Appendix F:
Transportation Impact Study

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Transportation Impact Study

Mill Creek Residential Development

Windsor, California

September 2018


TJKM

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CHAPTER 1 - INTRODUCTION & STUDY METHODOLOGY

This report summarizes the results of the transportation impact study (TIS) for the proposed Mill Creek residential development in Windsor, California.

Purpose

The purpose of the TIS is to evaluate potential operational impacts from the addition of project-related traffic, identify short- and long-term roadway circulation needs, determine potential mitigation measures and identify any critical traffic issues that should be addressed in the on-going planning process. The study was conducted in accordance with the transportation impact criteria established by the Town of Windsor, and is consistent with standard transportation engineering guidelines.

Report Overview

This report is organized into the following chapters:

- Chapter 1 Introduction & Study Methodology
- Chapter 2 Existing Conditions
- Chapter 3 Project Trip Generation & Existing plus Project Impacts Assessment
- Chapter 5 Cumulative Impact Assessment
- Chapter 6 Site Access & Parking Assessment

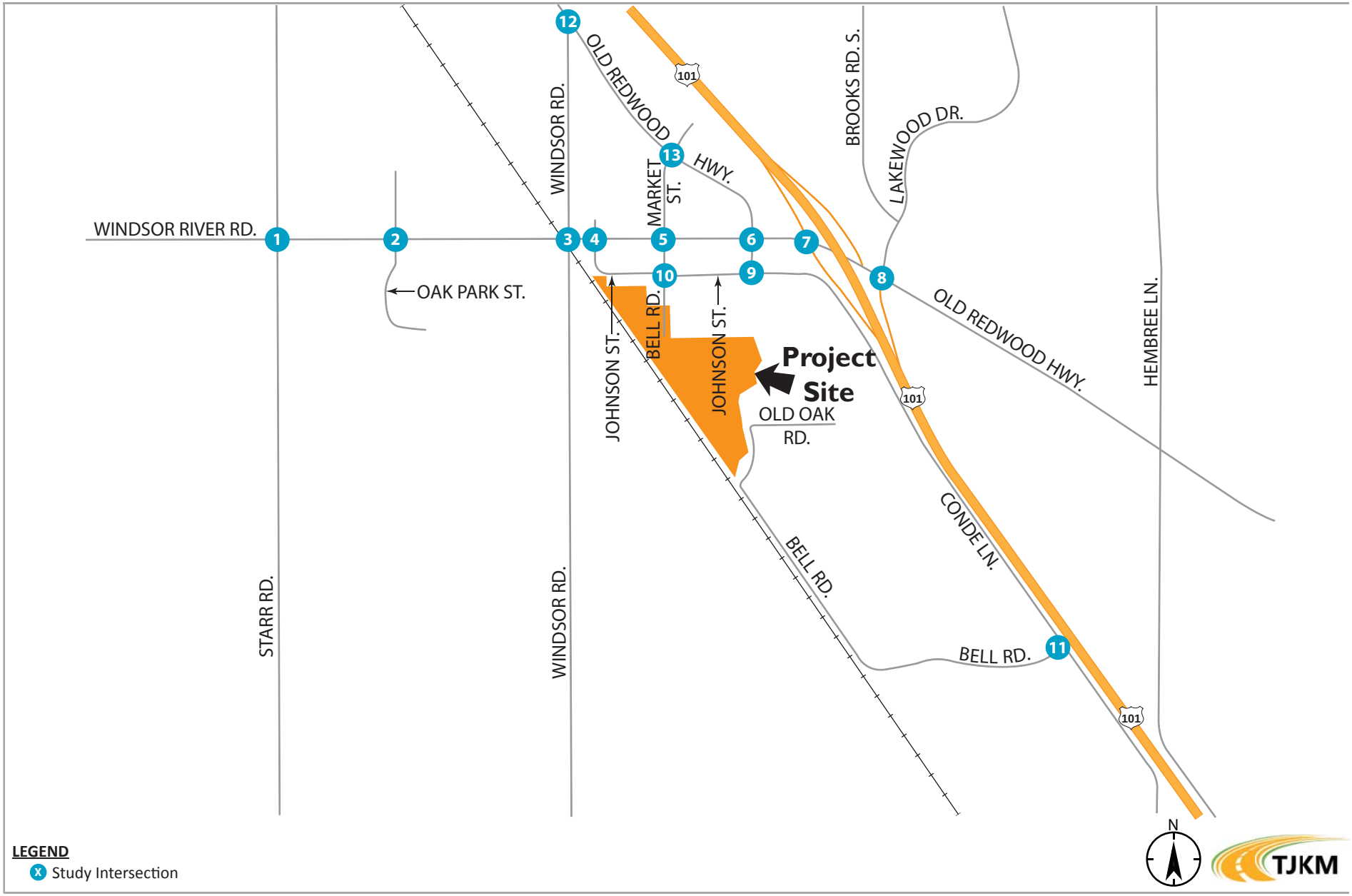
Project Description & Location

The proposed project would provide 360 attached residential dwelling units on a roughly 20-acre site located south of Windsor Mill Road, west of Conde Lane and east of the Northwest Pacific Railroad tracks, within walking distance of Downtown Windsor and Windsor Station. The site is within the boundaries of the Windsor Station Area / Downtown Specific Plan (SADSP). A creek separates the site from adjacent properties to the east and south. **Figure 1** shows the project site location, and **Figure 2** provides an additional perspective of the site location relative to adjacent properties. The proposed site plan including the proposed street layout is shown on **Figure 3.** Site access would be provided at four locations (one of which would be limited to bicyclists and pedestrians only) as summarized below:

- **Bell Road (2 access points):** Two primary access points for all travel modes would be provided by connecting two existing segments of Bell Road through the site with a north-south alignment.
- **Bill Beedle Way**: a third access point for all modes of travel would be provided by constructing a new local street, to be named Bill Beedle Way, between Bell Road and Johnson Street in the northwest portion of the site.
- **Bicycle & Pedestrian Bridge**: A fourth access point would be provided with a pedestrians and bicyclists bridge over the creek at the northeast corner of the site to provide a direct walking and bicycling connection to/from the adjacent school on the east side of the creek.

Within the site, 698 motor vehicle parking spaces would be provided, including 595 off-street motor vehicle parking spaces and 103 on-street public parking spaces.

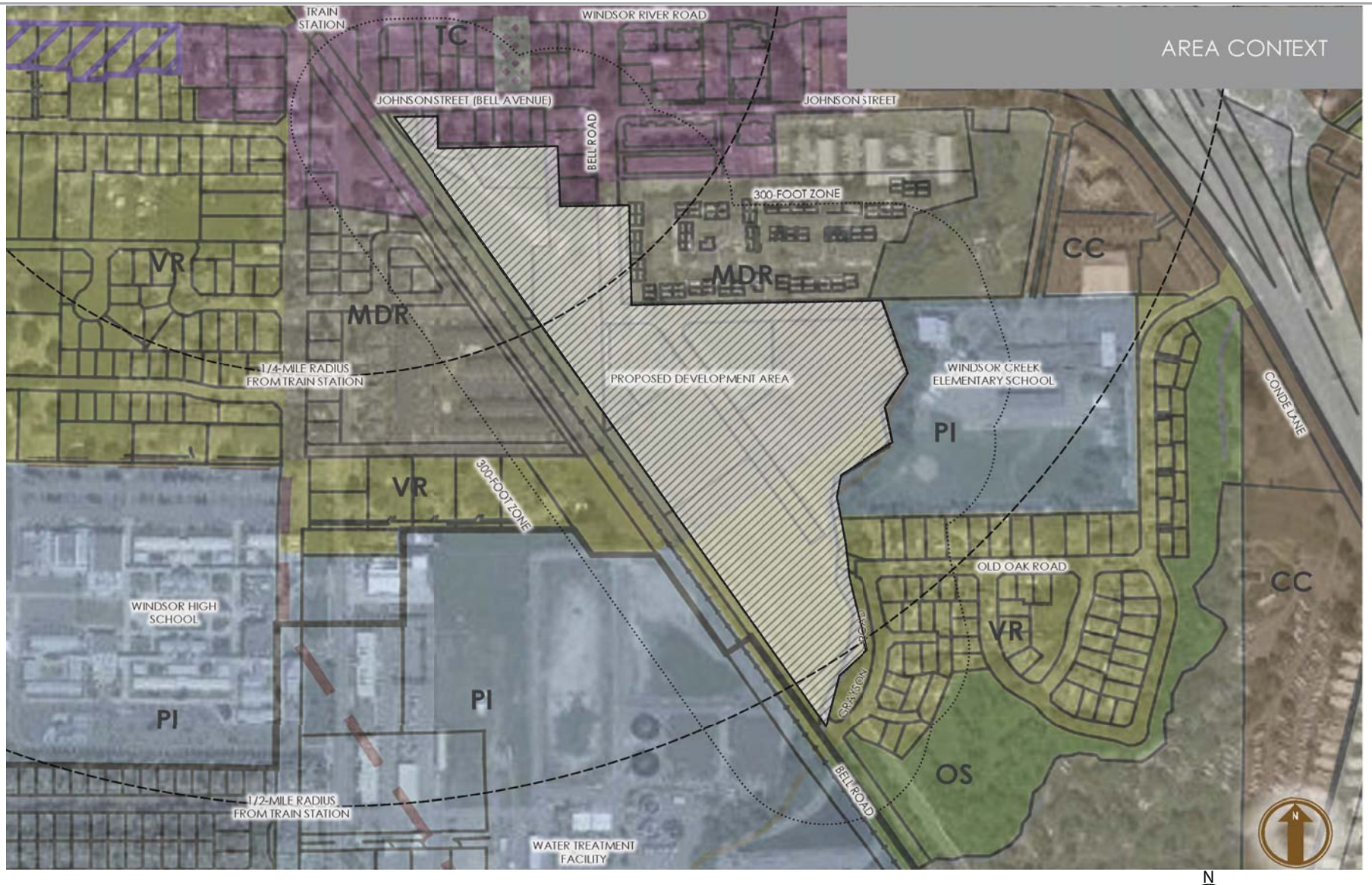
Vicinity Map



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Figure 1

Site Context



Source: ArchiLogix

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Figure 2

Site Plan



Source: ArchiLogix

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Figure 3

Study Intersections

TJKM evaluated traffic conditions at 13 study intersections, selected based on input from Town of Windsor staff, during the a.m. (7:00 a.m.-9:00 a.m.) and p.m. (4:00 p.m.-6:00 p.m.) peak periods for a typical weekday. The study intersections, as shown on Figure 1, are as follows:

1. Starr Road & Windsor River Rd
2. Oak Park Street & Windsor River Rd
3. Windsor Road & Windsor River Rd
4. Johnson Street & Windsor River Rd
5. Bell Road-Market Street & Windsor River Rd
6. Windsor River Road-Old Redwood Highway & Conde Lane
7. Old Redwood Highway & US 101 Southbound Off & On Ramps
8. Old Redwood Highway & Lakewood Drive- US 101 Northbound Off-Ramp
9. Conde Lane & Johnson Street
10. Bell Road & Johnson Street
11. Bell Road & Conde Lane
12. Windsor Road & Old Redwood Highway
13. Market Street & Old Redwood Highway

Analysis Scenarios

This study addresses the following four traffic scenarios:

1. **Existing Traffic Conditions** – This scenario evaluates the study intersections based on existing traffic volumes, lane geometry and traffic controls.
2. **Existing plus Project Traffic Conditions** – This scenario is identical to Existing Conditions, but with the addition of traffic from the proposed project.
3. **Cumulative No Project Traffic Conditions** – This scenario evaluates total traffic volumes and roadway conditions based on the *Windsor 2040 General Plan* horizon year 2040 without the proposed project.
4. **Cumulative plus Project Traffic Conditions** – This scenario is similar to Cumulative Conditions but includes traffic generated by the proposed project.

Level of Service Analysis Methodology

LOS is a qualitative index of the performance of an element of the transportation system. It is a rating scale running from A to F, with LOS A indicating no congestion, and LOS F indicating unacceptable congestion and delays. LOS in this study describes the operating conditions for unsignalized and signalized intersections. The *2010 Highway Capacity Manual (HCM)* is the standard reference published by the Transportation Research Board, and contains the specific criteria and methods to be used in assessing LOS. There are several software packages that have been developed to implement HCM methodologies. For this study, Synchro software is used to calculate the LOS at the study intersections. The study intersections with stop signs on all approaches were analyzed using the "All-Way Stop-Controlled Intersection" methodology from the HCM. This methodology evaluates delay for each approach based on turning movements, opposing and conflicting traffic volumes, and the number of lanes. Average vehicle delay is computed for the intersection as a whole and then given an LOS grade.

Tables 1 and 2 provide LOS definitions for both signalized and stop-controlled study intersections. The study intersections that are currently controlled by a traffic signal, or may be in the future, were evaluated using the signalized methodology from HCM. This methodology is based on factors including intersection geometries, traffic volumes, signal timing, phasing, whether or not the signals are coordinated, truck traffic, and bicycle and pedestrian activity. Average stopped delay per vehicle in seconds is used as the basis for evaluation in this methodology. For purposes of this study, delays were calculated using signal timings consistent with the Windsor General Plan EIR.

Table 1: - Intersection Level of Service Definitions for Signalized Intersections

LOS	Description
A	Very low control delay, up to 10 seconds per vehicle. Progression is extremely favorable, and most vehicles arrive during the green phase. Many vehicles do not stop at all. Short cycle lengths may tend to contribute to low delay values.
B	Control delay greater than 10 and up to 20 seconds per vehicle. There is good progression or short cycle lengths or both. More vehicles stop causing higher levels of delay.
C	Control delay greater than 20 and up to 35 seconds per vehicle. Higher delays are caused by fair progression or longer cycle lengths or both. Individual cycle failures may begin to appear. Cycle failure occurs when a given green phase does not serve queued vehicles, and overflow occurs. The number of vehicles stopping is significant, though many still pass through the intersection without stopping.
D	Control delay greater than 35 and up to 55 seconds per vehicle. The influence of congestions becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volumes. Many vehicles stop, the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Control delay greater than 55 and up to 80 seconds per vehicle. The limit of acceptable delay. High delays usually indicate poor progression, long cycle lengths, and high volumes. Individual cycle failures are frequent.
F	Control delay in excess of 80 seconds per vehicle. Unacceptable to most drivers. Oversaturation, arrival flow rates exceed the capacity of the intersection. Many individual cycle failures. Poor progression and long cycle lengths may also be contributing factors to higher delay.

Source: Highway Capacity Manual (HCM), 2010.

Table 2: Level of Service Definitions for Stop-controlled Intersections

LOS	Description
A	Very low control delay less than 10 seconds per vehicle for each movement subject to delay.
B	Low control delay greater than 10 and up to 15 seconds per vehicle for each movement subject to delay.
C	Acceptable control delay greater than 15 and up to 25 seconds per vehicle for each movement subject to delay.
D	Tolerable control delay greater than 25 and up to 35 seconds per vehicle for each movement subject to delay.
E	Limit of tolerable control delay greater than 35 and up to 50 seconds per vehicle for each movement subject to delay.
F	Unacceptable control delay in excess of 50 seconds per vehicle for each movement subject to delay.

Source: HCM 2010

Significant Impact Criteria/Level of Service Standards

The Town of Windsor's adopted LOS Standard is contained in the Town's General Plan and reads as follows:

> The Town shall adopt a level of services standard D for crosstown streets and signalized intersections. The Town shall recognize that reducing congestion must be balanced against improvements costs and community character concerns. The standard shall be used for planning new facilities and for monitoring proposed changes to the General Plan. The standard for local streets should be based on volume threshold instead of level of service designations.

For purposes of this study, off-site traffic impacts are considered potentially significant if:

- The project results in unacceptable LOS E or F at any study intersection; or
- At study intersections operating at an unacceptable LOS E or F without the project, impacts will be potentially significant if the Project adds more than four seconds of average delay to the intersection.

Impacts to left-turn vehicle queues would be significant if:

a) The 95th percentile queue length can be contained within the available stacking length without the project, and the project causes the queue to exceed the stacking length; or

b) The queue length exceeds the available stacking length without the project and the project increases he 95th percentile queue by more than 10 feet, or approximately one-half a car-length.

CHAPTER 2 - EXISTING CONDITIONS

Roadway Network

The Windsor 2040 General Plan street network designations are shown on Figure 4, which illustrate the Town's planned connection of Bell Road through the project site, and the provision of a local street (Bill Beedle Way) through the northwest corner of the project site. The key roadways adjacent to the project site are discussed below.

Windsor River Road is the major east-west roadway in the downtown area with one vehicle travel lane in each direction, designated as a 2-lane Crosstown Connector by the Windsor General Plan. Sidewalks are provided on both sides. Bicycle lanes are provided on most segments, except between Windsor Road and Conde Lane where on-street motor vehicle parking is permitted. The posted speed limit is 30 miles per hour (mph).

Old Redwood Highway is a five-lane Crosstown Connector to the east of Conde Lane, providing direct access to the U.S. 101 freeway, transitioning to a one-lane roadway to the north of Windsor River Road. Sidewalk and Class II bike lanes are generally provided in both directions, with a posted speed limit of 35 mph near the project site.

U.S. 101 is the largest regional freeway in the area, providing north-south access throughout Sonoma County and to the adjacent counties of Marin (south) and Mendocino (north). To the north of Old Redwood Highway, US 101 provides two travel lanes in each direction, and to the south of Old Redwood Highway it provides three lanes in each direction (one of which is a high occupancy vehicle (HOV) lane). The posted speed limit is 65 miles per hour (mph), and access points in the Town of Windsor are found at Old Redwood Highway in the north and Shiloh Road in the south.

Conde Lane is a two-lane Crosstown Connector, with Class II bike lanes and center medians that runs parallel to U.S. 101 between Windsor River Road and Shiloh Road. The road has a posted speed limit of 40 mph and provides sidewalk on one side for most of its length.

Johnson Street is a two-lane local street, one block north of the project site, that runs east-west between Conde Lane and Bell Road before intersecting Windsor River Road.

Bell Road is a partially constructed north--south roadway that runs along the east side of the Northwest Pacific Railroad to the south of the project site, and connects with Windsor River Road to the north, with a gap where the project site is located. Bell Road is designated as a "2-lane Crosstown Connector" by the *Windsor General Plan*, intended to ultimately carry mid-range traffic volumes and serve as important links for all modes between crosstown destinations. To the south, Bell Road connects with Grayson Way, Cameron Drive and Conde Lane. To the north, Bell Road connects directly with Johnson Street and Windsor River Road. North of Windsor River Road, the street names changes to Market Street, which connects directly with Old Redwood Highway.

Figure 4: Windsor 2040 General Plan Circulation System Map

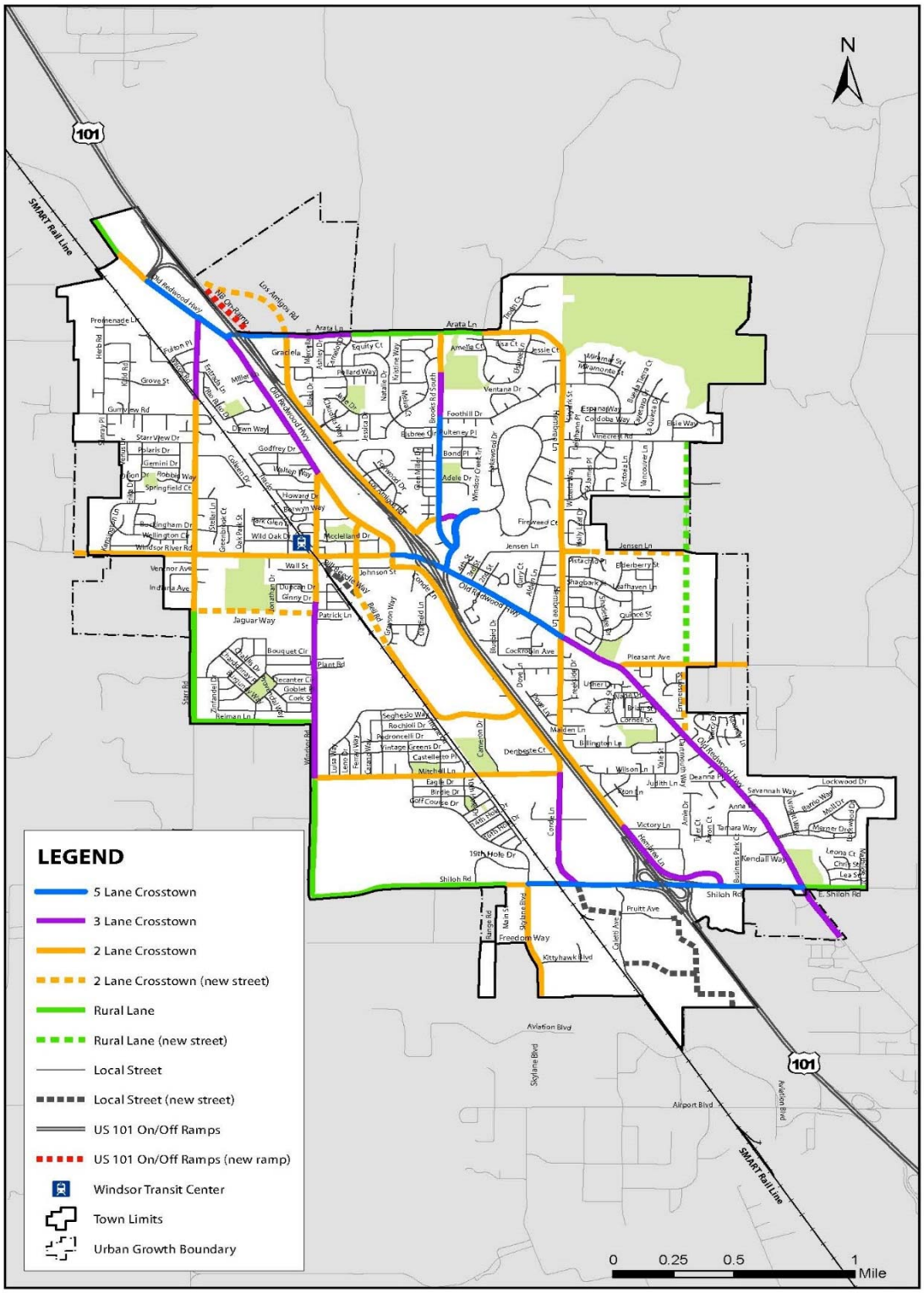


Figure M-1: Windsor 2040 General Plan Circulation System

Intersection Levels of Service

Peak period counts of motor vehicle, pedestrian and bicycle volumes at each study intersection were conducted on Wednesday, November 29, 2017, a weekday with clear weather. Detailed data sheets from the intersection counts are provided in **Appendix A**.

Figures 5A and 5B summarizes the existing peak hour motor vehicle turning movement volumes at the study intersections, and **Figures 5C and 5D** shows existing pedestrian and bicycle volumes at each study intersection. **Table 3** summarizes the existing motor vehicle levels of service (LOS) at the study intersections under existing conditions based on the counts conducted, and current lane geometries and intersection controls. HCM 2010 methodology was used except at intersections #6 and #7, where the HCM 2000 methodology was used due to issues with the implementation of HCM 2010 methodology at intersections with shared through/turn lanes. As shown: each of the study intersections operate acceptably at LOS D or better under Existing Conditions. Levels of Service worksheets for existing traffic conditions are provided in **Appendix B**.

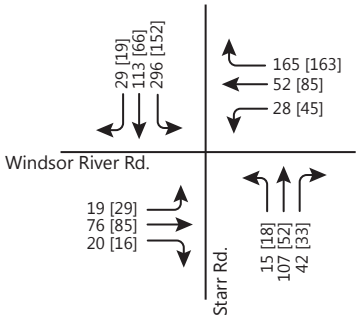
Table 3: Existing Conditions - Intersection Level of Service

ID	Intersection	Intersection Control	A.M. Peak Hour		P.M. Peak Hour	
			LOS[1]	*Average Delay*[2]	LOS[1]	*Average Delay*[2]
1	Starr Rd/Windsor River Rd	All-way Stop Controlled	C	22.7	B	10.8
2	Oak Park St/Windsor River Rd	Two-way Stop Controlled	C	21.9	C	15.0
3	Windsor Rd/Windsor River Rd	Signalized	C	24.3	B	19.0
4	Johnson St/Windsor River Rd	Two-way Stop Controlled	D	27.9	C	20.8
5	Bell Rd/Windsor River Rd	Signalized	A	5.9	A	5.9
6	Windsor River Rd-Old Redwood Hwy/Conde Ln	Signalized	C	33.7	C	30.6
7	Old Redwood Hwy/US 101 SB Off & On Ramps	Signalized	C	20.6	C	20.3
8	Old Redwood Hwy/US 101 NB Off-Ramp-Lakewood Dr	Signalized	C	27.4	D	38.1
9	Conde Ln/Johnson St	One-way Stop Controlled	B	13.3	B	10.0
10	Bell Rd/Johnson St	Two-way Stop Controlled	B	10.0	A	9.3
11	Bell Rd/Conde Ln	Two-way Stop Controlled	B	12.0	B	11.3
12	Windsor Rd/Old Redwood Hwy	Roundabout	A	5.5	A	6.5
13	Market St/Old Redwood Hwy	Roundabout	A	6.3	A	7.6

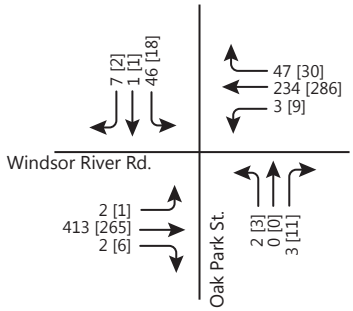
Notes: 1. LOS = Level of Service;
2. Average intersection delay expressed in seconds per vehicle for signalized intersections and all way stop controlled intersections.

Existing Conditions Peak Hour Traffic Volumes

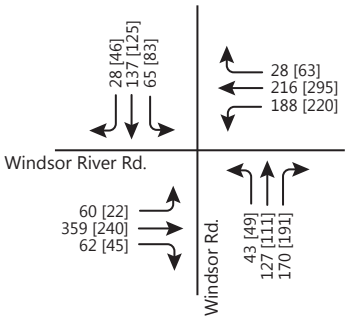
Intersection #1
Starr Rd. / Windsor River Rd.



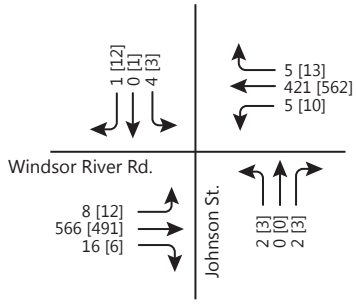
Intersection #2
Oak Park St. / Windsor River Rd.



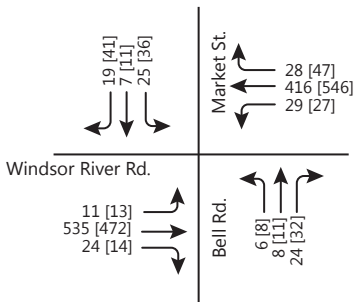
Intersection #3
Windsor Rd. / Windsor River Rd.



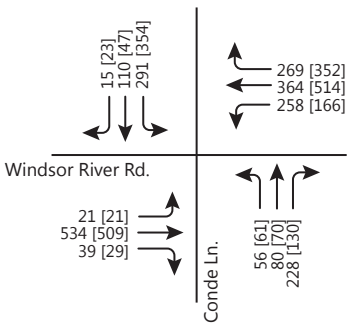
Intersection #4
Johnson St. / Windsor River Rd.



Intersection #5
Bell Rd.-Market St. / Windsor River Rd.



Intersection #6
Conde Ln. / Windsor River Rd.





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- X — Study Intersection
- XX — AM Peak Hour Volumes
- [XX] — PM Peak Hour Volumes
- Freeway
- Arterial
- Project Site

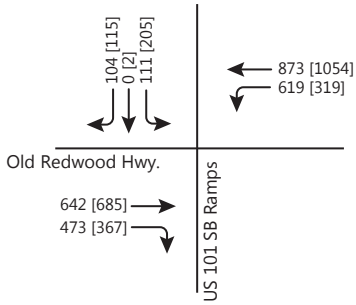
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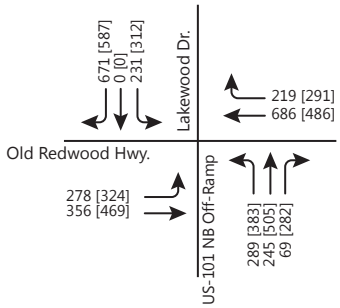
Figure 5-a

Existing Conditions Peak Hour Traffic Volumes

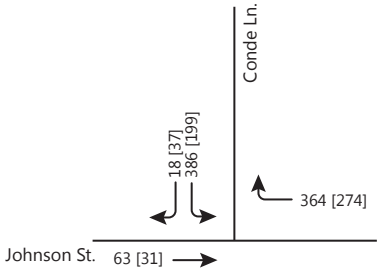
Intersection #7
Old Redwood Hwy. / US-101 SB Ramps



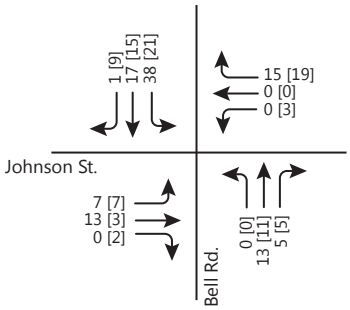
Intersection #8
Lakewood Dr. / Old Redwood Hwy.



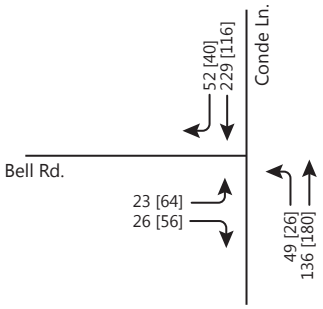
Intersection #9
Conde Ln. / Johnson St.



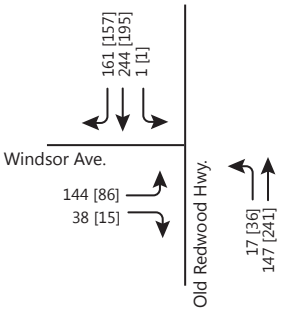
Intersection #10
Bell Rd. / Johnson St.



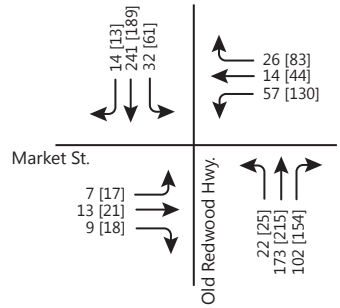
Intersection #11
Conde Ln. / Bell Rd.



Intersection #12
Old Redwood Hwy. / Windsor Ave.



Intersection #13
Old Redwood Hwy. / Market St.





LEGEND

- X — Study Intersection
- XX — AM Peak Hour Volumes
- [XX] — PM Peak Hour Volumes
- Freeway
- Arterial
- Project Site

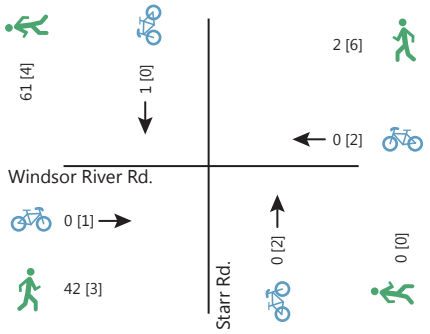
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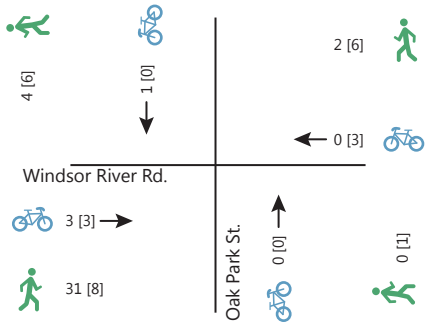
Figure 5-b

Existing Conditions Bicycle and Pedestrian Peak Hour Traffic Volumes

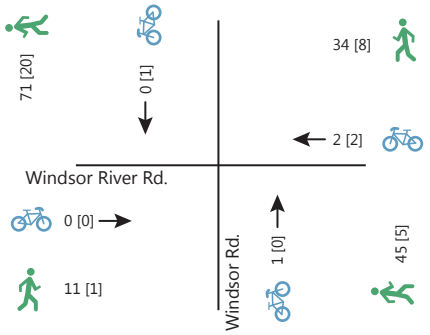
Intersection #1
Starr Rd. / Windsor River Rd.



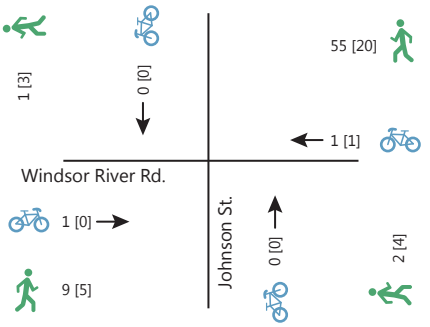
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Oak Park St. / Windsor River Rd.



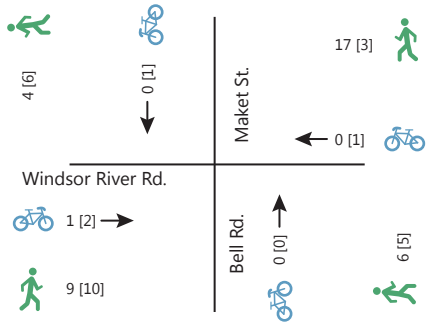
Intersection #3
Windsor Rd. / Windsor River Rd.



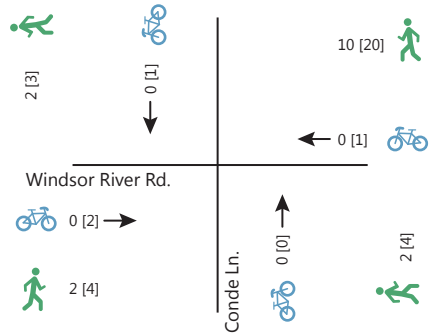
Intersection #4
Johnson St. / Windsor River Rd.



Intersection #5
Bell Rd. -Market St./ Windsor River Rd.



Intersection #6
Conde Ln. / Windsor River Rd.





LEGEND

- X — Study Intersection
- XX — AM Peak Hour Volumes
- [XX] — PM Peak Hour Volumes
- Pedestrian Crossing Volumes
- Bicycle Turn Movement Volumes

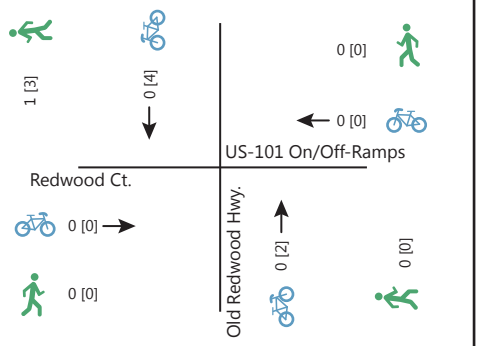
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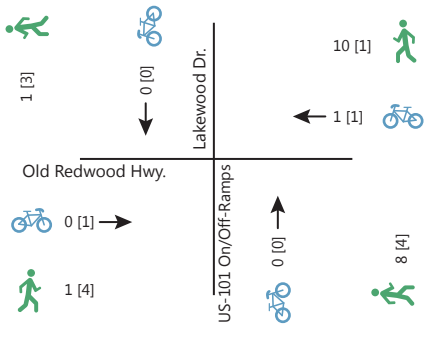
Figure 5-c

Existing Conditions Bicycle and Pedestrian Peak Hour Traffic Volumes

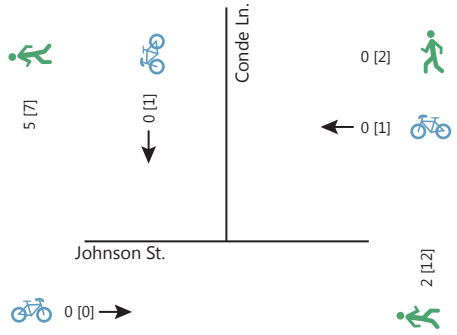
Intersection #7
Old Redwood Hwy. / US-101 On/Off-Ramps



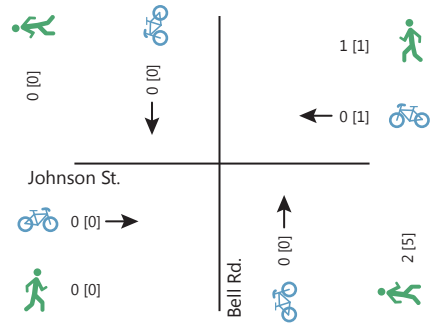
Intersection #8
Lakewood Dr. / Old Redwood Hwy.



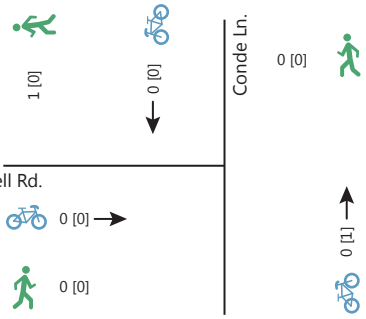
Intersection #9
Conde Ln. / Johnson St.



Intersection #10
Bell Rd. / Johnson St.



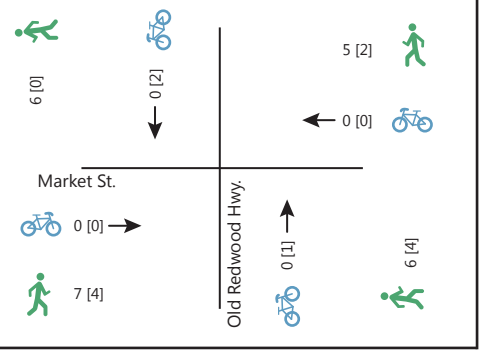
Intersection #11
Conde Ln. / Bell Rd.



Intersection #12
Old Redwood Hwy. / Windsor Ave.



Intersection #13
Old Redwood Hwy. / Market St.





LEGEND

- X — Study Intersection
- XX — AM Peak Hour Volumes
- [XX] — PM Peak Hour Volumes
- Pedestrian Crossing Volumes
- Bicycle Turn Movement Volumes

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CHAPTER 3 - PROJECT TRIP GENERATION & EXISTING PLUS PROJECT IMPACT ASSESSMENT

This chapter describes the assessment of conditions resulting from the addition of project traffic generated to Existing Volumes.

Project Vehicle Trip Generation

Vehicle trip generation is defined as the number of "vehicle trips" produced by a particular land use or project. A vehicle trip is defined as a one-direction vehicle movement. The total number of vehicle trips generated by each land use includes inbound and outbound trips.

Project vehicle trip generation was forecasted based on the Institute of Transportation Engineer's (ITE) publication *Trip Generation, 9th Edition*. The trip generation forecast is based on the trip generation rate for attached residential housing, consistent with the rates references in the Windsor General Plan EIR.

The trip generation forecast was reduced by four percent to account for the project site's proximity to commercial development and transit services within walking distance. The use of a four percent reduction was derived from the approved *Traffic Impact Study for Bell Village in the Town of Windsor* (Bell Village TIS), dated July 10, 2010.

Table 4 summarizes the peak hour vehicle trip generation forecast. As shown, the proposed project is forecasted to generate 177 vehicle trips during the a.m. peak hour, 214 vehicle trips during the p.m. peak hour, and 2,298 daily vehicle trips.

Table 4: Project Vehicle Trip Generation Forecast

Land Use (ITE Code)	Size	Daily		AM Peak Hour					PM Peak Hour				
		Rate	Trips	Rate	In %	In	Out	Total	Rate	In %	In	Out	Total
Residential - Attached (220)	360 dwelling units	6.65	2,394	0.51	20%	37	147	184	0.62	65%	145	78	223
4% Reduction for proximity to commercial development & transit			-96			-1	-6	-7			-6	-3	-9
Total		**-**	**2,298**	-	-	36	141	**177**			139	75	**214**

Vehicle Trip Distribution and Assignment

Trip distribution is the process of determining the proportion of vehicles that would travel between the project site and various origins and destinations near the study area. Trip assignment is the process of determining the various paths vehicles would take between the project site and each origin and destination. The trip distribution assumptions for the proposed project were derived from the trip distribution patterns identified in the *Traffic Impact Study for Bell Village* (W-Trans, July 10, 2010), which based the trip distribution pattern on a Sonoma County Transportation Agency (SCTA) travel demand model run. Based on the overall distribution, the assignment of trips to specific routes was predicted based on field review at the proposed project location and existing travel patterns.

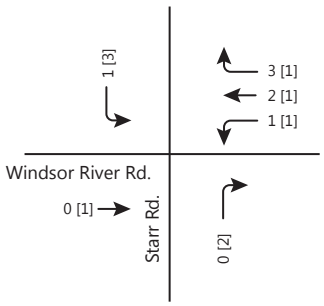
The Vehicle Trip Distribution pattern is shown on **Table 5**. Vehicle trip assignment at each study intersection for the proposed project are illustrated in **Figure 6**.

Table 5: Vehicle Trip Distribution

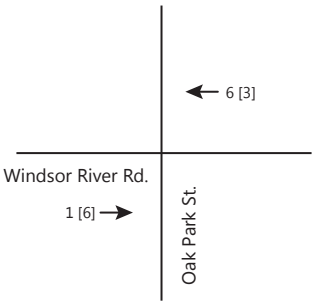
Origin/Destination	***Percent of Project Trips***
US 101 – South of Old Redwood Highway	42%
Lakewood Drive – North of Old Redwood Highway	11%
US 101 – North of Old Redwood Highway	11%
Conde Lane – south of Project site	9%
Old Redwood Highway – north of Starr Road	6%
Windsor River Road - west of Windsor Road	5%
Windsor Road - south of Windsor River Road	4%
Staff Road - south of Old Redwood Highway	2%
Arata Lane east of US 101	1%
Los Amigos Road (north of Arcata Ln)	1%
Reduction for proximity to Windsor Station & Downtown	***4%***
Total	**100%**

Project Vehicle Trip Assignment

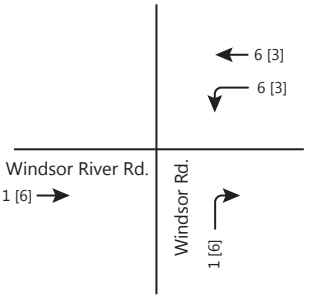
Intersection #1
Starr Rd. / Windsor River Rd.



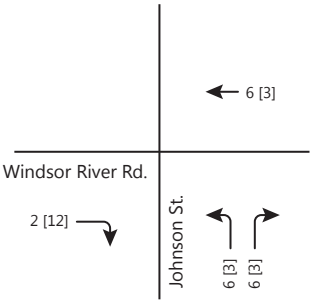
Intersection #2
Oak Park St. / Windsor River Rd.



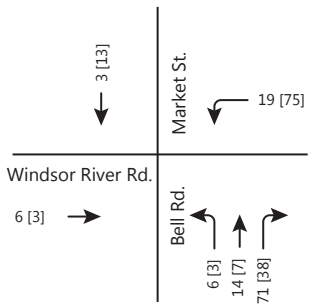
Intersection #3
Windsor Rd. / Windsor River Rd.



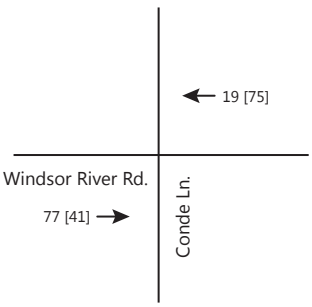
Intersection #4
Johnson St. / Windsor River Rd.



Intersection #5
Bell Rd.-Market St. / Windsor River Rd.



Intersection #6
Conde Ln. / Windsor River Rd.





LEGEND

- X — Study Intersection
- XX — AM Peak Hour Volumes
- [XX] — PM Peak Hour Volumes
- Freeway
- Arterial
- Project Site

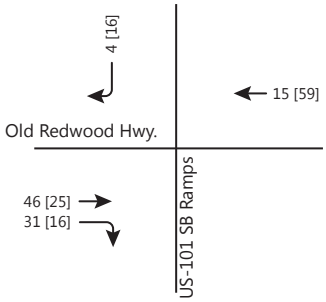
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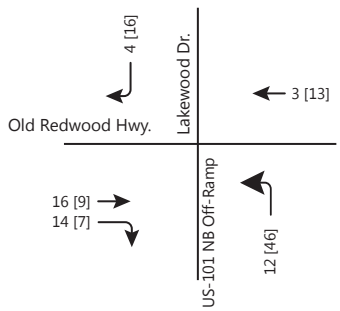
Figure 6-a

Project Vehicle Trip Assignment

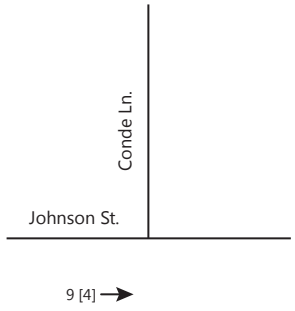
Intersection #7
Old Redwood Hwy. / US-101 SB Ramps



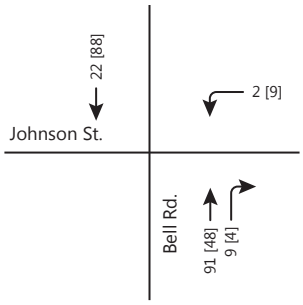
Intersection #8
Lakewood Dr. / Old Redwood Hwy.



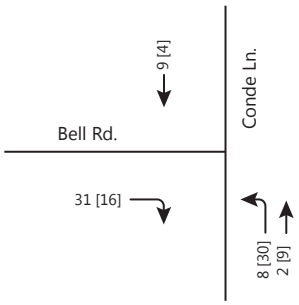
Intersection #9
Conde Ln. / Johnson St.



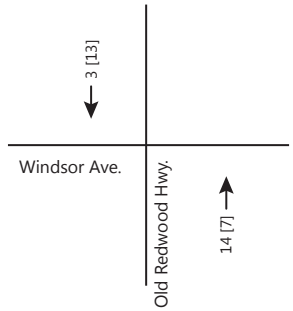
Intersection #10
Bell Rd. / Johnson St.



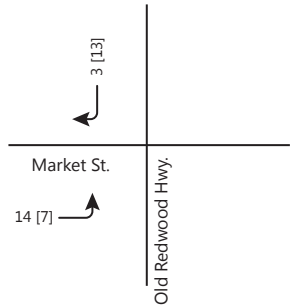
Intersection #11
Conde Ln. / Bell Rd.



Intersection #12
Old Redwood Hwy. / Windsor Ave.



Intersection #13
Old Redwood Hwy. / Market St.





LEGEND

- X — Study Intersection
- XX — AM Peak Hour Volumes
- [XX] — PM Peak Hour Volumes
- Freeway
- Arterial
- Project Site

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Figure 6-b

Intersection Levels of Service – Existing plus Project Conditions

Table 6 summarizes the results of the intersection LOS analysis under Existing plus Project conditions, and provides a comparison with Existing Conditions. The results indicate all study intersections would continue to operate acceptably at LOS D or better under Existing plus Project Conditions, while the project would have a negligible effect on average vehicle delay. Detailed LOS calculations and Existing plus Project volumes are shown in **Appendix C**. At all study intersections, the project impact on LOS would be less than significant based on the Town's LOS threshold of D or better.

Left-turn Queues

Left-turn queue reports for each signalized study intersection with left-turn pockets are provided for each scenario in **Appendix F.** The project's contribution to left-turn volumes at intersections with left-turn pockets is relatively small at most intersections, with the exception of the Windsor River Road intersection with Bell Road and Market Street (study intersection number 5).

- ***Left-turn queues at Windsor River Road / Bell Road & Market Street intersection:*** At the intersection, the project is forecasted to generate westbound left-turns from Windsor River Road for motorists entering from the north via Bell Road. At this intersection, the project is forecasted to generate 19 westbound left-turns during the a.m. peak hour and 75 westbound left-turns during the p.m. peak hour. This intersection was recently signalized, and average delay is very low – less than 10 seconds, with or without the project – thus operating at LOS A. The 95th percentile left-turn queue length would not exceed the stacking capacity.

Table 6B summarizes the results of the left-turn queue comparison under Existing plus Project Conditions. At all study intersections, the project contribution to left-turn queues is less than significant because the project does not cause the 95th percentile queue length to exceed the available stacking length. At intersections where the 95th percentile left-turn queue exceeds the stacking length without the project, the project would not increase the 95th percentile left-turn queue by more than 10 feet, or approximately one-half a car-length.

Table 6: Existing plus Project Conditions - Intersection Level of Service

ID #	Intersection	Peak Hour	Existing Conditions		Existing Plus Project Conditions	
			LOS[1]	Average Delay[2]	LOS[1]	Average Delay[2]
1	Starr Rd/Windsor River Rd	A.M.	C	22.7	C	23.3
		P.M.	B	10.8	B	10.4
2	Oak Park St/Windsor River Rd	A.M.	C	21.9	C	22.2
		P.M.	C	15.0	C	15.2
3	Windsor Rd/Windsor River Rd	A.M.	C	24.3	C	25.2
		P.M.	B	19.0	C	19.6
4	Johnson St/Windsor River Rd	A.M.	D	27.9	D	28.8
		P.M.	C	20.8	C	21.6
5	Bell Rd/Windsor River Rd	A.M.	A	5.9	A	6.3
		P.M.	A	5.9	A	5.9
6	Windsor River Rd-Old Redwood Hwy/Conde Ln	A.M.	C	33.7	C	34.8
		P.M.	C	30.7	C	30.6
7	Old Redwood Hwy/US 101 SB Off & On Ramps	A.M.	C	20.6	C	20.8
		P.M.	C	20.3	C	20.8
8	Old Redwood Hwy/US 101 NB Off-Ramp-Lakewood Dr	A.M.	C	27.4	C	27.5
		P.M.	D	38.1	D	38.1
9	Conde Ln/Johnson St	A.M.	B	13.3	B	13.6
		P.M.	B	10.0	B	10.0
10	Bell Rd/Johnson St	A.M.	B	10.0	B	11.1
		P.M.	A	9.3	B	10.2
11	Bell Rd/Conde Ln	A.M.	B	12.0	B	12.0
		P.M.	B	11.3	B	12.1
12	Windsor Rd/Old Redwood Hwy	A.M.	A	7.2	A	7.3
		P.M.	A	6.5	A	6.6
13	Market St/Old Redwood Hwy	A.M.	A	6.3	A	6.4
		P.M.	A	7.5	A	7.5

Notes:

1. LOS = Level of Service;
2. Average intersection delay expressed in seconds per vehicle.

Table 6b: Existing plus Project Conditions – 95th Percentile Left-turn Queue Comparison

ID #	*Intersection*	*Left-turn Movement*	Stacking Capacity (feet)	*95th Percentile Queue Length in Feet*			
				Existing Conditions		*Existing plus Project Conditions*	
				AM Peak Hour	*PM Peak Hour*	*AM Peak Hour*	*PM Peak Hour*
3	Windsor Rd/Windsor River Rd	Eastbound	50	82	40	81	41
		Westbound	200	257	290	265	300
		Northbound	200	41	40	41	41
		Southbound	200	56	61	56	68
5	Bell Rd/Windsor River Rd	Westbound	80	13	13	20	39
6	Windsor River Rd-Old Redwood Hwy/Conde Ln	Eastbound	85	44	42	44	42
		Westbound	210	298	202	276	201
		Northbound	75	86	87	86	87
7	Old Redwood Hwy/US 101 SB Off & On Ramps	Westbound	400	703	259	696	267
8	Old Redwood Hwy/US 101 NB Off-Ramp-Lakewood Dr	Southbound	180	152	209	152	209

CHAPTER 4 - CUMULATIVE CONDITIONS

This scenario evaluates total traffic volumes and roadway conditions based on Year 2040 conditions, with and without the proposed project.

