MEMORANDUM

DATE: July 8, 2015

TO: Matt Hough, PE, President, CPH Consultants

CC: Jack Hunden, DevCo, Inc.

FROM: Michael Read, PE, Principal, TENW

SUBJECT: Traffic and Parking Impact Analysis of the Promenade Apartments
TENW Project No. 3314

This memorandum summarizes a traffic impact analysis of the proposed *Promenade Apartments*, a mixed-use project containing a proposed 294 residential units and a 10,350 square foot building for retail/commercial uses in Auburn, WA. This memo includes a project description, a description of existing transportation conditions within the immediate site vicinity, methodology used to derive the trip generation estimate, traffic operational analysis of the key site access intersection and key off-site intersections under cumulative impacts, a summary of Auburn parking code requirements, and identification of any transportation mitigation measures to offset traffic impacts.

Project Description

The proposed *Promenade Apartments* project includes buildout of a 14.5-acre site north of SE 312th Street and east of 124th Avenue SE that currently consists of six single-family houses. The mixed-use development proposes a combination of apartment units and commercial uses, consistent with the underlying zoning. The apartment development would consist of up to 294 units with a recreational building and a separate 10,350 square foot separate retail/commercial building. A project site vicinity map is shown in Figure 1. For the purposes of this analysis, a 2017 horizon was used to evaluate cumulative traffic impacts.

A site plan is illustrated in Figure 2. Vehicular site access for the residential portion of the project is proposed via one access roadway onto SE 312th St; opposing the existing SE 312th Way intersection. As part of the project, the existing two-way left turning lane west of the site would be extended to the residential access driveway intersection where it would transition into a dedicated left turn only lane. A total of 586 on-site parking stalls would be provided. A secondary fire/emergency vehicle access roadway that connects to a new 130th Avenue SE cul-de-sac would also be constructed to serve the residential apartment units. At the request of the City of Auburn, an alternative access plan that includes a full public access and extension of 130th Avenue SE between its existing terminus to SE 312th Street was also evaluated for the residential portion of the project.

Access to the commercial building would be via a separate commercial driveway onto SE 312th Street given the presence of an existing stream/wetland area that impacts cross circulation on-site. A two-way center left-turning lane would also be provided at this commercial driveway location. For the purposes of the traffic and parking impact analysis, a YMCA Daycare Center has been assumed as a worst-case scenario as this specific use generates the highest number of trips among potential commercial uses under consideration by the applicant.

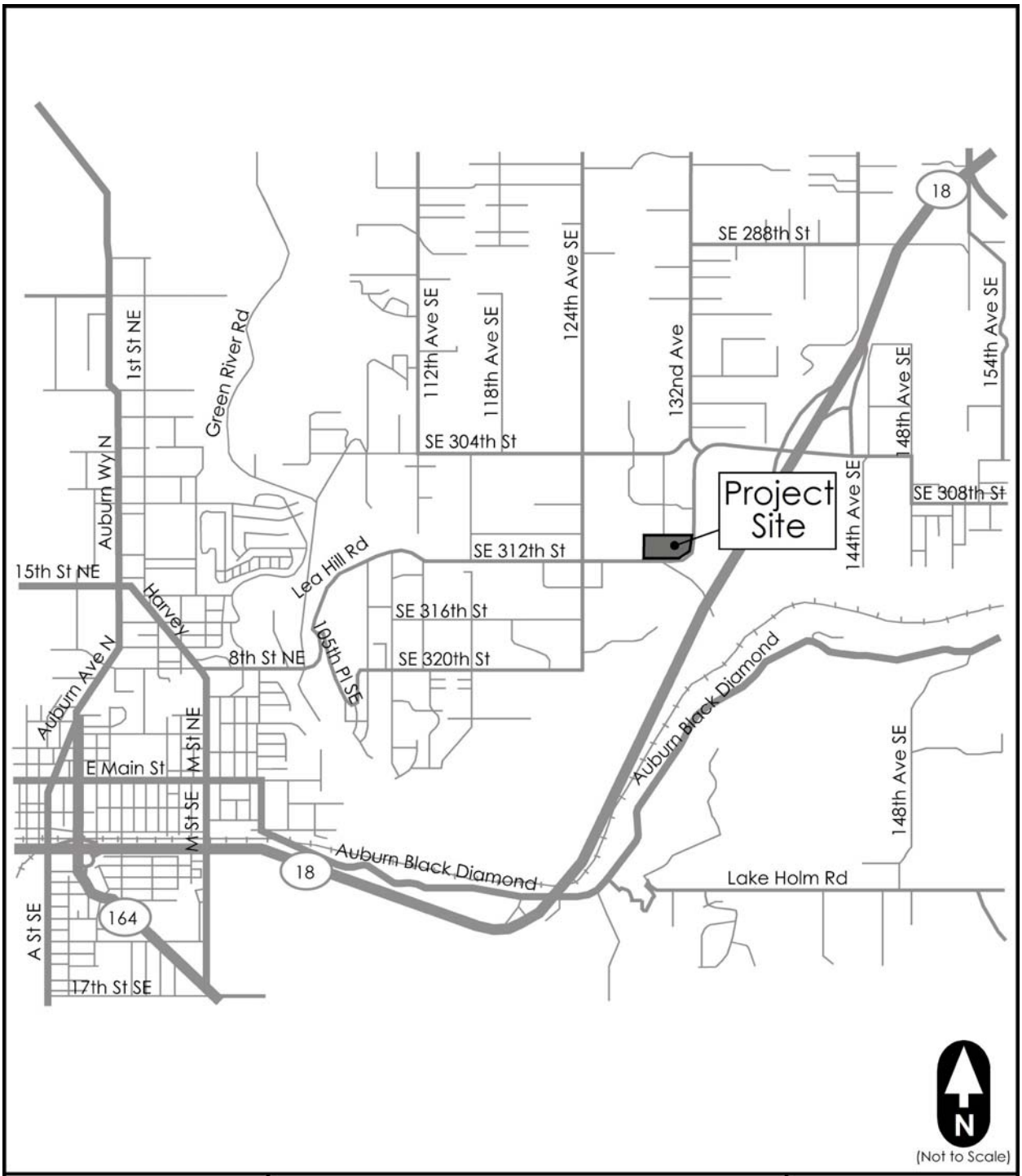

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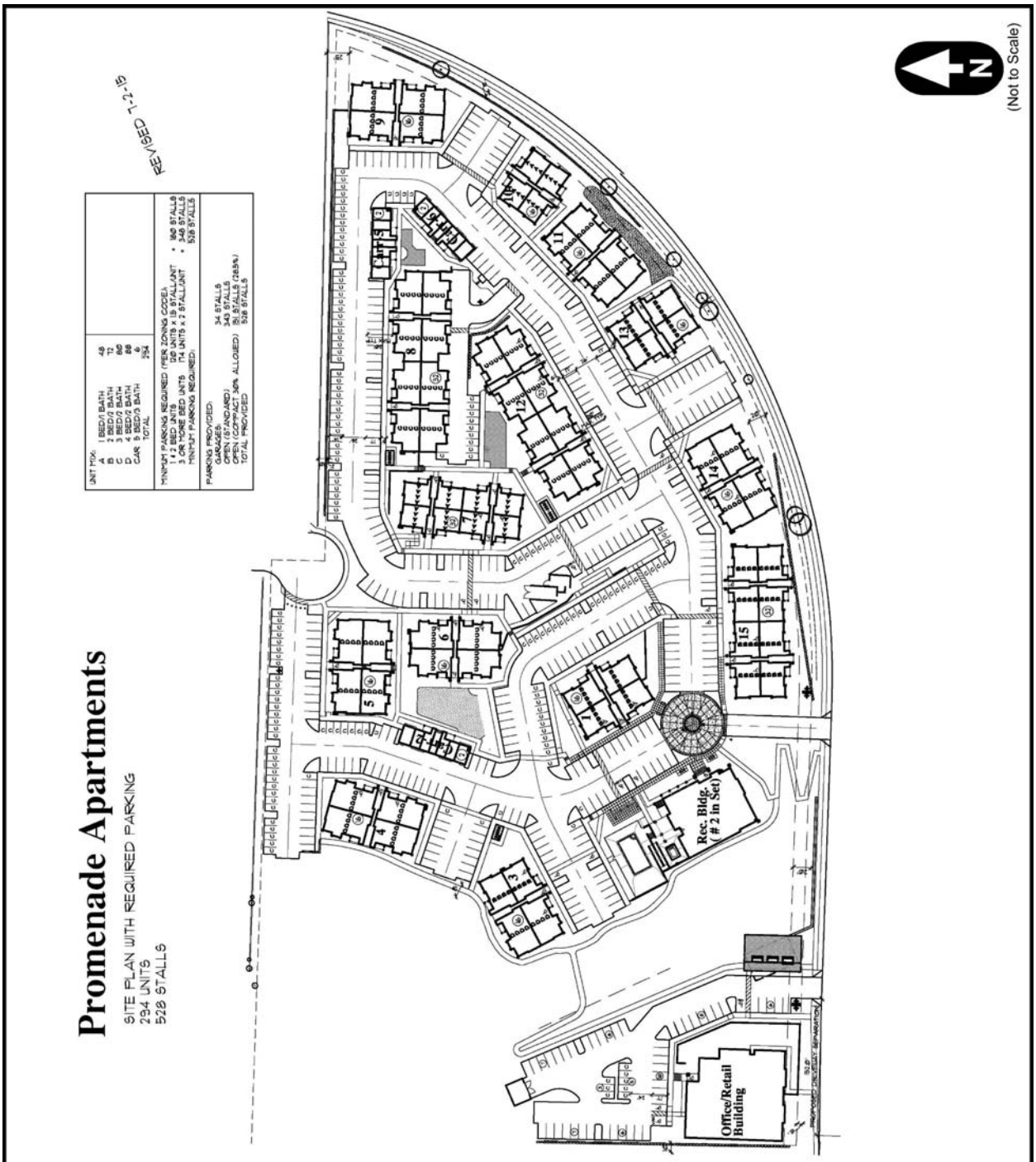
Figure 1
Project Site Vicinity

Promenade
Auburn, WA



Source: Casey + DeChant Architects, July 2015.

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Figure 2
Project Site Plan

Promenade
Auburn, WA

Existing Transportation Conditions

This section includes an inventory of existing roadway conditions, key intersections in the site vicinity and traffic volumes, levels of service, and planned roadway improvements.

Roadway Conditions

The following paragraphs describe existing arterial roadways that would be used for site access. Roadway characteristics are described in terms of number of lanes, posted speed limits, shoulder types and widths.

SR 18 is a 4 lane, divided freeway with an average daily traffic volume of 48,000 vehicles (WSDOT Annual Traffic Report, 2012). Near SE 304th Street, SR 18 is a four lane (two lanes in each direction), divided freeway with a 40 foot asphalt median and 12 foot asphalt lanes. The westbound lanes have 10 foot and 6 foot asphalt shoulders while the eastbound lanes have 10 foot and 4 foot asphalt shoulders. The posted speed is 60 mph (WSDOT State Highway Log, 2012).

SE 312th Street is an east-west minor arterial ranging in width from 2 to 3 lanes. Travel lanes are approximately 11 feet wide, with curbs, gutters, sidewalks, and bike lanes provided on both sides of the street west of the project site. A two-way, center left turn lane is provided west of the project site.

SE 304th Street is a 2-lane roadway with a traveled way of approximately 21 feet and 3-4 foot paved shoulders. West of 144th Avenue SE, the roadway widens to provide separate turn lanes at the SR 18 ramp junctions. Gravel/earthen shoulders beyond paving limits are also provided in various widths on the north side of the roadway. The posted speed limit is 35 mph.

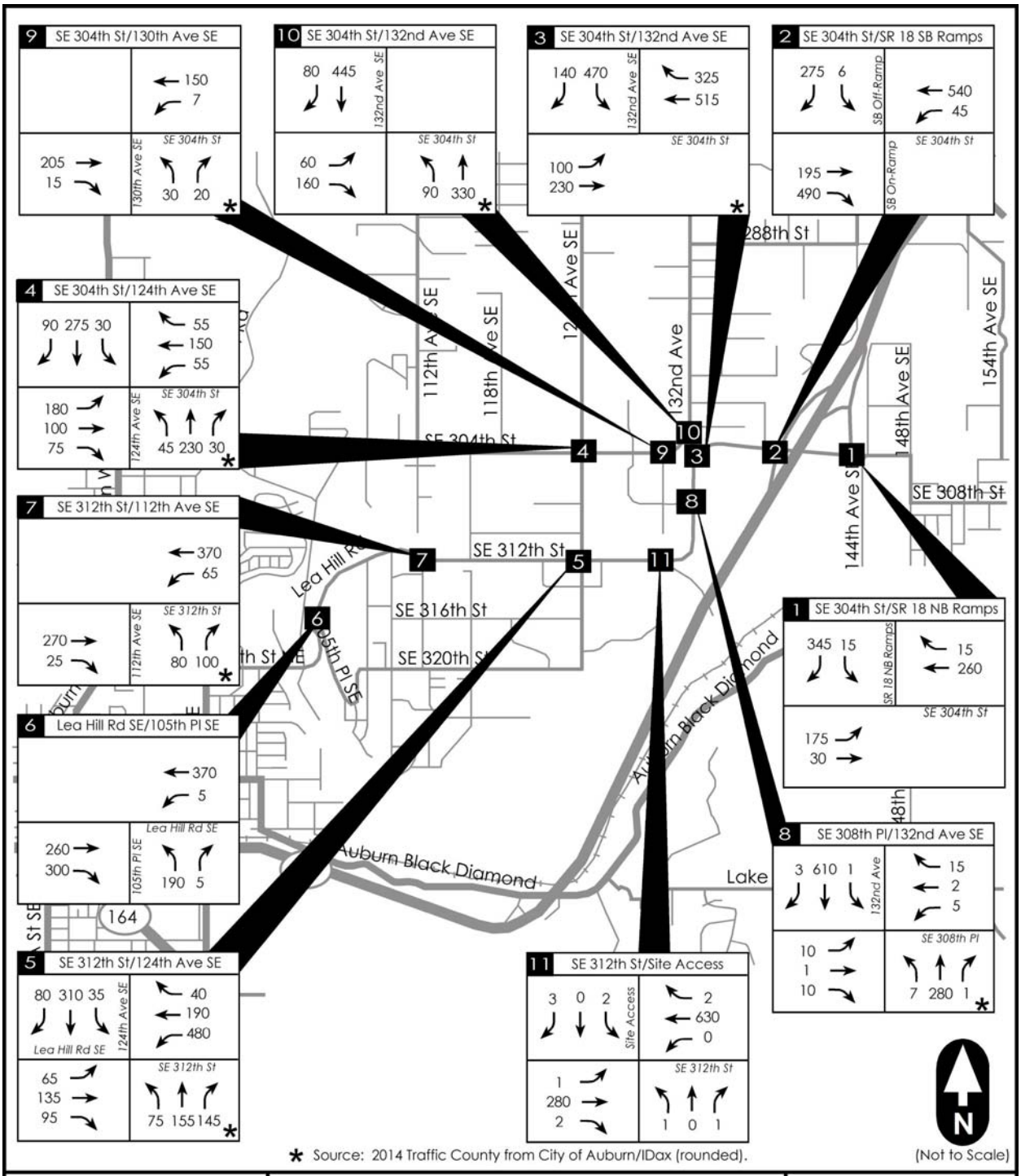
132nd Avenue SE is a two-lane principal arterial with 11- to 12-foot wide travel lanes and 7- to 9-foot paved shoulders. The posted speed limit is 35 mph.

124th Avenue SE is a north-south minor arterial consisting of two travel lanes 10 to 12 feet wide with 4- to 6-foot paved shoulders. Bicycle lanes are provided north of SE 314th Street. A two-way, center left-turn lane is provided between just north of SE 312th Street and halfway to SE 304th Street. The speed limit is posted at 35 mph.

105th Place SE is a two-lane, north-south roadway with 11-foot travel lanes and 4-foot paved shoulders. The posted speed limit is 35 mph.

Traffic Counts

Peak hour traffic volumes represent the highest hourly volume of vehicles passing through an intersection during a typical 7-9 a.m. or 4-6 p.m. weekday peak period. Historical p.m. peak period turning movement counts at study intersections were conducted during peak utilization periods of the vicinity Green River Community College (GRCC) campus during Fall quarter 2013 by TENW, and supplemented by traffic counts collected in March 2014 by the City of Auburn, and in March 2014/2015 by iDax Data Solutions. Given the distribution of traffic and total project trips, 10 separate off-site intersections were determined to warrant review. Figure 3 and Figure 4 summarize the existing p.m. peak period turning movements at the study intersections. Where count discrepancies were found, the higher traffic counts were utilized and all counts rounded to the nearest 5 vehicles. Attachment 1 includes 2014 traffic counts.



* Source: 2014 Traffic County from City of Auburn/IDax (rounded).

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Figure 3
2014 A.M. Peak Hour Traffic Volumes

Promenade
Auburn, WA

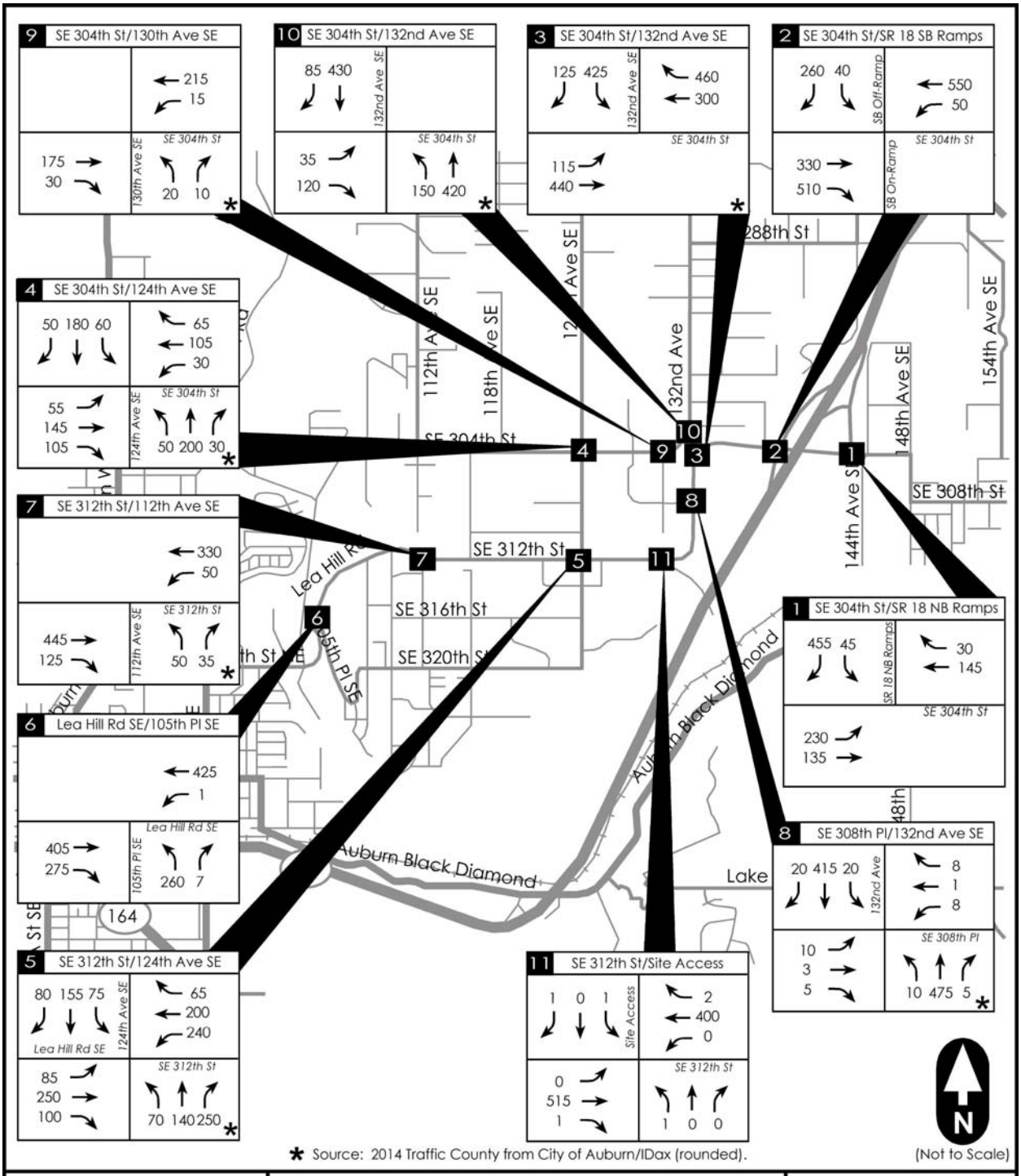

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Figure 4
2014 Existing P.M. Peak Hour Traffic Volumes

Promenade
Auburn, WA

Intersection Levels of Service

Intersection level of service (LOS) analyses were conducted at the study intersections during the weekday PM peak hour of existing conditions and with project traffic generated at full buildout of the *Promenade Apartments* project. LOS refers to the degree of congestion on a roadway or intersection. It is a measure of vehicle operating speed, travel time, travel delays, and driving comfort. A letter scale from A to F generally describes LOS.

At signalized intersections, LOS A represents free-flow conditions-motorists experience little or no delays, and LOS F represents forced-flow conditions-motorists experience an average delay in excess of 80 seconds per vehicle. The LOS reported for signalized intersections represents the average control delay per vehicle entering the intersection. The LOS reported at stop-controlled intersections is also based on the average control delay (sec/veh) and is reported for each movement. Therefore, the reported LOS at unsignalized intersections does not represent a measure of the overall operations of the intersection.

LOS calculations for both signalized and stop-controlled intersections were calculated using the methodologies and procedures outlined in the 2010 *Highway Capacity Manual (HCM)*, Special Report 209, Transportation Research Board (TRB). Table 1 outlines the LOS criteria for signalized and unsignalized intersections based on these methodologies.

Table 1
Level of Service Criteria for Signalized and Unsignalized Intersections

Level of Service	Signalized Intersection Average Delay Range (sec)	Unsignalized Intersection Delay Range (sec)
A	≤ 10	≤ 10
B	> 10 to ≤ 20	> 10 to ≤ 15
C	> 20 to ≤ 35	> 15 to ≤ 25
D	> 35 to ≤ 55	> 25 to ≤ 35
E	> 55 to ≤ 80	> 35 to ≤ 50
F	> 80	> 50

Source: "Highway Capacity Manual", Special Report 209, Transportation Research Board, 2010.

Intersection LOS were calculated using the methodology and procedures outlined in the 2010 *Highway Capacity Manual* (HCM), Special Report 209, Transportation Research Board (TRB), using the *Synchro 8* software program. Existing a.m. peak hour are summarized in Table 2 and existing p.m. peak hour LOS analyses are summarized in Table 3. As shown, all intersections or critical movements would operate at LOS D or better in 2014. The City of Auburn maintains a level of service standard of LOS D for its arterial intersections.

Detailed LOS summary worksheets are included in Attachment 2.

Table 2
2014 AM Peak Hour Intersection Levels of Service

Study Intersection	LOS	AM Peak Hour Delay (sec)	V/C Ratio
Signalized Intersections			
#3. SE 312th St & SE 304th St	B	17.8	--
#5. SE 312th St & 124th Ave SE	D	38.6	--
#6. 105th Pl SE & SE 312th St	B	11.5	--
Stop Controlled Intersections			
#1. SE 304th St & EB SR 18 Ramp			
Southbound Approach (stop)	B	14.5	0.50
Eastbound Left (yield)	A	7.1	0.15
#2. SE 304th St & WB SR 18 Ramp			
Southbound Approach (stop)	C	21.4	0.59
Westbound Left (yield)	A	7.8	0.04
#7. SE 312th St & 112th Ave SE			
Northbound Approach (stop)	C	20.5	0.47
Westbound Left (yield)	A	8.1	0.06
#8. SE 308th Pl & 132nd Ave SE			
Northbound Left (yield)	A	9.2	0.01
Southbound Left (yield)	A	7.9	0.00
Eastbound Approach (stop)	C	19.9	0.09
Westbound Approach (stop)	C	14.8	0.07
#9. SE 304th St & 130th Ave SE			
Northbound Approach (stop)	B	10.8	0.06
Westbound Left (yield)	A	7.8	0.01
#10. SE 304th St & 132nd Ave SE			
Eastbound Approach (stop)	C	20.8	0.52
Northbound Left (yield)	A	9.0	0.10
#11. SE 312th St & 312th Way SE/Site Access			
Southbound Approach (stop)	C	17.5	0.02
Northbound Approach (stop)	B	16.7	0.01
Roundabout Intersections			
#4. SE 304th St & 124th Avenue SE	B	11.4	--

Source: TENW. Level of service for the intersections has been reported using the HCM 2010, Synchro 8.

Table 3
2014 PM Peak Hour Intersection Levels of Service

Study Intersection	LOS	PM Peak Hour Delay (sec)	V/C Ratio
Signalized Intersections			
#3. SE 312th St & SE 304th St	B	15.5	--
#5. SE 312th St & 124th Ave SE	C	25.3	--
#6. 105th Pl SE & SE 312th St	A	8.2	--
Stop Controlled Intersections			
#1. SE 304th St & EB SR 18 Ramp			
Southbound Approach (stop)	B	14.1	0.54
Eastbound Left (yield)	A	8.1	0.17
#2. SE 304th St & WB SR 18 Ramp			
Southbound Approach (stop)	C	20.0	0.53
Westbound Left (yield)	A	9.0	0.04
#7. SE 312th St & 112th Ave SE			
Northbound Approach (stop)	C	21.1	0.29
Westbound Left (yield)	B	9.0	0.06
#8. SE 308th Pl & 132nd Ave SE			
Northbound Left (yield)	A	8.3	0.01
Southbound Left (yield)	A	8.5	0.02
Eastbound Approach (stop)	C	19.9	0.07
Westbound Approach (stop)	C	17.6	0.06
#9. SE 304th St & 130th Ave SE			
Northbound Approach (stop)	B	11.0	0.05
Westbound Left (yield)	A	7.7	0.01
#10. SE 304th St & 132nd Ave SE			
Eastbound Approach (stop)	C	17.5	0.37
Northbound Left (yield)	A	9.2	0.16
#11. SE 312th St & 312th Way SE/Site Access			
Southbound Approach (stop)	C	21.2	0.01
Northbound Approach (stop)	C	21.2	0.01
Roundabout Intersections			
#4. SE 304th St & 124th Avenue SE	A	8.6	--

Source: TENW. Level of service for the intersections has been reported using the HCM 2010, Synchro 8.

Planned Transportation Improvements

The WSDOT State Transportation Improvement Program (STIP), King County Capital Improvement Program, and City of Auburn 2014-2019 Transportation Improvement Program were reviewed for planned transportation improvements that would provide increased traffic capacity for future growth within the immediate vicinity of the site. While there are planned pedestrian improvements along SE 312th St and 124th Avenue SE corridors, and intersection and bike lane improvements along 116th Ave SE, no capacity improvements are currently planned for construction within the horizon year.

Traffic Impact Analysis

The following section describes projected future baseline traffic growth, new trips generated by the proposed development, distribution and assignment of new project trips, intersection level of service impacts, site access, safety and circulation issues, and identification of transportation mitigation to offset impacts.

2017 Baseline Traffic Volumes

To evaluate project traffic impact at full buildout, a review was conducted of available historical traffic counts and recent traffic counts conducted by TENW in the site vicinity. Based on this review, a background traffic growth rate of 1 percent per year was applied to existing traffic volumes. Additional traffic generated by known pipeline development was included in the forecasts for the new Trades Complex and Student Life Building at Green River Community College, the 4-lot Gian short plat and 12-lot subdivision for Willow on 130th Avenue SE immediately north of the project. Attachment 3 summarizes existing, pipeline, baseline, and with project forecast assumptions at each study intersection.

Project Trip Generation

Trip generation rates compiled by the Institute of Transportation Engineers (ITE) *Trip Generation, 9th Edition*, 2012, were used to estimate p.m. peak hour traffic that would be generated by the proposed action. Fitted curve equations Apartments (ITE Land Use Code 220) and Day Care Center (Land Use Code 565) were used to estimate new trips generated by the proposed development under a worse-case scenario (i.e., the highest trip generator of any potential commercial/retail use at the project site). For the purposes of the traffic analysis, up to 320 residential apartment units have been assumed, and no discounts were taken for existing residential uses that are expected use by the applicant of approximately 50 percent of all daycare students (under this worse-case scenario) to be generated by on-site residents and those of the adjacent Seasons complex. Table 4 summarizes estimated trip generation by the proposed action. An estimated net increase of 287 a.m. peak hour vehicular trips (99 entering and 189 exiting) and 322 p.m. peak hour vehicular trips (186 entering and 136 exiting) was assumed for traffic impacts at full build-out of the project. Attachment 4 provides a detailed summary of trip generation estimates.

Table 4
Promenade Trip Generation Summary

Time Period	In	Out	Total
Weekday AM Peak Hour	99	189	287
Weekday PM Peak Hour	186	136	322

Source: Trip Generation Manual, 9th Edition, ITE, 2012.

Trip Distribution and Assignment

To distribute trips onto the vicinity-street and arterial network, trip distribution patterns were determined based on review of existing travel patterns, and the relative distribution of schools, employment centers, and residential density in the vicinity. Generally, average distribution and assignment of project trips were:

- 15 percent north and 20 percent south via 124th Ave SE;
- 5 percent north via 132nd Ave SE;
- 30 percent west via 312th Ave SE; and
- 10 percent west / 20 percent east via SR 18

Figure 5 illustrates trip distribution and the project-generated trip assignments during the p.m. peak hour at the study intersections the 2017 horizon year. Figures 6 and 7 summarize project trips of the proposed *Promenade Apartments* project in 2017 during the a.m. peak hour and p.m. peak hour, respectively.

Intersection Level of Service Impacts

Table 5 and Table 6 summarize a.m. and p.m. level of service impacts in 2017 assuming full buildout of the proposed *Promenade Apartments* project. Figure 8 and Figure 9 summarize traffic volume impacts of the proposed Promenade project during the a.m. peak hour and p.m. peak hour in 2017. As shown, all study intersections are projected to operate at LOS D or better with or without the project, including the main site access intersection of SE 312th Street and SE 312th Way/Site Access.

Connection to 130th Avenue SE

The City of Auburn required an evaluation of an additional connection roadway from the northern end of the project site to 130th Avenue SE. Trips were redistributed accordingly and a traffic analysis was conducted based on this connection roadway. Only intersections 4, 5, 8, 9, 10, 11, and 12 would be affected by this additional access; thus, only those intersections warranted further review. It should be noted, that total existing demand for traffic volumes entering/exiting the residential neighborhood immediately north of the project that have turning movements south or west of the study area only total approximately 62 a.m. peak hour trips and 65 pm peak hour trips at study intersections 8 and 9. Additional a.m. and p.m. peak hour counts were also conducted at local neighborhood streets onto SE 304th Street via 127th Avenue SE and 128th Avenue SE to evaluate the potential for the entire residential draw area south of SE 304th Street and west of 132 Avenue SE (see 2015 counts in Attachment 7).

Of existing trips that would represent those as a potential for reassignment, all trips to/from the south observed via SE 308th Street, roughly a third of all trips via 130th Avenue SE at SE 304th Street to/from the west, and 20 percent of all traffic via the 127th Avenue SE and 128th Avenue SE neighborhood streets to/from the west were assumed to be redistributed onto an assumed 130th Avenue SE connection south to SE 312th Street. Under these redistribution assumptions, nearly 50 percent of all vehicle trips of neighborhood traffic currently being generated at study intersections 8 and 9 would be reassigned. Existing trips reassigned to 130th Avenue SE through the site included 29 exiting/12 entering during the a.m. peak hour and 12 exiting/28 entering during the p.m. peak hour. Pipeline developments within this residential neighborhood are expected to add an additional 2 a.m. peak hour vehicle trips and 3 p.m. peak hour vehicle trips to this redistribution of traffic volumes onto a roadway connection through the proposed development site, a cumulative total of 43 a.m. peak hour trips and 42 p.m. peak hour trips.

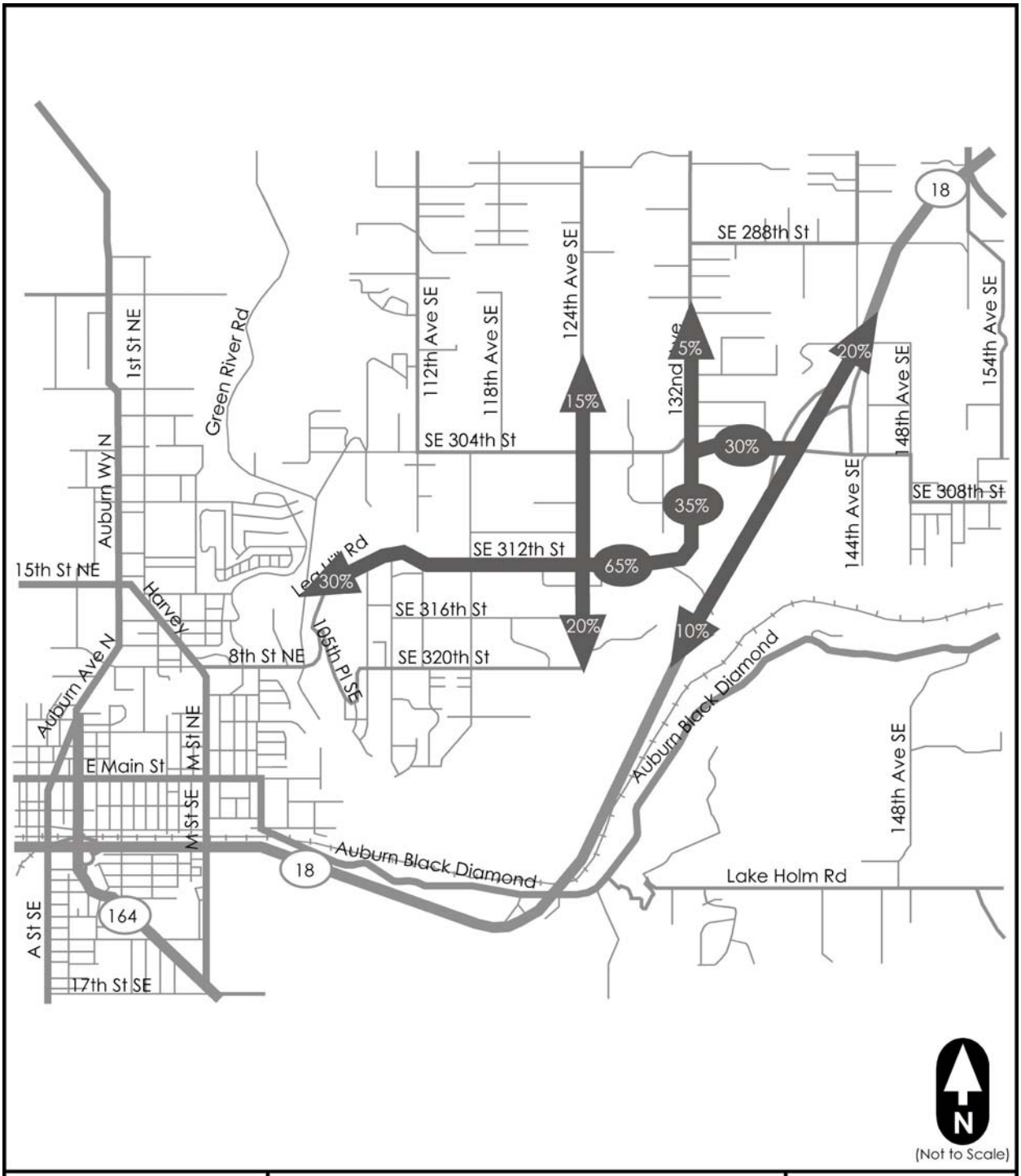

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Figure 5
Project Trip Distribution

Promenade
Auburn, WA

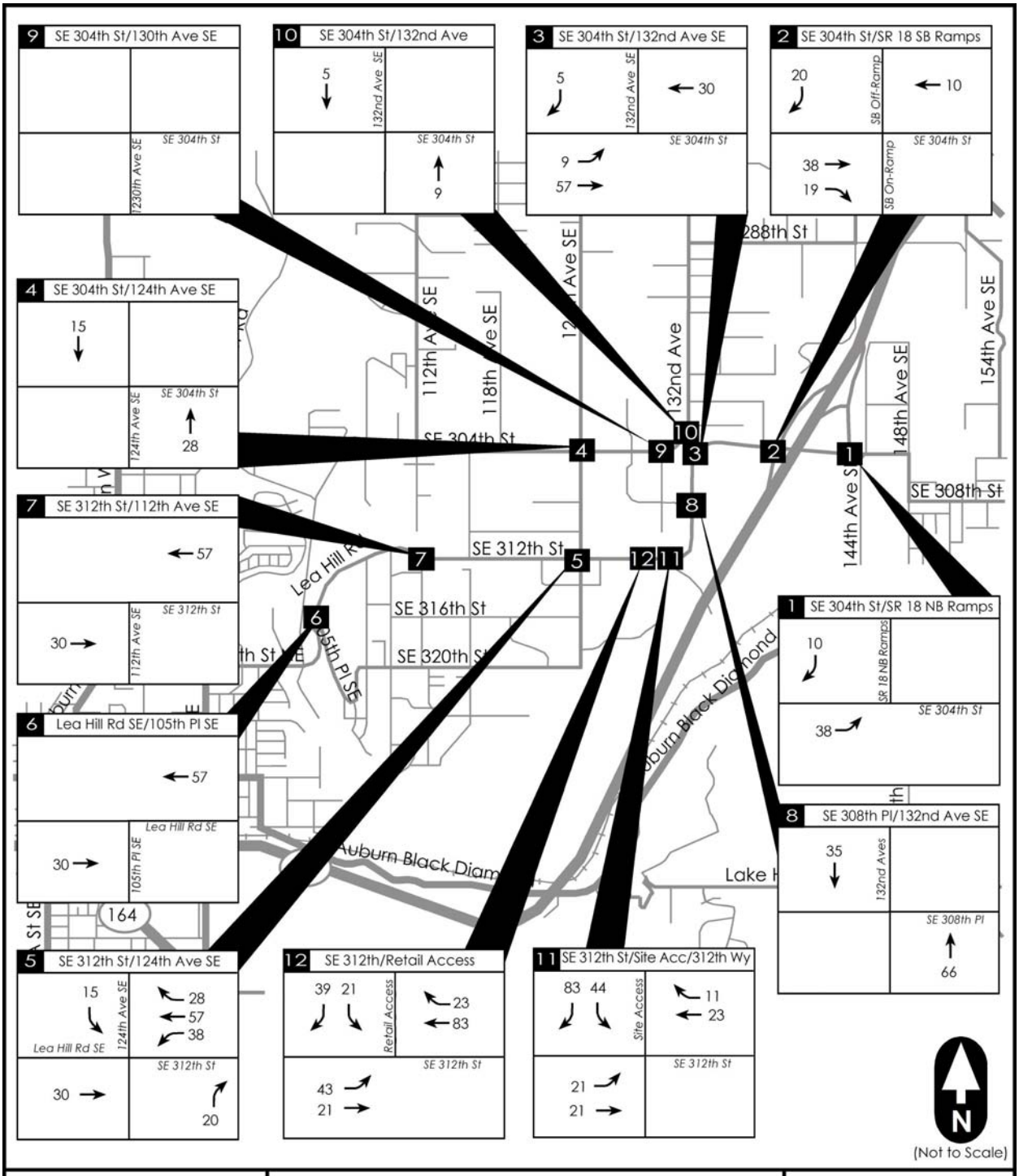

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Figure 6
A.M. Peak Hour Project Generated Net Traffic Volumes

