lancaster mobley

Hillside Master Plan

Transportation Impact Study

Milwaukie, Oregon

Date:
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Renews 12-31-21

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Executive Summary

1. The Hillside Master Plan is a mixed-use development planned for the property located at 2889 SE Hillside Court in Milwaukie, Oregon. The site consists of tax lots 11E25CD00100 and 11E25CD00102 totaling approximately 16 acres. It currently contains the 100-unit Hillside Manor apartment building and 100 single-family detached houses. The proposed 600-unit development will construct 20 new buildings containing 500 multifamily housing units with some ground-floor commercial space and accessory space for Hillside resident and retain the 100-unit Hillside Manor. The existing single-family houses will be demolished. Site access is proposed via SE Meek Street and an extension of SE Dwyer Drive.
2. The proposed development is projected to generate a net additional 110 trips during the morning peak hour, a net additional 105 trips during the evening peak hour, and a net additional 1,426 trips during the average weekday compared with existing development of the site.
3. No significant trends or crash patterns were identified at any of the study intersections that were indicative of safety concerns. Accordingly, no safety mitigation is recommended per the crash data analysis.
4. Adequate sight distance is available at the site access to ensure safe and efficient operation of the intersection; however, sight lines at the SE Meek Street access on SE 32nd Avenue could be improved by removing some of the foliage on the southeast corner of the intersection.
5. The SE Meek Street site access will meet access spacing standards for SE 32nd Avenue but the SE Dwyer Drive intersection will not meet spacing due to the north. However, the average access spacing across the site frontage will meet the standard, and the number of potential conflict points along this section of SE 32nd Avenue will be reduced compared with existing conditions, improving the safety and flow of the street.
6. Left-turn lane warrants are projected to be met for the northbound approach of the intersection of SE Meek Street at SE 32nd Avenue; however, a northbound left-turn lane is not recommended for several reasons. Stopped vehicles in a northbound left-turn lane would obstruct the line of sight between northbound vehicles and pedestrians using the crosswalk on SE 32nd Avenue north of the intersection. While the separation of left-turning vehicles can reduce potential conflicts, it would also support higher travel speeds on a roadway where traffic-calming measures have been installed to slow travel speeds.
7. Preliminary traffic signal warrants will not be met at any of the study intersections under buildout conditions.
8. All study area intersections are expected to operate within the City of Milwaukie and ODOT standards under all analysis scenarios except for the intersection of SE Harrison Street at SE 42nd Avenue. This intersection will exceed City standards under background conditions and worsen by one second of delay under building conditions. However, no mitigation is recommended because traffic volumes will not meet signal warrants.
9. A vehicular connection between the site and SE 29th Avenue is not projected to significantly improve or degrade the performance of the affected study intersections compared with providing only a bicycle/pedestrian connection.
10. Regarding the proposed zone change, a comparison of reasonable worst-case development scenarios shows that the transportation system is capable of supporting changes to adopted plans and land use regulations and no modifications to the City's TSP are needed. Therefore, the conditions of the TPR are satisfied.

Project Description

Introduction

The Hillside Master Plan is a mixed-use development planned for the property located at 2889 SE Hillside Court in Milwaukie, Oregon. The site consists of tax lots 11E25CD00100 and 11E25CD00102 totaling approximately 16 acres. It currently contains the 100-unit Hillside Manor apartment building and 100 single-family detached houses. The proposed 600-unit development will construct 20 new buildings containing 500 multifamily housing units with some ground-floor commercial space and accessory space for Hillside resident and retain the 100-unit Hillside Manor. The existing single-family houses will be demolished. Site access is proposed via SE Meek Street and an extension of SE Dwyer Drive.

The purpose of this study is to determine whether the transportation system within the vicinity of the site is capable of safely and efficiently supporting the proposed development and to determine any mitigation that may be necessary to do so. Through scoping with City and ODOT staff, the following ten intersections were selected for analysis:

- SE Tacoma Street/SE Johnson Creek Boulevard at SE 32nd Avenue
- SE Balfour Street at SE 29th Avenue
- SE Balfour Street at SE 32nd Avenue
- SE Dwyer Drive (site access) at SE 32nd Avenue
- SE Meek Street (site access) at SE 32nd Avenue
- SE Harrison Street at Oregon Highway 224 (Highway 224
- SE Harrison Street at SE 32nd Avenue
- SE Harrison Street at SE 42nd Avenue
- SE Monroe Street at Highway 224
- Highway 224 at SE Oak Street

Detailed information on traffic counts, trip generation calculations, safety analyses, and level of service calculations is included in the appendix to this report.

Location Description

The site is bordered by a vacant property to the south (the Murphy site); SE 32nd Avenue and Providence Milwaukie Hospital to the east; residential properties to the north; and railroad tracks and industrial lands to the west. The site is located less than a mile south of SE Johnson Creek Boulevard and is within a mile of Highway 99E and Highway 224. Development in the surrounding area is primarily residential, with industrial development west of the railroad adjacent to the site. The site is currently zoned as R-3 and occupied by 200 units of public housing.The nine-story Hillside Manor apartment building includes 100 multifamily homes which will remain after construction, however the remaining 100 detached single-family dwellings will be removed for the proposed project.

Vicinity Roadways

The proposed development is expected to impact eleven vicinity roadways near the site. Table 1 provides a description of each vicinity roadway.

Table 1: Vicinity Roadway Descriptions

Roadway	Jurisdiction	Functional Classification	Cross-Section	Speed	On-street Parking	Bicycle Lanes	Curbs	Sidewalks
SE Tacoma Street	City of Portland	Collector	2 to 3 Lanes	25 mph Posted	Not Permitted	Both Sides	Both Sides	Both Sides
SE Johnson Creek Boulevard	City of Portland	Collector	2 to 3 Lanes	25 mph Posted	Not Permitted	Both Sides	Both Sides	Both Sides
SE 32nd Avenue	City of Milwaukie	Collector	2 to 3 Lanes	25 mph Posted	Not Permitted	None	Both Sides	Both Sides
SE 29th Avenue	City of Milwaukie	Local Street	2 Lanes	25 mph Statutory	Permitted Both Sides	None	None	None
SE Balfour Street	City of Milwaukie	Local Street	2 Lanes	25 mph Statutory	Permitted Both Sides	None	None	None
SE Dwyer Street	City of Milwaukie	Local Street	2 Lanes	25 mph Statutory	Permitted South Side	None	Both Sides	Both Sides
SE Meek Street	City of Milwaukie	Local Street	2 Lanes	25 mph Statutory	Permitted Both Sides	None	Both Sides	Both Sides
Highway 224	ODOT	Regional Route	4 to 6 Lanes	40 mph Posted	Not Permitted	None	Both Sides	None
SE Harrison Street	City of Milwaukie	Arterial	2 to 4 Lanes	25 mph Posted	Partially Permitted	None	Both Sides	Both Sides
SE 42nd Avenue	City of Milwaukie	Arterial/Collector	2 to 3 Lanes	25 mph Posted	Permitted Both Sides	Both Sides	Both Sides	Both Sides
SE Monroe Street	City of Milwaukie	Local Street	2 Lanes	25 mph Posted	Permitted Both Sides	None	Both Sides	Both Sides
SE Oak Street	City of Milwaukie	Collector	2 to 6 Lanes	25 mph Statutory	Not Permitted	None	Both Sides	Both Sides

Notes: Functional Classification based on the City of Milwaukie Transportation System Plan

Study Intersections

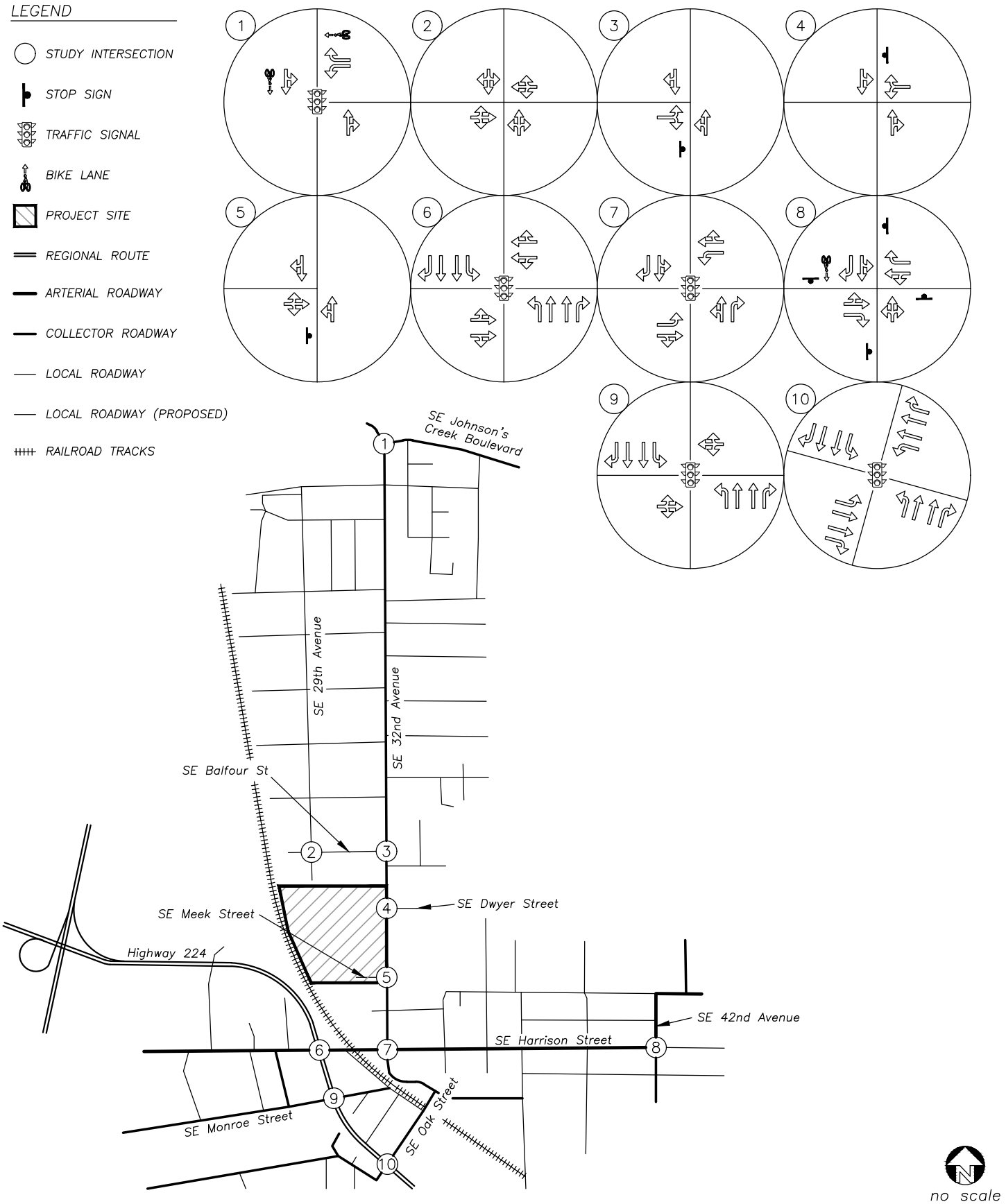
The proposed development is expected to impact ten vicinity intersections of significance. Table 2 provides a summarized description of the study intersections.

Table 2: Vicinity Intersection Descriptions

Number	Name	Geometry	Traffic Control	Phasing/Stopped Approaches
1	SE Tacoma Street/SE Johnson Creek Boulevard at SE 32nd Avenue	Three-Legged	Signalized	Split for NB/SB Approaches Right Overlap for WB Phase
2	SE Balfour Street at SE 29th Avenue	Four-Legged	Yield-Controlled	Yield Controlled All Approaches
3	SE Balfour Street at SE 32nd Avenue	Three-Legged	Stop Controlled	EB Stopped Approach
4	SE Dwyer Street at SE 32nd Avenue	Four-Legged	Stop Controlled	EB/WB Stopped Approach
5	SE Meek Street at SE 32nd Avenue	Three-Legged	Stop Controlled	EB Stopped Approach
6	SE Harrison Street at Highway 224	Four-Legged	Signalized	Permitted LT for EB/WB Approaches FYA for NB/SB Approaches
7	SE Harrison Street at SE 32nd Avenue	Four-Legged	Signalized	Protected LT for EB/WB Approaches Permitted LT for NB/SB Approaches
8	SE Harrison Street at SE 42nd Avenue	Four-Legged	Stop Controlled	All Way Stop Controlled
9	SE Monroe Street at Highway 224	Four-Legged	Signalized	Protected LT for NB/SB Approaches Permitted LT for EB/WB Approaches
10	Highway 224 at SE Oak Street	Four-Legged	Signalized	Permitted LT for NB/SB Approaches PM/PT LT for EB/WB Approaches

Note: Flashing-Yellow-Arrow denoted at FYA.

A vicinity map displaying the project site, vicinity streets, and the study intersections with their associated lane configurations and control types is shown in Figure 1.



VICINITY MAP

Figure 1

Hillside Master Plan

8/24/2020

Public Transit

The project site is located near three TriMet transit lines: bus line *#33 – McLoughlin/King Rd*, *#75 – Cesar Chavez/Lombard*, and *#152 – Milwaukie*. All three bus lines have stops located within a half-mile walking/biking distance of the site.

TriMet bus line *#33 – McLoughlin/King Rd* provides frequent service between Clackamas Community College Park & Ride and Clackamas Town Center Transit Center, with notable stops near Oregon City Health Center, Clackamas County Historic Museum, McLoughlin House, Oregon City Transit Center, Oregon City Shopping Center, and Milwaukie City Center. The nearest bus stops to the site are located along SE Harrison Street on both sides of SE 32nd Avenue. Adequate pedestrian facilities along SE 32nd Avenue such as sidewalks and crosswalks are available to connect the site with the bus stops along SE Harrison Street. Weekday service is scheduled from approximately 4:15 AM to 1:50 AM and has headways of approximately 15 to 70 minutes. Weekend service is scheduled from approximately 5:30 AM to 1:50 AM and has headways of approximately 15 to 60 minutes.

TriMet bus line *#75 – Cesar Chavez/Lombard* provides frequent service between Pier Park in the St. Johns Neighborhood and Milwaukie City Center, with notable stops near Roosevelt High School, Columbia Park, N Lombard Transit Center, NAYA, Hollywood/NE 42nd Avenue Transit Center, Reed College, Providence Milwaukie Hospital, and Ledding Library. Two bus stops abut the site, one at the current SE Hillsdale Court intersection and one at the SE Meek Street intersection. The northern stop is expected to relocate closer to the SE Dwyer Drive with site development. Weekday service is scheduled from approximately 4:45 AM and 1:30 AM and has headways of approximately 10 to 30 minutes. Weekend service is scheduled from approximately 5:30 AM to 1:40 AM and has headways of approximately 15 to 40 minutes.

TriMet bus line *#152 – Milwaukie* provides service between Milwaukie City Center and Clackamas Town Center Transit Center, with a notable stop near Exceed Enterprises. The nearest bus stops to the site are located along SE Harrison Street between SE 29th Avenue and Highway 224. Adequate crossing measures such as sidewalks and crosswalks are available along SE 32nd Avenue and SE Harrison Street to connect the site with the bus stops. Weekday service is scheduled from approximately 6:30 AM to 6:35 PM and has headways of approximately 30 to 40 minutes.

Site Trips

Trip Generation

The Hillside Master Plan includes the construction of town homes, apartment buildings, commercial space, and a community center. The multi-family housing buildings vary in size and planned for three or four stories. Two buildings will include ground-floor commercial space. One building will include ground-floor space available for use by residents of the Hillside community and is not expected to generate external trips to/from the surrounding transportation system. In total, the Hillside Master Plan proposes to replace 100 existing single-family houses with 500 multi-family housing units while maintaining the 100-unit Hillside Manor for a total of 600 housing units on site after construction.

To estimate trips that are currently generated by the site, as well as new trips that will be generated by the proposed Hillside development, trip rates from the *Trip Generation Manual*[1] were used. Land use codes were used based on the number of dwelling units for residential buildings with and without commercial space on the first floor.

Modal Split

2018 data from the United States Census Bureau's American Community Survey indicates that about 15 percent of workers in Portland travel to work via transit, bicycling, or walking[2]. Based on this value, the fact that fewer transit options serve the subject site than Portland's employment centers, and the site's proximity to the Springwater Corridor, it was estimated that 90 percent of site trips will be vehicle trips and 10 percent of site trips will be non-vehicular trips. The modal split was also applied to the existing land uses onsite while estimating the trip generation of the site under existing conditions.

The net site trips after applying reductions associated with modal splits are summarized in Table 3. Note the Hillside Manor apartment building will remain with the proposed development and is not included in either the existing or future development calculations.

[1] Institute of Transportation Engineers (ITE), *Trip Generation Manual*, 10th Edition, 2017.
[2] United States Census Bureau: American FactFinder, Commuting Characteristics by Sex, 2018. https://data.census.gov/cedsci/table?t=Commuting&tid=ACSST1Y2018.S0801&hidePreview=false&vintage=2018

Table 3: Trip Generation Summary

	ITE Code	Size	Morning Peak Hour			Evening Peak Hour			Weekday Total
			Enter	Exit	Total	Enter	Exit	Total	
Existing Conditions									
Single Family Housing	210	100 Units	19	55	74	62	37	99	944
Multi-Family Housing (Mid-Rise)	221	100 Units	9	27	36	27	17	44	544
Total Site Generated Trips			28	82	110	89	54	143	1488
Modal Split Reduction (10%)			*3*	*8*	*11*	*9*	*5*	*14*	*148*
Net External Trips			25	74	99	80	49	129	1340
Hillside Development									
Multi-Family Housing (Low-Rise)	220	39 Units	4	14	18	14	8	22	286
Multi-Family Housing (Mid-Rise)	221	415 Units	38	111	149	112	72	184	2258
Multi-Family Housing w/ First Floor Commercial	231	146 Units	15	51	66	34	20	54	530
Total Site Generated Trips			57	176	233	160	100	260	3074
Modal Split Reduction (10%)			*6*	*18*	*24*	*16*	*10*	*26*	*308*
Net External Trips			51	158	209	144	90	234	2766
Net Increase in Extenral Trips			**26**	**84**	**110**	**64**	**41**	**105**	**1426**

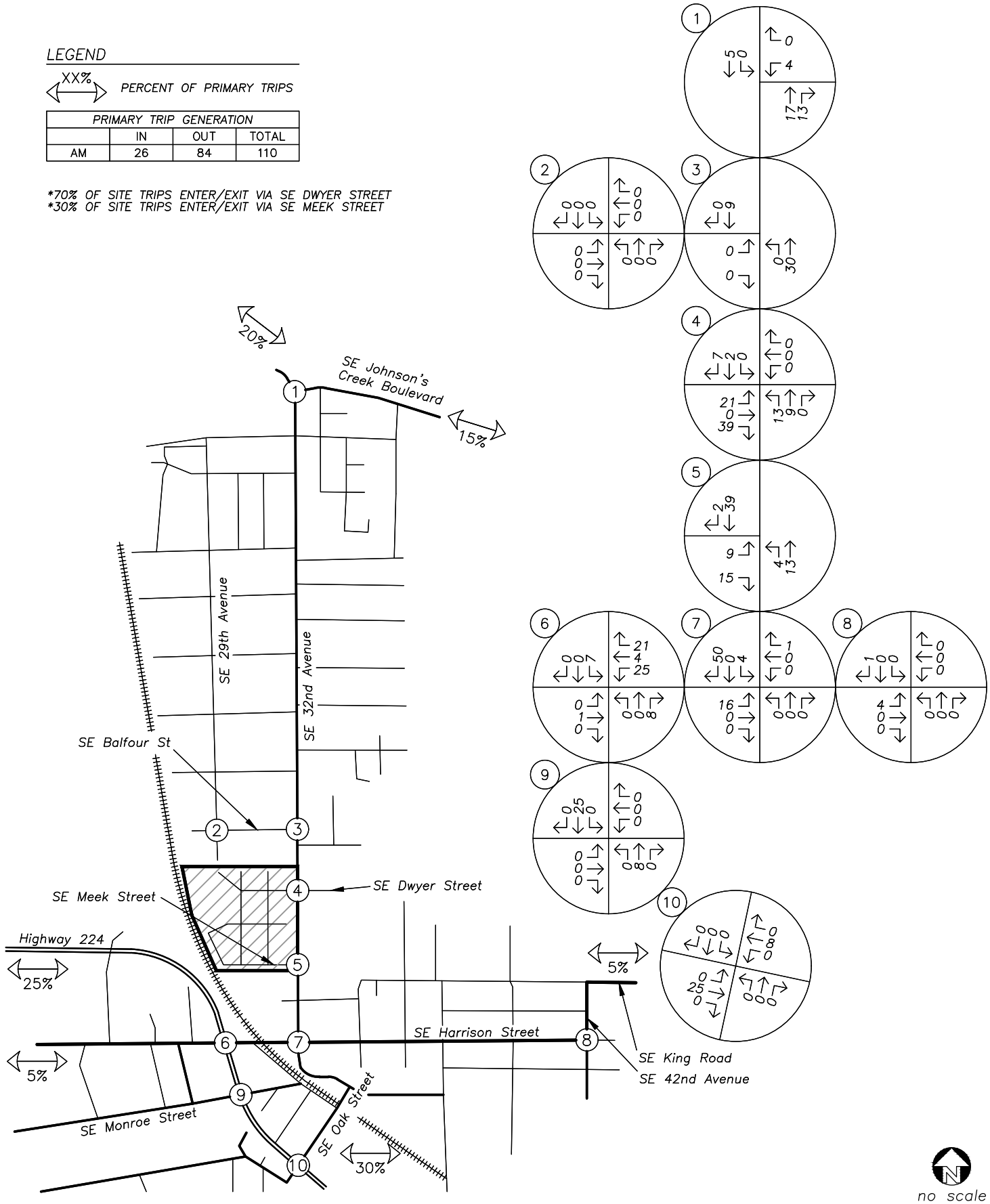
The trip generation calculations show that the proposed development is projected to generate a net additional 110 trips during the morning peak hour, a net additional 105 trips during the evening peak hour, and a net additional 1,426 trips during the average weekday. Detailed trip generation calculations are included in the technical appendix of this report.

Trip Distribution

The directional distribution of site trips to/from the project site was estimated based on the locations of likely trip destinations, locations of major transportation facilities in the site vicinity, and existing travel patterns at the study intersections. The following trip distribution was estimated and used for analysis:

- Approximately 30 percent of site trips will travel to/from the south along Highway 224
- Approximately 25 percent of site trips will travel to/from the north along Highway 224
- Approximately 20 percent of site trips will travel to/from the north along SE 32nd Avenue
- Approximately 15 percent of site trips will travel to/from the east along SE Johnson Creek Boulevard
- Approximately 5 percent of site trips will travel to/from the west along SE Harrison Street.
- Approximately 5 percent of site trips will travel to/from the east along SE King Road

The trip distribution and assignment for the site trips generated by the proposed development during the morning and evening peak hours is shown in Figure 2 and Figure 3 respectively.

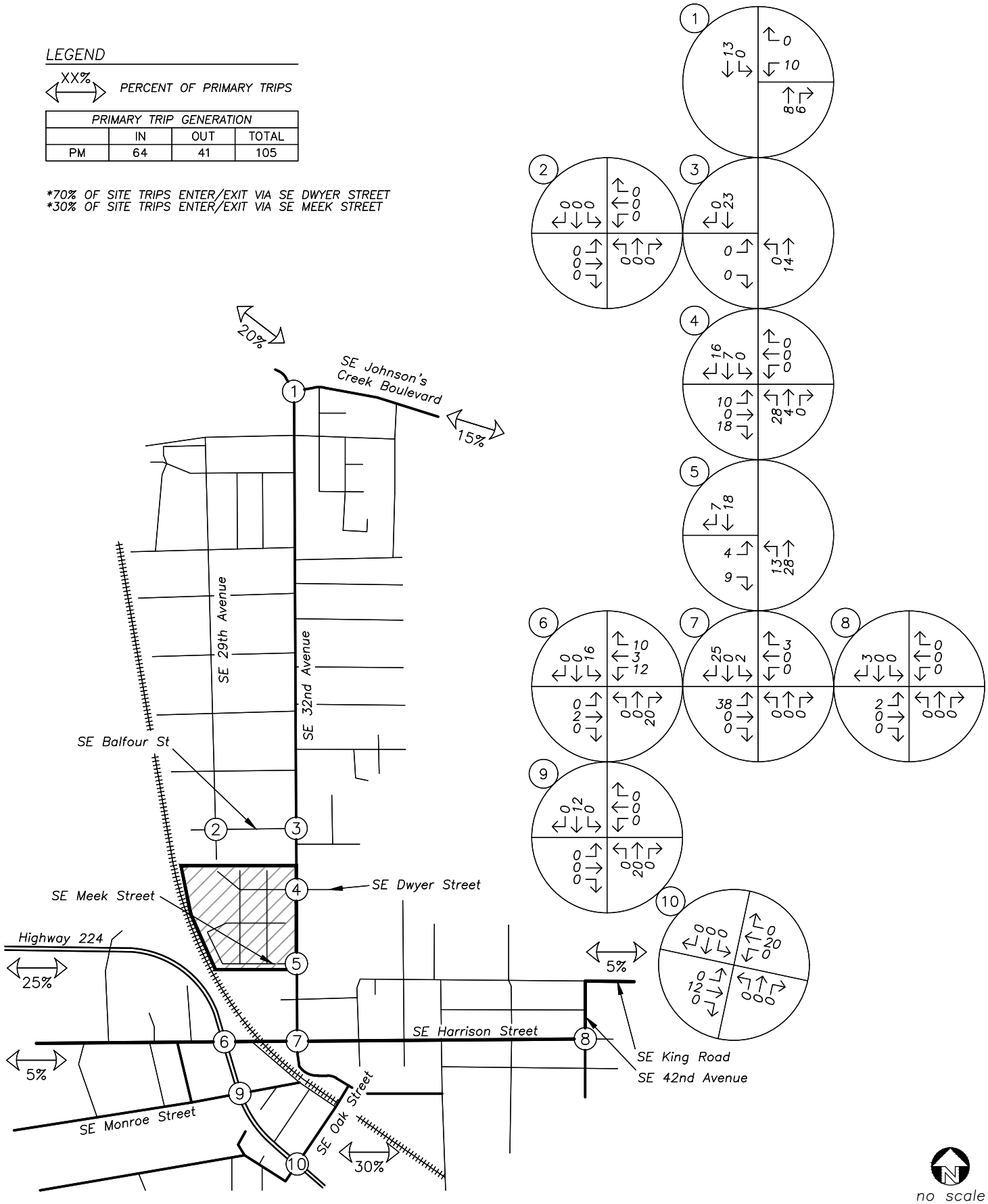


SITE TRIP DISTRIBUTION & ASSIGNMENT

Proposed Development Plan - Site Trips
AM Peak Hour

Figure 2

Hillside Master Plan
8/24/2020



SITE TRIP DISTRIBUTION & ASSIGNMENT

Proposed Development Plan - Site Trips
PM Peak Hour

Figure 3

Hillside Master Plan
8/24/2020

Traffic Volumes

Existing Conditions

Historic traffic data from two transportation impact studies, *Hillside Development Preliminary Master Plan* (dated December 21st, 2018) and *Monroe Apartments Transportation Impact Study* (dated July 16th, 2019), were used to estimate existing year turning movement volumes at six of the study intersections:

- SE Tacoma Street/SE Johnson Creek Boulevard at SE 32nd Avenue
- SE Harrison Street at Highway 224
- SE Harrison Street at SE 32nd Avenue
- SE Harrison Street SE 42nd Avenue
- SE Monroe Street at Highway 224
- Highway 224 at SE Oak Street

Year 2018 Data

As part of the *Hillside Development Preliminary Master Plan*, traffic counts were conducted at the intersection of SE Harrison Street at SE 32nd Avenue on Tuesday, September 18, 2018 from 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. At the intersections of SE Tacoma Street/SE Johnson Creek Boulevard at SE 32nd Avenue and SE Harrison Street at SE 42nd Avenue, traffic counts were conducted on Tuesday, September 25, 2018, from 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m.