Cumulative (Year 2040) Traffic Growth with Windsor 2040 General Plan

Cumulative traffic volumes were derived from the *Town of Windsor 2040 General Plan EIR* (October 2017). At intersections not included in the General Plan EIR, the anticipated 2040 volumes were forecasted based on upstream and downstream traffic growth predicted by the General Plan EIR. The general plan forecasts of traffic volumes in year 2040, under the 2040 General Plan, are based on anticipated development including the proposed project. Therefore, the General Plan forecast was utilized to determine the "Cumulative with Project" traffic volumes – with turning movement adjustments at intersections closest to the project site. The "Cumulative No Project" traffic volume were determined by subtracting the project trips, based on the Project Trip Assignment shown on **Figures 6-a and 6-b**.

In addition, the Cumulative with Project traffic forecasts presume pass-through traffic on Bell Road, through the project site, primarily in the northbound direction given the left-turn restriction from Conde Lane to Johnson Street. Therefore, under the Cumulative No Project scenario, the pass-through traffic on Bell Road would travel via Conde Lane to make a left-turn on to westbound Windsor River Road.

Intersection Levels of Service – Cumulative (Year 2040) Conditions

Table 7 summarizes the results of the intersection LOS analysis under Cumulative (Year 2040) Conditions, with and without the proposed project. The LOS analysis includes the following planned intersection improvements under both cumulative scenarios (with and without the proposed project):

- Installation of an eastbound left-turn lane on Windsor River Road approaching the intersection with Bell Road and Market Street (study intersection #5).

The results indicate all study intersections would continue to operate acceptably at LOS D or better under Cumulative (Year 2040) Conditions, with or without the proposed project. The project would have a negligible effect on average vehicle delay. Detailed LOS calculations for year 2040 are provided in **Appendix D and E**. At all study intersections, the project impact on LOS would be less than significant based on the Town's LOS threshold of D or better under Cumulative (Year 2040) Conditions.

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Table 7: Cumulative Conditions - Intersection Level of Service Comparison

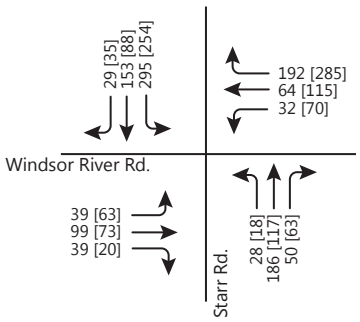
ID #	Intersection	Peak Hour	Cumulative No Project Conditions		Cumulative Condition with Project	
			LOS[1]	Average Delay[2]	LOS[1]	Average Delay[2]
1	Starr Rd/Windsor River Rd	A.M.	C	17.9	C	18.4
		P.M.	C	21.5	C	21.8
2	Oak Park St/Windsor River Rd	A.M.	C	23.8	C	24.2
		P.M.	D	30.8	D	31.2
3	Windsor Rd/Windsor River Rd	A.M.	C	27.4	C	27.9
		P.M.	C	22.1	C	22.4
4	Johnson St/Windsor River Rd	A.M.	C	24.7	D	25.1
		P.M.	D	29.3	D	30.1
5	Bell Rd – Market St / Windsor River Rd	A.M.	C	24.3	C[3]	22.6
		P.M.	C	22.8	C	22.9
6	Windsor River Rd-Old Redwood Hwy/Conde Ln	A.M.	C	34.6	C	34.9
		P.M.	C	33.7	C[3]	33.2
7	Old Redwood Hwy/US 101 SB Off & On Ramps	A.M.	C	30.1	C	30.9
		P.M.	C	25.0	C	25.4
8	Old Redwood Hwy/ US 101 NB Off-Ramp-Lakewood Dr	A.M.	C	22.5	C	22.9
		P.M.	D	42.1	D	47.4
9	Conde Ln/Johnson St	A.M.	B	12.7	B[3]	10.9
		P.M.	B	11.7	B[3]	10.9
10	Bell Rd/Johnson St	A.M.	B	11.6	B	11.6
		P.M.	B	10.3	B	11.8
11	Bell Rd/Conde Ln	A.M.	B	11.1	B	11.3
		P.M.	B	12.2	B	13.0
12	Windsor Rd/Old Redwood Hwy	A.M.	B	13.6	B	13.7
		P.M.	A	9.9	B	10.1
13	Market St/Old Redwood Hwy	A.M.	A	8.2	A	8.2
		P.M.	B	10.9	B	10.9

Notes:

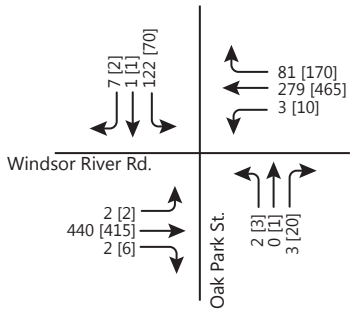
1. LOS = Level of Service;
2. Average intersection delay expressed in seconds per vehicle.
3. Minor reduction in average delay with the Project, at study intersections #5 (a.m.), #6 (p.m.), and #9 (a.m. and p.m.), reflects the anticipated rerouting of a portion of non-project traffic from Conde Lane to Bell Road that would occur south of Windsor Valley Road with the completion of Bell Road..

Cumulative plus Project Peak Hour Traffic Volumes

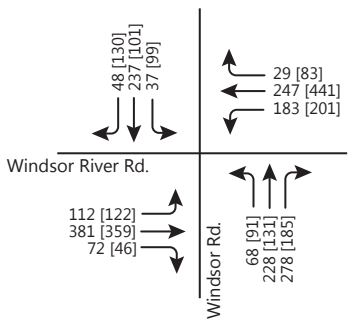
Intersection #1
Starr Rd. / Windsor River Rd.



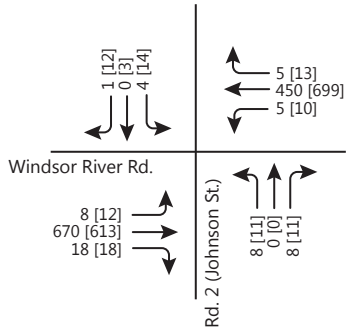
Intersection #2
Oak Park St. / Windsor River Rd.



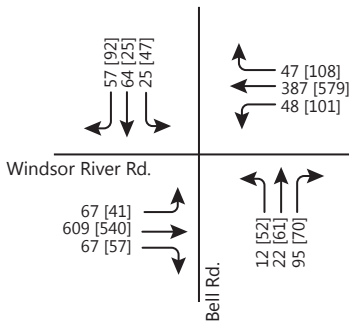
Intersection #3
Windsor Rd. / Windsor River Rd.



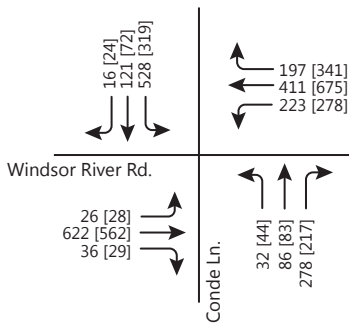
Intersection #4
Rd. 2 (Johnson St.) / Windsor River Rd.



Intersection #5
Bell Rd. / Windsor River Rd.



Intersection #6
Conde Ln. / Windsor River Rd.





LEGEND

- X — Study Intersection
- XX — AM Peak Hour Volumes
- [XX] — PM Peak Hour Volumes
- Freeway
- Arterial
- Project Site

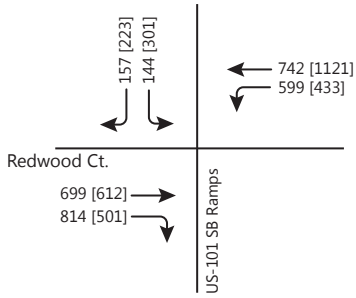
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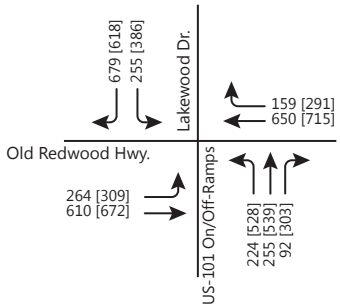
Figure 7-a

Cumulative plus Project Peak Hour Traffic Volumes

Intersection #7
Old Redwood Hwy. / US-101 On/Off-Ramps



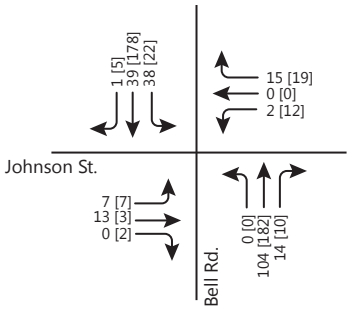
Intersection #8
Lakewood Dr. / Old Redwood Hwy.



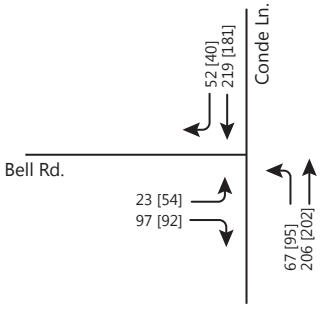
Intersection #9
Conde Ln. / Johnson St.



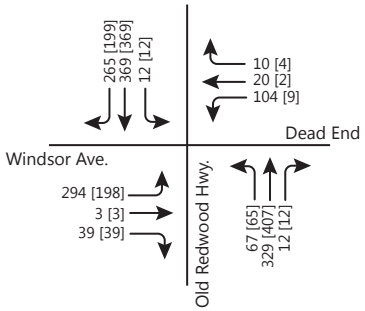
Intersection #10
Bell Rd. / Johnson St.



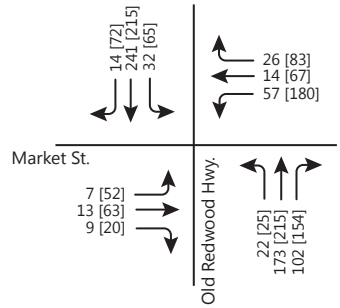
Intersection #11
Conde Ln. / Bell Rd.



Intersection #12
Old Redwood Hwy. / Windsor Ave.



Intersection #13
Old Redwood Hwy. / Market St.





LEGEND

- X — Study Intersection
- XX — AM Peak Hour Volumes
- [XX] — PM Peak Hour Volumes
- Freeway
- Arterial
- Project Site

N

TJKM

Figure 7-b

Left-turn Queues (Year 2040)

Left-turn queue reports for each signalized study intersection with left-turn pockets are provided for each scenario in **Appendix F.** The project's contribution to left-turn volumes at intersections with left-turn pockets is relatively small at most intersections, with the exception of the Windsor River Road intersection with Bell Road and Market Street (study intersection number 5).

At all study intersections, the project contribution to left-turn queues is less than significant. **Table 7B** summarizes the results of the left-turn queue comparison under Cumulative Conditions. At all study intersections, the project contribution to left-turn queues is less than significant because the project would not cause the 95th percentile queue length to exceed the available stacking length. At intersections where the 95th percentile left-turn queue would exceed the stacking length under the cumulative conditions without the project, the project would not increase the 95th percentile left-turn queue by more than 10 feet, or approximately one-half a car-length.

Table 7b: Cumulative Conditions – 95th Percentile Left-turn Queue Comparison

ID #	*Intersection*	*Left-turn Movement*	Stacking Capacity (feet)	*95th Percentile Queue Length in Feet*			
				Cumulative No Project Conditions		*Cumulative with Project Conditions*	
				AM Peak Hour	*PM Peak Hour*	*AM Peak Hour*	*PM Peak Hour*
3	Windsor Rd/Windsor River Rd	Eastbound	50	132	141	132	142
		Westbound	200	192	213	198	218
		Northbound	200	58	73	58	73
		Southbound	200	37	79	37	78
5	Bell Rd/Windsor River Rd	Eastbound	70	35	28	35	27
		Westbound	80	20	16	31	60
6	Windsor River Rd-Old Redwood Hwy/Conde Ln	Eastbound	85	48	50	48	50
		Westbound	210	360	257	354	258
		Northbound	75	53	65	53	65
7	Old Redwood Hwy/US 101 SB Off & On Ramps	Westbound	400	575	264	573	241
8	Old Redwood Hwy/US 101 NB Off-Ramp-Lakewood Dr	Southbound	180	133	265	136	265

CHAPTER 5 - SITE ACCESS AND PARKING

This section assesses the proposed site access and circulation provisions for vehicles, pedestrians, bikes and parking based on the plan set prepared by the project applicant.

Site Access and On-Site Circulation

The proposed site plan including the proposed street layout is shown on **Figure 3.** Site access would be provided at four locations (one of which would be limited to bicyclists and pedestrians only) as summarized below:

- **Bell Road (2 access points):** Two primary access points for all travel modes would be provided by connecting two existing segments of Bell Road through the site with a north-south alignment. Bell Road is designated as a "2-lane Crosstown Connector" by the *Windsor General Plan*, intended to carry mid-range traffic volumes and serve as important links for all modes between crosstown destinations. To the north, Bell Road connects directly with Johnson Street, Windsor Mill Road and Redwood Highway (with the street name changing to Market Street to the north of Windsor Mill road). To the south, Bell Road connects with several local streets and Conde Lane.
- **Bill Beedle Way**: a third access point for all modes of travel would be provided by constructing a new local street, to be named Bill Beedle Way, between Bell Road and Johnson Street in the northwest portion of the site.
- **Bicycle & Pedestrian Bridge**: A fourth access point would be provided with a pedestrians and bicyclists bridge over the creek at the northeast corner of the site to provide a direct walking and bicycling connection to/from the adjacent school.

Based on review of the plan set provided:

- **Emergency vehicle access will be adequate.** The project will provide adequate emergency access, given the proposed provision of three public street access points.
- **Motor vehicle circulation will be adequate to serve the project site and accommodate crosstown traffic on Bell Road.** Each of the new public street segments would be built according to Town of Windsor standards, including Bell Road that is designated as 2-lane "Crosstown Connector", thus envisioned to accommodate through-travel by all travel modes, not limited to project trips.
- **Truck access (including garbage pick-up) is anticipated to be adequate via Bell Road.** As proposed, the new section of Bell Road would not require turning movements by trucks when entering or exiting the site, as it would connect directly with existing segments both north and south of the project site. The internal street is conceptual for environmental review purposes, as the precise design of intersections is subject to ministerial review by town staff during the construction permitting phase that will include consideration of internal truck movements.
- **Site distance is anticipated to be adequate** given the direct connection of Bell Road with existing segments both north and south of the project site, while the proposed internal street layout is not anticipated to obstruct internal visibility.

- **Bicycle and pedestrian circulation and access.** Bicycle and pedestrian access would be accommodate via each of the four access points described above, including the bicycle and pedestrian bridge across the creek to the adjacent school. Sidewalks would be provided on both sides of each street, except for (1) the portions of Bill Beedie Way and Bell Road that will directly border the railroad right-of-way to the west of the site will include a sidewalk on the east side of the street only; and (2) portions of the internal loop road will limit sidewalks to the "inner" side of the loop only, on segments where the "outer" side of the loop road will directly border the east or north property line. Bicycle circulation within the site would include shared motor vehicle and bicycle travel lanes. Bell Road is not designated as a future bikeway by the Windsor Bicycle & Pedestrian Master Plan (BPMP). Instead, the BPMP designates the adjacent SMART Rail corridor as a future bikeway that would consist of a Class I bicycle and pedestrian path. Subject to town review, it may be desirable to identify a potential connection point between the future SMART Rail path and Bell Road.
- **Off-site pedestrian access constraints:** the segment of Bell Road, immediately north of the project site to Johnson Drive, currently has a sidewalk on one side only, while the existing sidewalk (on the east side of Bell Road) is relatively narrow, with some segments just over 4 feet wide. Enhancements to off-site pedestrian access would be desirable where feasible.

Proposed Parking Supply

Within the site, 698 motor vehicle parking spaces would be provided to include:

- 103 on-street public parking spaces on proposed street segments that would be provided within the project site; and
- 595 off-street motor vehicle parking spaces, including 384 covered spaces.

The supply of 595 off-street parking supply would include 160 spaces in private garages, 54 spaces in shared garages, 170 covered carport spaces, and 211 uncovered, off-street parking spaces.

Required Parking Supply

The project site is located within the boundaries of the Windsor *Station Area / Downtown Specific Plan* (SADSP) that specifies parking standards that differ from the Windsor Zoning Ordinance for specified land uses. The SADSP (page 3-28) identifies the following parking requirements for "compact residential" and "medium density residential" developments within the SADSP area:

- 1.0 covered parking spaces per studio or 1-bedroom unit, plus 0.5 spaces per unit required for visitor parking
- 1.5 covered parking spaces per 2-bedroom unit, plus 0.5 spaces per unit required for visitor parking. Each additional bedroom (over two), add 0.5 spaces per unit.
- Automobile parking for "compact residential" and "medium density residential" developments within the SADSP area is not required to be entirely off-street. This differs from the SADSP parking standards for "Town Center" (mixed-use commercial and residential) development that

specifies minimum off-street parking requirements. Therefore, the provision of on-street parking within the project site is included in the required parking provisions for this project.

- Two bicycle parking spaces are required per four residential units, unless separate secured garage parking space is provided for each unit. **Therefore, the project is required to provide 180 bicycle parking spaces, which the SADSP requires must be secure, covered and located conveniently for residents and visitors.**

Based on the anticipated provision of 1-bedroom, 2-bedroom, and 3-bedroom units, **Figure 8** summarizes the anticipated parking requirement based on the SADSP. As shown, the project is anticipated to require 682 motor vehicle spaces, which equates to 1.89 parking spaces per dwelling unit, including a minimum of 494 covered spaces.

Figure 8 – Required Motor Vehicle Supply (Town of Windsor standards)

Dwellings		Required spaces (Windsor SADAP)		
Size	No.	Covered	Visitor / Other	Total
1-bedroom	92	92	46	138
2-bedroom	252	378	126	504
3-bedroom	16	24	16	40
Total	**360**	**494**	**188**	**682**

Figure 9 provides a comparison of the required and proposed number of parking spaces. As shown: the total provision of motor vehicle parking, including on-street spaces, would exceed the town's requirement, but the provision of covered parking spaces would be fewer than required.

Figure 9 – Comparison of Required and Proposed Motor Vehicle Parking

	Covered Spaces	Visitor / Other Spaces	Total Off-Street Motor Vehicle Parking Spaces	On-Street Parking Spaces	Total Motor Vehicle Parking Spaces
Required number of parking spaces (see note 1)	494	188	N/A (see note 2)	N/A	**682**
Project: proposed number of parking spaces	384	211	595	103	**698**
Net Project Parking Supply	*-110*	*+23*	*N/A*	*N/A*	***+16***

Notes: (1) Required parking (number of spaces) based on Station Area/Downtown Specific Plan, and presuming the bedroom count as shown on Figure 8.

(2) Windsor Station Area Downtown Specific Plan (SADSP) allows "compact residential" and "medium density residential" developments within the SADSP area to include on-street parking within the project site in satisfying minimum parking requirements. This differs from the SADSP parking standards for "Town Center" (mixed-use commercial and residential) development that specifies minimum off-street parking requirements.

Typical Parking Demand for Similar Uses

Data on typical peak parking demand is provided by the Institute of Transportation Engineers (ITE) *Parking Generation* (4th Edition, 2010):

- **Apartments:** Typical peak parking demand for Low/Mid-rise Apartments (based on data collected at suburban sites with an average of 311 dwelling units and 1.7 bedrooms per unit) is 1.23 vehicles per dwelling unit (including visitors). Peak demand occurs between midnight and 5:00 AM.
- **Townhomes:** Typical peak parking demand for Rental Townhouses (based on data collected at sites with an average of 199 dwelling units) is 1.62 vehicles per dwelling unit (including visitors). The ITE data for Rental Townhouses does not specify the average number of bedrooms. Peak demand occurs between 9:00 PM and 6:00 AM.

Based on the ITE parking demand data:

- Typical peak parking demand for similar uses – including visitors - tend to be between 1.23 vehicles per unit for typical apartments, to 1.62 vehicles per unit for townhomes.
- Therefore, peak parking (overnight) parking demand, including visitors, would be range from just 442 vehicles (based on typical apartment rates) to 583 vehicles (based on townhome developments that have higher rates of parking demand).
- Both the required parking supply (682 required spaces based on the SADSP), and the proposed parking supply (698 total parking spaces, including 595 off-street spaces) exceeds the anticipated range of peak parking demand by a wide margin. Therefore, the proposed project is likely to provide a large supply of underutilized parking spaces.

Recommended Parking Supply to Serve Peak Demand

The industry-standard parking publication *Shared Parking* (2nd Edition, 2005), published by the Urban Land Institute (ULI), provides recommendations concerning parking supply based on empirical studies of hundreds of similar suburban rental projects in downtowns and other mixed-use settings in the United States. To serve the typical peak parking demand, ULI recommends a supply of 1.5 spaces per unit for residents, plus an additional 0.15 vehicles per dwelling unit (DU) for visitors, for a total supply of 1.65 spaces per dwelling unit. Based on the ULI recommendation, the recommended total parking supply (including on-street spaces) would be 594 spaces. Therefore, the findings and recommendations concerning the on-site supply of motor vehicle parking are that:

1. The recommended parking supply, based on Urban Land Institute recommendations, would be 594 motor vehicle parking spaces. Peak parking demand for residential uses occurs between 9:00 PM and 6:00 AM. The peak demand for overnight parking spaces would range from 442 vehicles (based on typical apartments) to 583 vehicles (based on suburban townhomes).
2. The City of Windsor's Station Area Plan/Downtown Specific Plan (SADSP) requires a supply of 682 spaces (including 180 visitor parking spaces) based on the bedroom count described on Figure 8.

Although the City of Windsor requires 0.5 visitor spaces per unit, ULI recommends just 0.15 visitor spaces per unit.

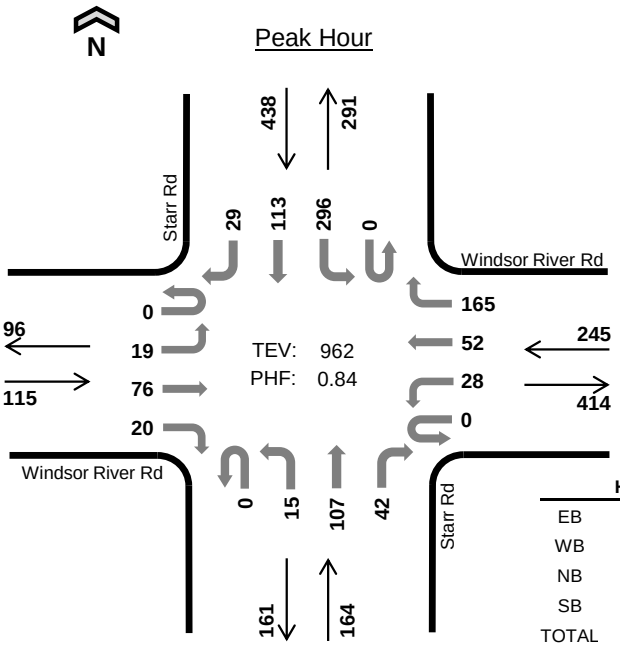
3. The proposed project will provide a supply of 698 parking spaces, including 595 off-street spaces and 103 on-street parking spaces. The proposed parking supply exceeds the predicted peak demand of 442 to 583 vehicles parked during the peak parking demand hours for residential development that typically occurs overnight between 9:00 PM and 6:00 AM.

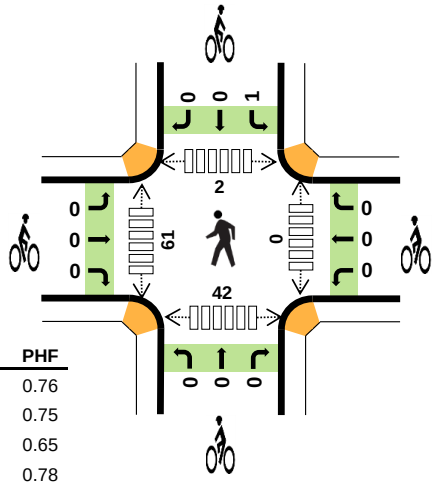
Technical Appendices

Appendix A: Intersection Data Collection Sheets

Starr Rd
Windsor River Rd

Date: 11-29-2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	1.7%	0.76
WB	2.9%	0.75
NB	0.6%	0.65
SB	0.7%	0.78
TOTAL	1.4%	0.84

Two-Hour Count Summaries

Interval Start	Windsor River Rd Eastbound				Windsor River Rd Westbound				Starr Rd Northbound				Starr Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	8	0	0	3	13	13	0	2	9	8	0	26	6	4	92	0
7:15 AM	0	2	11	1	0	3	6	18	0	7	13	10	0	39	8	3	121	0
7:30 AM	0	3	15	5	0	4	19	28	0	9	15	11	0	46	17	5	177	0
7:45 AM	**0**	**5**	**23**	**3**	**0**	**8**	**6**	**33**	**0**	**7**	**24**	**10**	**0**	**58**	**24**	**2**	**203**	593
8:00 AM	**0**	**4**	**7**	**6**	**0**	**4**	**21**	**57**	**0**	**5**	**48**	**10**	**0**	**66**	**26**	**8**	**262**	763
8:15 AM	**0**	**5**	**28**	**5**	**0**	**11**	**11**	**53**	**0**	**1**	**22**	**9**	**0**	**99**	**33**	**9**	**286**	928
8:30 AM	**0**	**5**	**18**	**6**	**0**	**5**	**14**	**22**	**0**	**2**	**13**	**13**	**0**	**73**	**30**	**10**	**211**	**962**
8:45 AM	0	2	19	3	0	5	13	16	0	1	9	12	0	36	16	2	134	893
Count Total	0	26	129	29	0	43	103	240	0	34	153	83	0	443	160	43	1,486	0
Peak Hour All	**0**	**19**	**76**	**20**	**0**	**28**	**52**	**165**	**0**	**15**	**107**	**42**	**0**	**296**	**113**	**29**	**962**	**0**
Peak Hour HV	**0**	**0**	**2**	**0**	**0**	**1**	**2**	**4**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**13**	**0**
Peak Hour HV%	**-**	**0%**	**3%**	**0%**	**-**	**4%**	**4%**	**2%**	**-**	**0%**	**1%**	**0%**	**-**	**1%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	1	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	3	0	3	*6*	0	0	0	0	*0*	0	0	1	0	*1*
7:30 AM	1	2	1	1	*5*	0	0	0	0	*0*	0	2	0	2	*4*
7:45 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**2**	**0**	*2*
8:00 AM	**0**	**2**	**0**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**39**	**0**	**37**	*76*
8:15 AM	**2**	**3**	**1**	**1**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**14**	**0**	**0**	*14*
8:30 AM	**0**	**2**	**0**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**8**	**0**	**5**	***13***
8:45 AM	0	0	0	0	*0*	2	1	2	0	*5*	1	2	0	1	*4*
Count Total	3	13	2	8	*26*	2	1	2	1	*6*	1	65	3	45	*114*
Peak Hour	**2**	**7**	**1**	**3**	***13***	**0**	**0**	**0**	**1**	***1***	**0**	**61**	**2**	**42**	***105***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor River Rd				Windsor River Rd				Starr Rd				Starr Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	0
7:15 AM	0	0	0	0	0	1	0	2	0	0	0	0	0	3	0	0	6	0
7:30 AM	0	0	0	1	0	0	0	2	0	0	1	0	0	0	1	0	5	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	13
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	14
8:15 AM	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**7**	15
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**13**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Count Total	0	0	2	1	0	2	2	9	0	0	2	0	0	7	1	0	26	0
Peak Hour	**0**	**0**	**2**	**0**	**0**	**1**	**2**	**4**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**13**	**0**

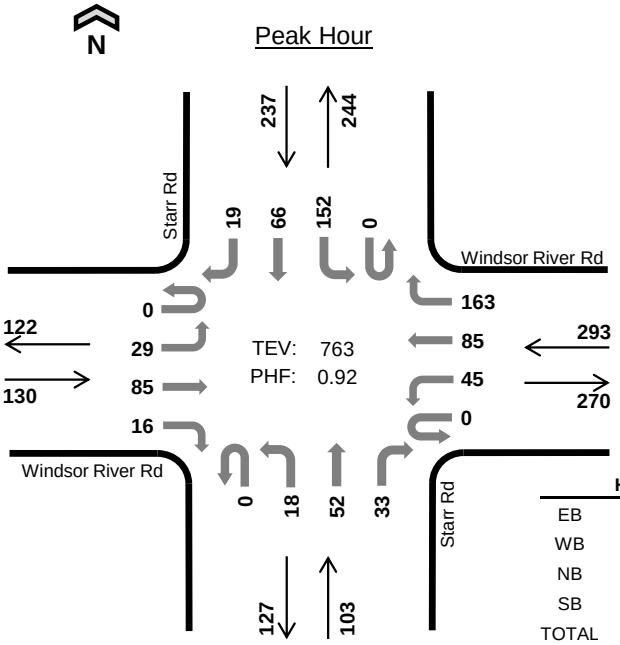
Two-Hour Count Summaries - Bikes

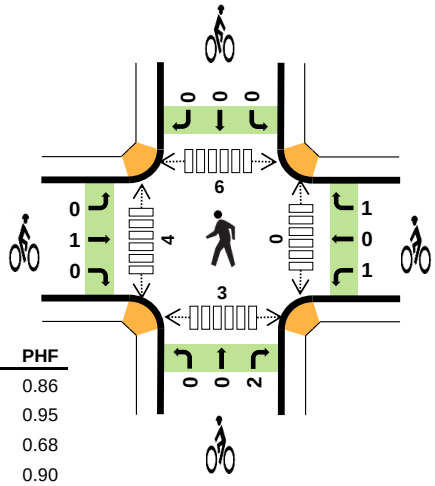
Interval Start	Windsor River Rd			Windsor River Rd			Starr Rd			Starr Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:45 AM	0	0	2	0	0	1	0	0	2	0	0	0	5	5
Count Total	0	0	2	0	0	1	0	0	2	1	0	0	6	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Starr Rd
Windsor River Rd

Date: 11-29-2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM





	HV %:	PHF
EB	0.8%	0.86
WB	1.4%	0.95
NB	0.0%	0.68
SB	0.8%	0.90
TOTAL	0.9%	0.92

Two-Hour Count Summaries

Interval Start		Windsor River Rd Eastbound				Windsor River Rd Westbound				Starr Rd Northbound				Starr Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		**0**	**8**	**24**	**4**	**0**	**8**	**18**	**38**	**0**	**4**	**8**	**8**	**0**	**33**	**18**	**5**	**176**	0
4:15 PM		**0**	**10**	**24**	**4**	**0**	**13**	**23**	**41**	**0**	**2**	**13**	**11**	**0**	**42**	**16**	**8**	**207**	0
4:30 PM		**0**	**4**	**16**	**5**	**0**	**12**	**23**	**42**	**0**	**8**	**24**	**6**	**0**	**39**	**20**	**3**	**202**	0
4:45 PM		**0**	**7**	**21**	**3**	**0**	**12**	**21**	**42**	**0**	**4**	**7**	**8**	**0**	**38**	**12**	**3**	**178**	**763**
5:00 PM		0	3	19	3	0	13	23	38	0	3	14	5	0	34	11	3	169	756
5:15 PM		0	3	16	4	0	18	22	34	0	4	8	11	0	32	11	4	167	716
5:30 PM		0	2	22	2	0	12	24	31	0	2	6	10	0	35	18	4	168	682
5:45 PM		0	3	14	2	0	12	22	32	0	2	11	12	0	30	10	4	154	658
Count Total		0	40	156	27	0	100	176	298	0	29	91	71	0	283	116	34	1,421	0
Peak Hour	**All**	**0**	**29**	**85**	**16**	**0**	**45**	**85**	**163**	**0**	**18**	**52**	**33**	**0**	**152**	**66**	**19**	**763**	**0**
	HV	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**7**	**0**
	HV%	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**1%**	**2%**	**-**	**0%**	**0%**	**0%**	**-**	**1%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**1**	**0**	***1***	**0**	**1**	**5**	**0**	*6*
4:15 PM	**0**	**1**	**0**	**1**	***2***	**0**	**2**	**1**	**0**	***3***	**0**	**1**	**1**	**2**	*4*
4:30 PM	**0**	**2**	**0**	**1**	***3***	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	*1*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**1**	***2***
5:00 PM	0	0	0	0	*0*	0	0	0	2	*2*	0	1	0	1	*2*
5:15 PM	0	0	0	2	*2*	0	0	1	0	*1*	1	3	2	0	*6*
5:30 PM	0	1	0	0	*1*	0	0	0	0	*0*	1	1	0	1	*3*
5:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	1	*1*
Count Total	1	5	0	5	*11*	1	2	3	2	*8*	2	9	8	6	*25*
Peak Hour	**1**	**4**	**0**	**2**	***7***	**1**	**2**	**2**	**0**	***5***	**0**	**4**	**6**	**3**	***13***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor River Rd				Windsor River Rd				Starr Rd				Starr Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2	5
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	4
Count Total	0	0	1	0	0	0	1	4	0	0	0	0	0	4	0	1	11	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**7**	**0**

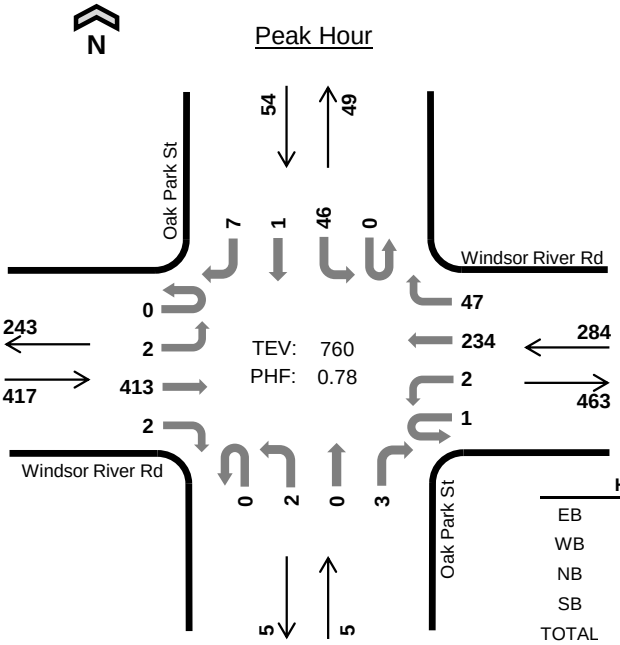
Two-Hour Count Summaries - Bikes

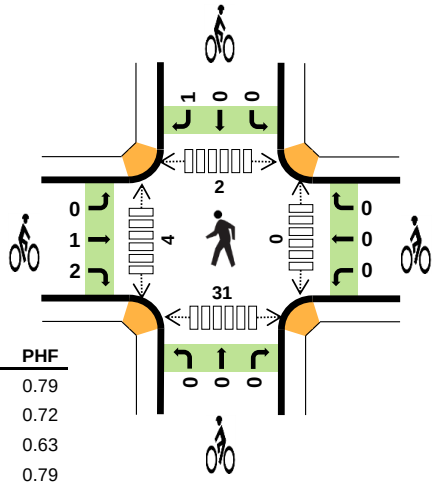
Interval Start	Windsor River Rd			Windsor River Rd			Starr Rd			Starr Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	0
4:15 PM	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	0
4:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
5:00 PM	0	0	0	0	0	0	0	0	0	1	1	0	2	6
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	1	0	1	0	1	0	1	2	1	1	0	8	0
Peak Hour	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Oak Park St
Windsor River Rd

Date: 11-29-2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	1.2%	0.79
WB	2.5%	0.72
NB	0.0%	0.63
SB	0.0%	0.79
TOTAL	1.6%	0.78

Two-Hour Count Summaries

Interval Start		Windsor River Rd Eastbound				Windsor River Rd Westbound				Oak Park St Northbound				Oak Park St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	44	0	0	1	25	2	0	0	0	0	0	7	0	1	80	0
7:15 AM		0	1	59	0	0	2	25	2	0	0	0	0	0	4	0	1	94	0
7:30 AM		0	0	69	0	0	1	50	8	0	1	0	0	0	7	0	0	136	0
7:45 AM		**0**	**0**	**93**	**1**	**0**	**1**	**46**	**3**	**0**	**0**	**0**	**2**	**0**	**6**	**0**	**2**	**154**	464
8:00 AM		**0**	**1**	**84**	**0**	**0**	**0**	**82**	**16**	**0**	**1**	**0**	**0**	**0**	**11**	**0**	**2**	**197**	581
8:15 AM		**0**	**0**	**132**	**0**	**1**	**0**	**67**	**27**	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**3**	**243**	730
8:30 AM		**0**	**1**	**104**	**1**	**0**	**1**	**39**	**1**	**0**	**1**	**0**	**1**	**0**	**16**	**1**	**0**	**166**	**760**
8:45 AM		0	0	69	2	0	1	33	2	0	0	0	3	0	3	0	0	113	719
Count Total		0	3	654	4	1	7	367	61	0	3	0	6	0	67	1	9	1,183	0
Peak Hour	**All**	**0**	**2**	**413**	**2**	**1**	**2**	**234**	**47**	**0**	**2**	**0**	**3**	**0**	**46**	**1**	**7**	**760**	**0**
	HV	**0**	**0**	**5**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**
	HV%	**-**	**0%**	**1%**	**0%**	**0%**	**0%**	**3%**	**0%**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**0%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	1	0	0	*3*	0	0	0	0	*0*	0	0	2	2	*4*
7:15 AM	3	4	0	0	*7*	0	0	0	0	*0*	0	1	0	0	*1*
7:30 AM	0	2	0	0	*2*	1	0	0	0	*1*	0	0	0	1	*1*
7:45 AM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**2**	**0**	*2*
8:00 AM	**1**	**2**	**0**	**0**	***3***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**26**	*26*
8:15 AM	**3**	**3**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**2**	*3*
8:30 AM	**1**	**2**	**0**	**0**	***3***	**1**	**0**	**0**	**1**	***2***	**0**	**3**	**0**	**3**	***6***
8:45 AM	0	0	0	0	*0*	0	1	0	0	*1*	0	2	0	1	*3*
Count Total	10	14	0	0	*24*	4	1	0	1	*6*	0	7	4	35	*46*
Peak Hour	**5**	**7**	**0**	**0**	***12***	**3**	**0**	**0**	**1**	***4***	**0**	**4**	**2**	**31**	***37***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor River Rd				Windsor River Rd				Oak Park St				Oak Park St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
7:15 AM	0	0	3	0	0	0	3	1	0	0	0	0	0	0	0	0	7	0
7:30 AM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	12
8:00 AM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	12
8:15 AM	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	11
8:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**12**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Count Total	0	0	10	0	0	0	13	1	0	0	0	0	0	0	0	0	24	0
Peak Hour	**0**	**0**	**5**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**

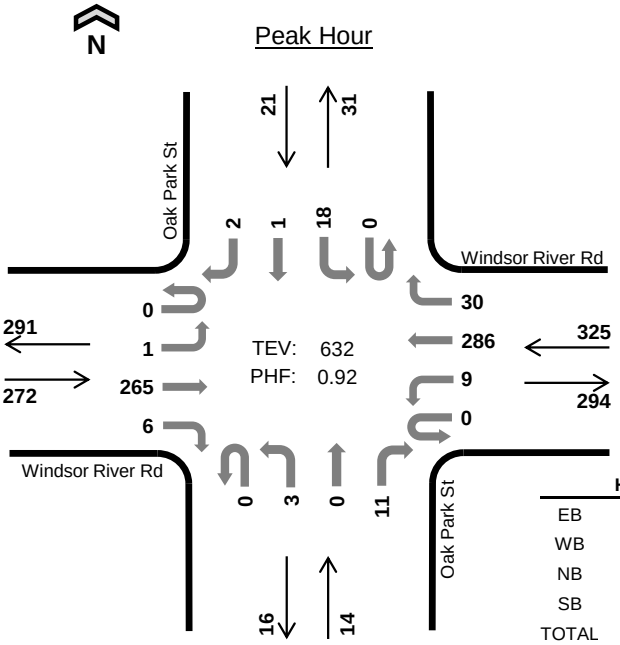
Two-Hour Count Summaries - Bikes

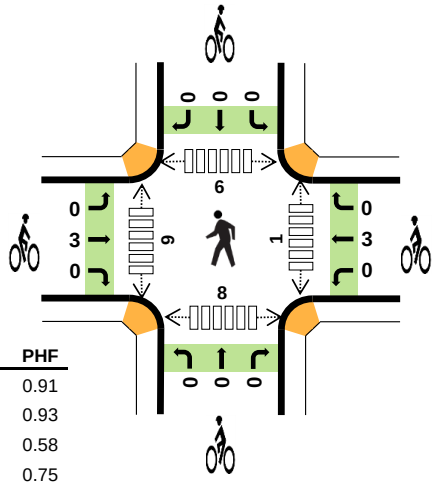
Interval Start	Windsor River Rd			Windsor River Rd			Oak Park St			Oak Park St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
8:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**4**
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	4
Count Total	0	2	2	0	1	0	0	0	0	0	0	1	6	0
Peak Hour	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Oak Park St
Windsor River Rd

Date: 11-29-2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM





	HV %:	PHF
EB	1.5%	0.91
WB	1.2%	0.93
NB	0.0%	0.58
SB	0.0%	0.75
TOTAL	1.3%	0.92

Two-Hour Count Summaries

Interval Start	Windsor River Rd Eastbound				Windsor River Rd Westbound				Oak Park St Northbound				Oak Park St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**64**	**3**	**0**	**5**	**60**	**14**	**0**	**1**	**0**	**5**	**0**	**3**	**0**	**1**	**156**	0
4:15 PM	**0**	**0**	**74**	**1**	**0**	**2**	**77**	**6**	**0**	**2**	**0**	**2**	**0**	**7**	**0**	**0**	**171**	0
4:30 PM	**0**	**0**	**60**	**2**	**0**	**1**	**81**	**5**	**0**	**0**	**0**	**2**	**0**	**3**	**1**	**1**	**156**	0
4:45 PM	**0**	**1**	**67**	**0**	**0**	**1**	**68**	**5**	**0**	**0**	**0**	**2**	**0**	**5**	**0**	**0**	**149**	**632**
5:00 PM	0	0	55	2	0	1	74	7	0	1	1	4	0	9	0	1	155	631
5:15 PM	0	1	54	1	0	2	73	10	0	0	0	2	0	5	0	1	149	609
5:30 PM	0	0	68	0	0	2	70	8	0	1	0	4	0	6	0	0	159	612
5:45 PM	0	1	56	0	0	0	68	6	0	0	0	0	0	3	0	0	134	597
Count Total	0	3	498	9	0	14	571	61	0	5	1	21	0	41	1	4	1,229	0
Peak Hour All	**0**	**1**	**265**	**6**	**0**	**9**	**286**	**30**	**0**	**3**	**0**	**11**	**0**	**18**	**1**	**2**	**632**	**0**
Peak Hour HV	**0**	**0**	**4**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**
Peak Hour HV%	**-**	**0%**	**2%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**1**	**1**	**0**	**0**	***2***	**1**	**1**	**0**	**0**	***2***	**1**	**4**	**4**	**0**	*9*
4:15 PM	**2**	**1**	**0**	**0**	***3***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**1**	**4**	*5*
4:30 PM	**1**	**2**	**0**	**0**	***3***	**2**	**0**	**0**	**0**	***2***	**0**	**5**	**1**	**0**	*6*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**4**	***4***
5:00 PM	0	0	0	0	*0*	0	1	0	0	*1*	0	1	0	1	*2*
5:15 PM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	1	*1*
5:30 PM	0	1	0	0	*1*	0	0	0	0	*0*	0	0	0	1	*1*
5:45 PM	1	0	0	0	*1*	0	0	0	0	*0*	1	4	1	1	*7*
Count Total	6	5	0	0	*11*	3	4	0	0	*7*	2	14	7	12	*35*
Peak Hour	**4**	**4**	**0**	**0**	***8***	**3**	**3**	**0**	**0**	***6***	**1**	**9**	**6**	**8**	***24***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor River Rd				Windsor River Rd				Oak Park St				Oak Park St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
4:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	2
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	3
Count Total	0	0	6	0	0	0	5	0	0	0	0	0	0	0	0	0	11	0
Peak Hour	**0**	**0**	**4**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**

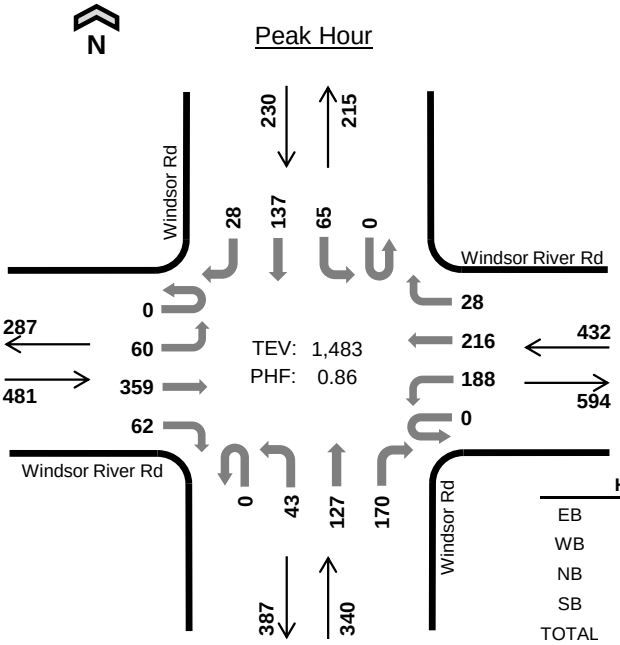
Two-Hour Count Summaries - Bikes

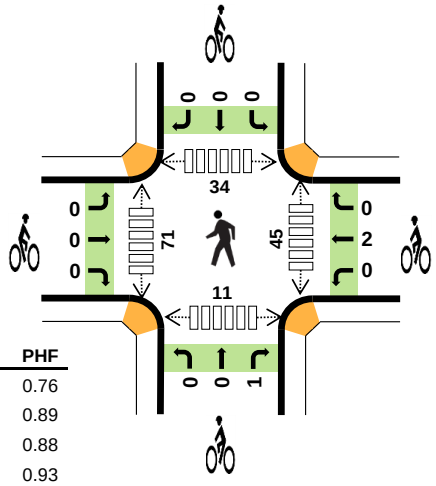
Interval Start	Windsor River Rd			Windsor River Rd			Oak Park St			Oak Park St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:15 PM	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:30 PM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	3	0	0	4	0	0	0	0	0	0	0	7	0
Peak Hour	**0**	**3**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Windsor Rd
Windsor River Rd

Date: 11-29-2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV %:	PHF
EB	1.0%	0.76
WB	3.2%	0.89
NB	1.5%	0.88
SB	3.9%	0.93
TOTAL	2.2%	0.86

Two-Hour Count Summaries

Interval Start	Windsor River Rd Eastbound				Windsor River Rd Westbound				Windsor Rd Northbound				Windsor Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	5	43	10	0	18	20	3	0	2	15	20	0	18	10	6	170	0
7:15 AM	0	5	64	6	0	15	23	2	0	4	11	28	0	18	12	6	194	0
7:30 AM	0	7	90	4	0	22	43	1	0	10	28	36	0	13	20	13	287	0
7:45 AM	0	7	82	17	0	25	35	5	0	6	25	42	0	17	28	6	295	946
8:00 AM	**0**	**13**	**83**	**12**	**0**	**33**	**74**	**2**	**0**	**20**	**30**	**47**	**0**	**12**	**28**	**11**	**365**	1,141
8:15 AM	**0**	**20**	**119**	**20**	**0**	**38**	**77**	**7**	**0**	**9**	**40**	**43**	**0**	**17**	**27**	**12**	**429**	1,376
8:30 AM	**0**	**14**	**102**	**14**	**0**	**54**	**30**	**10**	**0**	**9**	**33**	**26**	**0**	**17**	**42**	**3**	**354**	1,443
8:45 AM	**0**	**13**	**55**	**16**	**0**	**63**	**35**	**9**	**0**	**5**	**24**	**54**	**0**	**19**	**40**	**2**	**335**	**1,483**
Count Total	0	84	638	99	0	268	337	39	0	65	206	296	0	131	207	59	2,429	0
Peak Hour All	**0**	**60**	**359**	**62**	**0**	**188**	**216**	**28**	**0**	**43**	**127**	**170**	**0**	**65**	**137**	**28**	**1,483**	**0**
Peak Hour HV	**0**	**0**	**5**	**0**	**0**	**6**	**8**	**0**	**0**	**1**	**2**	**2**	**0**	**5**	**4**	**0**	**33**	**0**
Peak Hour HV%	**-**	**0%**	**1%**	**0%**	**-**	**3%**	**4%**	**0%**	**-**	**2%**	**2%**	**1%**	**-**	**8%**	**3%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	3	1	1	*7*	0	0	0	0	*0*	2	1	0	0	*3*
7:15 AM	4	2	1	4	*11*	0	0	0	0	*0*	1	3	0	0	*4*
7:30 AM	0	2	2	1	*5*	0	0	0	0	*0*	3	4	3	1	*11*
7:45 AM	0	2	0	1	*3*	0	0	0	0	*0*	0	36	2	0	*38*
8:00 AM	**1**	**2**	**1**	**4**	***8***	**0**	**0**	**0**	**0**	***0***	**6**	**8**	**6**	**1**	*21*
8:15 AM	**3**	**7**	**1**	**2**	***13***	**0**	**0**	**0**	**0**	***0***	**8**	**9**	**8**	**1**	*26*
8:30 AM	**1**	**3**	**2**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**19**	**21**	**7**	**2**	*49*
8:45 AM	**0**	**2**	**1**	**3**	***6***	**0**	**2**	**1**	**0**	***3***	**12**	**33**	**13**	**7**	***65***
Count Total	11	23	9	16	*59*	0	2	1	0	*3*	51	115	39	12	*217*
Peak Hour	**5**	**14**	**5**	**9**	***33***	**0**	**2**	**1**	**0**	***3***	**45**	**71**	**34**	**11**	***161***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor River Rd				Windsor River Rd				Windsor Rd				Windsor Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	2	0	1	1	1	0	0	0	1	0	0	1	0	7	0
7:15 AM	0	0	3	1	0	0	2	0	0	1	0	0	0	2	1	1	11	0
7:30 AM	0	0	0	0	0	2	0	0	0	2	0	0	0	0	1	0	5	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	0	0	1	0	3	26
8:00 AM	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**2**	**0**	**8**	27
8:15 AM	**0**	**0**	**3**	**0**	**0**	**3**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**13**	29
8:30 AM	**0**	**0**	**1**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**6**	30
8:45 AM	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	**1**	**0**	**6**	**33**
Count Total	0	0	8	3	0	9	11	3	0	4	2	3	0	7	8	1	59	0
Peak Hour	**0**	**0**	**5**	**0**	**0**	**6**	**8**	**0**	**0**	**1**	**2**	**2**	**0**	**5**	**4**	**0**	**33**	**0**