Promenade
Auburn, WA

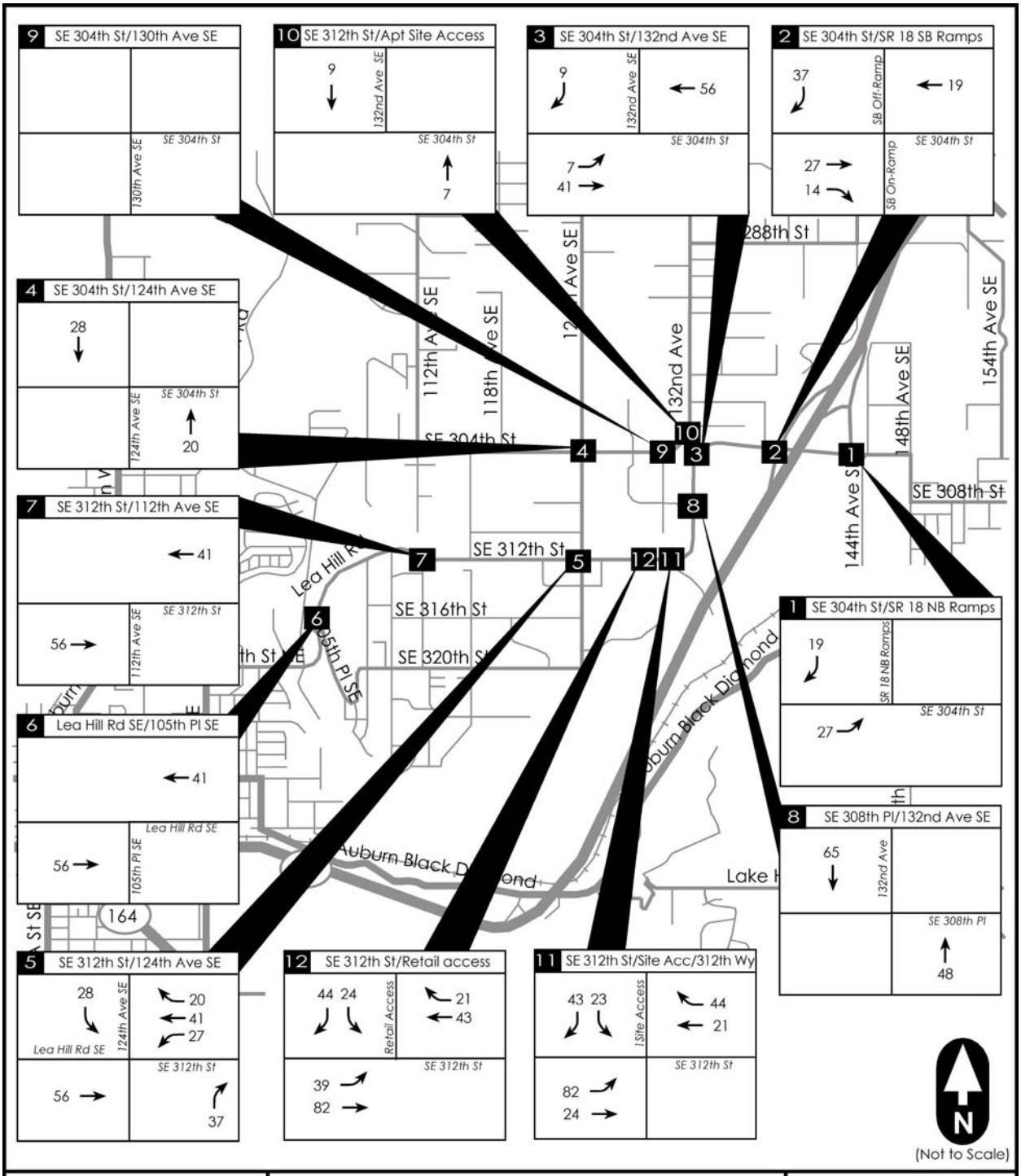

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Figure 7
P.M. Peak Hour Project Generated Net Traffic Volumes

Promenade
Auburn, WA

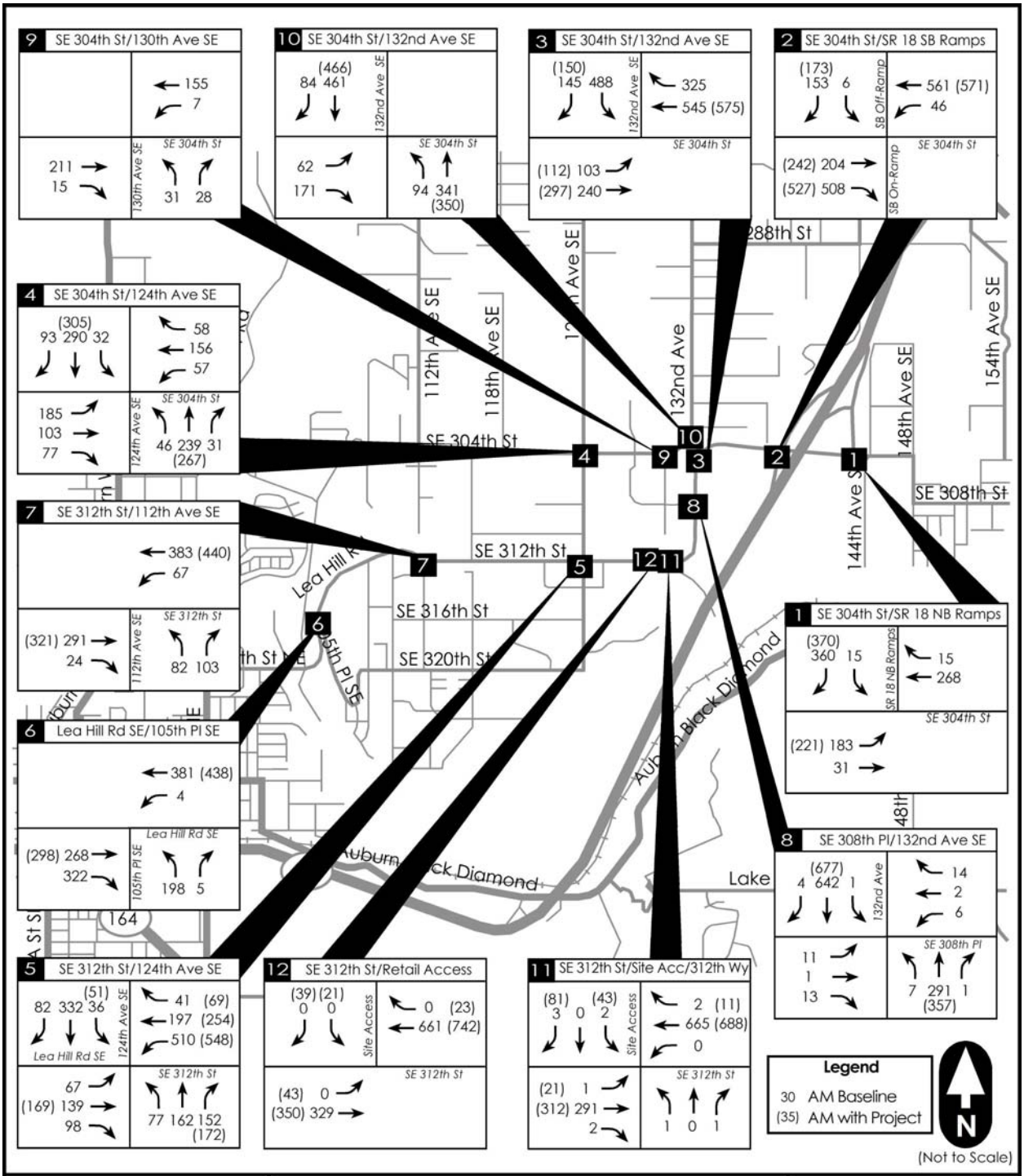

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Figure 8
2017 A.M. Peak Hour Project Traffic Volumes Impacts

Promenade
Auburn, WA

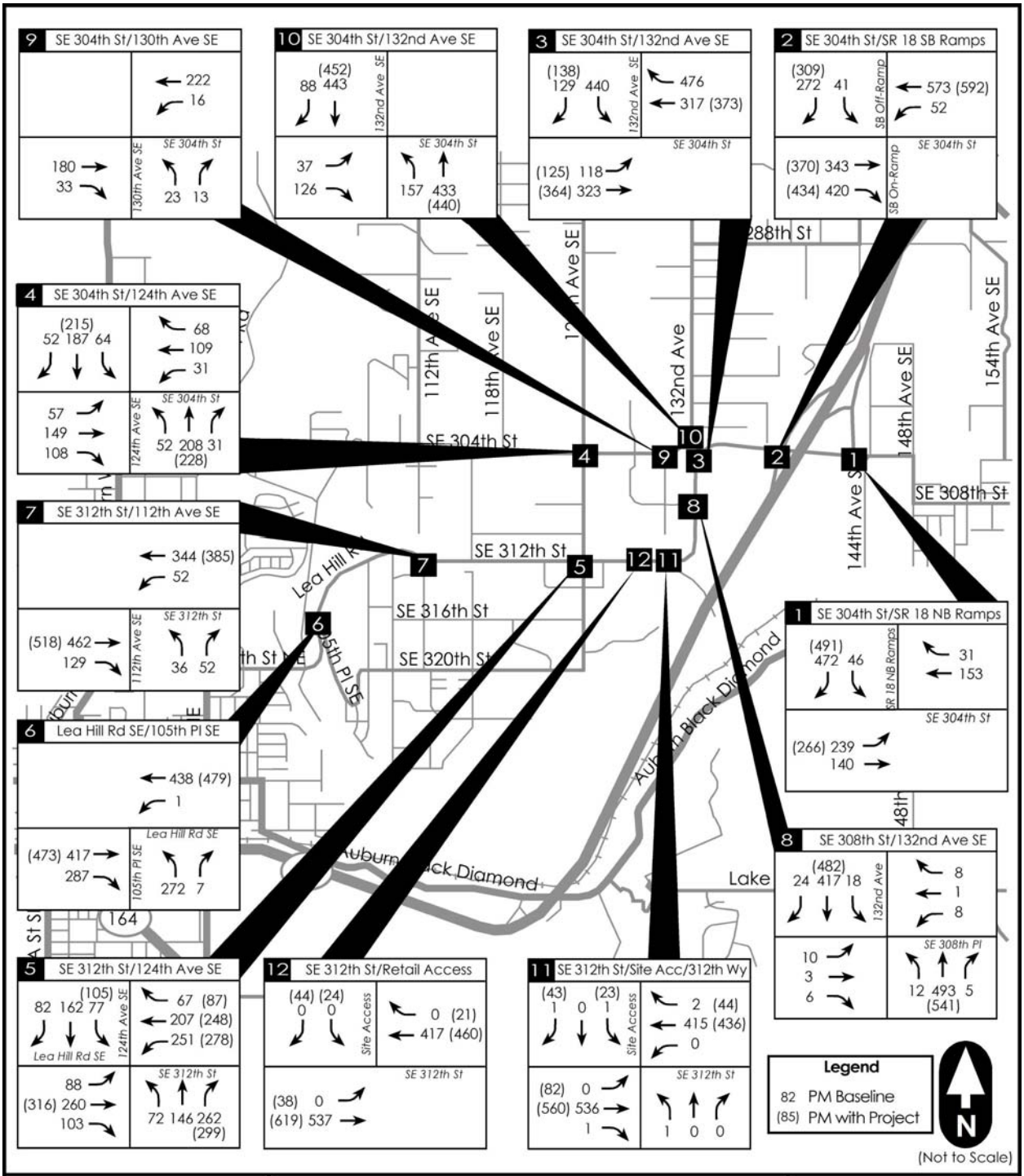

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Figure 9
2017 P.M. Peak Hour Project Traffic Volumes Impacts

Promenade
Auburn, WA

Table 5: 2017 AM Intersection Level of Service Impacts

Study Intersection	AM Peak Hour Without Project LOS	Delay (sec)	V/C Ratio	AM Peak Hour With Project LOS	Delay (sec)	V/C Ratio
Signalized Intersections						
#3. SE 312th St & SE 304th St	C	20.0	--	C	21.7	--
#5. SE 312th St & 124th Ave SE	D	44.8	--	D	51.3	--
#6. 105th Pl SE & SE 312th St	B	12.1	--	B	12.7	--
Stop Controlled Intersections						
#1. SE 304th St & EB SR 18 Ramp						
Southbound Approach (stop)	C	15.1	0.52	C	15.4	0.57
Eastbound Left (yield)	A	8.4	0.16	A	8.5	0.19
#2. SE 304th St & WB SR 18 Ramp						
Southbound Approach (stop)	C	16.0	0.34	C	17.1	0.39
Westbound Left (yield)	A	7.8	0.04	A	7.9	0.04
#7. SE 304th St & 112th Ave SE						
Northbound Approach (stop)	C	22.7	0.51	C	27.0	0.57
Westbound Left (yield)	A	8.2	0.06	A	8.3	0.07
#8. SE 308th Pl & SE 304th St						
Northbound Left (yield)	A	9.3	0.01	A	9.5	0.01
Southbound Left (yield)	A	8.0	0.00	A	8.2	0.00
Eastbound Left (stop)	C	20.8	0.11	C	23.7	0.13
Westbound Left (Stop)	B	16.3	0.07	C	18.5	0.09
#9. SE 304th St & 130th Ave SE						
Northbound Approach (stop)	B	10.9	0.06	B	10.9	0.07
Westbound Left (yield)	A	7.8	0.01	A	7.8	0.01
#10. SE 304th St & 132nd Ave SE						
Eastbound Approach (stop)	C	22.8	0.56	C	23.0	0.57
Northbound Left (yield)	A	9.1	0.10	A	9.2	0.11
#11. Apartment Site Access & SE 312th St						
Northbound Approach (stop)	C	17.6	0.01	C	23.4	0.01
Southbound Approach (stop)	C	18.5	0.02	D	25.2	0.33
Eastbound Left (yield)				A	9.6	0.03
#12. Retail Site Access & SE 312th St	-	-	-			
Southbound Approach (stop)				C	18.9	0.20
Eastbound Left (yield)				A	9.8	0.06
Roundabout Intersections						
#4. SE 304th St & 124th Ave SE	B	12.1		B	12.7	

Source: TENW. Level of service for the intersections has been reported using the HCM 2010, Synchro 8.

Table 6
2017 PM Intersection Level of Service Impacts

Study Intersection	PM Peak Hour Without Project LOS	Delay (sec)	V/C Ratio	PM Peak Hour With Project LOS	Delay (sec)	V/C Ratio
Signalized Intersections						
#3. SE 312th St & SE 304th St	B	17.5	--	B	17.5	--
#5. SE 312th St & 124th Ave SE	C	26.7	--	C	33.1	--
#6. 105th Pl SE & SE 312th St	A	8.7	--	A	9.5	--
Stop Controlled Intersections						
#1. SE 304th St & EB SR 18 Ramp						
Southbound Approach (stop)	B	14.7	0.56	C	15.2	0.59
Eastbound Left (yield)	A	8.1	0.18	A	8.2	0.20
#2. SE 304th St & WB SR 18 Ramp						
Southbound Approach (stop)	C	21.8	0.57	C	26.1	0.67
Westbound Left (yield)	A	8.5	0.05	A	8.2	0.05
#7. SE 304th St & 112th Ave SE						
Northbound Approach (stop)	C	19.5	0.28	C	22.4	0.32
Westbound Left (yield)	A	9.1	0.06	A	9.3	0.06
#8. SE 308th Pl & SE 304th St						
Northbound Left (yield)	A	8.3	0.01	A	8.5	0.01
Southbound Left (yield)	A	8.5	0.02	A	8.6	0.02
Eastbound Left (stop)	C	20.0	0.08	C	23.1	0.09
Westbound Left (Stop)	C	18.0	0.06	C	20.4	0.07
#9. SE 304th St & 130th Ave SE						
Northbound Approach (stop)	B	11.3	0.07	B	11.3	0.07
Westbound Left (yield)	A	7.7	0.01	A	7.7	0.01
#10. SE 304th St & 132nd Ave SE						
Eastbound Approach (stop)	C	18.5	0.40	C	18.8	0.41
Northbound Left (yield)	A	9.4	0.17	A	9.4	0.17
#11. Apartment Site Access & SE 312th St						
Northbound Approach (stop)	C	22.2	0.01	C	23.8	0.01
Southbound Approach (stop)	C	16.6	0.01	C	21.2	0.19
Eastbound Left (yield)				A	8.8	0.09
#12. Retail Site Access & SE 312th St	-	-	-			
Southbound Approach (stop)				C	15.0	0.17
Eastbound Left (yield)				A	8.6	0.04
Roundabout Intersections						
#4. SE 304th St & 124th Ave SE	A	9.0		A	9.5	

Source: TENW. Level of service for the intersections has been reported using the HCM 2010, Synchro 8.

Detailed LOS summary worksheets are included in Attachment 2.

Cumulatively, the addition of project trips and redistribution of existing/pipeline trips with the 130th Avenue SE connection would increase total traffic volumes on 130th Avenue SE, with a net increase of approximately 19 a.m. peak hour trips and 15 p.m. peak hour trips with the project and the "through" connection south to SE 312th Street measured at the SE 304th Street intersection. South of SE 308th Street on 130th Avenue SE this increase would be moderately higher compared to existing traffic volumes along this roadway segment. Changes in distribution of trips and project traffic impacts at off-site impacts however, remain insignificant given the relative levels of peak hour project volumes or redistribution of other non-project volumes as a result of the 130th Avenue SE extension. Figures 10 and 11 summarize project trip distribution and redistribution of non-project volumes during the a.m. peak hour and p.m. peak hour, respectively.

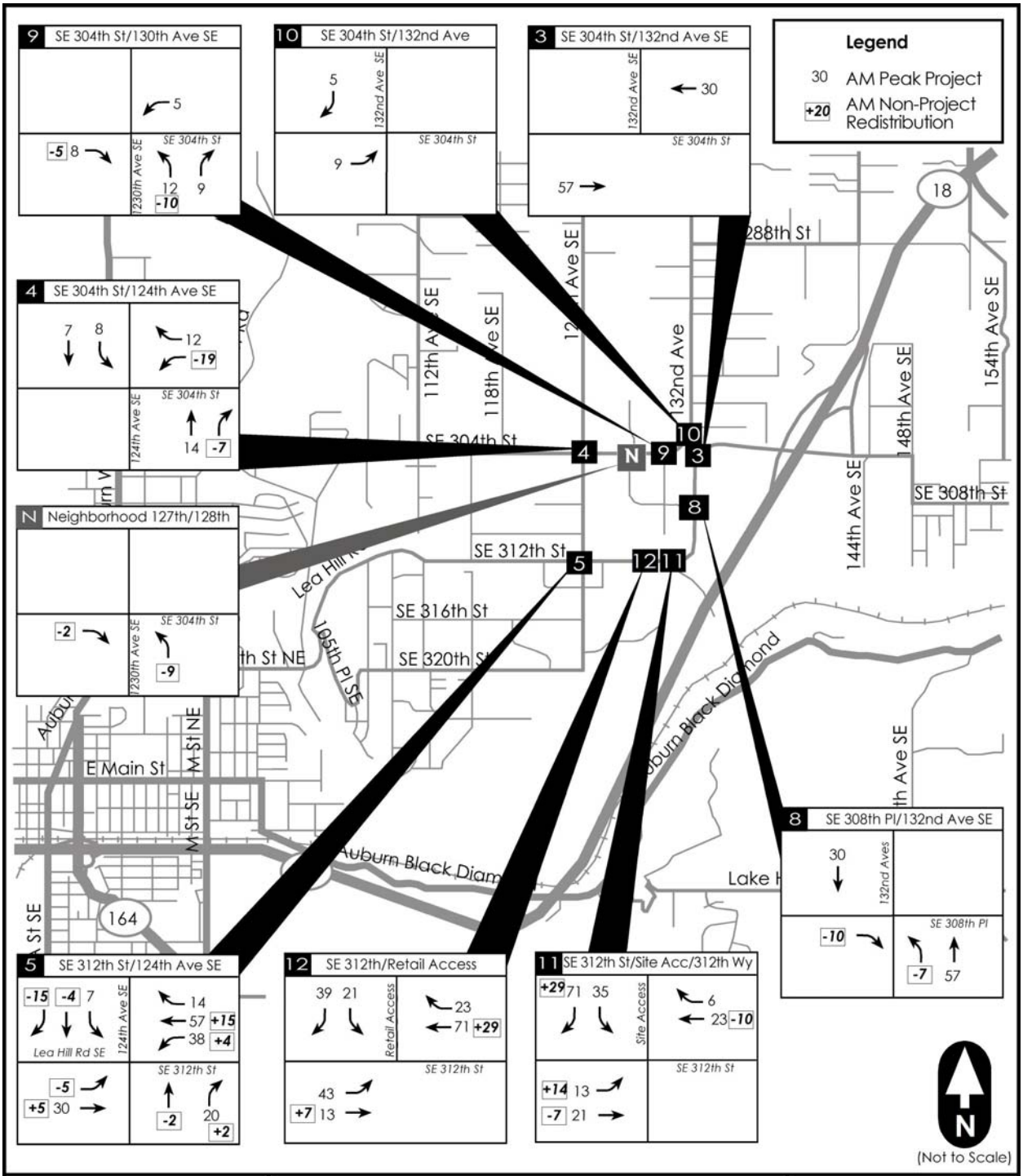
Table 7 summarizes the a.m. peak hour and p.m. peak hour LOS analyses at full buildout with the 130th Avenue SE connection. As shown, all intersections or critical movements would operate at LOS D or better in 2017. As there would be no substantial difference in off-site traffic impacts or level of service operations as a result of the 130th Avenue SE extension, there is no basis under SEPA or City code/engineering standards to require the applicant to construct a new public roadway through the site.

Detailed LOS summary worksheets are included in Attachment 2.

Table 7
2017 AM/PM Peak Hour Intersection Levels of Service with Project Access onto 130th Avenue SE

Study Intersection	AM Peak Hour (Delay)	PM Peak Hour (Delay)
Signalized Intersections		
#3. SE 304th St & 132nd Ave SE	C (21.3)	B (17.4)
#5. SE 312th St & 124th Ave SE	D (51.3)	C (34.5)
Stop Controlled Intersections		
#8. SE 308th Pl & SE 304th St		
Eastbound Approach (stop)	D (27.0)	D (25.3)
Westbound Approach (stop)	C (17.5)	C (19.4)
#9. SE 304th St & 130th Ave SE		
Northbound Approach (stop)	B (12.0)	B (11.4)
#10. SE 304th St & 132nd Ave SE		
Eastbound Approach (stop)	C (24.4)	C (19.8)
#11. Apartment Site Access & SE 312th St		
Northbound Approach (stop)	B (24.5)	C (24.1)
Southbound Approach (stop)	C (23.0)	B (18.2)
#12. Retail Site Access & SE 312th St		
Southbound Approach (stop)	C (19.2)	B (15.0)
Roundabout Intersections[1]		
#4. SE 304th St & 124th Ave SE	B (12.1)	A (9.2)

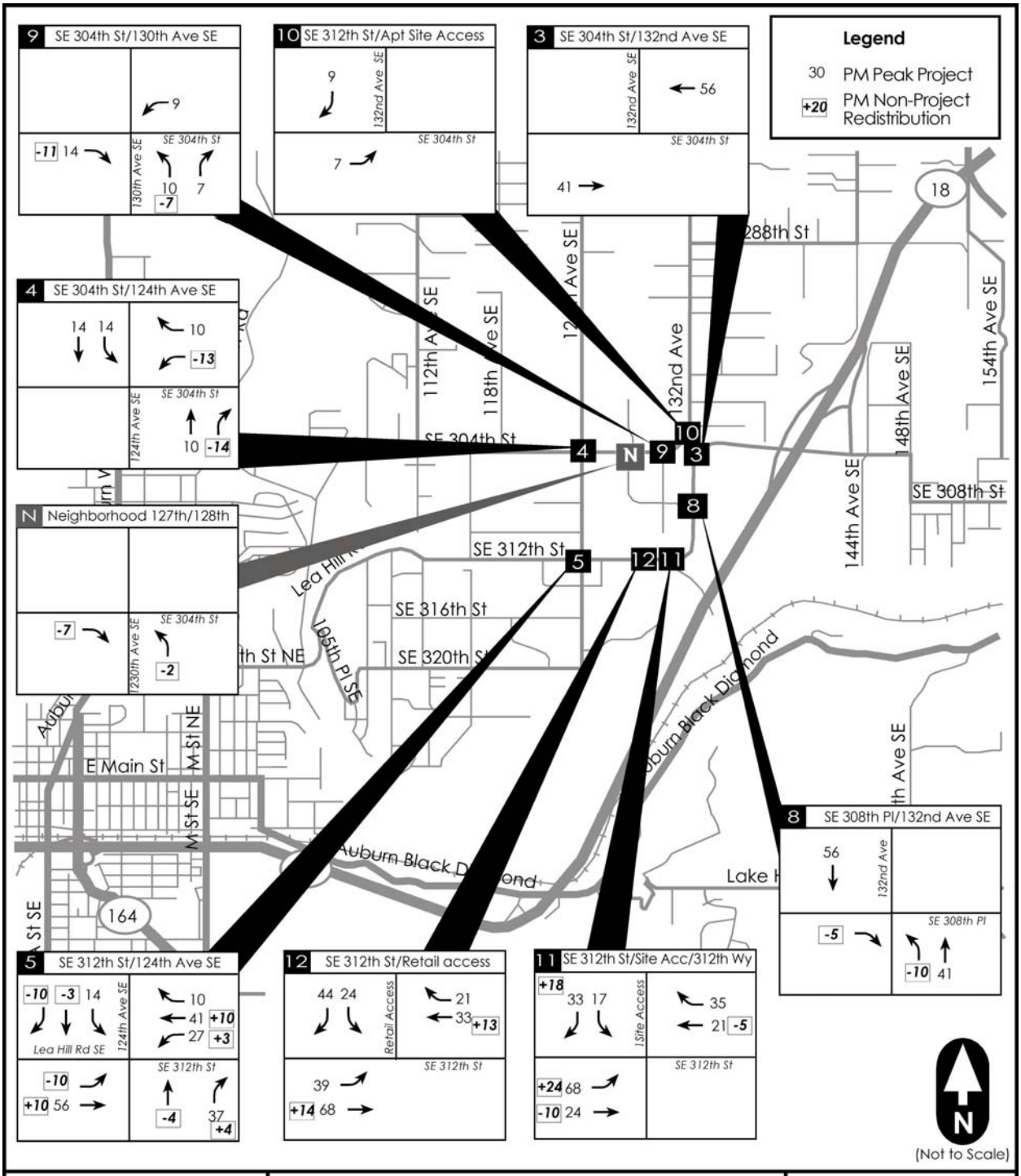
Source: TENW. Level of service for the intersections has been reported using the HCM 2010, Synchro 8.



Transportation Engineering NorthWest, LLC

Figure 10
AM Project and Redistributed Non-Project Volumes

Promenade
Auburn, WA



Transportation Engineering NorthWest, LLC

Figure 11
PM Project and Redistributed Non-Project Volumes

Promenade
Auburn, WA

Roadway Level of Service Impacts

Tables 8 and 9 summarize 2017 roadway level of service impacts during the a.m. and p.m. peak hours on roadway segments of 124th Avenue SE, 132nd Avenue SE, SE 304th Street, and SE 312th Street. Signalized intersections were assumed at arterial endpoints in order to obtain arterial levels of service. As shown, each roadway section would operate at LOS C or better with or without the project during the a.m. and p.m. peak hour in 2017, meeting City adopted standards. Roadway level of service analysis is in Attachment 5. It should be noted that SE 320th Street was excluded from the roadway level of service analysis as it does not contain any study intersections.

Table 8
2017 AM Peak Hour Roadway Level of Service

Arterial Segments			Travel Time	Travel Speed		Travel Time	Travel Speed	
#23. 124th Avenue SE	SE 304th Street to	NB	155.9	27.1	B	158.0	26.7	B
	SE 320th Street	SB	214.8	23.0	C	207.8	23.8	C
#22. 132nd Avenue SE	SE 304th Street to SE 308th Street	NB	114.0	21.9	C	98.3	21.1	C
		SB	107.4	18.5	C	107.6	18.4	C
#24. SE 304th Street	124th Avenue SE to	EB	130.8	22.8	C	128.5	22.7	C
	132nd Avenue SE	WB	74.5	24.5	B	72.2	24.4	B
#19. SE 312th Street	104th Avenue SE to	EB	310.7	24.8	B	253.5	26.2	B
	Apartment Site Access	WB	226.4	21.1	C	202.7	21.1	C

Note: Analysis based on *Synchro* , *Traffic Signal Coordination Software* using HCM 2000 control delays (seconds) and LOS.
1 – Assumes a distance of 1.0 miles on 124th Avenue SE.
2 – Assumes a distance of 0.5 miles on 132nd Avenue SE
3 – Assumes a distance of 0.6 miles on SE 304th Street
4– Assumes a distance of 1.90 miles on SE 312th Street.

Table 9
2017 PM Peak Hour Roadway Level of Service

Arterial Segments			Travel Time	Travel Speed		Travel Time	Travel Speed	
#23. 124th Avenue SE	SE 304th Street to	NB	157.7	26.8	B	158.3	26.7	B
	SE 320th Street	SB	216.2	22.9	C	216.2	22.9	C
#22. 132nd Avenue SE	SE 304th Street to SE 308th Street	NB	101.9	20.3	C	104.0	19.9	C
		SB	101.5	19.7	C	100.0	20.0	C
#24. SE 304th Street	124th Avenue SE to	EB	115.5	25.3	B	115.4	25.3	B
	132nd Avenue SE	WB	68.6	25.6	B	68.5	25.7	B
#19. SE 312th Street	104th Avenue SE to	EB	253.3	28.2	B	317.8	22.5	C
	Apartment Site Access	WB	211.6	20.6	C	228.6	19.1	C

Note: Analysis based on *Synchro*, *Traffic Signal Coordination Software* using HCM 2000 control delays (seconds) and LOS.
1 – Assumes a distance of 1.0 miles on 124th Avenue SE.
2 – Assumes a distance of 0.5 miles on 132nd Avenue SE
3 – Assumes a distance of 0.6 miles on SE 304th Street
4– Assumes a distance of 1.90 miles on SE 312th Street.

Auburn Code Parking Requirements

Auburn Municipal Code (AMC) 18.52.020 *Off-Street Parking Requirements by Land Use* identifies minimum off-street parking requirements for the proposed multifamily residential and retail commercial uses. A total of 586 stalls are proposed on-site, 528 to serve residential apartments and 58 for the proposed commercial building. Table 10 summarizes minimum off-street parking stalls required. As shown, the City of Auburn would require 528 off-street parking stalls for uses for the proposed apartment use and 528 stalls would be provided, meeting City code. For the proposed commercial building, code review of several different land uses were considered and the worst-case for parking demand was found to be medical office. For medical office uses, 52 stalls would be required under City code and 58 stalls would be provided, also meeting City code. As such, no off-site parking impacts would occur and more parking would be provided on-site than required by City code.

Table 10 – Auburn Minimum On-Site Parking Analysis

Parking Component	Minimum Off-Street Parking Requirements[1]	Size	Total Stalls
Residential Units with 1 or 2 Bedrooms	1.5 stalls per dwelling unit	120	180
Residential Units with 3 or more Bedrooms	2.0 stalls per dwelling unit	174	348
Total Minimum Off-Street Parking Supply for Residential Uses			**528**
YMCA Daycare[2]	2.0 stalls for every 10 children	135	14
	OR		
Medical Office Use	5.0 stalls per 1,000 square feet	10,350	52
Total Minimum Off-Street Parking Supply for Commercial Uses			**52**

1 – Per Auburn Municipal Code, Table 18.52.020.
2 – Source: Jason Berry, Executive Director, Auburn Valley YMCA, March 2015.

Site Access and Safety Issues

Vehicular site access is proposed via one access roadway onto SE 312th Street. There are no adjacent or opposing driveways within the immediate vicinity of the proposed full access driveway locations. The proposed residential site driveway is located opposite SE 312th Way. Under current conditions, entering sight distance at SE 312th Street east of the site access does not meet Auburn standards of for the design speed of 45 mph. The proposed interior roadways within the development would provide adequate fire and emergency vehicle access to the proposed residential subdivision.

Per City Code, the applicant would be required to construct the necessary site access roadways and frontage improvements along SE 312th Street, which could also include right-of-way dedication. As part of the project, existing center two-way left turn lane along the project frontage through to the proposed main residential entry were it would transition to a one-way left turning lane at the SE 312th Way intersection.

School Safe Walk Route Analysis

As part of the proposed *Promenade Apartments* project, a new sidewalk would be constructed along the SE 312th Street frontage. In addition, an interior separated sidewalk/trail system between the residential apartments and on-site daycare facility would be constructed. Raised and separated sidewalks between both the residential and commercial portions of the project would be constructed between on-site uses and the public sidewalk system. As the adjacent apartment complex (The Seasons), was developed and is owned and maintained by the same applicant, DevCo, Inc., a pedestrian easement or designated walk route between the SE 312th Street public sidewalk and the interior sidewalk system within The Seasons that provides a pedestrian link directly to the Lea Hill Elementary School (separated from arterial traffic) can be established to serve as the designated "safe walk route" for children to the adjacent elementary school. Two separate routes within The Seasons complex are shown in Attachment 6.

Project Mitigation

A review of traffic impacts to intersection levels of service, site access, and circulation issues was conducted in association with the *Promenade Apartments* project, a planned 294-unit residential development and 10,350 square foot commercial retail/commercial building in Auburn, WA. The following mitigation measures are recommended to reduce or eliminate project impacts:

- The applicant would be required to construct the necessary site access roadway and frontage improvements along SE 312th Street, including construction of a cul-de-sac on 130th Avenue SE.
- The results of the traffic operations analysis show that all the study intersections are expected to operate at acceptable levels with the proposed development and site access improvements proposed along SE 312th Street.
- To mitigate systemwide impacts in the City of Auburn, traffic impact fees are collected towards capacity improvements that serve new development. Based on impact fees effective January 2015, the estimated total traffic impact fee for the entire site buildout would be payable at the time of building permit is estimated as:

  294 Apartments X $2,237.30 = $657,766.2

  10,350 square foot Daycare X $18.05/SF = $186,817.50

  Removal of 6 Single-Family Homes X $3,413.48 = - $20,480.88

  Total Fee = $ 824,102.82
- The results of sight distance analysis show that the entering sight distance at SE 312th Street east of the project entrance does not meet Auburn standards. In order to provide adequate entering sight distance at SE 312th Street, a retaining wall must be constructed to the south of the project site, east of the entrance. This sight distance issue has been addressed in the development of the project site plan.
- Provide a cross access pedestrian easement for a designated school safe walk route through the adjacent *The Seasons* complex.

If you have any questions regarding the information presented in this memo, please call me at (206) 361-7333 x 101 or mikeread@tenw.com.

ATTACHMENTS

Attachment 1
2014 Traffic Counts

Prepared for: **City of Auburn**

Traffic Count Consultants, Inc.

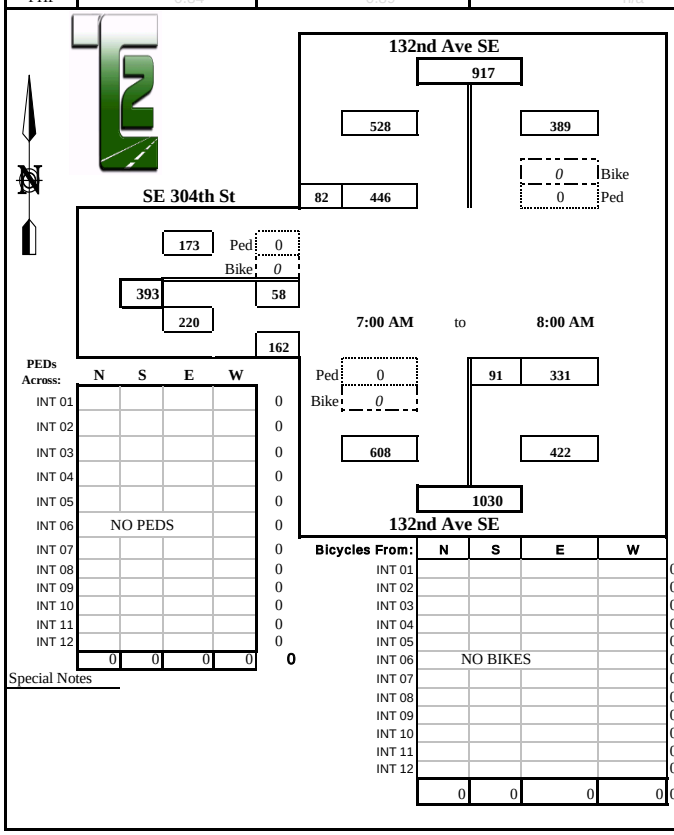
Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 132nd Ave SE & SE 304th St (stop sign) **Date of Count:** Wed 2/26/2014

Location: Auburn, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) 132nd Ave SE				From South on (NB) 132nd Ave SE				From East on (WB) 0				From West on (EB) SE 304th St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	0	82	16	4	20	68	0	0	0	0	0	0	12	0	45	243
7:30 A	1	0	106	17	4	22	77	0	0	0	0	0	2	17	0	52	291
7:45 A	6	0	129	29	5	30	87	0	0	0	0	0	0	16	0	35	326
8:00 A	7	0	129	20	1	19	99	0	0	0	0	0	3	13	0	30	310
8:15 A	4	0	108	9	4	18	61	0	0	0	0	0	0	3	0	23	222
8:30 A	0	0	78	10	1	23	63	0	0	0	0	0	1	19	0	34	227
8:45 A	2	0	102	6	2	10	55	0	0	0	0	0	4	25	0	39	237
9:00 A	8	0	111	14	5	13	91	0	0	0	0	0	3	23	0	23	275
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	28	0	845	121	26	155	601	0	0	0	0	0	13	128	0	281	2131
Peak Hour: 7:00 AM to 8:00 AM																	
Total	14	0	446	82	14	91	331	0	0	0	0	0	5	58	0	162	1170
Approach	528				422				0				220				1170
%HV	2.7%				3.3%				n/a				2.3%				2.8%
PHF	0.84				0.89				n/a				0.80				0.90



1304 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.80	2.3%
Check	WB	n/a	n/a
In: 1170	NB	0.89	3.3%
Out: 1170	SB	0.84	2.7%
	T Int.	0.90	2.8%

PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO PEDS				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

Special Notes

Bicycles From:	N	S	E	W		N U's	S U's	E U's	W U's
INT 01					0		0		
INT 02					0		0		
INT 03					0		0		
INT 04					0		1		
INT 05					0		0		
INT 06	NO BIKES				0		0		
INT 07					0		0		
INT 08					0		0		
INT 09					0				
INT 10					0				
INT 11					0				
INT 12					0				
	0	0	0	0	0	0	1	0	0

AUB14018M_03a

Prepared for: **City of Auburn**

Traffic Count Consultants, Inc.

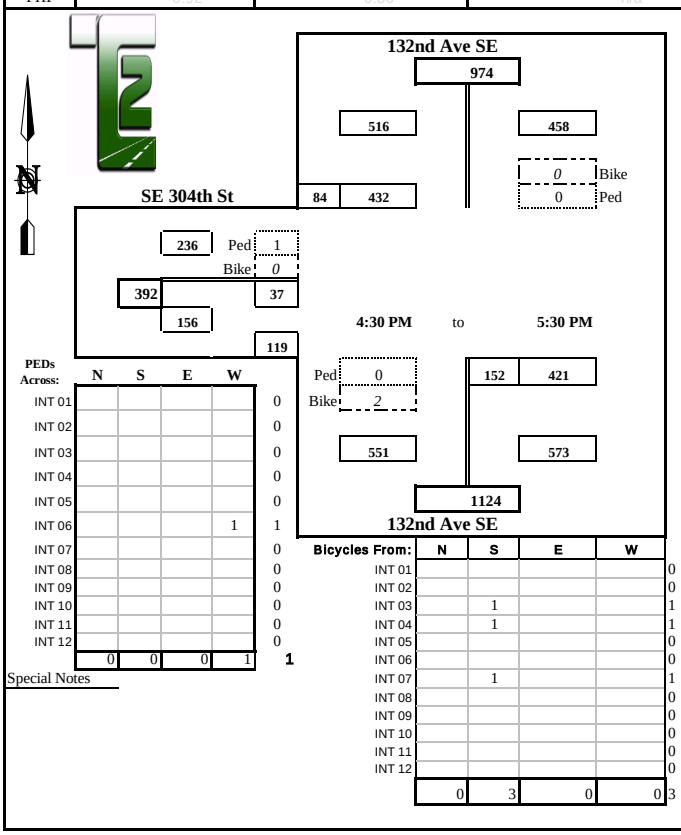
Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 132nd Ave SE & SE 304th St **Date of Count:** Wed 2/26/2014

Location: Auburn, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) 132nd Ave SE				From South on (NB) 132nd Ave SE				From East on (WB) 0				From West on (EB) SE 304th St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	3	0	88	16	0	26	101	0	0	0	0	0	2	16	0	39	286
4:30 P	0	0	101	16	1	31	96	0	0	0	0	0	2	12	0	41	297
4:45 P	1	0	116	24	1	38	98	0	0	0	0	0	2	13	0	36	325
5:00 P	1	0	112	24	1	34	106	0	0	0	0	0	0	4	0	24	304
5:15 P	3	0	89	19	1	33	97	0	0	0	0	0	0	11	0	36	285
5:30 P	0	0	115	17	1	47	120	0	0	0	0	0	1	9	0	23	331
5:45 P	0	0	87	15	1	19	97	0	0	0	0	0	0	9	0	25	252
6:00 P	0	0	110	12	0	45	93	0	0	0	0	0	1	10	0	22	292
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	8	0	818	143	6	273	808	0	0	0	0	0	8	84	0	246	2372
Peak Hour: 4:30 PM to 5:30 PM																	
Total	5	0	432	84	4	152	421	0	0	0	0	0	3	37	0	119	1245
Approach	516				573				0				156				1245
%HV	1.0%				0.7%				n/a				1.9%				1.0%
PHF	0.92				0.86				n/a				0.80				0.94



PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06				1	1
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	1	1

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03		1			1
INT 04		1			1
INT 05					0
INT 06					0
INT 07		1			1
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	3	0	0	3

Special Notes

1324 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.80	1.9%
Check	WB	n/a	n/a
In: 1245	NB	0.86	0.7%
Out: 1245	SB	0.92	1.0%
	T Int.	0.94	1.0%

Conditions:

AUB14018M_03p

Prepared for: **City of Auburn**

Traffic Count Consultants, Inc.