To reflect existing year 2020 conditions from the 2018 count data, a compounded growth rate of two percent per year over a two-year period was applied to the traffic volumes.

Year 2019 Data

As part of the *Monroe Apartments Transportation Impact Study*, traffic counts were conducted on Thursday, February 7th, 2019 from 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. at the intersections of SE Harrison Street at Highway 224, SE Monroe Street at Highway 224, and Highway 224 at SE Oak Street.

A growth rate for through traffic along Highway 224 was derived using ODOT's 2038 Future Volume Table in accordance with ODOT's APM. Using data corresponding to milepost 0.70 of ODOT highway number 171, an average linear growth factor of 1.004 was calculated for the one-year growth scenario. The growth factor was applied to through traffic volumes along Highway 224 to approximate year 2020 existing conditions. For all other turning movements at the Highway 224 study intersections, a compounded growth rate of two percent per year was applied to the traffic volumes to approximate year 2020 existing conditions.

Year 2020 Data

Traffic counts were collected on Tuesday, July 14th, 2020 from 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m. at the following intersections:

- SE Balfour Street at SE 29th Avenue
- SE Balfour Street at SE 32nd Avenue
- SE Dwyer Drive at SE 32nd Avenue
- SE Harrison Street at SE 32nd Avenue

Traffic counts were collected while the COVID-19 viral pandemic was considered a significant public health concern throughout the State of Oregon. Subsequently, traffic volumes had been significantly depressed statewide as of mid-March and into July. To reflect normal travel conditions at the intersections, adjustment factors for the morning and evening peak hours were calculated utilizing the count data at SE Harrison Street at SE 32nd Avenue collected prior to, and subsequent to, March 2020. The adjustment factors were calculated with the following methodology:

- The estimated year 2020 traffic volumes at the intersection of SE Harrison Street at SE 32nd Avenue were compared to the collected intersection volumes from July 2020. Based on the difference in volumes at the intersection, adjustment factors of 1.787 and 1.407 were calculated for the morning and evening peak hours, respectively.
- The adjustment factors were applied to all volumes at the remaining intersections.

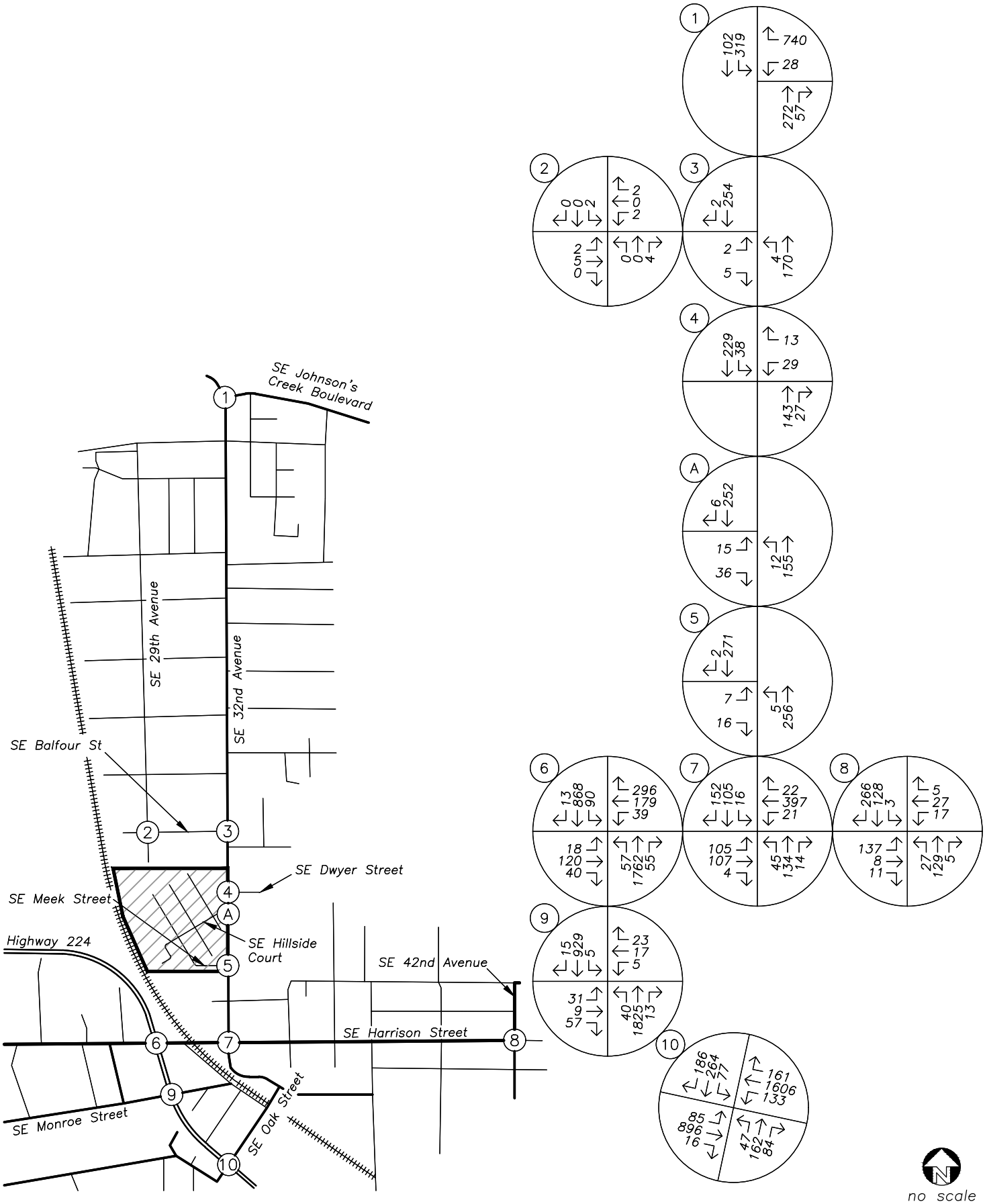
SE Hillside Court and SE Meek Street

Existing traffic volumes at the intersections of SE Hillside Court at SE 32nd Avenue and SE Meek Street at SE 32nd Avenue were estimated by balancing volumes with COVID-19 adjusted volumes at the intersections of SE Dwyer Drive at SE 32nd Avenue and SE Harrison Street at SE 32nd Avenue. For traffic entering/exiting the site via SE Hillside Court and SE Meek Street, traffic volumes were estimated based on ITE rates in the *Trip Generation Manual*. Land use codes 210, *Single Family Detached Housing*, and 221, *Multi-Family Housing (Mid-Rise)* were used to estimate the trips generated by the existing 100 single family houses onsite and the 100 units of the Hillside Manor apartment building, respectively.

A similar trip distribution as described in the Trip Distribution section was assigned the existing site trips, with approximately 30 percent of site trips traveling to/from the north along SE 32nd Avenue and 70 percent of site trips traveling to/from the south along SE 32nd Avenue. Due to the existing street layout of the site, it was assumed that 30 percent of site trips would utilize SE Meek Street to access the site and 70 percent of site trips would utilize SE Hillside Court.

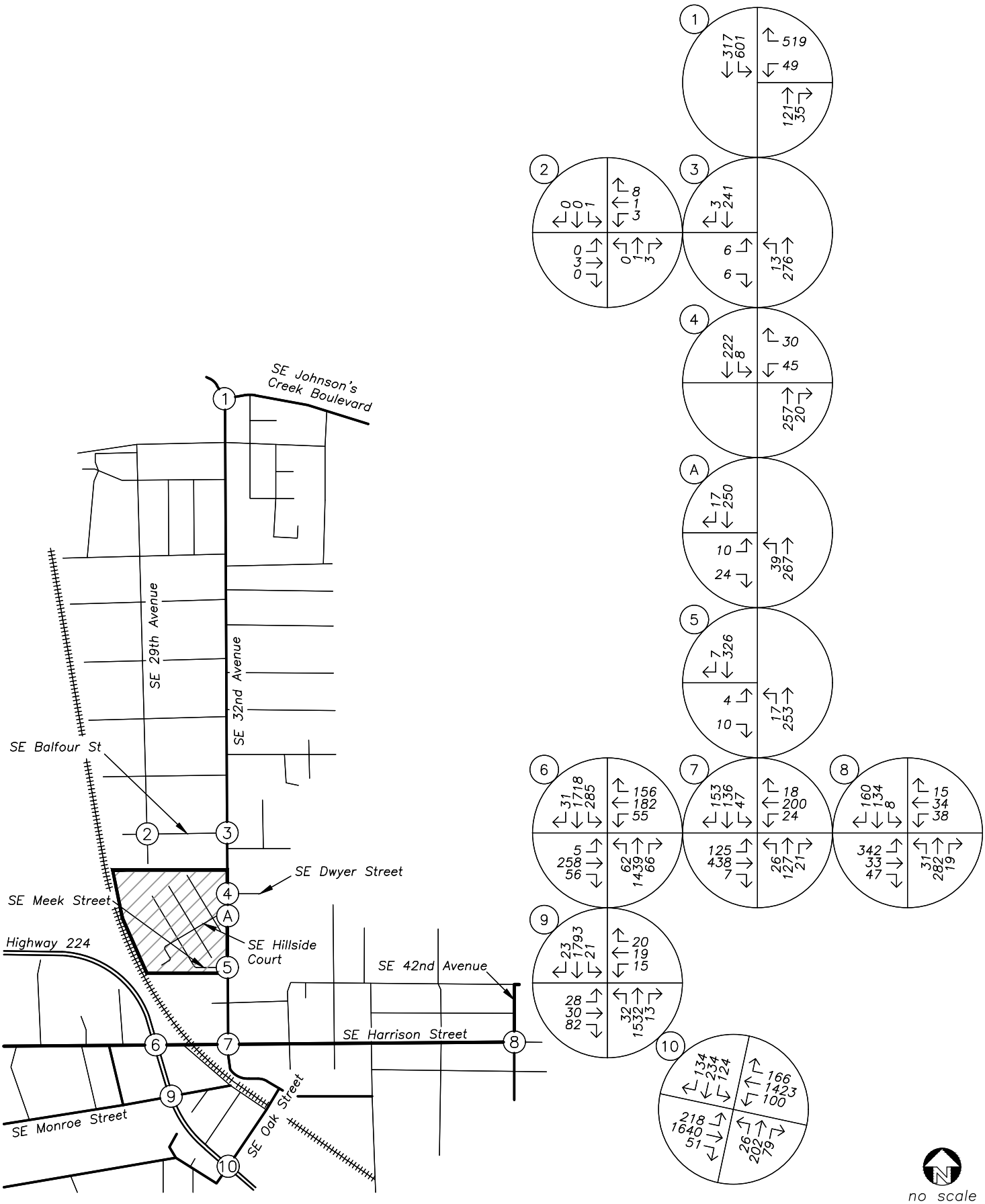
For all study intersections, data corresponding to each intersection's respective morning and evening peak hour was used for analysis.

Figure 4 and Figure 5 show the existing traffic volumes at the study intersections during the morning and evening peak hours, respectively. The intersection of SE Hillside Court at SE 32nd Avenue is not included as a study intersection because it and will not exist upon buildout of the site; however for the purpose of showing existing traffic patterns, the intersection is included in the figures and designated as intersection 'A'.



TRAFFIC VOLUMES
2020 Existing Conditions
AM Peak Hour

Figure 4
Hillside Master Plan
8/24/2020



TRAFFIC VOLUMES
2020 Existing Conditions
PM Peak Hour

Figure 5
Hillside Master Plan
8/24/2020

Background Conditions

To provide an analysis of the impact of the proposed development on the nearby transportation facilities, an estimate of future traffic volumes is required. To calculate the future traffic volumes, a compounded growth rate of 0.725 percent per year for an assumed buildout condition of six years was applied to the measured existing traffic volumes to approximate year 2026 background conditions. The growth rate was derived from the City of Milwaukie's *Transportation System Plan* (TSP)[3]; According to Figure 8-2A in the TSP, traffic volumes along SE Johnson Creek Boulevard, SE 32nd Avenue, and Highway 224 are expected to increase by an average of 18 percent over 23 years. An 18 percent increase in traffic over a 23-year period was calculated to be equivalent to applying a compounded growth rate of 0.725 percent per year for 23 years.

For through traffic along Highway 224, an average linear growth factor of 1.024 was calculated for the six-year growth scenario. This growth factor was calculated using the same methodology as described in the Existing Conditions section. The growth factor was applied to through traffic volumes along Highway 224 to approximate year 2026 background conditions.

In addition to the traffic volume growth described above, trips associated with three in-process developments within the site vicinity, that are currently approved but not yet fully constructed or occupied, were added to the background traffic volumes. The following projects were assumed to be completed and occupied by year 2026:

- Milwaukie Mixed-Use Development at 9391 SE 32nd Avenue
- Walnut Addition Plat (9 lots)
- Monroe Apartments

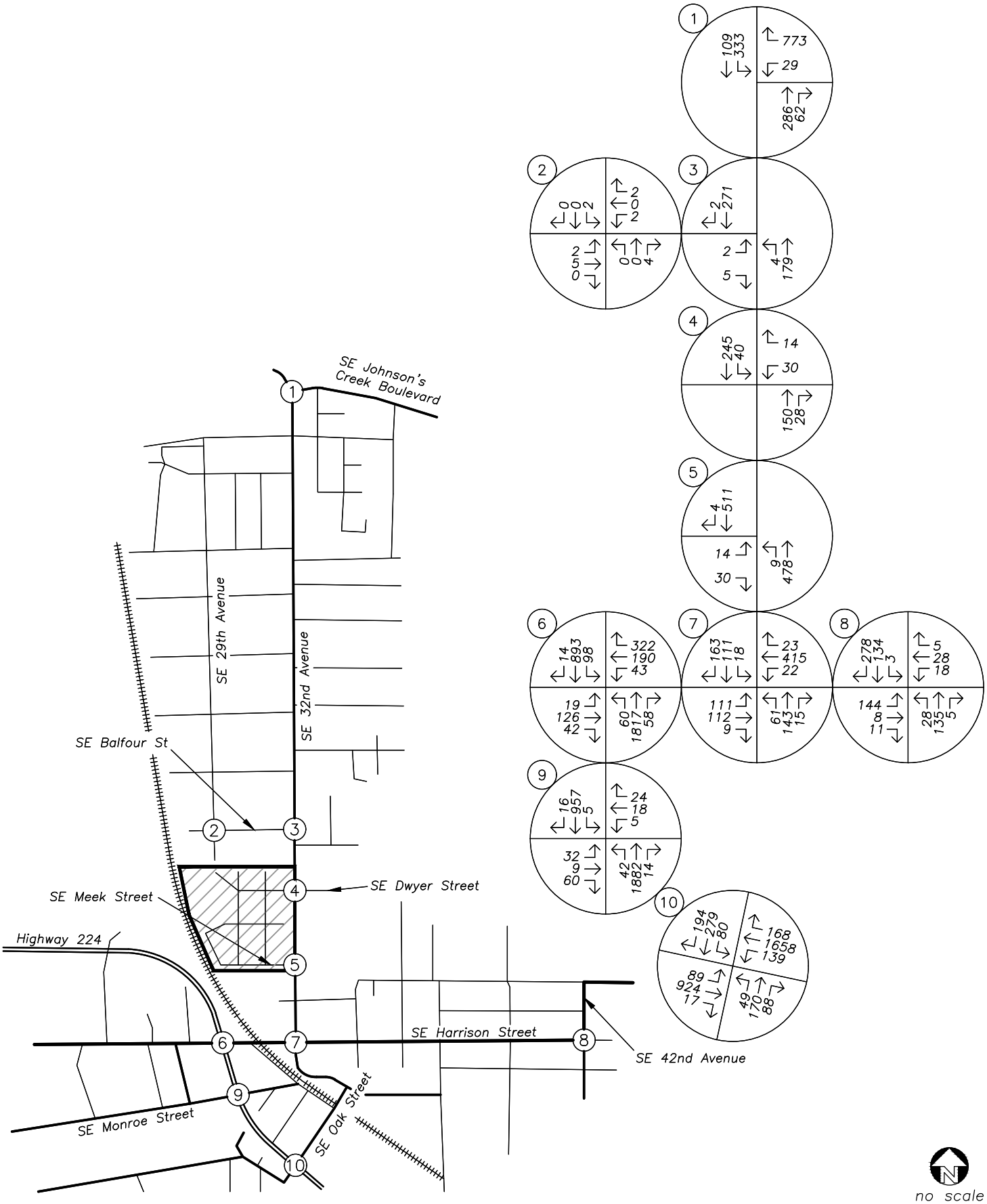
The Transportation Impact Study of each development was used to obtain trip generation and trip assigment data corresponding to their respective developments. The trip assignments assumed in these reports was used to quantify the total volume of site trips travelling through the study intersections related to this report.

The Walnut Addition Plat does not have a corresponding Transportation Impact Study, so to quantify the in-process trips associated with this development, the *Trip Generation Manual* was used to estimate the trips generated by the nine single-family dwellings expected to be built and occupied by year 2026. The trips were then distributed and assigned to the study intersections using the same trip distribution assumptions described in the Site Trips section.

Figures showing the total in-process trips at the study intersections for the AM and PM peak hours are included in the technical appendix.

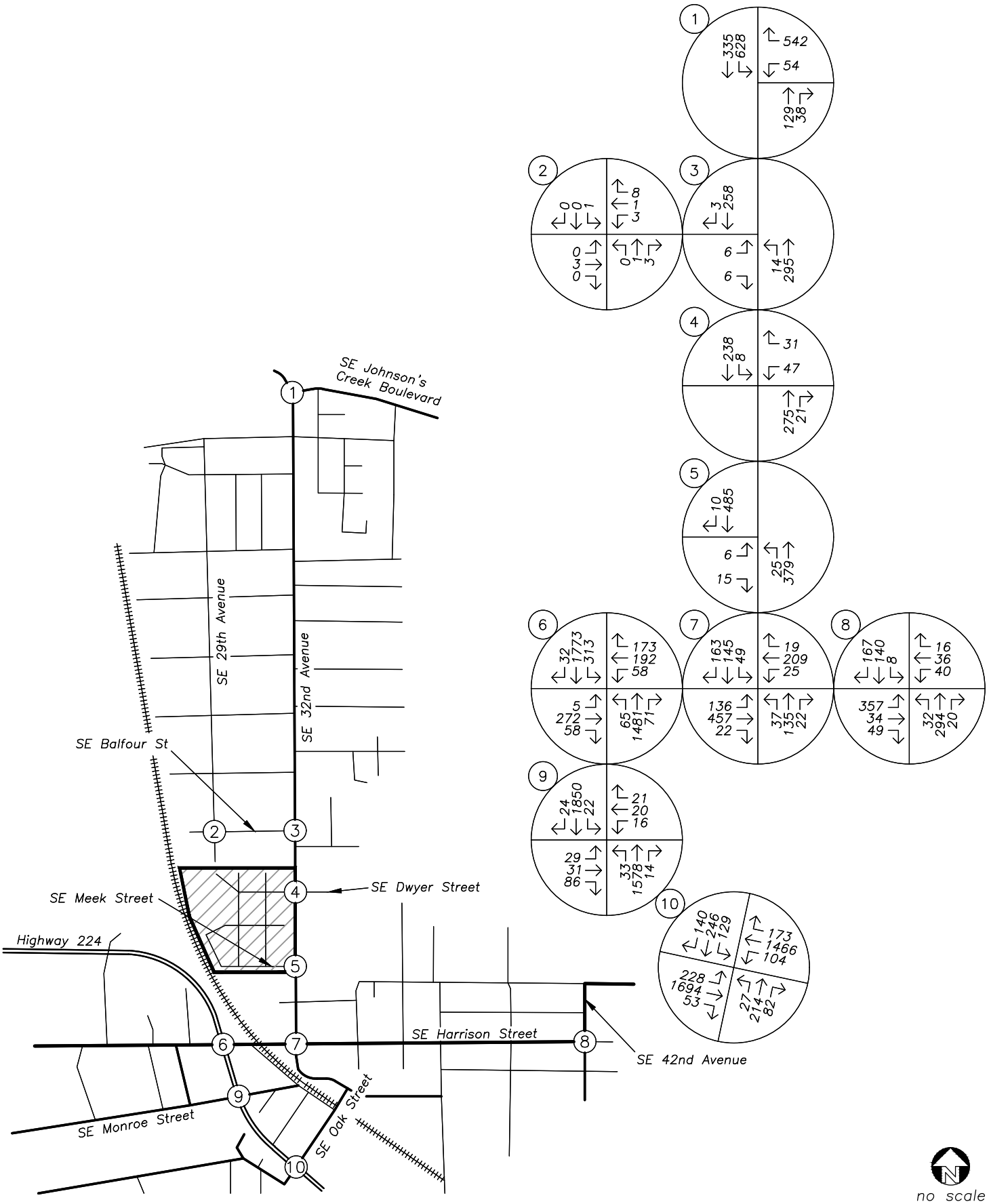
Figure 6 and Figure 7 show the total background traffic volumes at the study intersections during the morning and evening peak hours, respectively.

[3] City of Milwaukie, DKS Associates. *Transportation System Plan*, Revised October 2018



TRAFFIC VOLUMES
2026 Background Conditions
AM Peak Hour

Figure 6
Hillside Master Plan
8/24/2020

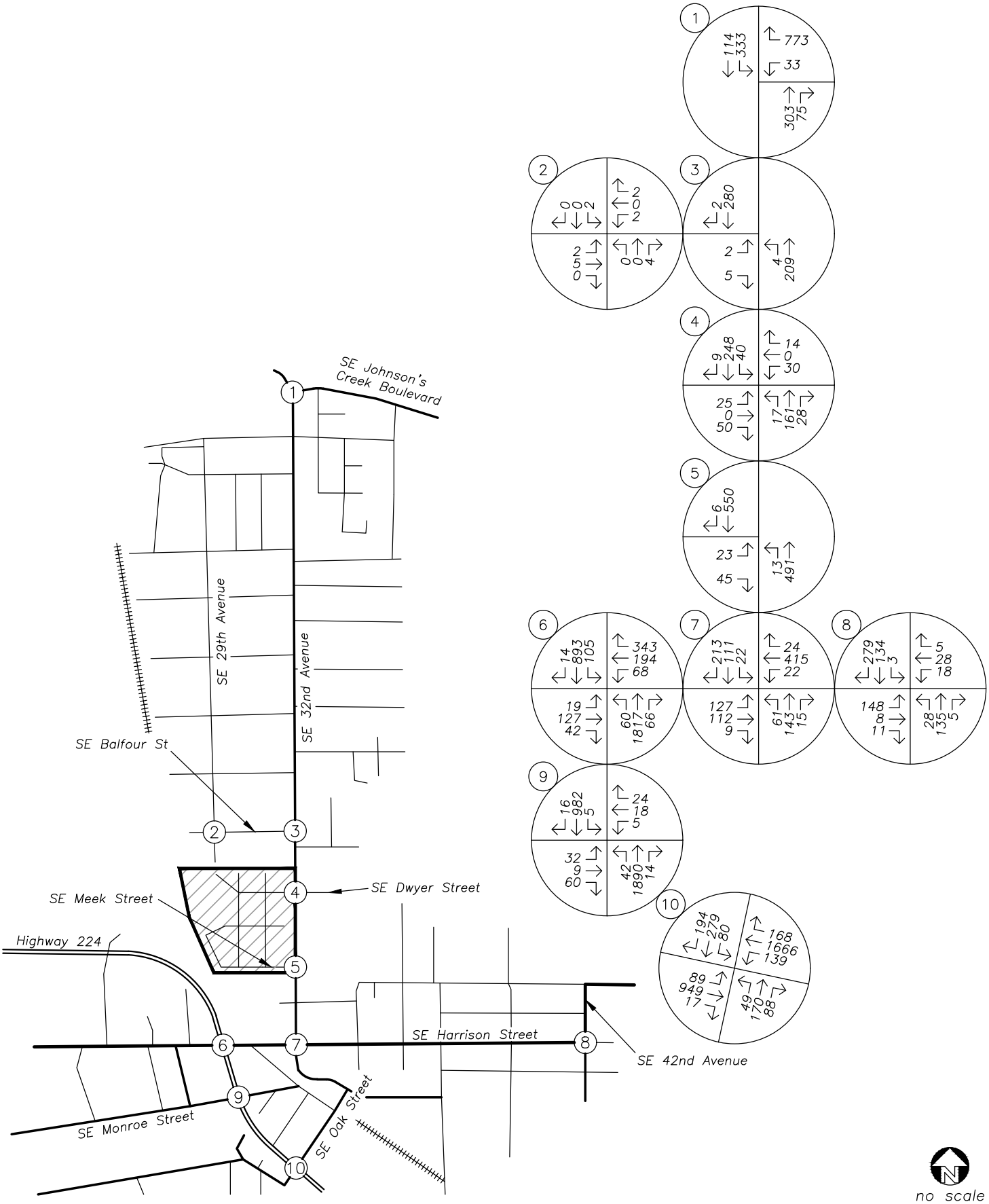


TRAFFIC VOLUMES
2026 Background Conditions
PM Peak Hour

Figure 7
Hillside Master Plan
8/24/2020

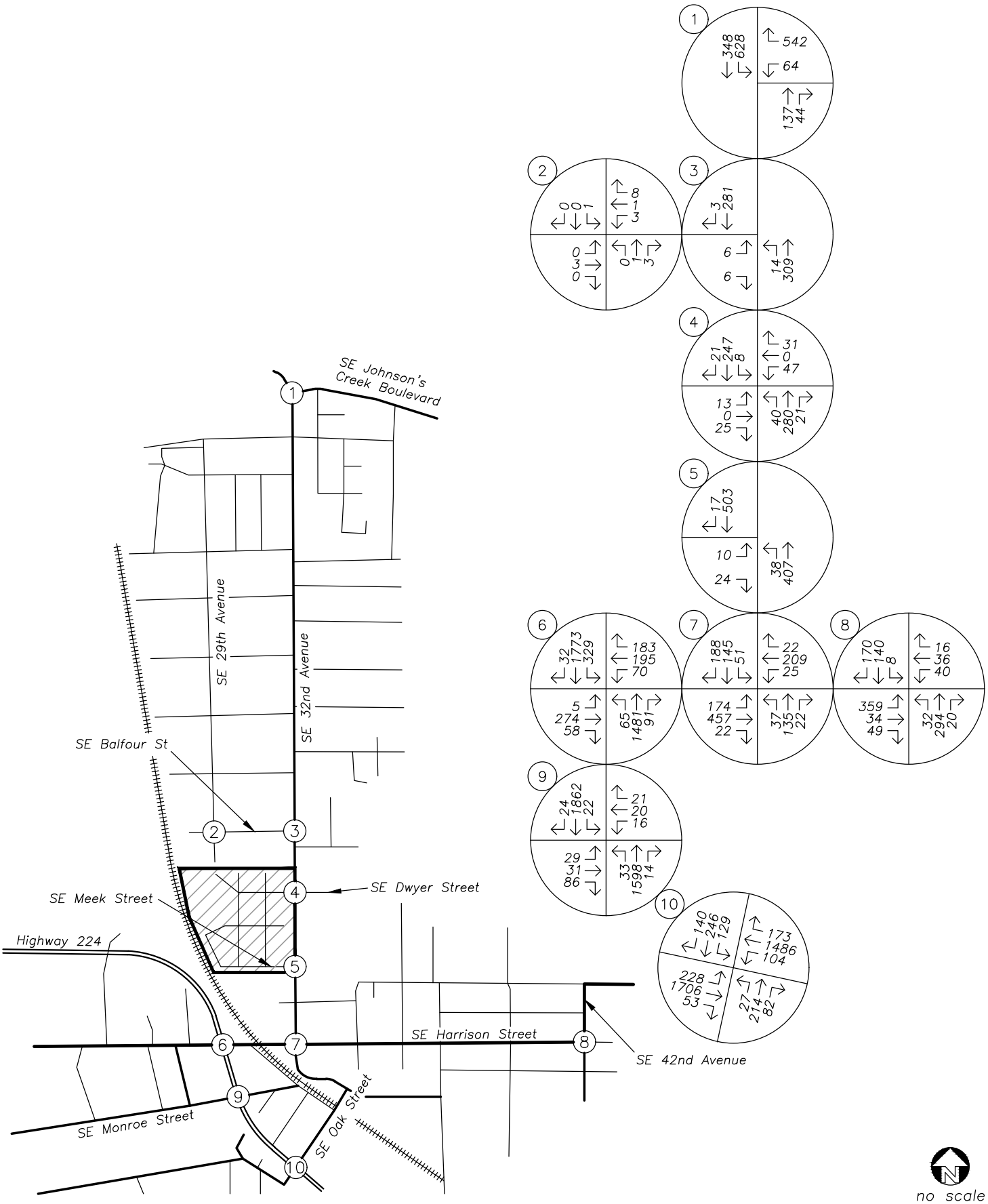
Buildout Conditions

Peak hour trips calculated to be generated by the proposed development, as described earlier within the Site Trips section, were added to the projected year 2026 background traffic volumes to obtain the expected 2026 buildout volumes. Furthermore, trips associated with the Hillside Manor apartment building were reassigned to SE Dwyer Drive since SE Dwyer Drive will replace SE Hillside Court as the northern site access along SE 32nd Avenue. Figure 8 and Figure 9 show the buildout traffic volumes at the study intersections during the morning and evening peak hours, respectively.