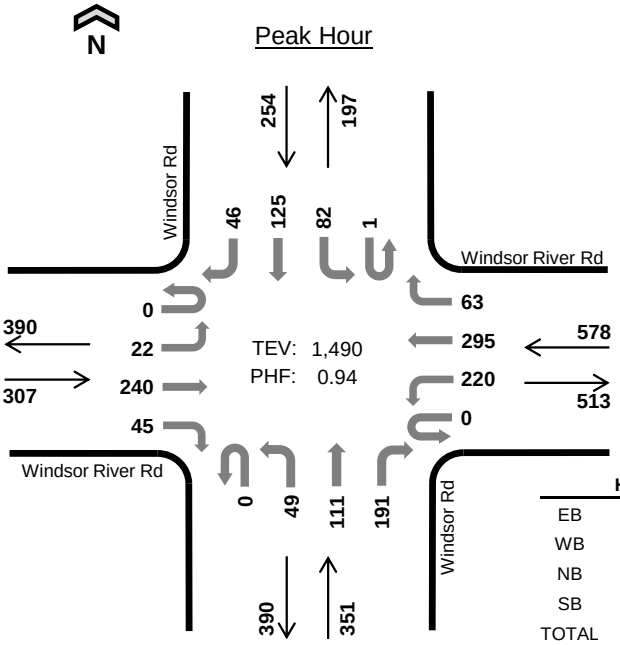
Two-Hour Count Summaries - Bikes

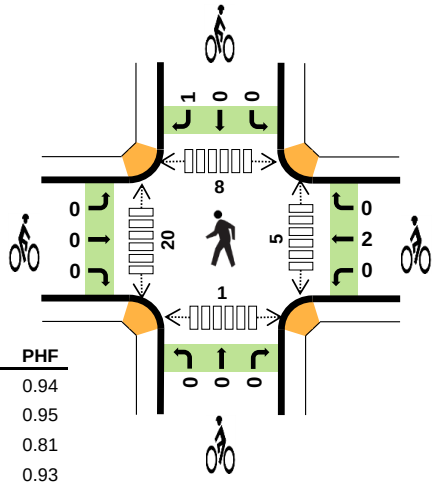
Interval Start	Windsor River Rd			Windsor River Rd			Windsor Rd			Windsor Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:45 AM	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**3**
Count Total	0	0	0	0	2	0	0	0	1	0	0	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Windsor Rd
Windsor River Rd

Date: 11-29-2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	1.0%	0.94
WB	0.5%	0.95
NB	0.0%	0.81
SB	2.0%	0.93
TOTAL	0.7%	0.94

Two-Hour Count Summaries

Interval Start		Windsor River Rd Eastbound				Windsor River Rd Westbound				Windsor Rd Northbound				Windsor Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	10	58	11	0	31	79	18	0	7	39	56	0	20	20	7	356	0
4:15 PM		0	8	62	10	0	47	75	13	0	6	27	32	0	17	31	9	337	0
4:30 PM		0	5	63	9	0	48	86	15	0	6	23	39	0	23	25	14	356	0
4:45 PM		0	12	62	5	0	37	72	23	0	13	23	36	0	21	32	12	348	1,397
5:00 PM		**0**	**3**	**64**	**14**	**0**	**51**	**73**	**15**	**0**	**12**	**30**	**36**	**1**	**24**	**33**	**10**	**366**	1,407
5:15 PM		**0**	**7**	**57**	**8**	**0**	**60**	**76**	**16**	**0**	**13**	**22**	**46**	**0**	**22**	**28**	**17**	**372**	1,442
5:30 PM		**0**	**9**	**57**	**16**	**0**	**53**	**79**	**17**	**0**	**13**	**33**	**63**	**0**	**20**	**32**	**4**	**396**	1,482
5:45 PM		**0**	**3**	**62**	**7**	**0**	**56**	**67**	**15**	**0**	**11**	**26**	**46**	**0**	**16**	**32**	**15**	**356**	**1,490**
Count Total		0	57	485	80	0	383	607	132	0	81	223	354	1	163	233	88	2,887	0
Peak Hour	**All**	**0**	**22**	**240**	**45**	**0**	**220**	**295**	**63**	**0**	**49**	**111**	**191**	**1**	**82**	**125**	**46**	**1,490**	**0**
	HV	**0**	**0**	**2**	**1**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**0**	**11**	**0**
	HV%	**-**	**0%**	**1%**	**2%**	**-**	**1%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**2%**	**2%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	2	2	0	*5*	0	0	0	0	*0*	9	10	14	2	*35*
4:15 PM	2	2	0	1	*5*	0	0	2	0	*2*	0	5	4	0	*9*
4:30 PM	1	4	1	2	*8*	1	0	1	0	*2*	4	3	0	0	*7*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	3	*4*
5:00 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**8**	**3**	**0**	*11*
5:15 PM	**1**	**1**	**0**	**1**	***3***	**0**	**1**	**0**	**0**	***1***	**2**	**6**	**2**	**0**	*10*
5:30 PM	**1**	**2**	**0**	**2**	***5***	**0**	**1**	**0**	**0**	***1***	**0**	**2**	**2**	**0**	*4*
5:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	***1***	**3**	**4**	**1**	**1**	***9***
Count Total	7	11	3	8	*29*	1	2	3	1	*7*	19	38	26	6	*89*
Peak Hour	**3**	**3**	**0**	**5**	***11***	**0**	**2**	**0**	**1**	***3***	**5**	**20**	**8**	**1**	***34***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor River Rd				Windsor River Rd				Windsor Rd				Windsor Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	1	1	0	0	0	0	2	0	0	0	0	5	0
4:15 PM	0	0	1	1	0	0	2	0	0	0	0	0	0	0	1	0	5	0
4:30 PM	0	0	1	0	0	0	3	1	0	0	1	0	0	1	1	0	8	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	15
5:15 PM	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	13
5:30 PM	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**5**	10
5:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**11**
Count Total	0	0	5	2	0	3	7	1	0	0	1	2	0	3	5	0	29	0
Peak Hour	**0**	**0**	**2**	**1**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**0**	**11**	**0**

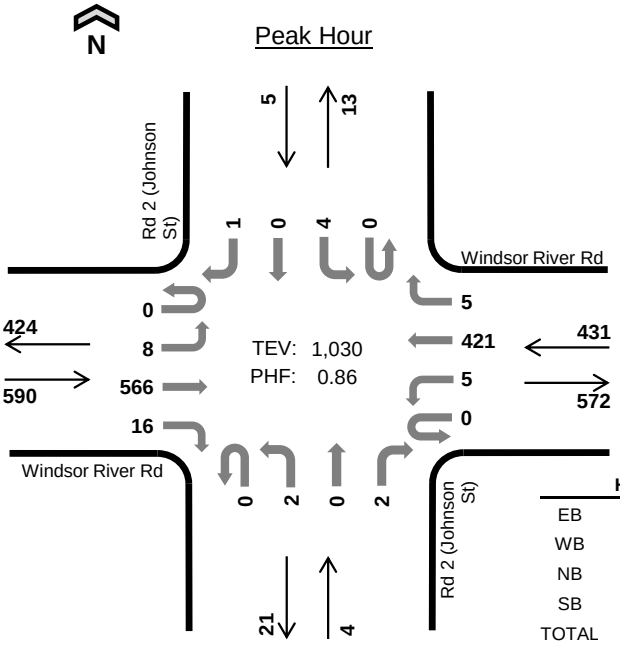
Two-Hour Count Summaries - Bikes

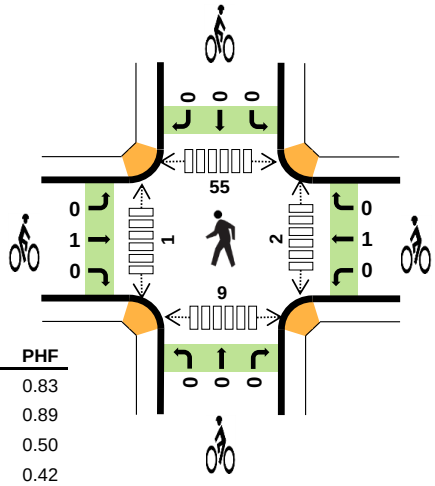
Interval Start	Windsor River Rd			Windsor River Rd			Windsor Rd			Windsor Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	1	0	0	0	0	2	0
4:30 PM	1	0	0	0	0	0	0	0	1	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:15 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
5:30 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**3**
Count Total	1	0	0	0	2	0	1	1	1	0	0	1	7	0
Peak Hour	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Rd 2 (Johnson St)
Windsor River Rd

Date: 11-29-2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV %:	PHF
EB	2.0%	0.83
WB	3.5%	0.89
NB	0.0%	0.50
SB	0.0%	0.42
TOTAL	2.6%	0.86

Two-Hour Count Summaries

Interval Start	Windsor River Rd Eastbound				Windsor River Rd Westbound				Rd 2 (Johnson St) Northbound				Rd 2 (Johnson St) Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	80	0	0	0	41	1	0	0	1	1	0	0	0	1	126	0
7:15 AM	0	2	107	1	0	0	40	0	0	0	0	0	0	0	0	0	150	0
7:30 AM	0	2	137	1	0	0	64	1	0	2	0	1	0	0	0	0	208	0
7:45 AM	0	3	132	5	0	1	67	1	0	1	0	0	0	0	0	0	210	694
8:00 AM	**0**	**1**	**138**	**3**	**0**	**0**	**105**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**250**	818
8:15 AM	**0**	**2**	**162**	**13**	**0**	**2**	**119**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**301**	969
8:30 AM	**0**	**3**	**142**	**0**	**0**	**1**	**92**	**2**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**242**	1,003
8:45 AM	**0**	**2**	**124**	**0**	**0**	**2**	**105**	**3**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**237**	**1,030**
Count Total	0	16	1,022	23	0	6	633	8	0	5	1	4	0	4	0	2	1,724	0
Peak Hour All	**0**	**8**	**566**	**16**	**0**	**5**	**421**	**5**	**0**	**2**	**0**	**2**	**0**	**4**	**0**	**1**	**1,030**	**0**
Peak Hour HV	**0**	**0**	**12**	**0**	**0**	**0**	**13**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27**	**0**
Peak Hour HV%	**-**	**0%**	**2%**	**0%**	**-**	**0%**	**3%**	**40%**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	4	0	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	5	3	0	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	1	1	0	*2*	0	0	0	0	*0*	0	0	5	0	*5*
7:45 AM	0	4	0	0	*4*	0	0	0	0	*0*	0	0	2	1	*3*
8:00 AM	**3**	**1**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**9**	**1**	*10*
8:15 AM	**4**	**7**	**0**	**0**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**11**	**0**	*11*
8:30 AM	**2**	**3**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**18**	**1**	*20*
8:45 AM	**3**	**4**	**0**	**0**	***7***	**1**	**1**	**0**	**0**	***2***	**2**	**0**	**17**	**7**	***26***
Count Total	18	27	1	0	*46*	1	1	0	0	*2*	2	1	62	10	*75*
Peak Hour	**12**	**15**	**0**	**0**	***27***	**1**	**1**	**0**	**0**	***2***	**2**	**1**	**55**	**9**	***67***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor River Rd				Windsor River Rd				Rd 2 (Johnson St)				Rd 2 (Johnson St)				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5	0
7:15 AM	0	0	4	1	0	0	3	0	0	0	0	0	0	0	0	0	8	0
7:30 AM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	4	19
8:00 AM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	18
8:15 AM	**0**	**0**	**4**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	21
8:30 AM	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	24
8:45 AM	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**27**
Count Total	0	0	17	1	0	0	24	3	0	0	0	1	0	0	0	0	46	0
Peak Hour	**0**	**0**	**12**	**0**	**0**	**0**	**13**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27**	**0**

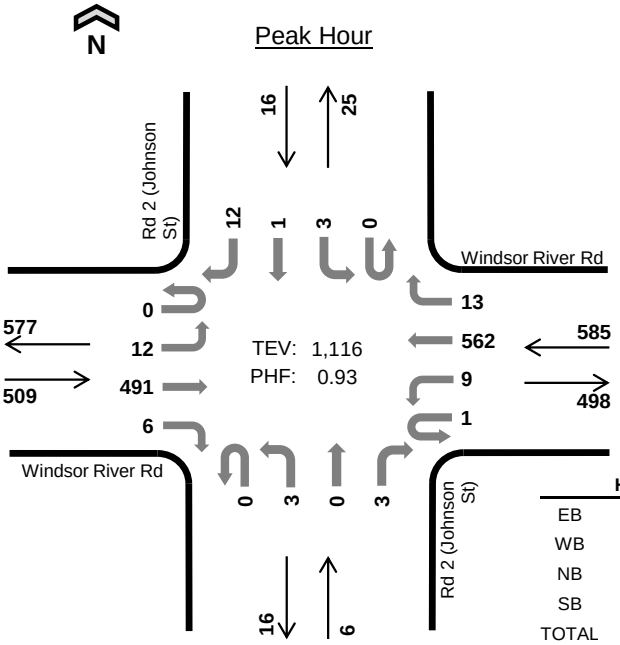
Two-Hour Count Summaries - Bikes

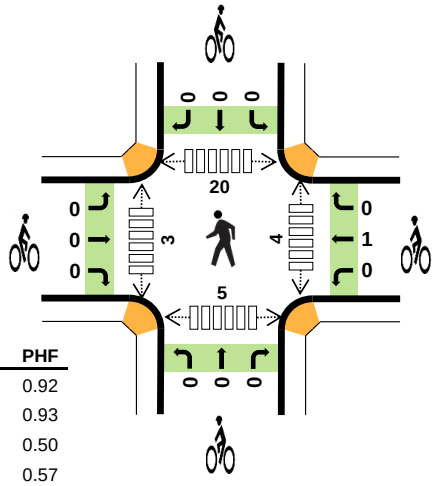
Interval Start	Windsor River Rd			Windsor River Rd			Rd 2 (Johnson St)			Rd 2 (Johnson St)			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:45 AM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**
Count Total	0	1	0	0	1	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Rd 2 (Johnson St)
Windsor River Rd

Date: 11-29-2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	0.8%	0.92
WB	0.5%	0.93
NB	0.0%	0.50
SB	0.0%	0.57
TOTAL	0.6%	0.93

Two-Hour Count Summaries

Interval Start	Windsor River Rd Eastbound				Windsor River Rd Westbound				Rd 2 (Johnson St) Northbound				Rd 2 (Johnson St) Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	5	128	1	0	2	126	4	0	0	0	1	0	1	0	0	268	0
4:15 PM	0	3	110	1	0	1	135	3	0	0	0	1	0	0	0	4	258	0
4:30 PM	0	7	116	1	0	1	145	3	0	1	0	0	0	1	0	2	277	0
4:45 PM	0	3	114	2	0	0	127	6	0	0	0	1	0	0	0	6	259	1,062
5:00 PM	**0**	**1**	**120**	**2**	**1**	**1**	**135**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**263**	1,057
5:15 PM	**0**	**2**	**124**	**1**	**0**	**3**	**151**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**287**	1,086
5:30 PM	**0**	**5**	**131**	**2**	**0**	**3**	**144**	**7**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**5**	**301**	1,110
5:45 PM	**0**	**4**	**116**	**1**	**0**	**2**	**132**	**1**	**0**	**1**	**0**	**2**	**0**	**1**	**0**	**5**	**265**	**1,116**
Count Total	0	30	959	11	1	13	1,095	29	0	4	0	6	0	5	1	24	2,178	0
Peak Hour All	**0**	**12**	**491**	**6**	**1**	**9**	**562**	**13**	**0**	**3**	**0**	**3**	**0**	**3**	**1**	**12**	**1,116**	**0**
Peak Hour HV	**0**	**0**	**4**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**
Peak Hour HV%	**-**	**0%**	**1%**	**0%**	**0%**	**0%**	**1%**	**0%**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	3	2	0	0	*5*	0	0	0	0	*0*	1	0	19	2	*22*
4:15 PM	1	2	0	0	*3*	1	0	0	0	*1*	1	1	7	2	*11*
4:30 PM	2	4	0	0	*6*	2	0	0	0	*2*	0	0	8	0	*8*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	4	0	4	1	*9*
5:00 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**4**	**1**	*5*
5:15 PM	**1**	**1**	**0**	**0**	***2***	**0**	**1**	**0**	**0**	***1***	**0**	**2**	**3**	**0**	*5*
5:30 PM	**1**	**2**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**8**	**3**	*13*
5:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**5**	**1**	***9***
Count Total	10	11	0	0	*21*	3	1	0	0	*4*	10	4	58	10	*82*
Peak Hour	**4**	**3**	**0**	**0**	***7***	**0**	**1**	**0**	**0**	***1***	**4**	**3**	**20**	**5**	***32***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor River Rd				Windsor River Rd				Rd 2 (Johnson St)				Rd 2 (Johnson St)				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	1	0	0	2	0	0	0	0	0	0	0	0	0	5	0
4:15 PM	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	3	0
4:30 PM	0	0	2	0	0	0	4	0	0	0	0	0	0	0	0	0	6	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	10
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	9
5:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	6
5:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**
Count Total	0	0	9	1	0	0	11	0	0	0	0	0	0	0	0	0	21	0
Peak Hour	**0**	**0**	**4**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**

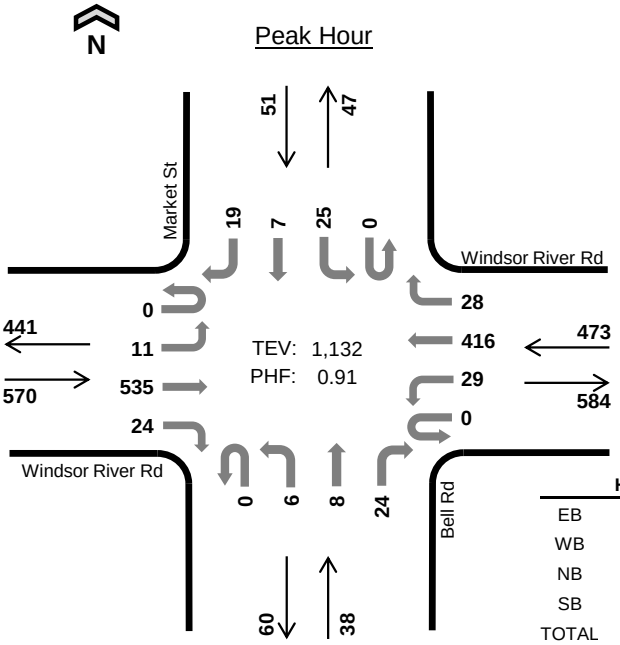
Two-Hour Count Summaries - Bikes

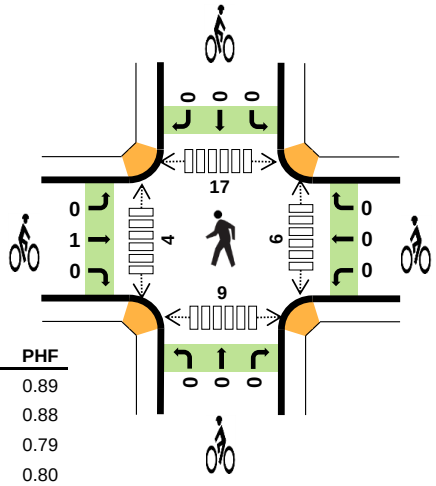
Interval Start	Windsor River Rd			Windsor River Rd			Rd 2 (Johnson St)			Rd 2 (Johnson St)			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:15 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	3	0	0	1	0	0	0	0	0	0	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Bell Rd
Windsor River Rd

Date: 11-29-2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV %:	PHF
EB	2.3%	0.89
WB	2.5%	0.88
NB	2.6%	0.79
SB	0.0%	0.80
TOTAL	2.3%	0.91

Two-Hour Count Summaries

Interval Start		Windsor River Rd Eastbound				Windsor River Rd Westbound				Bell Rd Northbound				Market St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	1	77	4	0	1	43	6	0	1	1	8	0	4	1	1	148	0
7:15 AM		0	3	102	1	0	3	41	6	0	1	1	1	0	7	1	1	168	0
7:30 AM		0	3	135	3	0	2	56	8	0	1	1	7	0	6	2	3	227	0
7:45 AM		0	2	123	6	0	3	79	6	0	1	2	1	0	7	0	4	234	777
8:00 AM		**0**	**6**	**129**	**5**	**0**	**5**	**99**	**8**	**0**	**1**	**0**	**9**	**0**	**4**	**4**	**5**	**275**	904
8:15 AM		**0**	**5**	**146**	**10**	**0**	**6**	**120**	**8**	**0**	**1**	**2**	**4**	**0**	**4**	**1**	**4**	**311**	1,047
8:30 AM		**0**	**0**	**134**	**6**	**0**	**9**	**93**	**6**	**0**	**0**	**4**	**5**	**0**	**13**	**0**	**3**	**273**	1,093
8:45 AM		**0**	**0**	**126**	**3**	**0**	**9**	**104**	**6**	**0**	**4**	**2**	**6**	**0**	**4**	**2**	**7**	**273**	**1,132**
Count Total		0	20	972	38	0	38	635	54	0	10	13	41	0	49	11	28	1,909	0
Peak Hour	**All**	**0**	**11**	**535**	**24**	**0**	**29**	**416**	**28**	**0**	**6**	**8**	**24**	**0**	**25**	**7**	**19**	**1,132**	**0**
	HV	**0**	**0**	**13**	**0**	**0**	**0**	**11**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**26**	**0**
	HV%	**-**	**0%**	**2%**	**0%**	**-**	**0%**	**3%**	**4%**	**-**	**0%**	**13%**	**0%**	**-**	**0%**	**0%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	3	0	1	*5*	0	0	0	0	*0*	2	0	2	0	*4*
7:15 AM	4	3	0	0	*7*	0	0	0	0	*0*	1	0	0	1	*2*
7:30 AM	1	1	1	1	*4*	0	0	0	0	*0*	2	0	4	0	*6*
7:45 AM	0	3	0	1	*4*	0	0	0	0	*0*	1	0	2	1	*4*
8:00 AM	**4**	**1**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**2**	**1**	**4**	*8*
8:15 AM	**4**	**5**	**0**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**3**	**2**	*7*
8:30 AM	**1**	**3**	**1**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**6**	**0**	*7*
8:45 AM	**4**	**3**	**0**	**0**	***7***	**1**	**0**	**0**	**0**	***1***	**4**	**0**	**7**	**3**	***14***
Count Total	19	22	2	3	*46*	1	0	0	0	*1*	12	4	25	11	*52*
Peak Hour	**13**	**12**	**1**	**0**	***26***	**1**	**0**	**0**	**0**	***1***	**6**	**4**	**17**	**9**	***36***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor River Rd				Windsor River Rd				Bell Rd				Market St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	1	0	5	0
7:15 AM	0	0	4	0	0	0	3	0	0	0	0	0	0	0	0	0	7	0
7:30 AM	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	4	0
7:45 AM	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	1	4	20
8:00 AM	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	20
8:15 AM	**0**	**0**	**4**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	22
8:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	23
8:45 AM	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**26**
Count Total	0	0	19	0	0	0	21	1	0	0	2	0	0	0	2	1	46	0
Peak Hour	**0**	**0**	**13**	**0**	**0**	**0**	**11**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**26**	**0**

Two-Hour Count Summaries - Bikes

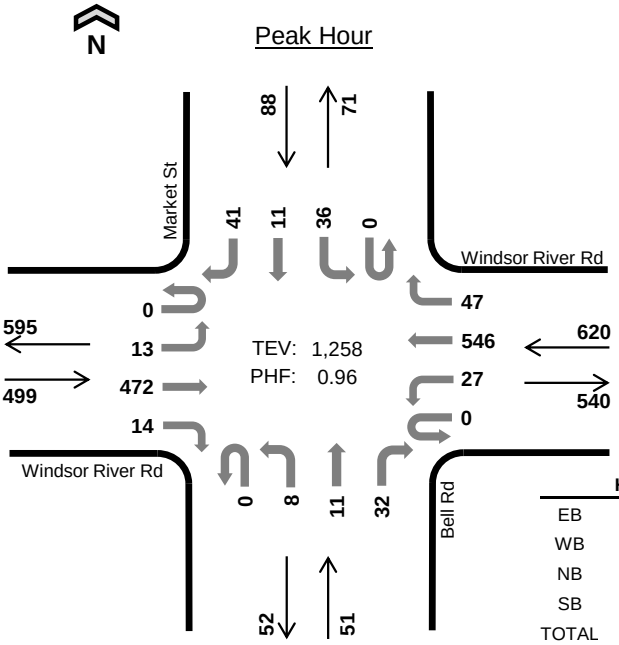
Interval Start	Windsor River Rd			Windsor River Rd			Bell Rd			Market St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

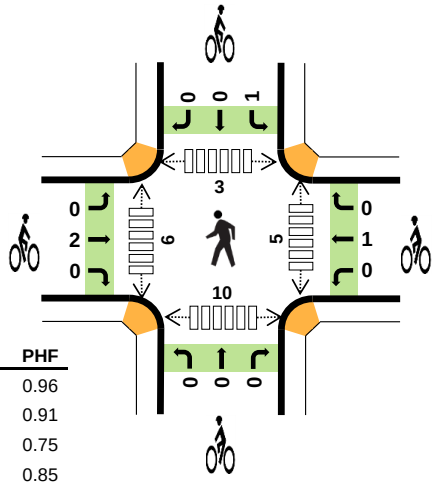
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Bell Rd
Windsor River Rd

Peak Hour

Date: 11-29-2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	0.8%	0.96
WB	0.5%	0.91
NB	2.0%	0.75
SB	1.1%	0.85
TOTAL	0.7%	0.96

Two-Hour Count Summaries

Interval Start	Windsor River Rd Eastbound				Windsor River Rd Westbound				Bell Rd Northbound				Market St Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	3	132	6	0	10	125	12	0	2	0	7	0	13	2	9	321	0
4:15 PM	0	1	106	7	0	9	131	7	0	2	2	11	0	11	3	12	302	0
4:30 PM	0	3	110	2	0	10	136	16	0	6	2	9	0	5	1	9	309	0
4:45 PM	0	1	113	1	0	9	129	11	0	1	2	8	0	2	2	6	285	1,217
5:00 PM	**0**	**6**	**111**	**2**	**0**	**3**	**124**	**6**	**0**	**3**	**3**	**11**	**0**	**9**	**2**	**10**	**290**	1,186
5:15 PM	**0**	**0**	**120**	**4**	**0**	**5**	**144**	**17**	**0**	**4**	**1**	**9**	**0**	**7**	**4**	**11**	**326**	1,210
5:30 PM	**0**	**6**	**114**	**6**	**0**	**11**	**144**	**15**	**0**	**0**	**4**	**5**	**0**	**5**	**4**	**10**	**324**	1,225
5:45 PM	**0**	**1**	**127**	**2**	**0**	**8**	**134**	**9**	**0**	**1**	**3**	**7**	**0**	**15**	**1**	**10**	**318**	**1,258**
Count Total	0	21	933	30	0	65	1,067	93	0	19	17	67	0	67	19	77	2,475	0
Peak Hour All	**0**	**13**	**472**	**14**	**0**	**27**	**546**	**47**	**0**	**8**	**11**	**32**	**0**	**36**	**11**	**41**	**1,258**	**0**
Peak Hour HV	**0**	**0**	**4**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**9**	**0**
Peak Hour HV%	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**9%**	**0%**	**-**	**0%**	**9%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	4	1	1	*7*	0	0	0	0	*0*	0	0	5	1	*6*
4:15 PM	2	1	1	0	*4*	0	1	0	0	*1*	0	0	2	0	*2*
4:30 PM	2	3	1	1	*7*	1	1	0	0	*2*	0	3	5	6	*14*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	5	0	2	1	*8*
5:00 PM	**1**	**0**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**1**	*3*
5:15 PM	**1**	**1**	**0**	**0**	***2***	**0**	**1**	**0**	**1**	***2***	**1**	**0**	**1**	**1**	*3*
5:30 PM	**1**	**2**	**0**	**1**	***4***	**1**	**0**	**0**	**0**	***1***	**3**	**3**	**1**	**3**	*10*
5:45 PM	**1**	**0**	**0**	**0**	***1***	**1**	**0**	**0**	**0**	***1***	**0**	**3**	**0**	**5**	***8***
Count Total	9	11	4	3	*27*	3	3	0	1	*7*	10	9	17	18	*54*
Peak Hour	**4**	**3**	**1**	**1**	***9***	**2**	**1**	**0**	**1**	***4***	**5**	**6**	**3**	**10**	***24***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor River Rd				Windsor River Rd				Bell Rd				Market St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	3	1	0	0	0	1	0	1	0	0	7	0
4:15 PM	0	0	2	0	0	0	1	0	0	0	1	0	0	0	0	0	4	0
4:30 PM	0	0	2	0	0	0	3	0	0	1	0	0	0	0	1	0	7	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	13
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	11
5:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	8
5:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**
Count Total	0	0	9	0	0	0	10	1	0	1	2	1	0	1	2	0	27	0
Peak Hour	**0**	**0**	**4**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**9**	**0**

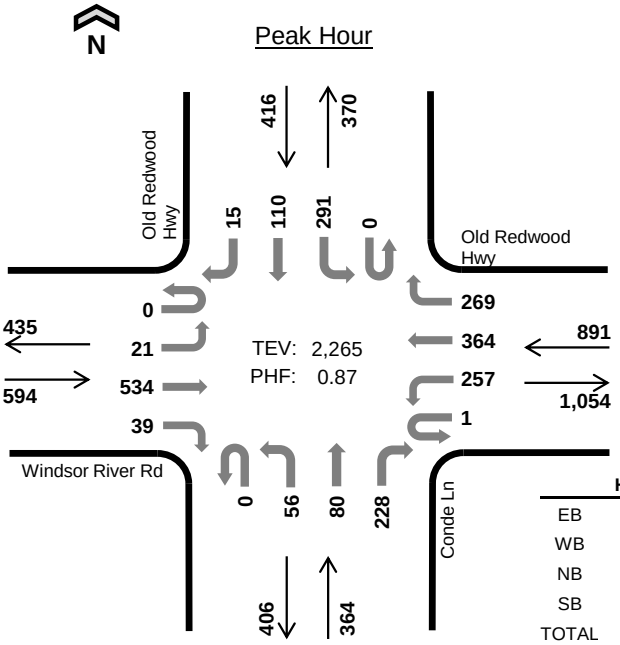
Two-Hour Count Summaries - Bikes

Interval Start	Windsor River Rd			Windsor River Rd			Bell Rd			Market St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:30 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:15 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	4
5:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	3
5:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**
Count Total	0	3	0	0	3	0	0	0	0	1	0	0	7	0
Peak Hour	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	**0**

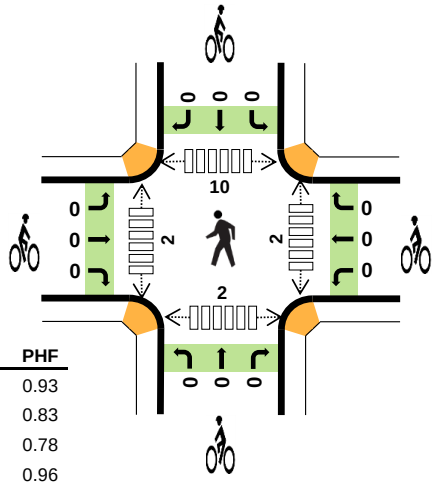
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Conde Ln
Windsor River Rd

Date: 11-29-2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	1.7%	0.93
WB	1.7%	0.83
NB	3.3%	0.78
SB	1.9%	0.96
TOTAL	2.0%	0.87



Two-Hour Count Summaries

Interval Start	Windsor River Rd Eastbound				Old Redwood Hwy Westbound				Conde Ln Northbound				Old Redwood Hwy Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	5	82	5	0	20	45	41	0	4	3	12	0	40	6	4	267	0
7:15 AM	0	5	109	7	0	13	45	37	0	7	3	20	0	62	4	3	315	0
7:30 AM	0	3	142	6	0	20	63	41	0	5	3	32	0	48	9	5	377	0
7:45 AM	**0**	**5**	**118**	**12**	**0**	**57**	**77**	**72**	**0**	**8**	**11**	**45**	**0**	**80**	**25**	**2**	**512**	1,471
8:00 AM	**0**	**1**	**131**	**9**	**0**	**77**	**81**	**66**	**0**	**19**	**18**	**67**	**0**	**77**	**28**	**3**	**577**	1,781
8:15 AM	**0**	**7**	**137**	**14**	**1**	**88**	**104**	**74**	**0**	**17**	**34**	**65**	**0**	**64**	**39**	**4**	**648**	2,114
8:30 AM	**0**	**8**	**148**	**4**	**0**	**35**	**102**	**57**	**0**	**12**	**17**	**51**	**0**	**70**	**18**	**6**	**528**	**2,265**
8:45 AM	0	6	113	8	0	25	108	65	0	8	13	13	0	64	16	3	442	2,195
Count Total	0	40	980	65	1	335	625	453	0	80	102	305	0	505	145	30	3,666	0
Peak Hour All	**0**	**21**	**534**	**39**	**1**	**257**	**364**	**269**	**0**	**56**	**80**	**228**	**0**	**291**	**110**	**15**	**2,265**	**0**
Peak Hour HV	**0**	**1**	**7**	**2**	**0**	**3**	**8**	**4**	**0**	**2**	**4**	**6**	**0**	**3**	**5**	**0**	**45**	**0**
Peak Hour HV%	**-**	**5%**	**1%**	**5%**	**0%**	**1%**	**2%**	**1%**	**-**	**4%**	**5%**	**3%**	**-**	**1%**	**5%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	5	0	2	*9*	0	0	0	0	*0*	0	0	2	0	*2*
7:15 AM	4	6	2	0	*12*	0	0	0	0	*0*	0	2	1	1	*4*
7:30 AM	1	2	3	2	*8*	0	0	0	0	*0*	0	0	4	2	*6*
7:45 AM	**0**	**4**	**2**	**5**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
8:00 AM	**3**	**2**	**4**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
8:15 AM	**5**	**6**	**2**	**1**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**6**	**0**	*7*
8:30 AM	**2**	**3**	**4**	**2**	***11***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**3**	**1**	***7***
8:45 AM	2	7	1	1	*11*	1	1	0	0	*2*	0	0	4	4	*8*
Count Total	19	35	18	13	*85*	1	1	0	0	*2*	2	4	21	9	*36*
Peak Hour	**10**	**15**	**12**	**8**	***45***	**0**	**0**	**0**	**0**	***0***	**2**	**2**	**10**	**2**	***16***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor River Rd				Old Redwood Hwy				Conde Ln				Old Redwood Hwy				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	1	0	0	4	1	0	0	0	0	0	1	1	0	9	0
7:15 AM	0	0	3	1	0	1	3	2	0	0	1	1	0	0	0	0	12	0
7:30 AM	0	0	0	1	0	0	0	2	0	1	0	2	0	2	0	0	8	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**1**	**0**	**0**	**1**	**1**	**0**	**1**	**4**	**0**	**11**	40
8:00 AM	**0**	**1**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**3**	**0**	**0**	**0**	**0**	**9**	40
8:15 AM	**0**	**0**	**3**	**2**	**0**	**0**	**4**	**2**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**14**	42
8:30 AM	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**1**	**0**	**1**	**1**	**2**	**0**	**1**	**1**	**0**	**11**	**45**
8:45 AM	0	0	2	0	0	1	3	3	0	0	0	1	0	1	0	0	11	45
Count Total	0	1	13	5	0	5	18	12	0	3	5	10	0	7	6	0	85	0
Peak Hour	**0**	**1**	**7**	**2**	**0**	**3**	**8**	**4**	**0**	**2**	**4**	**6**	**0**	**3**	**5**	**0**	**45**	**0**

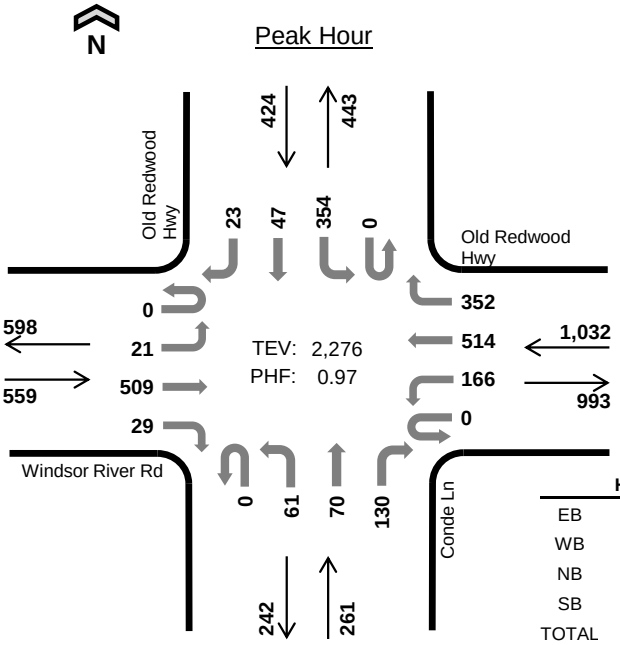
Two-Hour Count Summaries - Bikes

Interval Start	Windsor River Rd			Old Redwood Hwy			Conde Ln			Old Redwood Hwy			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	1	0	0	1	0	0	0	0	0	0	0	2	2
Count Total	0	1	0	0	1	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

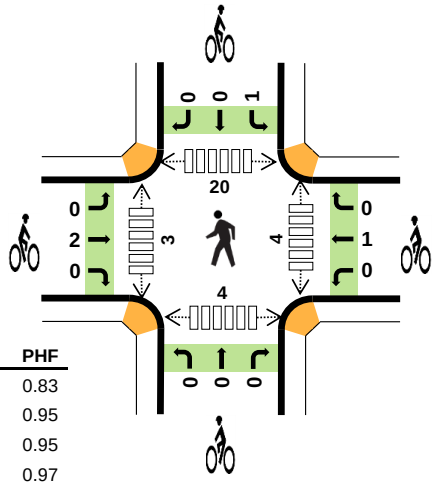
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Conde Ln
Windsor River Rd

Date: 11-29-2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	1.1%	0.83
WB	0.9%	0.95
NB	2.7%	0.95
SB	0.9%	0.97
TOTAL	1.1%	0.97



Two-Hour Count Summaries

Interval Start	Windsor River Rd (Eastbound)				Old Redwood Hwy (Westbound)				Conde Ln (Northbound)				Old Redwood Hwy (Southbound)				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**7**	**151**	**10**	**0**	**42**	**123**	**81**	**0**	**15**	**20**	**34**	**0**	**84**	**13**	**4**	**584**	0
4:15 PM	**0**	**3**	**117**	**7**	**0**	**43**	**121**	**88**	**0**	**16**	**12**	**36**	**0**	**89**	**13**	**7**	**552**	0
4:30 PM	**0**	**3**	**124**	**6**	**0**	**44**	**142**	**87**	**0**	**17**	**18**	**33**	**0**	**91**	**10**	**5**	**580**	0
4:45 PM	**0**	**8**	**117**	**6**	**0**	**37**	**128**	**96**	**0**	**13**	**20**	**27**	**0**	**90**	**11**	**7**	**560**	**2,276**
5:00 PM	0	8	119	5	0	38	109	78	0	22	18	44	0	104	14	5	564	2,256
5:15 PM	0	10	125	5	0	28	147	95	0	12	13	35	0	75	9	4	558	2,262
5:30 PM	0	5	106	6	0	49	127	72	0	23	12	35	0	95	10	10	550	2,232
5:45 PM	0	11	133	8	0	36	129	75	0	1	9	25	0	75	9	7	518	2,190
Count Total	0	55	992	53	0	317	1,026	672	0	119	122	269	0	703	89	49	4,466	0
Peak Hour All	**0**	**21**	**509**	**29**	**0**	**166**	**514**	**352**	**0**	**61**	**70**	**130**	**0**	**354**	**47**	**23**	**2,276**	**0**
Peak Hour HV	**0**	**0**	**4**	**2**	**0**	**3**	**4**	**2**	**0**	**2**	**2**	**3**	**0**	**3**	**1**	**0**	**26**	**0**
Peak Hour HV%	**-**	**0%**	**1%**	**7%**	**-**	**2%**	**1%**	**1%**	**-**	**3%**	**3%**	**2%**	**-**	**1%**	**2%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**2**	**1**	**2**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**2**	**9**	**3**	*15*
4:15 PM	**1**	**5**	**3**	**2**	***11***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**4**	**0**	*5*
4:30 PM	**3**	**3**	**1**	**1**	***8***	**2**	**1**	**0**	**1**	***4***	**2**	**0**	**6**	**1**	*9*
4:45 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	***2***
5:00 PM	1	3	0	1	*5*	0	0	0	1	*1*	1	0	1	0	*2*
5:15 PM	1	2	0	1	*4*	1	1	0	0	*2*	0	0	1	0	*1*
5:30 PM	1	1	0	0	*2*	1	0	0	0	*1*	0	0	0	2	*2*
5:45 PM	1	0	0	1	*2*	0	0	1	0	*1*	0	0	1	0	*1*
Count Total	10	15	7	7	*39*	4	2	1	2	*9*	5	3	23	6	*37*
Peak Hour	**6**	**9**	**7**	**4**	***26***	**2**	**1**	**0**	**1**	***4***	**4**	**3**	**20**	**4**	***31***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor River Rd				Old Redwood Hwy				Conde Ln				Old Redwood Hwy				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**5**	0
4:15 PM	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**2**	**0**	**1**	**1**	**1**	**0**	**1**	**1**	**0**	**11**	0
4:30 PM	**0**	**0**	**3**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**8**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**2**	**26**
5:00 PM	0	0	1	0	0	2	0	1	0	0	0	0	0	0	1	0	5	26
5:15 PM	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	1	4	19
5:30 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	13
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	2	13
Count Total	0	0	8	2	0	6	6	3	0	2	2	3	0	4	2	1	39	0
Peak Hour	**0**	**0**	**4**	**2**	**0**	**3**	**4**	**2**	**0**	**2**	**2**	**3**	**0**	**3**	**1**	**0**	**26**	**0**

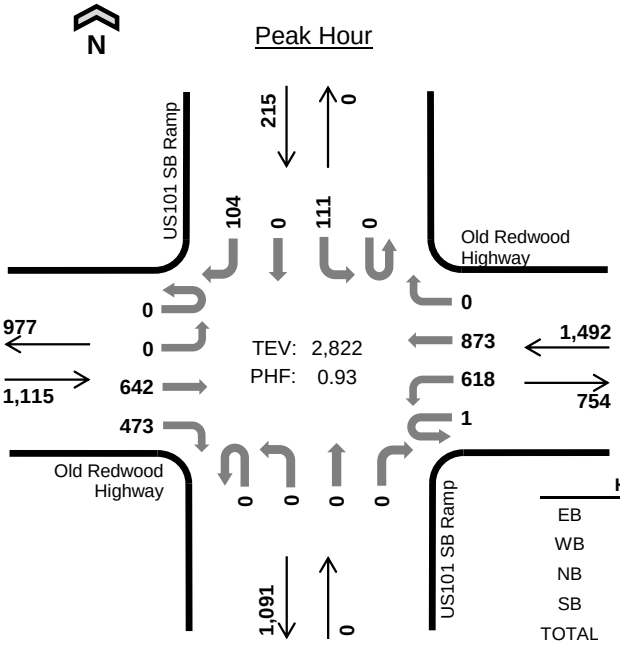
Two-Hour Count Summaries - Bikes

Interval Start	Windsor River Rd			Old Redwood Hwy			Conde Ln			Old Redwood Hwy			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
5:00 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	5
5:15 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	7
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	4
5:45 PM	0	0	0	0	0	0	0	0	1	0	0	0	1	5
Count Total	0	4	0	0	2	0	0	0	1	2	0	0	9	0
Peak Hour	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US101 SB Ramp
Old Redwood Highway

Date: 01-30-2018
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	1.3%	0.86
WB	1.5%	0.97
NB	-	-
SB	1.9%	0.93
TOTAL	1.5%	0.93

Two-Hour Count Summaries

Interval Start	Old Redwood Highway Eastbound				Old Redwood Highway Westbound				US101 SB Ramp Northbound				US101 SB Ramp Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	64	84	0	128	96	0	0	0	0	0	0	15	0	18	405	0
7:15 AM	0	0	61	93	0	150	101	0	0	0	0	0	0	12	0	27	444	0
7:30 AM	**0**	**0**	**104**	**121**	**1**	**164**	**220**	**0**	**0**	**0**	**0**	**0**	**0**	**24**	**0**	**22**	**656**	0
7:45 AM	**0**	**0**	**144**	**118**	**0**	**150**	**219**	**0**	**0**	**0**	**0**	**0**	**0**	**25**	**0**	**33**	**689**	2,194
8:00 AM	**0**	**0**	**198**	**107**	**0**	**139**	**220**	**0**	**0**	**0**	**0**	**0**	**0**	**35**	**0**	**18**	**717**	2,506
8:15 AM	**0**	**0**	**196**	**127**	**0**	**165**	**214**	**0**	**0**	**0**	**0**	**0**	**0**	**27**	**0**	**31**	**760**	**2,822**
8:30 AM	0	0	124	105	0	130	157	0	0	0	0	0	0	17	0	19	552	2,718
8:45 AM	0	0	115	79	0	106	144	0	0	0	0	0	0	31	1	9	485	2,514
Count Total	0	0	1,006	834	1	1,132	1,371	0	0	0	0	0	0	186	1	177	4,708	0
Peak Hour All	**0**	**0**	**642**	**473**	**1**	**618**	**873**	**0**	**0**	**0**	**0**	**0**	**0**	**111**	**0**	**104**	**2,822**	**0**
Peak Hour HV	**0**	**0**	**11**	**3**	**0**	**6**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**41**	**0**
Peak Hour HV%	**-**	**-**	**2%**	**1%**	**0%**	**1%**	**2%**	**-**	**-**	**-**	**-**	**-**	**-**	**3%**	**-**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	5	5	0	4	*14*	0	0	0	0	*0*	0	0	4	0	*4*
7:15 AM	9	6	0	2	*17*	0	0	0	0	*0*	0	0	6	5	*11*
7:30 AM	**1**	**2**	**0**	**0**	***3***	**0**	**3**	**0**	**0**	***3***	**0**	**0**	**7**	**5**	*12*
7:45 AM	**5**	**7**	**0**	**0**	***12***	**0**	**2**	**0**	**0**	***2***	**0**	**0**	**2**	**2**	*4*
8:00 AM	**5**	**12**	**0**	**2**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**7**	**4**	*11*
8:15 AM	**3**	**2**	**0**	**2**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**3**	**4**	***7***
8:30 AM	4	1	0	2	*7*	0	0	0	0	*0*	0	0	1	0	*1*
8:45 AM	5	9	0	0	*14*	1	0	0	0	*1*	0	0	4	1	*5*
Count Total	37	44	0	12	*93*	1	5	0	0	*6*	0	0	34	21	*55*
Peak Hour	**14**	**23**	**0**	**4**	***41***	**0**	**5**	**0**	**0**	***5***	**0**	**0**	**19**	**15**	***34***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Old Redwood Highway Eastbound				Old Redwood Highway Westbound				US101 SB Ramp Northbound				US101 SB Ramp Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	4	1	0	1	4	0	0	0	0	0	0	2	0	2	14	0
7:15 AM	0	0	7	2	0	1	5	0	0	0	0	0	0	1	0	1	17	0
7:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
7:45 AM	**0**	**0**	**5**	**0**	**0**	**1**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	46
8:00 AM	**0**	**0**	**3**	**2**	**0**	**5**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**19**	51
8:15 AM	**0**	**0**	**2**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**7**	**41**
8:30 AM	0	0	2	2	0	0	1	0	0	0	0	0	0	0	0	2	7	45
8:45 AM	0	0	4	1	0	4	5	0	0	0	0	0	0	0	0	0	14	47
Count Total	0	0	28	9	0	12	32	0	0	0	0	0	0	6	0	6	93	0
Peak Hour	**0**	**0**	**11**	**3**	**0**	**6**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**41**	**0**

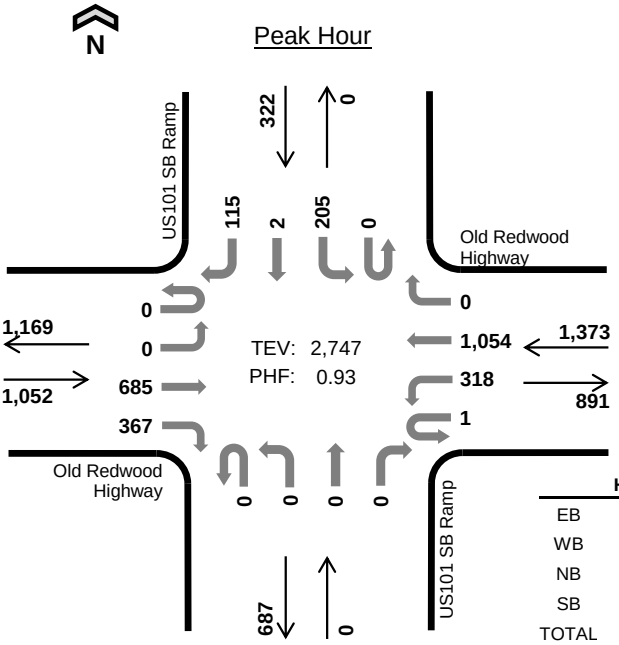
Two-Hour Count Summaries - Bikes

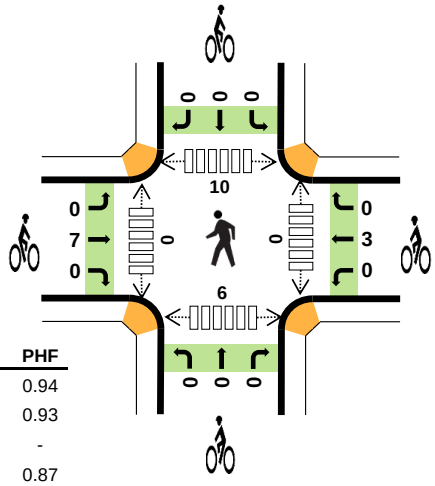
Interval Start	Old Redwood Highway Eastbound			Old Redwood Highway Westbound			US101 SB Ramp Northbound			US101 SB Ramp Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
7:45 AM	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	5
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	1
Count Total	0	1	0	0	5	0	0	0	0	0	0	0	6	0
Peak Hour	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US101 SB Ramp
Old Redwood Highway

