	0.5	10.2	0.0	0.0	0.0	12.8	0.0	0.0	13.8	13.9
Cycle Q Clear(g_c), s	1.1	0.0	0.5	11.3	0.0	0.0	0.0	12.8	0.0	0.0	13.8	13.9
Prop In Lane	0.85		1.00	0.92		1.00	1.00		0.00	1.00		0.16
Lane Grp Cap(c), veh/h	635	0	415	553	0		411	1300		414	644	654
V/C Ratio(X)	0.08	0.00	0.05	0.58	0.00		0.17	0.76		0.25	0.79	0.79
Avail Cap(c_a), veh/h	1598	0	1398	711	0		474	1546		451	739	750
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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.9	0.0	13.1	16.6	0.0	0.0	17.2	13.7	0.0	17.4	13.5	13.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.1	1.4	0.0	0.1	4.1	4.1
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(95%),veh/ln	0.6	0.0	0.3	5.3	0.0	0.0	1.1	7.2	0.0	1.7	8.0	8.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.9	0.0	13.1	17.0	0.0	0.0	17.2	15.1	0.0	17.6	17.6	17.7
LnGrp LOS	B	A	B	B	A		B	B		B	B	B
Approach Vol, veh/h		74			321	A		1057	A		1124	
Approach Delay, s/veh		12.3			17.0			15.3			17.6	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	22.3		18.5	9.1	23.0		18.5
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.8	20.0		19.0	5.0	20.0		48.0
Max Q Clear Time (g_c+I1), s	2.0	14.8		13.3	2.0	15.9		3.1
Green Ext Time (p_c), s	0.0	1.5		0.4	0.0	1.2		0.1

Intersection Summary	
HCM 6th Ctrl Delay	16.4
HCM 6th LOS	B

Notes

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

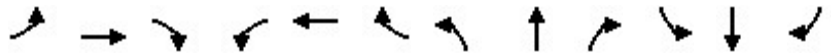
Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	64	700	35	19	583
Future Vol, veh/h	50	64	700	35	19	583
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	220	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	54	70	761	38	21	634

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1457	780	0	0	799	0
Stage 1	780	-	-	-	-	-
Stage 2	677	-	-	-	-	-
Critical Hdwy	6.61	6.31	-	-	4.12	-
Critical Hdwy Stg 1	5.61	-	-	-	-	-
Critical Hdwy Stg 2	5.61	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	132	388	-	-	824	-
Stage 1	434	-	-	-	-	-
Stage 2	488	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	129	388	-	-	824	-
Mov Cap-2 Maneuver	266	-	-	-	-	-
Stage 1	434	-	-	-	-	-
Stage 2	475	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	22.9	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	323	824	-
HCM Lane V/C Ratio	-	-	0.384	0.025	-
HCM Control Delay (s)	-	-	22.9	9.5	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.7	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	170	308	217	195	149	288	567	94	134	620	74
Future Volume (veh/h)	50	170	308	217	195	149	288	567	94	134	620	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		0.98	1.00		0.96	1.00		0.96
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	1709	1709	1709	1709	1709	1723	1723	1723	1701	1701	1701
Adj Flow Rate, veh/h	55	187	0	238	214	164	316	623	103	147	681	81
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
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	367	293		432	425	647	342	796	131	340	829	98
Arrive On Green	0.08	0.17	0.00	0.15	0.25	0.24	0.21	0.28	0.28	0.21	0.29	0.27
Sat Flow, veh/h	1628	1709	1448	1628	1709	1412	1641	2795	461	1620	2895	344
Grp Volume(v), veh/h	55	187	0	238	214	164	316	364	362	147	380	382
Grp Sat Flow(s),veh/h/ln	1628	1709	1448	1628	1709	1412	1641	1637	1620	1620	1616	1623
Q Serve(g_s), s	1.8	6.8	0.0	7.5	7.2	0.8	12.7	13.7	13.8	5.3	14.7	14.8
Cycle Q Clear(g_c), s	1.8	6.8	0.0	7.5	7.2	0.8	12.7	13.7	13.8	5.3	14.7	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		0.21
Lane Grp Cap(c), veh/h	367	293		432	425	647	342	466	461	340	463	465
V/C Ratio(X)	0.15	0.64		0.55	0.50	0.25	0.92	0.78	0.78	0.43	0.82	0.82
Avail Cap(c_a), veh/h	411	494		432	570	767	342	575	569	340	472	474
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	25.9	0.0	17.3	21.7	3.7	26.1	22.1	22.2	23.0	22.4	22.5
Incr Delay (d2), s/veh	0.1	0.9	0.0	0.9	0.3	0.1	29.5	4.3	4.5	0.3	10.1	10.3
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(95%),veh/ln	1.1	4.8	0.0	4.7	4.9	0.8	11.8	9.1	9.2	3.4	10.5	10.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.7	26.7	0.0	18.2	22.0	3.8	55.6	26.4	26.6	23.4	32.5	32.8
LnGrp LOS	B	C		B	C	A	E	C	C	C	C	C
Approach Vol, veh/h		242	A		616			1042			909	
Approach Delay, s/veh		25.1			15.7			35.3			31.1	
Approach LOS		C			B			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	22.1	8.2	19.7	17.0	22.2	13.0	14.9
Change Period (Y+Rc), s	5.0	5.3	5.0	5.4	5.0	5.3	5.0	* 5.4
Max Green Setting (Gmax), s	8.6	21.3	5.0	20.0	12.0	17.3	8.0	* 17
Max Q Clear Time (g_c+I1), s	11.3	15.8	3.8	9.2	14.7	16.8	9.5	8.8
Green Ext Time (p_c), s	0.0	1.0	0.0	0.7	0.0	0.1	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	28.8
HCM 6th LOS	C

Notes

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

Unsignalized Delay for [EBR] 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)	27	14	17	154	4	221	8	735	244	378	718	20
Future Volume (veh/h)	27	14	17	154	4	221	8	735	244	378	718	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.98		0.97	1.00		0.99	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	1723	1723	1723	1750	1750	1750	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	32	16	20	181	5	260	9	865	287	445	845	24
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	0	0	0	2	2	2	2	2	2
Cap, veh/h	111	55	40	347	7	364	598	1010	334	622	1034	29
Arrive On Green	0.27	0.27	0.25	0.27	0.27	0.25	0.30	0.42	0.41	0.20	0.32	0.31
Sat Flow, veh/h	155	205	150	951	26	1437	1641	2408	797	3183	3248	92
Grp Volume(v), veh/h	68	0	0	186	0	260	9	587	565	445	426	443
Grp Sat Flow(s),veh/h/ln	509	0	0	977	0	1437	1641	1637	1569	1591	1637	1704
Q Serve(g_s), s	1.0	0.0	0.0	0.0	0.0	12.5	0.0	24.6	24.8	9.9	18.1	18.2
Cycle Q Clear(g_c), s	16.0	0.0	0.0	15.0	0.0	12.5	0.0	24.6	24.8	9.9	18.1	18.2
Prop In Lane	0.47		0.29	0.97		1.00	1.00		0.51	1.00		0.05
Lane Grp Cap(c), veh/h	206	0	0	354	0	364	598	686	658	622	521	542
V/C Ratio(X)	0.33	0.00	0.00	0.53	0.00	0.71	0.02	0.86	0.86	0.72	0.82	0.82
Avail Cap(c_a), veh/h	459	0	0	624	0	646	598	1146	1098	967	1492	1553
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.3	0.0	0.0	25.9	0.0	25.8	17.6	19.9	20.2	28.5	23.8	23.8
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.5	0.0	1.0	0.0	1.6	1.7	0.6	1.2	1.2
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(95%),veh/ln	1.7	0.0	0.0	5.5	0.0	7.6	0.2	13.5	13.2	6.5	10.9	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.7	0.0	0.0	26.3	0.0	26.8	17.6	21.5	21.9	29.1	25.0	25.0
LnGrp LOS	C	A	A	C	A	C	B	C	C	C	C	C
Approach Vol, veh/h		68			446			1161			1314	
Approach Delay, s/veh		23.7			26.6			21.7			26.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.8	34.7		23.2	25.4	27.1		23.2
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	21.0	51.0		33.0	5.0	67.0		33.0
Max Q Clear Time (g_c+I1), s	11.3	26.8		17.0	2.0	20.2		18.0
Green Ext Time (p_c), s	0.9	3.0		1.1	0.0	2.0		0.1

Intersection Summary		
HCM 6th Ctrl Delay	24.5	
HCM 6th LOS	C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	62	232	64	22	96	235	823	224	138	721	168
Future Volume (veh/h)	132	62	232	64	22	96	235	823	224	138	721	168
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		0.99	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	1948	1948	1948	1736	1736	1736	1809	1809	1809	1723	1723	1723
Adj Flow Rate, veh/h	150	70	264	73	25	109	267	935	255	157	819	191
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, %	4	4	4	1	1	1	1	1	1	2	2	2
Cap, veh/h	579	99	374	372	74	321	322	1123	495	378	956	223
Arrive On Green	0.11	0.28	0.28	0.09	0.26	0.21	0.11	0.33	0.33	0.15	0.36	0.35
Sat Flow, veh/h	1856	357	1345	1654	282	1228	1723	3436	1516	1641	2623	612
Grp Volume(v), veh/h	150	0	334	73	0	134	267	935	255	157	511	499
Grp Sat Flow(s),veh/h/ln	1856	0	1701	1654	0	1509	1723	1718	1516	1641	1637	1598
Q Serve(g_s), s	3.4	0.0	11.3	1.9	0.0	4.8	4.6	16.1	5.7	0.0	18.5	18.5
Cycle Q Clear(g_c), s	3.4	0.0	11.3	1.9	0.0	4.8	4.6	16.1	5.7	0.0	18.5	18.5
Prop In Lane	1.00		0.79	1.00		0.81	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	579	0	473	372	0	394	322	1123	495	378	596	582
V/C Ratio(X)	0.26	0.00	0.71	0.20	0.00	0.34	0.83	0.83	0.51	0.42	0.86	0.86
Avail Cap(c_a), veh/h	579	0	769	400	0	682	322	1179	520	393	638	623
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	12.9	0.0	20.8	14.9	0.0	20.3	26.2	20.0	7.4	23.1	18.8	19.0
Incr Delay (d2), s/veh	0.2	0.0	0.7	0.3	0.0	0.5	15.4	4.7	0.3	0.3	9.9	10.1
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(95%),veh/ln	2.4	0.0	7.7	1.3	0.0	3.0	8.6	10.6	4.8	3.5	12.3	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.1	0.0	21.5	15.2	0.0	20.8	41.6	24.6	7.7	23.3	28.8	29.2
LnGrp LOS	B	A	C	B	A	C	D	C	A	C	C	C
Approach Vol, veh/h		484			207			1457			1167	
Approach Delay, s/veh		18.9			18.8			24.8			28.2	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	24.0	8.0	19.8	10.0	26.4	6.9	20.8
Change Period (Y+Rc), s	5.0	5.0	4.0	6.0	5.0	5.0	4.0	6.0
Max Green Setting (Gmax), s	8.0	20.0	4.0	26.0	5.0	23.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	7.4	18.1	5.4	6.8	6.6	20.5	3.9	13.3
Green Ext Time (p_c), s	0.1	0.8	0.0	0.7	0.0	0.8	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	24.8
HCM 6th LOS	C

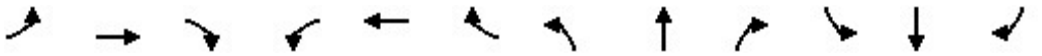
Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	5	10	3	69	4	39	9	170	80	93	87	1
Future Vol, veh/h	5	10	3	69	4	39	9	170	80	93	87	1
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
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	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	3	3	3	1	1	1	2	2	2
Mvmt Flow	5	11	3	74	4	42	10	183	86	100	94	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	565	585	96	548	542	226	96	0	0	269	0	0
Stage 1	296	296	-	246	246	-	-	-	-	-	-	-
Stage 2	269	289	-	302	296	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.13	6.53	6.23	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.527	4.027	3.327	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	439	426	966	446	446	811	1504	-	-	1295	-	-
Stage 1	717	672	-	756	701	-	-	-	-	-	-	-
Stage 2	741	677	-	705	666	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	385	388	965	405	406	811	1503	-	-	1295	-	-
Mov Cap-2 Maneuver	385	388	-	405	406	-	-	-	-	-	-	-
Stage 1	711	616	-	750	695	-	-	-	-	-	-	-
Stage 2	693	672	-	634	611	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.8	14.7	0.3	4.1
HCM LOS	B	B		

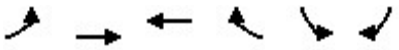
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1503	-	-	430	491	1295	-	-
HCM Lane V/C Ratio	0.006	-	-	0.045	0.245	0.077	-	-
HCM Control Delay (s)	7.4	0	-	13.8	14.7	8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	1	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	31	5	0	4	4	1205	14	8	1121	3
Future Volume (veh/h)	5	0	31	5	0	4	4	1205	14	8	1121	3
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		0.99	1.00		0.97	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	1723	1723	1723	1726	1726	1726	1723	1723	1723	1767	1767	1767
Adj Flow Rate, veh/h	6	0	35	6	0	5	5	1369	16	9	1274	3
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, %	2	2	2	7	7	7	2	2	2	4	4	4
Cap, veh/h	442	0	182	411	0	183	406	1703	20	335	1634	4
Arrive On Green	0.07	0.00	0.08	0.07	0.00	0.08	0.11	0.51	0.47	0.08	0.48	0.43
Sat Flow, veh/h	1641	0	1452	1644	0	1454	1641	3312	39	1683	3436	8
Grp Volume(v), veh/h	6	0	35	6	0	5	5	676	709	9	622	655
Grp Sat Flow(s),veh/h/ln	1641	0	1452	1644	0	1454	1641	1637	1714	1683	1679	1766
Q Serve(g_s), s	0.1	0.0	1.1	0.1	0.0	0.1	0.0	16.0	16.0	0.0	14.4	14.5
Cycle Q Clear(g_c), s	0.1	0.0	1.1	0.1	0.0	0.1	0.0	16.0	16.0	0.0	14.4	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.02	1.00		0.00
Lane Grp Cap(c), veh/h	442	0	182	411	0	183	406	841	881	335	798	840
V/C Ratio(X)	0.01	0.00	0.19	0.01	0.00	0.03	0.01	0.80	0.80	0.03	0.78	0.78
Avail Cap(c_a), veh/h	572	0	900	541	0	902	499	1190	1246	495	1221	1284
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	14.4	0.0	19.2	14.4	0.0	18.8	12.8	9.4	9.4	15.0	10.2	10.2
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.0	0.0	0.0	1.8	1.7	0.0	0.8	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(95%),veh/ln	0.1	0.0	0.6	0.1	0.0	0.1	0.1	7.0	7.3	0.1	6.5	6.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.4	0.0	19.4	14.4	0.0	18.8	12.8	11.2	11.1	15.0	11.0	11.0
LnGrp LOS	B	A	B	B	A	B	B	B	B	B	B	B
Approach Vol, veh/h		41			11			1390			1286	
Approach Delay, s/veh		18.7			16.4			11.2			11.0	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	27.0	4.3	8.9	8.4	25.2	4.3	8.9
Change Period (Y+Rc), s	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	31.0	4.0	26.0	5.0	31.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.0	18.0	2.1	2.1	2.0	16.5	2.1	3.1
Green Ext Time (p_c), s	0.0	3.0	0.0	0.0	0.0	2.8	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.2
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	5	463	457	90	233	12
Future Volume (veh/h)	5	463	457	90	233	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	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	1736	1736	1682	1682	1750	1750
Adj Flow Rate, veh/h	5	498	491	97	251	13
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	5	5	0	0
Cap, veh/h	163	813	796	1099	484	25
Arrive On Green	0.47	0.47	0.47	0.47	0.31	0.24
Sat Flow, veh/h	8	1719	1682	1392	1569	81
Grp Volume(v), veh/h	503	0	491	97	265	0
Grp Sat Flow(s),veh/h/ln	1727	0	1682	1392	1657	0
Q Serve(g_s), s	0.0	0.0	5.0	0.4	3.0	0.0
Cycle Q Clear(g_c), s	4.9	0.0	5.0	0.4	3.0	0.0
Prop In Lane	0.01			1.00	0.95	0.05
Lane Grp Cap(c), veh/h	976	0	796	1099	511	0
V/C Ratio(X)	0.52	0.00	0.62	0.09	0.52	0.00
Avail Cap(c_a), veh/h	3725	0	3487	3326	2350	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.5	0.0	4.5	0.6	6.5	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.3	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	0.0	0.4	0.1	0.9	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.6	0.0	4.8	0.6	6.9	0.0
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h		503	588		265	
Approach Delay, s/veh		4.6	4.1		6.9	
Approach LOS		A	A		A	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	13.3			13.3	9.6
Change Period (Y+Rc), s	5.0			5.0	5.0
Max Green Setting (Gmax), s	45.0			45.0	30.0
Max Q Clear Time (g_c+I1), s	6.9			7.0	5.0
Green Ext Time (p_c), s	1.1			1.4	0.6

Intersection Summary	
HCM 6th Ctrl Delay	4.8
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	13	416	20	7	410
Future Vol, veh/h	14	13	416	20	7	410
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, %	-6	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	7	7	2	2
Mvmt Flow	16	14	462	22	8	456

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	945	473	0	0	484	0
Stage 1	473	-	-	-	-	-
Stage 2	472	-	-	-	-	-
Critical Hdwy	5.22	5.62	-	-	4.12	-
Critical Hdwy Stg 1	4.22	-	-	-	-	-
Critical Hdwy Stg 2	4.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	398	640	-	-	1079	-
Stage 1	734	-	-	-	-	-
Stage 2	735	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	394	640	-	-	1079	-
Mov Cap-2 Maneuver	394	-	-	-	-	-
Stage 1	734	-	-	-	-	-
Stage 2	728	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.9	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	483	1079	-
HCM Lane V/C Ratio	-	-	0.062	0.007	-
HCM Control Delay (s)	-	-	12.9	8.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

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	5	19	39	43	43	150	49	107	42	52	117	8
Future Vol, veh/h	5	19	39	43	43	150	49	107	42	52	117	8
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
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	1	1	1
Mvmt Flow	5	21	42	47	47	163	53	116	46	57	127	9
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	8.9	10	9.8	9.7
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	72%	0%	33%	0%	22%	0%	94%
Vol Right, %	0%	28%	0%	67%	0%	78%	0%	6%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	149	5	58	43	193	52	125
LT Vol	49	0	5	0	43	0	52	0
Through Vol	0	107	0	19	0	43	0	117
RT Vol	0	42	0	39	0	150	0	8
Lane Flow Rate	53	162	5	63	47	210	57	136
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.09	0.242	0.01	0.097	0.08	0.299	0.097	0.209
Departure Headway (Hd)	6.088	5.385	6.539	5.556	6.176	5.123	6.192	5.543
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	583	659	550	649	576	694	582	640
Service Time	3.887	3.183	4.241	3.258	3.962	2.909	3.892	3.342
HCM Lane V/C Ratio	0.091	0.246	0.009	0.097	0.082	0.303	0.098	0.212
HCM Control Delay	9.5	9.9	9.3	8.9	9.5	10.1	9.6	9.8
HCM Lane LOS	A	A	A	A	A	B	A	A
HCM 95th-tile Q	0.3	0.9	0	0.3	0.3	1.3	0.3	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	13	242	408	20	34	340
Future Volume (veh/h)	13	242	408	20	34	340
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	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	1750	1750	1682	1682	1709	1709
Adj Flow Rate, veh/h	14	257	434	21	36	362
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	5	5	3	3
Cap, veh/h	410	365	561	27	113	911
Arrive On Green	0.25	0.25	0.35	0.35	0.07	0.53
Sat Flow, veh/h	1667	1483	1589	77	1628	1709
Grp Volume(v), veh/h	14	257	0	455	36	362
Grp Sat Flow(s),veh/h/ln	1667	1483	0	1666	1628	1709
Q Serve(g_s), s	0.2	5.7	0.0	8.8	0.8	4.5
Cycle Q Clear(g_c), s	0.2	5.7	0.0	8.8	0.8	4.5
Prop In Lane	1.00	1.00		0.05	1.00	
Lane Grp Cap(c), veh/h	410	365	0	588	113	911
V/C Ratio(X)	0.03	0.70	0.00	0.77	0.32	0.40
Avail Cap(c_a), veh/h	1655	1473	0	1654	1617	1697
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.4	12.5	0.0	10.4	16.0	5.0
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.8	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	2.9	0.0	4.1	0.4	1.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.4	13.4	0.0	11.3	16.6	5.1
LnGrp LOS	B	B	A	B	B	A
Approach Vol, veh/h	271		455			398
Approach Delay, s/veh	13.2		11.3			6.2
Approach LOS	B		B			A

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	23.3		6.5	16.8	12.9
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s	35.0		35.0	35.0	35.0
Max Q Clear Time (g_c+I1), s	6.5		2.8	10.8	7.7
Green Ext Time (p_c), s	0.8		0.1	1.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	9.9
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	114	253	116	517	559	58
Future Volume (veh/h)	114	253	116	517	559	58
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1660	1660	1954	1954	1636	1636
Adj Flow Rate, veh/h	125	278	127	568	614	64
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	5	5	1	1	2	2
Cap, veh/h	577	909	225	828	724	644
Arrive On Green	0.18	0.18	0.12	0.42	0.46	0.46
Sat Flow, veh/h	3237	1395	1861	1954	1558	1386
Grp Volume(v), veh/h	125	278	127	568	614	64
Grp Sat Flow(s),veh/h/ln	1577	1395	1861	1954	1558	1386
Q Serve(g_s), s	2.1	5.5	4.0	14.8	21.8	1.6
Cycle Q Clear(g_c), s	2.1	5.5	4.0	14.8	21.8	1.6
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	577	909	225	828	724	644
V/C Ratio(X)	0.22	0.31	0.56	0.69	0.85	0.10
Avail Cap(c_a), veh/h	1371	1260	485	1592	1382	1229
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.8	4.9	26.0	14.7	14.8	9.4
Incr Delay (d2), s/veh	0.2	0.2	2.2	1.0	2.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	10.8	3.2	9.7	11.2	3.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.9	5.0	28.2	15.7	17.7	9.5
LnGrp LOS	C	A	C	B	B	A
Approach Vol, veh/h	403			695	678	
Approach Delay, s/veh	10.3			18.0	16.9	
Approach LOS	B			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		30.0		32.6	15.1	14.9
Change Period (Y+Rc), s		5.5		5.5	9.5	5.5
Max Green Setting (Gmax), s		49.0		53.5	14.3	25.2
Max Q Clear Time (g_c+I1), s		16.8		23.8	6.0	7.5
Green Ext Time (p_c), s		2.5		3.3	0.2	1.7

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

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	239	97	56	775	430	98
Future Volume (veh/h)	239	97	56	775	430	98
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	1728	1728	1954	1954	1500	1500
Adj Flow Rate, veh/h	260	105	61	842	467	107
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	1	1	4	4
Cap, veh/h	400	356	374	1231	636	902
Arrive On Green	0.24	0.24	0.10	0.63	0.42	0.42
Sat Flow, veh/h	1646	1465	1861	1954	1500	1270
Grp Volume(v), veh/h	260	105	61	842	467	107
Grp Sat Flow(s),veh/h/ln	1646	1465	1861	1954	1500	1270
Q Serve(g_s), s	6.7	2.8	0.0	13.3	12.3	1.3
Cycle Q Clear(g_c), s	6.7	2.8	0.0	13.3	12.3	1.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	400	356	374	1231	636	902
V/C Ratio(X)	0.65	0.29	0.16	0.68	0.73	0.12
Avail Cap(c_a), veh/h	1077	958	462	3421	2311	2319
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.1	14.6	18.7	5.7	11.4	2.2
Incr Delay (d2), s/veh	0.7	0.2	0.1	0.5	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.2	1.5	0.9	3.8	5.3	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	16.8	14.8	18.7	6.2	12.6	2.2
LnGrp LOS	B	B	B	A	B	A
Approach Vol, veh/h	365			903	574	
Approach Delay, s/veh	16.2			7.0	10.7	
Approach LOS	B			A	B	

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	32.9		9.8	23.1	14.5
Change Period (Y+Rc), s	7.0		7.0	* 7	5.0
Max Green Setting (Gmax), s	79.0		5.0	* 69	29.0
Max Q Clear Time (g_c+I1), s	15.3		2.0	14.3	8.7
Green Ext Time (p_c), s	3.0		0.0	1.7	0.9

Intersection Summary	
HCM 6th Ctrl Delay	10.0
HCM 6th LOS	B

Notes

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

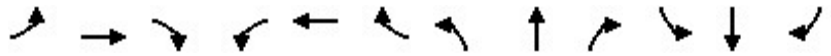
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	0	79	2	1	2	182	1124	7	2	1121	52
Future Volume (veh/h)	62	0	79	2	1	2	182	1124	7	2	1121	52
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	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	1709	1709	1709	1709	1709	1709	1709	1709	1709	1831	1831	1831
Adj Flow Rate, veh/h	69	0	88	2	1	2	202	1249	8	2	1246	58
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, %	3	3	3	3	3	3	3	3	3	2	2	2
Cap, veh/h	418	0	103	164	12	25	445	1943	12	279	1565	73
Arrive On Green	0.10	0.00	0.12	0.00	0.02	0.02	0.15	0.59	0.53	0.00	0.46	0.42
Sat Flow, veh/h	1628	0	1428	1628	509	1017	1628	3307	21	1744	3384	157
Grp Volume(v), veh/h	69	0	88	2	0	3	202	613	644	2	640	664
Grp Sat Flow(s),veh/h/ln	1628	0	1428	1628	0	1526	1628	1624	1705	1744	1739	1802
Q Serve(g_s), s	1.7	0.0	3.0	0.1	0.0	0.1	2.5	12.4	12.4	0.0	15.4	15.5
Cycle Q Clear(g_c), s	1.7	0.0	3.0	0.1	0.0	0.1	2.5	12.4	12.4	0.0	15.4	15.5
Prop In Lane	1.00		1.00	1.00		0.67	1.00		0.01	1.00		0.09
Lane Grp Cap(c), veh/h	418	0	103	164	0	37	445	954	1001	279	804	833
V/C Ratio(X)	0.17	0.00	0.86	0.01	0.00	0.08	0.45	0.64	0.64	0.01	0.80	0.80
Avail Cap(c_a), veh/h	469	0	694	293	0	739	567	1036	1088	417	1004	1040
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	15.7	0.0	21.4	23.4	0.0	23.5	8.6	6.7	6.8	9.2	11.3	11.4
Incr Delay (d2), s/veh	0.2	0.0	7.5	0.0	0.0	0.3	0.7	1.2	1.2	0.0	2.8	2.8
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(95%),veh/ln	1.0	0.0	1.9	0.0	0.0	0.1	1.2	4.7	4.9	0.0	8.3	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.9	0.0	28.9	23.4	0.0	23.9	9.4	8.0	7.9	9.2	14.1	14.1
LnGrp LOS	B	A	C	C	A	C	A	A	A	A	B	B
Approach Vol, veh/h		157			5			1459			1306	
Approach Delay, s/veh		23.2			23.7			8.1			14.1	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.1	32.0	4.1	9.2	10.3	25.8	6.4	6.8
Change Period (Y+Rc), s	4.0	6.0	4.0	* 5.6	5.6	6.0	4.0	5.6
Max Green Setting (Gmax), s	4.0	28.5	4.0	* 24	8.4	25.5	4.0	23.9
Max Q Clear Time (g_c+I1), s	2.0	14.4	2.1	5.0	4.5	17.5	3.7	2.1
Green Ext Time (p_c), s	0.0	4.9	0.0	0.1	0.2	2.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Notes

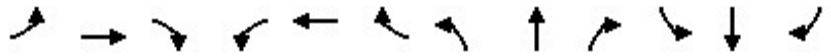
* HCM 6th computational engine requires equal clearance times for the phases crossing the barrier.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	3	5	145	3	342	2	1070	63	81	1143	4
Future Volume (veh/h)	2	3	5	145	3	342	2	1070	63	81	1143	4
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		0.98	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	1750	1750	1736	1736	1736	1709	1709	1709	1723	1723	1723
Adj Flow Rate, veh/h	2	3	5	159	3	376	2	1176	69	89	1256	4
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
Percent Heavy Veh, %	0	0	0	1	1	1	3	3	3	2	2	2
Cap, veh/h	56	84	117	476	9	421	235	1300	1002	251	1307	4
Arrive On Green	0.08	0.08	0.08	0.29	0.29	0.29	0.08	0.40	0.40	0.09	0.39	0.38
Sat Flow, veh/h	686	1029	1429	1624	31	1437	1628	3247	1413	1641	3346	11
Grp Volume(v), veh/h	5	0	5	162	0	376	2	1176	69	89	614	646
Grp Sat Flow(s),veh/h/ln	1716	0	1429	1655	0	1437	1628	1624	1413	1641	1637	1720
Q Serve(g_s), s	0.2	0.0	0.3	6.6	0.0	21.6	0.0	29.4	1.3	0.0	31.6	31.6
Cycle Q Clear(g_c), s	0.2	0.0	0.3	6.6	0.0	21.6	0.0	29.4	1.3	0.0	31.6	31.6
Prop In Lane	0.40		1.00	0.98		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	140	0	117	485	0	421	235	1300	1002	251	639	672
V/C Ratio(X)	0.04	0.00	0.04	0.33	0.00	0.89	0.01	0.90	0.07	0.35	0.96	0.96
Avail Cap(c_a), veh/h	596	0	497	485	0	421	249	1306	1004	262	639	672
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	36.5	0.0	36.5	23.9	0.0	29.2	33.7	24.3	4.0	35.3	25.7	25.7
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.1	0.0	20.1	0.0	8.9	0.0	0.3	26.0	25.2
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(95%),veh/ln	0.2	0.0	0.2	4.7	0.0	14.7	0.1	17.1	1.4	3.0	21.9	22.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.5	0.0	36.6	24.1	0.0	49.3	33.7	33.2	4.1	35.6	51.7	50.9
LnGrp LOS	D	A	D	C	A	D	C	C	A	D	D	D
Approach Vol, veh/h		10			538			1247			1349	
Approach Delay, s/veh		36.6			41.7			31.6			50.3	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.4	37.5		28.3	10.3	37.7		10.1
Change Period (Y+Rc), s	6.0	6.0		5.3	6.0	6.0		6.0
Max Green Setting (Gmax), s	5.3	31.7		23.0	5.0	31.7		27.0
Max Q Clear Time (g_c+I1), s	2.0	31.4		23.6	2.0	33.6		2.3
Green Ext Time (p_c), s	0.0	0.2		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 6th Ctrl Delay	41.4	
HCM 6th LOS	D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	89	32	209	92	588	24	486	117	480	751	42
Future Volume (veh/h)	62	89	32	209	92	588	24	486	117	480	751	42
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		0.97	1.00		0.97	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	1695	1695	1695	1781	1781	1781	1668	1668	1668	1695	1695	1695
Adj Flow Rate, veh/h	67	96	34	225	0	698	26	523	126	516	808	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
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	4	4	4
Cap, veh/h	83	198	70	275	0	811	38	1128	488	602	853	684
Arrive On Green	0.05	0.17	0.17	0.16	0.00	0.28	0.02	0.36	0.36	0.19	0.50	0.48
Sat Flow, veh/h	1615	1193	423	1696	0	2933	1589	3169	1370	3132	1695	1430
Grp Volume(v), veh/h	67	0	130	225	0	698	26	523	126	516	808	45
Grp Sat Flow(s),veh/h/ln	1615	0	1616	1696	0	1466	1589	1585	1370	1566	1695	1430
Q Serve(g_s), s	5.0	0.0	9.0	15.7	0.0	27.8	2.0	15.6	8.0	19.6	55.6	2.1
Cycle Q Clear(g_c), s	5.0	0.0	9.0	15.7	0.0	27.8	2.0	15.6	8.0	19.6	55.6	2.1
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	83	0	269	275	0	811	38	1128	488	602	853	684
V/C Ratio(X)	0.80	0.00	0.48	0.82	0.00	0.86	0.68	0.46	0.26	0.86	0.95	0.07
Avail Cap(c_a), veh/h	160	0	421	275	0	948	65	1272	550	602	901	725
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	57.6	0.0	46.4	49.7	0.0	42.2	59.5	30.5	28.1	48.0	29.0	17.3
Incr Delay (d2), s/veh	6.6	0.0	0.5	16.4	0.0	6.4	7.8	0.1	0.1	11.3	17.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.0	0.0	6.5	12.5	0.0	15.9	1.6	9.9	4.7	13.3	33.9	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	64.2	0.0	46.9	66.2	0.0	48.6	67.3	30.6	28.2	59.3	46.7	17.3
LnGrp LOS	E	A	D	E	A	D	E	C	C	E	D	B
Approach Vol, veh/h		197			923			675			1369	
Approach Delay, s/veh		52.8			52.9			31.6			50.5	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	46.7	12.0	37.1	8.9	64.8	23.0	26.1
Change Period (Y+Rc), s	6.0	6.0	5.7	5.7	6.0	6.0	5.7	5.7
Max Green Setting (Gmax), s	21.0	46.3	12.2	37.1	5.0	62.3	17.3	32.0
Max Q Clear Time (g_c+I1), s	11.6	17.6	7.0	29.8	4.0	57.6	17.7	11.0
Green Ext Time (p_c), s	0.0	1.7	0.0	1.6	0.0	1.2	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	47.3
HCM 6th LOS	D

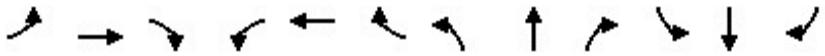
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	24	143	358	49	56	60	684	49	33	879	58
Future Volume (veh/h)	15	24	143	358	49	56	60	684	49	33	879	58
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		0.98
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	1695	1695	1695	1736	1736	1736	1709	1709	1709	1767	1767	1767
Adj Flow Rate, veh/h	16	25	149	373	51	58	62	712	51	34	916	60
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, %	4	4	4	1	1	1	3	3	3	4	4	4
Cap, veh/h	54	84	391	408	253	288	80	918	775	262	1000	66
Arrive On Green	0.34	0.34	0.33	0.34	0.34	0.33	0.54	0.54	0.54	0.05	0.61	0.60
Sat Flow, veh/h	70	244	1143	1218	740	841	572	1709	1444	1683	1638	107
Grp Volume(v), veh/h	190	0	0	373	0	109	62	712	51	34	0	976
Grp Sat Flow(s),veh/h/ln	1457	0	0	1218	0	1581	572	1709	1444	1683	0	1745
Q Serve(g_s), s	0.0	0.0	0.0	31.5	0.0	6.3	5.5	42.5	2.2	0.0	0.0	63.5
Cycle Q Clear(g_c), s	12.5	0.0	0.0	44.0	0.0	6.3	69.0	42.5	2.2	0.0	0.0	63.5
Prop In Lane	0.08		0.78	1.00		0.53	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	529	0	0	408	0	541	80	918	775	262	0	1066
V/C Ratio(X)	0.36	0.00	0.00	0.91	0.00	0.20	0.77	0.78	0.07	0.13	0.00	0.92
Avail Cap(c_a), veh/h	529	0	0	408	0	541	80	918	775	282	0	1086
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	32.2	0.0	0.0	46.2	0.0	30.0	63.2	23.6	14.3	41.2	0.0	22.1
Incr Delay (d2), s/veh	0.4	0.0	0.0	24.2	0.0	0.1	35.7	4.2	0.0	0.1	0.0	12.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.2	0.0	0.0	21.3	0.0	4.4	5.1	24.3	1.3	1.6	0.0	36.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.6	0.0	0.0	70.5	0.0	30.1	98.9	27.9	14.3	41.3	0.0	34.1
LnGrp LOS	C	A	A	E	A	C	F	C	B	D	A	C
Approach Vol, veh/h		190			482			825			1010	
Approach Delay, s/veh		32.6			61.3			32.4			34.3	
Approach LOS		C			E			C			C	

Timer - Assigned Phs	1	2		4		6		8				
Phs Duration (G+Y+Rc), s	9.5	72.0		47.0		81.5		47.0				
Change Period (Y+Rc), s	6.0	6.0		5.0		6.0		5.0				
Max Green Setting (Gmax), s	5.5	66.0		42.0		77.0		42.0				
Max Q Clear Time (g_c+I1), s	2.0	71.0		46.0		65.5		14.5				
Green Ext Time (p_c), s	0.0	0.0		0.0		5.8		0.8				

Intersection Summary	
HCM 6th Ctrl Delay	38.7
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	83	0	107	0	0	1	144	334	1	0	557	223
Future Volume (veh/h)	83	0	107	0	0	1	144	334	1	0	557	223
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1581	1581	1581	1750	1750	1750	1912	1912	1912	1736	1736	1736
Adj Flow Rate, veh/h	91	0	-14	0	0	1	158	367	1	0	612	245
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
Percent Heavy Veh, %	6	6	6	0	0	0	4	4	4	1	1	1
Cap, veh/h	230	0	268	0	0	4	335	1334	4	2	679	272
Arrive On Green	0.07	0.00	0.00	0.00	0.00	0.00	0.08	0.70	0.69	0.00	0.58	0.58
Sat Flow, veh/h	1506	1581	0	0	0	1483	1821	1906	5	1654	1179	472
Grp Volume(v), veh/h	91	-14	-14	0	0	1	158	0	368	0	0	857
Grp Sat Flow(s),veh/h/ln	1506	1581	1340	0	0	1483	1821	0	1911	1654	0	1651
Q Serve(g_s), s	4.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	5.1	0.0	0.0	32.3
Cycle Q Clear(g_c), s	4.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0	5.1	0.0	0.0	32.3
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		0.29
Lane Grp Cap(c), veh/h	230	0	0	0	0	4	335	0	1338	2	0	951
V/C Ratio(X)	0.40	0.00	0.00	0.00	0.00	0.25	0.47	0.00	0.28	0.00	0.00	0.90
Avail Cap(c_a), veh/h	230	0	0	0	0	210	444	0	1338	117	0	1122
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	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	29.4	0.0	0.0	0.0	0.0	35.1	14.5	0.0	3.9	0.0	0.0	13.2
Incr Delay (d2), s/veh	1.1	0.0	0.0	0.0	0.0	56.8	1.5	0.0	0.2	0.0	0.0	9.6
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(95%),veh/ln	2.6	0.0	0.0	0.0	0.0	0.1	2.6	0.0	2.4	0.0	0.0	17.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.5	0.0	0.0	0.0	0.0	91.9	15.9	0.0	4.1	0.0	0.0	22.8
LnGrp LOS	C	A	A	A	A	F	B	A	A	A	A	C
Approach Vol, veh/h		63			1			526			857	
Approach Delay, s/veh		44.1			91.9			7.7			22.8	
Approach LOS		D			F			A			C	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	55.4		15.2	8.8	46.7	8.0	7.2
Change Period (Y+Rc), s	7.0	7.0		7.0	4.0	* 7	4.0	* 7
Max Green Setting (Gmax), s	5.0	47.0		17.0	9.0	* 47	4.0	* 10
Max Q Clear Time (g_c+I1), s	0.0	7.1		0.0	4.1	34.3	6.0	2.0
Green Ext Time (p_c), s	0.0	2.5		0.0	0.3	5.3	0.0	0.0

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

Notes

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

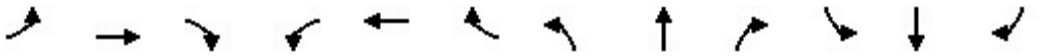
Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	51	23	704	40	26	672
Future Vol, veh/h	51	23	704	40	26	672
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	75	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	55	25	765	43	28	730

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1574	787	0	0	808	0
Stage 1	787	-	-	-	-	-
Stage 2	787	-	-	-	-	-
Critical Hdwy	6.61	6.31	-	-	4.12	-
Critical Hdwy Stg 1	5.61	-	-	-	-	-
Critical Hdwy Stg 2	5.61	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.218	-
Pot Cap-1 Maneuver	112	385	-	-	817	-
Stage 1	431	-	-	-	-	-
Stage 2	431	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	108	385	-	-	817	-
Mov Cap-2 Maneuver	302	-	-	-	-	-
Stage 1	431	-	-	-	-	-
Stage 2	416	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.7	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	324	817	-
HCM Lane V/C Ratio	-	-	0.248	0.035	-
HCM Control Delay (s)	-	-	19.7	9.6	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	3	35	72	5	109	10	719	32	35	480	2
Future Volume (veh/h)	44	3	35	72	5	109	10	719	32	35	480	2
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	0.99		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	1736	1736	1723	1723	1723	1736	1736	1736	1682	1682	1682
Adj Flow Rate, veh/h	48	3	38	78	5	118	11	782	35	38	522	2
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	1	1	2	2	2	1	1	1	5	5	5
Cap, veh/h	241	38	128	196	23	175	545	894	40	267	650	2
Arrive On Green	0.20	0.20	0.18	0.20	0.20	0.18	0.23	0.54	0.51	0.08	0.39	0.36
Sat Flow, veh/h	658	187	630	489	115	859	1654	1649	74	1602	1674	6
Grp Volume(v), veh/h	89	0	0	201	0	0	11	0	817	38	0	524
Grp Sat Flow(s),veh/h/ln	1475	0	0	1463	0	0	1654	0	1723	1602	0	1681
Q Serve(g_s), s	0.0	0.0	0.0	3.9	0.0	0.0	0.0	0.0	21.3	0.0	0.0	14.3
Cycle Q Clear(g_c), s	2.5	0.0	0.0	6.4	0.0	0.0	0.0	0.0	21.3	0.0	0.0	14.3
Prop In Lane	0.54		0.43	0.39		0.59	1.00		0.04	1.00		0.00
Lane Grp Cap(c), veh/h	407	0	0	394	0	0	545	0	934	267	0	653
V/C Ratio(X)	0.22	0.00	0.00	0.51	0.00	0.00	0.02	0.00	0.87	0.14	0.00	0.80
Avail Cap(c_a), veh/h	709	0	0	712	0	0	1187	0	3247	1136	0	3167
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	17.5	0.0	0.0	19.1	0.0	0.0	14.4	0.0	10.3	21.8	0.0	14.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.4	0.0	0.0	0.0	0.0	1.1	0.1	0.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.4	0.0	0.0	3.6	0.0	0.0	0.1	0.0	9.1	0.7	0.0	7.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	17.6	0.0	0.0	19.5	0.0	0.0	14.5	0.0	11.3	21.9	0.0	14.9
LnGrp LOS	B	A	A	B	A	A	B	A	B	C	A	B
Approach Vol, veh/h		89			201			828			562	
Approach Delay, s/veh		17.6			19.5			11.4			15.4	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	30.9		13.5	15.0	23.0		13.5				
Change Period (Y+Rc), s	5.0	5.6		5.0	5.0	5.6		5.0				
Max Green Setting (Gmax), s	30.0	94.4		20.0	30.0	94.4		20.0				
Max Q Clear Time (g_c+I1), s	2.0	23.3		8.4	2.0	16.3		4.5				
Green Ext Time (p_c), s	0.0	2.1		0.3	0.0	1.1		0.1				

Intersection Summary		
HCM 6th Ctrl Delay		14.0
HCM 6th LOS		B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	16	71	33	756	856	14
Future Volume (veh/h)	16	71	33	756	856	14
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	1614	1614	1723	1723	1695	1695
Adj Flow Rate, veh/h	17	77	36	822	930	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	2	2	4	4
Cap, veh/h	178	159	316	1285	1041	17
Arrive On Green	0.12	0.12	0.05	0.75	0.63	0.63
Sat Flow, veh/h	1537	1367	1641	1723	1664	27
Grp Volume(v), veh/h	17	77	36	822	0	945
Grp Sat Flow(s),veh/h/ln	1537	1367	1641	1723	0	1691
Q Serve(g_s), s	0.5	2.7	0.3	11.8	0.0	24.0
Cycle Q Clear(g_c), s	0.5	2.7	0.3	11.8	0.0	24.0
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	178	159	316	1285	0	1058
V/C Ratio(X)	0.10	0.49	0.11	0.64	0.00	0.89
Avail Cap(c_a), veh/h	516	459	394	1751	0	1451
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	20.0	21.0	9.2	3.1	0.0	8.1
Incr Delay (d2), s/veh	0.2	2.3	0.2	0.5	0.0	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	1.6	0.3	1.7	0.0	10.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	20.2	23.3	9.4	3.7	0.0	13.8
LnGrp LOS	C	C	A	A	A	B
Approach Vol, veh/h	94			858	945	
Approach Delay, s/veh	22.7			3.9	13.8	
Approach LOS	C			A	B	

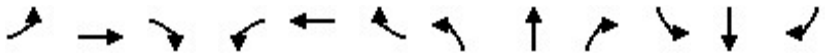
Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	9.4	6.1	35.2		41.3
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	16.0	4.0	42.5		50.5
Max Q Clear Time (g_c+I1), s	4.7	2.3	26.0		13.8
Green Ext Time (p_c), s	0.2	0.0	4.7		4.4

Intersection Summary	
HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	5	62	30	15	21	84	673	43	5	568	82
Future Volume (veh/h)	88	5	62	30	15	21	84	673	43	5	568	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.90	1.00		0.99	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	1690	1690	1690	1695	1695	1695	1704	1704	1704	1662	1662	1662
Adj Flow Rate, veh/h	104	6	73	35	18	25	99	792	51	6	668	96
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	4	4	4	4	4	4	3	3	3	9	9	9
Cap, veh/h	84	2	562	83	26	574	227	977	63	224	854	123
Arrive On Green	0.43	0.43	0.43	0.44	0.43	0.44	0.05	0.32	0.32	0.06	0.31	0.30
Sat Flow, veh/h	0	5	1299	25	60	1291	1623	3085	199	1583	2767	397
Grp Volume(v), veh/h	110	0	73	53	0	25	99	415	428	6	381	383
Grp Sat Flow(s),veh/h/ln	5	0	1299	85	0	1291	1623	1618	1666	1583	1579	1586
Q Serve(g_s), s	0.0	0.0	2.8	1.0	0.0	0.9	0.0	19.6	19.6	0.0	18.3	18.3
Cycle Q Clear(g_c), s	36.0	0.0	2.8	37.0	0.0	0.9	0.0	19.6	19.6	0.0	18.3	18.3
Prop In Lane	0.95		1.00	0.66		1.00	1.00		0.12	1.00		0.25
Lane Grp Cap(c), veh/h	87	0	562	110	0	574	227	512	527	224	487	490
V/C Ratio(X)	1.27	0.00	0.13	0.48	0.00	0.04	0.44	0.81	0.81	0.03	0.78	0.78
Avail Cap(c_a), veh/h	87	0	562	110	0	574	295	915	941	246	835	839
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	40.6	0.0	14.2	27.4	0.0	13.1	35.5	26.1	26.1	31.7	26.2	26.3
Incr Delay (d2), s/veh	185.9	0.0	0.0	3.3	0.0	0.0	0.5	3.1	3.1	0.0	2.8	2.8
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(95%),veh/ln	11.2	0.0	1.4	2.1	0.0	0.5	3.4	12.0	12.3	0.2	11.1	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	226.5	0.0	14.2	30.7	0.0	13.1	36.0	29.3	29.2	31.7	29.0	29.1
LnGrp LOS	F	A	B	C	A	B	D	C	C	C	C	C
Approach Vol, veh/h		183			78			942			770	
Approach Delay, s/veh		141.8			25.1			29.9			29.1	
Approach LOS		F			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.5	30.7		42.0	9.8	31.3		42.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	8.0	43.0		36.0	5.0	46.0		36.0
Max Q Clear Time (g_c+I1), s	12.0	20.3		39.0	2.0	21.6		38.0
Green Ext Time (p_c), s	0.0	3.2		0.0	0.0	3.6		0.0

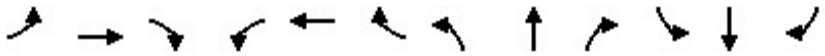
Intersection Summary		
HCM 6th Ctrl Delay	39.8	
HCM 6th LOS	D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	499	23	4	862	6	35	0	6	16	0	9
Future Volume (veh/h)	6	499	23	4	862	6	35	0	6	16	0	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	0.98		0.95	0.98		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	1926	1926	1926	1541	1541	1541	1809	1809	1809	1709	1709	1709
Adj Flow Rate, veh/h	7	548	25	4	947	7	38	0	7	18	0	10
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
Percent Heavy Veh, %	3	3	3	1	1	1	1	1	1	3	3	3
Cap, veh/h	291	1267	58	586	1059	8	295	12	29	225	24	63
Arrive On Green	0.69	0.69	0.69	0.69	0.69	0.69	0.12	0.00	0.12	0.12	0.00	0.12
Sat Flow, veh/h	658	1828	83	751	1527	11	1151	99	230	721	196	509
Grp Volume(v), veh/h	7	0	573	4	0	954	45	0	0	28	0	0
Grp Sat Flow(s),veh/h/ln	658	0	1911	751	0	1539	1480	0	0	1425	0	0
Q Serve(g_s), s	0.4	0.0	5.8	0.1	0.0	22.0	0.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	22.3	0.0	5.8	5.9	0.0	22.0	1.1	0.0	0.0	0.7	0.0	0.0
Prop In Lane	1.00		0.04	1.00		0.01	0.84		0.16	0.64		0.36
Lane Grp Cap(c), veh/h	291	0	1325	586	0	1067	336	0	0	312	0	0
V/C Ratio(X)	0.02	0.00	0.43	0.01	0.00	0.89	0.13	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	689	0	2483	1041	0	1999	979	0	0	928	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.5	0.0	2.9	4.2	0.0	5.4	17.3	0.0	0.0	17.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.0	2.9	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.7	0.0	0.0	3.4	0.7	0.0	0.0	0.4	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.5	0.0	3.2	4.2	0.0	8.3	17.5	0.0	0.0	17.2	0.0	0.0
LnGrp LOS	B	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		580			958			45			28	
Approach Delay, s/veh		3.3			8.3			17.5			17.2	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	9.5	34.4	9.5	34.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	56.0	24.0	56.0
Max Q Clear Time (g_c+I1), s	3.1	24.3	2.7	24.0
Green Ext Time (p_c), s	0.1	2.6	0.1	5.5

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	3	0	10	68	0	40	4	744	39	8	1373	0
Future Volume (veh/h)	3	0	10	68	0	40	4	744	39	8	1373	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1967	1967	1967	1701	1701	1701	1717	1717	1717	1759	1759	1759
Adj Flow Rate, veh/h	3	0	11	74	0	0	4	809	42	9	1492	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	2	2	2	2	2	2
Cap, veh/h	289	0	151	244	0		330	2422	126	581	2564	0
Arrive On Green	0.09	0.00	0.09	0.09	0.00	0.00	0.77	0.77	0.77	0.77	0.77	0.00
Sat Flow, veh/h	1604	0	1645	1278	0	1442	352	3155	164	661	3429	0
Grp Volume(v), veh/h	3	0	11	74	0	0	4	418	433	9	1492	0
Grp Sat Flow(s),veh/h/ln	1604	0	1645	1278	0	1442	352	1631	1688	661	1671	0
Q Serve(g_s), s	0.0	0.0	0.3	3.0	0.0	0.0	0.3	4.6	4.6	0.2	10.7	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.3	3.3	0.0	0.0	10.9	4.6	4.6	4.8	10.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		0.00
Lane Grp Cap(c), veh/h	289	0	151	244	0		330	1252	1295	581	2564	0
V/C Ratio(X)	0.01	0.00	0.07	0.30	0.00		0.01	0.33	0.33	0.02	0.58	0.00
Avail Cap(c_a), veh/h	762	0	637	648	0		592	2468	2553	1074	5054	0
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	0.00
Uniform Delay (d), s/veh	23.5	0.0	23.6	25.1	0.0	0.0	5.1	2.1	2.1	2.8	2.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.3	0.3	0.0	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.2	1.7	0.0	0.0	0.0	0.8	0.8	0.0	1.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.5	0.0	23.7	25.4	0.0	0.0	5.1	2.4	2.4	2.8	3.2	0.0
LnGrp LOS	C	A	C	C	A		A	A	A	A	A	A
Approach Vol, veh/h		14			74	A		855			1501	
Approach Delay, s/veh		23.6			25.4			2.4			3.2	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	47.6	9.2	47.6	9.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	85.0	21.0	85.0	21.0
Max Q Clear Time (g_c+I1), s	12.9	2.3	12.7	5.3
Green Ext Time (p_c), s	10.4	0.0	30.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	3.7
HCM 6th LOS	A

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	3	999	4	6	1024
Future Volume (veh/h)	1	3	999	4	6	1024
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98		0.98	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	1750	1750	1903	1903	1723	1723
Adj Flow Rate, veh/h	1	3	1122	4	7	1151
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	30	91	1958	7	487	2369
Arrive On Green	0.10	0.06	0.53	0.49	0.09	0.72
Sat Flow, veh/h	309	927	3791	13	1641	3359
Grp Volume(v), veh/h	5	0	549	577	7	1151
Grp Sat Flow(s),veh/h/ln	1544	0	1808	1901	1641	1637
Q Serve(g_s), s	0.1	0.0	5.8	5.8	0.0	4.2
Cycle Q Clear(g_c), s	0.1	0.0	5.8	5.8	0.0	4.2
Prop In Lane	0.20	0.60		0.01	1.00	
Lane Grp Cap(c), veh/h	152	0	958	1007	487	2369
V/C Ratio(X)	0.03	0.00	0.57	0.57	0.01	0.49
Avail Cap(c_a), veh/h	987	0	5460	5739	868	11278
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	0.0	4.5	4.5	7.8	1.7
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.0	0.6	0.6	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.8	0.0	4.7	4.7	7.8	1.7
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	5		1126			1158
Approach Delay, s/veh	11.8		4.7			1.7
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.5	17.9			23.4	4.8
Change Period (Y+Rc), s	5.2	5.2			5.2	4.0
Max Green Setting (Gmax), s	6.8	82.8			94.8	16.0
Max Q Clear Time (g_c+I1), s	2.0	7.8			6.2	2.1
Green Ext Time (p_c), s	0.0	4.9			6.2	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.2
HCM 6th LOS	A

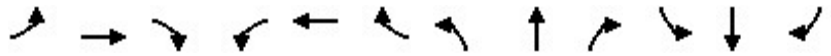
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	197	11	1	341	35	21	3	4	57	2	441
Future Volume (veh/h)	165	197	11	1	341	35	21	3	4	57	2	441
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1682	1682	1682	1736	1736	1736	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	177	212	12	1	367	38	23	3	4	61	2	474
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
Percent Heavy Veh, %	5	5	5	1	1	1	2	2	2	2	2	2
Cap, veh/h	383	611	35	448	446	46	175	240	320	656	2	522
Arrive On Green	0.12	0.39	0.37	0.00	0.29	0.29	0.36	0.36	0.36	0.38	0.36	0.38
Sat Flow, veh/h	1602	1576	89	1654	1547	160	918	668	891	1405	6	1451
Grp Volume(v), veh/h	177	0	224	1	0	405	23	0	7	61	0	476
Grp Sat Flow(s),veh/h/ln	1602	0	1666	1654	0	1708	918	0	1559	1405	0	1457
Q Serve(g_s), s	3.9	0.0	5.3	0.0	0.0	12.3	1.4	0.0	0.2	1.6	0.0	17.2
Cycle Q Clear(g_c), s	3.9	0.0	5.3	0.0	0.0	12.3	18.6	0.0	0.2	1.7	0.0	17.2
Prop In Lane	1.00		0.05	1.00		0.09	1.00		0.57	1.00		1.00
Lane Grp Cap(c), veh/h	383	0	645	448	0	492	175	0	561	656	0	524
V/C Ratio(X)	0.46	0.00	0.35	0.00	0.00	0.82	0.13	0.00	0.01	0.09	0.00	0.91
Avail Cap(c_a), veh/h	510	0	928	742	0	952	175	0	561	656	0	524
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	12.0	0.0	12.1	14.7	0.0	18.5	25.7	0.0	11.5	11.4	0.0	16.4
Incr Delay (d2), s/veh	0.3	0.0	0.1	0.0	0.0	1.3	0.1	0.0	0.0	0.0	0.0	19.3
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(95%),veh/ln	1.9	0.0	2.8	0.0	0.0	7.4	0.5	0.0	0.1	0.8	0.0	12.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.3	0.0	12.2	14.7	0.0	19.8	25.9	0.0	11.5	11.4	0.0	35.8
LnGrp LOS	B	A	B	B	A	B	C	A	B	B	A	D
Approach Vol, veh/h		401			406			30			537	
Approach Delay, s/veh		12.2			19.8			22.5			33.0	
Approach LOS		B			B			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	25.5		25.0	10.6	20.0		25.0				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	10.6	30.0		20.0	10.0	30.0		20.0				
Max Q Clear Time (g_c+I1), s	12.0	7.3		20.6	5.9	14.3		19.2				
Green Ext Time (p_c), s	0.0	0.4		0.0	0.1	0.7		0.2				

Intersection Summary		
HCM 6th Ctrl Delay		22.8
HCM 6th LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	0	8	203	13	46	49	897	252	46	890	14
Future Volume (veh/h)	11	0	8	203	13	46	49	897	252	46	890	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.90	0.91		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1709	1709	1709	1654	1654	1654	1709	1709	1709	1723	1723	1723
Adj Flow Rate, veh/h	13	0	9	233	15	0	56	1031	0	53	1023	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	7	7	7	3	3	3	2	2	2
Cap, veh/h	626	0	489	541	28		330	1291		323	1289	
Arrive On Green	0.37	0.00	0.34	0.37	0.37	0.00	0.10	0.40	0.00	0.09	0.39	0.00
Sat Flow, veh/h	1294	0	1310	1163	75	1402	1628	3333	0	1641	3359	0
Grp Volume(v), veh/h	13	0	9	248	0	0	56	1031	0	53	1023	0
Grp Sat Flow(s),veh/h/ln	1294	0	1310	1238	0	1402	1628	1624	0	1641	1637	0
Q Serve(g_s), s	0.0	0.0	0.3	10.2	0.0	0.0	0.0	18.3	0.0	0.0	18.0	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.3	10.5	0.0	0.0	0.0	18.3	0.0	0.0	18.0	0.0
Prop In Lane	1.00		1.00	0.94		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	626	0	489	569	0		330	1291		323	1289	
V/C Ratio(X)	0.02	0.00	0.02	0.44	0.00		0.17	0.80		0.16	0.79	
Avail Cap(c_a), veh/h	796	0	662	734	0		347	1988		373	2154	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	13.0	0.0	13.6	16.2	0.0	0.0	22.5	17.4	0.0	22.9	17.5	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.2	0.6	0.0	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	0.2	5.0	0.0	0.0	1.3	9.8	0.0	1.2	9.7	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.0	0.0	13.6	16.8	0.0	0.0	22.7	18.0	0.0	22.9	17.9	0.0
LnGrp LOS	B	A	B	B	A		C	B		C	B	
Approach Vol, veh/h		22			248	A		1087	A		1076	A
Approach Delay, s/veh		13.2			16.8			18.2			18.1	
Approach LOS		B			B			B			B	

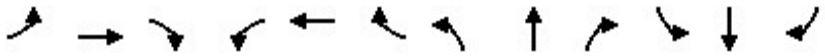
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	29.0		27.4	9.2	28.7		27.4
Change Period (Y+Rc), s	5.9	5.9		6.0	5.9	* 5.9		6.0
Max Green Setting (Gmax), s	5.1	37.1		30.0	4.0	* 40		30.0
Max Q Clear Time (g_c+I1), s	2.0	20.3		12.5	2.0	20.0		2.4
Green Ext Time (p_c), s	0.0	2.8		1.0	0.0	2.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	18.0
HCM 6th LOS	B

Notes

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	199	767	307	30	1909	57	800	97	25	89	141	353
Future Volume (veh/h)	199	767	307	30	1909	57	800	97	25	89	141	353
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		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1682	1682	1682	1723	1723	1723	1795	1795	1795	1709	1709	1709
Adj Flow Rate, veh/h	207	799	320	31	2287	68	811	260	0	93	147	0
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, %	5	5	5	2	2	2	2	2	2	3	3	3
Cap, veh/h	184	1682	1034	58	2068	61	746	392		175	184	
Arrive On Green	0.12	0.53	0.52	0.04	0.44	0.43	0.22	0.22	0.00	0.11	0.11	0.00
Sat Flow, veh/h	1602	3195	1391	1641	4693	139	3419	1795	0	1628	1709	1448
Grp Volume(v), veh/h	207	799	320	31	1525	830	811	260	0	93	147	0
Grp Sat Flow(s),veh/h/ln	1602	1598	1391	1641	1568	1697	1709	1795	0	1628	1709	1448
Q Serve(g_s), s	19.0	26.1	12.9	3.1	72.7	72.7	36.0	21.9	0.0	8.9	13.9	0.0
Cycle Q Clear(g_c), s	19.0	26.1	12.9	3.1	72.7	72.7	36.0	21.9	0.0	8.9	13.9	0.0
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	1682	1034	58	1382	748	746	392		175	184	
V/C Ratio(X)	1.12	0.48	0.31	0.53	1.10	1.11	1.09	0.66		0.53	0.80	
Avail Cap(c_a), veh/h	184	1682	1034	169	1382	748	746	392		227	238	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	73.0	24.7	7.3	78.2	46.1	46.2	64.5	59.0	0.0	69.6	71.8	0.0
Incr Delay (d2), s/veh	102.9	0.4	0.3	7.3	57.9	67.3	59.2	6.4	0.0	6.7	21.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.9	15.2	12.6	2.6	52.9	59.5	30.7	15.9	0.0	7.2	11.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	175.9	25.0	7.6	85.5	104.0	113.5	123.7	65.3	0.0	76.3	93.4	0.0
LnGrp LOS	F	C	A	F	F	F	F	E		E	F	
Approach Vol, veh/h		1326			2386			1071	A		240	A
Approach Delay, s/veh		44.4			107.1			109.5			86.8	
Approach LOS		D			F			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	92.3		22.8	23.0	78.2		41.0
Change Period (Y+Rc), s	5.0	7.5		6.0	5.0	* 7.5		6.0
Max Green Setting (Gmax), s	15.0	73.5		22.0	18.0	* 71		35.0
Max Q Clear Time (g_c+I1), s	5.1	28.1		15.9	21.0	74.7		38.0
Green Ext Time (p_c), s	0.0	12.7		0.9	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	90.1
HCM 6th LOS	F

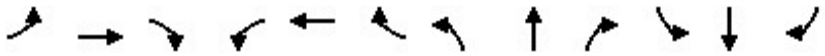
Notes

User approved volume balancing among the lanes for turning movement.