TRAFFIC VOLUMES
2026 Buildout Conditions
AM Peak Hour

Figure 8
Hillside Master Plan
8/24/2020



TRAFFIC VOLUMES
2026 Buildout Conditions
PM Peak Hour

Figure 9
Hillside Master Plan
8/24/2020

Safety Analysis

Crash History Review

Using data obtained from ODOT's Crash Analysis and Reporting Unit, a review was performed of the most recent five years of available crash data at the study intersections (January 2014 through December 2018). The crash data was evaluated based on the number of crashes, the type of collisions, the severity of the collisions, and the resulting crash rate for each intersection. Crash rates provide the ability to compare safety risks at different intersections by accounting for both the number of crashes that have occurred during the study period and the number of vehicles that typically travel through the intersection. Crash rates were calculated under the common assumption that traffic counted during the evening peak hour represents approximately ten percent of annual average daily traffic (AADT) at each intersection. Crash rates in excess of 1.00 crashes per million entering vehicles (CMEV) may be indicative of design deficiencies and therefore require a need for further investigation and possible mitigation.

Regarding crash severity, ODOT classifies crashes in the following categories:

- Property Damage Only (PDO)
- Possible Injury (Injury C)
- Suspected Minor Injury or Non-Incapacitating Injury (Injury B)
- Suspected Serious Injury or Incapacitating Injury (Injury A)

Fatality or Fatal InjuryThe study intersections along Highway 224 are ODOT facilities which adhere to the crash analysis methodologies within ODOT's *Analysis Procedures Manual* (APM). According to *Exhibit 4-1: Intersection Crash Rates per MEV by Land Type and Traffic Control* of the APM, intersections which experience crash rates in excess of 90th percentile crash rates should be "flagged for further analysis". For signalized intersections in urban settings, the 90th percentile rate for four-legged intersections is 0.860 CMEV.

Table 4 provides a summary of crash types while Table 5 summarizes crash severities and rates for each of the study intersections. Detailed crash reports are included in the technical appendix to this report.

Table 4: Crash Type Summary

Intersection		Crash Type									Total Crashes
		Rear End	Turn	Angle	Fixed Object	Side Swipe	Head On	Other	Ped	Bike	
1	SE Tacoma Street/ SE Johnson Creek Boulevard at SE 32nd Avenue	7	1	0	1	0	0	1	0	0	10
2	SE Balfour Street at SE 29th Avenue	0	0	0	0	0	0	0	0	0	0
3	SE Balfour Street at SE 32nd Avenue	0	1	0	0	0	0	0	0	0	1
4	SE Dwyer Street at SE 32nd Avenue	0	0	0	0	0	0	0	0	0	0
5	SE Meek Street at SE 32nd Avenue	0	0	0	0	0	0	0	0	0	0
6	SE Harrison Street at Highway 224	11	8	7	0	1	0	0	0	2	29
7	SE Harrison Street at SE 32nd Avenue	1	6	3	1	0	0	0	1	0	12
8	SE Harrison Street at SE 42nd Avenue	0	1	2	0	0	0	0	0	0	3
9	SE Monroe Street at Highway 224	8	1	2	0	0	0	0	0	0	11
10	Highway 224 at SE Oak Street	9	8	4	0	1	0	1	1	1	25

Table 5: Crash Severity and Rate Summary

Intersection		Crash Type					Total Crashes	AADT	Crash Rate
		PDO	C	B	A	Fatal			
1	SE Tacoma Street/ SE Johnson Creek Boulevard at SE 32nd Avenue	2	6	2	0	0	10	16,420	0.33
2	SE Balfour Street at SE 29th Avenue	0	0	0	0	0	0	200	0.00
3	SE Balfour Street at SE 32nd Avenue	0	1	0	0	0	1	5,450	0.10
4	SE Dwyer Street at SE 32nd Avenue	0	0	0	0	0	0	5,820	0.00
5	SE Meek Street at SE 32nd Avenue	0	0	0	0	0	0	6,170	0.00
6	SE Harrison Street at Highway 224	11	13	3	1	1	29	43,130	0.37
7	SE Harrison Street at SE 32nd Avenue	3	8	1	0	0	12	13,220	0.50
8	SE Harrison Street at SE 42nd Avenue	1	2	0	0	0	3	11,430	0.14
9	SE Monroe Street at Highway 224	3	7	0	1	0	11	36,080	0.17
10	Highway 224 at SE Oak Street	9	12	2	2	0	25	43,970	0.31

Based on the review of the crash data, there were five crashes which involved either a pedestrian or bicyclist and five crashes which resulted in injuries consistent with *Injury A* classification or a fatality. All occurred at intersections along Highway 224. An in-depth analysis of these intersections and crashes is detailed in the following sections.

SE Harrison Street at Highway 224

The intersection of SE Harrison Street at Highway 224 had one crash that was classified as *Injury A*, one crash which resulted in a fatality, and two crashes that involved a bicyclist.

- The *Injury A* collision occurred when the driver of a northbound passenger car disregarded the traffic signal and collided with a southbound left-turning passenger car. The driver of the northbound vehicle sustained injuries consistent with *Injury C* classification while the driver of the southbound vehicle sustained injuries consistent with *Injury A* classification.
- One crash at the study intersection resulted in a fatality. The crash involved one southbound passenger car and one eastbound motorcycle, and occurred at 3:00 PM on Sunday, January 25th, 2015. Driving conditions at the time of the collision were daylight with clear weather and dry roadways. The crash

occurred when the driver of the passenger car disregarded the traffic signal and collided with the motorcycle. The driver of the passenger car sustained no injuries while the motorcyclist sustained fatal injuries.

- A westbound bicyclist, utilizing an intersection crosswalk, disregarded the traffic signal and collided with a southbound passenger car. The bicyclist sustained injuries consistent with *Injury B* classification while the driver of the passenger car sustained no injuries.
- A westbound bicyclist, utilizing an intersection crosswalk, disregarded the traffic signal and collided with a southbound passenger car. The bicyclist sustained injuries consistent with *Injury C* classification while the driver of the passenger car sustained no injuries. The bicyclist was reported to be illegally in the roadway and wearing non-reflective clothing at the time of the crash.

SE Monroe Street at Highway 224

The intersection of SE Monroe Street at Highway 224 had one crash that was classified as *Injury A*. The collision occurred when the driver of an eastbound passenger car was inattentive, disregarded the traffic signal, and collided with a northbound passenger car. The driver of the eastbound vehicle sustained no injuries while the driver of the northbound passenger car was injured.

SE Oak Street at OR-224

The intersection of SE Oak Street at Highway 224 had three crashes that involved either a pedestrian or a bicyclist, one of which was classified as *Injury A*, and one vehicular crash which was classified as *Injury A*. The following includes a listed description of each crash:

- The driver of a northwest-bound right-turning passenger car failed to yield right-of-way to a northwest/southeast traveling bicyclist, who was utilizing an intersection crosswalk. The bicyclist sustained injuries consistent with *Injury C* classification.
- The driver of a southwest-bound passenger car rear-ended a southwest-bound passenger car that was stopped at the intersection. The driver and passenger of the oncoming passenger car sustained injuries consistent with *Injury A* classification while the driver of the stopped vehicle sustained no injuries.
- A southwest/northeast traveling bicyclist, who was utilizing an intersection crosswalk, disregarded the traffic signal, illegally entered the intersection, and collided with a southeast-bound passenger car. The bicyclist sustained injuries consistent with *Injury A* classification while the driver of the passenger car sustained injuries consistent with *Injury B* classification.
- The driver of a southwest-bound left-turning passenger car failed to yield right-of-way to a northeast/southwest traveling pedestrian, who was utilizing an intersection crosswalk. The pedestrian sustained injuries consistent with *Injury C* classification.

Analysis Conclusions

Based on a review of the most recent five years of available crash data, no significant trends or crash patterns were identified at any of the study intersections that were indicative of safety concerns. In addition, none of the study intersections exhibit crash rates near or above the 1.0 CMEV threshold nor do any of the study intersections along Highway 224 have a crash rate exceeding ODOT's 90th percentile rate. Accordingly, no safety mitigation is recommended per the crash data analysis.

Sight Distance Evaluation

Intersection sight distance was measured at the proposed site accesses along SE 32nd Avenue and evaluated in accordance with the standards established in *A Policy of Geometric Design of Highways and Streets*[4]. According to AASHTO, the driver's eye is assumed to be 15 feet from the near edge of the nearest travel lane of the intersecting street and at a height of 3.5 feet above the minor-street approach pavement. The vehicle driver's eye height along the major-street approach is assumed to be 3.5 feet above the cross-street pavement.

Stopping sight distance is considered the minimum requirement to ensure safe operation of the driveway. This distance allows the driver of a vehicle traveling on the major street to react to a turning vehicle or other object in the roadway and, if necessary, come to a complete stop to avoid a collision. To ensure safe operation of a driveway, the extent of available intersection sight distance must at least equal the minimum required stopping sight distance. As further described in the AASHTO Green Book, "Sight distance is provided at intersections to allow the drivers of stopped vehicles a sufficient view of the intersecting highway to decide when to enter the intersecting highway or to cross it. If the available sight distance for an entering vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient sight distance to anticipate and avoid collisions. However, in some cases, a major-road vehicle may need to stop or slow to accommodate the maneuver by a minor-road vehicle."

Based on the posted speed of 25 mph on SE 32nd Avenue, and the roadway's flat grade, the minimum recommended intersection sight distance is 280 feet and the minimum required stopping sight distance is 155 feet.

SE Dwyer Drive

Sight distances were measured to be in excess of 280 feet to the north and south of the proposed location of SE Dwyer Drive. It should be noted that measurements could not be conducted from the standard 15 feet behind the edge of the traveled way due to obstructing on-site foliage. However, provided this foliage is removed during construction, no other physical obstructions were noted that would limit sight distances to less than those measured in the field if measured from the standard 15 feet.

Therefore, adequate sight distance is available at the site access to ensure safe and efficient operation of the intersection of SE Dwyer Drive at SE 32nd Avenue. Accordingly, no sight distance related mitigation is necessary or recommended at this access.

SE Meek Street

At 15 feet from the near edge of the travel lane, sight distances at the intersection of SE Meek Street at SE 32nd Avenue were measured to be in excess of 280 feet to the north and 180 feet to the south. Sight distance to the south was limited by foliage on the adjacent property and does not meet the 280-foot recommendation set by AASHTO. However, sight distance exceeds the required 155 feet of stopping sight distance. Therefore, adequate sight distance is available to ensure safe operation of the intersection of SE Meek Street at SE 32nd Avenue.

To further investigate the available sight distance at this intersection, sight distance measurements were also taken 10 feet from the near edge of the nearest travel lane. In this case, the front of a standard passenger car would be at least 2 feet behind the edge of the travel lane, giving clearance between the passenger car and

[4] American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets*, 6th Edition, 2011.

vehicular traffic on SE 32nd Avenue. This result shows that a driver can safely approach SE 32nd Avenue with the driver's eye 10 feet from the near edge of the nearest travel lane. From a position measured 10 feet from the edge of the traveled way, sight distance was measured to be in excess of 280 feet to the north and south.

Given that adequate stopping sight distance is available 15 feet from the edge of the nearest travel lane along SE 32nd Avenue, and adequate intersection sight distance is available 10 feet from the edge of the nearest travel lane, no sight distance related mitigation is necessary or recommended at this access. However, the applicant will work with City staff and the adjacent property own to improve sight lines through the removal of some foliage on the southwest corner of the intersection.

Warrant Analysis

Left-turn lane warrants were examined for the site access intersections along SE 32nd Avenue, and preliminary signal warrants were examined for the intersection of SE Harrison Street at SE 42nd Avenue.

Left-Turn Lane Warrants

A left-turn refuge lane is primarily a safety consideration for the major-street, removing left-turning vehicles from the through traffic stream. The left-turn lane warrants used were developed from the *National Cooperative Highway Research Project's* (NCHRP) *Report 457*. Turn lane warrants were evaluated based on the number of advancing and opposing vehicles as well as the number of turning vehicles, the travel speed, and the number of through lanes.

Left-turn lane warrants are projected to be met for the northbound approach of the intersection of SE Meek Street at SE 32nd Avenue during the evening peak hour under year 2026 buildout conditions. However, due to the intersection's proximity to a transit stop crosswalk and the low posted speed along SE 32nd Avenue, constructing a left-turn lane could raise safety issues. Stopped vehicles in a northbound left-turn lane would obstruct the line of sight between northbound vehicles and pedestrians crossing SE 32nd Avenue. The restricted line of sight would cause a shorter reaction time for vehicles to yield the right-of-way to pedestrians and increase the potential for pedestrian-related collisions. Furthermore, removing left-turning vehicles from the through traffic stream by installing a left-turn lane could encourage through traffic to travel at higher speeds along SE 32nd Avenue. SE 32nd Avenue, with its various traffic calming measures such as concrete median islands and numerous crosswalks, has a low-speed character that would be enhanced by not installing a left-turn lane. Thus, the installation of a northbound left-turn lane at the intersection of SE Meek Street at SE 32nd Avenue is not recommended.

Preliminary Traffic Signal Warrants

Preliminary traffic signal warrants were examined for the two site accesses on SE 32nd Avenue to determine whether the installation of a new traffic signal will be warranted at the intersection upon completion of the proposed development. Preliminary signal warrants were examined based on the number of lanes and traffic volumes along the major and minor street approach during the evening peak hour.

Due to insufficient traffic volumes in any analysis case, traffic signal warrants ar not projected to be met at the intersections of SE Dwyer Drive at SE 32nd Avenue and SE Meek Street at SE 32nd Avenue under any of the analysis scenarios.

Preliminary traffic signal warrants were also examined for the intersection of SE Harrison Street at SE 42nd Avenue to determine whether the installation of a new traffic signal will be warranted at the intersection upon completion of the proposed development. Preliminary signal warrants were examined based on the number of lanes and traffic volumes along the major and minor street approach during the evening peak hour. Since SE Harrison Street and SE 42nd Avenue are both classified as collector roadways, warrants were evaluated in three cases: assigning SE Harrison Street as the major street, assigning SE 42nd Avenue as the major street, and assigning the westbound and southbound approaches as the major street approaches.

Due to insufficient traffic volumes in any analysis case, traffic signal warrants are not projected to be met at the intersection of SE Harrison Street at SE 42nd Avenue under any of the analysis scenarios.

Detailed warrant analyses for are included in the technical appendix to this report.

Access Spacing Standards

According to City of Milwaukie Municipal Code Section *12.16.040 Access Requirements and Standards*, spacing for accessways along Collector roadways shall be a minimum of 300 feet, measured between the nearest edge of driveway aprons between accessways or the nearest edge of the driveway apron to the nearest face of curb of the intersecting street (or nearest edge of pavement if no curb is available).

Based on an assessment of the proposed site access intersections and the roadways adjacent to the site, access spacing standards are met to the south of SE Meek Street and between SE Meek Street and SE Dwyer Drive. To the north of SE Dwyer Drive, access spacing between SE Dwyer Drive and the nearest offsite driveway was measured to be approximately 240 feet. This spacing is below the City standard of 300 feet; however, the proposed site access aligns with SE Dwyer Drive and the redevelopment will demolish three existing driveways along SE 32nd Avenue north of SE Dwyer Drive. Overall, the average access spacing across the site frontage will meet the standard, and the number of potential conflict points along this section of SE 32nd Avenue is reduced compared with existing conditions, improving the safety and flow of the street.

Safe Pedestrian Routes to Schools

According to the North Clackamas School District's school boundary maps, there are three nearby public schools which may reasonably serve the site:

- Ardenwald Elementary
- Wilbur Rowe Middle School
- Milwaukie High School

Ardenwald Elementary

Ardenwald Elementary is located within a 0.75-mile walking/biking distance to the north of the site. Pedestrian travel between the school and site is available by way of SE 32nd Avenue and SE Roswell Street, as shown in Figure 10. Complete sidewalks are available along both sides of SE 32nd Avenue, and along the south side of SE Roswell Street. Marked crosswalks/sidewalks are available at intersections along the east side of SE 32nd Avenue and along the south side of SE Roswell Street.

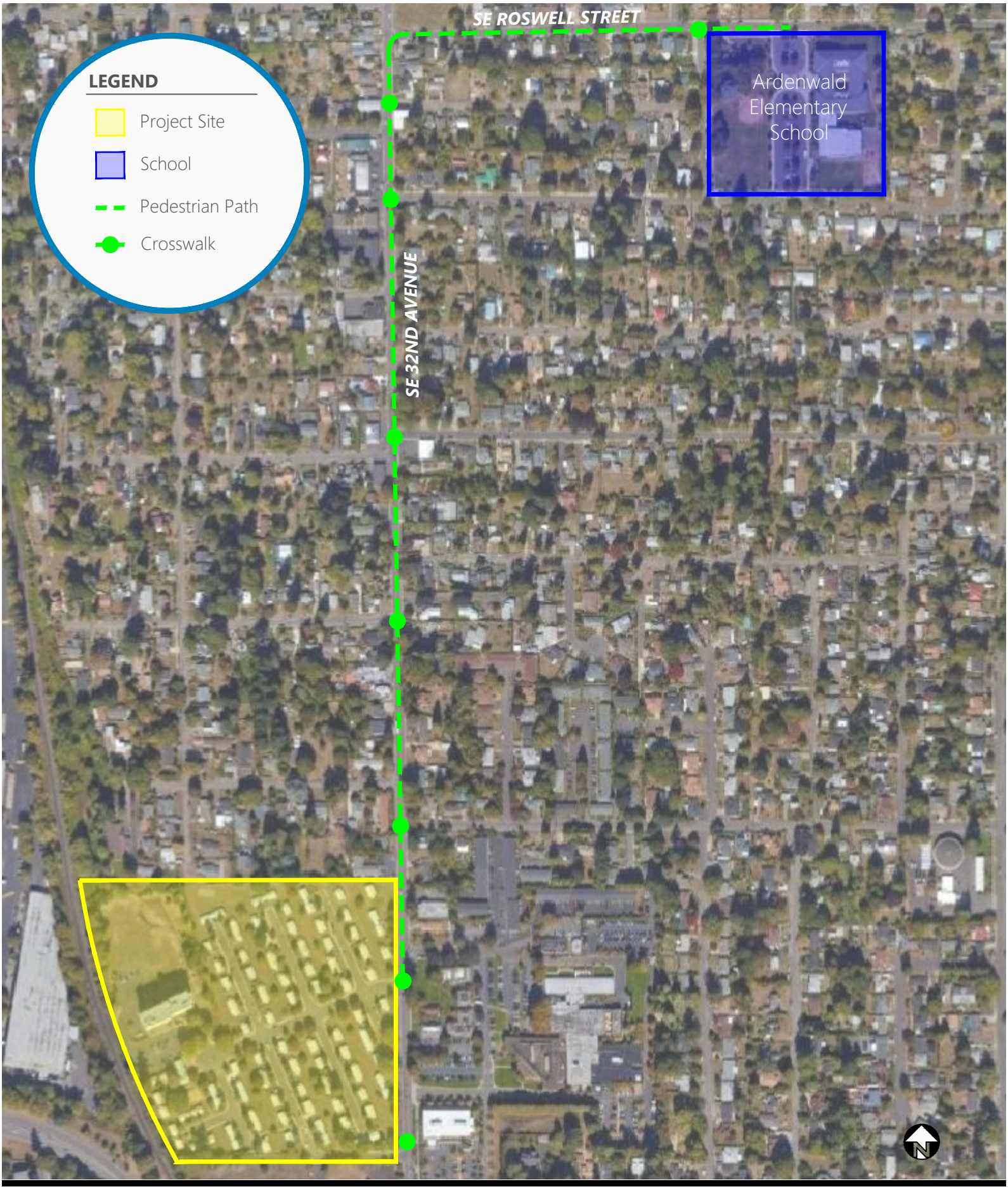
Wilbur Rowe Middle School

Wilbur Rowe Middle School is located within a 1.25-mile walking/biking distance to the south of the site. Pedestrian travel between the school and site is available by way of SE 32nd Avenue, SE Railroad Avenue, SE Monroe Street (segment east of SE Oak Street), SE 37th Avenue (segment north of Highway 224), SE Edison Street, SE 37th Avenue (segment south of Highway 224), SE Grogan Avenue, and SE 36th Avenue, as shown in Figure 11. Sidewalks are generally complete along both sides of SE 32nd Avenue, the north side of SE Railroad Avenue (segment west of SE Oak Street), the south side of SE Monroe Street (segment east of SE Oak Street), the west side of SE 37th Avenue (segment north of Highway 224), both sides of SE Edison Street, east side of SE 37th Avenue (segment south of Highway 224), both sides of SE Grogan Avenue, and both sides of SE 36th Avenue.

Relevant marked crossings are available across SE Harrison Street (one at the east side of SE 32nd Avenue), SE Railroad Avenue (one on the east side of SE Oak Street), SE 37th Avenue (two marked crosswalks on the segment north of Highway 224), SE Edison Street (two marked crosswalks), Highway 224 (two signalized marked crosswalks), and SE Lake Road (two marked crosswalks). While no marked crosswalks are available crossing the segment of SE 37th Avenue south of Highway 224, low vehicular travel speeds (posted speed of 25 mph) and relatively low vehicular volumes allow pedestrians the ability to safely cross the roadway at the intersection with SE Grogan Avenue.

Milwaukie High School

Milwaukie High School & Milwaukie Academy of the Arts are located within a 0.75-mile walking/biking distance to the southwest of the site. Pedestrian travel between the school and site is available by way of SE 32nd Avenue, SE Harrison Street, SE 28th Avenue, and SE Washington Street, as shown in Figure 12. Complete sidewalks are available along both sides of these roadways, with marked crossings across SE Harrison Street, SE Railroad Avenue, Highway 224 (two relevant signalized marked crosswalks), and SE Washington Street (six relevant marked crosswalks).



lancaster mobley

SAFE ROUTES TO SCHOOL
Ardenwald Elementary School

Figure 10
Hillside Master Plan
8/24/2020

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SAFE ROUTES TO SCHOOL
Wilbur Rowe Middle School

Figure 11
Hillside Master Plan
8/24/2020

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SAFE ROUTES TO SCHOOL
Milwaukie High School

Figure 12
Hillside Master Plan
8/24/2020

Operational Analysis

A capacity and delay analysis was conducted for each of the study intersections per the unsignalized intersection analysis methodologies in the *Highway Capacity Manual*[5] (HCM). Intersections are generally evaluated based on the average control delay experienced by vehicles and are assigned a grade according to their operation. The level of service (LOS) of an intersection can range from LOS A, which indicates very little or no delay experienced by vehicles, to LOS F, which indicates a high degree of congestion and delay. The volume-to-capacity (v/c) ratio is a measure that compares the traffic volumes (demand) against the available capacity of an intersection.

Performance Standards

According to Chapter 3 of the City of Milwaukie's *Transportation System Plan*, signalized and unsignalized intersections under City jurisdiction are required to operate at LOS D or better. For intersections under ODOT jurisdiction (i.e. intersections along Highway 224), per *Table 7: Volume to Capacity Ratio Targets within Portland Metropolitan Region* of the *Oregon Highway Plan* (OHP), intersections are required to operate with v/c ratios of 0.99 or less. The v/c ratios for signalized intersections were post-processed as per methodologies outlined in the APM.

Delay & Capacity Analysis

The v/c, delay, and LOS results of the capacity analysis are shown in Table 6 for the morning and evening peak hours. Detailed calculations as well as tables showing the relationship between delay and LOS are included in the appendix to this report.

Based on the results of the operational analysis, all other study intersections are currently operating acceptably per City of Milwaukie and ODOT standards and are projected to continue operating acceptably through the 2026 buildout year of the site except for the intersection of SE Harrison Street at SE 42nd Avenue. The delay and capacity analysis shows that the intersection of SE Harrison Street at SE 42nd Avenue is projected to operate above City of Milwaukie operational standards under year 2026 background conditions, regardless of the Hillside Master Plan. Delays are anticipated to worse by one second under 2026 buildout conditions.

The intersection of SE Harrison Street at SE 42nd Avenue is currently all-way stop controlled and is planned to be signalized to facilitate dominant traffic flow[6].However, the warrant analysis shows that the intersection is not projected to meet preliminary signal warrants upon buildout of the site. Since it does not meet preliminary signal warrants, it is not recommended or necessary to signalize the intersection of SE Harrison Street at SE 42nd Avenue as part of the Hillside development. Therefore, no operational mitigation is necessary or recommended at the intersection.

[5] Transportation Research Board, *Highway Capacity Manual, 6th Edition*, 2016.
[6] Table 8-10: Street Network Master Plan Projects. *Milwaukie Transportation System Plan*. October 20, 2018.