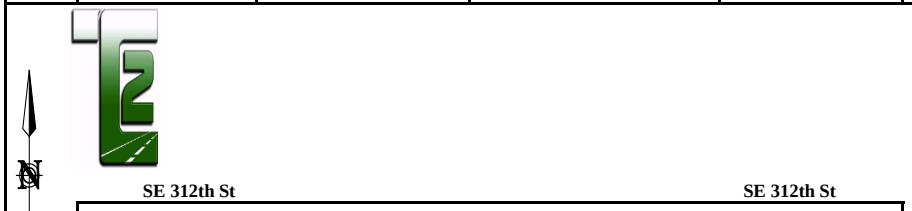
Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 112th Ave SE & SE 312th St **Date of Count:** Wed 2/26/2014

Location: Auburn, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) 0				From South on (NB) 112th Ave SE				From East on (WB) SE 312th St				From West on (EB) SE 312th St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	0	0	0	0	4	23	0	27	0	12	111	0	5	0	80	3	256
7:30 A	0	0	0	0	2	25	0	20	4	17	90	0	3	0	69	2	223
7:45 A	0	0	0	0	3	18	0	28	4	13	85	0	6	0	60	15	219
8:00 A	0	0	0	0	1	13	0	23	4	21	82	0	3	0	60	3	202
8:15 A	0	0	0	0	2	23	0	12	2	7	61	0	4	0	63	6	172
8:30 A	0	0	0	0	1	7	0	18	1	4	65	0	3	0	61	7	162
8:45 A	0	0	0	0	1	11	0	17	6	20	82	0	3	0	59	8	197
9:00 A	0	0	0	0	2	21	0	9	1	3	71	0	2	0	47	15	166
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	0	0	16	141	0	154	22	97	647	0	29	0	499	59	1597
Peak Hour: 7:00 AM to 8:00 AM																	
Total	0	0	0	0	10	79	0	98	12	63	368	0	17	0	269	23	900
Approach	0				177				431				292				900
%HV	n/a				5.6%				2.8%				5.8%				4.3%
PHF	n/a				0.89				0.88				0.88				0.88



PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03				1	1
INT 04					0
INT 05			1		1
INT 06					0
INT 07		1	1		2
INT 08		1			1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	2	2	1	5

Special Notes

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03				1	1
INT 04					0
INT 05					0
INT 06					0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	1	1

		PHF	%HV
	EB	0.88	5.8%
Check	WB	0.88	2.8%
In: 900	NB	0.89	5.6%
Out: 900	SB	n/a	n/a
	T Int.	0.88	4.3%

Conditions:

AUB14018M_06a

Prepared for: **City of Auburn**

Traffic Count Consultants, Inc.

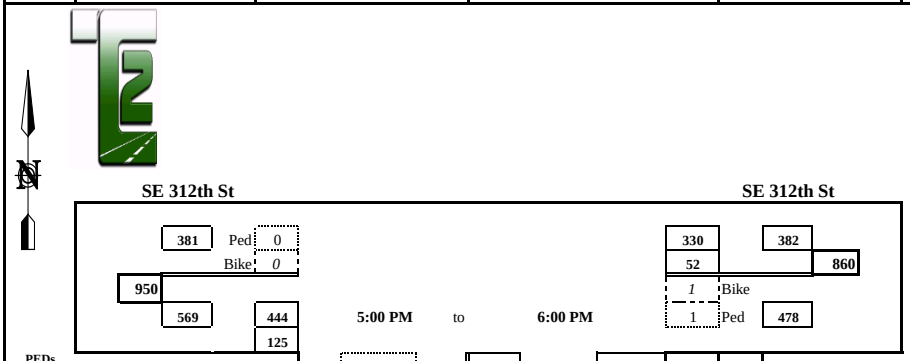
Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 112th Ave SE & SE 312th St **Date of Count:** Wed 2/26/2014

Location: Auburn, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) 0				From South on (NB) 112th Ave SE				From East on (WB) SE 312th St				From West on (EB) SE 312th St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	0	0	0	0	2	9	0	7	4	18	85	0	3	0	91	29	239
4:30 P	0	0	0	0	2	12	0	10	2	14	83	0	4	0	116	24	259
4:45 P	0	0	0	0	2	12	0	12	0	14	73	0	1	0	113	27	251
5:00 P	0	0	0	0	1	9	0	7	1	16	74	0	2	0	102	22	230
5:15 P	0	0	0	0	1	18	0	11	0	18	90	0	0	0	117	23	277
5:30 P	0	0	0	0	1	9	0	6	0	13	80	0	2	0	110	36	254
5:45 P	0	0	0	0	1	13	0	8	0	15	79	0	1	0	110	37	262
6:00 P	0	0	0	0	1	11	0	9	0	6	81	0	2	0	107	29	243
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	0	0	0	0	11	93	0	70	7	114	645	0	15	0	866	227	2015
	Peak Hour: 5:00 PM to 6:00 PM																
Total	0	0	0	0	4	51	0	34	0	52	330	0	5	0	444	125	1036
Approach	0				85				382				569				1036
%HV	n/a				4.7%				n/a				0.9%				0.9%
PHF	n/a				0.73				0.88				0.97				0.94



PEDs Across:	N	S	E	W	
INT 01	2	1	1		4
INT 02					0
INT 03		1			1
INT 04			1		1
INT 05					0
INT 06		1			1
INT 07			1		1
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	2	3	3	0	8

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06					0
INT 07			1		1
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	1	0	1

1108 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.97	0.9%
Check	WB	0.88	n/a
In: 1036	NB	0.73	4.7%
Out: 1036	SB	n/a	n/a
	T Int.	0.94	0.9%

N U's	S U's	E U's	W U's
		0	
		0	
		0	
		0	
		1	
		0	
		0	
		0	
0	0	1	0

Special Notes

AUB14018M_06p

Prepared for: **City of Auburn**

Traffic Count Consultants, Inc.

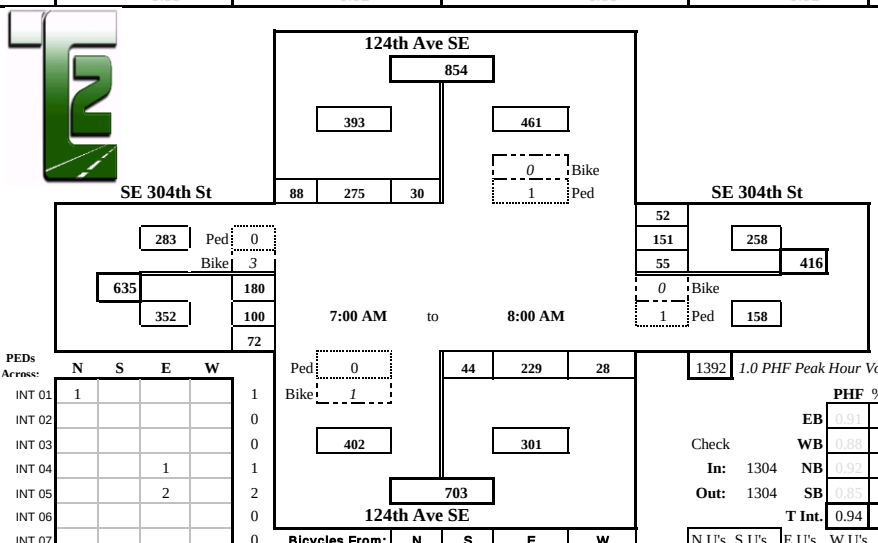
Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 124th Ave SE & SE 304th St **Date of Count:** Thurs 2/27/2014

Location: Auburn, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) 124th Ave SE				From South on (NB) 124th Ave SE				From East on (WB) SE 304th St				From West on (EB) SE 304th St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	6	7	53	28	2	22	53	7	1	7	49	6	2	33	36	28	329
7:30 A	0	6	81	20	4	7	59	8	2	11	33	11	4	36	31	20	323
7:45 A	2	8	87	20	2	8	58	7	5	15	35	18	7	60	15	17	348
8:00 A	2	9	54	20	1	7	59	6	5	22	34	17	1	51	18	7	304
8:15 A	3	9	39	14	0	11	25	3	1	4	24	7	1	26	10	8	180
8:30 A	4	7	43	6	7	28	38	4	2	15	24	5	2	15	17	15	217
8:45 A	4	5	52	5	2	15	46	13	1	9	21	7	3	15	13	13	214
9:00 A	0	1	38	10	5	12	46	7	0	9	24	4	0	14	19	3	187
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	21	52	447	123	23	110	384	55	17	92	244	75	20	250	159	111	2102
Peak Hour: 7:00 AM to 8:00 AM																	
Total	10	30	275	88	9	44	229	28	13	55	151	52	14	180	100	72	1304
Approach	393				301				258				352				1304
%HV	2.5%				3.0%				5.0%				4.0%				3.5%
PHF	0.85				0.92				0.88				0.91				0.94



1392 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.91	4.0%
Check	WB	0.88	5.0%
In: 1304	NB	0.92	3.0%
Out: 1304	SB	0.85	2.5%
	T Int.	0.94	3.5%

PEDs Across:	N	S	E	W	
INT 01	1				1
INT 02					0
INT 03					0
INT 04			1		1
INT 05			2		2
INT 06					0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	1	0	3	0	4

Special Notes

Bicycles From:	N	S	E	W		N U's	S U's	E U's	W U's
INT 01					0		0		0
INT 02					0		0		0
INT 03		1		3	4		0		0
INT 04					0		0		0
INT 05					0		1		0
INT 06				1	1		0		1
INT 07					0		0		0
INT 08					0		0		0
INT 09					0				
INT 10					0				
INT 11					0				
INT 12					0				
	0	1	0	4	5	0	1	0	1

AUB14018M_12a

Prepared for: **City of Auburn**

Traffic Count Consultants, Inc.

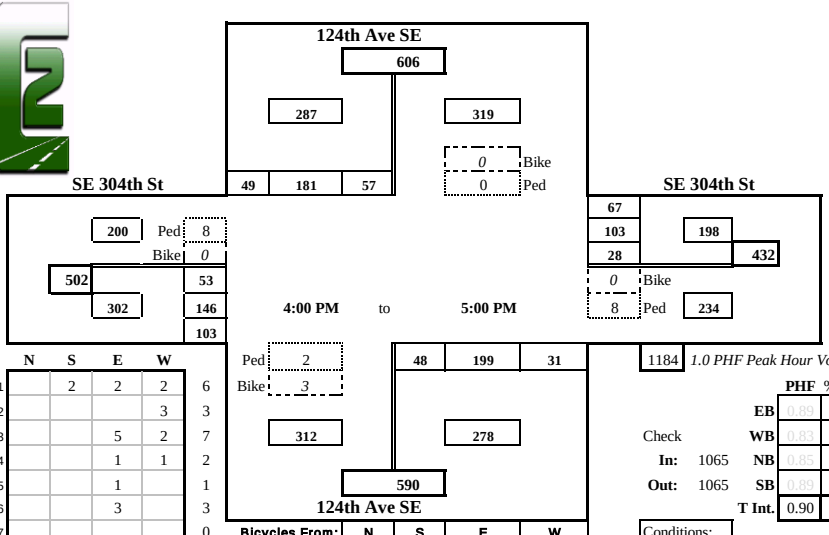
Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 124th Ave SE & SE 304th St **Date of Count:** Thurs 2/27/2014

Location: Auburn, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) 124th Ave SE				From South on (NB) 124th Ave SE				From East on (WB) SE 304th St				From West on (EB) SE 304th St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	4	17	51	13	1	14	46	10	1	5	22	13	0	13	30	25	259
4:30 P	1	8	38	19	1	15	47	6	3	5	26	19	1	9	35	24	251
4:45 P	1	17	43	8	0	8	44	6	1	7	31	10	1	16	37	32	259
5:00 P	3	15	49	9	1	11	62	9	2	11	24	25	1	15	44	22	296
5:15 P	2	10	36	7	1	17	49	6	1	12	20	8	0	12	19	24	220
5:30 P	3	10	47	10	1	8	54	7	0	8	22	14	0	13	33	18	244
5:45 P	1	12	42	8	0	9	39	9	0	8	22	8	0	15	27	20	219
6:00 P	1	19	50	15	1	11	48	9	0	6	25	7	2	10	36	17	253
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	16	108	356	89	6	93	389	62	8	62	192	104	5	103	261	182	2001
Peak Hour: 4:00 PM to 5:00 PM																	
Total	9	57	181	49	3	48	199	31	7	28	103	67	3	53	146	103	1065
Approach	287				278				198				302				1065
%HV	3.1%				1.1%				3.5%				1.0%				2.1%
PHF	0.89				0.85				0.83				0.89				0.90



PEDs Across:	N	S	E	W	
INT 01		2	2	2	6
INT 02				3	3
INT 03			5	2	7
INT 04			1	1	2
INT 05			1		1
INT 06			3		3
INT 07					0
INT 08				1	1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	2	12	9	23

Bicycles From:	N	S	E	W	
INT 01		1			1
INT 02					0
INT 03					0
INT 04		2			2
INT 05					0
INT 06					0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	3	0	0	3

1184 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.89	1.0%
Check	WB	0.83	3.5%
In: 1065	NB	0.85	1.1%
Out: 1065	SB	0.89	3.1%
	T Int.	0.90	2.1%

Conditions:

Special Notes

AUB14018M_12p

Prepared for: **City of Auburn**

Traffic Count Consultants, Inc.

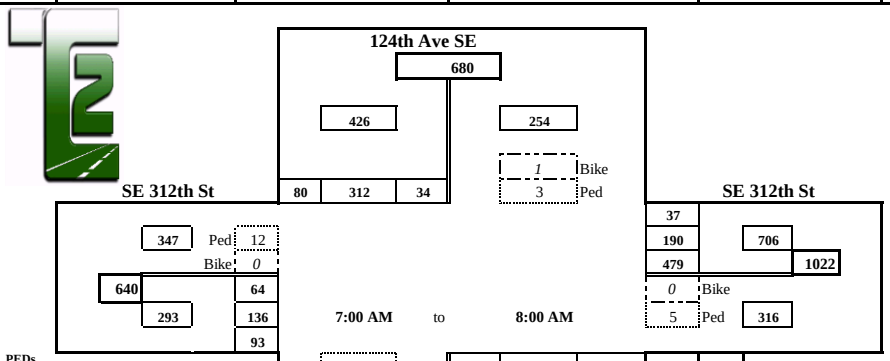
Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 124th Ave SE & SE 312th St **Date of Count:** Wed 2/26/2014

Location: Auburn, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) 124th Ave SE				From South on (NB) 124th Ave SE				From East on (WB) SE 312th St				From West on (EB) SE 312th St				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	3	9	43	30	5	24	25	31	2	85	50	10	2	11	34	27	379
7:30 A	3	14	85	24	4	18	39	28	1	107	42	7	6	10	37	25	436
7:45 A	0	6	97	8	3	16	45	36	6	141	48	8	3	23	27	21	476
8:00 A	3	5	87	18	3	19	44	51	8	146	50	12	1	20	38	20	510
8:15 A	3	10	40	24	6	20	31	42	12	71	31	13	2	34	30	11	357
8:30 A	3	9	37	20	11	6	42	31	7	65	21	17	1	27	31	14	320
8:45 A	4	15	55	36	3	9	20	33	6	92	35	12	2	30	28	28	393
9:00 A	3	12	88	25	8	13	48	75	6	106	37	12	0	17	27	26	486
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	22	80	532	185	43	125	294	327	48	813	314	91	17	172	252	172	3357
Peak Hour: 7:00 AM to 8:00 AM																	
Total	9	34	312	80	15	77	153	146	17	479	190	37	12	64	136	93	1801
Approach	426				376				706				293				1801
%HV	2.1%				4.0%				2.4%				4.1%				2.9%
PHF	0.87				0.82				0.85				0.94				0.88



PEDs Across:	N	S	E	W	
INT 01		2			2
INT 02	1	1	1	3	6
INT 03	1	1	1	2	5
INT 04	1	1	3	7	12
INT 05	1	1	2	1	5
INT 06		2	4	1	7
INT 07	2	3	3	4	12
INT 08	1	2	8	9	20
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	7	13	22	27	69

Special Notes

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03		1			1
INT 04	1				1
INT 05			1		1
INT 06					0
INT 07					0
INT 08	3				3
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	4	1	1	0	6

2040 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.94	4.1%
Check	WB	0.85	2.4%
In: 1801	NB	0.82	4.0%
Out: 1801	SB	0.87	2.1%
	T Int.	0.88	2.9%

Conditions:

AUB14018M_13a

Prepared for: **City of Auburn**

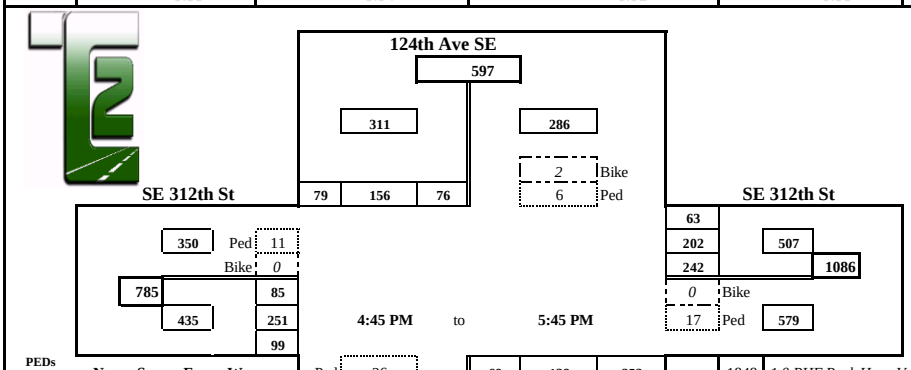
Traffic Count Consultants, Inc.

Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 124th Ave SE & SE 312th St **Date of Count:** Wed 2/26/2014
Location: Auburn, Washington **Checked By:** Jess

Time Interval	From North on (SB) 124th Ave SE				From South on (NB) 124th Ave SE				From East on (WB) SE 312th St				From West on (EB) SE 312th St				Interval Total
Ending at	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	1	19	28	25	0	23	35	59	2	68	54	22	1	22	63	26	444
4:30 P	3	19	44	20	1	18	29	54	2	55	42	7	0	20	51	19	378
4:45 P	0	21	42	19	0	19	33	63	2	54	33	10	5	27	58	27	406
5:00 P	3	21	50	21	2	18	35	69	0	79	51	9	2	19	73	17	462
5:15 P	0	16	30	15	1	20	39	57	0	51	60	22	0	16	58	24	408
5:30 P	1	17	39	25	1	17	32	67	0	44	41	13	0	26	61	26	408
5:45 P	1	22	37	18	0	14	32	59	0	68	50	19	0	24	59	32	434
6:00 P	1	14	66	15	1	17	35	61	0	54	50	11	2	18	56	24	421
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	10	149	336	158	6	146	270	489	6	473	381	113	10	172	479	195	3361
	Peak Hour: 4:45 PM to 5:45 PM																
Total	5	76	156	79	4	69	138	252	0	242	202	63	2	85	251	99	1712
Approach	311				459				507				435				1712
%HV	1.6%				0.9%				n/a				0.5%				0.6%
PHF	0.85				0.94				0.91				0.95				0.93



PEDs Across:	N	S	E	W	
INT 01	3	7	4	7	21
INT 02		3	8	9	20
INT 03	4		6	8	18
INT 04		9	2		11
INT 05	5	2	1	8	16
INT 06	1	10	8	1	20
INT 07		5	6	2	13
INT 08	7	10	7	12	36
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	20	46	42	47	155

Special Notes

Bicycles From:	N	S	E	W	
INT 01		1			1
INT 02					0
INT 03	1	2			3
INT 04		1			1
INT 05					0
INT 06		2			2
INT 07	2				2
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	3	6	0	0	9

1848 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.95	0.5%
Check	WB	0.91	n/a
In: 1712	NB	0.94	0.9%
Out: 1712	SB	0.89	1.6%
	T Int.	0.93	0.6%

Conditions:

AUB14018M_13p

Prepared for: **City of Auburn**

Traffic Count Consultants, Inc.

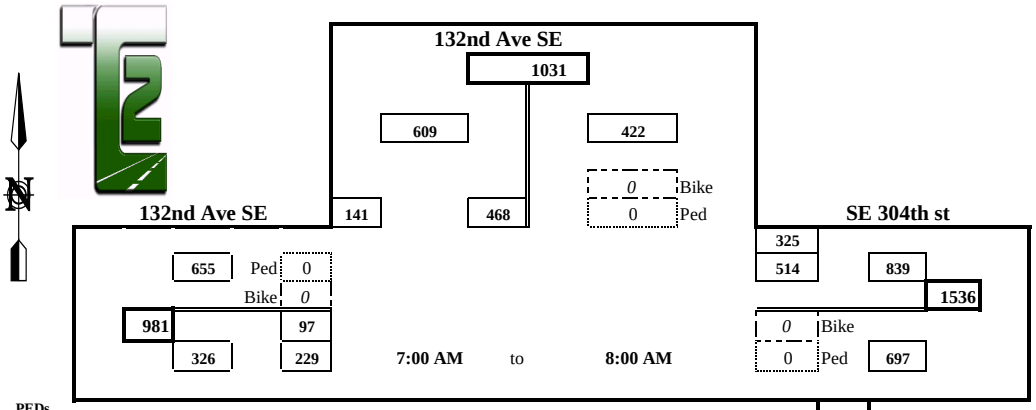
Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 132nd Ave SE & SE 304th St (signal) **Date of Count:** Wed 2/26/2014

Location: Auburn, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) 132nd Ave SE				From South on (NB) 0				From East on (WB) SE 304th st				From West on (EB) 132nd Ave SE				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
7:15 A	1	108	0	19	0	0	0	0	5	0	105	64	3	25	51	0	372
7:30 A	0	125	0	33	0	0	0	0	1	0	128	72	7	25	58	0	441
7:45 A	3	128	0	36	0	0	0	0	10	0	152	98	1	19	53	0	486
8:00 A	9	107	0	53	0	0	0	0	6	0	129	91	1	28	67	0	475
8:15 A	4	112	0	19	0	0	0	0	5	0	63	62	4	17	64	0	337
8:30 A	1	94	0	18	0	0	0	0	5	0	77	69	2	17	59	0	334
8:45 A	4	109	0	31	0	0	0	0	3	0	92	54	2	11	60	0	357
9:00 A	8	85	0	49	0	0	0	0	5	0	98	62	4	41	73	0	408
9:15 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:30 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9:45 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00 A	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	30	868	0	258	0	0	0	0	40	0	844	572	24	183	485	0	3210
	Peak Hour: 7:00 AM to 8:00 AM																
Total	13	468	0	141	0	0	0	0	22	0	514	325	12	97	229	0	1774
Approach	609				0				839				326				1774
%HV	2.1%				n/a				2.6%				3.7%				2.6%
PHF	0.93				n/a				0.84				0.86				0.91



1944 *1.0 PHF Peak Hour Volume*

	PHF	%HV
EB	0.86	3.7%
Check WB	0.84	2.6%
In: 1774 NB	n/a	n/a
Out: 1774 SB	0.93	2.1%
T Int.	0.91	2.6%

Conditions:

PEDs Across:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06	NO PEDS				0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	0	0	0

Special Notes

Bicycles From:	N	S	E	W	
INT 01					0
INT 02					0
INT 03					0
INT 04					0
INT 05			1		1
INT 06					0
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	0	1	0	1

AUB14018M_16a

Prepared for: **City of Auburn**

Traffic Count Consultants, Inc.

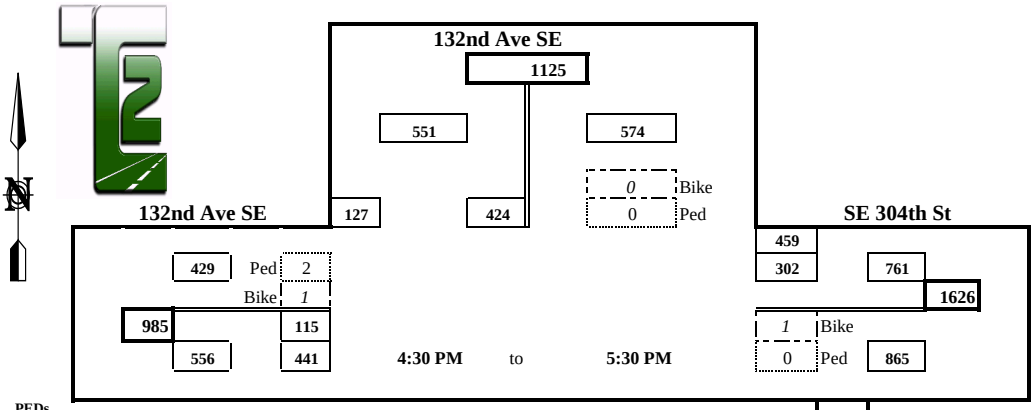
Phone: (253) 926-6009 FAX: (253) 922-7211 E-Mail: Team@TC2inc.com

WBE/DBE

Intersection: 132nd Ave SE & SE 304th St (signal) **Date of Count:** Wed 2/26/2014

Location: Auburn, Washington **Checked By:** Jess

Time Interval Ending at	From North on (SB) 132nd Ave SE				From South on (NB) 0				From East on (WB) SE 304th St				From West on (EB) 132nd Ave SE				Interval Total
	T	L	S	R	T	L	S	R	T	L	S	R	T	L	S	R	
4:15 P	6	101	0	27	0	0	0	0	4	0	80	92	3	35	87	0	422
4:30 P	2	112	0	29	0	0	0	0	1	0	84	107	0	20	101	0	453
4:45 P	3	122	0	30	0	0	0	0	3	0	75	106	4	30	111	0	474
5:00 P	3	101	0	35	0	0	0	0	0	0	84	114	2	27	108	0	469
5:15 P	2	97	0	28	0	0	0	0	1	0	78	101	1	28	105	0	437
5:30 P	2	104	0	34	0	0	0	0	0	0	65	138	0	30	117	0	488
5:45 P	0	88	0	24	0	0	0	0	1	0	77	103	0	13	106	0	411
6:00 P	0	92	0	41	0	0	0	0	1	0	79	115	0	22	85	0	434
6:15 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 P	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	18	817	0	248	0	0	0	0	11	0	622	876	10	205	820	0	3588
	Peak Hour: 4:30 PM to 5:30 PM																
Total	10	424	0	127	0	0	0	0	4	0	302	459	7	115	441	0	1868
Approach	551				0				761				556				1868
%HV	1.8%				n/a				0.5%				1.3%				1.1%
PHF	0.91				n/a				0.94				0.95				0.96



1952 *1.0 PHF Peak Hour Volume*

		PHF	%HV
	EB	0.95	1.3%
Check	WB	0.94	0.5%
In: 1868	NB	n/a	n/a
Out: 1868	SB	0.91	1.8%
	T Int.	0.96	1.1%

Conditions:

PEDs Across:

	N	S	E	W	
INT 01				1	1
INT 02					0
INT 03					0
INT 04					0
INT 05					0
INT 06		1		2	3
INT 07					0
INT 08					0
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	0	1	0	3	4

Special Notes

Bicycles From:

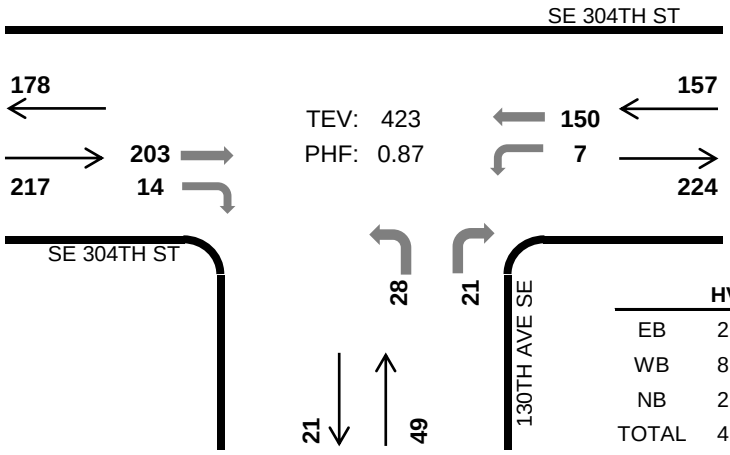
	N	S	E	W	
INT 01	1				1
INT 02					0
INT 03					0
INT 04			1		1
INT 05					0
INT 06				1	1
INT 07					0
INT 08				1	1
INT 09					0
INT 10					0
INT 11					0
INT 12					0
	1	0	1	2	4

130TH AVE SE
SE 304TH ST

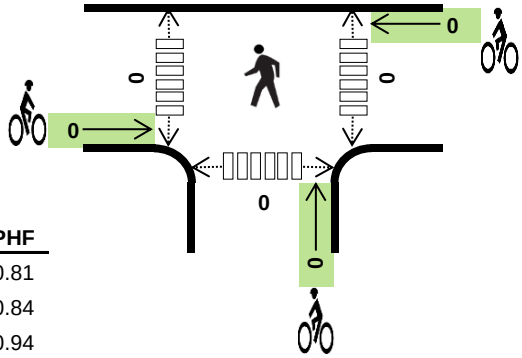
N

Peak Hour

Date: Wed, Mar 12, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	2.8%	0.81
WB	8.3%	0.84
NB	2.0%	0.94
TOTAL	4.7%	0.87



Two-Hour Count Summaries

Interval Start	SE 304TH ST Eastbound			SE 304TH ST Westbound			130TH AVE SE Northbound			130TH AVE SE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**45**	**7**	**3**	**28**	**0**	**10**	**0**	**3**	**0**	**0**	**0**	**96**	
7:15 AM	**0**	**65**	**2**	**1**	**43**	**0**	**6**	**0**	**5**	**0**	**0**	**0**	**122**	
7:30 AM	**0**	**50**	**5**	**1**	**34**	**0**	**7**	**0**	**5**	**0**	**0**	**0**	**102**	
7:45 AM	**0**	**43**	**0**	**2**	**45**	**0**	**5**	**0**	**8**	**0**	**0**	**0**	**103**	**423**
8:00 AM	0	38	0	1	40	0	10	0	3	0	0	0	92	419
8:15 AM	0	38	2	4	28	0	5	0	2	0	0	0	79	376
8:30 AM	0	48	9	1	27	0	7	0	3	0	0	0	95	369
8:45 AM	0	43	0	4	24	0	6	0	11	0	0	0	88	354
Count Total	0	370	25	17	269	0	56	0	40	0	0	0	777	
Peak Hr	**0**	**203**	**14**	**7**	**150**	**0**	**28**	**0**	**21**	**0**	**0**	**0**	**423**	

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**	**6**	**0**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:15 AM	**2**	**2**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:30 AM	**0**	**2**	**1**	**0**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:45 AM	**3**	**3**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	1	6	0	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	4	2	1	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	5	3	0	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	4	0	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	20	24	2	0	*46*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hr	**6**	**13**	**1**	**0**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

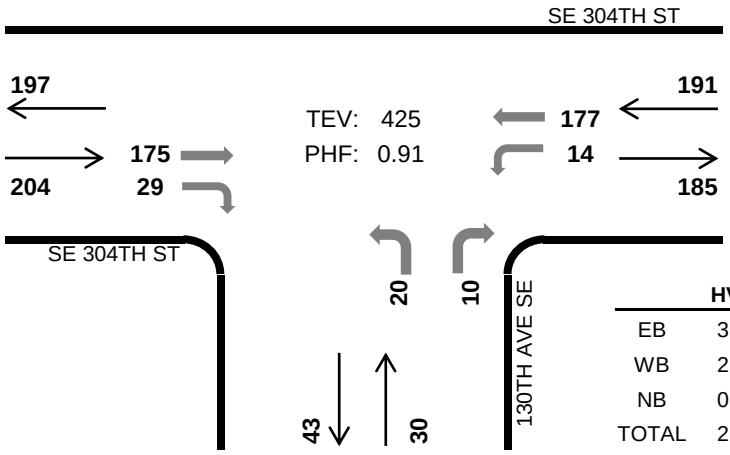
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

130TH AVE SE
SE 304TH ST

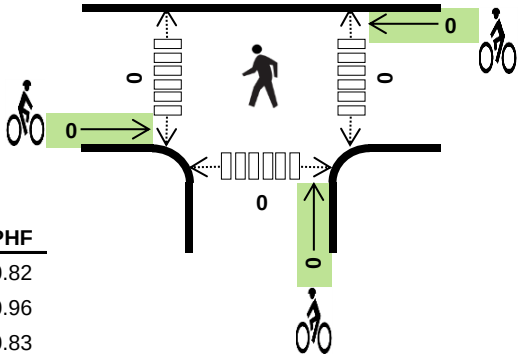
N

Peak Hour

Date: Thu, Mar 06, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:00 PM to 5:00 PM



	HV %:	PHF
EB	3.4%	0.82
WB	2.1%	0.96
NB	0.0%	0.83
TOTAL	2.6%	0.91



Two-Hour Count Summaries

Interval Start	SE 304TH ST Eastbound			SE 304TH ST Westbound			130TH AVE SE Northbound			130TH AVE SE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	**0**	**51**	**11**	**7**	**43**	**0**	**4**	**0**	**1**	**0**	**0**	**0**	**117**	
4:15 PM	**0**	**40**	**7**	**2**	**48**	**0**	**6**	**0**	**3**	**0**	**0**	**0**	**106**	
4:30 PM	**0**	**46**	**8**	**3**	**43**	**0**	**4**	**0**	**3**	**0**	**0**	**0**	**107**	
4:45 PM	**0**	**38**	**3**	**2**	**43**	**0**	**6**	**0**	**3**	**0**	**0**	**0**	**95**	**425**
5:00 PM	0	27	8	2	47	0	3	0	1	0	0	0	88	396
5:15 PM	0	39	8	5	50	0	5	0	2	0	0	0	109	399
5:30 PM	0	49	7	6	44	0	1	0	4	0	0	0	111	403
5:45 PM	0	38	11	6	44	0	2	0	6	0	0	0	107	415
Count Total	0	328	63	33	362	0	31	0	23	0	0	0	840	
Peak Hr	**0**	**175**	**29**	**14**	**177**	**0**	**20**	**0**	**10**	**0**	**0**	**0**	**425**	

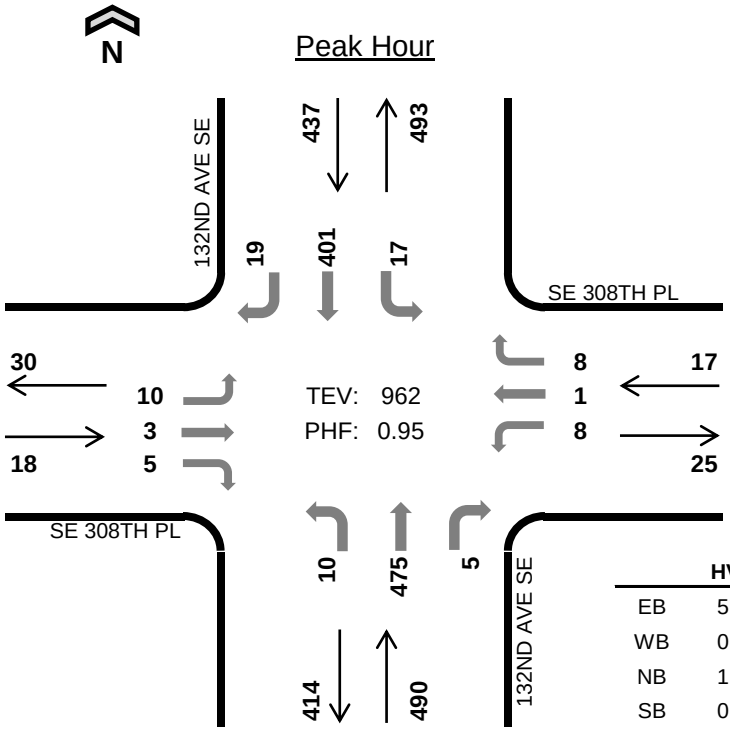
Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

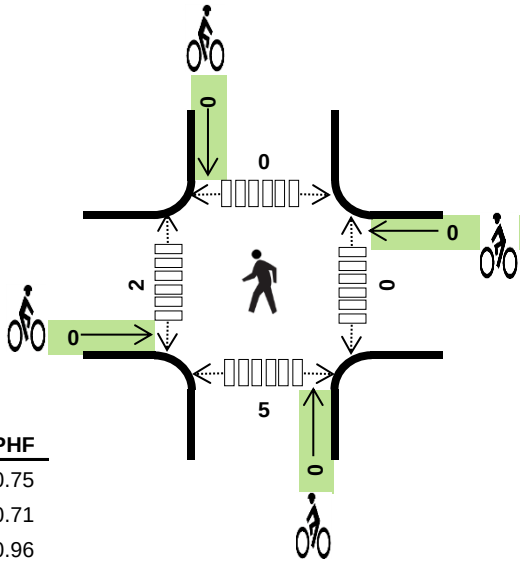
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:15 PM	**2**	**3**	**0**	**0**	***5***	**0**	**0**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

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

132ND AVE SE
SE 308TH PL

Date: Thu, Mar 06, 2014
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	5.6%	0.75
WB	0.0%	0.71
NB	1.2%	0.96
SB	0.9%	0.94
TOTAL	1.1%	0.95

Two-Hour Count Summaries

Interval Start	SE 308TH PL Eastbound			SE 308TH PL Westbound			132ND AVE SE Northbound			132ND AVE SE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	4	1	1	1	2	3	1	123	5	2	80	4	227	
4:15 PM	0	0	0	2	0	0	1	100	0	0	100	4	207	
4:30 PM	**3**	**1**	**1**	**1**	**0**	**2**	**4**	**116**	**1**	**2**	**104**	**3**	**238**	
4:45 PM	**2**	**1**	**0**	**3**	**1**	**2**	**0**	**127**	**1**	**4**	**105**	**7**	**253**	925
5:00 PM	**2**	**1**	**1**	**2**	**0**	**1**	**2**	**123**	**2**	**5**	**103**	**5**	**247**	945
5:15 PM	**3**	**0**	**3**	**2**	**0**	**3**	**4**	**109**	**1**	**6**	**89**	**4**	**224**	**962**
5:30 PM	3	2	6	2	0	1	2	93	2	1	93	4	209	933
5:45 PM	1	2	3	3	1	1	5	98	1	7	115	5	242	922
Count Total	18	8	15	16	4	13	19	889	13	27	789	36	1,847	
Peak Hr	**10**	**3**	**5**	**8**	**1**	**8**	**10**	**475**	**5**	**17**	**401**	**19**	**962**	

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	4	2	*6*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	0	3	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:45 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***
5:00 PM	**0**	**0**	**2**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**5**	***5***
5:15 PM	**1**	**0**	**1**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***
5:30 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	0	14	8	*23*	0	0	0	0	*0*	0	2	0	5	*7*
Peak Hr	**1**	**0**	**6**	**4**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**5**	***7***

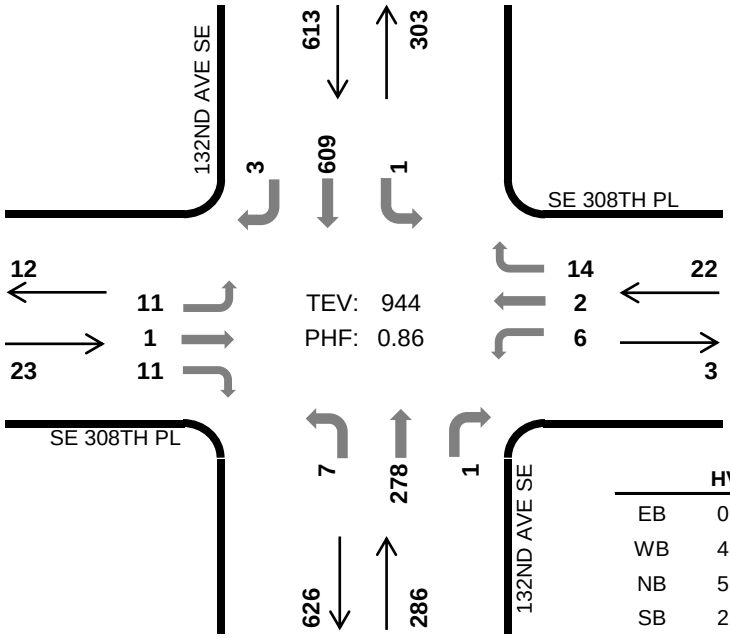
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

132ND AVE SE
SE 308TH PL

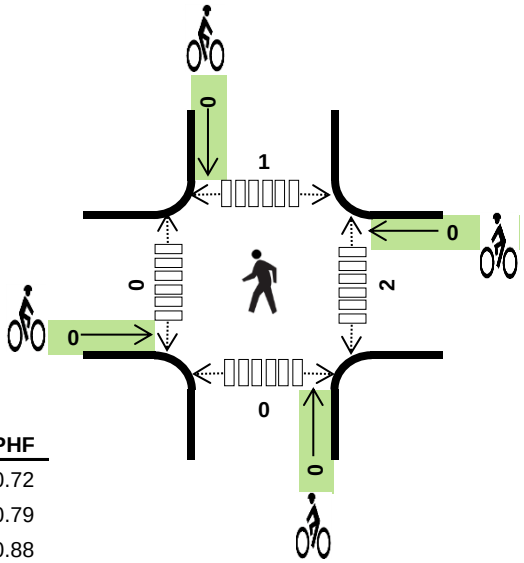
Date: Wed, Mar 12, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM

N

Peak Hour



	HV %:	PHF
EB	0.0%	0.72
WB	4.5%	0.79
NB	5.9%	0.88
SB	2.6%	0.83
TOTAL	3.6%	0.86



Two-Hour Count Summaries

Interval Start	SE 308TH PL Eastbound			SE 308TH PL Westbound			132ND AVE SE Northbound			132ND AVE SE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**3**	**0**	**5**	**3**	**0**	**3**	**2**	**64**	**0**	**0**	**115**	**0**	**195**	
7:15 AM	**3**	**1**	**2**	**2**	**1**	**4**	**1**	**63**	**1**	**0**	**135**	**1**	**214**	
7:30 AM	**2**	**0**	**1**	**0**	**1**	**5**	**2**	**79**	**0**	**0**	**184**	**0**	**274**	
7:45 AM	**3**	**0**	**3**	**1**	**0**	**2**	**2**	**72**	**0**	**1**	**175**	**2**	**261**	**944**
8:00 AM	3	0	2	0	0	3	1	61	0	1	109	3	183	932
8:15 AM	5	0	3	1	0	4	1	66	0	1	69	1	151	869
8:30 AM	4	0	6	1	2	0	0	68	2	1	104	2	190	785
8:45 AM	3	0	0	1	0	6	0	105	1	1	99	0	216	740
Count Total	26	1	22	9	4	27	9	578	4	5	990	9	1,684	
Peak Hr	**11**	**1**	**11**	**6**	**2**	**14**	**7**	**278**	**1**	**1**	**609**	**3**	**944**	

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

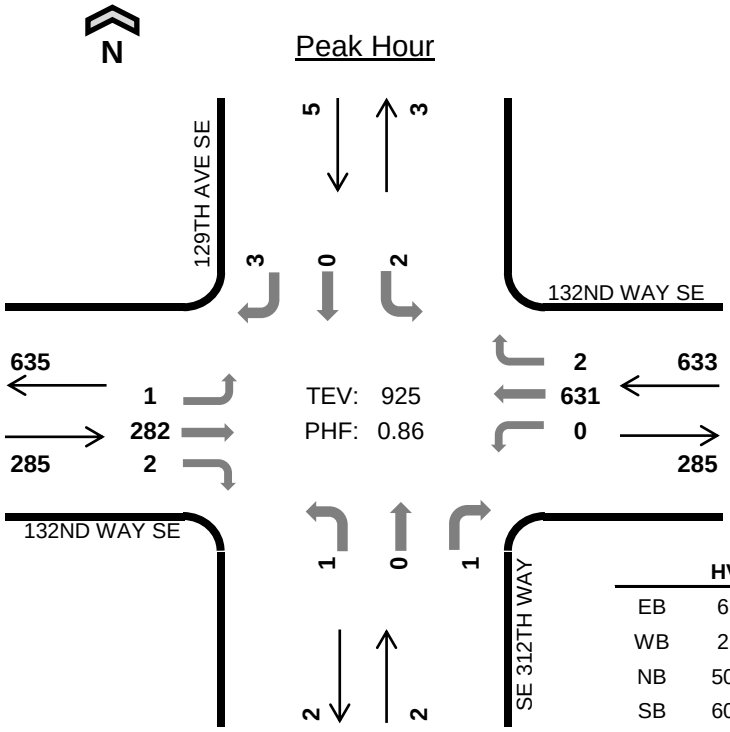
Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	**0**	**1**	**4**	**3**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:15 AM	**0**	**0**	**8**	**1**	***9***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**1**	**0**	***3***
7:30 AM	**0**	**0**	**1**	**4**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:45 AM	**0**	**0**	**4**	**8**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	0	0	5	8	*13*	0	0	0	1	*1*	0	0	0	0	*0*
8:15 AM	1	0	4	3	*8*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	0	5	5	*10*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	0	9	5	*14*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	1	40	37	*79*	0	0	0	1	*1*	2	0	1	0	*3*
Peak Hr	**0**	**1**	**17**	**16**	***34***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**1**	**0**	***3***

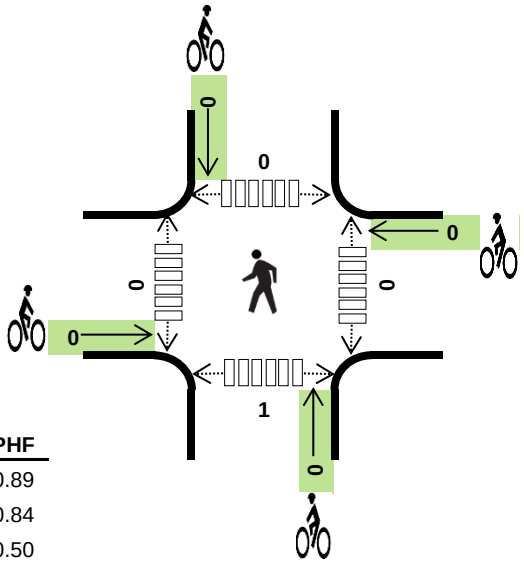
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

129TH AVE SE
132ND WAY SE

Date: Wed, Mar 12, 2014
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM

Peak Hour





	HV %:	PHF
EB	6.3%	0.89
WB	2.7%	0.84
NB	50.0%	0.50
SB	60.0%	0.63
TOTAL	4.2%	0.86

Two-Hour Count Summaries

Interval Start	132ND WAY SE Eastbound			132ND WAY SE Westbound			SE 312TH WAY Northbound			129TH AVE SE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**67**	**1**	**0**	**118**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**188**	
7:15 AM	**0**	**65**	**0**	**0**	**143**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**210**	
7:30 AM	**0**	**80**	**0**	**0**	**188**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**270**	
7:45 AM	**1**	**70**	**1**	**0**	**182**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**257**	**925**
8:00 AM	0	62	0	0	110	0	0	0	0	0	0	0	172	909
8:15 AM	0	69	2	0	71	0	0	0	0	0	0	0	142	841
8:30 AM	0	71	0	0	117	0	1	0	0	0	0	0	189	760
8:45 AM	0	110	0	0	105	0	1	0	0	0	0	0	216	719
Count Total	1	594	4	0	1,034	2	3	0	1	2	0	3	1,644	
Peak Hr	**1**	**282**	**2**	**0**	**631**	**2**	**1**	**0**	**1**	**2**	**0**	**3**	**925**	

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**	**4**	**0**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
7:15 AM	**7**	**1**	**0**	**1**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:30 AM	**1**	**4**	**0**	**1**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:45 AM	**5**	**8**	**1**	**1**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	5	7	0	0	*12*	0	1	0	0	*1*	0	0	0	0	*0*
8:15 AM	4	3	0	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	5	5	0	0	*10*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	10	7	0	0	*17*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	42	39	1	3	*85*	0	1	0	0	*1*	0	0	0	1	*1*
Peak Hr	**18**	**17**	**1**	**3**	***39***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***

Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

Attachment 2
Intersection LOS Summaries

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	175	30	260	15	15	345
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	200	0	250
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	4	5	5	2	2
Mvmt Flow	190	33	283	16	16	375

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	283	0	-	0	696	283
Stage 1	-	-	-	-	283	-
Stage 2	-	-	-	-	413	-
Critical Hdwy	4.14	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.236	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1268	-	-	-	408	756
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	668	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1268	-	-	-	347	756
Mov Cap-2 Maneuver	-	-	-	-	347	-
Stage 1	-	-	-	-	765	-
Stage 2	-	-	-	-	568	-

Approach	EB	WB	SB
HCM Control Delay, s	7.1	0	14.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1268	-	-	-	347	756
HCM Lane V/C Ratio	0.15	-	-	-	0.047	0.496
HCM Control Delay (s)	8.3	-	-	-	15.9	14.4
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.5	-	-	-	0.1	2.8

Intersection	
Int Delay, s/veh	6.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	195	490	45	540	0	0	0	0	6	6	275
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	420	160	-	-	-	-	-	-	-	200
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, %	3	3	3	3	3	3	2	2	2	2	2	2
Mvmt Flow	0	212	533	49	587	0	0	0	0	7	7	299

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	587	0	-	212	0	0	897	897	587
Stage 1	-	-	-	-	-	-	685	685	-
Stage 2	-	-	-	-	-	-	212	212	-
Critical Hdwy	4.13	-	-	4.13	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	983	-	0	1352	-	-	310	279	510
Stage 1	-	-	0	-	-	-	500	448	-
Stage 2	-	-	0	-	-	-	823	727	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	983	-	-	1352	-	-	299	0	510
Mov Cap-2 Maneuver	-	-	-	-	-	-	299	0	-
Stage 1	-	-	-	-	-	-	482	0	-
Stage 2	-	-	-	-	-	-	823	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.6	21.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	983	-	1352	-	-	299	510
HCM Lane V/C Ratio	-	-	0.036	-	-	0.044	0.586
HCM Control Delay (s)	0	-	7.8	-	-	17.6	21.6
HCM Lane LOS	A	-	A	-	-	C	C
HCM 95th %tile Q(veh)	0	-	0.1	-	-	0.1	3.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	100	230	515	325	470	140
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1863	1863	1863	1863
Adj Flow Rate, veh/h	110	253	566	357	516	154
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	299	922	682	580	605	540
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.50	0.37	0.37	0.34	0.34
Ln Grp Delay, s/veh	11.8	7.5	21.5	14.8	23.7	12.8
Ln Grp LOS	B	A	C	B	C	B
Approach Vol, veh/h		363	923		670	
Approach Delay, s/veh		8.8	18.9		21.2	
Approach LOS		A	B		C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			1.2	7.0
Phs Duration (G+Y+Rc), s	21.7			30.2			7.2	23.0
Change Period (Y+Rc), s	4.0			4.0			4.0	4.0
Max Green (Gmax), s	22.0			30.0			4.0	22.0
Max Allow Headway (MAH), s	4.4			4.3			4.3	4.3
Max Q Clear (g_c+l1), s	16.0			6.1			3.9	16.3
Green Ext Time (g_e), s	1.7			5.5			0.0	2.7
Prob of Phs Call (p_c)	1.00			1.00			0.79	1.00
Prob of Max Out (p_x)	0.67			0.06			1.00	0.83

Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1774						1740	0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			1827				1863

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1583			0				1583

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Pr/Pm)	
Lanes in Grp	1	0	0	0	0	0	1	0

Grp Vol (v), veh/h	516	0	0	0	0	0	110	0
Grp Sat Flow (s), veh/h/ln	1774	0	0	0	0	0	1740	0
Q Serve Time (g_s), s	14.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0
Cycle Q Clear Time (g_c), s	14.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1774	0	0	0	0	0	592	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	21.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	4.7	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	605	0	0	0	0	0	299	0
V/C Ratio (X)	0.85	0.00	0.00	0.00	0.00	0.00	0.37	0.00
Avail Cap (c_a), veh/h	753	0	0	0	0	0	326	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	15.9	0.0	0.0	0.0	0.0	0.0	11.1	0.0
Incr Delay (d2), s/veh	7.8	0.0	0.0	0.0	0.0	0.0	0.8	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	23.7	0.0	0.0	0.0	0.0	0.0	11.8	0.0
1st-Term Q (Q1), veh/ln	6.7	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	1.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	8.1	0.0	0.0	0.0	0.0	0.0	0.9	0.0
%ile Storage Ratio (RQ%)	0.22	0.00	0.00	0.00	0.00	0.00	0.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	253	0	0	0	566
Grp Sat Flow (s), veh/h/ln	0	0	0	1827	0	0	0	1863
Q Serve Time (g_s), s	0.0	0.0	0.0	4.1	0.0	0.0	0.0	14.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	4.1	0.0	0.0	0.0	14.3
Lane Grp Cap (c), veh/h	0	0	0	922	0	0	0	682
V/C Ratio (X)	0.00	0.00	0.00	0.27	0.00	0.00	0.00	0.83
Avail Cap (c_a), veh/h	0	0	0	1057	0	0	0	790
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	7.4	0.0	0.0	0.0	15.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	6.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	7.5	0.0	0.0	0.0	21.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.0	0.0	0.0	0.0	7.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.1	0.0	0.0	0.0	8.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	154	0	0	0	0	0	0	357
Grp Sat Flow (s), veh/h/ln	1583	0	0	0	0	0	0	1583
Q Serve Time (g_s), s	3.7	0.0	0.0	0.0	0.0	0.0	0.0	9.6
Cycle Q Clear Time (g_c), s	3.7	0.0	0.0	0.0	0.0	0.0	0.0	9.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	540	0	0	0	0	0	0	580
V/C Ratio (X)	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.62
Avail Cap (c_a), veh/h	672	0	0	0	0	0	0	672
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	12.5	0.0	0.0	0.0	0.0	0.0	0.0	13.4
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	12.8	0.0	0.0	0.0	0.0	0.0	0.0	14.8
1st-Term Q (Q1), veh/ln	3.6	0.0	0.0	0.0	0.0	0.0	0.0	4.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	3.7	0.0	0.0	0.0	0.0	0.0	0.0	4.4
%ile Storage Ratio (RQ%)	0.25	0.00	0.00	0.00	0.00	0.00	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		17.8						
HCM 2010 LOS		B						

Intersection	
Intersection Delay, s/veh	0.0
Intersection LOS	-

Approach	EB	WB	NB	SB
Entry Lanes	0	0	0	0
Conflicting Circle Lanes	1	1	1	1
Adj Approach Flow, veh/h	0	0	0	0
Demand Flow Rate, veh/h	0	0	0	0
Vehicles Circulating, veh/h	397	500	342	279
Vehicles Exiting, veh/h	316	176	447	513
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	0.0	0.0	0.0	0.0
Approach LOS	-	-	-	-

Lane
Designated Moves
Assumed Moves
RT Channelized
Lane Util
Critical Headway, s
Entry Flow, veh/h
Cap Entry Lane, veh/h
Entry HV Adj Factor
Flow Entry, veh/h
Cap Entry, veh/h
V/C Ratio
Control Delay, s/veh
LOS
95th %tile Queue, veh

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	65	135	95	480	190	40	75	155	145	35	310	80
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1863	1863	1863	1827	1827	1827	1863	1863	1863
Adj Flow Rate, veh/h	74	153	108	545	216	45	85	176	165	40	352	91
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	2	2	2	4	4	4	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	114	203	144	583	870	739	230	471	401	305	417	354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.20	0.19	0.33	0.47	0.47	0.06	0.26	0.26	0.03	0.22	0.22
Ln Grp Delay, s/veh	46.4	0.0	47.2	51.3	14.9	13.1	25.6	27.4	27.9	26.3	46.2	28.6
Ln Grp LOS	D		D	D	B	B	C	C	C	C	D	C
Approach Vol, veh/h		335			806			426			483	
Approach Delay, s/veh		47.0			39.4			27.2			41.2	
Approach LOS		D			D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	1.1	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	33.0	22.0	9.5	23.7	9.8	45.2	6.5	26.8
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0
Max Green (Gmax), s	28.0	17.0	5.0	20.0	8.0	37.0	4.0	22.0
Max Allow Headway (MAH), s	4.3	4.3	4.4	4.4	4.3	4.3	4.4	4.4
Max Q Clear (g_c+l1), s	28.3	14.7	5.2	18.0	5.7	8.2	3.5	9.8
Green Ext Time (g_e), s	0.0	0.5	0.0	0.8	0.0	2.1	0.0	2.8
Prob of Phs Call (p_c)	1.00	1.00	0.88	1.00	0.84	1.00	0.63	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.16

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1774		1740		1740		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		998		1863		1863		1827

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		705		1583		1583		1553

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Prot)		(Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0

Grp Vol (v), veh/h	545	0	85	0	74	0	40	0
Grp Sat Flow (s), veh/h/ln	1774	0	1740	0	1740	0	1774	0
Q Serve Time (g_s), s	26.3	0.0	3.2	0.0	3.7	0.0	1.5	0.0
Cycle Q Clear Time (g_c), s	26.3	0.0	3.2	0.0	3.7	0.0	1.5	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	925	0	0	0	1035	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	20.8	0.0	0.0	0.0	18.7	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	3.8	0.0	0.0	0.0	14.8	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	1.7	0.0	0.0	0.0	0.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	583	0	230	0	114	0	305	0
V/C Ratio (X)	0.94	0.00	0.37	0.00	0.65	0.00	0.13	0.00
Avail Cap (c_a), veh/h	583	0	239	0	177	0	336	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	28.7	0.0	24.7	0.0	40.3	0.0	26.1	0.0
Incr Delay (d2), s/veh	22.6	0.0	1.0	0.0	6.1	0.0	0.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	51.3	0.0	25.6	0.0	46.4	0.0	26.3	0.0
1st-Term Q (Q1), veh/ln	12.9	0.0	1.5	0.0	1.8	0.0	0.8	0.0
2nd-Term Q (Q2), veh/ln	3.7	0.0	0.1	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	16.5	0.0	1.6	0.0	2.0	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	1.68	0.00	0.41	0.00	0.56	0.00	0.19	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	352	0	216	0	176
Grp Sat Flow (s), veh/h/ln	0	0	0	1863	0	1863	0	1827
Q Serve Time (g_s), s	0.0	0.0	0.0	16.0	0.0	6.2	0.0	7.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	16.0	0.0	6.2	0.0	7.0
Lane Grp Cap (c), veh/h	0	0	0	417	0	870	0	471
V/C Ratio (X)	0.00	0.00	0.00	0.84	0.00	0.25	0.00	0.37
Avail Cap (c_a), veh/h	0	0	0	443	0	870	0	476
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	32.8	0.0	14.2	0.0	26.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	13.4	0.0	0.7	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
Control Delay (d), s/veh	0.0	0.0	0.0	46.2	0.0	14.9	0.0	27.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.2	0.0	3.2	0.0	3.5
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.5	0.0	0.2	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	9.8	0.0	3.3	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.07	0.00	0.05	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	261	0	91	0	45	0	165
Grp Sat Flow (s), veh/h/ln	0	1703	0	1583	0	1583	0	1553
Q Serve Time (g_s), s	0.0	12.7	0.0	4.2	0.0	1.4	0.0	7.8
Cycle Q Clear Time (g_c), s	0.0	12.7	0.0	4.2	0.0	1.4	0.0	7.8
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.41	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	347	0	354	0	739	0	401
V/C Ratio (X)	0.00	0.75	0.00	0.26	0.00	0.06	0.00	0.41
Avail Cap (c_a), veh/h	0	347	0	377	0	739	0	405
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	33.2	0.0	28.2	0.0	12.9	0.0	27.2
Incr Delay (d2), s/veh	0.0	14.0	0.0	0.4	0.0	0.2	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	47.2	0.0	28.6	0.0	13.1	0.0	27.9
1st-Term Q (Q1), veh/ln	0.0	6.0	0.0	1.8	0.0	0.6	0.0	3.3
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.3	0.0	1.9	0.0	0.6	0.0	3.4
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.79	0.00	0.13	0.00	0.27
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		38.6						
HCM 2010 LOS		D						

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	260	300	4	370	190	5
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1900	1863	1863	1900
Adj Flow Rate, veh/h	283	326	4	402	207	5
Adj No. of Lanes	1	0	0	1	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	361	416	84	847	622	15
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.46	0.46	0.46	0.46	0.36	0.36
Ln Grp Delay, s/veh	0.0	13.3	8.7	0.0	11.6	0.0
Ln Grp LOS		B	A		B	
Approach Vol, veh/h	609			406	213	
Approach Delay, s/veh	13.3			8.7	11.6	
Approach LOS	B			A	B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Case No		12.0		8.0				8.0
Phs Duration (G+Y+Rc), s		20.0		24.2				24.2
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green (Gmax), s		16.0		26.0				26.0
Max Allow Headway (MAH), s		3.8		5.2				5.2
Max Q Clear (g_c+l1), s		5.9		15.4				8.7
Green Ext Time (g_e), s		0.4		4.8				6.4
Prob of Phs Call (p_c)		1.00		1.00				1.00
Prob of Max Out (p_x)		0.00		0.57				0.28
Left-Turn Movement Data								
Assigned Mvmt		5		7				3
Mvmt Sat Flow, veh/h		1720		0				4
Through Movement Data								
Assigned Mvmt		2		4				8
Mvmt Sat Flow, veh/h		8		791				1854
Right-Turn Movement Data								
Assigned Mvmt		12		14				18
Mvmt Sat Flow, veh/h		42		911				0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	0	0	3
Lane Assignment		L+T+R						L+T
Lanes in Grp	0	1	0	0	0	0	0	1

Grp Vol (v), veh/h	0	213	0	0	0	0	0	406
Grp Sat Flow (s), veh/h/ln	0	1769	0	0	0	0	0	1858
Q Serve Time (g_s), s	0.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	3.9	0.0	0.0	0.0	0.0	0.0	6.7
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	825
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.8
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	20.2	0.0	0.0	0.0	15.8
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7
Prop LT Inside Lane (P_L)	0.00	0.97	0.00	0.00	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	640	0	0	0	0	0	931
V/C Ratio (X)	0.00	0.33	0.00	0.00	0.00	0.00	0.00	0.44
Avail Cap (c_a), veh/h	0	640	0	0	0	0	0	1172
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.2	0.0	0.0	0.0	0.0	0.0	8.3
Incr Delay (d2), s/veh	0.0	1.4	0.0	0.0	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	11.6	0.0	0.0	0.0	0.0	0.0	8.7
1st-Term Q (Q1), veh/ln	0.0	1.9	0.0	0.0	0.0	0.0	0.0	3.4
2nd-Term Q (Q2), veh/ln	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.1	0.0	0.0	0.0	0.0	0.0	3.5
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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

Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	609	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1702	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	13.4	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.02	0.00	0.54	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	778	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.78	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	1001	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.1	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	13.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.1	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	6.8	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	11.5
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	4.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	270	25	65	370	80	100
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	307	28	74	420	91	114

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	335	0	889	321
Stage 1	-	-	-	-	321	-
Stage 2	-	-	-	-	568	-
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	-	-	1224	-	314	720
Stage 1	-	-	-	-	735	-
Stage 2	-	-	-	-	567	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1224	-	289	720
Mov Cap-2 Maneuver	-	-	-	-	289	-
Stage 1	-	-	-	-	735	-
Stage 2	-	-	-	-	522	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	20.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	433	-	-	1224	-
HCM Lane V/C Ratio	0.472	-	-	0.06	-
HCM Control Delay (s)	20.5	-	-	8.1	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2.5	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	1	10	5	2	15	7	280	1	1	610	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	4	4	4	6	6	6	3	3	3
Mvmt Flow	12	1	12	6	2	17	8	326	1	1	709	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1065	1056	711	1062	1057	326	713	0	0	327	0	0
Stage 1	713	713	-	342	342	-	-	-	-	-	-	-
Stage 2	352	343	-	720	715	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.14	6.54	6.24	4.16	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.536	4.036	3.336	2.254	-	-	2.227	-	-
Pot Cap-1 Maneuver	202	227	436	200	223	711	869	-	-	1227	-	-
Stage 1	426	438	-	669	634	-	-	-	-	-	-	-
Stage 2	669	641	-	416	432	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	194	225	436	192	221	711	869	-	-	1227	-	-
Mov Cap-2 Maneuver	194	225	-	192	221	-	-	-	-	-	-	-
Stage 1	422	438	-	663	628	-	-	-	-	-	-	-
Stage 2	644	635	-	404	432	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.9	14.8	0.2	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	869	-	-	266	392	1227	-	-
HCM Lane V/C Ratio	0.009	-	-	0.092	0.065	0.001	-	-
HCM Control Delay (s)	9.2	-	-	19.9	14.8	7.9	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	205	15	7	150	0	30	0	20	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	8	8	8	2	2	2	2	2	2
Mvmt Flow	0	236	17	8	172	0	34	0	23	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	172	0	0	253	0	0	433	433	244
Stage 1	-	-	-	-	-	-	244	244	-
Stage 2	-	-	-	-	-	-	189	189	-
Critical Hdwy	4.13	-	-	4.18	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.227	-	-	2.272	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1399	-	-	1278	-	-	580	516	795
Stage 1	-	-	-	-	-	-	797	704	-
Stage 2	-	-	-	-	-	-	843	744	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1399	-	-	1278	-	-	576	0	795
Mov Cap-2 Maneuver	-	-	-	-	-	-	576	0	-
Stage 1	-	-	-	-	-	-	797	0	-
Stage 2	-	-	-	-	-	-	837	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	576	795	1399	-	-	1278	-	-
HCM Lane V/C Ratio	0.06	0.029	-	-	-	0.006	-	-
HCM Control Delay (s)	11.6	9.7	0	-	-	7.8	0	-
HCM Lane LOS	B	A	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0	-	-

Intersection	
Int Delay, s/veh	4.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	60	160	90	330	445	80
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	115	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	67	178	100	367	494	89

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1106	539	583	0	-	0
Stage 1	539	-	-	-	-	-
Stage 2	567	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	233	542	991	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	209	542	991	-	-	-
Mov Cap-2 Maneuver	344	-	-	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	511	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	20.8	1.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	991	-	468	-	-
HCM Lane V/C Ratio	0.101	-	0.522	-	-
HCM Control Delay (s)	9	-	20.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.3	-	3	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	280	2	0	630	2	1	0	1	2	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	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	1	326	2	0	733	2	1	0	1	2	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	735	0	0	328	0	0	1064	1064	327	1064	1064	734
Stage 1	-	-	-	-	-	-	329	329	-	734	734	-
Stage 2	-	-	-	-	-	-	735	735	-	330	330	-
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	870	-	-	1232	-	-	201	223	714	201	223	420
Stage 1	-	-	-	-	-	-	684	646	-	412	426	-
Stage 2	-	-	-	-	-	-	411	425	-	683	646	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	870	-	-	1232	-	-	199	223	714	201	223	420
Mov Cap-2 Maneuver	-	-	-	-	-	-	199	223	-	201	223	-
Stage 1	-	-	-	-	-	-	683	645	-	412	426	-
Stage 2	-	-	-	-	-	-	408	425	-	681	645	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	16.7	17.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	311	870	-	-	1232	-	-	293
HCM Lane V/C Ratio	0.007	0.001	-	-	-	-	-	0.02
HCM Control Delay (s)	16.7	9.1	0	-	0	-	-	17.5
HCM Lane LOS	C	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	8.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	230	135	145	30	45	455
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	200	0	250
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	4	5	5	2	2
Mvmt Flow	242	142	153	32	47	479

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	153	0	-	0	779	153
Stage 1	-	-	-	-	153	-
Stage 2	-	-	-	-	626	-
Critical Hdwy	4.14	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.236	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1415	-	-	-	364	893
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	533	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1415	-	-	-	302	893
Mov Cap-2 Maneuver	-	-	-	-	302	-
Stage 1	-	-	-	-	875	-
Stage 2	-	-	-	-	442	-

Approach	EB	WB	SB
HCM Control Delay, s	5.1	0	14.1
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1415	-	-	-	302	893
HCM Lane V/C Ratio	0.171	-	-	-	0.157	0.536
HCM Control Delay (s)	8.1	-	-	-	19.1	13.6
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.6	-	-	-	0.5	3.3

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	330	510	50	550	0	0	0	0	40	0	260
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	420	160	-	-	-	-	-	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	92	92	92	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	2	2	2	2	2	2
Mvmt Flow	0	347	537	53	579	0	0	0	0	42	0	274

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	579	0	-	347	0	0	1031	1031	579
Stage 1	-	-	-	-	-	-	684	684	-
Stage 2	-	-	-	-	-	-	347	347	-
Critical Hdwy	4.13	-	-	4.13	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	990	-	0	1206	-	-	258	233	515
Stage 1	-	-	0	-	-	-	501	449	-
Stage 2	-	-	0	-	-	-	716	635	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	990	-	-	1206	-	-	247	0	515
Mov Cap-2 Maneuver	-	-	-	-	-	-	247	0	-
Stage 1	-	-	-	-	-	-	479	0	-
Stage 2	-	-	-	-	-	-	716	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.7	20
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	990	-	1206	-	-	247	515
HCM Lane V/C Ratio	-	-	0.044	-	-	0.17	0.531
HCM Control Delay (s)	0	-	8.1	-	-	22.5	19.6
HCM Lane LOS	A	-	A	-	-	C	C
HCM 95th %tile Q(veh)	0	-	0.1	-	-	0.6	3.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	115	440	300	460	425	125
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1863	1863
Adj Flow Rate, veh/h	120	458	312	479	443	130
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	441	959	656	557	545	487
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.51	0.35	0.35	0.31	0.31
Ln Grp Delay, s/veh	7.9	7.3	11.7	25.2	19.2	11.7
Ln Grp LOS	A	A	B	C	B	B
Approach Vol, veh/h		578	791		573	
Approach Delay, s/veh		7.4	19.9		17.5	
Approach LOS		A	B		B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			1.2	7.0
Phs Duration (G+Y+Rc), s	17.5			26.3			7.1	19.3
Change Period (Y+Rc), s	4.0			4.0			4.0	4.0
Max Green (Gmax), s	18.0			24.0			4.0	16.0
Max Allow Headway (MAH), s	4.4			4.3			4.3	4.3
Max Q Clear (g_c+l1), s	12.1			8.9			3.7	14.2
Green Ext Time (g_e), s	1.4			5.1			0.0	1.1
Prob of Phs Call (p_c)	1.00			1.00			0.77	1.00
Prob of Max Out (p_x)	0.64			0.26			1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1774						1792	0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			1881				1881

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1583			0				1599

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Pr/Pm)	
Lanes in Grp	1	0	0	0	0	0	1	0

Grp Vol (v), veh/h	443	0	0	0	0	0	120	0
Grp Sat Flow (s), veh/h/ln	1774	0	0	0	0	0	1792	0
Q Serve Time (g_s), s	10.1	0.0	0.0	0.0	0.0	0.0	1.7	0.0
Cycle Q Clear Time (g_c), s	10.1	0.0	0.0	0.0	0.0	0.0	1.7	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1774	0	0	0	0	0	689	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	17.3	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	9.6	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.3
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	545	0	0	0	0	0	441	0
V/C Ratio (X)	0.81	0.00	0.00	0.00	0.00	0.00	0.27	0.00
Avail Cap (c_a), veh/h	729	0	0	0	0	0	479	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	14.0	0.0	0.0	0.0	0.0	0.0	7.6	0.0
Incr Delay (d2), s/veh	5.2	0.0	0.0	0.0	0.0	0.0	0.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	19.2	0.0	0.0	0.0	0.0	0.0	7.9	0.0
1st-Term Q (Q1), veh/ln	4.9	0.0	0.0	0.0	0.0	0.0	0.8	0.0
2nd-Term Q (Q2), veh/ln	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	5.7	0.0	0.0	0.0	0.0	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	0.15	0.00	0.00	0.00	0.00	0.00	0.09	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	458	0	0	0	312
Grp Sat Flow (s), veh/h/ln	0	0	0	1881	0	0	0	1881
Q Serve Time (g_s), s	0.0	0.0	0.0	6.9	0.0	0.0	0.0	5.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	6.9	0.0	0.0	0.0	5.7
Lane Grp Cap (c), veh/h	0	0	0	959	0	0	0	656
V/C Ratio (X)	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.48
Avail Cap (c_a), veh/h	0	0	0	1031	0	0	0	687
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	7.0	0.0	0.0	0.0	11.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	7.3	0.0	0.0	0.0	11.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.6	0.0	0.0	0.0	2.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.7	0.0	0.0	0.0	3.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.13
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	130	0	0	0	0	0	0	479
Grp Sat Flow (s), veh/h/ln	1583	0	0	0	0	0	0	1599
Q Serve Time (g_s), s	2.7	0.0	0.0	0.0	0.0	0.0	0.0	12.2
Cycle Q Clear Time (g_c), s	2.7	0.0	0.0	0.0	0.0	0.0	0.0	12.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	487	0	0	0	0	0	0	557
V/C Ratio (X)	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.86
Avail Cap (c_a), veh/h	651	0	0	0	0	0	0	584
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	11.4	0.0	0.0	0.0	0.0	0.0	0.0	13.3
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.0	0.0	0.0	11.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	11.7	0.0	0.0	0.0	0.0	0.0	0.0	25.2
1st-Term Q (Q1), veh/ln	2.6	0.0	0.0	0.0	0.0	0.0	0.0	5.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	2.7	0.0	0.0	0.0	0.0	0.0	0.0	7.2
%ile Storage Ratio (RQ%)	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.66
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		15.5						
HCM 2010 LOS		B						

Intersection	
Intersection Delay, s/veh	8.6
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	339	222	311	323
Demand Flow Rate, veh/h	343	229	314	333
Vehicles Circulating, veh/h	309	343	294	212
Vehicles Exiting, veh/h	236	265	358	360
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.5	7.9	8.7	8.2
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	343	229	314	333
Cap Entry Lane, veh/h	830	802	842	914
Entry HV Adj Factor	0.989	0.972	0.990	0.970
Flow Entry, veh/h	339	222	311	323
Cap Entry, veh/h	821	779	833	887
V/C Ratio	0.413	0.286	0.373	0.364
Control Delay, s/veh	9.5	7.9	8.7	8.2
LOS	A	A	A	A
95th %tile Queue, veh	2	1	2	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	85	250	100	240	200	65	70	140	250	75	155	80
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	91	269	108	258	215	70	75	151	269	81	167	86
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	144	369	148	328	737	627	392	439	373	348	399	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.29	0.27	0.18	0.39	0.39	0.07	0.23	0.23	0.05	0.21	0.21
Ln Grp Delay, s/veh	33.8	0.0	29.9	36.1	14.7	13.1	18.0	21.5	25.9	19.9	23.1	21.9
Ln Grp LOS	C		C	D	B	B	B	C	C	B	C	C
Approach Vol, veh/h		468			543			495			334	
Approach Delay, s/veh		30.6			24.7			23.3			22.0	
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
Case No	2.0	4.0	1.1	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	16.0	23.0	8.7	18.0	9.3	29.7	7.4	19.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0
Max Green (Gmax), s	12.0	18.0	5.0	20.0	8.0	22.0	4.0	22.0
Max Allow Headway (MAH), s	4.3	4.3	4.4	4.5	4.3	4.3	4.4	4.5
Max Q Clear (g_c+l1), s	11.0	14.5	4.1	7.0	5.2	7.2	4.3	12.2
Green Ext Time (g_e), s	0.1	1.0	0.0	2.4	0.1	2.4	0.0	2.1
Prob of Phs Call (p_c)	0.99	1.00	0.75	1.00	0.81	1.00	0.77	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.11	1.00	0.00	1.00	0.24

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1792		1792		1792		1792	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1278		1881		1881		1881

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		513		1599		1599		1599

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Prot)		(Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0

Grp Vol (v), veh/h	258	0	75	0	91	0	81	0
Grp Sat Flow (s), veh/h/ln	1792	0	1792	0	1792	0	1792	0
Q Serve Time (g_s), s	9.0	0.0	2.1	0.0	3.2	0.0	2.3	0.0
Cycle Q Clear Time (g_c), s	9.0	0.0	2.1	0.0	3.2	0.0	2.3	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1133	0	0	0	972	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	14.0	0.0	0.0	0.0	13.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	8.9	0.0	0.0	0.0	9.9	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	328	0	392	0	144	0	348	0
V/C Ratio (X)	0.79	0.00	0.19	0.00	0.63	0.00	0.23	0.00
Avail Cap (c_a), veh/h	354	0	427	0	245	0	366	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	25.6	0.0	17.8	0.0	29.3	0.0	19.5	0.0
Incr Delay (d2), s/veh	10.5	0.0	0.2	0.0	4.5	0.0	0.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	36.1	0.0	18.0	0.0	33.8	0.0	19.9	0.0
1st-Term Q (Q1), veh/ln	4.4	0.0	1.0	0.0	1.6	0.0	1.1	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	5.4	0.0	1.0	0.0	1.8	0.0	1.2	0.0
%ile Storage Ratio (RQ%)	1.13	0.00	0.26	0.00	0.50	0.00	0.28	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	167	0	215	0	151
Grp Sat Flow (s), veh/h/ln	0	0	0	1881	0	1881	0	1881
Q Serve Time (g_s), s	0.0	0.0	0.0	5.0	0.0	5.2	0.0	4.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	5.0	0.0	5.2	0.0	4.4
Lane Grp Cap (c), veh/h	0	0	0	399	0	737	0	439
V/C Ratio (X)	0.00	0.00	0.00	0.42	0.00	0.29	0.00	0.34
Avail Cap (c_a), veh/h	0	0	0	601	0	737	0	658
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	22.4	0.0	13.7	0.0	21.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	1.0	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	23.1	0.0	14.7	0.0	21.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.6	0.0	2.7	0.0	2.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.7	0.0	2.9	0.0	2.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.04	0.00	0.10
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	377	0	86	0	70	0	269
Grp Sat Flow (s), veh/h/ln	0	1791	0	1599	0	1599	0	1599
Q Serve Time (g_s), s	0.0	12.5	0.0	2.9	0.0	1.8	0.0	10.2
Cycle Q Clear Time (g_c), s	0.0	12.5	0.0	2.9	0.0	1.8	0.0	10.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.29	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	518	0	340	0	627	0	373
V/C Ratio (X)	0.00	0.73	0.00	0.25	0.00	0.11	0.00	0.72
Avail Cap (c_a), veh/h	0	518	0	511	0	627	0	560
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	21.2	0.0	21.5	0.0	12.7	0.0	23.2
Incr Delay (d2), s/veh	0.0	8.7	0.0	0.4	0.0	0.4	0.0	2.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	29.9	0.0	21.9	0.0	13.1	0.0	25.9
1st-Term Q (Q1), veh/ln	0.0	6.2	0.0	1.3	0.0	0.8	0.0	4.4
2nd-Term Q (Q2), veh/ln	0.0	1.3	0.0	0.0	0.0	0.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.4	0.0	1.3	0.0	0.9	0.0	4.7
%ile Storage Ratio (RQ%)	0.00	0.16	0.00	0.55	0.00	0.18	0.00	0.37
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		25.3						
HCM 2010 LOS		C						

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Volume (veh/h)	260	7	405	275	1	425
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1900	1881	1900	1900	1845
Adj Flow Rate, veh/h	283	8	440	299	1	462
Adj No. of Lanes	0	0	1	0	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	1	1	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	378	11	573	389	106	1010
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.22	0.22	0.55	0.55	0.55	0.55
Ln Grp Delay, s/veh	15.4	0.0	0.0	7.4	4.9	0.0
Ln Grp LOS	B			A	A	
Approach Vol, veh/h	292		739			463
Approach Delay, s/veh	15.4		7.4			4.9
Approach LOS	B		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8			6		
Case No		8.0	12.0			8.0		
Phs Duration (G+Y+Rc), s		22.8	11.5			22.8		
Change Period (Y+Rc), s		4.0	4.0			4.0		
Max Green (Gmax), s		31.0	16.0			31.0		
Max Allow Headway (MAH), s		4.3	4.3			4.3		
Max Q Clear (g_c+l1), s		13.3	7.2			7.2		
Green Ext Time (g_e), s		5.5	0.7			6.1		
Prob of Phs Call (p_c)		1.00	0.94			1.00		
Prob of Max Out (p_x)		0.18	0.10			0.08		
Left-Turn Movement Data								
Assigned Mvmt		5	3			1		
Mvmt Sat Flow, veh/h		0	1731			1		
Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		1045	6			1843		
Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		710	49			0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	0	0
Lane Assignment			L+T+R			L+T		
Lanes in Grp	0	0	1	0	0	1	0	0

Grp Vol (v), veh/h	0	0	292	0	0	463	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1786	0	0	1844	0	0
Q Serve Time (g_s), s	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	5.2	0.0	0.0	5.2	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	731	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	18.8	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	18.8	0.0	0.0	0.0	15.9	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	5.2	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.97	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	390	0	0	1116	0	0
V/C Ratio (X)	0.00	0.00	0.75	0.00	0.00	0.41	0.00	0.00
Avail Cap (c_a), veh/h	0	0	834	0	0	1771	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	12.5	0.0	0.0	4.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	2.9	0.0	0.0	0.2	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	15.4	0.0	0.0	4.9	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	2.5	0.0	0.0	2.6	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	2.8	0.0	0.0	2.6	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.04	0.00	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		T+R						
Lanes in Grp	0	1	0	0	0	0	0	0
Grp Vol (v), veh/h	0	739	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1756	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	11.3	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.40	0.03	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	962	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.77	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1588	0	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.3	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		8.2						
HCM 2010 LOS		A						

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	445	125	50	330	50	35
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	484	136	54	359	54	38

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	620	0	1019	552
Stage 1	-	-	-	-	552	-
Stage 2	-	-	-	-	467	-
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	-	-	960	-	263	533
Stage 1	-	-	-	-	577	-
Stage 2	-	-	-	-	631	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	960	-	245	533
Mov Cap-2 Maneuver	-	-	-	-	245	-
Stage 1	-	-	-	-	577	-
Stage 2	-	-	-	-	587	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	21.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	315	-	-	960	-
HCM Lane V/C Ratio	0.293	-	-	0.057	-
HCM Control Delay (s)	21.1	-	-	9	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.2	-	-	0.2	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	3	5	8	1	8	10	475	5	20	415	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	5	5	0	0	0	1	1	1	1	1	1
Mvmt Flow	10	3	5	8	1	8	10	495	5	21	432	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1007	1005	443	1007	1013	497	453	0	0	500	0	0
Stage 1	484	484	-	518	518	-	-	-	-	-	-	-
Stage 2	523	521	-	489	495	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.1	6.5	6.2	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.5	4	3.3	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	217	239	608	221	241	577	1113	-	-	1069	-	-
Stage 1	558	547	-	544	536	-	-	-	-	-	-	-
Stage 2	532	527	-	564	549	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	209	232	608	212	234	577	1113	-	-	1069	-	-
Mov Cap-2 Maneuver	209	232	-	212	234	-	-	-	-	-	-	-
Stage 1	553	536	-	539	531	-	-	-	-	-	-	-
Stage 2	519	522	-	545	538	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	19.9	17.6	0.2	0.4
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1113	-	-	261	304	1069	-	-
HCM Lane V/C Ratio	0.009	-	-	0.072	0.058	0.019	-	-
HCM Control Delay (s)	8.3	-	-	19.9	17.6	8.4	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	155	30	15	215	20	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	170	33	16	236	22	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	203	0	456	187
Stage 1	-	-	-	-	187	-
Stage 2	-	-	-	-	269	-
Critical Hdwy	-	-	4.12	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1369	-	566	860
Stage 1	-	-	-	-	850	-
Stage 2	-	-	-	-	781	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1369	-	559	860
Mov Cap-2 Maneuver	-	-	-	-	559	-
Stage 1	-	-	-	-	850	-
Stage 2	-	-	-	-	771	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	11
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	633	-	-	1369	-
HCM Lane V/C Ratio	0.052	-	-	0.012	-
HCM Control Delay (s)	11	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	35	120	150	420	430	85
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	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	38	130	163	457	467	92