Date: 01-30-2018
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	0.9%	0.94
WB	0.8%	0.93
NB	-	-
SB	0.3%	0.87
TOTAL	0.8%	0.93

Two-Hour Count Summaries

Interval Start	Old Redwood Highway Eastbound				Old Redwood Highway Westbound				US101 SB Ramp Northbound				US101 SB Ramp Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	166	77	0	97	210	0	0	0	0	0	0	46	1	21	618	0
4:15 PM	0	0	150	72	0	67	231	0	0	0	0	0	0	45	2	20	587	0
4:30 PM	0	0	153	90	0	79	233	0	0	0	0	0	0	55	0	19	629	0
4:45 PM	**0**	**0**	**158**	**90**	**1**	**86**	**264**	**0**	**0**	**0**	**0**	**0**	**0**	**61**	**0**	**32**	**692**	2,526
5:00 PM	**0**	**0**	**175**	**104**	**0**	**101**	**269**	**0**	**0**	**0**	**0**	**0**	**0**	**62**	**1**	**29**	**741**	2,649
5:15 PM	**0**	**0**	**176**	**88**	**0**	**68**	**247**	**0**	**0**	**0**	**0**	**0**	**0**	**43**	**1**	**31**	**654**	2,716
5:30 PM	**0**	**0**	**176**	**85**	**0**	**63**	**274**	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**0**	**23**	**660**	**2,747**
5:45 PM	0	0	143	81	1	79	287	0	0	0	0	0	0	52	2	39	684	2,739
Count Total	0	0	1,297	687	2	640	2,015	0	0	0	0	0	0	403	7	214	5,265	0
Peak Hour All	**0**	**0**	**685**	**367**	**1**	**318**	**1,054**	**0**	**0**	**0**	**0**	**0**	**0**	**205**	**2**	**115**	**2,747**	**0**
Peak Hour HV	**0**	**0**	**4**	**5**	**0**	**4**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**21**	**0**
Peak Hour HV%	**-**	**-**	**1%**	**1%**	**0%**	**1%**	**1%**	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**0%**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	4	0	0	*5*	0	0	0	0	*0*	0	0	9	7	*16*
4:15 PM	5	5	0	1	*11*	2	0	0	0	*2*	0	0	9	2	*11*
4:30 PM	2	2	0	1	*5*	2	3	0	0	*5*	0	0	4	1	*5*
4:45 PM	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**4**	**1**	*5*
5:00 PM	**2**	**3**	**0**	**1**	***6***	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**4**	**0**	*4*
5:15 PM	**4**	**5**	**0**	**0**	***9***	**4**	**0**	**0**	**0**	***4***	**0**	**0**	**1**	**0**	*1*
5:30 PM	**1**	**2**	**0**	**0**	***3***	**2**	**2**	**0**	**0**	***4***	**0**	**0**	**1**	**5**	***6***
5:45 PM	3	1	0	2	*6*	0	0	0	0	*0*	0	0	2	0	*2*
Count Total	20	23	0	5	*48*	11	6	0	0	*17*	0	0	34	16	*50*
Peak Hour	**9**	**11**	**0**	**1**	***21***	**7**	**3**	**0**	**0**	***10***	**0**	**0**	**10**	**6**	***16***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Old Redwood Highway Eastbound				Old Redwood Highway Westbound				US101 SB Ramp Northbound				US101 SB Ramp Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	4	0	0	0	0	0	0	0	0	0	0	5	0
4:15 PM	0	0	3	2	0	1	4	0	0	0	0	0	0	0	0	1	11	0
4:30 PM	0	0	1	1	0	2	0	0	0	0	0	0	0	1	0	0	5	0
4:45 PM	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	24
5:00 PM	**0**	**0**	**1**	**1**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**6**	25
5:15 PM	**0**	**0**	**2**	**2**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	23
5:30 PM	**0**	**0**	**0**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**21**
5:45 PM	0	0	2	1	0	0	1	0	0	0	0	0	0	2	0	0	6	24
Count Total	0	0	11	9	0	11	12	0	0	0	0	0	0	3	0	2	48	0
Peak Hour	**0**	**0**	**4**	**5**	**0**	**4**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**21**	**0**

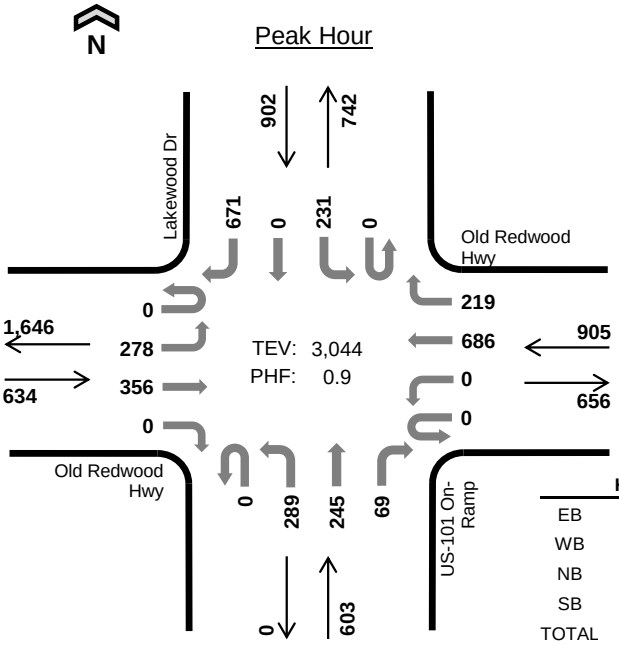
Two-Hour Count Summaries - Bikes

Interval Start	Old Redwood Highway Eastbound			Old Redwood Highway Westbound			US101 SB Ramp Northbound			US101 SB Ramp Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	2	0	0	0	0	0	0	0	0	0	0	2	0
4:30 PM	0	2	0	0	3	0	0	0	0	0	0	0	5	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7
5:00 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	9
5:15 PM	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	11
5:30 PM	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**10**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Count Total	0	11	0	0	6	0	0	0	0	0	0	0	17	0
Peak Hour	**0**	**7**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**

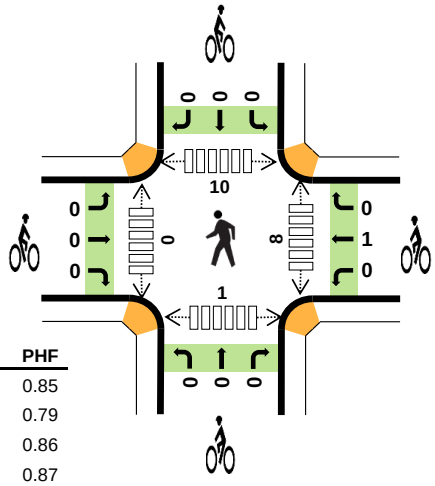
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Lakewood Dr
Old Redwood Hwy

Date: 11-29-2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	1.6%	0.85
WB	1.5%	0.79
NB	2.3%	0.86
SB	1.4%	0.87
TOTAL	1.7%	0.90



Two-Hour Count Summaries

Interval Start	Old Redwood Hwy Eastbound				Old Redwood Hwy Westbound				US-101 On-Ramp Northbound				Lakewood Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	12	23	0	0	0	128	18	0	33	27	16	0	14	0	132	403	0
7:15 AM	0	19	38	0	0	0	116	20	0	41	50	6	0	14	0	125	429	0
7:30 AM	0	38	62	0	0	0	171	25	0	46	47	20	0	35	0	128	572	0
7:45 AM	**0**	**39**	**72**	**0**	**0**	**0**	**150**	**45**	**0**	**80**	**52**	**20**	**0**	**40**	**0**	**159**	**657**	2,061
8:00 AM	**0**	**76**	**111**	**0**	**0**	**0**	**182**	**44**	**0**	**69**	**42**	**23**	**0**	**62**	**0**	**170**	**779**	2,437
8:15 AM	**0**	**94**	**76**	**0**	**0**	**0**	**209**	**78**	**0**	**84**	**82**	**9**	**0**	**54**	**0**	**157**	**843**	2,851
8:30 AM	**0**	**69**	**97**	**0**	**0**	**0**	**145**	**52**	**0**	**56**	**69**	**17**	**0**	**75**	**0**	**185**	**765**	**3,044**
8:45 AM	0	60	82	0	0	0	145	43	0	65	52	16	0	42	0	139	644	3,031
Count Total	0	407	561	0	0	0	1,246	325	0	474	421	127	0	336	0	1,195	5,092	0
Peak Hour All	**0**	**278**	**356**	**0**	**0**	**0**	**686**	**219**	**0**	**289**	**245**	**69**	**0**	**231**	**0**	**671**	**3,044**	**0**
Peak Hour HV	**0**	**2**	**8**	**0**	**0**	**0**	**11**	**3**	**0**	**7**	**4**	**3**	**0**	**3**	**0**	**10**	**51**	**0**
Peak Hour HV%	**-**	**1%**	**2%**	**-**	**-**	**-**	**2%**	**1%**	**-**	**2%**	**2%**	**4%**	**-**	**1%**	**-**	**1%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	4	1	6	2	*13*	0	0	0	0	*0*	2	0	1	0	*3*
7:15 AM	6	6	3	3	*18*	0	0	0	1	*1*	1	0	1	1	*3*
7:30 AM	3	1	5	3	*12*	0	1	0	0	*1*	2	0	1	5	*8*
7:45 AM	**2**	**4**	**5**	**4**	***15***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**2**	**0**	*3*
8:00 AM	**3**	**3**	**1**	**4**	***11***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**0**	*2*
8:15 AM	**1**	**5**	**6**	**1**	***13***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**4**	**0**	*6*
8:30 AM	**4**	**2**	**2**	**4**	***12***	**0**	**1**	**0**	**0**	***1***	**4**	**0**	**3**	**1**	***8***
8:45 AM	5	6	2	1	*14*	0	0	0	0	*0*	5	0	4	2	*11*
Count Total	28	28	30	22	*108*	0	2	0	1	*3*	18	0	17	9	*44*
Peak Hour	**10**	**14**	**14**	**13**	***51***	**0**	**1**	**0**	**0**	***1***	**8**	**0**	**10**	**1**	***19***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Old Redwood Hwy Eastbound				Old Redwood Hwy Westbound				US-101 On-Ramp Northbound				Lakewood Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	4	0	0	0	1	0	0	1	3	2	0	0	0	2	13	0
7:15 AM	0	1	5	0	0	0	5	1	0	0	3	0	0	0	0	3	18	0
7:30 AM	0	0	3	0	0	0	0	1	0	2	3	0	0	2	0	1	12	0
7:45 AM	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**2**	**0**	**3**	**1**	**1**	**0**	**1**	**0**	**3**	**15**	58
8:00 AM	**0**	**1**	**2**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	**11**	56
8:15 AM	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**1**	**0**	**3**	**2**	**1**	**0**	**1**	**0**	**0**	**13**	51
8:30 AM	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**4**	**12**	**51**
8:45 AM	0	0	5	0	0	0	5	1	0	2	0	0	0	0	0	1	14	50
Count Total	0	3	25	0	0	0	22	6	0	12	13	5	0	5	0	17	108	0
Peak Hour	**0**	**2**	**8**	**0**	**0**	**0**	**11**	**3**	**0**	**7**	**4**	**3**	**0**	**3**	**0**	**10**	**51**	**0**

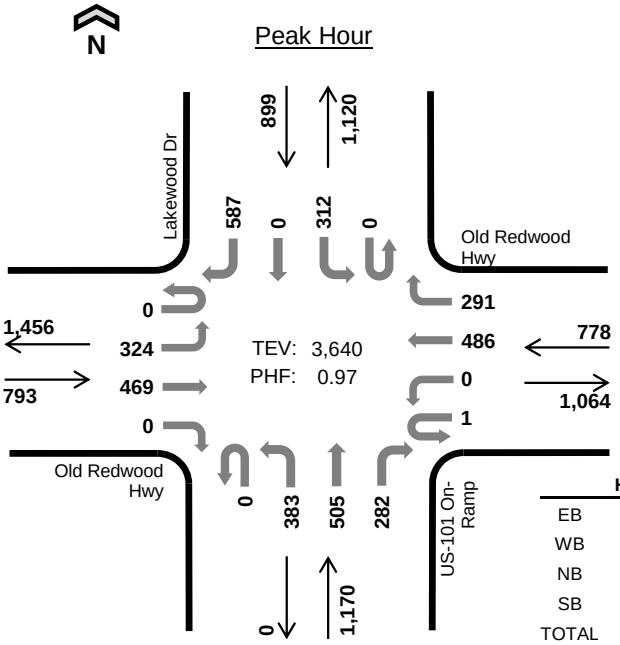
Two-Hour Count Summaries - Bikes

Interval Start	Old Redwood Hwy Eastbound			Old Redwood Hwy Westbound			US-101 On-Ramp Northbound			Lakewood Dr Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	2	0	0	0	0	1	0	0	3	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

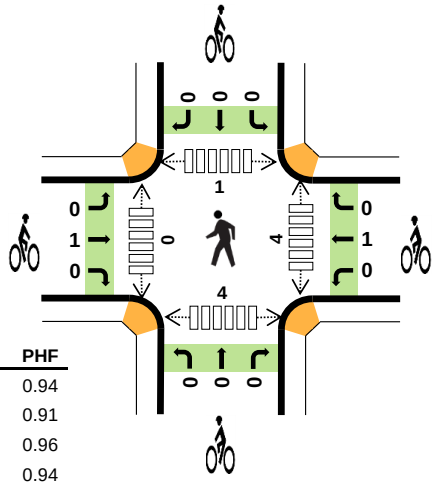
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Lakewood Dr
Old Redwood Hwy

Date: 11-29-2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.1%	0.94
WB	0.4%	0.91
NB	1.0%	0.96
SB	0.7%	0.94
TOTAL	0.6%	0.97



Two-Hour Count Summaries

Interval Start	Old Redwood Hwy Eastbound				Old Redwood Hwy Westbound				US-101 On-Ramp Northbound				Lakewood Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	97	98	0	0	0	104	61	0	115	106	43	0	75	0	132	831	0
4:15 PM	0	85	99	0	0	0	129	68	0	105	124	44	0	83	0	141	878	0
4:30 PM	0	81	104	0	0	0	121	61	0	105	100	50	0	84	0	176	882	0
4:45 PM	0	58	120	0	0	0	105	63	0	113	127	61	0	73	0	156	876	3,467
5:00 PM	**0**	**68**	**119**	**0**	**0**	**0**	**118**	**66**	**0**	**83**	**111**	**73**	**0**	**72**	**0**	**155**	**865**	3,501
5:15 PM	**0**	**80**	**113**	**0**	**0**	**0**	**128**	**71**	**0**	**111**	**134**	**53**	**0**	**88**	**0**	**150**	**928**	3,551
5:30 PM	**0**	**95**	**115**	**0**	**1**	**0**	**126**	**86**	**0**	**97**	**135**	**72**	**0**	**71**	**0**	**144**	**942**	3,611
5:45 PM	**0**	**81**	**122**	**0**	**0**	**0**	**114**	**68**	**0**	**92**	**125**	**84**	**0**	**81**	**0**	**138**	**905**	**3,640**
Count Total	0	645	890	0	1	0	945	544	0	821	962	480	0	627	0	1,192	7,107	0
Peak Hour All	**0**	**324**	**469**	**0**	**1**	**0**	**486**	**291**	**0**	**383**	**505**	**282**	**0**	**312**	**0**	**587**	**3,640**	**0**
Peak Hour HV	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**5**	**4**	**3**	**0**	**0**	**0**	**6**	**22**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**-**	**0%**	**-**	**1%**	**0%**	**-**	**1%**	**1%**	**1%**	**-**	**0%**	**-**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	1	1	2	*5*	0	0	0	0	*0*	5	0	3	9	*17*
4:15 PM	1	3	3	3	*10*	0	2	0	0	*2*	2	1	6	3	*12*
4:30 PM	1	4	1	1	*7*	1	1	0	0	*2*	1	0	5	1	*7*
4:45 PM	1	0	2	1	*4*	0	1	0	0	*1*	0	0	1	1	*2*
5:00 PM	**0**	**1**	**5**	**1**	***7***	**1**	**0**	**0**	**0**	***1***	**2**	**0**	**0**	**2**	*4*
5:15 PM	**1**	**0**	**4**	**2**	***7***	**0**	**1**	**0**	**0**	***1***	**1**	**0**	**1**	**1**	*3*
5:30 PM	**0**	**2**	**1**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:45 PM	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
Count Total	5	11	19	13	*48*	2	5	0	0	*7*	12	1	16	18	*47*
Peak Hour	**1**	**3**	**12**	**6**	***22***	**1**	**1**	**0**	**0**	***2***	**4**	**0**	**1**	**4**	***9***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Old Redwood Hwy Eastbound				Old Redwood Hwy Westbound				US-101 On-Ramp Northbound				Lakewood Dr Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	0	0	0	0	1	0	0	0	1	0	0	1	0	1	5	0
4:15 PM	0	0	1	0	0	0	3	0	0	2	1	0	0	1	0	2	10	0
4:30 PM	0	0	1	0	0	0	4	0	0	0	1	0	0	0	0	1	7	0
4:45 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	0	1	4	26
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**2**	**0**	**0**	**0**	**1**	**7**	28
5:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**2**	**7**	25
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**5**	23
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**22**
Count Total	0	3	2	0	0	0	11	0	0	7	9	3	0	2	0	11	48	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**5**	**4**	**3**	**0**	**0**	**0**	**6**	**22**	**0**

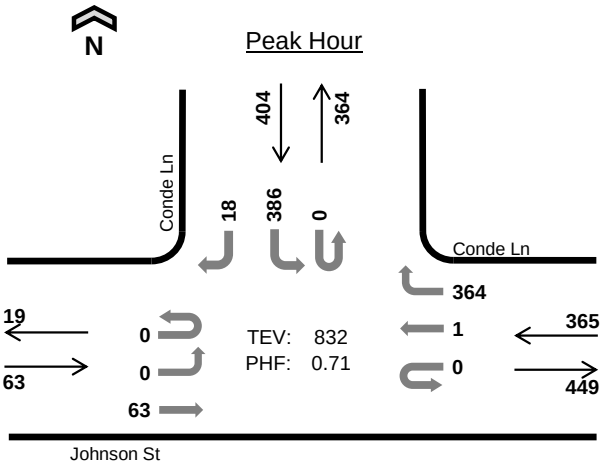
Two-Hour Count Summaries - Bikes

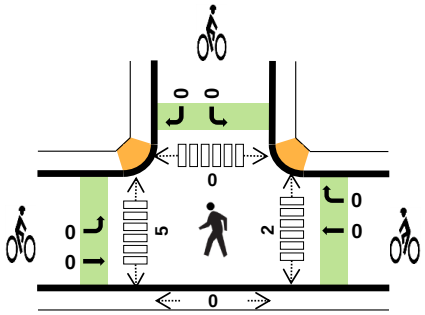
Interval Start	Old Redwood Hwy Eastbound			Old Redwood Hwy Westbound			US-101 On-Ramp Northbound			Lakewood Dr Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	1	0	0	0	0	0	0	2	0
4:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	5
5:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	6
5:15 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	5
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Count Total	0	2	0	0	3	2	0	0	0	0	0	0	7	0
Peak Hour	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Conde Ln
Johnson St

Date: 11-29-2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	0.0%	0.53
WB	3.3%	0.75
NB	-	-
SB	2.5%	0.71
TOTAL	2.6%	0.71

Two-Hour Count Summaries

Interval Start	Johnson St Eastbound				Conde Ln Westbound				0 Northbound				Conde Ln Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	11	0	0	0	0	20	0	0	0	0	0	29	0	1	61	0
7:15 AM	0	0	6	0	0	0	0	32	0	0	0	0	0	24	0	1	63	0
7:30 AM	0	0	8	0	0	0	0	42	0	0	0	0	0	31	0	3	84	0
7:45 AM	**0**	**0**	**12**	**0**	**0**	**0**	**1**	**66**	**0**	**0**	**0**	**0**	**0**	**86**	**0**	**5**	**170**	378
8:00 AM	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**104**	**0**	**0**	**0**	**0**	**0**	**109**	**0**	**4**	**232**	549
8:15 AM	**0**	**0**	**30**	**0**	**0**	**0**	**0**	**122**	**0**	**0**	**0**	**0**	**0**	**138**	**0**	**4**	**294**	780
8:30 AM	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**72**	**0**	**0**	**0**	**0**	**0**	**53**	**0**	**5**	**136**	**832**
8:45 AM	0	0	6	0	0	0	0	35	0	0	0	0	0	41	0	6	88	750
Count Total	0	0	94	0	0	0	1	493	0	0	0	0	0	511	0	29	1,128	0
Peak Hour All	**0**	**0**	**63**	**0**	**0**	**0**	**1**	**364**	**0**	**0**	**0**	**0**	**0**	**386**	**0**	**18**	**832**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**1**	**22**	**0**
Peak Hour HV%	**-**	**-**	**0%**	**-**	**-**	**-**	**0%**	**3%**	**-**	**-**	**-**	**-**	**-**	**2%**	**-**	**6%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	0	0	2	*3*	0	0	0	0	*0*	0	1	0	0	*1*
7:15 AM	0	4	0	2	*6*	0	0	0	0	*0*	0	2	1	0	*3*
7:30 AM	0	1	0	1	*2*	0	0	0	0	*0*	1	1	0	0	*2*
7:45 AM	**0**	**3**	**0**	**5**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
8:00 AM	**0**	**4**	**0**	**2**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**1**	**0**	**2**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
8:30 AM	**0**	**4**	**0**	**1**	***5***	**0**	**0**	**0**	**0**	***0***	**2**	**3**	**0**	**0**	***5***
8:45 AM	0	1	0	1	*2*	0	0	0	0	*0*	5	4	0	0	*9*
Count Total	1	18	0	16	*35*	0	0	0	0	*0*	8	13	1	0	*22*
Peak Hr	**0**	**12**	**0**	**10**	***22***	**0**	**0**	**0**	**0**	***0***	**2**	**5**	**0**	**0**	***7***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Johnson St				Conde Ln				0				Conde Ln				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	3	0
7:15 AM	0	0	0	0	0	0	0	4	0	0	0	0	0	2	0	0	6	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**8**	19
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**6**	22
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**3**	19
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**22**
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	16
Count Total	0	0	1	0	0	0	0	18	0	0	0	0	0	15	0	1	35	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**1**	**22**	**0**

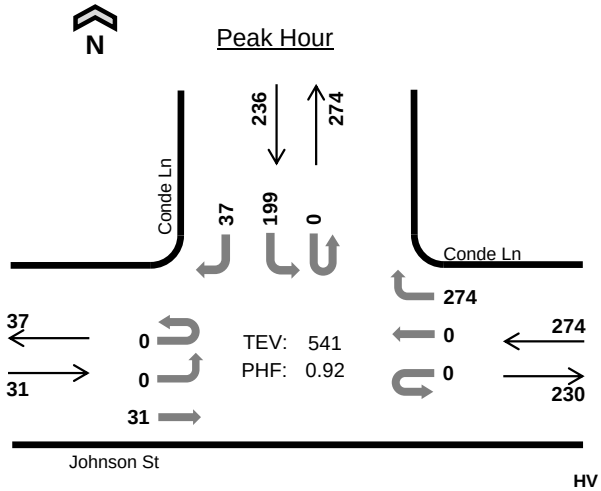
Two-Hour Count Summaries - Bikes

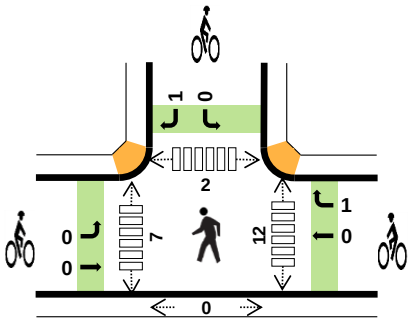
Interval Start	Johnson St			Conde Ln			0			Conde Ln			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Conde Ln
Johnson St

Date: 11-29-2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	3.2%	0.70
WB	1.8%	0.82
NB	-	-
SB	3.4%	0.94
TOTAL	2.6%	0.92

Two-Hour Count Summaries

Interval Start		Johnson St Eastbound				Conde Ln Westbound				0 Northbound				Conde Ln Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	7	0	0	0	0	71	0	0	0	0	0	53	0	9	140	0
4:15 PM		**0**	**0**	**8**	**0**	**0**	**0**	**0**	**65**	**0**	**0**	**0**	**0**	**0**	**50**	**0**	**13**	**136**	0
4:30 PM		**0**	**0**	**11**	**0**	**0**	**0**	**0**	**69**	**0**	**0**	**0**	**0**	**0**	**56**	**0**	**5**	**141**	0
4:45 PM		**0**	**0**	**7**	**0**	**0**	**0**	**0**	**56**	**0**	**0**	**0**	**0**	**0**	**49**	**0**	**5**	**117**	534
5:00 PM		**0**	**0**	**5**	**0**	**0**	**0**	**0**	**84**	**0**	**0**	**0**	**0**	**0**	**44**	**0**	**14**	**147**	**541**
5:15 PM		0	0	7	0	0	0	0	60	0	0	0	0	0	33	0	9	109	514
5:30 PM		0	0	6	0	0	0	0	68	0	0	0	0	0	63	0	3	140	513
5:45 PM		0	0	10	0	0	0	0	44	0	0	0	0	0	46	0	8	108	504
Count Total		0	0	61	0	0	0	0	517	0	0	0	0	0	394	0	66	1,038	0
Peak Hour	**All**	**0**	**0**	**31**	**0**	**0**	**0**	**0**	**274**	**0**	**0**	**0**	**0**	**0**	**199**	**0**	**37**	**541**	**0**
	HV	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**14**	**0**
	HV%	**-**	**-**	**3%**	**-**	**-**	**-**	**-**	**2%**	**-**	**-**	**-**	**-**	**-**	**3%**	**-**	**5%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	2	0	1	*3*	0	0	0	0	*0*	3	3	2	0	*8*
4:15 PM	**1**	**3**	**0**	**4**	***8***	**0**	**1**	**0**	**0**	***1***	**3**	**3**	**0**	**0**	*6*
4:30 PM	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**4**	**0**	**0**	**0**	*4*
4:45 PM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**4**	**2**	**1**	**0**	*7*
5:00 PM	**0**	**0**	**0**	**3**	***3***	**0**	**0**	**0**	**1**	***1***	**1**	**2**	**1**	**0**	***4***
5:15 PM	0	0	0	1	*1*	0	0	0	0	*0*	1	0	1	0	*2*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	0	0	*2*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	1	0	0	0	*1*
Count Total	1	7	0	10	*18*	0	1	0	1	*2*	19	10	5	0	*34*
Peak Hr	**1**	**5**	**0**	**8**	***14***	**0**	**1**	**0**	**1**	***2***	**12**	**7**	**2**	**0**	***21***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Johnson St				Conde Ln				0				Conde Ln				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	2	0	0	0	0	0	1	0	0	3	0
4:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**1**	**8**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	14
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**3**	**14**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	7
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	0	1	0	0	0	0	7	0	0	0	0	0	8	0	2	18	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**14**	**0**

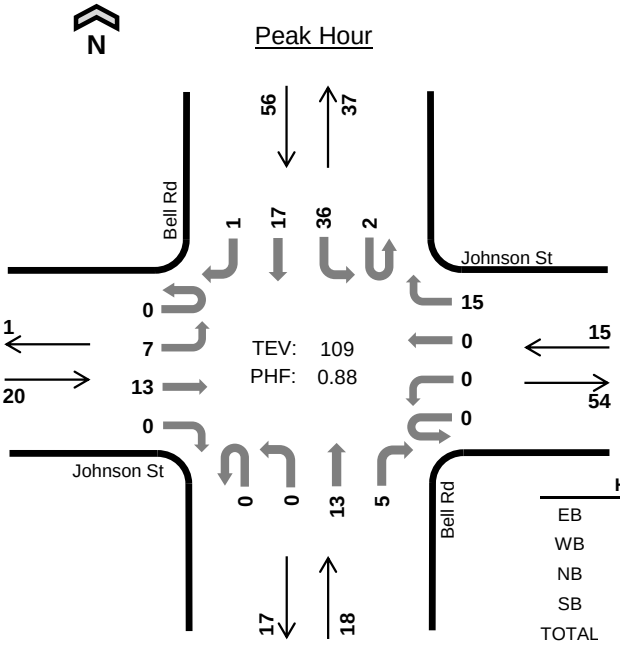
Two-Hour Count Summaries - Bikes

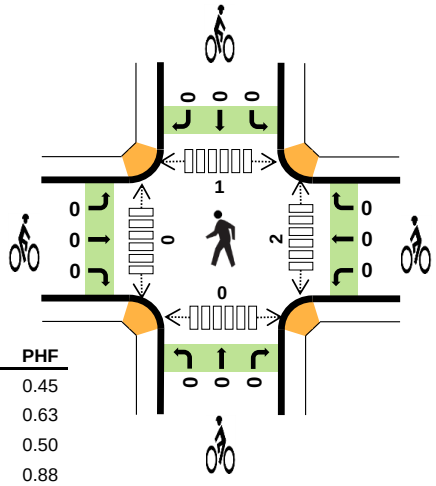
Interval Start	Johnson St			Conde Ln			0			Conde Ln			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	1	0	0	0	0	0	1	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Bell Rd
Johnson St

Date: 11-29-2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM





	HV %:	PHF
EB	0.0%	0.45
WB	6.7%	0.63
NB	0.0%	0.50
SB	0.0%	0.88
TOTAL	0.9%	0.88

Two-Hour Count Summaries

Interval Start		Johnson St Eastbound				Johnson St Westbound				Bell Rd Northbound				Bell Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	1	1	0	0	0	0	5	0	0	2	1	0	4	1	0	15	0
7:15 AM		0	0	1	1	0	0	0	0	0	0	2	0	0	2	0	0	6	0
7:30 AM		0	1	1	0	0	1	1	5	0	0	3	0	0	2	5	1	20	0
7:45 AM		0	3	4	0	0	1	0	4	0	0	4	0	0	7	1	0	24	65
8:00 AM		**0**	**2**	**3**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**6**	**3**	**0**	**8**	**6**	**0**	**29**	79
8:15 AM		**0**	**1**	**10**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**15**	**1**	**0**	**31**	104
8:30 AM		**0**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**1**	**0**	**2**	**6**	**7**	**0**	**24**	108
8:45 AM		**0**	**2**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**4**	**2**	**0**	**7**	**3**	**1**	**25**	**109**
Count Total		0	12	20	1	0	2	1	29	0	0	24	6	2	51	24	2	174	0
Peak Hour	**All**	**0**	**7**	**13**	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**13**	**5**	**2**	**36**	**17**	**1**	**109**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
	HV%	**-**	**0%**	**0%**	**-**	**-**	**-**	**-**	**7%**	**-**	**-**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	2	0	*2*
7:15 AM	1	0	0	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	1	1	0	1	*3*	0	2	0	0	*2*	1	0	0	0	*1*
7:45 AM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
8:15 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
8:45 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
Count Total	2	2	0	2	*6*	0	2	0	0	*2*	3	0	3	0	*6*
Peak Hour	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**1**	**0**	***3***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Johnson St Eastbound				Johnson St Westbound				Bell Rd Northbound				Bell Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0
7:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	3	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	1	0	1	0	0	1	1	0	0	0	0	0	1	0	1	6	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Two-Hour Count Summaries - Bikes

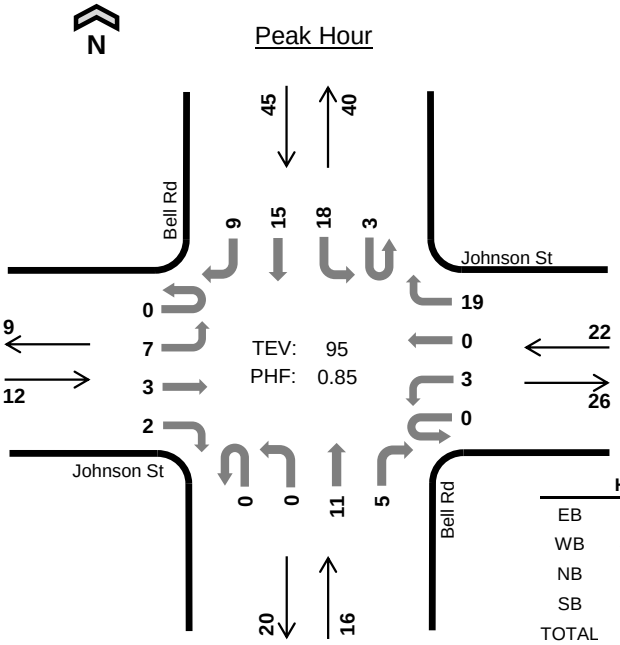
Interval Start	Johnson St Eastbound			Johnson St Westbound			Bell Rd Northbound			Bell Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	1	1	0	0	0	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	1	1	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

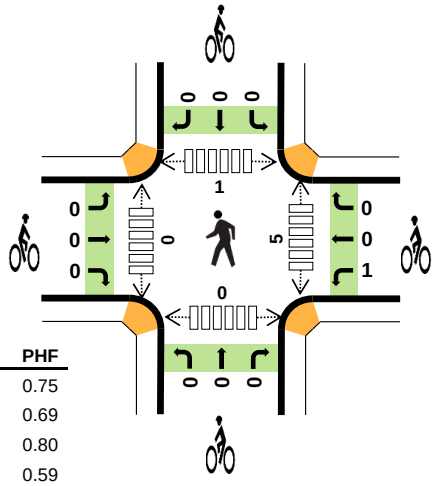
Bell Rd
Johnson St

Peak Hour

Date: 11-29-2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	0.0%	0.75
WB	4.5%	0.69
NB	0.0%	0.80
SB	0.0%	0.59
TOTAL	1.1%	0.85



Two-Hour Count Summaries

Interval Start		Johnson St Eastbound				Johnson St Westbound				Bell Rd Northbound				Bell Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	1	0	0	0	0	0	4	0	0	4	2	0	7	7	1	26	0
4:15 PM		0	0	0	0	1	1	0	4	1	0	4	1	0	7	5	0	24	0
4:30 PM		0	4	1	0	0	1	0	4	0	0	3	0	1	6	3	2	25	0
4:45 PM		0	2	0	0	0	1	0	3	0	0	4	1	0	4	2	0	17	92
5:00 PM		**0**	**3**	**0**	**1**	**0**	**0**	**0**	**7**	**0**	**0**	**4**	**0**	**0**	**4**	**1**	**0**	**20**	86
5:15 PM		**0**	**1**	**2**	**0**	**0**	**2**	**0**	**6**	**0**	**0**	**4**	**1**	**2**	**4**	**2**	**1**	**25**	87
5:30 PM		**0**	**1**	**0**	**1**	**0**	**1**	**0**	**2**	**0**	**0**	**2**	**2**	**0**	**8**	**8**	**3**	**28**	90
5:45 PM		**0**	**2**	**1**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**1**	**2**	**1**	**2**	**4**	**5**	**22**	**95**
Count Total		0	14	4	2	1	6	0	34	1	0	26	9	4	42	32	12	187	0
Peak Hour	**All**	**0**	**7**	**3**	**2**	**0**	**3**	**0**	**19**	**0**	**0**	**11**	**5**	**3**	**18**	**15**	**9**	**95**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**
	HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**-**	**5%**	**-**	**-**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	1	0	1	1	*3*	0	0	0	0	*0*	0	0	1	0	*1*
4:15 PM	0	1	0	0	*1*	0	1	0	0	*1*	2	1	2	3	*8*
4:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	2	0	1	0	*3*
4:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	3	0	0	0	*3*
5:00 PM	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	***1***	**3**	**0**	**0**	**0**	*3*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**1**	**0**	*3*
5:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	1	2	1	1	*5*	0	2	0	0	*2*	12	1	5	3	*21*
Peak Hour	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**0**	**0**	***1***	**5**	**0**	**1**	**0**	***6***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Johnson St				Johnson St				Bell Rd				Bell Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	0	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	1	0	0	0	0	0	2	0	0	0	1	0	0	1	0	5	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Two-Hour Count Summaries - Bikes

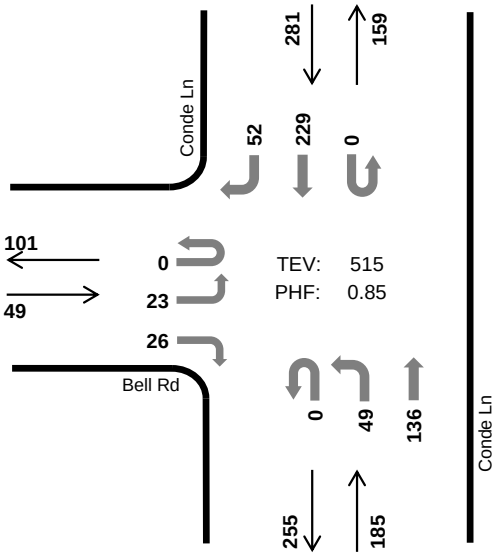
Interval Start	Johnson St			Johnson St			Bell Rd			Bell Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	0	0	1	0	1	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

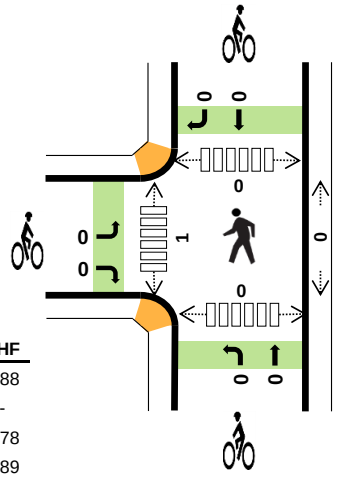
Conde Ln
Bell Rd

Peak Hour

Date: 11-29-2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM



	HV %:	PHF
EB	8.2%	0.88
WB	-	-
NB	4.3%	0.78
SB	1.8%	0.89
TOTAL	3.3%	0.85



Two-Hour Count Summaries

Interval Start	Bell Rd Eastbound				0 Westbound				Conde Ln Northbound				Conde Ln Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	3	0	0	0	0	0	10	11	0	0	0	28	16	69	0
7:15 AM	0	2	0	5	0	0	0	0	0	2	15	0	0	0	23	5	52	0
7:30 AM	0	3	0	9	0	0	0	0	0	6	25	0	0	0	30	8	81	0
7:45 AM	**0**	**4**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**11**	**28**	**0**	**0**	**0**	**36**	**16**	**100**	302
8:00 AM	**0**	**7**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**16**	**43**	**0**	**0**	**0**	**62**	**17**	**152**	385
8:15 AM	**0**	**6**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**12**	**44**	**0**	**0**	**0**	**63**	**11**	**143**	476
8:30 AM	**0**	**6**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**10**	**21**	**0**	**0**	**0**	**68**	**8**	**120**	**515**
8:45 AM	0	7	0	2	0	0	0	0	0	7	26	0	0	0	38	7	87	502
Count Total	0	36	0	45	0	0	0	0	0	74	213	0	0	0	348	88	804	0
Peak Hour All	**0**	**23**	**0**	**26**	**0**	**0**	**0**	**0**	**0**	**49**	**136**	**0**	**0**	**0**	**229**	**52**	**515**	**0**
Peak Hour HV	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**6**	**0**	**0**	**0**	**5**	**0**	**17**	**0**
Peak Hour HV%	**-**	**13%**	**-**	**4%**	**-**	**-**	**-**	**-**	**-**	**4%**	**4%**	**-**	**-**	**-**	**2%**	**0%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	1	0	0	3	*4*	0	0	0	0	*0*	0	2	0	0	*2*
7:45 AM	**0**	**0**	**3**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
8:00 AM	**1**	**0**	**1**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**2**	**0**	**2**	**1**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:30 AM	**1**	**0**	**2**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:45 AM	3	0	0	2	*5*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	8	0	9	12	*29*	0	0	0	0	*0*	0	3	0	0	*3*
Peak Hr	**4**	**0**	**8**	**5**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Bell Rd				0				Conde Ln				Conde Ln				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
7:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0	4	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**5**	12
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**4**	14
8:15 AM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**5**	18
8:30 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**17**
8:45 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	0	1	1	5	17
Count Total	0	5	0	3	0	0	0	0	0	2	7	0	0	0	10	2	29	0
Peak Hour	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**6**	**0**	**0**	**0**	**5**	**0**	**17**	**0**

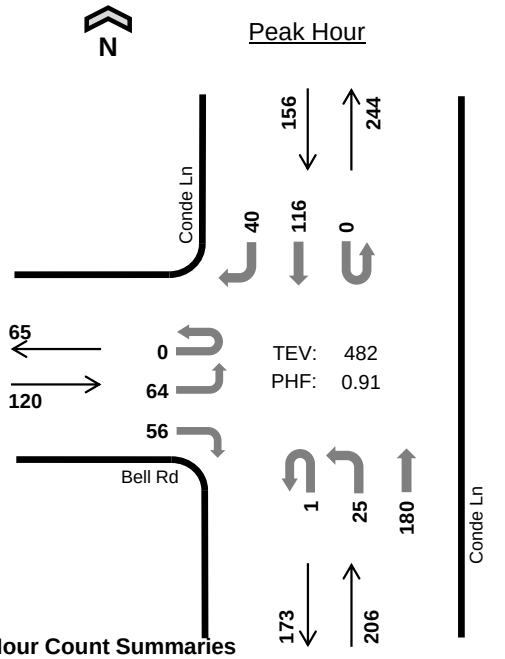
Two-Hour Count Summaries - Bikes

Interval Start	Bell Rd			0			Conde Ln			Conde Ln			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

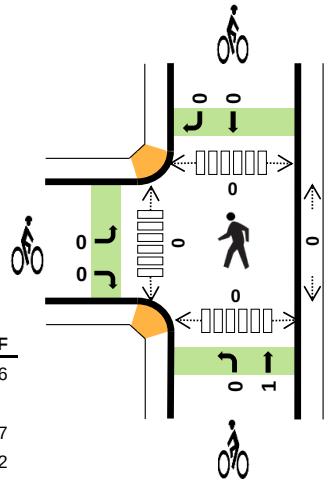
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Conde Ln
Bell Rd

Date: 11-29-2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	3.3%	0.86
WB	-	-
NB	1.9%	0.97
SB	3.2%	0.72
TOTAL	2.7%	0.91



Two-Hour Count Summaries

Interval Start	Bell Rd Eastbound				0 Westbound				Conde Ln Northbound				Conde Ln Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	14	0	7	0	0	0	0	0	18	44	0	0	0	28	7	118	0
4:15 PM	**0**	**16**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**7**	**46**	**0**	**0**	**0**	**36**	**9**	**122**	0
4:30 PM	**0**	**17**	**0**	**12**	**0**	**0**	**0**	**0**	**0**	**4**	**46**	**0**	**0**	**0**	**38**	**16**	**133**	0
4:45 PM	**0**	**13**	**0**	**19**	**0**	**0**	**0**	**0**	**1**	**7**	**43**	**0**	**0**	**0**	**18**	**6**	**107**	480
5:00 PM	**0**	**18**	**0**	**17**	**0**	**0**	**0**	**0**	**0**	**7**	**45**	**0**	**0**	**0**	**24**	**9**	**120**	**482**
5:15 PM	0	17	0	10	0	0	0	0	0	7	44	0	0	0	21	5	104	464
5:30 PM	0	10	0	6	0	0	0	0	0	2	46	0	0	0	40	6	110	441
5:45 PM	0	6	0	1	0	0	0	0	0	3	33	0	0	0	28	6	77	411
Count Total	0	111	0	80	0	0	0	0	1	55	347	0	0	0	233	64	891	0
Peak Hour All	**0**	**64**	**0**	**56**	**0**	**0**	**0**	**0**	**1**	**25**	**180**	**0**	**0**	**0**	**116**	**40**	**482**	**0**
Peak Hour HV	**0**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**3**	**2**	**13**	**0**
Peak Hour HV%	**-**	**3%**	**-**	**4%**	**-**	**-**	**-**	**-**	**0%**	**8%**	**1%**	**-**	**-**	**-**	**3%**	**5%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	0	4	0	*6*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	**2**	**0**	**1**	**2**	***5***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
4:30 PM	**2**	**0**	**1**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:15 PM	1	0	0	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	7	0	8	6	*21*	0	0	1	0	*1*	0	0	0	0	*0*
Peak Hr	**4**	**0**	**4**	**5**	***13***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Bell Rd				0				Conde Ln				Conde Ln				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	0	1	0	0	0	0	0	2	2	0	0	0	0	0	6	0
4:15 PM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**5**	0
4:30 PM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**5**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	18
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**13**
5:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	2	10
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	3	0	4	0	0	0	0	0	4	4	0	0	0	3	3	21	0
Peak Hour	**0**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**3**	**2**	**13**	**0**

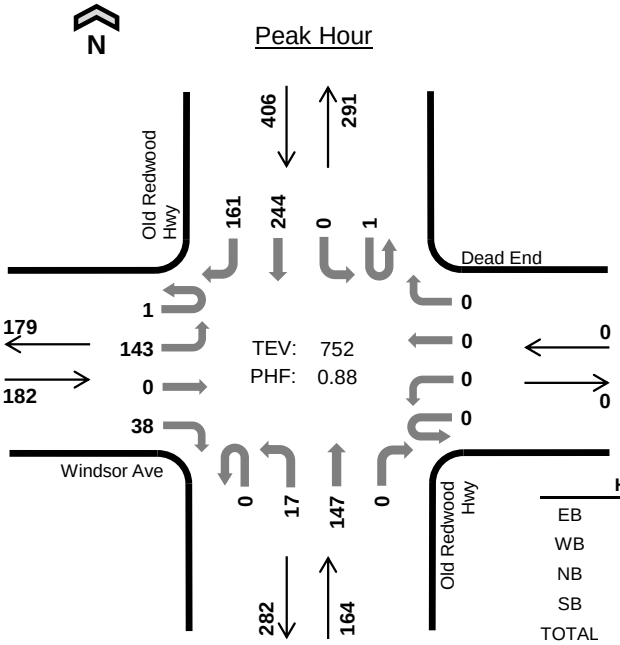
Two-Hour Count Summaries - Bikes

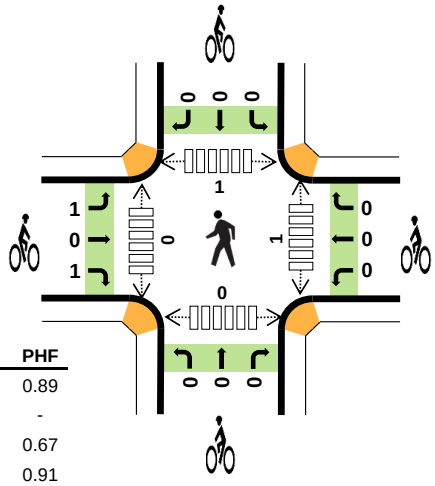
Interval Start	Bell Rd			0			Conde Ln			Conde Ln			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Old Redwood Hwy
Windsor Ave

Date: 11-29-2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM





	HV %:	PHF
EB	2.2%	0.89
WB	-	-
NB	5.5%	0.67
SB	2.5%	0.91
TOTAL	3.1%	0.88

Two-Hour Count Summaries

Interval Start		Windsor Ave (Eastbound)				Dead End (Westbound)				Old Redwood Hwy (Northbound)				Old Redwood Hwy (Southbound)				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	12	0	7	0	0	0	0	0	0	8	0	0	0	21	18	66	0
7:15 AM		0	11	0	5	0	0	0	0	0	2	12	0	0	0	37	18	85	0
7:30 AM		0	22	0	4	0	0	0	0	0	0	14	0	0	0	34	33	107	0
7:45 AM		**1**	**32**	**0**	**11**	**0**	**0**	**0**	**0**	**0**	**5**	**18**	**0**	**0**	**0**	**63**	**29**	**159**	417
8:00 AM		**0**	**33**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**3**	**27**	**0**	**0**	**0**	**67**	**35**	**178**	529
8:15 AM		**0**	**44**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**5**	**56**	**0**	**0**	**0**	**57**	**44**	**213**	657
8:30 AM		**0**	**34**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**4**	**46**	**0**	**1**	**0**	**57**	**53**	**202**	**752**
8:45 AM		0	18	0	8	0	0	0	0	0	3	26	1	1	0	54	35	146	739
Count Total		1	206	0	62	0	0	0	0	0	22	207	1	2	0	390	265	1,156	0
Peak Hour	**All**	**1**	**143**	**0**	**38**	**0**	**0**	**0**	**0**	**0**	**17**	**147**	**0**	**1**	**0**	**244**	**161**	**752**	**0**
	HV	**1**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**6**	**0**	**0**	**0**	**4**	**6**	**23**	**0**
	HV%	**100%**	**1%**	**-**	**3%**	**-**	**-**	**-**	**-**	**-**	**18%**	**4%**	**-**	**0%**	**-**	**2%**	**4%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	0	0	2	*3*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	0	1	3	*4*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	0	1	3	*4*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	**2**	**0**	**2**	**5**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**0**	**1**	**2**	***3***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**1**	**0**	*1*
8:15 AM	**1**	**0**	**4**	**1**	***6***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
8:30 AM	**1**	**0**	**2**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:45 AM	0	0	0	1	*1*	0	0	0	0	*0*	3	0	3	0	*6*
Count Total	5	0	11	19	*35*	2	0	0	0	*2*	4	0	4	0	*8*
Peak Hour	**4**	**0**	**9**	**10**	***23***	**2**	**0**	**0**	**0**	***2***	**1**	**0**	**1**	**0**	***2***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor Ave				Dead End				Old Redwood Hwy				Old Redwood Hwy				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0	3	0
7:15 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	3	4	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	3	4	0
7:45 AM	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**3**	**9**	20
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	20
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**1**	**6**	22
8:30 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**0**	**5**	**23**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	15
Count Total	1	3	0	1	0	0	0	0	0	4	7	0	0	0	7	12	35	0
Peak Hour	**1**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**6**	**0**	**0**	**0**	**4**	**6**	**23**	**0**