Table 6: Intersection Capacity Analysis Summary

Intersection & Condition	Morning Peak Hour			Evening Peak Hour		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
1 SE Tacoma Street/SE Johnson Creek Boulevard at SE 32nd Avenue						
2020 Existing Conditions	B	12	0.58	B	18	0.80
2026 Background Conditions	B	13	0.61	C	23	0.84
2026 Buildout Conditions	B	14	0.64	C	26	0.87
2 SE Balfour Street at SE 29th Avenue						
2020 Existing Conditions	A	7	0.01	A	7	0.02
2026 Background Conditions	A	7	0.01	A	7	0.02
2026 Buildout Conditions	A	7	0.01	A	7	0.02
3 SE Balfour Street at SE 32nd Avenue						
2020 Existing Conditions	B	11	0.01	B	12	0.03
2026 Background Conditions	B	11	0.01	B	12	0.03
2026 Buildout Conditions	B	11	0.01	B	12	0.03
4 SE Dwyer Drive at SE 32nd Avenue						
2020 Existing Conditions	B	14	0.11	B	14	0.17
2026 Background Conditions	B	14	0.12	B	14	0.19
2026 Buildout Conditions	C	16	0.17	C	17	0.23
5 SE Meek Street at SE 32nd Avenue						
2020 Existing Conditions	C	17	0.15	B	14	0.06
2026 Background Conditions	C	18	0.17	B	15	0.06
2026 Buildout Conditions	C	23	0.29	C	16	0.11
6 SE Harrison Street at Highway 224						
2020 Existing Conditions	B	20	0.83	B	19	0.80
2026 Background Conditions	C	24	0.88	C	20	0.85
2026 Buildout Conditions	C	28	0.92	C	22	0.87
7 SE Harrison Street at SE 32nd Avenue						
2020 Existing Conditions	B	14	0.56	B	18	0.61
2026 Background Conditions	C	27	0.60	C	27	0.64
2026 Buildout Conditions	C	29	0.60	C	28	0.62
8 SE Harrison Street at SE 42nd Avenue						
2020 Existing Conditions	B	12	0.38	D	34	0.80
2026 Background Conditions	B	13	0.41	**E**	**41**	0.85
2026 Buildout Conditions	B	13	0.41	**E**	**42**	0.85
9 SE Monroe Street at Highway 224						
2020 Existing Conditions	A	7	0.68	A	8	0.67
2026 Background Conditions	A	7	0.70	A	9	0.70
2026 Buildout Conditions	A	7	0.71	A	9	0.70
10 Highway 224 at SE Oak Street						
2020 Existing Conditions	C	30	0.68	C	34	0.80
2026 Background Conditions	C	30	0.70	D	38	0.83
2026 Buildout Conditions	C	30	0.71	D	39	0.84

BOLDED results indicate operation above acceptable jurisdictional standards.

SE 29th Avenue Connection

The Hillside Master Plan has the potential to connect its internal street system to SE 29th Avenue on the north side of the site. This connection would extend SE 29th Avenue to connect with SE Dwyer Drive within the property and has the option to either accommodate vehicular traffic or provide connection to SE 29th Avenue for pedestrian and bicycle uses exclusively. The analysis summarized in Table 6 assumed that only bicycles and pedestrians would have direct access between the proposed Hillside development SE 29th Avenue.

To understand the potential impacts that a vehicular connection with SE 29th Avenue would have on the study intersections, a delay and capacity analysis was also completed. Two factors were considered in estimating the traffic demand on SE 29th Avenue: 1) how much traffic from the proposed development enter the neighborhood to the north using by SE 29th Avenue instead of SE 32nd Avenue and 2) how much traffic from the neighborhood would travel through the Hillside development instead of using SE 32nd Avenue.

To estimate the vehicular demand from the proposed Hillside development, the internal site layout of buildings and parking was considered. Based on the proposed layout of the site's streets, buildings, and parking spaces, about two percent of site trips could reasonably be expected to utilize SE 29th Avenue to enter/exit the site during the morning and evening peak hours. The incentive for other areas of the site to travel into the northern neighborhood is low because there are no significant destinations within the neighborhood and all traffic would eventually need to access SE 32nd Avenue. Further, delays from the site accesses (SE Dwyer Drive and SE Meek Street) onto SE 32nd Avenue are expected to be minimal so there is little incentive to find an alternate route from the site. Lastly, the streets in the northern neighborhood are narrow and not conducive to through travel. Overall, a five percent assignment of site traffic to SE 29th Avenue was used to present a conservative analysis.

The potential for vehicular traffic from the northern neighborhood to travel through the Hillside development is expected to be minimal. The travel distance from the intersection of SE Balfour Street at SE 29th Avenue to SE Meek Street at SE 32nd Avenue is currently approximately 1,900 feet. Cutting through the proposed Hillside development would save approximately 100 feet of travel, which would not yield a perceivable travel time savings and would be unlikely to incentivize cut-through traffic. The current peak hour counts at the SE Balfour Street/SE 29th Avenue intersection are below 20 vehicles, which reflect; thus, the potential demand is also very low. Considering the small potential travel savings and the small potential demand, no existing traffic was reassigned through the Hillside development using the SE 29th Avenue connection.

Table 7 shows the v/c, delay, and LOS results of the intersections affected by redistributing five percent of trips from SE Dwyer Drive and SE Meek Street to SE 29th Avenue and SE Balfour Street. Figures showing traffic volumes at the affected intersections during the morning and evening peak hours are included in the technical appendix.

Table 7: Capacity Analysis Summary - SE 29th Avenue Connection

Intersection	Morning Peak Hour			Evening Peak Hour		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
2 SE Balfour Street at SE 29th Avenue	A	7	0.02	A	7	0.03
3 SE Balfour Street at SE 32nd Avenue	B	11	0.02	B	12	0.03
4 SE Dwyer Drive at SE 32nd Avenue	C	16	0.17	C	17	0.23
5 SE Meek Street at SE 32nd Avenue	C	23	0.29	C	16	0.11

BOLDED results indicate operation above acceptable jurisdictional standards.

The delay and capacity analysis shows that a vehicular connection between the site and SE 29th Avenue is not projected to significantly improve or degrade the performance of the affected study intersections compared with providing only a bicycle/pedestrian connection.

Transportation Planning Rule Analysis

The Transportation Planning Rule (TPR) is in place to ensure that the transportation system is capable of supporting possible increases in traffic intensity that could result from changes to adopted plans and land-use regulations. The applicable elements of the TPR are each quoted directly in italics below, with responses following.

660-012-0060

(1) If an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would significantly affect an existing or planned transportation facility, then the local government must put in place measures as provided in section (2) of this rule, unless the amendment is allowed under section (3), (9) or (10) of this rule. A plan or land use regulation amendment significantly affects a transportation facility if it would:

(a) Change the functional classification of an existing or planned transportation facility (exclusive of correction of map errors in an adopted plan);

(b) Change standards implementing a functional classification system; or

(c) Result in any of the effects listed in paragraphs (A) through (C) of this subsection based on projected conditions measured at the end of the planning period identified in the adopted TSP. As part of evaluating projected conditions, the amount of traffic projected to be generated within the area of the amendment may be reduced if the amendment includes an enforceable, ongoing requirement that would demonstrably limit traffic generation, including, but not limited to, transportation demand management. This reduction may diminish or completely eliminate the significant effect of the amendment.

(A) Types or levels of travel or access that are inconsistent with the functional classification of an existing or planned transportation facility;

(B) Degrade the performance of an existing or planned transportation facility such that it would not meet the performance standards identified in the TSP or comprehensive plan; or

(C) Degrade the performance of an existing or planned transportation facility that is otherwise projected to not meet the performance standards identified in the TSP or comprehensive plan.

Based on the analysis findings in the report, subsections (a) and (b) are not triggered since the proposed zone change will not impact or alter the functional classification of any existing or planned facility and the proposal does not include a change to any functional classification standards.

Estimated Traffic Demand

The Hillside Master Plan proposes a zone change for the property from medium-density residential zoning (R-3) to a split of high-density residential and general mixed-use zoning (R-1 and GMU). To determine the potential impacts the zone change could have on the surrounding transportation system, the trip generation of the site in the reasonable worst-case development scenario under existing and proposed zoning was estimated.

The reasonable worst-case development scenario of the site under existing and proposed zoning was selected based on the permitted land uses listed in Table 19.302.2 of the City of Milwaukie's municipal code. For the GMU zone, the Hillside Master Plan proposes a more restrictive list of permitted land uses in the GMU zone. This list is included in the technical appendix of this report. Within the permitted land uses listed in the City's municipal code as well as the modified list of permitted land uses in the GMU zone, the land uses selected to represent the worst-case development scenario were single-family housing for the R-3 zone and multifamily housing for the R-3 and GMU zones. These land uses are expected to have the highest trip generation potential and are considered the most trip-intensive land uses of the site.

The maximum allowable density of residential units permitted onsite under existing and proposed zoning was derived from the City of Milwaukie's municipal code. Table 19.302.4 of the City's municipal code requires R-3 zoned properties to have a maximum density of 14.5 dwelling units per acre. Some consideration was given to maintaining the existing Hillside Manor as multi-family housing but redevelopment of that portion of the site as single-family housing produced a higher trip rate than maintaining the building, therefore, the entire site was considered for redevelopment at its maximum potential. Since the subject site is approximately 16 acres, this gives a reasonable worst-case development potential of 232 units under existing R-3 zoning.

For R-1 and GMU zones, the required density is 17.4 units per acre and 50 stand-alone units per acre, respectively. The Hillside Master Plan proposes an average 24.2 units per acre in the proposed R-1 zone of the site and 70 units per acre in the GMU zone of the site. Thus, the Hillside development is assumed to be a reasonable worst-case scenario under proposed zoning. Since the Hillside Manor apartment building is planned to remain after the zone change, trips generated by the Hillside Manor were included in the proposed zoning analysis.

The *Trip Generation Manual* was used to estimate trips generated by the site under existing zoning, and the trips generated by the Hillside development as described in the Site Trips section of this report (in addition to trips associated with the Hillside Manor) were considered to be the site trips under proposed zoning. Table 8 summarizes the net difference of site trips under existing zoning and proposed zoning.

Table 8: Trip Generation Summary - Zone Change Analysis

	ITE Code	Size	Morning Peak Hour			Evening Peak Hour			Weekday Total
			Enter	Exit	Total	Enter	Exit	Total	
Existing Zoning (R-3)									
Single Family Housing	210	232	43	129	172	145	85	230	2,190
Modal Split Reduction (10%)			*4*	*13*	*17*	*15*	*9*	*23*	*220*
Net External Trips			39	116	155	130	76	207	1970
Proposed Zoning (R-1, GMU)									
Multi-Family Housing (Low-Rise)	220	39 Units	4	14	18	14	8	22	286
Multi-Family Housing (Mid-Rise)	221	415 Units	38	111	149	112	72	184	2258
Multi-Family Housing w/ First Floor Commercial	231	146 Units	15	51	66	34	20	54	530
Total Site Generated Trips			57	176	233	160	100	260	3074
Modal Split (10%)			*6*	*18*	*24*	*16*	*10*	*26*	*308*
Net External Trips			51	158	209	144	90	234	2766
Net Difference			12	42	54	14	14	27	796

As required by the City of Milwaukie, an analysis of the study intersections in the 20-year planning horizon was done to determine the potential impacts the proposed zone change could have on the transportation system. A compounded growth rate of 0.725 percent per year for an assumed buildout condition for 20 years was applied to the year 2020 traffic volumes to approximate year 2040 background conditions. This growth rate is consistent with the growth rate derived from the City of Milwaukie's TSP and as described in the Site Trips section.

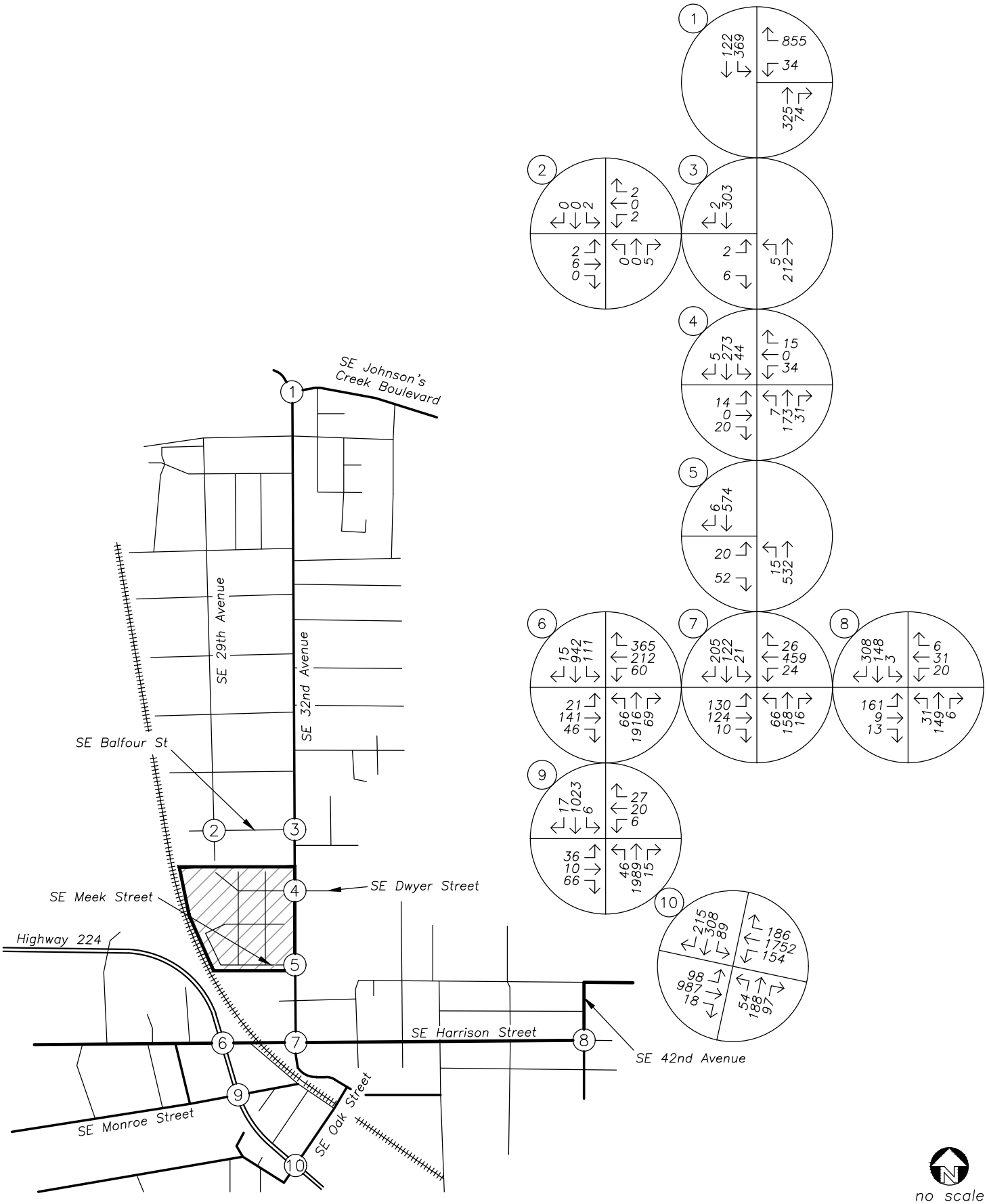
The net site trips shown in Table 8 were then added to the year 2040 background traffic volumes to obtain traffic volumes at the study intersections under the proposed zoning. Figure 13 and Figure 14 show the year 2040 traffic volumes under proposed zoning for the morning and evening peak hours, respectively.

Planned Transportation Improvements

According to Table 8-10 of the City of Milwaukie's TSP, the intersections of SE Harrison Street at Highway 224, SE Harrison Street at SE 42nd Avenue, and Highway 224 at SE Oak Street are identified in the Street Network Master Plan as intersections with deficiencies and are planned to be improved as follows:

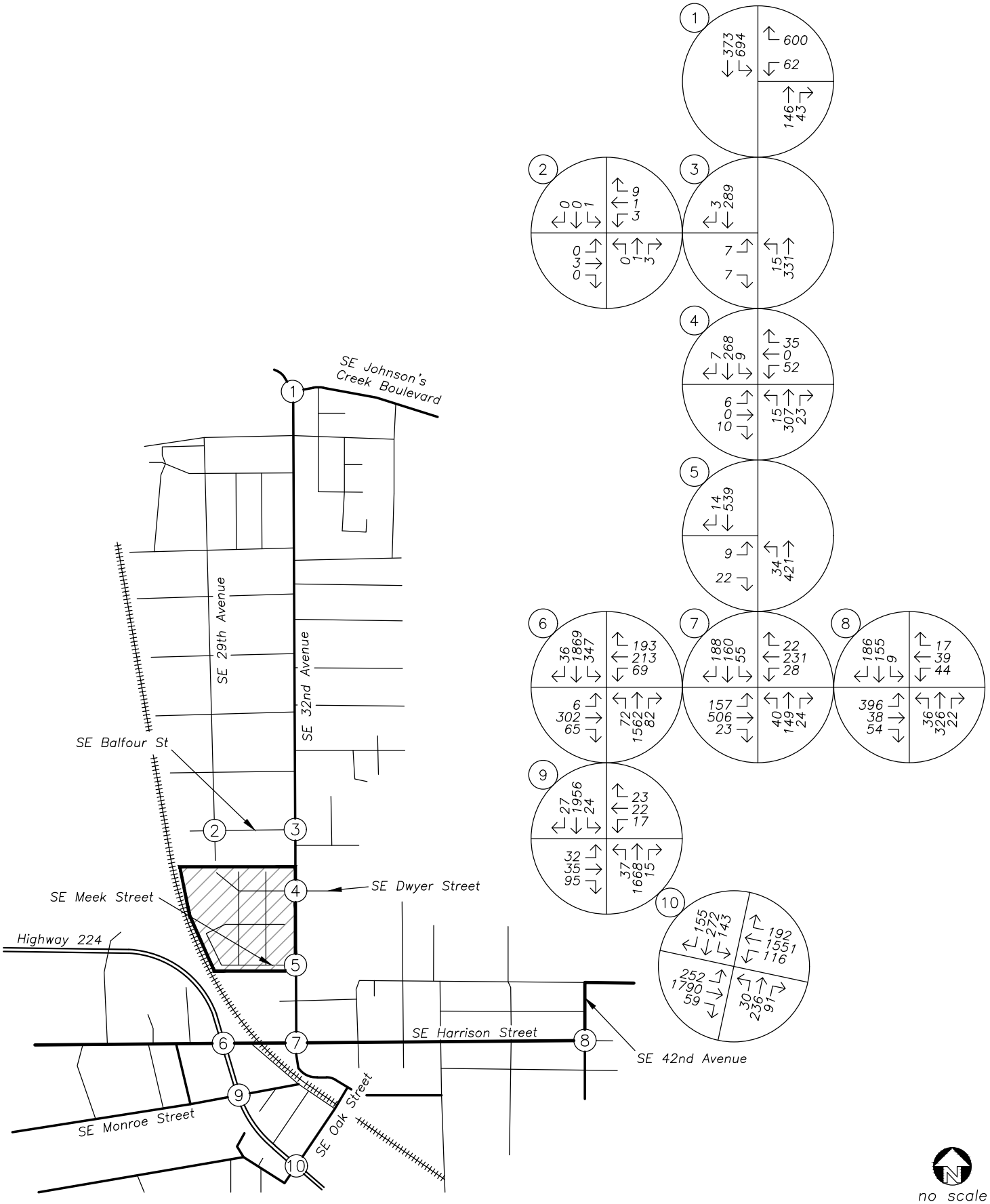
- The intersection of Highway 224 at SE Oak Street is planned to be improved by adding left-turn lanes and protected signal phasing for left-turn approaches on SE Oak Street. This is listed as a high priority project. SE Oak Street currently has left-turn lanes but does not have separate left-turn phasing.

- The intersection of SE Harrison Street at Highway 224 is planned to be improved by adding left-turn lanes and protected signal phasing for left-turn approaches on SE Harrison Street. This is listed as a medium priority project. No improvements have been made to date at this location.
- The intersection of SE Harrison Street at SE 42nd Avenue is planned to be signalized to facilitate dominant traffic flow. This is listed as a low priority project.



TRAFFIC VOLUMES
2040 Planning Horizon
AM Peak Hour

Figure 13
Hillside Master Plan
8/24/2020



TRAFFIC VOLUMES
2040 Planning Horizon
PM Peak Hour

Figure 14
Hillside Master Plan
8/24/2020

Operational Analysis

A capacity and delay analysis was conducted for each study intersection assuming the improvement projects mentioned above will be complete by year 2040. The v/c, delay, and LOS results of the capacity and delay analysis are shown in Table 9 for the morning and evening peak hours. Detailed calculations as well as tables showing the relationship between delay and LOS are included in the appendix to this report.

Table 9: Capacity Analysis Summary - Year 2040 Planning Horizon

Intersection	Morning Peak Hour			Evening Peak Hour		
	LOS	Delay (s)	v/c	LOS	Delay (s)	v/c
1 SE Tacoma Street/SE Johnson Creek Boulevard at SE 32nd Avenue	B	15	0.68	D	38	0.94
2 SE Balfour Street at SE 29th Avenue	A	7	0.02	A	7	0.02
3 SE Balfour Street at SE 32nd Avenue	B	11	0.02	B	13	0.03
4 SE Dwyer Drive at SE 32nd Avenue	C	16	0.16	C	17	0.25
5 SE Meek Street at SE 32nd Avenue	C	23	0.31	C	17	0.10
6 SE Harrison Street at Highway 224	D	52	0.93	D	48	0.93
7 SE Harrison Street at SE 32nd Avenue	D	43	0.65	C	35	0.67
8 SE Harrison Street at SE 42nd Avenue	A	9	0.39	B	15	0.67
9 SE Monroe Street at Highway 224	C	24	0.75	A	10	0.74
10 Highway 224 at SE Oak Street	D	49	0.83	D	35	0.93

BOLDED results indicate operation above acceptable jurisdictional standards.

The delay and capacity analysis shows that upon the proposed zone change, the study intersections are projected to operate acceptably per the performance standards identified in the city of Milwaukie's TSP. The proposed zone change will not further degrade the performance of any existing or planned transportation facility beyond what is allowed in the current zone. Accordingly, the Transportation Planning Rule is satisfied.

Conclusions

Regarding the proposed development, the results presented in this TIS conclude:

- No significant trends or crash patterns were identified at any of the study intersections that were indicative of safety concerns. Accordingly, no safety mitigation is recommended per the crash data analysis.
- Adequate sight distance is available at the site access to ensure safe and efficient operation of the intersection; however, sight lines at the SE Meek Street access on SE 32nd Avenue could be improved by removing some of the foliage on the southeast corner of the intersection.
- The SE Meek Street site access will meet access spacing standards for SE 32nd Avenue but the SE Dwyer Drive intersection will not meet spacing due to the north. However, the average access spacing across the site frontage will meet the standard, and the number of potential conflict points along this section of SE 32nd Avenue will be reduced compared with existing conditions, improving the safety and flow of the street.
- Left-turn lane warrants are projected to be met for the northbound approach of the intersection of SE Meek Street at SE 32nd Avenue; however, a northbound left-turn lane is not recommended for several reasons. Stopped vehicles in a northbound left-turn lane would obstruct the line of sight between northbound vehicles and pedestrians using the crosswalk on SE 32nd Avenue north of the intersection. While the separation of left-turning vehicles can reduce potential conflicts, it would also support higher travel speeds on a roadway where traffic-calming measures have been installed to slow travel speeds.
- Preliminary traffic signal warrants are not projected to be met at any of the study intersections under buildout conditions.
- All study area intersections are calculated to operate within the City of Milwaukie and ODOT standards under all analysis scenarios except for the intersection of SE Harrison Street at SE 42nd Avenue. This analysis shows this intersection will exceed City standards under background conditions and worsen by one second of delay under building conditions. However, no mitigation is recommended because traffic volumes will not meet signal warrants.
- A vehicular connection between the site and SE 29th Avenue is not projected to significantly improve or degrade the performance of the affected study intersections compared with providing only a bicycle/pedestrian connection.

Regarding the proposed zone change, a comparison of reasonable worst-case development scenarios shows that the transportation system is capable of supporting changes to adopted plans and land use regulations and no modifications to the City's TSP are needed. Therefore, the conditions of the TPR are satisfied.