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1297	514	560	0	-	0
Stage 1	514	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	179	560	1011	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	450	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	150	560	1011	-	-	-
Mov Cap-2 Maneuver	275	-	-	-	-	-
Stage 1	600	-	-	-	-	-
Stage 2	377	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.5	2.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1011	-	454	-	-
HCM Lane V/C Ratio	0.161	-	0.371	-	-
HCM Control Delay (s)	9.2	-	17.5	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.6	-	1.7	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	515	1	0	400	2	1	0	0	1	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	560	1	0	435	2	1	0	0	1	0	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	437	0	0	561	0	0	996	997	560	996	997	436
Stage 1	-	-	-	-	-	-	560	560	-	436	436	-
Stage 2	-	-	-	-	-	-	436	437	-	560	561	-
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	1123	-	-	1010	-	-	223	244	528	223	244	620
Stage 1	-	-	-	-	-	-	513	511	-	599	580	-
Stage 2	-	-	-	-	-	-	599	579	-	513	510	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1123	-	-	1010	-	-	223	244	528	223	244	620
Mov Cap-2 Maneuver	-	-	-	-	-	-	223	244	-	223	244	-
Stage 1	-	-	-	-	-	-	513	511	-	599	580	-
Stage 2	-	-	-	-	-	-	599	579	-	513	510	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	21.2	21.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	223	1123	-	-	1010	-	-	223
HCM Lane V/C Ratio	0.005	-	-	-	-	-	-	0.005
HCM Control Delay (s)	21.2	0	-	-	0	-	-	21.2
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	8.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	183	31	268	15	15	360
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	200	0	250
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	4	5	5	2	2
Mvmt Flow	199	34	291	16	16	391

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	291	0	-	0	723	291
Stage 1	-	-	-	-	291	-
Stage 2	-	-	-	-	432	-
Critical Hdwy	4.14	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.236	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1259	-	-	-	393	748
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	655	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1259	-	-	-	331	748
Mov Cap-2 Maneuver	-	-	-	-	331	-
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	551	-

Approach	EB	WB	SB
HCM Control Delay, s	7.2	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1259	-	-	-	331	748
HCM Lane V/C Ratio	0.158	-	-	-	0.049	0.523
HCM Control Delay (s)	8.4	-	-	-	16.4	15
HCM Lane LOS	A	-	-	-	C	C
HCM 95th %tile Q(veh)	0.6	-	-	-	0.2	3.1

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	205	508	46	561	0	0	0	0	6	0	153
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	420	160	-	-	-	-	-	-	-	200
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, %	3	3	3	3	3	3	2	2	2	2	2	2
Mvmt Flow	0	223	552	50	610	0	0	0	0	7	0	166

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	610	0	-	223	0	0	933	933	610
Stage 1	-	-	-	-	-	-	710	710	-
Stage 2	-	-	-	-	-	-	223	223	-
Critical Hdwy	4.13	-	-	4.13	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	964	-	0	1340	-	-	295	266	494
Stage 1	-	-	0	-	-	-	487	437	-
Stage 2	-	-	0	-	-	-	814	719	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	964	-	-	1340	-	-	284	0	494
Mov Cap-2 Maneuver	-	-	-	-	-	-	284	0	-
Stage 1	-	-	-	-	-	-	469	0	-
Stage 2	-	-	-	-	-	-	814	0	-

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

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	964	-	1340	-	-	284	494
HCM Lane V/C Ratio	-	-	0.037	-	-	0.023	0.337
HCM Control Delay (s)	0	-	7.8	-	-	18	15.9
HCM Lane LOS	A	-	A	-	-	C	C
HCM 95th %tile Q(veh)	0	-	0.1	-	-	0.1	1.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	103	240	545	325	488	145
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1863	1863	1863	1863
Adj Flow Rate, veh/h	113	264	599	357	536	159
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	280	925	693	589	615	549
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.51	0.37	0.37	0.35	0.35
Ln Grp Delay, s/veh	12.9	7.9	25.4	15.2	26.8	13.2
Ln Grp LOS	B	A	C	B	C	B
Approach Vol, veh/h		377	956		695	
Approach Delay, s/veh		9.4	21.6		23.7	
Approach LOS		A	C		C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			1.2	7.0
Phs Duration (G+Y+Rc), s	22.8			31.5			7.3	24.2
Change Period (Y+Rc), s	4.0			4.0			4.0	4.0
Max Green (Gmax), s	22.0			30.0			4.0	22.0
Max Allow Headway (MAH), s	4.4			4.3			4.3	4.3
Max Q Clear (g_c+l1), s	17.4			6.5			4.0	18.1
Green Ext Time (g_e), s	1.4			5.7			0.0	2.0
Prob of Phs Call (p_c)	1.00			1.00			0.82	1.00
Prob of Max Out (p_x)	0.95			0.08			1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1774						1740	0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			1827				1863

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1583			0				1583

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Pr/Pm)	
Lanes in Grp	1	0	0	0	0	0	1	0

Grp Vol (v), veh/h	536	0	0	0	0	0	113	0
Grp Sat Flow (s), veh/h/ln	1774	0	0	0	0	0	1740	0
Q Serve Time (g_s), s	15.4	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	15.4	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1774	0	0	0	0	0	574	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	22.2	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	615	0	0	0	0	0	280	0
V/C Ratio (X)	0.87	0.00	0.00	0.00	0.00	0.00	0.40	0.00
Avail Cap (c_a), veh/h	719	0	0	0	0	0	304	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	16.6	0.0	0.0	0.0	0.0	0.0	11.9	0.0
Incr Delay (d2), s/veh	10.2	0.0	0.0	0.0	0.0	0.0	0.9	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	26.8	0.0	0.0	0.0	0.0	0.0	12.9	0.0
1st-Term Q (Q1), veh/ln	7.4	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	1.7	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	9.2	0.0	0.0	0.0	0.0	0.0	1.0	0.0
%ile Storage Ratio (RQ%)	0.25	0.00	0.00	0.00	0.00	0.00	0.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	264	0	0	0	599
Grp Sat Flow (s), veh/h/ln	0	0	0	1827	0	0	0	1863
Q Serve Time (g_s), s	0.0	0.0	0.0	4.5	0.0	0.0	0.0	16.1
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	4.5	0.0	0.0	0.0	16.1
Lane Grp Cap (c), veh/h	0	0	0	925	0	0	0	693
V/C Ratio (X)	0.00	0.00	0.00	0.29	0.00	0.00	0.00	0.86
Avail Cap (c_a), veh/h	0	0	0	1010	0	0	0	755
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	7.7	0.0	0.0	0.0	15.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	9.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	7.9	0.0	0.0	0.0	25.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.3	0.0	0.0	0.0	8.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.3	0.0	0.0	0.0	10.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.44
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	159	0	0	0	0	0	0	357
Grp Sat Flow (s), veh/h/ln	1583	0	0	0	0	0	0	1583
Q Serve Time (g_s), s	4.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9
Cycle Q Clear Time (g_c), s	4.0	0.0	0.0	0.0	0.0	0.0	0.0	9.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	549	0	0	0	0	0	0	589
V/C Ratio (X)	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.61
Avail Cap (c_a), veh/h	642	0	0	0	0	0	0	642
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	12.9	0.0	0.0	0.0	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	13.2	0.0	0.0	0.0	0.0	0.0	0.0	15.2
1st-Term Q (Q1), veh/ln	4.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	4.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5
%ile Storage Ratio (RQ%)	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.42
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		20.0						
HCM 2010 LOS		C						

Intersection	
Intersection Delay, s/veh	12.1
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	389	289	336	442
Demand Flow Rate, veh/h	404	303	346	455
Vehicles Circulating, veh/h	417	517	354	288
Vehicles Exiting, veh/h	326	183	467	532
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	13.5	12.4	10.4	12.0
Approach LOS	B	B	B	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	404	303	346	455
Cap Entry Lane, veh/h	745	674	793	847
Entry HV Adj Factor	0.962	0.953	0.972	0.971
Flow Entry, veh/h	389	289	336	442
Cap Entry, veh/h	716	642	771	822
V/C Ratio	0.543	0.450	0.436	0.537
Control Delay, s/veh	13.5	12.4	10.4	12.0
LOS	B	B	B	B
95th %tile Queue, veh	3	2	2	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	67	139	98	510	197	41	77	162	152	36	332	82
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1863	1863	1863	1827	1827	1827	1863	1863	1863
Adj Flow Rate, veh/h	76	158	111	580	224	47	88	184	173	41	377	93
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	2	2	2	4	4	4	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	116	202	142	576	856	728	223	485	413	307	429	365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.20	0.19	0.32	0.46	0.46	0.06	0.27	0.27	0.03	0.23	0.23
Ln Grp Delay, s/veh	46.8	0.0	50.2	69.2	15.5	13.6	25.8	27.3	27.8	26.1	50.9	28.4
Ln Grp LOS	D		D	F	B	B	C	C	C	C	D	C
Approach Vol, veh/h		345			851			445			511	
Approach Delay, s/veh		49.5			52.0			27.2			44.9	
Approach LOS		D			D			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	1.1	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	33.0	22.0	9.7	24.6	10.0	45.0	6.6	27.7
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0
Max Green (Gmax), s	28.0	17.0	5.0	20.0	8.0	37.0	4.0	22.0
Max Allow Headway (MAH), s	4.3	4.3	4.4	4.4	4.3	4.3	4.4	4.4
Max Q Clear (g_c+l1), s	31.0	15.4	5.3	19.4	5.8	8.6	3.6	10.2
Green Ext Time (g_e), s	0.0	0.4	0.0	0.1	0.0	2.2	0.0	2.9
Prob of Phs Call (p_c)	1.00	1.00	0.89	1.00	0.85	1.00	0.64	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.20

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1774		1740		1740		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1000		1863		1863		1827

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		703		1583		1583		1553

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Prot)		(Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0

Grp Vol (v), veh/h	580	0	88	0	76	0	41	0
Grp Sat Flow (s), veh/h/ln	1774	0	1740	0	1740	0	1774	0
Q Serve Time (g_s), s	29.0	0.0	3.3	0.0	3.8	0.0	1.6	0.0
Cycle Q Clear Time (g_c), s	29.0	0.0	3.3	0.0	3.8	0.0	1.6	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	902	0	0	0	1020	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	21.7	0.0	0.0	0.0	19.6	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	3.1	0.0	0.0	0.0	15.4	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	2.0	0.0	0.0	0.0	0.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	576	0	223	0	116	0	307	0
V/C Ratio (X)	1.01	0.00	0.39	0.00	0.66	0.00	0.13	0.00
Avail Cap (c_a), veh/h	576	0	229	0	175	0	336	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	30.1	0.0	24.7	0.0	40.7	0.0	26.0	0.0
Incr Delay (d2), s/veh	39.1	0.0	1.1	0.0	6.1	0.0	0.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	69.2	0.0	25.8	0.0	46.8	0.0	26.1	0.0
1st-Term Q (Q1), veh/ln	14.1	0.0	1.6	0.0	1.8	0.0	0.8	0.0
2nd-Term Q (Q2), veh/ln	6.3	0.0	0.1	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	20.3	0.0	1.6	0.0	2.0	0.0	0.8	0.0
%ile Storage Ratio (RQ%)	2.07	0.00	0.42	0.00	0.58	0.00	0.19	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	377	0	224	0	184
Grp Sat Flow (s), veh/h/ln	0	0	0	1863	0	1863	0	1827
Q Serve Time (g_s), s	0.0	0.0	0.0	17.4	0.0	6.6	0.0	7.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.4	0.0	6.6	0.0	7.3
Lane Grp Cap (c), veh/h	0	0	0	429	0	856	0	485
V/C Ratio (X)	0.00	0.00	0.00	0.88	0.00	0.26	0.00	0.38
Avail Cap (c_a), veh/h	0	0	0	438	0	856	0	485
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	33.1	0.0	14.8	0.0	26.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	17.8	0.0	0.7	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
Control Delay (d), s/veh	0.0	0.0	0.0	50.9	0.0	15.5	0.0	27.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.9	0.0	3.4	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.1	0.0	0.2	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	11.0	0.0	3.5	0.0	3.7
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.05	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	269	0	93	0	47	0	173
Grp Sat Flow (s), veh/h/ln	0	1703	0	1583	0	1583	0	1553
Q Serve Time (g_s), s	0.0	13.4	0.0	4.3	0.0	1.5	0.0	8.2
Cycle Q Clear Time (g_c), s	0.0	13.4	0.0	4.3	0.0	1.5	0.0	8.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.41	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	343	0	365	0	728	0	413
V/C Ratio (X)	0.00	0.78	0.00	0.25	0.00	0.06	0.00	0.42
Avail Cap (c_a), veh/h	0	343	0	372	0	728	0	413
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	34.0	0.0	28.1	0.0	13.4	0.0	27.1
Incr Delay (d2), s/veh	0.0	16.3	0.0	0.4	0.0	0.2	0.0	0.7
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	50.2	0.0	28.4	0.0	13.6	0.0	27.8
1st-Term Q (Q1), veh/ln	0.0	6.3	0.0	1.9	0.0	0.6	0.0	3.5
2nd-Term Q (Q2), veh/ln	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	7.8	0.0	1.9	0.0	0.7	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.17	0.00	0.81	0.00	0.14	0.00	0.29
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		44.8						
HCM 2010 LOS		D						

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	268	322	4	381	198	5
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1900	1863	1863	1900
Adj Flow Rate, veh/h	291	350	4	414	215	5
Adj No. of Lanes	1	0	0	1	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	362	435	82	870	609	14
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.47	0.47	0.47	0.47	0.35	0.35
Ln Grp Delay, s/veh	0.0	14.3	8.5	0.0	12.3	0.0
Ln Grp LOS		B	A		B	
Approach Vol, veh/h	641			418	221	
Approach Delay, s/veh	14.3			8.5	12.3	
Approach LOS	B			A	B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Case No		12.0		8.0				8.0
Phs Duration (G+Y+Rc), s		20.0		25.2				25.2
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green (Gmax), s		16.0		26.0				26.0
Max Allow Headway (MAH), s		3.8		5.2				5.2
Max Q Clear (g_c+l1), s		6.2		16.5				8.9
Green Ext Time (g_e), s		0.4		4.7				6.7
Prob of Phs Call (p_c)		1.00		1.00				1.00
Prob of Max Out (p_x)		0.00		0.66				0.31
Left-Turn Movement Data								
Assigned Mvmt		5		7				3
Mvmt Sat Flow, veh/h		1722		0				4
Through Movement Data								
Assigned Mvmt		2		4				8
Mvmt Sat Flow, veh/h		8		771				1854
Right-Turn Movement Data								
Assigned Mvmt		12		14				18
Mvmt Sat Flow, veh/h		40		928				0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	0	0	3
Lane Assignment		L+T+R						L+T
Lanes in Grp	0	1	0	0	0	0	0	1

Grp Vol (v), veh/h	0	221	0	0	0	0	0	418
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	0	0	1858
Q Serve Time (g_s), s	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.2	0.0	0.0	0.0	0.0	0.0	6.9
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	801
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.2
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	21.2	0.0	0.0	0.0	16.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.9
Prop LT Inside Lane (P_L)	0.00	0.97	0.00	0.00	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	626	0	0	0	0	0	952
V/C Ratio (X)	0.00	0.35	0.00	0.00	0.00	0.00	0.00	0.44
Avail Cap (c_a), veh/h	0	626	0	0	0	0	0	1146
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	10.8	0.0	0.0	0.0	0.0	0.0	8.2
Incr Delay (d2), s/veh	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	12.3	0.0	0.0	0.0	0.0	0.0	8.5
1st-Term Q (Q1), veh/ln	0.0	2.0	0.0	0.0	0.0	0.0	0.0	3.5
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.3	0.0	0.0	0.0	0.0	0.0	3.6
%ile Storage Ratio (RQ%)	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.05
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	641	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1699	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	14.5	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	14.5	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.02	0.00	0.55	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	797	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.80	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	977	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.2	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	14.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	6.6	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	7.5	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.1
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	291	25	67	383	82	103
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	331	28	76	435	93	117

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	359	0	933	345
Stage 1	-	-	-	-	345	-
Stage 2	-	-	-	-	588	-
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	-	-	1200	-	295	698
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	555	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1200	-	270	698
Mov Cap-2 Maneuver	-	-	-	-	270	-
Stage 1	-	-	-	-	717	-
Stage 2	-	-	-	-	508	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	22.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	410	-	-	1200	-
HCM Lane V/C Ratio	0.513	-	-	0.063	-
HCM Control Delay (s)	22.7	-	-	8.2	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	2.8	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	11	1	13	6	2	14	7	291	1	1	642	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	4	4	4	6	6	6	3	3	3
Mvmt Flow	13	1	15	7	2	16	8	338	1	1	747	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1116	1107	749	1114	1108	339	751	0	0	340	0	0
Stage 1	751	751	-	355	355	-	-	-	-	-	-	-
Stage 2	365	356	-	759	753	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.14	6.54	6.24	4.16	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.536	4.036	3.336	2.254	-	-	2.227	-	-
Pot Cap-1 Maneuver	187	212	415	184	208	699	841	-	-	1214	-	-
Stage 1	406	421	-	658	626	-	-	-	-	-	-	-
Stage 2	658	633	-	396	415	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	180	210	415	175	206	699	841	-	-	1214	-	-
Mov Cap-2 Maneuver	180	210	-	175	206	-	-	-	-	-	-	-
Stage 1	402	421	-	652	620	-	-	-	-	-	-	-
Stage 2	634	627	-	380	415	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20.8	16.3	0.2	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	841	-	-	257	344	1214	-	-
HCM Lane V/C Ratio	0.01	-	-	0.113	0.074	0.001	-	-
HCM Control Delay (s)	9.3	-	-	20.8	16.3	8	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.2	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	211	15	7	155	0	31	0	28	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	8	8	8	2	2	2	2	2	2
Mvmt Flow	0	243	17	8	178	0	36	0	32	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	178	0	0	260	0	0	445	445	251
Stage 1	-	-	-	-	-	-	251	251	-
Stage 2	-	-	-	-	-	-	194	194	-
Critical Hdwy	4.13	-	-	4.18	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.227	-	-	2.272	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1392	-	-	1270	-	-	571	508	788
Stage 1	-	-	-	-	-	-	791	699	-
Stage 2	-	-	-	-	-	-	839	740	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1392	-	-	1270	-	-	567	0	788
Mov Cap-2 Maneuver	-	-	-	-	-	-	567	0	-
Stage 1	-	-	-	-	-	-	791	0	-
Stage 2	-	-	-	-	-	-	833	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	567	788	1392	-	-	1270	-	-
HCM Lane V/C Ratio	0.063	0.041	-	-	-	0.006	-	-
HCM Control Delay (s)	11.8	9.8	0	-	-	7.9	0	-
HCM Lane LOS	B	A	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0	-	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	62	171	94	341	461	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	115	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	190	104	379	512	93

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1147	559	606	0	-	0
Stage 1	559	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	220	529	972	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	196	529	972	-	-	-
Mov Cap-2 Maneuver	331	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	496	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.8	2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	972	-	456	-	-
HCM Lane V/C Ratio	0.107	-	0.568	-	-
HCM Control Delay (s)	9.1	-	22.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	3.5	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	1	291	2	0	665	2	1	0	1	2	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	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	1	338	2	0	773	2	1	0	1	2	0	3

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	776	0	0	341	0	0	1118	1118	340	1116	1117	774
Stage 1	-	-	-	-	-	-	342	342	-	774	774	-
Stage 2	-	-	-	-	-	-	776	776	-	342	343	-
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	840	-	-	1218	-	-	184	207	702	185	207	398
Stage 1	-	-	-	-	-	-	673	638	-	391	408	-
Stage 2	-	-	-	-	-	-	390	407	-	673	637	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	840	-	-	1218	-	-	182	207	702	185	207	398
Mov Cap-2 Maneuver	-	-	-	-	-	-	182	207	-	185	207	-
Stage 1	-	-	-	-	-	-	672	637	-	391	408	-
Stage 2	-	-	-	-	-	-	387	407	-	671	636	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	17.6	18.5
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	289	840	-	-	1218	-	-	273
HCM Lane V/C Ratio	0.008	0.001	-	-	-	-	-	0.021
HCM Control Delay (s)	17.6	9.3	0	-	0	-	-	18.5
HCM Lane LOS	C	A	A	-	A	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0.1

Intersection	
Int Delay, s/veh	8.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	239	140	153	31	45	472
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	200	0	250
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	4	5	5	2	2
Mvmt Flow	252	147	161	33	47	497

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	161	0	-	0	812	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	651	-
Critical Hdwy	4.14	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.236	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1406	-	-	-	348	884
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	519	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1406	-	-	-	286	884
Mov Cap-2 Maneuver	-	-	-	-	286	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	426	-

Approach	EB	WB	SB
HCM Control Delay, s	5.1	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1406	-	-	-	286	884
HCM Lane V/C Ratio	0.179	-	-	-	0.166	0.562
HCM Control Delay (s)	8.1	-	-	-	20.1	14.2
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.7	-	-	-	0.6	3.6

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	343	420	52	573	0	0	0	0	41	0	272
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	420	160	-	-	-	-	-	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	92	92	92	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	2	2	2	2	2	2
Mvmt Flow	0	361	442	55	603	0	0	0	0	43	0	286

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	603	0	-	361	0	0	1074	1074	603
Stage 1	-	-	-	-	-	-	713	713	-
Stage 2	-	-	-	-	-	-	361	361	-
Critical Hdwy	4.13	-	-	4.13	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	970	-	0	1192	-	-	243	220	499
Stage 1	-	-	0	-	-	-	486	435	-
Stage 2	-	-	0	-	-	-	705	626	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	970	-	-	1192	-	-	232	0	499
Mov Cap-2 Maneuver	-	-	-	-	-	-	232	0	-
Stage 1	-	-	-	-	-	-	464	0	-
Stage 2	-	-	-	-	-	-	705	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.7	21.8
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	970	-	1192	-	-	232	499
HCM Lane V/C Ratio	-	-	0.046	-	-	0.186	0.574
HCM Control Delay (s)	0	-	8.2	-	-	24	21.5
HCM Lane LOS	A	-	A	-	-	C	C
HCM 95th %tile Q(veh)	0	-	0.1	-	-	0.7	3.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	118	323	317	476	440	129
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1863	1863
Adj Flow Rate, veh/h	123	336	330	496	458	134
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	427	956	657	558	555	496
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.51	0.35	0.35	0.31	0.31
Ln Grp Delay, s/veh	8.2	6.8	12.1	29.4	20.4	11.8
Ln Grp LOS	A	A	B	C	C	B
Approach Vol, veh/h		459	826		592	
Approach Delay, s/veh		7.2	22.5		18.5	
Approach LOS		A	C		B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			1.2	7.0
Phs Duration (G+Y+Rc), s	18.0			26.8			7.1	19.6
Change Period (Y+Rc), s	4.0			4.0			4.0	4.0
Max Green (Gmax), s	18.0			24.0			4.0	16.0
Max Allow Headway (MAH), s	4.4			4.4			4.3	4.4
Max Q Clear (g_c+l1), s	12.7			6.8			3.8	15.1
Green Ext Time (g_e), s	1.3			4.9			0.0	0.5
Prob of Phs Call (p_c)	1.00			1.00			0.78	1.00
Prob of Max Out (p_x)	0.78			0.16			1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1774						1792	0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			1881				1881

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1583			0				1599

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Pr/Pm)	
Lanes in Grp	1	0	0	0	0	0	1	0

Grp Vol (v), veh/h	458	0	0	0	0	0	123	0
Grp Sat Flow (s), veh/h/ln	1774	0	0	0	0	0	1792	0
Q Serve Time (g_s), s	10.7	0.0	0.0	0.0	0.0	0.0	1.8	0.0
Cycle Q Clear Time (g_c), s	10.7	0.0	0.0	0.0	0.0	0.0	1.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1774	0	0	0	0	0	667	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	17.6	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	9.4	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.6
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	555	0	0	0	0	0	427	0
V/C Ratio (X)	0.82	0.00	0.00	0.00	0.00	0.00	0.29	0.00
Avail Cap (c_a), veh/h	713	0	0	0	0	0	461	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	14.2	0.0	0.0	0.0	0.0	0.0	7.8	0.0
Incr Delay (d2), s/veh	6.2	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	20.4	0.0	0.0	0.0	0.0	0.0	8.2	0.0
1st-Term Q (Q1), veh/ln	5.2	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	6.2	0.0	0.0	0.0	0.0	0.0	0.9	0.0
%ile Storage Ratio (RQ%)	0.17	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	336	0	0	0	330
Grp Sat Flow (s), veh/h/ln	0	0	0	1881	0	0	0	1881
Q Serve Time (g_s), s	0.0	0.0	0.0	4.8	0.0	0.0	0.0	6.2
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	4.8	0.0	0.0	0.0	6.2
Lane Grp Cap (c), veh/h	0	0	0	956	0	0	0	657
V/C Ratio (X)	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.50
Avail Cap (c_a), veh/h	0	0	0	1008	0	0	0	672
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	6.6	0.0	0.0	0.0	11.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	6.8	0.0	0.0	0.0	12.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.4	0.0	0.0	0.0	3.2
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.5	0.0	0.0	0.0	3.3
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.09	0.00	0.00	0.00	0.15
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	134	0	0	0	0	0	0	496
Grp Sat Flow (s), veh/h/ln	1583	0	0	0	0	0	0	1599
Q Serve Time (g_s), s	2.8	0.0	0.0	0.0	0.0	0.0	0.0	13.1
Cycle Q Clear Time (g_c), s	2.8	0.0	0.0	0.0	0.0	0.0	0.0	13.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	496	0	0	0	0	0	0	558
V/C Ratio (X)	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.89
Avail Cap (c_a), veh/h	636	0	0	0	0	0	0	571
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	11.5	0.0	0.0	0.0	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.0	0.0	0.0	15.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	11.8	0.0	0.0	0.0	0.0	0.0	0.0	29.4
1st-Term Q (Q1), veh/ln	2.8	0.0	0.0	0.0	0.0	0.0	0.0	5.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	2.8	0.0	0.0	0.0	0.0	0.0	0.0	8.1
%ile Storage Ratio (RQ%)	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.74
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		17.5						
HCM 2010 LOS		B						

Intersection	
Intersection Delay, s/veh	9.0
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	349	231	323	337
Demand Flow Rate, veh/h	353	238	326	347
Vehicles Circulating, veh/h	322	356	305	219
Vehicles Exiting, veh/h	244	275	370	375
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	9.9	8.2	9.1	8.5
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	353	238	326	347
Cap Entry Lane, veh/h	819	791	833	908
Entry HV Adj Factor	0.990	0.972	0.990	0.971
Flow Entry, veh/h	349	231	323	337
Cap Entry, veh/h	810	769	824	881
V/C Ratio	0.431	0.301	0.391	0.382
Control Delay, s/veh	9.9	8.2	9.1	8.5
LOS	A	A	A	A
95th %tile Queue, veh	2	1	2	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	88	260	103	251	207	67	72	146	262	77	162	82
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	95	280	111	270	223	72	77	157	282	83	174	88
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	149	363	144	337	730	620	393	450	383	348	413	351
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.28	0.27	0.19	0.39	0.39	0.07	0.24	0.24	0.05	0.22	0.22
Ln Grp Delay, s/veh	34.4	0.0	33.2	38.5	15.4	13.6	18.1	21.7	26.7	19.9	23.2	22.0
Ln Grp LOS	C		C	D	B	B	B	C	C	B	C	C
Approach Vol, veh/h		486			565			516			345	
Approach Delay, s/veh		33.4			26.2			23.9			22.1	
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
Case No	2.0	4.0	1.1	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	16.6	23.0	8.8	18.8	9.6	30.1	7.5	20.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0
Max Green (Gmax), s	12.0	18.0	5.0	20.0	8.0	22.0	4.0	22.0
Max Allow Headway (MAH), s	4.3	4.3	4.4	4.5	4.3	4.3	4.4	4.5
Max Q Clear (g_c+l1), s	11.7	15.5	4.1	7.3	5.5	7.5	4.4	12.9
Green Ext Time (g_e), s	0.0	0.8	0.0	2.5	0.1	2.5	0.0	2.1
Prob of Phs Call (p_c)	0.99	1.00	0.76	1.00	0.83	1.00	0.79	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.12	1.00	0.00	1.00	0.31

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1792		1792		1792		1792	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1283		1881		1881		1881

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		509		1599		1599		1599

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Prot)		(Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0

Grp Vol (v), veh/h	270	0	77	0	95	0	83	0
Grp Sat Flow (s), veh/h/ln	1792	0	1792	0	1792	0	1792	0
Q Serve Time (g_s), s	9.7	0.0	2.1	0.0	3.5	0.0	2.4	0.0
Cycle Q Clear Time (g_c), s	9.7	0.0	2.1	0.0	3.5	0.0	2.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1124	0	0	0	956	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	14.8	0.0	0.0	0.0	13.8	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	9.4	0.0	0.0	0.0	10.4	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.4	0.0	0.0	0.0	0.3	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	337	0	393	0	149	0	348	0
V/C Ratio (X)	0.80	0.00	0.20	0.00	0.64	0.00	0.24	0.00
Avail Cap (c_a), veh/h	346	0	425	0	240	0	362	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	26.1	0.0	17.9	0.0	29.9	0.0	19.6	0.0
Incr Delay (d2), s/veh	12.4	0.0	0.2	0.0	4.5	0.0	0.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	38.5	0.0	18.1	0.0	34.4	0.0	19.9	0.0
1st-Term Q (Q1), veh/ln	4.8	0.0	1.0	0.0	1.7	0.0	1.2	0.0
2nd-Term Q (Q2), veh/ln	1.2	0.0	0.0	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	6.0	0.0	1.1	0.0	1.9	0.0	1.2	0.0
%ile Storage Ratio (RQ%)	1.25	0.00	0.27	0.00	0.53	0.00	0.30	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	174	0	223	0	157
Grp Sat Flow (s), veh/h/ln	0	0	0	1881	0	1881	0	1881
Q Serve Time (g_s), s	0.0	0.0	0.0	5.3	0.0	5.5	0.0	4.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	5.3	0.0	5.5	0.0	4.7
Lane Grp Cap (c), veh/h	0	0	0	413	0	730	0	450
V/C Ratio (X)	0.00	0.00	0.00	0.42	0.00	0.31	0.00	0.35
Avail Cap (c_a), veh/h	0	0	0	588	0	730	0	644
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	22.6	0.0	14.3	0.0	21.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	1.1	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	23.2	0.0	15.4	0.0	21.7
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.8	0.0	2.8	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.2	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.8	0.0	3.1	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.05	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	391	0	88	0	72	0	282
Grp Sat Flow (s), veh/h/ln	0	1791	0	1599	0	1599	0	1599
Q Serve Time (g_s), s	0.0	13.5	0.0	3.1	0.0	1.9	0.0	10.9
Cycle Q Clear Time (g_c), s	0.0	13.5	0.0	3.1	0.0	1.9	0.0	10.9
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.28	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	506	0	351	0	620	0	383
V/C Ratio (X)	0.00	0.77	0.00	0.25	0.00	0.12	0.00	0.74
Avail Cap (c_a), veh/h	0	506	0	499	0	620	0	547
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	22.3	0.0	21.7	0.0	13.2	0.0	23.6
Incr Delay (d2), s/veh	0.0	10.9	0.0	0.4	0.0	0.4	0.0	3.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	33.2	0.0	22.0	0.0	13.6	0.0	26.7
1st-Term Q (Q1), veh/ln	0.0	6.6	0.0	1.3	0.0	0.8	0.0	4.8
2nd-Term Q (Q2), veh/ln	0.0	1.5	0.0	0.0	0.0	0.1	0.0	0.3
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	8.2	0.0	1.4	0.0	0.9	0.0	5.1
%ile Storage Ratio (RQ%)	0.00	0.18	0.00	0.57	0.00	0.19	0.00	0.40
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		26.7						
HCM 2010 LOS		C						

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Volume (veh/h)	272	7	417	287	1	438
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1900	1881	1900	1900	1845
Adj Flow Rate, veh/h	296	8	453	312	1	476
Adj No. of Lanes	0	0	1	0	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	1	1	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	390	11	576	397	100	1022
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.22	0.22	0.55	0.55	0.55	0.55
Ln Grp Delay, s/veh	16.1	0.0	0.0	7.9	5.1	0.0
Ln Grp LOS	B			A	A	
Approach Vol, veh/h	305		765			477
Approach Delay, s/veh	16.1		7.9			5.1
Approach LOS	B		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8			6		
Case No		8.0	12.0			8.0		
Phs Duration (G+Y+Rc), s		24.1	12.1			24.1		
Change Period (Y+Rc), s		4.0	4.0			4.0		
Max Green (Gmax), s		31.0	16.0			31.0		
Max Allow Headway (MAH), s		4.3	4.3			4.3		
Max Q Clear (g_c+l1), s		14.5	7.8			7.6		
Green Ext Time (g_e), s		5.6	0.8			6.3		
Prob of Phs Call (p_c)		1.00	0.95			1.00		
Prob of Max Out (p_x)		0.23	0.14			0.10		
Left-Turn Movement Data								
Assigned Mvmt		5	3			1		
Mvmt Sat Flow, veh/h		0	1734			1		
Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		1039	6			1843		
Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		716	47			0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	0	0
Lane Assignment			L+T+R			L+T		
Lanes in Grp	0	0	1	0	0	1	0	0

Grp Vol (v), veh/h	0	0	305	0	0	477	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1786	0	0	1844	0	0
Q Serve Time (g_s), s	0.0	0.0	5.8	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	5.8	0.0	0.0	5.6	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	713	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	20.1	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	7.6	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	20.1	0.0	0.0	0.0	17.2	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.97	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	401	0	0	1122	0	0
V/C Ratio (X)	0.00	0.00	0.76	0.00	0.00	0.43	0.00	0.00
Avail Cap (c_a), veh/h	0	0	788	0	0	1675	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	13.1	0.0	0.0	4.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.0	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
Control Delay (d), s/veh	0.0	0.0	16.1	0.0	0.0	5.1	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	2.8	0.0	0.0	2.8	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.3	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	3.1	0.0	0.0	2.9	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.04	0.00	0.00	0.04	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		T+R						
Lanes in Grp	0	1	0	0	0	0	0	0
Grp Vol (v), veh/h	0	765	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1755	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	12.5	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.41	0.03	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	973	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.79	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1501	0	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	7.9	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	5.7	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		8.7						
HCM 2010 LOS		A						

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	462	129	52	344	36	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	502	140	57	374	39	57

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	642	0	1059	572
Stage 1	-	-	-	-	572	-
Stage 2	-	-	-	-	487	-
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	-	-	943	-	249	520
Stage 1	-	-	-	-	565	-
Stage 2	-	-	-	-	618	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	943	-	230	520
Mov Cap-2 Maneuver	-	-	-	-	230	-
Stage 1	-	-	-	-	565	-
Stage 2	-	-	-	-	571	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.2	19.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	343	-	-	943	-
HCM Lane V/C Ratio	0.279	-	-	0.06	-
HCM Control Delay (s)	19.5	-	-	9.1	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.1	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	3	6	8	1	8	12	493	5	18	417	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	5	5	0	0	0	1	1	1	1	1	1
Mvmt Flow	10	3	6	8	1	8	12	514	5	19	434	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1030	1028	447	1030	1038	516	459	0	0	519	0	0
Stage 1	484	484	-	541	541	-	-	-	-	-	-	-
Stage 2	546	544	-	489	497	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.1	6.5	6.2	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.5	4	3.3	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	209	231	605	214	233	563	1107	-	-	1052	-	-
Stage 1	558	547	-	529	524	-	-	-	-	-	-	-
Stage 2	517	514	-	564	548	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	201	224	605	205	226	563	1107	-	-	1052	-	-
Mov Cap-2 Maneuver	201	224	-	205	226	-	-	-	-	-	-	-
Stage 1	551	537	-	523	518	-	-	-	-	-	-	-
Stage 2	502	508	-	545	538	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	20	18	0.2	0.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1107	-	-	260	295	1052	-	-
HCM Lane V/C Ratio	0.011	-	-	0.076	0.06	0.018	-	-
HCM Control Delay (s)	8.3	-	-	20	18	8.5	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	180	33	16	222	23	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	198	36	18	244	25	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	234	0	495	216
Stage 1	-	-	-	-	216	-
Stage 2	-	-	-	-	279	-
Critical Hdwy	-	-	4.12	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1333	-	537	829
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	773	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1333	-	528	829
Mov Cap-2 Maneuver	-	-	-	-	528	-
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	761	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	608	-	-	1333	-
HCM Lane V/C Ratio	0.065	-	-	0.013	-
HCM Control Delay (s)	11.3	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	37	126	157	433	443	88
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	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	40	137	171	471	482	96

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1341	529	577	0	-	0
Stage 1	529	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	168	550	996	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	139	550	996	-	-	-
Mov Cap-2 Maneuver	263	-	-	-	-	-
Stage 1	591	-	-	-	-	-
Stage 2	362	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.5	2.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	996	-	441	-	-
HCM Lane V/C Ratio	0.171	-	0.402	-	-
HCM Control Delay (s)	9.4	-	18.5	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.6	-	1.9	-	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	536	1	0	415	2	1	0	0	1	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	583	1	0	451	2	1	0	0	1	0	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	453	0	0	584	0	0	1036	1036	583	1035	1036	452
Stage 1	-	-	-	-	-	-	583	583	-	452	452	-
Stage 2	-	-	-	-	-	-	453	453	-	583	584	-
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	1108	-	-	991	-	-	210	232	512	210	232	608
Stage 1	-	-	-	-	-	-	498	499	-	587	570	-
Stage 2	-	-	-	-	-	-	586	570	-	498	498	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1108	-	-	991	-	-	210	232	512	210	232	608
Mov Cap-2 Maneuver	-	-	-	-	-	-	210	232	-	210	232	-
Stage 1	-	-	-	-	-	-	498	499	-	587	570	-
Stage 2	-	-	-	-	-	-	585	570	-	498	498	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0	22.2	16.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	210	1108	-	-	991	-	-	312
HCM Lane V/C Ratio	0.005	-	-	-	-	-	-	0.007
HCM Control Delay (s)	22.2	0	-	-	0	-	-	16.6
HCM Lane LOS	C	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	8.5

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	221	31	268	15	15	370
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	200	0	250
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	4	4	5	5	2	2
Mvmt Flow	240	34	291	16	16	402

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	291	0	-	0	805	291
Stage 1	-	-	-	-	291	-
Stage 2	-	-	-	-	514	-
Critical Hdwy	4.14	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.236	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1259	-	-	-	352	748
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	600	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1259	-	-	-	285	748
Mov Cap-2 Maneuver	-	-	-	-	285	-
Stage 1	-	-	-	-	759	-
Stage 2	-	-	-	-	486	-

Approach	EB	WB	SB
HCM Control Delay, s	7.5	0	15.4
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1259	-	-	-	285	748
HCM Lane V/C Ratio	0.191	-	-	-	0.057	0.538
HCM Control Delay (s)	8.5	-	-	-	18.4	15.3
HCM Lane LOS	A	-	-	-	C	C
HCM 95th %tile Q(veh)	0.7	-	-	-	0.2	3.2

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	242	527	46	571	0	0	0	0	6	0	173
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	420	160	-	-	-	-	-	-	-	200
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, %	3	3	3	3	3	3	2	2	2	2	2	2
Mvmt Flow	0	263	573	50	621	0	0	0	0	7	0	188