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

User approved changes to right turn type.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	444	393	79	815	0	963	0	125	1	0	0
Future Volume (veh/h)	0	444	393	79	815	0	963	0	125	1	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1695	1695	1695	1709	1709	1709	1809	1809	1809	1709	1709	1709
Adj Flow Rate, veh/h	0	496	439	97	997	0	1229	0	160	1	0	0
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, %	4	4	4	3	3	3	1	1	1	3	3	3
Cap, veh/h	73	572	1045	115	1487	0	1482	0	659	18	0	0
Arrive On Green	0.00	0.34	0.32	0.07	0.46	0.00	0.43	0.00	0.43	0.01	0.00	0.00
Sat Flow, veh/h	556	1695	1437	1628	3333	0	3445	0	1533	1628	0	0
Grp Volume(v), veh/h	0	496	439	97	997	0	1229	0	160	1	0	0
Grp Sat Flow(s),veh/h/ln	556	1695	1437	1628	1624	0	1723	0	1533	1628	0	0
Q Serve(g_s), s	0.0	27.2	11.9	5.8	23.8	0.0	31.4	0.0	6.6	0.1	0.0	0.0
Cycle Q Clear(g_c), s	0.0	27.2	11.9	5.8	23.8	0.0	31.4	0.0	6.6	0.1	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	73	572	1045	115	1487	0	1482	0	659	18	0	0
V/C Ratio(X)	0.00	0.87	0.42	0.85	0.67	0.00	0.83	0.00	0.24	0.06	0.00	0.00
Avail Cap(c_a), veh/h	81	598	1067	115	1537	0	1769	0	787	279	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	30.8	5.3	45.6	21.1	0.0	25.1	0.0	18.0	48.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	12.5	0.3	40.9	1.1	0.0	3.0	0.0	0.2	1.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	18.5	15.2	6.5	13.6	0.0	18.2	0.0	4.0	0.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	43.4	5.6	86.6	22.1	0.0	28.0	0.0	18.2	49.8	0.0	0.0
LnGrp LOS	A	D	A	F	C	A	C	A	B	D	A	A
Approach Vol, veh/h		935			1094			1389			1	
Approach Delay, s/veh		25.6			27.9			26.9			49.8	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	2		4	5	6		8
Phs Duration (G+Y+Rc), s	49.5		45.7	12.0	37.5		4.1
Change Period (Y+Rc), s	7.0		6.0	6.0	7.0		4.0
Max Green Setting (Gmax), s	44.0		48.0	6.0	32.0		16.0
Max Q Clear Time (g_c+I1), s	25.8		33.4	7.8	29.2		2.1
Green Ext Time (p_c), s	4.8		6.3	0.0	1.3		0.0

Intersection Summary		
HCM 6th Ctrl Delay	26.9	
HCM 6th LOS	C	

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	295	187	189	605	126	69
Future Volume (veh/h)	295	187	189	605	126	69
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	1608	1608	1682	1682	1674	1674
Adj Flow Rate, veh/h	307	195	236	756	144	79
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	10	10	5	5	4	4
Cap, veh/h	539	457	302	1093	274	214
Arrive On Green	0.34	0.34	0.19	0.65	0.17	0.15
Sat Flow, veh/h	1608	1363	1602	1682	1594	1418
Grp Volume(v), veh/h	307	195	236	756	144	79
Grp Sat Flow(s),veh/h/ln	1608	1363	1602	1682	1594	1418
Q Serve(g_s), s	7.5	5.3	6.7	13.6	3.9	2.4
Cycle Q Clear(g_c), s	7.5	5.3	6.7	13.6	3.9	2.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	539	457	302	1093	274	214
V/C Ratio(X)	0.57	0.43	0.78	0.69	0.53	0.37
Avail Cap(c_a), veh/h	1164	986	302	1746	903	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	12.3	18.4	5.3	18.0	18.2
Incr Delay (d2), s/veh	2.0	1.3	12.3	1.7	1.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.4	2.6	5.7	4.7	2.4	1.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.0	13.6	30.7	7.0	19.1	19.0
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	502			992	223	
Approach Delay, s/veh	14.5			12.6	19.1	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	15.0	21.0				36.0	11.7
Change Period (Y+Rc), s	7.0	7.0				7.0	5.5
Max Green Setting (Gmax), s	8.0	32.5				47.5	25.0
Max Q Clear Time (g_c+I1), s	8.7	9.5				15.6	5.9
Green Ext Time (p_c), s	0.0	4.5				9.2	0.6

Intersection Summary		
HCM 6th Ctrl Delay	14.0	
HCM 6th LOS	B	

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	206	305	160	324	143	116
Future Volume (veh/h)	206	305	160	324	143	116
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	1690	1690	1689	1689	1701	1701
Adj Flow Rate, veh/h	231	343	180	364	161	130
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	4	4	7	7	0	0
Cap, veh/h	723	613	522	723	252	203
Arrive On Green	0.43	0.43	0.43	0.43	0.30	0.30
Sat Flow, veh/h	1690	1432	823	1689	840	678
Grp Volume(v), veh/h	231	343	180	364	292	0
Grp Sat Flow(s),veh/h/ln	1690	1432	823	1689	1523	0
Q Serve(g_s), s	2.7	5.3	5.5	4.6	4.9	0.0
Cycle Q Clear(g_c), s	2.7	5.3	8.1	4.6	4.9	0.0
Prop In Lane		1.00	1.00		0.55	0.45
Lane Grp Cap(c), veh/h	723	613	522	723	457	0
V/C Ratio(X)	0.32	0.56	0.34	0.50	0.64	0.00
Avail Cap(c_a), veh/h	977	828	646	977	1037	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	5.6	6.3	8.3	6.1	8.9	0.0
Incr Delay (d2), s/veh	0.3	0.8	0.4	0.5	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	1.5	1.1	1.5	2.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	5.8	7.1	8.7	6.7	10.4	0.0
LnGrp LOS	A	A	A	A	B	A
Approach Vol, veh/h	574			544	292	
Approach Delay, s/veh	6.6			7.3	10.4	
Approach LOS	A			A	B	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	12.8	16.6	16.6
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	19.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	6.9	7.3	10.1
Green Ext Time (p_c), s	0.9	1.7	1.5

Intersection Summary	
HCM 6th Ctrl Delay	7.7
HCM 6th LOS	A

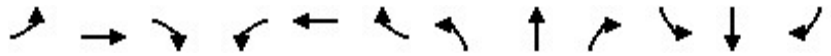
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	872	24	8	2199	88	22
Future Volume (veh/h)	872	24	8	2199	88	22
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	1753	1753	1701	1701	1881	1881
Adj Flow Rate, veh/h	908	20	8	2291	92	11
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	2	2	1	1
Cap, veh/h	2535	1131	33	2687	168	150
Arrive On Green	0.76	0.76	0.02	0.83	0.09	0.09
Sat Flow, veh/h	3419	1486	1620	3317	1791	1594
Grp Volume(v), veh/h	908	20	8	2291	92	11
Grp Sat Flow(s),veh/h/ln	1666	1486	1620	1616	1791	1594
Q Serve(g_s), s	7.2	0.3	0.4	32.9	3.9	0.5
Cycle Q Clear(g_c), s	7.2	0.3	0.4	32.9	3.9	0.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2535	1131	33	2687	168	150
V/C Ratio(X)	0.36	0.02	0.24	0.85	0.55	0.07
Avail Cap(c_a), veh/h	4812	2146	101	5031	424	377
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	3.2	2.3	38.7	3.9	34.8	33.2
Incr Delay (d2), s/veh	0.1	0.0	3.6	0.8	2.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.1	0.3	5.3	3.2	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	3.2	2.3	42.3	4.7	37.5	33.4
LnGrp LOS	A	A	D	A	D	C
Approach Vol, veh/h	928			2299	103	
Approach Delay, s/veh	3.2			4.9	37.1	
Approach LOS	A			A	D	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	10.5	5.7	64.1		69.8
Change Period (Y+Rc), s	5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	4.0	114.0		123.0
Max Q Clear Time (g_c+I1), s	5.9	2.4	9.2		34.9
Green Ext Time (p_c), s	0.2	0.0	5.1		29.8

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	240	8	533	650	36	2	568	469	56	790	682
Future Volume (veh/h)	200	240	8	533	650	36	2	568	469	56	790	682
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	1641	1641	1641	1759	1759	1759	1762	1762	1762	1674	1674	1674
Adj Flow Rate, veh/h	211	253	8	561	684	38	2	598	0	59	832	0
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, %	8	8	8	2	2	2	7	7	7	2	2	2
Cap, veh/h	293	378	12	854	928	51	192	1065		301	1129	
Arrive On Green	0.10	0.12	0.12	0.26	0.29	0.29	0.00	0.32	0.00	0.04	0.35	0.00
Sat Flow, veh/h	3032	3085	97	3249	3215	179	1678	3348	1493	1594	3264	0
Grp Volume(v), veh/h	211	127	134	561	355	367	2	598	0	59	832	0
Grp Sat Flow(s),veh/h/ln	1516	1559	1623	1625	1671	1723	1678	1674	1493	1594	1590	0
Q Serve(g_s), s	4.7	5.5	5.5	10.7	13.4	13.4	0.1	10.4	0.0	1.7	16.0	0.0
Cycle Q Clear(g_c), s	4.7	5.5	5.5	10.7	13.4	13.4	0.1	10.4	0.0	1.7	16.0	0.0
Prop In Lane	1.00		0.06	1.00		0.10	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	293	191	199	854	482	497	192	1065		301	1129	
V/C Ratio(X)	0.72	0.67	0.67	0.66	0.74	0.74	0.01	0.56		0.20	0.74	
Avail Cap(c_a), veh/h	391	379	395	1698	1065	1098	284	3087		332	2937	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.6	29.3	29.3	22.9	22.4	22.5	17.4	19.8	0.0	15.8	19.7	0.0
Incr Delay (d2), s/veh	4.2	4.0	3.9	0.9	2.2	2.2	0.0	0.5	0.0	0.3	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.2	3.9	4.0	7.0	8.8	9.1	0.0	6.8	0.0	1.1	9.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	34.9	33.3	33.2	23.8	24.7	24.6	17.5	20.2	0.0	16.1	20.6	0.0
LnGrp LOS	C	C	C	C	C	C	B	C		B	C	
Approach Vol, veh/h		472			1283			600	A		891	A
Approach Delay, s/veh		34.0			24.3			20.2			20.3	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	13.1	4.7	29.3	11.3	24.6	7.2	26.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	36.5	17.0	4.0	64.5	9.0	44.5	4.1	64.4
Max Q Clear Time (g_c+I1), s	12.7	7.5	2.1	18.0	6.7	15.4	3.7	12.4
Green Ext Time (p_c), s	2.1	0.9	0.0	6.8	0.2	4.7	0.0	4.5

Intersection Summary	
HCM 6th Ctrl Delay	23.9
HCM 6th LOS	C

Notes

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

MOVEMENT SUMMARY

Site: 3 [3 - SE Issaquah Fall City Rd & Klahanie Dr SE]

2035 AM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Klahanie Dr SE												
3	L2	2	0.0	0.005	4.2	LOS A	0.0	0.4	0.46	0.31	0.46	34.0
8	T1	1	0.0	0.005	4.2	LOS A	0.0	0.4	0.46	0.31	0.46	34.0
18	R2	1	0.0	0.005	4.2	LOS A	0.0	0.4	0.46	0.31	0.46	33.1
Approach		4	0.0	0.005	4.2	LOS A	0.0	0.4	0.46	0.31	0.46	33.7
NorthEast: SE Issaquah Fall City Rd												
1	L2	1	1.0	0.321	6.2	LOS A	1.6	41.1	0.41	0.28	0.41	34.4
6	T1	701	1.0	0.321	6.1	LOS A	1.6	41.5	0.40	0.28	0.40	34.4
16	R2	59	1.0	0.321	6.0	LOS A	1.6	41.5	0.40	0.27	0.40	33.5
Approach		761	1.0	0.321	6.1	LOS A	1.6	41.5	0.40	0.28	0.40	34.4
NorthWest: Klahanie Dr SE												
7	L2	103	1.0	0.175	8.2	LOS A	0.6	16.2	0.56	0.56	0.56	31.0
4	T1	1	1.0	0.175	8.2	LOS A	0.6	16.2	0.56	0.56	0.56	31.0
14	R2	482	1.0	0.475	9.1	LOS A	3.0	75.8	0.63	0.69	0.82	31.7
Approach		586	1.0	0.475	9.0	LOS A	3.0	75.8	0.61	0.67	0.77	31.6
SouthWest: SE Issaquah Fall City Rd												
5	L2	234	5.0	0.268	5.4	LOS A	1.4	36.1	0.28	0.14	0.28	32.7
2	T1	428	5.0	0.268	5.3	LOS A	1.4	36.4	0.27	0.14	0.27	34.4
12	R2	1	5.0	0.268	5.2	LOS A	1.4	36.4	0.27	0.14	0.27	33.8
Approach		663	5.0	0.268	5.3	LOS A	1.4	36.4	0.27	0.14	0.27	33.8
All Vehicles		2014	2.3	0.475	6.7	LOS A	3.0	75.8	0.42	0.35	0.47	33.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 6 [6 - Issaquah-Pine LK Rd and SE 32nd Way]

2035 AM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Issaquah-Pine Lk Rd NB												
3x	L2	1	2.0	0.690	10.2	LOS B	8.1	205.8	0.43	0.31	0.43	32.4
8x	T1	905	2.0	0.690	2.3	LOS A	8.1	205.8	0.43	0.31	0.43	29.3
18x	R2	137	2.0	0.690	2.8	LOS A	8.1	205.8	0.43	0.31	0.43	28.5
Approach		1043	2.0	0.690	2.4	LOS A	8.1	205.8	0.43	0.31	0.43	29.2
NorthEast: SE 32nd Way WB												
1x	L2	204	3.0	0.718	22.9	LOS C	8.8	225.7	1.00	1.29	1.60	24.5
6x	T1	1	3.0	0.718	19.9	LOS B	8.8	225.7	1.00	1.29	1.60	26.4
16x	R2	263	3.0	0.718	18.1	LOS B	8.8	225.7	1.00	1.29	1.60	23.8
Approach		468	3.0	0.718	20.2	LOS C	8.8	225.7	1.00	1.29	1.60	24.1
NorthWest: Issaquah-Pine Lk Rd SB												
7x	L2	64	2.0	0.650	8.6	LOS A	6.4	161.7	0.68	0.44	0.68	28.9
4x	T1	732	2.0	0.650	3.3	LOS A	6.4	161.7	0.68	0.44	0.68	28.6
14x	R2	2	2.0	0.650	5.5	LOS A	6.4	161.7	0.68	0.44	0.68	30.8
Approach		798	2.0	0.650	3.7	LOS A	6.4	161.7	0.68	0.44	0.68	28.7
SouthWest: Drive Way Access EB												
5x	L2	2	0.0	0.011	15.7	LOS B	0.1	1.8	0.84	0.66	0.84	33.5
2x	T1	1	0.0	0.011	10.1	LOS B	0.1	1.8	0.84	0.66	0.84	33.5
12x	R2	3	0.0	0.011	10.1	LOS B	0.1	1.8	0.84	0.66	0.84	32.6
Approach		6	0.0	0.011	12.0	LOS B	0.1	1.8	0.84	0.66	0.84	33.0
All Vehicles		2316	2.2	0.718	6.5	LOS A	8.8	225.7	0.63	0.55	0.75	27.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 9 [9 - SE Issaquah Fall City Rd & 247th Pl SE]

2035 AM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Pacific Crest Middle School Drwy												
3	L2	188	13.0	0.290	7.9	LOS A	1.0	28.7	0.49	0.48	0.49	30.9
8	T1	30	13.0	0.290	7.9	LOS A	1.0	28.7	0.49	0.48	0.49	31.1
18	R2	11	13.0	0.290	7.9	LOS A	1.0	28.7	0.49	0.48	0.49	30.4
Approach		229	13.0	0.290	7.9	LOS A	1.0	28.7	0.49	0.48	0.49	30.9
NorthEast: SE Issaquah Fall City Rd												
1	L2	4	1.0	0.514	9.7	LOS A	3.0	74.6	0.51	0.39	0.51	32.3
6	T1	1077	1.0	0.514	9.5	LOS A	3.0	75.5	0.51	0.38	0.51	32.5
16	R2	3	1.0	0.514	9.4	LOS A	3.0	75.5	0.51	0.37	0.51	31.7
Approach		1085	1.0	0.514	9.5	LOS A	3.0	75.5	0.51	0.38	0.51	32.4
NorthWest: 247th Pl SE												
7	L2	8	4.0	0.072	6.9	LOS A	0.3	7.5	0.65	0.63	0.65	33.1
4	T1	35	4.0	0.072	6.9	LOS A	0.3	7.5	0.65	0.63	0.65	33.2
14	R2	46	4.0	0.064	5.7	LOS A	0.3	7.0	0.65	0.60	0.65	33.1
Approach		89	4.0	0.072	6.3	LOS A	0.3	7.5	0.65	0.62	0.65	33.1
SouthWest: SE Issaquah Fall CIty Rd												
5	L2	19	3.0	0.186	4.1	LOS A	0.9	23.7	0.16	0.06	0.16	34.9
2	T1	527	3.0	0.186	3.9	LOS A	0.9	24.3	0.16	0.06	0.16	35.2
12	R2	214	3.0	0.132	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	36.5
Approach		760	3.0	0.186	2.8	LOS A	0.9	24.3	0.12	0.04	0.12	35.5
All Vehicles		2163	3.1	0.514	6.9	LOS A	3.0	75.5	0.37	0.28	0.37	33.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 14 [14 - 216th Ave and NE Inglewood Hill Rd]

2035 AM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 216th Ave (NB)												
3	L2	94	1.0	0.176	11.0	LOS B	1.0	24.5	0.60	0.71	0.60	31.5
8	T1	28	1.0	0.176	5.8	LOS A	1.0	24.5	0.60	0.71	0.60	31.4
18	R2	44	1.0	0.176	5.9	LOS A	1.0	24.5	0.60	0.71	0.60	30.6
Approach		166	1.0	0.176	8.8	LOS A	1.0	24.5	0.60	0.71	0.60	31.2
East: NE Inglewood Hill Rd												
1	L2	11	2.0	0.499	9.5	LOS A	3.6	92.0	0.47	0.49	0.47	32.8
6	T1	448	2.0	0.499	4.3	LOS A	3.6	92.0	0.47	0.49	0.47	32.7
16	R2	148	2.0	0.499	4.4	LOS A	3.6	92.0	0.47	0.49	0.47	31.8
Approach		608	2.0	0.499	4.4	LOS A	3.6	92.0	0.47	0.49	0.47	32.5
North: 216th Ave (SB)												
7	L2	233	1.0	0.478	12.2	LOS B	3.5	88.4	0.74	0.83	0.79	31.1
4	T1	29	1.0	0.478	7.0	LOS A	3.5	88.4	0.74	0.83	0.79	31.0
14	R2	184	1.0	0.478	7.1	LOS A	3.5	88.4	0.74	0.83	0.79	30.2
Approach		446	1.0	0.478	9.7	LOS A	3.5	88.4	0.74	0.83	0.79	30.7
West: NE Inglewood Hill Rd												
5	L2	48	2.0	0.345	9.8	LOS A	2.2	56.2	0.53	0.55	0.53	32.5
2	T1	272	2.0	0.345	4.6	LOS A	2.2	56.2	0.53	0.55	0.53	32.4
12	R2	63	2.0	0.345	4.7	LOS A	2.2	56.2	0.53	0.55	0.53	31.5
Approach		383	2.0	0.345	5.3	LOS A	2.2	56.2	0.53	0.55	0.53	32.2
All Vehicles		1603	1.6	0.499	6.6	LOS A	3.6	92.0	0.57	0.62	0.59	31.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 26 [26 - NE 8th St and 244th Ave]

2035 AM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	211	1.0	0.365	6.5	LOS A	2.3	58.3	0.43	0.49	0.43	24.4
8	T1	209	1.0	0.365	2.4	LOS A	2.3	58.3	0.43	0.49	0.43	24.2
18	R2	7	1.0	0.365	2.9	LOS A	2.3	58.3	0.43	0.49	0.43	23.7
Approach		427	1.0	0.365	4.5	LOS A	2.3	58.3	0.43	0.49	0.43	24.3
East: NE 8th St (WB)												
1	L2	7	2.0	0.065	8.2	LOS A	0.3	8.4	0.58	0.57	0.58	24.5
6	T1	22	2.0	0.065	4.1	LOS A	0.3	8.4	0.58	0.57	0.58	24.3
16	R2	27	2.0	0.065	4.5	LOS A	0.3	8.4	0.58	0.57	0.58	23.8
Approach		57	2.0	0.065	4.8	LOS A	0.3	8.4	0.58	0.57	0.58	24.1
North: 244th Ave (SB)												
7	L2	7	2.0	0.590	7.4	LOS A	4.6	116.8	0.61	0.51	0.61	24.6
4	T1	381	2.0	0.590	3.3	LOS A	4.6	116.8	0.61	0.51	0.61	24.4
14	R2	268	2.0	0.590	3.7	LOS A	4.6	116.8	0.61	0.51	0.61	23.9
Approach		657	2.0	0.590	3.5	LOS A	4.6	116.8	0.61	0.51	0.61	24.2
West: NE 8th St (EB)												
5	L2	153	3.0	0.258	10.2	LOS B	1.5	38.6	0.58	0.71	0.58	31.1
2	T1	16	3.0	0.258	5.8	LOS A	1.5	38.6	0.58	0.71	0.58	31.2
12	R2	79	3.0	0.258	5.7	LOS A	1.5	38.6	0.58	0.71	0.58	30.5
Approach		248	3.0	0.258	8.5	LOS A	1.5	38.6	0.58	0.71	0.58	30.9
All Vehicles		1389	1.9	0.590	4.7	LOS A	4.6	116.8	0.55	0.54	0.55	25.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 32 [32 - Issaquah Beaver Lake Rd & 256th Ave]

2035 AM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 256th Ave												
3	L2	167	2.0	0.171	4.3	LOS A	0.8	21.2	0.29	0.16	0.29	33.0
8	T1	26	2.0	0.171	4.3	LOS A	0.8	21.2	0.29	0.16	0.29	33.1
18	R2	21	2.0	0.171	4.3	LOS A	0.8	21.2	0.29	0.16	0.29	32.2
Approach		214	2.0	0.171	4.3	LOS A	0.8	21.2	0.29	0.16	0.29	32.9
East: Issaquah Beaver Lake Rd												
1	L2	66	4.0	0.361	6.7	LOS A	2.1	54.6	0.44	0.30	0.44	33.3
6	T1	329	4.0	0.361	6.7	LOS A	2.1	54.6	0.44	0.30	0.44	33.4
16	R2	24	4.0	0.361	6.7	LOS A	2.1	54.6	0.44	0.30	0.44	32.5
Approach		419	4.0	0.361	6.7	LOS A	2.1	54.6	0.44	0.30	0.44	33.3
North: 256th Ave												
7	L2	31	0.0	0.104	4.8	LOS A	0.6	13.9	0.58	0.45	0.58	34.0
4	T1	48	0.0	0.104	4.8	LOS A	0.6	13.9	0.58	0.45	0.58	34.0
14	R2	19	0.0	0.104	4.8	LOS A	0.6	13.9	0.58	0.45	0.58	33.1
Approach		98	0.0	0.104	4.8	LOS A	0.6	13.9	0.58	0.45	0.58	33.8
West: Issaquah Beaver Lake Rd												
5	L2	23	4.0	0.207	4.8	LOS A	1.1	27.4	0.32	0.18	0.32	34.4
2	T1	84	4.0	0.207	4.8	LOS A	1.1	27.4	0.32	0.18	0.32	34.5
12	R2	146	4.0	0.207	4.8	LOS A	1.1	27.4	0.32	0.18	0.32	33.6
Approach		253	4.0	0.207	4.8	LOS A	1.1	27.4	0.32	0.18	0.32	34.0
All Vehicles		984	3.2	0.361	5.5	LOS A	2.1	54.6	0.39	0.25	0.39	33.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 39 [39 - 233rd Ave NE & NE 8th Street]

2035 AM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 233rd Ave (NB)												
3	L2	51	6.0	0.171	7.5	LOS A	0.9	23.6	0.53	0.61	0.53	25.0
8	T1	23	6.0	0.171	6.6	LOS A	0.9	23.6	0.53	0.61	0.53	29.2
18	R2	86	6.0	0.171	3.8	LOS A	0.9	23.6	0.53	0.61	0.53	24.3
Approach		160	6.0	0.171	5.4	LOS A	0.9	23.6	0.53	0.61	0.53	25.1
East: NE 8th St (WB)												
1	L2	178	1.0	0.581	6.3	LOS A	5.0	126.6	0.41	0.40	0.41	25.0
6	T1	487	1.0	0.581	2.1	LOS A	5.0	126.6	0.41	0.40	0.41	24.8
16	R2	66	1.0	0.581	5.1	LOS A	5.0	126.6	0.41	0.40	0.41	28.7
Approach		731	1.0	0.581	3.4	LOS A	5.0	126.6	0.41	0.40	0.41	25.2
North: 233rd Ave NE												
7	L2	76	0.0	0.358	13.5	LOS B	2.3	57.8	0.77	0.84	0.77	33.7
4	T1	138	0.0	0.358	9.1	LOS A	2.3	57.8	0.77	0.84	0.77	33.8
14	R2	66	0.0	0.358	8.8	LOS A	2.3	57.8	0.77	0.84	0.77	33.1
Approach		280	0.0	0.358	10.2	LOS B	2.3	57.8	0.77	0.84	0.77	33.6
West: NE 8th St (EB)												
5	L2	12	4.0	0.408	11.5	LOS B	2.5	65.7	0.61	0.66	0.61	33.1
2	T1	295	4.0	0.408	6.1	LOS A	2.5	65.7	0.61	0.66	0.61	31.9
12	R2	88	4.0	0.408	6.0	LOS A	2.5	65.7	0.61	0.66	0.61	31.2
Approach		395	4.0	0.408	6.2	LOS A	2.5	65.7	0.61	0.66	0.61	31.8
All Vehicles		1567	2.1	0.581	5.5	LOS A	5.0	126.6	0.54	0.57	0.54	27.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 41 [41 - 244th Ave NE & E Main Dr]

2035 AM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	9	1.0	0.138	8.5	LOS A	0.6	16.3	0.24	0.44	0.24	32.7
8	T1	134	1.0	0.138	4.1	LOS A	0.6	16.3	0.24	0.44	0.24	32.7
18	R2	30	1.0	0.138	4.0	LOS A	0.6	16.3	0.24	0.44	0.24	32.0
Approach		174	1.0	0.138	4.3	LOS A	0.6	16.3	0.24	0.44	0.24	32.6
East: E Main Dr (WB)												
1	L2	90	1.0	0.167	8.9	LOS A	0.8	20.1	0.34	0.59	0.34	31.9
6	T1	1	1.0	0.167	4.5	LOS A	0.8	20.1	0.34	0.59	0.34	31.9
16	R2	107	1.0	0.167	4.5	LOS A	0.8	20.1	0.34	0.59	0.34	31.2
Approach		198	1.0	0.167	6.5	LOS A	0.8	20.1	0.34	0.59	0.34	31.5
North: 244th Ave (SB)												
7	L2	49	3.0	0.306	8.7	LOS A	1.7	44.5	0.29	0.47	0.29	32.4
4	T1	311	3.0	0.306	4.2	LOS A	1.7	44.5	0.29	0.47	0.29	32.4
14	R2	16	3.0	0.306	4.2	LOS A	1.7	44.5	0.29	0.47	0.29	31.7
Approach		377	3.0	0.306	4.8	LOS A	1.7	44.5	0.29	0.47	0.29	32.4
West: E Main Dr (EB)												
5	L2	45	2.0	0.064	10.1	LOS B	0.3	7.8	0.50	0.66	0.50	31.1
2	T1	1	2.0	0.064	5.7	LOS A	0.3	7.8	0.50	0.66	0.50	31.1
12	R2	16	2.0	0.064	5.6	LOS A	0.3	7.8	0.50	0.66	0.50	30.4
Approach		62	2.0	0.064	8.8	LOS A	0.3	7.8	0.50	0.66	0.50	30.9
All Vehicles		810	2.0	0.306	5.4	LOS A	1.7	44.5	0.31	0.51	0.31	32.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 62 [62 - E Lk Sammamish Pk Way and SE 43rd Way]

2035 AM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: E Lk Sammamish Pk Way WB												
8x	T1	563	5.0	0.356	1.5	LOS A	2.8	72.2	0.17	0.20	0.17	30.1
18x	R2	528	5.0	0.331	1.9	LOS A	0.0	0.0	0.00	0.29	0.00	29.5
Approach		1091	5.0	0.356	1.7	LOS A	2.8	72.2	0.09	0.24	0.09	29.8
NorthEast: SE 43rd Way SB												
1x	L2	1026	1.0	0.495	11.0	LOS B	3.9	97.4	0.74	0.83	0.79	27.4
16x	R2	24	1.0	0.495	5.7	LOS A	3.9	97.4	0.74	0.79	0.77	26.6
Approach		1050	1.0	0.495	10.9	LOS B	3.9	97.4	0.74	0.83	0.79	27.4
NorthWest: E Lk Sammamish Pk Way EB												
7x	L2	28	1.0	0.481	11.3	LOS B	2.7	68.2	0.76	0.81	0.88	29.0
4x	T1	695	1.0	0.481	5.0	LOS A	2.9	72.7	0.76	0.73	0.87	28.7
Approach		723	1.0	0.481	5.3	LOS A	2.9	72.7	0.76	0.74	0.87	28.7
All Vehicles		2864	2.5	0.495	6.0	LOS A	3.9	97.4	0.50	0.58	0.55	28.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

HCM 6th Signalized Intersection Summary
1: Issaquah-Pine Lk Rd & SE 48th Street

07/14/2021

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	40	89	133	1540	962	78
Future Volume (veh/h)	40	89	133	1540	962	78
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	1895	1895	1772	1772	1731	1731
Adj Flow Rate, veh/h	41	40	137	1588	992	80
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	79	236	174	1588	1320	1119
Arrive On Green	0.04	0.04	0.10	0.90	0.76	0.76
Sat Flow, veh/h	1805	1606	1688	1772	1731	1467
Grp Volume(v), veh/h	41	40	137	1588	992	80
Grp Sat Flow(s),veh/h/ln	1805	1606	1688	1772	1731	1467
Q Serve(g_s), s	3.0	2.9	10.5	119.0	42.3	1.8
Cycle Q Clear(g_c), s	3.0	2.9	10.5	119.0	42.3	1.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	79	236	174	1588	1320	1119
V/C Ratio(X)	0.52	0.17	0.79	1.00	0.75	0.07
Avail Cap(c_a), veh/h	313	444	318	1588	1320	1119
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.1	49.6	58.1	6.9	8.8	4.0
Incr Delay (d2), s/veh	2.0	0.1	3.0	22.6	3.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.0	8.1	29.0	20.7	0.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	64.1	49.7	61.1	29.5	12.3	4.1
LnGrp LOS	E	D	E	C	B	A
Approach Vol, veh/h	81			1725	1072	
Approach Delay, s/veh	57.0			32.0	11.7	
Approach LOS	E			C	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		123.0		9.8	17.7	105.3
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		118.0		22.0	24.0	89.0
Max Q Clear Time (g_c+I1), s		121.0		5.0	12.5	44.3
Green Ext Time (p_c), s		0.0		0.1	0.2	23.2

Intersection Summary	
HCM 6th Ctrl Delay	25.1
HCM 6th LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	44	76	126	789	835	53
Future Volume (veh/h)	44	76	126	789	835	53
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	1967	1967	1723	1723	1736	1736
Adj Flow Rate, veh/h	46	80	133	831	879	56
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	1	1
Cap, veh/h	217	162	222	1305	984	804
Arrive On Green	0.12	0.10	0.14	0.76	0.57	0.55
Sat Flow, veh/h	1874	1667	1641	1723	1736	1467
Grp Volume(v), veh/h	46	80	133	831	879	56
Grp Sat Flow(s),veh/h/ln	1874	1667	1641	1723	1736	1467
Q Serve(g_s), s	1.2	2.4	4.1	12.2	23.9	1.0
Cycle Q Clear(g_c), s	1.2	2.4	4.1	12.2	23.9	1.0
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	217	162	222	1305	984	804
V/C Ratio(X)	0.21	0.49	0.60	0.64	0.89	0.07
Avail Cap(c_a), veh/h	941	806	244	2442	2106	1753
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	23.0	21.9	3.1	10.2	5.7
Incr Delay (d2), s/veh	0.2	0.9	2.0	0.2	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	1.7	2.8	1.6	10.5	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	21.7	23.9	23.8	3.2	11.4	5.7
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	126			964	935	
Approach Delay, s/veh	23.1			6.1	11.1	
Approach LOS	C			A	B	

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	43.7		10.3	33.5	10.0
Change Period (Y+Rc), s	5.0		5.0	5.0	5.8
Max Green Setting (Gmax), s	74.2		6.0	63.2	25.0
Max Q Clear Time (g_c+I1), s	14.2		6.1	25.9	4.4
Green Ext Time (p_c), s	2.2		0.0	2.6	0.3

Intersection Summary	
HCM 6th Ctrl Delay	9.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↗		↕	
Traffic Vol, veh/h	0	124	261	125	55	0	179	0	113	0	0	1
Future Vol, veh/h	0	124	261	125	55	0	179	0	113	0	0	1
Conflicting Peds, #/hr	0	0	6	6	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	-	-	-	-	-	-	-	-	105	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	0	-	-	0	-
Peak Hour Factor	95	91	91	91	91	95	91	95	91	95	95	95
Heavy Vehicles, %	0	0	0	1	1	0	0	0	0	0	0	0
Mvmt Flow	0	136	287	137	60	0	197	0	124	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	60	0	0	429	0	0	621	620	286	676	763	60
Stage 1	-	-	-	-	-	-	286	286	-	334	334	-
Stage 2	-	-	-	-	-	-	335	334	-	342	429	-
Critical Hdwy	4.1	-	-	4.11	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1556	-	-	1136	-	-	403	407	758	370	337	1011
Stage 1	-	-	-	-	-	-	726	679	-	684	647	-
Stage 2	-	-	-	-	-	-	683	647	-	677	587	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1556	-	-	1131	-	-	362	354	755	279	294	1011
Mov Cap-2 Maneuver	-	-	-	-	-	-	362	354	-	279	294	-
Stage 1	-	-	-	-	-	-	722	676	-	684	566	-
Stage 2	-	-	-	-	-	-	597	566	-	566	584	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	6	20.2	8.6
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	362	755	1556	-	-	1131	-	-	1011
HCM Lane V/C Ratio	0.543	0.164	-	-	-	0.121	-	-	0.001
HCM Control Delay (s)	26.2	10.7	0	-	-	8.6	0	-	8.6
HCM Lane LOS	D	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	3.1	0.6	0	-	-	0.4	-	-	0

Intersection	
Intersection Delay, s/veh	14
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	127	182	139	179	271	80
Future Vol, veh/h	127	182	139	179	271	80
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	131	188	143	185	279	82
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	14.1	12.9	14.9
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	41%	0%	100%	0%
Vol Thru, %	59%	44%	0%	0%
Vol Right, %	0%	56%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	309	318	271	80
LT Vol	127	0	271	0
Through Vol	182	139	0	0
RT Vol	0	179	0	80
Lane Flow Rate	319	328	279	82
Geometry Grp	2	2	7	7
Degree of Util (X)	0.497	0.474	0.522	0.126
Departure Headway (Hd)	5.611	5.208	6.728	5.511
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	640	692	536	650
Service Time	3.655	3.253	4.469	3.251
HCM Lane V/C Ratio	0.498	0.474	0.521	0.126
HCM Control Delay	14.1	12.9	16.6	9
HCM Lane LOS	B	B	C	A
HCM 95th-tile Q	2.8	2.6	3	0.4

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	27	1058	37	35	492
Future Vol, veh/h	8	27	1058	37	35	492
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	-	-	-	125	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	9	29	1138	40	38	529

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1763	1158	0	0	1178	0
Stage 1	1158	-	-	-	-	-
Stage 2	605	-	-	-	-	-
Critical Hdwy	7	6.5	-	-	4.11	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.209	-
Pot Cap-1 Maneuver	70	219	-	-	596	-
Stage 1	249	-	-	-	-	-
Stage 2	496	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	66	219	-	-	596	-
Mov Cap-2 Maneuver	214	-	-	-	-	-
Stage 1	249	-	-	-	-	-
Stage 2	464	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.9	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	218	596	-
HCM Lane V/C Ratio	-	-	0.173	0.063	-
HCM Control Delay (s)	-	-	24.9	11.4	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.6	0.2	-

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	67	108	3	7	119	154	3	6	2	144	2	100
Future Vol, veh/h	67	108	3	7	119	154	3	6	2	144	2	100
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	70	113	3	7	124	160	3	6	2	150	2	104
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	9.6	11.2	9.3	10.2
HCM LOS	A	B	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	27%	100%	0%	100%	0%	100%	0%
Vol Thru, %	55%	0%	97%	0%	44%	0%	2%
Vol Right, %	18%	0%	3%	0%	56%	0%	98%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	67	111	7	273	144	102
LT Vol	3	67	0	7	0	144	0
Through Vol	6	0	108	0	119	0	2
RT Vol	2	0	3	0	154	0	100
Lane Flow Rate	11	70	116	7	284	150	106
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.02	0.118	0.178	0.012	0.402	0.259	0.148
Departure Headway (Hd)	6.19	6.073	5.549	5.99	5.087	6.224	5.03
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	582	586	641	594	702	573	704
Service Time	4.19	3.857	3.333	3.763	2.86	4.015	2.82
HCM Lane V/C Ratio	0.019	0.119	0.181	0.012	0.405	0.262	0.151
HCM Control Delay	9.3	9.7	9.5	8.8	11.3	11.2	8.7
HCM Lane LOS	A	A	A	A	B	B	A
HCM 95th-tile Q	0.1	0.4	0.6	0	1.9	1	0.5

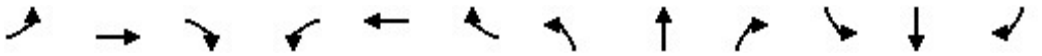
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	0	10	1	0	0	23	544	1	0	867	34
Future Vol, veh/h	34	0	10	1	0	0	23	544	1	0	867	34
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	250	-	-	-	-	0	110	-	-	110	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-4	-	-	0	-	-	0	-	-	1	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	36	0	11	1	0	0	24	579	1	0	922	36

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1568	1568	940	1574	-	580	958	0	0	580	0	0
Stage 1	940	940	-	628	-	-	-	-	-	-	-	-
Stage 2	628	628	-	946	-	-	-	-	-	-	-	-
Critical Hdwy	6.3	5.7	5.8	7.1	-	6.2	4.12	-	-	4.11	-	-
Critical Hdwy Stg 1	5.3	4.7	-	6.1	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.3	4.7	-	6.1	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	-	3.3	2.218	-	-	2.209	-	-
Pot Cap-1 Maneuver	129	159	358	90	0	518	718	-	-	999	-	-
Stage 1	393	425	-	474	0	-	-	-	-	-	-	-
Stage 2	545	551	-	317	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	126	154	358	85	-	518	718	-	-	999	-	-
Mov Cap-2 Maneuver	313	344	-	85	-	-	-	-	-	-	-	-
Stage 1	380	425	-	458	-	-	-	-	-	-	-	-
Stage 2	527	533	-	308	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	17.4	0	0.4	0
HCM LOS	C	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	718	-	-	313	358	-	999	-	-
HCM Lane V/C Ratio	0.034	-	-	0.116	0.03	-	-	-	-
HCM Control Delay (s)	10.2	-	-	18	15.4	0	0	-	-
HCM Lane LOS	B	-	-	C	C	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.4	0.1	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	398	8	7	333	17	10	1	5	22	0	46
Future Volume (veh/h)	59	398	8	7	333	17	10	1	5	22	0	46
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		0.99	1.00		0.97	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	1750	1750	1750	1750	1750	1750	1750	1750	1736	1736	1736
Adj Flow Rate, veh/h	66	447	9	8	374	19	11	1	6	25	0	52
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	1	1	1
Cap, veh/h	458	629	13	390	516	26	68	20	121	95	0	161
Arrive On Green	0.09	0.37	0.37	0.04	0.31	0.31	0.04	0.10	0.10	0.06	0.00	0.11
Sat Flow, veh/h	1667	1708	34	1667	1650	84	1667	211	1264	1654	0	1438
Grp Volume(v), veh/h	66	0	456	8	0	393	11	0	7	25	0	52
Grp Sat Flow(s),veh/h/ln	1667	0	1742	1667	0	1734	1667	0	1475	1654	0	1438
Q Serve(g_s), s	0.9	0.0	8.4	0.1	0.0	7.6	0.2	0.0	0.2	0.5	0.0	1.3
Cycle Q Clear(g_c), s	0.9	0.0	8.4	0.1	0.0	7.6	0.2	0.0	0.2	0.5	0.0	1.3
Prop In Lane	1.00		0.02	1.00		0.05	1.00		0.86	1.00		1.00
Lane Grp Cap(c), veh/h	458	0	641	390	0	542	68	0	141	95	0	161
V/C Ratio(X)	0.14	0.00	0.71	0.02	0.00	0.73	0.16	0.00	0.05	0.26	0.00	0.32
Avail Cap(c_a), veh/h	2108	0	3046	1025	0	1878	1153	0	824	1144	0	804
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	7.7	0.0	10.2	8.5	0.0	11.5	17.4	0.0	15.4	17.0	0.0	15.4
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.0	0.0	0.7	1.5	0.0	0.1	2.1	0.0	0.4
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(95%),veh/ln	0.4	0.0	4.1	0.1	0.0	3.9	0.2	0.0	0.1	0.4	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.8	0.0	10.7	8.5	0.0	12.2	18.9	0.0	15.5	19.1	0.0	15.8
LnGrp LOS	A	A	B	A	A	B	B	A	B	B	A	B
Approach Vol, veh/h		522			401			18			77	
Approach Delay, s/veh		10.3			12.1			17.6			16.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	16.0	6.1	7.6	5.7	18.1	5.5	8.2
Change Period (Y+Rc), s	5.3	5.3	5.0	5.0	5.3	5.3	5.0	5.0
Max Green Setting (Gmax), s	39.7	39.7	25.0	20.0	14.7	64.7	25.0	20.0
Max Q Clear Time (g_c+I1), s	2.9	9.6	2.5	2.2	2.1	10.4	2.2	3.3
Green Ext Time (p_c), s	0.1	0.8	0.1	0.0	0.0	1.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.7
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	45	60	197	24	173	109	1094	266	188	1078	91
Future Volume (veh/h)	108	45	60	197	24	173	109	1094	266	188	1078	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		1.00	1.00		1.00	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	1715	1715	1715	1809	1809	1809	1809	1809	1809	1728	1728	1728
Adj Flow Rate, veh/h	112	47	62	205	25	0	114	1140	0	196	1123	95
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	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	393	144	337	335	26		232	1453		249	1373	116
Arrive On Green	0.27	0.27	0.24	0.25	0.25	0.00	0.13	0.42	0.00	0.15	0.45	0.41
Sat Flow, veh/h	1037	531	1431	836	102	1533	1723	3527	0	1646	3062	259
Grp Volume(v), veh/h	159	0	62	230	0	0	114	1140	0	196	602	616
Grp Sat Flow(s),veh/h/ln	1569	0	1431	938	0	1533	1723	1718	0	1646	1642	1679
Q Serve(g_s), s	0.0	0.0	1.9	9.2	0.0	0.0	3.4	15.8	0.0	6.3	17.6	17.7
Cycle Q Clear(g_c), s	4.4	0.0	1.9	13.6	0.0	0.0	3.4	15.8	0.0	6.3	17.6	17.7
Prop In Lane	0.70		1.00	0.89		1.00	1.00		0.00	1.00		0.15
Lane Grp Cap(c), veh/h	538	0	337	361	0		232	1453		249	736	753
V/C Ratio(X)	0.30	0.00	0.18	0.64	0.00		0.49	0.78		0.79	0.82	0.82
Avail Cap(c_a), veh/h	1303	0	1089	361	0		250	1868		249	892	912
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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.2	0.0	16.9	22.7	0.0	0.0	22.1	13.8	0.0	22.6	13.3	13.4
Incr Delay (d2), s/veh	0.3	0.0	0.3	3.7	0.0	0.0	0.6	1.3	0.0	14.1	4.2	4.1
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(95%),veh/ln	2.6	0.0	1.0	5.4	0.0	0.0	2.3	8.6	0.0	5.6	9.7	9.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.5	0.0	17.1	26.3	0.0	0.0	22.7	15.0	0.0	36.7	17.4	17.6
LnGrp LOS	B	A	B	C	A		C	B		D	B	B
Approach Vol, veh/h		221			230	A		1254	A		1414	
Approach Delay, s/veh		16.7			26.3			15.7			20.2	
Approach LOS		B			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	26.3		17.0	10.4	27.7		17.0
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.9	27.0		12.0	5.0	27.0		41.0
Max Q Clear Time (g_c+I1), s	8.3	17.8		15.6	5.4	19.7		6.4
Green Ext Time (p_c), s	0.0	2.5		0.0	0.0	2.0		0.9

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

Notes

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

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	28	633	71	51	792
Future Vol, veh/h	50	28	633	71	51	792
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	220	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	1	1	2	2	1	1
Mvmt Flow	52	29	653	73	53	816

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1613	692	0	0	727	0
Stage 1	691	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Critical Hdwy	6.61	6.31	-	-	4.11	-
Critical Hdwy Stg 1	5.61	-	-	-	-	-
Critical Hdwy Stg 2	5.61	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	105	437	-	-	881	-
Stage 1	480	-	-	-	-	-
Stage 2	370	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	99	436	-	-	880	-
Mov Cap-2 Maneuver	228	-	-	-	-	-
Stage 1	480	-	-	-	-	-
Stage 2	348	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.4	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	275	880	-
HCM Lane V/C Ratio	-	-	0.292	0.06	-
HCM Control Delay (s)	-	-	23.4	9.4	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.2	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	241	324	205	123	118	238	725	229	200	701	44
Future Volume (veh/h)	79	241	324	205	123	118	238	725	229	200	701	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		1.00	0.99		0.96	1.00		0.96	1.00		0.95
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	1750	1750	1750	1750	1736	1736	1736	1715	1715	1715
Adj Flow Rate, veh/h	82	251	0	214	128	123	248	755	239	208	730	46
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, %	0	0	0	0	0	0	1	1	1	1	1	1
Cap, veh/h	424	341		365	432	604	399	870	276	285	901	57
Arrive On Green	0.08	0.19	0.00	0.12	0.25	0.24	0.24	0.36	0.35	0.17	0.29	0.27
Sat Flow, veh/h	1667	1750	1483	1667	1750	1430	1654	2436	771	1633	3102	195
Grp Volume(v), veh/h	82	251	0	214	128	123	248	511	483	208	383	393
Grp Sat Flow(s),veh/h/ln	1667	1750	1483	1667	1750	1430	1654	1650	1557	1633	1629	1668
Q Serve(g_s), s	3.0	10.8	0.0	7.8	4.8	0.7	10.8	23.2	23.2	9.7	17.6	17.6
Cycle Q Clear(g_c), s	3.0	10.8	0.0	7.8	4.8	0.7	10.8	23.2	23.2	9.7	17.6	17.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		0.12
Lane Grp Cap(c), veh/h	424	341		365	432	604	399	589	557	285	473	485
V/C Ratio(X)	0.19	0.74		0.59	0.30	0.20	0.62	0.87	0.87	0.73	0.81	0.81
Avail Cap(c_a), veh/h	440	422		365	496	657	925	648	612	954	680	697
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	30.4	0.0	21.1	24.6	6.4	27.3	24.1	24.1	31.4	26.5	26.6
Incr Delay (d2), s/veh	0.1	3.6	0.0	1.7	0.1	0.1	0.6	10.4	10.9	1.4	3.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	8.3	0.0	5.4	3.4	1.3	7.4	15.2	14.7	6.8	11.1	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	22.5	34.1	0.0	22.8	24.8	6.4	27.9	34.5	35.1	32.8	29.5	29.6
LnGrp LOS	C	C		C	C	A	C	C	D	C	C	C
Approach Vol, veh/h		333	A		465			1242			984	
Approach Delay, s/veh		31.2			19.0			33.4			30.2	
Approach LOS		C			B			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	31.7	9.2	22.5	22.4	26.4	13.0	18.7
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	45.0	29.3	5.0	20.4	43.0	31.3	8.0	17.4
Max Q Clear Time (g_c+I1), s	11.7	25.2	5.0	6.8	12.8	19.6	9.8	12.8
Green Ext Time (p_c), s	0.4	1.2	0.0	0.5	0.5	1.5	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	29.9
HCM 6th LOS	C

Notes

Unsignalized Delay for [EBR] 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)	9	1	16	87	5	76	17	1100	69	397	900	8
Future Volume (veh/h)	9	1	16	87	5	76	17	1100	69	397	900	8
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.96	1.00		0.99	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	1736	1736	1736	1736	1736	1723	1723	1723	1736	1736	1736
Adj Flow Rate, veh/h	9	1	16	90	5	78	18	1134	71	409	928	8
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	177	50	210	451	21	309	538	1400	88	441	1221	11
Arrive On Green	0.24	0.24	0.22	0.24	0.24	0.22	0.22	0.45	0.43	0.14	0.36	0.34
Sat Flow, veh/h	343	208	883	1315	89	1413	1641	3127	196	3208	3351	29
Grp Volume(v), veh/h	26	0	0	95	0	78	18	593	612	409	457	479
Grp Sat Flow(s),veh/h/ln	1434	0	0	1404	0	1413	1641	1637	1686	1604	1650	1730
Q Serve(g_s), s	0.0	0.0	0.0	2.0	0.0	2.3	0.0	16.0	16.0	6.4	12.4	12.4
Cycle Q Clear(g_c), s	0.7	0.0	0.0	2.7	0.0	2.3	0.0	16.0	16.0	6.4	12.4	12.4
Prop In Lane	0.35		0.62	0.95		1.00	1.00		0.12	1.00		0.02
Lane Grp Cap(c), veh/h	437	0	0	472	0	309	538	733	755	441	601	631
V/C Ratio(X)	0.06	0.00	0.00	0.20	0.00	0.25	0.03	0.81	0.81	0.93	0.76	0.76
Avail Cap(c_a), veh/h	898	0	0	933	0	777	538	1125	1158	441	1134	1189
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.3	0.0	0.0	15.8	0.0	16.5	13.7	12.2	12.2	21.7	14.2	14.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.2	0.0	1.3	1.3	25.4	0.8	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(95%),veh/ln	0.4	0.0	0.0	1.5	0.0	1.3	0.2	8.2	8.4	6.6	6.9	7.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.3	0.0	0.0	15.9	0.0	16.6	13.7	13.5	13.6	47.1	15.0	15.0
LnGrp LOS	B	A	A	B	A	B	B	B	B	D	B	B
Approach Vol, veh/h		26			173			1223			1345	
Approach Delay, s/veh		15.3			16.2			13.6			24.7	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	25.8		15.1	14.2	21.6		15.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	33.0		27.0	5.0	33.0		27.0
Max Q Clear Time (g_c+I1), s	8.4	18.0		4.7	2.0	14.4		2.7
Green Ext Time (p_c), s	0.0	2.8		0.4	0.0	2.0		0.0

Intersection Summary		
HCM 6th Ctrl Delay	19.2	
HCM 6th LOS	B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	12	407	67	16	63	335	988	51	54	872	280
Future Volume (veh/h)	277	12	407	67	16	63	335	988	51	54	872	280
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	1.00		0.99	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	2004	2004	2004	1709	1709	1709	1809	1809	1809	1750	1750	1750
Adj Flow Rate, veh/h	289	12	424	70	17	66	349	1029	0	56	908	292
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, %	0	0	0	3	3	3	1	1	1	0	0	0
Cap, veh/h	711	14	484	219	86	333	266	1173		238	847	271
Arrive On Green	0.10	0.29	0.34	0.04	0.28	0.28	0.10	0.34	0.00	0.07	0.34	0.33
Sat Flow, veh/h	1908	47	1644	1628	304	1178	1723	3436	1533	1667	2456	787
Grp Volume(v), veh/h	289	0	436	70	0	83	349	1029	0	56	614	586
Grp Sat Flow(s),veh/h/ln	1908	0	1690	1628	0	1482	1723	1718	1533	1667	1663	1581
Q Serve(g_s), s	7.0	0.0	17.6	2.2	0.0	3.1	7.0	20.4	0.0	0.0	25.0	25.0
Cycle Q Clear(g_c), s	7.0	0.0	17.6	2.2	0.0	3.1	7.0	20.4	0.0	0.0	25.0	25.0
Prop In Lane	1.00		0.97	1.00		0.80	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	711	0	497	219	0	419	266	1173		238	573	545
V/C Ratio(X)	0.41	0.00	0.88	0.32	0.00	0.20	1.31	0.88		0.24	1.07	1.08
Avail Cap(c_a), veh/h	711	0	606	237	0	531	266	1185		238	573	545
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	13.4	0.0	22.9	19.3	0.0	19.8	31.4	22.4	0.0	30.8	23.7	24.0
Incr Delay (d2), s/veh	0.4	0.0	10.5	0.8	0.0	0.2	165.5	7.6	0.0	0.2	57.8	60.5
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(95%),veh/ln	5.3	0.0	12.4	1.5	0.0	1.9	25.7	13.5	0.0	1.6	26.1	25.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.8	0.0	33.4	20.1	0.0	20.0	196.9	30.1	0.0	31.0	81.5	84.5
LnGrp LOS	B	A	C	C	A	B	F	C		C	F	F
Approach Vol, veh/h		725			153			1378	A		1256	
Approach Delay, s/veh		25.6			20.0			72.3			80.7	
Approach LOS		C			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	27.7	8.0	26.5	10.0	28.0	7.2	27.3
Change Period (Y+Rc), s	5.0	5.0	4.0	6.0	5.0	5.0	4.0	6.0
Max Green Setting (Gmax), s	5.3	23.0	4.0	26.0	5.0	23.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	12.0	22.4	9.0	5.1	9.0	27.0	4.2	19.6
Green Ext Time (p_c), s	0.0	0.3	0.0	0.4	0.0	0.0	0.0	1.2

Intersection Summary	
HCM 6th Ctrl Delay	63.4
HCM 6th LOS	E

Notes

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

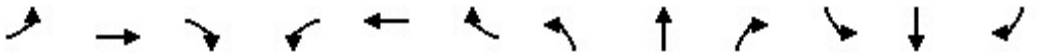
Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	5	7	58	3	59	6	83	146	68	168	4
Future Vol, veh/h	1	5	7	58	3	59	6	83	146	68	168	4
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	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	0	0	0
Mvmt Flow	1	6	8	67	3	68	7	95	168	78	193	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	581	629	196	552	547	179	198	0	0	263	0	0
Stage 1	352	352	-	193	193	-	-	-	-	-	-	-
Stage 2	229	277	-	359	354	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.11	6.51	6.21	4.11	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.509	4.009	3.309	2.209	-	-	2.2	-	-
Pot Cap-1 Maneuver	428	402	850	446	446	866	1381	-	-	1313	-	-
Stage 1	669	635	-	811	743	-	-	-	-	-	-	-
Stage 2	778	685	-	661	632	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	370	373	850	413	413	866	1381	-	-	1313	-	-
Mov Cap-2 Maneuver	370	373	-	413	413	-	-	-	-	-	-	-
Stage 1	665	592	-	806	739	-	-	-	-	-	-	-
Stage 2	709	681	-	605	590	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.9	13.6	0.2	2.2
HCM LOS	B	B		

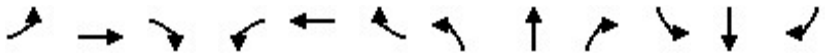
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1381	-	-	534	556	1313	-	-
HCM Lane V/C Ratio	0.005	-	-	0.028	0.248	0.06	-	-
HCM Control Delay (s)	7.6	0	-	11.9	13.6	7.9	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	1	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	0	13	8	0	9	8	1543	2	8	1427	14
Future Volume (veh/h)	17	0	13	8	0	9	8	1543	2	8	1427	14
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		0.99	1.00		0.99	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	1709	1709	1709	1712	1712	1712	1736	1736	1736	1809	1809	1809
Adj Flow Rate, veh/h	18	0	13	8	0	9	8	1591	2	8	1471	14
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	8	8	8	1	1	1	1	1	1
Cap, veh/h	397	0	164	391	0	151	373	1899	2	297	1806	17
Arrive On Green	0.07	0.00	0.08	0.07	0.00	0.07	0.11	0.56	0.52	0.07	0.52	0.48
Sat Flow, veh/h	1628	0	1439	1630	0	1442	1654	3381	4	1723	3487	33
Grp Volume(v), veh/h	18	0	13	8	0	9	8	776	817	8	724	761
Grp Sat Flow(s),veh/h/ln	1628	0	1439	1630	0	1442	1654	1650	1736	1723	1718	1802
Q Serve(g_s), s	0.5	0.0	0.4	0.2	0.0	0.3	0.0	20.4	20.4	0.0	18.4	18.4
Cycle Q Clear(g_c), s	0.5	0.0	0.4	0.2	0.0	0.3	0.0	20.4	20.4	0.0	18.4	18.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		0.02
Lane Grp Cap(c), veh/h	397	0	164	391	0	151	373	927	975	297	890	933
V/C Ratio(X)	0.05	0.00	0.08	0.02	0.00	0.06	0.02	0.84	0.84	0.03	0.81	0.81
Avail Cap(c_a), veh/h	492	0	797	501	0	798	440	1386	1458	444	1443	1514
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	16.7	0.0	21.7	17.7	0.0	22.0	15.0	9.5	9.5	17.3	10.5	10.5
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.0	0.0	0.1	0.0	1.9	1.8	0.0	0.7	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(95%),veh/ln	0.3	0.0	0.3	0.1	0.0	0.2	0.1	8.6	8.9	0.1	8.4	8.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.7	0.0	21.7	17.7	0.0	22.1	15.0	11.4	11.3	17.3	11.3	11.3
LnGrp LOS	B	A	C	B	A	C	B	B	B	B	B	B
Approach Vol, veh/h		31			17			1601			1493	
Approach Delay, s/veh		18.8			20.0			11.3			11.3	
Approach LOS		B			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	32.4	4.9	8.5	8.9	30.1	4.4	9.0
Change Period (Y+Rc), s	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	41.0	4.0	26.0	5.0	41.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.0	22.4	2.5	2.3	2.0	20.4	2.2	2.4
Green Ext Time (p_c), s	0.0	4.0	0.0	0.0	0.0	3.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.4
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	627	0	3	606	263	0	0	0	127	0	14
Future Volume (veh/h)	10	627	0	3	606	263	0	0	0	127	0	14
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1736	1736	1736				1750	1750	1750
Adj Flow Rate, veh/h	11	674	0	3	652	283				137	0	15
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	1	1	1				0	0	0
Cap, veh/h	168	997	0	160	1024	870				183	0	20
Arrive On Green	0.59	0.59	0.00	0.48	0.59	0.59				0.23	0.00	0.17
Sat Flow, veh/h	12	1688	0	2	1732	1471				1484	0	162
Grp Volume(v), veh/h	685	0	0	655	0	283				152	0	0
Grp Sat Flow(s),veh/h/ln	1700	0	0	1734	0	1471				1647	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	2.2				2.0	0.0	0.0
Cycle Q Clear(g_c), s	6.1	0.0	0.0	6.5	0.0	2.2				2.0	0.0	0.0
Prop In Lane	0.02		0.00	0.00		1.00				0.90		0.10
Lane Grp Cap(c), veh/h	1166	0	0	993	0	870				203	0	0
V/C Ratio(X)	0.59	0.00	0.00	0.66	0.00	0.33				0.75	0.00	0.00
Avail Cap(c_a), veh/h	3670	0	0	3579	0	3074				1159	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.2	0.0	0.0	3.2	0.0	2.4				8.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.3	0.0	0.1				5.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.0	0.4	0.0	0.0				1.3	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.3	0.0	0.0	3.5	0.0	2.4				14.0	0.0	0.0
LnGrp LOS	A	A	A	A	A	A				B	A	A
Approach Vol, veh/h		685			938						152	
Approach Delay, s/veh		3.3			3.2						14.0	
Approach LOS		A			A						B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	15.9	6.8	15.9
Change Period (Y+Rc), s	5.0	4.0	5.0
Max Green Setting (Gmax), s	45.0	16.0	45.0
Max Q Clear Time (g_c+I1), s	8.1	4.0	8.5
Green Ext Time (p_c), s	1.7	0.6	2.4

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

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	6	488	29	4	580
Future Vol, veh/h	20	6	488	29	4	580
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, %	-6	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	1	1	1	1
Mvmt Flow	22	6	525	31	4	624

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1173	541	0	0	556	0
Stage 1	541	-	-	-	-	-
Stage 2	632	-	-	-	-	-
Critical Hdwy	5.22	5.62	-	-	4.11	-
Critical Hdwy Stg 1	4.22	-	-	-	-	-
Critical Hdwy Stg 2	4.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	314	592	-	-	1020	-
Stage 1	699	-	-	-	-	-
Stage 2	654	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	312	592	-	-	1020	-
Mov Cap-2 Maneuver	312	-	-	-	-	-
Stage 1	699	-	-	-	-	-
Stage 2	650	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.2	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	350	1020	-
HCM Lane V/C Ratio	-	-	0.08	0.004	-
HCM Control Delay (s)	-	-	16.2	8.5	0
HCM Lane LOS	-	-	C	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0	-

Intersection	
Intersection Delay, s/veh	11.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	30	15	36	160	49	74	145	58	122	103	5
Future Vol, veh/h	7	30	15	36	160	49	74	145	58	122	103	5
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	8	35	17	42	186	57	86	169	67	142	120	6
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9.9	12.6	11.6	11
HCM LOS	A	B	B	B

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	71%	0%	67%	0%	77%	0%	95%
Vol Right, %	0%	29%	0%	33%	0%	23%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	74	203	7	45	36	209	122	108
LT Vol	74	0	7	0	36	0	122	0
Through Vol	0	145	0	30	0	160	0	103
RT Vol	0	58	0	15	0	49	0	5
Lane Flow Rate	86	236	8	52	42	243	142	126
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.155	0.38	0.016	0.094	0.079	0.411	0.258	0.21
Departure Headway (Hd)	6.499	5.79	7.188	6.44	6.767	6.094	6.559	6.02
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	552	621	497	555	530	591	548	595
Service Time	4.239	3.53	4.944	4.196	4.508	3.835	4.301	3.762
HCM Lane V/C Ratio	0.156	0.38	0.016	0.094	0.079	0.411	0.259	0.212
HCM Control Delay	10.4	12.1	10.1	9.9	10.1	13	11.6	10.4
HCM Lane LOS	B	B	B	A	B	B	B	B
HCM 95th-tile Q	0.5	1.8	0	0.3	0.3	2	1	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	21	74	446	30	194	537
Future Volume (veh/h)	21	74	446	30	194	537
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	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	1723	1723	1736	1736	1736	1736
Adj Flow Rate, veh/h	23	80	480	32	209	577
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	1	1	1	1
Cap, veh/h	189	168	607	40	302	1161
Arrive On Green	0.12	0.12	0.38	0.38	0.18	0.67
Sat Flow, veh/h	1641	1460	1606	107	1654	1736
Grp Volume(v), veh/h	23	80	0	512	209	577
Grp Sat Flow(s),veh/h/ln	1641	1460	0	1714	1654	1736
Q Serve(g_s), s	0.5	1.9	0.0	9.8	4.4	6.1
Cycle Q Clear(g_c), s	0.5	1.9	0.0	9.8	4.4	6.1
Prop In Lane	1.00	1.00		0.06	1.00	
Lane Grp Cap(c), veh/h	189	168	0	647	302	1161
V/C Ratio(X)	0.12	0.48	0.00	0.79	0.69	0.50
Avail Cap(c_a), veh/h	1153	1026	0	2130	492	2159
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	15.3	0.0	10.2	14.1	3.0
Incr Delay (d2), s/veh	0.1	0.8	0.0	0.8	1.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	1.0	0.0	4.6	2.4	0.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.8	16.1	0.0	11.1	15.2	3.2
LnGrp LOS	B	B	A	B	B	A
Approach Vol, veh/h	103		512			786
Approach Delay, s/veh	15.8		11.1			6.4
Approach LOS	B		B			A

Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	28.7			10.8	18.0	8.3
Change Period (Y+Rc), s	5.0			5.0	5.0	5.0
Max Green Setting (Gmax), s	45.0			10.0	45.0	25.0
Max Q Clear Time (g_c+I1), s	8.1			6.4	11.8	3.9
Green Ext Time (p_c), s	1.3			0.1	1.2	0.2

Intersection Summary	
HCM 6th Ctrl Delay	8.8
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	727	495	85	257	415	110
Future Volume (veh/h)	727	495	85	257	415	110
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	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	1715	1715	1954	1954	1650	1650
Adj Flow Rate, veh/h	765	521	89	271	437	116
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1087	977	175	1064	543	484
Arrive On Green	0.33	0.33	0.09	0.54	0.35	0.35
Sat Flow, veh/h	3344	1420	1861	1954	1571	1398
Grp Volume(v), veh/h	765	521	89	271	437	116
Grp Sat Flow(s),veh/h/ln	1629	1420	1861	1954	1571	1398
Q Serve(g_s), s	13.1	11.9	2.9	4.7	16.2	3.8
Cycle Q Clear(g_c), s	13.1	11.9	2.9	4.7	16.2	3.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1087	977	175	1064	543	484
V/C Ratio(X)	0.70	0.53	0.51	0.25	0.80	0.24
Avail Cap(c_a), veh/h	1322	1079	464	1509	821	731
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.6	5.2	27.6	7.7	19.0	14.9
Incr Delay (d2), s/veh	1.3	0.5	2.3	0.1	3.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.1	18.1	2.4	2.9	9.6	6.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.9	5.6	29.9	7.8	22.5	15.2
LnGrp LOS	B	A	C	A	C	B
Approach Vol, veh/h	1286			360	553	
Approach Delay, s/veh	14.1			13.3	20.9	
Approach LOS	B			B	C	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		38.4		25.7	13.5	24.9
Change Period (Y+Rc), s		5.5		5.5	9.5	5.5
Max Green Setting (Gmax), s		47.5		31.5	14.0	24.0
Max Q Clear Time (g_c+I1), s		6.7		18.2	4.9	15.1
Green Ext Time (p_c), s		1.1		2.0	0.1	4.3

Intersection Summary		
HCM 6th Ctrl Delay		15.7
HCM 6th LOS		B

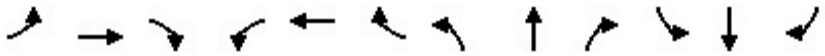
Notes

User approved changes to right turn type.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	100	45	84	535	856	259
Future Volume (veh/h)	100	45	84	535	856	259
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	1715	1715	1940	1940	1541	1541
Adj Flow Rate, veh/h	104	47	88	557	892	252
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	2	2	1	1
Cap, veh/h	196	175	171	1586	997	1043
Arrive On Green	0.12	0.12	0.09	0.82	0.65	0.65
Sat Flow, veh/h	1633	1453	1847	1940	1541	1306
Grp Volume(v), veh/h	104	47	88	557	892	252
Grp Sat Flow(s),veh/h/ln	1633	1453	1847	1940	1541	1306
Q Serve(g_s), s	3.8	1.9	2.9	4.7	31.2	3.1
Cycle Q Clear(g_c), s	3.8	1.9	2.9	4.7	31.2	3.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	196	175	171	1586	997	1043
V/C Ratio(X)	0.53	0.27	0.51	0.35	0.89	0.24
Avail Cap(c_a), veh/h	635	565	201	2747	1894	1803
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	25.7	27.8	1.5	9.5	1.6
Incr Delay (d2), s/veh	0.8	0.3	0.9	0.1	2.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.7	1.2	2.2	0.1	10.6	1.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	27.4	26.0	28.7	1.6	11.8	1.7
LnGrp LOS	C	C	C	A	B	A
Approach Vol, veh/h	151			645	1144	
Approach Delay, s/veh	27.0			5.3	9.6	
Approach LOS	C			A	A	

Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	53.5			9.0	44.6	10.7
Change Period (Y+Rc), s	5.0			5.0	7.0	5.0
Max Green Setting (Gmax), s	87.0			5.0	75.0	23.0
Max Q Clear Time (g_c+I1), s	6.7			4.9	33.2	5.8
Green Ext Time (p_c), s	1.7			0.0	4.4	0.3

Intersection Summary			
HCM 6th Ctrl Delay		9.5	
HCM 6th LOS		A	



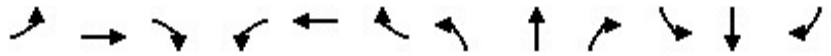
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	0	151	15	1	18	88	1470	2	5	1375	78
Future Volume (veh/h)	66	0	151	15	1	18	88	1470	2	5	1375	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	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	1736	1736	1736	1709	1709	1709	1736	1736	1736	1845	1845	1845
Adj Flow Rate, veh/h	68	0	156	15	1	19	91	1515	2	5	1418	80
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	443	0	194	175	8	144	332	1967	3	196	1678	94
Arrive On Green	0.09	0.00	0.18	0.01	0.10	0.10	0.10	0.58	0.53	0.01	0.50	0.47
Sat Flow, veh/h	1654	0	1445	1628	73	1379	1654	3380	4	1757	3367	189
Grp Volume(v), veh/h	68	0	156	15	0	20	91	739	778	5	736	762
Grp Sat Flow(s),veh/h/ln	1654	0	1445	1628	0	1451	1654	1650	1735	1757	1753	1804
Q Serve(g_s), s	2.0	0.0	6.5	0.5	0.0	0.8	1.4	21.3	21.3	0.1	22.8	23.1
Cycle Q Clear(g_c), s	2.0	0.0	6.5	0.5	0.0	0.8	1.4	21.3	21.3	0.1	22.8	23.1
Prop In Lane	1.00		1.00	1.00		0.95	1.00		0.00	1.00		0.10
Lane Grp Cap(c), veh/h	443	0	194	175	0	151	332	960	1010	196	874	899
V/C Ratio(X)	0.15	0.00	0.81	0.09	0.00	0.13	0.27	0.77	0.77	0.03	0.84	0.85
Avail Cap(c_a), veh/h	475	0	550	255	0	552	448	960	1010	298	934	961
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	17.9	0.0	25.1	24.8	0.0	25.6	11.3	10.0	10.0	11.4	13.6	13.8
Incr Delay (d2), s/veh	0.2	0.0	3.0	0.2	0.0	0.1	0.4	3.9	3.7	0.1	6.7	6.8
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(95%),veh/ln	1.3	0.0	3.9	0.4	0.0	0.5	0.9	10.5	10.8	0.1	13.3	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.0	0.0	28.1	25.0	0.0	25.7	11.8	13.8	13.6	11.5	20.3	20.6
LnGrp LOS	B	A	C	C	A	C	B	B	B	B	C	C
Approach Vol, veh/h		224			35			1608			1503	
Approach Delay, s/veh		25.1			25.4			13.6			20.4	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.3	39.6	6.8	12.2	9.6	34.3	4.9	14.0
Change Period (Y+Rc), s	4.0	6.0	4.0	5.6	5.6	6.0	4.0	5.6
Max Green Setting (Gmax), s	4.6	33.5	4.0	23.9	8.4	30.5	4.0	23.9
Max Q Clear Time (g_c+I1), s	2.1	23.3	4.0	2.8	3.4	25.1	2.5	8.5
Green Ext Time (p_c), s	0.0	5.1	0.0	0.0	0.1	3.2	0.0	0.5

Intersection Summary	
HCM 6th Ctrl Delay	17.5
HCM 6th LOS	B

Notes

User approved ignoring U-Turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	7	27	71	13	237	14	1300	185	295	1236	23
Future Volume (veh/h)	19	7	27	71	13	237	14	1300	185	295	1236	23
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		0.98	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	1750	1750	1750	1750	1736	1736	1736	1736	1736	1736
Adj Flow Rate, veh/h	20	7	28	74	14	247	15	1354	193	307	1288	24
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, %	0	0	0	0	0	0	1	1	1	1	1	1
Cap, veh/h	85	30	100	282	53	296	418	1497	956	368	1409	26
Arrive On Green	0.07	0.07	0.07	0.20	0.20	0.20	0.20	0.45	0.45	0.17	0.43	0.42
Sat Flow, veh/h	1250	438	1470	1412	267	1479	1654	3299	1438	1654	3311	62
Grp Volume(v), veh/h	27	0	28	88	0	247	15	1354	193	307	641	671
Grp Sat Flow(s),veh/h/ln	1688	0	1470	1679	0	1479	1654	1650	1438	1654	1650	1723
Q Serve(g_s), s	1.7	0.0	2.1	5.1	0.0	18.5	0.0	43.9	6.1	14.8	42.2	42.3
Cycle Q Clear(g_c), s	1.7	0.0	2.1	5.1	0.0	18.5	0.0	43.9	6.1	14.8	42.2	42.3
Prop In Lane	0.74		1.00	0.84		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	115	0	100	336	0	296	418	1497	956	368	702	733
V/C Ratio(X)	0.23	0.00	0.28	0.26	0.00	0.84	0.04	0.90	0.20	0.83	0.91	0.91
Avail Cap(c_a), veh/h	438	0	382	368	0	324	418	1677	1034	424	910	950
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	51.0	0.0	51.1	39.0	0.0	44.4	33.6	29.2	7.7	43.4	31.2	31.2
Incr Delay (d2), s/veh	0.4	0.0	0.6	0.2	0.0	14.6	0.0	6.4	0.0	10.5	9.9	9.6
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(95%),veh/ln	1.4	0.0	1.4	3.9	0.0	12.7	0.6	24.2	5.6	14.1	24.4	25.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	51.3	0.0	51.7	39.2	0.0	59.0	33.6	35.6	7.8	53.9	41.1	40.9
LnGrp LOS	D	A	D	D	A	E	C	D	A	D	D	D
Approach Vol, veh/h		55			335			1562			1619	
Approach Delay, s/veh		51.5			53.8			32.1			43.4	
Approach LOS		D			D			C			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.1	55.4		26.1	26.4	52.1		10.9
Change Period (Y+Rc), s	6.0	6.0		5.3	6.0	5.0		6.0
Max Green Setting (Gmax), s	21.0	55.7		23.0	16.0	61.7		27.0
Max Q Clear Time (g_c+I1), s	16.8	45.9		20.5	2.0	44.3		4.1
Green Ext Time (p_c), s	0.3	3.5		0.3	0.0	2.9		0.1