Appendix

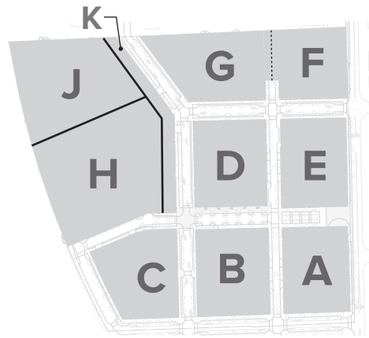
TABULATIONS

Lot A	= 1.25 ac	**100 du/ac**
Lot B	= 1.39 ac	**71 du/ac**
Lot C	= 1.36 ac	**40 du/ac**
Lot D	= 1.38 ac	**34 du/ac**
Lot E	= 1.29 ac	**81 du/ac**
Lot F	= 1.05 ac	**38 du/ac**
Lot G	= 1.52 ac	**17 du/ac**
Lot H	= 2.68 ac	**37 du/ac**
Lot J	= 1.95 ac	**0 du/ac**
Lot K	= 0.85 ac	**14 du/ac**
Total	= **14.72 ac**	

Hillside Manor (existing)	= 100 units
Hillside Park (replacement units)	= 100 units
Net New Units (to be developed)	= 400 units
Grand Total	= **600 units**

Off-street parking	= 319 stalls
On-street parking	= 175 stalls
Total	= **494 stalls**

KEY PLAN

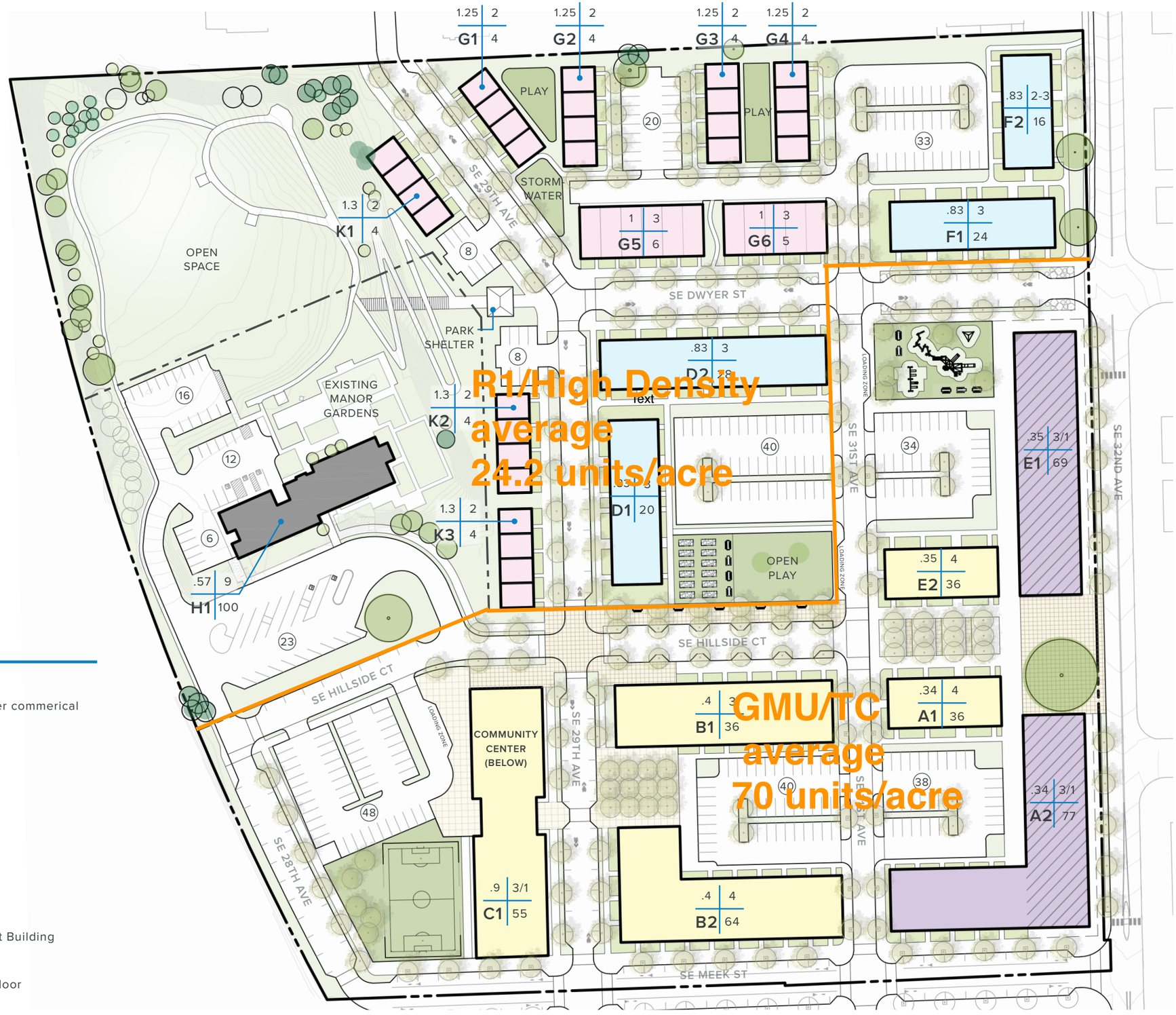


LEGEND

HILLSIDE MASTER PLAN
Housing Authority of Clackamas County

MASTER PLAN

0 25' 50' 100'

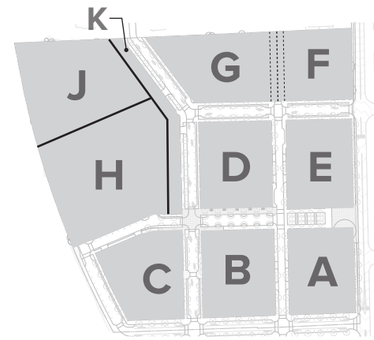


LEGEND

- parking ratio
- .5 | 3/1 — # of stories / over commerical
- E1 | 50 — # of units
- Building

- Townhouse
- Walk-Up Apartment
- Apartment Building (residential all floors)
- Mixed-Use Apartment Building
- Commercial ground floor

KEY PLAN



TABULATIONS

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Lot F	= 1.05 ac	**38 du/ac**
Lot G	= 1.52 ac	**17 du/ac**
Lot H	= 2.68 ac	**37 du/ac**
Lot J	= 1.95 ac	
Lot K	= 0.85 ac	**14 du/ac**
Total	= **14.72 ac**	

Manor (Existing)	= 100 units
New Units	= 500 units
Total	= **600 units**
Off-street parking	= 337 stalls
On-street parking	= 163 stalls
Total	= **500 stalls**

HILLSIDE MASTER PLAN
Design Option | 07.01.2019

REVISED MASTER PLAN OPTION
URBAN EDGES & URBAN GREENSPACES

DRAFT

0 25' 50' 100'

SEA SCOTT|EDWARDS ARCHITECTURE LLP

Modified GMU use chart for Hillside Master Plan

GMU Uses

Commercial Uses	GMU code	Hillside Application	Notes
General office	Permitted	Yes.	Total available commercial space on Lots A + E will be 20,000 sq. ft. Anticipated uses will be a blend of these permitted uses with the total of all uses combined not exceeding 20,000 sq. ft. Further limits on mix of uses may be determined by TIS
Drinking establishments	Permitted	Yes	
Eating establishments	Permitted	Yes	
Indoor recreation (gyms, yoga studios, dance studios)	Permitted	Yes. Max size limit of 5,000 sq. ft.	
Retail-oriented sales	Permitted	Yes.	
Personal/business services	Permitted	Yes.	
Day care	Permitted	Yes	
Repair-oriented (includes repair of electronics, bicycles, clocks, jewelry, guns, small appliances, and office equipment; tailors; shoe repair; locksmiths; and upholsterers.)	Permitted	Yes. Max size limit of 5,000 sq. ft.	
Community service uses (includes schools, government offices, religious institutions, community meeting buildings, private club/lodge and recreational facilities – mainly outdoor.)	Community Service Use approval (Type III review)	Yes. Limited to 15,000 sq. ft. Anticipated to be primarily for Hillside residents with some larger neighborhood use.	The Pre-App notes indicate that we can establish this through the PD approval (no Type III CSU required). The application materials should specify the use and purpose of this building (Hillside residents only, or open to the public)? Ask HACC if we should limit the list of uses in column 1.
Marijuana retailer	Permitted	No	
Commercial lodging (hotel, motel, etc.)	Permitted	No	
Vehicle sales and rentals (only when in a completely enclosed building)	Permitted	No	
Vehicle repair and service	Permitted	No	

(only when in a completely enclosed building)			
Manufacturing and production (limited to 5,000 sq ft per use and only permitted when associated with a retail-oriented sales or eating/ drinking establishment use.)	Permitted	No	
Residential Uses:			
Rowhouse, Multi-family, Cottage Cluster housing, Live-work units, Senior and Retirement housing	Permitted	Yes	
Mixed-Use	Permitted	Yes	
Boarding house	Conditional Use	No	

TRIP GENERATION CALCULATIONS

Land Use: Single-Family Detached Housing
Land Use Code: 210
Setting/Location General Urban/Suburban
Variable: Dwelling Units
Variable Value: 100

AM PEAK HOUR

Trip Rate: 0.74

	Enter	Exit	Total
Directional Distribution	25%	75%	
Trip Ends	**19**	**55**	**74**

PM PEAK HOUR

Trip Rate: 0.99

	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	**62**	**37**	**99**

WEEKDAY

Trip Rate: 9.44

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**472**	**472**	**944**

SATURDAY

Trip Rate: 9.54

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**477**	**477**	**954**

Source: Trip Generation Manual, Tenth Edition

TRIP GENERATION CALCULATIONS

Land Use: Single-Family Detached Housing
Land Use Code: 210
Setting/Location General Urban/Suburban
Variable: Dwelling Units
Variable Value: 232

AM PEAK HOUR

Trip Rate: 0.74

	Enter	Exit	Total
Directional Distribution	25%	75%	
Trip Ends	**43**	**129**	**172**

PM PEAK HOUR

Trip Rate: 0.99

	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	**145**	**85**	**230**

WEEKDAY

Trip Rate: 9.44

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**1,095**	**1,095**	**2,190**

SATURDAY

Trip Rate: 9.54

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**1,107**	**1,107**	**2,214**

Source: Trip Generation Manual, Tenth Edition

TRIP GENERATION CALCULATIONS

Land Use: Multifamily Housing (Low-Rise)
Land Use Code: 220
Setting/Location General Urban/Suburban
Variable: Dwelling Units
Variable Value: 39

AM PEAK HOUR

Trip Rate: 0.46

	Enter	Exit	Total
Directional Distribution	23%	77%	
Trip Ends	**4**	**14**	**18**

PM PEAK HOUR

Trip Rate: 0.56

	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	**14**	**8**	**22**

WEEKDAY

Trip Rate: 7.32

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**143**	**143**	**286**

SATURDAY

Trip Rate: 8.14

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**159**	**159**	**318**

Source: TRIP GENERATION, Tenth Edition

TRIP GENERATION CALCULATIONS

Land Use: Multifamily Housing (Mid-Rise)
Land Use Code: 221
Setting/Location General Urban/Suburban
Variable: Dwelling Units
Variable Value: 100

AM PEAK HOUR

Trip Rate: 0.36

	Enter	Exit	Total
Directional Distribution	26%	74%	
Trip Ends	**9**	**27**	**36**

PM PEAK HOUR

Trip Rate: 0.44

	Enter	Exit	Total
Directional Distribution	61%	39%	
Trip Ends	**27**	**18**	**45**

WEEKDAY

Trip Rate: 5.44

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**272**	**272**	**544**

SATURDAY

Trip Rate: 4.91

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**246**	**246**	**492**

Source: TRIP GENERATION, Tenth Edition

TRIP GENERATION CALCULATIONS

Land Use: Multifamily Housing (Mid-Rise)
Land Use Code: 221
Setting/Location General Urban/Suburban
Variable: Dwelling Units
Variable Value: 415

AM PEAK HOUR

Trip Rate: 0.36

	Enter	Exit	Total
Directional Distribution	26%	74%	
Trip Ends	**39**	**110**	**149**

PM PEAK HOUR

Trip Rate: 0.44

	Enter	Exit	Total
Directional Distribution	61%	39%	
Trip Ends	**112**	**72**	**184**

WEEKDAY

Trip Rate: 5.44

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**1,129**	**1,129**	**2,258**

SATURDAY

Trip Rate: 4.91

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**1,019**	**1,019**	**2,038**

Source: TRIP GENERATION, Tenth Edition

TRIP GENERATION CALCULATIONS

Land Use: Mid-Ride Residential with 1st Floor Commercial
Land Use Code: 231
Setting/Location General Urban/Suburban
Variable: Occupied Dwelling Units
Variable Value: 146

AM PEAK HOUR

Trip Rate: 0.45

	Enter	Exit	Total
Directional Distribution	23%	77%	
Trip Ends	**15**	**51**	**66**

PM PEAK HOUR

Trip Rate: 0.37

	Enter	Exit	Total
Directional Distribution	63%	37%	
Trip Ends	**34**	**20**	**54**

WEEKDAY

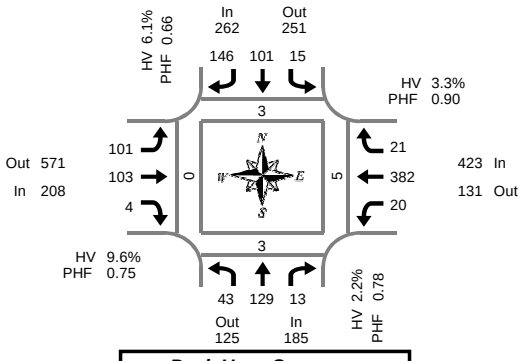
Trip Rate: 3.62

	Enter	Exit	Total
Directional Distribution	50%	50%	
Trip Ends	**265**	**264**	**529**

Source: TRIP GENERATION, Tenth Edition

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:15 AM to 8:15 AM

SE 32nd Ave & SE Harrison St

Tuesday, September 18, 2018
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	5	4	0	0	0	3	12	0	4	9	0	0	0	29	0	0	66	1	0	1	0
7:05 AM	3	11	0	0	0	4	6	1	7	7	0	0	1	33	4	0	76	0	0	0	0
7:10 AM	5	9	0	0	0	4	7	0	6	8	1	0	2	28	4	0	74	0	0	0	0
7:15 AM	2	12	0	1	0	5	10	2	5	19	0	0	0	28	3	1	84	0	0	0	0
7:20 AM	7	8	0	0	0	6	12	0	10	6	0	0	2	34	2	0	87	1	0	1	0
7:25 AM	4	9	1	0	3	4	13	0	4	8	0	1	1	44	4	0	95	0	0	0	0
7:30 AM	5	11	0	1	3	14	12	0	6	6	0	0	3	26	0	0	86	0	0	0	0
7:35 AM	2	10	0	0	0	14	19	0	3	11	0	0	0	29	1	0	89	0	0	0	0
7:40 AM	2	14	1	0	0	18	19	0	7	4	1	0	0	34	2	0	102	0	0	0	0
7:45 AM	3	9	3	0	1	6	7	0	11	8	1	0	4	37	0	0	90	0	1	1	0
7:50 AM	5	12	3	0	1	10	13	0	4	4	0	0	3	26	1	0	82	0	0	0	0
7:55 AM	3	19	2	0	4	7	4	0	14	7	0	0	1	33	4	0	98	1	1	1	0
8:00 AM	3	10	2	0	1	10	9	0	15	3	0	0	3	32	3	0	91	0	0	1	0
8:05 AM	2	6	1	0	2	4	16	0	10	16	0	1	2	31	0	0	90	1	1	1	0
8:10 AM	5	9	0	0	0	3	12	0	12	11	2	0	1	28	1	0	84	0	0	0	0
8:15 AM	3	4	1	0	1	7	7	0	12	8	0	0	3	17	0	0	63	0	4	0	2
8:20 AM	3	8	3	0	1	5	12	0	10	9	0	0	0	32	1	0	84	0	0	1	0
8:25 AM	3	8	3	0	2	9	10	0	20	14	0	1	0	23	3	0	95	0	1	0	0
8:30 AM	1	7	1	0	0	4	10	0	14	11	0	0	1	18	0	2	67	0	0	1	0
8:35 AM	3	15	1	0	0	13	8	0	11	12	0	0	2	20	2	0	87	0	0	0	1
8:40 AM	4	8	0	0	1	6	12	0	6	10	1	0	1	28	0	0	77	0	0	0	0
8:45 AM	3	9	2	0	2	3	5	0	11	11	0	1	2	18	5	0	71	0	1	0	0
8:50 AM	0	7	2	0	1	13	14	0	6	9	0	0	3	20	0	0	75	1	1	0	0
8:55 AM	1	2	2	0	1	11	10	0	10	28	0	0	3	22	3	0	93	1	0	1	0
Total Survey	77	221	28	2	24	183	259	3	218	239	6	4	38	670	43	3	2,006	6	10	9	3

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	13	24	0	0	0	11	25	1	17	24	1	0	3	90	8	0	216	1	0	1	0
7:15 AM	13	29	1	1	3	15	35	2	19	33	0	1	3	106	9	1	266	1	0	1	0
7:30 AM	9	35	1	1	3	46	50	0	16	21	1	0	3	89	3	0	277	0	0	0	0
7:45 AM	11	40	8	0	6	23	24	0	29	19	1	0	8	96	5	0	270	1	2	2	0
8:00 AM	10	25	3	0	3	17	37	0	37	30	2	1	6	91	4	0	265	1	1	2	0
8:15 AM	9	20	7	0	4	21	29	0	42	31	0	1	3	72	4	0	242	0	5	1	2
8:30 AM	8	30	2	0	1	23	30	0	31	33	1	0	4	66	2	2	231	0	0	1	1
8:45 AM	4	18	6	0	4	27	29	0	27	48	0	1	8	60	8	0	239	2	2	1	0
Total Survey	77	221	28	2	24	183	259	3	218	239	6	4	38	670	43	3	2,006	6	10	9	3

Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	185	125	310	2	262	251	513	2	208	571	779	2	423	131	554	1	1,078	3	3	5	0
%HV	2.2%				6.1%				9.6%				3.3%				5.0%				
PHF	0.78				0.66				0.75				0.90				0.96				

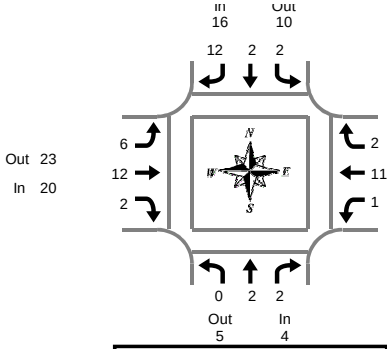
By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	43	129	13	185	15	101	146	262	101	103	4	208	20	382	21	423	1,078
%HV	0.0%	1.6%	15.4%	2.2%	13.3%	2.0%	8.2%	6.1%	5.9%	11.7%	50.0%	9.6%	5.0%	2.9%	9.5%	3.3%	5.0%
PHF	0.67	0.79	0.41	0.78	0.54	0.55	0.73	0.66	0.65	0.78	0.50	0.75	0.63	0.90	0.58	0.90	0.96

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	46	128	10	2	12	95	134	3	81	97	3	1	17	381	25	1	1,029	3	2	4	0
7:15 AM	43	129	13	2	15	101	146	2	101	103	4	2	20	382	21	1	1,078	3	3	5	0
7:30 AM	39	120	19	1	16	107	140	0	124	101	4	2	20	348	16	0	1,054	2	8	5	2
7:45 AM	38	115	20	0	14	84	120	0	139	113	4	2	21	325	15	2	1,008	2	8	6	3
8:00 AM	31	93	18	0	12	88	125	0	137	142	3	3	21	289	18	2	977	3	8	5	3

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Peak Hour Summary
7:15 AM to 8:15 AM

SE 32nd Ave & SE Harrison St

Tuesday, September 18, 2018
7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
7:05 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
7:10 AM	0	0	0	0	0	0	0	0	1	3	0	4	0	1	0	1	5
7:15 AM	0	0	0	0	0	1	0	1	1	3	0	4	0	0	1	1	6
7:20 AM	0	0	0	0	0	0	2	2	1	3	0	4	0	1	0	1	7
7:25 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	2	0	2	5
7:30 AM	0	0	0	0	1	0	1	2	0	1	0	1	0	1	0	1	4
7:35 AM	0	0	0	0	0	0	2	2	0	1	0	1	0	1	0	1	4
7:40 AM	0	0	0	0	0	0	0	0	1	0	1	2	0	1	0	1	3
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	2	3
7:50 AM	0	0	1	1	0	0	1	1	1	0	0	1	0	2	0	2	5
7:55 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
8:00 AM	0	1	1	2	0	0	2	2	0	0	0	0	0	2	0	2	6
8:05 AM	0	0	0	0	1	1	2	4	0	1	0	1	0	0	0	0	5
8:10 AM	0	0	0	0	0	0	2	2	1	0	1	2	0	0	0	0	4
8:15 AM	0	1	0	1	0	0	0	0	1	0	0	1	0	1	0	1	3
8:20 AM	0	0	1	1	0	0	0	0	0	1	0	1	0	1	1	2	4
8:25 AM	0	0	0	0	0	0	2	2	0	1	0	1	0	1	0	1	4
8:30 AM	0	0	0	0	0	1	1	2	2	1	0	3	0	1	0	1	6
8:35 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	1	0	1	3
8:40 AM	0	1	0	1	0	1	1	2	1	1	0	2	0	0	0	0	5
8:45 AM	0	0	0	0	1	0	0	1	1	1	0	2	0	4	0	4	7
8:50 AM	0	1	0	1	0	1	0	1	1	0	0	1	0	1	0	1	4
8:55 AM	0	0	0	0	0	0	1	1	1	1	0	2	0	0	0	0	3
Total Survey	0	6	3	9	3	5	18	26	15	23	2	40	1	23	3	27	102

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	1	1	2	4	0	6	0	2	0	2	9
7:15 AM	0	1	0	1	0	1	2	3	2	8	0	10	0	3	1	4	18
7:30 AM	0	0	0	0	1	0	3	4	1	2	1	4	0	3	0	3	11
7:45 AM	0	0	1	1	0	0	1	1	2	1	0	3	1	3	1	5	10
8:00 AM	0	1	1	2	1	1	6	8	1	1	1	3	0	2	0	2	15
8:15 AM	0	1	1	2	0	0	2	2	1	2	0	3	0	3	1	4	11
8:30 AM	0	2	0	2	0	2	2	4	3	3	0	6	0	2	0	2	14
8:45 AM	0	1	0	1	1	1	1	3	3	2	0	5	0	5	0	5	14
Total Survey	0	6	3	9	3	5	18	26	15	23	2	40	1	23	3	27	102

Heavy Vehicle Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound SE 32nd Ave			Southbound SE 32nd Ave			Eastbound SE Harrison St			Westbound SE Harrison St			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	4	5	9	16	10	26	20	23	43	14	16	30	54
PHF	0.33			0.50			0.50			0.70			0.75

By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	2	2	4	2	2	12	16	6	12	2	20	1	11	2	14	54
PHF	0.00	0.50	0.25	0.33	0.50	0.50	0.50	0.50	0.75	0.38	0.50	0.50	0.25	0.69	0.50	0.70	0.75

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

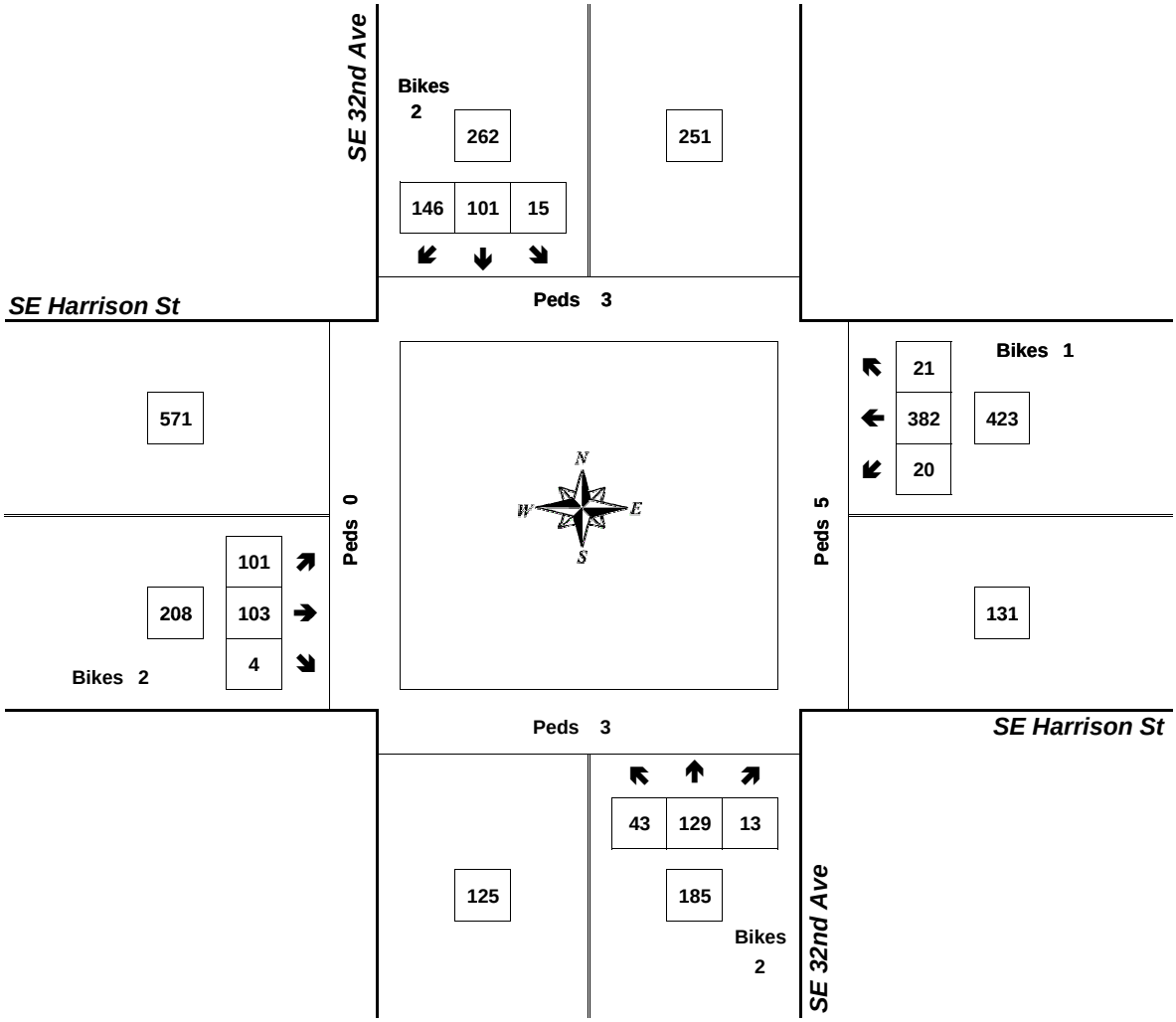
Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	1	1	2	1	1	7	9	7	15	1	23	1	11	2	14	48
7:15 AM	0	2	2	4	2	2	12	16	6	12	2	20	1	11	2	14	54
7:30 AM	0	2	3	5	2	1	12	15	5	6	2	13	1	11	2	14	47
7:45 AM	0	4	3	7	1	3	11	15	7	7	1	15	1	10	2	13	50
8:00 AM	0	5	2	7	2	4	11	17	8	8	1	17	0	12	1	13	54

Peak Hour Summary

Clay Carney
(503) 833-2740

SE 32nd Ave & SE Harrison St

7:15 AM to 8:15 AM
Tuesday, September 18, 2018

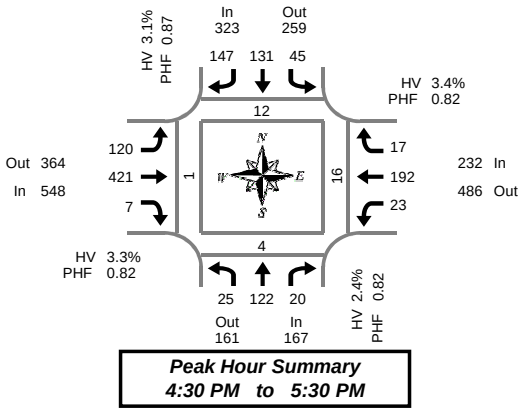


Approach	PHF	HV%	Volume
EB	0.75	9.6%	208
WB	0.90	3.3%	423
NB	0.78	2.2%	185
SB	0.66	6.1%	262
Intersection	0.96	5.0%	1,078

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



SE 32nd Ave & SE Harrison St

Tuesday, September 18, 2018
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	1	10	1	0	4	10	12	0	8	34	0	0	2	17	0	0	99	0	0	0	0
4:05 PM	1	11	6	1	1	13	10	0	10	37	0	0	2	17	0	0	108	2	0	3	0
4:10 PM	4	7	3	0	7	11	6	0	10	38	2	2	4	12	0	0	104	1	0	0	0
4:15 PM	1	10	4	0	6	12	9	0	7	30	0	0	2	20	1	0	102	0	0	2	1
4:20 PM	2	11	2	2	6	9	9	0	6	26	2	0	0	18	3	0	94	1	0	1	0
4:25 PM	3	3	1	0	8	10	9	0	6	17	0	0	5	15	3	0	80	0	0	3	0
4:30 PM	4	7	3	1	3	10	13	0	13	34	1	0	3	14	0	0	105	1	0	2	0
4:35 PM	3	11	3	0	3	8	15	0	10	44	0	0	1	19	4	0	121	6	0	4	0
4:40 PM	2	12	0	0	6	5	14	0	19	41	0	0	2	18	2	0	121	1	0	1	0
4:45 PM	1	15	4	0	4	12	15	0	7	32	2	0	1	22	2	0	117	2	1	2	0
4:50 PM	2	10	1	0	4	15	15	0	4	23	1	1	4	20	0	0	99	1	3	1	0
4:55 PM	4	10	0	0	2	12	14	0	10	38	0	0	2	18	1	0	111	0	0	2	0
5:00 PM	1	6	1	0	1	18	11	0	6	27	0	0	1	12	2	0	86	0	0	1	0
5:05 PM	1	7	0	0	4	14	14	1	5	20	0	1	1	12	2	0	80	0	0	0	0
5:10 PM	2	15	3	0	5	9	11	0	11	52	1	0	3	18	2	0	132	1	0	0	1
5:15 PM	3	10	2	1	5	13	9	0	9	36	1	0	1	14	2	0	105	0	0	3	0
5:20 PM	1	11	2	0	4	7	7	1	16	41	0	0	0	12	0	0	101	0	0	0	0
5:25 PM	1	8	1	0	4	8	9	1	10	33	1	1	4	13	0	1	92	0	0	0	0
5:30 PM	1	15	1	0	3	8	7	0	12	33	0	0	2	16	0	0	98	0	0	0	0
5:35 PM	5	8	1	0	6	11	10	0	5	24	1	1	2	14	1	0	88	0	0	0	0
5:40 PM	0	8	1	0	3	17	11	0	7	23	3	0	1	24	1	0	99	0	0	0	0
5:45 PM	0	5	0	0	1	5	13	0	5	26	0	0	1	15	1	0	72	2	1	4	1
5:50 PM	4	6	2	0	2	11	5	1	12	32	0	1	3	18	0	0	95	0	0	1	0
5:55 PM	4	5	0	1	2	13	10	0	8	30	1	0	1	18	2	0	94	3	0	1	0
Total Survey	51	221	42	6	94	261	258	4	216	771	16	7	48	396	29	1	2,403	21	5	31	3