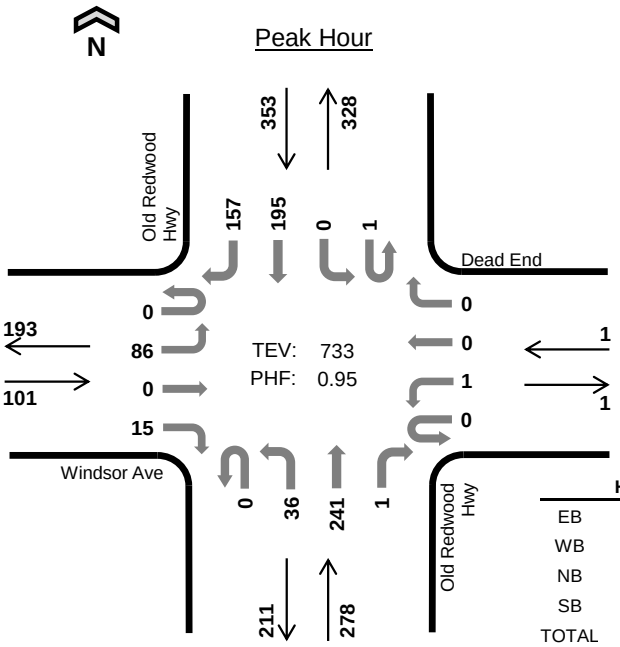
Two-Hour Count Summaries - Bikes

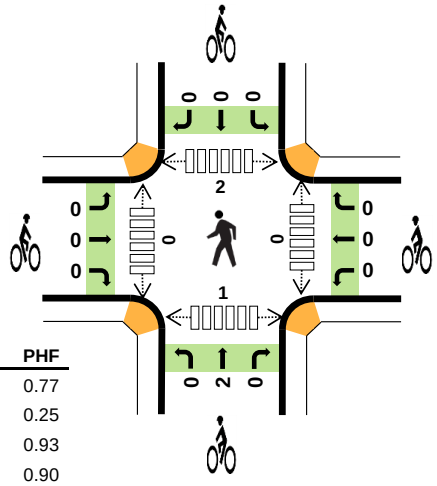
Interval Start	Windsor Ave			Dead End			Old Redwood Hwy			Old Redwood Hwy			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	2
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	1	0	1	0	0	0	0	0	0	0	0	0	2	0
Peak Hour	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Old Redwood Hwy
Windsor Ave

Date: 11-29-2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	0.0%	0.77
WB	0.0%	0.25
NB	0.4%	0.93
SB	1.4%	0.90
TOTAL	0.8%	0.95

Two-Hour Count Summaries

Interval Start	Windsor Ave				Dead End				Old Redwood Hwy				Old Redwood Hwy				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	28	0	8	0	0	0	0	0	10	55	0	1	0	55	19	176	0
4:15 PM	0	21	0	1	0	0	0	0	0	5	57	2	0	0	51	28	165	0
4:30 PM	**0**	**21**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**9**	**62**	**0**	**1**	**0**	**51**	**46**	**192**	0
4:45 PM	**0**	**20**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**11**	**49**	**1**	**0**	**0**	**57**	**37**	**180**	713
5:00 PM	**0**	**28**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**3**	**68**	**0**	**0**	**0**	**48**	**40**	**192**	729
5:15 PM	**0**	**17**	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**13**	**62**	**0**	**0**	**0**	**39**	**34**	**169**	**733**
5:30 PM	0	36	0	7	0	0	0	0	0	8	47	0	0	0	42	43	183	724
5:45 PM	0	17	0	2	0	2	0	0	0	8	52	0	0	0	28	27	136	680
Count Total	0	188	0	33	0	3	0	0	0	67	452	3	2	0	371	274	1,393	0
Peak Hour All	**0**	**86**	**0**	**15**	**0**	**1**	**0**	**0**	**0**	**36**	**241**	**1**	**1**	**0**	**195**	**157**	**733**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**6**	**0**
Peak Hour HV%	**-**	**0%**	**-**	**0%**	**-**	**0%**	**-**	**-**	**-**	**0%**	**0%**	**0%**	**0%**	**-**	**3%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	0	0	*0*	1	0	1	0	*2*	0	0	0	0	*0*
4:15 PM	0	0	2	2	*4*	1	0	0	0	*1*	0	0	0	0	*0*
4:30 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
4:45 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
5:00 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
5:30 PM	0	0	2	1	*3*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	2	2	1	*5*	0	0	0	1	*1*	1	0	1	0	*2*
Count Total	0	2	7	9	*18*	2	0	3	1	*6*	1	0	3	1	*5*
Peak Hour	**0**	**0**	**1**	**5**	***6***	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**2**	**1**	***3***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Windsor Ave				Dead End				Old Redwood Hwy				Old Redwood Hwy				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	1	1	4	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	6
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	8
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**6**
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	1	3	8
5:45 PM	0	0	0	0	0	2	0	0	0	1	1	0	0	0	0	1	5	12
Count Total	0	0	0	0	0	2	0	0	0	1	4	2	0	0	6	3	18	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**6**	**0**

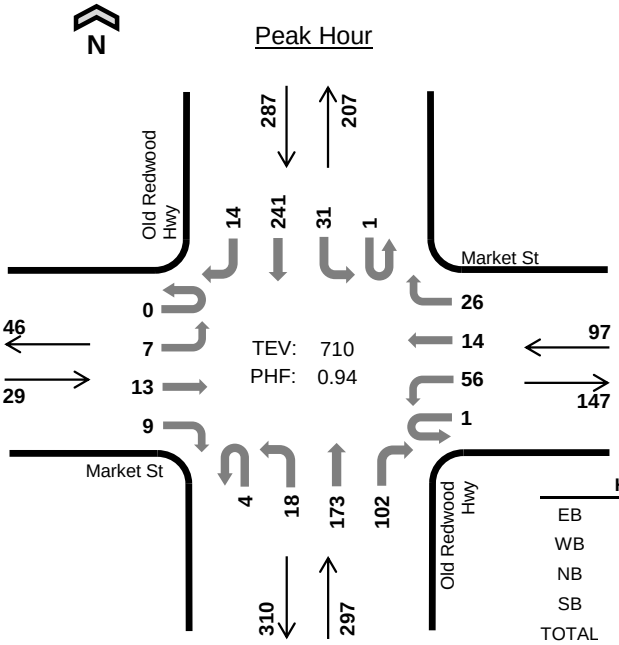
Two-Hour Count Summaries - Bikes

Interval Start	Windsor Ave			Dead End			Old Redwood Hwy			Old Redwood Hwy			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	1	0	0	0	0	0	0	1	0	0	0	0	2	0
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	3
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	3
Count Total	1	0	1	0	0	0	0	3	0	0	1	0	6	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**

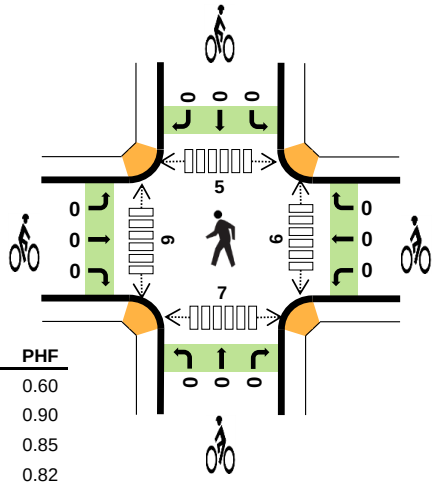
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Old Redwood Hwy
Market St

Peak Hour



Date: 11-29-2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 8:00 AM to 9:00 AM



	HV %:	PHF
EB	0.0%	0.60
WB	0.0%	0.90
NB	3.0%	0.85
SB	1.4%	0.82
TOTAL	1.8%	0.94

Two-Hour Count Summaries

Interval Start		Market St Eastbound				Market St Westbound				Old Redwood Hwy Northbound				Old Redwood Hwy Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		1	0	3	1	0	6	1	1	0	1	19	9	0	1	28	1	72	0
7:15 AM		0	2	2	1	0	5	3	1	0	0	17	14	0	7	40	4	96	0
7:30 AM		0	1	3	2	0	8	2	4	0	1	9	21	0	5	32	5	93	0
7:45 AM		1	1	4	3	0	8	5	3	0	4	21	25	0	9	72	2	158	419
8:00 AM		**0**	**2**	**0**	**2**	**0**	**16**	**7**	**3**	**0**	**4**	**38**	**25**	**0**	**7**	**77**	**3**	**184**	531
8:15 AM		**0**	**4**	**6**	**2**	**1**	**11**	**1**	**8**	**0**	**3**	**58**	**26**	**0**	**4**	**61**	**4**	**189**	624
8:30 AM		**0**	**0**	**5**	**2**	**0**	**15**	**2**	**10**	**3**	**4**	**48**	**18**	**0**	**10**	**55**	**5**	**177**	708
8:45 AM		**0**	**1**	**2**	**3**	**0**	**14**	**4**	**5**	**1**	**7**	**29**	**33**	**1**	**10**	**48**	**2**	**160**	**710**
Count Total		2	11	25	16	1	83	25	35	4	24	239	171	1	53	413	26	1,129	0
Peak Hour	**All**	**0**	**7**	**13**	**9**	**1**	**56**	**14**	**26**	**4**	**18**	**173**	**102**	**1**	**31**	**241**	**14**	**710**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**3**	**1**	**0**	**3**	**0**	**13**	**0**
	HV%	**-**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**3%**	**3%**	**100%**	**0%**	**1%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	1	0	0	2	*3*	0	0	0	0	*0*	2	0	2	0	*4*
7:15 AM	0	0	3	0	*3*	0	0	0	0	*0*	3	0	4	0	*7*
7:30 AM	0	0	2	0	*2*	0	0	0	0	*0*	1	0	1	0	*2*
7:45 AM	0	1	1	5	*7*	0	0	0	0	*0*	0	1	0	0	*1*
8:00 AM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**3**	**4**	**1**	**4**	*12*
8:15 AM	**0**	**0**	**5**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**2**	**1**	**1**	*5*
8:30 AM	**0**	**0**	**2**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**1**	**0**	*4*
8:45 AM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**2**	**2**	***6***
Count Total	1	1	15	11	*28*	0	0	0	0	*0*	12	10	12	7	*41*
Peak Hour	**0**	**0**	**9**	**4**	***13***	**0**	**0**	**0**	**0**	***0***	**6**	**9**	**5**	**7**	***27***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Market St Eastbound				Market St Westbound				Old Redwood Hwy Northbound				Old Redwood Hwy Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	3	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	3	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	5	0	7	15
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	14
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**5**	16
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**4**	18
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**13**
Count Total	1	0	0	0	0	0	1	0	0	0	9	6	1	0	9	1	28	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**3**	**1**	**0**	**3**	**0**	**13**	**0**

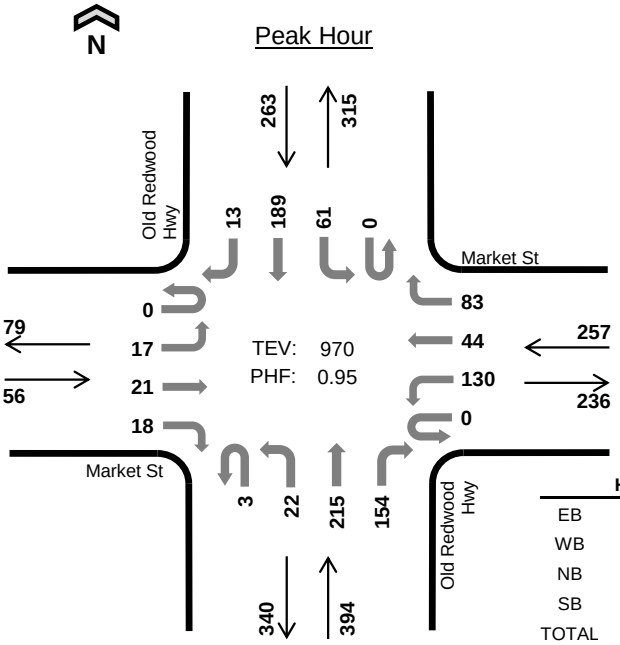
Two-Hour Count Summaries - Bikes

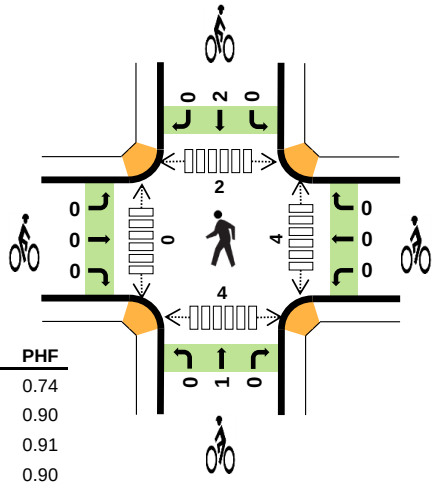
Interval Start	Market St Eastbound			Market St Westbound			Old Redwood Hwy Northbound			Old Redwood Hwy Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Old Redwood Hwy
Market St

Date: 11-29-2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	0.0%	0.74
WB	0.0%	0.90
NB	0.3%	0.91
SB	1.5%	0.90
TOTAL	0.5%	0.95

Two-Hour Count Summaries

Interval Start		Market St Eastbound				Market St Westbound				Old Redwood Hwy Northbound				Old Redwood Hwy Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	5	5	8	0	34	5	11	1	7	55	38	0	16	45	5	235	0
4:15 PM		0	4	1	5	0	21	14	15	0	6	57	33	0	15	45	6	222	0
4:30 PM		**0**	**6**	**7**	**6**	**0**	**34**	**6**	**21**	**1**	**5**	**48**	**38**	**0**	**18**	**43**	**2**	**235**	0
4:45 PM		**0**	**3**	**2**	**5**	**0**	**32**	**12**	**19**	**0**	**5**	**58**	**45**	**0**	**12**	**58**	**3**	**254**	946
5:00 PM		**0**	**4**	**7**	**5**	**0**	**38**	**14**	**19**	**1**	**7**	**55**	**33**	**0**	**18**	**49**	**2**	**252**	963
5:15 PM		**0**	**4**	**5**	**2**	**0**	**26**	**12**	**24**	**1**	**5**	**54**	**38**	**0**	**13**	**39**	**6**	**229**	**970**
5:30 PM		0	3	6	3	0	29	11	24	1	7	35	28	0	14	33	3	197	932
5:45 PM		0	4	5	1	0	19	11	22	2	5	39	34	0	10	34	4	190	868
Count Total		0	33	38	35	0	233	85	155	7	47	401	287	0	116	346	31	1,814	0
Peak Hour	**All**	**0**	**17**	**21**	**18**	**0**	**130**	**44**	**83**	**3**	**22**	**215**	**154**	**0**	**61**	**189**	**13**	**970**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**3**	**0**	**5**	**0**
	HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**-**	**2%**	**2%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	0	0	1	0	*1*	0	0	0	0	*0*	2	1	2	7	*12*
4:15 PM	0	0	2	1	*3*	0	0	1	0	*1*	0	4	0	2	*6*
4:30 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**1**	***1***	**1**	**0**	**0**	**0**	*1*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**2**	*3*
5:00 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**1**	**1**	***2***	**2**	**0**	**2**	**2**	*6*
5:15 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	0	1	1	0	*2*	0	0	0	0	*0*	0	0	0	1	*1*
5:45 PM	0	0	2	1	*3*	0	0	0	1	*1*	0	0	1	3	*4*
Count Total	0	1	7	6	*14*	0	0	2	3	*5*	6	5	5	17	*33*
Peak Hour	**0**	**0**	**1**	**4**	***5***	**0**	**0**	**1**	**2**	***3***	**4**	**0**	**2**	**4**	***10***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Market St Eastbound				Market St Westbound				Old Redwood Hwy Northbound				Old Redwood Hwy Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	6
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	**5**
5:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2	6
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	9
Count Total	0	0	0	0	0	0	0	1	0	0	6	1	0	1	5	0	14	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**3**	**0**	**5**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Market St Eastbound			Market St Westbound			Old Redwood Hwy Northbound			Old Redwood Hwy Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	4
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	3
Count Total	0	0	0	0	0	0	0	2	0	0	3	0	5	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Appendix B: Existing Conditions LOS Results

Intersection	
Intersection Delay, s/veh	22.7
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	76	20	28	52	165	15	107	42	296	113	29
Future Vol, veh/h	19	76	20	28	52	165	15	107	42	296	113	29
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	23	90	24	33	62	196	18	127	50	352	135	35
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	12	15.3	12.5	33.4
HCM LOS	B	C	B	D

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	9%	20%	0%	11%	68%
Vol Thru, %	65%	80%	0%	21%	26%
Vol Right, %	26%	0%	100%	67%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	164	95	20	245	438
LT Vol	15	19	0	28	296
Through Vol	107	76	0	52	113
RT Vol	42	0	20	165	29
Lane Flow Rate	195	113	24	292	521
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.339	0.234	0.044	0.5	0.851
Departure Headway (Hd)	6.254	7.45	6.628	6.175	5.875
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	574	481	538	583	620
Service Time	4.31	5.214	4.392	4.23	3.875
HCM Lane V/C Ratio	0.34	0.235	0.045	0.501	0.84
HCM Control Delay	12.5	12.5	9.7	15.3	33.4
HCM Lane LOS	B	B	A	C	D
HCM 95th-tile Q	1.5	0.9	0.1	2.8	9.4

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	413	2	3	234	47	2	0	3	46	1	7
Future Vol, veh/h	2	413	2	3	234	47	2	0	3	46	1	7
Conflicting Peds, #/hr	6	0	8	8	0	9	9	0	1	1	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	529	3	4	300	60	3	0	4	59	1	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	369	0	0	540	0	0	897	922	540	887	893	348
Stage 1	-	-	-	-	-	-	545	545	-	347	347	-
Stage 2	-	-	-	-	-	-	352	377	-	540	546	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1190	-	-	1028	-	-	261	270	542	265	281	695
Stage 1	-	-	-	-	-	-	523	519	-	669	635	-
Stage 2	-	-	-	-	-	-	665	616	-	526	518	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1180	-	-	1020	-	-	251	263	537	259	274	683
Mov Cap-2 Maneuver	-	-	-	-	-	-	251	263	-	259	274	-
Stage 1	-	-	-	-	-	-	517	513	-	660	626	-
Stage 2	-	-	-	-	-	-	646	607	-	520	512	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	14.9	21.9
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	369	1180	-	-	1020	-	-	282
HCM Lane V/C Ratio	0.017	0.002	-	-	0.004	-	-	0.245
HCM Control Delay (s)	14.9	8.1	0	-	8.5	0	-	21.9
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	359	62	188	216	28	43	127	170	65	137	28
Future Volume (veh/h)	60	359	62	188	216	28	43	127	170	65	137	28
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.73	0.98		0.94	0.99		0.94
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	70	417	72	219	251	33	50	148	198	76	159	33
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	96	499	86	268	645	85	400	181	243	269	402	83
Arrive On Green	0.05	0.32	0.32	0.15	0.42	0.42	0.05	0.26	0.26	0.06	0.27	0.27
Sat Flow, veh/h	1774	1545	267	1774	1536	202	1774	696	932	1774	1479	307
Grp Volume(v), veh/h	70	0	489	219	0	284	50	0	346	76	0	192
Grp Sat Flow(s),veh/h/ln	1774	0	1812	1774	0	1738	1774	0	1628	1774	0	1786
Q Serve(g_s), s	2.6	0.0	16.8	8.0	0.0	7.6	1.4	0.0	13.4	2.1	0.0	5.9
Cycle Q Clear(g_c), s	2.6	0.0	16.8	8.0	0.0	7.6	1.4	0.0	13.4	2.1	0.0	5.9
Prop In Lane	1.00		0.15	1.00		0.12	1.00		0.57	1.00		0.17
Lane Grp Cap(c), veh/h	96	0	585	268	0	730	400	0	424	269	0	486
V/C Ratio(X)	0.73	0.00	0.84	0.82	0.00	0.39	0.12	0.00	0.82	0.28	0.00	0.40
Avail Cap(c_a), veh/h	423	0	944	423	0	906	849	0	849	698	0	931
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	31.3	0.0	21.1	27.6	0.0	13.5	16.9	0.0	23.3	17.8	0.0	19.9
Incr Delay (d2), s/veh	9.9	0.0	3.6	6.7	0.0	0.3	0.1	0.0	3.9	0.6	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(50%),veh/ln	1.5	0.0	8.9	4.4	0.0	3.7	0.7	0.0	6.4	1.0	0.0	3.0
LnGrp Delay(d),s/veh	41.2	0.0	24.7	34.3	0.0	13.8	17.0	0.0	27.2	18.4	0.0	20.5
LnGrp LOS	D		C	C		B	B		C	B		C
Approach Vol, veh/h		559			503			396			268	
Approach Delay, s/veh		26.8			22.7			25.9			19.9	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	21.5	13.2	25.7	6.0	22.3	6.6	32.2
Change Period (Y+Rc), s	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
Max Green Setting (Gmax), s	20.0	35.0	16.0	35.0	20.0	35.0	16.0	35.0
Max Q Clear Time (g_c+I1), s	4.1	15.4	10.0	18.8	3.4	7.9	4.6	9.6
Green Ext Time (p_c), s	0.1	2.1	0.3	2.9	0.1	1.2	0.1	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	8	566	16	5	421	5	2	0	2	4	0	1
Future Vol, veh/h	8	566	16	5	421	5	2	0	2	4	0	1
Conflicting Peds, #/hr	55	0	9	9	0	55	1	0	2	2	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	658	19	6	490	6	2	0	2	5	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	551	0	0	686	0	0	1202	1258	679	1249	1264	549
Stage 1	-	-	-	-	-	-	695	695	-	560	560	-
Stage 2	-	-	-	-	-	-	507	563	-	689	704	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1019	-	-	908	-	-	161	171	452	150	169	535
Stage 1	-	-	-	-	-	-	433	444	-	513	511	-
Stage 2	-	-	-	-	-	-	548	509	-	436	440	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	966	-	-	900	-	-	156	157	447	139	155	506
Mov Cap-2 Maneuver	-	-	-	-	-	-	156	157	-	139	155	-
Stage 1	-	-	-	-	-	-	423	433	-	479	480	-
Stage 2	-	-	-	-	-	-	541	478	-	426	429	-

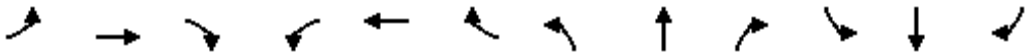
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	20.9	27.9
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	231	966	-	-	900	-	-	163
HCM Lane V/C Ratio	0.02	0.009	-	-	0.006	-	-	0.036
HCM Control Delay (s)	20.9	8.8	0	-	9	0	-	27.9
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	535	24	27	546	47	8	11	32	25	7	19
Future Volume (veh/h)	11	535	24	27	546	47	8	11	32	25	7	19
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	0.99		0.96	0.99		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
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	12	588	26	30	600	52	9	12	35	27	8	21
Adj No. of Lanes	0	1	0	1	1	0	0	1	0	0	1	0
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	134	914	40	713	883	77	171	92	195	281	96	114
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	11	1744	76	801	1684	146	127	471	996	480	494	585
Grp Volume(v), veh/h	626	0	0	30	0	652	56	0	0	56	0	0
Grp Sat Flow(s),veh/h/ln	1831	0	0	801	0	1830	1594	0	0	1559	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.0	0.0	0.0	0.4	0.0	7.5	0.8	0.0	0.0	0.8	0.0	0.0
Prop In Lane	0.02		0.04	1.00		0.08	0.16		0.62	0.48		0.37
Lane Grp Cap(c), veh/h	1088	0	0	713	0	959	458	0	0	492	0	0
V/C Ratio(X)	0.58	0.00	0.00	0.04	0.00	0.68	0.12	0.00	0.00	0.11	0.00	0.00
Avail Cap(c_a), veh/h	2353	0	0	1276	0	2247	1081	0	0	1083	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	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.9	0.0	0.0	3.3	0.0	5.0	9.6	0.0	0.0	9.5	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	0.9	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(50%),veh/ln	3.6	0.0	0.0	0.1	0.0	3.9	0.4	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d),s/veh	5.4	0.0	0.0	3.4	0.0	5.9	9.7	0.0	0.0	9.6	0.0	0.0
LnGrp LOS	A			A		A	A			A		
Approach Vol, veh/h		626			682			56			56	
Approach Delay, s/veh		5.4			5.8			9.7			9.6	
Approach LOS		A			A			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		9.6		18.9		9.6		18.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		17.0		35.0		17.0		35.0
Max Q Clear Time (g_c+I1), s		2.8		9.0		2.8		9.5
Green Ext Time (p_c), s		0.2		4.7		0.2		5.1

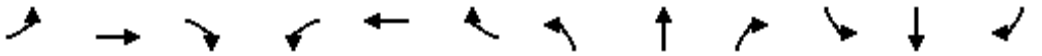
Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	534	39	258	364	369	56	80	228	291	110	15
Future Volume (vph)	21	534	39	258	364	369	56	80	228	291	110	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	
Satd. Flow (prot)	1770	3497		1770	1863	1534	1770	1863	1555	1681	1714	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	
Satd. Flow (perm)	1770	3497		1770	1863	1534	1770	1863	1555	1681	1714	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	24	614	45	297	418	424	64	92	262	334	126	17
RTOR Reduction (vph)	0	4	0	0	0	100	0	0	239	0	3	0
Lane Group Flow (vph)	24	655	0	297	418	324	64	92	23	237	237	0
Confl. Peds. (#/hr)	10		2	2		10	2		2	2		2
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8	6	2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	3.8	39.7		22.3	58.2	82.5	9.7	9.7	9.7	24.3	24.3	
Effective Green, g (s)	3.8	39.7		22.3	58.2	82.5	9.7	9.7	9.7	24.3	24.3	
Actuated g/C Ratio	0.03	0.35		0.20	0.52	0.74	0.09	0.09	0.09	0.22	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	2.5	3.2		2.3	3.2	3.1	3.0	3.0	3.0	3.1	3.1	
Lane Grp Cap (vph)	60	1239		352	968	1129	153	161	134	364	371	
v/s Ratio Prot	0.01	c0.19		c0.17	0.22	0.06	0.04	c0.05		c0.14	0.14	
v/s Ratio Perm						0.15			0.01			
v/c Ratio	0.40	0.53		0.84	0.43	0.29	0.42	0.57	0.17	0.65	0.64	
Uniform Delay, d1	53.0	28.7		43.2	16.7	4.9	48.5	49.2	47.4	40.0	39.9	
Progression Factor	1.00	1.00		1.32	0.72	1.01	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.2	0.4		15.7	1.3	0.1	1.8	4.8	0.6	4.2	3.6	
Delay (s)	56.1	29.2		72.8	13.3	5.1	50.3	54.0	48.0	44.2	43.5	
Level of Service	E	C		E	B	A	D	D	D	D	D	
Approach Delay (s)		30.1			25.8			49.7			43.8	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	33.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	642	473	619	873	0	0	0	0	111	0	104
Future Volume (vph)	0	642	473	619	873	0	0	0	0	111	0	104
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.97	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		3539	1529	1770	3539					1681	1681	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		3539	1529	1770	3539					1681	1681	1583
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	690	509	666	939	0	0	0	0	119	0	112
RTOR Reduction (vph)	0	0	149	0	0	0	0	0	0	0	0	104
Lane Group Flow (vph)	0	690	360	666	939	0	0	0	0	59	60	8
Confl. Peds. (#/hr)			15	15		19						
Confl. Bikes (#/hr)						5						
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		46.0	46.0	45.7	95.7					8.3	8.3	8.3
Effective Green, g (s)		46.0	46.0	45.7	95.7					8.3	8.3	8.3
Actuated g/C Ratio		0.41	0.41	0.41	0.85					0.07	0.07	0.07
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1453	627	722	3023					124	124	117
v/s Ratio Prot		0.19		c0.38	0.27					0.04	c0.04	0.01
v/s Ratio Perm			c0.24									
v/c Ratio		0.47	0.57	0.92	0.31					0.48	0.48	0.07
Uniform Delay, d1		24.2	25.4	31.5	1.6					49.8	49.8	48.3
Progression Factor		0.79	0.61	0.97	0.36					1.00	1.00	1.00
Incremental Delay, d2		0.2	1.1	12.0	0.2					2.9	3.0	0.3
Delay (s)		19.2	16.7	42.5	0.8					52.6	52.7	48.5
Level of Service		B	B	D	A					D	D	D
Approach Delay (s)		18.1			18.1			0.0			50.7	
Approach LOS		B			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	278	356	0	0	686	219	289	245	69	231	0	671
Future Volume (veh/h)	278	356	0	0	686	219	289	245	69	231	0	671
Number	7	4	14	3	8	18	5	2	12	1	6	16
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		0.99	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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	309	396	0	0	762	243	321	272	77	257	0	746
Adj No. of Lanes	2	1	0	0	2	0	1	2	0	1	0	1
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, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	393	1337	0	0	1495	477	374	576	160	0	0	0
Arrive On Green	0.11	0.72	0.00	0.00	0.57	0.57	0.21	0.21	0.21	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	2725	839	1774	2732	758		0	
Grp Volume(v), veh/h	309	396	0	0	512	493	321	174	175		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1702	1774	1770	1720			
Q Serve(g_s), s	9.8	8.5	0.0	0.0	19.7	19.7	19.5	9.6	10.0			
Cycle Q Clear(g_c), s	9.8	8.5	0.0	0.0	19.7	19.7	19.5	9.6	10.0			
Prop In Lane	1.00		0.00	0.00		0.49	1.00		0.44			
Lane Grp Cap(c), veh/h	393	1337	0	0	1005	966	374	373	363			
V/C Ratio(X)	0.79	0.30	0.00	0.00	0.51	0.51	0.86	0.47	0.48			
Avail Cap(c_a), veh/h	922	1337	0	0	1005	966	475	474	461			
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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	48.3	5.7	0.0	0.0	14.7	14.7	42.6	38.7	38.8			
Incr Delay (d2), s/veh	3.5	0.6	0.0	0.0	0.4	0.4	12.0	0.9	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			
%ile BackOfQ(50%),veh/ln	4.8	4.5	0.0	0.0	9.7	9.3	10.8	4.8	4.9			
LnGrp Delay(d),s/veh	51.8	6.2	0.0	0.0	15.1	15.2	54.6	39.6	39.8			
LnGrp LOS	D	A			B	B	D	D	D			
Approach Vol, veh/h		705			1005			670				
Approach Delay, s/veh		26.2			15.2			46.9				
Approach LOS		C			B			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		27.6		84.4			16.8	67.6
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		30.0		59.0			30.0	25.0
Max Q Clear Time (g_c+I1), s		21.5		10.5			11.8	21.7
Green Ext Time (p_c), s		2.1		2.7			1.0	1.9

Intersection Summary	
HCM 2010 Ctrl Delay	27.4
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR		NWBT	SEBT	
Lane Configurations						
Traffic Vol, veh/h	0	63	0	365	386	18
Future Vol, veh/h	0	63	0	365	386	18
Conflicting Peds, #/hr	0	7	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	89	0	514	544	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	566	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	524	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	520	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

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

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	520	-	-
HCM Lane V/C Ratio	-	0.171	-	-
HCM Control Delay (s)	-	13.3	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.6	-	-

Intersection	
Int Delay, s/veh	5.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	13	0	0	0	15	0	13	5	38	17	1
Future Vol, veh/h	7	13	0	0	0	15	0	13	5	38	17	1
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	20	5	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	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	15	0	0	0	17	0	15	6	43	19	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	134	147	20	151	144	39	20	0	0	41	0	0
Stage 1	106	106	-	38	38	-	-	-	-	-	-	-
Stage 2	28	41	-	113	106	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	838	744	1058	816	747	1033	1596	-	-	1568	-	-
Stage 1	900	807	-	977	863	-	-	-	-	-	-	-
Stage 2	989	861	-	892	807	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	805	710	1058	771	713	1012	1596	-	-	1538	-	-
Mov Cap-2 Maneuver	805	710	-	771	713	-	-	-	-	-	-	-
Stage 1	900	784	-	958	847	-	-	-	-	-	-	-
Stage 2	971	845	-	851	784	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10	8.6	0	5
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1596	-	-	741	1012	1538	-	-
HCM Lane V/C Ratio	-	-	-	0.031	0.017	0.028	-	-
HCM Control Delay (s)	0	-	-	10	8.6	7.4	0	-
HCM Lane LOS	A	-	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	229	52	49	136	23	26
Future Vol, veh/h	229	52	49	136	23	26
Conflicting Peds, #/hr	0	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	269	61	58	160	27	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	331	0	577	301
Stage 1	-	-	-	-	301	-
Stage 2	-	-	-	-	276	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1228	-	478	739
Stage 1	-	-	-	-	751	-
Stage 2	-	-	-	-	771	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1227	-	453	738
Mov Cap-2 Maneuver	-	-	-	-	453	-
Stage 1	-	-	-	-	711	-
Stage 2	-	-	-	-	771	-

Approach	SE	NW	NE
HCM Control Delay, s	0	2.1	12
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	570	1227	-	-	-
HCM Lane V/C Ratio	0.101	0.047	-	-	-
HCM Control Delay (s)	12	8.1	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.3	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	5.5
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	461	186	207
Demand Flow Rate, veh/h	471	189	211
Vehicles Circulating, veh/h	19	167	284
Vehicles Exiting, veh/h	337	328	206
Ped Vol Crossing Leg, #/h	2	1	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	5.9	4.6	5.5
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Follow-Up Headway, s	2.609	2.609	2.609
Critical Headway, s	4.976	4.976	4.976
Entry Flow, veh/h	471	189	211
Cap Entry Lane, veh/h	1353	1164	1033
Entry HV Adj Factor	0.980	0.982	0.981
Flow Entry, veh/h	461	186	207
Cap Entry, veh/h	1326	1143	1013
V/C Ratio	0.348	0.162	0.204
Control Delay, s/veh	5.9	4.6	5.5
LOS	A	A	A
95th %tile Queue, veh	2	1	1

Intersection	
Intersection Delay, s/veh	6.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	31	104	316	305
Demand Flow Rate, veh/h	31	106	322	311
Vehicles Circulating, veh/h	358	218	56	100
Vehicles Exiting, veh/h	53	160	333	224
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	4	0	4
Ped Cap Adj	1.000	0.999	1.000	0.999
Approach Delay, s/veh	5.0	5.2	6.4	6.7
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	31	106	322	311
Cap Entry Lane, veh/h	790	909	1068	1022
Entry HV Adj Factor	0.991	0.978	0.982	0.980
Flow Entry, veh/h	31	104	316	305
Cap Entry, veh/h	783	888	1050	1002
V/C Ratio	0.039	0.117	0.301	0.304
Control Delay, s/veh	5.0	5.2	6.4	6.7
LOS	A	A	A	A
95th %tile Queue, veh	0	0	1	1

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	29	85	16	45	85	163	18	52	33	19	66	152
Future Vol, veh/h	29	85	16	45	85	163	18	52	33	19	66	152
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	92	17	49	92	177	20	57	36	21	72	165
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	10	11.8	9.5	10.7
HCM LOS	A	B	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	17%	25%	0%	15%	8%
Vol Thru, %	50%	75%	0%	29%	28%
Vol Right, %	32%	0%	100%	56%	64%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	103	114	16	293	237
LT Vol	18	29	0	45	19
Through Vol	52	85	0	85	66
RT Vol	33	0	16	163	152
Lane Flow Rate	112	124	17	318	258
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.168	0.208	0.025	0.437	0.355
Departure Headway (Hd)	5.396	6.029	5.19	4.945	4.958
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	664	596	690	729	726
Service Time	3.434	3.761	2.922	2.973	2.99
HCM Lane V/C Ratio	0.169	0.208	0.025	0.436	0.355
HCM Control Delay	9.5	10.3	8.1	11.8	10.7
HCM Lane LOS	A	B	A	B	B
HCM 95th-tile Q	0.6	0.8	0.1	2.2	1.6

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	1	265	6	9	286	30	3	0	11	18	1	2
Future Vol, veh/h	1	265	6	9	286	30	3	0	11	18	1	2
Conflicting Peds, #/hr	6	0	8	8	0	9	9	0	1	1	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	288	7	10	311	33	3	0	12	20	1	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	353	0	0	303	0	0	660	675	301	658	662	346
Stage 1	-	-	-	-	-	-	302	302	-	357	357	-
Stage 2	-	-	-	-	-	-	358	373	-	301	305	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1206	-	-	1258	-	-	376	376	739	378	382	697
Stage 1	-	-	-	-	-	-	707	664	-	661	628	-
Stage 2	-	-	-	-	-	-	660	618	-	708	662	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1196	-	-	1248	-	-	365	365	733	365	371	685
Mov Cap-2 Maneuver	-	-	-	-	-	-	365	365	-	365	371	-
Stage 1	-	-	-	-	-	-	701	658	-	654	616	-
Stage 2	-	-	-	-	-	-	645	606	-	695	656	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	11.1	15
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	603	1196	-	-	1248	-	-	382
HCM Lane V/C Ratio	0.025	0.001	-	-	0.008	-	-	0.06
HCM Control Delay (s)	11.1	8	0	-	7.9	0	-	15
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	240	45	220	295	63	49	111	191	83	125	46
Future Volume (veh/h)	22	240	45	220	295	63	49	111	191	83	125	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.97		0.94	0.98		0.94
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	23	255	48	234	314	67	52	118	203	88	133	49
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	358	67	294	554	118	463	161	276	347	369	136
Arrive On Green	0.03	0.24	0.24	0.17	0.37	0.37	0.05	0.27	0.27	0.07	0.29	0.29
Sat Flow, veh/h	1774	1520	286	1774	1479	316	1774	591	1017	1774	1276	470
Grp Volume(v), veh/h	23	0	303	234	0	381	52	0	321	88	0	182
Grp Sat Flow(s),veh/h/ln	1774	0	1806	1774	0	1795	1774	0	1609	1774	0	1747
Q Serve(g_s), s	0.7	0.0	8.3	6.9	0.0	9.1	1.1	0.0	9.8	1.9	0.0	4.5
Cycle Q Clear(g_c), s	0.7	0.0	8.3	6.9	0.0	9.1	1.1	0.0	9.8	1.9	0.0	4.5
Prop In Lane	1.00		0.16	1.00		0.18	1.00		0.63	1.00		0.27
Lane Grp Cap(c), veh/h	48	0	426	294	0	672	463	0	437	347	0	505
V/C Ratio(X)	0.48	0.00	0.71	0.80	0.00	0.57	0.11	0.00	0.73	0.25	0.00	0.36
Avail Cap(c_a), veh/h	525	0	1170	525	0	1162	1031	0	1042	883	0	1131
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	25.9	0.0	19.0	21.7	0.0	13.4	12.9	0.0	17.9	13.4	0.0	15.2
Incr Delay (d2), s/veh	7.3	0.0	2.2	4.9	0.0	0.8	0.1	0.0	2.4	0.4	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(50%),veh/ln	0.4	0.0	4.4	3.7	0.0	4.6	0.5	0.0	4.6	0.9	0.0	2.2
LnGrp Delay(d),s/veh	33.2	0.0	21.2	26.6	0.0	14.2	13.0	0.0	20.3	13.8	0.0	15.7
LnGrp LOS	C		C	C		B	B		C	B		B
Approach Vol, veh/h		326			615			373			270	
Approach Delay, s/veh		22.0			18.9			19.3			15.0	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	18.7	12.0	16.7	5.7	19.6	4.5	24.2
Change Period (Y+Rc), s	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
Max Green Setting (Gmax), s	20.0	35.0	16.0	35.0	20.0	35.0	16.0	35.0
Max Q Clear Time (g_c+I1), s	3.9	11.8	8.9	10.3	3.1	6.5	2.7	11.1
Green Ext Time (p_c), s	0.2	2.0	0.4	1.9	0.1	1.1	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

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	12	491	6	10	562	13	3	0	3	3	1	12
Future Vol, veh/h	12	491	6	10	562	13	3	0	3	3	1	12
Conflicting Peds, #/hr	20	0	5	5	0	20	3	0	4	4	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	528	6	11	604	14	3	0	3	3	1	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	638	0	0	539	0	0	1205	1222	540	1216	1218	634
Stage 1	-	-	-	-	-	-	562	562	-	653	653	-
Stage 2	-	-	-	-	-	-	643	660	-	563	565	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	946	-	-	1029	-	-	161	180	542	158	181	479
Stage 1	-	-	-	-	-	-	512	510	-	456	464	-
Stage 2	-	-	-	-	-	-	462	460	-	511	508	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	928	-	-	1024	-	-	150	169	537	149	170	469
Mov Cap-2 Maneuver	-	-	-	-	-	-	150	169	-	149	170	-
Stage 1	-	-	-	-	-	-	499	497	-	438	448	-
Stage 2	-	-	-	-	-	-	440	444	-	496	495	-

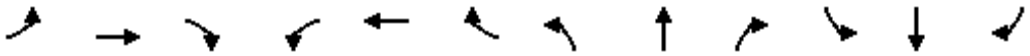
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	20.8	17.3
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	234	928	-	-	1024	-	-	310
HCM Lane V/C Ratio	0.028	0.014	-	-	0.011	-	-	0.055
HCM Control Delay (s)	20.8	8.9	0	-	8.6	0	-	17.3
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	472	14	27	546	47	8	11	32	36	11	41
Future Volume (veh/h)	13	472	14	27	546	47	8	11	32	36	11	41
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		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
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	14	513	15	29	593	51	9	12	35	39	12	45
Adj No. of Lanes	0	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	139	914	26	772	874	75	174	93	197	262	79	142
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	15	1765	51	868	1687	145	127	470	994	415	402	721
Grp Volume(v), veh/h	542	0	0	29	0	644	56	0	0	96	0	0
Grp Sat Flow(s),veh/h/ln	1831	0	0	868	0	1832	1591	0	0	1538	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.6	0.0	0.0	0.3	0.0	7.4	0.8	0.0	0.0	1.4	0.0	0.0
Prop In Lane	0.03		0.03	1.00		0.08	0.16		0.62	0.41		0.47
Lane Grp Cap(c), veh/h	1080	0	0	772	0	949	463	0	0	484	0	0
V/C Ratio(X)	0.50	0.00	0.00	0.04	0.00	0.68	0.12	0.00	0.00	0.20	0.00	0.00
Avail Cap(c_a), veh/h	2378	0	0	1402	0	2279	1092	0	0	1082	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	0.00	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	0.0	3.3	0.0	5.0	9.4	0.0	0.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	0.0	0.9	0.1	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(50%),veh/ln	2.8	0.0	0.0	0.1	0.0	3.8	0.4	0.0	0.0	0.6	0.0	0.0
LnGrp Delay(d),s/veh	5.0	0.0	0.0	3.4	0.0	5.9	9.5	0.0	0.0	9.8	0.0	0.0
LnGrp LOS	A			A		A	A			A		
Approach Vol, veh/h		542			673			56			96	
Approach Delay, s/veh		5.0			5.8			9.5			9.8	
Approach LOS		A			A			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		9.6		18.6		9.6		18.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		17.0		35.0		17.0		35.0
Max Q Clear Time (g_c+I1), s		2.8		7.6		3.4		9.4
Green Ext Time (p_c), s		0.2		3.9		0.4		5.0

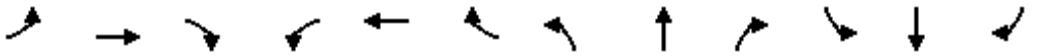
Intersection Summary	
HCM 2010 Ctrl Delay	5.9
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	509	29	166	514	352	61	70	130	354	47	23
Future Volume (vph)	21	509	29	166	514	352	61	70	130	354	47	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (prot)	1770	3505		1770	1863	1505	1770	1863	1545	1681	1681	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (perm)	1770	3505		1770	1863	1505	1770	1863	1545	1681	1681	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	22	525	30	171	530	363	63	72	134	365	48	24
RTOR Reduction (vph)	0	3	0	0	0	90	0	0	123	0	5	0
Lane Group Flow (vph)	22	552	0	171	530	273	63	72	11	219	213	0
Confl. Peds. (#/hr)	20		4	4		20	3		4	3		4
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8	6	2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	2.7	48.8		15.4	61.5	84.1	9.2	9.2	9.2	22.6	22.6	
Effective Green, g (s)	2.7	48.8		15.4	61.5	84.1	9.2	9.2	9.2	22.6	22.6	
Actuated g/C Ratio	0.02	0.44		0.14	0.55	0.75	0.08	0.08	0.08	0.20	0.20	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	2.5	3.2		2.3	3.2	3.1	3.0	3.0	3.0	3.1	3.1	
Lane Grp Cap (vph)	42	1527		243	1022	1130	145	153	126	339	339	
v/s Ratio Prot	0.01	0.16		c0.10	c0.28	0.05	0.04	c0.04		c0.13	0.13	
v/s Ratio Perm						0.13			0.01			
v/c Ratio	0.52	0.36		0.70	0.52	0.24	0.43	0.47	0.09	0.65	0.63	
Uniform Delay, d1	54.0	21.2		46.1	15.9	4.2	48.9	49.1	47.5	41.0	40.9	
Progression Factor	1.00	1.00		1.20	0.91	4.29	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.7	0.2		7.4	1.7	0.1	2.1	2.3	0.3	4.2	3.7	
Delay (s)	62.7	21.3		62.8	16.2	18.3	51.0	51.4	47.8	45.3	44.5	
Level of Service	E	C		E	B	B	D	D	D	D	D	
Approach Delay (s)		22.9			24.4			49.5			44.9	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	30.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	612	501	433	1121	0	0	0	0	205	2	115
Future Volume (vph)	0	612	501	433	1121	0	0	0	0	205	2	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		3539	1583	1770	3539					1681	1687	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		3539	1583	1770	3539					1681	1687	1583
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	658	539	466	1205	0	0	0	0	220	2	124
RTOR Reduction (vph)	0	0	218	0	0	0	0	0	0	0	0	111
Lane Group Flow (vph)	0	658	321	466	1205	0	0	0	0	110	112	13
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		53.8	53.8	34.8	92.6					11.4	11.4	11.4
Effective Green, g (s)		53.8	53.8	34.8	92.6					11.4	11.4	11.4
Actuated g/C Ratio		0.48	0.48	0.31	0.83					0.10	0.10	0.10
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1699	760	549	2925					171	171	161
v/s Ratio Prot		0.19		c0.26	c0.34					0.07	c0.07	0.01
v/s Ratio Perm			0.20									
v/c Ratio		0.39	0.42	0.85	0.41					0.64	0.65	0.08
Uniform Delay, d1		18.6	19.0	36.1	2.5					48.3	48.4	45.5
Progression Factor		0.89	1.39	0.75	1.07					1.00	1.00	1.00
Incremental Delay, d2		0.6	1.6	9.7	0.1					8.0	8.7	0.2
Delay (s)		17.2	28.0	36.6	2.8					56.4	57.1	45.8
Level of Service		B	C	D	A					E	E	D
Approach Delay (s)		22.1			12.2			0.0			52.8	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	20.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	324	469	0	0	486	291	383	505	282	312	0	587
Future Volume (veh/h)	324	469	0	0	486	291	383	505	282	312	0	587
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	334	484	0	0	501	300	395	521	291	322	0	605
Adj No. of Lanes	2	1	0	0	2	0	1	2	0	2	0	1
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, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	419	1243	0	0	1082	646	463	572	319	0	0	0
Arrive On Green	0.12	0.67	0.00	0.00	0.51	0.51	0.26	0.26	0.26	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	2216	1267	1774	2190	1220		0	
Grp Volume(v), veh/h	334	484	0	0	417	384	395	421	391		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1620	1774	1770	1641			
Q Serve(g_s), s	10.6	13.1	0.0	0.0	16.9	17.0	23.7	25.8	25.9			
Cycle Q Clear(g_c), s	10.6	13.1	0.0	0.0	16.9	17.0	23.7	25.8	25.9			
Prop In Lane	1.00		0.00	0.00		0.78	1.00		0.74			
Lane Grp Cap(c), veh/h	419	1243	0	0	902	826	463	462	428			
V/C Ratio(X)	0.80	0.39	0.00	0.00	0.46	0.46	0.85	0.91	0.91			
Avail Cap(c_a), veh/h	922	1243	0	0	902	826	475	474	439			
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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	47.8	8.4	0.0	0.0	17.6	17.6	39.3	40.1	40.2			
Incr Delay (d2), s/veh	3.5	0.9	0.0	0.0	0.4	0.4	13.7	21.4	23.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.2	7.0	0.0	0.0	8.3	7.7	13.4	15.4	14.5			
LnGrp Delay(d),s/veh	51.3	9.3	0.0	0.0	18.0	18.0	53.1	61.5	63.2			
LnGrp LOS	D	A			B	B	D	E	E			
Approach Vol, veh/h		818			801			1207				
Approach Delay, s/veh		26.4			18.0			59.3				
Approach LOS		C			B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		33.2		78.8			17.6	61.1
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		30.0		59.0			30.0	25.0
Max Q Clear Time (g_c+I1), s		27.9		15.1			12.6	19.0
Green Ext Time (p_c), s		1.3		3.5			1.1	2.6

Intersection Summary	
HCM 2010 Ctrl Delay	38.1
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR		NWBT	SEBT	
Lane Configurations						
Traffic Vol, veh/h	0	37	0	274	199	37
Future Vol, veh/h	0	37	0	274	199	37
Conflicting Peds, #/hr	0	19	12	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	40	0	298	216	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	264	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	775	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	754	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	754	-	-
HCM Lane V/C Ratio	-	0.053	-	-
HCM Control Delay (s)	-	10	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

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	7	3	2	3	0	19	0	11	5	21	15	9
Future Vol, veh/h	7	3	2	3	0	19	0	11	5	21	15	9
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	20	5	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	3	2	3	0	21	0	12	5	23	16	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	93	104	21	105	107	36	26	0	0	37	0	0
Stage 1	67	67	-	35	35	-	-	-	-	-	-	-
Stage 2	26	37	-	70	72	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	891	786	1056	875	783	1037	1588	-	-	1574	-	-
Stage 1	943	839	-	981	866	-	-	-	-	-	-	-
Stage 2	992	864	-	940	835	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	862	759	1056	844	756	1016	1588	-	-	1544	-	-
Mov Cap-2 Maneuver	862	759	-	844	756	-	-	-	-	-	-	-
Stage 1	943	826	-	962	850	-	-	-	-	-	-	-
Stage 2	971	848	-	920	822	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	9.3	8.7	0	3.4
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1588	-	-	859	989	1544	-	-
HCM Lane V/C Ratio	-	-	-	0.015	0.024	0.015	-	-
HCM Control Delay (s)	0	-	-	9.3	8.7	7.4	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.2

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	116	40	26	180	64	56
Future Vol, veh/h	116	40	26	180	64	56
Conflicting Peds, #/hr	0	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	127	44	29	198	70	62

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	172	0	406	150
Stage 1	-	-	-	-	150	-
Stage 2	-	-	-	-	256	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1405	-	601	896
Stage 1	-	-	-	-	878	-
Stage 2	-	-	-	-	787	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1404	-	587	895
Mov Cap-2 Maneuver	-	-	-	-	587	-
Stage 1	-	-	-	-	857	-
Stage 2	-	-	-	-	787	-