Intersection Summary	
HCM 6th Ctrl Delay	39.6
HCM 6th LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	205	30	120	132	558	33	834	167	648	524	40
Future Volume (veh/h)	67	205	30	120	132	558	33	834	167	648	524	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		0.99	1.00		0.97	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	1736	1736	1736	1809	1809	1809	1736	1736	1736	1736	1736	1736
Adj Flow Rate, veh/h	70	214	31	125	470	360	34	869	174	675	546	42
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	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	88	356	52	189	495	451	49	1026	444	637	792	622
Arrive On Green	0.05	0.24	0.24	0.11	0.27	0.30	0.03	0.31	0.31	0.20	0.46	0.43
Sat Flow, veh/h	1654	1479	214	1723	1809	1517	1654	3299	1426	3208	1736	1450
Grp Volume(v), veh/h	70	0	245	125	470	360	34	869	174	675	546	42
Grp Sat Flow(s),veh/h/ln	1654	0	1694	1723	1809	1517	1654	1650	1426	1604	1736	1450
Q Serve(g_s), s	4.6	0.0	14.0	7.6	27.8	23.8	2.2	26.8	10.4	21.6	27.1	1.9
Cycle Q Clear(g_c), s	4.6	0.0	14.0	7.6	27.8	23.8	2.2	26.8	10.4	21.6	27.1	1.9
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	88	0	408	189	495	451	49	1026	444	637	792	622
V/C Ratio(X)	0.80	0.00	0.60	0.66	0.95	0.80	0.70	0.85	0.39	1.06	0.69	0.07
Avail Cap(c_a), veh/h	187	0	498	201	495	452	76	1167	505	637	838	660
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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	0.0	36.7	46.5	38.8	35.2	52.3	35.1	29.4	43.6	23.5	18.3
Incr Delay (d2), s/veh	6.0	0.0	0.5	5.4	27.9	9.0	6.5	4.8	0.2	52.6	1.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.6	0.0	9.7	6.3	22.3	14.8	1.8	16.6	6.4	19.6	16.5	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	56.9	0.0	37.2	51.9	66.7	44.2	58.8	39.8	29.6	96.2	25.3	18.3
LnGrp LOS	E	A	D	D	E	D	E	D	C	F	C	B
Approach Vol, veh/h		315			955			1077			1263	
Approach Delay, s/veh		41.6			56.3			38.8			63.0	
Approach LOS		D			E			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	36.9	11.5	35.5	9.2	52.6	15.1	31.9
Change Period (Y+Rc), s	6.0	6.0	5.7	5.7	6.0	6.0	5.7	5.7
Max Green Setting (Gmax), s	9.0	35.5	12.3	29.8	5.0	49.5	10.1	32.0
Max Q Clear Time (g_c+I1), s	23.6	28.8	6.6	29.8	4.2	29.1	9.6	16.0
Green Ext Time (p_c), s	0.0	1.9	0.0	0.0	0.0	1.3	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	52.1
HCM 6th LOS	D

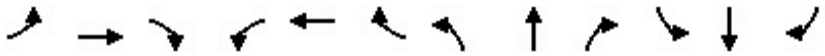
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	16	32	143	9	36	36	1057	349	50	935	7
Future Volume (veh/h)	14	16	32	143	9	36	36	1057	349	50	935	7
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	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	1750	1750	1750	1723	1723	1723	1736	1736	1736	1809	1809	1809
Adj Flow Rate, veh/h	15	17	35	155	10	39	39	1149	379	54	1016	8
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	0	2	2	2	1	1	1	1	1	1
Cap, veh/h	71	77	120	268	46	179	356	1232	1021	190	1119	9
Arrive On Green	0.15	0.15	0.14	0.15	0.15	0.14	0.15	0.71	0.71	0.06	0.62	0.61
Sat Flow, veh/h	216	517	802	1341	306	1193	1654	1736	1439	1723	1792	14
Grp Volume(v), veh/h	67	0	0	155	0	49	39	1149	379	54	0	1024
Grp Sat Flow(s),veh/h/ln	1536	0	0	1341	0	1499	1654	1736	1439	1723	0	1806
Q Serve(g_s), s	0.0	0.0	0.0	8.0	0.0	3.3	0.0	65.0	11.9	0.0	0.0	56.3
Cycle Q Clear(g_c), s	4.3	0.0	0.0	12.3	0.0	3.3	0.0	65.0	11.9	0.0	0.0	56.3
Prop In Lane	0.22		0.52	1.00		0.80	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	268	0	0	268	0	224	356	1232	1021	190	0	1128
V/C Ratio(X)	0.25	0.00	0.00	0.58	0.00	0.22	0.11	0.93	0.37	0.28	0.00	0.91
Avail Cap(c_a), veh/h	346	0	0	337	0	301	356	1366	1132	204	0	1420
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.4	0.0	0.0	46.5	0.0	43.1	35.9	14.3	6.5	49.1	0.0	18.6
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.7	0.0	0.2	0.0	11.1	0.2	0.3	0.0	8.1
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(95%),veh/ln	3.1	0.0	0.0	7.7	0.0	2.3	1.6	32.8	5.8	2.6	0.0	31.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.9	0.0	0.0	47.2	0.0	43.3	35.9	25.4	6.8	49.4	0.0	26.7
LnGrp LOS	D	A	A	D	A	D	D	C	A	D	A	C
Approach Vol, veh/h		67			204			1567			1078	
Approach Delay, s/veh		43.9			46.3			21.1			27.9	
Approach LOS		D			D			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.1	84.2		20.1	19.8	74.5		20.1
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.0	87.0		21.0	5.0	87.0		21.0
Max Q Clear Time (g_c+I1), s	2.0	67.0		14.3	2.0	58.3		6.3
Green Ext Time (p_c), s	0.0	11.2		0.3	0.0	10.2		0.2

Intersection Summary	
HCM 6th Ctrl Delay	25.9
HCM 6th LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	215	0	88	0	1	0	110	745	0	0	472	155
Future Volume (veh/h)	215	0	88	0	1	0	110	745	0	0	472	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1750	1750	1750	1967	1967	1967	1750	1750	1750
Adj Flow Rate, veh/h	226	0	42	0	1	0	116	784	0	0	497	163
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	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	351	0	279	0	143	0	186	1204	0	2	592	194
Arrive On Green	0.07	0.00	0.21	0.00	0.08	0.00	0.10	0.61	0.00	0.00	0.47	0.47
Sat Flow, veh/h	1584	0	1409	0	1750	0	1874	1967	0	1667	1262	414
Grp Volume(v), veh/h	226	0	42	0	1	0	116	784	0	0	0	660
Grp Sat Flow(s),veh/h/ln	1584	0	1409	0	1750	0	1874	1967	0	1667	0	1676
Q Serve(g_s), s	5.0	0.0	1.7	0.0	0.0	0.0	4.1	17.6	0.0	0.0	0.0	23.6
Cycle Q Clear(g_c), s	5.0	0.0	1.7	0.0	0.0	0.0	4.1	17.6	0.0	0.0	0.0	23.6
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.00	1.00		0.25
Lane Grp Cap(c), veh/h	351	0	279	0	143	0	186	1204	0	2	0	786
V/C Ratio(X)	0.64	0.00	0.15	0.00	0.01	0.00	0.62	0.65	0.00	0.00	0.00	0.84
Avail Cap(c_a), veh/h	351	0	514	0	664	0	574	2296	0	122	0	1687
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	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	26.8	0.0	22.3	0.0	28.9	0.0	29.7	8.6	0.0	0.0	0.0	15.9
Incr Delay (d2), s/veh	4.0	0.0	0.1	0.0	0.0	0.0	4.8	0.9	0.0	0.0	0.0	3.5
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(95%),veh/ln	6.8	0.0	0.9	0.0	0.0	0.0	3.6	9.8	0.0	0.0	0.0	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	30.7	0.0	22.4	0.0	29.0	0.0	34.5	9.4	0.0	0.0	0.0	19.4
LnGrp LOS	C	A	C	A	C	A	C	A	A	A	A	B
Approach Vol, veh/h		268			1			900			660	
Approach Delay, s/veh		29.4			29.0			12.7			19.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	48.0		20.6	9.8	38.2	8.0	12.6
Change Period (Y+Rc), s	7.0	7.0		7.0	4.0	* 7	4.0	* 7
Max Green Setting (Gmax), s	5.0	79.0		25.0	20.0	* 68	4.0	* 26
Max Q Clear Time (g_c+I1), s	10.0	19.6		3.7	6.1	25.6	7.0	2.0
Green Ext Time (p_c), s	0.0	7.1		0.1	0.4	5.5	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	17.6
HCM 6th LOS	B

Notes

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

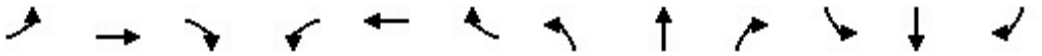
Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	68	20	735	99	41	820
Future Vol, veh/h	68	20	735	99	41	820
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	75	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	2	2	1	1
Mvmt Flow	71	21	766	103	43	854

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1759	818	0	0	869	0
Stage 1	818	-	-	-	-	-
Stage 2	941	-	-	-	-	-
Critical Hdwy	6.6	6.3	-	-	4.11	-
Critical Hdwy Stg 1	5.6	-	-	-	-	-
Critical Hdwy Stg 2	5.6	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.209	-
Pot Cap-1 Maneuver	85	371	-	-	780	-
Stage 1	418	-	-	-	-	-
Stage 2	363	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	80	371	-	-	780	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	418	-	-	-	-	-
Stage 2	343	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.9	0	0.5
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	281	780	-
HCM Lane V/C Ratio	-	-	0.326	0.055	-
HCM Control Delay (s)	-	-	23.9	9.9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q(veh)	-	-	1.4	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	5	35	78	5	43	35	514	100	136	697	4
Future Volume (veh/h)	18	5	35	78	5	43	35	514	100	136	697	4
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	0.99		0.99	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	1750	1750	1750	1750	1750	1750	1723	1723	1723	1736	1736	1736
Adj Flow Rate, veh/h	19	5	37	82	5	45	37	541	105	143	734	4
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	0	0	0	0	0	2	2	2	1	1	1
Cap, veh/h	176	35	149	285	9	79	433	669	130	522	886	5
Arrive On Green	0.16	0.16	0.13	0.16	0.16	0.13	0.11	0.48	0.44	0.15	0.51	0.48
Sat Flow, veh/h	395	220	948	919	56	504	1641	1396	271	1654	1725	9
Grp Volume(v), veh/h	61	0	0	132	0	0	37	0	646	143	0	738
Grp Sat Flow(s),veh/h/ln	1563	0	0	1480	0	0	1641	0	1667	1654	0	1735
Q Serve(g_s), s	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	13.7	0.0	0.0	14.9
Cycle Q Clear(g_c), s	1.4	0.0	0.0	3.3	0.0	0.0	0.0	0.0	13.7	0.0	0.0	14.9
Prop In Lane	0.31		0.61	0.62		0.34	1.00		0.16	1.00		0.01
Lane Grp Cap(c), veh/h	359	0	0	373	0	0	433	0	799	522	0	891
V/C Ratio(X)	0.17	0.00	0.00	0.35	0.00	0.00	0.09	0.00	0.81	0.27	0.00	0.83
Avail Cap(c_a), veh/h	1259	0	0	1251	0	0	1520	0	2299	1561	0	2393
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	0.00	1.00	0.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.6	0.0	0.0	16.2	0.0	0.0	13.4	0.0	9.3	13.0	0.0	8.5
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.8	0.1	0.0	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.8	0.0	0.0	1.8	0.0	0.0	0.4	0.0	5.4	1.6	0.0	5.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.6	0.0	0.0	16.4	0.0	0.0	13.4	0.0	10.0	13.1	0.0	9.3
LnGrp LOS	B	A	A	B	A	A	B	A	B	B	A	A
Approach Vol, veh/h		61			132			683			881	
Approach Delay, s/veh		15.6			16.4			10.2			9.9	
Approach LOS		B			B			B			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	22.8		9.5	7.6	24.2		9.5				
Change Period (Y+Rc), s	5.0	5.6		5.0	5.0	5.6		5.0				
Max Green Setting (Gmax), s	30.0	54.4		30.0	30.0	54.4		30.0				
Max Q Clear Time (g_c+I1), s	2.0	15.7		5.3	2.0	16.9		3.4				
Green Ext Time (p_c), s	0.3	1.5		0.3	0.0	1.7		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		10.7	
HCM 6th LOS		B	

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	33	23	799	662	26
Future Volume (veh/h)	21	33	23	799	662	26
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	1695	1695	1736	1736	1736	1736
Adj Flow Rate, veh/h	23	35	25	859	712	28
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	1	1	1	1
Cap, veh/h	213	189	399	1142	876	34
Arrive On Green	0.13	0.13	0.05	0.66	0.53	0.53
Sat Flow, veh/h	1615	1437	1654	1736	1659	65
Grp Volume(v), veh/h	23	35	25	859	0	740
Grp Sat Flow(s),veh/h/ln	1615	1437	1654	1736	0	1725
Q Serve(g_s), s	0.5	0.8	0.2	12.7	0.0	13.5
Cycle Q Clear(g_c), s	0.5	0.8	0.2	12.7	0.0	13.5
Prop In Lane	1.00	1.00	1.00			0.04
Lane Grp Cap(c), veh/h	213	189	399	1142	0	910
V/C Ratio(X)	0.11	0.18	0.06	0.75	0.00	0.81
Avail Cap(c_a), veh/h	765	681	533	2241	0	1862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.5	14.7	5.9	4.4	0.0	7.4
Incr Delay (d2), s/veh	0.2	0.5	0.1	1.0	0.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.3	0.4	0.1	2.1	0.0	5.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	15.1	6.0	5.4	0.0	9.2
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	58			884	740	
Approach Delay, s/veh	15.0			5.4	9.2	
Approach LOS	B			A	A	

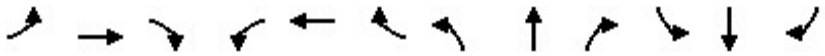
Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	9.0	4.9	24.0		29.0
Change Period (Y+Rc), s	5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	4.0	40.0		48.0
Max Q Clear Time (g_c+I1), s	2.8	2.2	15.5		14.7
Green Ext Time (p_c), s	0.1	0.0	3.6		4.7

Intersection Summary	
HCM 6th Ctrl Delay	7.4
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	2	44	102	2	18	72	816	71	34	932	46
Future Volume (veh/h)	25	2	44	102	2	18	72	816	71	34	932	46
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.99		0.97	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	1750	1750	1750	1750	1723	1723	1723	1736	1736	1736
Adj Flow Rate, veh/h	26	2	46	106	2	19	75	850	74	35	971	48
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Cap, veh/h	144	32	122	353	5	234	333	1219	106	455	1394	69
Arrive On Green	0.14	0.14	0.14	0.16	0.14	0.16	0.07	0.40	0.40	0.12	0.44	0.42
Sat Flow, veh/h	296	228	860	1432	35	1437	1641	3037	264	1654	3194	158
Grp Volume(v), veh/h	74	0	0	108	0	19	75	458	466	35	501	518
Grp Sat Flow(s),veh/h/ln	1384	0	0	1467	0	1437	1641	1637	1665	1654	1650	1702
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.5	0.0	11.1	11.1	0.0	11.8	11.8
Cycle Q Clear(g_c), s	2.8	0.0	0.0	2.8	0.0	0.5	0.0	11.1	11.1	0.0	11.8	11.8
Prop In Lane	0.35		0.62	0.98		1.00	1.00		0.16	1.00		0.09
Lane Grp Cap(c), veh/h	298	0	0	388	0	234	333	657	668	455	720	743
V/C Ratio(X)	0.25	0.00	0.00	0.28	0.00	0.08	0.23	0.70	0.70	0.08	0.70	0.70
Avail Cap(c_a), veh/h	905	0	0	965	0	841	396	1472	1497	461	1483	1530
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	0.0	0.0	18.4	0.0	17.0	17.7	11.9	11.9	12.8	10.9	11.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.1	0.1	1.4	1.3	0.0	1.2	1.2
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(95%),veh/ln	1.2	0.0	0.0	1.7	0.0	0.3	1.2	6.0	6.1	0.4	6.1	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.6	0.0	0.0	18.7	0.0	17.1	17.8	13.3	13.2	12.8	12.1	12.1
LnGrp LOS	B	A	A	B	A	B	B	B	B	B	B	B
Approach Vol, veh/h		74			127			999			1054	
Approach Delay, s/veh		18.6			18.5			13.6			12.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.2	25.9		12.8	10.8	24.2		12.8
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	5.6	42.0		27.0	5.0	42.0		27.0
Max Q Clear Time (g_c+I1), s	2.0	13.8		4.8	2.0	13.1		4.8
Green Ext Time (p_c), s	0.0	4.7		0.6	0.0	4.2		0.2

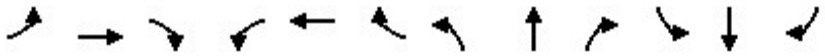
Intersection Summary		
HCM 6th Ctrl Delay	13.4	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	835	57	6	538	11	20	0	12	14	3	7
Future Volume (veh/h)	16	835	57	6	538	11	20	0	12	14	3	7
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		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1954	1954	1954	1527	1527	1527	1781	1781	1781	1641	1641	1641
Adj Flow Rate, veh/h	17	870	59	6	560	11	21	0	12	15	3	7
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	1	1	2	2	2	3	3	3	8	8	8
Cap, veh/h	631	1138	77	395	941	18	295	0	55	279	17	40
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.10	0.00	0.10	0.10	0.10	0.10
Sat Flow, veh/h	953	1806	122	534	1493	29	959	0	548	849	170	396
Grp Volume(v), veh/h	17	0	929	6	0	571	33	0	0	25	0	0
Grp Sat Flow(s),veh/h/ln	953	0	1928	534	0	1522	1507	0	0	1416	0	0
Q Serve(g_s), s	0.3	0.0	10.2	0.2	0.0	6.6	0.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	6.9	0.0	10.2	10.5	0.0	6.6	0.5	0.0	0.0	0.4	0.0	0.0
Prop In Lane	1.00		0.06	1.00		0.02	0.64		0.36	0.60		0.28
Lane Grp Cap(c), veh/h	631	0	1215	395	0	959	350	0	0	336	0	0
V/C Ratio(X)	0.03	0.00	0.76	0.02	0.00	0.60	0.09	0.00	0.00	0.07	0.00	0.00
Avail Cap(c_a), veh/h	1858	0	3696	1082	0	2917	1438	0	0	1356	0	0
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	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.3	0.0	3.9	7.7	0.0	3.3	12.3	0.0	0.0	12.2	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	1.0	0.0	0.0	0.6	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.6	0.0	0.0	0.3	0.3	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	5.3	0.0	5.0	7.7	0.0	3.8	12.4	0.0	0.0	12.3	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		946			577			33			25	
Approach Delay, s/veh		5.0			3.9			12.4			12.3	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	7.0	22.7	7.0	22.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	24.0	56.0	24.0	56.0
Max Q Clear Time (g_c+I1), s	2.5	12.2	2.4	12.5
Green Ext Time (p_c), s	0.1	5.5	0.0	2.6

Intersection Summary	
HCM 6th Ctrl Delay	4.8
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	0	5	71	0	32	9	1405	99	42	1062	4
Future Volume (veh/h)	7	0	5	71	0	32	9	1405	99	42	1062	4
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1967	1967	1967	1701	1701	1701	1731	1731	1731	1772	1772	1772
Adj Flow Rate, veh/h	8	0	5	76	0	0	10	1511	106	45	1142	4
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
Percent Heavy Veh, %	0	0	0	0	0	0	1	1	1	1	1	1
Cap, veh/h	269	0	144	231	0		450	2451	171	303	2705	9
Arrive On Green	0.09	0.00	0.09	0.09	0.00	0.00	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1619	0	1667	1349	0	1442	493	3119	218	322	3442	12
Grp Volume(v), veh/h	8	0	5	76	0	0	10	793	824	45	559	587
Grp Sat Flow(s),veh/h/ln	1619	0	1667	1349	0	1442	493	1644	1692	322	1684	1770
Q Serve(g_s), s	0.0	0.0	0.2	3.3	0.0	0.0	0.4	12.5	12.7	4.2	6.6	6.6
Cycle Q Clear(g_c), s	0.2	0.0	0.2	3.5	0.0	0.0	7.1	12.5	12.7	17.0	6.6	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		0.01
Lane Grp Cap(c), veh/h	269	0	144	231	0		450	1292	1329	303	1323	1391
V/C Ratio(X)	0.03	0.00	0.03	0.33	0.00		0.02	0.61	0.62	0.15	0.42	0.42
Avail Cap(c_a), veh/h	673	0	560	602	0		741	2262	2327	492	2316	2435
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	26.2	0.0	26.2	27.8	0.0	0.0	3.3	2.8	2.8	6.3	2.1	2.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.0	1.0	0.5	0.5	0.4
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(95%),veh/ln	0.2	0.0	0.1	2.0	0.0	0.0	0.1	2.3	2.4	0.5	1.2	1.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	26.2	0.0	26.2	28.1	0.0	0.0	3.3	3.8	3.8	6.8	2.6	2.6
LnGrp LOS	C	A	C	C	A		A	A	A	A	A	A
Approach Vol, veh/h		13			76	A		1627			1191	
Approach Delay, s/veh		26.2			28.1			3.8			2.8	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	53.1	9.4	53.1	9.4
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	85.0	20.0	85.0	21.0
Max Q Clear Time (g_c+I1), s	14.7	2.2	19.0	5.5
Green Ext Time (p_c), s	33.4	0.0	19.4	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.1
HCM 6th LOS	A

Notes

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

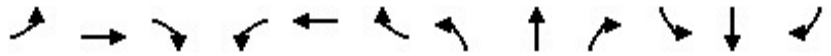
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	10	1	1297	6	3	1161
Future Volume (veh/h)	10	1	1297	6	3	1161
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.96		0.98	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1750	1750	1917	1917	1736	1736
Adj Flow Rate, veh/h	10	1	1351	6	3	1209
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	145	14	2140	10	119	2441
Arrive On Green	0.11	0.08	0.58	0.54	0.07	0.74
Sat Flow, veh/h	1365	136	3815	17	1654	3386
Grp Volume(v), veh/h	12	0	662	695	3	1209
Grp Sat Flow(s),veh/h/ln	1637	0	1821	1914	1654	1650
Q Serve(g_s), s	0.2	0.0	7.9	7.9	0.1	4.9
Cycle Q Clear(g_c), s	0.2	0.0	7.9	7.9	0.1	4.9
Prop In Lane	0.83	0.08		0.01	1.00	
Lane Grp Cap(c), veh/h	174	0	1048	1101	119	2441
V/C Ratio(X)	0.07	0.00	0.63	0.63	0.03	0.50
Avail Cap(c_a), veh/h	908	0	4824	5069	407	9856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	0.0	4.6	4.6	14.0	1.7
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	1.0	1.1	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.3	0.0	4.8	4.8	14.0	1.8
LnGrp LOS	B	A	A	A	B	A
Approach Vol, veh/h	12		1357			1212
Approach Delay, s/veh	13.3		4.8			1.8
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.3	21.7			27.0	5.4
Change Period (Y+Rc), s	5.2	5.2			5.2	4.0
Max Green Setting (Gmax), s	5.8	83.8			94.8	16.0
Max Q Clear Time (g_c+I1), s	2.1	9.9			6.9	2.2
Green Ext Time (p_c), s	0.0	6.6			6.7	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	373	506	27	2	318	43	14	1	4	38	2	256
Future Volume (veh/h)	373	506	27	2	318	43	14	1	4	38	2	256
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Adj Flow Rate, veh/h	385	522	28	2	328	44	14	1	4	39	2	264
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	593	771	41	334	419	56	223	70	278	508	3	335
Arrive On Green	0.22	0.47	0.45	0.00	0.28	0.28	0.23	0.23	0.23	0.25	0.23	0.25
Sat Flow, veh/h	1667	1646	88	1667	1511	203	1131	306	1224	1434	11	1474
Grp Volume(v), veh/h	385	0	550	2	0	372	14	0	5	39	0	266
Grp Sat Flow(s),veh/h/ln	1667	0	1734	1667	0	1714	1131	0	1530	1434	0	1485
Q Serve(g_s), s	6.5	0.0	11.5	0.0	0.0	9.3	0.5	0.0	0.1	1.0	0.0	7.8
Cycle Q Clear(g_c), s	6.5	0.0	11.5	0.0	0.0	9.3	8.3	0.0	0.1	1.1	0.0	7.8
Prop In Lane	1.00		0.05	1.00		0.12	1.00		0.80	1.00		0.99
Lane Grp Cap(c), veh/h	593	0	813	334	0	475	223	0	348	508	0	337
V/C Ratio(X)	0.65	0.00	0.68	0.01	0.00	0.78	0.06	0.00	0.01	0.08	0.00	0.79
Avail Cap(c_a), veh/h	915	0	1343	509	0	848	452	0	658	799	0	639
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	8.5	0.0	9.6	12.9	0.0	15.5	20.8	0.0	13.9	13.6	0.0	16.4
Incr Delay (d2), s/veh	0.4	0.0	0.4	0.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	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(95%),veh/ln	2.3	0.0	4.9	0.0	0.0	5.2	0.2	0.0	0.1	0.5	0.0	4.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	9.0	0.0	10.0	12.9	0.0	16.6	20.8	0.0	13.9	13.6	0.0	18.0
LnGrp LOS	A	A	A	B	A	B	C	A	B	B	A	B
Approach Vol, veh/h		935			374			19			305	
Approach Delay, s/veh		9.6			16.6			19.0			17.4	
Approach LOS		A			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	25.8		15.6	14.0	16.9		15.6				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	5.6	35.0		20.0	18.0	22.0		20.0				
Max Q Clear Time (g_c+I1), s	2.0	13.5		10.3	8.5	11.3		9.8				
Green Ext Time (p_c), s	0.0	1.1		0.0	0.6	0.6		0.9				

Intersection Summary		
HCM 6th Ctrl Delay		12.8
HCM 6th LOS		B

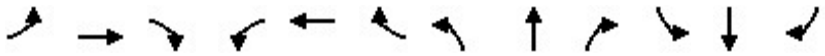
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	0	6	121	1	24	13	1426	124	12	1308	11
Future Volume (veh/h)	13	0	6	121	1	24	13	1426	124	12	1308	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1736	1736	1736	1709	1709	1709	1736	1736	1736	1736	1736	1736
Adj Flow Rate, veh/h	14	0	6	126	1	0	14	1485	0	12	1362	0
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	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	439	0	279	406	2		392	1809		324	1699	
Arrive On Green	0.19	0.00	0.15	0.19	0.19	0.00	0.11	0.55	0.00	0.07	0.52	0.00
Sat Flow, veh/h	1415	0	1451	1350	11	1448	1654	3386	0	1654	3386	0
Grp Volume(v), veh/h	14	0	6	127	0	0	14	1485	0	12	1362	0
Grp Sat Flow(s),veh/h/ln	1415	0	1451	1360	0	1448	1654	1650	0	1654	1650	0
Q Serve(g_s), s	0.0	0.0	0.2	4.0	0.0	0.0	0.0	18.0	0.0	0.0	16.6	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.2	4.2	0.0	0.0	0.0	18.0	0.0	0.0	16.6	0.0
Prop In Lane	1.00		1.00	0.99		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	439	0	279	409	0		392	1809		324	1699	
V/C Ratio(X)	0.03	0.00	0.02	0.31	0.00		0.04	0.82		0.04	0.80	
Avail Cap(c_a), veh/h	1009	0	863	967	0		484	2302		471	2302	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.0	0.0	16.8	17.7	0.0	0.0	13.5	9.0	0.0	15.3	9.8	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	1.6	0.0	0.0	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	0.1	2.2	0.0	0.0	0.2	7.5	0.0	0.2	7.2	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.1	0.0	16.8	18.1	0.0	0.0	13.5	10.6	0.0	15.3	10.8	0.0
LnGrp LOS	B	A	B	B	A		B	B		B	B	
Approach Vol, veh/h		20			127	A		1499	A		1374	A
Approach Delay, s/veh		16.3			18.1			10.6			10.9	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	29.7		12.4	8.3	28.1		12.4
Change Period (Y+Rc), s	5.9	5.9		6.0	5.9	5.9		6.0
Max Green Setting (Gmax), s	5.1	31.1		26.0	5.1	31.1		26.0
Max Q Clear Time (g_c+I1), s	2.0	20.0		6.2	2.0	18.6		2.3
Green Ext Time (p_c), s	0.0	3.8		0.4	0.0	3.6		0.0

Intersection Summary	
HCM 6th Ctrl Delay	11.1
HCM 6th LOS	B

Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1578	747	196	1158	163	403	259	46	227	323	91
Future Volume (veh/h)	110	1578	747	196	1158	163	403	259	46	227	323	91
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	1736	1736	1709	1709	1709	1809	1809	1809	1736	1736	1736
Adj Flow Rate, veh/h	133	1913	905	208	1228	173	427	275	0	275	392	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	168	1492	836	254	2058	290	462	242		222	233	
Arrive On Green	0.10	0.45	0.45	0.16	0.50	0.49	0.13	0.13	0.00	0.13	0.13	0.00
Sat Flow, veh/h	1654	3299	1435	1628	4118	580	3445	1809	0	1654	1736	1471
Grp Volume(v), veh/h	133	1913	905	208	927	474	427	275	0	275	392	0
Grp Sat Flow(s),veh/h/ln	1654	1650	1435	1628	1555	1588	1723	1809	0	1654	1736	1471
Q Serve(g_s), s	11.7	67.5	66.5	18.5	31.7	31.8	18.3	20.0	0.0	20.0	20.0	0.0
Cycle Q Clear(g_c), s	11.7	67.5	66.5	18.5	31.7	31.8	18.3	20.0	0.0	20.0	20.0	0.0
Prop In Lane	1.00		1.00	1.00		0.37	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	168	1492	836	254	1554	794	462	242		222	233	
V/C Ratio(X)	0.79	1.28	1.08	0.82	0.60	0.60	0.93	1.13		1.24	1.68	
Avail Cap(c_a), veh/h	631	1492	836	589	1554	794	462	242		222	233	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	65.5	40.9	27.2	61.0	26.6	26.8	63.9	64.6	0.0	64.6	64.6	0.0
Incr Delay (d2), s/veh	8.1	132.3	55.7	6.5	0.8	1.6	25.7	99.0	0.0	140.7	326.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.1	78.3	59.5	12.7	17.5	18.1	14.7	23.6	0.0	26.0	46.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	73.6	173.2	82.9	67.4	27.5	28.4	89.6	163.6	0.0	205.4	390.8	0.0
LnGrp LOS	E	F	F	E	C	C	F	F		F	F	
Approach Vol, veh/h		2951			1609			702	A		667	A
Approach Delay, s/veh		141.0			32.9			118.6			314.4	
Approach LOS		F			C			F			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	26.3	73.0		25.0	19.2	80.1		25.0
Change Period (Y+Rc), s	5.0	7.5		6.0	5.0	* 7.5		6.0
Max Green Setting (Gmax), s	52.6	65.5		19.0	56.0	* 62		19.0
Max Q Clear Time (g_c+I1), s	20.5	69.5		22.0	13.7	33.8		22.0
Green Ext Time (p_c), s	0.8	0.0		0.0	0.5	13.8		0.0

Intersection Summary	
HCM 6th Ctrl Delay	128.5
HCM 6th LOS	F

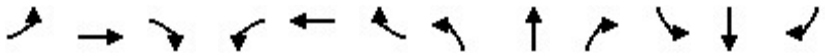
Notes

User approved volume balancing among the lanes for turning movement.

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

User approved changes to right turn type.

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1022	1064	37	525	0	537	0	99	1	0	2
Future Volume (veh/h)	0	1022	1064	37	525	0	537	0	99	1	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1736	1736	1736	1723	1723	1723	1795	1795	1795	1750	1750	1750
Adj Flow Rate, veh/h	0	1196	1245	39	559	0	628	0	116	1	0	2
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, %	1	1	1	2	2	2	2	2	2	0	0	0
Cap, veh/h	57	1039	1177	62	2212	0	798	0	355	6	0	11
Arrive On Green	0.00	0.60	0.58	0.04	0.68	0.00	0.23	0.00	0.23	0.01	0.00	0.01
Sat Flow, veh/h	857	1736	1471	1641	3359	0	3419	0	1521	513	0	1026
Grp Volume(v), veh/h	0	1196	1245	39	559	0	628	0	116	3	0	0
Grp Sat Flow(s),veh/h/ln	857	1736	1471	1641	1637	0	1709	0	1521	1540	0	0
Q Serve(g_s), s	0.0	75.0	73.0	2.9	8.4	0.0	21.6	0.0	7.9	0.2	0.0	0.0
Cycle Q Clear(g_c), s	0.0	75.0	73.0	2.9	8.4	0.0	21.6	0.0	7.9	0.2	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.33		0.67
Lane Grp Cap(c), veh/h	57	1039	1177	62	2212	0	798	0	355	17	0	0
V/C Ratio(X)	0.00	1.15	1.06	0.63	0.25	0.00	0.79	0.00	0.33	0.17	0.00	0.00
Avail Cap(c_a), veh/h	57	1039	1177	79	2245	0	1009	0	449	209	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	25.2	9.8	59.5	7.9	0.0	45.1	0.0	39.9	61.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	79.4	43.0	10.2	0.1	0.0	3.3	0.0	0.5	4.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	70.4	66.3	2.5	5.0	0.0	14.4	0.0	5.4	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	104.6	52.9	69.7	8.0	0.0	48.4	0.0	40.4	66.2	0.0	0.0
LnGrp LOS	A	F	F	E	A	A	D	A	D	E	A	A
Approach Vol, veh/h		2441			598			744			3	
Approach Delay, s/veh		78.2			12.0			47.2			66.2	
Approach LOS		E			B			D			E	

Timer - Assigned Phs	2		4	5	6		8					
Phs Duration (G+Y+Rc), s	88.7		32.3	9.7	79.0		4.4					
Change Period (Y+Rc), s	7.0		6.0	6.0	7.0		4.0					
Max Green Setting (Gmax), s	83.0		34.0	5.0	72.0		16.0					
Max Q Clear Time (g_c+I1), s	10.4		23.6	4.9	77.0		2.2					
Green Ext Time (p_c), s	2.7		2.6	0.0	0.0		0.0					

Intersection Summary												
HCM 6th Ctrl Delay		61.6										
HCM 6th LOS		E										

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	906	164	99	448	188	231
Future Volume (veh/h)	906	164	99	448	188	231
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	1731	1731	1709	1709	1701	1701
Adj Flow Rate, veh/h	1108	201	105	477	220	270
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	3	3	2	2
Cap, veh/h	1135	962	91	1287	304	261
Arrive On Green	0.66	0.66	0.06	0.75	0.19	0.18
Sat Flow, veh/h	1731	1467	1628	1709	1620	1442
Grp Volume(v), veh/h	1108	201	105	477	220	270
Grp Sat Flow(s),veh/h/ln	1731	1467	1628	1709	1620	1442
Q Serve(g_s), s	88.0	7.9	8.0	13.7	18.4	26.0
Cycle Q Clear(g_c), s	88.0	7.9	8.0	13.7	18.4	26.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1135	962	91	1287	304	261
V/C Ratio(X)	0.98	0.21	1.16	0.37	0.72	1.04
Avail Cap(c_a), veh/h	1150	974	91	1302	304	261
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	9.9	67.9	6.1	54.9	58.9
Incr Delay (d2), s/veh	20.8	0.1	143.8	0.2	8.2	65.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	49.6	4.5	11.7	8.0	12.8	20.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	44.5	10.0	211.7	6.3	63.1	124.2
LnGrp LOS	D	A	F	A	E	F
Approach Vol, veh/h	1309			582	490	
Approach Delay, s/veh	39.2			43.3	96.8	
Approach LOS	D			D	F	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	44.0	99.3			113.3	30.5
Change Period (Y+Rc), s	7.0	7.0			7.0	5.5
Max Green Setting (Gmax), s	37.0	93.5			107.5	25.0
Max Q Clear Time (g_c+I1), s	10.0	90.0			15.7	28.0
Green Ext Time (p_c), s	0.0	2.2			2.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.1
HCM 6th LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	491	268	139	245	368	218
Future Volume (veh/h)	491	268	139	245	368	218
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	0.98
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	1717	1717	1759	1759	1701	1701
Adj Flow Rate, veh/h	534	291	151	266	400	237
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	732	621	220	750	432	256
Arrive On Green	0.43	0.43	0.43	0.43	0.46	0.46
Sat Flow, veh/h	1717	1455	678	1759	948	561
Grp Volume(v), veh/h	534	291	151	266	638	0
Grp Sat Flow(s),veh/h/ln	1717	1455	678	1759	1511	0
Q Serve(g_s), s	17.6	9.7	11.4	7.0	27.0	0.0
Cycle Q Clear(g_c), s	17.6	9.7	29.0	7.0	27.0	0.0
Prop In Lane		1.00	1.00		0.63	0.37
Lane Grp Cap(c), veh/h	732	621	220	750	689	0
V/C Ratio(X)	0.73	0.47	0.69	0.35	0.93	0.00
Avail Cap(c_a), veh/h	732	621	220	750	733	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	16.2	14.0	29.7	13.2	17.4	0.0
Incr Delay (d2), s/veh	3.7	0.6	8.7	0.3	17.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	11.0	5.2	5.2	4.5	16.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	19.9	14.5	38.4	13.5	34.6	0.0
LnGrp LOS	B	B	D	B	C	A
Approach Vol, veh/h	825			417	638	
Approach Delay, s/veh	18.0			22.5	34.6	
Approach LOS	B			C	C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	35.0	33.0	33.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	32.0	28.0	28.0
Max Q Clear Time (g_c+I1), s	29.0	19.6	31.0
Green Ext Time (p_c), s	1.0	2.5	0.0

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

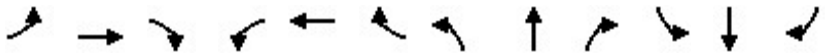
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	2086	73	11	1114	54	13
Future Volume (veh/h)	2086	73	11	1114	54	13
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	1809	1809	1687	1687	1895	1895
Adj Flow Rate, veh/h	2219	47	12	1185	57	8
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	3	3	0	0
Cap, veh/h	2695	1202	39	2750	123	109
Arrive On Green	0.78	0.78	0.02	0.86	0.07	0.07
Sat Flow, veh/h	3527	1533	1607	3290	1805	1606
Grp Volume(v), veh/h	2219	47	12	1185	57	8
Grp Sat Flow(s),veh/h/ln	1718	1533	1607	1603	1805	1606
Q Serve(g_s), s	31.8	0.6	0.6	6.7	2.5	0.4
Cycle Q Clear(g_c), s	31.8	0.6	0.6	6.7	2.5	0.4
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2695	1202	39	2750	123	109
V/C Ratio(X)	0.82	0.04	0.31	0.43	0.46	0.07
Avail Cap(c_a), veh/h	4968	2216	99	4991	401	357
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	5.3	1.9	38.8	1.3	36.3	35.3
Incr Delay (d2), s/veh	0.7	0.0	4.5	0.1	2.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.6	0.2	0.5	0.3	2.1	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.0	2.0	43.3	1.4	39.0	35.6
LnGrp LOS	A	A	D	A	D	D
Approach Vol, veh/h	2266			1197	65	
Approach Delay, s/veh	5.9			1.8	38.6	
Approach LOS	A			A	D	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	8.5	5.9	66.5		72.4
Change Period (Y+Rc), s	5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	16.0	4.0	115.0		124.0
Max Q Clear Time (g_c+I1), s	4.5	2.6	33.8		8.7
Green Ext Time (p_c), s	0.1	0.0	27.7		7.4

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	673	688	16	504	468	45	21	1025	729	27	713	341
Future Volume (veh/h)	673	688	16	504	468	45	21	1025	729	27	713	341
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		0.99	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	1750	1750	1750	1772	1772	1772	1845	1845	1845	1688	1688	1688
Adj Flow Rate, veh/h	724	740	17	542	503	48	23	1102	0	29	767	0
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
Percent Heavy Veh, %	0	0	0	1	1	1	1	1	1	1	1	1
Cap, veh/h	891	891	20	712	652	62	60	1243		60	1147	
Arrive On Green	0.28	0.27	0.26	0.22	0.21	0.20	0.03	0.35	0.00	0.04	0.36	0.00
Sat Flow, veh/h	3233	3321	76	3275	3104	295	1757	3505	1563	1607	3291	0
Grp Volume(v), veh/h	724	370	387	542	272	279	23	1102	0	29	767	0
Grp Sat Flow(s),veh/h/ln	1617	1663	1734	1637	1684	1716	1757	1753	1563	1607	1603	0
Q Serve(g_s), s	20.5	20.6	20.6	15.2	15.0	15.1	1.3	29.1	0.0	1.7	19.8	0.0
Cycle Q Clear(g_c), s	20.5	20.6	20.6	15.2	15.0	15.1	1.3	29.1	0.0	1.7	19.8	0.0
Prop In Lane	1.00		0.04	1.00		0.17	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	891	446	465	712	354	360	60	1243		60	1147	
V/C Ratio(X)	0.81	0.83	0.83	0.76	0.77	0.77	0.38	0.89		0.48	0.67	
Avail Cap(c_a), veh/h	1238	567	592	1400	650	662	98	1321		90	1208	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.2	33.8	33.8	36.1	36.5	36.6	46.4	29.8	0.0	46.3	26.6	0.0
Incr Delay (d2), s/veh	3.0	8.1	7.8	1.7	3.5	3.6	3.9	7.3	0.0	5.8	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	12.8	14.0	14.4	10.1	10.5	10.7	1.1	18.8	0.0	1.4	12.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.2	41.9	41.7	37.8	40.1	40.2	50.3	37.2	0.0	52.1	28.0	0.0
LnGrp LOS	D	D	D	D	D	D	D	D		D	C	
Approach Vol, veh/h		1481			1093			1125	A		796	A
Approach Delay, s/veh		39.0			39.0			37.4			28.8	
Approach LOS		D			D			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	34.3	29.4	6.4	38.1	30.1	23.6	6.7	37.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	32.0	4.0	35.5	36.1	36.4	4.0	35.5
Max Q Clear Time (g_c+I1), s	17.2	22.6	3.3	21.8	22.5	17.1	3.7	31.1
Green Ext Time (p_c), s	2.6	2.2	0.0	3.1	3.0	2.1	0.0	2.3

Intersection Summary	
HCM 6th Ctrl Delay	36.8
HCM 6th LOS	D

Notes

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

MOVEMENT SUMMARY

Site: 3 [3 - SE Issaquah Fall Clty Rd & Klahanie Dr SE]

2035 PM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Klahanie Dr SE												
3	L2	2	0.0	0.007	6.2	LOS A	0.0	0.7	0.64	0.50	0.64	32.8
8	T1	1	0.0	0.007	6.2	LOS A	0.0	0.7	0.64	0.50	0.64	32.8
18	R2	1	0.0	0.007	6.2	LOS A	0.0	0.7	0.64	0.50	0.64	32.1
Approach		4	0.0	0.007	6.2	LOS A	0.0	0.7	0.64	0.50	0.64	32.6
NorthEast: SE Issaquah Fall City Rd												
1	L2	1	1.0	0.371	8.9	LOS A	2.2	55.0	0.70	0.65	0.70	32.7
6	T1	561	1.0	0.371	8.6	LOS A	2.3	57.1	0.70	0.64	0.70	32.9
16	R2	71	1.0	0.371	8.2	LOS A	2.3	57.1	0.70	0.63	0.70	32.1
Approach		633	1.0	0.371	8.5	LOS A	2.3	57.1	0.70	0.64	0.70	32.8
NorthWest: Klahanie Dr SE												
7	L2	120	0.0	0.185	7.6	LOS A	0.7	18.3	0.55	0.52	0.55	31.1
4	T1	2	0.0	0.185	7.6	LOS A	0.7	18.3	0.55	0.52	0.55	31.1
14	R2	393	0.0	0.389	7.8	LOS A	2.0	49.0	0.59	0.54	0.59	32.2
Approach		514	0.0	0.389	7.7	LOS A	2.0	49.0	0.58	0.54	0.58	31.9
SouthWest: SE Issauqah Fall City Rd												
5	L2	641	0.0	0.568	9.4	LOS A	4.3	108.0	0.42	0.25	0.42	30.5
2	T1	799	0.0	0.568	9.2	LOS A	4.3	108.6	0.42	0.24	0.42	32.4
12	R2	2	0.0	0.568	9.2	LOS A	4.3	108.6	0.42	0.24	0.42	31.8
Approach		1442	0.0	0.568	9.3	LOS A	4.3	108.6	0.42	0.24	0.42	31.5
All Vehicles		2594	0.2	0.568	8.8	LOS A	4.3	108.6	0.52	0.40	0.52	31.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 6 [6 - Issaquah-Pine LK Rd and SE 32nd Way]

2035 PM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Issaquah-Pine Lk Rd NB												
3x	L2	1	1.0	0.955	20.1	LOS C	29.0	730.3	1.00	0.95	1.34	29.1
8x	T1	883	1.0	0.955	12.2	LOS B	29.0	730.3	1.00	0.95	1.34	26.5
18x	R2	268	1.0	0.955	12.7	LOS B	29.0	730.3	1.00	0.95	1.34	25.9
Approach		1152	1.0	0.955	12.4	LOS B	29.0	730.3	1.00	0.95	1.34	26.4
NorthEast: SE 32nd Way WB												
1x	L2	163	1.0	0.616	18.3	LOS B	6.3	159.6	1.00	1.13	1.28	25.8
6x	T1	1	1.0	0.616	15.2	LOS B	6.3	159.6	1.00	1.13	1.28	27.9
16x	R2	170	1.0	0.616	13.5	LOS B	6.3	159.6	1.00	1.13	1.28	24.9
Approach		334	1.0	0.616	15.8	LOS B	6.3	159.6	1.00	1.13	1.28	25.4
NorthWest: Issaquah-Pine Lk Rd SB												
7x	L2	184	1.0	0.981	20.2	LOS C	36.6	921.6	1.00	0.97	1.39	25.8
4x	T1	1017	1.0	0.981	14.9	LOS B	36.6	921.6	1.00	0.97	1.39	25.6
14x	R2	5	1.0	0.981	17.1	LOS B	36.6	921.6	1.00	0.97	1.39	27.3
Approach		1206	1.0	0.981	15.7	LOS B	36.6	921.6	1.00	0.97	1.39	25.6
SouthWest: Drive Way Access EB												
5x	L2	3	0.0	0.026	26.5	LOS C	0.2	5.2	1.00	0.76	1.00	28.6
2x	T1	1	0.0	0.026	20.9	LOS C	0.2	5.2	1.00	0.76	1.00	28.6
12x	R2	2	0.0	0.026	20.9	LOS C	0.2	5.2	1.00	0.76	1.00	27.9
Approach		6	0.0	0.026	23.7	LOS C	0.2	5.2	1.00	0.76	1.00	28.4
All Vehicles		2699	1.0	0.981	14.3	LOS B	36.6	921.6	1.00	0.98	1.36	25.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 9 [9 - SE Issaquah Fall City Rd & 247th Pl SE]

2035 PM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Pacific Crest Middle School Drwy												
3	L2	32	2.0	0.070	6.1	LOS A	0.2	6.3	0.60	0.59	0.60	32.6
8	T1	5	2.0	0.070	6.1	LOS A	0.2	6.3	0.60	0.59	0.60	32.6
18	R2	10	2.0	0.070	6.1	LOS A	0.2	6.3	0.60	0.59	0.60	31.7
Approach		47	2.0	0.070	6.1	LOS A	0.2	6.3	0.60	0.59	0.60	32.4
NorthEast: SE Issaquah Fall City Rd												
1	L2	12	2.0	0.363	6.2	LOS A	2.0	50.0	0.23	0.11	0.23	34.3
6	T1	895	2.0	0.363	6.1	LOS A	2.0	50.1	0.23	0.11	0.23	34.4
16	R2	47	2.0	0.363	6.0	LOS A	2.0	50.1	0.23	0.10	0.23	33.4
Approach		955	2.0	0.363	6.1	LOS A	2.0	50.1	0.23	0.11	0.23	34.3
NorthWest: 247th Pl SE												
7	L2	28	2.0	0.054	5.4	LOS A	0.2	4.8	0.53	0.48	0.53	32.9
4	T1	12	2.0	0.054	5.4	LOS A	0.2	4.8	0.53	0.48	0.53	32.9
14	R2	69	2.0	0.073	4.5	LOS A	0.3	6.8	0.52	0.45	0.52	33.9
Approach		109	2.0	0.073	4.8	LOS A	0.3	6.8	0.52	0.46	0.52	33.5
SouthWest: SE Issaquah Fall City Rd												
5	L2	34	2.0	0.473	7.2	LOS A	3.1	79.8	0.23	0.09	0.23	33.7
2	T1	1389	2.0	0.473	6.9	LOS A	3.2	80.6	0.22	0.09	0.22	34.0
12	R2	70	2.0	0.043	2.5	LOS A	0.2	4.3	0.08	0.02	0.08	35.0
Approach		1493	2.0	0.473	6.7	LOS A	3.2	80.6	0.21	0.09	0.21	34.0
All Vehicles		2604	2.0	0.473	6.4	LOS A	3.2	80.6	0.24	0.12	0.24	34.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 14 [14 - 216th Ave and NE Inglewood Hill Rd]

2035 PM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 216th Ave (NB)												
3	L2	123	2.0	0.261	12.1	LOS B	1.6	41.1	0.72	0.79	0.72	31.0
8	T1	58	2.0	0.261	6.9	LOS A	1.6	41.1	0.72	0.79	0.72	30.9
18	R2	33	2.0	0.261	7.1	LOS A	1.6	41.1	0.72	0.79	0.72	30.1
Approach		214	2.0	0.261	9.9	LOS A	1.6	41.1	0.72	0.79	0.72	30.8
East: NE Inglewood Hill Rd												
1	L2	28	1.0	0.380	10.0	LOS A	2.4	59.6	0.54	0.58	0.54	32.7
6	T1	197	1.0	0.380	4.8	LOS A	2.4	59.6	0.54	0.58	0.54	32.5
16	R2	198	1.0	0.380	4.9	LOS A	2.4	59.6	0.54	0.58	0.54	31.7
Approach		423	1.0	0.380	5.2	LOS A	2.4	59.6	0.54	0.58	0.54	32.1
North: 216th Ave (SB)												
7	L2	121	1.0	0.184	9.9	LOS A	1.0	24.2	0.48	0.64	0.48	31.7
4	T1	37	1.0	0.184	4.7	LOS A	1.0	24.2	0.48	0.64	0.48	31.6
14	R2	42	1.0	0.184	4.8	LOS A	1.0	24.2	0.48	0.64	0.48	30.9
Approach		200	1.0	0.184	7.9	LOS A	1.0	24.2	0.48	0.64	0.48	31.5
West: NE Inglewood Hill Rd												
5	L2	127	0.0	0.579	9.7	LOS A	4.6	115.7	0.54	0.55	0.54	32.4
2	T1	436	0.0	0.579	4.5	LOS A	4.6	115.7	0.54	0.55	0.54	32.3
12	R2	149	0.0	0.579	4.6	LOS A	4.6	115.7	0.54	0.55	0.54	31.5
Approach		713	0.0	0.579	5.5	LOS A	4.6	115.7	0.54	0.55	0.54	32.1
All Vehicles		1549	0.7	0.579	6.3	LOS A	4.6	115.7	0.55	0.60	0.55	31.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 26 [26 - NE 8th St and 244th Ave]

2035 PM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	92	0.0	0.254	6.7	LOS A	1.4	34.8	0.44	0.44	0.44	24.8
8	T1	195	0.0	0.254	2.3	LOS A	1.4	34.8	0.44	0.44	0.44	24.5
18	R2	5	0.0	0.254	2.9	LOS A	1.4	34.8	0.44	0.44	0.44	24.0
Approach		292	0.0	0.254	3.7	LOS A	1.4	34.8	0.44	0.44	0.44	24.6
East: NE 8th St (WB)												
1	L2	4	0.0	0.053	7.6	LOS A	0.3	6.6	0.53	0.50	0.53	24.9
6	T1	21	0.0	0.053	3.2	LOS A	0.3	6.6	0.53	0.50	0.53	24.6
16	R2	27	0.0	0.053	3.8	LOS A	0.3	6.6	0.53	0.50	0.53	24.1
Approach		52	0.0	0.053	3.8	LOS A	0.3	6.6	0.53	0.50	0.53	24.3
North: 244th Ave (SB)												
7	L2	10	0.0	0.319	6.1	LOS A	1.9	46.6	0.31	0.33	0.31	25.2
4	T1	134	0.0	0.319	1.7	LOS A	1.9	46.6	0.31	0.33	0.31	24.9
14	R2	264	0.0	0.319	2.2	LOS A	1.9	46.6	0.31	0.33	0.31	24.4
Approach		408	0.0	0.319	2.1	LOS A	1.9	46.6	0.31	0.33	0.31	24.6
West: NE 8th St (EB)												
5	L2	234	0.0	0.381	9.0	LOS A	2.3	58.6	0.37	0.58	0.37	32.0
2	T1	23	0.0	0.381	4.2	LOS A	2.3	58.6	0.37	0.58	0.37	31.9
12	R2	219	0.0	0.381	4.3	LOS A	2.3	58.6	0.37	0.58	0.37	31.2
Approach		477	0.0	0.381	6.6	LOS A	2.3	58.6	0.37	0.58	0.37	31.6
All Vehicles		1229	0.0	0.381	4.3	LOS A	2.3	58.6	0.38	0.46	0.38	26.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 32 [32 - Issaquah Beaver Lake Rd & 256th Ave SE]

2035 PM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 256th Ave SE												
3	L2	116	0.0	0.197	5.0	LOS A	1.0	26.0	0.47	0.34	0.47	33.9
8	T1	47	0.0	0.197	5.0	LOS A	1.0	26.0	0.47	0.34	0.47	33.8
18	R2	61	0.0	0.197	5.0	LOS A	1.0	26.0	0.47	0.34	0.47	32.8
Approach		224	0.0	0.197	5.0	LOS A	1.0	26.0	0.47	0.34	0.47	33.5
East: Issaquah Beaver Lake Rd												
1	L2	48	0.0	0.238	5.0	LOS A	1.3	32.3	0.38	0.24	0.38	34.9
6	T1	195	0.0	0.238	5.0	LOS A	1.3	32.3	0.38	0.24	0.38	34.8
16	R2	54	0.0	0.238	5.0	LOS A	1.3	32.3	0.38	0.24	0.38	33.8
Approach		297	0.0	0.238	5.0	LOS A	1.3	32.3	0.38	0.24	0.38	34.6
North: 256th Ave SE												
7	L2	46	0.0	0.094	4.0	LOS A	0.5	11.4	0.44	0.30	0.44	34.6
4	T1	33	0.0	0.094	4.0	LOS A	0.5	11.4	0.44	0.30	0.44	34.5
14	R2	28	0.0	0.094	4.0	LOS A	0.5	11.4	0.44	0.30	0.44	33.5
Approach		107	0.0	0.094	4.0	LOS A	0.5	11.4	0.44	0.30	0.44	34.3
West: Issaquah Beaver Lake Rd												
5	L2	40	0.0	0.356	6.0	LOS A	2.1	53.2	0.33	0.18	0.33	34.6
2	T1	271	0.0	0.356	6.0	LOS A	2.1	53.2	0.33	0.18	0.33	34.5
12	R2	160	0.0	0.356	6.0	LOS A	2.1	53.2	0.33	0.18	0.33	33.5
Approach		471	0.0	0.356	6.0	LOS A	2.1	53.2	0.33	0.18	0.33	34.1
All Vehicles		1098	0.0	0.356	5.3	LOS A	2.1	53.2	0.38	0.24	0.38	34.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 39 [39 - 233rd Ave NE & NE 8th Street]

2035 PM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	54	1.0	0.197	8.8	LOS A	1.1	28.8	0.67	0.73	0.67	25.2
8	T1	55	1.0	0.197	8.0	LOS A	1.1	28.8	0.67	0.73	0.67	29.8
18	R2	49	1.0	0.197	5.3	LOS A	1.1	28.8	0.67	0.73	0.67	24.7
Approach		159	1.0	0.197	7.5	LOS A	1.1	28.8	0.67	0.73	0.67	26.4
East: NE 8th St (WB)												
1	L2	106	1.0	0.402	6.7	LOS A	2.5	63.4	0.44	0.47	0.44	24.6
6	T1	323	1.0	0.402	2.9	LOS A	2.5	63.4	0.44	0.47	0.44	24.5
16	R2	29	1.0	0.402	5.7	LOS A	2.5	63.4	0.44	0.47	0.44	28.4
Approach		459	1.0	0.402	3.9	LOS A	2.5	63.4	0.44	0.47	0.44	24.7
North: RoadName												
7	L2	21	0.0	0.153	11.1	LOS B	0.8	20.2	0.56	0.68	0.56	34.6
4	T1	52	0.0	0.153	7.1	LOS A	0.8	20.2	0.56	0.68	0.56	34.8
14	R2	68	0.0	0.153	6.8	LOS A	0.8	20.2	0.56	0.68	0.56	34.1
Approach		141	0.0	0.153	7.6	LOS A	0.8	20.2	0.56	0.68	0.56	34.4
West: NE 8th St (EB)												
5	L2	79	1.0	0.598	10.3	LOS B	4.7	118.3	0.54	0.58	0.54	33.2
2	T1	510	1.0	0.598	5.4	LOS A	4.7	118.3	0.54	0.58	0.54	31.9
12	R2	103	1.0	0.598	5.3	LOS A	4.7	118.3	0.54	0.58	0.54	31.2
Approach		691	1.0	0.598	5.9	LOS A	4.7	118.3	0.54	0.58	0.54	31.9
All Vehicles		1450	0.9	0.598	5.6	LOS A	4.7	118.3	0.53	0.57	0.53	28.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 41 [41 - 244th Ave NE & E Main Dr]

2035 PM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	5	0.0	0.207	8.6	LOS A	1.0	25.3	0.26	0.44	0.26	32.7
8	T1	218	0.0	0.207	4.2	LOS A	1.0	25.3	0.26	0.44	0.26	32.7
18	R2	38	0.0	0.207	4.1	LOS A	1.0	25.3	0.26	0.44	0.26	32.0
Approach		261	0.0	0.207	4.3	LOS A	1.0	25.3	0.26	0.44	0.26	32.6
East: E Main Dr (WB)												
1	L2	45	0.0	0.101	9.0	LOS A	0.5	11.8	0.36	0.58	0.36	32.0
6	T1	3	0.0	0.101	4.6	LOS A	0.5	11.8	0.36	0.58	0.36	32.0
16	R2	69	0.0	0.101	4.6	LOS A	0.5	11.8	0.36	0.58	0.36	31.3
Approach		117	0.0	0.101	6.3	LOS A	0.5	11.8	0.36	0.58	0.36	31.6
North: 244th Ave (SB)												
7	L2	92	0.0	0.261	8.3	LOS A	1.4	35.7	0.20	0.48	0.20	32.4
4	T1	210	0.0	0.261	3.9	LOS A	1.4	35.7	0.20	0.48	0.20	32.5
14	R2	42	0.0	0.261	3.9	LOS A	1.4	35.7	0.20	0.48	0.20	31.7
Approach		344	0.0	0.261	5.1	LOS A	1.4	35.7	0.20	0.48	0.20	32.4
West: E Main Dr (EB)												
5	L2	18	0.0	0.028	9.4	LOS A	0.1	3.1	0.41	0.60	0.41	31.5
2	T1	3	0.0	0.028	5.0	LOS A	0.1	3.1	0.41	0.60	0.41	31.5
12	R2	9	0.0	0.028	4.9	LOS A	0.1	3.1	0.41	0.60	0.41	30.8
Approach		30	0.0	0.028	7.6	LOS A	0.1	3.1	0.41	0.60	0.41	31.3
All Vehicles		753	0.0	0.261	5.1	LOS A	1.4	35.7	0.25	0.49	0.25	32.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 62 [62 - E Lk Sammamish Pk Way and SE 43nd Way]

2035 PM Alternative 3
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: E Lk Sammamish Pk Way WB												
8x	T1	909	2.0	0.527	1.6	LOS A	5.1	129.2	0.25	0.21	0.25	29.9
18x	R2	1040	2.0	0.633	2.0	LOS A	0.0	0.0	0.00	0.29	0.00	29.4
Approach		1949	2.0	0.633	1.8	LOS A	5.1	129.2	0.12	0.25	0.12	29.7
NorthEast: SE 43rd Way SB												
1x	L2	669	1.0	0.451	14.7	LOS B	3.9	97.6	0.90	0.95	1.00	26.4
16x	R2	33	1.0	0.451	8.9	LOS A	3.9	97.6	0.91	0.91	0.97	25.7
Approach		702	1.0	0.451	14.4	LOS B	3.9	97.6	0.90	0.95	0.99	26.3
NorthWest: E Lk Sammamish Pk Way EB												
7x	L2	42	2.0	0.450	9.8	LOS A	2.5	64.4	0.68	0.61	0.74	29.1
4x	T1	760	2.0	0.450	3.8	LOS A	2.6	66.5	0.68	0.55	0.73	28.9
Approach		802	2.0	0.450	4.1	LOS A	2.6	66.5	0.68	0.55	0.73	28.9
All Vehicles		3453	1.8	0.633	4.9	LOS A	5.1	129.2	0.41	0.47	0.44	28.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	31	108	64	772	1701	25
Future Volume (veh/h)	31	108	64	772	1701	25
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
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	1840	1840	1745	1745	1717	1717
Adj Flow Rate, veh/h	34	41	70	839	1849	27
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	4	4	3	3	2	2
Cap, veh/h	81	145	275	2956	2678	39
Arrive On Green	0.05	0.05	0.05	0.89	0.81	0.81
Sat Flow, veh/h	1752	1559	1662	3402	3377	48
Grp Volume(v), veh/h	34	41	70	839	914	962
Grp Sat Flow(s),veh/h/ln	1752	1559	1662	1658	1631	1707
Q Serve(g_s), s	2.4	3.1	0.7	4.7	30.5	30.8
Cycle Q Clear(g_c), s	2.4	3.1	0.7	4.7	30.5	30.8
Prop In Lane	1.00	1.00	1.00			0.03
Lane Grp Cap(c), veh/h	81	145	275	2956	1328	1389
V/C Ratio(X)	0.42	0.28	0.25	0.28	0.69	0.69
Avail Cap(c_a), veh/h	396	425	275	3692	1690	1769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.6	54.3	6.9	1.0	5.1	5.1
Incr Delay (d2), s/veh	1.3	0.4	0.2	0.2	2.4	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.0	5.0	1.1	0.9	13.0	13.6
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	60.9	54.7	7.1	1.2	7.4	7.4
LnGrp LOS	E	D	A	A	A	A
Approach Vol, veh/h	75			909	1876	
Approach Delay, s/veh	57.5			1.7	7.4	
Approach LOS	E			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		118.5		9.9	10.0	108.5
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		142.0		28.0	5.0	132.0
Max Q Clear Time (g_c+I1), s		6.7		5.1	2.7	32.8
Green Ext Time (p_c), s		16.3		0.1	0.0	70.6

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

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	54	105	54	894	848	10
Future Volume (veh/h)	54	105	54	894	848	10
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
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	1954	1954	1723	1723	1723	1723
Adj Flow Rate, veh/h	58	113	58	961	912	11
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	2	2	2	2
Cap, veh/h	331	246	525	2028	1352	16
Arrive On Green	0.18	0.15	0.12	0.62	0.41	0.38
Sat Flow, veh/h	1861	1656	1641	3359	3397	40
Grp Volume(v), veh/h	58	113	58	961	451	472
Grp Sat Flow(s),veh/h/ln	1861	1656	1641	1637	1637	1714
Q Serve(g_s), s	0.9	2.1	0.5	5.3	7.6	7.6
Cycle Q Clear(g_c), s	0.9	2.1	0.5	5.3	7.6	7.6
Prop In Lane	1.00	1.00	1.00			0.02
Lane Grp Cap(c), veh/h	331	246	525	2028	668	700
V/C Ratio(X)	0.17	0.46	0.11	0.47	0.67	0.67
Avail Cap(c_a), veh/h	1495	1281	667	4500	1763	1847
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.7	13.1	4.4	3.4	8.1	8.1
Incr Delay (d2), s/veh	0.1	0.5	0.0	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.6	1.2	0.1	0.6	2.9	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.8	13.6	4.5	3.5	8.6	8.6
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	171			1019	923	
Approach Delay, s/veh	13.0			3.6	8.6	
Approach LOS	B			A	A	

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	23.8		7.1	16.7	9.8
Change Period (Y+Rc), s	5.0		5.0	5.0	5.8
Max Green Setting (Gmax), s	44.2		5.0	34.2	25.0
Max Q Clear Time (g_c+I1), s	7.3		2.5	9.6	4.1
Green Ext Time (p_c), s	2.9		0.0	2.1	0.4

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

Intersection	
Int Delay, s/veh	10.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↱		↕	
Traffic Vol, veh/h	0	31	63	115	74	0	228	0	158	0	0	0
Future Vol, veh/h	0	31	63	115	74	0	228	0	158	0	0	0
Conflicting Peds, #/hr	4	0	0	0	0	4	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	105	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	0	0	0
Mvmt Flow	0	35	72	131	84	0	259	0	180	0	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	88	0	0	107	0	0	417	421	72	512	457	88
Stage 1	-	-	-	-	-	-	71	71	-	350	350	-
Stage 2	-	-	-	-	-	-	346	350	-	162	107	-
Critical Hdwy	4.13	-	-	4.12	-	-	7.12	6.52	6.22	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.1	5.5	-
Follow-up Hdwy	2.227	-	-	2.218	-	-	3.518	4.018	3.318	3.5	4	3.3
Pot Cap-1 Maneuver	1501	-	-	1484	-	-	546	524	990	476	503	976
Stage 1	-	-	-	-	-	-	939	836	-	671	636	-
Stage 2	-	-	-	-	-	-	670	633	-	845	811	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1496	-	-	1484	-	-	507	474	989	360	455	973
Mov Cap-2 Maneuver	-	-	-	-	-	-	507	474	-	360	455	-
Stage 1	-	-	-	-	-	-	939	836	-	669	575	-
Stage 2	-	-	-	-	-	-	608	572	-	691	811	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	4.7	15.2	0
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	507	989	1496	-	-	1484	-	-	-
HCM Lane V/C Ratio	0.511	0.182	-	-	-	0.088	-	-	-
HCM Control Delay (s)	19.3	9.4	0	-	-	7.7	0	-	0
HCM Lane LOS	C	A	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	2.9	0.7	0	-	-	0.3	-	-	-

Intersection	
Intersection Delay, s/veh	12.4
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	54	118	170	284	54	147
Future Vol, veh/h	54	118	170	284	54	147
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Heavy Vehicles, %	7	7	4	4	1	1
Mvmt Flow	59	130	187	312	59	162
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	10.3	14.3	10
HCM LOS	B	B	A

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	31%	0%	100%	0%
Vol Thru, %	69%	37%	0%	0%
Vol Right, %	0%	63%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	172	454	54	147
LT Vol	54	0	54	0
Through Vol	118	170	0	0
RT Vol	0	284	0	147
Lane Flow Rate	189	499	59	162
Geometry Grp	2	2	7	7
Degree of Util (X)	0.274	0.613	0.11	0.244
Departure Headway (Hd)	5.225	4.426	6.65	5.433
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	679	808	542	666
Service Time	3.322	2.496	4.35	3.133
HCM Lane V/C Ratio	0.278	0.618	0.109	0.243
HCM Control Delay	10.3	14.3	10.2	9.9
HCM Lane LOS	B	B	B	A
HCM 95th-tile Q	1.1	4.3	0.4	1

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	25	56	513	24	19	1035
Future Vol, veh/h	25	56	513	24	19	1035
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	-	-	-	125	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	6	6	4	4	2	2
Mvmt Flow	28	62	570	27	21	1150

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1201	299	0	0	597	0
Stage 1	584	-	-	-	-	-
Stage 2	617	-	-	-	-	-
Critical Hdwy	7.52	7.32	-	-	4.14	-
Critical Hdwy Stg 1	6.52	-	-	-	-	-
Critical Hdwy Stg 2	6.52	-	-	-	-	-
Follow-up Hdwy	3.56	3.36	-	-	2.22	-
Pot Cap-1 Maneuver	141	669	-	-	976	-
Stage 1	462	-	-	-	-	-
Stage 2	442	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	138	669	-	-	976	-
Mov Cap-2 Maneuver	326	-	-	-	-	-
Stage 1	462	-	-	-	-	-
Stage 2	432	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	505	976	-
HCM Lane V/C Ratio	-	-	0.178	0.022	-
HCM Control Delay (s)	-	-	13.7	8.8	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q(veh)	-	-	0.6	0.1	-