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	621	0	-	263	0	0	984	984	621
Stage 1	-	-	-	-	-	-	721	721	-
Stage 2	-	-	-	-	-	-	263	263	-
Critical Hdwy	4.13	-	-	4.13	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	955	-	0	1295	-	-	275	248	487
Stage 1	-	-	0	-	-	-	482	432	-
Stage 2	-	-	0	-	-	-	781	691	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	955	-	-	1295	-	-	264	0	487
Mov Cap-2 Maneuver	-	-	-	-	-	-	264	0	-
Stage 1	-	-	-	-	-	-	463	0	-
Stage 2	-	-	-	-	-	-	781	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.6	17.1
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	955	-	1295	-	-	264	487
HCM Lane V/C Ratio	-	-	0.039	-	-	0.025	0.386
HCM Control Delay (s)	0	-	7.9	-	-	19	17
HCM Lane LOS	A	-	A	-	-	C	C
HCM 95th %tile Q(veh)	0	-	0.1	-	-	0.1	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	112	297	575	325	488	150
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1863	1863	1863	1863
Adj Flow Rate, veh/h	123	326	632	357	536	165
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	273	939	704	599	609	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.51	0.38	0.38	0.34	0.34
Ln Grp Delay, s/veh	13.7	8.3	30.0	15.5	28.7	13.8
Ln Grp LOS	B	A	C	B	C	B
Approach Vol, veh/h		449	989		701	
Approach Delay, s/veh		9.8	24.7		25.2	
Approach LOS		A	C		C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			1.2	7.0
Phs Duration (G+Y+Rc), s	23.2			32.8			7.6	25.2
Change Period (Y+Rc), s	4.0			4.0			4.0	4.0
Max Green (Gmax), s	22.0			30.0			4.0	22.0
Max Allow Headway (MAH), s	4.4			4.3			4.3	4.3
Max Q Clear (g_c+l1), s	17.9			7.9			4.2	19.9
Green Ext Time (g_e), s	1.3			6.2			0.0	1.3
Prob of Phs Call (p_c)	1.00			1.00			0.85	1.00
Prob of Max Out (p_x)	1.00			0.12			1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1774						1740	0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			1827				1863

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1583			0				1583

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Pr/Pm)	
Lanes in Grp	1	0	0	0	0	0	1	0

Grp Vol (v), veh/h	536	0	0	0	0	0	123	0
Grp Sat Flow (s), veh/h/ln	1774	0	0	0	0	0	1740	0
Q Serve Time (g_s), s	15.9	0.0	0.0	0.0	0.0	0.0	2.2	0.0
Cycle Q Clear Time (g_c), s	15.9	0.0	0.0	0.0	0.0	0.0	2.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1774	0	0	0	0	0	556	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	23.2	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	3.3	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.2
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	609	0	0	0	0	0	273	0
V/C Ratio (X)	0.88	0.00	0.00	0.00	0.00	0.00	0.45	0.00
Avail Cap (c_a), veh/h	697	0	0	0	0	0	285	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	17.3	0.0	0.0	0.0	0.0	0.0	12.6	0.0
Incr Delay (d2), s/veh	11.4	0.0	0.0	0.0	0.0	0.0	1.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	28.7	0.0	0.0	0.0	0.0	0.0	13.7	0.0
1st-Term Q (Q1), veh/ln	7.7	0.0	0.0	0.0	0.0	0.0	1.0	0.0
2nd-Term Q (Q2), veh/ln	1.9	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	9.7	0.0	0.0	0.0	0.0	0.0	1.1	0.0
%ile Storage Ratio (RQ%)	0.26	0.00	0.00	0.00	0.00	0.00	0.13	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	326	0	0	0	632
Grp Sat Flow (s), veh/h/ln	0	0	0	1827	0	0	0	1863
Q Serve Time (g_s), s	0.0	0.0	0.0	5.9	0.0	0.0	0.0	17.9
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	5.9	0.0	0.0	0.0	17.9
Lane Grp Cap (c), veh/h	0	0	0	939	0	0	0	704
V/C Ratio (X)	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.90
Avail Cap (c_a), veh/h	0	0	0	978	0	0	0	732
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.1	0.0	0.0	0.0	16.4
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	13.6
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	8.3	0.0	0.0	0.0	30.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	3.0	0.0	0.0	0.0	9.1
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	2.7

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.0	0.0	0.0	0.0	11.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.52
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	165	0	0	0	0	0	0	357
Grp Sat Flow (s), veh/h/ln	1583	0	0	0	0	0	0	1583
Q Serve Time (g_s), s	4.3	0.0	0.0	0.0	0.0	0.0	0.0	10.1
Cycle Q Clear Time (g_c), s	4.3	0.0	0.0	0.0	0.0	0.0	0.0	10.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	544	0	0	0	0	0	0	599
V/C Ratio (X)	0.30	0.00	0.00	0.00	0.00	0.00	0.00	0.60
Avail Cap (c_a), veh/h	622	0	0	0	0	0	0	622
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	13.5	0.0	0.0	0.0	0.0	0.0	0.0	14.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	13.8	0.0	0.0	0.0	0.0	0.0	0.0	15.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		21.7						
HCM 2010 LOS		C						

Intersection	
Intersection Delay, s/veh	12.7
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	389	289	366	457
Demand Flow Rate, veh/h	404	303	377	471
Vehicles Circulating, veh/h	433	548	354	288
Vehicles Exiting, veh/h	326	183	483	563
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	14.0	13.0	11.2	12.5
Approach LOS	B	B	B	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	404	303	377	471
Cap Entry Lane, veh/h	733	653	793	847
Entry HV Adj Factor	0.962	0.953	0.972	0.971
Flow Entry, veh/h	389	289	366	457
Cap Entry, veh/h	705	622	771	822
V/C Ratio	0.551	0.464	0.475	0.556
Control Delay, s/veh	14.0	13.0	11.2	12.5
LOS	B	B	B	B
95th %tile Queue, veh	3	2	3	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	67	169	98	548	254	69	77	162	172	51	332	82
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1863	1863	1863	1827	1827	1827	1863	1863	1863
Adj Flow Rate, veh/h	76	192	111	623	289	78	88	184	195	58	377	93
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	2	2	2	4	4	4	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	116	219	127	576	856	727	224	472	402	309	430	365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.20	0.19	0.32	0.46	0.46	0.06	0.26	0.26	0.04	0.23	0.23
Ln Grp Delay, s/veh	46.8	0.0	60.1	91.7	16.5	14.0	26.1	27.8	29.0	26.0	50.9	28.4
Ln Grp LOS	D		E	F	B	B	C	C	C	C	D	C
Approach Vol, veh/h		379			990			467			528	
Approach Delay, s/veh		57.5			63.7			28.0			44.2	
Approach LOS		E			E			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	1.1	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	33.0	22.0	9.7	24.6	10.0	45.0	7.2	27.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0
Max Green (Gmax), s	28.0	17.0	5.0	20.0	8.0	37.0	4.0	22.0
Max Allow Headway (MAH), s	4.3	4.3	4.4	4.4	4.3	4.3	4.4	4.4
Max Q Clear (g_c+l1), s	31.0	17.3	5.3	19.4	5.8	10.9	4.2	11.5
Green Ext Time (g_e), s	0.0	0.0	0.0	0.2	0.0	2.8	0.0	2.8
Prob of Phs Call (p_c)	1.00	1.00	0.89	1.00	0.85	1.00	0.76	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.28

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1774		1740		1740		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1087		1863		1863		1827

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		629		1583		1583		1553

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Prot)		(Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0

Grp Vol (v), veh/h	623	0	88	0	76	0	58	0
Grp Sat Flow (s), veh/h/ln	1774	0	1740	0	1740	0	1774	0
Q Serve Time (g_s), s	29.0	0.0	3.3	0.0	3.8	0.0	2.2	0.0
Cycle Q Clear Time (g_c), s	29.0	0.0	3.3	0.0	3.8	0.0	2.2	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	902	0	0	0	1000	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	21.1	0.0	0.0	0.0	19.6	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	3.2	0.0	0.0	0.0	14.7	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	1.9	0.0	0.0	0.0	0.3	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	576	0	224	0	116	0	309	0
V/C Ratio (X)	1.08	0.00	0.39	0.00	0.66	0.00	0.19	0.00
Avail Cap (c_a), veh/h	576	0	229	0	175	0	324	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	30.2	0.0	25.0	0.0	40.7	0.0	25.7	0.0
Incr Delay (d2), s/veh	61.6	0.0	1.1	0.0	6.1	0.0	0.3	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	91.7	0.0	26.1	0.0	46.8	0.0	26.0	0.0
1st-Term Q (Q1), veh/ln	14.1	0.0	1.6	0.0	1.8	0.0	1.1	0.0
2nd-Term Q (Q2), veh/ln	9.8	0.0	0.1	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	23.9	0.0	1.6	0.0	2.0	0.0	1.1	0.0
%ile Storage Ratio (RQ%)	2.43	0.00	0.42	0.00	0.58	0.00	0.27	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	377	0	289	0	184
Grp Sat Flow (s), veh/h/ln	0	0	0	1863	0	1863	0	1827
Q Serve Time (g_s), s	0.0	0.0	0.0	17.4	0.0	8.9	0.0	7.4
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.4	0.0	8.9	0.0	7.4
Lane Grp Cap (c), veh/h	0	0	0	430	0	856	0	472
V/C Ratio (X)	0.00	0.00	0.00	0.88	0.00	0.34	0.00	0.39
Avail Cap (c_a), veh/h	0	0	0	438	0	856	0	472
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	33.1	0.0	15.5	0.0	27.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	17.7	0.0	1.1	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	50.9	0.0	16.5	0.0	27.8
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	9.0	0.0	4.5	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.1	0.0	0.3	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	11.1	0.0	4.7	0.0	3.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.10	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	303	0	93	0	78	0	195
Grp Sat Flow (s), veh/h/ln	0	1716	0	1583	0	1583	0	1553
Q Serve Time (g_s), s	0.0	15.3	0.0	4.3	0.0	2.5	0.0	9.5
Cycle Q Clear Time (g_c), s	0.0	15.3	0.0	4.3	0.0	2.5	0.0	9.5
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.37	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	346	0	365	0	727	0	402
V/C Ratio (X)	0.00	0.88	0.00	0.25	0.00	0.11	0.00	0.49
Avail Cap (c_a), veh/h	0	346	0	372	0	727	0	402
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	34.8	0.0	28.1	0.0	13.7	0.0	28.1
Incr Delay (d2), s/veh	0.0	25.4	0.0	0.4	0.0	0.3	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	60.1	0.0	28.4	0.0	14.0	0.0	29.0
1st-Term Q (Q1), veh/ln	0.0	7.2	0.0	1.9	0.0	1.1	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	2.4	0.0	0.0	0.0	0.1	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	9.7	0.0	1.9	0.0	1.1	0.0	4.2
%ile Storage Ratio (RQ%)	0.00	0.21	0.00	0.81	0.00	0.24	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		51.3						
HCM 2010 LOS		D						

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	298	322	4	438	198	5
Number	4	14	3	8	5	12
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)		1.00	1.00		1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1900	1900	1863	1863	1900
Adj Flow Rate, veh/h	324	350	4	476	215	5
Adj No. of Lanes	1	0	0	1	0	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	0	0
Opposing Right Turn Influence			Yes		Yes	
Cap, veh/h	395	427	80	893	595	14
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.48	0.48	0.48	0.48	0.35	0.35
Ln Grp Delay, s/veh	0.0	15.3	8.8	0.0	13.0	0.0
Ln Grp LOS		B	A		B	
Approach Vol, veh/h	674			480	221	
Approach Delay, s/veh	15.3			8.8	13.0	
Approach LOS	B			A	B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Case No		12.0		8.0				8.0
Phs Duration (G+Y+Rc), s		20.0		26.3				26.3
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green (Gmax), s		16.0		26.0				26.0
Max Allow Headway (MAH), s		3.8		5.2				5.2
Max Q Clear (g_c+l1), s		6.3		17.7				10.3
Green Ext Time (g_e), s		0.4		4.6				7.0
Prob of Phs Call (p_c)		1.00		1.00				1.00
Prob of Max Out (p_x)		0.00		0.77				0.41
Left-Turn Movement Data								
Assigned Mvmt		5		7				3
Mvmt Sat Flow, veh/h		1722		0				3
Through Movement Data								
Assigned Mvmt		2		4				8
Mvmt Sat Flow, veh/h		8		820				1855
Right-Turn Movement Data								
Assigned Mvmt		12		14				18
Mvmt Sat Flow, veh/h		40		886				0
Left Lane Group Data								
Assigned Mvmt	0	5	0	7	0	0	0	3
Lane Assignment		L+T+R						L+T
Lanes in Grp	0	1	0	0	0	0	0	1

Grp Vol (v), veh/h	0	221	0	0	0	0	0	480
Grp Sat Flow (s), veh/h/ln	0	1770	0	0	0	0	0	1858
Q Serve Time (g_s), s	0.0	4.3	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	4.3	0.0	0.0	0.0	0.0	0.0	8.3
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	0	0	777
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.3
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.6
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	22.3	0.0	0.0	0.0	17.5
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.3
Prop LT Inside Lane (P_L)	0.00	0.97	0.00	0.00	0.00	0.00	0.00	0.01
Lane Grp Cap (c), veh/h	0	612	0	0	0	0	0	973
V/C Ratio (X)	0.00	0.36	0.00	0.00	0.00	0.00	0.00	0.49
Avail Cap (c_a), veh/h	0	612	0	0	0	0	0	1120
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	11.3	0.0	0.0	0.0	0.0	0.0	8.4
Incr Delay (d2), s/veh	0.0	1.7	0.0	0.0	0.0	0.0	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
Control Delay (d), s/veh	0.0	13.0	0.0	0.0	0.0	0.0	0.0	8.8
1st-Term Q (Q1), veh/ln	0.0	2.1	0.0	0.0	0.0	0.0	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	2.4	0.0	0.0	0.0	0.0	0.0	4.2
%ile Storage Ratio (RQ%)	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.06
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	0	0	8
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	0	0	18
Lane Assignment				T+R				
Lanes in Grp	0	0	0	1	0	0	0	0
Grp Vol (v), veh/h	0	0	0	674	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	1706	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	15.7	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	15.7	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.02	0.00	0.52	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	0	822	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.82	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	958	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	10.3	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	5.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	15.3	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	7.3	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	1.1	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	8.4	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	12.7
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	321	25	67	440	82	103
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	365	28	76	500	93	117

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	393	0	1031	379
Stage 1	-	-	-	-	379	-
Stage 2	-	-	-	-	652	-
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	-	-	1166	-	258	668
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	518	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1166	-	235	668
Mov Cap-2 Maneuver	-	-	-	-	235	-
Stage 1	-	-	-	-	692	-
Stage 2	-	-	-	-	471	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	27
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	368	-	-	1166	-
HCM Lane V/C Ratio	0.571	-	-	0.065	-
HCM Control Delay (s)	27	-	-	8.3	0
HCM Lane LOS	D	-	-	A	A
HCM 95th %tile Q(veh)	3.4	-	-	0.2	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	11	1	13	6	2	14	7	357	1	1	677	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	4	4	4	6	6	6	3	3	3
Mvmt Flow	13	1	15	7	2	16	8	415	1	1	787	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1233	1225	790	1232	1226	416	792	0	0	416	0	0
Stage 1	792	792	-	432	432	-	-	-	-	-	-	-
Stage 2	441	433	-	800	794	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.14	6.54	6.24	4.16	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.536	4.036	3.336	2.254	-	-	2.227	-	-
Pot Cap-1 Maneuver	155	180	393	152	177	632	811	-	-	1138	-	-
Stage 1	385	404	-	598	579	-	-	-	-	-	-	-
Stage 2	599	585	-	376	397	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	148	178	393	144	175	632	811	-	-	1138	-	-
Mov Cap-2 Maneuver	148	178	-	144	175	-	-	-	-	-	-	-
Stage 1	381	404	-	592	573	-	-	-	-	-	-	-
Stage 2	575	579	-	360	397	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.7	18.5	0.2	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	811	-	-	221	292	1138	-	-
HCM Lane V/C Ratio	0.01	-	-	0.132	0.088	0.001	-	-
HCM Control Delay (s)	9.5	-	-	23.7	18.5	8.2	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.3	0	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	211	15	7	155	0	31	0	28	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	8	8	8	2	2	2	2	2	2
Mvmt Flow	0	243	17	8	178	0	36	0	32	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	178	0	0	260	0	0	445	445	251
Stage 1	-	-	-	-	-	-	251	251	-
Stage 2	-	-	-	-	-	-	194	194	-
Critical Hdwy	4.13	-	-	4.18	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.227	-	-	2.272	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1392	-	-	1270	-	-	571	508	788
Stage 1	-	-	-	-	-	-	791	699	-
Stage 2	-	-	-	-	-	-	839	740	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1392	-	-	1270	-	-	567	0	788
Mov Cap-2 Maneuver	-	-	-	-	-	-	567	0	-
Stage 1	-	-	-	-	-	-	791	0	-
Stage 2	-	-	-	-	-	-	833	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	10.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	567	788	1392	-	-	1270	-	-
HCM Lane V/C Ratio	0.063	0.041	-	-	-	0.006	-	-
HCM Control Delay (s)	11.8	9.8	0	-	-	7.9	0	-
HCM Lane LOS	B	A	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.2	0.1	0	-	-	0	-	-

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	62	171	94	350	466	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	115	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	69	190	104	389	518	93

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1162	564	611	0	-	0
Stage 1	564	-	-	-	-	-
Stage 2	598	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	216	525	968	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	549	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	193	525	968	-	-	-
Mov Cap-2 Maneuver	328	-	-	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	490	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23	1.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	968	-	453	-	-
HCM Lane V/C Ratio	0.108	-	0.571	-	-
HCM Control Delay (s)	9.2	-	23	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	3.5	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	21	312	2	0	688	11	1	0	1	43	0	81
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	363	2	0	800	13	1	0	1	50	0	94

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	813	0	0	365	0	0	1219	1226	364	1219	1220	806
Stage 1	-	-	-	-	-	-	413	413	-	806	806	-
Stage 2	-	-	-	-	-	-	806	813	-	413	414	-
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	814	-	-	1194	-	-	157	179	681	157	180	382
Stage 1	-	-	-	-	-	-	616	594	-	376	395	-
Stage 2	-	-	-	-	-	-	376	392	-	616	593	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	814	-	-	1194	-	-	116	174	681	153	175	382
Mov Cap-2 Maneuver	-	-	-	-	-	-	116	174	-	153	175	-
Stage 1	-	-	-	-	-	-	598	576	-	365	395	-
Stage 2	-	-	-	-	-	-	283	392	-	597	576	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0	23.4	25.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	198	814	-	-	1194	-	-	153	382
HCM Lane V/C Ratio	0.012	0.03	-	-	-	-	-	0.327	0.247
HCM Control Delay (s)	23.4	9.6	-	-	0	-	-	39.6	17.5
HCM Lane LOS	C	A	-	-	A	-	-	E	C
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	1.3	1

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	43	350	742	23	39	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	380	807	25	42	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	832	0	-	0	1293	819
Stage 1	-	-	-	-	819	-
Stage 2	-	-	-	-	474	-
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	801	-	-	-	180	375
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	626	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	801	-	-	-	169	375
Mov Cap-2 Maneuver	-	-	-	-	302	-
Stage 1	-	-	-	-	433	-
Stage 2	-	-	-	-	589	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	18.9
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	801	-	-	-	324
HCM Lane V/C Ratio	0.058	-	-	-	0.201
HCM Control Delay (s)	9.8	-	-	-	18.9
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.7

Intersection	
Int Delay, s/veh	9.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	266	140	153	31	45	491
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	200	0	250
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	4	4	5	5	2	2
Mvmt Flow	280	147	161	33	47	517

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	161	0	-	0	868	161
Stage 1	-	-	-	-	161	-
Stage 2	-	-	-	-	707	-
Critical Hdwy	4.14	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.236	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1406	-	-	-	323	884
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	489	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1406	-	-	-	259	884
Mov Cap-2 Maneuver	-	-	-	-	259	-
Stage 1	-	-	-	-	868	-
Stage 2	-	-	-	-	392	-

Approach	EB	WB	SB
HCM Control Delay, s	5.4	0	15.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1406	-	-	-	259	884
HCM Lane V/C Ratio	0.199	-	-	-	0.183	0.585
HCM Control Delay (s)	8.2	-	-	-	22	14.6
HCM Lane LOS	A	-	-	-	C	B
HCM 95th %tile Q(veh)	0.7	-	-	-	0.7	3.9

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	370	434	52	592	0	0	0	0	41	0	309
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	Free	-	-	None	-	-	None	-	-	None
Storage Length	-	-	420	160	-	-	-	-	-	-	-	200
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	92	92	92	95	95	95
Heavy Vehicles, %	3	3	3	3	3	3	2	2	2	2	2	2
Mvmt Flow	0	389	457	55	623	0	0	0	0	43	0	325

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	623	0	-	389	0	0	1122	1122	623
Stage 1	-	-	-	-	-	-	733	733	-
Stage 2	-	-	-	-	-	-	389	389	-
Critical Hdwy	4.13	-	-	4.13	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.227	-	-	2.227	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	953	-	0	1164	-	-	228	206	486
Stage 1	-	-	0	-	-	-	475	426	-
Stage 2	-	-	0	-	-	-	685	608	-
Platoon blocked, %		-			-	-			
Mov Cap-1 Maneuver	953	-	-	1164	-	-	217	0	486
Mov Cap-2 Maneuver	-	-	-	-	-	-	217	0	-
Stage 1	-	-	-	-	-	-	453	0	-
Stage 2	-	-	-	-	-	-	685	0	-

Approach	EB	WB	SB
HCM Control Delay, s	0	0.7	26.1
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	953	-	1164	-	-	217	486
HCM Lane V/C Ratio	-	-	0.047	-	-	0.199	0.669
HCM Control Delay (s)	0	-	8.2	-	-	25.7	26.1
HCM Lane LOS	A	-	A	-	-	D	D
HCM 95th %tile Q(veh)	0	-	0.1	-	-	0.7	4.9

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	125	364	373	476	440	138
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1863	1863
Adj Flow Rate, veh/h	130	379	389	496	458	144
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	401	958	656	558	556	496
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.51	0.35	0.35	0.31	0.31
Ln Grp Delay, s/veh	8.7	7.1	13.4	29.6	20.6	12.0
Ln Grp LOS	A	A	B	C	C	B
Approach Vol, veh/h		509	885		602	
Approach Delay, s/veh		7.5	22.5		18.5	
Approach LOS		A	C		B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			1.2	7.0
Phs Duration (G+Y+Rc), s	18.1			26.9			7.2	19.7
Change Period (Y+Rc), s	4.0			4.0			4.0	4.0
Max Green (Gmax), s	18.0			24.0			4.0	16.0
Max Allow Headway (MAH), s	4.4			4.3			4.3	4.3
Max Q Clear (g_c+l1), s	12.8			7.6			3.9	15.2
Green Ext Time (g_e), s	1.3			5.3			0.0	0.5
Prob of Phs Call (p_c)	1.00			1.00			0.80	1.00
Prob of Max Out (p_x)	0.79			0.22			1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1774						1792	0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			1881				1881

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1583			0				1599

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Pr/Pm)	
Lanes in Grp	1	0	0	0	0	0	1	0

Grp Vol (v), veh/h	458	0	0	0	0	0	130	0
Grp Sat Flow (s), veh/h/ln	1774	0	0	0	0	0	1792	0
Q Serve Time (g_s), s	10.8	0.0	0.0	0.0	0.0	0.0	1.9	0.0
Cycle Q Clear Time (g_c), s	10.8	0.0	0.0	0.0	0.0	0.0	1.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1774	0	0	0	0	0	631	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	17.7	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	8.1	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	2.5	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.7
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	556	0	0	0	0	0	401	0
V/C Ratio (X)	0.82	0.00	0.00	0.00	0.00	0.00	0.32	0.00
Avail Cap (c_a), veh/h	710	0	0	0	0	0	432	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	14.3	0.0	0.0	0.0	0.0	0.0	8.3	0.0
Incr Delay (d2), s/veh	6.3	0.0	0.0	0.0	0.0	0.0	0.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	20.6	0.0	0.0	0.0	0.0	0.0	8.7	0.0
1st-Term Q (Q1), veh/ln	5.2	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	6.2	0.0	0.0	0.0	0.0	0.0	1.0	0.0
%ile Storage Ratio (RQ%)	0.17	0.00	0.00	0.00	0.00	0.00	0.11	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	379	0	0	0	389
Grp Sat Flow (s), veh/h/ln	0	0	0	1881	0	0	0	1881
Q Serve Time (g_s), s	0.0	0.0	0.0	5.6	0.0	0.0	0.0	7.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	5.6	0.0	0.0	0.0	7.6
Lane Grp Cap (c), veh/h	0	0	0	958	0	0	0	656
V/C Ratio (X)	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.59
Avail Cap (c_a), veh/h	0	0	0	1003	0	0	0	669
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	6.8	0.0	0.0	0.0	12.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	7.1	0.0	0.0	0.0	13.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.8	0.0	0.0	0.0	3.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.9	0.0	0.0	0.0	4.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.18
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	144	0	0	0	0	0	0	496
Grp Sat Flow (s), veh/h/ln	1583	0	0	0	0	0	0	1599
Q Serve Time (g_s), s	3.1	0.0	0.0	0.0	0.0	0.0	0.0	13.2
Cycle Q Clear Time (g_c), s	3.1	0.0	0.0	0.0	0.0	0.0	0.0	13.2
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	496	0	0	0	0	0	0	558
V/C Ratio (X)	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.89
Avail Cap (c_a), veh/h	633	0	0	0	0	0	0	569
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	11.7	0.0	0.0	0.0	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.0	0.0	0.0	15.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	12.0	0.0	0.0	0.0	0.0	0.0	0.0	29.6
1st-Term Q (Q1), veh/ln	3.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	3.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2
%ile Storage Ratio (RQ%)	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.75
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		17.5						
HCM 2010 LOS		B						

Intersection	
Intersection Delay, s/veh	9.5
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	349	231	345	368
Demand Flow Rate, veh/h	353	238	349	379
Vehicles Circulating, veh/h	354	379	305	219
Vehicles Exiting, veh/h	244	275	402	398
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.4	8.4	9.6	9.1
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	353	238	349	379
Cap Entry Lane, veh/h	793	773	833	908
Entry HV Adj Factor	0.990	0.972	0.990	0.971
Flow Entry, veh/h	349	231	345	368
Cap Entry, veh/h	785	752	824	881
V/C Ratio	0.445	0.308	0.419	0.418
Control Delay, s/veh	10.4	8.4	9.6	9.1
LOS	B	A	A	A
95th %tile Queue, veh	2	1	2	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	88	316	103	278	248	87	72	146	299	105	162	82
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	95	340	111	299	267	94	77	157	322	113	174	88
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	147	369	120	332	705	599	417	485	412	367	461	392
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.08	0.27	0.26	0.19	0.37	0.37	0.07	0.26	0.26	0.06	0.25	0.25
Ln Grp Delay, s/veh	35.8	0.0	50.3	53.8	17.5	15.1	17.6	21.4	30.0	19.5	22.5	21.4
Ln Grp LOS	D		D	D	B	B	B	C	C	B	C	C
Approach Vol, veh/h		546			660			556			375	
Approach Delay, s/veh		47.8			33.6			25.8			21.4	
Approach LOS		D			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	1.1	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	17.0	23.0	8.9	21.2	9.8	30.2	8.0	22.1
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0
Max Green (Gmax), s	12.0	18.0	5.0	20.0	8.0	22.0	4.0	22.0
Max Allow Headway (MAH), s	4.3	4.3	4.4	4.5	4.3	4.3	4.4	4.5
Max Q Clear (g_c+l1), s	13.4	19.0	4.2	7.4	5.6	9.2	5.4	15.1
Green Ext Time (g_e), s	0.0	0.0	0.0	2.7	0.1	2.9	0.0	1.9
Prob of Phs Call (p_c)	1.00	1.00	0.78	1.00	0.84	1.00	0.89	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.14	1.00	0.00	1.00	0.56

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1792		1792		1792		1792	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1359		1881		1881		1881

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		444		1599		1599		1599

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Prot)		(Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0

Grp Vol (v), veh/h	299	0	77	0	95	0	113	0
Grp Sat Flow (s), veh/h/ln	1792	0	1792	0	1792	0	1792	0
Q Serve Time (g_s), s	11.4	0.0	2.2	0.0	3.6	0.0	3.4	0.0
Cycle Q Clear Time (g_c), s	11.4	0.0	2.2	0.0	3.6	0.0	3.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1124	0	0	0	921	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	17.2	0.0	0.0	0.0	16.2	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	11.8	0.0	0.0	0.0	12.3	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.4	0.0	0.0	0.0	0.5	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	332	0	417	0	147	0	367	0
V/C Ratio (X)	0.90	0.00	0.18	0.00	0.64	0.00	0.31	0.00
Avail Cap (c_a), veh/h	332	0	445	0	230	0	367	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	27.9	0.0	17.4	0.0	31.2	0.0	19.1	0.0
Incr Delay (d2), s/veh	25.9	0.0	0.2	0.0	4.7	0.0	0.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	53.8	0.0	17.6	0.0	35.8	0.0	19.5	0.0
1st-Term Q (Q1), veh/ln	5.6	0.0	1.0	0.0	1.8	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	2.4	0.0	0.0	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	8.0	0.0	1.1	0.0	2.0	0.0	1.7	0.0
%ile Storage Ratio (RQ%)	1.69	0.00	0.27	0.00	0.55	0.00	0.40	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	174	0	267	0	157
Grp Sat Flow (s), veh/h/ln	0	0	0	1881	0	1881	0	1881
Q Serve Time (g_s), s	0.0	0.0	0.0	5.4	0.0	7.2	0.0	4.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	5.4	0.0	7.2	0.0	4.7
Lane Grp Cap (c), veh/h	0	0	0	461	0	705	0	485
V/C Ratio (X)	0.00	0.00	0.00	0.38	0.00	0.38	0.00	0.32
Avail Cap (c_a), veh/h	0	0	0	564	0	705	0	618
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	22.0	0.0	16.0	0.0	21.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	1.6	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
Control Delay (d), s/veh	0.0	0.0	0.0	22.5	0.0	17.5	0.0	21.4
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.8	0.0	3.7	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.9	0.0	4.0	0.0	2.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.10	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	451	0	88	0	94	0	322
Grp Sat Flow (s), veh/h/ln	0	1803	0	1599	0	1599	0	1599
Q Serve Time (g_s), s	0.0	17.0	0.0	3.1	0.0	2.7	0.0	13.1
Cycle Q Clear Time (g_c), s	0.0	17.0	0.0	3.1	0.0	2.7	0.0	13.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.25	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	489	0	392	0	599	0	412
V/C Ratio (X)	0.00	0.92	0.00	0.22	0.00	0.16	0.00	0.78
Avail Cap (c_a), veh/h	0	489	0	479	0	599	0	525
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	24.9	0.0	21.1	0.0	14.6	0.0	24.2
Incr Delay (d2), s/veh	0.0	25.4	0.0	0.3	0.0	0.6	0.0	5.8
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	50.3	0.0	21.4	0.0	15.1	0.0	30.0
1st-Term Q (Q1), veh/ln	0.0	8.4	0.0	1.4	0.0	1.2	0.0	5.7
2nd-Term Q (Q2), veh/ln	0.0	3.4	0.0	0.0	0.0	0.1	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	11.8	0.0	1.4	0.0	1.3	0.0	6.4
%ile Storage Ratio (RQ%)	0.00	0.26	0.00	0.59	0.00	0.27	0.00	0.50
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		33.1						
HCM 2010 LOS		C						

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Volume (veh/h)	272	7	473	287	1	479
Number	3	18	2	12	1	6
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1900	1881	1900	1900	1845
Adj Flow Rate, veh/h	296	8	514	312	1	521
Adj No. of Lanes	0	0	1	0	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	1	1	3	3
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	384	10	631	383	92	1059
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.22	0.22	0.57	0.57	0.57	0.57
Ln Grp Delay, s/veh	17.5	0.0	0.0	9.4	5.2	0.0
Ln Grp LOS	B			A	A	
Approach Vol, veh/h	305		826			522
Approach Delay, s/veh	17.5		9.4			5.2
Approach LOS	B		A			A

Timer:	1	2	3	4	5	6	7	8
Assigned Phs		2	8			6		
Case No		8.0	12.0			8.0		
Phs Duration (G+Y+Rc), s		26.5	12.7			26.5		
Change Period (Y+Rc), s		4.0	4.0			4.0		
Max Green (Gmax), s		31.0	16.0			31.0		
Max Allow Headway (MAH), s		4.3	4.3			4.3		
Max Q Clear (g_c+l1), s		16.7	8.3			8.6		
Green Ext Time (g_e), s		5.8	0.7			7.1		
Prob of Phs Call (p_c)		1.00	0.96			1.00		
Prob of Max Out (p_x)		0.36	0.18			0.15		
Left-Turn Movement Data								
Assigned Mvmt		5	3			1		
Mvmt Sat Flow, veh/h		0	1734			0		
Through Movement Data								
Assigned Mvmt		2	8			6		
Mvmt Sat Flow, veh/h		1097	6			1843		
Right-Turn Movement Data								
Assigned Mvmt		12	18			16		
Mvmt Sat Flow, veh/h		666	47			0		
Left Lane Group Data								
Assigned Mvmt	0	5	3	0	0	1	0	0
Lane Assignment			L+T+R			L+T		
Lanes in Grp	0	0	1	0	0	1	0	0

Grp Vol (v), veh/h	0	0	305	0	0	522	0	0
Grp Sat Flow (s), veh/h/ln	0	0	1786	0	0	1844	0	0
Q Serve Time (g_s), s	0.0	0.0	6.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	6.3	0.0	0.0	6.6	0.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	0	0	0	674	0	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	22.5	0.0	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	7.8	0.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Time to First Blk (g_f), s	0.0	22.5	0.0	0.0	0.0	19.4	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	6.6	0.0	0.0
Prop LT Inside Lane (P_L)	0.00	0.00	0.97	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	0	396	0	0	1151	0	0
V/C Ratio (X)	0.00	0.00	0.77	0.00	0.00	0.45	0.00	0.00
Avail Cap (c_a), veh/h	0	0	728	0	0	1548	0	0
Upstream Filter (I)	0.00	0.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	14.3	0.0	0.0	5.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	3.2	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
Control Delay (d), s/veh	0.0	0.0	17.5	0.0	0.0	5.2	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	3.0	0.0	0.0	3.2	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.4	0.0	0.0	0.1	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	3.4	0.0	0.0	3.3	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.04	0.00	0.00	0.05	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	8	0	0	6	0	0
Lane Assignment								
Lanes in Grp	0	0	0	0	0	0	0	0
Grp Vol (v), veh/h	0	0	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	0	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lane Grp Cap (c), veh/h	0	0	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	0	0	0	0	0	0	0
Upstream Filter (I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	18	0	0	16	0	0
Lane Assignment		T+R						
Lanes in Grp	0	1	0	0	0	0	0	0
Grp Vol (v), veh/h	0	826	0	0	0	0	0	0
Grp Sat Flow (s), veh/h/ln	0	1764	0	0	0	0	0	0
Q Serve Time (g_s), s	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear Time (g_c), s	0.0	14.7	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.38	0.03	0.00	0.00	0.00	0.00	0.00
Lane Grp Cap (c), veh/h	0	1013	0	0	0	0	0	0
V/C Ratio (X)	0.00	0.82	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap (c_a), veh/h	0	1394	0	0	0	0	0	0
Upstream Filter (I)	0.00	1.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d1), s/veh	0.0	6.7	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	9.4	0.0	0.0	0.0	0.0	0.0	0.0
1st-Term Q (Q1), veh/ln	0.0	6.9	0.0	0.0	0.0	0.0	0.0	0.0
2nd-Term Q (Q2), veh/ln	0.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
%ile Back of Q (50%), veh/ln	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0
%ile Storage Ratio (RQ%)	0.00	0.14	0.00	0.00	0.00	0.00	0.00	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		9.6						
HCM 2010 LOS		A						

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	518	129	52	385	36	52
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	563	140	57	418	39	57

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	703	0	1165	633
Stage 1	-	-	-	-	633	-
Stage 2	-	-	-	-	532	-
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	-	-	895	-	215	480
Stage 1	-	-	-	-	529	-
Stage 2	-	-	-	-	589	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	895	-	197	480
Mov Cap-2 Maneuver	-	-	-	-	197	-
Stage 1	-	-	-	-	529	-
Stage 2	-	-	-	-	540	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.1	22.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	302	-	-	895	-
HCM Lane V/C Ratio	0.317	-	-	0.063	-
HCM Control Delay (s)	22.4	-	-	9.3	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q(veh)	1.3	-	-	0.2	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	3	6	8	1	8	12	541	5	18	482	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	5	5	0	0	0	1	1	1	1	1	1
Mvmt Flow	10	3	6	8	1	8	12	564	5	19	502	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1148	1146	515	1148	1156	566	527	0	0	569	0	0
Stage 1	552	552	-	591	591	-	-	-	-	-	-	-
Stage 2	596	594	-	557	565	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.1	6.5	6.2	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.5	4	3.3	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	173	197	554	177	198	528	1045	-	-	1008	-	-
Stage 1	513	510	-	497	498	-	-	-	-	-	-	-
Stage 2	485	488	-	518	511	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	166	191	554	169	192	528	1045	-	-	1008	-	-
Mov Cap-2 Maneuver	166	191	-	169	192	-	-	-	-	-	-	-
Stage 1	507	500	-	491	492	-	-	-	-	-	-	-
Stage 2	470	482	-	499	501	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	23.1	20.4	0.2	0.3
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1045	-	-	219	251	1008	-	-
HCM Lane V/C Ratio	0.012	-	-	0.09	0.071	0.019	-	-
HCM Control Delay (s)	8.5	-	-	23.1	20.4	8.6	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	180	33	16	222	23	13
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	198	36	18	244	25	14

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	234	0	495	216
Stage 1	-	-	-	-	216	-
Stage 2	-	-	-	-	279	-
Critical Hdwy	-	-	4.12	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1333	-	537	829
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	773	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1333	-	528	829
Mov Cap-2 Maneuver	-	-	-	-	528	-
Stage 1	-	-	-	-	825	-
Stage 2	-	-	-	-	761	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.5	11.3
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	608	-	-	1333	-
HCM Lane V/C Ratio	0.065	-	-	0.013	-
HCM Control Delay (s)	11.3	-	-	7.7	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.2	-	-	0	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	37	126	157	440	452	88
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	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	40	137	171	478	491	96

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1359	539	587	0	-	0
Stage 1	539	-	-	-	-	-
Stage 2	820	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	164	542	988	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	433	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	136	542	988	-	-	-
Mov Cap-2 Maneuver	260	-	-	-	-	-
Stage 1	585	-	-	-	-	-
Stage 2	358	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.8	2.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	988	-	435	-	-
HCM Lane V/C Ratio	0.173	-	0.407	-	-
HCM Control Delay (s)	9.4	-	18.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.6	-	1.9	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	82	560	1	0	436	44	1	0	1	23	0	43
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	0	-	0
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	89	609	1	0	474	48	1	0	1	25	0	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	522	0	0	610	0	0	1286	1310	609	1286	1286	498
Stage 1	-	-	-	-	-	-	788	788	-	498	498	-
Stage 2	-	-	-	-	-	-	498	522	-	788	788	-
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	1044	-	-	969	-	-	141	159	495	141	164	572
Stage 1	-	-	-	-	-	-	384	402	-	554	544	-
Stage 2	-	-	-	-	-	-	554	531	-	384	402	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1044	-	-	969	-	-	121	145	495	132	150	572
Mov Cap-2 Maneuver	-	-	-	-	-	-	121	145	-	132	150	-
Stage 1	-	-	-	-	-	-	351	368	-	507	544	-
Stage 2	-	-	-	-	-	-	509	531	-	350	368	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.1	0	23.8	21.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	194	1044	-	-	969	-	-	132	572
HCM Lane V/C Ratio	0.011	0.085	-	-	-	-	-	0.189	0.082
HCM Control Delay (s)	23.8	8.8	-	-	0	-	-	38.5	11.9
HCM Lane LOS	C	A	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	0	0.3	-	-	0	-	-	0.7	0.3

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	38	619	460	21	24	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	673	500	23	26	48

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	523	0	-	0	1266	511
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	755	-
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	1043	-	-	-	187	563
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	464	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1043	-	-	-	175	563
Mov Cap-2 Maneuver	-	-	-	-	307	-
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	435	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	15
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1043	-	-	-	435
HCM Lane V/C Ratio	0.04	-	-	-	0.17
HCM Control Delay (s)	8.6	0	-	-	15
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	103	297	575	325	488	145
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1863	1863	1863	1863
Adj Flow Rate, veh/h	113	326	632	357	536	159
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	4	4	2	2	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	268	935	707	601	611	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.51	0.38	0.38	0.34	0.34
Ln Grp Delay, s/veh	13.5	8.3	29.1	15.2	28.2	13.6
Ln Grp LOS	B	A	C	B	C	B
Approach Vol, veh/h		439	989		695	
Approach Delay, s/veh		9.6	24.1		24.8	
Approach LOS		A	C		C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			1.2	7.0
Phs Duration (G+Y+Rc), s	23.1			32.4			7.3	25.1
Change Period (Y+Rc), s	4.0			4.0			4.0	4.0
Max Green (Gmax), s	22.0			30.0			4.0	22.0
Max Allow Headway (MAH), s	4.4			4.3			4.3	4.3
Max Q Clear (g_c+l1), s	17.8			7.9			4.0	19.7
Green Ext Time (g_e), s	1.3			6.2			0.0	1.4
Prob of Phs Call (p_c)	1.00			1.00			0.82	1.00
Prob of Max Out (p_x)	1.00			0.12			1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1774						1740	0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			1827				1863

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1583			0				1583

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Pr/Pm)	
Lanes in Grp	1	0	0	0	0	0	1	0