Approach	SE	NW	NE
HCM Control Delay, s	0	1	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	699	1404	-	-	-
HCM Lane V/C Ratio	0.189	0.02	-	-	-
HCM Control Delay (s)	11.3	7.6	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.7	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	6.5
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	370	292	107
Demand Flow Rate, veh/h	377	298	109
Vehicles Circulating, veh/h	39	93	209
Vehicles Exiting, veh/h	352	225	207
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	1	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	6.9	6.5	5.1
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193
Entry Flow, veh/h	377	298	109
Cap Entry Lane, veh/h	1087	1030	917
Entry HV Adj Factor	0.981	0.980	0.982
Flow Entry, veh/h	370	292	107
Cap Entry, veh/h	1066	1008	900
V/C Ratio	0.347	0.289	0.119
Control Delay, s/veh	6.9	6.5	5.1
LOS	A	A	A
95th %tile Queue, veh	2	1	0

Intersection	
Intersection Delay, s/veh	7.5
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	277	414	59	270
Demand Flow Rate, veh/h	282	423	59	276
Vehicles Circulating, veh/h	214	54	357	276
Vehicles Exiting, veh/h	338	362	139	201
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	4	0	4
Ped Cap Adj	1.000	0.999	1.000	0.999
Approach Delay, s/veh	7.4	7.6	5.3	7.9
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	282	423	59	276
Cap Entry Lane, veh/h	912	1071	791	857
Entry HV Adj Factor	0.982	0.980	0.993	0.979
Flow Entry, veh/h	277	414	59	270
Cap Entry, veh/h	896	1048	785	839
V/C Ratio	0.309	0.395	0.075	0.322
Control Delay, s/veh	7.4	7.6	5.3	7.9
LOS	A	A	A	A
95th %tile Queue, veh	1	2	0	1

Appendix C: Existing Plus Project Conditions LOS Results

Intersection	
Intersection Delay, s/veh	23.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	76	20	29	54	168	15	107	44	297	113	29
Future Vol, veh/h	19	76	20	29	54	168	15	107	44	297	113	29
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	23	90	24	35	64	200	18	127	52	354	135	35
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	12.1	15.7	12.7	34.6
HCM LOS	B	C	B	D

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	9%	20%	0%	12%	68%
Vol Thru, %	64%	80%	0%	22%	26%
Vol Right, %	27%	0%	100%	67%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	166	95	20	251	439
LT Vol	15	19	0	29	297
Through Vol	107	76	0	54	113
RT Vol	44	0	20	168	29
Lane Flow Rate	198	113	24	299	523
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.345	0.235	0.044	0.515	0.859
Departure Headway (Hd)	6.291	7.494	6.672	6.201	5.915
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	569	477	534	580	617
Service Time	4.352	5.264	4.442	4.26	3.915
HCM Lane V/C Ratio	0.348	0.237	0.045	0.516	0.848
HCM Control Delay	12.7	12.6	9.8	15.7	34.6
HCM Lane LOS	B	B	A	C	D
HCM 95th-tile Q	1.5	0.9	0.1	2.9	9.6

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	414	2	3	240	47	2	0	3	46	1	7
Future Vol, veh/h	2	414	2	3	240	47	2	0	3	46	1	7
Conflicting Peds, #/hr	6	0	8	8	0	9	9	0	1	1	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	78	78	78	78	78	78	78	78	78	78	78	78
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	531	3	4	308	60	3	0	4	59	1	9

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	377	0	0	542	0	0	907	932	542	897	903	356
Stage 1	-	-	-	-	-	-	547	547	-	355	355	-
Stage 2	-	-	-	-	-	-	360	385	-	542	548	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1181	-	-	1027	-	-	257	266	540	261	277	688
Stage 1	-	-	-	-	-	-	521	517	-	662	630	-
Stage 2	-	-	-	-	-	-	658	611	-	525	517	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1171	-	-	1019	-	-	247	259	535	255	270	676
Mov Cap-2 Maneuver	-	-	-	-	-	-	247	259	-	255	270	-
Stage 1	-	-	-	-	-	-	515	511	-	653	621	-
Stage 2	-	-	-	-	-	-	639	602	-	519	511	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	15	22.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	365	1171	-	-	1019	-	-	278
HCM Lane V/C Ratio	0.018	0.002	-	-	0.004	-	-	0.249
HCM Control Delay (s)	15	8.1	0	-	8.5	0	-	22.2
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	365	62	191	219	28	43	127	176	65	137	28
Future Volume (veh/h)	60	365	62	191	219	28	43	127	176	65	137	28
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.73	0.98		0.94	0.99		0.94
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	70	424	72	222	255	33	50	148	205	76	159	33
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	504	86	270	653	85	401	180	249	264	407	84
Arrive On Green	0.05	0.33	0.33	0.15	0.42	0.42	0.04	0.26	0.26	0.06	0.27	0.27
Sat Flow, veh/h	1774	1549	263	1774	1541	199	1774	682	944	1774	1479	307
Grp Volume(v), veh/h	70	0	496	222	0	288	50	0	353	76	0	192
Grp Sat Flow(s),veh/h/ln	1774	0	1812	1774	0	1740	1774	0	1625	1774	0	1786
Q Serve(g_s), s	2.7	0.0	17.5	8.4	0.0	7.9	1.4	0.0	14.1	2.1	0.0	6.0
Cycle Q Clear(g_c), s	2.7	0.0	17.5	8.4	0.0	7.9	1.4	0.0	14.1	2.1	0.0	6.0
Prop In Lane	1.00		0.15	1.00		0.11	1.00		0.58	1.00		0.17
Lane Grp Cap(c), veh/h	95	0	589	270	0	738	401	0	429	264	0	491
V/C Ratio(X)	0.74	0.00	0.84	0.82	0.00	0.39	0.12	0.00	0.82	0.29	0.00	0.39
Avail Cap(c_a), veh/h	411	0	920	411	0	883	836	0	825	679	0	906
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	32.2	0.0	21.6	28.3	0.0	13.7	17.2	0.0	23.9	18.2	0.0	20.3
Incr Delay (d2), s/veh	10.5	0.0	4.3	7.8	0.0	0.3	0.1	0.0	4.0	0.6	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(50%),veh/ln	1.6	0.0	9.4	4.7	0.0	3.8	0.7	0.0	6.8	1.1	0.0	3.1
LnGrp Delay(d),s/veh	42.7	0.0	25.9	36.1	0.0	14.1	17.3	0.0	27.9	18.8	0.0	20.8
LnGrp LOS	D		C	D		B	B		C	B		C
Approach Vol, veh/h		566			510			403			268	
Approach Delay, s/veh		28.0			23.6			26.6			20.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	22.2	13.5	26.4	6.1	23.0	6.7	33.2
Change Period (Y+Rc), s	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
Max Green Setting (Gmax), s	20.0	35.0	16.0	35.0	20.0	35.0	16.0	35.0
Max Q Clear Time (g_c+I1), s	4.1	16.1	10.4	19.5	3.4	8.0	4.7	9.9
Green Ext Time (p_c), s	0.1	2.1	0.3	2.9	0.1	1.2	0.1	1.8

Intersection Summary	
HCM 2010 Ctrl Delay	25.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	566	18	5	427	5	8	0	8	4	0	1
Future Vol, veh/h	8	566	18	5	427	5	8	0	8	4	0	1
Conflicting Peds, #/hr	55	0	9	9	0	55	1	0	2	2	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	9	658	21	6	497	6	9	0	9	5	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	558	0	0	688	0	0	1210	1266	680	1260	1273	556
Stage 1	-	-	-	-	-	-	696	696	-	567	567	-
Stage 2	-	-	-	-	-	-	514	570	-	693	706	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1013	-	-	906	-	-	159	169	451	147	167	531
Stage 1	-	-	-	-	-	-	432	443	-	508	507	-
Stage 2	-	-	-	-	-	-	543	505	-	434	439	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	960	-	-	898	-	-	154	155	446	134	153	503
Mov Cap-2 Maneuver	-	-	-	-	-	-	154	155	-	134	153	-
Stage 1	-	-	-	-	-	-	422	432	-	474	476	-
Stage 2	-	-	-	-	-	-	536	474	-	418	428	-

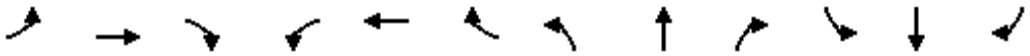
Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	22.1	28.8
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	229	960	-	-	898	-	-	157
HCM Lane V/C Ratio	0.081	0.009	-	-	0.006	-	-	0.037
HCM Control Delay (s)	22.1	8.8	0	-	9	0	-	28.8
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	538	24	46	546	47	14	25	103	25	10	19
Future Volume (veh/h)	11	538	24	46	546	47	14	25	103	25	10	19
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.96	0.99		0.96	0.99		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
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	12	591	26	51	600	52	15	27	113	27	11	21
Adj No. of Lanes	0	1	0	1	1	0	0	1	0	0	1	0
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	133	916	40	706	885	77	153	68	227	270	112	110
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	11	1745	76	798	1684	146	83	344	1150	445	567	559
Grp Volume(v), veh/h	629	0	0	51	0	652	155	0	0	59	0	0
Grp Sat Flow(s),veh/h/ln	1831	0	0	798	0	1830	1577	0	0	1571	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	7.6	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.1	0.0	0.0	0.8	0.0	7.6	2.5	0.0	0.0	0.8	0.0	0.0
Prop In Lane	0.02		0.04	1.00		0.08	0.10		0.73	0.46		0.36
Lane Grp Cap(c), veh/h	1089	0	0	706	0	961	448	0	0	492	0	0
V/C Ratio(X)	0.58	0.00	0.00	0.07	0.00	0.68	0.35	0.00	0.00	0.12	0.00	0.00
Avail Cap(c_a), veh/h	2326	0	0	1256	0	2221	1058	0	0	1052	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	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.9	0.0	0.0	3.4	0.0	5.0	10.3	0.0	0.0	9.6	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.0	0.0	0.0	0.8	0.5	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(50%),veh/ln	3.6	0.0	0.0	0.2	0.0	3.8	1.1	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d),s/veh	5.4	0.0	0.0	3.5	0.0	5.9	10.7	0.0	0.0	9.7	0.0	0.0
LnGrp LOS	A			A		A	B			A		
Approach Vol, veh/h		629			703			155			59	
Approach Delay, s/veh		5.4			5.7			10.7			9.7	
Approach LOS		A			A			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		9.7		19.2		9.7		19.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		17.0		35.0		17.0		35.0
Max Q Clear Time (g_c+I1), s		4.5		9.1		2.8		9.6
Green Ext Time (p_c), s		0.6		4.7		0.2		5.3

Intersection Summary	
HCM 2010 Ctrl Delay	6.3
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	611	39	258	383	269	56	80	228	291	110	15
Future Volume (vph)	21	611	39	258	383	269	56	80	228	291	110	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	
Satd. Flow (prot)	1770	3502		1770	1863	1534	1770	1863	1555	1681	1714	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.98	
Satd. Flow (perm)	1770	3502		1770	1863	1534	1770	1863	1555	1681	1714	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	24	702	45	297	440	309	64	92	262	334	126	17
RTOR Reduction (vph)	0	3	0	0	0	82	0	0	239	0	3	0
Lane Group Flow (vph)	24	744	0	297	440	227	64	92	23	237	237	0
Confl. Peds. (#/hr)	10		2	2		10	2		2	2		2
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8	6	2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	4.0	40.2		22.5	58.7	82.3	9.7	9.7	9.7	23.6	23.6	
Effective Green, g (s)	4.0	40.2		22.5	58.7	82.3	9.7	9.7	9.7	23.6	23.6	
Actuated g/C Ratio	0.04	0.36		0.20	0.52	0.73	0.09	0.09	0.09	0.21	0.21	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	2.5	3.2		2.3	3.2	3.1	3.0	3.0	3.0	3.1	3.1	
Lane Grp Cap (vph)	63	1256		355	976	1127	153	161	134	354	361	
v/s Ratio Prot	0.01	c0.21		c0.17	0.24	0.04	0.04	c0.05		c0.14	0.14	
v/s Ratio Perm						0.11			0.01			
v/c Ratio	0.38	0.59		0.84	0.45	0.20	0.42	0.57	0.17	0.67	0.66	
Uniform Delay, d1	52.8	29.2		43.0	16.6	4.6	48.5	49.2	47.4	40.6	40.5	
Progression Factor	1.00	1.00		1.37	0.67	0.84	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.8	0.8		14.5	1.4	0.1	1.8	4.8	0.6	4.8	4.3	
Delay (s)	55.6	30.0		73.3	12.5	4.0	50.3	54.0	48.0	45.4	44.8	
Level of Service	E	C		E	B	A	D	D	D	D	D	
Approach Delay (s)		30.8			27.2			49.7			45.1	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	34.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	688	504	619	888	0	0	0	0	111	0	108
Future Volume (vph)	0	688	504	619	888	0	0	0	0	111	0	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.97	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		3539	1529	1770	3539					1681	1681	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		3539	1529	1770	3539					1681	1681	1583
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	740	542	666	955	0	0	0	0	119	0	116
RTOR Reduction (vph)	0	0	147	0	0	0	0	0	0	0	0	107
Lane Group Flow (vph)	0	740	395	666	955	0	0	0	0	59	60	9
Confl. Peds. (#/hr)			15	15		19						
Confl. Bikes (#/hr)						5						
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		46.8	46.8	44.9	95.7					8.3	8.3	8.3
Effective Green, g (s)		46.8	46.8	44.9	95.7					8.3	8.3	8.3
Actuated g/C Ratio		0.42	0.42	0.40	0.85					0.07	0.07	0.07
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1478	638	709	3023					124	124	117
v/s Ratio Prot		0.21		c0.38	0.27					0.04	c0.04	0.01
v/s Ratio Perm			c0.26									
v/c Ratio		0.50	0.62	0.94	0.32					0.48	0.48	0.07
Uniform Delay, d1		24.0	25.6	32.2	1.6					49.8	49.8	48.3
Progression Factor		0.76	0.59	0.96	0.41					1.00	1.00	1.00
Incremental Delay, d2		0.2	1.5	14.3	0.2					2.9	3.0	0.3
Delay (s)		18.4	16.6	45.2	0.8					52.6	52.7	48.5
Level of Service		B	B	D	A					D	D	D
Approach Delay (s)		17.6			19.0			0.0			50.6	
Approach LOS		B			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	294	370	0	0	689	219	289	245	69	231	0	671
Future Volume (veh/h)	294	370	0	0	689	219	289	245	69	231	0	671
Number	7	4	14	3	8	18	5	2	12	1	6	16
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		0.99	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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	327	411	0	0	766	243	321	272	77	257	0	746
Adj No. of Lanes	2	1	0	0	2	0	1	2	0	2	0	1
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, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	412	1337	0	0	1482	470	374	577	160	0	0	0
Arrive On Green	0.12	0.72	0.00	0.00	0.56	0.56	0.21	0.21	0.21	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	2729	836	1774	2735	759		0	
Grp Volume(v), veh/h	327	411	0	0	514	495	321	174	175		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1702	1774	1770	1724			
Q Serve(g_s), s	10.4	8.9	0.0	0.0	20.1	20.1	19.5	9.6	10.0			
Cycle Q Clear(g_c), s	10.4	8.9	0.0	0.0	20.1	20.1	19.5	9.6	10.0			
Prop In Lane	1.00		0.00	0.00		0.49	1.00		0.44			
Lane Grp Cap(c), veh/h	412	1337	0	0	995	957	374	373	363			
V/C Ratio(X)	0.79	0.31	0.00	0.00	0.52	0.52	0.86	0.47	0.48			
Avail Cap(c_a), veh/h	922	1337	0	0	995	957	475	474	462			
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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	48.0	5.7	0.0	0.0	15.1	15.1	42.6	38.7	38.8			
Incr Delay (d2), s/veh	3.5	0.6	0.0	0.0	0.5	0.5	12.0	0.9	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			
%ile BackOfQ(50%),veh/ln	5.1	4.8	0.0	0.0	9.8	9.5	10.8	4.8	4.9			
LnGrp Delay(d),s/veh	51.5	6.3	0.0	0.0	15.6	15.6	54.6	39.6	39.8			
LnGrp LOS	D	A			B	B	D	D	D			
Approach Vol, veh/h		738			1009			670				
Approach Delay, s/veh		26.3			15.6			46.8				
Approach LOS		C			B			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		27.6		84.4			17.4	67.0
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		30.0		59.0			30.0	25.0
Max Q Clear Time (g_c+I1), s		21.5		10.9			12.4	22.1
Green Ext Time (p_c), s		2.1		2.9			1.1	1.7

Intersection Summary	
HCM 2010 Ctrl Delay	27.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR		NWBT	SEBT	
Lane Configurations						
Traffic Vol, veh/h	0	72	0	365	386	18
Future Vol, veh/h	0	72	0	365	386	18
Conflicting Peds, #/hr	0	7	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	101	0	514	544	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	566	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	524	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	520	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	520	-	-
HCM Lane V/C Ratio	-	0.195	-	-
HCM Control Delay (s)	-	13.6	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.7	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	13	0	0	0	15	0	104	14	38	39	1
Future Vol, veh/h	7	13	0	0	0	15	0	104	14	38	39	1
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	20	5	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	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	15	0	0	0	17	0	118	16	43	44	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	267	285	45	284	277	147	45	0	0	154	0	0
Stage 1	131	131	-	146	146	-	-	-	-	-	-	-
Stage 2	136	154	-	138	131	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	686	624	1025	668	631	900	1563	-	-	1426	-	-
Stage 1	873	788	-	857	776	-	-	-	-	-	-	-
Stage 2	867	770	-	865	788	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	656	593	1025	627	599	882	1563	-	-	1399	-	-
Mov Cap-2 Maneuver	656	593	-	627	599	-	-	-	-	-	-	-
Stage 1	873	763	-	841	761	-	-	-	-	-	-	-
Stage 2	849	755	-	821	763	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.1	9.2	0	3.7
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1563	-	-	614	882	1399	-	-
HCM Lane V/C Ratio	-	-	-	0.037	0.019	0.031	-	-
HCM Control Delay (s)	0	-	-	11.1	9.2	7.7	0	-
HCM Lane LOS	A	-	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	238	52	57	138	23	57
Future Vol, veh/h	238	52	57	138	23	57
Conflicting Peds, #/hr	0	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	280	61	67	162	27	67

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	342	0	608	312
Stage 1	-	-	-	-	312	-
Stage 2	-	-	-	-	296	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1217	-	459	728
Stage 1	-	-	-	-	742	-
Stage 2	-	-	-	-	755	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1216	-	431	727
Mov Cap-2 Maneuver	-	-	-	-	431	-
Stage 1	-	-	-	-	696	-
Stage 2	-	-	-	-	755	-

Approach	SE	NW	NE
HCM Control Delay, s	0	2.4	12
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	607	1216	-	-	-
HCM Lane V/C Ratio	0.155	0.055	-	-	-
HCM Control Delay (s)	12	8.1	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.5	0.2	-	-	-

Intersection	
Intersection Delay, s/veh	7.3
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	465	202	207
Demand Flow Rate, veh/h	475	206	211
Vehicles Circulating, veh/h	19	167	288
Vehicles Exiting, veh/h	354	332	206
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	1	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.9	6.0	7.0
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193
Entry Flow, veh/h	475	206	211
Cap Entry Lane, veh/h	1109	956	847
Entry HV Adj Factor	0.980	0.982	0.981
Flow Entry, veh/h	465	202	207
Cap Entry, veh/h	1086	939	831
V/C Ratio	0.429	0.215	0.249
Control Delay, s/veh	7.9	6.0	7.0
LOS	A	A	A
95th %tile Queue, veh	2	1	1

Intersection	
Intersection Delay, s/veh	6.4
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	34	104	331	305
Demand Flow Rate, veh/h	34	106	338	311
Vehicles Circulating, veh/h	358	234	56	116
Vehicles Exiting, veh/h	69	160	336	224
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	4	0	4
Ped Cap Adj	1.000	0.999	1.000	0.999
Approach Delay, s/veh	5.0	5.3	6.6	6.8
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	34	106	338	311
Cap Entry Lane, veh/h	790	894	1068	1006
Entry HV Adj Factor	0.992	0.978	0.980	0.980
Flow Entry, veh/h	34	104	331	305
Cap Entry, veh/h	783	874	1047	986
V/C Ratio	0.043	0.119	0.316	0.309
Control Delay, s/veh	5.0	5.3	6.6	6.8
LOS	A	A	A	A
95th %tile Queue, veh	0	0	1	1

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	29	86	16	46	86	164	18	52	35	22	66	152
Future Vol, veh/h	29	86	16	46	86	164	18	52	35	22	66	152
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	32	93	17	50	93	178	20	57	38	24	72	165
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	1	1
HCM Control Delay	9.8	11.5	9.7	9.6
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1	SBLn2
Vol Left, %	17%	22%	16%	17%	0%
Vol Thru, %	50%	66%	29%	52%	0%
Vol Right, %	33%	12%	55%	30%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	105	131	296	126	114
LT Vol	18	29	46	22	0
Through Vol	52	86	86	66	0
RT Vol	35	16	164	38	114
Lane Flow Rate	114	142	322	137	124
Geometry Grp	5	2	2	7	7
Degree of Util (X)	0.173	0.212	0.434	0.219	0.178
Departure Headway (Hd)	5.469	5.352	4.858	5.764	5.18
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	655	671	746	623	693
Service Time	3.508	3.385	2.858	3.496	2.912
HCM Lane V/C Ratio	0.174	0.212	0.432	0.22	0.179
HCM Control Delay	9.7	9.8	11.5	10.1	9
HCM Lane LOS	A	A	B	B	A
HCM 95th-tile Q	0.6	0.8	2.2	0.8	0.6

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	271	6	9	289	30	3	0	11	18	1	2
Future Vol, veh/h	1	271	6	9	289	30	3	0	11	18	1	2
Conflicting Peds, #/hr	6	0	8	8	0	9	9	0	1	1	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	295	7	10	314	33	3	0	12	20	1	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	356	0	0	310	0	0	670	685	308	668	672	349
Stage 1	-	-	-	-	-	-	309	309	-	360	360	-
Stage 2	-	-	-	-	-	-	361	376	-	308	312	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1203	-	-	1250	-	-	371	371	732	372	377	694
Stage 1	-	-	-	-	-	-	701	660	-	658	626	-
Stage 2	-	-	-	-	-	-	657	616	-	702	658	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1193	-	-	1240	-	-	360	361	726	359	366	682
Mov Cap-2 Maneuver	-	-	-	-	-	-	360	361	-	359	366	-
Stage 1	-	-	-	-	-	-	695	654	-	651	614	-
Stage 2	-	-	-	-	-	-	642	604	-	689	652	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	11.2	15.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	596	1193	-	-	1240	-	-	376
HCM Lane V/C Ratio	0.026	0.001	-	-	0.008	-	-	0.061
HCM Control Delay (s)	11.2	8	0	-	7.9	0	-	15.2
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	252	45	223	298	63	49	111	203	83	125	46
Future Volume (veh/h)	22	252	45	223	298	63	49	111	203	83	125	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.98		0.94	0.99		0.94
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	23	268	48	237	317	67	52	118	216	88	133	49
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	48	368	66	296	563	119	462	156	286	335	373	138
Arrive On Green	0.03	0.24	0.24	0.17	0.38	0.38	0.05	0.28	0.28	0.07	0.29	0.29
Sat Flow, veh/h	1774	1534	275	1774	1482	313	1774	567	1037	1774	1277	470
Grp Volume(v), veh/h	23	0	316	237	0	384	52	0	334	88	0	182
Grp Sat Flow(s),veh/h/ln	1774	0	1809	1774	0	1795	1774	0	1604	1774	0	1747
Q Serve(g_s), s	0.7	0.0	9.0	7.2	0.0	9.4	1.1	0.0	10.6	1.9	0.0	4.6
Cycle Q Clear(g_c), s	0.7	0.0	9.0	7.2	0.0	9.4	1.1	0.0	10.6	1.9	0.0	4.6
Prop In Lane	1.00		0.15	1.00		0.17	1.00		0.65	1.00		0.27
Lane Grp Cap(c), veh/h	48	0	434	296	0	682	462	0	442	335	0	511
V/C Ratio(X)	0.48	0.00	0.73	0.80	0.00	0.56	0.11	0.00	0.76	0.26	0.00	0.36
Avail Cap(c_a), veh/h	509	0	1135	509	0	1127	1011	0	1007	852	0	1096
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	26.8	0.0	19.5	22.3	0.0	13.6	13.2	0.0	18.5	13.8	0.0	15.6
Incr Delay (d2), s/veh	7.4	0.0	2.3	5.0	0.0	0.7	0.1	0.0	2.7	0.4	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(50%),veh/ln	0.4	0.0	4.8	3.9	0.0	4.7	0.6	0.0	5.0	0.9	0.0	2.2
LnGrp Delay(d),s/veh	34.1	0.0	21.9	27.4	0.0	14.4	13.3	0.0	21.2	14.2	0.0	16.0
LnGrp LOS	C		C	C		B	B		C	B		B
Approach Vol, veh/h		339			621			386			270	
Approach Delay, s/veh		22.7			19.3			20.1			15.4	
Approach LOS		C			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	19.4	12.3	17.4	5.8	20.3	4.5	25.2
Change Period (Y+Rc), s	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
Max Green Setting (Gmax), s	20.0	35.0	16.0	35.0	20.0	35.0	16.0	35.0
Max Q Clear Time (g_c+I1), s	3.9	12.6	9.2	11.0	3.1	6.6	2.7	11.4
Green Ext Time (p_c), s	0.2	2.1	0.4	1.9	0.1	1.1	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	19.6
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	491	18	10	565	13	6	0	6	3	1	12
Future Vol, veh/h	12	491	18	10	565	13	6	0	6	3	1	12
Conflicting Peds, #/hr	20	0	5	5	0	20	3	0	4	4	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	13	528	19	11	608	14	6	0	6	3	1	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	642	0	0	552	0	0	1216	1233	547	1228	1235	638
Stage 1	-	-	-	-	-	-	569	569	-	657	657	-
Stage 2	-	-	-	-	-	-	647	664	-	571	578	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	943	-	-	1018	-	-	158	177	537	155	176	477
Stage 1	-	-	-	-	-	-	507	506	-	454	462	-
Stage 2	-	-	-	-	-	-	460	458	-	506	501	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	925	-	-	1013	-	-	147	166	532	145	165	467
Mov Cap-2 Maneuver	-	-	-	-	-	-	147	166	-	145	165	-
Stage 1	-	-	-	-	-	-	494	493	-	436	445	-
Stage 2	-	-	-	-	-	-	437	442	-	488	488	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	21.6	17.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	230	925	-	-	1013	-	-	305
HCM Lane V/C Ratio	0.056	0.014	-	-	0.011	-	-	0.056
HCM Control Delay (s)	21.6	8.9	0	-	8.6	0	-	17.5
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	472	17	102	546	47	11	18	70	36	24	41
Future Volume (veh/h)	13	472	17	102	546	47	11	18	70	36	24	41
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.96	0.99		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
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	14	513	18	111	593	51	12	20	76	39	26	45
Adj No. of Lanes	0	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	924	32	771	889	76	157	73	215	241	107	123
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	15	1754	60	866	1687	145	92	375	1110	367	550	635
Grp Volume(v), veh/h	545	0	0	111	0	644	108	0	0	110	0	0
Grp Sat Flow(s),veh/h/ln	1829	0	0	866	0	1832	1577	0	0	1553	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.7	0.0	0.0	1.4	0.0	7.4	1.7	0.0	0.0	1.6	0.0	0.0
Prop In Lane	0.03		0.03	1.00		0.08	0.11		0.70	0.35		0.41
Lane Grp Cap(c), veh/h	1093	0	0	771	0	966	446	0	0	471	0	0
V/C Ratio(X)	0.50	0.00	0.00	0.14	0.00	0.67	0.24	0.00	0.00	0.23	0.00	0.00
Avail Cap(c_a), veh/h	2330	0	0	1370	0	2234	1062	0	0	1063	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	0.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	4.5	0.0	0.0	3.5	0.0	4.9	10.0	0.0	0.0	10.0	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.1	0.0	0.8	0.3	0.0	0.0	0.3	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	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	0.0	0.0	0.4	0.0	3.8	0.8	0.0	0.0	0.8	0.0	0.0
LnGrp Delay(d),s/veh	4.9	0.0	0.0	3.6	0.0	5.8	10.3	0.0	0.0	10.2	0.0	0.0
LnGrp LOS	A			A		A	B			B		
Approach Vol, veh/h		545			755			108			110	
Approach Delay, s/veh		4.9			5.4			10.3			10.2	
Approach LOS		A			A			B			B	

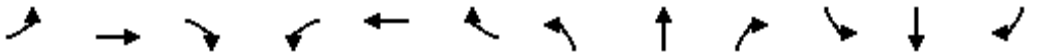
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		9.6		19.1		9.6		19.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		17.0		35.0		17.0		35.0
Max Q Clear Time (g_c+I1), s		3.7		7.7		3.6		9.4
Green Ext Time (p_c), s		0.4		4.0		0.4		5.6

Intersection Summary		
HCM 2010 Ctrl Delay		5.9
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	550	29	166	589	352	61	70	130	354	47	23
Future Volume (veh/h)	21	550	29	166	589	352	61	70	130	354	47	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.97	0.99		0.99	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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	22	567	30	171	607	363	63	72	134	365	48	24
Adj No. of Lanes	1	2	0	1	1	1	1	1	1	1	1	0
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	39	958	51	203	695	858	290	197	166	462	275	138
Arrive On Green	0.02	0.28	0.28	0.11	0.37	0.37	0.05	0.11	0.11	0.18	0.24	0.24
Sat Flow, veh/h	1774	3408	180	1774	1863	1541	1774	1863	1565	1774	1171	585
Grp Volume(v), veh/h	22	294	303	171	607	363	63	72	134	365	0	72
Grp Sat Flow(s),veh/h/ln	1774	1770	1818	1774	1863	1541	1774	1863	1565	1774	0	1756
Q Serve(g_s), s	1.4	16.0	16.1	10.6	33.9	15.5	3.5	4.0	9.4	20.0	0.0	3.7
Cycle Q Clear(g_c), s	1.4	16.0	16.1	10.6	33.9	15.5	3.5	4.0	9.4	20.0	0.0	3.7
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	39	498	511	203	695	858	290	197	166	462	0	413
V/C Ratio(X)	0.56	0.59	0.59	0.84	0.87	0.42	0.22	0.37	0.81	0.79	0.00	0.17
Avail Cap(c_a), veh/h	79	600	617	380	948	1067	377	233	196	462	0	413
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	0.83	0.83	0.83	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	54.2	34.7	34.7	48.6	32.6	14.7	41.4	46.6	49.0	34.6	0.0	34.2
Incr Delay (d2), s/veh	9.0	1.2	1.2	4.9	12.2	1.3	0.4	1.1	19.0	9.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	8.0	8.3	5.5	19.7	6.9	1.7	2.1	4.9	11.0	0.0	1.8
LnGrp Delay(d),s/veh	63.2	35.9	35.9	53.6	44.8	16.0	41.8	47.7	68.0	43.6	0.0	34.4
LnGrp LOS	E	D	D	D	D	B	D	D	E	D		C
Approach Vol, veh/h		619			1141			269			437	
Approach Delay, s/veh		36.9			37.0			56.4			42.1	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	15.9	16.8	35.5	9.5	30.3	6.5	45.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	14.0	24.0	38.0	11.0	23.0	5.0	57.0
Max Q Clear Time (g_c+I1), s	22.0	11.4	12.6	18.1	5.5	5.7	3.4	35.9
Green Ext Time (p_c), s	0.0	0.2	0.2	3.9	0.0	0.3	0.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay	40.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	710	383	319	1113	0	0	0	0	205	2	131
Future Volume (vph)	0	710	383	319	1113	0	0	0	0	205	2	131
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		3539	1583	1770	3539					1681	1687	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		3539	1583	1770	3539					1681	1687	1583
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	763	412	343	1197	0	0	0	0	220	2	141
RTOR Reduction (vph)	0	0	187	0	0	0	0	0	0	0	0	127
Lane Group Flow (vph)	0	763	225	343	1197	0	0	0	0	110	112	14
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		61.1	61.1	27.5	92.6					11.4	11.4	11.4
Effective Green, g (s)		61.1	61.1	27.5	92.6					11.4	11.4	11.4
Actuated g/C Ratio		0.55	0.55	0.25	0.83					0.10	0.10	0.10
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1930	863	434	2925					171	171	161
v/s Ratio Prot		0.22		c0.19	c0.34					0.07	c0.07	0.01
v/s Ratio Perm			0.14									
v/c Ratio		0.40	0.26	0.79	0.41					0.64	0.65	0.09
Uniform Delay, d1		14.7	13.5	39.6	2.5					48.3	48.4	45.6
Progression Factor		0.92	2.63	0.98	1.11					1.00	1.00	1.00
Incremental Delay, d2		0.5	0.7	7.1	0.1					8.0	8.7	0.2
Delay (s)		14.1	36.1	46.0	2.9					56.4	57.1	45.8
Level of Service		B	D	D	A					E	E	D
Approach Delay (s)		21.8			12.5			0.0			52.5	
Approach LOS		C			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	333	476	0	0	499	291	383	505	282	312	0	603
Future Volume (veh/h)	333	476	0	0	499	291	383	505	282	312	0	603
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	343	491	0	0	514	300	395	521	291	322	0	622
Adj No. of Lanes	2	1	0	0	2	0	1	2	0	2	0	1
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, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	429	1243	0	0	1088	633	463	572	319	0	0	0
Arrive On Green	0.12	0.67	0.00	0.00	0.51	0.51	0.26	0.26	0.26	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	2238	1248	1774	2190	1220		0	
Grp Volume(v), veh/h	343	491	0	0	424	390	395	421	391		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1623	1774	1770	1641			
Q Serve(g_s), s	10.9	13.3	0.0	0.0	17.4	17.5	23.7	25.8	25.9			
Cycle Q Clear(g_c), s	10.9	13.3	0.0	0.0	17.4	17.5	23.7	25.8	25.9			
Prop In Lane	1.00		0.00	0.00		0.77	1.00		0.74			
Lane Grp Cap(c), veh/h	429	1243	0	0	898	823	463	462	428			
V/C Ratio(X)	0.80	0.39	0.00	0.00	0.47	0.47	0.85	0.91	0.91			
Avail Cap(c_a), veh/h	922	1243	0	0	898	823	475	474	439			
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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	47.7	8.4	0.0	0.0	17.9	17.9	39.3	40.1	40.2			
Incr Delay (d2), s/veh	3.5	0.9	0.0	0.0	0.4	0.4	13.7	21.4	23.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.4	7.1	0.0	0.0	8.6	7.9	13.4	15.4	14.5			
LnGrp Delay(d),s/veh	51.1	9.3	0.0	0.0	18.3	18.3	53.1	61.5	63.2			
LnGrp LOS	D	A			B	B	D	E	E			
Approach Vol, veh/h		834			814			1207				
Approach Delay, s/veh		26.5			18.3			59.3				
Approach LOS		C			B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		33.2		78.8			18.0	60.8
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		30.0		59.0			30.0	25.0
Max Q Clear Time (g_c+I1), s		27.9		15.3			12.9	19.5
Green Ext Time (p_c), s		1.3		3.6			1.1	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	38.0
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBR		NWBT	SEBT	
Lane Configurations						
Traffic Vol, veh/h	0	37	0	274	199	37
Future Vol, veh/h	0	37	0	274	199	37
Conflicting Peds, #/hr	0	19	14	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	40	0	298	216	40

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	264	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	775	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	754	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	754	-	-
HCM Lane V/C Ratio	-	0.053	-	-
HCM Control Delay (s)	-	10	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	3	2	3	0	19	0	59	9	21	103	9
Future Vol, veh/h	7	3	2	3	0	19	0	59	9	21	103	9
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	20	5	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	3	2	3	0	21	0	64	10	23	112	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	244	257	117	255	257	90	122	0	0	94	0	0
Stage 1	163	163	-	89	89	-	-	-	-	-	-	-
Stage 2	81	94	-	166	168	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	710	647	935	698	647	968	1465	-	-	1500	-	-
Stage 1	839	763	-	918	821	-	-	-	-	-	-	-
Stage 2	927	817	-	836	759	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	685	624	935	671	624	949	1465	-	-	1471	-	-
Mov Cap-2 Maneuver	685	624	-	671	624	-	-	-	-	-	-	-
Stage 1	839	750	-	901	805	-	-	-	-	-	-	-
Stage 2	906	801	-	816	746	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	9.1	0	1.2
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1465	-	-	699	898	1471	-	-
HCM Lane V/C Ratio	-	-	-	0.019	0.027	0.016	-	-
HCM Control Delay (s)	0	-	-	10.2	9.1	7.5	0	-
HCM Lane LOS	A	-	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0	-	-

Intersection	
Int Delay, s/veh	3.9

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	120	40	65	180	64	72
Future Vol, veh/h	120	40	65	180	64	72
Conflicting Peds, #/hr	0	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	132	44	71	198	67	76

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	177	0	495	155
Stage 1	-	-	-	-	155	-
Stage 2	-	-	-	-	340	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1399	-	534	891
Stage 1	-	-	-	-	873	-
Stage 2	-	-	-	-	721	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1398	-	503	890
Mov Cap-2 Maneuver	-	-	-	-	503	-
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	721	-

Approach	SE	NW	NE
HCM Control Delay, s	0	2	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	653	1398	-	-	-
HCM Lane V/C Ratio	0.219	0.051	-	-	-
HCM Control Delay (s)	12.1	7.7	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.8	0.2	-	-	-

Intersection	
Intersection Delay, s/veh	6.6
Intersection LOS	A

Approach	EB	WB	NB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	384	299	107
Demand Flow Rate, veh/h	391	305	109
Vehicles Circulating, veh/h	39	93	223
Vehicles Exiting, veh/h	359	239	207
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	1	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	7.1	6.5	5.2
Approach LOS	A	A	A

Lane	Left	Left	Left
Designated Moves	TR	LT	LR
Assumed Moves	TR	LT	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193
Entry Flow, veh/h	391	305	109
Cap Entry Lane, veh/h	1087	1030	904
Entry HV Adj Factor	0.981	0.980	0.982
Flow Entry, veh/h	384	299	107
Cap Entry, veh/h	1066	1008	887
V/C Ratio	0.360	0.296	0.121
Control Delay, s/veh	7.1	6.5	5.2
LOS	A	A	A
95th %tile Queue, veh	2	1	0

Intersection	
Intersection Delay, s/veh	7.6
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	291	414	66	270
Demand Flow Rate, veh/h	297	423	67	276
Vehicles Circulating, veh/h	214	61	357	283
Vehicles Exiting, veh/h	345	362	154	201
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	4	0	4
Ped Cap Adj	1.000	0.999	1.000	0.999
Approach Delay, s/veh	7.6	7.7	5.5	8.0
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	297	423	67	276
Cap Entry Lane, veh/h	912	1063	791	851
Entry HV Adj Factor	0.980	0.980	0.979	0.979
Flow Entry, veh/h	291	414	66	270
Cap Entry, veh/h	894	1041	774	833
V/C Ratio	0.326	0.398	0.085	0.324
Control Delay, s/veh	7.6	7.7	5.5	8.0
LOS	A	A	A	A
95th %tile Queue, veh	1	2	0	1

Appendix D: Cumulative No Project Conditions LOS Results

Intersection	
Intersection Delay, s/veh	17.9
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	99	39	31	62	189	28	186	50	253	153	29
Future Vol, veh/h	39	99	39	31	62	189	28	186	50	253	153	29
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	99	39	31	62	189	28	186	50	253	153	29
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	13	14.8	14.5	23.9
HCM LOS	B	B	B	C

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	11%	22%	11%	58%
Vol Thru, %	70%	56%	22%	35%
Vol Right, %	19%	22%	67%	7%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	264	177	282	435
LT Vol	28	39	31	253
Through Vol	186	99	62	153
RT Vol	50	39	189	29
Lane Flow Rate	264	177	282	435
Geometry Grp	1	1	1	1
Degree of Util (X)	0.457	0.328	0.481	0.731
Departure Headway (Hd)	6.235	6.679	6.135	6.05
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	576	536	587	596
Service Time	4.294	4.746	4.191	4.1
HCM Lane V/C Ratio	0.458	0.33	0.48	0.73
HCM Control Delay	14.5	13	14.8	23.9
HCM Lane LOS	B	B	B	C
HCM 95th-tile Q	2.4	1.4	2.6	6.2

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	2	439	2	3	273	81	2	0	3	122	1	7
Future Vol, veh/h	2	439	2	3	273	81	2	0	3	122	1	7
Conflicting Peds, #/hr	6	0	8	8	0	9	9	0	1	1	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	439	2	3	273	81	2	0	3	122	1	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	363	0	0	449	0	0	785	821	449	776	782	332
Stage 1	-	-	-	-	-	-	452	452	-	329	329	-
Stage 2	-	-	-	-	-	-	333	369	-	447	453	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1196	-	-	1111	-	-	310	309	610	315	326	710
Stage 1	-	-	-	-	-	-	587	570	-	684	646	-
Stage 2	-	-	-	-	-	-	681	621	-	591	570	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1186	-	-	1103	-	-	300	302	605	309	319	698
Mov Cap-2 Maneuver	-	-	-	-	-	-	300	302	-	309	319	-
Stage 1	-	-	-	-	-	-	581	564	-	676	638	-
Stage 2	-	-	-	-	-	-	665	614	-	586	564	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	13.5	23.8
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	430	1186	-	-	1103	-	-	319
HCM Lane V/C Ratio	0.012	0.002	-	-	0.003	-	-	0.408
HCM Control Delay (s)	13.5	8	0	-	8.3	0	-	23.8
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	380	72	177	241	29	68	228	277	37	237	48
Future Volume (veh/h)	112	380	72	177	241	29	68	228	277	37	237	48
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.97	0.89		0.95	1.00		0.64
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	112	380	72	177	241	29	68	228	277	37	237	48
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	451	86	222	552	66	378	261	317	219	455	92
Arrive On Green	0.08	0.30	0.30	0.13	0.34	0.34	0.05	0.35	0.35	0.04	0.34	0.34
Sat Flow, veh/h	1774	1519	288	1774	1625	196	1774	744	904	1774	1357	275
Grp Volume(v), veh/h	112	0	452	177	0	270	68	0	505	37	0	285
Grp Sat Flow(s),veh/h/ln	1774	0	1807	1774	0	1820	1774	0	1647	1774	0	1631
Q Serve(g_s), s	4.5	0.0	17.2	7.1	0.0	8.4	1.8	0.0	21.1	1.0	0.0	10.3
Cycle Q Clear(g_c), s	4.5	0.0	17.2	7.1	0.0	8.4	1.8	0.0	21.1	1.0	0.0	10.3
Prop In Lane	1.00		0.16	1.00		0.11	1.00		0.55	1.00		0.17
Lane Grp Cap(c), veh/h	146	0	537	222	0	619	378	0	578	219	0	547
V/C Ratio(X)	0.76	0.00	0.84	0.80	0.00	0.44	0.18	0.00	0.87	0.17	0.00	0.52
Avail Cap(c_a), veh/h	484	0	862	484	0	869	675	0	786	542	0	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	33.0	0.0	24.2	31.2	0.0	18.8	15.1	0.0	22.3	17.6	0.0	19.6
Incr Delay (d2), s/veh	8.0	0.0	4.3	6.4	0.0	0.5	0.2	0.0	8.3	0.4	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(50%),veh/ln	2.5	0.0	9.2	3.9	0.0	4.3	0.9	0.0	10.9	0.5	0.0	4.7
LnGrp Delay(d),s/veh	41.0	0.0	28.4	37.5	0.0	19.2	15.3	0.0	30.6	18.0	0.0	20.4
LnGrp LOS	D		C	D		B	B		C	B		C
Approach Vol, veh/h		564			447			573			322	
Approach Delay, s/veh		30.9			26.5			28.8			20.1	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	29.7	12.2	25.8	6.7	28.6	9.1	28.9
Change Period (Y+Rc), s	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
Max Green Setting (Gmax), s	16.0	35.0	20.0	35.0	16.0	35.0	20.0	35.0
Max Q Clear Time (g_c+I1), s	3.0	23.1	9.1	19.2	3.8	12.3	6.5	10.4
Green Ext Time (p_c), s	0.0	2.7	0.3	2.6	0.1	1.9	0.2	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	27.4
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	8	670	16	5	444	5	2	0	2	4	0	1
Future Vol, veh/h	8	670	16	5	444	5	2	0	2	4	0	1
Conflicting Peds, #/hr	20	0	5	5	0	20	3	0	4	4	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	670	16	5	444	5	2	0	2	4	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	469	0	0	691	0	0	1159	1178	687	1176	1184	470
Stage 1	-	-	-	-	-	-	699	699	-	477	477	-
Stage 2	-	-	-	-	-	-	460	479	-	699	707	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1093	-	-	904	-	-	173	191	447	168	189	594
Stage 1	-	-	-	-	-	-	430	442	-	569	556	-
Stage 2	-	-	-	-	-	-	581	555	-	430	438	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1072	-	-	900	-	-	169	183	443	161	181	581
Mov Cap-2 Maneuver	-	-	-	-	-	-	169	183	-	161	181	-
Stage 1	-	-	-	-	-	-	423	434	-	551	542	-
Stage 2	-	-	-	-	-	-	574	541	-	421	431	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	19.9	24.7
HCM LOS			C	C

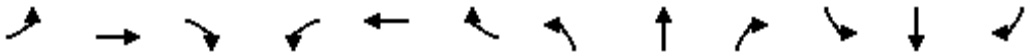
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	245	1072	-	-	900	-	-	188
HCM Lane V/C Ratio	0.016	0.007	-	-	0.006	-	-	0.027
HCM Control Delay (s)	19.9	8.4	0	-	9	0	-	24.7
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	603	67	29	387	47	6	8	24	25	61	57
Future Volume (veh/h)	67	603	67	29	387	47	6	8	24	25	61	57
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	0.99		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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	67	603	67	29	387	47	6	8	24	25	61	57
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	697	77	149	689	84	131	183	460	149	357	304
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	950	1641	182	764	1623	197	183	395	991	221	768	655
Grp Volume(v), veh/h	67	0	670	29	0	434	38	0	0	143	0	0
Grp Sat Flow(s),veh/h/ln	950	0	1823	764	0	1820	1569	0	0	1644	0	0
Q Serve(g_s), s	5.2	0.0	30.1	3.2	0.0	16.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	21.4	0.0	30.1	33.3	0.0	16.2	1.1	0.0	0.0	4.4	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.11	0.16		0.63	0.17		0.40
Lane Grp Cap(c), veh/h	312	0	774	149	0	773	775	0	0	810	0	0
V/C Ratio(X)	0.21	0.00	0.87	0.19	0.00	0.56	0.05	0.00	0.00	0.18	0.00	0.00
Avail Cap(c_a), veh/h	490	0	1114	296	0	1122	775	0	0	810	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	27.6	0.0	23.5	38.7	0.0	19.6	13.2	0.0	0.0	14.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	5.2	0.6	0.0	0.6	0.1	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	16.2	0.7	0.0	8.2	0.5	0.0	0.0	2.2	0.0	0.0
LnGrp Delay(d),s/veh	28.0	0.0	28.7	39.3	0.0	20.2	13.3	0.0	0.0	14.6	0.0	0.0
LnGrp LOS	C		C	D		C	B			B		
Approach Vol, veh/h		737			463			38			143	
Approach Delay, s/veh		28.6			21.4			13.3			14.6	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		46.8		43.2		46.8		43.2
Change Period (Y+Rc), s		5.0		5.0		* 5		* 5
Max Green Setting (Gmax), s		25.0		55.0		* 26		* 56
Max Q Clear Time (g_c+I1), s		3.1		32.1		6.4		35.3
Green Ext Time (p_c), s		0.1		5.3		0.8		2.9