Intersection	
Intersection Delay, s/veh	17.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	72	62	0	5	280	97	4	9	13	186	1	177
Future Vol, veh/h	72	62	0	5	280	97	4	9	13	186	1	177
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	86	74	0	6	333	115	5	11	15	221	1	211
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	10.9	24.4	10.5	13.1
HCM LOS	B	C	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	15%	100%	0%	100%	0%	100%	0%
Vol Thru, %	35%	0%	100%	0%	74%	0%	1%
Vol Right, %	50%	0%	0%	0%	26%	0%	99%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	26	72	62	5	377	186	178
LT Vol	4	72	0	5	0	186	0
Through Vol	9	0	62	0	280	0	1
RT Vol	13	0	0	0	97	0	177
Lane Flow Rate	31	86	74	6	449	221	212
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.06	0.17	0.136	0.011	0.749	0.426	0.337
Departure Headway (Hd)	6.966	7.127	6.616	6.694	6.004	6.93	5.719
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	511	501	540	534	601	518	627
Service Time	5.057	4.896	4.385	4.447	3.757	4.688	3.476
HCM Lane V/C Ratio	0.061	0.172	0.137	0.011	0.747	0.427	0.338
HCM Control Delay	10.5	11.4	10.4	9.5	24.6	14.8	11.4
HCM Lane LOS	B	B	B	A	C	B	B
HCM 95th-tile Q	0.2	0.6	0.5	0	6.6	2.1	1.5

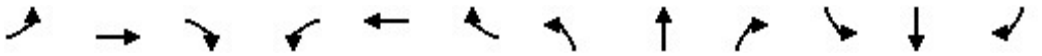
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	36	0	18	0	0	0	12	1049	2	5	617	19
Future Vol, veh/h	36	0	18	0	0	0	12	1049	2	5	617	19
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	1	1	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	250	-	-	-	-	0	110	-	-	110	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-4	-	-	0	-	-	0	-	-	1	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	4	4	4	0	0	0	2	2	2	4	4	4
Mvmt Flow	39	0	20	0	0	0	13	1140	2	5	671	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1288	1861	346	-	-	572	692	0	0	1143	0	0
Stage 1	692	692	-	-	-	-	-	-	-	-	-	-
Stage 2	596	1169	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	6.78	5.78	6.58	-	-	6.9	4.14	-	-	4.18	-	-
Critical Hdwy Stg 1	5.78	4.78	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.78	4.78	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.54	4.04	3.34	-	-	3.3	2.22	-	-	2.24	-	-
Pot Cap-1 Maneuver	159	107	669	0	0	468	899	-	-	596	-	-
Stage 1	462	511	-	0	0	-	-	-	-	-	-	-
Stage 2	516	339	-	0	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	156	105	669	-	-	468	899	-	-	596	-	-
Mov Cap-2 Maneuver	352	277	-	-	-	-	-	-	-	-	-	-
Stage 1	456	507	-	-	-	-	-	-	-	-	-	-
Stage 2	509	334	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	14.5	0	0.1	0.1
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	899	-	-	352	669	-	596	-	-
HCM Lane V/C Ratio	0.015	-	-	0.111	0.029	-	0.009	-	-
HCM Control Delay (s)	9.1	-	-	16.5	10.5	0	11.1	-	-
HCM Lane LOS	A	-	-	C	B	A	B	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.1	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	120	3	4	283	168	17	49	12	103	7	278
Future Volume (veh/h)	240	120	3	4	283	168	17	49	12	103	7	278
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	0.99		0.97	1.00		0.96	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	1682	1682	1682	1695	1695	1695	1695	1695	1695	1695	1695	1695
Adj Flow Rate, veh/h	286	143	4	5	337	200	20	58	14	123	8	331
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	5	5	5	4	4	4	4	4	4	4	4	4
Cap, veh/h	345	808	23	563	369	219	53	254	61	170	9	371
Arrive On Green	0.14	0.50	0.50	0.02	0.38	0.38	0.03	0.19	0.19	0.11	0.27	0.27
Sat Flow, veh/h	1602	1628	46	1615	983	583	1615	1306	315	1615	34	1390
Grp Volume(v), veh/h	286	0	147	5	0	537	20	0	72	123	0	339
Grp Sat Flow(s),veh/h/ln	1602	0	1673	1615	0	1566	1615	0	1622	1615	0	1423
Q Serve(g_s), s	9.0	0.0	4.3	0.2	0.0	29.2	1.1	0.0	3.3	6.6	0.0	20.5
Cycle Q Clear(g_c), s	9.0	0.0	4.3	0.2	0.0	29.2	1.1	0.0	3.3	6.6	0.0	20.5
Prop In Lane	1.00		0.03	1.00		0.37	1.00		0.19	1.00		0.98
Lane Grp Cap(c), veh/h	345	0	831	563	0	587	53	0	316	170	0	380
V/C Ratio(X)	0.83	0.00	0.18	0.01	0.00	0.91	0.37	0.00	0.23	0.72	0.00	0.89
Avail Cap(c_a), veh/h	511	0	1391	644	0	1028	108	0	327	271	0	430
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	18.4	0.0	12.4	16.5	0.0	26.6	42.3	0.0	30.3	38.7	0.0	31.5
Incr Delay (d2), s/veh	4.6	0.0	0.0	0.0	0.0	3.6	6.1	0.0	0.1	8.0	0.0	17.6
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(95%),veh/ln	6.0	0.0	2.7	0.1	0.0	16.1	0.9	0.0	2.4	5.4	0.0	13.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	23.0	0.0	12.5	16.5	0.0	30.2	48.4	0.0	30.5	46.7	0.0	49.1
LnGrp LOS	C	A	B	B	A	C	D	A	C	D	A	D
Approach Vol, veh/h		433			542			92			462	
Approach Delay, s/veh		19.4			30.1			34.4			48.5	
Approach LOS		B			C			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	37.8	13.4	21.4	5.9	48.7	7.0	27.9
Change Period (Y+Rc), s	5.3	5.3	5.0	5.0	5.3	5.3	5.0	5.0
Max Green Setting (Gmax), s	20.7	57.7	14.0	17.0	5.1	73.3	5.0	26.0
Max Q Clear Time (g_c+I1), s	11.0	31.2	8.6	5.3	2.2	6.3	3.1	22.5
Green Ext Time (p_c), s	0.5	1.4	0.2	0.1	0.0	0.3	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	32.9
HCM 6th LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	7	21	277	22	330	64	1028	127	100	959	79
Future Volume (veh/h)	40	7	21	277	22	330	64	1028	127	100	959	79
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		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	1715	1715	1715	1809	1809	1809	1795	1795	1795	1715	1715	1715
Adj Flow Rate, veh/h	43	8	23	301	24	0	70	1117	0	109	1042	86
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	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	534	88	414	511	31		385	1366		379	1245	103
Arrive On Green	0.32	0.32	0.29	0.30	0.30	0.00	0.12	0.40	0.00	0.12	0.41	0.37
Sat Flow, veh/h	1278	274	1447	1259	100	1533	1709	3500	0	1633	3038	251
Grp Volume(v), veh/h	51	0	23	325	0	0	70	1117	0	109	559	569
Grp Sat Flow(s),veh/h/ln	1552	0	1447	1359	0	1533	1709	1705	0	1633	1629	1659
Q Serve(g_s), s	0.0	0.0	0.6	11.1	0.0	0.0	0.0	15.9	0.0	0.0	16.7	16.8
Cycle Q Clear(g_c), s	1.2	0.0	0.6	12.3	0.0	0.0	0.0	15.9	0.0	0.0	16.7	16.8
Prop In Lane	0.84		1.00	0.93		1.00	1.00		0.00	1.00		0.15
Lane Grp Cap(c), veh/h	623	0	414	541	0		385	1366		379	668	680
V/C Ratio(X)	0.08	0.00	0.06	0.60	0.00		0.18	0.82		0.29	0.84	0.84
Avail Cap(c_a), veh/h	1498	0	1305	662	0		432	1444		408	690	702
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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	0.0	14.1	18.0	0.0	0.0	19.3	14.5	0.0	19.8	14.4	14.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.1	3.3	0.0	0.2	8.1	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.7	0.0	0.3	5.9	0.0	0.0	1.3	9.2	0.0	2.0	10.3	10.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.9	0.0	14.1	18.4	0.0	0.0	19.4	17.8	0.0	19.9	22.5	22.5
LnGrp LOS	B	A	B	B	A		B	B		B	C	C
Approach Vol, veh/h		74			325	A		1187	A		1237	
Approach Delay, s/veh		13.3			18.4			17.9			22.3	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	24.8		19.5	9.5	25.3		19.5
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.0	20.0		19.0	5.0	20.0		48.0
Max Q Clear Time (g_c+I1), s	2.0	17.9		14.3	2.0	18.8		3.2
Green Ext Time (p_c), s	0.0	0.9		0.3	0.0	0.5		0.1

Intersection Summary	
HCM 6th Ctrl Delay	19.8
HCM 6th LOS	B

Notes

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

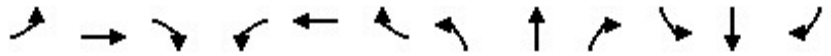
Intersection	
Int Delay, s/veh	1.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	52	64	910	40	20	720
Future Vol, veh/h	52	64	910	40	20	720
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	220	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	1	2	2
Mvmt Flow	57	70	989	43	22	783

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1448	516	0	0	1032	0
Stage 1	1011	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Critical Hdwy	7.02	7.02	-	-	4.14	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.22	-
Pot Cap-1 Maneuver	114	499	-	-	669	-
Stage 1	297	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	110	499	-	-	669	-
Mov Cap-2 Maneuver	223	-	-	-	-	-
Stage 1	297	-	-	-	-	-
Stage 2	586	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.3	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	321	669	-
HCM Lane V/C Ratio	-	-	0.393	0.032	-
HCM Control Delay (s)	-	-	23.3	10.6	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	1.8	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	167	281	210	159	184	269	710	81	155	755	75
Future Volume (veh/h)	52	167	281	210	159	184	269	710	81	155	755	75
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		1.00	0.99		0.97	1.00		0.97	1.00		0.96
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	1709	1709	1709	1709	1709	1723	1723	1723	1701	1701	1701
Adj Flow Rate, veh/h	57	184	0	231	175	202	296	780	89	170	830	82
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
Percent Heavy Veh, %	3	3	3	3	3	3	2	2	2	2	2	2
Cap, veh/h	386	290		430	420	597	341	943	108	289	860	85
Arrive On Green	0.08	0.17	0.00	0.15	0.25	0.24	0.21	0.32	0.32	0.18	0.29	0.27
Sat Flow, veh/h	1628	1709	1448	1628	1709	1412	1641	2949	336	1620	2958	292
Grp Volume(v), veh/h	57	184	0	231	175	202	296	433	436	170	453	459
Grp Sat Flow(s),veh/h/ln	1628	1709	1448	1628	1709	1412	1641	1637	1648	1620	1616	1635
Q Serve(g_s), s	1.8	6.8	0.0	7.3	5.8	1.0	11.8	16.5	16.5	6.5	18.7	18.7
Cycle Q Clear(g_c), s	1.8	6.8	0.0	7.3	5.8	1.0	11.8	16.5	16.5	6.5	18.7	18.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		0.18
Lane Grp Cap(c), veh/h	386	290		430	420	597	341	523	527	289	470	475
V/C Ratio(X)	0.15	0.63		0.54	0.42	0.34	0.87	0.83	0.83	0.59	0.97	0.97
Avail Cap(c_a), veh/h	427	492		430	568	719	341	573	577	289	470	475
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	26.1	0.0	17.4	21.4	4.7	25.8	21.2	21.2	25.4	23.6	23.7
Incr Delay (d2), s/veh	0.1	0.9	0.0	0.7	0.2	0.1	19.9	8.2	8.2	2.1	32.5	32.3
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(95%),veh/ln	1.2	4.7	0.0	4.6	3.9	1.4	10.2	11.1	11.2	4.5	16.0	16.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.8	26.9	0.0	18.1	21.6	4.9	45.8	29.4	29.4	27.6	56.1	56.0
LnGrp LOS	B	C		B	C	A	D	C	C	C	E	E
Approach Vol, veh/h		241	A		608			1165			1082	
Approach Delay, s/veh		25.2			14.7			33.6			51.5	
Approach LOS		C			B			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	24.6	8.3	19.6	17.0	22.6	13.0	14.8
Change Period (Y+Rc), s	5.0	5.3	5.0	5.4	5.0	5.3	5.0	* 5.4
Max Green Setting (Gmax), s	8.6	21.3	5.0	20.0	12.0	17.3	8.0	* 17
Max Q Clear Time (g_c+I1), s	8.5	18.5	3.8	7.8	13.8	20.7	9.3	8.8
Green Ext Time (p_c), s	0.0	0.8	0.0	0.7	0.0	0.0	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

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

Unsignalized Delay for [EBR] 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)	28	14	18	154	4	221	7	846	241	380	817	20
Future Volume (veh/h)	28	14	18	154	4	221	7	846	241	380	817	20
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.98		0.97	1.00		0.99	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	1723	1723	1723	1750	1750	1750	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	33	16	21	181	5	260	8	995	284	447	961	24
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	2	2	2	0	0	0	2	2	2	2	2	2
Cap, veh/h	98	47	37	324	7	375	565	1118	318	589	1118	28
Arrive On Green	0.27	0.27	0.26	0.27	0.27	0.26	0.29	0.45	0.43	0.19	0.34	0.33
Sat Flow, veh/h	147	173	137	907	25	1439	1641	2510	713	3183	3261	81
Grp Volume(v), veh/h	70	0	0	186	0	260	8	647	632	447	482	503
Grp Sat Flow(s),veh/h/ln	458	0	0	932	0	1439	1641	1637	1586	1591	1637	1706
Q Serve(g_s), s	1.9	0.0	0.0	0.0	0.0	15.0	0.0	33.3	33.7	12.2	25.2	25.2
Cycle Q Clear(g_c), s	20.8	0.0	0.0	18.9	0.0	15.0	0.0	33.3	33.7	12.2	25.2	25.2
Prop In Lane	0.47		0.30	0.97		1.00	1.00		0.45	1.00		0.05
Lane Grp Cap(c), veh/h	182	0	0	330	0	375	565	729	706	589	561	585
V/C Ratio(X)	0.38	0.00	0.00	0.56	0.00	0.69	0.01	0.89	0.89	0.76	0.86	0.86
Avail Cap(c_a), veh/h	325	0	0	482	0	533	565	946	916	798	1231	1284
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	0.0	0.0	31.2	0.0	30.6	22.0	23.3	23.7	35.4	28.1	28.1
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.6	0.0	0.9	0.0	7.1	7.9	1.8	1.5	1.5
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(95%),veh/ln	2.8	0.0	0.0	6.9	0.0	9.0	0.2	19.2	19.2	8.3	14.6	15.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.0	0.0	0.0	31.8	0.0	31.5	22.0	30.5	31.6	37.2	29.6	29.6
LnGrp LOS	C	A	A	C	A	C	C	C	C	D	C	C
Approach Vol, veh/h		70			446			1287			1432	
Approach Delay, s/veh		31.0			31.6			31.0			32.0	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	30.0	43.9		27.9	29.4	34.5		27.9
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	21.0	51.0		33.0	5.0	67.0		33.0
Max Q Clear Time (g_c+I1), s	14.2	35.7		20.9	2.0	27.2		22.8
Green Ext Time (p_c), s	0.8	3.1		1.0	0.0	2.3		0.1

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	123	74	241	65	23	94	232	941	220	130	816	178
Future Volume (veh/h)	123	74	241	65	23	94	232	941	220	130	816	178
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		0.99	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	1948	1948	1948	1736	1736	1736	1809	1809	1809	1723	1723	1723
Adj Flow Rate, veh/h	140	84	274	74	26	107	264	1069	250	148	927	202
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, %	4	4	4	1	1	1	1	1	1	2	2	2
Cap, veh/h	582	115	375	355	80	331	286	1123	496	351	989	215
Arrive On Green	0.10	0.29	0.29	0.09	0.27	0.23	0.10	0.33	0.33	0.15	0.37	0.36
Sat Flow, veh/h	1856	401	1307	1654	296	1216	1723	3436	1516	1641	2662	579
Grp Volume(v), veh/h	140	0	358	74	0	133	264	1069	250	148	570	559
Grp Sat Flow(s),veh/h/ln	1856	0	1708	1654	0	1512	1723	1718	1516	1641	1637	1605
Q Serve(g_s), s	3.3	0.0	12.7	2.0	0.0	4.9	6.0	20.5	6.0	0.9	22.6	22.7
Cycle Q Clear(g_c), s	3.3	0.0	12.7	2.0	0.0	4.9	6.0	20.5	6.0	0.9	22.6	22.7
Prop In Lane	1.00		0.77	1.00		0.80	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	582	0	490	355	0	411	286	1123	496	351	608	596
V/C Ratio(X)	0.24	0.00	0.73	0.21	0.00	0.32	0.92	0.95	0.50	0.42	0.94	0.94
Avail Cap(c_a), veh/h	582	0	736	379	0	651	286	1123	496	351	608	596
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	13.3	0.0	21.7	15.5	0.0	20.6	28.5	22.1	8.2	24.4	20.4	20.6
Incr Delay (d2), s/veh	0.2	0.0	0.8	0.3	0.0	0.5	33.0	16.4	0.3	0.3	21.9	22.5
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(95%),veh/ln	2.4	0.0	8.6	1.3	0.0	3.1	10.7	15.1	5.0	3.5	16.8	16.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.5	0.0	22.5	15.8	0.0	21.0	61.5	38.5	8.5	24.7	42.3	43.1
LnGrp LOS	B	A	C	B	A	C	E	D	A	C	D	D
Approach Vol, veh/h		498			207			1583			1277	
Approach Delay, s/veh		19.9			19.2			37.6			40.6	
Approach LOS		B			B			D			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	25.0	8.0	21.3	10.0	28.0	7.0	22.3
Change Period (Y+Rc), s	5.0	5.0	4.0	6.0	5.0	5.0	4.0	6.0
Max Green Setting (Gmax), s	8.0	20.0	4.0	26.0	5.0	23.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	12.9	22.5	5.3	6.9	8.0	24.7	4.0	14.7
Green Ext Time (p_c), s	0.1	0.0	0.0	0.7	0.0	0.0	0.0	1.3

Intersection Summary	
HCM 6th Ctrl Delay	35.2
HCM 6th LOS	D

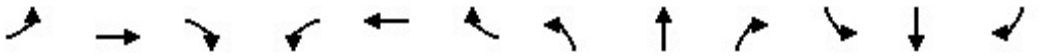
Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	5	12	3	65	4	41	9	80	80	91	75	1
Future Vol, veh/h	5	12	3	65	4	41	9	80	80	91	75	1
Conflicting Peds, #/hr	0	0	0	0	0	0	1	0	0	0	0	1
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	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	3	3	3	1	1	1	2	2	2
Mvmt Flow	5	13	3	70	4	44	10	86	86	98	81	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	452	471	83	435	428	129	83	0	0	172	0	0
Stage 1	279	279	-	149	149	-	-	-	-	-	-	-
Stage 2	173	192	-	286	279	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.13	6.53	6.23	4.11	-	-	4.12	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.527	4.027	3.327	2.209	-	-	2.218	-	-
Pot Cap-1 Maneuver	521	494	982	530	518	918	1520	-	-	1405	-	-
Stage 1	732	683	-	851	772	-	-	-	-	-	-	-
Stage 2	834	745	-	719	678	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	462	454	981	485	477	918	1519	-	-	1405	-	-
Mov Cap-2 Maneuver	462	454	-	485	477	-	-	-	-	-	-	-
Stage 1	726	632	-	845	767	-	-	-	-	-	-	-
Stage 2	784	740	-	651	628	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.6	12.7	0.4	4.2
HCM LOS	B	B		

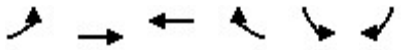
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1519	-	-	496	588	1405	-	-
HCM Lane V/C Ratio	0.006	-	-	0.043	0.201	0.07	-	-
HCM Control Delay (s)	7.4	0	-	12.6	12.7	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.7	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	0	32	6	0	4	4	1321	14	8	1230	3
Future Volume (veh/h)	5	0	32	6	0	4	4	1321	14	8	1230	3
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		0.99	1.00		0.97	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	1723	1723	1723	1726	1726	1726	1723	1723	1723	1767	1767	1767
Adj Flow Rate, veh/h	6	0	36	7	0	5	5	1501	16	9	1398	3
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, %	2	2	2	7	7	7	2	2	2	4	4	4
Cap, veh/h	419	0	175	387	0	177	380	1795	19	307	1722	4
Arrive On Green	0.07	0.00	0.08	0.07	0.00	0.08	0.11	0.54	0.50	0.07	0.50	0.46
Sat Flow, veh/h	1641	0	1451	1644	0	1454	1641	3316	35	1683	3437	7
Grp Volume(v), veh/h	6	0	36	7	0	5	5	740	777	9	683	718
Grp Sat Flow(s),veh/h/ln	1641	0	1451	1644	0	1454	1641	1637	1715	1683	1679	1766
Q Serve(g_s), s	0.1	0.0	1.2	0.2	0.0	0.2	0.0	19.0	19.1	0.0	17.2	17.2
Cycle Q Clear(g_c), s	0.1	0.0	1.2	0.2	0.0	0.2	0.0	19.0	19.1	0.0	17.2	17.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.02	1.00		0.00
Lane Grp Cap(c), veh/h	419	0	175	387	0	177	380	886	928	307	841	885
V/C Ratio(X)	0.01	0.00	0.21	0.02	0.00	0.03	0.01	0.84	0.84	0.03	0.81	0.81
Avail Cap(c_a), veh/h	539	0	839	506	0	841	459	1110	1163	455	1138	1197
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	15.9	0.0	20.8	15.8	0.0	20.3	14.3	9.6	9.7	16.8	10.5	10.5
Incr Delay (d2), s/veh	0.0	0.0	0.2	0.0	0.0	0.0	0.0	3.8	3.7	0.0	2.4	2.3
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(95%),veh/ln	0.1	0.0	0.7	0.1	0.0	0.1	0.1	8.8	9.1	0.1	8.3	8.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.9	0.0	21.0	15.8	0.0	20.3	14.3	13.4	13.4	16.8	12.9	12.8
LnGrp LOS	B	A	C	B	A	C	B	B	B	B	B	B
Approach Vol, veh/h		42			12			1522			1410	
Approach Delay, s/veh		20.3			17.7			13.4			12.9	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	30.1	4.3	9.1	8.6	28.1	4.4	9.0
Change Period (Y+Rc), s	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	31.0	4.0	26.0	5.0	31.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.0	21.1	2.1	2.2	2.0	19.2	2.2	3.2
Green Ext Time (p_c), s	0.0	3.1	0.0	0.0	0.0	3.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	13.3
HCM 6th LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	2	421	442	90	192	9
Future Volume (veh/h)	2	421	442	90	192	9
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	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	1736	1736	1682	1682	1750	1750
Adj Flow Rate, veh/h	2	453	475	97	206	10
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	5	5	0	0
Cap, veh/h	171	827	804	1075	452	22
Arrive On Green	0.48	0.48	0.48	0.48	0.29	0.22
Sat Flow, veh/h	4	1729	1682	1392	1574	76
Grp Volume(v), veh/h	455	0	475	97	217	0
Grp Sat Flow(s),veh/h/ln	1733	0	1682	1392	1658	0
Q Serve(g_s), s	0.0	0.0	4.4	0.4	2.3	0.0
Cycle Q Clear(g_c), s	3.9	0.0	4.4	0.4	2.3	0.0
Prop In Lane	0.00			1.00	0.95	0.05
Lane Grp Cap(c), veh/h	998	0	804	1075	476	0
V/C Ratio(X)	0.46	0.00	0.59	0.09	0.46	0.00
Avail Cap(c_a), veh/h	4025	0	3749	3513	2528	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.9	0.0	4.0	0.6	6.3	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.3	0.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.1	0.0	0.7	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	4.1	0.0	4.3	0.6	6.5	0.0
LnGrp LOS	A	A	A	A	A	A
Approach Vol, veh/h		455	572		217	
Approach Delay, s/veh		4.1	3.7		6.5	
Approach LOS		A	A		A	

Timer - Assigned Phs	2			6	8
Phs Duration (G+Y+Rc), s	12.7			12.7	8.6
Change Period (Y+Rc), s	5.0			5.0	5.0
Max Green Setting (Gmax), s	45.0			45.0	30.0
Max Q Clear Time (g_c+I1), s	5.9			6.4	4.3
Green Ext Time (p_c), s	1.0			1.3	0.5

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

Intersection	
Int Delay, s/veh	0.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	12	398	20	8	361
Future Vol, veh/h	14	12	398	20	8	361
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, %	-6	-	0	-	-	0
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	7	7	2	2
Mvmt Flow	16	13	442	22	9	401

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	872	453	0	0	464	0
Stage 1	453	-	-	-	-	-
Stage 2	419	-	-	-	-	-
Critical Hdwy	5.22	5.62	-	-	4.12	-
Critical Hdwy Stg 1	4.22	-	-	-	-	-
Critical Hdwy Stg 2	4.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	429	654	-	-	1097	-
Stage 1	745	-	-	-	-	-
Stage 2	763	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	424	654	-	-	1097	-
Mov Cap-2 Maneuver	424	-	-	-	-	-
Stage 1	745	-	-	-	-	-
Stage 2	755	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	12.5	0	0.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	506	1097	-
HCM Lane V/C Ratio	-	-	0.057	0.008	-
HCM Control Delay (s)	-	-	12.5	8.3	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	21	36	35	42	56	49	102	36	42	111	8
Future Vol, veh/h	6	21	36	35	42	56	49	102	36	42	111	8
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
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	1	1	1
Mvmt Flow	7	23	39	38	46	61	53	111	39	46	121	9
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	8.5	9	9.2	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	74%	0%	37%	0%	43%	0%	93%
Vol Right, %	0%	26%	0%	63%	0%	57%	0%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	49	138	6	57	35	98	42	119
LT Vol	49	0	6	0	35	0	42	0
Through Vol	0	102	0	21	0	42	0	111
RT Vol	0	36	0	36	0	56	0	8
Lane Flow Rate	53	150	7	62	38	107	46	129
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.085	0.212	0.011	0.09	0.064	0.153	0.073	0.188
Departure Headway (Hd)	5.769	5.083	6.183	5.233	6.068	5.161	5.778	5.228
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	619	704	576	681	589	691	618	683
Service Time	3.524	2.837	3.946	2.995	3.823	2.916	3.535	2.984
HCM Lane V/C Ratio	0.086	0.213	0.012	0.091	0.065	0.155	0.074	0.189
HCM Control Delay	9.1	9.2	9	8.5	9.2	8.9	9	9.2
HCM Lane LOS	A	A	A	A	A	A	A	A
HCM 95th-tile Q	0.3	0.8	0	0.3	0.2	0.5	0.2	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	14	138	380	22	22	287
Future Volume (veh/h)	14	138	380	22	22	287
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.98	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	1750	1750	1682	1682	1709	1709
Adj Flow Rate, veh/h	15	147	404	23	23	305
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	5	5	3	3
Cap, veh/h	271	241	563	32	104	957
Arrive On Green	0.16	0.16	0.36	0.36	0.06	0.56
Sat Flow, veh/h	1667	1483	1574	90	1628	1709
Grp Volume(v), veh/h	15	147	0	427	23	305
Grp Sat Flow(s),veh/h/ln	1667	1483	0	1663	1628	1709
Q Serve(g_s), s	0.2	2.7	0.0	6.4	0.4	2.8
Cycle Q Clear(g_c), s	0.2	2.7	0.0	6.4	0.4	2.8
Prop In Lane	1.00	1.00		0.05	1.00	
Lane Grp Cap(c), veh/h	271	241	0	595	104	957
V/C Ratio(X)	0.06	0.61	0.00	0.72	0.22	0.32
Avail Cap(c_a), veh/h	2078	1849	0	2074	2030	2131
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.2	11.2	0.0	8.0	12.8	3.4
Incr Delay (d2), s/veh	0.0	0.9	0.0	0.6	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	1.3	0.0	2.3	0.2	0.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.2	12.2	0.0	8.6	13.2	3.5
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	162		427			328
Approach Delay, s/veh	12.0		8.6			4.2
Approach LOS	B		A			A

Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	20.2			5.8	14.3	8.7
Change Period (Y+Rc), s	5.0			5.0	5.0	5.0
Max Green Setting (Gmax), s	35.0			35.0	35.0	35.0
Max Q Clear Time (g_c+I1), s	4.8			2.4	8.4	4.7
Green Ext Time (p_c), s	0.6			0.0	0.9	0.4

Intersection Summary	
HCM 6th Ctrl Delay	7.6
HCM 6th LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	55	198	101	373	352	72
Future Volume (veh/h)	55	198	101	373	352	72
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.99	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	1660	1660	1954	1954	1636	1636
Adj Flow Rate, veh/h	60	218	111	410	387	79
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	5	5	1	1	2	2
Cap, veh/h	627	770	238	965	545	485
Arrive On Green	0.20	0.20	0.13	0.49	0.35	0.35
Sat Flow, veh/h	3237	1396	1861	1954	1558	1386
Grp Volume(v), veh/h	60	218	111	410	387	79
Grp Sat Flow(s),veh/h/ln	1577	1396	1861	1954	1558	1386
Q Serve(g_s), s	0.7	3.7	2.5	6.0	9.6	1.8
Cycle Q Clear(g_c), s	0.7	3.7	2.5	6.0	9.6	1.8
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	627	770	238	965	545	485
V/C Ratio(X)	0.10	0.28	0.47	0.42	0.71	0.16
Avail Cap(c_a), veh/h	1913	1339	676	2221	1928	1715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.7	5.4	18.1	7.3	12.6	10.0
Incr Delay (d2), s/veh	0.1	0.2	1.4	0.3	1.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.4	7.2	1.8	3.1	5.1	3.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.7	5.6	19.5	7.6	14.3	10.2
LnGrp LOS	B	A	B	A	B	B
Approach Vol, veh/h	278			521	466	
Approach Delay, s/veh	7.6			10.1	13.6	
Approach LOS	A			B	B	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		25.7		19.2	13.2	12.4
Change Period (Y+Rc), s		5.5		5.5	9.5	5.5
Max Green Setting (Gmax), s		49.0		53.5	14.3	25.2
Max Q Clear Time (g_c+I1), s		8.0		11.6	4.5	5.7
Green Ext Time (p_c), s		1.7		2.1	0.2	1.1

Intersection Summary		
HCM 6th Ctrl Delay		10.9
HCM 6th LOS		B

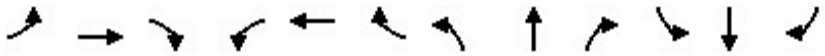
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	254	103	57	1004	560	102
Future Volume (veh/h)	254	103	57	1004	560	102
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1728	1728	1954	1954	1500	1500
Adj Flow Rate, veh/h	276	112	62	1091	609	111
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	1	1	4	4
Cap, veh/h	425	378	397	2255	941	171
Arrive On Green	0.26	0.26	0.10	0.61	0.39	0.39
Sat Flow, veh/h	1646	1465	1861	3809	2483	438
Grp Volume(v), veh/h	276	112	62	1091	360	360
Grp Sat Flow(s),veh/h/ln	1646	1465	1861	1856	1425	1421
Q Serve(g_s), s	6.7	2.7	0.0	7.3	9.2	9.2
Cycle Q Clear(g_c), s	6.7	2.7	0.0	7.3	9.2	9.2
Prop In Lane	1.00	1.00	1.00			0.31
Lane Grp Cap(c), veh/h	425	378	397	2255	557	555
V/C Ratio(X)	0.65	0.30	0.16	0.48	0.65	0.65
Avail Cap(c_a), veh/h	1143	1017	494	6898	2329	2322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.8	13.3	17.2	4.9	11.1	11.1
Incr Delay (d2), s/veh	0.6	0.2	0.1	0.1	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.0	1.5	0.8	1.9	3.7	3.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.4	13.5	17.2	5.0	12.0	12.1
LnGrp LOS	B	B	B	A	B	B
Approach Vol, veh/h	388			1153	720	
Approach Delay, s/veh	14.8			5.7	12.1	
Approach LOS	B			A	B	

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	30.1		9.7	20.4	14.5
Change Period (Y+Rc), s	7.0		7.0	* 7	5.0
Max Green Setting (Gmax), s	79.0		5.0	* 69	29.0
Max Q Clear Time (g_c+I1), s	9.3		2.0	11.2	8.7
Green Ext Time (p_c), s	4.4		0.0	2.1	0.9

Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

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)	58	0	76	2	1	2	70	1244	7	2	1234	50
Future Volume (veh/h)	58	0	76	2	1	2	70	1244	7	2	1234	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		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	1709	1709	1709	1709	1709	1709	1709	1709	1709	1831	1831	1831
Adj Flow Rate, veh/h	64	0	84	2	1	2	78	1382	8	2	1371	56
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, %	3	3	3	3	3	3	3	3	3	2	2	2
Cap, veh/h	415	0	99	165	12	25	393	1950	11	246	1677	68
Arrive On Green	0.10	0.00	0.12	0.00	0.02	0.02	0.12	0.59	0.53	0.00	0.49	0.45
Sat Flow, veh/h	1628	0	1428	1628	509	1017	1628	3309	19	1744	3406	139
Grp Volume(v), veh/h	64	0	84	2	0	3	78	678	712	2	699	728
Grp Sat Flow(s),veh/h/ln	1628	0	1428	1628	0	1526	1628	1624	1705	1744	1739	1806
Q Serve(g_s), s	1.6	0.0	2.8	0.1	0.0	0.1	0.9	14.5	14.5	0.0	16.8	16.9
Cycle Q Clear(g_c), s	1.6	0.0	2.8	0.1	0.0	0.1	0.9	14.5	14.5	0.0	16.8	16.9
Prop In Lane	1.00		1.00	1.00		0.67	1.00		0.01	1.00		0.08
Lane Grp Cap(c), veh/h	415	0	99	165	0	37	393	957	1005	246	856	889
V/C Ratio(X)	0.15	0.00	0.85	0.01	0.00	0.08	0.20	0.71	0.71	0.01	0.82	0.82
Avail Cap(c_a), veh/h	470	0	696	294	0	741	562	1039	1091	384	1007	1045
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	15.7	0.0	21.4	23.4	0.0	23.5	7.9	7.1	7.2	8.9	10.6	10.7
Incr Delay (d2), s/veh	0.2	0.0	7.3	0.0	0.0	0.3	0.2	2.1	2.0	0.0	3.9	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(95%),veh/ln	0.9	0.0	1.8	0.0	0.0	0.1	0.4	5.8	6.0	0.0	8.9	9.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	15.9	0.0	28.7	23.4	0.0	23.8	8.1	9.2	9.1	8.9	14.5	14.6
LnGrp LOS	B	A	C	C	A	C	A	A	A	A	B	B
Approach Vol, veh/h		148			5			1468			1429	
Approach Delay, s/veh		23.2			23.7			9.1			14.5	
Approach LOS		C			C			A			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.1	32.0	4.1	9.0	8.9	27.2	6.3	6.8
Change Period (Y+Rc), s	4.0	6.0	4.0	* 5.6	5.6	6.0	4.0	5.6
Max Green Setting (Gmax), s	4.0	28.5	4.0	* 24	8.4	25.5	4.0	23.9
Max Q Clear Time (g_c+I1), s	2.0	16.5	2.1	4.8	2.9	18.9	3.6	2.1
Green Ext Time (p_c), s	0.0	5.1	0.0	0.1	0.1	2.3	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	12.4
HCM 6th LOS	B

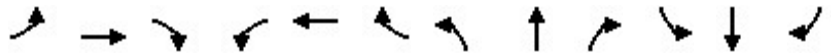
Notes

* 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)	2	3	5	153	3	334	2	1040	65	85	1251	4
Future Volume (veh/h)	2	3	5	153	3	334	2	1040	65	85	1251	4
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		0.98	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	1750	1750	1736	1736	1736	1709	1709	1709	1723	1723	1723
Adj Flow Rate, veh/h	2	3	5	168	3	367	2	1143	71	93	1375	4
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
Percent Heavy Veh, %	0	0	0	1	1	1	3	3	3	2	2	2
Cap, veh/h	56	85	117	478	9	422	209	1286	997	259	1323	4
Arrive On Green	0.08	0.08	0.08	0.29	0.29	0.29	0.08	0.40	0.40	0.09	0.40	0.38
Sat Flow, veh/h	686	1029	1429	1626	29	1437	1628	3247	1413	1641	3347	10
Grp Volume(v), veh/h	5	0	5	171	0	367	2	1143	71	93	672	707
Grp Sat Flow(s),veh/h/ln	1716	0	1429	1655	0	1437	1628	1624	1413	1641	1637	1721
Q Serve(g_s), s	0.2	0.0	0.3	6.9	0.0	20.7	0.0	28.0	1.4	0.0	33.7	33.7
Cycle Q Clear(g_c), s	0.2	0.0	0.3	6.9	0.0	20.7	0.0	28.0	1.4	0.0	33.7	33.7
Prop In Lane	0.40		1.00	0.98		1.00	1.00		1.00	1.00		0.01
Lane Grp Cap(c), veh/h	141	0	117	486	0	422	209	1286	997	259	647	680
V/C Ratio(X)	0.04	0.00	0.04	0.35	0.00	0.87	0.01	0.89	0.07	0.36	1.04	1.04
Avail Cap(c_a), veh/h	603	0	503	491	0	426	237	1321	1012	270	647	680
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	36.0	0.0	36.1	23.7	0.0	28.6	36.4	24.0	4.1	34.6	25.8	25.8
Incr Delay (d2), s/veh	0.0	0.0	0.1	0.2	0.0	16.5	0.0	7.4	0.0	0.3	46.0	45.2
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(95%),veh/ln	0.2	0.0	0.2	4.9	0.0	13.7	0.1	16.2	1.5	3.1	27.8	28.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.1	0.0	36.1	23.9	0.0	45.0	36.4	31.4	4.1	34.9	71.8	71.0
LnGrp LOS	D	A	D	C	A	D	D	C	A	C	F	F
Approach Vol, veh/h		10			538			1216			1472	
Approach Delay, s/veh		36.1			38.3			29.8			69.1	
Approach LOS		D			D			C			E	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.4	36.8		28.1	9.5	37.7		10.0
Change Period (Y+Rc), s	6.0	6.0		5.3	6.0	6.0		6.0
Max Green Setting (Gmax), s	5.0	31.7		23.0	5.0	31.7		27.0
Max Q Clear Time (g_c+I1), s	2.0	30.0		22.7	2.0	35.7		2.3
Green Ext Time (p_c), s	0.0	0.8		0.1	0.0	0.0		0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.1
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	92	33	217	91	545	24	498	121	546	812	42
Future Volume (veh/h)	66	92	33	217	91	545	24	498	121	546	812	42
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		0.97	1.00		0.96	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	1695	1695	1695	1781	1781	1781	1668	1668	1668	1695	1695	1695
Adj Flow Rate, veh/h	71	99	35	233	0	651	26	535	130	587	873	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
Percent Heavy Veh, %	4	4	4	3	3	3	6	6	6	4	4	4
Cap, veh/h	88	187	66	313	0	840	43	780	335	744	1329	68
Arrive On Green	0.05	0.16	0.16	0.18	0.00	0.29	0.03	0.25	0.25	0.24	0.43	0.39
Sat Flow, veh/h	1615	1194	422	1696	0	2934	1589	3169	1364	3132	3116	161
Grp Volume(v), veh/h	71	0	134	233	0	651	26	535	130	587	451	467
Grp Sat Flow(s),veh/h/ln	1615	0	1616	1696	0	1467	1589	1585	1364	1566	1611	1665
Q Serve(g_s), s	3.8	0.0	6.6	11.2	0.0	17.6	1.4	13.3	6.9	15.2	19.3	19.4
Cycle Q Clear(g_c), s	3.8	0.0	6.6	11.2	0.0	17.6	1.4	13.3	6.9	15.2	19.3	19.4
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	88	0	253	313	0	840	43	780	335	744	687	710
V/C Ratio(X)	0.80	0.00	0.53	0.74	0.00	0.78	0.61	0.69	0.39	0.79	0.66	0.66
Avail Cap(c_a), veh/h	228	0	597	390	0	1346	92	1805	777	854	1215	1256
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	40.4	0.0	33.6	33.4	0.0	28.3	41.7	29.6	27.2	31.0	19.8	19.9
Incr Delay (d2), s/veh	6.2	0.0	0.6	4.2	0.0	0.6	5.1	0.4	0.3	3.7	0.4	0.4
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(95%),veh/ln	2.9	0.0	4.6	8.4	0.0	9.9	1.1	8.5	3.9	9.9	11.0	11.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.6	0.0	34.2	37.5	0.0	28.9	46.8	30.0	27.5	34.7	20.2	20.3
LnGrp LOS	D	A	C	D	A	C	D	C	C	C	C	C
Approach Vol, veh/h		205			884			691			1505	
Approach Delay, s/veh		38.5			31.2			30.2			25.9	
Approach LOS		D			C			C			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	24.3	10.4	27.9	8.3	39.9	19.1	19.2
Change Period (Y+Rc), s	6.0	6.0	5.7	5.7	6.0	6.0	5.7	5.7
Max Green Setting (Gmax), s	21.0	46.3	12.2	37.1	5.0	62.3	17.3	32.0
Max Q Clear Time (g_c+I1), s	11.2	15.3	5.8	19.6	3.4	21.4	13.2	8.6
Green Ext Time (p_c), s	0.7	1.8	0.0	2.2	0.0	2.1	0.2	0.4

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

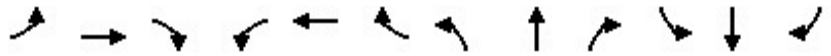
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	16	153	433	39	59	69	656	75	34	1019	59
Future Volume (veh/h)	15	16	153	433	39	59	69	656	75	34	1019	59
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		0.99	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	1695	1695	1695	1736	1736	1736	1709	1709	1709	1767	1767	1767
Adj Flow Rate, veh/h	16	17	159	451	41	61	72	683	78	35	1061	61
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, %	4	4	4	1	1	1	3	3	3	4	4	4
Cap, veh/h	66	76	498	532	260	387	196	873	100	433	1370	79
Arrive On Green	0.41	0.41	0.40	0.41	0.41	0.40	0.07	0.30	0.30	0.20	0.43	0.41
Sat Flow, veh/h	67	182	1203	1217	629	936	1628	2935	335	1683	3222	185
Grp Volume(v), veh/h	192	0	0	451	0	102	72	377	384	35	553	569
Grp Sat Flow(s),veh/h/ln	1452	0	0	1217	0	1565	1628	1624	1647	1683	1679	1728
Q Serve(g_s), s	0.0	0.0	0.0	31.7	0.0	4.2	0.0	21.6	21.7	0.0	28.6	28.7
Cycle Q Clear(g_c), s	9.0	0.0	0.0	40.7	0.0	4.2	0.0	21.6	21.7	0.0	28.6	28.7
Prop In Lane	0.08		0.83	1.00		0.60	1.00		0.20	1.00		0.11
Lane Grp Cap(c), veh/h	639	0	0	532	0	648	196	483	490	433	714	735
V/C Ratio(X)	0.30	0.00	0.00	0.85	0.00	0.16	0.37	0.78	0.78	0.08	0.77	0.77
Avail Cap(c_a), veh/h	639	0	0	532	0	648	206	1136	1152	433	1175	1209
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	0.0	0.0	30.8	0.0	18.8	43.6	32.6	32.7	31.2	25.0	25.1
Incr Delay (d2), s/veh	0.3	0.0	0.0	11.6	0.0	0.0	0.4	2.8	2.8	0.0	2.6	2.5
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(95%),veh/ln	5.7	0.0	0.0	18.1	0.0	2.8	3.0	13.4	13.6	1.2	16.8	17.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.6	0.0	0.0	42.5	0.0	18.9	44.0	35.5	35.5	31.2	27.6	27.6
LnGrp LOS	C	A	A	D	A	B	D	D	D	C	C	C
Approach Vol, veh/h		192			553			833			1157	
Approach Delay, s/veh		20.6			38.1			36.2			27.7	
Approach LOS		C			D			D			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.3	33.2		45.0	10.3	46.1		45.0
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.3	68.0		40.0	5.0	68.0		40.0
Max Q Clear Time (g_c+I1), s	12.0	23.7		42.7	2.0	30.7		11.0
Green Ext Time (p_c), s	0.0	3.3		0.0	0.1	9.4		0.9

Intersection Summary		
HCM 6th Ctrl Delay	31.9	
HCM 6th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	0	73	0	0	1	146	381	1	0	489	215
Future Volume (veh/h)	77	0	73	0	0	1	146	381	1	0	489	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1581	1581	1581	1750	1750	1750	1912	1912	1912	1736	1736	1736
Adj Flow Rate, veh/h	85	0	-52	0	0	1	160	419	1	0	537	236
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
Percent Heavy Veh, %	6	6	6	0	0	0	4	4	4	1	1	1
Cap, veh/h	249	0	268	0	0	4	374	1286	3	3	618	272
Arrive On Green	0.08	0.00	0.00	0.00	0.00	0.00	0.09	0.67	0.66	0.00	0.54	0.54
Sat Flow, veh/h	1506	1581	0	0	0	1483	1821	1907	5	1654	1143	502
Grp Volume(v), veh/h	85	-52	-52	0	0	1	160	0	420	0	0	773
Grp Sat Flow(s),veh/h/ln	1506	1581	1340	0	0	1483	1821	0	1911	1654	0	1646
Q Serve(g_s), s	3.4	0.0	0.0	0.0	0.0	0.0	2.1	0.0	6.0	0.0	0.0	26.5
Cycle Q Clear(g_c), s	3.4	0.0	0.0	0.0	0.0	0.0	2.1	0.0	6.0	0.0	0.0	26.5
Prop In Lane	1.00		0.00	0.00		1.00	1.00		0.00	1.00		0.31
Lane Grp Cap(c), veh/h	249	0	0	0	0	4	374	0	1289	3	0	889
V/C Ratio(X)	0.34	0.00	0.00	0.00	0.00	0.24	0.43	0.00	0.33	0.00	0.00	0.87
Avail Cap(c_a), veh/h	249	0	0	0	0	228	494	0	1410	127	0	1214
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	0.00	0.00	0.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	26.4	0.0	0.0	0.0	0.0	32.4	12.0	0.0	4.4	0.0	0.0	13.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	0.0	0.0	56.7	1.1	0.0	0.2	0.0	0.0	6.1
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(95%),veh/ln	2.2	0.0	0.0	0.0	0.0	0.1	2.0	0.0	2.8	0.0	0.0	14.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	27.2	0.0	0.0	0.0	0.0	89.1	13.1	0.0	4.6	0.0	0.0	19.0
LnGrp LOS	C	A	A	A	A	F	B	A	A	A	A	B
Approach Vol, veh/h		-19			1			580			773	
Approach Delay, s/veh		0.0			89.1			7.0			19.0	
Approach LOS		A			F			A			B	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	49.9		15.2	8.7	41.2	8.0	7.2
Change Period (Y+Rc), s	7.0	7.0		7.0	4.0	* 7	4.0	* 7
Max Green Setting (Gmax), s	5.0	47.0		17.0	9.0	* 47	4.0	* 10
Max Q Clear Time (g_c+I1), s	0.0	8.0		0.0	4.1	28.5	5.4	2.0
Green Ext Time (p_c), s	0.0	2.9		0.0	0.3	5.7	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B

Notes

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

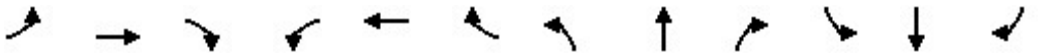
Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	27	914	35	26	813
Future Vol, veh/h	50	27	914	35	26	813
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	75	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	1	1	2	2	2	2
Mvmt Flow	54	29	993	38	28	884

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1511	516	0	0	1031	0
Stage 1	1012	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Critical Hdwy	7.02	7.02	-	-	4.14	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.22	-
Pot Cap-1 Maneuver	103	499	-	-	670	-
Stage 1	297	-	-	-	-	-
Stage 2	562	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	99	499	-	-	670	-
Mov Cap-2 Maneuver	259	-	-	-	-	-
Stage 1	297	-	-	-	-	-
Stage 2	538	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	20.7	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	312	670	-
HCM Lane V/C Ratio	-	-	0.268	0.042	-
HCM Control Delay (s)	-	-	20.7	10.6	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	1.1	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	3	39	74	5	108	9	932	31	37	611	2
Future Volume (veh/h)	44	3	39	74	5	108	9	932	31	37	611	2
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		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1736	1736	1736	1723	1723	1723	1736	1736	1736	1682	1682	1682
Adj Flow Rate, veh/h	48	3	42	80	5	117	10	1013	34	40	664	2
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	1	1	2	2	2	1	1	1	5	5	5
Cap, veh/h	285	46	152	247	23	187	596	1431	48	383	1081	3
Arrive On Green	0.22	0.22	0.19	0.22	0.22	0.19	0.21	0.44	0.40	0.10	0.33	0.29
Sat Flow, veh/h	628	208	688	511	104	847	1654	3257	109	1602	3268	10
Grp Volume(v), veh/h	93	0	0	202	0	0	10	513	534	40	325	341
Grp Sat Flow(s),veh/h/ln	1524	0	0	1463	0	0	1654	1650	1717	1602	1598	1680
Q Serve(g_s), s	0.0	0.0	0.0	2.8	0.0	0.0	0.0	9.5	9.5	0.0	6.4	6.4
Cycle Q Clear(g_c), s	1.8	0.0	0.0	4.6	0.0	0.0	0.0	9.5	9.5	0.0	6.4	6.4
Prop In Lane	0.52		0.45	0.40		0.58	1.00		0.06	1.00		0.01
Lane Grp Cap(c), veh/h	483	0	0	458	0	0	596	725	754	383	528	556
V/C Ratio(X)	0.19	0.00	0.00	0.44	0.00	0.00	0.02	0.71	0.71	0.10	0.61	0.61
Avail Cap(c_a), veh/h	982	0	0	978	0	0	1667	4276	4450	1594	4141	4355
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	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.3	0.0	0.0	13.3	0.0	0.0	9.7	8.5	8.6	14.3	10.5	10.5
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.5	0.5	0.0	0.4	0.4
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(95%),veh/ln	0.9	0.0	0.0	2.2	0.0	0.0	0.1	3.5	3.6	0.4	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	12.3	0.0	0.0	13.6	0.0	0.0	9.7	9.0	9.0	14.3	11.0	10.9
LnGrp LOS	B	A	A	B	A	A	A	A	A	B	B	B
Approach Vol, veh/h		93			202			1057			706	
Approach Delay, s/veh		12.3			13.6			9.0			11.1	
Approach LOS		B			B			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.7	19.4		11.3	10.8	15.4		11.3				
Change Period (Y+Rc), s	5.0	5.6		5.0	5.0	5.6		5.0				
Max Green Setting (Gmax), s	30.0	94.4		20.0	30.0	94.4		20.0				
Max Q Clear Time (g_c+I1), s	2.0	11.5		6.6	2.0	8.4		3.8				
Green Ext Time (p_c), s	0.1	2.3		0.4	0.0	1.4		0.2				

Intersection Summary			
HCM 6th Ctrl Delay		10.3	
HCM 6th LOS		B	

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	17	62	33	728	1008	14
Future Volume (veh/h)	17	62	33	728	1008	14
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	1614	1614	1723	1723	1695	1695
Adj Flow Rate, veh/h	18	67	36	791	1096	15
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	10	10	2	2	4	4
Cap, veh/h	219	195	429	2152	1611	22
Arrive On Green	0.14	0.14	0.06	0.66	0.50	0.50
Sat Flow, veh/h	1537	1367	1641	3359	3338	45
Grp Volume(v), veh/h	18	67	36	791	543	568
Grp Sat Flow(s),veh/h/ln	1537	1367	1641	1637	1611	1687
Q Serve(g_s), s	0.4	1.5	0.3	3.8	9.0	9.0
Cycle Q Clear(g_c), s	0.4	1.5	0.3	3.8	9.0	9.0
Prop In Lane	1.00	1.00	1.00			0.03
Lane Grp Cap(c), veh/h	219	195	429	2152	798	836
V/C Ratio(X)	0.08	0.34	0.08	0.37	0.68	0.68
Avail Cap(c_a), veh/h	746	664	561	4812	2000	2095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.0	13.5	4.5	2.7	6.7	6.7
Incr Delay (d2), s/veh	0.2	1.0	0.1	0.1	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.8	0.1	0.3	3.1	3.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	13.2	14.6	4.6	2.8	7.8	7.7
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	85			827	1111	
Approach Delay, s/veh	14.3			2.9	7.7	
Approach LOS	B			A	A	

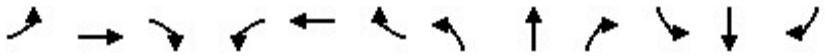
Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	8.5	5.7	20.8		26.5
Change Period (Y+Rc), s	4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s	16.0	4.0	42.5		50.5
Max Q Clear Time (g_c+I1), s	3.5	2.3	11.0		5.8
Green Ext Time (p_c), s	0.2	0.0	5.4		4.1

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	88	5	62	31	15	20	84	641	43	5	642	82
Future Volume (veh/h)	88	5	62	31	15	20	84	641	43	5	642	82
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.90	1.00		0.99	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	1690	1690	1690	1695	1695	1695	1704	1704	1704	1662	1662	1662
Adj Flow Rate, veh/h	104	6	73	36	18	24	99	754	51	6	755	96
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	4	4	4	4	4	4	3	3	3	9	9	9
Cap, veh/h	81	2	542	80	25	554	198	931	63	279	931	118
Arrive On Green	0.42	0.42	0.42	0.43	0.42	0.43	0.05	0.30	0.30	0.09	0.33	0.32
Sat Flow, veh/h	0	5	1295	25	59	1287	1623	3074	208	1583	2814	358
Grp Volume(v), veh/h	110	0	73	54	0	24	99	397	408	6	423	428
Grp Sat Flow(s),veh/h/ln	5	0	1295	84	0	1287	1623	1618	1664	1583	1579	1593
Q Serve(g_s), s	0.0	0.0	3.0	1.0	0.0	0.9	0.0	19.5	19.5	0.0	21.1	21.1
Cycle Q Clear(g_c), s	36.0	0.0	3.0	37.0	0.0	0.9	0.0	19.5	19.5	0.0	21.1	21.1
Prop In Lane	0.95		1.00	0.67		1.00	1.00		0.12	1.00		0.22
Lane Grp Cap(c), veh/h	84	0	542	106	0	554	198	490	504	279	522	527
V/C Ratio(X)	1.31	0.00	0.13	0.51	0.00	0.04	0.50	0.81	0.81	0.02	0.81	0.81
Avail Cap(c_a), veh/h	84	0	542	106	0	554	264	885	910	279	808	816
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	42.0	0.0	15.4	29.9	0.0	14.2	38.0	27.7	27.7	30.0	26.3	26.4
Incr Delay (d2), s/veh	203.4	0.0	0.0	4.0	0.0	0.0	0.7	3.2	3.2	0.0	3.6	3.6
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(95%),veh/ln	11.6	0.0	1.5	2.2	0.0	0.5	3.6	12.1	12.3	0.2	12.6	12.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	245.4	0.0	15.4	34.0	0.0	14.2	38.7	30.9	30.8	30.0	29.9	30.0
LnGrp LOS	F	A	B	C	A	B	D	C	C	C	C	C
Approach Vol, veh/h		183			78			904			857	
Approach Delay, s/veh		153.7			27.9			31.7			30.0	
Approach LOS		F			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.5	33.4		42.0	12.9	31.0		42.0
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	8.5	43.0		36.0	5.0	46.0		36.0
Max Q Clear Time (g_c+I1), s	12.0	23.1		39.0	2.0	21.5		38.0
Green Ext Time (p_c), s	0.0	3.6		0.0	0.0	3.4		0.0

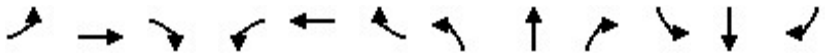
Intersection Summary	
HCM 6th Ctrl Delay	41.9
HCM 6th LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	632	26	4	1075	6	44	0	6	16	0	9
Future Volume (veh/h)	6	632	26	4	1075	6	44	0	6	16	0	9
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	0.99		0.98	0.99		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	1926	1926	1926	1541	1541	1541	1809	1809	1809	1709	1709	1709
Adj Flow Rate, veh/h	7	695	29	4	1181	7	48	0	7	18	0	10
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
Percent Heavy Veh, %	3	3	3	1	1	1	1	1	1	3	3	3
Cap, veh/h	396	2059	86	548	1716	10	416	15	30	313	31	82
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.16	0.00	0.16	0.16	0.00	0.16
Sat Flow, veh/h	527	3579	149	653	2984	18	1207	93	190	730	195	514
Grp Volume(v), veh/h	7	355	369	4	579	609	55	0	0	28	0	0
Grp Sat Flow(s),veh/h/ln	527	1830	1899	653	1464	1537	1490	0	0	1438	0	0
Q Serve(g_s), s	0.3	3.1	3.1	0.1	8.4	8.4	0.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.7	3.1	3.1	3.2	8.4	8.4	0.9	0.0	0.0	0.5	0.0	0.0
Prop In Lane	1.00		0.08	1.00		0.01	0.87		0.13	0.64		0.36
Lane Grp Cap(c), veh/h	396	1052	1092	548	842	884	461	0	0	425	0	0
V/C Ratio(X)	0.02	0.34	0.34	0.01	0.69	0.69	0.12	0.00	0.00	0.07	0.00	0.00
Avail Cap(c_a), veh/h	1478	4809	4991	1888	3848	4041	1836	0	0	1740	0	0
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	0.00
Uniform Delay (d), s/veh	7.5	3.4	3.4	4.2	4.5	4.5	11.0	0.0	0.0	10.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.0	1.0	1.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.2	0.2	0.0	0.8	0.8	0.4	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.5	3.6	3.5	4.2	5.5	5.5	11.1	0.0	0.0	10.9	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		731			1192			55			28	
Approach Delay, s/veh		3.6			5.5			11.1			10.9	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	8.8	21.3	8.8	21.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	32.0	78.0	32.0	78.0
Max Q Clear Time (g_c+I1), s	2.9	10.7	2.5	10.4
Green Ext Time (p_c), s	0.2	3.1	0.1	5.9

Intersection Summary	
HCM 6th Ctrl Delay	5.0
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	11	122	0	37	4	756	40	7	1603	0
Future Volume (veh/h)	2	0	11	122	0	37	4	756	40	7	1603	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1967	1967	1967	1701	1701	1701	1717	1717	1717	1759	1759	1759
Adj Flow Rate, veh/h	2	0	12	133	0	0	4	822	43	8	1742	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0	2	2	2	2	2	2
Cap, veh/h	339	0	228	272	0		229	2399	125	533	2542	0
Arrive On Green	0.14	0.00	0.14	0.14	0.00	0.00	0.76	0.76	0.76	0.76	0.76	0.00
Sat Flow, veh/h	1610	0	1653	1311	0	1442	276	3154	165	653	3429	0
Grp Volume(v), veh/h	2	0	12	133	0	0	4	425	440	8	1742	0
Grp Sat Flow(s),veh/h/ln	1610	0	1653	1311	0	1442	276	1631	1688	653	1671	0
Q Serve(g_s), s	0.0	0.0	0.5	7.4	0.0	0.0	0.6	6.7	6.7	0.3	20.6	0.0
Cycle Q Clear(g_c), s	0.1	0.0	0.5	7.9	0.0	0.0	21.2	6.7	6.7	7.0	20.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		0.00
Lane Grp Cap(c), veh/h	339	0	228	272	0		229	1241	1284	533	2542	0
V/C Ratio(X)	0.01	0.00	0.05	0.49	0.00		0.02	0.34	0.34	0.02	0.69	0.00
Avail Cap(c_a), veh/h	564	0	460	465	0		320	1775	1836	746	3636	0
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	0.00
Uniform Delay (d), s/veh	29.4	0.0	29.6	33.0	0.0	0.0	10.0	3.1	3.1	4.2	4.7	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.1	0.3	0.3	0.0	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.4	4.4	0.0	0.0	0.1	2.4	2.5	0.1	7.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.4	0.0	29.6	33.5	0.0	0.0	10.1	3.4	3.4	4.2	5.4	0.0
LnGrp LOS	C	A	C	C	A		B	A	A	A	A	A
Approach Vol, veh/h		14			133	A		869			1750	
Approach Delay, s/veh		29.6			33.5			3.4			5.4	
Approach LOS		C			C			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	64.1	14.9	64.1	14.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	85.0	21.0	85.0	21.0
Max Q Clear Time (g_c+I1), s	23.2	2.5	22.6	9.9
Green Ext Time (p_c), s	10.6	0.0	36.5	0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.3
HCM 6th LOS	A

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	1	3	1105	4	6	1120
Future Volume (veh/h)	1	3	1105	4	6	1120
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.98		0.98	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	1750	1750	1903	1903	1723	1723
Adj Flow Rate, veh/h	1	3	1242	4	7	1258
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	2	2	2	2
Cap, veh/h	29	87	2058	7	461	2420
Arrive On Green	0.09	0.06	0.56	0.52	0.08	0.74
Sat Flow, veh/h	309	926	3793	12	1641	3359
Grp Volume(v), veh/h	5	0	607	639	7	1258
Grp Sat Flow(s),veh/h/ln	1543	0	1808	1901	1641	1637
Q Serve(g_s), s	0.1	0.0	6.7	6.7	0.0	4.9
Cycle Q Clear(g_c), s	0.1	0.0	6.7	6.7	0.0	4.9
Prop In Lane	0.20	0.60		0.01	1.00	
Lane Grp Cap(c), veh/h	145	0	1006	1058	461	2420
V/C Ratio(X)	0.03	0.00	0.60	0.60	0.02	0.52
Avail Cap(c_a), veh/h	926	0	5123	5386	818	10582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.6	0.0	4.4	4.4	8.0	1.7
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.7	0.7	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	12.7	0.0	4.7	4.7	8.0	1.7
LnGrp LOS	B	A	A	A	A	A
Approach Vol, veh/h	5		1246			1265
Approach Delay, s/veh	12.7		4.7			1.8
Approach LOS	B		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.5	19.7			25.2	4.8
Change Period (Y+Rc), s	5.2	5.2			5.2	4.0
Max Green Setting (Gmax), s	6.8	82.8			94.8	16.0
Max Q Clear Time (g_c+I1), s	2.0	8.7			6.9	2.1
Green Ext Time (p_c), s	0.0	5.7			7.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.2
HCM 6th LOS	A

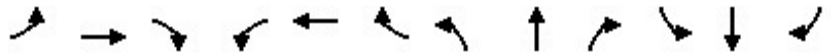
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	162	242	11	1	272	38	20	3	4	57	2	433
Future Volume (veh/h)	162	242	11	1	272	38	20	3	4	57	2	433
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1682	1682	1682	1736	1736	1736	1723	1723	1723	1723	1723	1723
Adj Flow Rate, veh/h	174	260	12	1	292	41	22	3	4	61	2	466
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
Percent Heavy Veh, %	5	5	5	1	1	1	2	2	2	2	2	2
Cap, veh/h	415	568	26	382	378	53	202	242	323	678	2	526
Arrive On Green	0.12	0.36	0.34	0.00	0.25	0.25	0.36	0.36	0.36	0.38	0.36	0.38
Sat Flow, veh/h	1602	1595	74	1654	1490	209	924	668	891	1405	6	1451
Grp Volume(v), veh/h	174	0	272	1	0	333	22	0	7	61	0	468
Grp Sat Flow(s),veh/h/ln	1602	0	1669	1654	0	1699	924	0	1559	1405	0	1457
Q Serve(g_s), s	3.6	0.0	6.3	0.0	0.0	9.1	1.1	0.0	0.1	1.4	0.0	15.0
Cycle Q Clear(g_c), s	3.6	0.0	6.3	0.0	0.0	9.1	16.1	0.0	0.1	1.6	0.0	15.0
Prop In Lane	1.00		0.04	1.00		0.12	1.00		0.57	1.00		1.00
Lane Grp Cap(c), veh/h	415	0	594	382	0	431	202	0	566	678	0	529
V/C Ratio(X)	0.42	0.00	0.46	0.00	0.00	0.77	0.11	0.00	0.01	0.09	0.00	0.89
Avail Cap(c_a), veh/h	570	0	1034	709	0	1053	236	0	624	730	0	583
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	11.0	0.0	12.4	14.6	0.0	17.3	22.5	0.0	10.2	10.1	0.0	14.5
Incr Delay (d2), s/veh	0.3	0.0	0.2	0.0	0.0	1.1	0.1	0.0	0.0	0.0	0.0	13.4
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(95%),veh/ln	1.6	0.0	3.2	0.0	0.0	5.3	0.4	0.0	0.1	0.7	0.0	10.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	11.3	0.0	12.6	14.6	0.0	18.4	22.6	0.0	10.2	10.1	0.0	27.8
LnGrp LOS	B	A	B	B	A	B	C	A	B	B	A	C
Approach Vol, veh/h		446			334			29			529	
Approach Delay, s/veh		12.1			18.4			19.6			25.8	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	21.8		23.1	10.2	16.7		23.1
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	10.6	30.0		20.0	10.0	30.0		20.0
Max Q Clear Time (g_c+I1), s	12.0	8.3		18.1	5.6	11.1		17.0
Green Ext Time (p_c), s	0.0	0.5		0.0	0.1	0.6		0.8

Intersection Summary		
HCM 6th Ctrl Delay	19.2	
HCM 6th LOS	B	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	9	209	11	46	49	1015	249	46	994	15
Future Volume (veh/h)	10	0	9	209	11	46	49	1015	249	46	994	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.90	0.91		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1709	1709	1709	1654	1654	1654	1709	1709	1709	1723	1723	1723
Adj Flow Rate, veh/h	11	0	10	240	13	0	56	1167	0	53	1143	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	3	3	3	7	7	7	3	3	3	2	2	2
Cap, veh/h	600	0	465	514	22		310	1397		293	1383	
Arrive On Green	0.36	0.00	0.33	0.36	0.36	0.00	0.09	0.43	0.00	0.09	0.42	0.00
Sat Flow, veh/h	1295	0	1304	1163	63	1402	1628	3333	0	1641	3359	0
Grp Volume(v), veh/h	11	0	10	253	0	0	56	1167	0	53	1143	0
Grp Sat Flow(s),veh/h/ln	1295	0	1304	1226	0	1402	1628	1624	0	1641	1637	0
Q Serve(g_s), s	0.0	0.0	0.4	11.8	0.0	0.0	0.0	22.7	0.0	0.0	22.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.4	12.1	0.0	0.0	0.0	22.7	0.0	0.0	22.0	0.0
Prop In Lane	1.00		1.00	0.95		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	600	0	465	536	0		310	1397		293	1383	
V/C Ratio(X)	0.02	0.00	0.02	0.47	0.00		0.18	0.84		0.18	0.83	
Avail Cap(c_a), veh/h	740	0	606	671	0		315	1829		336	1982	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	14.8	0.0	15.5	18.8	0.0	0.0	25.2	18.0	0.0	26.2	18.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.0	0.3	2.1	0.0	0.1	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	0.2	6.0	0.0	0.0	1.4	12.1	0.0	1.4	11.8	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	14.8	0.0	15.5	19.4	0.0	0.0	25.5	20.1	0.0	26.3	19.5	0.0
LnGrp LOS	B	A	B	B	A		C	C		C	B	
Approach Vol, veh/h		21			253	A		1223	A		1196	A
Approach Delay, s/veh		15.1			19.4			20.4			19.8	
Approach LOS		B			B			C			B	

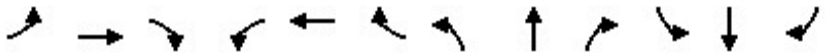
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	33.6		28.3	9.7	33.0		28.3
Change Period (Y+Rc), s	5.9	5.9		6.0	5.9	* 5.9		6.0
Max Green Setting (Gmax), s	5.1	37.1		30.0	4.0	* 40		30.0
Max Q Clear Time (g_c+I1), s	2.0	24.7		14.1	2.0	24.0		2.4
Green Ext Time (p_c), s	0.0	3.0		1.0	0.0	3.1		0.0

Intersection Summary	
HCM 6th Ctrl Delay	20.0
HCM 6th LOS	C

Notes

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

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	825	248	77	2049	91	654	62	32	108	122	354
Future Volume (veh/h)	200	825	248	77	2049	91	654	62	32	108	122	354
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		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1682	1682	1682	1723	1723	1723	1795	1795	1795	1709	1709	1709
Adj Flow Rate, veh/h	208	859	258	80	2455	109	660	195	0	112	127	0
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, %	5	5	5	2	2	2	2	2	2	3	3	3
Cap, veh/h	188	1599	996	117	2069	91	740	389		160	168	
Arrive On Green	0.12	0.50	0.49	0.07	0.45	0.44	0.22	0.22	0.00	0.10	0.10	0.00
Sat Flow, veh/h	1602	3195	1390	1641	4617	203	3419	1795	0	1628	1709	1448
Grp Volume(v), veh/h	208	859	258	80	1660	904	660	195	0	112	127	0
Grp Sat Flow(s),veh/h/ln	1602	1598	1390	1641	1568	1685	1709	1795	0	1628	1709	1448
Q Serve(g_s), s	19.0	29.8	10.7	7.7	72.7	72.7	30.4	15.5	0.0	10.8	11.7	0.0
Cycle Q Clear(g_c), s	19.0	29.8	10.7	7.7	72.7	72.7	30.4	15.5	0.0	10.8	11.7	0.0
Prop In Lane	1.00		1.00	1.00		0.12	1.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	1599	996	117	1405	755	740	389		160	168	
V/C Ratio(X)	1.11	0.54	0.26	0.69	1.18	1.20	0.89	0.50		0.70	0.76	
Avail Cap(c_a), veh/h	188	1599	996	172	1405	755	759	398		231	242	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	71.6	27.7	8.3	73.6	44.8	44.8	61.7	55.9	0.0	70.9	71.3	0.0
Incr Delay (d2), s/veh	97.9	0.5	0.2	6.9	89.4	101.2	13.9	2.8	0.0	14.3	17.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.6	17.1	10.4	6.3	63.3	71.3	20.8	11.7	0.0	8.8	9.9	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	169.5	28.2	8.6	80.5	134.2	146.0	75.7	58.6	0.0	85.2	89.1	0.0
LnGrp LOS	F	C	A	F	F	F	E	E		F	F	
Approach Vol, veh/h		1325			2644			855	A		239	A
Approach Delay, s/veh		46.6			136.6			71.8			87.2	
Approach LOS		D			F			E			F	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.5	86.7		20.9	23.0	78.2		40.1
Change Period (Y+Rc), s	5.0	7.5		6.0	5.0	* 7.5		6.0
Max Green Setting (Gmax), s	15.0	73.5		22.0	18.0	* 71		35.0
Max Q Clear Time (g_c+I1), s	9.7	31.8		13.7	21.0	74.7		32.4
Green Ext Time (p_c), s	0.1	12.4		1.2	0.0	0.0		1.7

Intersection Summary	
HCM 6th Ctrl Delay	99.8
HCM 6th LOS	F

Notes

User approved volume balancing among the lanes for turning movement.