Grp Vol (v), veh/h	536	0	0	0	0	0	113	0
Grp Sat Flow (s), veh/h/ln	1774	0	0	0	0	0	1740	0
Q Serve Time (g_s), s	15.8	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Cycle Q Clear Time (g_c), s	15.8	0.0	0.0	0.0	0.0	0.0	2.0	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1774	0	0	0	0	0	556	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	23.1	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.1
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	611	0	0	0	0	0	268	0
V/C Ratio (X)	0.88	0.00	0.00	0.00	0.00	0.00	0.42	0.00
Avail Cap (c_a), veh/h	703	0	0	0	0	0	289	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	17.1	0.0	0.0	0.0	0.0	0.0	12.4	0.0
Incr Delay (d2), s/veh	11.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	28.2	0.0	0.0	0.0	0.0	0.0	13.5	0.0
1st-Term Q (Q1), veh/ln	7.6	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	1.9	0.0	0.0	0.0	0.0	0.0	0.1	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	9.5	0.0	0.0	0.0	0.0	0.0	1.0	0.0
%ile Storage Ratio (RQ%)	0.26	0.00	0.00	0.00	0.00	0.00	0.12	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	326	0	0	0	632
Grp Sat Flow (s), veh/h/ln	0	0	0	1827	0	0	0	1863
Q Serve Time (g_s), s	0.0	0.0	0.0	5.9	0.0	0.0	0.0	17.7
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	5.9	0.0	0.0	0.0	17.7
Lane Grp Cap (c), veh/h	0	0	0	935	0	0	0	707
V/C Ratio (X)	0.00	0.00	0.00	0.35	0.00	0.00	0.00	0.89
Avail Cap (c_a), veh/h	0	0	0	987	0	0	0	738
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	8.1	0.0	0.0	0.0	16.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	13.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	8.3	0.0	0.0	0.0	29.1
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.9	0.0	0.0	0.0	9.0
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	2.6

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	3.0	0.0	0.0	0.0	11.5
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.11	0.00	0.00	0.00	1.03
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	159	0	0	0	0	0	0	357
Grp Sat Flow (s), veh/h/ln	1583	0	0	0	0	0	0	1583
Q Serve Time (g_s), s	4.1	0.0	0.0	0.0	0.0	0.0	0.0	10.0
Cycle Q Clear Time (g_c), s	4.1	0.0	0.0	0.0	0.0	0.0	0.0	10.0
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	545	0	0	0	0	0	0	601
V/C Ratio (X)	0.29	0.00	0.00	0.00	0.00	0.00	0.00	0.59
Avail Cap (c_a), veh/h	628	0	0	0	0	0	0	628
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	13.3	0.0	0.0	0.0	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.0	0.0	0.0	1.4
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	13.6	0.0	0.0	0.0	0.0	0.0	0.0	15.2
1st-Term Q (Q1), veh/ln	4.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	4.1	0.0	0.0	0.0	0.0	0.0	0.0	4.6
%ile Storage Ratio (RQ%)	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.42
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		21.3						
HCM 2010 LOS		C						

Intersection	
Intersection Delay, s/veh	12.1
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	389	280	344	458
Demand Flow Rate, veh/h	404	294	354	471
Vehicles Circulating, veh/h	411	532	363	266
Vehicles Exiting, veh/h	326	185	452	560
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	13.4	12.4	10.8	12.0
Approach LOS	B	B	B	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	404	294	354	471
Cap Entry Lane, veh/h	749	664	786	866
Entry HV Adj Factor	0.962	0.951	0.972	0.971
Flow Entry, veh/h	389	280	344	458
Cap Entry, veh/h	721	632	764	841
V/C Ratio	0.539	0.443	0.450	0.544
Control Delay, s/veh	13.4	12.4	10.8	12.0
LOS	B	B	B	B
95th %tile Queue, veh	3	2	2	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	62	174	98	548	269	55	77	160	174	43	328	67
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1863	1863	1863	1827	1827	1827	1863	1863	1863
Adj Flow Rate, veh/h	70	198	111	623	306	62	88	182	198	49	373	76
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	2	2	2	4	4	4	2	2	2
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	109	222	125	577	866	736	225	478	406	305	426	362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.06	0.20	0.19	0.33	0.47	0.47	0.06	0.26	0.26	0.03	0.23	0.23
Ln Grp Delay, s/veh	47.1	0.0	61.9	90.6	16.4	13.5	25.9	27.5	28.8	26.2	50.4	28.1
Ln Grp LOS	D		E	F	B	B	C	C	C	C	D	C
Approach Vol, veh/h		379			991			468			498	
Approach Delay, s/veh		59.2			62.8			27.7			44.6	
Approach LOS		E			E			C			D	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	1.1	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	33.0	22.0	9.7	24.4	9.6	45.4	6.8	27.3
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0
Max Green (Gmax), s	28.0	17.0	5.0	20.0	8.0	37.0	4.0	22.0
Max Allow Headway (MAH), s	4.3	4.3	4.4	4.4	4.3	4.3	4.4	4.4
Max Q Clear (g_c+l1), s	31.0	17.6	5.3	19.2	5.5	11.4	3.9	11.6
Green Ext Time (g_e), s	0.0	0.0	0.0	0.2	0.0	2.8	0.0	2.7
Prob of Phs Call (p_c)	1.00	1.00	0.89	1.00	0.82	1.00	0.70	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	1.00	1.00	0.00	1.00	0.27

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1774		1740		1740		1774	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1101		1863		1863		1827

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		617		1583		1583		1553

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Prot)		(Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0

Grp Vol (v), veh/h	623	0	88	0	70	0	49	0
Grp Sat Flow (s), veh/h/ln	1774	0	1740	0	1740	0	1774	0
Q Serve Time (g_s), s	29.0	0.0	3.3	0.0	3.5	0.0	1.9	0.0
Cycle Q Clear Time (g_c), s	29.0	0.0	3.3	0.0	3.5	0.0	1.9	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	919	0	0	0	999	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	21.3	0.0	0.0	0.0	19.4	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	3.2	0.0	0.0	0.0	15.0	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	1.9	0.0	0.0	0.0	0.2	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	577	0	225	0	109	0	305	0
V/C Ratio (X)	1.08	0.00	0.39	0.00	0.65	0.00	0.16	0.00
Avail Cap (c_a), veh/h	577	0	231	0	176	0	329	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	30.1	0.0	24.8	0.0	40.8	0.0	25.9	0.0
Incr Delay (d2), s/veh	60.5	0.0	1.1	0.0	6.3	0.0	0.2	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	90.6	0.0	25.9	0.0	47.1	0.0	26.2	0.0
1st-Term Q (Q1), veh/ln	14.1	0.0	1.6	0.0	1.7	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	9.7	0.0	0.1	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	23.8	0.0	1.6	0.0	1.9	0.0	0.9	0.0
%ile Storage Ratio (RQ%)	2.42	0.00	0.42	0.00	0.54	0.00	0.23	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	11.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	373	0	306	0	182
Grp Sat Flow (s), veh/h/ln	0	0	0	1863	0	1863	0	1827
Q Serve Time (g_s), s	0.0	0.0	0.0	17.2	0.0	9.4	0.0	7.3
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	17.2	0.0	9.4	0.0	7.3
Lane Grp Cap (c), veh/h	0	0	0	426	0	866	0	478
V/C Ratio (X)	0.00	0.00	0.00	0.87	0.00	0.35	0.00	0.38
Avail Cap (c_a), veh/h	0	0	0	439	0	866	0	478
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	33.1	0.0	15.3	0.0	27.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	17.3	0.0	1.1	0.0	0.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	50.4	0.0	16.4	0.0	27.5
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	8.8	0.0	4.8	0.0	3.7
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	2.0	0.0	0.3	0.0	0.1

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	10.9	0.0	5.0	0.0	3.8
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.08	0.00	0.11	0.00	0.08
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	309	0	76	0	62	0	198
Grp Sat Flow (s), veh/h/ln	0	1718	0	1583	0	1583	0	1553
Q Serve Time (g_s), s	0.0	15.6	0.0	3.5	0.0	1.9	0.0	9.6
Cycle Q Clear Time (g_c), s	0.0	15.6	0.0	3.5	0.0	1.9	0.0	9.6
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.36	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	347	0	362	0	736	0	406
V/C Ratio (X)	0.00	0.89	0.00	0.21	0.00	0.08	0.00	0.49
Avail Cap (c_a), veh/h	0	347	0	373	0	736	0	406
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	34.8	0.0	27.8	0.0	13.3	0.0	27.9
Incr Delay (d2), s/veh	0.0	27.2	0.0	0.3	0.0	0.2	0.0	0.9
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	61.9	0.0	28.1	0.0	13.5	0.0	28.8
1st-Term Q (Q1), veh/ln	0.0	7.4	0.0	1.5	0.0	0.8	0.0	4.1
2nd-Term Q (Q2), veh/ln	0.0	2.6	0.0	0.0	0.0	0.0	0.0	0.1
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	10.0	0.0	1.5	0.0	0.9	0.0	4.2
%ile Storage Ratio (RQ%)	0.00	0.45	0.00	0.65	0.00	0.19	0.00	0.33
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		51.3						
HCM 2010 LOS		D						

Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	11	1	3	6	2	14	0	348	1	1	672	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	0	0	0	4	4	4	6	6	6	3	3	3
Mvmt Flow	13	1	3	7	2	16	0	405	1	1	781	5

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1201	1192	784	1193	1193	405	786	0	0	406	0	0
Stage 1	786	786	-	405	405	-	-	-	-	-	-	-
Stage 2	415	406	-	788	788	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.14	6.54	6.24	4.16	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.14	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.14	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.536	4.036	3.336	2.254	-	-	2.227	-	-
Pot Cap-1 Maneuver	163	189	396	162	185	641	815	-	-	1147	-	-
Stage 1	388	406	-	618	595	-	-	-	-	-	-	-
Stage 2	619	601	-	381	399	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	157	189	396	160	185	641	815	-	-	1147	-	-
Mov Cap-2 Maneuver	157	189	-	160	185	-	-	-	-	-	-	-
Stage 1	388	406	-	618	595	-	-	-	-	-	-	-
Stage 2	601	601	-	376	399	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	27	17.5	0	0
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	815	-	-	181	314	1147	-	-
HCM Lane V/C Ratio	-	-	-	0.096	0.081	0.001	-	-
HCM Control Delay (s)	0	-	-	27	17.5	8.1	-	-
HCM Lane LOS	A	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	0	211	18	12	155	0	33	0	37	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	0	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	3	3	3	8	8	8	2	2	2	2	2	2
Mvmt Flow	0	243	21	14	178	0	38	0	43	0	0	0

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	178	0	0	263	0	0	459	459	253
Stage 1	-	-	-	-	-	-	253	253	-
Stage 2	-	-	-	-	-	-	206	206	-
Critical Hdwy	4.13	-	-	4.18	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.227	-	-	2.272	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1392	-	-	1267	-	-	560	499	786
Stage 1	-	-	-	-	-	-	789	698	-
Stage 2	-	-	-	-	-	-	829	731	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1392	-	-	1267	-	-	553	0	786
Mov Cap-2 Maneuver	-	-	-	-	-	-	553	0	-
Stage 1	-	-	-	-	-	-	789	0	-
Stage 2	-	-	-	-	-	-	819	0	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.6	10.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	553	786	1392	-	-	1267	-	-
HCM Lane V/C Ratio	0.069	0.054	-	-	-	0.011	-	-
HCM Control Delay (s)	12	9.8	0	-	-	7.9	0	-
HCM Lane LOS	B	A	A	-	-	A	A	-
HCM 95th %tile Q(veh)	0.2	0.2	0	-	-	0	-	-

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	71	171	94	341	461	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	115	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	79	190	104	379	512	99

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1150	562	611	0	-	0
Stage 1	562	-	-	-	-	-
Stage 2	588	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	219	526	968	-	-	-
Stage 1	571	-	-	-	-	-
Stage 2	555	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	195	526	968	-	-	-
Mov Cap-2 Maneuver	330	-	-	-	-	-
Stage 1	571	-	-	-	-	-
Stage 2	495	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	24.4	2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	968	-	448	-	-
HCM Lane V/C Ratio	0.108	-	0.6	-	-
HCM Control Delay (s)	9.2	-	24.4	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.4	-	3.8	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	28	305	2	0	678	6	1	0	1	35	0	100
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	0	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	355	2	0	788	7	1	0	1	41	0	116

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	795	0	0	357	0	0	1213	1216	356	1214	1214	792
Stage 1	-	-	-	-	-	-	421	421	-	792	792	-
Stage 2	-	-	-	-	-	-	792	795	-	422	422	-
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	826	-	-	1202	-	-	159	181	688	158	182	389
Stage 1	-	-	-	-	-	-	610	589	-	382	401	-
Stage 2	-	-	-	-	-	-	382	399	-	609	588	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	826	-	-	1202	-	-	108	174	688	153	175	389
Mov Cap-2 Maneuver	-	-	-	-	-	-	108	174	-	153	175	-
Stage 1	-	-	-	-	-	-	586	565	-	367	401	-
Stage 2	-	-	-	-	-	-	268	399	-	584	565	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0	24.5	23
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	187	826	-	-	1202	-	-	153	389
HCM Lane V/C Ratio	0.012	0.039	-	-	-	-	-	0.266	0.299
HCM Control Delay (s)	24.5	9.5	-	-	0	-	-	36.8	18.2
HCM Lane LOS	C	A	-	-	A	-	-	E	C
HCM 95th %tile Q(veh)	0	0.1	-	-	0	-	-	1	1.2

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	43	349	761	23	39	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	379	827	25	42	23

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	852	0	-	0	1313	840
Stage 1	-	-	-	-	840	-
Stage 2	-	-	-	-	473	-
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	787	-	-	-	175	365
Stage 1	-	-	-	-	424	-
Stage 2	-	-	-	-	627	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	787	-	-	-	165	365
Mov Cap-2 Maneuver	-	-	-	-	298	-
Stage 1	-	-	-	-	424	-
Stage 2	-	-	-	-	590	-

Approach	EB	WB	SB
HCM Control Delay, s	1.1	0	19.2
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	787	-	-	-	318
HCM Lane V/C Ratio	0.059	-	-	-	0.205
HCM Control Delay (s)	9.9	-	-	-	19.2
HCM Lane LOS	A	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	118	364	373	476	440	129
Number	7	4	8	18	1	16
Initial Q, veh	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00			1.00	1.00	1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1863	1863
Adj Flow Rate, veh/h	123	379	389	496	458	134
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	2	2
Opposing Right Turn Influence	Yes				Yes	
Cap, veh/h	399	957	657	559	555	496
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.51	0.35	0.35	0.31	0.31
Ln Grp Delay, s/veh	8.6	7.0	13.3	29.2	20.5	11.9
Ln Grp LOS	A	A	B	C	C	B
Approach Vol, veh/h		502	885		592	
Approach Delay, s/veh		7.4	22.2		18.5	
Approach LOS		A	C		B	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	6			4			7	8
Case No	9.0			4.0			1.2	7.0
Phs Duration (G+Y+Rc), s	18.0			26.8			7.1	19.7
Change Period (Y+Rc), s	4.0			4.0			4.0	4.0
Max Green (Gmax), s	18.0			24.0			4.0	16.0
Max Allow Headway (MAH), s	4.4			4.3			4.3	4.3
Max Q Clear (g_c+l1), s	12.7			7.6			3.8	15.1
Green Ext Time (g_e), s	1.3			5.3			0.0	0.6
Prob of Phs Call (p_c)	1.00			1.00			0.78	1.00
Prob of Max Out (p_x)	0.78			0.22			1.00	1.00

Left-Turn Movement Data								
Assigned Mvmt	1						7	3
Mvmt Sat Flow, veh/h	1774						1792	0

Through Movement Data								
Assigned Mvmt	6			4				8
Mvmt Sat Flow, veh/h	0			1881				1881

Right-Turn Movement Data								
Assigned Mvmt	16			14				18
Mvmt Sat Flow, veh/h	1583			0				1599

Left Lane Group Data								
Assigned Mvmt	1	0	0	0	0	0	7	3
Lane Assignment							(Pr/Pm)	
Lanes in Grp	1	0	0	0	0	0	1	0

Grp Vol (v), veh/h	458	0	0	0	0	0	123	0
Grp Sat Flow (s), veh/h/ln	1774	0	0	0	0	0	1792	0
Q Serve Time (g_s), s	10.7	0.0	0.0	0.0	0.0	0.0	1.8	0.0
Cycle Q Clear Time (g_c), s	10.7	0.0	0.0	0.0	0.0	0.0	1.8	0.0
Perm LT Sat Flow (s_l), veh/h/ln	1774	0	0	0	0	0	631	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	0.0	0.0	0.0	0.0	17.7	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	0.0	0.0	0.0	0.0	8.1	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.0	0.0	0.0	0.0	2.3	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.7
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	555	0	0	0	0	0	399	0
V/C Ratio (X)	0.82	0.00	0.00	0.00	0.00	0.00	0.31	0.00
Avail Cap (c_a), veh/h	712	0	0	0	0	0	434	0
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	14.3	0.0	0.0	0.0	0.0	0.0	8.2	0.0
Incr Delay (d2), s/veh	6.2	0.0	0.0	0.0	0.0	0.0	0.4	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	20.5	0.0	0.0	0.0	0.0	0.0	8.6	0.0
1st-Term Q (Q1), veh/ln	5.2	0.0	0.0	0.0	0.0	0.0	0.9	0.0
2nd-Term Q (Q2), veh/ln	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	0.00	0.00	0.00	1.00	1.00
%ile Back of Q (50%), veh/ln	6.2	0.0	0.0	0.0	0.0	0.0	0.9	0.0
%ile Storage Ratio (RQ%)	0.17	0.00	0.00	0.00	0.00	0.00	0.10	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	6	0	0	4	0	0	0	8
Lane Assignment				T				T
Lanes in Grp	0	0	0	1	0	0	0	1
Grp Vol (v), veh/h	0	0	0	379	0	0	0	389
Grp Sat Flow (s), veh/h/ln	0	0	0	1881	0	0	0	1881
Q Serve Time (g_s), s	0.0	0.0	0.0	5.6	0.0	0.0	0.0	7.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	5.6	0.0	0.0	0.0	7.6
Lane Grp Cap (c), veh/h	0	0	0	957	0	0	0	657
V/C Ratio (X)	0.00	0.00	0.00	0.40	0.00	0.00	0.00	0.59
Avail Cap (c_a), veh/h	0	0	0	1007	0	0	0	671
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	6.8	0.0	0.0	0.0	12.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.3	0.0	0.0	0.0	1.3
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	0.0	0.0	7.0	0.0	0.0	0.0	13.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.8	0.0	0.0	0.0	3.9
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.2

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.9	0.0	0.0	0.0	4.1
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.38
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	16	0	0	14	0	0	0	18
Lane Assignment	R							R
Lanes in Grp	1	0	0	0	0	0	0	1
Grp Vol (v), veh/h	134	0	0	0	0	0	0	496
Grp Sat Flow (s), veh/h/ln	1583	0	0	0	0	0	0	1599
Q Serve Time (g_s), s	2.8	0.0	0.0	0.0	0.0	0.0	0.0	13.1
Cycle Q Clear Time (g_c), s	2.8	0.0	0.0	0.0	0.0	0.0	0.0	13.1
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Lane Grp Cap (c), veh/h	496	0	0	0	0	0	0	559
V/C Ratio (X)	0.27	0.00	0.00	0.00	0.00	0.00	0.00	0.89
Avail Cap (c_a), veh/h	636	0	0	0	0	0	0	571
Upstream Filter (I)	1.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00
Uniform Delay (d1), s/veh	11.6	0.0	0.0	0.0	0.0	0.0	0.0	13.8
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.0	0.0	0.0	0.0	15.5
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	11.9	0.0	0.0	0.0	0.0	0.0	0.0	29.2
1st-Term Q (Q1), veh/ln	2.8	0.0	0.0	0.0	0.0	0.0	0.0	5.6
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.4
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	0.00	1.00	0.00	0.00	0.00	1.00
%ile Back of Q (50%), veh/ln	2.8	0.0	0.0	0.0	0.0	0.0	0.0	8.1
%ile Storage Ratio (RQ%)	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.74
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		17.4						
HCM 2010 LOS		B						

Intersection	
Intersection Delay, s/veh	9.2
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	349	228	319	368
Demand Flow Rate, veh/h	353	236	322	380
Vehicles Circulating, veh/h	341	367	322	205
Vehicles Exiting, veh/h	244	277	372	398
Follow-Up Headway, s	3.186	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0	0
Ped Cap Adj	1.000	1.000	1.000	1.000
Approach Delay, s/veh	10.2	8.3	9.3	8.9
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	353	236	322	380
Cap Entry Lane, veh/h	803	783	819	921
Entry HV Adj Factor	0.990	0.968	0.989	0.969
Flow Entry, veh/h	349	228	319	368
Cap Entry, veh/h	795	757	810	892
V/C Ratio	0.439	0.301	0.393	0.413
Control Delay, s/veh	10.2	8.3	9.3	8.9
LOS	B	A	A	A
95th %tile Queue, veh	2	1	2	2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	78	326	103	281	258	77	72	142	303	105	159	72
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q, veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj (A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	84	351	111	302	277	83	77	153	326	113	171	77
Adj No. of Lanes	1	1	0	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Opposing Right Turn Influence	Yes			Yes			Yes			Yes		
Cap, veh/h	133	371	117	332	718	610	422	488	414	370	464	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Prop Arrive On Green	0.07	0.27	0.26	0.19	0.38	0.38	0.07	0.26	0.26	0.06	0.25	0.25
Ln Grp Delay, s/veh	36.4	0.0	54.4	55.9	17.3	14.6	17.6	21.3	30.3	19.5	22.4	21.2
Ln Grp LOS	D		D	E	B	B	B	C	C	B	C	C
Approach Vol, veh/h		546			662			556			361	
Approach Delay, s/veh		51.7			34.6			26.1			21.2	
Approach LOS		D			C			C			C	

Timer:	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Case No	2.0	4.0	1.1	3.0	2.0	3.0	1.1	3.0
Phs Duration (G+Y+Rc), s	17.0	23.0	8.9	21.3	9.2	30.8	8.0	22.2
Change Period (Y+Rc), s	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0
Max Green (Gmax), s	12.0	18.0	5.0	20.0	8.0	22.0	4.0	22.0
Max Allow Headway (MAH), s	4.3	4.3	4.4	4.5	4.3	4.3	4.4	4.5
Max Q Clear (g_c+l1), s	13.6	19.6	4.2	7.3	5.2	9.5	5.4	15.3
Green Ext Time (g_e), s	0.0	0.0	0.0	2.7	0.0	2.9	0.0	1.9
Prob of Phs Call (p_c)	1.00	1.00	0.78	1.00	0.81	1.00	0.89	1.00
Prob of Max Out (p_x)	1.00	0.00	1.00	0.14	1.00	0.00	1.00	0.58

Left-Turn Movement Data								
Assigned Mvmt	1		3		5		7	
Mvmt Sat Flow, veh/h	1792		1792		1792		1792	

Through Movement Data								
Assigned Mvmt		2		4		6		8
Mvmt Sat Flow, veh/h		1371		1881		1881		1881

Right-Turn Movement Data								
Assigned Mvmt		12		14		16		18
Mvmt Sat Flow, veh/h		434		1599		1599		1599

Left Lane Group Data								
Assigned Mvmt	1	0	3	0	5	0	7	0
Lane Assignment	(Prot)		(Pr/Pm)		(Prot)		(Pr/Pm)	
Lanes in Grp	1	0	1	0	1	0	1	0

Grp Vol (v), veh/h	302	0	77	0	84	0	113	0
Grp Sat Flow (s), veh/h/ln	1792	0	1792	0	1792	0	1792	0
Q Serve Time (g_s), s	11.6	0.0	2.2	0.0	3.2	0.0	3.4	0.0
Cycle Q Clear Time (g_c), s	11.6	0.0	2.2	0.0	3.2	0.0	3.4	0.0
Perm LT Sat Flow (s_l), veh/h/ln	0	0	1138	0	0	0	921	0
Shared LT Sat Flow (s_sh), veh/h/ln	0	0	0	0	0	0	0	0
Perm LT Eff Green (g_p), s	0.0	0.0	17.3	0.0	0.0	0.0	16.3	0.0
Perm LT Serve Time (g_u), s	0.0	0.0	12.0	0.0	0.0	0.0	12.6	0.0
Perm LT Q Serve Time (g_ps), s	0.0	0.0	0.4	0.0	0.0	0.0	0.5	0.0
Time to First Blk (g_f), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Serve Time pre Blk (g_fs), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop LT Inside Lane (P_L)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Lane Grp Cap (c), veh/h	332	0	422	0	133	0	370	0
V/C Ratio (X)	0.91	0.00	0.18	0.00	0.63	0.00	0.31	0.00
Avail Cap (c_a), veh/h	332	0	451	0	230	0	370	0
Upstream Filter (I)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d1), s/veh	28.0	0.0	17.4	0.0	31.5	0.0	19.0	0.0
Incr Delay (d2), s/veh	27.9	0.0	0.2	0.0	4.8	0.0	0.5	0.0
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	55.9	0.0	17.6	0.0	36.4	0.0	19.5	0.0
1st-Term Q (Q1), veh/ln	5.7	0.0	1.0	0.0	1.6	0.0	1.6	0.0
2nd-Term Q (Q2), veh/ln	2.6	0.0	0.0	0.0	0.2	0.0	0.0	0.0
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
%ile Back of Q (50%), veh/ln	8.3	0.0	1.1	0.0	1.8	0.0	1.7	0.0
%ile Storage Ratio (RQ%)	1.74	0.00	0.27	0.00	0.49	0.00	0.40	0.00
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Middle Lane Group Data								
Assigned Mvmt	0	2	0	4	0	6	0	8
Lane Assignment				T		T		T
Lanes in Grp	0	0	0	1	0	1	0	1
Grp Vol (v), veh/h	0	0	0	171	0	277	0	153
Grp Sat Flow (s), veh/h/ln	0	0	0	1881	0	1881	0	1881
Q Serve Time (g_s), s	0.0	0.0	0.0	5.3	0.0	7.5	0.0	4.6
Cycle Q Clear Time (g_c), s	0.0	0.0	0.0	5.3	0.0	7.5	0.0	4.6
Lane Grp Cap (c), veh/h	0	0	0	464	0	718	0	488
V/C Ratio (X)	0.00	0.00	0.00	0.37	0.00	0.39	0.00	0.31
Avail Cap (c_a), veh/h	0	0	0	563	0	718	0	616
Upstream Filter (I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	0.0	0.0	21.9	0.0	15.7	0.0	21.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	1.6	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
Control Delay (d), s/veh	0.0	0.0	0.0	22.4	0.0	17.3	0.0	21.3
1st-Term Q (Q1), veh/ln	0.0	0.0	0.0	2.8	0.0	3.8	0.0	2.4
2nd-Term Q (Q2), veh/ln	0.0	0.0	0.0	0.1	0.0	0.3	0.0	0.0

3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	0.0	0.0	2.8	0.0	4.2	0.0	2.4
%ile Storage Ratio (RQ%)	0.00	0.00	0.00	0.02	0.00	0.11	0.00	0.11
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Right Lane Group Data								
Assigned Mvmt	0	12	0	14	0	16	0	18
Lane Assignment		T+R		R		R		R
Lanes in Grp	0	1	0	1	0	1	0	1
Grp Vol (v), veh/h	0	462	0	77	0	83	0	326
Grp Sat Flow (s), veh/h/ln	0	1805	0	1599	0	1599	0	1599
Q Serve Time (g_s), s	0.0	17.6	0.0	2.7	0.0	2.4	0.0	13.3
Cycle Q Clear Time (g_c), s	0.0	17.6	0.0	2.7	0.0	2.4	0.0	13.3
Prot RT Sat Flow (s_R), veh/h/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prot RT Eff Green (g_R), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop RT Outside Lane (P_R)	0.00	0.24	0.00	1.00	0.00	1.00	0.00	1.00
Lane Grp Cap (c), veh/h	0	489	0	394	0	610	0	414
V/C Ratio (X)	0.00	0.95	0.00	0.20	0.00	0.14	0.00	0.79
Avail Cap (c_a), veh/h	0	489	0	478	0	610	0	524
Upstream Filter (I)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d1), s/veh	0.0	25.2	0.0	20.9	0.0	14.2	0.0	24.2
Incr Delay (d2), s/veh	0.0	29.2	0.0	0.2	0.0	0.5	0.0	6.1
Initial Q Delay (d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	0.0	54.4	0.0	21.2	0.0	14.6	0.0	30.3
1st-Term Q (Q1), veh/ln	0.0	8.7	0.0	1.2	0.0	1.0	0.0	5.9
2nd-Term Q (Q2), veh/ln	0.0	4.0	0.0	0.0	0.0	0.1	0.0	0.7
3rd-Term Q (Q3), veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile Back of Q Factor (f_B%)	0.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00
%ile Back of Q (50%), veh/ln	0.0	12.7	0.0	1.2	0.0	1.1	0.0	6.6
%ile Storage Ratio (RQ%)	0.00	0.56	0.00	0.50	0.00	0.24	0.00	0.51
Initial Q (Qb), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Final (Residual) Q (Qe), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Delay (ds), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Q (Qs), veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sat Cap (cs), veh/h	0	0	0	0	0	0	0	0
Initial Q Clear Time (tc), h	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Intersection Summary								
HCM 2010 Ctrl Delay		34.5						
HCM 2010 LOS		C						

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	10	3	1	8	1	8	2	534	5	18	473	24
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	5	5	5	0	0	0	1	1	1	1	1	1
Mvmt Flow	10	3	1	8	1	8	2	556	5	19	493	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1111	1109	505	1108	1118	559	518	0	0	561	0	0
Stage 1	543	543	-	563	563	-	-	-	-	-	-	-
Stage 2	568	566	-	545	555	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.55	6.25	7.1	6.5	6.2	4.11	-	-	4.11	-	-
Critical Hdwy Stg 1	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.55	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.045	3.345	3.5	4	3.3	2.209	-	-	2.209	-	-
Pot Cap-1 Maneuver	184	207	561	189	209	532	1053	-	-	1015	-	-
Stage 1	519	515	-	514	512	-	-	-	-	-	-	-
Stage 2	502	503	-	526	516	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	178	203	561	184	205	532	1053	-	-	1015	-	-
Mov Cap-2 Maneuver	178	203	-	184	205	-	-	-	-	-	-	-
Stage 1	518	505	-	513	511	-	-	-	-	-	-	-
Stage 2	492	502	-	512	506	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	25.3	19.4	0	0.3
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1053	-	-	192	268	1015	-	-
HCM Lane V/C Ratio	0.002	-	-	0.076	0.066	0.018	-	-
HCM Control Delay (s)	8.4	-	-	25.3	19.4	8.6	-	-
HCM Lane LOS	A	-	-	D	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Vol, veh/h	180	36	25	222	26	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	3	3	2	2	0	0
Mvmt Flow	198	40	27	244	29	22

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	237	0	517	218
Stage 1	-	-	-	-	218	-
Stage 2	-	-	-	-	299	-
Critical Hdwy	-	-	4.12	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.218	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1330	-	522	827
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	757	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1330	-	510	827
Mov Cap-2 Maneuver	-	-	-	-	510	-
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	740	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.8	11.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	612	-	-	1330	-
HCM Lane V/C Ratio	0.083	-	-	0.021	-
HCM Control Delay (s)	11.4	-	-	7.8	0
HCM Lane LOS	B	-	-	A	A
HCM 95th %tile Q(veh)	0.3	-	-	0.1	-

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Vol, veh/h	44	126	157	433	443	97
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	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	48	137	171	471	482	105

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1346	534	587	0	-	0
Stage 1	534	-	-	-	-	-
Stage 2	812	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	167	546	988	-	-	-
Stage 1	588	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	138	546	988	-	-	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	588	-	-	-	-	-
Stage 2	361	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19.8	2.5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	988	-	426	-	-
HCM Lane V/C Ratio	0.173	-	0.434	-	-
HCM Control Delay (s)	9.4	-	19.8	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0.6	-	2.1	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Vol, veh/h	92	550	1	0	431	35	1	0	1	17	0	51
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	0	-	-	-	-	-	0	-	0
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	100	598	1	0	468	38	1	0	1	18	0	55

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	507	0	0	599	0	0	1286	1305	598	1287	1287	488
Stage 1	-	-	-	-	-	-	798	798	-	488	488	-
Stage 2	-	-	-	-	-	-	488	507	-	799	799	-
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	1058	-	-	978	-	-	141	160	502	141	164	580
Stage 1	-	-	-	-	-	-	380	398	-	561	550	-
Stage 2	-	-	-	-	-	-	561	539	-	379	398	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1058	-	-	978	-	-	118	145	502	131	148	580
Mov Cap-2 Maneuver	-	-	-	-	-	-	118	145	-	131	148	-
Stage 1	-	-	-	-	-	-	344	360	-	508	550	-
Stage 2	-	-	-	-	-	-	507	539	-	342	360	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	1.3	0	24.1	18.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	191	1058	-	-	978	-	-	131	580
HCM Lane V/C Ratio	0.011	0.095	-	-	-	-	-	0.141	0.096
HCM Control Delay (s)	24.1	8.8	-	-	0	-	-	36.9	11.9
HCM Lane LOS	C	A	-	-	A	-	-	E	B
HCM 95th %tile Q(veh)	0	0.3	-	-	0	-	-	0.5	0.3

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Vol, veh/h	38	619	463	21	24	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	41	673	503	23	26	48

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	526	0	-	0	1270	515
Stage 1	-	-	-	-	515	-
Stage 2	-	-	-	-	755	-
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	1041	-	-	-	186	560
Stage 1	-	-	-	-	600	-
Stage 2	-	-	-	-	464	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1041	-	-	-	174	560
Mov Cap-2 Maneuver	-	-	-	-	307	-
Stage 1	-	-	-	-	600	-
Stage 2	-	-	-	-	435	-

Approach	EB	WB	SB
HCM Control Delay, s	0.5	0	15
HCM LOS			C

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	1041	-	-	-	434
HCM Lane V/C Ratio	0.04	-	-	-	0.17
HCM Control Delay (s)	8.6	0	-	-	15
HCM Lane LOS	A	A	-	-	C
HCM 95th %tile Q(veh)	0.1	-	-	-	0.6

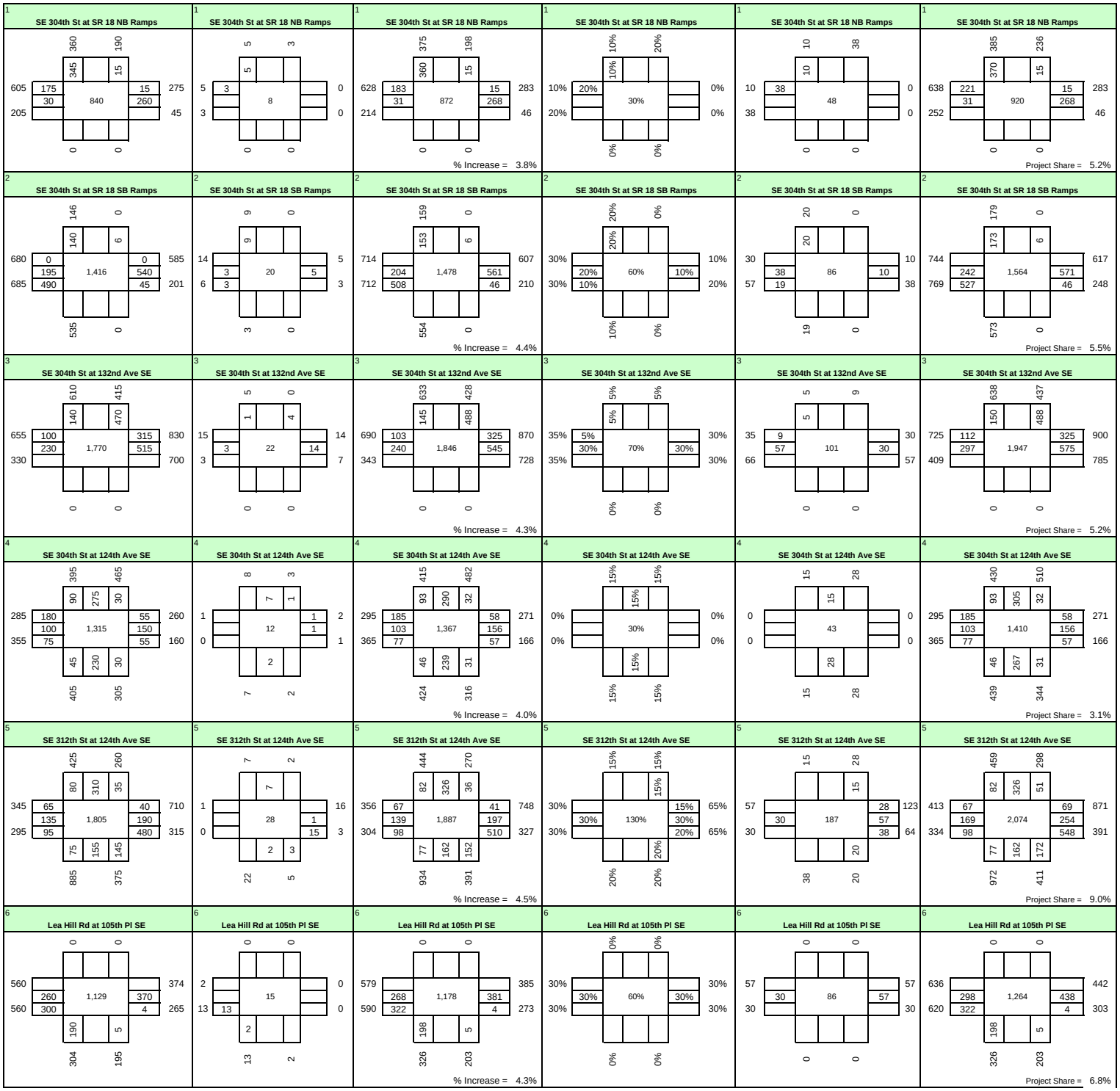
Attachment 3
2017 Traffic Forecasts

AM Peak Hour

	Existing	Baseline
Growth Rate =	1.0%	1.0%
Existing Year =	2014	
Future Year =	2017	

Enter	Exit	Total
99	189	288

2014 Baseline | **Pipeline Volumes** | **2017 Baseline** | **Trip Distribution** | **Project Trips** | **2017 With-Project**

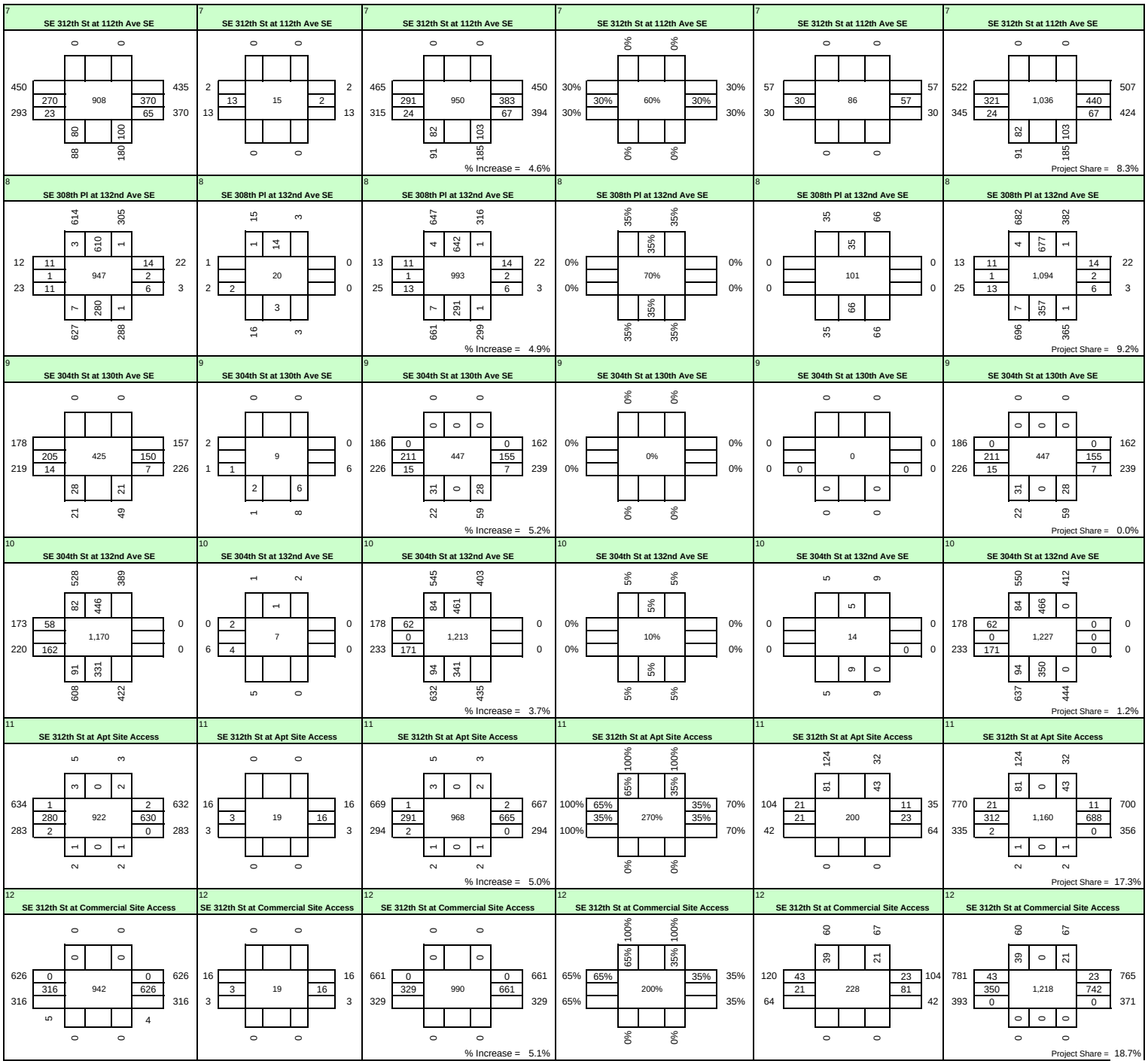


AM Peak Hour

	Existing	Baseline
Growth Rate =	1.0%	1.0%
Existing Year =	2014	
Future Year =	2017	