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

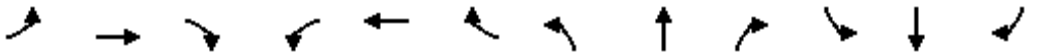
Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	545	36	223	392	197	32	86	278	528	121	16
Future Volume (vph)	26	545	36	223	392	197	32	86	278	528	121	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (prot)	1770	3500		1770	1863	1514	1770	1863	1574	1681	1705	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (perm)	1770	3500		1770	1863	1514	1770	1863	1574	1681	1705	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	26	545	36	223	392	197	32	86	278	528	121	16
RTOR Reduction (vph)	0	5	0	0	0	51	0	0	92	0	1	0
Lane Group Flow (vph)	26	576	0	223	392	146	32	86	186	333	331	0
Confl. Peds. (#/hr)	20		4	4		20	3		4	3		4
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Split	NA	
Protected Phases	7	4		3	8	6	2	2	3	6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	4.5	33.4		24.9	53.8	83.2	8.3	8.3	33.2	29.4	29.4	
Effective Green, g (s)	4.5	33.4		24.9	53.8	83.2	8.3	8.3	33.2	29.4	29.4	
Actuated g/C Ratio	0.04	0.30		0.22	0.48	0.74	0.07	0.07	0.30	0.26	0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	71	1043		393	894	1124	131	138	466	441	447	
v/s Ratio Prot	0.01	c0.16		c0.13	0.21	0.03	0.02	c0.05	0.09	c0.20	0.19	
v/s Ratio Perm						0.06			0.03			
v/c Ratio	0.37	0.55		0.57	0.44	0.13	0.24	0.62	0.40	0.76	0.74	
Uniform Delay, d1	52.4	33.0		38.8	19.2	4.1	48.9	50.3	31.4	38.0	37.8	
Progression Factor	1.00	1.00		0.83	1.26	2.31	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.2	0.6		1.8	1.5	0.1	1.0	8.5	0.6	7.2	6.3	
Delay (s)	55.5	33.7		34.1	25.7	9.5	49.9	58.8	32.0	45.2	44.1	
Level of Service	E	C		C	C	A	D	E	C	D	D	
Approach Delay (s)		34.6			24.1			39.3			44.7	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	34.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	653	783	599	727	0	0	0	0	144	0	149
Future Volume (vph)	0	653	783	599	727	0	0	0	0	144	0	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.97		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1583	1770	3539					3433		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1583	1770	3539					3433		1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	653	783	599	727	0	0	0	0	144	0	149
RTOR Reduction (vph)	0	0	163	0	0	0	0	0	0	0	0	134
Lane Group Flow (vph)	0	653	621	599	727	0	0	0	0	144	0	15
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		4		3	8					6		6
Permitted Phases			4									
Actuated Green, G (s)		47.0	47.0	41.5	92.5					11.5		11.5
Effective Green, g (s)		47.0	47.0	41.5	92.5					11.5		11.5
Actuated g/C Ratio		0.42	0.42	0.37	0.83					0.10		0.10
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1485	664	655	2922					352		162
v/s Ratio Prot		0.18		c0.34	0.21					c0.04		0.01
v/s Ratio Perm			c0.39									
v/c Ratio		0.44	0.93	0.91	0.25					0.41		0.09
Uniform Delay, d1		23.1	31.0	33.6	2.1					47.1		45.5
Progression Factor		0.84	0.88	0.97	0.87					1.00		1.00
Incremental Delay, d2		0.2	17.9	14.6	0.0					3.5		1.2
Delay (s)		19.5	45.1	47.1	1.9					50.6		46.7
Level of Service		B	D	D	A					D		D
Approach Delay (s)		33.5			22.3			0.0			48.6	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	30.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	248	596	0	0	647	159	212	225	92	255	0	675
Future Volume (veh/h)	248	596	0	0	647	159	212	225	92	255	0	675
Number	7	4	14	3	8	18	5	2	12	1	6	16
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		0.99	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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	248	596	0	0	647	159	212	225	92	255	0	675
Adj No. of Lanes	2	1	0	0	2	0	1	2	0	2	0	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	328	1441	0	0	1806	443	275	383	152	0	0	0
Arrive On Green	0.10	0.77	0.00	0.00	0.64	0.64	0.16	0.16	0.16	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	2904	690	1774	2472	979		0	
Grp Volume(v), veh/h	248	596	0	0	407	399	212	159	158		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1731	1774	1770	1681			
Q Serve(g_s), s	7.9	11.9	0.0	0.0	12.0	12.0	12.8	9.3	9.8			
Cycle Q Clear(g_c), s	7.9	11.9	0.0	0.0	12.0	12.0	12.8	9.3	9.8			
Prop In Lane	1.00		0.00	0.00		0.40	1.00		0.58			
Lane Grp Cap(c), veh/h	328	1441	0	0	1137	1112	275	275	261			
V/C Ratio(X)	0.76	0.41	0.00	0.00	0.36	0.36	0.77	0.58	0.61			
Avail Cap(c_a), veh/h	922	1441	0	0	1137	1112	475	474	450			
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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	49.4	4.2	0.0	0.0	9.3	9.3	45.4	43.9	44.1			
Incr Delay (d2), s/veh	3.6	0.9	0.0	0.0	0.2	0.2	4.5	1.9	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			
%ile BackOfQ(50%),veh/ln	3.9	6.3	0.0	0.0	5.8	5.7	6.6	4.7	4.7			
LnGrp Delay(d),s/veh	53.0	5.1	0.0	0.0	9.5	9.5	49.9	45.8	46.4			
LnGrp LOS	D	A			A	A	D	D	D			
Approach Vol, veh/h		844			806			529				
Approach Delay, s/veh		19.2			9.5			47.6				
Approach LOS		B			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		21.4		90.6			14.7	76.0
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		30.0		59.0			30.0	25.0
Max Q Clear Time (g_c+I1), s		14.8		13.9			9.9	14.0
Green Ext Time (p_c), s		2.2		4.7			0.8	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	22.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBR		NWBT	SEBT	
Lane Configurations						
Traffic Vol, veh/h	0	155	0	364	386	2
Future Vol, veh/h	0	155	0	364	386	2
Conflicting Peds, #/hr	0	19	12	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	155	0	364	386	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	415	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	637	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	620	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	620	-	-
HCM Lane V/C Ratio	-	0.25	-	-
HCM Control Delay (s)	-	12.7	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	1	-	-

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	13	0	2	0	15	0	13	5	128	17	1
Future Vol, veh/h	7	13	0	2	0	15	0	13	5	128	17	1
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	20	5	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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	13	0	2	0	15	0	13	5	128	17	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	298	312	18	316	310	37	18	0	0	38	0	0
Stage 1	274	274	-	36	36	-	-	-	-	-	-	-
Stage 2	24	38	-	280	274	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	654	603	1061	637	605	1035	1599	-	-	1572	-	-
Stage 1	732	683	-	980	865	-	-	-	-	-	-	-
Stage 2	994	863	-	727	683	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	602	542	1061	574	544	1014	1599	-	-	1542	-	-
Mov Cap-2 Maneuver	602	542	-	574	544	-	-	-	-	-	-	-
Stage 1	732	626	-	961	849	-	-	-	-	-	-	-
Stage 2	978	847	-	652	626	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	8.9	0	6.6
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1599	-	-	562	930	1542	-	-
HCM Lane V/C Ratio	-	-	-	0.036	0.018	0.083	-	-
HCM Control Delay (s)	0	-	-	11.6	8.9	7.5	0	-
HCM Lane LOS	A	-	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.3	-	-

Intersection	
Int Delay, s/veh	2.3

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	210	52	57	206	23	66
Future Vol, veh/h	210	52	57	206	23	66
Conflicting Peds, #/hr	0	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	210	52	57	206	23	66

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	263	0	557	237
Stage 1	-	-	-	-	237	-
Stage 2	-	-	-	-	320	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1301	-	491	802
Stage 1	-	-	-	-	802	-
Stage 2	-	-	-	-	736	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1300	-	466	801
Mov Cap-2 Maneuver	-	-	-	-	466	-
Stage 1	-	-	-	-	761	-
Stage 2	-	-	-	-	736	-

Approach	SE	NW	NE
HCM Control Delay, s	0	1.7	11.1
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	676	1300	-	-	-
HCM Lane V/C Ratio	0.132	0.044	-	-	-
HCM Control Delay (s)	11.1	7.9	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.5	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	13.6
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	643	394	336	134
Demand Flow Rate, veh/h	655	401	343	136
Vehicles Circulating, veh/h	194	315	491	689
Vehicles Exiting, veh/h	631	519	358	27
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	1	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	16.3	11.0	12.9	9.7
Approach LOS	C	B	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	655	401	343	136
Cap Entry Lane, veh/h	931	825	692	567
Entry HV Adj Factor	0.981	0.982	0.979	0.982
Flow Entry, veh/h	643	394	336	134
Cap Entry, veh/h	913	810	677	557
V/C Ratio	0.704	0.486	0.496	0.240
Control Delay, s/veh	16.3	11.0	12.9	9.7
LOS	C	B	B	A
95th %tile Queue, veh	6	3	3	1

Intersection	
Intersection Delay, s/veh	8.2
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	524	297	55	97
Demand Flow Rate, veh/h	534	302	55	99
Vehicles Circulating, veh/h	94	69	571	211
Vehicles Exiting, veh/h	216	557	57	160
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	4	0	4
Ped Cap Adj	1.000	0.999	1.000	0.999
Approach Delay, s/veh	10.0	6.3	6.7	5.1
Approach LOS	A	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	534	302	55	99
Cap Entry Lane, veh/h	1029	1055	638	915
Entry HV Adj Factor	0.981	0.982	0.992	0.977
Flow Entry, veh/h	524	297	55	97
Cap Entry, veh/h	1008	1035	633	893
V/C Ratio	0.519	0.287	0.086	0.108
Control Delay, s/veh	10.0	6.3	6.7	5.1
LOS	A	A	A	A
95th %tile Queue, veh	3	1	0	0

Intersection	
Intersection Delay, s/veh	21.5
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	63	72	20	70	115	284	18	117	61	251	88	35
Future Vol, veh/h	63	72	20	70	115	284	18	117	61	251	88	35
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	72	20	70	115	284	18	117	61	251	88	35
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	12.9	27.2	13.6	22
HCM LOS	B	D	B	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	9%	47%	0%	15%	67%
Vol Thru, %	60%	53%	0%	25%	24%
Vol Right, %	31%	0%	100%	61%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	196	135	20	469	374
LT Vol	18	63	0	70	251
Through Vol	117	72	0	115	88
RT Vol	61	0	20	284	35
Lane Flow Rate	196	135	20	469	374
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.364	0.286	0.037	0.78	0.673
Departure Headway (Hd)	6.691	7.619	6.66	5.989	6.478
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	535	470	535	600	557
Service Time	4.769	5.396	4.436	4.046	4.54
HCM Lane V/C Ratio	0.366	0.287	0.037	0.782	0.671
HCM Control Delay	13.6	13.4	9.7	27.2	22
HCM Lane LOS	B	B	A	D	C
HCM 95th-tile Q	1.7	1.2	0.1	7.3	5

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	2	409	6	10	462	170	3	1	20	70	1	2
Future Vol, veh/h	2	409	6	10	462	170	3	1	20	70	1	2
Conflicting Peds, #/hr	6	0	8	8	0	9	9	0	1	1	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	409	6	10	462	170	3	1	20	70	1	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	641	0	0	423	0	0	1002	1085	421	1004	1003	565
Stage 1	-	-	-	-	-	-	424	424	-	576	576	-
Stage 2	-	-	-	-	-	-	578	661	-	428	427	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	943	-	-	1136	-	-	221	217	632	220	242	524
Stage 1	-	-	-	-	-	-	608	587	-	503	502	-
Stage 2	-	-	-	-	-	-	501	460	-	605	585	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	935	-	-	1127	-	-	213	210	627	207	234	515
Mov Cap-2 Maneuver	-	-	-	-	-	-	213	210	-	207	234	-
Stage 1	-	-	-	-	-	-	601	581	-	497	490	-
Stage 2	-	-	-	-	-	-	487	449	-	582	579	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	13	30.8
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	473	935	-	-	1127	-	-	211
HCM Lane V/C Ratio	0.051	0.002	-	-	0.009	-	-	0.346
HCM Control Delay (s)	13	8.9	0	-	8.2	0	-	30.8
HCM Lane LOS	B	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	353	46	198	438	83	91	131	179	99	101	130
Future Volume (veh/h)	122	353	46	198	438	83	91	131	179	99	101	130
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.97	0.98		0.94	0.98		0.94
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	122	353	46	198	438	83	91	131	179	99	101	130
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	484	63	253	533	101	387	175	239	323	183	236
Arrive On Green	0.09	0.30	0.30	0.14	0.35	0.35	0.07	0.25	0.25	0.07	0.26	0.26
Sat Flow, veh/h	1774	1612	210	1774	1514	287	1774	687	938	1774	713	918
Grp Volume(v), veh/h	122	0	399	198	0	521	91	0	310	99	0	231
Grp Sat Flow(s),veh/h/ln	1774	0	1822	1774	0	1801	1774	0	1625	1774	0	1631
Q Serve(g_s), s	4.0	0.0	11.7	6.4	0.0	15.7	2.2	0.0	10.5	2.4	0.0	7.3
Cycle Q Clear(g_c), s	4.0	0.0	11.7	6.4	0.0	15.7	2.2	0.0	10.5	2.4	0.0	7.3
Prop In Lane	1.00		0.12	1.00		0.16	1.00		0.58	1.00		0.56
Lane Grp Cap(c), veh/h	161	0	547	253	0	634	387	0	413	323	0	419
V/C Ratio(X)	0.76	0.00	0.73	0.78	0.00	0.82	0.24	0.00	0.75	0.31	0.00	0.55
Avail Cap(c_a), veh/h	596	0	1072	596	0	1059	748	0	956	680	0	959
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	26.4	0.0	18.7	24.6	0.0	17.6	15.0	0.0	20.4	15.5	0.0	19.2
Incr Delay (d2), s/veh	7.1	0.0	1.9	5.3	0.0	2.7	0.3	0.0	2.8	0.5	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(50%),veh/ln	2.3	0.0	6.2	3.5	0.0	8.2	1.1	0.0	5.0	1.2	0.0	3.4
LnGrp Delay(d),s/veh	33.5	0.0	20.5	29.9	0.0	20.3	15.3	0.0	23.2	16.0	0.0	20.3
LnGrp LOS	C		C	C		C	B		C	B		C
Approach Vol, veh/h		521			719			401			330	
Approach Delay, s/veh		23.6			23.0			21.4			19.0	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	19.1	11.5	21.9	6.9	19.3	8.4	24.9
Change Period (Y+Rc), s	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
Max Green Setting (Gmax), s	16.0	35.0	20.0	35.0	16.0	35.0	20.0	35.0
Max Q Clear Time (g_c+I1), s	4.4	12.5	8.4	13.7	4.2	9.3	6.0	17.7
Green Ext Time (p_c), s	0.2	1.9	0.4	2.5	0.1	1.6	0.2	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	22.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	613	6	10	696	13	8	0	8	14	1	15
Future Vol, veh/h	12	613	6	10	696	13	8	0	8	14	1	15
Conflicting Peds, #/hr	20	0	5	5	0	20	3	0	4	4	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	613	6	10	696	13	8	0	8	14	1	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	729	0	0	624	0	0	1379	1394	625	1391	1391	726
Stage 1	-	-	-	-	-	-	645	645	-	743	743	-
Stage 2	-	-	-	-	-	-	734	749	-	648	648	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	875	-	-	957	-	-	122	141	485	120	142	425
Stage 1	-	-	-	-	-	-	461	467	-	407	422	-
Stage 2	-	-	-	-	-	-	412	419	-	459	466	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	858	-	-	952	-	-	113	132	481	112	133	416
Mov Cap-2 Maneuver	-	-	-	-	-	-	113	132	-	112	133	-
Stage 1	-	-	-	-	-	-	449	455	-	391	407	-
Stage 2	-	-	-	-	-	-	388	404	-	440	454	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	26.5	29.3
HCM LOS			D	D

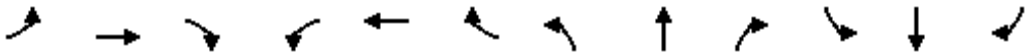
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	183	858	-	-	952	-	-	178
HCM Lane V/C Ratio	0.087	0.014	-	-	0.011	-	-	0.169
HCM Control Delay (s)	26.5	9.3	0	-	8.8	0	-	29.3
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.3	0	-	-	0	-	-	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	540	57	26	623	108	8	11	32	47	12	92
Future Volume (veh/h)	41	540	57	26	623	108	8	11	32	47	12	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	0.99		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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	41	540	57	26	623	108	8	11	32	47	12	92
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	786	83	261	733	127	119	170	408	221	75	380
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	722	1651	174	818	1539	267	175	411	988	410	181	921
Grp Volume(v), veh/h	41	0	597	26	0	731	51	0	0	151	0	0
Grp Sat Flow(s),veh/h/ln	722	0	1825	818	0	1805	1575	0	0	1512	0	0
Q Serve(g_s), s	4.8	0.0	22.9	2.3	0.0	32.1	0.0	0.0	0.0	1.0	0.0	0.0
Cycle Q Clear(g_c), s	36.8	0.0	22.9	25.2	0.0	32.1	1.7	0.0	0.0	5.4	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.15	0.16		0.63	0.31		0.61
Lane Grp Cap(c), veh/h	166	0	869	261	0	860	696	0	0	677	0	0
V/C Ratio(X)	0.25	0.00	0.69	0.10	0.00	0.85	0.07	0.00	0.00	0.22	0.00	0.00
Avail Cap(c_a), veh/h	264	0	1116	376	0	1113	696	0	0	677	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	37.0	0.0	18.3	28.2	0.0	20.7	16.0	0.0	0.0	17.1	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	1.2	0.2	0.0	5.1	0.2	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	11.7	0.5	0.0	17.1	0.8	0.0	0.0	2.6	0.0	0.0
LnGrp Delay(d),s/veh	37.7	0.0	19.6	28.3	0.0	25.9	16.2	0.0	0.0	17.9	0.0	0.0
LnGrp LOS	D		B	C		C	B			B		
Approach Vol, veh/h		638			757			51			151	
Approach Delay, s/veh		20.7			25.9			16.2			17.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		42.1		47.9		42.1		47.9
Change Period (Y+Rc), s		5.0		5.0		* 5		* 5
Max Green Setting (Gmax), s		25.0		55.0		* 26		* 56
Max Q Clear Time (g_c+I1), s		3.7		38.8		7.4		34.1
Green Ext Time (p_c), s		0.2		4.0		0.8		5.7

Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	536	29	278	650	341	88	158	217	319	72	24
Future Volume (vph)	28	536	29	278	650	341	88	158	217	319	72	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (prot)	1770	3506		1770	1863	1502	1770	1863	1545	1681	1690	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (perm)	1770	3506		1770	1863	1502	1770	1863	1545	1681	1690	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	28	536	29	278	650	341	88	158	217	319	72	24
RTOR Reduction (vph)	0	3	0	0	0	69	0	0	163	0	4	0
Lane Group Flow (vph)	28	562	0	278	650	272	88	158	54	207	204	0
Confl. Peds. (#/hr)	20		4	4		20	3		4	3		4
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8	6	2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	3.3	42.1		20.9	59.7	78.9	13.8	13.8	13.8	19.2	19.2	
Effective Green, g (s)	3.3	42.1		20.9	59.7	78.9	13.8	13.8	13.8	19.2	19.2	
Actuated g/C Ratio	0.03	0.38		0.19	0.53	0.70	0.12	0.12	0.12	0.17	0.17	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	2.5	3.2		2.3	3.2	3.1	3.0	3.0	3.0	3.1	3.1	
Lane Grp Cap (vph)	52	1317		330	993	1058	218	229	190	288	289	
v/s Ratio Prot	0.02	0.16		c0.16	c0.35	0.04	0.05	c0.08		c0.12	0.12	
v/s Ratio Perm						0.14			0.03			
v/c Ratio	0.54	0.43		0.84	0.65	0.26	0.40	0.69	0.28	0.72	0.71	
Uniform Delay, d1	53.6	26.0		44.0	18.8	6.0	45.3	47.1	44.6	43.8	43.7	
Progression Factor	1.00	1.00		1.17	0.68	1.13	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.1	0.2		16.2	3.2	0.1	1.2	8.4	0.8	8.4	7.7	
Delay (s)	61.7	26.2		67.7	15.9	6.9	46.5	55.4	45.4	52.2	51.4	
Level of Service	E	C		E	B	A	D	E	D	D	D	
Approach Delay (s)		27.9			24.8			49.1			51.8	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	33.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	587	485	433	1062	0	0	0	0	301	0	207
Future Volume (veh/h)	0	587	485	433	1062	0	0	0	0	301	0	207
Number	7	4	14	3	8	18				1	6	16
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
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	587	485	433	1062	0				301	0	207
Adj No. of Lanes	0	2	1	1	2	0				2	0	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1664	744	470	2729	0				542	0	250
Arrive On Green	0.00	0.47	0.47	0.27	0.77	0.00				0.16	0.00	0.16
Sat Flow, veh/h	0	3632	1583	1774	3632	0				3442	0	1583
Grp Volume(v), veh/h	0	587	485	433	1062	0				301	0	207
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1770	0				1721	0	1583
Q Serve(g_s), s	0.0	11.8	26.2	26.6	11.0	0.0				9.0	0.0	14.2
Cycle Q Clear(g_c), s	0.0	11.8	26.2	26.6	11.0	0.0				9.0	0.0	14.2
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1664	744	470	2729	0				542	0	250
V/C Ratio(X)	0.00	0.35	0.65	0.92	0.39	0.00				0.55	0.00	0.83
Avail Cap(c_a), veh/h	0	1664	744	649	2729	0				860	0	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.80	0.80	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	18.9	22.7	40.0	4.2	0.0				43.5	0.0	45.7
Incr Delay (d2), s/veh	0.0	0.5	3.5	14.9	0.1	0.0				0.9	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
%ile BackOfQ(50%),veh/ln	0.0	5.9	12.2	14.9	5.3	0.0				4.4	0.0	6.8
LnGrp Delay(d),s/veh	0.0	19.3	26.2	54.9	4.3	0.0				44.4	0.0	53.7
LnGrp LOS		B	C	D	A					D		D
Approach Vol, veh/h		1072			1495						508	
Approach Delay, s/veh		22.4			19.0						48.2	
Approach LOS		C			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			33.7	56.6		21.7		90.3
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			41.0	31.0		28.0		76.0
Max Q Clear Time (g_c+I1), s			28.6	28.2		16.2		13.0
Green Ext Time (p_c), s			1.1	1.5		1.5		9.9

Intersection Summary	
HCM 2010 Ctrl Delay	25.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	665	0	0	702	291	482	539	303	386	0	602
Future Volume (veh/h)	300	665	0	0	702	291	482	539	303	386	0	602
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	300	665	0	0	702	291	482	539	303	386	0	602
Adj No. of Lanes	2	1	0	0	2	0	1	2	0	2	0	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	380	1231	0	0	1251	518	475	585	328	0	0	0
Arrive On Green	0.11	0.66	0.00	0.00	0.51	0.51	0.27	0.27	0.27	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	2524	1008	1774	2184	1226		0	
Grp Volume(v), veh/h	300	665	0	0	511	482	482	437	405		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1669	1774	1770	1640			
Q Serve(g_s), s	9.5	21.1	0.0	0.0	22.1	22.1	30.0	26.9	26.9			
Cycle Q Clear(g_c), s	9.5	21.1	0.0	0.0	22.1	22.1	30.0	26.9	26.9			
Prop In Lane	1.00		0.00	0.00		0.60	1.00		0.75			
Lane Grp Cap(c), veh/h	380	1231	0	0	910	859	475	474	439			
V/C Ratio(X)	0.79	0.54	0.00	0.00	0.56	0.56	1.01	0.92	0.92			
Avail Cap(c_a), veh/h	768	1231	0	0	910	859	475	474	439			
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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	48.5	10.0	0.0	0.0	18.6	18.6	41.0	39.8	39.9			
Incr Delay (d2), s/veh	3.7	1.7	0.0	0.0	0.8	0.8	44.9	23.4	25.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.7	11.3	0.0	0.0	11.0	10.4	20.6	16.2	15.2			
LnGrp Delay(d),s/veh	52.2	11.7	0.0	0.0	19.3	19.4	86.0	63.2	64.9			
LnGrp LOS	D	B			B	B	F	E	E			
Approach Vol, veh/h		965			993			1324				
Approach Delay, s/veh		24.3			19.4			72.0				
Approach LOS		C			B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		34.0		78.0			16.4	61.6
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		30.0		59.0			25.0	30.0
Max Q Clear Time (g_c+I1), s		32.0		23.1			11.5	24.1
Green Ext Time (p_c), s		0.0		5.3			0.9	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	42.1
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR		NWBT	SEBT	
Lane Configurations						
Traffic Vol, veh/h	0	111	0	467	319	60
Future Vol, veh/h	0	111	0	467	319	60
Conflicting Peds, #/hr	0	19	12	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	111	0	467	319	60

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	377	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	670	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	652	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	652	-	-
HCM Lane V/C Ratio	-	0.17	-	-
HCM Control Delay (s)	-	11.7	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.6	-	-

Intersection	
Int Delay, s/veh	6.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	7	3	2	12	0	19	0	11	5	97	15	10
Future Vol, veh/h	7	3	2	12	0	19	0	11	5	97	15	10
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	20	5	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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	3	2	12	0	19	0	11	5	97	15	10

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	238	250	20	251	253	35	25	0	0	36	0	0
Stage 1	214	214	-	34	34	-	-	-	-	-	-	-
Stage 2	24	36	-	217	219	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	716	653	1058	702	650	1038	1589	-	-	1575	-	-
Stage 1	788	725	-	982	867	-	-	-	-	-	-	-
Stage 2	994	865	-	785	722	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	667	599	1058	651	597	1017	1589	-	-	1545	-	-
Mov Cap-2 Maneuver	667	599	-	651	597	-	-	-	-	-	-	-
Stage 1	788	679	-	963	851	-	-	-	-	-	-	-
Stage 2	975	849	-	730	676	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	9.5	0	6
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1589	-	-	690	835	1545	-	-
HCM Lane V/C Ratio	-	-	-	0.017	0.037	0.063	-	-
HCM Control Delay (s)	0	-	-	10.3	9.5	7.5	0	-
HCM Lane LOS	A	-	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.2	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	201	40	26	232	64	56
Future Vol, veh/h	201	40	26	232	64	56
Conflicting Peds, #/hr	0	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	201	40	26	232	64	56

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	242	0	506	222
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	284	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1324	-	526	818
Stage 1	-	-	-	-	815	-
Stage 2	-	-	-	-	764	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1323	-	513	817
Mov Cap-2 Maneuver	-	-	-	-	513	-
Stage 1	-	-	-	-	795	-
Stage 2	-	-	-	-	764	-

Approach	SE	NW	NE
HCM Control Delay, s	0	0.8	12.2
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	621	1323	-	-	-
HCM Lane V/C Ratio	0.193	0.02	-	-	-
HCM Control Delay (s)	12.2	7.8	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.7	0.1	-	-	-

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	519	477	240	15
Demand Flow Rate, veh/h	529	486	245	15
Vehicles Circulating, veh/h	77	217	335	676
Vehicles Exiting, veh/h	614	363	271	27
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	1	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.6	11.2	8.0	6.6
Approach LOS	A	B	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	529	486	245	15
Cap Entry Lane, veh/h	1046	910	808	575
Entry HV Adj Factor	0.981	0.981	0.979	0.997
Flow Entry, veh/h	519	477	240	15
Cap Entry, veh/h	1026	893	792	573
V/C Ratio	0.506	0.534	0.303	0.026
Control Delay, s/veh	9.6	11.2	8.0	6.6
LOS	A	B	A	A
95th %tile Queue, veh	3	3	1	0

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	339	527	153	330
Demand Flow Rate, veh/h	345	538	156	337
Vehicles Circulating, veh/h	277	202	469	451
Vehicles Exiting, veh/h	511	423	153	288
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	4	0	4
Ped Cap Adj	1.000	0.999	1.000	0.999
Approach Delay, s/veh	9.2	12.3	7.7	11.9
Approach LOS	A	B	A	B

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	345	538	156	337
Cap Entry Lane, veh/h	857	923	707	720
Entry HV Adj Factor	0.982	0.979	0.983	0.978
Flow Entry, veh/h	339	527	153	330
Cap Entry, veh/h	841	903	695	704
V/C Ratio	0.403	0.583	0.221	0.468
Control Delay, s/veh	9.2	12.3	7.7	11.9
LOS	A	B	A	B
95th %tile Queue, veh	2	4	1	3

Appendix E: Cumulative Plus Project Conditions LOS Results

Intersection	
Intersection Delay, s/veh	18.4
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	99	39	32	64	192	28	186	50	254	153	29
Future Vol, veh/h	39	99	39	32	64	192	28	186	50	254	153	29
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	39	99	39	32	64	192	28	186	50	254	153	29
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	12.6	15.6	14.8	24.7
HCM LOS	B	C	B	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	11%	28%	0%	11%	58%
Vol Thru, %	70%	72%	0%	22%	35%
Vol Right, %	19%	0%	100%	67%	7%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	264	138	39	288	436
LT Vol	28	39	0	32	254
Through Vol	186	99	0	64	153
RT Vol	50	0	39	192	29
Lane Flow Rate	264	138	39	288	436
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.463	0.287	0.072	0.504	0.741
Departure Headway (Hd)	6.319	7.496	6.632	6.298	6.12
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	568	477	538	570	589
Service Time	4.381	5.262	4.397	4.357	4.171
HCM Lane V/C Ratio	0.465	0.289	0.072	0.505	0.74
HCM Control Delay	14.8	13.3	9.9	15.6	24.7
HCM Lane LOS	B	B	A	C	C
HCM 95th-tile Q	2.4	1.2	0.2	2.8	6.4

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	2	440	2	3	279	81	2	0	3	122	1	7
Future Vol, veh/h	2	440	2	3	279	81	2	0	3	122	1	7
Conflicting Peds, #/hr	6	0	8	8	0	9	9	0	1	1	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	440	2	3	279	81	2	0	3	122	1	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	369	0	0	450	0	0	792	828	450	783	789	338
Stage 1	-	-	-	-	-	-	453	453	-	335	335	-
Stage 2	-	-	-	-	-	-	339	375	-	448	454	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1190	-	-	1110	-	-	307	306	609	311	323	704
Stage 1	-	-	-	-	-	-	586	570	-	679	643	-
Stage 2	-	-	-	-	-	-	676	617	-	590	569	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1180	-	-	1102	-	-	297	299	604	305	316	692
Mov Cap-2 Maneuver	-	-	-	-	-	-	297	299	-	305	316	-
Stage 1	-	-	-	-	-	-	580	564	-	672	635	-
Stage 2	-	-	-	-	-	-	660	610	-	585	563	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	13.5	24.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	427	1180	-	-	1102	-	-	315
HCM Lane V/C Ratio	0.012	0.002	-	-	0.003	-	-	0.413
HCM Control Delay (s)	13.5	8.1	0	-	8.3	0	-	24.2
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	381	72	183	247	29	68	228	278	37	237	48
Future Volume (veh/h)	112	381	72	183	247	29	68	228	278	37	237	48
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.97	0.90		0.95	1.00		0.64
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	112	381	72	183	247	29	68	228	278	37	237	48
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	146	451	85	228	559	66	377	260	317	216	456	92
Arrive On Green	0.08	0.30	0.30	0.13	0.34	0.34	0.05	0.35	0.35	0.04	0.34	0.34
Sat Flow, veh/h	1774	1520	287	1774	1630	191	1774	742	905	1774	1359	275
Grp Volume(v), veh/h	112	0	453	183	0	276	68	0	506	37	0	285
Grp Sat Flow(s),veh/h/ln	1774	0	1807	1774	0	1821	1774	0	1647	1774	0	1634
Q Serve(g_s), s	4.6	0.0	17.5	7.5	0.0	8.7	1.8	0.0	21.4	1.0	0.0	10.4
Cycle Q Clear(g_c), s	4.6	0.0	17.5	7.5	0.0	8.7	1.8	0.0	21.4	1.0	0.0	10.4
Prop In Lane	1.00		0.16	1.00		0.11	1.00		0.55	1.00		0.17
Lane Grp Cap(c), veh/h	146	0	536	228	0	625	377	0	577	216	0	548
V/C Ratio(X)	0.77	0.00	0.84	0.80	0.00	0.44	0.18	0.00	0.88	0.17	0.00	0.52
Avail Cap(c_a), veh/h	477	0	851	477	0	857	669	0	775	534	0	769
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	33.4	0.0	24.5	31.5	0.0	18.9	15.3	0.0	22.7	17.9	0.0	19.9
Incr Delay (d2), s/veh	8.1	0.0	4.6	6.4	0.0	0.5	0.2	0.0	8.8	0.4	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(50%),veh/ln	2.6	0.0	9.4	4.1	0.0	4.5	0.9	0.0	11.1	0.5	0.0	4.8
LnGrp Delay(d),s/veh	41.5	0.0	29.1	37.9	0.0	19.4	15.5	0.0	31.4	18.3	0.0	20.7
LnGrp LOS	D		C	D		B	B		C	B		C
Approach Vol, veh/h		565			459			574			322	
Approach Delay, s/veh		31.6			26.8			29.5			20.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.7	30.1	12.6	26.1	6.8	28.9	9.1	29.5
Change Period (Y+Rc), s	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
Max Green Setting (Gmax), s	16.0	35.0	20.0	35.0	16.0	35.0	20.0	35.0
Max Q Clear Time (g_c+I1), s	3.0	23.4	9.5	19.5	3.8	12.4	6.6	10.7
Green Ext Time (p_c), s	0.0	2.6	0.3	2.6	0.1	1.9	0.2	1.6

Intersection Summary	
HCM 2010 Ctrl Delay	27.9
HCM 2010 LOS	C

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	8	670	18	5	450	5	8	0	8	4	0	1
Future Vol, veh/h	8	670	18	5	450	5	8	0	8	4	0	1
Conflicting Peds, #/hr	20	0	5	5	0	20	3	0	4	4	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	670	18	5	450	5	8	0	8	4	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	475	0	0	693	0	0	1166	1185	688	1186	1192	476
Stage 1	-	-	-	-	-	-	700	700	-	483	483	-
Stage 2	-	-	-	-	-	-	466	485	-	703	709	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1087	-	-	902	-	-	171	189	446	166	187	589
Stage 1	-	-	-	-	-	-	430	441	-	565	553	-
Stage 2	-	-	-	-	-	-	577	552	-	428	437	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1066	-	-	898	-	-	167	181	442	157	179	576
Mov Cap-2 Maneuver	-	-	-	-	-	-	167	181	-	157	179	-
Stage 1	-	-	-	-	-	-	423	434	-	547	539	-
Stage 2	-	-	-	-	-	-	570	538	-	414	430	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	0.1	20.9	25.1
HCM LOS			C	D

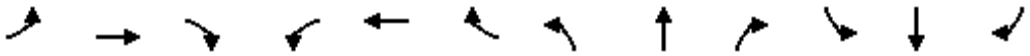
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	242	1066	-	-	898	-	-	184
HCM Lane V/C Ratio	0.066	0.008	-	-	0.006	-	-	0.027
HCM Control Delay (s)	20.9	8.4	0	-	9	0	-	25.1
HCM Lane LOS	C	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	609	67	48	387	47	12	22	95	25	64	57
Future Volume (veh/h)	67	609	67	48	387	47	12	22	95	25	64	57
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	67	609	67	48	387	47	12	22	95	25	64	57
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	335	728	80	167	719	87	81	148	518	140	350	284
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	950	1643	181	760	1623	197	84	332	1163	210	784	636
Grp Volume(v), veh/h	67	0	676	48	0	434	129	0	0	146	0	0
Grp Sat Flow(s),veh/h/ln	950	0	1824	760	0	1820	1579	0	0	1630	0	0
Q Serve(g_s), s	5.0	0.0	29.5	5.4	0.0	15.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	20.7	0.0	29.5	34.9	0.0	15.7	4.3	0.0	0.0	4.6	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.11	0.09		0.74	0.17		0.39
Lane Grp Cap(c), veh/h	335	0	808	167	0	806	748	0	0	774	0	0
V/C Ratio(X)	0.20	0.00	0.84	0.29	0.00	0.54	0.17	0.00	0.00	0.19	0.00	0.00
Avail Cap(c_a), veh/h	495	0	1115	299	0	1122	748	0	0	774	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	25.9	0.0	22.2	37.6	0.0	18.3	15.0	0.0	0.0	15.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	4.1	0.9	0.0	0.6	0.5	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	15.8	1.2	0.0	8.0	2.0	0.0	0.0	2.3	0.0	0.0
LnGrp Delay(d),s/veh	26.2	0.0	26.3	38.6	0.0	18.9	15.5	0.0	0.0	15.6	0.0	0.0
LnGrp LOS	C		C	D		B	B			B		
Approach Vol, veh/h		743			482			129			146	
Approach Delay, s/veh		26.3			20.9			15.5			15.6	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		45.1		44.9		45.1		44.9
Change Period (Y+Rc), s		5.0		5.0		* 5		* 5
Max Green Setting (Gmax), s		25.0		55.0		* 26		* 56
Max Q Clear Time (g_c+I1), s		6.3		31.5		6.6		36.9
Green Ext Time (p_c), s		0.7		5.4		0.8		3.0

Intersection Summary	
HCM 2010 Ctrl Delay	22.6
HCM 2010 LOS	C

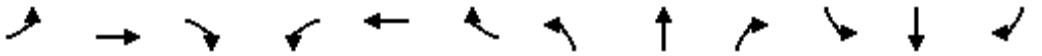
Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	622	36	223	411	197	32	86	278	528	121	16
Future Volume (vph)	26	622	36	223	411	197	32	86	278	528	121	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (prot)	1770	3504		1770	1863	1514	1770	1863	1574	1681	1705	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (perm)	1770	3504		1770	1863	1514	1770	1863	1574	1681	1705	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	26	622	36	223	411	197	32	86	278	528	121	16
RTOR Reduction (vph)	0	4	0	0	0	50	0	0	79	0	1	0
Lane Group Flow (vph)	26	654	0	223	411	147	32	86	199	333	331	0
Confl. Peds. (#/hr)	20		4	4		20	3		4	3		4
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	pm+ov	Split	NA	
Protected Phases	7	4		3	8	6	2	2	3	6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	4.4	34.1		24.2	53.9	83.3	8.3	8.3	32.5	29.4	29.4	
Effective Green, g (s)	4.4	34.1		24.2	53.9	83.3	8.3	8.3	32.5	29.4	29.4	
Actuated g/C Ratio	0.04	0.30		0.22	0.48	0.74	0.07	0.07	0.29	0.26	0.26	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	69	1066		382	896	1126	131	138	456	441	447	
v/s Ratio Prot	0.01	c0.19		c0.13	0.22	0.03	0.02	c0.05	0.09	c0.20	0.19	
v/s Ratio Perm						0.06			0.03			
v/c Ratio	0.38	0.61		0.58	0.46	0.13	0.24	0.62	0.44	0.76	0.74	
Uniform Delay, d1	52.5	33.3		39.4	19.3	4.1	48.9	50.3	32.3	38.0	37.8	
Progression Factor	1.00	1.00		0.83	1.29	2.14	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.4	1.1		2.2	1.6	0.1	1.0	8.5	0.7	7.2	6.3	
Delay (s)	55.9	34.4		34.9	26.6	8.8	49.9	58.8	33.0	45.2	44.1	
Level of Service	E	C		C	C	A	D	E	C	D	D	
Approach Delay (s)		35.2			24.6			40.0			44.7	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	699	814	599	742	0	0	0	0	144	0	157
Future Volume (vph)	0	699	814	599	742	0	0	0	0	144	0	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Lane Util. Factor		0.95	1.00	1.00	0.95					0.97		1.00
Frt		1.00	0.85	1.00	1.00					1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (prot)		3539	1583	1770	3539					3433		1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95		1.00
Satd. Flow (perm)		3539	1583	1770	3539					3433		1583
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	0	699	814	599	742	0	0	0	0	144	0	157
RTOR Reduction (vph)	0	0	158	0	0	0	0	0	0	0	0	144
Lane Group Flow (vph)	0	699	656	599	742	0	0	0	0	144	0	13
Turn Type		NA	Perm	Prot	NA					Prot		Prot
Protected Phases		4		3	8					6		6
Permitted Phases			4									
Actuated Green, G (s)		48.9	48.9	41.5	94.4					9.6		9.6
Effective Green, g (s)		48.9	48.9	41.5	94.4					9.6		9.6
Actuated g/C Ratio		0.44	0.44	0.37	0.84					0.09		0.09
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1545	691	655	2982					294		135
v/s Ratio Prot		0.20		c0.34	0.21					c0.04		0.01
v/s Ratio Perm			c0.41									
v/c Ratio		0.45	0.95	0.91	0.25					0.49		0.10
Uniform Delay, d1		22.2	30.4	33.6	1.7					48.9		47.2
Progression Factor		0.87	0.91	0.98	0.74					1.00		1.00
Incremental Delay, d2		0.2	20.3	14.5	0.0					5.7		1.5
Delay (s)		19.5	47.8	47.4	1.3					54.6		48.7
Level of Service		B	D	D	A					D		D
Approach Delay (s)		34.7			21.9			0.0			51.5	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM 2000 Control Delay	30.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	90.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	264	610	0	0	650	159	224	225	92	255	0	679
Future Volume (veh/h)	264	610	0	0	650	159	224	225	92	255	0	679
Number	7	4	14	3	8	18	5	2	12	1	6	16
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		0.99	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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	264	610	0	0	650	159	224	225	92	255	0	679
Adj No. of Lanes	2	1	0	0	2	0	1	2	0	2	0	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	345	1429	0	0	1776	434	286	399	158	0	0	0
Arrive On Green	0.10	0.77	0.00	0.00	0.63	0.63	0.16	0.16	0.16	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	2906	687	1774	2472	979		0	
Grp Volume(v), veh/h	264	610	0	0	409	400	224	159	158		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1731	1774	1770	1681			
Q Serve(g_s), s	8.4	12.7	0.0	0.0	12.4	12.4	13.6	9.3	9.7			
Cycle Q Clear(g_c), s	8.4	12.7	0.0	0.0	12.4	12.4	13.6	9.3	9.7			
Prop In Lane	1.00		0.00	0.00		0.40	1.00		0.58			
Lane Grp Cap(c), veh/h	345	1429	0	0	1117	1093	286	285	271			
V/C Ratio(X)	0.77	0.43	0.00	0.00	0.37	0.37	0.78	0.56	0.58			
Avail Cap(c_a), veh/h	922	1429	0	0	1117	1093	475	474	450			
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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	49.1	4.5	0.0	0.0	9.9	9.9	45.1	43.3	43.5			
Incr Delay (d2), s/veh	3.6	0.9	0.0	0.0	0.2	0.2	4.7	1.7	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			
%ile BackOfQ(50%),veh/ln	4.2	6.8	0.0	0.0	6.1	6.0	7.0	4.7	4.7			
LnGrp Delay(d),s/veh	52.7	5.4	0.0	0.0	10.1	10.1	49.8	45.0	45.5			
LnGrp LOS	D	A			B	B	D	D	D			
Approach Vol, veh/h		874			809			541				
Approach Delay, s/veh		19.7			10.1			47.1				
Approach LOS		B			B			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		22.1		89.9			15.2	74.7
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		30.0		59.0			30.0	25.0
Max Q Clear Time (g_c+I1), s		15.6		14.7			10.4	14.4
Green Ext Time (p_c), s		2.2		4.8			0.8	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	22.9
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR		NEBT	SEBT	
Lane Configurations						
Traffic Vol, veh/h	0	40	0	344	319	60
Future Vol, veh/h	0	40	0	344	319	60
Conflicting Peds, #/hr	0	19	12	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	40	0	344	319	60

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	377	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	670	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	652	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	652	-	-
HCM Lane V/C Ratio	-	0.061	-	-
HCM Control Delay (s)	-	10.9	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	13	0	2	0	15	0	104	14	38	129	1
Future Vol, veh/h	7	13	0	2	0	15	0	104	14	38	129	1
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	20	5	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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	13	0	2	0	15	0	104	14	38	129	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	326	344	130	343	337	132	130	0	0	138	0	0
Stage 1	206	206	-	131	131	-	-	-	-	-	-	-
Stage 2	120	138	-	212	206	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	627	579	920	611	584	917	1455	-	-	1446	-	-
Stage 1	796	731	-	873	788	-	-	-	-	-	-	-
Stage 2	884	782	-	790	731	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	603	552	920	576	557	899	1455	-	-	1418	-	-
Mov Cap-2 Maneuver	603	552	-	576	557	-	-	-	-	-	-	-
Stage 1	796	710	-	856	773	-	-	-	-	-	-	-
Stage 2	868	767	-	753	710	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.6	9.4	0	1.7
HCM LOS	B	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1455	-	-	569	843	1418	-	-
HCM Lane V/C Ratio	-	-	-	0.035	0.02	0.027	-	-
HCM Control Delay (s)	0	-	-	11.6	9.4	7.6	0	-
HCM Lane LOS	A	-	-	B	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	219	52	67	206	23	97
Future Vol, veh/h	219	52	67	206	23	97
Conflicting Peds, #/hr	0	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	219	52	67	206	23	97

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	272	0	586	246
Stage 1	-	-	-	-	246	-
Stage 2	-	-	-	-	340	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1291	-	473	793
Stage 1	-	-	-	-	795	-
Stage 2	-	-	-	-	721	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1290	-	445	792
Mov Cap-2 Maneuver	-	-	-	-	445	-
Stage 1	-	-	-	-	747	-
Stage 2	-	-	-	-	721	-

Approach	SE	NW	NE
HCM Control Delay, s	0	1.9	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	689	1290	-	-	-
HCM Lane V/C Ratio	0.174	0.052	-	-	-
HCM Control Delay (s)	11.3	7.9	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	0.6	0.2	-	-	-

Intersection	
Intersection Delay, s/veh	13.7
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	646	408	336	134
Demand Flow Rate, veh/h	658	416	343	136
Vehicles Circulating, veh/h	194	315	494	704
Vehicles Exiting, veh/h	646	522	358	27
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	1	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	16.4	11.4	13.0	9.9
Approach LOS	C	B	B	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	658	416	343	136
Cap Entry Lane, veh/h	931	825	689	559
Entry HV Adj Factor	0.981	0.982	0.979	0.982
Flow Entry, veh/h	646	408	336	134
Cap Entry, veh/h	913	809	675	549
V/C Ratio	0.707	0.505	0.497	0.243
Control Delay, s/veh	16.4	11.4	13.0	9.9
LOS	C	B	B	A
95th %tile Queue, veh	6	3	3	1

Intersection	
Intersection Delay, s/veh	8.3
Intersection LOS	A

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	527	297	69	97
Demand Flow Rate, veh/h	537	302	70	99
Vehicles Circulating, veh/h	94	84	571	226
Vehicles Exiting, veh/h	231	557	60	160
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	4	0	4
Ped Cap Adj	1.000	0.999	1.000	0.999
Approach Delay, s/veh	10.0	6.4	7.0	5.1
Approach LOS	B	A	A	A

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	537	302	70	99
Cap Entry Lane, veh/h	1029	1039	638	901
Entry HV Adj Factor	0.981	0.982	0.979	0.977
Flow Entry, veh/h	527	297	69	97
Cap Entry, veh/h	1008	1020	625	880
V/C Ratio	0.522	0.291	0.110	0.110
Control Delay, s/veh	10.0	6.4	7.0	5.1
LOS	B	A	A	A
95th %tile Queue, veh	3	1	0	0

Intersection	
Intersection Delay, s/veh	21.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	63	73	20	70	115	285	18	117	63	254	88	35
Future Vol, veh/h	63	73	20	70	115	285	18	117	63	254	88	35
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	63	73	20	70	115	285	18	117	63	254	88	35
Number of Lanes	0	1	1	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	2
HCM Control Delay	13	27.7	13.7	22.4
HCM LOS	B	D	B	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	SBLn1
Vol Left, %	9%	46%	0%	15%	67%
Vol Thru, %	59%	54%	0%	24%	23%
Vol Right, %	32%	0%	100%	61%	9%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	198	136	20	470	377
LT Vol	18	63	0	70	254
Through Vol	117	73	0	115	88
RT Vol	63	0	20	285	35
Lane Flow Rate	198	136	20	470	377
Geometry Grp	2	7	7	5	2
Degree of Util (X)	0.369	0.289	0.037	0.785	0.681
Departure Headway (Hd)	6.717	7.651	6.693	6.016	6.5
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	533	468	532	602	554
Service Time	4.795	5.431	4.472	4.075	4.564
HCM Lane V/C Ratio	0.371	0.291	0.038	0.781	0.681
HCM Control Delay	13.7	13.5	9.7	27.7	22.4
HCM Lane LOS	B	B	A	D	C
HCM 95th-tile Q	1.7	1.2	0.1	7.5	5.2

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	2	415	6	10	465	170	3	1	20	70	1	2
Future Vol, veh/h	2	415	6	10	465	170	3	1	20	70	1	2
Conflicting Peds, #/hr	6	0	8	8	0	9	9	0	1	1	0	6
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	2	415	6	10	465	170	3	1	20	70	1	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	644	0	0	429	0	0	1011	1094	427	1013	1012	568
Stage 1	-	-	-	-	-	-	430	430	-	579	579	-
Stage 2	-	-	-	-	-	-	581	664	-	434	433	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	941	-	-	1130	-	-	218	214	628	217	239	522
Stage 1	-	-	-	-	-	-	603	583	-	501	501	-
Stage 2	-	-	-	-	-	-	499	458	-	600	582	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	933	-	-	1121	-	-	210	207	623	205	231	513
Mov Cap-2 Maneuver	-	-	-	-	-	-	210	207	-	205	231	-
Stage 1	-	-	-	-	-	-	596	577	-	495	489	-
Stage 2	-	-	-	-	-	-	485	447	-	577	576	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.1	13.1	31.2
HCM LOS			B	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	469	933	-	-	1121	-	-	209
HCM Lane V/C Ratio	0.051	0.002	-	-	0.009	-	-	0.349
HCM Control Delay (s)	13.1	8.9	0	-	8.2	0	-	31.2
HCM Lane LOS	B	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	359	46	201	441	83	91	131	185	99	101	130
Future Volume (veh/h)	122	359	46	201	441	83	91	131	185	99	101	130
Number	7	4	14	3	8	18	5	2	12	1	6	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		0.97	0.98		0.94	0.98		0.94
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	122	359	46	201	441	83	91	131	185	99	101	130
Adj No. of Lanes	1	1	0	1	1	0	1	1	0	1	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	483	62	256	535	101	388	172	244	319	185	237
Arrive On Green	0.09	0.30	0.30	0.14	0.35	0.35	0.06	0.26	0.26	0.07	0.26	0.26
Sat Flow, veh/h	1774	1616	207	1774	1516	285	1774	673	950	1774	713	918
Grp Volume(v), veh/h	122	0	405	201	0	524	91	0	316	99	0	231
Grp Sat Flow(s),veh/h/ln	1774	0	1823	1774	0	1801	1774	0	1623	1774	0	1631
Q Serve(g_s), s	4.0	0.0	12.0	6.6	0.0	16.0	2.2	0.0	10.8	2.4	0.0	7.4
Cycle Q Clear(g_c), s	4.0	0.0	12.0	6.6	0.0	16.0	2.2	0.0	10.8	2.4	0.0	7.4
Prop In Lane	1.00		0.11	1.00		0.16	1.00		0.59	1.00		0.56
Lane Grp Cap(c), veh/h	161	0	545	256	0	635	388	0	416	319	0	422
V/C Ratio(X)	0.76	0.00	0.74	0.79	0.00	0.82	0.23	0.00	0.76	0.31	0.00	0.55
Avail Cap(c_a), veh/h	590	0	1061	590	0	1048	745	0	944	672	0	949
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	26.7	0.0	19.0	24.8	0.0	17.8	15.1	0.0	20.6	15.6	0.0	19.2
Incr Delay (d2), s/veh	7.1	0.0	2.0	5.3	0.0	2.8	0.3	0.0	2.9	0.5	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(50%),veh/ln	2.3	0.0	6.3	3.6	0.0	8.4	1.1	0.0	5.2	1.2	0.0	3.4
LnGrp Delay(d),s/veh	33.8	0.0	21.0	30.1	0.0	20.5	15.4	0.0	23.5	16.2	0.0	20.4
LnGrp LOS	C		C	C		C	B		C	B		C
Approach Vol, veh/h		527			725			407			330	
Approach Delay, s/veh		24.0			23.2			21.7			19.1	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	19.4	11.7	22.0	6.9	19.6	8.5	25.2
Change Period (Y+Rc), s	3.0	4.0	3.0	4.0	3.0	4.0	3.0	4.0
Max Green Setting (Gmax), s	16.0	35.0	20.0	35.0	16.0	35.0	20.0	35.0
Max Q Clear Time (g_c+I1), s	4.4	12.8	8.6	14.0	4.2	9.4	6.0	18.0
Green Ext Time (p_c), s	0.2	2.0	0.4	2.5	0.1	1.5	0.2	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	22.4
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		⇕			⇕			⇕			⇕	
Traffic Vol, veh/h	12	613	18	10	699	13	11	0	11	14	1	15
Future Vol, veh/h	12	613	18	10	699	13	11	0	11	14	1	15
Conflicting Peds, #/hr	20	0	5	5	0	20	3	0	4	4	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	12	613	18	10	699	13	11	0	11	14	1	15