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	6	28	10	1	12	34	28	0	28	109	2	2	8	46	0	0	311	3	0	3	0
4:15 PM	6	24	7	2	20	31	27	0	19	73	2	0	7	53	7	0	276	1	0	6	1
4:30 PM	9	30	6	1	12	23	42	0	42	119	1	0	6	51	6	0	347	8	0	7	0
4:45 PM	7	35	5	0	10	39	44	0	21	93	3	1	7	60	3	0	327	3	4	5	0
5:00 PM	4	28	4	0	10	41	36	1	22	99	1	1	5	42	6	0	298	1	0	1	1
5:15 PM	5	29	5	1	13	28	25	2	35	110	2	1	5	39	2	1	298	0	0	3	0
5:30 PM	6	31	3	0	12	36	28	0	24	80	4	1	5	54	2	0	285	0	0	0	0
5:45 PM	8	16	2	1	5	29	28	1	25	88	1	1	5	51	3	0	261	5	1	6	1
Total Survey	51	221	42	6	94	261	258	4	216	771	16	7	48	396	29	1	2,403	21	5	31	3

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	
Volume	167	161	328	2	323	259	582	3	548	364	912	3	232	486	718	1	1,270
%HV	2.4%				3.1%				3.3%				3.4%				3.1%
PHF	0.82				0.87				0.82				0.82				0.88

Pedestrians Crosswalk			
North	South	East	West
12	4	16	1

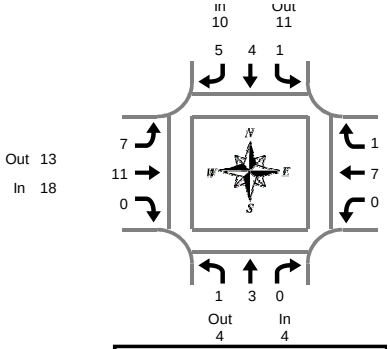
By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	25	122	20	167	45	131	147	323	120	421	7	548	23	192	17	232	1,270
%HV	4.0%	2.5%	0.0%	2.4%	2.2%	3.1%	3.4%	3.1%	5.8%	2.6%	0.0%	3.3%	0.0%	3.6%	5.9%	3.4%	3.1%
PHF	0.69	0.80	0.71	0.82	0.80	0.73	0.84	0.87	0.71	0.82	0.58	0.82	0.82	0.80	0.53	0.82	0.88

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	28	117	28	4	54	127	141	0	110	394	8	3	28	210	16	0	1,261	15	4	21	1
4:15 PM	26	117	22	3	52	134	149	1	104	384	7	2	25	206	22	0	1,248	13	4	19	2
4:30 PM	25	122	20	2	45	131	147	3	120	421	7	3	23	192	17	1	1,270	12	4	16	1
4:45 PM	22	123	17	1	45	144	133	3	102	382	10	4	22	195	13	1	1,208	4	4	9	1
5:00 PM	23	104	14	2	40	134	117	4	106	377	8	4	20	186	13	1	1,142	6	1	10	2

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



SE 32nd Ave & SE Harrison St

Tuesday, September 18, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
4:30 PM to 5:30 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	2	0	2	4
4:05 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
4:10 PM	0	0	0	0	0	0	2	2	0	3	0	3	0	0	0	0	5
4:15 PM	0	0	0	0	0	0	0	0	1	2	0	3	0	0	0	0	3
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	3	0	3	0	0	1	1	1	3	0	4	0	1	0	1	9
4:35 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
4:40 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	1	1	2	4
4:45 PM	0	0	0	0	0	2	0	2	1	3	0	4	0	0	0	0	6
4:50 PM	1	0	0	1	0	0	1	1	0	2	0	2	0	1	0	1	5
4:55 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	1	0	1	3
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:10 PM	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	1	1	1	1	0	2	0	0	0	0	3
5:20 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2
5:25 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
5:30 PM	0	0	0	0	0	0	1	1	1	1	0	2	0	1	0	1	4
5:35 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
5:40 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:50 PM	0	0	0	0	0	0	1	1	1	0	0	1	0	1	0	1	3
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	1	3	0	4	1	4	11	16	12	21	0	33	0	13	1	14	67

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	3	3	1	5	0	6	0	2	0	2	11
4:15 PM	0	0	0	0	0	0	0	0	1	2	0	3	0	2	0	2	5
4:30 PM	0	3	0	3	0	1	2	3	1	4	0	5	0	3	1	4	15
4:45 PM	1	0	0	1	0	3	1	4	1	5	0	6	0	1	0	1	12
5:00 PM	0	0	0	0	1	0	1	2	1	1	0	2	0	2	0	2	6
5:15 PM	0	0	0	0	0	0	1	1	4	1	0	5	0	1	0	1	7
5:30 PM	0	0	0	0	0	0	2	2	1	3	0	4	0	1	0	1	7
5:45 PM	0	0	0	0	0	0	1	1	2	0	0	2	0	1	0	1	4
Total Survey	1	3	0	4	1	4	11	16	12	21	0	33	0	13	1	14	67

Heavy Vehicle Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound SE 32nd Ave			Southbound SE 32nd Ave			Eastbound SE Harrison St			Westbound SE Harrison St			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	4	4	8	10	11	21	18	13	31	8	12	20	40
PHF	0.33			0.63			0.64			0.50			0.67

By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	1	3	0	4	1	4	5	10	7	11	0	18	0	7	1	8	40
PHF	0.25	0.25	0.00	0.33	0.25	0.33	0.63	0.63	0.44	0.46	0.00	0.64	0.00	0.58	0.25	0.50	0.67

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

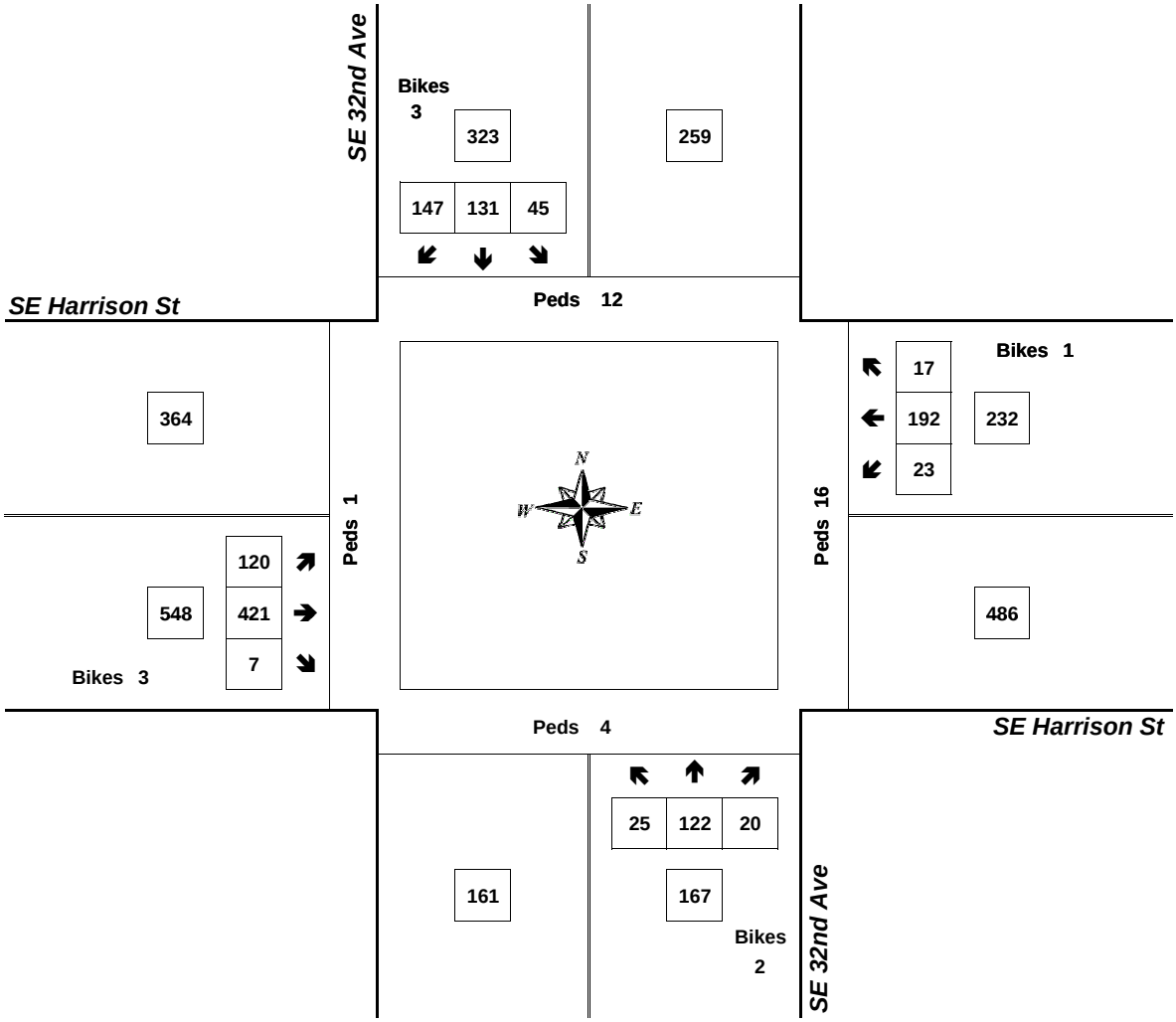
Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	3	0	4	0	4	6	10	4	16	0	20	0	8	1	9	43
4:15 PM	1	3	0	4	1	4	4	9	4	12	0	16	0	8	1	9	38
4:30 PM	1	3	0	4	1	4	5	10	7	11	0	18	0	7	1	8	40
4:45 PM	1	0	0	1	1	3	5	9	7	10	0	17	0	5	0	5	32
5:00 PM	0	0	0	0	1	0	5	6	8	5	0	13	0	5	0	5	24

Peak Hour Summary

Clay Carney
(503) 833-2740

SE 32nd Ave & SE Harrison St

4:30 PM to 5:30 PM
Tuesday, September 18, 2018

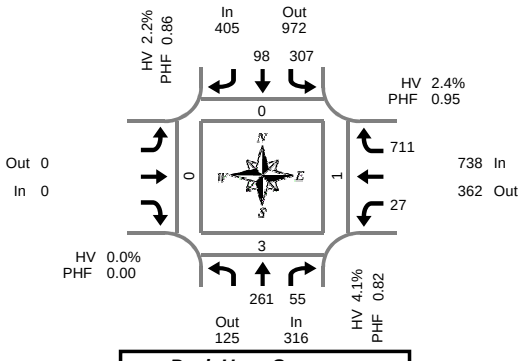


Approach	PHF	HV%	Volume
EB	0.82	3.3%	548
WB	0.82	3.4%	232
NB	0.82	2.4%	167
SB	0.87	3.1%	323
Intersection	0.88	3.1%	1,270

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



SE 32nd Ave & SE Johnson Creek Blvd

Tuesday, September 25, 2018
7:00 AM to 9:00 AM

Peak Hour Summary
7:00 AM to 8:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T		Bikes				Bikes	L		R	Bikes		North	South	East	West
7:00 AM	17	2	0		27	10		0				0	4		57	0	117	0	0	0	0
7:05 AM	30	3	0		18	7		0				0	0		60	2	118	0	0	0	0
7:10 AM	21	3	0		27	8		0				0	0		70	0	129	0	1	0	0
7:15 AM	20	2	3		24	8		0				0	2		58	4	114	0	0	0	0
7:20 AM	24	1	1		23	5		1				0	0		64	2	117	0	2	0	0
7:25 AM	25	2	2		18	6		2				0	2		54	1	107	0	0	1	0
7:30 AM	23	8	1		25	10		1				0	3		62	0	131	0	0	0	0
7:35 AM	20	4	1		32	8		1				0	2		63	1	129	0	0	0	0
7:40 AM	31	10	4		28	8		0				0	0		56	2	133	0	0	0	0
7:45 AM	17	10	2		31	11		0				0	8		45	3	122	0	0	0	0
7:50 AM	20	3	2		32	8		1				0	3		62	0	128	0	0	0	0
7:55 AM	13	7	0		22	9		0				0	3		60	5	114	0	0	0	0
8:00 AM	18	4	0		30	6		1				0	2		55	0	115	0	0	0	0
8:05 AM	18	3	2		17	7		1				0	2		42	1	89	0	0	0	0
8:10 AM	22	2	0		35	11		1				0	2		54	1	126	0	1	0	0
8:15 AM	16	3	1		20	7		0				0	4		44	0	94	0	0	0	0
8:20 AM	14	0	1		32	6		1				0	6		52	2	110	0	0	0	0
8:25 AM	20	1	3		22	8		0				0	4		59	0	114	0	1	2	0
8:30 AM	10	2	1		24	6		0				0	2		52	1	96	0	0	0	0
8:35 AM	10	4	0		38	5		0				0	2		43	2	102	0	1	1	0
8:40 AM	13	6	0		34	4		0				0	1		54	2	112	0	0	0	0
8:45 AM	10	3	0		21	4		1				0	2		35	1	75	3	0	0	0
8:50 AM	13	3	1		25	4		1				0	5		53	1	103	0	0	0	0
8:55 AM	15	6	0		18	10		0				0	3		38	3	90	0	1	0	0
Total Survey	440	92	25		623	176		12				0	62		1,292	34	2,685	3	7	4	0

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T		Bikes				Bikes	L		R	Bikes		North	South	East	West
7:00 AM	68	8	0		72	25		0				0	4		187	2	364	0	1	0	0
7:15 AM	69	5	6		65	19		3				0	4		176	7	338	0	2	1	0
7:30 AM	74	22	6		85	26		2				0	5		181	3	393	0	0	0	0
7:45 AM	50	20	4		85	28		1				0	14		167	8	364	0	0	0	0
8:00 AM	58	9	2		82	24		3				0	6		151	2	330	0	1	0	0
8:15 AM	50	4	5		74	21		1				0	14		155	2	318	0	1	2	0
8:30 AM	33	12	1		96	15		0				0	5		149	5	310	0	1	1	0
8:45 AM	38	12	1		64	18		2				0	10		126	5	268	3	1	0	0
Total Survey	440	92	25		623	176		12				0	62		1,292	34	2,685	3	7	4	0

Peak Hour Summary
7:00 AM to 8:00 AM

By Approach	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	316	125	441	16	405	972	1,377	6	0	0	0	0	738	362	1,100	20	1,459	0	3	1	0
%HV	4.1%				2.2%				0.0%				2.4%				2.7%				
PHF	0.82				0.86				0.00				0.95				0.93				

By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total
	T	R	Total		L	T		Total				Total	L		R	Total	
Volume	261	55	316		307	98		405				0	27		711	738	1,459
%HV	NA	1.5%	16.4%	4.1%	2.6%	1.0%	NA	2.2%	NA	NA	NA	0.0%	18.5%	NA	1.8%	2.4%	2.7%
PHF		0.88	0.57	0.82	0.84	0.88		0.86				0.00	0.48		0.93	0.95	0.93

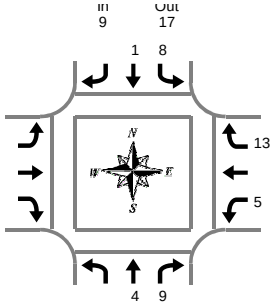
Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T		Bikes				Bikes	L		R	Bikes		North	South	East	West
7:00 AM	261	55	16		307	98		6				0	27		711	20	1,459	0	3	1	0
7:15 AM	251	56	18		317	97		9				0	29		675	20	1,425	0	3	1	0
7:30 AM	232	55	17		326	99		7				0	39		654	15	1,405	0	2	2	0
7:45 AM	191	45	12		337	88		5				0	39		622	17	1,322	0	3	3	0
8:00 AM	179	37	9		316	78		6				0	35		581	14	1,226	3	4	3	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740

Out 0
In 0



SE 32nd Ave & SE Johnson Creek Blvd

Tuesday, September 25, 2018
7:00 AM to 9:00 AM

Peak Hour Summary
7:00 AM to 8:00 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	T	R	Total		L	T		Total				Total	L		R	Total	
7:00 AM	0	1	1		0	1		1				0	1		2	3	5
7:05 AM	0	1	1		0	0		0				0	0		0	0	1
7:10 AM	0	0	0		1	0		1				0	0		1	1	2
7:15 AM	0	1	1		2	0		2				0	1		1	2	5
7:20 AM	0	0	0		0	0		0				0	0		2	2	2
7:25 AM	1	1	2		1	0		1				0	0		1	1	4
7:30 AM	0	0	0		0	0		0				0	1		1	2	2
7:35 AM	0	1	1		2	0		2				0	0		1	1	4
7:40 AM	1	0	1		0	0		0				0	0		0	0	1
7:45 AM	0	2	2		1	0		1				0	1		0	1	4
7:50 AM	1	0	1		0	0		0				0	0		2	2	3
7:55 AM	1	2	3		1	0		1				0	1		2	3	7
8:00 AM	0	0	0		0	0		0				0	0		3	3	3
8:05 AM	1	0	1		1	0		1				0	0		0	0	2
8:10 AM	0	0	0		2	0		2				0	2		3	5	7
8:15 AM	0	1	1		2	0		2				0	0		1	1	4
8:20 AM	0	0	0		1	0		1				0	1		0	1	2
8:25 AM	0	0	0		4	0		4				0	0		2	2	6
8:30 AM	0	1	1		1	0		1				0	0		1	1	3
8:35 AM	0	0	0		1	0		1				0	2		2	4	5
8:40 AM	2	0	2		1	0		1				0	0		0	0	3
8:45 AM	0	0	0		1	0		1				0	0		2	2	3
8:50 AM	0	0	0		3	0		3				0	1		5	6	9
8:55 AM	0	1	1		1	1		2				0	1		2	3	6
Total Survey	7	12	19		26	2		28				0	12		34	46	93

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	T	R	Total		L	T		Total				Total	L		R	Total	
7:00 AM	0	2	2		1	1		2				0	1		3	4	8
7:15 AM	1	2	3		3	0		3				0	1		4	5	11
7:30 AM	1	1	2		2	0		2				0	1		2	3	7
7:45 AM	2	4	6		2	0		2				0	2		4	6	14
8:00 AM	1	0	1		3	0		3				0	2		6	8	12
8:15 AM	0	1	1		7	0		7				0	1		3	4	12
8:30 AM	2	1	3		3	0		3				0	2		3	5	11
8:45 AM	0	1	1		5	1		6				0	2		9	11	18
Total Survey	7	12	19		26	2		28				0	12		34	46	93

Heavy Vehicle Peak Hour Summary
7:00 AM to 8:00 AM

By Approach	Northbound SE 32nd Ave			Southbound SE 32nd Ave			Eastbound SE Johnson Creek Blvd			Westbound SE Johnson Creek Blvd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	13	6	19	9	17	26	0	0	0	18	17	35	40
PHF	0.54			0.75			0.00			0.75			0.71

By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total
	T	R	Total		L	T		Total				Total	L		R	Total	
Volume	4	9	13		8	1		9				0	5		13	18	40
PHF	0.50	0.56	0.54		0.67	0.25		0.75				0.00	0.63		0.81	0.75	0.71

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

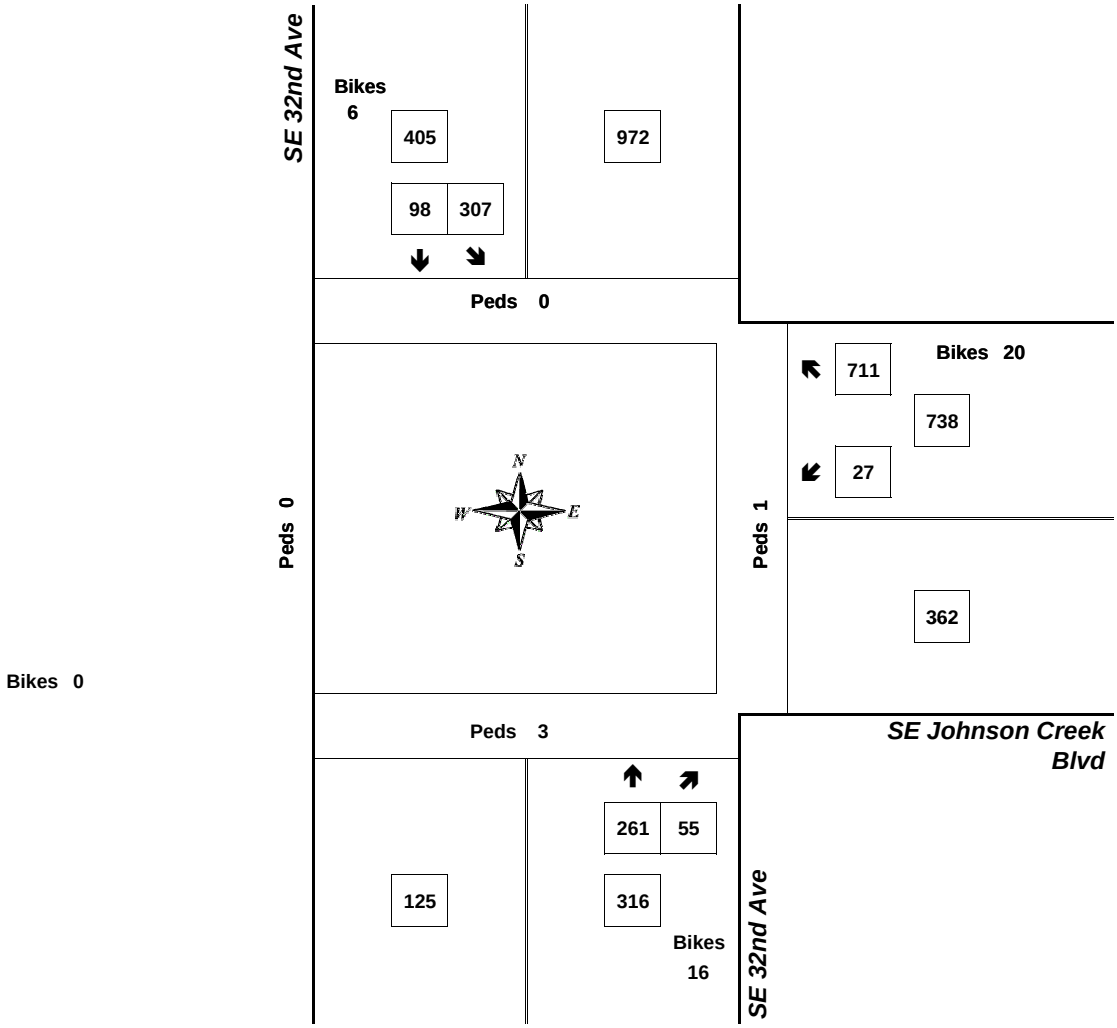
Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	T	R	Total		L	T		Total				Total	L		R	Total	
7:00 AM	4	9	13		8	1		9				0	5		13	18	40
7:15 AM	5	7	12		10	0		10				0	6		16	22	44
7:30 AM	4	6	10		14	0		14				0	6		15	21	45
7:45 AM	5	6	11		15	0		15				0	7		16	23	49
8:00 AM	3	3	6		18	1		19				0	7		21	28	53

Peak Hour Summary

Clay Carney
(503) 833-2740

SE 32nd Ave & SE Johnson Creek Blvd

7:00 AM to 8:00 AM
Tuesday, September 25, 2018

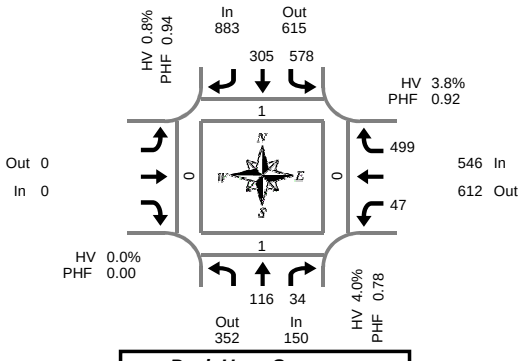


Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.95	2.4%	738
NB	0.82	4.1%	316
SB	0.86	2.2%	405
Intersection	0.93	2.7%	1,459

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:30 PM to 5:30 PM

SE 32nd Ave & SE Johnson Creek Blvd

Tuesday, September 25, 2018
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T		Bikes				Bikes	L		R	Bikes		North	South	East	West
4:00 PM	8	4	0		37	27		0				0	8		35	0	119	0	0	0	0
4:05 PM	5	5	0		33	18		1				0	9		34	0	104	0	1	0	0
4:10 PM	12	4	0		60	32		0				0	2		35	0	145	0	0	0	0
4:15 PM	3	2	0		47	26		2				0	4		38	0	120	0	1	0	0
4:20 PM	11	6	0		38	26		1				0	5		36	0	122	0	0	0	0
4:25 PM	9	3	0		40	29		0				0	5		33	2	119	0	0	1	0
4:30 PM	4	2	0		48	28		5				0	3		36	0	121	0	0	0	0
4:35 PM	15	4	0		39	25		0				0	5		33	0	121	0	0	0	0
4:40 PM	7	1	0		49	24		3				0	3		43	0	127	1	0	0	0
4:45 PM	9	1	0		54	26		0				0	2		48	0	140	0	0	0	0
4:50 PM	9	3	0		54	25		4				0	4		40	1	135	0	0	0	0
4:55 PM	10	2	0		49	22		0				0	6		42	3	131	0	0	0	0
5:00 PM	8	3	0		53	25		1				0	5		37	3	131	0	0	0	0
5:05 PM	12	3	0		55	31		1				0	3		40	0	144	0	0	0	0
5:10 PM	7	4	2		47	22		0				0	4		43	3	127	0	0	0	0
5:15 PM	18	4	0		43	31		3				0	2		46	0	144	0	0	0	0
5:20 PM	10	5	0		41	27		3				0	5		41	1	129	0	0	0	0
5:25 PM	7	2	0		46	19		3				0	5		50	1	129	0	1	0	0
5:30 PM	12	1	1		38	20		1				0	2		37	0	110	0	0	0	0
5:35 PM	10	2	0		43	18		3				0	0		38	0	111	1	0	0	0
5:40 PM	13	3	0		32	32		0				0	2		49	3	131	0	0	0	0
5:45 PM	6	3	0		48	21		0				0	4		42	1	124	0	3	0	0
5:50 PM	12	4	0		48	24		5				0	3		44	1	135	0	0	0	0
5:55 PM	8	5	0		40	30		2				0	6		31	0	120	0	0	1	0
Total Survey	225	76	3		1,082	608		38				0	97		951	19	3,039	2	6	2	0