Enter	Exit	Total
99	189	288

2014 Baseline | **Pipeline Volumes** | **2017 Baseline** | **Trip Distribution** | **Project Trips** | **2017 With-Project**

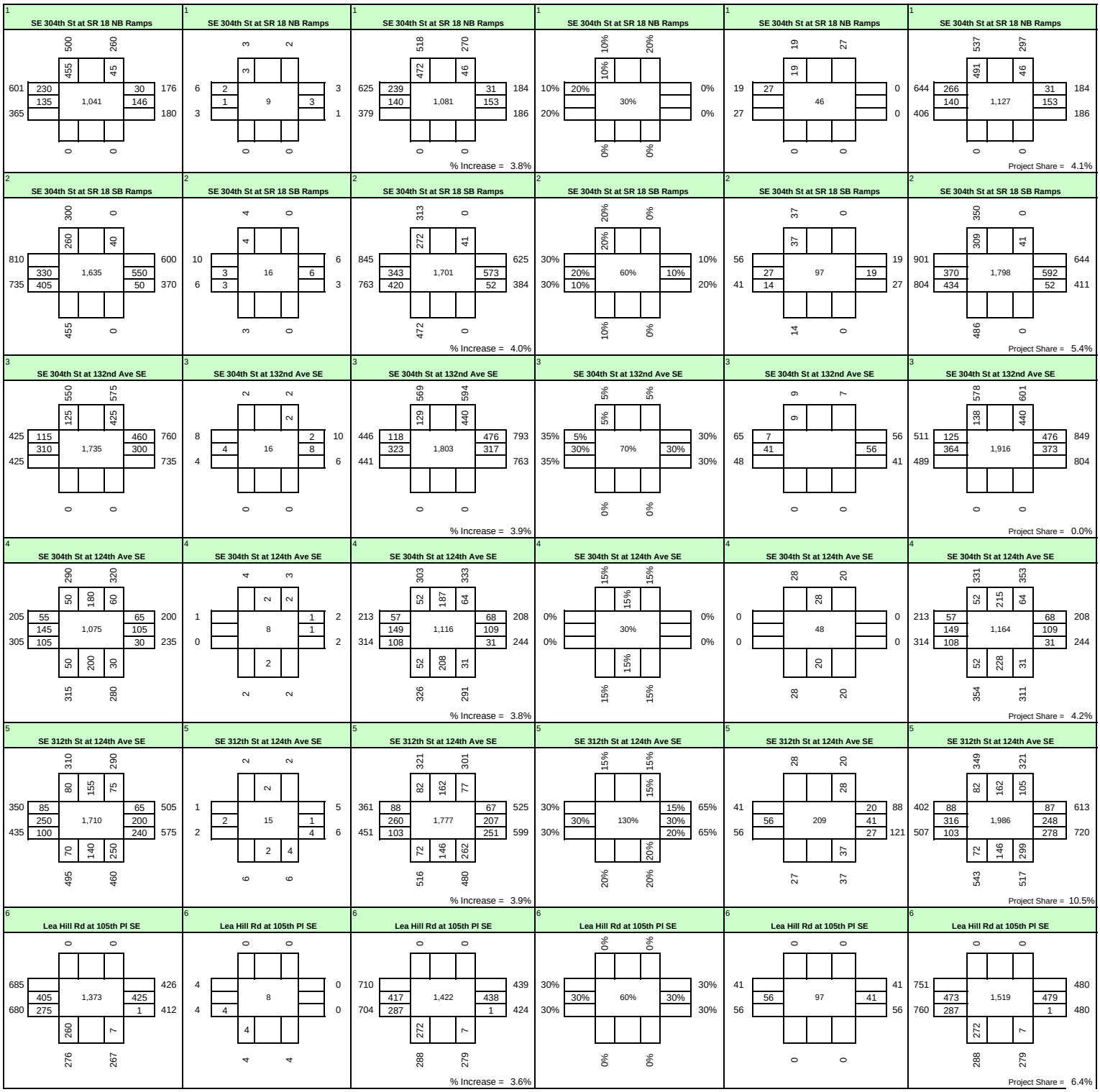


PM Peak Hour

	Existing	Baseline
Growth Rate =	1.0%	1.0%
Existing Year =	2014	
Future Year =	2017	

Enter	Exit	Total
186	136	322

2014 Baseline | **Pipeline** | **2017 Baseline** | **Trip Distribution** | **Project Trips** | **2017 With-Project**

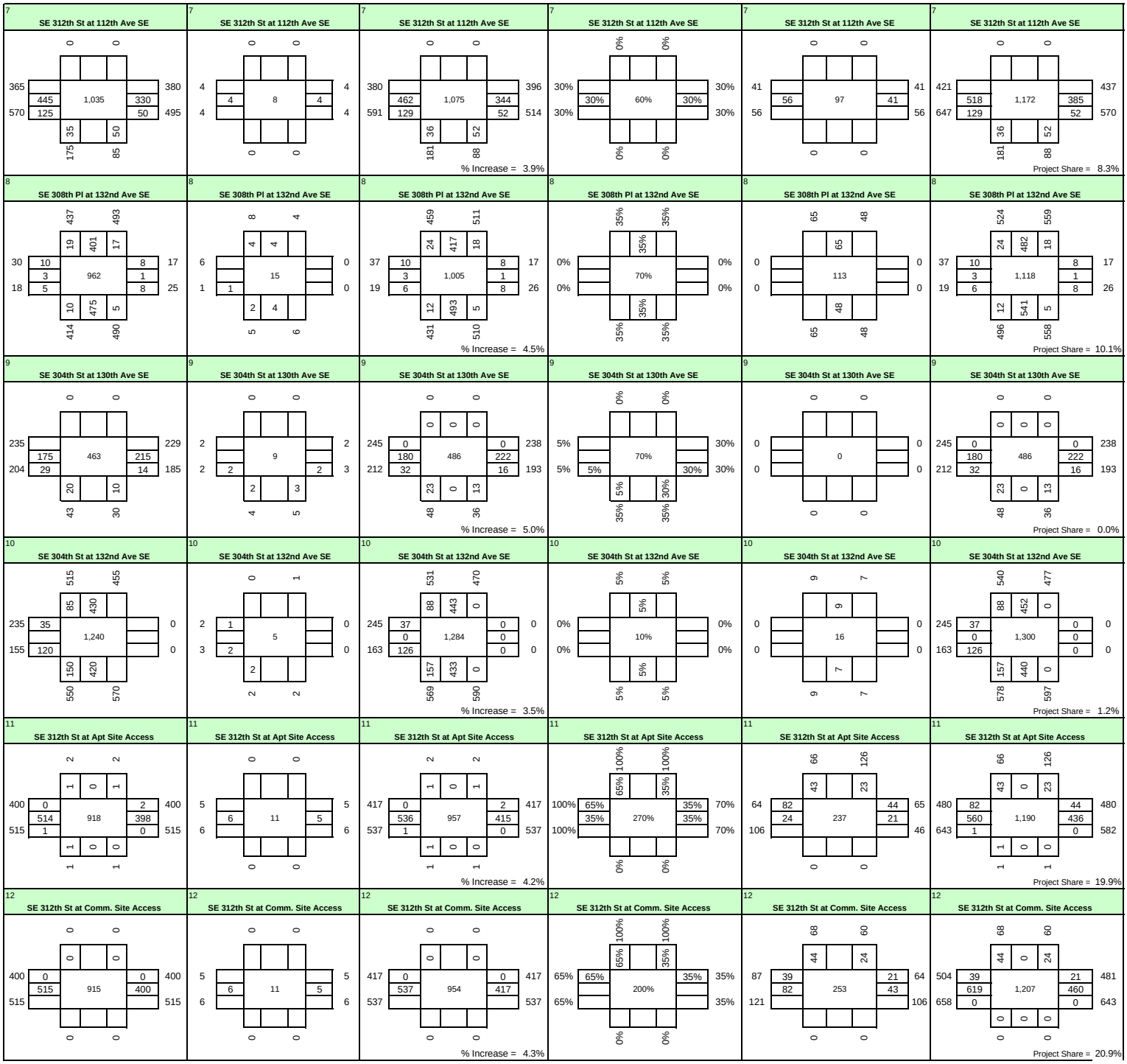


PM Peak Hour

	Existing	Baseline
Growth Rate =	1.0%	1.0%
Existing Year =	2014	
Future Year =	2017	

Enter	Exit	Total
186	136	322

2014 Baseline | **Pipeline** | **2017 Baseline** | **Trip Distribution** | **Project Trips** | **2017 With-Project**



Attachment 4
Detailed Trip Generation Estimates

Land Use 220 Number of Apartment Units: 320 units
Apartment
Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (Fitted Curve)

Total Trips	Entering	Exiting
161	32	129

Land Use 565 1000 Sq. Footage 10.350
Day Care Center
Peak Hour of Adjacent Street Traffic, One Hour Between 7 and 9 a.m. (Average Rate)

	Total Trips	Entering	Exiting
	126	67	60
Net Project Trips	126	67	60

Total

Total Trips	Entering	Exiting
287	99	189

Land Use 220 Number of Apartment Units: 320 units
Apartment
Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (Fitted Curve)

	Total Trips	Entering	Exiting
	194	126	68

Land Use 565 1000 Sq. Footage 10.350
Day Care Center
Peak Hour of Adjacent Street Traffic, One Hour Between 4 and 6 p.m. (Average Rate)

	Total Trips	Entering	Exiting	
	128	60	68	
Pass-By	0	0	0	0
Net Project Trips	128	60	68	

Total

	Total Trips	Entering	Exiting
	322	186	136

Attachment 5
Roadway LOS Summary

Arterial Level of Service: NB 124th Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 312th St	III	30	60.5	0.0	60.5	0.48	28.3	B
SE 304th St	III	30	83.6	11.8	95.4	0.70	26.3	B
Total	III		144.1	11.8	155.9	1.17	27.1	B

Arterial Level of Service: SB 124th Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 304th St	III	30	25.4	13.1	38.5	0.20	18.7	C
SE 312th St	III	30	83.6	0.0	83.6	0.70	30.0	B
SE 320th St	III	30	60.5	32.2	92.7	0.48	18.5	C
Total	III		169.5	45.3	214.8	1.37	23.0	C

Arterial Level of Service: NB 132nd Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 308th Pl	III	30	37.5	8.1	45.6	0.29	23.3	C
	III	30	29.4	6.7	36.1	0.23	23.1	C
SE 304th St	III	30	22.4	9.9	32.3	0.17	18.7	C
Total	III		89.3	24.7	114.0	0.69	21.9	C

Arterial Level of Service: SB 132nd Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 304th St	III	30	20.4	14.0	34.4	0.15	15.9	D
	III	30	22.4	7.0	29.4	0.17	20.5	C
SE 308th Pl	III	30	29.4	14.2	43.6	0.23	19.1	C
Total	III		72.2	35.2	107.4	0.55	18.5	C

Arterial Level of Service: EB SE 304th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
124th Ave SE	III	30	40.8	20.3	61.1	0.32	18.9	C
132nd Ave SE	III	30	64.4	5.3	69.7	0.51	26.2	B
Total	III		105.2	25.6	130.8	0.83	22.8	C

Arterial Level of Service: WB SE 304th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
124th Ave SE	III	30	64.4	10.1	74.5	0.51	24.5	B
Total	III		64.4	10.1	74.5	0.51	24.5	B

Arterial Level of Service: EB SE 312th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
104th Ave SE	III	30	27.9	13.9	41.8	0.22	18.9	C
105th Pl SE	III	30	65.2	0.4	65.6	0.54	29.8	B
124th Ave SE	III	30	148.1	36.4	184.5	1.23	24.1	B
Retail Site Access	III	30	18.6	0.2	18.8	0.14	26.6	B
Total	III		259.8	50.9	310.7	2.14	24.8	B

Arterial Level of Service: WB SE 312th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Retail Site Access	III	30	35.2	0.6	35.8	0.28	27.9	B
124th Ave SE	III	30	18.6	2.7	21.3	0.14	23.5	C
105th Pl SE	III	30	47.6	25.4	73.0	0.37	18.5	C
104th Ave SE	III	30	65.2	31.1	96.3	0.54	20.3	C
Total	III		166.6	59.8	226.4	1.33	21.2	C

Arterial Level of Service: NB 124th Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 312th St	III	30	60.5	0.0	60.5	0.48	28.3	B
SE 304th St	III	30	83.6	13.6	97.2	0.70	25.8	B
Total	III		144.1	13.6	157.7	1.17	26.8	B

Arterial Level of Service: SB 124th Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 304th St	III	30	25.4	14.5	39.9	0.20	18.1	C
SE 312th St	III	30	83.6	0.0	83.6	0.70	30.0	B
SE 320th St	III	30	60.5	32.2	92.7	0.48	18.5	C
Total	III		169.5	46.7	216.2	1.37	22.9	C

Arterial Level of Service: NB 132nd Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 308th Pl	III	35	21.0	13.0	34.0	0.18	18.5	C
	III	35	24.7	8.4	33.1	0.21	22.4	C
SE 304th St	III	35	23.3	11.5	34.8	0.19	20.1	C
Total	III		69.0	32.9	101.9	0.58	20.3	C

Arterial Level of Service: SB 132nd Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 304th St	III	35	19.8	13.4	33.2	0.15	16.8	D
	III	35	23.3	8.5	31.8	0.19	22.0	C
SE 308th Pl	III	35	24.7	11.8	36.5	0.21	20.3	C
Total	III		67.8	33.7	101.5	0.55	19.7	C

Arterial Level of Service: EB SE 304th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
124th Ave SE	III	30	40.8	8.3	49.1	0.32	23.6	C
132nd Ave SE	III	30	62.1	4.2	66.3	0.49	26.5	B
Total	III		102.9	12.5	115.4	0.81	25.3	B

Arterial Level of Service: WB SE 304th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
124th Ave SE	III	30	62.1	6.5	68.6	0.49	25.6	B
Total	III		62.1	6.5	68.6	0.49	25.6	B

Arterial Level of Service: EB SE 312th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
104th Ave SE	III	35	27.7	13.9	41.6	0.23	20.0	C
105th Pl SE	III	35	45.5	0.5	46.0	0.38	29.7	B
124th Ave SE	III	35	127.0	20.5	147.5	1.23	30.1	A
Retail Site Access	III	35	17.8	0.4	18.2	0.14	27.5	B
Total	III		218.0	35.3	253.3	1.98	28.2	B

Arterial Level of Service: WB SE 312th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Retail Site Access	III	35	33.2	0.3	33.5	0.28	29.8	B
124th Ave SE	III	35	17.8	3.5	21.3	0.14	23.5	C
105th Pl SE	III	35	49.9	30.3	80.2	0.42	18.7	C
104th Ave SE	III	35	45.5	31.1	76.6	0.38	17.8	D
Total	III		146.4	65.2	211.6	1.21	20.6	C

Arterial Level of Service: NB 124th Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 312th St	III	30	60.5	0.0	60.5	0.48	28.3	B
SE 304th St	III	30	83.6	13.9	97.5	0.70	25.7	B
Total	III		144.1	13.9	158.0	1.17	26.7	B

Arterial Level of Service: SB 124th Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 304th St	III	30	25.4	6.1	31.5	0.20	22.9	C
SE 312th St	III	30	83.6	0.0	83.6	0.70	30.0	B
SE 320th St	III	30	60.5	32.2	92.7	0.48	18.5	C
Total	III		169.5	38.3	207.8	1.37	23.8	C

Arterial Level of Service: NB 132nd Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 308th Pl	III	30	22.2	8.8	31.0	0.18	20.3	C
	III	30	25.7	6.5	32.2	0.20	22.6	C
SE 304th St	III	30	25.1	10.0	35.1	0.20	20.3	C
Total	III		73.0	25.3	98.3	0.58	21.1	C

Arterial Level of Service: SB 132nd Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 304th St	III	30	20.1	14.1	34.2	0.15	15.8	D
	III	30	25.1	6.7	31.8	0.20	22.4	C
SE 308th Pl	III	30	25.7	15.9	41.6	0.20	17.5	D
Total	III		70.9	36.7	107.6	0.55	18.4	C

Arterial Level of Service: EB SE 304th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
124th Ave SE	III	30	40.8	20.3	61.1	0.32	18.9	C
132nd Ave SE	III	30	62.1	5.3	67.4	0.49	26.1	B
Total	III		102.9	25.6	128.5	0.81	22.7	C

Arterial Level of Service: WB SE 304th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
124th Ave SE	III	30	62.1	10.1	72.2	0.49	24.4	B
Total	III		62.1	10.1	72.2	0.49	24.4	B

Arterial Level of Service: EB SE 312th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
104th Ave SE	III	35	26.4	13.9	40.3	0.22	19.6	C
105th Pl SE	III	35	46.8	0.5	47.3	0.39	29.7	B
124th Ave SE	III	35	127.0	38.9	165.9	1.23	26.8	B
Total	III		200.2	53.3	253.5	1.84	26.2	B

Arterial Level of Service: WB SE 312th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
124th Ave SE	III	35	49.9	3.0	52.9	0.42	28.3	B
105th Pl SE	III	35	45.9	26.0	71.9	0.38	19.2	C
104th Ave SE	III	35	46.8	31.1	77.9	0.39	18.0	C
Total	III		142.6	60.1	202.7	1.19	21.1	C

Arterial Level of Service: NB 124th Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 312th St	III	30	60.5	0.0	60.5	0.48	28.3	B
SE 304th St	III	30	83.6	14.2	97.8	0.70	25.6	B
Total	III		144.1	14.2	158.3	1.17	26.7	B

Arterial Level of Service: SB 124th Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 304th St	III	30	25.4	14.5	39.9	0.20	18.1	C
SE 312th St	III	30	83.6	0.0	83.6	0.70	30.0	B
SE 320th St	III	30	60.5	32.2	92.7	0.48	18.5	C
Total	III		169.5	46.7	216.2	1.37	22.9	C

Arterial Level of Service: NB 132nd Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 308th Pl	III	35	21.0	14.4	35.4	0.18	17.8	D
	III	35	24.7	9.0	33.7	0.21	22.0	C
SE 304th St	III	35	23.3	11.6	34.9	0.19	20.0	C
Total	III		69.0	35.0	104.0	0.58	19.9	C

Arterial Level of Service: SB 132nd Ave SE

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
SE 304th St	III	35	19.8	13.7	33.5	0.15	16.6	D
	III	35	23.3	9.1	32.4	0.19	21.6	C
SE 308th Pl	III	35	24.7	9.4	34.1	0.21	21.7	C
Total	III		67.8	32.2	100.0	0.55	20.0	C

Arterial Level of Service: EB SE 304th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
124th Ave SE	III	30	40.8	8.3	49.1	0.32	23.6	C
132nd Ave SE	III	30	62.1	4.2	66.3	0.49	26.5	B
Total	III		102.9	12.5	115.4	0.81	25.3	B

Arterial Level of Service: WB SE 304th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
124th Ave SE	III	30	62.1	6.4	68.5	0.49	25.7	B
Total	III		62.1	6.4	68.5	0.49	25.7	B

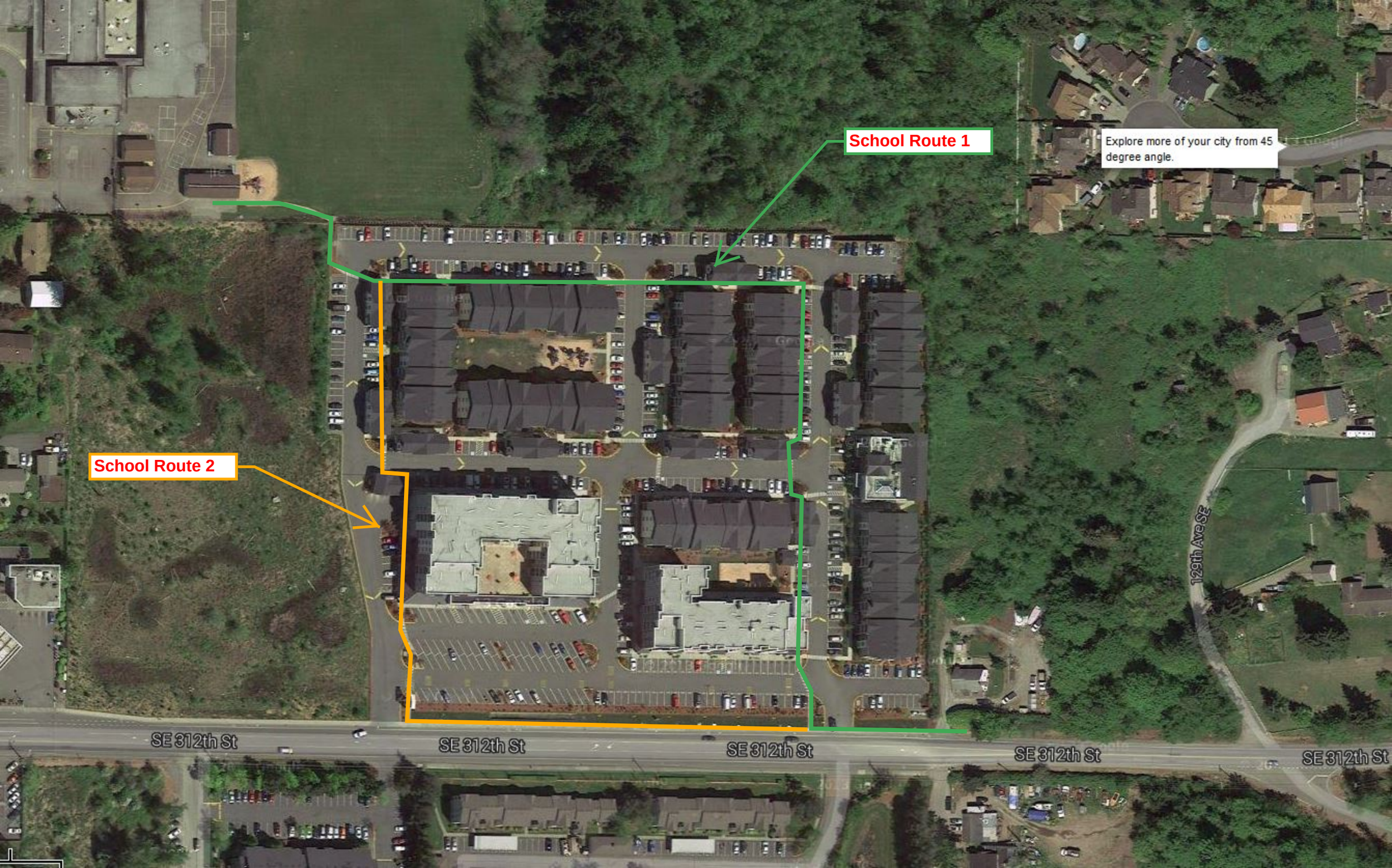
Arterial Level of Service: EB SE 312th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
104th Ave SE	III	35	27.7	13.9	41.6	0.23	20.0	C
105th Pl SE	III	35	45.5	0.5	46.0	0.38	29.7	B
124th Ave SE	III	35	127.0	24.4	151.4	1.23	29.4	B
Retail Site Access	III	35	17.8	61.0	78.8	0.14	6.4	F
Total	III		218.0	99.8	317.8	1.98	22.5	C

Arterial Level of Service: WB SE 312th St

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Retail Site Access	III	35	33.2	17.0	50.2	0.28	19.9	C
124th Ave SE	III	35	17.8	3.8	21.6	0.14	23.2	C
105th Pl SE	III	35	49.9	30.3	80.2	0.42	18.7	C
104th Ave SE	III	35	45.5	31.1	76.6	0.38	17.8	D
Total	III		146.4	82.2	228.6	1.21	19.1	C

Attachment 6
Safe Walk Route Alternatives


School Route 1
School Route 2
Explore more of your city from 45 degree angle.
SE 312th St
SE 312th St
SE 312th St
SE 312th St
SE 312th St
129th Ave SE

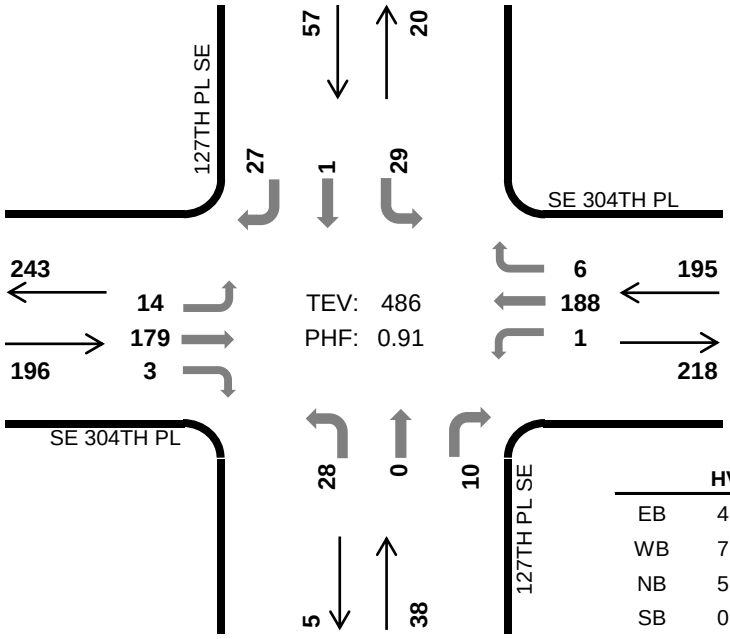
Attachment 7
April 2015 Neighborhood AM/PM Traffic Counts

127TH PL SE
SE 304TH PL

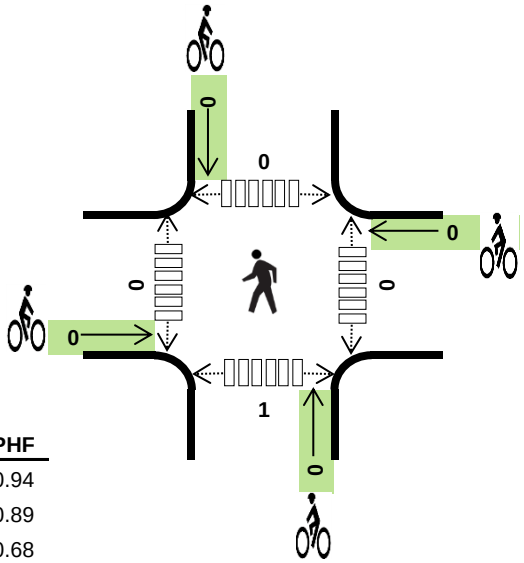
Date: Tue, Mar 31, 2015
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM

N

Peak Hour



	HV %:	PHF
EB	4.1%	0.94
WB	7.7%	0.89
NB	5.3%	0.68
SB	0.0%	0.68
TOTAL	5.1%	0.91



Two-Hour Count Summaries

Interval Start	SE 304TH PL Eastbound			SE 304TH PL Westbound			127TH PL SE Northbound			127TH PL SE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**2**	**45**	**2**	**0**	**47**	**2**	**11**	**0**	**3**	**10**	**1**	**10**	**133**	
7:15 AM	**4**	**48**	**0**	**0**	**45**	**1**	**8**	**0**	**3**	**8**	**0**	**6**	**123**	
7:30 AM	**5**	**38**	**0**	**0**	**54**	**1**	**5**	**0**	**2**	**4**	**0**	**6**	**115**	
7:45 AM	**3**	**48**	**1**	**1**	**42**	**2**	**4**	**0**	**2**	**7**	**0**	**5**	**115**	**486**
8:00 AM	5	24	1	1	34	3	2	0	4	11	0	3	88	441
8:15 AM	5	28	2	1	29	1	2	0	2	4	0	4	78	396
8:30 AM	5	48	1	0	26	2	3	0	6	10	0	10	111	392
8:45 AM	2	31	0	1	25	2	2	0	3	14	1	6	87	364
Count Total	31	310	7	4	302	14	37	0	25	68	2	50	850	
Peak Hr	**14**	**179**	**3**	**1**	**188**	**6**	**28**	**0**	**10**	**29**	**1**	**27**	**486**	

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**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:15 AM	**5**	**1**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
7:30 AM	**2**	**6**	**1**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:45 AM	**0**	**8**	**0**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:00 AM	2	2	0	0	*4*	0	0	0	0	*0*	1	0	0	0	*1*
8:15 AM	3	1	0	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	5	0	0	0	*5*	0	0	0	0	*0*	2	0	1	0	*3*
8:45 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	18	18	2	2	*40*	0	0	0	0	*0*	3	0	1	1	*5*
Peak Hr	**8**	**15**	**2**	**0**	***25***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***

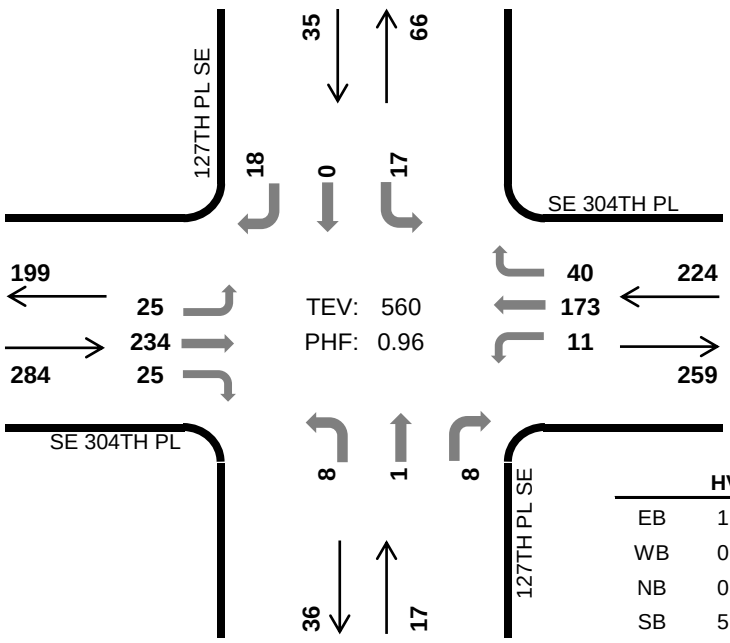
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

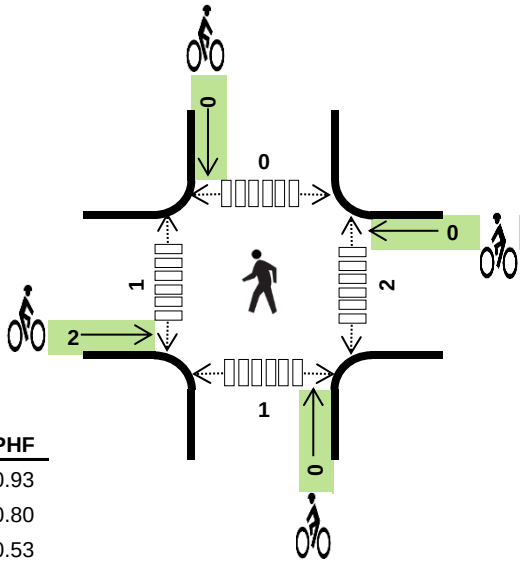
127TH PL SE
SE 304TH PL

Date: Tue, Mar 31, 2015
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour





	HV %:	PHF
EB	1.4%	0.93
WB	0.0%	0.80
NB	0.0%	0.53
SB	5.7%	0.67
TOTAL	1.1%	0.96

Two-Hour Count Summaries

Interval Start	SE 304TH PL Eastbound			SE 304TH PL Westbound			127TH PL SE Northbound			127TH PL SE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	7	45	7	5	48	7	4	0	3	4	0	8	138	
4:15 PM	11	45	7	3	36	4	1	0	0	11	1	4	123	
4:30 PM	5	55	2	3	35	11	2	0	3	11	0	2	129	
4:45 PM	**8**	**61**	**7**	**5**	**42**	**6**	**1**	**1**	**2**	**6**	**0**	**7**	**146**	536
5:00 PM	**7**	**55**	**3**	**2**	**53**	**15**	**2**	**0**	**1**	**3**	**0**	**4**	**145**	543
5:15 PM	**6**	**62**	**4**	**2**	**35**	**9**	**4**	**0**	**4**	**6**	**0**	**1**	**133**	553
5:30 PM	**4**	**56**	**11**	**2**	**43**	**10**	**1**	**0**	**1**	**2**	**0**	**6**	**136**	**560**
5:45 PM	9	47	3	1	35	15	4	0	0	5	0	8	127	541
Count Total	57	426	44	23	327	77	19	1	14	48	1	40	1,077	
Peak Hr	**25**	**234**	**25**	**11**	**173**	**40**	**8**	**1**	**8**	**17**	**0**	**18**	**560**	

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	0	1	*4*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	1	1	0	0	*2*	0	1	0	0	*1*	0	0	0	0	*0*
4:30 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**3**	**0**	**0**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	***2***
5:15 PM	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	***2***	**0**	**1**	**0**	**1**	***2***
5:30 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:45 PM	0	0	0	0	*0*	0	0	0	0	*0*	0	1	0	1	*2*
Count Total	8	3	0	3	*14*	2	1	0	0	*3*	2	2	0	2	*6*
Peak Hr	**4**	**0**	**0**	**2**	***6***	**2**	**0**	**0**	**0**	***2***	**2**	**1**	**0**	**1**	***4***

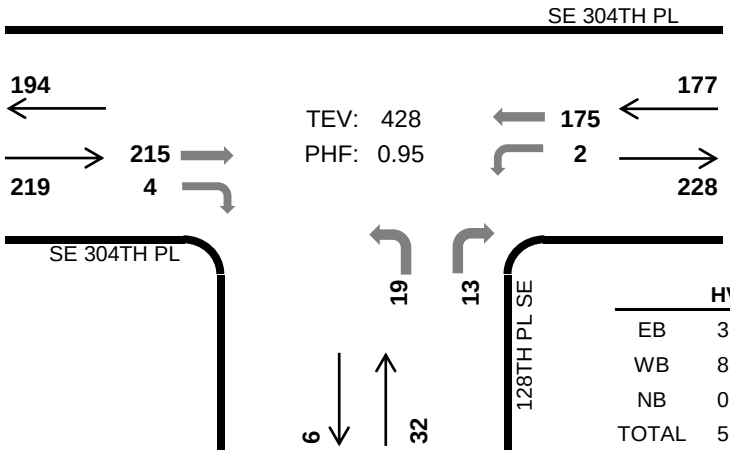
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

128TH PL SE
SE 304TH PL

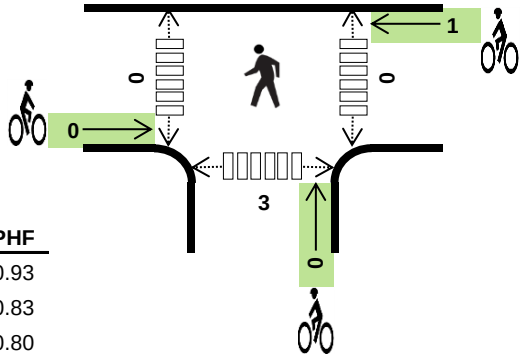
N

Peak Hour

Date: Tue, Mar 31, 2015
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:00 AM to 8:00 AM



	HV %:	PHF
EB	3.2%	0.93
WB	8.5%	0.83
NB	0.0%	0.80
TOTAL	5.1%	0.95



Two-Hour Count Summaries

Interval Start	SE 304TH PL Eastbound			SE 304TH PL Westbound			128TH PL SE Northbound			128TH PL SE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	**0**	**58**	**1**	**0**	**40**	**0**	**8**	**0**	**1**	**0**	**0**	**0**	**108**	
7:15 AM	**0**	**59**	**0**	**2**	**43**	**0**	**3**	**0**	**6**	**0**	**0**	**0**	**113**	
7:30 AM	**0**	**43**	**1**	**0**	**53**	**0**	**3**	**0**	**1**	**0**	**0**	**0**	**101**	
7:45 AM	**0**	**55**	**2**	**0**	**39**	**0**	**5**	**0**	**5**	**0**	**0**	**0**	**106**	**428**
8:00 AM	0	37	1	0	38	0	2	0	0	0	0	0	78	398
8:15 AM	0	33	1	1	24	0	6	0	3	0	0	0	68	353
8:30 AM	0	66	1	0	26	0	2	0	0	0	0	0	95	347
8:45 AM	0	50	0	4	27	0	1	0	2	0	0	0	84	325
Count Total	0	401	7	7	290	0	30	0	18	0	0	0	753	
Peak Hr	**0**	**215**	**4**	**2**	**175**	**0**	**19**	**0**	**13**	**0**	**0**	**0**	**428**	

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**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:15 AM	**5**	**1**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
7:30 AM	**1**	**7**	**0**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	***2***
7:45 AM	**0**	**7**	**0**	**0**	***7***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	***1***
8:00 AM	2	3	0	0	*5*	0	0	0	0	*0*	0	0	0	1	*1*
8:15 AM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	4	0	0	0	*4*	0	0	0	0	*0*	0	0	1	2	*3*
8:45 AM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	15	20	0	0	*35*	0	1	0	0	*1*	0	0	1	6	*7*
Peak Hr	**7**	**15**	**0**	**0**	***22***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**3**	***3***

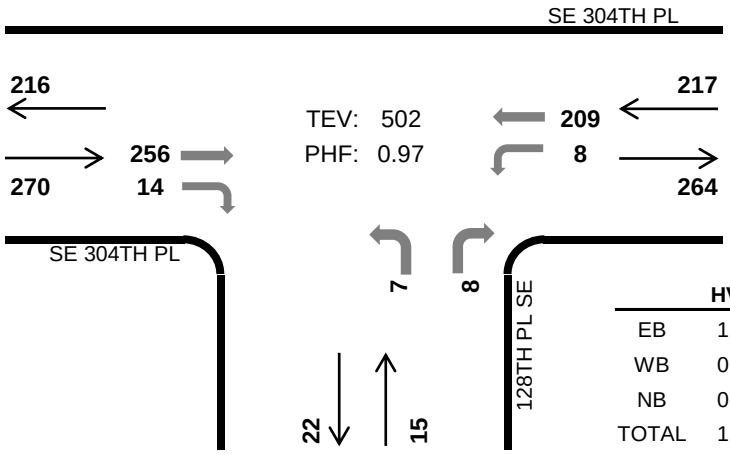
Mark Skaggs: 425 - 250 - 0777 mark.skaggs@idaxdata.com

128TH PL SE
SE 304TH PL

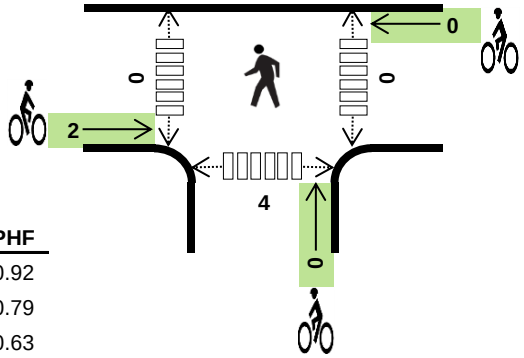
N

Peak Hour

Date: Tue, Mar 31, 2015
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	1.9%	0.92
WB	0.9%	0.79
NB	0.0%	0.63
TOTAL	1.4%	0.97



Two-Hour Count Summaries

Interval Start	SE 304TH PL Eastbound			SE 304TH PL Westbound			128TH PL SE Northbound			128TH PL SE Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	47	4	3	56	0	3	0	2	0	0	0	115	
4:15 PM	0	51	4	3	42	0	1	0	1	0	0	0	102	
4:30 PM	**0**	**64**	**6**	**1**	**46**	**0**	**2**	**0**	**4**	**0**	**0**	**0**	**123**	
4:45 PM	**0**	**65**	**4**	**2**	**52**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**125**	465
5:00 PM	**0**	**56**	**2**	**1**	**68**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**129**	479
5:15 PM	**0**	**71**	**2**	**4**	**43**	**0**	**2**	**0**	**3**	**0**	**0**	**0**	**125**	**502**
5:30 PM	0	57	2	7	54	0	1	0	1	0	0	0	122	501
5:45 PM	0	48	3	6	49	0	2	0	1	0	0	0	109	485
Count Total	0	459	27	27	410	0	14	0	13	0	0	0	950	
Peak Hr	**0**	**256**	**14**	**8**	**209**	**0**	**7**	**0**	**8**	**0**	**0**	**0**	**502**	

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	0	0	*3*	0	0	0	0	*0*	0	1	0	1	*2*
4:15 PM	1	3	0	0	*4*	0	0	0	0	*0*	0	0	0	1	*1*
4:30 PM	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
4:45 PM	**4**	**1**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
5:15 PM	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**3**	***3***
5:30 PM	1	0	0	0	*1*	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	1	*1*
Count Total	9	6	0	0	*15*	2	0	0	0	*2*	0	1	0	7	*8*
Peak Hr	**5**	**2**	**0**	**0**	***7***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**4**	***4***

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