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

User approved changes to right turn type.

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

HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	253	192	183	680	137	61
Future Volume (veh/h)	253	192	183	680	137	61
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	1608	1608	1682	1682	1674	1674
Adj Flow Rate, veh/h	264	200	229	850	157	70
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	10	10	5	5	4	4
Cap, veh/h	556	471	293	1094	282	222
Arrive On Green	0.35	0.35	0.18	0.65	0.18	0.16
Sat Flow, veh/h	1608	1363	1602	1682	1594	1418
Grp Volume(v), veh/h	264	200	229	850	157	70
Grp Sat Flow(s),veh/h/ln	1608	1363	1602	1682	1594	1418
Q Serve(g_s), s	6.3	5.5	6.7	17.6	4.4	2.2
Cycle Q Clear(g_c), s	6.3	5.5	6.7	17.6	4.4	2.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	556	471	293	1094	282	222
V/C Ratio(X)	0.47	0.42	0.78	0.78	0.56	0.31
Avail Cap(c_a), veh/h	1126	954	293	1690	874	749
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.6	12.4	19.2	6.1	18.5	18.4
Incr Delay (d2), s/veh	1.3	1.3	12.9	2.6	1.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.7	2.8	5.8	6.7	2.7	1.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.0	13.6	32.1	8.7	19.8	19.0
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	464			1079	227	
Approach Delay, s/veh	13.8			13.7	19.5	
Approach LOS	B			B	B	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	15.0	22.0			37.0	12.2
Change Period (Y+Rc), s	7.0	7.0			7.0	5.5
Max Green Setting (Gmax), s	8.0	32.5			47.5	25.0
Max Q Clear Time (g_c+I1), s	8.7	8.3			19.6	6.4
Green Ext Time (p_c), s	0.0	4.2			10.4	0.6

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

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	209	248	152	331	200	113
Future Volume (veh/h)	209	248	152	331	200	113
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	1690	1690	1689	1689	1701	1701
Adj Flow Rate, veh/h	235	279	171	372	225	127
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	4	4	7	7	0	0
Cap, veh/h	688	583	505	688	326	184
Arrive On Green	0.41	0.41	0.41	0.41	0.33	0.33
Sat Flow, veh/h	1690	1432	869	1689	981	554
Grp Volume(v), veh/h	235	279	171	372	353	0
Grp Sat Flow(s),veh/h/ln	1690	1432	869	1689	1539	0
Q Serve(g_s), s	2.9	4.4	5.2	5.1	6.1	0.0
Cycle Q Clear(g_c), s	2.9	4.4	8.1	5.1	6.1	0.0
Prop In Lane		1.00	1.00		0.64	0.36
Lane Grp Cap(c), veh/h	688	583	505	688	512	0
V/C Ratio(X)	0.34	0.48	0.34	0.54	0.69	0.00
Avail Cap(c_a), veh/h	934	791	631	933	1000	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.3	6.7	9.1	6.9	8.9	0.0
Incr Delay (d2), s/veh	0.3	0.6	0.4	0.7	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.1	1.4	1.2	1.9	2.6	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	6.6	7.3	9.5	7.6	10.6	0.0
LnGrp LOS	A	A	A	A	B	A
Approach Vol, veh/h	514			543	353	
Approach Delay, s/veh	7.0			8.2	10.6	
Approach LOS	A			A	B	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	14.2	16.5	16.5
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	19.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	8.1	6.4	10.1
Green Ext Time (p_c), s	1.1	1.6	1.4

Intersection Summary	
HCM 6th Ctrl Delay	8.3
HCM 6th LOS	A

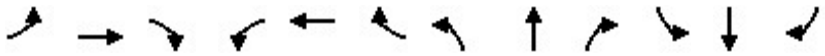
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	955	24	8	2515	86	24
Future Volume (veh/h)	955	24	8	2515	86	24
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	1753	1753	1701	1701	1881	1881
Adj Flow Rate, veh/h	995	20	8	2620	90	13
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	2	2	1	1
Cap, veh/h	2731	1218	26	2809	145	129
Arrive On Green	0.82	0.82	0.02	0.87	0.08	0.08
Sat Flow, veh/h	3419	1486	1620	3317	1791	1594
Grp Volume(v), veh/h	995	20	8	2620	90	13
Grp Sat Flow(s),veh/h/ln	1666	1486	1620	1616	1791	1594
Q Serve(g_s), s	9.3	0.3	0.6	67.6	5.9	0.9
Cycle Q Clear(g_c), s	9.3	0.3	0.6	67.6	5.9	0.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2731	1218	26	2809	145	129
V/C Ratio(X)	0.36	0.02	0.31	0.93	0.62	0.10
Avail Cap(c_a), veh/h	3203	1429	67	3348	282	251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	2.8	2.0	58.7	5.5	53.6	51.3
Incr Delay (d2), s/veh	0.1	0.0	6.5	5.0	4.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	3.8	0.1	0.5	16.1	5.0	0.7
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	2.9	2.0	65.2	10.5	57.9	51.7
LnGrp LOS	A	A	E	B	E	D
Approach Vol, veh/h	1015			2628	103	
Approach Delay, s/veh	2.9			10.6	57.1	
Approach LOS	A			B	E	

Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	12.8	5.9	101.9	107.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	17.0	4.0	114.0	123.0
Max Q Clear Time (g_c+I1), s	7.9	2.6	11.3	69.6
Green Ext Time (p_c), s	0.2	0.0	5.8	33.2

Intersection Summary	
HCM 6th Ctrl Delay	9.8
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	188	253	7	427	471	49	2	582	455	66	896	860
Future Volume (veh/h)	188	253	7	427	471	49	2	582	455	66	896	860
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		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	1641	1641	1641	1759	1759	1759	1762	1762	1762	1674	1674	1674
Adj Flow Rate, veh/h	198	266	7	449	496	52	2	613	0	69	943	0
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, %	8	8	8	2	2	2	7	7	7	2	2	2
Cap, veh/h	283	399	10	639	707	74	203	1211		349	1281	
Arrive On Green	0.09	0.13	0.13	0.20	0.23	0.23	0.00	0.36	0.00	0.04	0.40	0.00
Sat Flow, veh/h	3032	3103	81	3249	3048	318	1678	3348	1493	1594	3264	0
Grp Volume(v), veh/h	198	133	140	449	271	277	2	613	0	69	943	0
Grp Sat Flow(s),veh/h/ln	1516	1559	1626	1625	1671	1695	1678	1674	1493	1594	1590	0
Q Serve(g_s), s	4.2	5.4	5.5	8.6	9.9	10.0	0.1	9.5	0.0	1.8	16.8	0.0
Cycle Q Clear(g_c), s	4.2	5.4	5.5	8.6	9.9	10.0	0.1	9.5	0.0	1.8	16.8	0.0
Prop In Lane	1.00		0.05	1.00		0.19	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	283	200	209	639	387	393	203	1211		349	1281	
V/C Ratio(X)	0.70	0.67	0.67	0.70	0.70	0.70	0.01	0.51		0.20	0.74	
Avail Cap(c_a), veh/h	409	397	414	1777	1114	1131	300	3231		378	3074	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.3	27.7	27.7	25.0	23.5	23.5	15.0	16.6	0.0	13.0	16.9	0.0
Incr Delay (d2), s/veh	3.1	3.8	3.7	1.4	2.3	2.3	0.0	0.3	0.0	0.3	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.8	3.8	4.0	5.8	6.9	7.1	0.0	6.0	0.0	1.1	9.3	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	32.5	31.5	31.4	26.4	25.8	25.8	15.0	17.0	0.0	13.3	17.8	0.0
LnGrp LOS	C	C	C	C	C	C	B	B		B	B	
Approach Vol, veh/h		471			997			615	A		1012	A
Approach Delay, s/veh		31.9			26.1			17.0			17.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.6	13.1	4.6	31.4	10.7	20.0	7.4	28.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	36.5	17.0	4.0	64.5	9.0	44.5	4.1	64.4
Max Q Clear Time (g_c+I1), s	10.6	7.5	2.1	18.8	6.2	12.0	3.8	11.5
Green Ext Time (p_c), s	1.6	1.0	0.0	8.1	0.2	3.5	0.0	4.7

Intersection Summary	
HCM 6th Ctrl Delay	22.3
HCM 6th LOS	C

Notes

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

MOVEMENT SUMMARY

Site: 3 [3 - SE Issaquah Fall City Rd & Klahanie Dr SE]

2035 AM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Klahanie Dr SE												
3	L2	2	0.0	0.005	4.3	LOS A	0.0	0.4	0.46	0.31	0.46	34.0
8	T1	1	0.0	0.005	4.3	LOS A	0.0	0.4	0.46	0.31	0.46	34.0
18	R2	1	0.0	0.005	4.3	LOS A	0.0	0.4	0.46	0.31	0.46	33.1
Approach		4	0.0	0.005	4.3	LOS A	0.0	0.4	0.46	0.31	0.46	33.7
NorthEast: SE Issaquah Fall City Rd												
1	L2	1	1.0	0.266	5.5	LOS A	1.3	32.2	0.35	0.23	0.35	34.8
6	T1	585	1.0	0.266	5.4	LOS A	1.3	32.5	0.35	0.23	0.35	34.8
16	R2	61	1.0	0.266	5.3	LOS A	1.3	32.5	0.35	0.22	0.35	33.8
Approach		647	1.0	0.266	5.4	LOS A	1.3	32.5	0.35	0.23	0.35	34.7
NorthWest: Klahanie Dr SE												
7	L2	107	1.0	0.169	7.7	LOS A	0.6	15.6	0.52	0.51	0.52	31.2
4	T1	1	1.0	0.169	7.7	LOS A	0.6	15.6	0.52	0.51	0.52	31.2
14	R2	422	1.0	0.397	7.6	LOS A	1.9	47.3	0.55	0.52	0.56	32.4
Approach		529	1.0	0.397	7.6	LOS A	1.9	47.3	0.55	0.51	0.55	32.1
SouthWest: SE Issaquah Fall City Rd												
5	L2	197	5.0	0.273	5.5	LOS A	1.4	36.6	0.28	0.15	0.28	33.0
2	T1	477	5.0	0.273	5.3	LOS A	1.4	36.9	0.28	0.15	0.28	34.3
12	R2	1	5.0	0.273	5.3	LOS A	1.4	36.9	0.27	0.14	0.27	33.7
Approach		675	5.0	0.273	5.4	LOS A	1.4	36.9	0.28	0.15	0.28	33.9
All Vehicles		1855	2.5	0.397	6.0	LOS A	1.9	47.3	0.38	0.28	0.38	33.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 6 [6 - Issaquah-Pine LK Rd and SE 32nd Way]

2035 AM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Issaquah-Pine Lk Rd NB												
3x	L2	1	2.0	0.688	10.1	LOS B	8.5	215.5	0.41	0.30	0.41	32.5
8x	T1	881	2.0	0.688	2.3	LOS A	8.5	215.5	0.41	0.30	0.41	29.3
18x	R2	174	2.0	0.688	2.7	LOS A	8.5	215.5	0.41	0.30	0.41	28.6
Approach		1056	2.0	0.688	2.3	LOS A	8.5	215.5	0.41	0.30	0.41	29.2
NorthEast: SE 32nd Way WB												
1x	L2	243	3.0	0.739	23.2	LOS C	9.5	243.0	1.00	1.31	1.64	24.4
6x	T1	1	3.0	0.739	20.1	LOS C	9.5	243.0	1.00	1.31	1.64	26.3
16x	R2	256	3.0	0.739	18.3	LOS B	9.5	243.0	1.00	1.31	1.64	23.7
Approach		500	3.0	0.739	20.7	LOS C	9.5	243.0	1.00	1.31	1.64	24.0
NorthWest: Issaquah-Pine Lk Rd SB												
7x	L2	54	2.0	0.748	10.2	LOS B	9.6	243.6	0.82	0.68	0.90	28.6
4x	T1	828	2.0	0.748	4.9	LOS A	9.6	243.6	0.82	0.68	0.90	28.3
14x	R2	2	2.0	0.748	7.1	LOS A	9.6	243.6	0.82	0.68	0.90	30.4
Approach		884	2.0	0.748	5.3	LOS A	9.6	243.6	0.82	0.68	0.90	28.4
SouthWest: Drive Way Access EB												
5x	L2	2	0.0	0.014	18.0	LOS B	0.1	2.5	0.93	0.69	0.93	32.4
2x	T1	1	0.0	0.014	12.4	LOS B	0.1	2.5	0.93	0.69	0.93	32.4
12x	R2	3	0.0	0.014	12.4	LOS B	0.1	2.5	0.93	0.69	0.93	31.5
Approach		6	0.0	0.014	14.2	LOS B	0.1	2.5	0.93	0.69	0.93	32.0
All Vehicles		2446	2.2	0.748	7.2	LOS A	9.6	243.6	0.68	0.64	0.84	27.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 9 [9 - SE Issaquah Fall City Rd & 247th Pl SE]

2035 AM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Pacific Crest Middle School Drwy												
3	L2	188	13.0	0.293	7.9	LOS A	1.1	29.0	0.49	0.48	0.49	30.9
8	T1	30	13.0	0.293	7.9	LOS A	1.1	29.0	0.49	0.48	0.49	31.1
18	R2	13	13.0	0.293	7.9	LOS A	1.1	29.0	0.49	0.48	0.49	30.4
Approach		231	13.0	0.293	7.9	LOS A	1.1	29.0	0.49	0.48	0.49	30.9
NorthEast: SE Issaquah Fall City Rd												
1	L2	7	1.0	0.428	8.2	LOS A	2.3	57.2	0.47	0.35	0.47	33.0
6	T1	895	1.0	0.428	8.1	LOS A	2.3	57.8	0.47	0.34	0.47	33.1
16	R2	3	1.0	0.428	7.9	LOS A	2.3	57.8	0.47	0.34	0.47	32.3
Approach		904	1.0	0.428	8.1	LOS A	2.3	57.8	0.47	0.34	0.47	33.1
NorthWest: 247th Pl SE												
7	L2	7	4.0	0.055	6.2	LOS A	0.2	5.5	0.61	0.56	0.61	33.5
4	T1	30	4.0	0.055	6.2	LOS A	0.2	5.5	0.61	0.56	0.61	33.6
14	R2	46	4.0	0.058	5.2	LOS A	0.2	6.1	0.60	0.53	0.60	33.3
Approach		82	4.0	0.058	5.6	LOS A	0.2	6.1	0.60	0.55	0.60	33.4
SouthWest: SE Issaquah Fall CIty Rd												
5	L2	18	3.0	0.188	4.1	LOS A	0.9	23.4	0.15	0.05	0.15	34.9
2	T1	537	3.0	0.188	4.0	LOS A	0.9	23.9	0.15	0.05	0.15	35.2
12	R2	214	3.0	0.132	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	36.5
Approach		769	3.0	0.188	2.9	LOS A	0.9	23.9	0.11	0.04	0.11	35.5
All Vehicles		1987	3.3	0.428	5.9	LOS A	2.3	57.8	0.34	0.25	0.34	33.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 14 [14 - 216th Ave and NE Inglewood Hill Rd]

2035 AM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 216th Ave (NB)												
3	L2	87	1.0	0.167	10.7	LOS B	0.9	22.6	0.57	0.69	0.57	31.7
8	T1	27	1.0	0.167	5.6	LOS A	0.9	22.6	0.57	0.69	0.57	31.5
18	R2	49	1.0	0.167	5.7	LOS A	0.9	22.6	0.57	0.69	0.57	30.8
Approach		163	1.0	0.167	8.4	LOS A	0.9	22.6	0.57	0.69	0.57	31.4
East: NE Inglewood Hill Rd												
1	L2	12	2.0	0.417	9.3	LOS A	2.7	69.3	0.42	0.48	0.42	33.0
6	T1	352	2.0	0.417	4.1	LOS A	2.7	69.3	0.42	0.48	0.42	32.8
16	R2	148	2.0	0.417	4.2	LOS A	2.7	69.3	0.42	0.48	0.42	32.0
Approach		512	2.0	0.417	4.3	LOS A	2.7	69.3	0.42	0.48	0.42	32.6
North: 216th Ave (SB)												
7	L2	227	1.0	0.406	10.9	LOS B	2.6	64.9	0.64	0.74	0.64	31.5
4	T1	35	1.0	0.406	5.7	LOS A	2.6	64.9	0.64	0.74	0.64	31.4
14	R2	151	1.0	0.406	5.9	LOS A	2.6	64.9	0.64	0.74	0.64	30.7
Approach		412	1.0	0.406	8.6	LOS A	2.6	64.9	0.64	0.74	0.64	31.2
West: NE Inglewood Hill Rd												
5	L2	47	2.0	0.311	9.7	LOS A	1.9	48.0	0.50	0.54	0.50	32.5
2	T1	242	2.0	0.311	4.6	LOS A	1.9	48.0	0.50	0.54	0.50	32.4
12	R2	58	2.0	0.311	4.7	LOS A	1.9	48.0	0.50	0.54	0.50	31.6
Approach		347	2.0	0.311	5.3	LOS A	1.9	48.0	0.50	0.54	0.50	32.3
All Vehicles		1435	1.6	0.417	6.2	LOS A	2.7	69.3	0.52	0.59	0.52	32.0

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 26 [26 - NE 8th St and 244th Ave]

2035 AM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	207	1.0	0.367	6.5	LOS A	2.3	58.7	0.44	0.49	0.44	24.4
8	T1	214	1.0	0.367	2.4	LOS A	2.3	58.7	0.44	0.49	0.44	24.2
18	R2	7	1.0	0.367	2.9	LOS A	2.3	58.7	0.44	0.49	0.44	23.8
Approach		428	1.0	0.367	4.4	LOS A	2.3	58.7	0.44	0.49	0.44	24.3
East: NE 8th St (WB)												
1	L2	7	2.0	0.065	8.2	LOS A	0.3	8.5	0.58	0.57	0.58	24.5
6	T1	22	2.0	0.065	4.1	LOS A	0.3	8.5	0.58	0.57	0.58	24.3
16	R2	27	2.0	0.065	4.5	LOS A	0.3	8.5	0.58	0.57	0.58	23.8
Approach		57	2.0	0.065	4.8	LOS A	0.3	8.5	0.58	0.57	0.58	24.1
North: 244th Ave (SB)												
7	L2	7	2.0	0.587	7.4	LOS A	4.6	115.8	0.60	0.51	0.60	24.6
4	T1	386	2.0	0.587	3.2	LOS A	4.6	115.8	0.60	0.51	0.60	24.4
14	R2	262	2.0	0.587	3.7	LOS A	4.6	115.8	0.60	0.51	0.60	23.9
Approach		656	2.0	0.587	3.5	LOS A	4.6	115.8	0.60	0.51	0.60	24.2
West: NE 8th St (EB)												
5	L2	154	3.0	0.261	10.2	LOS B	1.5	39.0	0.58	0.71	0.58	31.1
2	T1	16	3.0	0.261	5.8	LOS A	1.5	39.0	0.58	0.71	0.58	31.2
12	R2	79	3.0	0.261	5.7	LOS A	1.5	39.0	0.58	0.71	0.58	30.5
Approach		249	3.0	0.261	8.5	LOS A	1.5	39.0	0.58	0.71	0.58	30.9
All Vehicles		1390	1.9	0.587	4.7	LOS A	4.6	115.8	0.55	0.54	0.55	25.2

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 32 [32 - Issaquah Beaver Lake Rd & 256th Ave]

2035 AM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 256th Ave												
3	L2	170	2.0	0.170	4.2	LOS A	0.8	21.0	0.26	0.13	0.26	33.0
8	T1	26	2.0	0.170	4.2	LOS A	0.8	21.0	0.26	0.13	0.26	33.1
18	R2	21	2.0	0.170	4.2	LOS A	0.8	21.0	0.26	0.13	0.26	32.3
Approach		218	2.0	0.170	4.2	LOS A	0.8	21.0	0.26	0.13	0.26	33.0
East: Issaquah Beaver Lake Rd												
1	L2	58	4.0	0.356	6.6	LOS A	2.1	53.1	0.44	0.30	0.44	33.4
6	T1	330	4.0	0.356	6.6	LOS A	2.1	53.1	0.44	0.30	0.44	33.5
16	R2	24	4.0	0.356	6.6	LOS A	2.1	53.1	0.44	0.30	0.44	32.6
Approach		412	4.0	0.356	6.6	LOS A	2.1	53.1	0.44	0.30	0.44	33.4
North: 256th Ave												
7	L2	20	0.0	0.090	4.7	LOS A	0.5	12.0	0.58	0.44	0.58	34.3
4	T1	47	0.0	0.090	4.7	LOS A	0.5	12.0	0.58	0.44	0.58	34.3
14	R2	19	0.0	0.090	4.7	LOS A	0.5	12.0	0.58	0.44	0.58	33.4
Approach		86	0.0	0.090	4.7	LOS A	0.5	12.0	0.58	0.44	0.58	34.1
West: Issaquah Beaver Lake Rd												
5	L2	22	4.0	0.195	4.6	LOS A	1.0	25.5	0.29	0.16	0.29	34.5
2	T1	67	4.0	0.195	4.6	LOS A	1.0	25.5	0.29	0.16	0.29	34.6
12	R2	153	4.0	0.195	4.6	LOS A	1.0	25.5	0.29	0.16	0.29	33.7
Approach		242	4.0	0.195	4.6	LOS A	1.0	25.5	0.29	0.16	0.29	34.0
All Vehicles		957	3.2	0.356	5.4	LOS A	2.1	53.1	0.37	0.24	0.37	33.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 39 [39 - 233rd Ave NE & NE 8th Street]

2035 AM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 233rd Ave (NB)												
3	L2	51	6.0	0.170	7.5	LOS A	0.9	23.6	0.53	0.61	0.53	25.0
8	T1	23	6.0	0.170	6.6	LOS A	0.9	23.6	0.53	0.61	0.53	29.2
18	R2	85	6.0	0.170	3.8	LOS A	0.9	23.6	0.53	0.61	0.53	24.3
Approach		159	6.0	0.170	5.4	LOS A	0.9	23.6	0.53	0.61	0.53	25.1
East: NE 8th St (WB)												
1	L2	176	1.0	0.575	6.3	LOS A	4.9	124.3	0.41	0.40	0.41	25.0
6	T1	483	1.0	0.575	2.1	LOS A	4.9	124.3	0.41	0.40	0.41	24.8
16	R2	66	1.0	0.575	5.1	LOS A	4.9	124.3	0.41	0.40	0.41	28.7
Approach		724	1.0	0.575	3.4	LOS A	4.9	124.3	0.41	0.40	0.41	25.2
North: 233rd Ave NE												
7	L2	77	0.0	0.350	13.4	LOS B	2.2	56.0	0.76	0.83	0.76	33.7
4	T1	138	0.0	0.350	9.0	LOS A	2.2	56.0	0.76	0.83	0.76	33.8
14	R2	60	0.0	0.350	8.8	LOS A	2.2	56.0	0.76	0.83	0.76	33.1
Approach		276	0.0	0.350	10.2	LOS B	2.2	56.0	0.76	0.83	0.76	33.6
West: NE 8th St (EB)												
5	L2	12	4.0	0.413	11.5	LOS B	2.6	66.9	0.62	0.67	0.62	33.1
2	T1	299	4.0	0.413	6.1	LOS A	2.6	66.9	0.62	0.67	0.62	31.9
12	R2	91	4.0	0.413	6.0	LOS A	2.6	66.9	0.62	0.67	0.62	31.2
Approach		401	4.0	0.413	6.2	LOS A	2.6	66.9	0.62	0.67	0.62	31.8
All Vehicles		1560	2.1	0.575	5.5	LOS A	4.9	124.3	0.54	0.57	0.54	27.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 41 [41 - 244th Ave NE & E Main Dr]

2035 AM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	9	1.0	0.138	8.5	LOS A	0.6	16.3	0.24	0.44	0.24	32.7
8	T1	136	1.0	0.138	4.1	LOS A	0.6	16.3	0.24	0.44	0.24	32.7
18	R2	29	1.0	0.138	4.0	LOS A	0.6	16.3	0.24	0.44	0.24	32.0
Approach		174	1.0	0.138	4.3	LOS A	0.6	16.3	0.24	0.44	0.24	32.6
East: E Main Dr (WB)												
1	L2	89	1.0	0.167	8.9	LOS A	0.8	20.2	0.34	0.59	0.34	31.9
6	T1	1	1.0	0.167	4.5	LOS A	0.8	20.2	0.34	0.59	0.34	31.9
16	R2	108	1.0	0.167	4.5	LOS A	0.8	20.2	0.34	0.59	0.34	31.2
Approach		198	1.0	0.167	6.5	LOS A	0.8	20.2	0.34	0.59	0.34	31.5
North: 244th Ave (SB)												
7	L2	49	3.0	0.311	8.6	LOS A	1.8	45.4	0.29	0.47	0.29	32.4
4	T1	317	3.0	0.311	4.2	LOS A	1.8	45.4	0.29	0.47	0.29	32.4
14	R2	16	3.0	0.311	4.2	LOS A	1.8	45.4	0.29	0.47	0.29	31.7
Approach		383	3.0	0.311	4.8	LOS A	1.8	45.4	0.29	0.47	0.29	32.4
West: E Main Dr (EB)												
5	L2	45	2.0	0.064	10.1	LOS B	0.3	7.9	0.50	0.67	0.50	31.0
2	T1	1	2.0	0.064	5.7	LOS A	0.3	7.9	0.50	0.67	0.50	31.1
12	R2	16	2.0	0.064	5.6	LOS A	0.3	7.9	0.50	0.67	0.50	30.4
Approach		62	2.0	0.064	8.9	LOS A	0.3	7.9	0.50	0.67	0.50	30.9
All Vehicles		816	2.0	0.311	5.4	LOS A	1.8	45.4	0.31	0.50	0.31	32.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 62 [62 - E Lk Sammamish Pk Way and SE 43rd Way]

2035 AM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: E Lk Sammamish Pk Way WB												
8x	T1	540	5.0	0.347	1.6	LOS A	2.7	68.9	0.23	0.21	0.23	30.0
18x	R2	550	5.0	0.345	1.9	LOS A	0.0	0.0	0.00	0.29	0.00	29.5
Approach		1090	5.0	0.347	1.7	LOS A	2.7	68.9	0.11	0.25	0.11	29.7
NorthEast: SE 43rd Way SB												
1x	L2	1127	1.0	0.542	11.3	LOS B	4.7	117.9	0.76	0.85	0.85	27.4
16x	R2	30	1.0	0.542	6.0	LOS A	4.7	117.9	0.76	0.82	0.82	26.5
Approach		1158	1.0	0.542	11.2	LOS B	4.7	117.9	0.76	0.85	0.85	27.3
NorthWest: E Lk Sammamish Pk Way EB												
7x	L2	46	1.0	0.453	11.5	LOS B	2.5	62.2	0.77	0.84	0.88	28.8
4x	T1	587	1.0	0.453	5.1	LOS A	2.7	66.8	0.78	0.75	0.88	28.6
Approach		633	1.0	0.453	5.6	LOS A	2.7	66.8	0.78	0.75	0.88	28.6
All Vehicles		2880	2.5	0.542	6.4	LOS A	4.7	117.9	0.52	0.60	0.58	28.5

Site Level of Service (LOS) Method: Delay & v/c (HCM 2010). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 2010).
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	42	95	145	1862	1098	69
Future Volume (veh/h)	42	95	145	1862	1098	69
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	1895	1895	1772	1772	1731	1731
Adj Flow Rate, veh/h	43	46	149	1920	1132	71
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	102	91	197	2904	2215	139
Arrive On Green	0.06	0.06	0.12	0.86	0.70	0.70
Sat Flow, veh/h	1805	1606	1688	3456	3229	197
Grp Volume(v), veh/h	43	46	149	1920	592	611
Grp Sat Flow(s),veh/h/ln	1805	1606	1688	1684	1644	1695
Q Serve(g_s), s	2.3	2.7	8.4	18.0	16.4	16.4
Cycle Q Clear(g_c), s	2.3	2.7	8.4	18.0	16.4	16.4
Prop In Lane	1.00	1.00	1.00			0.12
Lane Grp Cap(c), veh/h	102	91	197	2904	1159	1195
V/C Ratio(X)	0.42	0.51	0.76	0.66	0.51	0.51
Avail Cap(c_a), veh/h	403	359	257	3623	1452	1497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.9	45.2	42.1	2.2	6.7	6.7
Incr Delay (d2), s/veh	1.0	1.6	6.1	1.0	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.9	0.1	6.8	3.3	8.7	8.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	46.0	46.8	48.2	3.1	8.0	7.9
LnGrp LOS	D	D	D	A	A	A
Approach Vol, veh/h	89			2069	1203	
Approach Delay, s/veh	46.4			6.4	8.0	
Approach LOS	D			A	A	

Timer - Assigned Phs		2		4	5	6
Phs Duration (G+Y+Rc), s		89.0		9.6	15.5	73.5
Change Period (Y+Rc), s		5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s		105.0		21.0	14.0	86.0
Max Q Clear Time (g_c+I1), s		20.0		4.7	10.4	18.4
Green Ext Time (p_c), s		64.0		0.1	0.1	26.3

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

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	46	61	156	882	1221	66
Future Volume (veh/h)	46	61	156	882	1221	66
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	1967	1967	1723	1723	1736	1736
Adj Flow Rate, veh/h	48	64	164	928	1285	69
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	2	2	1	1
Cap, veh/h	235	173	267	2385	1597	86
Arrive On Green	0.13	0.10	0.16	0.73	0.50	0.48
Sat Flow, veh/h	1874	1667	1641	3359	3271	171
Grp Volume(v), veh/h	48	64	164	928	665	689
Grp Sat Flow(s),veh/h/ln	1874	1667	1641	1637	1650	1705
Q Serve(g_s), s	1.1	1.7	4.3	5.0	15.7	15.8
Cycle Q Clear(g_c), s	1.1	1.7	4.3	5.0	15.7	15.8
Prop In Lane	1.00	1.00	1.00			0.10
Lane Grp Cap(c), veh/h	235	173	267	2385	827	855
V/C Ratio(X)	0.20	0.37	0.61	0.39	0.80	0.81
Avail Cap(c_a), veh/h	1087	932	282	5361	2312	2389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.3	19.4	18.1	2.4	9.7	9.7
Incr Delay (d2), s/veh	0.2	0.5	2.4	0.0	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.8	1.1	2.9	0.5	7.0	7.3
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.4	19.9	20.6	2.4	10.4	10.4
LnGrp LOS	B	B	C	A	B	B
Approach Vol, veh/h	112			1092	1354	
Approach Delay, s/veh	19.3			5.2	10.4	
Approach LOS	B			A	B	

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	36.9		10.6	26.3	9.6
Change Period (Y+Rc), s	5.0		5.0	5.0	5.8
Max Green Setting (Gmax), s	74.2		6.0	63.2	25.0
Max Q Clear Time (g_c+I1), s	7.0		6.3	17.8	3.7
Green Ext Time (p_c), s	2.7		0.0	3.6	0.2

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↰	↗		↕	
Traffic Vol, veh/h	0	123	269	129	68	0	152	0	136	0	0	1
Future Vol, veh/h	0	123	269	129	68	0	152	0	136	0	0	1
Conflicting Peds, #/hr	0	0	6	6	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	-	-	-	-	-	-	-	-	105	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	-2	-	-	0	-	-	0	-
Peak Hour Factor	95	91	91	91	91	95	91	95	91	95	95	95
Heavy Vehicles, %	0	0	0	1	1	0	0	0	0	0	0	0
Mvmt Flow	0	135	296	142	75	0	167	0	149	0	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	75	0	0	437	0	0	649	648	289	717	796	75
Stage 1	-	-	-	-	-	-	289	289	-	359	359	-
Stage 2	-	-	-	-	-	-	360	359	-	358	437	-
Critical Hdwy	4.1	-	-	4.11	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.209	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1537	-	-	1128	-	-	386	392	755	347	322	992
Stage 1	-	-	-	-	-	-	723	677	-	663	631	-
Stage 2	-	-	-	-	-	-	662	631	-	664	583	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1537	-	-	1123	-	-	345	339	752	250	278	992
Mov Cap-2 Maneuver	-	-	-	-	-	-	345	339	-	250	278	-
Stage 1	-	-	-	-	-	-	719	674	-	663	548	-
Stage 2	-	-	-	-	-	-	574	548	-	532	580	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	5.7	18.3	8.6
HCM LOS			C	A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	345	752	1537	-	-	1123	-	-	992
HCM Lane V/C Ratio	0.484	0.199	-	-	-	0.126	-	-	0.001
HCM Control Delay (s)	24.8	11	0	-	-	8.7	0	-	8.6
HCM Lane LOS	C	B	A	-	-	A	A	-	A
HCM 95th %tile Q(veh)	2.5	0.7	0	-	-	0.4	-	-	0

Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	209	178	132	93	278	84
Future Vol, veh/h	209	178	132	93	278	84
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	215	184	136	96	287	87
Number of Lanes	0	1	1	0	1	1

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	1	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	1
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	17	11.5	15.2
HCM LOS	C	B	C

Lane	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	54%	0%	100%	0%
Vol Thru, %	46%	59%	0%	0%
Vol Right, %	0%	41%	0%	100%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	387	225	278	84
LT Vol	209	0	278	0
Through Vol	178	132	0	0
RT Vol	0	93	0	84
Lane Flow Rate	399	232	287	87
Geometry Grp	2	2	7	7
Degree of Util (X)	0.614	0.352	0.536	0.133
Departure Headway (Hd)	5.538	5.458	6.731	5.514
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	650	656	536	649
Service Time	3.579	3.507	4.473	3.255
HCM Lane V/C Ratio	0.614	0.354	0.535	0.134
HCM Control Delay	17	11.5	17	9.1
HCM Lane LOS	C	B	C	A
HCM 95th-tile Q	4.2	1.6	3.1	0.5

Intersection	
Int Delay, s/veh	0.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	27	1058	37	35	492
Future Vol, veh/h	8	27	1058	37	35	492
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	-	-	-	125	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	3	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	0	0	1	1	1	1
Mvmt Flow	9	29	1138	40	38	529

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1499	589	0	0	1178	0
Stage 1	1158	-	-	-	-	-
Stage 2	341	-	-	-	-	-
Critical Hdwy	7.4	7.2	-	-	4.12	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.21	-
Pot Cap-1 Maneuver	90	435	-	-	594	-
Stage 1	219	-	-	-	-	-
Stage 2	659	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	84	435	-	-	594	-
Mov Cap-2 Maneuver	202	-	-	-	-	-
Stage 1	219	-	-	-	-	-
Stage 2	617	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.7	0	0.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	344	594	-
HCM Lane V/C Ratio	-	-	0.109	0.063	-
HCM Control Delay (s)	-	-	16.7	11.5	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	0.4	0.2	-

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	67	108	3	7	119	154	3	6	2	144	2	100
Future Vol, veh/h	67	108	3	7	119	154	3	6	2	144	2	100
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	70	113	3	7	124	160	3	6	2	150	2	104
Number of Lanes	1	1	0	1	1	0	0	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	9.6	11.2	9.3	10.2
HCM LOS	A	B	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	27%	100%	0%	100%	0%	100%	0%
Vol Thru, %	55%	0%	97%	0%	44%	0%	2%
Vol Right, %	18%	0%	3%	0%	56%	0%	98%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	11	67	111	7	273	144	102
LT Vol	3	67	0	7	0	144	0
Through Vol	6	0	108	0	119	0	2
RT Vol	2	0	3	0	154	0	100
Lane Flow Rate	11	70	116	7	284	150	106
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.02	0.118	0.178	0.012	0.402	0.259	0.148
Departure Headway (Hd)	6.19	6.073	5.549	5.99	5.087	6.224	5.03
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	582	586	641	594	702	573	704
Service Time	4.19	3.857	3.333	3.763	2.86	4.015	2.82
HCM Lane V/C Ratio	0.019	0.119	0.181	0.012	0.405	0.262	0.151
HCM Control Delay	9.3	9.7	9.5	8.8	11.3	11.2	8.7
HCM Lane LOS	A	A	A	A	B	B	A
HCM 95th-tile Q	0.1	0.4	0.6	0	1.9	1	0.5

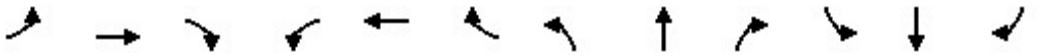
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	0	11	1	0	0	27	611	1	0	1291	27
Future Vol, veh/h	34	0	11	1	0	0	27	611	1	0	1291	27
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	250	-	-	-	-	0	110	-	-	110	-	-
Veh in Median Storage, #	-	2	-	-	0	-	-	0	-	-	0	-
Grade, %	-	-4	-	-	0	-	-	0	-	-	1	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0	2	2	2	1	1	1
Mvmt Flow	36	0	12	1	0	0	29	650	1	0	1373	29

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1771	2097	701	1396	-	326	1402	0	0	651	0	0
Stage 1	1388	1388	-	709	-	-	-	-	-	-	-	-
Stage 2	383	709	-	687	-	-	-	-	-	-	-	-
Critical Hdwy	6.7	5.7	6.5	7.5	-	6.9	4.14	-	-	4.12	-	-
Critical Hdwy Stg 1	5.7	4.7	-	6.5	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.7	4.7	-	6.5	-	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	-	3.3	2.22	-	-	2.21	-	-
Pot Cap-1 Maneuver	80	84	417	103	0	676	483	-	-	938	-	-
Stage 1	208	288	-	396	0	-	-	-	-	-	-	-
Stage 2	672	515	-	408	0	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	76	79	417	95	-	676	483	-	-	938	-	-
Mov Cap-2 Maneuver	182	244	-	95	-	-	-	-	-	-	-	-
Stage 1	196	288	-	372	-	-	-	-	-	-	-	-
Stage 2	632	484	-	397	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.8	0	0.5	0
HCM LOS	D	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	483	-	-	182	417	-	938	-	-
HCM Lane V/C Ratio	0.059	-	-	0.199	0.028	-	-	-	-
HCM Control Delay (s)	12.9	-	-	29.6	13.9	0	0	-	-
HCM Lane LOS	B	-	-	D	B	A	A	-	-
HCM 95th %tile Q(veh)	0.2	-	-	0.7	0.1	-	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	397	8	7	312	16	10	1	6	20	0	47
Future Volume (veh/h)	61	397	8	7	312	16	10	1	6	20	0	47
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		0.99	1.00		0.97	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	1750	1750	1750	1750	1750	1750	1750	1750	1736	1736	1736
Adj Flow Rate, veh/h	69	446	9	8	351	18	11	1	7	22	0	53
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	1	1	1
Cap, veh/h	471	614	12	384	497	25	69	18	126	90	0	159
Arrive On Green	0.10	0.36	0.36	0.04	0.30	0.30	0.04	0.10	0.10	0.05	0.00	0.11
Sat Flow, veh/h	1667	1708	34	1667	1649	85	1667	184	1286	1654	0	1438
Grp Volume(v), veh/h	69	0	455	8	0	369	11	0	8	22	0	53
Grp Sat Flow(s),veh/h/ln	1667	0	1742	1667	0	1734	1667	0	1470	1654	0	1438
Q Serve(g_s), s	1.0	0.0	8.3	0.1	0.0	7.0	0.2	0.0	0.2	0.5	0.0	1.3
Cycle Q Clear(g_c), s	1.0	0.0	8.3	0.1	0.0	7.0	0.2	0.0	0.2	0.5	0.0	1.3
Prop In Lane	1.00		0.02	1.00		0.05	1.00		0.88	1.00		1.00
Lane Grp Cap(c), veh/h	471	0	626	384	0	523	69	0	144	90	0	159
V/C Ratio(X)	0.15	0.00	0.73	0.02	0.00	0.71	0.16	0.00	0.06	0.24	0.00	0.33
Avail Cap(c_a), veh/h	2151	0	3106	1031	0	1915	1176	0	838	1167	0	819
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	7.7	0.0	10.2	8.6	0.0	11.4	17.0	0.0	15.1	16.7	0.0	15.1
Incr Delay (d2), s/veh	0.1	0.0	0.6	0.0	0.0	0.7	1.5	0.0	0.1	2.0	0.0	0.5
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(95%),veh/ln	0.4	0.0	4.0	0.1	0.0	3.6	0.2	0.0	0.1	0.4	0.0	0.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	7.7	0.0	10.8	8.6	0.0	12.1	18.5	0.0	15.1	18.7	0.0	15.6
LnGrp LOS	A	A	B	A	A	B	B	A	B	B	A	B
Approach Vol, veh/h		524			377			19			75	
Approach Delay, s/veh		10.4			12.0			17.1			16.5	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	15.4	6.0	7.6	5.7	17.5	5.5	8.1
Change Period (Y+Rc), s	5.3	5.3	5.0	5.0	5.3	5.3	5.0	5.0
Max Green Setting (Gmax), s	39.7	39.7	25.0	20.0	14.7	64.7	25.0	20.0
Max Q Clear Time (g_c+I1), s	3.0	9.0	2.5	2.2	2.1	10.3	2.2	3.3
Green Ext Time (p_c), s	0.1	0.8	0.1	0.0	0.0	1.0	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	11.6
HCM 6th LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	45	60	185	24	169	110	1256	275	184	1260	91
Future Volume (veh/h)	108	45	60	185	24	169	110	1256	275	184	1260	91
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		1.00	1.00		1.00	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	1715	1715	1715	1809	1809	1809	1809	1809	1809	1728	1728	1728
Adj Flow Rate, veh/h	112	47	62	193	25	0	115	1308	0	192	1312	95
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	1	1	1	1	1	1	1	1	0	0	0
Cap, veh/h	363	133	311	298	24		227	1560		251	1498	108
Arrive On Green	0.25	0.25	0.22	0.23	0.23	0.00	0.13	0.45	0.00	0.15	0.48	0.45
Sat Flow, veh/h	1034	530	1429	786	102	1533	1723	3527	0	1646	3103	224
Grp Volume(v), veh/h	159	0	62	218	0	0	115	1308	0	192	693	714
Grp Sat Flow(s),veh/h/ln	1565	0	1429	887	0	1533	1723	1718	0	1646	1642	1686
Q Serve(g_s), s	0.0	0.0	2.1	9.0	0.0	0.0	3.7	20.0	0.0	6.7	22.5	22.7
Cycle Q Clear(g_c), s	5.0	0.0	2.1	14.0	0.0	0.0	3.7	20.0	0.0	6.7	22.5	22.7
Prop In Lane	0.70		1.00	0.89		1.00	1.00		0.00	1.00		0.13
Lane Grp Cap(c), veh/h	496	0	311	322	0		227	1560		251	793	814
V/C Ratio(X)	0.32	0.00	0.20	0.68	0.00		0.51	0.84		0.77	0.87	0.88
Avail Cap(c_a), veh/h	1204	0	1006	322	0		231	1728		251	826	848
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	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.5	0.0	19.1	25.5	0.0	0.0	24.1	14.4	0.0	24.3	13.8	14.0
Incr Delay (d2), s/veh	0.4	0.0	0.3	5.6	0.0	0.0	0.7	3.2	0.0	12.0	9.5	9.6
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(95%),veh/ln	3.0	0.0	1.2	6.0	0.0	0.0	2.5	10.9	0.0	5.7	13.1	13.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.9	0.0	19.4	31.1	0.0	0.0	24.7	17.5	0.0	36.3	23.3	23.6
LnGrp LOS	B	A	B	C	A		C	B		D	C	C
Approach Vol, veh/h		221			218	A		1423	A		1599	
Approach Delay, s/veh		19.0			31.1			18.1			25.0	
Approach LOS		B			C			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.6	30.1		17.0	10.9	31.8		17.0
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.0	27.0		12.0	5.0	27.0		41.0
Max Q Clear Time (g_c+I1), s	7.7	22.0		16.0	5.7	24.7		7.0
Green Ext Time (p_c), s	0.0	2.1		0.0	0.0	1.1		0.9

Intersection Summary	
HCM 6th Ctrl Delay	22.2
HCM 6th LOS	C

Notes

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

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	28	716	75	50	1192
Future Vol, veh/h	70	28	716	75	50	1192
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	220	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	1	1	2	2	1	1
Mvmt Flow	72	29	738	77	52	1229

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1497	410	0	0	816	0
Stage 1	778	-	-	-	-	-
Stage 2	719	-	-	-	-	-
Critical Hdwy	7.02	7.02	-	-	4.12	-
Critical Hdwy Stg 1	6.02	-	-	-	-	-
Critical Hdwy Stg 2	6.02	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	105	587	-	-	814	-
Stage 1	398	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	98	586	-	-	813	-
Mov Cap-2 Maneuver	227	-	-	-	-	-
Stage 1	398	-	-	-	-	-
Stage 2	402	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.5	0	0.4
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	275	813	-
HCM Lane V/C Ratio	-	-	0.367	0.063	-
HCM Control Delay (s)	-	-	25.5	9.7	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q(veh)	-	-	1.6	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	216	316	191	125	128	187	893	229	238	1011	73
Future Volume (veh/h)	43	216	316	191	125	128	187	893	229	238	1011	73
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		1.00	0.99		0.96	1.00		0.96	1.00		0.96
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	1750	1750	1750	1750	1736	1736	1736	1715	1715	1715
Adj Flow Rate, veh/h	45	225	0	199	130	133	195	930	239	248	1053	76
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, %	0	0	0	0	0	0	1	1	1	1	1	1
Cap, veh/h	379	313		345	417	625	304	948	243	320	1170	84
Arrive On Green	0.06	0.18	0.00	0.12	0.24	0.23	0.18	0.37	0.37	0.20	0.38	0.37
Sat Flow, veh/h	1667	1750	1483	1667	1750	1429	1654	2573	660	1633	3071	222
Grp Volume(v), veh/h	45	225	0	199	130	133	195	595	574	248	558	571
Grp Sat Flow(s),veh/h/ln	1667	1750	1483	1667	1750	1429	1654	1650	1584	1633	1629	1664
Q Serve(g_s), s	1.8	10.4	0.0	7.9	5.2	0.6	9.4	30.6	30.8	12.3	27.7	27.7
Cycle Q Clear(g_c), s	1.8	10.4	0.0	7.9	5.2	0.6	9.4	30.6	30.8	12.3	27.7	27.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.42	1.00		0.13
Lane Grp Cap(c), veh/h	379	313		345	417	625	304	608	584	320	620	634
V/C Ratio(X)	0.12	0.72		0.58	0.31	0.21	0.64	0.98	0.98	0.77	0.90	0.90
Avail Cap(c_a), veh/h	412	396		345	465	664	868	608	584	895	638	652
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.4	33.2	0.0	23.7	26.9	7.1	32.4	26.8	26.9	32.7	25.0	25.1
Incr Delay (d2), s/veh	0.1	3.0	0.0	1.6	0.2	0.1	0.8	31.1	32.7	1.5	15.0	14.9
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(95%),veh/ln	1.3	8.0	0.0	5.6	3.8	1.6	6.6	23.0	22.6	8.4	18.3	18.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.5	36.2	0.0	25.2	27.0	7.1	33.2	57.9	59.6	34.2	40.1	40.0
LnGrp LOS	C	D		C	C	A	C	E	E	C	D	D
Approach Vol, veh/h		270	A		462			1364			1377	
Approach Delay, s/veh		34.4			20.5			55.1			39.0	
Approach LOS		C			C			E			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.8	34.6	8.3	23.0	18.8	35.7	13.0	18.3
Change Period (Y+Rc), s	5.0	5.3	5.0	5.0	5.0	5.3	5.0	5.0
Max Green Setting (Gmax), s	45.0	29.3	5.0	20.4	43.0	31.3	8.0	17.4
Max Q Clear Time (g_c+I1), s	14.3	32.8	3.8	7.2	11.4	29.7	9.9	12.4
Green Ext Time (p_c), s	0.5	0.0	0.0	0.5	0.4	0.6	0.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	42.5
HCM 6th LOS	D

Notes

Unsignalized Delay for [EBR] 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	1	16	85	4	78	21	1231	67	399	1130	37
Future Volume (veh/h)	6	1	16	85	4	78	21	1231	67	399	1130	37
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.96	1.00		0.99	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	1736	1736	1736	1736	1736	1723	1723	1723	1736	1736	1736
Adj Flow Rate, veh/h	6	1	16	88	4	80	22	1269	69	411	1165	38
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	2	2	2	1	1	1
Cap, veh/h	135	49	231	434	17	299	455	1509	82	409	1420	46
Arrive On Green	0.23	0.23	0.21	0.23	0.23	0.21	0.17	0.48	0.46	0.13	0.44	0.42
Sat Flow, veh/h	226	214	1006	1327	73	1412	1641	3156	171	3208	3258	106
Grp Volume(v), veh/h	23	0	0	92	0	80	22	657	681	411	590	613
Grp Sat Flow(s),veh/h/ln	1446	0	0	1400	0	1412	1641	1637	1690	1604	1650	1715
Q Serve(g_s), s	0.0	0.0	0.0	2.2	0.0	2.6	0.0	19.2	19.3	7.0	17.2	17.3
Cycle Q Clear(g_c), s	0.7	0.0	0.0	2.9	0.0	2.6	0.0	19.2	19.3	7.0	17.2	17.3
Prop In Lane	0.26		0.70	0.96		1.00	1.00		0.10	1.00		0.06
Lane Grp Cap(c), veh/h	415	0	0	450	0	299	455	783	809	409	719	747
V/C Ratio(X)	0.06	0.00	0.00	0.20	0.00	0.27	0.05	0.84	0.84	1.00	0.82	0.82
Avail Cap(c_a), veh/h	835	0	0	864	0	720	455	1044	1078	409	1052	1094
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.8	0.0	0.0	17.3	0.0	18.1	15.5	12.5	12.6	23.9	13.6	13.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.1	0.0	0.2	0.0	3.7	3.6	45.6	2.1	2.1
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(95%),veh/ln	0.4	0.0	0.0	1.6	0.0	1.5	0.3	10.2	10.5	8.7	9.3	9.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.8	0.0	0.0	17.4	0.0	18.2	15.5	16.1	16.2	69.5	15.7	15.7
LnGrp LOS	B	A	A	B	A	B	B	B	B	F	B	B
Approach Vol, veh/h		23			172			1360			1614	
Approach Delay, s/veh		16.8			17.8			16.1			29.4	
Approach LOS		B			B			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	29.3		15.6	12.3	26.9		15.6
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	5.0	33.0		27.0	5.0	33.0		27.0
Max Q Clear Time (g_c+I1), s	9.0	21.3		4.9	2.0	19.3		2.7
Green Ext Time (p_c), s	0.0	2.9		0.4	0.0	2.7		0.0

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	12	400	66	15	65	369	1113	50	54	1057	316
Future Volume (veh/h)	277	12	400	66	15	65	369	1113	50	54	1057	316
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.99	0.98		0.97	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	2004	2004	2004	1709	1709	1709	1809	1809	1809	1750	1750	1750
Adj Flow Rate, veh/h	289	12	206	69	16	10	384	1159	0	56	1101	295
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, %	0	0	0	3	3	3	1	1	1	0	0	0
Cap, veh/h	601	16	278	234	91	57	338	1400		359	1103	293
Arrive On Green	0.17	0.17	0.21	0.05	0.09	0.09	0.14	0.41	0.00	0.14	0.43	0.41
Sat Flow, veh/h	1908	93	1596	1628	970	606	1723	3436	1533	1667	2583	685
Grp Volume(v), veh/h	289	0	218	69	0	26	384	1159	0	56	705	691
Grp Sat Flow(s),veh/h/ln	1908	0	1689	1628	0	1576	1723	1718	1533	1667	1663	1606
Q Serve(g_s), s	9.3	0.0	9.3	2.9	0.0	1.2	11.0	23.3	0.0	0.0	32.6	33.0
Cycle Q Clear(g_c), s	9.3	0.0	9.3	2.9	0.0	1.2	11.0	23.3	0.0	0.0	32.6	33.0
Prop In Lane	1.00		0.94	1.00		0.38	1.00		1.00	1.00		0.43
Lane Grp Cap(c), veh/h	601	0	295	234	0	149	338	1400		359	710	686
V/C Ratio(X)	0.48	0.00	0.74	0.29	0.00	0.17	1.14	0.83		0.16	0.99	1.01
Avail Cap(c_a), veh/h	601	0	568	238	0	408	338	1645		359	710	686
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	20.7	0.0	28.8	29.7	0.0	32.2	31.6	20.5	0.0	26.7	22.0	22.4
Incr Delay (d2), s/veh	0.6	0.0	1.4	0.7	0.0	0.6	90.7	3.2	0.0	0.1	31.9	36.5
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(95%),veh/ln	7.4	0.0	6.7	2.1	0.0	0.8	21.9	14.0	0.0	1.6	24.4	25.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	0.0	30.2	30.4	0.0	32.8	122.4	23.7	0.0	26.8	53.9	58.8
LnGrp LOS	C	A	C	C	A	C	F	C		C	D	F
Approach Vol, veh/h		507			95			1543	A		1452	
Approach Delay, s/veh		25.1			31.0			48.2			55.2	
Approach LOS		C			C			D			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.5	34.5	14.0	13.3	14.0	36.0	7.8	19.5
Change Period (Y+Rc), s	5.0	5.0	4.0	6.0	5.0	5.0	4.0	6.0
Max Green Setting (Gmax), s	5.6	35.0	10.0	20.0	9.0	31.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.0	25.3	11.3	3.2	13.0	35.0	4.9	11.3
Green Ext Time (p_c), s	0.0	4.2	0.0	0.1	0.0	0.0	0.0	0.8

Intersection Summary	
HCM 6th Ctrl Delay	47.3
HCM 6th LOS	D

Notes

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

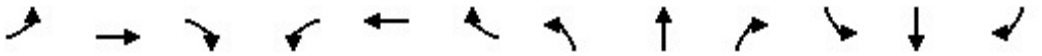
Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	5	7	60	3	57	6	73	112	64	97	4
Future Vol, veh/h	1	5	7	60	3	57	6	73	112	64	97	4
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	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	1	1	1	1	1	1	0	0	0
Mvmt Flow	1	6	8	69	3	66	7	84	129	74	111	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	459	489	114	432	427	149	116	0	0	213	0	0
Stage 1	262	262	-	163	163	-	-	-	-	-	-	-
Stage 2	197	227	-	269	264	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.11	6.51	6.21	4.11	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.11	5.51	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.509	4.009	3.309	2.209	-	-	2.2	-	-
Pot Cap-1 Maneuver	516	482	944	536	521	900	1479	-	-	1369	-	-
Stage 1	747	695	-	841	765	-	-	-	-	-	-	-
Stage 2	809	720	-	739	692	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	453	452	944	501	488	900	1479	-	-	1369	-	-
Mov Cap-2 Maneuver	453	452	-	501	488	-	-	-	-	-	-	-
Stage 1	743	655	-	837	761	-	-	-	-	-	-	-
Stage 2	743	716	-	684	652	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.9	12.3	0.2	3
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1479	-	-	628	634	1369	-	-
HCM Lane V/C Ratio	0.005	-	-	0.024	0.218	0.054	-	-
HCM Control Delay (s)	7.4	0	-	10.9	12.3	7.8	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.8	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	0	14	8	0	9	8	1716	2	8	1598	14
Future Volume (veh/h)	17	0	14	8	0	9	8	1716	2	8	1598	14
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	0.99		0.99	1.00		0.99	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	1709	1709	1709	1712	1712	1712	1736	1736	1736	1809	1809	1809
Adj Flow Rate, veh/h	18	0	14	8	0	9	8	1769	2	8	1647	14
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	8	8	8	1	1	1	1	1	1
Cap, veh/h	364	0	155	357	0	142	338	2027	2	262	1937	16
Arrive On Green	0.07	0.00	0.07	0.06	0.00	0.06	0.11	0.60	0.57	0.06	0.55	0.52
Sat Flow, veh/h	1628	0	1438	1630	0	1441	1654	3381	4	1723	3492	30
Grp Volume(v), veh/h	18	0	14	8	0	9	8	863	908	8	810	851
Grp Sat Flow(s),veh/h/ln	1628	0	1438	1630	0	1441	1654	1650	1736	1723	1718	1803
Q Serve(g_s), s	0.5	0.0	0.5	0.2	0.0	0.3	0.0	25.6	25.7	0.0	23.2	23.2
Cycle Q Clear(g_c), s	0.5	0.0	0.5	0.2	0.0	0.3	0.0	25.6	25.7	0.0	23.2	23.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		0.02
Lane Grp Cap(c), veh/h	364	0	155	357	0	142	338	989	1040	262	953	1000
V/C Ratio(X)	0.05	0.00	0.09	0.02	0.00	0.06	0.02	0.87	0.87	0.03	0.85	0.85
Avail Cap(c_a), veh/h	448	0	715	455	0	716	389	1244	1309	392	1296	1360
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	19.2	0.0	24.4	20.4	0.0	24.8	17.5	9.8	9.8	20.3	10.9	11.0
Incr Delay (d2), s/veh	0.1	0.0	0.1	0.0	0.0	0.1	0.0	5.0	4.8	0.0	3.2	3.1
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(95%),veh/ln	0.4	0.0	0.3	0.2	0.0	0.2	0.1	11.4	11.8	0.2	11.0	11.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.3	0.0	24.5	20.4	0.0	24.8	17.5	14.8	14.6	20.4	14.1	14.0
LnGrp LOS	B	A	C	C	A	C	B	B	B	C	B	B
Approach Vol, veh/h		32			17			1779			1669	
Approach Delay, s/veh		21.5			22.7			14.7			14.1	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	38.0	5.0	8.8	9.2	35.4	4.5	9.3
Change Period (Y+Rc), s	6.0	6.0	4.0	6.0	6.0	6.0	4.0	6.0
Max Green Setting (Gmax), s	5.0	41.0	4.0	26.0	5.0	41.0	4.0	26.0
Max Q Clear Time (g_c+I1), s	2.0	27.7	2.5	2.3	2.0	25.2	2.2	2.5
Green Ext Time (p_c), s	0.0	4.3	0.0	0.0	0.0	4.1	0.0	0.0

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)	3	610	0	3	445	205	0	0	0	116	0	9
Future Volume (veh/h)	3	610	0	3	445	205	0	0	0	116	0	9
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	1723	1723	1723	1736	1736	1736				1750	1750	1750
Adj Flow Rate, veh/h	3	656	0	3	478	220				125	0	10
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	1	1	1				0	0	0
Cap, veh/h	182	977	0	182	986	839				163	0	13
Arrive On Green	0.57	0.57	0.00	0.45	0.57	0.57				0.23	0.00	0.16
Sat Flow, veh/h	3	1715	0	3	1730	1471				1529	0	122
Grp Volume(v), veh/h	659	0	0	481	0	220				135	0	0
Grp Sat Flow(s),veh/h/ln	1718	0	0	1733	0	1471				1652	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	1.5				1.5	0.0	0.0
Cycle Q Clear(g_c), s	5.4	0.0	0.0	3.7	0.0	1.5				1.5	0.0	0.0
Prop In Lane	0.00		0.00	0.01		1.00				0.93		0.07
Lane Grp Cap(c), veh/h	1159	0	0	952	0	839				176	0	0
V/C Ratio(X)	0.57	0.00	0.00	0.51	0.00	0.26				0.77	0.00	0.00
Avail Cap(c_a), veh/h	4235	0	0	4047	0	3481				1316	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00				1.00	0.00	0.00
Uniform Delay (d), s/veh	3.0	0.0	0.0	2.7	0.0	2.2				7.5	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.2	0.0	0.1				6.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	0.0	0.1	0.0	0.0				1.1	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.2	0.0	0.0	2.8	0.0	2.2				14.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A				B	A	A
Approach Vol, veh/h		659			701						135	
Approach Delay, s/veh		3.2			2.6						14.4	
Approach LOS		A			A						B	

Timer - Assigned Phs	2	4	6
Phs Duration (G+Y+Rc), s	13.9	6.1	13.9
Change Period (Y+Rc), s	5.0	4.0	5.0
Max Green Setting (Gmax), s	45.0	16.0	45.0
Max Q Clear Time (g_c+I1), s	7.4	3.5	5.7
Green Ext Time (p_c), s	1.6	0.5	1.7

Intersection Summary	
HCM 6th Ctrl Delay	3.9
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	6	316	25	4	545
Future Vol, veh/h	20	6	316	25	4	545
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, %	-6	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	2	2	1	1	1	1
Mvmt Flow	22	6	340	27	4	586

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	948	354	0	0	367	0
Stage 1	354	-	-	-	-	-
Stage 2	594	-	-	-	-	-
Critical Hdwy	5.22	5.62	-	-	4.11	-
Critical Hdwy Stg 1	4.22	-	-	-	-	-
Critical Hdwy Stg 2	4.22	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.209	-
Pot Cap-1 Maneuver	397	732	-	-	1197	-
Stage 1	799	-	-	-	-	-
Stage 2	672	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	395	732	-	-	1197	-
Mov Cap-2 Maneuver	395	-	-	-	-	-
Stage 1	799	-	-	-	-	-
Stage 2	669	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	13.7	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	442	1197	-
HCM Lane V/C Ratio	-	-	0.063	0.004	-
HCM Control Delay (s)	-	-	13.7	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0	-

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	7	30	15	31	161	41	73	107	47	66	96	5
Future Vol, veh/h	7	30	15	31	161	41	73	107	47	66	96	5
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	8	35	17	36	187	48	85	124	55	77	112	6
Number of Lanes	1	1	0	1	1	0	1	1	0	1	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay	9.3	11.6	10.3	10
HCM LOS	A	B	B	A

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	100%	0%	100%	0%	100%	0%	100%	0%
Vol Thru, %	0%	69%	0%	67%	0%	80%	0%	95%
Vol Right, %	0%	31%	0%	33%	0%	20%	0%	5%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	73	154	7	45	31	202	66	101
LT Vol	73	0	7	0	31	0	66	0
Through Vol	0	107	0	30	0	161	0	96
RT Vol	0	47	0	15	0	41	0	5
Lane Flow Rate	85	179	8	52	36	235	77	117
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.148	0.276	0.015	0.087	0.064	0.374	0.136	0.19
Departure Headway (Hd)	6.276	5.555	6.722	5.978	6.387	5.739	6.362	5.822
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	573	648	533	600	562	627	565	618
Service Time	4	3.279	4.455	3.711	4.113	3.464	4.087	3.546
HCM Lane V/C Ratio	0.148	0.276	0.015	0.087	0.064	0.375	0.136	0.189
HCM Control Delay	10.1	10.4	9.6	9.3	9.6	11.9	10.1	9.9
HCM Lane LOS	B	B	A	A	A	B	B	A
HCM 95th-tile Q	0.5	1.1	0	0.3	0.2	1.7	0.5	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	21	63	266	26	120	482
Future Volume (veh/h)	21	63	266	26	120	482
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		0.97	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	1723	1723	1736	1736	1736	1736
Adj Flow Rate, veh/h	23	68	286	28	129	518
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	1	1	1	1
Cap, veh/h	208	185	453	44	247	1016
Arrive On Green	0.13	0.13	0.29	0.29	0.15	0.59
Sat Flow, veh/h	1641	1460	1552	152	1654	1736
Grp Volume(v), veh/h	23	68	0	314	129	518
Grp Sat Flow(s),veh/h/ln	1641	1460	0	1704	1654	1736
Q Serve(g_s), s	0.3	1.2	0.0	4.4	2.0	4.9
Cycle Q Clear(g_c), s	0.3	1.2	0.0	4.4	2.0	4.9
Prop In Lane	1.00	1.00		0.09	1.00	
Lane Grp Cap(c), veh/h	208	185	0	497	247	1016
V/C Ratio(X)	0.11	0.37	0.00	0.63	0.52	0.51
Avail Cap(c_a), veh/h	1535	1366	0	2820	655	2875
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.7	11.1	0.0	8.5	10.9	3.4
Incr Delay (d2), s/veh	0.1	0.5	0.0	0.5	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.6	0.0	1.8	0.9	0.2
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.8	11.6	0.0	9.0	11.5	3.6
LnGrp LOS	B	B	A	A	B	A
Approach Vol, veh/h	91		314			647
Approach Delay, s/veh	11.4		9.0			5.1
Approach LOS	B		A			A

Timer - Assigned Phs	2		5	6	8
Phs Duration (G+Y+Rc), s	20.3		8.2	12.1	7.5
Change Period (Y+Rc), s	5.0		5.0	5.0	5.0
Max Green Setting (Gmax), s	45.0		10.0	45.0	25.0
Max Q Clear Time (g_c+I1), s	6.9		4.0	6.4	3.2
Green Ext Time (p_c), s	1.2		0.1	0.7	0.2

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

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	506	298	103	195	324	74
Future Volume (veh/h)	506	298	103	195	324	74
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	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	1715	1715	1954	1954	1650	1650
Adj Flow Rate, veh/h	533	314	108	205	341	78
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	948	855	218	1088	478	425
Arrive On Green	0.29	0.29	0.12	0.56	0.30	0.30
Sat Flow, veh/h	3344	1420	1861	1954	1571	1398
Grp Volume(v), veh/h	533	314	108	205	341	78
Grp Sat Flow(s),veh/h/ln	1629	1420	1861	1954	1571	1398
Q Serve(g_s), s	7.0	5.8	2.7	2.6	9.7	2.1
Cycle Q Clear(g_c), s	7.0	5.8	2.7	2.6	9.7	2.1
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	948	855	218	1088	478	425
V/C Ratio(X)	0.56	0.37	0.50	0.19	0.71	0.18
Avail Cap(c_a), veh/h	1681	1175	591	1919	1044	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.1	5.3	20.9	5.5	15.6	12.9
Incr Delay (d2), s/veh	0.5	0.3	1.7	0.1	2.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	4.0	10.3	2.1	1.3	5.7	3.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	15.7	5.6	22.6	5.6	17.6	13.1
LnGrp LOS	B	A	C	A	B	B
Approach Vol, veh/h	847			313	419	
Approach Delay, s/veh	11.9			11.5	16.7	
Approach LOS	B			B	B	

Timer - Assigned Phs	2		4	5	6
Phs Duration (G+Y+Rc), s	31.6		18.8	13.4	18.2
Change Period (Y+Rc), s	5.5		5.5	9.5	5.5
Max Green Setting (Gmax), s	47.5		31.5	14.0	24.0
Max Q Clear Time (g_c+I1), s	4.6		11.7	4.7	9.0
Green Ext Time (p_c), s	0.8		1.6	0.2	3.6

Intersection Summary	
HCM 6th Ctrl Delay	13.1
HCM 6th LOS	B

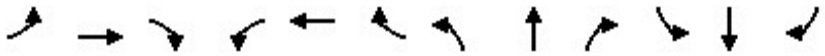
Notes

User approved changes to right turn type.