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T		Bikes				Bikes	L		R	Bikes		North	South	East	West
4:00 PM	25	13	0		130	77		1				0	19		104	0	368	0	1	0	0
4:15 PM	23	11	0		125	81		3				0	14		107	2	361	0	1	1	0
4:30 PM	26	7	0		136	77		8				0	11		112	0	369	1	0	0	0
4:45 PM	28	6	0		157	73		4				0	12		130	4	406	0	0	0	0
5:00 PM	27	10	2		155	78		2				0	12		120	6	402	0	0	0	0
5:15 PM	35	11	0		130	77		9				0	12		137	2	402	0	1	0	0
5:30 PM	35	6	1		113	70		4				0	4		124	3	352	1	0	0	0
5:45 PM	26	12	0		136	75		7				0	13		117	2	379	0	3	1	0
Total Survey	225	76	3		1,082	608		38				0	97		951	19	3,039	2	6	2	0

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	150	352	502	2	883	615	1,498	23	0	0	0	0	546	612	1,158	12	1,579	1	1	0	0
%HV	4.0%				0.8%				0.0%				3.8%				2.2%				
PHF	0.78				0.94				0.00				0.92				0.95				

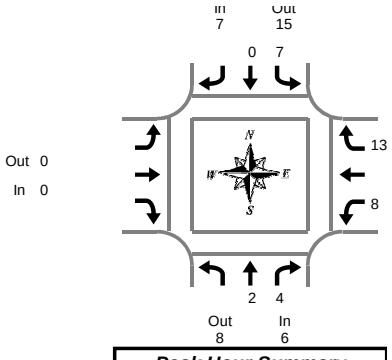
By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total
		T	R	Total	L	T		Total				Total	L		R	Total	
Volume		116	34	150	578	305		883				0	47		499	546	1,579
%HV	NA	1.7%	11.8%	4.0%	1.2%	0.0%	NA	0.8%	NA	NA	NA	0.0%	17.0%	NA	2.6%	3.8%	2.2%
PHF		0.78	0.65	0.78	0.92	0.91		0.94				0.00	0.78		0.91	0.92	0.95

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T		Bikes				Bikes	L		R	Bikes		North	South	East	West
4:00 PM	102	37	0		548	308		16				0	56		453	6	1,504	1	2	1	0
4:15 PM	104	34	2		573	309		17				0	49		469	12	1,538	1	1	1	0
4:30 PM	116	34	2		578	305		23				0	47		499	12	1,579	1	1	0	0
4:45 PM	125	33	3		555	298		19				0	40		511	15	1,562	1	1	0	0
5:00 PM	123	39	3		534	300		22				0	41		498	13	1,535	1	4	1	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



SE 32nd Ave & SE Johnson Creek Blvd

Tuesday, September 25, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
4:30 PM to 5:30 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	T	R	Total		L	T		Total				Total	L		R	Total	
4:00 PM	0	0	0		4	1		5				0	1		1	2	7
4:05 PM	0	1	1		2	0		2				0	1		0	1	4
4:10 PM	0	0	0		0	0		0				0	0		2	2	2
4:15 PM	0	0	0		0	0		0				0	0		0	0	0
4:20 PM	0	1	1		3	0		3				0	1		1	2	6
4:25 PM	0	0	0		0	0		0				0	0		2	2	2
4:30 PM	0	0	0		2	0		2				0	1		1	2	4
4:35 PM	0	1	1		0	0		0				0	1		2	3	4
4:40 PM	0	0	0		0	0		0				0	0		0	0	0
4:45 PM	0	0	0		0	0		0				0	1		3	4	4
4:50 PM	1	1	2		2	0		2				0	0		2	2	6
4:55 PM	0	0	0		1	0		1				0	0		0	0	1
5:00 PM	0	0	0		1	0		1				0	1		1	2	3
5:05 PM	0	0	0		0	0		0				0	2		1	3	3
5:10 PM	0	0	0		1	0		1				0	1		1	2	3
5:15 PM	0	1	1		0	0		0				0	0		0	0	1
5:20 PM	1	1	2		0	0		0				0	0		2	2	4
5:25 PM	0	0	0		0	0		0				0	1		0	1	1
5:30 PM	0	0	0		0	0		0				0	0		1	1	1
5:35 PM	0	1	1		1	0		1				0	0		2	2	4
5:40 PM	0	0	0		0	1		1				0	0		1	1	2
5:45 PM	0	0	0		2	0		2				0	0		1	1	3
5:50 PM	0	1	1		2	0		2				0	1		0	1	4
5:55 PM	0	0	0		0	0		0				0	0		1	1	1
Total Survey	2	8	10		21	2		23				0	12		25	37	70

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	T	R	Total		L	T		Total				Total	L		R	Total	
4:00 PM	0	1	1		6	1		7				0	2		3	5	13
4:15 PM	0	1	1		3	0		3				0	1		3	4	8
4:30 PM	0	1	1		2	0		2				0	2		3	5	8
4:45 PM	1	1	2		3	0		3				0	1		5	6	11
5:00 PM	0	0	0		2	0		2				0	4		3	7	9
5:15 PM	1	2	3		0	0		0				0	1		2	3	6
5:30 PM	0	1	1		1	1		2				0	0		4	4	7
5:45 PM	0	1	1		4	0		4				0	1		2	3	8
Total Survey	2	8	10		21	2		23				0	12		25	37	70

Heavy Vehicle Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound SE 32nd Ave			Southbound SE 32nd Ave			Eastbound SE Johnson Creek Blvd			Westbound SE Johnson Creek Blvd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	6	8	14	7	15	22	0	0	0	21	11	32	34
PHF	0.50			0.44			0.00			0.75			0.77

By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total
	T	R	Total		L	T		Total				Total	L		R	Total	
Volume	2	4	6		7	0		7				0	8		13	21	34
PHF	0.50	0.50	0.50		0.44	0.00		0.44				0.00	0.50		0.65	0.75	0.77

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

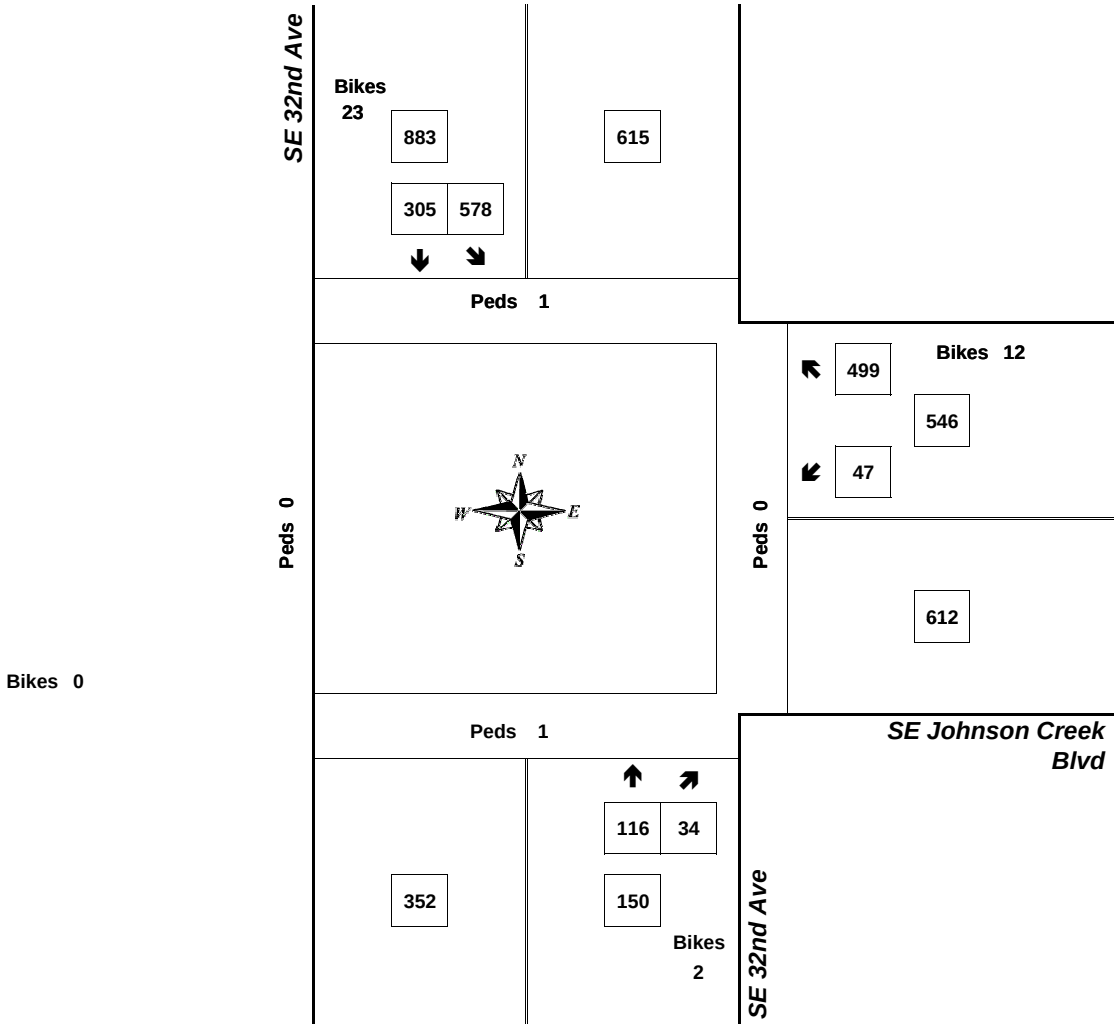
Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	T	R	Total		L	T		Total				Total	L		R	Total	
4:00 PM	1	4	5		14	1		15				0	6		14	20	40
4:15 PM	1	3	4		10	0		10				0	8		14	22	36
4:30 PM	2	4	6		7	0		7				0	8		13	21	34
4:45 PM	2	4	6		6	1		7				0	6		14	20	33
5:00 PM	1	4	5		7	1		8				0	6		11	17	30

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

SE 32nd Ave & SE Johnson Creek Blvd

4:30 PM to 5:30 PM
Tuesday, September 25, 2018

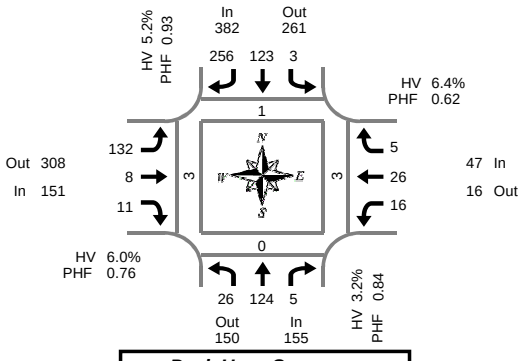


Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.92	3.8%	546
NB	0.78	4.0%	150
SB	0.94	0.8%	883
Intersection	0.95	2.2%	1,579

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:25 AM to 8:25 AM

SE 42nd Ave & SE Harrison St

Tuesday, September 25, 2018
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	4	6	0	0	0	2	19	0	8	0	1	0	0	2	0	0	42	0	0	1	1
7:05 AM	3	5	0	0	0	6	21	0	12	3	1	1	0	1	0	0	52	0	0	0	0
7:10 AM	4	3	0	0	0	10	23	0	5	0	0	0	0	2	0	0	47	0	0	1	0
7:15 AM	3	7	2	0	0	5	23	0	4	1	1	0	0	4	1	0	51	0	0	1	2
7:20 AM	2	6	1	0	0	10	17	0	7	0	1	0	0	1	0	0	45	1	0	0	0
7:25 AM	6	7	0	0	0	10	18	0	9	0	0	0	1	2	0	0	53	0	0	0	0
7:30 AM	2	11	1	0	0	12	29	0	8	0	1	1	0	4	0	0	68	0	0	0	0
7:35 AM	3	12	0	0	0	7	20	0	12	0	1	0	1	0	0	0	56	0	0	1	0
7:40 AM	1	15	1	0	1	7	20	0	9	1	1	0	0	3	0	0	59	0	0	0	0
7:45 AM	1	12	0	0	1	2	23	0	11	1	1	0	5	6	0	0	63	0	0	0	0
7:50 AM	4	12	0	0	0	12	30	0	8	0	0	0	1	3	0	0	70	0	0	0	1
7:55 AM	2	4	2	0	1	9	18	0	10	2	0	0	0	2	2	0	52	0	0	0	0
8:00 AM	4	9	0	0	0	13	14	0	17	0	0	0	1	2	0	0	60	0	0	0	0
8:05 AM	2	11	0	0	0	15	17	0	13	1	3	0	1	1	1	0	65	0	0	0	1
8:10 AM	1	8	1	0	0	12	28	0	14	2	0	0	4	1	1	0	72	1	0	1	1
8:15 AM	0	14	0	0	0	17	14	0	11	1	1	0	1	0	1	0	60	0	0	1	0
8:20 AM	0	9	0	0	0	7	25	0	10	0	3	0	1	2	0	0	57	0	0	0	0
8:25 AM	2	6	0	0	0	3	18	0	8	0	4	0	1	2	0	0	44	0	0	0	0
8:30 AM	3	12	0	0	0	12	14	0	8	2	0	0	0	2	0	0	53	0	1	1	0
8:35 AM	3	11	3	0	0	7	11	0	5	2	0	0	0	2	0	0	44	1	0	1	0
8:40 AM	1	9	0	0	0	11	16	0	7	0	2	0	0	1	0	0	47	0	0	1	0
8:45 AM	2	4	0	0	1	10	9	0	6	0	0	0	1	0	0	0	33	0	0	1	0
8:50 AM	1	17	0	0	0	10	17	0	12	1	0	0	1	1	0	0	60	0	0	3	0
8:55 AM	0	7	1	0	0	11	10	0	12	1	3	0	0	2	0	0	47	0	0	1	0
Total Survey	54	217	12	0	4	220	454	0	226	18	24	2	19	46	6	0	1,300	3	1	14	6

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	11	14	0	0	0	18	63	0	25	3	2	1	0	5	0	0	141	0	0	2	1
7:15 AM	11	20	3	0	0	25	58	0	20	1	2	0	1	7	1	0	149	1	0	1	2
7:30 AM	6	38	2	0	1	26	69	0	29	1	3	1	1	7	0	0	183	0	0	1	0
7:45 AM	7	28	2	0	2	23	71	0	29	3	1	0	6	11	2	0	185	0	0	0	1
8:00 AM	7	28	1	0	0	40	59	0	44	3	3	0	6	4	2	0	197	1	0	1	2
8:15 AM	2	29	0	0	0	27	57	0	29	1	8	0	3	4	1	0	161	0	0	1	0
8:30 AM	7	32	3	0	0	30	41	0	20	4	2	0	0	5	0	0	144	1	1	3	0
8:45 AM	3	28	1	0	1	31	36	0	30	2	3	0	2	3	0	0	140	0	0	5	0
Total Survey	54	217	12	0	4	220	454	0	226	18	24	2	19	46	6	0	1,300	3	1	14	6

Peak Hour Summary
7:25 AM to 8:25 AM

By Approach	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	155	150	305	0	382	261	643	0	151	308	459	1	47	16	63	0	735	1	0	3	3
%HV	3.2%				5.2%				6.0%				6.4%				5.0%				
PHF	0.84				0.93				0.76				0.62				0.93				

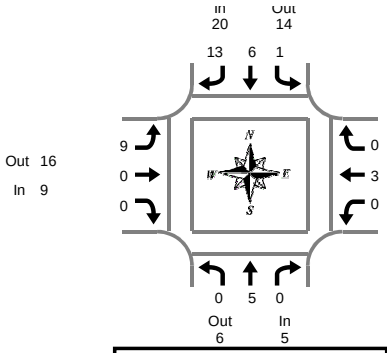
By Movement	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	26	124	5	155	3	123	256	382	132	8	11	151	16	26	5	47	735
%HV	0.0%	4.0%	0.0%	3.2%	33.3%	4.9%	5.1%	5.2%	6.8%	0.0%	0.0%	6.0%	0.0%	11.5%	0.0%	6.4%	5.0%
PHF	0.59	0.79	0.63	0.84	0.38	0.70	0.88	0.93	0.75	0.50	0.69	0.76	0.67	0.54	0.42	0.62	0.93

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	35	100	7	0	3	92	261	0	103	8	8	2	8	30	3	0	658	1	0	4	4
7:15 AM	31	114	8	0	3	114	257	0	122	8	9	1	14	29	5	0	714	2	0	3	5
7:30 AM	22	123	5	0	3	116	256	0	131	8	15	1	16	26	5	0	726	1	0	3	3
7:45 AM	23	117	6	0	2	120	228	0	122	11	14	0	15	24	5	0	687	2	1	5	3
8:00 AM	19	117	5	0	1	128	193	0	123	10	16	0	11	16	3	0	642	2	1	10	2

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



SE 42nd Ave & SE Harrison St

Tuesday, September 25, 2018
7:00 AM to 9:00 AM

Peak Hour Summary
7:25 AM to 8:25 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	2
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 AM	0	0	0	0	0	0	2	2	1	0	0	1	0	0	0	0	3
7:15 AM	0	0	1	1	0	0	1	1	1	0	0	1	0	0	0	0	3
7:20 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
7:25 AM	0	0	0	0	0	2	2	4	1	0	0	1	0	0	0	0	5
7:30 AM	0	0	0	0	0	0	2	2	1	0	0	1	0	0	0	0	3
7:35 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
7:40 AM	0	2	0	2	1	0	0	1	2	0	0	2	0	0	0	0	5
7:45 AM	0	0	0	0	0	0	3	3	0	0	0	0	0	2	0	2	5
7:50 AM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
7:55 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	2
8:00 AM	0	2	0	2	0	1	0	1	2	0	0	2	0	0	0	0	5
8:05 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
8:10 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	3
8:20 AM	0	0	0	0	0	0	2	2	1	0	0	1	0	1	0	1	4
8:25 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
8:35 AM	0	1	1	2	0	0	0	0	1	0	0	1	0	0	0	0	3
8:40 AM	0	1	0	1	0	0	0	0	1	0	1	2	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
8:50 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:55 AM	0	0	0	0	0	1	2	3	2	0	1	3	0	0	0	0	6
Total Survey	0	10	2	12	1	7	22	30	16	0	2	18	0	3	0	3	63

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	3	3	2	0	0	2	0	0	0	0	5
7:15 AM	0	0	1	1	0	2	4	6	2	0	0	2	0	0	0	0	9
7:30 AM	0	2	0	2	1	0	3	4	3	0	0	3	0	0	0	0	9
7:45 AM	0	1	0	1	0	1	5	6	0	0	0	0	0	2	0	2	9
8:00 AM	0	2	0	2	0	1	0	1	4	0	0	4	0	0	0	0	7
8:15 AM	0	1	0	1	0	2	3	5	1	0	0	1	0	1	0	1	8
8:30 AM	0	2	1	3	0	0	1	1	2	0	1	3	0	0	0	0	7
8:45 AM	0	2	0	2	0	1	3	4	2	0	1	3	0	0	0	0	9
Total Survey	0	10	2	12	1	7	22	30	16	0	2	18	0	3	0	3	63

Heavy Vehicle Peak Hour Summary
7:25 AM to 8:25 AM

By Approach	Northbound SE 42nd Ave			Southbound SE 42nd Ave			Eastbound SE Harrison St			Westbound SE Harrison St			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	5	6	11	20	14	34	9	16	25	3	1	4	37
PHF	0.42			0.71			0.56			0.38			0.77

By Movement	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	5	0	5	1	6	13	20	9	0	0	9	0	3	0	3	37
PHF	0.00	0.42	0.00	0.42	0.25	0.75	0.65	0.71	0.56	0.00	0.00	0.56	0.00	0.38	0.00	0.38	0.77

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

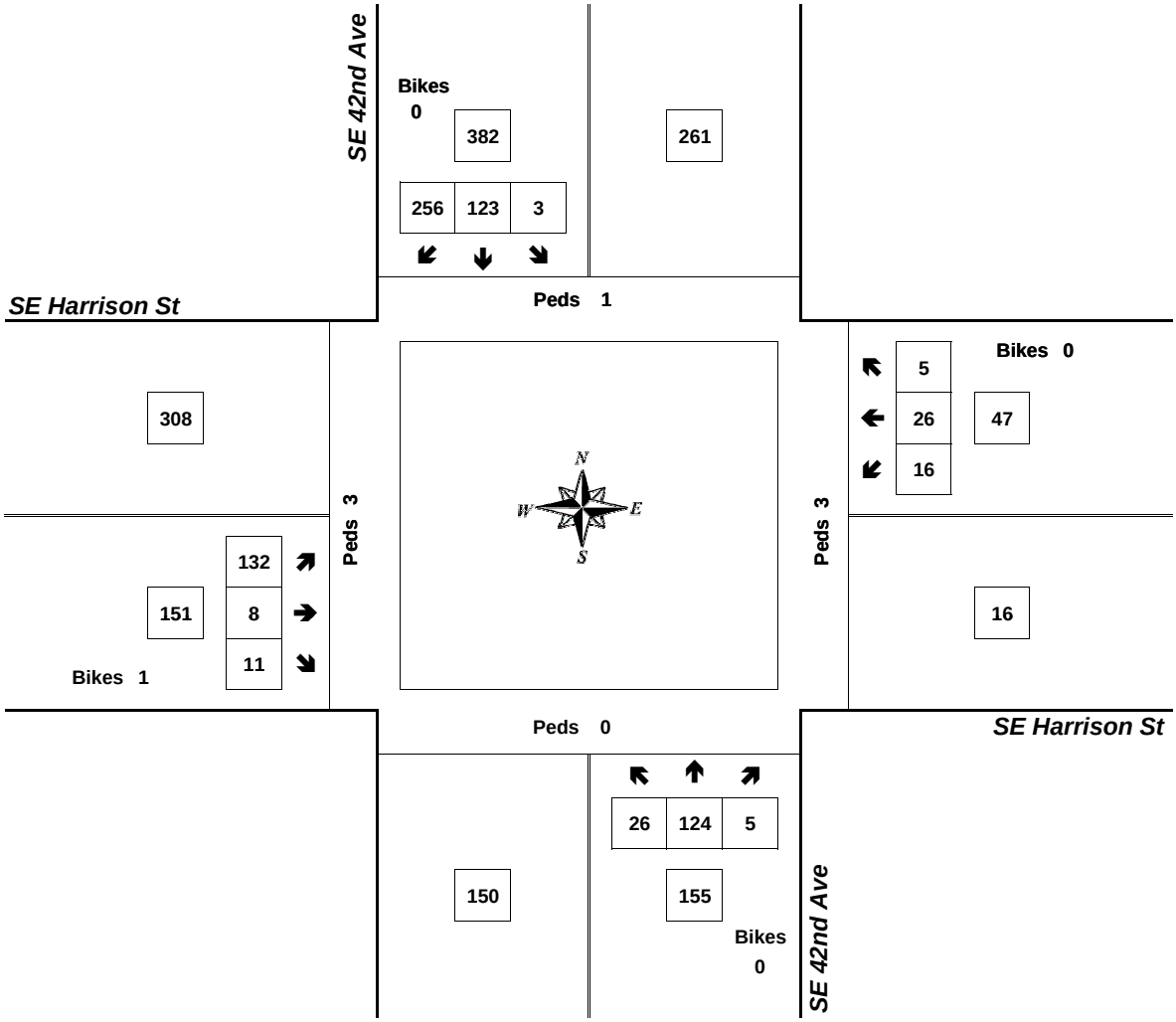
Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	3	1	4	1	3	15	19	7	0	0	7	0	2	0	2	32
7:15 AM	0	5	1	6	1	4	12	17	9	0	0	9	0	2	0	2	34
7:30 AM	0	6	0	6	1	4	11	16	8	0	0	8	0	3	0	3	33
7:45 AM	0	6	1	7	0	4	9	13	7	0	1	8	0	3	0	3	31
8:00 AM	0	7	1	8	0	4	7	11	9	0	2	11	0	1	0	1	31

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

SE 42nd Ave & SE Harrison St

7:25 AM to 8:25 AM
Tuesday, September 25, 2018

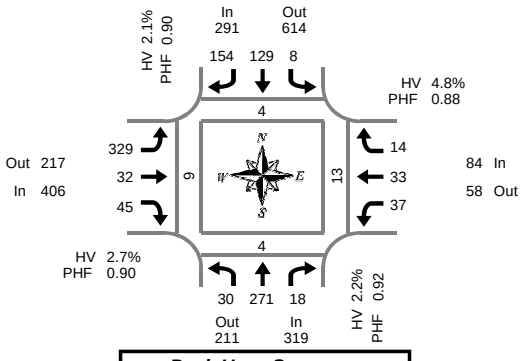


Approach	PHF	HV%	Volume
EB	0.76	6.0%	151
WB	0.62	6.4%	47
NB	0.84	3.2%	155
SB	0.93	5.2%	382
Intersection	0.93	5.0%	735

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:50 PM to 5:50 PM

SE 42nd Ave & SE Harrison St

Tuesday, September 25, 2018
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	2	26	0	0	0	8	9	0	21	1	1	0	0	3	2	0	73	0	0	2	3
4:05 PM	3	18	3	0	0	10	14	0	19	1	1	0	3	1	0	0	73	0	0	2	0
4:10 PM	4	28	1	0	0	7	12	0	19	1	3	0	0	6	1	0	82	0	0	1	0
4:15 PM	1	23	2	0	0	13	10	0	24	3	2	0	1	2	1	0	82	0	1	2	0
4:20 PM	2	20	1	0	0	9	5	0	23	3	6	0	3	1	0	0	73	0	0	0	0
4:25 PM	2	28	1	0	0	8	18	0	22	4	9	0	1	0	0	0	93	0	0	0	0
4:30 PM	3	18	1	0	0	8	9	0	21	3	2	0	2	4	1	0	72	1	0	0	0
4:35 PM	1	18	0	0	0	5	17	0	22	4	4	0	4	1	0	0	76	0	0	0	0
4:40 PM	1	24	3	0	0	8	11	0	26	1	3	0	0	2	0	0	79	1	0	0	0
4:45 PM	2	17	2	0	0	10	13	0	30	1	2	0	2	3	1	0	83	1	0	0	0
4:50 PM	1	27	2	0	0	16	11	0	25	3	1	0	1	3	1	0	91	0	0	0	0
4:55 PM	3	17	2	0	0	10	15	1	27	3	2	0	2	4	1	0	86	1	1	0	0
5:00 PM	0	20	3	0	1	13	15	0	30	0	3	0	2	3	3	0	93	0	0	1	3
5:05 PM	2	30	5	0	1	8	13	0	22	2	3	1	1	4	3	0	94	0	1	2	0
5:10 PM	5	20	0	0	0	7	12	0	36	5	6	0	3	4	0	0	98	0	0	0	2
5:15 PM	1	23	1	0	0	10	12	0	16	4	8	0	2	3	1	0	81	0	0	0	0
5:20 PM	5	21	2	0	2	10	13	0	31	1	3	0	7	2	2	0	99	1	1	1	2
5:25 PM	5	25	1	0	0	10	15	0	26	1	1	0	1	0	2	0	87	0	1	2	0
5:30 PM	1	22	0	0	2	11	14	0	30	3	6	0	4	4	0	0	97	0	0	2	2
5:35 PM	3	22	1	0	0	15	10	0	30	2	1	0	7	1	1	0	93	0	0	1	0
5:40 PM	4	20	1	0	0	7	12	0	30	5	6	0	2	4	0	0	91	1	0	2	0
5:45 PM	0	24	0	0	2	12	12	0	26	3	5	0	5	1	0	0	90	1	0	2	0
5:50 PM	4	10	1	0	1	13	17	0	23	5	2	0	4	4	0	0	84	0	0	1	1
5:55 PM	1	14	3	0	1	9	11	0	16	2	4	1	1	3	2	0	67	0	0	0	0
Total Survey	56	515	36	0	10	237	300	1	595	61	84	2	58	63	22	0	2,037	7	5	21	13