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	732	0	0	636	0	0	1388	1403	631	1402	1406	729
Stage 1	-	-	-	-	-	-	651	651	-	746	746	-
Stage 2	-	-	-	-	-	-	737	752	-	656	660	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	873	-	-	947	-	-	120	140	481	117	139	423
Stage 1	-	-	-	-	-	-	457	465	-	405	421	-
Stage 2	-	-	-	-	-	-	410	418	-	454	460	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	856	-	-	942	-	-	111	131	477	108	130	414
Mov Cap-2 Maneuver	-	-	-	-	-	-	111	131	-	108	130	-
Stage 1	-	-	-	-	-	-	445	452	-	388	405	-
Stage 2	-	-	-	-	-	-	386	403	-	432	448	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	0.1	27.8	30.1
HCM LOS			D	D

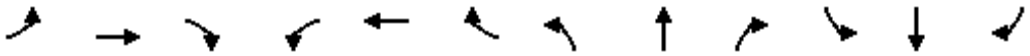
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	180	856	-	-	942	-	-	173
HCM Lane V/C Ratio	0.122	0.014	-	-	0.011	-	-	0.173
HCM Control Delay (s)	27.8	9.3	0	-	8.9	0	-	30.1
HCM Lane LOS	D	A	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.4	0	-	-	0	-	-	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	540	57	101	579	108	52	86	70	47	25	92
Future Volume (veh/h)	41	540	57	101	579	108	52	86	70	47	25	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	41	540	57	101	579	108	52	86	70	47	25	92
Adj No. of Lanes	1	1	0	1	1	0	0	1	0	0	1	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	759	80	242	698	130	192	311	230	211	125	364
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	752	1651	174	818	1518	283	331	726	536	372	292	849
Grp Volume(v), veh/h	41	0	597	101	0	687	208	0	0	164	0	0
Grp Sat Flow(s),veh/h/ln	752	0	1825	818	0	1802	1594	0	0	1514	0	0
Q Serve(g_s), s	4.5	0.0	23.6	10.2	0.0	30.0	1.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	34.5	0.0	23.6	33.8	0.0	30.0	7.1	0.0	0.0	5.5	0.0	0.0
Prop In Lane	1.00		0.10	1.00		0.16	0.25		0.34	0.29		0.56
Lane Grp Cap(c), veh/h	176	0	840	242	0	829	734	0	0	701	0	0
V/C Ratio(X)	0.23	0.00	0.71	0.42	0.00	0.83	0.28	0.00	0.00	0.23	0.00	0.00
Avail Cap(c_a), veh/h	289	0	1115	370	0	1111	734	0	0	701	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	36.3	0.0	19.5	33.1	0.0	21.2	16.7	0.0	0.0	16.3	0.0	0.0
Incr Delay (d2), s/veh	0.7	0.0	1.4	1.2	0.0	4.0	1.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	12.1	2.4	0.0	15.8	3.5	0.0	0.0	2.7	0.0	0.0
LnGrp Delay(d),s/veh	36.9	0.0	20.9	34.2	0.0	25.2	17.6	0.0	0.0	17.1	0.0	0.0
LnGrp LOS	D		C	C		C	B			B		
Approach Vol, veh/h		638			788			208			164	
Approach Delay, s/veh		21.9			26.4			17.6			17.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		43.6		46.4		43.6		46.4
Change Period (Y+Rc), s		5.0		5.0		* 5		* 5
Max Green Setting (Gmax), s		25.0		55.0		* 26		* 56
Max Q Clear Time (g_c+I1), s		9.1		36.5		7.5		35.8
Green Ext Time (p_c), s		1.1		4.2		0.9		5.6

Intersection Summary	
HCM 2010 Ctrl Delay	22.9
HCM 2010 LOS	C

Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	577	29	278	715	341	88	158	217	319	72	24
Future Volume (vph)	28	577	29	278	715	341	88	158	217	319	72	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (prot)	1770	3509		1770	1863	1502	1770	1863	1545	1681	1690	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	
Satd. Flow (perm)	1770	3509		1770	1863	1502	1770	1863	1545	1681	1690	
Peak-hour factor, PHF	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	28	577	29	278	715	341	88	158	217	319	72	24
RTOR Reduction (vph)	0	3	0	0	0	67	0	0	164	0	4	0
Lane Group Flow (vph)	28	603	0	278	715	274	88	158	53	207	204	0
Confl. Peds. (#/hr)	20		4	4		20	3		4	3		4
Confl. Bikes (#/hr)			1									
Turn Type	Prot	NA		Prot	NA	pm+ov	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8	6	2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	3.3	42.8		20.9	60.4	79.6	13.1	13.1	13.1	19.2	19.2	
Effective Green, g (s)	3.3	42.8		20.9	60.4	79.6	13.1	13.1	13.1	19.2	19.2	
Actuated g/C Ratio	0.03	0.38		0.19	0.54	0.71	0.12	0.12	0.12	0.17	0.17	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	2.5	3.2		2.3	3.2	3.1	3.0	3.0	3.0	3.1	3.1	
Lane Grp Cap (vph)	52	1340		330	1004	1067	207	217	180	288	289	
v/s Ratio Prot	0.02	0.17		c0.16	c0.38	0.04	0.05	c0.08		c0.12	0.12	
v/s Ratio Perm						0.14			0.03			
v/c Ratio	0.54	0.45		0.84	0.71	0.26	0.43	0.73	0.29	0.72	0.71	
Uniform Delay, d1	53.6	25.8		44.0	19.3	5.7	46.0	47.7	45.2	43.8	43.7	
Progression Factor	1.00	1.00		1.14	0.64	0.91	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.1	0.3		16.3	4.1	0.1	1.4	11.5	0.9	8.4	7.7	
Delay (s)	61.7	26.1		66.2	16.4	5.3	47.4	59.3	46.1	52.2	51.4	
Level of Service	E	C		E	B	A	D	E	D	D	D	
Approach Delay (s)		27.6			24.0			50.8			51.8	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	33.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	112.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	612	501	433	1121	0	0	0	0	301	0	223
Future Volume (veh/h)	0	612	501	433	1121	0	0	0	0	301	0	223
Number	7	4	14	3	8	18				1	6	16
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
Adj Sat Flow, veh/h/ln	0	1863	1863	1863	1863	0				1863	0	1863
Adj Flow Rate, veh/h	0	612	501	433	1121	0				301	0	223
Adj No. of Lanes	0	2	1	1	2	0				2	0	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Percent Heavy Veh, %	0	2	2	2	2	0				2	0	2
Cap, veh/h	0	1629	729	470	2694	0				576	0	265
Arrive On Green	0.00	0.46	0.46	0.27	0.76	0.00				0.17	0.00	0.17
Sat Flow, veh/h	0	3632	1583	1774	3632	0				3442	0	1583
Grp Volume(v), veh/h	0	612	501	433	1121	0				301	0	223
Grp Sat Flow(s),veh/h/ln	0	1770	1583	1774	1770	0				1721	0	1583
Q Serve(g_s), s	0.0	12.6	28.0	26.6	12.4	0.0				8.9	0.0	15.3
Cycle Q Clear(g_c), s	0.0	12.6	28.0	26.6	12.4	0.0				8.9	0.0	15.3
Prop In Lane	0.00		1.00	1.00		0.00				1.00		1.00
Lane Grp Cap(c), veh/h	0	1629	729	470	2694	0				576	0	265
V/C Ratio(X)	0.00	0.38	0.69	0.92	0.42	0.00				0.52	0.00	0.84
Avail Cap(c_a), veh/h	0	1629	729	649	2694	0				860	0	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.81	0.81	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	19.7	23.9	40.0	4.7	0.0				42.5	0.0	45.2
Incr Delay (d2), s/veh	0.0	0.5	4.3	14.9	0.1	0.0				0.7	0.0	10.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.2	13.1	14.9	6.0	0.0				4.3	0.0	7.4
LnGrp Delay(d),s/veh	0.0	20.3	28.1	54.9	4.8	0.0				43.3	0.0	55.2
LnGrp LOS		C	C	D	A					D		E
Approach Vol, veh/h		1113			1554						524	
Approach Delay, s/veh		23.8			18.7						48.3	
Approach LOS		C			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			33.7	55.6		22.7		89.3
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			41.0	31.0		28.0		76.0
Max Q Clear Time (g_c+I1), s			28.6	30.0		17.3		14.4
Green Ext Time (p_c), s			1.1	0.6		1.5		10.8

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	309	672	0	0	715	291	528	539	303	386	0	618
Future Volume (veh/h)	309	672	0	0	715	291	528	539	303	386	0	618
Number	7	4	14	3	8	18	5	2	12	1	6	16
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
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1900	1863	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	309	672	0	0	715	291	528	539	303	386	0	618
Adj No. of Lanes	2	1	0	0	2	0	1	2	0	2	0	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	390	1231	0	0	1252	509	475	585	328	0	0	0
Arrive On Green	0.11	0.66	0.00	0.00	0.51	0.51	0.27	0.27	0.27	0.00	0.00	0.00
Sat Flow, veh/h	3442	1863	0	0	2539	995	1774	2184	1226		0	
Grp Volume(v), veh/h	309	672	0	0	517	489	528	437	405		0.0	
Grp Sat Flow(s),veh/h/ln	1721	1863	0	0	1770	1672	1774	1770	1640			
Q Serve(g_s), s	9.8	21.4	0.0	0.0	22.6	22.6	30.0	26.9	26.9			
Cycle Q Clear(g_c), s	9.8	21.4	0.0	0.0	22.6	22.6	30.0	26.9	26.9			
Prop In Lane	1.00		0.00	0.00		0.60	1.00		0.75			
Lane Grp Cap(c), veh/h	390	1231	0	0	906	856	475	474	439			
V/C Ratio(X)	0.79	0.55	0.00	0.00	0.57	0.57	1.11	0.92	0.92			
Avail Cap(c_a), veh/h	768	1231	0	0	906	856	475	474	439			
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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	48.4	10.1	0.0	0.0	18.9	18.9	41.0	39.8	39.9			
Incr Delay (d2), s/veh	3.7	1.7	0.0	0.0	0.9	0.9	75.2	23.4	25.1			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.9	11.4	0.0	0.0	11.1	10.5	24.6	16.2	15.2			
LnGrp Delay(d),s/veh	52.1	11.8	0.0	0.0	19.7	19.8	116.2	63.2	64.9			
LnGrp LOS	D	B			B	B	F	E	E			
Approach Vol, veh/h		981			1006			1370				
Approach Delay, s/veh		24.5			19.8			84.2				
Approach LOS		C			B			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		34.0		78.0			16.7	61.3
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		30.0		59.0			25.0	30.0
Max Q Clear Time (g_c+I1), s		32.0		23.4			11.8	24.6
Green Ext Time (p_c), s		0.0		5.4			0.9	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.4
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR		NEBT	SEBT	
Lane Configurations						
Traffic Vol, veh/h	0	40	0	344	319	60
Future Vol, veh/h	0	40	0	344	319	60
Conflicting Peds, #/hr	0	19	12	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	40	0	344	319	60

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	377	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	670	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	652	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	652	-	-
HCM Lane V/C Ratio	-	0.061	-	-
HCM Control Delay (s)	-	10.9	-	-
HCM Lane LOS	-	B	-	-
HCM 95th %tile Q(veh)	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	7	3	2	12	0	19	5	182	10	22	178	5
Future Vol, veh/h	7	3	2	12	0	19	5	182	10	22	178	5
Conflicting Peds, #/hr	1	0	0	0	0	1	0	0	20	5	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	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	7	3	2	12	0	19	5	182	10	22	178	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	433	447	181	444	444	208	183	0	0	212	0	0
Stage 1	225	225	-	217	217	-	-	-	-	-	-	-
Stage 2	208	222	-	227	227	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	533	506	862	524	508	832	1392	-	-	1358	-	-
Stage 1	778	718	-	785	723	-	-	-	-	-	-	-
Stage 2	794	720	-	776	716	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	511	485	862	502	487	815	1392	-	-	1332	-	-
Mov Cap-2 Maneuver	511	485	-	502	487	-	-	-	-	-	-	-
Stage 1	775	705	-	767	706	-	-	-	-	-	-	-
Stage 2	772	703	-	757	703	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.8	10.8	0.2	0.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1392	-	-	540	657	1332	-	-
HCM Lane V/C Ratio	0.004	-	-	0.022	0.047	0.017	-	-
HCM Control Delay (s)	7.6	0	-	11.8	10.8	7.7	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.1	-	-

Intersection	
Int Delay, s/veh	4.1

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Vol, veh/h	181	40	95	202	64	92
Future Vol, veh/h	181	40	95	202	64	92
Conflicting Peds, #/hr	0	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	181	40	95	202	64	92

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	222	0	594	202
Stage 1	-	-	-	-	202	-
Stage 2	-	-	-	-	392	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1347	-	468	839
Stage 1	-	-	-	-	832	-
Stage 2	-	-	-	-	683	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1346	-	430	838
Mov Cap-2 Maneuver	-	-	-	-	430	-
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	683	-

Approach	SE	NW	NE
HCM Control Delay, s	0	2.5	13
HCM LOS			B

Minor Lane/Major Mvmt	NELn1	NWL	NWT	SET	SER
Capacity (veh/h)	603	1346	-	-	-
HCM Lane V/C Ratio	0.259	0.071	-	-	-
HCM Control Delay (s)	13	7.9	0	-	-
HCM Lane LOS	B	A	A	-	-
HCM 95th %tile Q(veh)	1	0.2	-	-	-

Intersection	
Intersection Delay, s/veh	10.1
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	532	484	240	15
Demand Flow Rate, veh/h	542	493	245	15
Vehicles Circulating, veh/h	77	217	348	683
Vehicles Exiting, veh/h	621	376	271	27
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	1	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.8	11.4	8.2	6.6
Approach LOS	A	B	A	A

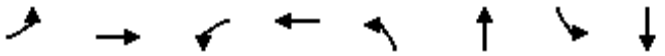
Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	542	493	245	15
Cap Entry Lane, veh/h	1046	910	798	571
Entry HV Adj Factor	0.981	0.981	0.979	0.997
Flow Entry, veh/h	532	484	240	15
Cap Entry, veh/h	1026	893	781	569
V/C Ratio	0.518	0.542	0.307	0.026
Control Delay, s/veh	9.8	11.4	8.2	6.6
LOS	A	B	A	A
95th %tile Queue, veh	3	3	1	0

Intersection	
Intersection Delay, s/veh	10.9
Intersection LOS	B

Approach	EB	WB	NB	SB
Entry Lanes	1	1	1	1
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	352	452	235	330
Demand Flow Rate, veh/h	358	461	239	337
Vehicles Circulating, veh/h	277	285	469	458
Vehicles Exiting, veh/h	518	423	166	287
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	2	4	0	4
Ped Cap Adj	1.000	0.999	1.000	0.999
Approach Delay, s/veh	9.4	12.1	9.5	12.0
Approach LOS	A	B	A	B

Lane	Left	Left	Left	Left
Designated Moves	LTR	LTR	LTR	LTR
Assumed Moves	LTR	LTR	LTR	LTR
RT Channelized				
Lane Util	1.000	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193	5.193
Entry Flow, veh/h	358	461	239	337
Cap Entry Lane, veh/h	857	850	707	715
Entry HV Adj Factor	0.982	0.979	0.982	0.978
Flow Entry, veh/h	352	452	235	330
Cap Entry, veh/h	841	832	694	699
V/C Ratio	0.418	0.543	0.338	0.472
Control Delay, s/veh	9.4	12.1	9.5	12.0
LOS	A	B	A	B
95th %tile Queue, veh	2	3	1	3

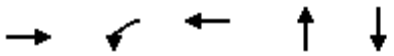
Appendix F: Left-turn Queue Reports



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	79	554	211	274	49	337	70	177
v/c Ratio	0.43	0.78	0.72	0.32	0.14	0.79	0.28	0.41
Control Delay	48.9	36.9	54.0	20.7	20.2	42.0	22.6	31.4
Queue Delay	0.0	0.0	0.0	0.0	0.3	4.3	0.0	0.7
Total Delay	48.9	36.9	54.0	20.7	20.5	46.3	22.6	32.1
Queue Length 50th (ft)	45	292	121	103	19	161	28	86
Queue Length 95th (ft)	82	398	#257	213	41	257	56	148
Internal Link Dist (ft)		698		103		68		120
Turn Bay Length (ft)	50		200		200			
Base Capacity (vph)	313	708	313	868	522	680	446	698
Starvation Cap Reductn	0	0	0	0	232	262	10	276
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.78	0.67	0.32	0.17	0.81	0.16	0.42

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	626	30	652	56	56
v/c Ratio	0.65	0.07	0.67	0.15	0.16
Control Delay	9.8	4.9	10.2	9.1	11.2
Queue Delay	0.0	0.0	0.3	0.0	0.0
Total Delay	9.8	4.9	10.5	9.1	11.2
Queue Length 50th (ft)	54	2	56	3	5
Queue Length 95th (ft)	209	13	219	28	32
Internal Link Dist (ft)	612		2	66	533
Turn Bay Length (ft)					
Base Capacity (vph)	1662	730	1671	868	802
Starvation Cap Reductn	0	231	486	157	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.38	0.06	0.55	0.08	0.07

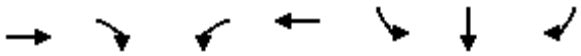
Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	24	659	297	418	424	64	92	262	237	240
v/c Ratio	0.26	0.53	0.84	0.42	0.34	0.42	0.57	0.70	0.65	0.64
Control Delay	58.1	33.2	76.8	15.0	1.2	56.5	63.0	16.7	47.4	46.1
Queue Delay	0.0	1.4	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.1	34.6	76.8	15.3	1.2	56.5	63.0	16.7	47.4	46.1
Queue Length 50th (ft)	17	203	219	110	6	44	64	0	164	163
Queue Length 95th (ft)	44	287	#298	168	17	86	113	69	216	215
Internal Link Dist (ft)		63		422			215			514
Turn Bay Length (ft)	85		210			75		70	200	
Base Capacity (vph)	92	1241	388	995	1299	173	182	388	510	522
Starvation Cap Reductn	0	374	0	175	76	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	3	3
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.26	0.76	0.77	0.51	0.35	0.37	0.51	0.68	0.47	0.46

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	690	509	666	939	59	60	112
v/c Ratio	0.60	0.77	0.92	0.35	0.50	0.51	0.52
Control Delay	23.8	21.1	36.6	3.2	64.9	65.4	18.6
Queue Delay	0.0	0.6	0.0	0.0	0.0	0.0	0.0
Total Delay	23.8	21.7	36.6	3.2	64.9	65.4	18.6
Queue Length 50th (ft)	222	254	307	97	43	44	0
Queue Length 95th (ft)	224	m289	m#703	m141	#111	#113	57
Internal Link Dist (ft)	422			325		822	
Turn Bay Length (ft)		200	400				40
Base Capacity (vph)	1365	734	721	2763	120	120	216
Starvation Cap Reductn	0	50	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.51	0.74	0.92	0.34	0.49	0.50	0.52

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

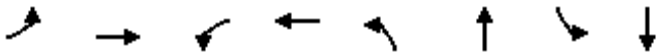
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	309	396	1005	321	349	257	746
v/c Ratio	0.54	0.40	0.89	0.80	0.44	0.54	0.78
Control Delay	62.8	5.3	46.6	55.5	34.5	51.2	22.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	62.8	5.3	46.6	55.5	34.5	51.2	22.3
Queue Length 50th (ft)	117	10	342	215	101	91	384
Queue Length 95th (ft)	103	72	#608	308	141	#152	388
Internal Link Dist (ft)		255	308		371		
Turn Bay Length (ft)						180	
Base Capacity (vph)	919	981	1129	474	936	475	1119
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.34	0.40	0.89	0.68	0.37	0.54	0.67

Intersection Summary

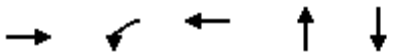
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	23	303	232	377	60	373	89	183
v/c Ratio	0.14	0.68	0.59	0.45	0.13	0.75	0.29	0.37
Control Delay	42.0	36.2	40.7	21.1	15.1	31.9	17.0	24.0
Queue Delay	0.0	0.0	0.0	0.0	0.2	1.5	0.0	0.3
Total Delay	42.0	36.2	40.7	21.1	15.3	33.4	17.0	24.3
Queue Length 50th (ft)	11	129	102	108	17	133	25	65
Queue Length 95th (ft)	40	264	#290	303	40	230	61	138
Internal Link Dist (ft)		698		103		68		120
Turn Bay Length (ft)	50		200		200		200	
Base Capacity (vph)	394	887	394	898	652	838	562	863
Starvation Cap Reductn	0	0	0	0	283	285	20	303
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.34	0.59	0.42	0.16	0.67	0.16	0.33

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



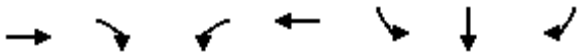
Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	542	29	644	56	96
v/c Ratio	0.57	0.06	0.67	0.14	0.25
Control Delay	8.6	4.9	10.2	9.0	10.6
Queue Delay	0.0	0.0	0.4	0.0	0.0
Total Delay	8.6	4.9	10.6	9.0	10.6
Queue Length 50th (ft)	46	2	58	3	7
Queue Length 95th (ft)	169	13	215	28	44
Internal Link Dist (ft)	612		2	66	533
Turn Bay Length (ft)					
Base Capacity (vph)	1648	797	1664	857	806
Starvation Cap Reductn	0	275	489	169	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.33	0.06	0.55	0.08	0.12

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	22	555	171	530	363	63	72	134	219	218
v/c Ratio	0.23	0.36	0.70	0.50	0.29	0.43	0.47	0.54	0.65	0.63
Control Delay	56.3	24.8	69.1	18.3	1.9	57.8	58.9	16.5	48.8	47.0
Queue Delay	0.0	0.8	0.0	0.6	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	56.3	25.5	69.1	18.8	1.9	57.8	58.9	16.5	48.8	47.0
Queue Length 50th (ft)	15	137	126	175	27	44	50	0	153	148
Queue Length 95th (ft)	42	236	202	217	29	87	97	59	213	208
Internal Link Dist (ft)		63		422			215			514
Turn Bay Length (ft)	85		210			75		70	200	
Base Capacity (vph)	96	1528	379	1062	1297	173	182	272	510	514
Starvation Cap Reductn	0	626	0	220	139	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.23	0.62	0.45	0.63	0.31	0.36	0.40	0.49	0.43	0.42

Intersection Summary



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	658	539	466	1205	110	112	124
v/c Ratio	0.39	0.55	0.85	0.41	0.64	0.65	0.46
Control Delay	18.8	9.8	39.0	3.2	65.4	66.1	13.8
Queue Delay	0.0	0.5	0.0	0.0	0.0	0.0	0.0
Total Delay	18.8	10.2	39.0	3.2	65.4	66.1	13.8
Queue Length 50th (ft)	158	118	211	96	80	82	0
Queue Length 95th (ft)	221	202	m259	149	143	145	55
Internal Link Dist (ft)	422			325		822	
Turn Bay Length (ft)		200	400				
Base Capacity (vph)	1700	978	679	2925	195	195	293
Starvation Cap Reductn	0	138	0	0	0	0	0
Spillback Cap Reductn	0	0	0	4	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.64	0.69	0.41	0.56	0.57	0.42

Intersection Summary

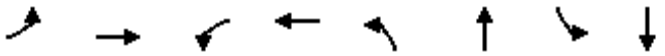
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	334	484	801	395	812	322	605
v/c Ratio	0.63	0.49	0.67	0.86	0.87	0.91	0.63
Control Delay	54.8	15.2	31.7	58.2	45.8	80.2	16.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.8	15.2	31.7	58.2	45.8	80.2	16.4
Queue Length 50th (ft)	87	95	226	268	261	121	244
Queue Length 95th (ft)	143	122	323	#428	#346	#209	310
Internal Link Dist (ft)		255	308		371		
Turn Bay Length (ft)						180	
Base Capacity (vph)	919	985	1190	474	959	354	1128
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.49	0.67	0.83	0.85	0.91	0.54

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	79	562	215	277	49	344	70	177
v/c Ratio	0.43	0.80	0.73	0.32	0.14	0.80	0.29	0.41
Control Delay	49.2	38.2	55.0	21.0	20.1	42.1	22.6	31.2
Queue Delay	0.0	0.0	0.0	0.0	0.3	5.6	0.0	0.7
Total Delay	49.2	38.2	55.0	21.0	20.4	47.7	22.6	31.9
Queue Length 50th (ft)	45	300	124	105	19	164	28	86
Queue Length 95th (ft)	81	#413	#265	218	41	261	56	147
Internal Link Dist (ft)		698		103		68		120
Turn Bay Length (ft)	50		200		200		200	
Base Capacity (vph)	311	703	311	865	522	675	443	693
Starvation Cap Reductn	0	0	0	0	236	266	10	282
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.80	0.69	0.32	0.17	0.84	0.16	0.43

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	629	51	652	155	59
v/c Ratio	0.66	0.12	0.68	0.34	0.17
Control Delay	10.1	5.4	10.4	8.2	11.4
Queue Delay	0.0	0.1	0.4	0.1	0.0
Total Delay	10.1	5.5	10.7	8.3	11.4
Queue Length 50th (ft)	56	3	58	6	5
Queue Length 95th (ft)	210	20	219	49	34
Internal Link Dist (ft)	612		2	66	533
Turn Bay Length (ft)					
Base Capacity (vph)	1647	716	1656	893	772
Starvation Cap Reductn	0	218	485	149	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.38	0.10	0.56	0.21	0.08

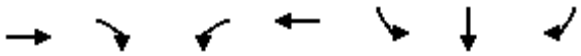
Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	24	747	297	440	309	64	92	262	237	240
v/c Ratio	0.25	0.59	0.83	0.44	0.25	0.42	0.57	0.70	0.67	0.66
Control Delay	57.2	34.3	77.4	14.1	0.7	56.5	63.0	16.7	49.1	47.6
Queue Delay	0.0	2.6	0.0	0.3	0.0	0.0	0.0	0.1	0.1	0.1
Total Delay	57.2	36.9	77.4	14.4	0.7	56.5	63.0	16.8	49.1	47.7
Queue Length 50th (ft)	17	236	228	110	1	44	64	0	165	165
Queue Length 95th (ft)	44	#352	#276	167	6	86	113	69	220	218
Internal Link Dist (ft)		63		422			215			514
Turn Bay Length (ft)	85		210			75		70	200	
Base Capacity (vph)	95	1258	391	1003	1287	173	182	388	510	522
Starvation Cap Reductn	0	376	0	163	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	2	14	14
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.85	0.76	0.52	0.24	0.37	0.51	0.68	0.48	0.47

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBL	WBT	SBL	SBT	SBR
Lane Group Flow (vph)	740	542	666	955	59	60	116
v/c Ratio	0.62	0.81	0.93	0.35	0.55	0.56	0.56
Control Delay	24.2	23.9	38.2	3.1	69.7	70.4	19.9
Queue Delay	0.0	0.9	0.0	0.0	0.0	0.0	0.0
Total Delay	24.2	24.8	38.2	3.1	69.7	70.4	19.9
Queue Length 50th (ft)	231	286	359	105	43	44	0
Queue Length 95th (ft)	m246	m343	m#696	m145	#111	#113	57
Internal Link Dist (ft)	422			325		822	
Turn Bay Length (ft)		200	400				40
Base Capacity (vph)	1365	734	713	2763	110	110	211
Starvation Cap Reductn	0	51	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.79	0.93	0.35	0.54	0.55	0.55

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

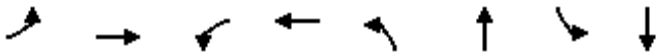
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	327	411	1009	321	349	257	746
v/c Ratio	0.56	0.42	0.90	0.80	0.44	0.54	0.77
Control Delay	65.2	6.2	48.3	55.5	34.5	51.2	21.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	65.2	6.2	48.3	55.5	34.5	51.2	21.8
Queue Length 50th (ft)	121	45	347	215	101	91	378
Queue Length 95th (ft)	111	70	#612	308	141	#152	388
Internal Link Dist (ft)		255	308		371		
Turn Bay Length (ft)						180	
Base Capacity (vph)	919	981	1115	474	936	475	1119
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.42	0.90	0.68	0.37	0.54	0.67

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	23	316	235	380	60	388	89	183
v/c Ratio	0.15	0.69	0.61	0.46	0.13	0.77	0.30	0.36
Control Delay	42.8	36.9	42.1	21.3	15.4	33.0	17.5	24.2
Queue Delay	0.0	0.0	0.0	0.0	0.2	2.0	0.0	0.4
Total Delay	42.8	36.9	42.1	21.3	15.7	35.0	17.5	24.5
Queue Length 50th (ft)	11	139	108	113	17	141	26	66
Queue Length 95th (ft)	41	275	#300	305	41	243	62	140
Internal Link Dist (ft)		698		103		68		120
Turn Bay Length (ft)	50		200		200		200	
Base Capacity (vph)	385	867	385	885	646	821	547	843
Starvation Cap Reductn	0	0	0	0	287	286	17	312
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.36	0.61	0.43	0.17	0.73	0.17	0.34

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

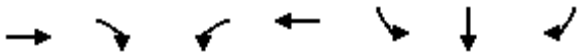
Lane Group	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	545	111	644	108	110
v/c Ratio	0.57	0.24	0.67	0.25	0.29
Control Delay	8.7	6.5	10.3	8.3	11.5
Queue Delay	0.0	0.1	0.4	0.1	0.0
Total Delay	8.7	6.6	10.7	8.3	11.5
Queue Length 50th (ft)	48	8	60	4	9
Queue Length 95th (ft)	170	39	215	39	51
Internal Link Dist (ft)	612		2	66	533
Turn Bay Length (ft)					
Base Capacity (vph)	1631	784	1646	864	802
Starvation Cap Reductn	0	238	488	169	0
Spillback Cap Reductn	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0
Reduced v/c Ratio	0.33	0.20	0.56	0.16	0.14

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	22	597	171	607	363	63	72	134	365	72
v/c Ratio	0.24	0.40	0.70	0.58	0.29	0.26	0.44	0.47	0.75	0.16
Control Delay	57.6	25.4	70.4	17.4	0.7	28.6	56.2	9.0	41.0	26.0
Queue Delay	0.0	1.1	0.0	0.5	0.1	0.0	0.0	0.0	0.0	0.0
Total Delay	57.6	26.5	70.4	17.9	0.7	28.6	56.2	9.0	41.0	26.0
Queue Length 50th (ft)	15	160	121	202	0	30	50	0	211	29
Queue Length 95th (ft)	43	231	201	160	0	60	94	34	309	69
Internal Link Dist (ft)		63		422			215			514
Turn Bay Length (ft)	85		210			75		70	70	
Base Capacity (vph)	91	1475	379	1074	1245	289	232	338	492	443
Starvation Cap Reductn	0	613	0	160	126	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.24	0.69	0.45	0.66	0.32	0.22	0.31	0.40	0.74	0.16

Intersection Summary



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	763	412	343	1197	110	112	141
v/c Ratio	0.40	0.39	0.79	0.41	0.64	0.65	0.49
Control Delay	15.5	5.7	48.6	3.3	65.4	66.1	13.8
Queue Delay	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	6.0	48.6	3.3	65.4	66.1	13.8
Queue Length 50th (ft)	174	83	194	100	80	82	0
Queue Length 95th (ft)	252	145	m225	152	143	145	59
Internal Link Dist (ft)	422			325		822	
Turn Bay Length (ft)			400				
Base Capacity (vph)	1931	1051	679	2925	195	195	308
Starvation Cap Reductn	0	231	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.50	0.51	0.41	0.56	0.57	0.46

Intersection Summary

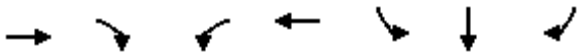
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	343	491	814	395	812	322	622
v/c Ratio	0.63	0.50	0.69	0.86	0.87	0.91	0.65
Control Delay	44.5	15.4	32.6	58.2	45.8	80.2	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.5	15.4	32.6	58.2	45.8	80.2	16.9
Queue Length 50th (ft)	74	264	234	268	261	121	256
Queue Length 95th (ft)	115	111	333	#428	#346	#209	324
Internal Link Dist (ft)		255	308		371		
Turn Bay Length (ft)						180	
Base Capacity (vph)	919	985	1180	474	959	354	1127
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.50	0.69	0.83	0.85	0.91	0.55

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	763	412	343	1197	110	112	141
v/c Ratio	0.40	0.39	0.79	0.41	0.64	0.65	0.49
Control Delay	15.5	5.7	48.6	3.3	65.4	66.1	13.8
Queue Delay	0.0	0.3	0.0	0.0	0.0	0.0	0.0
Total Delay	15.5	6.0	48.6	3.3	65.4	66.1	13.8
Queue Length 50th (ft)	174	83	194	100	80	82	0
Queue Length 95th (ft)	252	145	m225	152	143	145	59
Internal Link Dist (ft)	422			325		822	
Turn Bay Length (ft)			400				
Base Capacity (vph)	1931	1051	679	2925	195	195	308
Starvation Cap Reductn	0	231	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.50	0.51	0.41	0.56	0.57	0.46

Intersection Summary

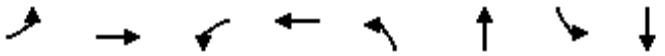
m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	343	491	814	395	812	322	622
v/c Ratio	0.63	0.50	0.69	0.86	0.87	0.91	0.65
Control Delay	44.5	15.4	32.6	58.2	45.8	80.2	16.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.5	15.4	32.6	58.2	45.8	80.2	16.9
Queue Length 50th (ft)	74	264	234	268	261	121	256
Queue Length 95th (ft)	115	111	333	#428	#346	#209	324
Internal Link Dist (ft)		255	308		371		
Turn Bay Length (ft)						180	
Base Capacity (vph)	919	985	1180	474	959	354	1127
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.50	0.69	0.83	0.85	0.91	0.55

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	112	452	177	270	68	505	37	285
v/c Ratio	0.50	0.81	0.63	0.43	0.18	0.81	0.15	0.50
Control Delay	50.6	43.8	50.4	27.7	19.4	39.7	19.6	31.6
Queue Delay	0.0	0.0	0.0	0.0	0.5	55.5	0.0	5.0
Total Delay	50.6	43.8	50.4	27.7	19.9	95.1	19.6	36.6
Queue Length 50th (ft)	71	269	111	133	25	277	14	144
Queue Length 95th (ft)	132	#449	192	225	58	#526	37	256
Internal Link Dist (ft)		698		103		68		120
Turn Bay Length (ft)	35							
Base Capacity (vph)	400	722	400	750	494	693	411	706
Starvation Cap Reductn	0	0	0	0	228	322	0	348
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.63	0.44	0.36	0.26	1.36	0.09	0.80

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	67	670	29	434	38	143
v/c Ratio	0.20	0.76	0.17	0.49	0.06	0.20
Control Delay	12.3	24.3	12.4	16.1	12.1	15.7
Queue Delay	0.0	0.0	0.9	7.9	0.7	0.0
Total Delay	12.3	24.3	13.4	24.0	12.8	15.7
Queue Length 50th (ft)	21	290	9	152	5	37
Queue Length 95th (ft)	35	321	20	171	29	93
Internal Link Dist (ft)		612		2	66	533
Turn Bay Length (ft)	70					
Base Capacity (vph)	440	1120	222	1131	676	723
Starvation Cap Reductn	0	0	97	647	489	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.60	0.23	0.90	0.20	0.20

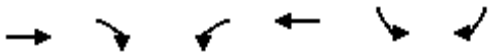
Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	26	681	223	392	197	32	86	278	333	332
v/c Ratio	0.25	0.61	0.59	0.42	0.16	0.21	0.54	0.53	0.76	0.74
Control Delay	56.4	35.8	47.2	29.7	1.6	50.4	61.6	15.7	48.5	47.1
Queue Delay	0.0	0.8	0.0	0.2	0.0	0.0	0.0	0.0	0.3	0.3
Total Delay	56.4	36.7	47.2	29.9	1.6	50.4	61.6	15.7	48.8	47.3
Queue Length 50th (ft)	18	229	150	237	13	22	60	45	231	228
Queue Length 95th (ft)	48	282	#360	378	20	53	112	103	303	300
Internal Link Dist (ft)		63		422			215			514
Turn Bay Length (ft)	85		210			75		70	200	
Base Capacity (vph)	103	1315	376	970	1239	173	182	525	525	534
Starvation Cap Reductn	0	337	0	136	0	0	0	0	0	0
Spillback Cap Reductn	0	10	0	0	0	0	0	1	22	22
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.70	0.59	0.47	0.16	0.18	0.47	0.53	0.66	0.65

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	653	783	599	727	144	149
v/c Ratio	0.44	0.95	0.91	0.25	0.41	0.50
Control Delay	20.1	36.9	49.0	2.0	53.5	14.7
Queue Delay	0.0	10.3	0.0	0.0	0.0	0.0
Total Delay	20.1	47.2	49.0	2.0	53.5	14.7
Queue Length 50th (ft)	161	261	313	22	53	0
Queue Length 95th (ft)	206	#465	#575	30	#94	64
Internal Link Dist (ft)	422			325		
Turn Bay Length (ft)		200	400			40
Base Capacity (vph)	1536	845	711	3065	353	296
Starvation Cap Reductn	0	60	0	0	0	0
Spillback Cap Reductn	0	0	0	10	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.43	1.00	0.84	0.24	0.41	0.50

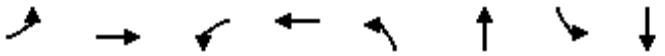
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	248	596	806	212	317	255	675
v/c Ratio	0.53	0.60	0.65	0.70	0.51	0.39	0.74
Control Delay	36.5	37.7	33.3	54.9	36.5	43.3	22.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.5	37.7	33.3	54.9	36.5	43.3	22.3
Queue Length 50th (ft)	96	457	243	144	90	83	336
Queue Length 95th (ft)	105	571	355	209	125	133	391
Internal Link Dist (ft)		255	308		371		
Turn Bay Length (ft)						180	
Base Capacity (vph)	919	989	1240	474	941	649	1115
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.60	0.65	0.45	0.34	0.39	0.61

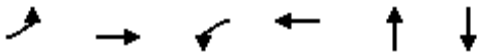
Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	122	399	198	521	91	310	99	231
v/c Ratio	0.50	0.61	0.64	0.73	0.26	0.73	0.33	0.56
Control Delay	46.5	31.3	47.0	33.2	21.3	37.6	22.5	29.3
Queue Delay	0.0	0.0	0.0	0.0	0.6	1.3	0.1	0.4
Total Delay	46.5	31.3	47.0	33.2	21.9	38.9	22.6	29.7
Queue Length 50th (ft)	65	179	105	239	34	134	37	88
Queue Length 95th (ft)	141	363	213	#539	73	257	79	181
Internal Link Dist (ft)		698		103		68		120
Turn Bay Length (ft)	35							
Base Capacity (vph)	431	783	431	781	477	742	432	722
Starvation Cap Reductn	0	0	0	0	196	248	35	193
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.51	0.46	0.67	0.32	0.63	0.25	0.44

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	41	597	26	731	51	151
v/c Ratio	0.25	0.64	0.10	0.78	0.08	0.23
Control Delay	14.1	18.2	9.5	22.7	12.5	11.4
Queue Delay	0.0	0.0	0.9	52.3	1.0	0.0
Total Delay	14.1	18.2	10.4	75.0	13.4	11.4
Queue Length 50th (ft)	12	224	7	303	7	23
Queue Length 95th (ft)	28	257	16	349	35	75
Internal Link Dist (ft)		612		2	66	533
Turn Bay Length (ft)	70					
Base Capacity (vph)	196	1124	317	1127	631	647
Starvation Cap Reductn	0	0	190	514	440	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.21	0.53	0.20	1.19	0.27	0.23

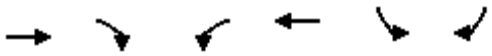
Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	28	565	278	650	341	88	158	217	207	208
v/c Ratio	0.33	0.43	0.84	0.64	0.30	0.40	0.69	0.61	0.72	0.71
Control Delay	61.9	28.8	72.2	16.7	1.9	51.3	63.4	18.4	57.5	55.5
Queue Delay	0.0	0.8	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.9	29.5	72.2	17.0	1.9	51.3	63.4	18.4	57.5	55.5
Queue Length 50th (ft)	20	169	214	210	28	58	108	20	147	144
Queue Length 95th (ft)	50	220	#257	149	2	114	#229	100	228	225
Internal Link Dist (ft)		63		422			215			514
Turn Bay Length (ft)	85		210			75		70	200	
Base Capacity (vph)	86	1361	379	1052	1170	218	230	353	345	351
Starvation Cap Reductn	0	471	0	74	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.63	0.73	0.66	0.29	0.40	0.69	0.61	0.60	0.59

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	587	485	433	1062	301	207
v/c Ratio	0.36	0.49	0.84	0.38	0.64	0.62
Control Delay	21.6	7.4	46.3	4.1	51.9	24.0
Queue Delay	0.0	0.5	0.0	0.0	0.0	0.0
Total Delay	21.6	8.0	46.3	4.1	51.9	24.0
Queue Length 50th (ft)	172	122	282	113	107	45
Queue Length 95th (ft)	254	178	m264	m134	145	117
Internal Link Dist (ft)	422			325		
Turn Bay Length (ft)			400			
Base Capacity (vph)	1641	994	648	2802	858	500
Starvation Cap Reductn	0	199	0	0	0	0
Spillback Cap Reductn	0	0	0	19	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.61	0.67	0.38	0.35	0.41

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.

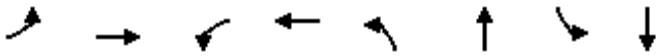


Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	300	665	993	482	842	386	602
v/c Ratio	0.61	0.68	0.82	1.02	0.88	1.15	0.65
Control Delay	44.8	16.7	39.1	87.0	46.3	139.9	18.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.8	16.7	39.1	87.0	46.3	139.9	18.1
Queue Length 50th (ft)	86	337	324	~358	275	~168	260
Queue Length 95th (ft)	110	477	#478	#572	#384	#265	340
Internal Link Dist (ft)		255	308		371		
Turn Bay Length (ft)						180	
Base Capacity (vph)	766	981	1205	474	960	337	1056
Starvation Cap Reductn	0	5	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.39	0.68	0.82	1.02	0.88	1.15	0.57

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	112	453	183	276	68	506	37	285
v/c Ratio	0.50	0.81	0.64	0.44	0.18	0.81	0.15	0.50
Control Delay	50.8	44.2	50.9	27.8	19.5	39.9	19.8	31.8
Queue Delay	0.0	0.0	0.0	0.0	0.5	55.5	0.0	5.3
Total Delay	50.8	44.2	50.9	27.8	20.1	95.4	19.8	37.0
Queue Length 50th (ft)	71	271	116	137	26	280	14	145
Queue Length 95th (ft)	132	#451	198	231	58	#526	37	256
Internal Link Dist (ft)		698		103		68		120
Turn Bay Length (ft)	35							
Base Capacity (vph)	398	717	398	749	492	690	408	702
Starvation Cap Reductn	0	0	0	0	227	321	0	347
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.63	0.46	0.37	0.26	1.37	0.09	0.80

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	67	676	48	434	129	146
v/c Ratio	0.19	0.76	0.28	0.48	0.18	0.21
Control Delay	12.1	24.2	15.3	15.9	8.6	16.1
Queue Delay	0.0	0.0	1.6	8.5	1.9	0.0
Total Delay	12.1	24.2	16.9	24.4	10.5	16.1
Queue Length 50th (ft)	21	292	15	150	12	39
Queue Length 95th (ft)	35	324	31	170	56	96
Internal Link Dist (ft)		612		2	66	533
Turn Bay Length (ft)	70					
Base Capacity (vph)	442	1120	220	1131	706	710
Starvation Cap Reductn	0	0	88	651	447	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.15	0.60	0.36	0.90	0.50	0.21

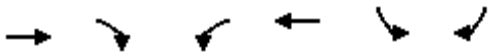
Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	26	658	223	411	197	32	86	278	333	332
v/c Ratio	0.25	0.60	0.58	0.44	0.16	0.21	0.54	0.52	0.76	0.74
Control Delay	56.0	35.9	46.2	30.3	1.6	50.4	61.6	14.7	48.5	47.1
Queue Delay	0.0	0.7	0.0	0.2	0.0	0.0	0.0	0.0	0.4	0.4
Total Delay	56.0	36.6	46.2	30.5	1.6	50.4	61.6	14.7	48.9	47.4
Queue Length 50th (ft)	18	220	149	255	12	22	60	43	231	228
Queue Length 95th (ft)	48	272	#354	398	20	53	112	100	303	300
Internal Link Dist (ft)		63		422			215			514
Turn Bay Length (ft)	85		210			75		70	200	
Base Capacity (vph)	105	1315	382	970	1238	173	182	534	525	534
Starvation Cap Reductn	0	336	0	131	0	0	0	0	0	0
Spillback Cap Reductn	0	22	0	0	0	0	0	2	28	28
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.25	0.67	0.58	0.49	0.16	0.18	0.47	0.52	0.67	0.66

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	699	814	599	742	144	157
v/c Ratio	0.45	0.96	0.91	0.25	0.49	0.56
Control Delay	20.4	39.8	49.3	1.5	56.7	16.5
Queue Delay	0.0	14.6	0.0	0.0	0.0	0.1
Total Delay	20.4	54.4	49.3	1.5	56.7	16.5
Queue Length 50th (ft)	169	278	318	22	53	0
Queue Length 95th (ft)	220	#703	#573	30	#94	#66
Internal Link Dist (ft)	422			325		
Turn Bay Length (ft)		200	400			40
Base Capacity (vph)	1555	852	711	3065	294	279
Starvation Cap Reductn	0	57	0	0	0	0
Spillback Cap Reductn	0	0	0	63	0	2
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.45	1.02	0.84	0.25	0.49	0.57

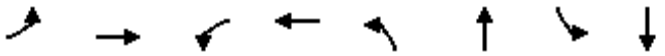
Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	264	610	809	224	317	255	679
v/c Ratio	0.55	0.62	0.66	0.70	0.48	0.41	0.74
Control Delay	36.5	38.5	33.7	53.7	35.3	44.6	22.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.5	38.5	33.7	53.7	35.3	44.6	22.2
Queue Length 50th (ft)	0	471	246	153	89	84	336
Queue Length 95th (ft)	112	586	355	217	122	136	397
Internal Link Dist (ft)		255	308		371		
Turn Bay Length (ft)						180	
Base Capacity (vph)	919	989	1230	474	941	618	1116
Starvation Cap Reductn	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.62	0.66	0.47	0.34	0.41	0.61

Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	122	405	201	524	91	316	99	231
v/c Ratio	0.51	0.62	0.65	0.73	0.26	0.74	0.33	0.56
Control Delay	47.0	32.0	47.5	33.4	21.3	37.9	22.6	29.2
Queue Delay	0.0	0.0	0.0	0.0	0.7	1.6	0.1	0.5
Total Delay	47.0	32.0	47.5	33.4	22.0	39.5	22.7	29.7
Queue Length 50th (ft)	65	186	107	244	34	137	37	88
Queue Length 95th (ft)	142	372	218	#549	73	261	78	181
Internal Link Dist (ft)		698		103		68		120
Turn Bay Length (ft)	35							
Base Capacity (vph)	425	772	425	772	473	733	427	713
Starvation Cap Reductn	0	0	0	0	198	252	34	200
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.29	0.52	0.47	0.68	0.33	0.66	0.25	0.45

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBL	EBT	WBL	WBT	NBT	SBT
Lane Group Flow (vph)	41	597	101	687	208	164
v/c Ratio	0.24	0.67	0.42	0.76	0.32	0.25
Control Delay	14.5	20.1	18.3	23.1	20.4	13.4
Queue Delay	0.0	0.0	3.9	52.5	11.4	0.0
Total Delay	14.5	20.1	22.2	75.6	31.8	13.4
Queue Length 50th (ft)	13	236	34	288	69	33
Queue Length 95th (ft)	27	264	60	322	149	92
Internal Link Dist (ft)		612		2	66	533
Turn Bay Length (ft)	70					
Base Capacity (vph)	211	1122	298	1123	645	651
Starvation Cap Reductn	0	0	131	516	404	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.53	0.60	1.13	0.86	0.25

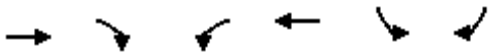
Intersection Summary



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Group Flow (vph)	28	606	278	715	341	88	158	217	207	208
v/c Ratio	0.33	0.45	0.84	0.69	0.30	0.43	0.72	0.63	0.72	0.71
Control Delay	61.9	28.5	70.8	17.0	1.6	53.0	67.6	19.3	57.5	55.5
Queue Delay	0.0	0.9	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.9	29.5	70.8	17.3	1.6	53.0	67.6	19.3	57.5	55.5
Queue Length 50th (ft)	20	184	192	372	11	58	108	20	147	144
Queue Length 95th (ft)	50	236	#258	400	2	114	#235	101	228	225
Internal Link Dist (ft)		63		422			215			514
Turn Bay Length (ft)	85		210			75		70	200	
Base Capacity (vph)	86	1363	379	1052	1177	207	218	345	345	351
Starvation Cap Reductn	0	469	0	54	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.33	0.68	0.73	0.72	0.29	0.43	0.72	0.63	0.60	0.59

Intersection Summary

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.



Lane Group	EBT	EBR	WBL	WBT	SBL	SBR
Lane Group Flow (vph)	612	501	433	1121	301	223
v/c Ratio	0.38	0.50	0.84	0.40	0.63	0.68
Control Delay	28.3	11.9	45.1	4.1	50.8	30.9
Queue Delay	0.0	0.1	0.0	0.1	0.0	0.1
Total Delay	28.3	12.0	45.1	4.2	50.8	31.0
Queue Length 50th (ft)	124	63	283	115	107	68
Queue Length 95th (ft)	287	195	m241	m153	142	143
Internal Link Dist (ft)	422			325		
Turn Bay Length (ft)			400			
Base Capacity (vph)	1628	998	648	2789	858	488
Starvation Cap Reductn	0	49	0	0	0	0
Spillback Cap Reductn	0	0	0	428	0	14
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.53	0.67	0.47	0.35	0.47

Intersection Summary

m Volume for 95th percentile queue is metered by upstream signal.



Lane Group	EBL	EBT	WBT	NBL	NBT	SBL	SBR
Lane Group Flow (vph)	309	672	1006	528	842	386	618
v/c Ratio	0.61	0.69	0.84	1.11	0.88	1.15	0.66
Control Delay	47.6	15.8	40.7	115.1	46.3	139.9	18.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.6	15.9	40.7	115.1	46.3	139.9	18.3
Queue Length 50th (ft)	115	252	332	~437	275	~168	272
Queue Length 95th (ft)	117	112	#504	#647	#384	#265	344
Internal Link Dist (ft)		255	308		371		
Turn Bay Length (ft)						180	
Base Capacity (vph)	766	981	1192	474	960	337	1055
Starvation Cap Reductn	0	5	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.69	0.84	1.11	0.88	1.15	0.59

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

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