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	99	55	89	597	1263	262
Future Volume (veh/h)	99	55	89	597	1263	262
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	1715	1715	1940	1940	1541	1541
Adj Flow Rate, veh/h	103	57	93	622	1316	255
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	2	2	1	1
Cap, veh/h	200	178	178	2996	1558	298
Arrive On Green	0.12	0.12	0.10	0.81	0.64	0.64
Sat Flow, veh/h	1633	1453	1847	3782	2529	469
Grp Volume(v), veh/h	103	57	93	622	779	792
Grp Sat Flow(s),veh/h/ln	1633	1453	1847	1843	1464	1457
Q Serve(g_s), s	3.7	2.2	3.0	2.4	25.7	26.9
Cycle Q Clear(g_c), s	3.7	2.2	3.0	2.4	25.7	26.9
Prop In Lane	1.00	1.00	1.00			0.32
Lane Grp Cap(c), veh/h	200	178	178	2996	931	926
V/C Ratio(X)	0.51	0.32	0.52	0.21	0.84	0.85
Avail Cap(c_a), veh/h	658	586	208	5406	1864	1855
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	24.9	26.7	1.3	8.8	9.0
Incr Delay (d2), s/veh	0.8	0.4	0.9	0.0	1.6	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	1.4	2.2	0.0	8.5	8.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.2	25.2	27.5	1.3	10.4	10.8
LnGrp LOS	C	C	C	A	B	B
Approach Vol, veh/h	160			715	1571	
Approach Delay, s/veh	25.9			4.7	10.6	
Approach LOS	C			A	B	

Timer - Assigned Phs	2			5	6	8
Phs Duration (G+Y+Rc), s	51.4			9.0	42.4	10.6
Change Period (Y+Rc), s	5.0			5.0	7.0	5.0
Max Green Setting (Gmax), s	87.0			5.0	75.0	23.0
Max Q Clear Time (g_c+I1), s	4.4			5.0	28.9	5.7
Green Ext Time (p_c), s	2.2			0.0	6.5	0.3

Intersection Summary		
HCM 6th Ctrl Delay		9.9
HCM 6th LOS		A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	0	85	15	1	18	87	1649	2	5	1551	74
Future Volume (veh/h)	62	0	85	15	1	18	87	1649	2	5	1551	74
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	0.99		0.99	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	1736	1736	1736	1709	1709	1709	1736	1736	1736	1845	1845	1845
Adj Flow Rate, veh/h	64	0	88	15	1	19	90	1700	2	5	1599	76
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	371	0	108	164	3	63	336	2121	2	192	1840	87
Arrive On Green	0.09	0.00	0.12	0.01	0.05	0.05	0.11	0.63	0.58	0.01	0.54	0.51
Sat Flow, veh/h	1654	0	1441	1628	72	1377	1654	3381	4	1757	3402	161
Grp Volume(v), veh/h	64	0	88	15	0	20	90	829	873	5	820	855
Grp Sat Flow(s),veh/h/ln	1654	0	1441	1628	0	1449	1654	1650	1735	1757	1753	1810
Q Serve(g_s), s	1.9	0.0	3.6	0.5	0.0	0.8	1.1	22.5	22.5	0.1	24.1	24.6
Cycle Q Clear(g_c), s	1.9	0.0	3.6	0.5	0.0	0.8	1.1	22.5	22.5	0.1	24.1	24.6
Prop In Lane	1.00		1.00	1.00		0.95	1.00		0.00	1.00		0.09
Lane Grp Cap(c), veh/h	371	0	108	164	0	66	336	1035	1089	192	948	979
V/C Ratio(X)	0.17	0.00	0.82	0.09	0.00	0.30	0.27	0.80	0.80	0.03	0.86	0.87
Avail Cap(c_a), veh/h	409	0	577	249	0	580	462	1035	1089	300	983	1015
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	19.5	0.0	25.9	26.6	0.0	27.6	11.5	8.3	8.3	10.2	11.8	12.0
Incr Delay (d2), s/veh	0.2	0.0	5.6	0.2	0.0	0.9	0.4	4.6	4.4	0.1	7.9	8.3
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(95%),veh/ln	1.2	0.0	2.3	0.4	0.0	0.5	1.0	10.1	10.4	0.1	13.5	14.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	19.7	0.0	31.5	26.9	0.0	28.5	11.9	12.9	12.7	10.2	19.8	20.3
LnGrp LOS	B	A	C	C	A	C	B	B	B	B	B	C
Approach Vol, veh/h		152			35			1792			1680	
Approach Delay, s/veh		26.5			27.8			12.8			20.0	
Approach LOS		C			C			B			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.3	40.5	6.6	8.3	9.5	35.3	4.9	10.1
Change Period (Y+Rc), s	4.0	6.0	4.0	5.6	5.6	6.0	4.0	5.6
Max Green Setting (Gmax), s	4.3	33.5	4.0	23.9	8.4	30.5	4.0	23.9
Max Q Clear Time (g_c+I1), s	2.1	24.5	3.9	2.8	3.1	26.6	2.5	5.6
Green Ext Time (p_c), s	0.0	5.4	0.0	0.0	0.1	2.7	0.0	0.3

Intersection Summary	
HCM 6th Ctrl Delay	16.8
HCM 6th LOS	B

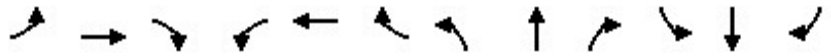
Notes

User approved ignoring U-Turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	7	27	76	13	228	14	1492	195	283	1310	23
Future Volume (veh/h)	19	7	27	76	13	228	14	1492	195	283	1310	23
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		0.98	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	1750	1750	1750	1750	1736	1736	1736	1736	1736	1736
Adj Flow Rate, veh/h	20	7	28	79	14	238	15	1554	203	295	1365	24
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, %	0	0	0	0	0	0	1	1	1	1	1	1
Cap, veh/h	81	28	95	272	48	282	413	1553	966	351	1471	26
Arrive On Green	0.06	0.06	0.06	0.19	0.19	0.19	0.20	0.47	0.47	0.18	0.44	0.44
Sat Flow, veh/h	1250	438	1469	1426	253	1478	1654	3299	1438	1654	3315	58
Grp Volume(v), veh/h	27	0	28	93	0	238	15	1554	203	295	679	710
Grp Sat Flow(s),veh/h/ln	1688	0	1469	1679	0	1478	1654	1650	1438	1654	1650	1724
Q Serve(g_s), s	1.9	0.0	2.3	5.9	0.0	19.4	0.0	58.7	6.8	17.0	48.5	48.6
Cycle Q Clear(g_c), s	1.9	0.0	2.3	5.9	0.0	19.4	0.0	58.7	6.8	17.0	48.5	48.6
Prop In Lane	0.74		1.00	0.85		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	109	0	95	321	0	282	413	1553	966	351	732	765
V/C Ratio(X)	0.25	0.00	0.30	0.29	0.00	0.84	0.04	1.00	0.21	0.84	0.93	0.93
Avail Cap(c_a), veh/h	406	0	354	341	0	300	413	1553	966	376	843	881
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	55.4	0.0	55.6	43.2	0.0	48.6	36.7	33.0	8.0	47.5	32.8	32.8
Incr Delay (d2), s/veh	0.4	0.0	0.6	0.2	0.0	17.0	0.0	23.0	0.0	13.7	14.0	13.7
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(95%),veh/ln	1.5	0.0	1.6	4.5	0.0	13.3	0.6	35.1	6.3	15.0	28.5	29.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	55.9	0.0	56.3	43.4	0.0	65.7	36.7	55.9	8.1	61.2	46.8	46.6
LnGrp LOS	E	A	E	D	A	E	D	F	A	E	D	D
Approach Vol, veh/h		55			331			1772			1684	
Approach Delay, s/veh		56.1			59.4			50.3			49.2	
Approach LOS		E			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	25.1	61.7		26.8	28.5	58.3		11.0
Change Period (Y+Rc), s	6.0	6.0		5.3	6.0	5.0		6.0
Max Green Setting (Gmax), s	21.0	55.7		23.0	16.0	61.7		27.0
Max Q Clear Time (g_c+I1), s	19.0	60.7		21.4	2.0	50.6		4.3
Green Ext Time (p_c), s	0.1	0.0		0.2	0.0	2.7		0.1

Intersection Summary		
HCM 6th Ctrl Delay	50.7	
HCM 6th LOS	D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	193	29	169	135	603	37	1009	234	721	538	40
Future Volume (veh/h)	55	193	29	169	135	603	37	1009	234	721	538	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		0.99	1.00		0.97	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	1736	1736	1736	1809	1809	1809	1736	1736	1736	1736	1736	1736
Adj Flow Rate, veh/h	57	201	30	176	0	722	39	1051	244	751	560	42
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	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	72	300	45	198	0	835	52	1149	497	627	1518	114
Arrive On Green	0.04	0.20	0.20	0.11	0.00	0.28	0.03	0.35	0.35	0.20	0.49	0.46
Sat Flow, veh/h	1654	1472	220	1723	0	3032	1654	3299	1428	3208	3107	233
Grp Volume(v), veh/h	57	0	231	176	0	722	39	1051	244	751	297	305
Grp Sat Flow(s),veh/h/ln	1654	0	1692	1723	0	1516	1654	1650	1428	1604	1650	1690
Q Serve(g_s), s	3.8	0.0	13.9	11.1	0.0	25.0	2.6	33.7	14.8	21.6	12.4	12.5
Cycle Q Clear(g_c), s	3.8	0.0	13.9	11.1	0.0	25.0	2.6	33.7	14.8	21.6	12.4	12.5
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	72	0	345	198	0	835	52	1149	497	627	806	826
V/C Ratio(X)	0.80	0.00	0.67	0.89	0.00	0.86	0.75	0.91	0.49	1.20	0.37	0.37
Avail Cap(c_a), veh/h	184	0	490	198	0	889	75	1149	497	627	806	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	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	0.0	40.6	48.2	0.0	38.1	53.1	34.5	28.3	44.5	17.6	17.8
Incr Delay (d2), s/veh	7.3	0.0	0.8	34.4	0.0	8.0	11.1	11.0	0.3	104.0	0.1	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(95%),veh/ln	3.1	0.0	9.7	10.8	0.0	15.2	2.2	21.1	8.7	26.6	8.1	8.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.7	0.0	41.4	82.7	0.0	46.0	64.2	45.5	28.6	148.5	17.7	17.9
LnGrp LOS	E	A	D	F	A	D	E	D	C	F	B	B
Approach Vol, veh/h		288			898			1334			1353	
Approach Delay, s/veh		45.0			53.2			42.9			90.3	
Approach LOS		D			D			D			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	41.5	10.5	33.6	9.5	57.0	15.8	28.2
Change Period (Y+Rc), s	6.0	6.0	5.7	5.7	6.0	6.0	5.7	5.7
Max Green Setting (Gmax), s	19.0	35.5	12.3	29.8	5.0	49.5	10.1	32.0
Max Q Clear Time (g_c+I1), s	23.6	35.7	5.8	27.0	4.6	14.5	13.1	15.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.8	0.0	1.3	0.0	0.7

Intersection Summary	
HCM 6th Ctrl Delay	62.0
HCM 6th LOS	E

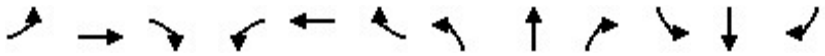
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	15	31	138	5	54	38	1261	400	100	1046	9
Future Volume (veh/h)	16	15	31	138	5	54	38	1261	400	100	1046	9
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		0.99	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	1750	1750	1750	1723	1723	1723	1736	1736	1736	1809	1809	1809
Adj Flow Rate, veh/h	17	16	34	150	5	59	41	1371	435	109	1137	10
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	0	2	2	2	1	1	1	1	1	1
Cap, veh/h	86	79	119	295	18	207	648	1649	500	223	1529	13
Arrive On Green	0.15	0.15	0.14	0.15	0.15	0.14	0.31	0.67	0.67	0.08	0.44	0.42
Sat Flow, veh/h	241	515	778	1348	115	1354	1654	2478	752	1723	3491	31
Grp Volume(v), veh/h	67	0	0	150	0	64	41	892	914	109	560	587
Grp Sat Flow(s),veh/h/ln	1533	0	0	1348	0	1469	1654	1650	1581	1723	1718	1803
Q Serve(g_s), s	0.0	0.0	0.0	5.5	0.0	3.6	0.0	36.1	42.1	1.2	24.9	24.9
Cycle Q Clear(g_c), s	3.4	0.0	0.0	8.9	0.0	3.6	0.0	36.1	42.1	1.2	24.9	24.9
Prop In Lane	0.25		0.51	1.00		0.92	1.00		0.48	1.00		0.02
Lane Grp Cap(c), veh/h	283	0	0	295	0	224	648	1097	1052	223	753	790
V/C Ratio(X)	0.24	0.00	0.00	0.51	0.00	0.29	0.06	0.81	0.87	0.49	0.74	0.74
Avail Cap(c_a), veh/h	430	0	0	428	0	369	648	1620	1553	229	1688	1771
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	0.0	0.0	36.5	0.0	34.8	16.6	11.2	12.2	38.6	21.5	21.5
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.5	0.0	0.3	0.0	2.0	3.8	0.6	2.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.5	0.0	0.0	5.8	0.0	2.3	0.9	16.6	18.7	4.1	14.8	15.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.0	0.0	0.0	37.0	0.0	35.1	16.7	13.2	16.0	39.2	23.6	23.5
LnGrp LOS	C	A	A	D	A	D	B	B	B	D	C	C
Approach Vol, veh/h		67			214			1847			1256	
Approach Delay, s/veh		35.0			36.4			14.7			24.9	
Approach LOS		C			D			B			C	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	64.0		17.0	31.5	43.1		17.0
Change Period (Y+Rc), s	6.0	6.0		5.0	6.0	6.0		5.0
Max Green Setting (Gmax), s	5.6	87.0		21.0	5.0	87.0		21.0
Max Q Clear Time (g_c+I1), s	13.2	44.1		10.9	2.0	26.9		5.4
Green Ext Time (p_c), s	0.0	13.9		0.4	0.0	10.3		0.2

Intersection Summary		
HCM 6th Ctrl Delay	20.2	
HCM 6th LOS	C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	0	84	0	1	0	57	720	0	0	405	153
Future Volume (veh/h)	219	0	84	0	1	0	57	720	0	0	405	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1663	1663	1663	1750	1750	1750	1967	1967	1967	1750	1750	1750
Adj Flow Rate, veh/h	231	0	37	0	1	0	60	758	0	0	426	161
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	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	391	0	305	0	138	0	132	1102	0	3	530	200
Arrive On Green	0.09	0.00	0.23	0.00	0.08	0.00	0.07	0.56	0.00	0.00	0.44	0.44
Sat Flow, veh/h	1584	0	1409	0	1750	0	1874	1967	0	1667	1210	457
Grp Volume(v), veh/h	231	0	37	0	1	0	60	758	0	0	0	587
Grp Sat Flow(s),veh/h/ln	1584	0	1409	0	1750	0	1874	1967	0	1667	0	1668
Q Serve(g_s), s	5.0	0.0	1.2	0.0	0.0	0.0	1.8	16.0	0.0	0.0	0.0	17.8
Cycle Q Clear(g_c), s	5.0	0.0	1.2	0.0	0.0	0.0	1.8	16.0	0.0	0.0	0.0	17.8
Prop In Lane	1.00		1.00	0.00		0.00	1.00		0.00	1.00		0.27
Lane Grp Cap(c), veh/h	391	0	305	0	138	0	132	1102	0	3	0	730
V/C Ratio(X)	0.59	0.00	0.12	0.00	0.01	0.00	0.45	0.69	0.00	0.00	0.00	0.80
Avail Cap(c_a), veh/h	391	0	606	0	782	0	676	2706	0	143	0	1978
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	0.00	1.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	21.7	0.0	17.9	0.0	24.7	0.0	26.0	9.2	0.0	0.0	0.0	14.2
Incr Delay (d2), s/veh	2.4	0.0	0.1	0.0	0.0	0.0	3.4	1.1	0.0	0.0	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	5.4	0.0	0.6	0.0	0.0	0.0	1.6	9.0	0.0	0.0	0.0	10.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.1	0.0	18.0	0.0	24.7	0.0	29.4	10.3	0.0	0.0	0.0	17.2
LnGrp LOS	C	A	B	A	C	A	C	B	A	A	A	B
Approach Vol, veh/h		268			1			818			587	
Approach Delay, s/veh		23.2			24.7			11.7			17.2	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	38.6		19.6	7.1	31.5	8.0	11.6
Change Period (Y+Rc), s	7.0	7.0		7.0	4.0	* 7	4.0	* 7
Max Green Setting (Gmax), s	5.0	79.0		25.0	20.0	* 68	4.0	* 26
Max Q Clear Time (g_c+I1), s	0.0	18.0		3.2	3.8	19.8	7.0	2.0
Green Ext Time (p_c), s	0.0	6.7		0.1	0.2	4.7	0.0	0.0

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.

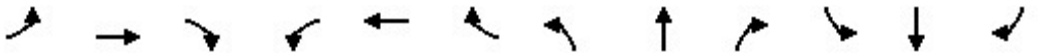
Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	52	20	831	98	44	1235
Future Vol, veh/h	52	20	831	98	44	1235
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	Stop	-	None	-	None
Storage Length	0	-	-	-	75	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	1	-	-1	-	-	1
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	2	2	1	1
Mvmt Flow	54	21	866	102	46	1286

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1653	484	0	0	968	0
Stage 1	917	-	-	-	-	-
Stage 2	736	-	-	-	-	-
Critical Hdwy	7	7	-	-	4.12	-
Critical Hdwy Stg 1	6	-	-	-	-	-
Critical Hdwy Stg 2	6	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.21	-
Pot Cap-1 Maneuver	83	527	-	-	714	-
Stage 1	337	-	-	-	-	-
Stage 2	422	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	78	527	-	-	714	-
Mov Cap-2 Maneuver	254	-	-	-	-	-
Stage 1	337	-	-	-	-	-
Stage 2	395	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	21.2	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	297	714	-
HCM Lane V/C Ratio	-	-	0.253	0.064	-
HCM Control Delay (s)	-	-	21.2	10.4	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q(veh)	-	-	1	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	4	36	80	5	42	39	586	102	135	1094	4
Future Volume (veh/h)	18	4	36	80	5	42	39	586	102	135	1094	4
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	1750	1750	1750	1750	1750	1750	1723	1723	1723	1736	1736	1736
Adj Flow Rate, veh/h	19	4	38	84	5	44	41	617	107	142	1152	4
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	0	0	0	0	0	2	2	2	1	1	1
Cap, veh/h	202	29	161	320	9	81	408	1000	173	632	1608	6
Arrive On Green	0.17	0.17	0.14	0.17	0.17	0.14	0.10	0.36	0.31	0.22	0.48	0.43
Sat Flow, veh/h	416	173	974	933	56	489	1641	2779	481	1654	3372	12
Grp Volume(v), veh/h	61	0	0	133	0	0	41	363	361	142	564	592
Grp Sat Flow(s),veh/h/ln	1563	0	0	1478	0	0	1641	1637	1623	1654	1650	1734
Q Serve(g_s), s	0.0	0.0	0.0	1.6	0.0	0.0	0.0	6.4	6.5	0.0	9.6	9.6
Cycle Q Clear(g_c), s	1.2	0.0	0.0	2.8	0.0	0.0	0.0	6.4	6.5	0.0	9.6	9.6
Prop In Lane	0.31		0.62	0.63		0.33	1.00		0.30	1.00		0.01
Lane Grp Cap(c), veh/h	392	0	0	410	0	0	408	589	584	632	787	827
V/C Ratio(X)	0.16	0.00	0.00	0.32	0.00	0.00	0.10	0.62	0.62	0.22	0.72	0.72
Avail Cap(c_a), veh/h	1471	0	0	1464	0	0	1724	2639	2617	1764	2660	2796
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	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.1	0.0	0.0	13.6	0.0	0.0	13.1	9.3	9.5	10.1	7.3	7.4
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.4	0.4	0.1	0.5	0.4
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(95%),veh/ln	0.6	0.0	0.0	1.4	0.0	0.0	0.4	2.6	2.6	1.1	2.9	3.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.2	0.0	0.0	13.8	0.0	0.0	13.2	9.7	9.9	10.1	7.8	7.8
LnGrp LOS	B	A	A	B	A	A	B	A	A	B	A	A
Approach Vol, veh/h		61			133			765			1298	
Approach Delay, s/veh		13.2			13.8			10.0			8.1	
Approach LOS		B			B			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.8	15.7		8.8	6.7	19.9		8.8				
Change Period (Y+Rc), s	5.0	5.6		5.0	5.0	5.6		5.0				
Max Green Setting (Gmax), s	30.0	54.4		30.0	30.0	54.4		30.0				
Max Q Clear Time (g_c+I1), s	2.0	8.5		4.8	2.0	11.6		3.2				
Green Ext Time (p_c), s	0.3	1.6		0.3	0.1	2.6		0.1				

Intersection Summary			
HCM 6th Ctrl Delay		9.2	
HCM 6th LOS		A	

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	33	23	799	662	26
Future Volume (veh/h)	21	33	23	799	662	26
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	1695	1695	1736	1736	1736	1736
Adj Flow Rate, veh/h	23	35	25	859	712	28
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	1	1	1	1
Cap, veh/h	280	249	502	1813	1249	49
Arrive On Green	0.17	0.17	0.06	0.55	0.39	0.39
Sat Flow, veh/h	1615	1437	1654	3386	3323	127
Grp Volume(v), veh/h	23	35	25	859	363	377
Grp Sat Flow(s),veh/h/ln	1615	1437	1654	1650	1650	1713
Q Serve(g_s), s	0.3	0.6	0.2	4.6	5.0	5.0
Cycle Q Clear(g_c), s	0.3	0.6	0.2	4.6	5.0	5.0
Prop In Lane	1.00	1.00	1.00			0.07
Lane Grp Cap(c), veh/h	280	249	502	1813	636	661
V/C Ratio(X)	0.08	0.14	0.05	0.47	0.57	0.57
Avail Cap(c_a), veh/h	1007	896	690	5601	2343	2434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.0	10.1	4.3	4.0	7.0	7.0
Incr Delay (d2), s/veh	0.1	0.3	0.0	0.2	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.3	0.0	0.6	1.8	1.8
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	10.1	10.4	4.4	4.2	7.8	7.8
LnGrp LOS	B	B	A	A	A	A
Approach Vol, veh/h	58			884	740	
Approach Delay, s/veh	10.3			4.2	7.8	
Approach LOS	B			A	A	

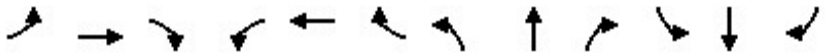
Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	9.0	4.7	15.1		19.9
Change Period (Y+Rc), s	5.0	4.0	5.0		5.0
Max Green Setting (Gmax), s	17.0	4.0	40.0		48.0
Max Q Clear Time (g_c+I1), s	2.6	2.2	7.0		6.6
Green Ext Time (p_c), s	0.1	0.0	3.1		4.6

Intersection Summary	
HCM 6th Ctrl Delay	6.0
HCM 6th LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	1	47	103	2	16	75	926	72	33	1074	43
Future Volume (veh/h)	22	1	47	103	2	16	75	926	72	33	1074	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.98	0.99		0.97	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	1750	1750	1750	1750	1723	1723	1723	1736	1736	1736
Adj Flow Rate, veh/h	23	1	49	107	2	17	78	965	75	34	1119	45
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, %	0	0	0	0	0	0	2	2	2	1	1	1
Cap, veh/h	127	28	130	337	5	227	305	1307	102	437	1511	61
Arrive On Green	0.14	0.14	0.14	0.16	0.14	0.16	0.07	0.43	0.43	0.13	0.47	0.45
Sat Flow, veh/h	258	200	936	1435	35	1436	1641	3069	238	1654	3228	130
Grp Volume(v), veh/h	73	0	0	109	0	17	78	515	525	34	572	592
Grp Sat Flow(s),veh/h/ln	1394	0	0	1470	0	1436	1641	1637	1671	1654	1650	1708
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.5	0.0	13.7	13.7	0.0	14.6	14.7
Cycle Q Clear(g_c), s	3.1	0.0	0.0	3.1	0.0	0.5	0.0	13.7	13.7	0.0	14.6	14.7
Prop In Lane	0.32		0.67	0.98		1.00	1.00		0.14	1.00		0.08
Lane Grp Cap(c), veh/h	285	0	0	370	0	227	305	697	712	437	772	800
V/C Ratio(X)	0.26	0.00	0.00	0.29	0.00	0.07	0.26	0.74	0.74	0.08	0.74	0.74
Avail Cap(c_a), veh/h	832	0	0	890	0	775	357	1356	1385	437	1367	1416
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	0.0	0.0	20.1	0.0	18.6	20.2	12.5	12.5	14.0	11.2	11.3
Incr Delay (d2), s/veh	0.2	0.0	0.0	0.4	0.0	0.1	0.2	1.6	1.5	0.0	1.4	1.4
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(95%),veh/ln	1.3	0.0	0.0	1.9	0.0	0.3	1.5	7.5	7.6	0.5	7.7	7.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	20.4	0.0	0.0	20.5	0.0	18.7	20.4	14.0	14.0	14.0	12.6	12.6
LnGrp LOS	C	A	A	C	A	B	C	B	B	B	B	B
Approach Vol, veh/h		73			126			1118			1198	
Approach Delay, s/veh		20.4			20.3			14.5			12.7	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	29.3		13.2	11.6	27.1		13.2
Change Period (Y+Rc), s	6.0	6.0		6.0	6.0	6.0		6.0
Max Green Setting (Gmax), s	5.6	42.0		27.0	5.0	42.0		27.0
Max Q Clear Time (g_c+I1), s	2.0	16.7		5.1	2.0	15.7		5.1
Green Ext Time (p_c), s	0.0	5.5		0.6	0.0	4.8		0.2

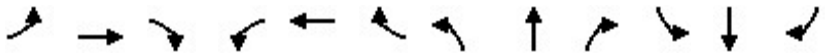
Intersection Summary	
HCM 6th Ctrl Delay	14.1
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	1231	77	6	608	13	21	0	12	14	3	7
Future Volume (veh/h)	15	1231	77	6	608	13	21	0	12	14	3	7
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		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1954	1954	1954	1527	1527	1527	1781	1781	1781	1641	1641	1641
Adj Flow Rate, veh/h	16	1282	80	6	633	14	22	0	12	15	3	7
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	1	1	2	2	2	3	3	3	8	8	8
Cap, veh/h	701	2151	134	395	1762	39	316	0	56	297	18	42
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.11	0.00	0.11	0.11	0.11	0.11
Sat Flow, veh/h	889	3543	221	354	2903	64	974	0	531	850	170	397
Grp Volume(v), veh/h	16	670	692	6	316	331	34	0	0	25	0	0
Grp Sat Flow(s),veh/h/ln	889	1856	1908	354	1451	1516	1506	0	0	1417	0	0
Q Serve(g_s), s	0.3	6.2	6.2	0.3	3.0	3.1	0.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.3	6.2	6.2	6.5	3.0	3.1	0.5	0.0	0.0	0.4	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.04	0.65		0.35	0.60		0.28
Lane Grp Cap(c), veh/h	701	1127	1159	395	881	920	372	0	0	356	0	0
V/C Ratio(X)	0.02	0.59	0.60	0.02	0.36	0.36	0.09	0.00	0.00	0.07	0.00	0.00
Avail Cap(c_a), veh/h	2683	5267	5416	1185	4118	4302	1961	0	0	1846	0	0
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	0.00
Uniform Delay (d), s/veh	3.6	3.4	3.4	5.4	2.7	2.7	11.4	0.0	0.0	11.3	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.5	0.5	0.0	0.2	0.2	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	0.3	0.3	0.0	0.1	0.1	0.3	0.0	0.0	0.2	0.0	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	3.6	3.9	3.9	5.4	3.0	3.0	11.5	0.0	0.0	11.4	0.0	0.0
LnGrp LOS	A	A	A	A	A	A	B	A	A	B	A	A
Approach Vol, veh/h		1378			653			34			25	
Approach Delay, s/veh		3.9			3.0			11.5			11.4	
Approach LOS		A			A			B			B	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	6.9	20.9	6.9	20.9
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	32.0	78.0	32.0	78.0
Max Q Clear Time (g_c+I1), s	2.5	8.2	2.4	8.5
Green Ext Time (p_c), s	0.1	7.7	0.1	2.7

Intersection Summary	
HCM 6th Ctrl Delay	3.8
HCM 6th LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	0	5	72	0	21	10	1675	153	23	1188	3
Future Volume (veh/h)	7	0	5	72	0	21	10	1675	153	23	1188	3
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1967	1967	1967	1701	1701	1701	1731	1731	1731	1772	1772	1772
Adj Flow Rate, veh/h	8	0	5	77	0	0	11	1801	165	25	1277	3
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
Percent Heavy Veh, %	0	0	0	0	0	0	1	1	1	1	1	1
Cap, veh/h	235	0	139	198	0		397	2505	226	213	2830	7
Arrive On Green	0.08	0.00	0.08	0.08	0.00	0.00	0.82	0.82	0.82	0.82	0.82	0.82
Sat Flow, veh/h	1619	0	1667	1347	0	1442	434	3051	275	229	3447	8
Grp Volume(v), veh/h	8	0	5	77	0	0	11	958	1008	25	624	656
Grp Sat Flow(s),veh/h/ln	1619	0	1667	1347	0	1442	434	1644	1681	229	1684	1771
Q Serve(g_s), s	0.0	0.0	0.2	4.5	0.0	0.0	0.6	20.9	22.5	4.6	8.8	8.8
Cycle Q Clear(g_c), s	0.3	0.0	0.2	4.7	0.0	0.0	9.4	20.9	22.5	27.1	8.8	8.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.16	1.00		0.00
Lane Grp Cap(c), veh/h	235	0	139	198	0		397	1350	1381	213	1383	1454
V/C Ratio(X)	0.03	0.00	0.04	0.39	0.00		0.03	0.71	0.73	0.12	0.45	0.45
Avail Cap(c_a), veh/h	505	0	417	447	0		485	1686	1724	259	1726	1816
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	35.4	0.0	35.3	37.5	0.0	0.0	3.5	3.2	3.3	9.4	2.1	2.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.1	1.7	1.9	0.5	0.5	0.5
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(95%),veh/ln	0.3	0.0	0.2	2.8	0.0	0.0	0.1	5.5	6.1	0.4	2.2	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.4	0.0	35.4	38.0	0.0	0.0	3.5	4.9	5.3	9.9	2.6	2.6
LnGrp LOS	D	A	D	D	A		A	A	A	A	A	A
Approach Vol, veh/h		13			77	A		1977			1305	
Approach Delay, s/veh		35.4			38.0			5.1			2.8	
Approach LOS		D			D			A			A	

Timer - Assigned Phs	2	4	6	8
Phs Duration (G+Y+Rc), s	72.9	11.0	72.9	11.0
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0
Max Green Setting (Gmax), s	85.0	20.0	85.0	21.0
Max Q Clear Time (g_c+I1), s	24.5	2.3	29.1	6.7
Green Ext Time (p_c), s	43.4	0.0	21.5	0.1

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

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	10	1	1424	6	3	1384
Future Volume (veh/h)	10	1	1424	6	3	1384
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	0.96		0.98	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	1750	1750	1917	1917	1736	1736
Adj Flow Rate, veh/h	10	1	1483	6	3	1442
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	1	1	1	1
Cap, veh/h	138	14	2249	9	110	2496
Arrive On Green	0.10	0.07	0.60	0.57	0.07	0.76
Sat Flow, veh/h	1364	136	3816	15	1654	3386
Grp Volume(v), veh/h	12	0	726	763	3	1442
Grp Sat Flow(s),veh/h/ln	1637	0	1821	1914	1654	1650
Q Serve(g_s), s	0.2	0.0	9.2	9.2	0.1	6.6
Cycle Q Clear(g_c), s	0.2	0.0	9.2	9.2	0.1	6.6
Prop In Lane	0.83	0.08		0.01	1.00	
Lane Grp Cap(c), veh/h	166	0	1101	1157	110	2496
V/C Ratio(X)	0.07	0.00	0.66	0.66	0.03	0.58
Avail Cap(c_a), veh/h	838	0	4456	4683	376	9103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	14.3	0.0	4.6	4.6	15.3	1.9
Incr Delay (d2), s/veh	0.2	0.0	0.3	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.1	0.0	1.3	1.4	0.0	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	14.5	0.0	4.8	4.8	15.4	1.9
LnGrp LOS	B	A	A	A	B	A
Approach Vol, veh/h	12		1489			1445
Approach Delay, s/veh	14.5		4.8			2.0
Approach LOS	B		A			A

Timer - Assigned Phs	1	2				6	8
Phs Duration (G+Y+Rc), s	5.3	24.2				29.6	5.6
Change Period (Y+Rc), s	5.2	5.2				5.2	4.0
Max Green Setting (Gmax), s	5.8	83.8				94.8	16.0
Max Q Clear Time (g_c+I1), s	2.1	11.2				8.6	2.2
Green Ext Time (p_c), s	0.0	7.8				8.9	0.0

Intersection Summary	
HCM 6th Ctrl Delay	3.5
HCM 6th LOS	A

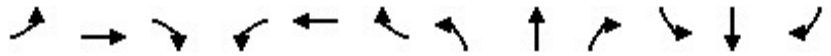
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	372	482	27	2	248	45	14	1	4	39	2	255
Future Volume (veh/h)	372	482	27	2	248	45	14	1	4	39	2	255
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Adj Flow Rate, veh/h	384	497	28	2	256	46	14	1	4	40	2	263
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	632	728	41	330	352	63	239	70	281	525	3	339
Arrive On Green	0.23	0.44	0.42	0.00	0.24	0.24	0.23	0.23	0.23	0.25	0.23	0.25
Sat Flow, veh/h	1667	1641	92	1667	1444	259	1132	306	1224	1434	11	1474
Grp Volume(v), veh/h	384	0	525	2	0	302	14	0	5	40	0	265
Grp Sat Flow(s),veh/h/ln	1667	0	1733	1667	0	1703	1132	0	1530	1434	0	1485
Q Serve(g_s), s	6.3	0.0	10.5	0.0	0.0	7.1	0.5	0.0	0.1	0.9	0.0	7.2
Cycle Q Clear(g_c), s	6.3	0.0	10.5	0.0	0.0	7.1	7.7	0.0	0.1	1.0	0.0	7.2
Prop In Lane	1.00		0.05	1.00		0.15	1.00		0.80	1.00		0.99
Lane Grp Cap(c), veh/h	632	0	769	330	0	415	239	0	352	525	0	341
V/C Ratio(X)	0.61	0.00	0.68	0.01	0.00	0.73	0.06	0.00	0.01	0.08	0.00	0.78
Avail Cap(c_a), veh/h	986	0	1442	518	0	905	502	0	707	858	0	686
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	8.0	0.0	9.6	13.1	0.0	15.1	19.2	0.0	12.9	12.5	0.0	15.1
Incr Delay (d2), s/veh	0.4	0.0	0.4	0.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	1.4
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(95%),veh/ln	2.1	0.0	4.4	0.0	0.0	3.9	0.2	0.0	0.1	0.5	0.0	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	8.4	0.0	10.0	13.1	0.0	16.0	19.2	0.0	12.9	12.5	0.0	16.6
LnGrp LOS	A	A	B	B	A	B	B	A	B	B	A	B
Approach Vol, veh/h		909			304			19			305	
Approach Delay, s/veh		9.3			16.0			17.6			16.1	
Approach LOS		A			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.1	23.2		14.9	13.8	14.5		14.9				
Change Period (Y+Rc), s	5.0	5.0		5.0	5.0	5.0		5.0				
Max Green Setting (Gmax), s	5.0	35.0		20.0	18.0	22.0		20.0				
Max Q Clear Time (g_c+I1), s	2.0	12.5		9.7	8.3	9.1		9.2				
Green Ext Time (p_c), s	0.0	1.1		0.0	0.6	0.5		1.0				

Intersection Summary	
HCM 6th Ctrl Delay	12.1
HCM 6th LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	0	6	120	1	24	14	1598	125	12	1478	11
Future Volume (veh/h)	13	0	6	120	1	24	14	1598	125	12	1478	11
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1736	1736	1736	1709	1709	1709	1736	1736	1736	1736	1736	1736
Adj Flow Rate, veh/h	14	0	6	125	1	0	15	1665	0	12	1540	0
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	1	1	3	3	3	1	1	1	1	1	1
Cap, veh/h	416	0	269	384	2		345	1906		284	1809	
Arrive On Green	0.19	0.00	0.15	0.19	0.19	0.00	0.10	0.58	0.00	0.07	0.55	0.00
Sat Flow, veh/h	1415	0	1451	1348	11	1448	1654	3386	0	1654	3386	0
Grp Volume(v), veh/h	14	0	6	126	0	0	15	1665	0	12	1540	0
Grp Sat Flow(s),veh/h/ln	1415	0	1451	1359	0	1448	1654	1650	0	1654	1650	0
Q Serve(g_s), s	0.0	0.0	0.2	4.4	0.0	0.0	0.0	23.1	0.0	0.0	21.2	0.0
Cycle Q Clear(g_c), s	0.4	0.0	0.2	4.6	0.0	0.0	0.0	23.1	0.0	0.0	21.2	0.0
Prop In Lane	1.00		1.00	0.99		1.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	416	0	269	386	0		345	1906		284	1809	
V/C Ratio(X)	0.03	0.00	0.02	0.33	0.00		0.04	0.87		0.04	0.85	
Avail Cap(c_a), veh/h	917	0	783	877	0		429	2088		416	2088	
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	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	18.0	0.0	18.7	19.8	0.0	0.0	16.2	9.7	0.0	18.5	10.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	3.8	0.0	0.0	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.2	0.0	0.1	2.5	0.0	0.0	0.2	10.0	0.0	0.2	9.5	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	18.0	0.0	18.7	20.3	0.0	0.0	16.2	13.5	0.0	18.5	13.1	0.0
LnGrp LOS	B	A	B	C	A		B	B		B	B	
Approach Vol, veh/h		20			126	A		1680	A		1552	A
Approach Delay, s/veh		18.2			20.3			13.5			13.1	
Approach LOS		B			C			B			B	

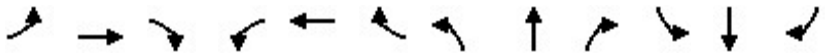
Timer - Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	34.0		13.0	8.3	32.4		13.0
Change Period (Y+Rc), s	5.9	5.9		6.0	5.9	5.9		6.0
Max Green Setting (Gmax), s	5.1	31.1		26.0	5.1	31.1		26.0
Max Q Clear Time (g_c+I1), s	2.0	25.1		6.6	2.0	23.2		2.4
Green Ext Time (p_c), s	0.0	3.0		0.4	0.0	3.3		0.0

Intersection Summary	
HCM 6th Ctrl Delay	13.6
HCM 6th LOS	B

Notes

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

HCM 6th Edition methodology does not support turning movements with shared & exclusive lanes.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	960	1467	37	553	0	583	0	109	1	0	2
Future Volume (veh/h)	0	960	1467	37	553	0	583	0	109	1	0	2
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1736	1736	1736	1723	1723	1723	1795	1795	1795	1750	1750	1750
Adj Flow Rate, veh/h	0	1123	1524	39	588	0	682	0	128	1	0	2
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, %	1	1	1	2	2	2	2	2	2	0	0	0
Cap, veh/h	48	1073	2032	59	2251	0	907	0	404	99	0	59
Arrive On Green	0.00	0.62	0.60	0.04	0.69	0.00	0.19	0.00	0.27	0.04	0.00	0.04
Sat Flow, veh/h	834	1736	2590	1641	3359	0	3419	0	1521	1282	0	1483
Grp Volume(v), veh/h	0	1123	1524	39	588	0	682	0	128	1	0	2
Grp Sat Flow(s),veh/h/ln	834	1736	1295	1641	1637	0	1709	0	1521	1282	0	1483
Q Serve(g_s), s	0.0	93.0	46.4	3.5	10.3	0.0	27.8	0.0	10.1	0.1	0.0	0.2
Cycle Q Clear(g_c), s	0.0	93.0	46.4	3.5	10.3	0.0	27.8	0.0	10.1	0.1	0.0	0.2
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	48	1073	2032	59	2251	0	907	0	404	99	0	59
V/C Ratio(X)	0.00	1.05	0.75	0.66	0.26	0.00	0.75	0.00	0.32	0.01	0.00	0.03
Avail Cap(c_a), veh/h	48	1073	2032	65	2263	0	907	0	404	99	0	59
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	28.7	8.5	71.6	8.9	0.0	51.6	0.0	44.3	69.4	0.0	69.4
Incr Delay (d2), s/veh	0.0	40.3	1.6	18.9	0.1	0.0	3.6	0.0	0.4	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.0	62.0	16.4	3.2	6.4	0.0	17.9	0.0	7.0	0.1	0.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	69.0	10.1	90.5	9.0	0.0	55.1	0.0	44.7	69.4	0.0	69.7
LnGrp LOS	A	F	B	F	A	A	E	A	D	E	A	E
Approach Vol, veh/h		2647			627			810			3	
Approach Delay, s/veh		35.1			14.1			53.5			69.6	
Approach LOS		D			B			D			E	

Timer - Assigned Phs	2	4	5	6	7	8
Phs Duration (G+Y+Rc), s	107.4	43.0	10.4	97.0	32.0	11.0
Change Period (Y+Rc), s	7.0	6.0	6.0	7.0	6.0	* 6
Max Green Setting (Gmax), s	101.0	36.0	5.0	90.0	26.0	* 5
Max Q Clear Time (g_c+I1), s	12.3	12.1	5.5	95.0	29.8	2.2
Green Ext Time (p_c), s	2.9	0.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	35.5
HCM 6th LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

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

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	862	163	87	456	215	225
Future Volume (veh/h)	862	163	87	456	215	225
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	1731	1731	1709	1709	1701	1701
Adj Flow Rate, veh/h	1055	199	93	485	252	263
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	3	3	2	2
Cap, veh/h	1104	936	95	1265	320	274
Arrive On Green	0.64	0.64	0.06	0.74	0.20	0.19
Sat Flow, veh/h	1731	1467	1628	1709	1620	1442
Grp Volume(v), veh/h	1055	199	93	485	252	263
Grp Sat Flow(s),veh/h/ln	1731	1467	1628	1709	1620	1442
Q Serve(g_s), s	77.3	7.8	7.8	14.1	20.2	24.7
Cycle Q Clear(g_c), s	77.3	7.8	7.8	14.1	20.2	24.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1104	936	95	1265	320	274
V/C Ratio(X)	0.96	0.21	0.98	0.38	0.79	0.96
Avail Cap(c_a), veh/h	1209	1024	95	1369	320	274
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.9	10.4	64.3	6.4	52.1	54.9
Incr Delay (d2), s/veh	15.7	0.1	84.4	0.2	12.3	43.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	43.0	4.5	9.3	8.2	14.3	17.9
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	38.6	10.5	148.6	6.6	64.5	98.1
LnGrp LOS	D	B	F	A	E	F
Approach Vol, veh/h	1254			578	515	
Approach Delay, s/veh	34.2			29.5	81.6	
Approach LOS	C			C	F	

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	14.0	92.2			106.2	30.5
Change Period (Y+Rc), s	7.0	7.0			7.0	5.5
Max Green Setting (Gmax), s	7.0	93.5			107.5	25.0
Max Q Clear Time (g_c+I1), s	9.8	79.3			16.1	26.7
Green Ext Time (p_c), s	0.0	6.0			2.1	0.0

Intersection Summary		
HCM 6th Ctrl Delay	43.4	
HCM 6th LOS	D	

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	497	199	138	246	349	212
Future Volume (veh/h)	497	199	138	246	349	212
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	0.98
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	1717	1717	1759	1759	1701	1701
Adj Flow Rate, veh/h	540	216	150	267	379	230
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Cap, veh/h	749	635	237	767	416	252
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1717	1455	723	1759	938	569
Grp Volume(v), veh/h	540	216	150	267	610	0
Grp Sat Flow(s),veh/h/ln	1717	1455	723	1759	1510	0
Q Serve(g_s), s	17.2	6.5	11.8	6.7	25.1	0.0
Cycle Q Clear(g_c), s	17.2	6.5	29.0	6.7	25.1	0.0
Prop In Lane		1.00	1.00		0.62	0.38
Lane Grp Cap(c), veh/h	749	635	237	767	669	0
V/C Ratio(X)	0.72	0.34	0.63	0.35	0.91	0.00
Avail Cap(c_a), veh/h	749	635	237	767	750	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	15.4	12.4	28.2	12.4	17.3	0.0
Incr Delay (d2), s/veh	3.4	0.3	5.4	0.3	14.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	10.6	3.4	4.7	4.2	15.2	0.0
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	18.8	12.7	33.5	12.7	31.7	0.0
LnGrp LOS	B	B	C	B	C	A
Approach Vol, veh/h	756			417	610	
Approach Delay, s/veh	17.0			20.2	31.7	
Approach LOS	B			C	C	

Timer - Assigned Phs	2	4	8
Phs Duration (G+Y+Rc), s	33.5	33.0	33.0
Change Period (Y+Rc), s	5.0	5.0	5.0
Max Green Setting (Gmax), s	32.0	28.0	28.0
Max Q Clear Time (g_c+I1), s	27.1	19.2	31.0
Green Ext Time (p_c), s	1.4	2.3	0.0

Intersection Summary	
HCM 6th Ctrl Delay	22.8
HCM 6th LOS	C

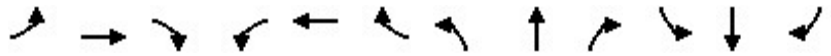
Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↱	↰	↑↑	↰	↱
Traffic Volume (veh/h)	2424	69	15	1179	54	12
Future Volume (veh/h)	2424	69	15	1179	54	12
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	1809	1809	1687	1687	1895	1895
Adj Flow Rate, veh/h	2579	42	16	1254	57	7
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	3	3	0	0
Cap, veh/h	2855	1273	36	2847	108	96
Arrive On Green	0.83	0.83	0.02	0.89	0.06	0.06
Sat Flow, veh/h	3527	1533	1607	3290	1805	1606
Grp Volume(v), veh/h	2579	42	16	1254	57	7
Grp Sat Flow(s),veh/h/ln	1718	1533	1607	1603	1805	1606
Q Serve(g_s), s	58.7	0.5	1.1	8.3	3.5	0.5
Cycle Q Clear(g_c), s	58.7	0.5	1.1	8.3	3.5	0.5
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2855	1273	36	2847	108	96
V/C Ratio(X)	0.90	0.03	0.44	0.44	0.53	0.07
Avail Cap(c_a), veh/h	3489	1556	70	3506	282	251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	6.6	1.7	55.6	1.2	52.6	51.1
Incr Delay (d2), s/veh	3.2	0.0	8.2	0.1	3.9	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	9.3	0.2	1.0	1.0	3.1	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	9.9	1.7	63.8	1.3	56.5	51.5
LnGrp LOS	A	A	E	A	E	D
Approach Vol, veh/h	2621			1270	64	
Approach Delay, s/veh	9.7			2.1	56.0	
Approach LOS	A			A	E	

Timer - Assigned Phs	2	3	4		8
Phs Duration (G+Y+Rc), s	9.9	6.6	98.7		105.3
Change Period (Y+Rc), s	5.0	5.0	5.0		5.0
Max Green Setting (Gmax), s	16.0	4.0	115.0		124.0
Max Q Clear Time (g_c+I1), s	5.5	3.1	60.7		10.3
Green Ext Time (p_c), s	0.1	0.0	33.0		8.1

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	821	540	15	431	419	72	21	1173	581	34	788	390
Future Volume (veh/h)	821	540	15	431	419	72	21	1173	581	34	788	390
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		0.99	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	1750	1750	1750	1772	1772	1772	1845	1845	1845	1688	1688	1688
Adj Flow Rate, veh/h	883	581	16	463	451	77	23	1261	0	37	847	0
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
Percent Heavy Veh, %	0	0	0	1	1	1	1	1	1	1	1	1
Cap, veh/h	1007	715	20	965	575	97	56	1184		66	1113	
Arrive On Green	0.31	0.22	0.21	0.29	0.20	0.20	0.03	0.34	0.00	0.04	0.35	0.00
Sat Flow, veh/h	3233	3303	91	3275	2875	488	1757	3505	1563	1607	3291	0
Grp Volume(v), veh/h	883	292	305	463	263	265	23	1261	0	37	847	0
Grp Sat Flow(s),veh/h/ln	1617	1663	1731	1637	1684	1678	1757	1753	1563	1607	1603	0
Q Serve(g_s), s	28.3	18.3	18.3	12.7	16.2	16.4	1.4	37.0	0.0	2.5	25.7	0.0
Cycle Q Clear(g_c), s	28.3	18.3	18.3	12.7	16.2	16.4	1.4	37.0	0.0	2.5	25.7	0.0
Prop In Lane	1.00		0.05	1.00		0.29	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1007	360	375	965	337	335	56	1184		66	1113	
V/C Ratio(X)	0.88	0.81	0.81	0.48	0.78	0.79	0.41	1.06		0.56	0.76	
Avail Cap(c_a), veh/h	1110	508	529	1256	583	581	88	1184		81	1113	
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.7	40.8	40.8	31.7	41.5	41.7	52.0	36.3	0.0	51.5	31.7	0.0
Incr Delay (d2), s/veh	7.6	6.6	6.5	0.4	4.0	4.2	4.7	45.3	0.0	7.1	3.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	17.6	12.7	13.1	8.7	11.3	11.4	1.2	31.8	0.0	2.0	15.4	0.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	43.3	47.4	47.3	32.1	45.5	45.9	56.7	81.6	0.0	58.7	34.9	0.0
LnGrp LOS	D	D	D	C	D	D	E	F		E	C	
Approach Vol, veh/h		1480			991			1284	A		884	A
Approach Delay, s/veh		44.9			39.3			81.1			35.9	
Approach LOS		D			D			F			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	35.3	26.7	6.5	41.0	37.1	24.9	7.5	40.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	40.5	32.0	4.0	35.5	36.1	36.4	4.0	35.5
Max Q Clear Time (g_c+I1), s	14.7	20.3	3.4	27.7	30.3	18.4	4.5	39.0
Green Ext Time (p_c), s	2.2	1.9	0.0	2.6	2.3	2.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	52.0
HCM 6th LOS	D

Notes

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

MOVEMENT SUMMARY

Site: 3 [3 - SE Issaquah Fall Clty Rd & Klahanie Dr SE]

2035 PM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Klahanie Dr SE												
3	L2	2	0.0	0.006	5.6	LOS A	0.0	0.6	0.60	0.46	0.60	33.1
8	T1	1	0.0	0.006	5.6	LOS A	0.0	0.6	0.60	0.46	0.60	33.1
18	R2	1	0.0	0.006	5.6	LOS A	0.0	0.6	0.60	0.46	0.60	32.3
Approach		4	0.0	0.006	5.6	LOS A	0.0	0.6	0.60	0.46	0.60	32.9
NorthEast: SE Issaquah Fall City Rd												
1	L2	1	1.0	0.314	7.8	LOS A	1.8	44.2	0.65	0.58	0.65	33.2
6	T1	476	1.0	0.314	7.5	LOS A	1.8	45.8	0.65	0.57	0.65	33.4
16	R2	81	1.0	0.314	7.2	LOS A	1.8	45.8	0.65	0.57	0.65	32.6
Approach		559	1.0	0.314	7.5	LOS A	1.8	45.8	0.65	0.57	0.65	33.3
NorthWest: Klahanie Dr SE												
7	L2	129	0.0	0.179	6.9	LOS A	0.7	17.9	0.51	0.46	0.51	31.4
4	T1	2	0.0	0.179	6.9	LOS A	0.7	17.9	0.51	0.46	0.51	31.4
14	R2	377	0.0	0.357	7.1	LOS A	1.8	44.0	0.54	0.47	0.54	32.5
Approach		508	0.0	0.357	7.0	LOS A	1.8	44.0	0.53	0.47	0.53	32.2
SouthWest: SE Issauqah Fall City Rd												
5	L2	603	0.0	0.497	8.2	LOS A	3.4	83.9	0.39	0.23	0.39	30.9
2	T1	652	0.0	0.497	8.0	LOS A	3.4	84.3	0.38	0.23	0.38	33.1
12	R2	2	0.0	0.497	8.0	LOS A	3.4	84.3	0.38	0.23	0.38	32.3
Approach		1257	0.0	0.497	8.1	LOS A	3.4	84.3	0.39	0.23	0.39	32.0
All Vehicles		2328	0.2	0.497	7.7	LOS A	3.4	84.3	0.48	0.36	0.48	32.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 6 [6 - Issaquah-Pine LK Rd and SE 32nd Way]

2035 PM Alternative 4 (Two-Lane NB/SB)
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Issaquah-Pine Lk Rd NB												
3x	L2	1	1.0	0.520	10.8	LOS B	4.3	107.8	0.55	0.38	0.55	32.1
8x	T1	1028	1.0	0.520	2.8	LOS A	4.4	111.4	0.54	0.40	0.54	29.1
18x	R2	355	1.0	0.520	3.5	LOS A	4.4	111.4	0.52	0.42	0.52	28.3
Approach		1384	1.0	0.520	3.0	LOS A	4.4	111.4	0.54	0.41	0.54	28.9
NorthEast: SE 32nd Way WB												
1x	L2	246	1.0	0.713	28.6	LOS C	9.0	226.1	1.00	1.34	1.72	22.9
6x	T1	1	1.0	0.713	25.4	LOS C	9.0	226.1	1.00	1.34	1.72	24.6
16x	R2	154	1.0	0.713	23.8	LOS C	9.0	226.1	1.00	1.34	1.72	22.3
Approach		401	1.0	0.713	26.8	LOS C	9.0	226.1	1.00	1.34	1.72	22.7
NorthWest: Issaquah-Pine Lk Rd SB												
7x	L2	183	1.0	0.555	8.8	LOS A	4.9	123.3	0.67	0.52	0.67	28.7
4x	T1	1187	1.0	0.555	3.1	LOS A	5.1	129.6	0.66	0.45	0.66	28.7
14x	R2	5	1.0	0.555	5.5	LOS A	5.1	129.6	0.65	0.40	0.65	31.0
Approach		1376	1.0	0.555	3.9	LOS A	5.1	129.6	0.66	0.46	0.66	28.7
SouthWest: Drive Way Access EB												
5x	L2	3	0.0	0.051	40.6	LOS D	0.2	5.7	0.94	0.97	0.94	24.2
2x	T1	1	0.0	0.051	34.9	LOS C	0.2	5.7	0.94	0.97	0.94	24.2
12x	R2	2	0.0	0.051	35.0	LOS D	0.2	5.7	0.94	0.97	0.94	23.8
Approach		6	0.0	0.051	37.8	LOS D	0.2	5.7	0.94	0.97	0.94	24.1
All Vehicles		3167	1.0	0.713	6.5	LOS A	9.0	226.1	0.65	0.55	0.74	27.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 6 [*6 - Issaquah-Pine LK Rd and SE 32nd Way Single Lane RAB]

2035 PM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Issaquah-Pine Lk Rd NB												
3x	L2	1	1.0	1.135	77.3	LOS E	88.8	2237.3	1.00	2.08	2.82	16.7
8x	T1	1028	1.0	1.135	69.4	LOS E	88.8	2237.3	1.00	2.08	2.82	15.8
18x	R2	355	1.0	1.135	70.0	LOS E	88.8	2237.3	1.00	2.08	2.82	15.6
Approach		1384	1.0	1.135	69.5	LOS E	88.8	2237.3	1.00	2.08	2.82	15.7
NorthEast: SE 32nd Way WB												
1x	L2	246	1.0	0.788	27.3	LOS C	10.3	260.6	1.00	1.30	1.64	23.2
6x	T1	1	1.0	0.788	24.0	LOS C	10.3	260.6	1.00	1.30	1.64	24.9
16x	R2	154	1.0	0.788	22.5	LOS C	10.3	260.6	1.00	1.30	1.64	22.6
Approach		401	1.0	0.788	25.4	LOS C	10.3	260.6	1.00	1.30	1.64	23.0
NorthWest: Issaquah-Pine Lk Rd SB												
7x	L2	183	1.0	1.224	115.1	LOS F	107.2	2702.5	1.00	3.22	4.68	12.4
4x	T1	1187	1.0	1.224	109.7	LOS F	107.2	2702.5	1.00	3.22	4.68	12.3
14x	R2	5	1.0	1.224	112.0	LOS F	107.2	2702.5	1.00	3.22	4.68	12.7
Approach		1376	1.0	1.224	110.4	LOS F	107.2	2702.5	1.00	3.22	4.68	12.3
SouthWest: Drive Way Access EB												
5x	L2	3	0.0	0.026	26.0	LOS C	0.2	4.9	1.00	0.77	1.00	28.7
2x	T1	1	0.0	0.026	20.3	LOS C	0.2	4.9	1.00	0.77	1.00	28.7
12x	R2	2	0.0	0.026	20.5	LOS C	0.2	4.9	1.00	0.77	1.00	28.1
Approach		6	0.0	0.026	23.2	LOS C	0.2	4.9	1.00	0.77	1.00	28.5
All Vehicles		3167	1.0	1.224	81.6	LOS F	107.2	2702.5	1.00	2.48	3.47	14.6

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 9 [9 - SE Issaquah Fall City Rd & 247th Pl SE]

2035 PM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: Pacific Crest Middle School Drwy												
3	L2	32	2.0	0.065	5.7	LOS A	0.2	5.7	0.56	0.54	0.56	32.8
8	T1	5	2.0	0.065	5.7	LOS A	0.2	5.7	0.56	0.54	0.56	32.8
18	R2	10	2.0	0.065	5.7	LOS A	0.2	5.7	0.56	0.54	0.56	31.9
Approach		47	2.0	0.065	5.7	LOS A	0.2	5.7	0.56	0.54	0.56	32.6
NorthEast: SE Issaquah Fall City Rd												
1	L2	12	2.0	0.323	5.7	LOS A	1.7	42.1	0.22	0.10	0.22	34.5
6	T1	794	2.0	0.323	5.7	LOS A	1.7	42.3	0.22	0.10	0.22	34.6
16	R2	45	2.0	0.323	5.6	LOS A	1.7	42.3	0.21	0.10	0.21	33.6
Approach		852	2.0	0.323	5.7	LOS A	1.7	42.3	0.22	0.10	0.22	34.6
NorthWest: 247th Pl SE												
7	L2	30	2.0	0.053	5.1	LOS A	0.2	4.7	0.51	0.44	0.51	33.0
4	T1	12	2.0	0.053	5.1	LOS A	0.2	4.7	0.51	0.44	0.51	33.0
14	R2	66	2.0	0.067	4.3	LOS A	0.2	6.2	0.49	0.42	0.49	34.0
Approach		108	2.0	0.067	4.6	LOS A	0.2	6.2	0.50	0.43	0.50	33.6
SouthWest: SE Issaquah Fall City Rd												
5	L2	34	2.0	0.411	6.4	LOS A	2.5	63.1	0.21	0.09	0.21	34.1
2	T1	1201	2.0	0.411	6.1	LOS A	2.5	63.9	0.20	0.08	0.20	34.3
12	R2	70	2.0	0.043	2.5	LOS A	0.2	4.2	0.08	0.02	0.08	35.0
Approach		1305	2.0	0.411	5.9	LOS A	2.5	63.9	0.20	0.08	0.20	34.4
All Vehicles		2312	2.0	0.411	5.8	LOS A	2.5	63.9	0.23	0.11	0.23	34.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 14 [14 - 216th Ave and NE Inglewood Hill Rd]

2035 PM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 216th Ave (NB)												
3	L2	122	2.0	0.199	10.3	LOS B	1.1	27.0	0.52	0.67	0.52	31.6
8	T1	55	2.0	0.199	5.1	LOS A	1.1	27.0	0.52	0.67	0.52	31.6
18	R2	31	2.0	0.199	5.2	LOS A	1.1	27.0	0.52	0.67	0.52	30.8
Approach		207	2.0	0.199	8.2	LOS A	1.1	27.0	0.52	0.67	0.52	31.5
East: NE Inglewood Hill Rd												
1	L2	29	1.0	0.336	9.7	LOS A	2.0	50.0	0.47	0.55	0.47	32.8
6	T1	172	1.0	0.336	4.5	LOS A	2.0	50.0	0.47	0.55	0.47	32.7
16	R2	189	1.0	0.336	4.6	LOS A	2.0	50.0	0.47	0.55	0.47	31.8
Approach		391	1.0	0.336	5.0	LOS A	2.0	50.0	0.47	0.55	0.47	32.3
North: 216th Ave (SB)												
7	L2	111	1.0	0.161	9.7	LOS A	0.8	20.5	0.45	0.63	0.45	31.8
4	T1	31	1.0	0.161	4.6	LOS A	0.8	20.5	0.45	0.63	0.45	31.7
14	R2	39	1.0	0.161	4.7	LOS A	0.8	20.5	0.45	0.63	0.45	30.9
Approach		180	1.0	0.161	7.8	LOS A	0.8	20.5	0.45	0.63	0.45	31.6
West: NE Inglewood Hill Rd												
5	L2	82	0.0	0.333	9.2	LOS A	2.0	49.5	0.39	0.51	0.39	32.7
2	T1	227	0.0	0.333	4.0	LOS A	2.0	49.5	0.39	0.51	0.39	32.6
12	R2	107	0.0	0.333	4.1	LOS A	2.0	49.5	0.39	0.51	0.39	31.8
Approach		417	0.0	0.333	5.1	LOS A	2.0	49.5	0.39	0.51	0.39	32.4
All Vehicles		1195	0.8	0.336	6.0	LOS A	2.0	50.0	0.45	0.57	0.45	32.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 26 [26 - NE 8th St and 244th Ave]

2035 PM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	94	0.0	0.272	6.8	LOS A	1.5	37.7	0.45	0.44	0.45	24.8
8	T1	212	0.0	0.272	2.3	LOS A	1.5	37.7	0.45	0.44	0.45	24.5
18	R2	5	0.0	0.272	2.9	LOS A	1.5	37.7	0.45	0.44	0.45	24.0
Approach		311	0.0	0.272	3.7	LOS A	1.5	37.7	0.45	0.44	0.45	24.6
East: NE 8th St (WB)												
1	L2	4	0.0	0.054	7.8	LOS A	0.3	6.8	0.54	0.51	0.54	24.8
6	T1	21	0.0	0.054	3.3	LOS A	0.3	6.8	0.54	0.51	0.54	24.6
16	R2	27	0.0	0.054	3.9	LOS A	0.3	6.8	0.54	0.51	0.54	24.0
Approach		52	0.0	0.054	4.0	LOS A	0.3	6.8	0.54	0.51	0.54	24.3
North: 244th Ave (SB)												
7	L2	10	0.0	0.305	6.1	LOS A	1.8	43.9	0.31	0.33	0.31	25.2
4	T1	137	0.0	0.305	1.7	LOS A	1.8	43.9	0.31	0.33	0.31	24.9
14	R2	242	0.0	0.305	2.2	LOS A	1.8	43.9	0.31	0.33	0.31	24.4
Approach		389	0.0	0.305	2.1	LOS A	1.8	43.9	0.31	0.33	0.31	24.6
West: NE 8th St (EB)												
5	L2	234	0.0	0.381	9.0	LOS A	2.3	58.4	0.38	0.58	0.38	32.0
2	T1	23	0.0	0.381	4.3	LOS A	2.3	58.4	0.38	0.58	0.38	31.9
12	R2	217	0.0	0.381	4.3	LOS A	2.3	58.4	0.38	0.58	0.38	31.2
Approach		474	0.0	0.381	6.6	LOS A	2.3	58.4	0.38	0.58	0.38	31.6
All Vehicles		1227	0.0	0.381	4.3	LOS A	2.3	58.4	0.38	0.46	0.38	26.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 32 [32 - Issaquah Beaver Lake Rd & 256th Ave SE]

2035 PM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 256th Ave SE												
3	L2	125	0.0	0.205	5.0	LOS A	1.1	27.1	0.47	0.34	0.47	33.8
8	T1	46	0.0	0.205	5.0	LOS A	1.1	27.1	0.47	0.34	0.47	33.7
18	R2	63	0.0	0.205	5.0	LOS A	1.1	27.1	0.47	0.34	0.47	32.7
Approach		234	0.0	0.205	5.0	LOS A	1.1	27.1	0.47	0.34	0.47	33.5
East: Issaquah Beaver Lake Rd												
1	L2	50	0.0	0.148	4.1	LOS A	0.7	18.6	0.36	0.21	0.36	35.0
6	T1	90	0.0	0.148	4.1	LOS A	0.7	18.6	0.36	0.21	0.36	34.9
16	R2	43	0.0	0.148	4.1	LOS A	0.7	18.6	0.36	0.21	0.36	33.9
Approach		184	0.0	0.148	4.1	LOS A	0.7	18.6	0.36	0.21	0.36	34.7
North: 256th Ave SE												
7	L2	46	0.0	0.087	3.7	LOS A	0.4	10.2	0.37	0.23	0.37	34.8
4	T1	33	0.0	0.087	3.7	LOS A	0.4	10.2	0.37	0.23	0.37	34.6
14	R2	27	0.0	0.087	3.7	LOS A	0.4	10.2	0.37	0.23	0.37	33.7
Approach		105	0.0	0.087	3.7	LOS A	0.4	10.2	0.37	0.23	0.37	34.4
West: Issaquah Beaver Lake Rd												
5	L2	37	0.0	0.356	6.0	LOS A	2.1	52.4	0.33	0.18	0.33	34.6
2	T1	267	0.0	0.356	6.0	LOS A	2.1	52.4	0.33	0.18	0.33	34.5
12	R2	166	0.0	0.356	6.0	LOS A	2.1	52.4	0.33	0.18	0.33	33.5
Approach		471	0.0	0.356	6.0	LOS A	2.1	52.4	0.33	0.18	0.33	34.1
All Vehicles		993	0.0	0.356	5.2	LOS A	2.1	52.4	0.37	0.23	0.37	34.1

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: SIDRA Standard.
HCM Delay Formula option is used. Control Delay does not include Geometric Delay since Exclude Geometric Delay option applies.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 39 [39 - 233rd Ave NE & NE 8th Street]

2035 PM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	55	1.0	0.199	8.9	LOS A	1.2	29.4	0.68	0.74	0.68	25.2
8	T1	55	1.0	0.199	8.1	LOS A	1.2	29.4	0.68	0.74	0.68	29.7
18	R2	48	1.0	0.199	5.4	LOS A	1.2	29.4	0.68	0.74	0.68	24.6
Approach		159	1.0	0.199	7.6	LOS A	1.2	29.4	0.68	0.74	0.68	26.4
East: NE 8th St (WB)												
1	L2	105	1.0	0.395	6.7	LOS A	2.5	61.9	0.44	0.48	0.44	24.6
6	T1	316	1.0	0.395	2.9	LOS A	2.5	61.9	0.44	0.48	0.44	24.5
16	R2	29	1.0	0.395	5.7	LOS A	2.5	61.9	0.44	0.48	0.44	28.4
Approach		450	1.0	0.395	3.9	LOS A	2.5	61.9	0.44	0.48	0.44	24.8
North: RoadName												
7	L2	21	0.0	0.152	11.1	LOS B	0.8	20.0	0.56	0.68	0.56	34.7
4	T1	52	0.0	0.152	7.0	LOS A	0.8	20.0	0.56	0.68	0.56	34.8
14	R2	68	0.0	0.152	6.8	LOS A	0.8	20.0	0.56	0.68	0.56	34.1
Approach		141	0.0	0.152	7.5	LOS A	0.8	20.0	0.56	0.68	0.56	34.5
West: NE 8th St (EB)												
5	L2	79	1.0	0.607	10.3	LOS B	4.8	122.0	0.54	0.58	0.54	33.1
2	T1	521	1.0	0.607	5.4	LOS A	4.8	122.0	0.54	0.58	0.54	31.9
12	R2	103	1.0	0.607	5.3	LOS A	4.8	122.0	0.54	0.58	0.54	31.2
Approach		703	1.0	0.607	5.9	LOS A	4.8	122.0	0.54	0.58	0.54	31.9
All Vehicles		1453	0.9	0.607	5.7	LOS A	4.8	122.0	0.53	0.58	0.53	28.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 41 [41 - 244th Ave NE & E Main Dr]

2035 PM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
South: 244th Ave (NB)												
3	L2	5	0.0	0.221	8.6	LOS A	1.1	27.4	0.27	0.44	0.27	32.7
8	T1	237	0.0	0.221	4.2	LOS A	1.1	27.4	0.27	0.44	0.27	32.7
18	R2	38	0.0	0.221	4.1	LOS A	1.1	27.4	0.27	0.44	0.27	32.0
Approach		280	0.0	0.221	4.3	LOS A	1.1	27.4	0.27	0.44	0.27	32.6
East: E Main Dr (WB)												
1	L2	44	0.0	0.104	9.1	LOS A	0.5	12.2	0.38	0.59	0.38	32.0
6	T1	3	0.0	0.104	4.7	LOS A	0.5	12.2	0.38	0.59	0.38	32.0
16	R2	71	0.0	0.104	4.7	LOS A	0.5	12.2	0.38	0.59	0.38	31.3
Approach		118	0.0	0.104	6.3	LOS A	0.5	12.2	0.38	0.59	0.38	31.6
North: 244th Ave (SB)												
7	L2	92	0.0	0.262	8.3	LOS A	1.4	36.2	0.19	0.48	0.19	32.4
4	T1	212	0.0	0.262	3.9	LOS A	1.4	36.2	0.19	0.48	0.19	32.5
14	R2	42	0.0	0.262	3.9	LOS A	1.4	36.2	0.19	0.48	0.19	31.7
Approach		346	0.0	0.262	5.1	LOS A	1.4	36.2	0.19	0.48	0.19	32.4
West: E Main Dr (EB)												
5	L2	18	0.0	0.028	9.4	LOS A	0.1	3.1	0.41	0.60	0.41	31.5
2	T1	3	0.0	0.028	5.0	LOS A	0.1	3.1	0.41	0.60	0.41	31.5
12	R2	9	0.0	0.028	4.9	LOS A	0.1	3.1	0.41	0.60	0.41	30.8
Approach		30	0.0	0.028	7.6	LOS A	0.1	3.1	0.41	0.60	0.41	31.3
All Vehicles		774	0.0	0.262	5.1	LOS A	1.4	36.2	0.26	0.49	0.26	32.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 62 [62 - E Lk Sammamish Pk Way and SE 43nd Way]

2035 PM Alternative 4
Site Category: -
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance ft	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed mph
SouthEast: E Lk Sammamish Pk Way WB												
8x	T1	644	2.0	0.393	1.7	LOS A	3.1	77.7	0.30	0.22	0.30	29.8
18x	R2	1305	2.0	0.795	2.1	LOS A	0.0	0.0	0.00	0.29	0.00	29.3
Approach		1949	2.0	0.795	2.0	LOS A	3.1	77.7	0.10	0.27	0.10	29.5
NorthEast: SE 43rd Way SB												
1x	L2	733	1.0	0.408	10.8	LOS B	3.0	76.0	0.76	0.81	0.76	27.6
16x	R2	71	1.0	0.408	5.7	LOS A	3.0	76.0	0.75	0.78	0.75	26.8
Approach		804	1.0	0.408	10.4	LOS B	3.0	76.0	0.76	0.80	0.76	27.5
NorthWest: E Lk Sammamish Pk Way EB												
7x	L2	77	2.0	0.439	10.0	LOS A	2.3	59.6	0.68	0.67	0.73	29.0
4x	T1	697	2.0	0.439	3.9	LOS A	2.4	61.6	0.67	0.58	0.72	28.8
Approach		774	2.0	0.439	4.5	LOS A	2.4	61.6	0.67	0.58	0.72	28.8
All Vehicles		3527	1.8	0.795	4.4	LOS A	3.1	77.7	0.37	0.46	0.39	28.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Signalised Intersections.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

Appendix D. 2035 Mitigated Street Segment and Corridor Service Volumes

2035 Alternative 2 Capacity Analysis

	Segment		AM Volume	PM Volume	Characteristics							Capacity	AM V/C	PM V/C	AM Trips to Fail	PM Trips to Fail	AM	PM
					Speed limit (mph)	# Lanes	LT Lane	Median	RT Lane	ITS	FYA	2016 HCM Mod	2016 HCM Mod	2016 HCM Mod			Corridor ≤1.1 Segment ≤1.4	
	East Lake Sammamish Parkway North Corridor	**NB**											**0.92**	**0.47**			**Pass**	**Pass**
		SB											**0.27**	**0.97**			**Pass**	**Pass**
1	E Lk Sammamish Pkwy, City limits - 196th Ave NE (Weber Pl)	NB	1,286	643	35	4	1			1	1	1,808	0.71	0.36	1,246	1,888	Pass	Pass
		SB	396	1,430									0.22	0.79	2,135	1,102	Pass	Pass
2	E Lk Sammamish Pkwy, 196th Ave NE - NE 26th Pl	NB	1,338	672	35	4	1			1	1	1,808	0.74	0.37	1,194	1,859	Pass	Pass
		SB	342	1,355									0.19	0.75	2,189	1,176	Pass	Pass
3	E Lk Sammamish Pkwy, NE 26th Pl - NE Inglewood Hill Rd	NB	1,342	683	35	2	1	1	1	1	1	1,031	1.30	0.66	102	761	Pass	Pass
		SB	394	1,397									0.38	1.35	1,049	47	Pass	Pass
	East Lake Sammamish Parkway Central Corridor	**NB**											**0.66**	**0.72**			**Pass**	**Pass**
		SB											**0.55**	**0.85**			**Pass**	**Pass**
4	E Lk Sammamish Pkwy, Inglewood Hill Rd – Louis Thompson Rd	NB	728	573	35	2	1		1		1	943	0.77	0.61	592	747	Pass	Pass
		SB	421	841									0.45	0.89	899	479	Pass	Pass
5	E Lk Sammamish Pkwy, Louis Thompson Rd NE – SE 8th St	NB	420	519	35	2					1	723	0.58	0.72	592	493	Pass	Pass
		SB	402	616									0.56	0.85	611	396	Pass	Pass
6	E Lk Sammamish Pkwy, SE 8th St – SE 24th Way	NB	383	589	35	2						705	0.54	0.83	604	398	Pass	Pass
		SB	450	564									0.64	0.80	537	423	Pass	Pass
	East Lake Sammamish Parkway South Corridor	**NB**											**0.52**	**1.07**			**Pass**	**Pass**
		SB											**0.88**	**0.80**			**Pass**	**Pass**
7	E Lk Sammamish Pkwy, SE 24th Way – 212th Ave SE	NB	381	608	35	2						705	0.54	0.86	606	379	Pass	Pass
		SB	533	612									0.76	0.87	454	375	Pass	Pass
8	E Lk Sammamish Pkwy, 212th Ave SE – South City Limit	NB	482	1,114	35	2	1		1		1	943	0.51	1.18	838	206	Pass	Pass
		SB	894	698									0.95	0.74	426	622	Pass	Pass
	Sahalee Way–228th Avenue North Corridor	**NB**											**1.00**	**0.69**			**Pass**	**Pass**
		SB											**0.58**	**1.02**			**Pass**	**Pass**
9	Sahalee Way/228th Ave NE, City Limit – NE 37th Way	NB	1,219	593	45	4	1		1	1	1	1,949	0.63	0.30	1,510	2,135	Pass	Pass
		SB	499	1,138									0.26	0.58	2,230	1,591	Pass	Pass
10	Sahalee Way/228th Ave NE, NE 37th Way - NE 36th St	NB	995	573	45	2				1	1	788	1.26	0.73	109	530	Pass	Pass
		SB	496	1,021									0.63	1.30	608	82	Pass	Pass
11	Sahalee Way/228th Ave NE, NE 36th St - 223rd Ave NE	NB	982	559	45	2				1	1	788	1.25	0.71	122	544	Pass	Pass
		SB	480	984									0.61	1.25	623	119	Pass	Pass
12	Sahalee Way/228th Ave NE, 223rd Ave NE – NE 25th Way	NB	919	575	45	2				1	1	788	1.17	0.73	184	528	Pass	Pass
		SB	475	877									0.60	1.11	628	226	Pass	Pass
13	228th Ave, NE 25th Way – NE 12th Pl[3]	NB	716	863	45	2	1			1	1	969	0.74	0.89	641	494	Pass	Pass
		SB	723	873									0.75	0.90	633	483	Pass	Pass
	228th Avenue Central Corridor	**NB**											**0.59**	**0.81**			**Pass**	**Pass**
		SB											**0.65**	**0.80**			**Pass**	**Pass**
14	228th Ave, NE 12th Pl – NE 8th St/Inglewood Hill Rd	NB	740	981	35	2	1	1		1	1	987	0.75	0.99	642	400	Pass	Pass
		SB	877	974									0.89	0.99	505	408	Pass	Pass
15	228th Ave, NE 8th St/Inglewood Hill Rd – Main St	NB	891	1,309	35	4	1	1		1	1	1,896	0.47	0.69	1,763	1,346	Pass	Pass
		SB	1,194	1,309									0.63	0.69	1,461	1,345	Pass	Pass
16	228th Ave, Main St - SE 8th St[4]	NB	1,015	1,339	40	4	1	1		1	1	1,896	0.54	0.71	1,639	1,315	Pass	Pass
		SB	1,000	1,403									0.53	0.74	1,655	1,251	Pass	Pass
17	228th Ave, SE 8th St – SE 10th St	NB	1,038	1,533	40	4	1	1		1	1	1,896	0.55	0.81	1,617	1,122	Pass	Pass
		SB	1,134	1,455									0.60	0.77	1,520	1,199	Pass	Pass
18	228th Ave, Se 10th St – SE 20th St	NB	1,239	1,634	40	4	1	1		1	1	1,896	0.65	0.86	1,415	1,021	Pass	Pass
		SB	1,259	1,618									0.66	0.85	1,395	1,036	Pass	Pass
	228th Avenue South Corridor	**NB**											**0.64**	**0.86**			**Pass**	**Pass**
		SB											**0.77**	**0.76**			**Pass**	**Pass**
19	228th Ave, SE 20th St – Issaquah Pine Lake Rd SE	NB	1,354	1,583	40	4	1	1	1	1	1	1,985	0.68	0.80	1,425	1,196	Pass	Pass
		SB	1,365	1,623									0.69	0.82	1,414	1,156	Pass	Pass
20	228th Ave, Issaquah Pine Lake Rd SE – SE 43rd Way	NB	536	946	40	2	1		1	1	1	987	0.54	0.96	846	435	Pass	Pass
		SB	893	616									0.91	0.62	489	766	Pass	Pass
	244th Avenue North Corridor	**NB**											**0.31**	**0.47**			**Pass**	**Pass**
		SB											**0.50**	**0.42**			**Pass**	**Pass**
21	244th Ave NE, NE 30th Pl - NE 20th St	NB	248	384	35	2						705	0.35	0.55	739	603	Pass	Pass
		SB	369	349									0.52	0.49	618	638	Pass	Pass
22	244th Ave NE, NE 20th St - NE 8th St	NB	275	439	35	2	1					881	0.31	0.50	959	794	Pass	Pass
		SB	535	381									0.61	0.43	699	853	Pass	Pass
23	244th Ave NE, NE 8th St – E Main St	NB	317	337	35	2	1	1				925	0.34	0.36	978	958	Pass	Pass
		SB	319	370									0.34	0.40	976	925	Pass	Pass
24	244th Ave NE/SE, E Main St - SE 8th St	NB	148	389	35	2	1					881	0.17	0.44	1,085	844	Pass	Pass
		SB	404	301									0.46	0.34	829	932	Pass	Pass

	Segment		AM Volume	PM Volume	Characteristics							Capacity	AM V/C	PM V/C	AM Trips to Fail	PM Trips to Fail	AM	PM
					Speed limit (mph)	# Lanes	LT Lane	Median	RT Lane	ITS	FYA	2016 HCM Mod	2016 HCM Mod	2016 HCM Mod			Corridor ≤1.1 Segment ≤1.4	
	NE Inglewood Hill Road Corridor	**EB**											**0.32**	**0.89**			**Pass**	**Pass**
		WB											**0.86**	**0.39**			**Pass**	**Pass**
25	NE Inglewood Hill Rd, E Lk Sammamish Pkwy – 216th Ave	EB	194	792	35	2						705	0.28	1.12	793	195	Pass	Pass
		WB	776	313									1.10	0.44	211	674	Pass	Pass
26	NE Inglewood Hill Rd, 216th Ave NE – 228th Ave NE[4]	EB	355	593	35	2	1	1	1	1	1	1,031	0.34	0.57	1,089	851	Pass	Pass
		WB	525	359									0.51	0.35	918	1,084	Pass	Pass
	NE 8th Street Corridor	**EB**											**0.36**	**0.60**			**Pass**	**Pass**
		WB											**0.52**	**0.38**			**Pass**	**Pass**
27	NE 8th St, 228th Ave NE – 235th Ave NE	EB	402	646	35	2	1	1		1		969	0.41	0.67	955	711	Pass	Pass
		WB	530	386									0.55	0.40	827	970	Pass	Pass
28	NE 8th St, 235th Ave NE – 244th Ave NE	EB	236	453	35	2	1					881	0.27	0.51	998	780	Pass	Pass
		WB	425	320									0.48	0.36	809	913	Pass	Pass
	SE 8th Street Corridor	**EB**											**0.35**	**0.57**			**Pass**	**Pass**
		WB											**0.75**	**0.44**			**Pass**	**Pass**
29	SE 8th St, 228th Ave SE – 244th Ave SE	EB	324	530	30	2	1	1				925	0.35	0.57	971	765	Pass	Pass
		WB	692	407									0.75	0.44	603	888	Pass	Pass
	Issaquah-Pine Lake Road Corridor	**EB/SB**											**0.92**	**1.02**			**Pass**	**Pass**
		WB/NB											**0.73**	**1.04**			**Pass**	**Pass**
30	Issaquah-Pine Lk Rd, 228th Ave SE - SE 32nd Way[3]	EB	722	1,115	35	2		1		1	1	811	0.89	1.37	414	21	Pass	Pass
		WB	834	871									1.03	1.07	301	264	Pass	Pass
31	Issaquah-Pine Lk Rd, SE 32nd Way - SE Klahanie Blvd	NB	747	1,039	35	2				1	1	767	0.97	1.35	327	35	Pass	Pass
		SB	886	1,071									1.16	1.40	188	2	Pass	Pass
32	Issaquah-Pine Lk Rd, SE Klahanie Blvd – SE 46th St	NB	754	1,482	35	4	1					1,683	0.45	0.88	1,602	874	Pass	Pass
		SB	1,422	1,139									0.85	0.68	934	1,217	Pass	Pass
33	Issaquah-Pine Lk Rd, SE 46th St - SE 48th St	NB	776	1,665	35	4	1				1	1,719	0.45	0.97	1,631	741	Pass	Pass
		SB	1,489	1,104									0.87	0.64	917	1,303	Pass	Pass
	SE 32nd Way/Street - Issaquah-Beaver Lake Road Corridor	**EB**											**0.21**	**0.54**			**Pass**	**Pass**
		WB											**0.47**	**0.40**			**Pass**	**Pass**
34	SE 32nd Way, Issaquah-Pine Lk Rd – 235th Place SE	EB	170	498	35	2	1	1				925	0.18	0.54	1,125	797	Pass	Pass
		WB	458	331									0.50	0.36	837	964	Pass	Pass
35	SE 32nd Way, 235th Place SE – 244th Ave SE	EB	142	350	35	2						705	0.20	0.50	845	637	Pass	Pass
		WB	280	254									0.40	0.36	707	733	Pass	Pass
36	SE 32nd Way, 244th Ave SE – E Beaver Lake Dr SE	EB	188	482	35	2						705	0.27	0.68	799	505	Pass	Pass
		WB	410	360									0.58	0.51	577	627	Pass	Pass
37	Issaquah-Beaver Lk Rd, E Beaver Lk Dr – SE Duthie Hill Rd	EB	163	345	35	2	1					881	0.19	0.39	1,070	889	Pass	Pass
		WB	325	307									0.37	0.35	909	927	Pass	Pass
	Issaquah-Fall City Road Corridor	**NB/EB**											**0.45**	1.02			**Pass**	**Pass**
		SB/WB											**0.94**	0.65			**Pass**	**Pass**
38	SE Issaquah-Fall City Rd, Issaquah-Pine Lk Rd – 245th Pl SE[1]	EB	813	1,627	40	4	1	1				1,772	0.46	0.92	1,668	854	Pass	Pass
		WB	1,460	1,045									0.82	0.59	1,020	1,436	Pass	Pass
39	SE Issaquah-Fall City Rd, 245th Ave SE - Klahanie Dr SE	EB	369	1,561	40	4	1	1				1,772	0.21	0.88	2,112	920	Pass	Pass
		WB	1,500	940									0.85	0.53	981	1,540	Pass	Pass
40	SE Issaquah-Fall City Rd, Klahanie Dr SE - SE Duthie Hill Rd	EB	405	981	40	2						705	0.57	1.39	582	6	Pass	Pass
		WB	832	663									1.18	0.94	155	324	Pass	Pass
41	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – SE Issaquah-Fall City Rd[1]	NB	373	747	40	2						705	0.53	1.06	614	240	Pass	Pass
		SB	754	439									1.07	0.62	233	548	Pass	Pass
	Duthie Hill Road Corridor	**NB/EB**											**0.43**	**1.09**			**Pass**	**Pass**
		SB/WB											**0.91**	**0.66**			**Pass**	**Pass**
42	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – 266th Ave SE	NB	397	1,039	45	2	1				1	924	0.43	1.12	897	255	Pass	Pass
		SB	949	698									1.03	0.76	345	595	Pass	Pass
43	SE Duthie Hill Rd, 266th Ave SE – Trossachs Blvd SE[2]	EB	394	971	45	2	1				1	924	0.43	1.05	900	322	Pass	Pass
		WB	696	493									0.75	0.53	598	801	Pass	Pass

Notes

Corridor V/C ratios are volume weighted.

[1] This segment transitions from a wider cross-section to two lanes. The two-lane section was used.

[2] Segment is partially outside of Sammamish City Limits.

2035 Alternative 3 Capacity Analysis

	Segment		AM Volume	PM Volume	Characteristics							Capacities	AM V/C	PM V/C	AM Trips to Fail	PM Trips to Fail	AM	PM
					Speed limit (mph)	# Lanes	LT Lane	Median	RT Lane	ITS	FYA	2016 HCM Mod	2016 HCM Mod	2016 HCM Mod			Corridor ≤1.1 Segment ≤1.4	
	East Lake Sammamish Parkway North Corridor	**NB**											**0.94**	**0.54**			**Pass**	**Pass**
		SB											**0.29**	**1.06**			**Pass**	**Pass**
1	E Lk Sammamish Pkwy, City limits - 196th Ave NE (Weber Pl)	NB	1,030	593	35	4	1			1	1	1,808	0.57	0.33	1,501	1,938	Pass	Pass
		SB	364	1,272									0.20	0.70	2,167	1,259	Pass	Pass
2	E Lk Sammamish Pkwy, 196th Ave NE - NE 26th Pl	NB	1,091	623	35	2	1			1	1	943	1.16	0.66	229	698	Pass	Pass
		SB	312	1,204									0.33	1.28	1,008	116	Pass	Pass
3	E Lk Sammamish Pkwy, NE 26th Pl - NE Inglewood Hill Rd	NB	1,102	635	35	2	1	1	1	1	1	1,031	1.07	0.62	341	808	Pass	Pass
		SB	365	1,250									0.35	1.21	1,078	193	Pass	Pass
	East Lake Sammamish Parkway Central Corridor	**NB**											**0.60**	**0.62**			**Pass**	**Pass**
		SB											**0.45**	**0.77**			**Pass**	**Pass**
4	E Lk Sammamish Pkwy, Inglewood Hill Rd – Louis Thompson Rd	NB	627	495	35	**2**	1		1		1	943	0.67	0.52	693	826	Pass	Pass
		SB	349	739									0.37	0.78	971	581	Pass	Pass
5	E Lk Sammamish Pkwy, Louis Thompson Rd NE – SE 8th St	NB	403	441	35	**2**					1	723	0.56	0.61	609	571	Pass	Pass
		SB	329	572									0.46	0.79	683	440	Pass	Pass
6	E Lk Sammamish Pkwy, SE 8th St – SE 24th Way	NB	375	508	35	**2**						705	0.53	0.72	612	479	Pass	Pass
		SB	375	526									0.53	0.75	612	461	Pass	Pass
	East Lake Sammamish Parkway South Corridor	**NB**											**0.62**	**0.99**			**Pass**	**Pass**
		SB											**0.79**	**0.87**			**Pass**	**Pass**
7	E Lk Sammamish Pkwy, SE 24th Way – 212th Ave SE	NB	402	519	35	**2**						705	0.57	0.74	585	468	Pass	Pass
		SB	429	600									0.61	0.85	558	387	Pass	Pass
8	E Lk Sammamish Pkwy, 212th Ave SE – South City Limit	NB	504	877	35	**2**			1		1	767	0.66	1.14	570	197	Pass	Pass
		SB	691	675									0.90	0.88	383	399	Pass	Pass
	Sahalee Way–228th Avenue North Corridor	**NB**											**1.01**	**0.74**			**Pass**	**Pass**
		SB											**0.64**	**1.01**			**Pass**	**Pass**
9	Sahalee Way/228th Ave NE, City Limit – NE 37th Way	NB	1,034	616	45	**2**	1		1	1	1	1,015	1.02	0.61	387	805	Pass	Pass
		SB	514	980									0.51	0.97	907	441	Pass	Pass
10	Sahalee Way/228th Ave NE, NE 37th Way - NE 36th St	NB	861	589	45	**2**				1	1	788	1.09	0.75	242	514	Pass	Pass
		SB	518	895									0.66	1.14	585	208	Pass	Pass
11	Sahalee Way/228th Ave NE, NE 36th St - 223rd Ave NE	NB	869	570	45	**2**				1	1	788	1.10	0.72	234	534	Pass	Pass
		SB	499	868									0.63	1.10	605	235	Pass	Pass
12	Sahalee Way/228th Ave NE, 223rd Ave NE – NE 25th Way	NB	837	586	45	**2**				1	1	788	1.06	0.74	266	517	Pass	Pass
		SB	494	788									0.63	1.00	609	315	Pass	Pass
13	228th Ave, NE 25th Way – NE 12th Pl[3]	NB	713	832	45	**2**	1			1	1	969	0.74	0.86	643	525	Pass	Pass
		SB	700	824									0.72	0.85	657	533	Pass	Pass
	228th Avenue Central Corridor	**NB**											**0.59**	**0.77**			**Pass**	**Pass**
		SB											**0.62**	**0.77**			**Pass**	**Pass**
14	228th Ave, NE 12th Pl – NE 8th St/Inglewood Hill Rd	NB	736	932	35	**2**	1	1		1	1	987	0.75	0.94	646	450	Pass	Pass
		SB	833	932									0.84	0.94	549	450	Pass	Pass
15	228th Ave, NE 8th St/Inglewood Hill Rd – Main St	NB	868	1,260	35	**4**	1	1		1	1	1,896	0.46	0.66	1,787	1,394	Pass	Pass
		SB	1,140	1,264									0.60	0.67	1,514	1,390	Pass	Pass
16	228th Ave, Main St - SE 8th St[4]	NB	993	1,290	40	**4**	1	1		1	1	1,896	0.52	0.68	1,662	1,364	Pass	Pass
		SB	944	1,359									0.50	0.72	1,711	1,296	Pass	Pass
17	228th Ave, SE 8th St – SE 10th St	NB	1,037	1,456	40	**4**	1	1		1	1	1,896	0.55	0.77	1,617	1,199	Pass	Pass
		SB	1,082	1,417									0.57	0.75	1,572	1,237	Pass	Pass
18	228th Ave, Se 10th St – SE 20th St	NB	1,258	1,558	40	**4**	1	1		1	1	1,896	0.66	0.82	1,397	1,096	Pass	Pass
		SB	1,212	1,583									0.64	0.83	1,443	1,072	Pass	Pass
	228th Avenue South Corridor	**NB**											**0.63**	**0.85**			**Pass**	**Pass**
		SB											**0.71**	**0.74**			**Pass**	**Pass**
19	228th Ave, SE 20th St – Issaquah Pine Lake Rd SE	NB	1,332	1,566	40	**4**	1	1	1	1	1	1,985	0.67	0.79	1,447	1,213	Pass	Pass
		SB	1,268	1,564									0.64	0.79	1,511	1,215	Pass	Pass
20	228th Ave, Issaquah Pine Lake Rd SE – SE 43rd Way	NB	500	930	40	**2**	1		1	1	1	987	0.51	0.94	882	452	Pass	Pass
		SB	810	591									0.82	0.60	572	790	Pass	Pass
	244th Avenue North Corridor	**NB**											**0.25**	**0.46**			**Pass**	**Pass**
		SB											**0.51**	**0.35**			**Pass**	**Pass**
21	244th Ave NE, NE 30th Pl - NE 20th St	NB	184	388	35	**2**						705	0.26	0.55	803	599	Pass	Pass
		SB	387	279									0.55	0.40	600	708	Pass	Pass
22	244th Ave NE, NE 20th St - NE 8th St	NB	221	437	35	**2**	1					881	0.25	0.50	1,013	797	Pass	Pass
		SB	543	318									0.62	0.36	690	915	Pass	Pass
23	244th Ave NE, NE 8th St – E Main St	NB	273	325	35	**2**	1	1				925	0.30	0.35	1,022	970	Pass	Pass
		SB	316	319									0.34	0.35	979	976	Pass	Pass
24	244th Ave NE/SE, E Main St - SE 8th St	NB	121	370	35	**2**	1					881	0.14	0.42	1,112	863	Pass	Pass
		SB	394	258									0.45	0.29	840	975	Pass	Pass

	Segment		AM Volume	PM Volume	Characteristics							Capacities	AM V/C	PM V/C	AM Trips to Fail	PM Trips to Fail	AM	PM
					Speed limit (mph)	# Lanes	LT Lane	Median	RT Lane	ITS	FYA	2016 HCM Mod	2016 HCM Mod	2016 HCM Mod			Corridor ≤1.1 Segment ≤1.4	
	NE Inglewood Hill Road Corridor	**EB**											**0.33**	**0.80**			**Pass**	**Pass**
		WB											**0.69**	**0.38**			**Pass**	**Pass**
25	NE Inglewood Hill Rd, E Lk Sammamish Pkwy – 216th Ave	EB	202	706	35	**2**						705	0.29	1.00	785	281	Pass	Pass
		WB	608	299									0.86	0.42	379	688	Pass	Pass
26	NE Inglewood Hill Rd, 216th Ave NE – 228th Ave NE[4]	EB	365	569	35	**2**	1	1	1	1	1	1,031	0.35	0.55	1,078	874	Pass	Pass
		WB	501	347									0.49	0.34	942	1,096	Pass	Pass
	NE 8th Street Corridor	**EB**											**0.34**	**0.60**			**Pass**	**Pass**
		WB											**0.50**	**0.37**			**Pass**	**Pass**
27	NE 8th St, 228th Ave NE – 235th Ave NE	EB	381	635	35	**2**	1	1		1		969	0.39	0.66	975	722	Pass	Pass
		WB	511	372									0.53	0.38	845	984	Pass	Pass
28	NE 8th St, 235th Ave NE – 244th Ave NE	EB	210	456	35	**2**	1					881	0.24	0.52	1,023	778	Pass	Pass
		WB	421	306									0.48	0.35	813	927	Pass	Pass
	SE 8th Street Corridor	**EB**											**0.35**	**0.54**			**Pass**	**Pass**
		WB											**0.70**	**0.43**			**Pass**	**Pass**
29	SE 8th St, 228th Ave SE – 244th Ave SE	EB	325	498	30	**2**	1	1				925	0.35	0.54	970	797	Pass	Pass
		WB	646	400									0.70	0.43	649	895	Pass	Pass
	Issaquah-Pine Lake Road Corridor	**EB/SB**											**0.84**	**0.96**			**Pass**	**Pass**
		WB/NB											**0.72**	**0.96**			**Pass**	**Pass**
30	Issaquah-Pine Lk Rd, 228th Ave SE - SE 32nd Way[3]	EB	655	1,016	35	**2**		1		1	1	811	0.81	1.25	480	119	Pass	Pass
		WB	798	797									0.98	0.98	338	339	Pass	Pass
31	Issaquah-Pine Lk Rd, SE 32nd Way - SE Klahanie Blvd	NB	755	990	35	**2**				1	1	767	0.98	1.29	319	84	Pass	Pass
		SB	820	1,042									1.07	1.36	253	32	Pass	Pass
32	Issaquah-Pine Lk Rd, SE Klahanie Blvd – SE 46th St	NB	743	1,347	35	**4**	1				1	1,719	0.43	0.78	1,663	1,060	Pass	Pass
		SB	1,305	1,113									0.76	0.65	1,102	1,293	Pass	Pass
33	Issaquah-Pine Lk Rd, SE 46th St - SE 48th St	NB	776	1,517	35	**4**	1				1	1,719	0.45	0.88	1,630	890	Pass	Pass
		SB	1,350	1,083									0.79	0.63	1,057	1,324	Pass	Pass
	SE 32nd Way/Street - Issaquah-Beaver Lake Road Corridor	**EB**											**0.19**	**0.49**			**Pass**	**Pass**
		WB											**0.46**	**0.36**			**Pass**	**Pass**
34	SE 32nd Way, Issaquah-Pine Lk Rd – 235th Place SE	EB	165	447	35	**2**	1	1				925	0.18	0.48	1,130	848	Pass	Pass
		WB	415	319									0.45	0.35	880	976	Pass	Pass
35	SE 32nd Way, 235th Place SE – 244th Ave SE	EB	147	308	35	**2**						705	0.21	0.44	840	679	Pass	Pass
		WB	253	232									0.36	0.33	734	755	Pass	Pass
36	SE 32nd Way, 244th Ave SE – E Beaver Lake Dr SE	EB	155	449	35	**2**						705	0.22	0.64	832	538	Pass	Pass
		WB	413	314									0.59	0.45	574	673	Pass	Pass
37	Issaquah-Beaver Lk Rd, E Beaver Lk Dr – SE Duthie Hill Rd	EB	103	322	35	**2**	1					881	0.12	0.37	1,131	911	Pass	Pass
		WB	328	276									0.37	0.31	905	957	Pass	Pass
	Issaquah-Fall City Road Corridor	**NB/EB**											**0.40**	0.92			**Pass**	**Pass**
		SB/WB											**0.80**	0.62			**Pass**	**Pass**
38	SE Issaquah-Fall City Rd, Issaquah-Pine Lk Rd – 245th Pl SE[1]	EB	764	1,442	40	4	1	1				1,772	0.43	0.81	1,717	1,039	Pass	Pass
		WB	1,195	1,004									0.67	0.57	1,286	1,477	Pass	Pass
39	SE Issaquah-Fall City Rd, 245th Ave SE - Klahanie Dr SE	EB	332	1,416	40	4	1	1				1,772	0.19	0.80	2,148	1,065	Pass	Pass
		WB	1,282	907									0.72	0.51	1,199	1,573	Pass	Pass
40	SE Issaquah-Fall City Rd, Klahanie Dr SE - SE Duthie Hill Rd	EB	352	902	40	2						705	0.50	1.28	635	85	Pass	Pass
		WB	717	626									1.02	0.89	270	361	Pass	Pass
41	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – SE Issaquah-Fall City Rd[1]	NB	317	662	40	2						705	0.45	0.94	670	325	Pass	Pass
		SB	648	395									0.92	0.56	339	592	Pass	Pass
	Duthie Hill Road Corridor	**NB/EB**											**0.37**	**1.09**			**Pass**	**Pass**
		SB/WB											**0.93**	**0.66**			**Pass**	**Pass**
42	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – 266th Ave SE	NB	314	937	45	**2**	1			1	1	969	0.32	0.97	1,043	420	Pass	Pass
		SB	880	629									0.91	0.65	476	728	Pass	Pass
43	SE Duthie Hill Rd, 266th Ave SE – Trossachs Blvd SE[2]	EB	300	882	45	**2**						725	0.41	1.22	715	133	Pass	Pass
		WB	696	493									0.96	0.68	319	522	Pass	Pass

Notes

Corridor V/C ratios are volume weighted.

[1] This segment transitions from a wider cross-section to two lanes. The two-lane section was used.

[2] Segment is partially outside of Sammamish City Limits.

2035 Alternative 4 Capacity Analysis

	Segment		AM Volume	PM Volume	Characteristics							Capacity	AM V/C	PM V/C	AM Trips to Fail	PM Trips to Fail	AM	PM
					Speed limit (mph)	# Lanes	LT Lane	Median	RT Lane	ITS	FYA	2016 HCM Mod	2016 HCM Mod	2016 HCM Mod			Corridor ≤1.1 Segment ≤1.4	
	East Lake Sammamish Parkway North Corridor	**NB**											**0.86**	**0.54**			**Pass**	**Pass**
		SB											**0.28**	**0.97**			**Pass**	**Pass**
1	E Lk Sammamish Pkwy, City limits - 196th Ave NE (Weber Pl)	NB	678	433	35	2				1	1	767	0.88	0.56	396	641	Pass	Pass
		SB	248	846									0.32	1.10	825	228	Pass	Pass
2	E Lk Sammamish Pkwy, 196th Ave NE - NE 26th Pl	NB	738	461	35	2				1	1	767	0.96	0.60	336	613	Pass	Pass
		SB	195	777									0.25	1.01	879	297	Pass	Pass
3	E Lk Sammamish Pkwy, NE 26th Pl - NE Inglewood Hill Rd	NB	752	482	35	2	1	1	1	1	1	1,031	0.73	0.47	692	962	Pass	Pass
		SB	251	832									0.24	0.81	1,193	611	Pass	Pass
	East Lake Sammamish Parkway Central Corridor	**NB**											**0.49**	**0.39**			**Pass**	**Pass**
		SB											**0.38**	**0.66**			**Pass**	**Pass**
4	E Lk Sammamish Pkwy, Inglewood Hill Rd – Louis Thompson Rd	NB	434	303	35	**2**	1		1		1	943	0.46	0.32	886	1,017	Pass	Pass
		SB	280	560									0.30	0.59	1,040	760	Pass	Pass
5	E Lk Sammamish Pkwy, Louis Thompson Rd NE – SE 8th St	NB	376	257	35	**2**					1	723	0.52	0.36	636	755	Pass	Pass
		SB	277	516									0.38	0.71	735	496	Pass	Pass
6	E Lk Sammamish Pkwy, SE 8th St – SE 24th Way	NB	351	330	35	**2**						705	0.50	0.47	636	657	Pass	Pass
		SB	325	476									0.46	0.68	662	511	Pass	Pass
	East Lake Sammamish Parkway South Corridor	**NB**											**0.60**	**0.73**			**Pass**	**Pass**
		SB											**0.69**	**0.83**			**Pass**	**Pass**
7	E Lk Sammamish Pkwy, SE 24th Way – 212th Ave SE	NB	384	354	35	**2**						705	0.55	0.50	603	633	Pass	Pass
		SB	378	574									0.54	0.81	609	413	Pass	Pass
8	E Lk Sammamish Pkwy, 212th Ave SE – South City Limit	NB	490	659	35	**2**			1		1	767	0.64	0.86	584	415	Pass	Pass
		SB	608	647									0.79	0.84	466	427	Pass	Pass
	Sahalee Way–228th Avenue North Corridor	**NB**											**0.58**	**0.39**			**Pass**	**Pass**
		SB											**0.37**	**0.68**			**Pass**	**Pass**
9	Sahalee Way/228th Ave NE, City Limit – NE 37th Way	NB	1,277	677	45	**4**	1		1	1	1	1,949	0.66	0.35	1,451	2,051	Pass	Pass
		SB	649	1,390									0.33	0.71	2,080	1,339	Pass	Pass
10	Sahalee Way/228th Ave NE, NE 37th Way - NE 36th St	NB	1,090	656	45	**4**	1			1	1	1,858	0.59	0.35	1,511	1,945	Pass	Pass
		SB	654	1,312									0.35	0.71	1,948	1,289	Pass	Pass
11	Sahalee Way/228th Ave NE, NE 36th St - 223rd Ave NE	NB	1,092	640	45	**4**	1			1	1	1,858	0.59	0.34	1,509	1,962	Pass	Pass
		SB	635	1,284									0.34	0.69	1,966	1,317	Pass	Pass
12	Sahalee Way/228th Ave NE, 223rd Ave NE – NE 25th Way	NB	1,049	658	45	**4**	1			1	1	1,858	0.56	0.35	1,552	1,944	Pass	Pass
		SB	628	1,185									0.34	0.64	1,974	1,416	Pass	Pass
13	228th Ave, NE 25th Way – NE 12th Pl[3]	NB	918	927	45	**4**	1			1	1	1,858	0.49	0.50	1,683	1,674	Pass	Pass
		SB	839	1,223									0.45	0.66	1,762	1,379	Pass	Pass
	228th Avenue Central Corridor	**NB**											**0.59**	**0.78**			**Pass**	**Pass**
		SB											**0.62**	**0.82**			**Pass**	**Pass**
14	228th Ave, NE 12th Pl – NE 8th St/Inglewood Hill Rd	NB	915	1,062	35	**4**	1	1		1	1	1,896	0.48	0.56	1,739	1,592	Pass	Pass
		SB	990	1,309									0.52	0.69	1,665	1,345	Pass	Pass
15	228th Ave, NE 8th St/Inglewood Hill Rd – Main St	NB	976	1,393	35	**4**	1	1		1	1	1,896	0.51	0.73	1,678	1,261	Pass	Pass
		SB	1,239	1,492									0.65	0.79	1,415	1,162	Pass	Pass
16	228th Ave, Main St - SE 8th St[4]	NB	1,099	1,416	40	**4**	1	1		1	1	1,896	0.58	0.75	1,555	1,238	Pass	Pass
		SB	1,041	1,580									0.55	0.83	1,614	1,075	Pass	Pass
17	228th Ave, SE 8th St – SE 10th St	NB	1,155	1,628	40	**4**	1	1		1	1	1,896	0.61	0.86	1,500	1,026	Pass	Pass
		SB	1,187	1,588									0.63	0.84	1,468	1,067	Pass	Pass
18	228th Ave, Se 10th St – SE 20th St	NB	1,373	1,732	40	**4**	1	1		1	1	1,896	0.72	0.91	1,281	923	Pass	Pass
		SB	1,321	1,752									0.70	0.92	1,333	902	Pass	Pass
	228th Avenue South Corridor	**NB**											**0.55**	**0.78**			**Pass**	**Pass**
		SB											**0.61**	**0.69**			**Pass**	**Pass**
19	228th Ave, SE 20th St – Issaquah Pine Lake Rd SE	NB	1,304	1,768	40	**4**	1	1	1	1	1	1,985	0.66	0.89	1,475	1,011	Pass	Pass
		SB	1,385	1,643									0.70	0.83	1,394	1,136	Pass	Pass
20	228th Ave, Issaquah Pine Lake Rd SE – SE 43rd Way	NB	518	1,185	40	**4**	1		1	1	1	1,896	0.27	0.63	2,137	1,469	Pass	Pass
		SB	899	665									0.47	0.35	1,755	1,989	Pass	Pass
	244th Avenue North Corridor	**NB**											**0.25**	**0.48**			**Pass**	**Pass**
		SB											**0.51**	**0.34**			**Pass**	**Pass**
21	244th Ave NE, NE 30th Pl - NE 20th St	NB	187	407	35	**2**						705	0.27	0.58	800	580	Pass	Pass
		SB	385	264									0.55	0.37	602	723	Pass	Pass
22	244th Ave NE, NE 20th St - NE 8th St	NB	226	454	35	**2**	1					881	0.26	0.52	1,008	779	Pass	Pass
		SB	543	300									0.62	0.34	690	933	Pass	Pass
23	244th Ave NE, NE 8th St – E Main St	NB	275	344	35	**2**	1	1				925	0.30	0.37	1,020	951	Pass	Pass
		SB	321	321									0.35	0.35	974	974	Pass	Pass
24	244th Ave NE/SE, E Main St - SE 8th St	NB	122	387	35	**2**	1					881	0.14	0.44	1,112	846	Pass	Pass
		SB	398	259									0.45	0.29	836	974	Pass	Pass

	Segment		AM Volume	PM Volume	Characteristics							Capacity	AM V/C	PM V/C	AM Trips to Fail	PM Trips to Fail	AM	PM
					Speed limit (mph)	# Lanes	LT Lane	Median	RT Lane	ITS	FYA	2016 HCM Mod	2016 HCM Mod	2016 HCM Mod			Corridor ≤1.1 Segment ≤1.4	
	NE Inglewood Hill Road Corridor	**EB**											**0.29**	**0.48**			**Pass**	**Pass**
		WB											**0.53**	**0.32**			**Pass**	**Pass**
25	NE Inglewood Hill Rd, E Lk Sammamish Pkwy – 216th Ave	EB	157	383	35	**2**						705	0.22	0.54	830	604	Pass	Pass
		WB	450	255									0.64	0.36	537	732	Pass	Pass
26	NE Inglewood Hill Rd, 216th Ave NE – 228th Ave NE[4]	EB	330	446	35	**2**	1	1	1	1	1	1,031	0.32	0.43	1,113	998	Pass	Pass
		WB	444	294									0.43	0.29	1,000	1,149	Pass	Pass
	NE 8th Street Corridor	**EB**											**0.34**	**0.60**			**Pass**	**Pass**
		WB											**0.50**	**0.35**			**Pass**	**Pass**
27	NE 8th St, 228th Ave NE – 235th Ave NE	EB	386	644	35	**2**	1	1		1		969	0.40	0.66	970	713	Pass	Pass
		WB	503	365									0.52	0.38	853	992	Pass	Pass
28	NE 8th St, 235th Ave NE – 244th Ave NE	EB	216	456	35	**2**	1					881	0.24	0.52	1,018	778	Pass	Pass
		WB	417	287									0.47	0.33	816	946	Pass	Pass
	SE 8th Street Corridor	**EB**											**0.35**	**0.54**			**Pass**	**Pass**
		WB											**0.69**	**0.41**			**Pass**	**Pass**
29	SE 8th St, 228th Ave SE – 244th Ave SE	EB	327	503	30	**2**	1	1				925	0.35	0.54	968	792	Pass	Pass
		WB	642	383									0.69	0.41	653	912	Pass	Pass
	Issaquah-Pine Lake Road Corridor	**EB/SB**											**0.76**	**0.68**			**Pass**	**Pass**
		WB/NB											**0.43**	**0.85**			**Pass**	**Pass**
30	Issaquah-Pine Lk Rd, 228th Ave SE - SE 32nd Way[3]	EB	728	1,154	35	**4**	1	1		1	1	1,896	0.38	0.61	1,926	1,500	Pass	Pass
		WB	763	903									0.40	0.48	1,891	1,752	Pass	Pass
31	Issaquah-Pine Lk Rd, SE 32nd Way - SE Klahanie Blvd	NB	764	1,186	35	**4**	1			1	1	1,808	0.42	0.66	1,767	1,345	Pass	Pass
		SB	954	1,248									0.53	0.69	1,577	1,284	Pass	Pass
32	Issaquah-Pine Lk Rd, SE Klahanie Blvd – SE 46th St	NB	749	1,604	35	**4**	1				1	1,719	0.44	0.93	1,658	802	Pass	Pass
		SB	1,530	1,219									0.89	0.71	876	1,188	Pass	Pass
33	Issaquah-Pine Lk Rd, SE 46th St - SE 48th St	NB	789	1,841	35	**4**	1				1	1,719	0.46	1.07	1,618	566	Pass	Pass
		SB	1,634	1,210									0.95	0.70	773	1,196	Pass	Pass
	SE 32nd Way/Street - Issaquah-Beaver Lake Road Corridor	**EB**											**0.18**	**0.54**			**Pass**	**Pass**
		WB											**0.47**	**0.33**			**Pass**	**Pass**
34	SE 32nd Way, Issaquah-Pine Lk Rd – 235th Place SE	EB	190	528	35	**2**	1	1				925	0.21	0.57	1,105	767	Pass	Pass
		WB	444	382									0.48	0.41	851	913	Pass	Pass
35	SE 32nd Way, 235th Place SE – 244th Ave SE	EB	134	386	35	**2**						705	0.19	0.55	853	601	Pass	Pass
		WB	288	229									0.41	0.32	699	758	Pass	Pass
36	SE 32nd Way, 244th Ave SE – E Beaver Lake Dr SE	EB	129	449	35	**2**						705	0.18	0.64	858	538	Pass	Pass
		WB	418	217									0.59	0.31	569	770	Pass	Pass
37	Issaquah-Beaver Lk Rd, E Beaver Lk Dr – SE Duthie Hill Rd	EB	62	321	35	**2**	1					881	0.07	0.36	1,172	912	Pass	Pass
		WB	322	164									0.37	0.19	911	1,069	Pass	Pass
	Issaquah-Fall City Road Corridor	**NB/EB**											**0.44**	0.77			**Pass**	**Pass**
		SB/WB											**0.67**	0.55			**Pass**	**Pass**
38	SE Issaquah-Fall City Rd, Issaquah-Pine Lk Rd – 245th Pl SE[1]	EB	772	1,154	40	4	1	1				1,772	0.44	0.65	1,708	1,327	Pass	Pass
		WB	923	910									0.52	0.51	1,558	1,571	Pass	Pass
39	SE Issaquah-Fall City Rd, 245th Ave SE - Klahanie Dr SE	EB	343	1,235	40	4	1	1				1,772	0.19	0.70	2,138	1,245	Pass	Pass
		WB	1,120	810									0.63	0.46	1,360	1,671	Pass	Pass
40	SE Issaquah-Fall City Rd, Klahanie Dr SE - SE Duthie Hill Rd	EB	399	767	40	2						705	0.57	1.09	588	220	Pass	Pass
		WB	612	555									0.87	0.79	375	432	Pass	Pass
41	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – SE Issaquah-Fall City Rd[1]	NB	366	528	40	2						705	0.52	0.75	621	459	Pass	Pass
		SB	544	323									0.77	0.46	443	664	Pass	Pass
	Duthie Hill Road Corridor	**NB/EB**											**0.42**	**1.06**			**Pass**	**Pass**
		SB/WB											**0.89**	**0.62**			**Pass**	**Pass**
42	SE Duthie Hill Rd, SE Issaquah-Beaver Lk Rd – 266th Ave SE	NB	356	915	45	**2**	1			1	1	969	0.37	0.94	1,001	441	Pass	Pass
		SB	805	559									0.83	0.58	552	798	Pass	Pass
43	SE Duthie Hill Rd, 266th Ave SE – Trossachs Blvd SE[2]	EB	341	857	45	**2**						725	0.47	1.18	674	158	Pass	Pass
		WB	696	493									0.96	0.68	319	522	Pass	Pass

Notes

Corridor V/C ratios are volume weighted.

[1] This segment transitions from a wider cross-section to two lanes. The wider section was used.

[2] Segment is partially outside of Sammamish City Limits.

D Sammamish Municipal Code Title 14A

Current through Ordinance O2021-532, passed July 13, 2021

Title 14A
PUBLIC FACILITIES

Chapters:

Chapter 14A.01
PUBLIC WORKS STANDARDS ADOPTED

Sections:

14A.01.010 Public works standards adopted.

(1) The City hereby adopts by reference the design standards and specifications set forth in the document entitled “City of Sammamish 2016 Public Works Standards” as now or hereafter amended as the public works standards for the City, which includes but is not limited to transportation standards and street standards. Pursuant to RCW 35A.13.180, a copy of the most current City of Sammamish public works standards is available on the City’s website at www.sammamish.us.

(2) The public works director is hereby authorized to administratively interpret and apply the standards in a manner consistent with their terms in order to better implement the standards or allow for changes in street design and construction technology and methods. (Ord. O2018-465 § 2 (Att. A))

14A.01.020 Resolution of conflicts.

In case of inconsistency or conflict between other provisions of the Sammamish Municipal Code and the City of Sammamish public works standards adopted in this chapter, the most restrictive provision shall apply. (Ord. O2018-465 § 2 (Att. A))

14A.01.030 Appeals.

Any person or agency aggrieved by an act or decision of the City pursuant to the public works standards may appeal said act or decision to the City of Sammamish pursuant to the appeal provisions for the underlying development permit application as contained in Chapter 20.05 SMC. (Ord. O2018-465 § 2 (Att. A))

Chapter 14A.05
DEFINITIONS

Sections:

14A.05.010 Definitions.

The following words and terms shall have the following meanings for the purposes of this title, unless the context clearly requires otherwise. The following words, terms, and definitions shall apply to all portions of this title, except as specifically superseded by definitions set forth elsewhere in this title.

“Accessory dwelling unit” is defined for the purposes of this title the same as the term “Dwelling unit, accessory” in SMC 21A.15.350.

“Affordable housing” or “low-income housing” means residential housing that is rented or owned by a person or household whose monthly housing expenses, including utilities other than telephone, do not exceed 30 percent of the applicable median family income listed below and adjusted for household size. Based on the King County Income and Affordability Guidelines, housing affordability levels include:

(a) “Low income” means a family earning between zero and 50 percent of the King County median household income.

(b) “Moderate income” means a family earning between 51 and 80 percent of the King County median household income.

(c) “King County median household income” means the median income of the Seattle Metropolitan Statistical Area (“SMSA”), adjusted for household size, as determined by the United States Department of Housing and Urban Development (“HUD”). In the event that HUD no longer publishes median income figures for King County, the City may determine such other method as it may choose to determine the King County median household income, adjusted for household size.

“Applicant” means a property owner or a public agency or public or private utility that owns a right-of-way or other easement or has been adjudicated the right to such an easement pursuant to RCW 8.12.090, or any person or entity designated or named in writing by the property or easement owner to be the applicant, in an application for a development proposal, permit or approval.

“Building permit” means an official document or certification which is issued by the City and which authorizes the construction, alteration, enlargement, conversion, reconstruction, remodeling, rehabilitation, erection, demolition, moving or repair of a building or structure.

"Capital facilities plan" means the Capital Facilities Plan Element of a Comprehensive Plan adopted by the City of Sammamish pursuant to Chapter 36.70A RCW, and such plan as amended.

"Capital improvement program (CIP)" means the expenditures programmed by the City of Sammamish for capital purposes over the next six-year period in the CIP most recently adopted by the City council.

"Certificate of concurrency" means the document issued by the City indicating the location or other description of the property on which the development is proposed, the type of development permit for which the certificate is issued, the number and type of units, square footage, and/or maximum trip generation approved, the public facilities that are available and reserved for the property described in the certificate, any conditions attached to the approval, and the date of issuance.

"City" means the City of Sammamish.

"City's traffic model a.m. peak hour" is from 7:00 to 8:00 a.m., which accommodates many schools' peak hour.

"City's traffic model p.m. peak hour" is from 4:45 to 5:45 p.m., which reflects the afternoon's average system peak hour.

"Concurrency" means that a development does not cause the level of service on a locally owned transportation facility to decline below the standards adopted in the Transportation Element of the Comprehensive Plan, unless transportation improvements or strategies to accommodate the impacts of the development are made concurrent with the development. For the purposes of this title, "concurrent with the development" means that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years.

"Concurrency test" means the determination of an applicant's impact on transportation facilities by the comparison of the City's adopted level of service standards to the projected level of service at intersections or road corridors, or road segments with the proposed development.

"Concurrency test deferral affidavit" means a document signed by an applicant which defers the application for a certificate of concurrency and the concurrency test, acknowledges that future rights to develop the property are subject to the deferred concurrency test, and acknowledges that no vested rights concerning concurrency have been granted by the City or acquired by the applicant without such a test.

"Council" means the City council of the City of Sammamish.

"Department" means the department of public works, department of community development, or, when

referenced in Chapter 14A.20 SMC, means the department of parks and recreation.

“Development” means specified improvements or changes in use designed or intended to permit a use of land that will contain more dwelling units or buildings than the existing use of the land, or to otherwise change the use of the land or buildings/improvements on the land, and that require a development permit from the City of Sammamish. The rezoning of land is not development.

“Development activity” means any construction or expansion of a building, structure, or use, any change in use of a building or structure, or any changes in the use of land, that creates additional demand and need for public facilities.

“Development approval” means any written authorization from the City which authorizes the commencement of development activity.

“Development permit” means any order, permit or other official action of the City granting, or granting with conditions, an application for development, including specifically:

(a) Planned action, as that term is defined in RCW 43.21C.031(2);

(b) Subdivision, including preliminary plat, short plat, or binding site plan and revisions or alterations which increase the number of dwelling units or trip generation;

(c) Mobile home park;

(d) Unified zone development plan (UZDP);

(e) Conditional use permit;

(f) Site development permit;

(g) Building permit; or

(h) Certificate of occupancy for a change in use.

“Director,” when referenced in this title, means the director of the department of public works or the director’s designee, or the director of the department of parks and recreation or the director’s designee, or the director of the department of community development or the director’s designee, as appropriate.

“Dwelling unit” means a residential location such as a house, apartment, condominium, townhouse, mobile home, or manufactured home in which people may live.

“Encumbered” means to reserve, set aside, or otherwise earmark the impact fees in order to pay for commitments, contractual obligations, or other liabilities incurred for public facilities.

“Feepayer” means a person, corporation, partnership, incorporated association, or any other similar entity, or department or bureau of any governmental entity or municipal corporation commencing a land development activity which creates the demand for additional capital facilities, and which requires the issuance of a building permit. “Feepayer” includes an applicant for an impact fee credit.

“Financial commitment” consists of the following:

“Financial commitment” means that sources of public or private funds or combinations thereof have been identified which will be sufficient to finance public facilities necessary to support development and that there is reasonable assurance that such funds will be timely put to that end.

(a) Revenue designated in the most currently adopted CIP for transportation facilities or strategies needed in the committed network for the transportation adequacy measure to test for concurrency. The financial plan underlying the adopted CIP identifies all applicable and available revenue sources and forecasts these revenues through the six-year period that can be reasonably expected. Projects to be used in defining the committed network shall represent those projects that are anticipated to be constructed in the six years of the CIP. This commitment is reviewed annually through the budget process;

(b) Unanticipated revenue from federal or state grants for which the City has received notice of approval;

(c) Revenue that is assured by an applicant in a form approved by the City in a voluntary agreement;

(d) Grants from federal, state or private sources if the grant has been awarded for specific projects;

(e) Appropriations in state biennial budget for specific projects;

(f) Revenues that can be imposed or expended at the discretion of the City, including, but not limited to, impact fees, SEPA mitigation payments, property taxes, real estate excise taxes, user fees, charges, intergovernmental entitlements, and bonds;

(g) Revenue from special assessment districts created by the City;

(h) Irrevocable commitments from developers in a form acceptable to the City including:

(i) Performance or surety bonds from Washington State financial institutions;

(ii) Letters of credit from Washington State financial institutions; or

(iii) Assignments of assets in Washington State (i.e., interests in real property, savings

certificates, bank accounts, or negotiable securities); or

(i) Payments by special districts if such payments are similar in character and reliability to those listed in subsections (a) through (e) of this definition.

“Gross floor area” means the total square footage of any building, structure, or use, including accessory uses.

“Hearing examiner” means the examiner who acts on behalf of the City in considering and applying land use regulatory codes as provided under the Sammamish Municipal Code. Where appropriate, “hearing examiner” also refers to the office of the hearing examiner.

“Impact fee” means a payment of money imposed upon development as a condition of development approval to pay for public facilities needed to serve new growth and development, and that is reasonably related to the new development that creates additional demand and need for public facilities, that is a proportionate share of the cost of the public facilities, and that is used for facilities that reasonably benefit the new development. “Impact fee” does not include a reasonable permit or application fee.

“Impact fee account” or “account” means the account(s) established for each type of public facility for which impact fees are collected. The accounts shall be established pursuant to SMC 14A.15.070, 14A.15.080, 14A.20.070 and 14A.20.080, and comply with the requirements of RCW 82.02.070.

“Independent fee calculation” means the street impact calculation or park and recreational impact fee and/or economic documentation prepared by a feepayer to support the assessment of an impact fee calculation other than by the use of the rates listed in SMC 14A.15.110 or 14A.20.110, or the calculations prepared by the director where none of the fee categories or fee amounts in SMC 14A.15.110 or 14A.20.110 accurately describe or capture the impacts of the new development on public facilities.

“ITE land use code” means the classification code number assigned to a type of land use by the Institute of Transportation Engineers in the current edition of Trip Generation Manual.

“Level of service standards” means the City’s defined performance standards for its adopted concurrency intersections, road corridors, and road segments, as defined in SMC 14A.10.050.

“Occupancy” means that a space is being lived in, rented, or used and therefore not vacant.

“Owner” means the owner of record of real property, although when real property is being purchased under a real estate contract, the purchaser shall be considered the owner of the real property if the contract is recorded.

“Peak hour” means the hour during the morning or afternoon with the highest traffic volumes for a

particular roadway or intersection.

“Planned action” means a project action as that term is defined in RCW 43.21C.031(2).

“Preapplication meeting” for the purposes of this title means a meeting between the applicant for a transportation concurrency certificate or its extension and the staff of the department, according to that department’s rules and administrative procedures held for the purpose of determining the requirements to file a development permit application.

“Project improvements” mean site improvements and facilities that are planned and designed to provide service for a particular development project and that are necessary for the use and convenience of the occupants or users of the project, and are not system improvements. No improvement or facility included in a capital facilities plan approved by the City council shall be considered a project improvement.

“Proportionate share” means that portion of the cost of public facility improvements that are reasonably related to the service demands and needs of new development.

“Public facilities” means the following capital facilities owned or operated by government entities: (a) public streets and roads; (b) publicly owned parks, open space, and recreation facilities; (c) school facilities; and (d) fire protection facilities in jurisdictions that are not part of a fire district.

“Rate Study for Impact Fees for Parks and Recreational Facilities” means the rate study completed by Henderson, Young and Company, dated November 2, 2006, for the City of Sammamish.

“Reservation” and “reserve” mean development units are set aside in the City’s concurrency records in a manner that assigns the units to the applicant and prevents the same units being assigned to any other applicant.

“Residential” or “residential development” means all types of construction intended for human habitation. This shall include, but is not limited to, single-family, duplex, triplex, townhouse and other multifamily development.

“Service area” means a geographic area defined by a county, city, town, or intergovernmental agreement in which a defined set of public facilities provide service to development within the area. Service areas shall be designated on the basis of sound planning or engineering principles.

“Significant past tax payment” means taxes exceeding five percent of the amount of the impact fee, and which were paid prior to the date the impact fee is assessed and were earmarked or proratable to the same system improvements for which the impact fee is assessed.

“Square footage” means the square footage of the gross floor area of the development.

“State” means the state of Washington.

“Street” means a public thoroughfare providing pedestrian and vehicular access through neighborhoods and communities and to abutting property.

“Street Impact Fee Rate Study” means the “Rate Study for Impact Fees for Streets,” City of Sammamish, dated September 27, 2006, or the most current update.

“System improvements” mean public facilities that are included in the capital facilities plan and are designed to provide service to service areas within the community at large, in contrast to project improvements.

“Trip” is a single or one-direction person or vehicle movement. A trip has an origin and a destination at its respective ends (known as trip ends). (Ord. O2019-484 § 2 (Att. A); Ord. O2018-465 § 2 (Att. A); Ord. O2014-366 § 1 (Att. A); Ord. O2006-206 § 1; Ord. O2004-138 § 1)

Chapter 14A.10
CONCURRENCY

Sections:

14A.10.010 Concurrency requirement.

(1) In accordance with RCW 36.70A.070(6)(b), the City must adopt and enforce ordinances which prohibit development approval if the development causes the level of service on a locally owned transportation facility to decline below the standards defined in SMC 14A.10.050, unless transportation improvements or strategies to accommodate the impacts of development are made concurrent with the development. These strategies may include increased public transportation service, ride sharing programs, demand management, and other transportation systems management strategies. For the purposes of the City's concurrency requirement, "concurrent with the development" shall mean that improvements or strategies are in place at the time of development, or that a financial commitment is in place to complete the improvements or strategies within six years.

(2) The City shall not issue a development permit until:

(a) A certificate of concurrency has been issued; or

(b) The applicant has executed a concurrency test deferral affidavit where specifically allowed; or

(c) The applicant has been determined to be exempt from the concurrency test as provided in SMC 14A.10.030(1). (Ord. O2019-484 § 2 (Att. A); Ord. O2018-465 § 2 (Att. A); Ord. O2006-208 § 1; Ord. O2004-139 § 1)

14A.10.020 Application for certificate of concurrency.

(1) Each applicant requesting a Comprehensive Plan site-specific land use map amendment or zone reclassification, except as provided in SMC 14A.10.030(1), shall elect one of the following options:

(a) Apply for a certificate of concurrency; or

(b) Execute a concurrency test deferral affidavit.

(2) Each applicant for a planned action, subdivision (including a preliminary plat, short plat, or binding site plan and revisions or alterations which increase the number of dwelling units or trip generation), mobile home park, unified zone development plan, conditional use permit, or site development permit shall apply for a certificate of concurrency, unless a certificate has been issued for the same parcel in conjunction with a Comprehensive Plan site-specific land use map amendment or zone reclassification, or except as provided in SMC 14A.10.030(1).

(3) Each applicant for a building permit or certificate of occupancy for a change in use shall apply for a certificate of concurrency, unless a certificate has been issued for the same parcel in conjunction with subsection (1) or (2) of this section, or except as provided in SMC 14A.10.030(1).

(4) Each applicant filing under subsections (1) and (2) of this section shall contact the department to schedule a preapplication conference as defined in SMC 14A.05.010 and 20.05.030, that shall be held prior to filing an application for a certificate of concurrency. The director may waive the requirement for a preapplication conference if it is determined to be unnecessary for review of an application.

(5) Applicants for a certificate of concurrency may designate the density and intensity of development to be tested for concurrency, provided such density and intensity shall not exceed the maximum allowed for the parcel. If the applicant designates the density and intensity of development, the concurrency test will be based on and applicable to only the applicant's designated density and intensity. If the applicant does not designate density and intensity, the concurrency test will be based on the maximum allowable density and intensity. (Ord. O2019-484 § 2 (Att. A); Ord. O2018-465 § 2 (Att. A); Ord. O2006-208 § 1; Ord. O2004-139 § 1)

14A.10.030 Exemptions from concurrency test.

(1) The following developments are exempt from this chapter, and applicants may submit applications, obtain development permits and commence development without a certificate of concurrency:

(a) Any development permit for the following development because it creates insignificant and/or temporary additional impacts on any public facility:

(i) Right-of-way use;

(ii) Street improvements, including new streets constructed by the City of Sammamish;

(iii) Street use permits;

(iv) Utility facilities which do not impact public facilities, such as pump stations, transmission or collection systems, and reservoirs;

(v) Expansion of an existing nonresidential structure that results in the addition of 100

square feet or less of gross floor area and does not add residential units or accessory dwelling units as defined in SMC 21A.15.345 to 21A.15.370;

(vi) Expansion of a residential structure provided the expansion does not result in the creation of an additional dwelling unit or accessory dwelling unit as defined in SMC 21A.15.345 to 21A.15.370;

(vii) Miscellaneous non-traffic generating improvements, including, but not limited to, fences, walls, swimming pools, sheds, and signs;

(viii) Demolition or moving of a structure; or

(ix) Tenant improvements that do not generate additional trips. (Ord. O2019-484 § 2 (Att. A); Ord. O2018-465 § 2 (Att. A); Ord. O2006-208 § 1; Ord. O2004-139 § 1)

14A.10.040 Concurrency test.

(1) The City shall perform a concurrency test for each application for a certificate of concurrency. The public works director, or his/her designee, shall use the following methods to conduct the concurrency test:

(a) For individual single-family residential building permit applications on existing lots, or other land use permits that generate less than 10 trips during an individual peak hour, the City will run a concurrency test after permit applications have been received that collectively result in 10 or more trips during an individual peak hour; provided, however, that a concurrency certificate can be issued without conducting the concurrency test when fewer than 10 accumulated trips have been generated since the last concurrency test. The City may run the concurrency test when less than 10 accumulated trips have been generated since the last test when there are existing public transportation facility circumstances that necessitate the concurrency test be performed in the order received for single-family residential building permit applications on existing lots.

(b) For all other development, review of each application as received in subsection (4) of this section.

(2) If the impact of the development does not cause the level of service to decline below the standards set forth in SMC 14A.10.050, the concurrency test is passed, and the applicant shall receive a certificate of concurrency.

(3) If the impact of the development will cause the level of service to decline below the standards set forth in SMC 14A.10.050, the concurrency test is not passed, and the applicant may select one of the following options:

(a) Accept a 90-day reservation of public facilities that are available, and within the same 90-day

period amend the application to meet the level of service standard set forth in SMC 14A.10.050; or

(b) Appeal the denial of the application for a certificate of concurrency, pursuant to the provisions of SMC 14A.10.080; or

(c) Arrange to provide for public facilities that are not otherwise available and that cause the level of service to rise to the standards set forth in SMC 14A.10.050.

(4) The City shall conduct the concurrency test, as needed, in the order that completed applications are received and proposed trip generation estimates are approved by the City.

(5) A concurrency test, and any resulting certificate of concurrency, shall be administrative actions of the City that are categorically exempt from the State Environmental Policy Act. (Ord. O2019-484 § 2 (Att. A); Ord. O2018-465 § 2 (Att. A); Ord. O2006-208 § 1; Ord. O2004-139 § 1)

14A.10.050 Level of service standards.

(1) In conducting the concurrency test in accord with this chapter, the intersection LOS standards adopted in the Transportation Element of the Comprehensive Plan are LOS D for intersections that include principal arterials and LOS C for intersections that include minor arterials or collector arterials. The LOS for intersections with principal arterials may be reduced to E for intersections that require more than three approach lanes in any direction. The intersection standards shall be applied to both the morning and afternoon peak hours. The LOS standard for the higher road classification shall be the standard applied.

(2) *Repealed by Ord. O2020-524.*

(3) In conducting the concurrency test in accord with this chapter, the City shall apply the level of service standards for the concurrency intersections as designated in subsection (1) of this section. If any intersection operates at or better than the level of service standards, the concurrency certificate shall be granted. If any concurrency intersection operates worse than the level of service standards, the concurrency certificate will be denied, or the applicant may select one of the options described in SMC 14A.10.040(3).

(4) In conducting the concurrency test, the City shall find that the impact of development occurs, and therefore the level of service standards for intersections, corridors and segments shall be achieved and maintained, no later than six years from the date of the development.

(5) In the event that the applicant is required to construct a public facility, the development cannot be occupied until the public facility is completed, or the applicant provides the City with a performance bond that is acceptable to the City.

(6) The City shall determine which additional public facilities are needed to be included in the Capital Facilities Plan Element of the Comprehensive Plan to achieve the adopted level of service standards. Such additional public facilities shall be underwritten by a financial commitment. (Ord. O2020-524 §§ 1, 2; Ord. O2019-484 § 2 (Att. A); Ord. O2018-465 § 2 (Att. A); Ord. O2006-208 § 1; Ord. O2004-139 § 1)

14A.10.060 Certificate of concurrency.

(1) A certificate of concurrency shall be issued by the public works director or his/her designee after the concurrency test is passed.

(2) Upon issuance of a certificate of concurrency, the City shall reserve capacity on behalf of the applicant, and indicate the reservation on the certificate of concurrency.

(3) A certificate of concurrency shall expire if the development permit for which the concurrency is reserved is not applied for within 180 days of issuance of the certificate of concurrency.

(4) A certificate of concurrency shall be valid for the development permit application period and subsequently for the same period of time as the development permit for which it was issued.

(5) A certificate of concurrency may be extended according to the same terms and conditions as the underlying development permit. If a development permit is granted an extension, the certificate of concurrency, if any, shall also be extended. Certificates of concurrency shall not be extended beyond the expiration of the underlying development permit, or any extensions thereof.

(6) A certificate of concurrency is valid only for the uses and intensities authorized for the development permit for which it is issued. Any change in use or intensity that increases the impact of development on public facilities is subject to an additional concurrency test of the incremental increase in impact on public facilities. Any change in use or intensity that decreases the impact of development on public facilities is not subject to an additional concurrency test and any capacity that is not required as a result of the decrease in impact shall be available for other applications.

(7) A certificate of concurrency is valid only for the development permit with which it is issued, and for subsequent development permits for the same parcel, as long as the applicant obtains the subsequent development permit prior to the expiration of the earlier development permit. A certificate of concurrency transfers automatically to subsequent development permits for the parcel for which the certificate was issued; provided, that the use or intensity has not changed, and the previous development permit has not expired. The transfer of validity of a certificate of concurrency from one development permit to a subsequent development permit shall not extend or otherwise change the expiration of the certificate of concurrency.

(8) A certificate of concurrency runs with the land and cannot be transferred to a different parcel. A

certificate of concurrency transfers automatically with ownership of the parcel for which the certificate was issued. Upon final subdivision approval of a parcel that has obtained a certificate of concurrency, the City shall replace the certificate of concurrency by issuing a separate certificate of concurrency to each subdivided parcel, assigning to each a pro rata portion of the public facility capacity or other measure that was reserved for the original certificate. The issuance of pro rata certificates of concurrency to subdivided parcels shall not extend or otherwise change the expiration of the certificates of concurrency. (Ord. O2018-465 § 2 (Att. A); Ord. O2006-208 § 1; Ord. O2004-139 § 1)

14A.10.070 Fees.

(1) The City shall charge each applicant an administrative fee and a concurrency test fee in an amount to be established by resolution by the City council. The concurrency test fee shall not be refundable after the concurrency test has been performed.

(2) The City shall charge a processing fee to any individual who requests an informal analysis of capacity if the requested analysis requires substantially the same research as a concurrency test. The processing fee shall be nonrefundable and nonassignable to a concurrency test. The amount of the processing fee shall be the same as the concurrency test fee authorized by subsection (1) of this section. (Ord. O2018-465 § 2 (Att. A); Ord. O2006-208 § 1; Ord. O2004-139 § 1)

14A.10.080 Appeals.

(1) An applicant may appeal a denial of a certificate of concurrency on the following grounds:

(a) A technical or mathematical error;

(b) The applicant provided alternative data that was rejected by the City; or

(c) Unwarranted delay in review of the application that allowed capacity to be given to another applicant.

(2) Appeal of denial of a certificate of concurrency shall be to the hearing examiner in accordance with procedures in SMC Title 20. (Ord. O2018-465 § 2 (Att. A); Ord. O2006-208 § 1; Ord. O2004-139 § 1)

Chapter 14A.15
STREET IMPACT FEES

Sections:

14A.15.010 Findings and authority.

The council hereby finds and determines that new growth and development, including but not limited to new residential, commercial, retail, and office development in the City, will create additional demand and need for public facilities in the City, and the council finds that new growth and development should pay a proportionate share of the cost of system improvements reasonably related to and that will reasonably benefit the new growth and development. The City has conducted extensive studies documenting the procedures for measuring the impact of new development on public facilities, has prepared the street impact fee analysis, and hereby incorporates this study into this title by reference. Therefore, pursuant to RCW 82.02.050 through 82.02.090, the council adopts this chapter to assess impact fees for streets ("impact fee"). The provisions of this chapter shall be liberally construed in order to carry out the purposes of the council in establishing the impact fee program. (Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.020 Assessment of impact fees.

(1) The City shall collect impact fees, based on the rates in SMC 14A.15.110, from any applicant seeking development approval from the City for any development within the City, where such development requires the issuance of a building permit. This shall include, but is not limited to, the development of residential, commercial, retail, and office uses, and includes the expansion of existing uses that creates a demand for additional public facilities, as well as a change in existing use that creates a demand for additional public facilities.

(2) An impact fee shall not be assessed for the following types of development activity because the activity either does not create additional demand as provided in RCW 82.02.050 and/or is a project improvement (as opposed to a system improvement) under RCW 82.02.090:

(a) Miscellaneous non-traffic generating improvements, including, but not limited to, fences, walls, swimming pools, sheds, and signs;

(b) Demolition or moving of a structure;

(c) Expansion of an existing nonresidential structure that results in the addition of 100 square feet or less of gross floor area;

(d) Expansion of a residential structure provided the expansion does not result in the creation of any additional dwelling units as defined in SMC 21A.15.345 through 21A.15.370;

(e) Replacement of a residential structure with a new residential structure at the same site or lot when such replacement occurs within 12 months of the demolition or destruction of the prior structure. For the terms of this requirement, “replacement” is satisfied by submitting a complete building permit application;

(f) Replacement of a nonresidential structure with a new nonresidential structure of the same size and use at the same site or lot when such replacement occurs within 12 months of the demolition or destruction of the prior structure. Replacement of a nonresidential structure with a new nonresidential structure of the same size shall be interpreted to include any structure for which the gross square footage of the building will not be increased by more than 100 square feet. For the terms of this requirement, “replacement” is satisfied by submitting a complete building permit application.

(3) For a change in use of an existing building or dwelling unit, including any alteration, expansion, replacement or new accessory building, the impact fee for the new use shall be reduced by an amount equal to the current impact fee rate for the prior use; provided, that the applicant has previously paid the required impact fee for the original use.

(4) For mixed use developments, impact fees shall be imposed for the proportionate share of each land use based on the applicable measurement in the impact fee rates set forth in SMC 14A.15.110.

(5) Applicants seeking a building permit for a change in use shall be required to pay an impact fee if the change in use increases the existing trip generation by the lesser of five percent or 10 peak hour trips.

(6) Except as provided in SMC 14A.25.030, impact fees shall be assessed and collected, at the option of the applicant, either:

(a) At the time of final plat (for platted development) or building permit application (for nonplatted development); or

(b) At the time of building permit issuance;

which option shall be declared at the time of final plat (for platted development) or building permit application (for nonplatted development) in writing on a form or forms provided by the City.

(7) Applicants that have been awarded credits prior to the submittal of the complete building permit application pursuant to SMC 14A.15.040 shall submit, along with the complete building permit application, a copy of the letter or certificate prepared by the director pursuant to SMC 14A.15.040 setting forth the dollar amount of the credit awarded. Impact fees, as determined after the application of appropriate credits, shall be collected from the feepayer at the time the building permit is issued by the City for each unit in the development.

(8) Where the impact fees imposed are determined by the square footage of the development, a deposit shall be due from the feepayer pursuant to subsection (6) of this section. Deposit and installment percentages shall be based on an estimate, submitted by the feepayer, of the size and type of structure proposed to be constructed on the property. In the absence of an estimate provided by the feepayer, the department shall calculate percentages based on the maximum allowable density/intensity permissible on the property. If the final square footage of the development is in excess of the initial estimate, any difference in the amount of the impact fee will be due prior to the issuance of a building permit, using the same impact fee rate previously assessed. The feepayer shall pay any such difference plus interest, calculated at the statutory rate. If the final square footage is less than the initial estimate, the department shall give a credit for the difference, plus interest at the statutory rate.

(9) The department shall not issue the required building permit unless and until the impact fees required by this chapter, less any permitted exemptions or credits provided pursuant to SMC 14A.15.030 or 14A.15.040, have been paid, unless a deferral has been granted pursuant to Chapter 14A.25 SMC.

(10) The service area for impact fees shall be a single City-wide service area.

(11) In accordance with RCW 82.02.050, the City shall collect and spend impact fees only for the public facilities defined in this title and RCW 82.02.090 which are addressed by the capital facilities plan element of the City's Comprehensive Plan. The City shall base continued authorization to collect and expend impact fees on revising its Comprehensive Plan in compliance with RCW 36.70A.070 and on the capital facilities plan identifying: (a) deficiencies in public facilities serving existing development and the means by which existing deficiencies will be eliminated within a reasonable period of time; (b) additional demands placed on existing public facilities by new development; and (c)

additional public facility improvements required to serve new development.

(12) In accordance with RCW 82.02.050, if the City's capital facilities plan is complete other than for the inclusion of those elements which are the responsibility of a special district, the City may impose impact fees to address those public facility needs for which the City is responsible.

(13) Applicants for single-family attached or single-family detached residential construction may request deferral of all impact fees due under this chapter in accordance with the provisions of Chapter 14A.25 SMC. (Ord. 2016-412 § 2 (Att. B); Ord. O2012-339 § 1 (Att. A); Ord. O2010-294 § 1 (Att. A); Ord. O2009-263 § 1 (Att. A); Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.030 Exemptions.

(1) Pursuant to RCW 82.02.060, the City may provide exemptions for low-income housing and other development activities with broad public purposes; provided, that the impact fees from such development activity shall be paid from public funds other than impact fee accounts if the waiver is greater than 80 percent of the impact fee. The director shall be authorized to determine whether a particular development falls within an exemption identified in this chapter. Determinations of the director shall be in writing and shall be subject to the appeals procedures set forth in SMC 14A.15.060.

(2) Except as provided in subsection (3) of this section, the following development activities are exempt from the requirements of this chapter. An impact fee shall not be assessed for:

(a) Any development activity undertaken by the City of Sammamish;

(b) Public schools;

(c) Accessory dwelling units approved by the City.

(3) Except as provided above, the provision of affordable housing as defined in SMC 14A.05.010 may be exempted from some or all of the required impact fees as shown in Table 1:

Table 1: Impact Fee Reductions for Affordable Housing Units

Affordable Housing	Impact Fee Reduction*	Maximum Number of Affordable Housing Units per Development
Low-Income	Up to 100%	4 units
	50% to 80%	5 units or more (including the first 4) subject to recommendation by the community development director in consultation with the public works director

Moderate-Income	Up to 80%	4 units
	0% to 50%	5 units or more (including the first 4) subject to recommendation by the community development director in consultation with the public works director
*The % fee reduction is expressed as a maximum amount per unit.		

(a) As a condition of receiving an exemption or percentage fee reduction under this subsection, prior to any development approval, the owner shall execute and record in the King County real property title records a City-prepared lien, covenant, or other contractual provision against the property that provides that the proposed housing unit or development will continue to be used for low- or moderate-income housing and remain affordable to those families/households for a period of not less than 30 years. The lien, covenant, or other contractual provision shall run with the land and apply to subsequent owners and assigns. In the event that the housing unit(s) no longer meets the definition of affordable housing set forth in Table 1 during the term of the life of the lien, covenant or contractual provision, then the owner(s) shall pay to the City the amount of impact fees from which the housing unit(s) was exempted into the City's account for impact fees plus 12 percent interest per year.

(b) In determining the impact fee reductions for development(s) containing five or more affordable housing units, the community development director in consultation with the public works director should consider the following:

(i) The proposed housing units meet the provisions set forth by the City's housing strategy plan adopted by the City council.

(ii) The proposed housing units will assist the City in meeting Sammamish's affordable housing targets.

(iii) The location of the units meets the City's comprehensive plan policies for the proposed housing type and density.

(iv) Approval of the proposed housing units and the associated impact fee reduction does not exempt the proposed housing units from meeting the City's concurrency requirements and public works standards.

(c) The impact fee amounts waived in excess of 80 percent shall be paid from public funds from sources other than impact fees or interest on impact fees, and budgeted for this purpose.

(d) Determinations of the community development director in consultation with the public works director regarding the reduction of impact fees shall be in writing and shall be subject to the

appeals procedures set forth in SMC 14A.15.060. (Ord. O2014-366 § 1 (Att. A); Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.040 Credits.

(1) A feepayer can request that a credit or credits for impact fees be awarded to him/her for the total value of dedicated land, improvements, or construction provided by the feepayer. Credits will be given only if the land, improvements, and/or the facility constructed are:

(a) For one or more of the system improvements identified in the capital facilities plan, which are included in the street impact fee analysis as the basis of the impact fee, and that are required by the City as a condition of approving the development activity; and

(b) At suitable sites and constructed at acceptable quality as determined by the City.

(2) The director shall determine if requests for credits meet the criteria in subsection (1) of this section.

(3) The value of a credit for structures, facilities or other improvements shall be established by original receipts provided by the applicant for one or more of the same system improvements for which the impact fee is being charged.

(4) The value of a credit for land, including right-of-way and easements, shall be established on a case-by-case basis by an appraiser selected by or acceptable to the director. The appraiser must be licensed in good standing by the state of Washington for the category of the property appraised. The appraiser must possess an MAI or other equivalent certification and shall not have a fiduciary or personal interest in the property being appraised. A description of the appraiser's certification shall be included with the appraisal, and the appraiser shall certify that he/she does not have a fiduciary or personal interest in the property being appraised. The appraisal shall be in accord with the most recent version of the Uniform Standards of Professional Appraisal Practice and shall be subject to review and acceptance by the director.

(5) The feepayer shall pay for the cost of the appraisal or request that the cost of the appraisal be deducted from the credit which the City may be providing to the feepayer, in the event that a credit is awarded.

(6) If a credit is due, after receiving the appraisal the director shall provide the applicant with a letter or certificate setting forth the dollar amount of the credit, the reason for the credit, the legal description of the site donated where applicable, and the legal description or other adequate description of the project or development to which the credit may be applied. The applicant must sign and date a duplicate copy of such letter or certificate indicating his/her agreement to the terms of the letter or certificate, and return such signed document to the director before the impact fee credit will

be awarded. The failure of the applicant to sign, date, and return such document within 60 calendar days shall nullify the credit.

(7) No credit shall be given for project improvements as defined in SMC 14A.05.010.

(8) A feepayer can request that a credit or credits for impact fees be awarded to him/her for significant past tax payments as defined in SMC 14A.05.010. For each request for a credit or credits for significant past tax payments, the feepayer shall submit receipts and a calculation of significant past tax payments earmarked for or proratable to the particular system improvement. The director shall determine the amount of credits, if any, for significant past tax payments.

(9) Any claim for credit must be made prior to or at the time of submission of an application for a building permit. The failure to timely file such a claim shall constitute a final bar to later request any such credit.

(10) A feepayer shall receive a credit for all impact fee deposits paid pursuant to SMC 14A.15.020.

(11) Determinations made by the director pursuant to this section shall be subject to the appeals procedures set forth in SMC 14A.15.060. (Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.050 Tax adjustments.

Pursuant to and consistent with the requirements of RCW 82.02.060, the street impact fee analysis provides adjustments for past and future taxes and other sources of revenue to be paid by the new development which are earmarked or proratable to the same new public facilities which will serve the new development. The impact fee rates in SMC 14A.15.110 have been reasonably adjusted for taxes and other revenue sources which are anticipated to be available to fund these system improvements. (Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.060 Appeals.

(1) Any feepayer may pay the impact fees imposed by this title under protest in order to obtain a building permit or occupancy permit. No appeal shall be permitted until the impact fees at issue have been paid.

(2) Appeals regarding the impact fees imposed on any development may only be filed by the feepayer of the property where such development will occur.

(3) The feepayer must first file a request for review regarding impact fees with the director, as provided herein:

(a) The request shall be in writing on the form provided by the City;

(b) The request for review by the director shall be filed within 21 calendar days after the feepayer's payment of the impact fees at issue. The failure to timely file such a request shall constitute a final bar to later seek such review;

(c) No administrative fee will be imposed for the request for review by the director; and

(d) The director shall issue his/her determination in writing.

(4) The following decisions may be appealed to the hearing examiner: determinations of the director with respect to the applicability of the impact fees to a given development; the director's determination regarding the availability or value of a credit; the director's decision concerning the independent fee calculation which is authorized in SMC 14A.15.120; fees imposed by the director pursuant to SMC 14A.15.110; or any other determination which the director is authorized to make pursuant to this title.

(5) Appeals to the hearing examiner shall be taken within 21 calendar days of the director's issuance of a written determination by filing with the department a notice of appeal specifying the grounds thereof, and depositing the necessary administrative fee, which is set forth in the existing fee schedules for appeals of such decisions. The director shall transmit to the office of the hearing examiner all papers constituting the record for the determination, including, where appropriate, the independent fee calculation.

(6) The hearing examiner shall fix a time for the hearing of the appeal, give notice to the parties in interest, and decide the same as provided in the Sammamish Municipal Code. At the hearing, any party may appear in person or by agent or attorney.

(7) The hearing examiner is authorized to make findings of fact regarding the applicability of the impact fees to a given development, the availability or amount of the credit, or the accuracy or applicability of an independent fee calculation. The decision of the hearing examiner shall be final, except as provided in this section.

(8) The hearing examiner may, so long as such action is in conformance with the provisions of this title, reverse or affirm, in whole or in part, or may modify the determinations of the director with respect to the amount of the impact fees imposed or the credit awarded. (Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.070 Establishment of impact fee accounts.

(1) Impact fee receipts shall be earmarked specifically and deposited in a special interest-bearing impact fee account maintained by the City.

(2) There is hereby established the street impact fee account for the fees collected pursuant to this title. Funds withdrawn from this account must be used in accordance with the provisions of SMC 14A.15.090 and applicable state law. Interest earned on the fees shall be retained in the account and

expended for the purposes for which the impact fees were collected.

(3) On an annual basis, the finance department shall provide a report to the City council on the street impact fee account showing the source and amount of all moneys collected, earned, or received, and the system improvements that were financed in whole or in part by impact fees.

(4) Impact fees for system improvements shall be expended only in conformance with the capital facilities plan element of the City's Comprehensive Plan.

(5) Impact fees shall be expended or encumbered within 10 years of receipt, unless the council identifies in written findings extraordinary and compelling reason or reasons for the City to hold the fees beyond the 10-year period. Under such circumstances, the council shall establish the period of time within which the impact fees shall be expended or encumbered. (Ord. O2013-341 § 1 (Att. A); Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.080 Refunds.

(1) If the City fails to expend or encumber the impact fees within 10 years of when the fees were paid, or where extraordinary or compelling reasons exist and the council has established other time periods pursuant to SMC 14A.15.070, the current owner of the property on which impact fees have been paid may receive a refund of such fees. In determining whether impact fees have been expended or encumbered, impact fees shall be considered expended or encumbered on a first-in, first-out basis.

(2) The City shall notify potential claimants by first class mail deposited with the United States Postal Service at the last known address of such claimants. A potential claimant or claimant must be the owner of the property for which the impact fee was paid.

(3) Owners seeking a refund of impact fees must submit a written request for a refund of the fees to the director within one year of the date the right to claim the refund arises or the date that notice is given, whichever is later.

(4) Any impact fees for which no application for a refund has been made within this one-year period shall be retained by the City and expended on the appropriate public capital facilities.

(5) Refunds of impact fees under this section shall include any interest paid at the statutory rate.

(6) When the City seeks to terminate any or all components of the impact fee program, all unexpended or unencumbered funds from any terminated component or components, including interest earned, shall be refunded pursuant to this section. Upon the finding that any or all fee requirements are to be terminated, the City shall place notice of such termination and the availability of refunds in a newspaper of general circulation at least two times and shall notify all potential claimants by first class mail at the last known address of the claimants. All funds available for refund

shall be retained for a period of one year. At the end of one year, any remaining funds shall be retained by the City, but must be expended for the appropriate public facilities. This notice requirement shall not apply if there are no unexpended or unencumbered balances within the account or accounts being terminated.

(7) The City shall refund to the current owner of property for which impact fees have been paid all impact fees paid, including interest earned on the impact fees pursuant to RCW 82.02.080(3), if the development for which the impact fees were imposed did not occur; provided, that if the City has expended or encumbered the impact fees in good faith prior to the application for a refund, the director shall determine whether an impact has resulted and whether all or a portion of the impact fees paid shall be refunded. (Ord. O2013-341 § 1 (Att. A); Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.090 Use of funds.

(1) Pursuant to this title, impact fees:

(a) Shall be used for system improvements that will reasonably benefit the new growth and development; and

(b) Shall not be imposed to make up for any system improvement deficiencies serving existing developments; and

(c) Shall not be used for maintenance or operation.

(2) Impact fees may be spent for public improvements, including, but not limited to, planning, land acquisition, right-of-way acquisition, site improvements, necessary off-site improvements, construction, engineering, architectural, permitting, financing, administrative expenses, mitigation costs, and any other expenses which can be capitalized pertaining to transportation improvements.

(3) Impact fees may also be used to recoup public improvement costs previously incurred by the City to the extent that new growth and development will be served by the previously constructed improvements or incurred costs.

(4) In the event that bonds or similar debt instruments are or have been issued for the advanced provision of public improvements for which impact fees may be expended, impact fees may be used to pay debt service on such bonds or similar debt instruments to the extent that the facilities or improvements provided are consistent with the requirements of this section and are used to serve the new development. (Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.100 Review.

(1) The fee rates set forth in SMC 14A.15.110 may be reviewed and adjusted by the council as it

deems necessary and appropriate to meet City needs, including but not limited to addressing the impact of inflation on labor, materials, and real property costs. The fee rates may be adjusted 12 months after the effective date of the ordinance codified in this chapter, or 12 months after the most recent review by the council. The council may determine the amount of the adjustment and revise the fee rates set forth in SMC 14A.15.110. If the council does not determine the amount of the adjustment, the adjustment shall be administratively adjusted by the same amount that the five-year average Washington State Department of Transportation Construction Cost Index changed for the most recent 12-month period prior to the date of the adjustment.

(2) In the last quarter of each calendar year, the community development director, together with the public works director, shall prepare a report to the planning commission for the year to date, including the following:

(a) The number of requests for impact fee exemptions pursuant to SMC 14A.15.030;

(b) The total number of residential units and dollar amounts of the exemptions approved by the community development director in consultation with the public works director;

(c) A copy of the hearing examiner decision, if any of the decisions of the community development director, in consultation with the public works director, were appealed to the hearing examiner.

Based on this annual review, the planning commission shall recommend to the City council any revision to SMC 14A.15.030 deemed appropriate. (Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.110 Street impact fee rates.

In accordance with RCW 82.02.060, the street impact fees are based upon a schedule of impact fees which is adopted for each type of development activity that is subject to impact fees and which specifies the amount of the impact fee to be imposed for each type of system improvement. The schedule is based upon a formula and/or method of calculating the impact fees. In determining proportionate share, the formula and/or method of calculating the fees incorporates, among other things, the following: (a) the cost of public facilities necessitated by new development; (b) an adjustment to the cost of the public facilities for past or future payments made or reasonably anticipated to be made by new development to pay for particular system improvements in the form of user fees, debt service payments, taxes, or other payments earmarked for or proratable to the particular system improvement; (c) the availability of other means of funding public facility improvements; (d) the cost of existing public facilities improvements; and (e) the methods by which public facilities improvements were financed.

The street impact fee rates in this section are generated from the formula for calculating impact fees

set forth in the street impact fee analysis, which is incorporated herein by reference. Except as otherwise provided for independent fee calculations in SMC 14A.15.120, exemptions in SMC 14A.15.030, and credits in SMC 14A.15.040, all new developments in the City will be charged the impact fee applicable to the type of development:

Street Impact Fee Rates per Unit of Development

ITE Code[1]	ITE Land Use Category[1]	ITE Trip Rate[2]	Percent New Trips[3]	Trip Length Factor[4]	Net New Trips per Development Unit	Impact Fee per Unit @ $14,063.63	per Trip
090	Park and Ride with Bus Service	0.75	75%	1.00	0.563	7,910.79	per Space
110	Light Industrial	0.98	100%	1.22	1.196	16.81	per Sq. Ft.
130	Industrial Park	0.86	100%	1.22	1.049	14.76	per Sq. Ft.
140	Manufacturing	0.74	100%	1.22	0.903	12.70	per Sq. Ft.
151	Mini Warehouse	0.26	75%	0.29	0.057	0.80	per Sq. Ft.
210	Single-Family House	1.01	100%	1.00	1.010	14,204.27	per DU
220	Apartment	0.62	100%	1.00	0.620	8,719.45	per DU
231	Low-Rise Condo/Townhouse	0.78	100%	1.00	0.780	10,969.63	per DU
240	Mobile Home	0.56	100%	1.00	0.560	7,875.63	per DU
251	Sr. Housing Detached	0.26	75%	1.00	0.195	2,742.41	per DU
252	Sr. Housing Attached	0.11	75%	1.00	0.083	1,160.25	per DU
253	Congregate Care Facility	0.18	75%	0.29	0.039	550.59	per DU
254	Assisted Living (limited data)	0.22	75%	0.29	0.048	672.94	per Bed

310	Hotel	0.59	75%	0.29	0.128	1.80	per Sq. Ft.
320	Motel	0.94	75%	0.29	0.204	2.88	per Sq. Ft.
420	Marina (limited data)	0.19	75%	0.29	0.041	581.18	per Slip
430	Golf Course	0.30	75%	0.29	0.065	917.65	per Acre
441	Live Theater (limited data)	1.00	75%	0.29	0.218	3.06	per Sq. Ft.
445	Multiplex Movie Theater	5.22	75%	0.29	1.135	15.97	per Sq. Ft.
491	Racquet Club	0.64	50%	0.29	0.093	1.31	per Sq. Ft.
492	Health Fitness Club	4.05	50%	0.29	0.587	8.26	per Sq. Ft.
495	Recreational Community Center	1.64	50%	0.29	0.238	3.34	per Sq. Ft.
520	Public Elementary School	1.19	75%	0.29	0.259	3.64	per Sq. Ft.
522	Public Middle School	1.19	75%	0.29	0.259	3.64	per Sq. Ft.
530	Public High School	0.97	75%	0.29	0.211	2.97	per Sq. Ft.
534	Private School K-8 (limited data)	3.40	75%	0.29	0.740	10.40	per Sq. Ft.
536	Private School K-12 (limited data)	2.75	75%	0.29	0.598	8.41	per Sq. Ft.
560	Church over 20,000 Sq. Ft.	0.66	75%	0.29	0.144	2.02	per Sq. Ft.
560	Church under 20,000 Sq. Ft.	0.66	50%	0.29	0.096	1.35	per Sq. Ft.
565	Day Care Center	13.18	25%	0.29	0.956	13.44	per Sq. Ft.
590	Library	7.09	40%	0.29	0.822	11.57	per Sq. Ft.

610	Hospital	1.18	75%	0.29	0.257	3.61	per Sq. Ft.
620	Nursing Home	0.22	75%	0.29	0.048	672.94	per Bed
630	Clinic (limited data)	5.18	75%	0.29	1.127	15.84	per Sq. Ft.
710	General Office	1.49	100%	1.22	1.818	25.56	per Sq. Ft.
715	Single Tenant Office	1.73	100%	1.22	2.111	29.68	per Sq. Ft.
720	Medical/Dental Office	3.72	75%	0.29	0.809	11.38	per Sq. Ft.
732	U.S. Post Office	25.00	25%	0.29	1.813	25.49	per Sq. Ft.
750	Office Park	1.50	100%	1.22	1.830	25.74	per Sq. Ft.
813	Freestanding Discount Super Store	3.87	43%	1.00	1.664	23.40	per Sq. Ft.
814	Specialty Retail Center	2.71	75%	0.29	0.589	8.29	per Sq. Ft.
815	Freestanding Discount Store	5.06	54%	0.29	0.792	11.14	per Sq. Ft.
816	Hardware/Paint Store	4.84	43%	0.29	0.604	8.49	per Sq. Ft.
820	Shopping Center < 1 million Sq. Ft.	3.75	43%	1.00	1.613	22.68	per Sq. Ft.
848	Tire Store	4.15	40%	0.29	0.481	6.77	per Sq. Ft.
849	Tire Super Store	2.11	40%	0.29	0.245	3.44	per Sq. Ft.
850	Supermarket	10.45	34%	0.29	1.030	14.49	per Sq. Ft.
851	Convenience Market	52.41	24%	0.29	3.648	51.30	per Sq. Ft.
853	Convenience Market	19.22	14%	0.29	0.780	10,974.30	per

	w/Gas Pumps						VSP
854	Discount Supermarket	8.90	54%	0.29	1.394	19.60	per Sq. Ft.
861	Discount Club	4.24	43%	1.00	1.823	25.64	per Sq. Ft.
862	Home Improvement Super Store	2.45	32%	1.00	0.784	11.03	per Sq. Ft.
863	Electronics Super Store	4.50	27%	1.00	1.215	17.09	per Sq. Ft.
867	Office Supply Super Store	3.40	32%	1.00	1.088	15.30	per Sq. Ft.
880	Pharmacy/Drug Store	8.42	38%	0.29	0.928	13.05	per Sq. Ft.
881	Pharmacy/Drug Store w/Drive-up	8.62	38%	0.29	0.950	13.36	per Sq. Ft.
896	Video Rental Store	13.60	20%	0.29	0.789	11.09	per Sq. Ft.
911	Walk-in Bank (limited data)	33.15	27%	0.29	2.596	36.50	per Sq. Ft.
912	Drive-in Bank	45.74	27%	0.29	3.581	50.37	per Sq. Ft.
931	Quality Restaurant	7.49	38%	0.29	0.825	11.61	per Sq. Ft.
932	High Turnover Restaurant	10.92	37%	0.29	1.172	16.48	per Sq. Ft.
933	Fast Food	26.15	30%	0.29	2.275	32.00	per Sq. Ft.
934	Fast Food w/Drive-up	34.64	30%	0.29	3.014	42.38	per Sq. Ft.
936	Drinking Place	11.34	38%	0.29	1.250	17.57	per Sq. Ft.
941	Quick Lube	5.19	14%	0.29	0.211	2,963.40	per VSP
942	Auto Care	3.38	30%	0.29	0.294	4.14	per Sq. Ft.
944	Gas Station	13.86	14%	0.29	0.563	7,913.83	per

							VSP
945	Gas Station w/Conven Mkt	13.38	14%	0.29	0.543	7,639.76	per VSP
946	Gas Station w/Conven Mkt & Car Wash	13.33	14%	0.29	0.541	7,611.21	per VSP
947	Self-Serve Car Wash	5.54	14%	0.29	0.225	3,163.25	per VSP

[1] Institute of Transportation Engineers, Trip Generation (7th Edition).

[2] Trip generation rate per development unit, for p.m. peak hour of the adjacent street traffic (4:00 – 6:00 p.m.).

Note: Sq. Ft. rate expressed per 1,000 SF.

[3] Omits linked/diverted and pass-by trips, per Trip Generation Handbook: an ITE Recommended Practice, March, 2001.

[4] Average trip length relative to single-family trip.

[5] DU = dwelling unit, Sq. Ft. = square feet, VSP = vehicle servicing position.

If an applicant proposes a land use that is not identified above, the impact fee shall be an amount equal to $14,063.63 for each p.m. peak hour trip generated, adjusted for trip length and percentage of new trips using methods and data comparable to those in the street study. (Ord. O2014-366 § 1 (Att. A); Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.120 Independent fee calculations.

(1) If, in the judgment of the director, none of the fee categories or fee amounts set forth in SMC 14A.15.110 accurately describe or capture the impacts of a new development on streets and roads, the department may prepare independent fee calculations and the director may impose alternative fees on a specific development based on those calculations. The alternative fees and the calculations shall be set forth in writing and shall be mailed to the feepayer.

(2) If a feepayer opts not to have the impact fees determined according to SMC 14A.15.110, then the feepayer shall prepare and submit to the director an independent fee calculation for the development for which a building permit is sought. The documentation submitted shall show the basis upon which the independent fee calculation was made.

(3) Any feepayer submitting an independent fee calculation shall be required to pay the City a fee to cover the cost of reviewing the independent fee calculation. The amount of the fee required by the City for conducting the review of the independent fee calculation shall be in accordance with the adopted fee resolution by the City council and shall be paid by the feepayer prior to initiation of review.

(4) While there is a presumption that the calculations set forth in the street impact fee analysis are valid, the director shall consider the documentation submitted by the feepayer, but is not required to accept such documentation or analysis which the director reasonably deems to be inaccurate or not reliable, and may modify or deny the request, or, in the alternative, require the feepayer to submit additional or different documentation for consideration. The director is authorized to adjust the impact fees on a case-by-case basis based on the independent fee calculation, the specific characteristics of the development, and/or principles of fairness. The director's decision shall be set forth in writing and shall be mailed to the feepayer.

(5) Determinations made by the director pursuant to this section may be appealed to the office of the hearing examiner as set forth in SMC 14A.15.060. (Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.130 Administrative fees.

(1) All development permits subject to the impact fees pursuant to SMC 14A.15.110 shall pay an administrative processing fee as adopted by the City council.

(2) All development permits that require an independently determined impact fee pursuant to SMC 14A.15.120 shall pay an administrative processing fee as adopted by the City council. (Ord. O2006-208 § 2; Ord. O2004-140 § 1; Ord. O2004-136 § 1)

14A.15.140 Mitigation of adverse environmental impacts.

Nothing in this title shall preclude the City from requiring the feepayer or the proponent of a development to mitigate adverse environmental impacts of a specific development pursuant to the State Environmental Policy Act, Chapter 43.21C RCW, based on the environmental documents accompanying the underlying development approval process, and/or Chapter 58.17 RCW, governing plats and subdivisions; provided, that the exercise of this authority is consistent with the provisions of Chapters 43.21C and 82.02 RCW. (Ord. O2006-208 § 2)

Chapter 14A.20
IMPACT FEES FOR PARKS AND RECREATIONAL FACILITIES

Sections:

14A.20.010 Findings and authority.

The council hereby finds and determines that new growth and development, including but not limited to new residential development in the City, will create additional demand and need for public facilities in the City, and the council finds that new growth and development should pay a proportionate share of the cost of system improvements reasonably related to and that will reasonably benefit the new growth and development. The City has conducted extensive studies documenting the procedures for measuring the impact of new development on public facilities, has prepared the Rate Study for Impact Fees for Parks and Recreational Facilities, Henderson, Young and Company, dated November 2, 2006, and the Park Impact Fee Update Summary Memorandum by FCS Group dated October 14, 2015 (collectively referred to hereafter as the "rate study"), and hereby incorporates the rate study into this title by reference. Therefore, pursuant to RCW 82.02.050 through 82.02.090, the council adopts this chapter to assess impact fees for parks and recreational facilities ("impact fee"). The provisions of this chapter shall be liberally construed in order to carry out the purposes of the council in establishing the impact fee program. (Ord. O2015-400 § 1 (Att. A); Ord. O2006-207 § 1)

14A.20.020 Assessment of impact fees.

(1) The City shall collect impact fees, based on the rates in SMC 14A.20.110, from any applicant seeking development approval from the City for any residential development within the City, where such development requires the issuance of a building permit. This shall include, but is not limited to, the expansion or change of use of existing uses that creates a demand for additional public facilities.

(2) An impact fee shall not be assessed for the following types of development activity because the activity either does not create additional demand as provided in RCW 82.02.050 and/or is a project improvement (as opposed to a system improvement) under RCW 82.02.090:

(a) Miscellaneous improvements to residential dwelling units that will not create additional park use demand, including, but not limited to, fences, signs, walls, swimming pools, sheds, and residential accessory uses as defined in SMC 21A.15.020;

(b) Demolition or moving of a residential structure;

(c) Expansion or alteration of a residential structure provided the expansion or alteration does not result in the creation of any additional dwelling units as defined in SMC 21A.15.345 through 21A.15.370;

(d) Replacement of a residential structure with a new residential structure at the same site or lot when such replacement occurs within 12 months of the demolition or destruction of the prior structure.

(3) For a change in use of an existing structure or dwelling unit, including any alteration, expansion, replacement or new accessory building, the impact fee for the new use shall be reduced by an amount equal to the current impact fee rate for the prior use; provided, that the applicant has previously paid the required impact fee for the original use.

(4) For mixed use developments, impact fees shall be imposed for the proportionate share of each residential land use based on the applicable measurement in the impact fee rates set forth in SMC 14A.20.110.

(5) Applicants seeking development approval for a change in use shall be required to pay an impact fee if the change in use increases the number of dwelling units.

(6) Except as provided in SMC 14A.25.030, impact fees shall be assessed and collected, at the option of the applicant, either:

(a) At the time of final plat (for platted development) or building permit application (for nonplatted development); or

(b) At the time of building permit issuance;

which option shall be declared at the time of final plat (for platted development) or building permit application (for nonplatted development) in writing on a form or forms provided by the City.

(7) Applicants that have been awarded credits prior to the submittal of the complete building permit application pursuant to SMC 14A.20.040 shall submit, along with the complete building permit

application, a copy of the letter or certificate prepared by the director pursuant to SMC 14A.20.040 setting forth the dollar amount of the credit awarded. Impact fees, as determined after the application of appropriate credits, shall be collected from the feepayer at the time the building permit is issued by the City for each residential dwelling unit in the development.

(8) The department shall not issue the required building permit unless and until the impact fees required by this chapter, less any permitted exemptions or credits provided pursuant to SMC 14A.20.030 or 14A.20.040, have been paid, unless a deferral has been granted pursuant to Chapter 14A.25 SMC.

(9) The service area for impact fees shall be a single City-wide service area.

(10) In accordance with RCW 82.02.050, the City shall collect and spend impact fees only for the public facilities defined in this title and RCW 82.02.090 which are addressed by the capital facilities plan element of the City's Comprehensive Plan. The City shall base continued authorization to collect and expend impact fees on revising its Comprehensive Plan in compliance with RCW 36.70A.070, and on the capital facilities plan identifying: (a) deficiencies in public facilities serving existing development and the means by which existing deficiencies will be eliminated within a reasonable period of time; (b) additional demands placed on existing public facilities by new development; and (c) additional public facility improvements required to serve new development.

(11) In accordance with RCW 82.02.050, if the City's capital facilities plan is complete other than for the inclusion of those elements which are the responsibility of a special district, the City may impose impact fees to address those public facility needs for which the City is responsible.

(12) Applicants for single-family attached or single-family detached residential construction may request deferral of all impact fees due under this chapter in accordance with the provisions of Chapter 14A.25 SMC.

(13) If, prior to February 12, 2016, an applicant submits a copy of a fully executed purchase and sale agreement with an affidavit from the applicant attesting that the agreement was fully executed prior to November 11, 2015, the residential dwelling unit that is the subject of that agreement will be subject to the parks and recreational facilities impact fee in effect on the date of execution of that agreement, as provided in SMC 14A.20.110. (Ord. O2016-412 § 3 (Att. C); Ord. O2015-400 § 1 (Att. A); Ord. O2012-339 § 1 (Att. A); Ord. O2010-294 § 1 (Att. A); Ord. O2009-263 § 1 (Att. A); Ord. O2006-207 § 1)

14A.20.030 Exemptions.

(1) Pursuant to RCW 82.02.060, the City may provide exemptions for low-income housing and other development activities with broad public purposes; provided, that the impact fees from such development activity shall be paid from public funds other than impact fee accounts if the waiver is greater than 80 percent of the impact fee. The director shall be authorized to determine whether a

particular development falls within an exemption identified below. Determinations of the director shall be in writing and shall be subject to the appeals procedures set forth in SMC 14A.20.060. The following development activities are exempt from the requirements of this chapter. A parks impact fee shall not be assessed for:

(a) Any development activity undertaken by the City of Sammamish;

(b) Accessory dwelling units approved by the City.

(2) Except as provided above, the provision of affordable housing as defined in SMC 14A.05.010 may be exempted from some or all of the required impact fees as shown in Table 1:

Table 1: Impact Fee Reductions for Affordable Housing Units

Affordable Housing	Impact Fee Reduction*	Maximum Number of Affordable Housing Units per Development
Low-Income	Up to 100%	4 units
	50% to 80%	5 units or more (including the first 4) subject to decision by the director of the department of community development in consultation with the director of the department of parks and recreation
Moderate-Income	Up to 80%	4 units
	0% to 50%	5 units or more (including the first 4) subject to approval by the director of the department of community development in consultation with the director of the department of parks and recreation
*The % fee reduction is expressed as a maximum amount per unit.		

(a) As a condition of receiving an exemption or percentage fee reduction under this section, prior to any development approval, the owner shall execute and record in the King County real property title records a City-prepared lien, covenant, or other contractual provision against the property that provides that the proposed housing unit or development will continue to be used for low- or moderate-income housing and remain affordable to those families/households for a period of not less than 30 years. The lien, covenant, or other contractual provision shall run with the land and apply to subsequent owners and assigns. In the event that the housing unit(s) no longer meets the definition of affordable housing set forth in Table 1 during the term of the life of the lien, covenant or contractual provision, then the owner(s) shall pay to the City the amount of impact fees from which the housing unit(s) was exempted into the City's account for park impact

fees plus 12 percent interest per year.

(b) In determining the impact fee reductions for development(s) containing five or more affordable housing units, the community development director in consultation with the parks and recreation director should consider the following:

(i) The proposed housing units meet the provisions set forth by the City's housing strategy plan adopted by the City council.

(ii) The proposed housing units will assist the City in meeting Sammamish's affordable housing targets.

(iii) The location of the units meets the City's Comprehensive Plan policies for the proposed housing type and density.

(iv) Approval of the proposed housing units and the associated impact fee reduction would not result in a significant adverse impact on the level of service provided by the parks system.

(c) The impact fee amounts waived in excess of 80 percent shall be paid from public funds from sources other than impact fees or interest on impact fees.

(d) Determinations of the community development director in consultation with the parks and recreation director regarding the exemption or reduction of impact fees shall be in writing and shall be subject to the appeals procedures set forth in SMC 14A.20.060. (Ord. O2014-367 § 1 (Att. A); Ord. O2006-207 § 1)

14A.20.040 Credits.

(1) A feepayer can request that a credit or credits for impact fees be awarded to him/her for the total value of dedicated land, improvements, or construction provided by the feepayer. Credits will be given only if the land, improvements, and/or the facility constructed are:

(a) For one or more of the system improvements identified in the capital facilities plan for parks and recreational facilities which are included in the rate study as the basis of the impact fee, and that are required by the City as a condition of approving the development activity; and

(b) At suitable sites and constructed at acceptable quality as determined by the City.

(2) The director shall determine if requests for credits meet the criteria in subsection (1) of this section.

(3) The value of a credit for structures, facilities or other improvements shall be established by original receipts provided by the applicant for one or more of the same system improvements for

which the impact fee is being charged.

(4) The value of a credit for land, including right-of-way and easements, shall be established on a case-by-case basis by an appraiser selected by, or acceptable to, the director. The appraiser must be licensed in good standing by the state of Washington for the category of the property appraised.

The appraiser must possess an MAI or other equivalent certification and shall not have a fiduciary or personal interest in the property being appraised. A description of the appraiser's certification shall be included with the appraisal, and the appraiser shall certify that he/she does not have a fiduciary or personal interest in the property being appraised. The appraisal shall be in accord with the most recent version of the Uniform Standards of Professional Appraisal Practice and shall be subject to review and acceptance by the director.

(5) The feepayer shall pay for the cost of the appraisal or request that the cost of the appraisal be deducted from the credit which the City may be providing to the feepayer, in the event that a credit is awarded.

(6) If a credit is due, after receiving the appraisal the director shall provide the applicant with a letter or certificate setting forth the dollar amount of the credit, the reason for the credit, the legal description of the site donated where applicable, and the legal description or other adequate description of the project or development to which the credit may be applied. The applicant must sign and date a duplicate copy of such letter or certificate indicating his/her agreement to the terms of the letter or certificate, and return such signed document to the director before the impact fee credit will be awarded. The failure of the applicant to sign, date, and return such document within 60 calendar days shall nullify the credit.

(7) No credit shall be given for project improvements as defined in SMC 14A.05.010.

(8) A feepayer can request that a credit or credits for impact fees be awarded to him/her for significant past tax payments as defined in SMC 14A.05.010. For each request for a credit or credits for significant past tax payments, the feepayer shall submit receipts and a calculation of past tax payments earmarked for or proratable to the particular system improvement. The director shall determine the amount of credits, if any, for significant past tax payments.

(9) Any claim for credit must be made prior to or at the time of submission of an application for a building permit. The failure to timely file such a claim shall constitute a final bar to later request any such credit.

(10) Determinations made by the director pursuant to this section shall be subject to the appeals procedures set forth in SMC 14A.20.060. (Ord. O2006-207 § 1)

14A.20.050 Tax adjustments.

Pursuant to and consistent with the requirements of RCW 82.02.060, the rate study provides adjustments for past and future taxes and other sources of revenue to be paid by the new development which are earmarked or proratable to the same new public facilities which will serve the new development. The impact fee rates in SMC 14A.20.110 have been reasonably adjusted for taxes and other revenue sources which are anticipated to be available to fund these system improvements. (Ord. O2006-207 § 1)

14A.20.060 Appeals.

(1) Any feepayer may pay the impact fees imposed by this title under protest in order to obtain a building permit. No appeal shall be permitted until the impact fees at issue have been paid.

(2) Appeals regarding the impact fees imposed on any development may only be filed by the feepayer of the property where such development will occur.

(3) The feepayer must first file a request for review regarding impact fees with the director, as provided herein:

(a) The request shall be in writing on the form provided by the City;

(b) The request for review by the director shall be filed within 21 calendar days after the feepayer's payment of the impact fees at issue. The failure to timely file such a request shall constitute a final bar to later seek such review;

(c) No administrative fee will be imposed for the request for review by the director; and

(d) The director shall issue his/her determination in writing.

(4) The following decisions may be appealed to the hearing examiner: determinations of the director with respect to the applicability of the impact fees to a given development; the director's determination regarding the availability or value of a credit; the director's decision concerning the independent fee calculation which is authorized in SMC 14A.20.120; fees imposed by the director pursuant to SMC 14A.20.110; or any other determination which the director is authorized to make pursuant to this title.

(5) Appeals to the hearing examiner shall be taken within 21 calendar days of the director's issuance of a written determination by filing with the department a notice of appeal specifying the grounds thereof, and depositing the necessary administrative fee, which is set forth in the existing fee schedules for appeals of such decisions. The director shall transmit to the office of the hearing examiner all papers constituting the record for the determination, including, where appropriate, the independent fee calculation.

(6) The hearing examiner shall fix a time for the hearing of the appeal, give notice to the parties in interest, and decide the same as provided in the Sammamish Municipal Code. At the hearing, any

party may appear in person or by agent or attorney.

(7) The hearing examiner is authorized to make findings of fact regarding the applicability of the impact fees to a given development, the availability or amount of the credit, or the accuracy or applicability of an independent fee calculation. The decision of the hearing examiner shall be final, except as provided in this section.

(8) The hearing examiner may, so long as such action is in conformance with the provisions of this title, reverse or affirm, in whole or in part, or may modify the determinations of the director with respect to the amount of the impact fees imposed or the credit awarded. (Ord. O2006-207 § 1)

14A.20.070 Establishment of impact fee accounts.

(1) Impact fee receipts shall be earmarked specifically and deposited in a special interest-bearing impact fee account maintained by the City.

(2) There is hereby established the parks and recreational facilities impact fee account for the fees collected pursuant to this title. Funds withdrawn from this account must be used in accordance with the provisions of SMC 14A.20.090 and applicable state law. Interest earned on the fees shall be retained in the account and expended for the purposes for which the impact fees were collected.

(3) On an annual basis, the finance director shall provide a report to the City council on the parks and recreational facilities impact fee account showing the source and amount of all moneys collected, earned, or received, and the system improvements that were financed in whole or in part by impact fees.

(4) Impact fees for system improvements shall be expended only in conformance with the capital facilities plan element of the City's Comprehensive Plan.

(5) Impact fees shall be expended or encumbered within 10 years of receipt, unless the council identifies in written findings extraordinary and compelling reason or reasons for the City to hold the fees beyond the 10-year period. Under such circumstances, the council shall establish the period of time within which the impact fees shall be expended or encumbered. (Ord. O2013-342 § 1 (Att. A); Ord. O2006-207 § 1)

14A.20.080 Refunds.

(1) If the City fails to expend or encumber the impact fees within 10 years of when the fees were paid, or where extraordinary or compelling reasons exist and the council has established other time periods pursuant to SMC 14A.20.070, the current owner of the property on which impact fees have been paid may receive a refund of such fees. In determining whether impact fees have been expended or encumbered, impact fees shall be considered expended or encumbered on a first-in, first-out basis.

(2) The City shall notify potential claimants by first class mail deposited with the United States Postal Service at the last known address of such claimants. A potential claimant or claimant must be the owner of the property for which the impact fee was paid.

(3) Owners seeking a refund of impact fees must submit a written request for a refund of the fees to the director within one year of the date the right to claim the refund arises or the date that notice is given, whichever is later.

(4) Any impact fees for which no application for a refund has been made within this one-year period shall be retained by the City and expended on the appropriate public capital facilities.

(5) Refunds of impact fees under this section shall include interest paid at the statutory rate.

(6) When the City seeks to terminate any or all components of the impact fee program, all unexpended or unencumbered funds from any terminated component or components, including interest earned, shall be refunded pursuant to this section. Upon the finding that any or all fee requirements are to be terminated, the City shall place notice of such termination and the availability of refunds in a newspaper of general circulation at least two times and shall notify all potential claimants by first class mail at the last known address of the claimants. All funds available for refund shall be retained for a period of one year. At the end of one year, any remaining funds shall be retained by the City, but must be expended for the appropriate public facilities. This notice requirement shall not apply if there are no unexpended or unencumbered balances within the account or accounts being terminated.

(7) The City shall refund to the current owner of property for which impact fees have been paid all impact fees paid, including interest earned on the impact fees, pursuant to RCW 82.02.080(3), if the development for which impact fees were imposed did not occur; provided, that if the City has expended or encumbered the impact fees in good faith prior to the application for a refund, the director shall determine whether an impact has resulted and whether all or a portion of the impact fees paid shall be refunded. (Ord. O2013-342 § 1 (Att. A); Ord. O2006-207 § 1)

14A.20.090 Use of funds.

(1) Pursuant to this title, impact fees:

(a) Shall be used for system improvements that will reasonably benefit the new growth and development;

(b) Shall not be imposed to make up for any system improvement deficiencies serving existing developments; and

(c) Shall not be used for maintenance or operation.

(2) Impact fees may be spent for system improvements, including, but not limited to, planning, land acquisition, right-of-way acquisition, site improvements, necessary off-site improvements, construction, engineering, architectural, permitting, financing, administrative expenses, mitigation costs, and any other expenses which can be capitalized pertaining to parks and recreational facility improvements.

(3) Impact fees may also be used to recoup public improvement costs previously incurred by the City to the extent that new growth and development will be served by the previously constructed improvements or incurred costs.

(4) In the event that bonds or similar debt instruments are or have been issued for the advanced provision of public improvements for which impact fees may be expended, impact fees may be used to pay debt service on such bonds or similar debt instruments to the extent that the facilities or improvements provided are consistent with the requirements of this section and are used to serve the new development. (Ord. O2006-207 § 1)

14A.20.100 Review.

(1) The fee rates set forth in SMC 14A.20.110 may be reviewed and adjusted by the council as it deems necessary and appropriate to meet City needs, including, but not limited to, addressing the impact of inflation on labor, materials, and real property costs. The fee rates may be adjusted 12 months after the effective date of the ordinance codified in this chapter, or 12 months after the most recent review by the council. The council may determine the amount of the adjustment and revise the fee rates set forth in SMC 14A.20.110. If the council does not determine the amount of the adjustment, the adjustment shall be administratively adjusted by the same amount that the five-year average Washington State Department of Transportation Construction Cost Index changed for the most recent 12-month period prior to the date of the adjustment.

(2) In the last quarter of each calendar year, the community development director together with the parks and recreation director shall prepare a report to the planning commission, for the year to date, including the following:

(a) The number of requests for impact fee exemptions or waivers pursuant to SMC 14A.20.030(2);

(b) The total number of residential units and dollar amounts of the exemptions or waivers approved by the community development director in consultation with the parks and recreation director;

(c) A copy of the hearing examiner decision, if any of the decisions of the community development director, in consultation with the parks and recreation director, were appealed to the hearing examiner.

Based on this annual review, the planning commission shall recommend to the City council any revision to SMC 14A.20.030 deemed appropriate. (Ord. O2006-207 § 1)

14A.20.110 Park and recreational facilities impact fee rates.

In accordance with RCW 82.02.060, the park and recreational facilities impact fees are based upon a schedule of impact fees which is adopted for each type of development activity that is subject to impact fees and which specifies the amount of the impact fee to be imposed for each type of system improvement.

The park and recreational facilities impact fee rates in this section are generated from the formula for calculating impact fees set forth in the rate study which is incorporated herein by reference. Except as otherwise provided for independent fee calculations in SMC 14A.20.120, exemptions in SMC 14A.20.030, and credits in SMC 14A.20.040, all new residential developments in the City will be charged the following park and recreational facilities impact fee applicable to the type of development:

Unit Type	**Fee per Dwelling Unit**		
	For qualifying residences under SMC 14A.20.020(13) only	Through January 31, 2016	February 1, 2016, and later
Single-Family	$2,697.28	$5,526.00	$6,739.00 per dwelling unit, or
Multifamily	$1,558.19	$3,521.00	$4,362.00 per dwelling unit

(Ord. O2015-400 § 1 (Att. A); Ord. O2013-342 § 1 (Att. A); Ord. O2006-207 § 1)

14A.20.120 Independent fee calculations.

(1) If, in the judgment of the director, none of the fee categories or fee amounts set forth in SMC 14A.20.110 accurately describe or capture the impacts of a new development on parks and recreational facilities, the department may prepare independent fee calculations and the director may impose alternative fees on a specific development based on those calculations. The alternative fees and the calculations shall be set forth in writing and shall be mailed to the feepayer.

(2) If a feepayer opts not to have the impact fees determined according to SMC 14A.20.110, then the feepayer shall prepare and submit to the director an independent fee calculation for the development for which a building permit is sought. The documentation submitted shall show the basis upon which the independent fee calculation was made.

(3) Any feepayer submitting an independent fee calculation shall be required to pay the City a fee to

cover the cost of reviewing the independent fee calculation. The amount of the fee required by the City for conducting the review of the independent fee calculation shall be in accordance with the adopted fee resolution approved by the City council and shall be paid by the feepayer prior to initiation of review.

(4) While there is a presumption that the calculations set forth in the rate study are valid, the director shall consider the documentation submitted by the feepayer, but is not required to accept such documentation or analysis which the director reasonably deems to be inaccurate or not reliable, and may modify or deny the request, or, in the alternative, require the feepayer to submit additional or different documentation for consideration. The director is authorized to adjust the impact fees on a case-by-case basis based on the independent fee calculation, the specific characteristics of the development, and/or principles of fairness. The director's decision shall be set forth in writing and shall be mailed to the feepayer.

(5) Determinations made by the director pursuant to this section may be appealed to the office of the hearing examiner subject to the procedures set forth in SMC 14A.20.060. (Ord. O2006-207 § 1)

14A.20.130 Administrative fees.

(1) All development permits subject to the park and recreational facilities impact fees pursuant to SMC 14A.20.110 shall pay an administrative processing fee as adopted by the City council.

(2) All development permits that require an independently determined park and recreational facilities impact fee pursuant to SMC 14A.20.120 shall pay an administrative processing fee as adopted by the City council. (Ord. O2006-207 § 1)

14A.20.140 Mitigation of adverse environmental impacts.

Nothing in this title shall preclude the City from requiring the feepayer or the proponent of a development to mitigate adverse environmental impacts of a specific development pursuant to the State Environmental Policy Act, Chapter 43.21C RCW, based on the environmental documents accompanying the underlying development approval process, and/or Chapter 58.17 RCW, governing plats and subdivisions; provided, that the exercise of this authority is consistent with the provisions of Chapters 43.21C and 82.02 RCW. (Ord. O2006-207 § 1)

Chapter 14A.25
IMPACT FEE DEFERRAL

Sections:

14A.25.010 Purpose.

The purpose of this chapter is to comply with the requirements of RCW 82.02.050, as amended by ESB 5923, Chapter 241, Laws of 2015, to provide an impact fee deferral process for single-family residential construction, in order to promote economic recovery in the construction industry. (Ord. O2016-412 § 1 (Att. A))

14A.25.020 Applicability.

(1) The provisions of this chapter shall apply to all impact fees established and adopted by the City pursuant to Chapter 82.02 RCW, including street impact fees assessed under Chapter 14A.15 SMC, impact fees for parks and recreational facilities assessed under Chapter 14A.20 SMC, and school impact fees assessed under Chapter 21A.105 SMC.

(2) Subject to the limitations imposed in SMC 14A.25.060, the provisions of this chapter shall apply to all building permit applications for single-family detached and single-family attached residential construction. For the purposes of this chapter, an “applicant” includes an entity that controls the named applicant, is controlled by the named applicant, or is under common control with the named applicant. (Ord. O2016-412 § 1 (Att. A))

14A.25.030 Impact fee deferral.

(1) Deferral Request Authorized. Applicants for single-family attached or single-family detached residential building permits may request to defer payment of required impact fees until the sooner of:

(a) Final inspection; or

(b) The closing of the first sale of the property occurring after the issuance of the applicable building permit;

which request shall be granted so long as the requirements of this chapter are satisfied.

(2) Method of Request. A request for impact fee deferral shall be declared at the time of preliminary

plat application (for platted development) or building permit application (for nonplatted development) in writing on a form or forms provided by the City. Any request for impact fee deferral must be accompanied by an administrative fee in an amount equal to one hour at the City's hourly rate for planning as stated in the City's current fee schedule.

(3) Calculation of Impact Fees. The amount of impact fees to be deferred under this chapter shall be determined as of the date the request for deferral is submitted. (Ord. O2016-412 § 1 (Att. A))

14A.25.040 Deferral term.

The term of an impact fee deferral granted under this chapter may not exceed 18 months from the date the building permit is issued ("deferral term"). If the condition triggering payment of the deferred impact fees does not occur prior to the expiration of the deferral term, then full payment of the impact fees shall be due on the last date of the deferral term. (Ord. O2016-412 § 1 (Att. A))

14A.25.050 Deferred impact fee lien.

(1) Applicant's Duty to Record Lien. An applicant requesting a deferral under this chapter must grant and record a deferred impact fee lien, in an amount equal to the deferred impact fees as determined under SMC 14A.25.030(3), against the property in favor of the City in accordance with the requirements of RCW 82.02.050(3)(c).

(2) Satisfaction of Lien. Upon receipt of final payment of all deferred impact fees for the property, the City shall execute a release of deferred impact fee lien for the property. The property owner at the time of the release is responsible, at his or her own expense, for recording the lien release. (Ord. O2016-412 § 1 (Att. A))

14A.25.060 Limitation on deferrals.

The deferral entitlements allowed under this chapter shall be limited to the first 20 single-family residential construction building permits per applicant, as identified by contractor registration number or other unique identification number, per year. (Ord. O2016-412 § 1 (Att. A))

Chapter 14A.30
RIGHT-OF-WAY USE PERMITS

Sections:

14A.30.010 Purpose – Permit required.

The purpose of this chapter is to establish minimum rules and regulations for controlling and enforcing right-of-way uses to assure that proposed uses are consistent with the public health, safety, and welfare of the community, and that harm or nuisance which may result from a proposed right-of-way use is prevented.

It shall be unlawful for anyone to make private use of any public right-of-way without a right-of-way use permit issued by the City, or to use any public right-of-way without complying with all provisions of a permit issued by the City. (Ord. O2018-465 § 2 (Att. A))

14A.30.015 Definitions.

The following words and phrases, wherever used in this chapter, shall have the meanings ascribed to them in this section except where otherwise defined or unless the context shall clearly indicate to the contrary.

(1) “Abutting property” means and includes property bordering upon and contiguous to a public right-of-way as defined herein.

(2) “Applicant” means any person, company, corporation, enterprise, or entity applying for the issuance or renewal of a right-of-way use permit or any person, company, corporation, enterprise, or entity that has been issued a right-of-way use permit.

(3) “Application” means, for the purposes of this chapter, the collection of papers or electronic data necessary to initiate a right-of-way use permit request and shall include an application in the form approved by the City, and other submittals consistent with the purposes of this chapter.

(4) “Private use” means use of the public right-of-way for the benefit of a person, partnership, group, organization, company, corporation, entity or outside jurisdiction other than as a public thoroughfare for any type of vehicle, pedestrian, bicycle or equestrian travel.

(5) “Right-of-way” or “ROW” means and includes streets, avenues, ways, boulevards, drives, places, alleys, sidewalks, landscape (parking) strips, squares, triangles, easements and other rights-of-way open to the use of the public, including the space above or beneath the surface of same. This definition specifically does not include streets, alleys, ways, landscape strips, sidewalks, easements, etc., which have not been deeded, dedicated, or otherwise permanently appropriated to the City for public use.

(6) “Special event” means an event which will generate or invite public participation, and/or spectators, for a particular and limited purpose and time including, but not limited to, fun runs/walks, roadway foot races, fundraising walks, bike-a-thons, parades, block parties, carnivals, shows, exhibitions and fairs. (Ord. O2018-465 § 2 (Att. A))

14A.30.020 Right-of-way use permit application process and fee.

(1) The City engineer or designee, herein referred to as “the City,” shall establish policies and procedures to administer the permit program.

(2) Applicants may be required to submit, in addition to the application form, any documents the City deems necessary for the City to perform an accurate evaluation of the right-of-way use permit application.

(3) Decisions regarding issuance, renewal, denial, or termination of any such permits shall be subject to insurance requirements, bond requirements, indemnification and hold harmless agreements, the capacity of the rights-of-way to accommodate the applicant’s proposed facilities or use, evaluation of competing public interests, and any other administrative requirements applicable to the permit.

(4) As part of a complete right-of-way use permit application, the applicant shall submit to the City, at the time of application, right-of-way use permit fees, including a nonrefundable application fee, as set forth in the most current City of Sammamish fee schedule.

(5) If insurance is required, the insurance guidelines in City policy shall apply unless otherwise established by the City.

(6) Conditions of approval will be identified during the City’s review of the application and may include a certificate of insurance, indemnification and hold harmless agreement, traffic control plan, performance bond, time and use restrictions, video data, status reports, restoration of disturbed right-of-way features, or any other requirements the City deems necessary to protect the right-of-way and public health, safety, and welfare. (Ord. O2018-465 § 2 (Att. A))

14A.30.025 Right-of-way use permit types.

(1) Type A, ROW special use permit, is a short-term permit and allows the use of the right-of-way for nonconstruction activities as described in SMC 14A.30.030.

(2) Type B, ROW construction permit, is a permit that allows the use of the right-of-way for construction activities as described in SMC 14A.30.040.

(3) Type C, ROW utility permit, is a permit that allows for the use of the right-of-way to construct or maintain utilities as described in SMC 14A.30.050.

(4) Type D, ROW lease permit, is a permit that allows long-term usage of public right-of-way for nonconstruction activities as described in SMC 14A.30.060. (Ord. O2018-465 § 2 (Att. A))

14A.30.030 Type A right-of-way special use permit.

(1) Type A ROW special use permit is required for any special event that is held within the public right-of-way or creates significant traffic impacts within the public right-of-way.

(2) Type A ROW special use permit may be required for uses that are nonconstruction uses but not defined as a special event by this chapter.

(3) Proof of insurance may be required with the City listed as an additional insured to protect the public and the City against liability for injury to persons or property. (Ord. O2018-465 § 2 (Att. A))

14A.30.040 Type B right-of-way construction permit.

(1) Type B ROW construction permits are required before any person, firm, corporation, company, enterprise or entity shall commence or permit any other person, firm, corporation, company, enterprise or entity to commence any work within the public right-of-way. Types of activities that would fall under a Type B ROW construction permit include but are not limited to driveways, curbs, stormwater infrastructure, sidewalks, retaining walls, cutting or maintaining trees and haul routes. Construction work associated with a franchised utility provider or a telecommunications provider shall obtain a Type C ROW utility permit as described in SMC 14A.30.050.

(2) Proof of insurance shall be required, with the City listed as an additional insured, on all work within the right-of-way to address liability for injury to persons or property. Insurance amounts shall be those identified in Section 1-07.18 (Public Liability and Property Damage Insurance) of the Standard Specifications for Road, Bridge and Municipal Construction (current version) published by the Washington State Department of Transportation, and City amendments thereto. These insurance requirements may be modified at the discretion of the City.

(3) A current City business license is required for any person performing work in the City right-of-way.

(4) It is unlawful for any person to perform any work in City right-of-way unless operating under a valid state of Washington general contractor's license, or a valid state of Washington specialty contractor's license applicable to the type of work being performed.

(5) Contractors are responsible for traffic control, work area protection/security and street maintenance to protect the life, health and safety of the public during any permitted work within the right-of-way, and all methods and equipment used will be subject to the approval of the City.

(6) All streets, sidewalks, alleys, parkways, and other public rights-of-way disturbed in the course of work performed under any permit shall be restored in accordance with the City of Sammamish public works standards or as required and approved by the City engineer.

(7) All work within City right-of-way must be pursued to completion with due diligence, and if work is not completed within a reasonable length of time, as determined by the City engineer, the City shall cause the work to be completed at the applicant's expense.

(8) Any costs incurred by the City for right-of-way restoration will be charged to the property owner and/or developer employing the contractor. (Ord. O2018-465 § 2 (Att. A))

14A.30.050 Type C right-of-way utility permit.

(1) Type C ROW utility permits are required before any person, firm, corporation, company, enterprise or entity shall commence or permit any other person, firm, or corporation to commence any work within the public right-of-way associated with providing or maintaining franchised utilities or telecommunication facilities within the City right-of-way.

(2) Proof of insurance shall be required, with the City listed as an additional insured, on all work within the right-of-way to address liability for injury to persons or property. Insurance amounts shall be those identified in Section 1-07.18 (Public Liability and Property Damage Insurance) of the Standard Specifications for Road, Bridge and Municipal Construction (current version) published by the Washington State Department of Transportation, and City amendments thereto. These insurance requirements may be modified at the discretion of the City.

(3) A current City business license is required for any person performing work in the City right-of-way.

(4) It is unlawful for any person to perform any work in City right-of-way unless operating under a valid state of Washington general contractor's license, or a valid state of Washington specialty contractor's license applicable to the type of work being performed.

(5) Contractors are responsible for traffic control, work area protection/security and street maintenance to protect the life, health and safety of the public during any permitted work within the right-of-way, and all methods and equipment used will be subject to the approval of the City.

(6) All streets, sidewalks, alleys, parkways, and other public rights-of-way disturbed in the course of work performed under any permit shall be restored in accordance with the City of Sammamish public works standards or as required and approved by the City engineer.

(7) All work within City right-of-way must be pursued to completion with due diligence, and if work is not completed within a reasonable length of time, as determined by the City engineer, the City shall cause the work to be completed at the applicant's expense.

(8) Any costs incurred by the City for right-of-way restoration will be charged to the property owner and/or developer employing the contractor. (Ord. O2018-465 § 2 (Att. A))

14A.30.060 Type D right-of-way lease permit.

(1) Type D ROW lease permits are required before any person, firm, corporation, company, enterprise or entity shall commence or permit any other person, firm, or corporation to commence any work within the ROW or utilize the unopened or unused public ROW for long-term private benefit or use. Types of activities that fall under a Type D ROW lease permit include, but are not limited to, construction of fences, landscaping, private irrigation, sheds, private nonfranchised utilities, and garages. Infrastructure associated with a franchised utility provider or a telecommunications provider shall obtain a Type C ROW utility permit as described in SMC 14A.30.050.

(2) Proof of insurance may be required with the City listed as an additional insured to protect the public and the City against liability for injury to persons or property.

(3) At any time the City deems the area being leased is necessary for public benefit, the ROW lease permit may be terminated and the applicant will be required, at their expense, to move their facilities from the public ROW. (Ord. O2018-465 § 2 (Att. A))

14A.30.070 Revocation or suspension of permit.

All permits issued pursuant to this chapter shall be temporary, shall vest no permanent rights in the applicant, and may be revoked by the City as follows:

(1) The permit may be immediately revoked by the City in the event of a violation of any of the terms or conditions of the permit; or

(2) The permit may be immediately revoked by the City in the event the permitted special event or street use shall become dangerous to persons or property, or if any structure, site condition or obstruction permitted becomes insecure or unsafe; or

(3) The permit may be revoked by the City upon 30 days' notice if the permit was not for a specified period of time and is not covered by either of the preceding subsections.

(4) If any event, use or occupancy for which the permit has been revoked is not immediately

discontinued, the City may remove any structure, site condition or obstruction, or cause to be made such repairs upon the structure, site condition or obstruction as may be necessary to render the same secure and safe, or to adjourn any special event. The cost and expense of such removal, repair or adjournment shall be assessed against the permittee, including all fees and costs associated with enforcement of the collection of same, including attorney's fees. (Ord. O2018-465 § 2 (Att. A))

14A.30.080 Enforcement.

The City engineer is authorized to enforce or seek enforcement of the provisions of this chapter, and ordinances and resolutions codified in it, and any rules and regulations promulgated thereunder pursuant to the enforcement and penalty provisions of SMC Title 23. (Ord. O2018-465 § 2 (Att. A))