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	9	72	4	0	0	25	35	0	59	3	5	0	3	10	3	0	228	0	0	5	3
4:15 PM	5	71	4	0	0	30	33	0	69	10	17	0	5	3	1	0	248	0	1	2	0
4:30 PM	5	60	4	0	0	21	37	0	69	8	9	0	6	7	1	0	227	2	0	0	0
4:45 PM	6	61	6	0	0	36	39	1	82	7	5	0	5	10	3	0	260	2	1	0	0
5:00 PM	7	70	8	0	2	28	40	0	88	7	12	1	6	11	6	0	285	0	1	3	5
5:15 PM	11	69	4	0	2	30	40	0	73	6	12	0	10	5	5	0	267	1	2	3	2
5:30 PM	8	64	2	0	2	33	36	0	90	10	13	0	13	9	1	0	281	1	0	5	2
5:45 PM	5	48	4	0	4	34	40	0	65	10	11	1	10	8	2	0	241	1	0	3	1
Total Survey	56	515	36	0	10	237	300	1	595	61	84	2	58	63	22	0	2,037	7	5	21	13

Peak Hour Summary
4:50 PM to 5:50 PM

By Approach	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	319	211	530	0	291	614	905	1	406	217	623	1	84	58	142	0	1,100	4	4	13	9
%HV	2.2%				2.1%				2.7%				4.8%				2.5%				
PHF	0.92				0.90				0.90				0.88				0.96				

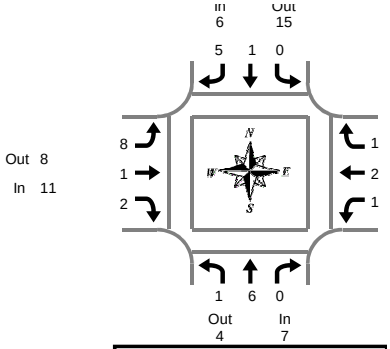
By Movement	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	30	271	18	319	8	129	154	291	329	32	45	406	37	33	14	84	1,100
%HV	3.3%	2.2%	0.0%	2.2%	0.0%	0.8%	3.2%	2.1%	2.4%	3.1%	4.4%	2.7%	2.7%	6.1%	7.1%	4.8%	2.5%
PHF	0.68	0.93	0.45	0.92	0.50	0.83	0.90	0.90	0.91	0.73	0.66	0.90	0.66	0.75	0.50	0.88	0.96

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	25	264	18	0	0	112	144	1	279	28	36	0	19	30	8	0	963	4	2	7	3
4:15 PM	23	262	22	0	2	115	149	1	308	32	43	1	22	31	11	0	1,020	4	3	5	5
4:30 PM	29	260	22	0	4	115	156	1	312	28	38	1	27	33	15	0	1,039	5	4	6	7
4:45 PM	32	264	20	0	6	127	155	1	333	30	42	1	34	35	15	0	1,093	4	4	11	9
5:00 PM	31	251	18	0	10	125	156	0	316	33	48	2	39	33	14	0	1,074	3	3	14	10

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



SE 42nd Ave & SE Harrison St

Tuesday, September 25, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
4:50 PM to 5:50 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
4:05 PM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	1	3	0	0	3	0	0	0	0	4
4:20 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
4:25 PM	0	2	0	2	0	0	2	2	0	0	0	0	0	0	0	0	4
4:30 PM	0	1	0	1	0	0	1	1	1	0	0	1	0	0	0	0	3
4:35 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
4:40 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	2
4:50 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	1	0	1	3
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	1	0	1	1	2	1	0	0	1	0	0	0	0	4
5:05 PM	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	3	4
5:10 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:20 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
5:25 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	2	2	3	0	0	3	0	0	0	0	5
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	1	0	0	1	0	0	1	1	1	0	1	2	0	0	0	0	4
5:45 PM	0	2	0	2	0	0	0	0	1	0	0	1	0	0	0	0	3
5:50 PM	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	2
5:55 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
Total Survey	1	10	0	11	0	1	14	15	16	1	2	19	2	4	1	7	52

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	1	0	1	0	0	1	1	1	0	0	1	0	1	0	1	4
4:15 PM	0	2	0	2	0	0	4	4	3	0	0	3	0	0	0	0	9
4:30 PM	0	1	0	1	0	0	3	3	1	0	0	1	0	0	0	0	5
4:45 PM	0	1	0	1	0	0	1	1	1	1	0	2	0	1	0	1	5
5:00 PM	0	3	0	3	0	1	1	2	1	0	1	2	1	1	1	3	10
5:15 PM	0	0	0	0	0	0	1	1	2	0	0	2	0	0	0	0	3
5:30 PM	1	0	0	1	0	0	3	3	4	0	1	5	0	0	0	0	9
5:45 PM	0	2	0	2	0	0	0	0	3	0	0	3	1	1	0	2	7
Total Survey	1	10	0	11	0	1	14	15	16	1	2	19	2	4	1	7	52

Heavy Vehicle Peak Hour Summary
4:50 PM to 5:50 PM

By Approach	Northbound SE 42nd Ave			Southbound SE 42nd Ave			Eastbound SE Harrison St			Westbound SE Harrison St			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	7	4	11	6	15	21	11	8	19	4	1	5	28
PHF	0.58			0.50			0.55			0.33			0.70

By Movement	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	1	6	0	7	0	1	5	6	8	1	2	11	1	2	1	4	28
PHF	0.25	0.50	0.00	0.58	0.00	0.25	0.42	0.50	0.50	0.25	0.50	0.55	0.25	0.50	0.25	0.33	0.70

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

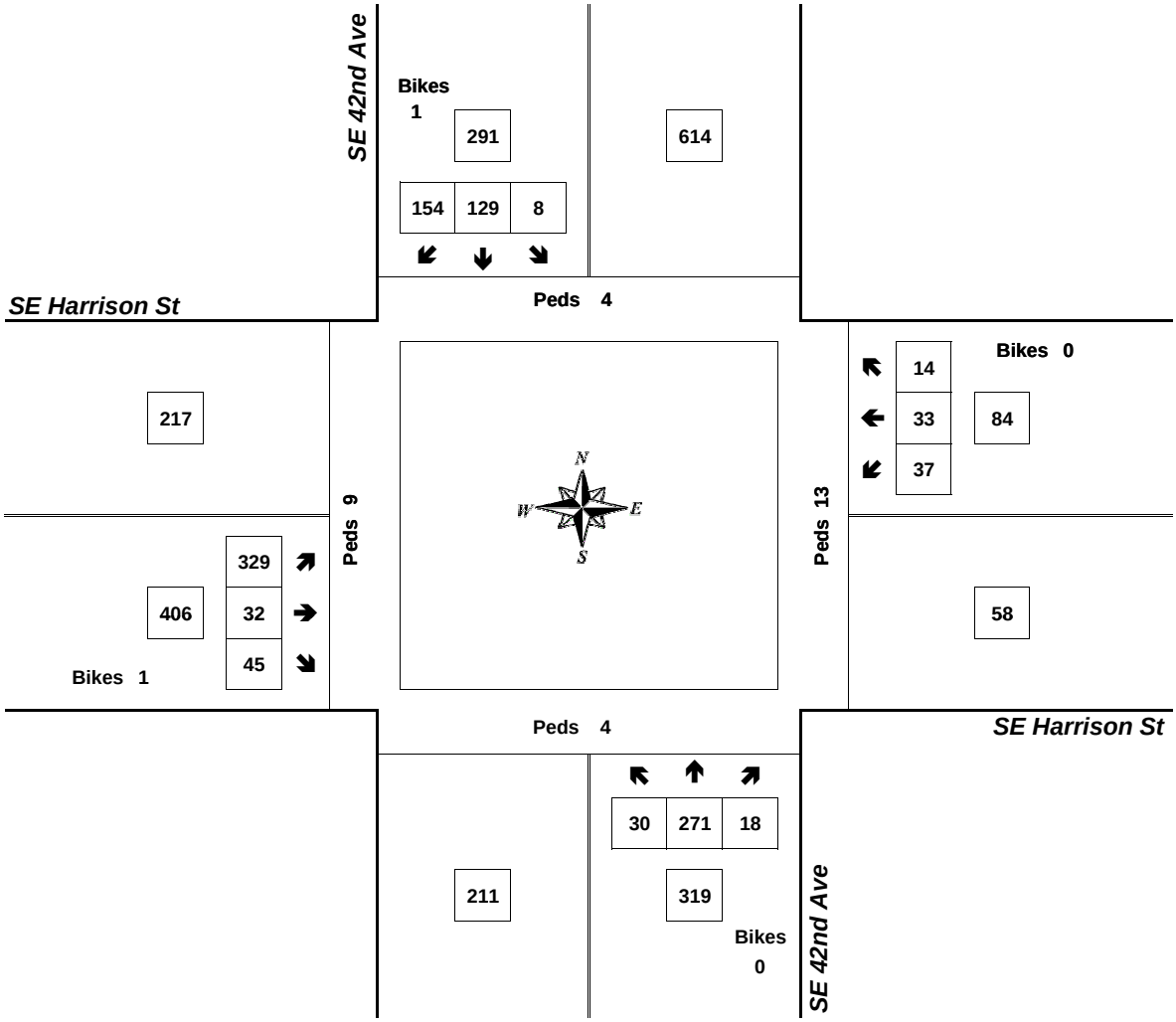
Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	5	0	5	0	0	9	9	6	1	0	7	0	2	0	2	23
4:15 PM	0	7	0	7	0	1	9	10	6	1	1	8	1	2	1	4	29
4:30 PM	0	5	0	5	0	1	6	7	5	1	1	7	1	2	1	4	23
4:45 PM	1	4	0	5	0	1	6	7	8	1	2	11	1	2	1	4	27
5:00 PM	1	5	0	6	0	1	5	6	10	0	2	12	2	2	1	5	29

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

SE 42nd Ave & SE Harrison St

4:50 PM to 5:50 PM
Tuesday, September 25, 2018

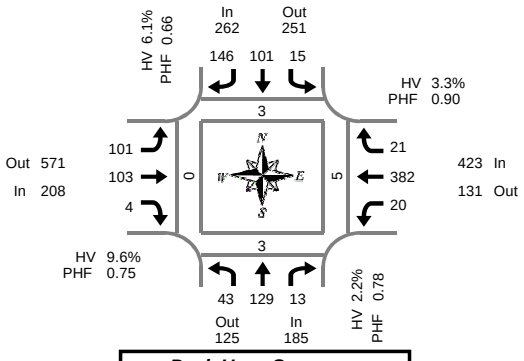


Approach	PHF	HV%	Volume
EB	0.90	2.7%	406
WB	0.88	4.8%	84
NB	0.92	2.2%	319
SB	0.90	2.1%	291
Intersection	0.96	2.5%	1,100

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:15 AM to 8:15 AM

SE 32nd Ave & SE Harrison St

Tuesday, September 18, 2018
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	5	4	0	0	0	3	12	0	4	9	0	0	0	29	0	0	66	1	0	1	0
7:05 AM	3	11	0	0	0	4	6	1	7	7	0	0	1	33	4	0	76	0	0	0	0
7:10 AM	5	9	0	0	0	4	7	0	6	8	1	0	2	28	4	0	74	0	0	0	0
7:15 AM	2	12	0	1	0	5	10	2	5	19	0	0	0	28	3	1	84	0	0	0	0
7:20 AM	7	8	0	0	0	6	12	0	10	6	0	0	2	34	2	0	87	1	0	1	0
7:25 AM	4	9	1	0	3	4	13	0	4	8	0	1	1	44	4	0	95	0	0	0	0
7:30 AM	5	11	0	1	3	14	12	0	6	6	0	0	3	26	0	0	86	0	0	0	0
7:35 AM	2	10	0	0	0	14	19	0	3	11	0	0	0	29	1	0	89	0	0	0	0
7:40 AM	2	14	1	0	0	18	19	0	7	4	1	0	0	34	2	0	102	0	0	0	0
7:45 AM	3	9	3	0	1	6	7	0	11	8	1	0	4	37	0	0	90	0	1	1	0
7:50 AM	5	12	3	0	1	10	13	0	4	4	0	0	3	26	1	0	82	0	0	0	0
7:55 AM	3	19	2	0	4	7	4	0	14	7	0	0	1	33	4	0	98	1	1	1	0
8:00 AM	3	10	2	0	1	10	9	0	15	3	0	0	3	32	3	0	91	0	0	1	0
8:05 AM	2	6	1	0	2	4	16	0	10	16	0	1	2	31	0	0	90	1	1	1	0
8:10 AM	5	9	0	0	0	3	12	0	12	11	2	0	1	28	1	0	84	0	0	0	0
8:15 AM	3	4	1	0	1	7	7	0	12	8	0	0	3	17	0	0	63	0	4	0	2
8:20 AM	3	8	3	0	1	5	12	0	10	9	0	0	0	32	1	0	84	0	0	1	0
8:25 AM	3	8	3	0	2	9	10	0	20	14	0	1	0	23	3	0	95	0	1	0	0
8:30 AM	1	7	1	0	0	4	10	0	14	11	0	0	1	18	0	2	67	0	0	1	0
8:35 AM	3	15	1	0	0	13	8	0	11	12	0	0	2	20	2	0	87	0	0	0	1
8:40 AM	4	8	0	0	1	6	12	0	6	10	1	0	1	28	0	0	77	0	0	0	0
8:45 AM	3	9	2	0	2	3	5	0	11	11	0	1	2	18	5	0	71	0	1	0	0
8:50 AM	0	7	2	0	1	13	14	0	6	9	0	0	3	20	0	0	75	1	1	0	0
8:55 AM	1	2	2	0	1	11	10	0	10	28	0	0	3	22	3	0	93	1	0	1	0
Total Survey	77	221	28	2	24	183	259	3	218	239	6	4	38	670	43	3	2,006	6	10	9	3

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	13	24	0	0	0	11	25	1	17	24	1	0	3	90	8	0	216	1	0	1	0
7:15 AM	13	29	1	1	3	15	35	2	19	33	0	1	3	106	9	1	266	1	0	1	0
7:30 AM	9	35	1	1	3	46	50	0	16	21	1	0	3	89	3	0	277	0	0	0	0
7:45 AM	11	40	8	0	6	23	24	0	29	19	1	0	8	96	5	0	270	1	2	2	0
8:00 AM	10	25	3	0	3	17	37	0	37	30	2	1	6	91	4	0	265	1	1	2	0
8:15 AM	9	20	7	0	4	21	29	0	42	31	0	1	3	72	4	0	242	0	5	1	2
8:30 AM	8	30	2	0	1	23	30	0	31	33	1	0	4	66	2	2	231	0	0	1	1
8:45 AM	4	18	6	0	4	27	29	0	27	48	0	1	8	60	8	0	239	2	2	1	0
Total Survey	77	221	28	2	24	183	259	3	218	239	6	4	38	670	43	3	2,006	6	10	9	3

Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	185	125	310	2	262	251	513	2	208	571	779	2	423	131	554	1	1,078	3	3	5	0
%HV	2.2%				6.1%				9.6%				3.3%				5.0%				
PHF	0.78				0.66				0.75				0.90				0.96				

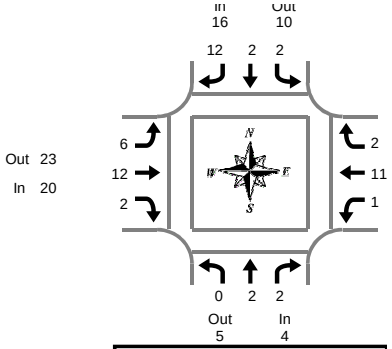
By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	43	129	13	185	15	101	146	262	101	103	4	208	20	382	21	423	1,078
%HV	0.0%	1.6%	15.4%	2.2%	13.3%	2.0%	8.2%	6.1%	5.9%	11.7%	50.0%	9.6%	5.0%	2.9%	9.5%	3.3%	5.0%
PHF	0.67	0.79	0.41	0.78	0.54	0.55	0.73	0.66	0.65	0.78	0.50	0.75	0.63	0.90	0.58	0.90	0.96

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	46	128	10	2	12	95	134	3	81	97	3	1	17	381	25	1	1,029	3	2	4	0
7:15 AM	43	129	13	2	15	101	146	2	101	103	4	2	20	382	21	1	1,078	3	3	5	0
7:30 AM	39	120	19	1	16	107	140	0	124	101	4	2	20	348	16	0	1,054	2	8	5	2
7:45 AM	38	115	20	0	14	84	120	0	139	113	4	2	21	325	15	2	1,008	2	8	6	3
8:00 AM	31	93	18	0	12	88	125	0	137	142	3	3	21	289	18	2	977	3	8	5	3

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



Peak Hour Summary
7:15 AM to 8:15 AM

SE 32nd Ave & SE Harrison St

Tuesday, September 18, 2018
7:00 AM to 9:00 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
7:05 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
7:10 AM	0	0	0	0	0	0	0	0	1	3	0	4	0	1	0	1	5
7:15 AM	0	0	0	0	0	1	0	1	1	3	0	4	0	0	1	1	6
7:20 AM	0	0	0	0	0	0	2	2	1	3	0	4	0	1	0	1	7
7:25 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	2	0	2	5
7:30 AM	0	0	0	0	1	0	1	2	0	1	0	1	0	1	0	1	4
7:35 AM	0	0	0	0	0	0	2	2	0	1	0	1	0	1	0	1	4
7:40 AM	0	0	0	0	0	0	0	0	1	0	1	2	0	1	0	1	3
7:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	1	1	0	2	3
7:50 AM	0	0	1	1	0	0	1	1	1	0	0	1	0	2	0	2	5
7:55 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	1	2
8:00 AM	0	1	1	2	0	0	2	2	0	0	0	0	0	2	0	2	6
8:05 AM	0	0	0	0	1	1	2	4	0	1	0	1	0	0	0	0	5
8:10 AM	0	0	0	0	0	0	2	2	1	0	1	2	0	0	0	0	4
8:15 AM	0	1	0	1	0	0	0	0	1	0	0	1	0	1	0	1	3
8:20 AM	0	0	1	1	0	0	0	0	0	1	0	1	0	1	1	2	4
8:25 AM	0	0	0	0	0	0	2	2	0	1	0	1	0	1	0	1	4
8:30 AM	0	0	0	0	0	1	1	2	2	1	0	3	0	1	0	1	6
8:35 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	1	0	1	3
8:40 AM	0	1	0	1	0	1	1	2	1	1	0	2	0	0	0	0	5
8:45 AM	0	0	0	0	1	0	0	1	1	1	0	2	0	4	0	4	7
8:50 AM	0	1	0	1	0	1	0	1	1	0	0	1	0	1	0	1	4
8:55 AM	0	0	0	0	0	0	1	1	1	1	0	2	0	0	0	0	3
Total Survey	0	6	3	9	3	5	18	26	15	23	2	40	1	23	3	27	102

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	1	1	2	4	0	6	0	2	0	2	9
7:15 AM	0	1	0	1	0	1	2	3	2	8	0	10	0	3	1	4	18
7:30 AM	0	0	0	0	1	0	3	4	1	2	1	4	0	3	0	3	11
7:45 AM	0	0	1	1	0	0	1	1	2	1	0	3	1	3	1	5	10
8:00 AM	0	1	1	2	1	1	6	8	1	1	1	3	0	2	0	2	15
8:15 AM	0	1	1	2	0	0	2	2	1	2	0	3	0	3	1	4	11
8:30 AM	0	2	0	2	0	2	2	4	3	3	0	6	0	2	0	2	14
8:45 AM	0	1	0	1	1	1	1	3	3	2	0	5	0	5	0	5	14
Total Survey	0	6	3	9	3	5	18	26	15	23	2	40	1	23	3	27	102

Heavy Vehicle Peak Hour Summary
7:15 AM to 8:15 AM

By Approach	Northbound SE 32nd Ave			Southbound SE 32nd Ave			Eastbound SE Harrison St			Westbound SE Harrison St			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	4	5	9	16	10	26	20	23	43	14	16	30	54
PHF	0.33			0.50			0.50			0.70			0.75

By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	2	2	4	2	2	12	16	6	12	2	20	1	11	2	14	54
PHF	0.00	0.50	0.25	0.33	0.50	0.50	0.50	0.50	0.75	0.38	0.50	0.50	0.25	0.69	0.50	0.70	0.75

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

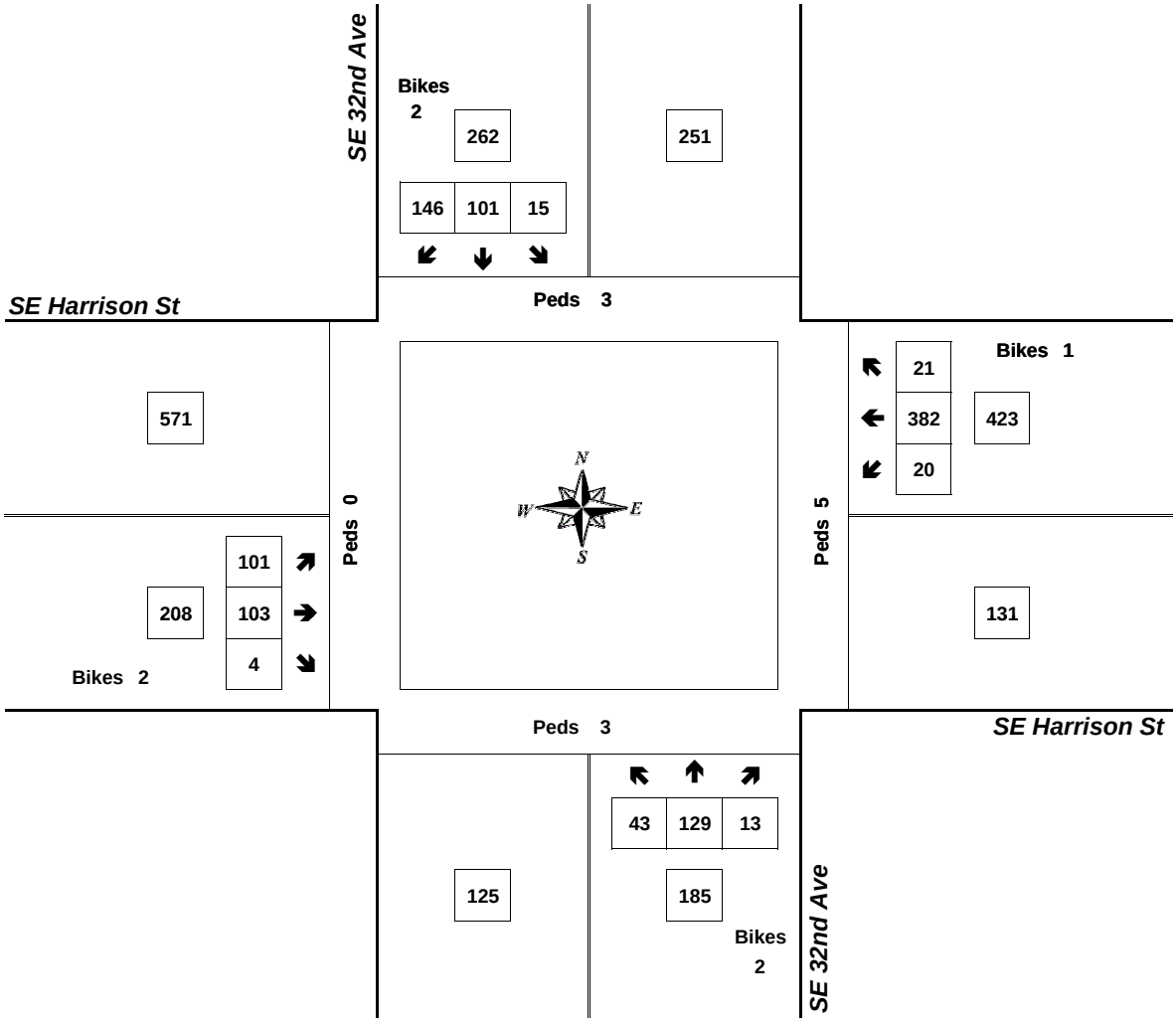
Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	1	1	2	1	1	7	9	7	15	1	23	1	11	2	14	48
7:15 AM	0	2	2	4	2	2	12	16	6	12	2	20	1	11	2	14	54
7:30 AM	0	2	3	5	2	1	12	15	5	6	2	13	1	11	2	14	47
7:45 AM	0	4	3	7	1	3	11	15	7	7	1	15	1	10	2	13	50
8:00 AM	0	5	2	7	2	4	11	17	8	8	1	17	0	12	1	13	54

Peak Hour Summary

Clay Carney
(503) 833-2740

SE 32nd Ave & SE Harrison St

7:15 AM to 8:15 AM
Tuesday, September 18, 2018

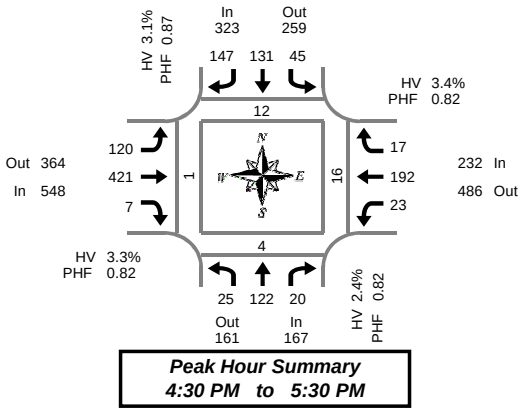


Approach	PHF	HV%	Volume
EB	0.75	9.6%	208
WB	0.90	3.3%	423
NB	0.78	2.2%	185
SB	0.66	6.1%	262
Intersection	0.96	5.0%	1,078

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



SE 32nd Ave & SE Harrison St

Tuesday, September 18, 2018
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	1	10	1	0	4	10	12	0	8	34	0	0	2	17	0	0	99	0	0	0	0
4:05 PM	1	11	6	1	1	13	10	0	10	37	0	0	2	17	0	0	108	2	0	3	0
4:10 PM	4	7	3	0	7	11	6	0	10	38	2	2	4	12	0	0	104	1	0	0	0
4:15 PM	1	10	4	0	6	12	9	0	7	30	0	0	2	20	1	0	102	0	0	2	1
4:20 PM	2	11	2	2	6	9	9	0	6	26	2	0	0	18	3	0	94	1	0	1	0
4:25 PM	3	3	1	0	8	10	9	0	6	17	0	0	5	15	3	0	80	0	0	3	0
4:30 PM	4	7	3	1	3	10	13	0	13	34	1	0	3	14	0	0	105	1	0	2	0
4:35 PM	3	11	3	0	3	8	15	0	10	44	0	0	1	19	4	0	121	6	0	4	0
4:40 PM	2	12	0	0	6	5	14	0	19	41	0	0	2	18	2	0	121	1	0	1	0
4:45 PM	1	15	4	0	4	12	15	0	7	32	2	0	1	22	2	0	117	2	1	2	0
4:50 PM	2	10	1	0	4	15	15	0	4	23	1	1	4	20	0	0	99	1	3	1	0
4:55 PM	4	10	0	0	2	12	14	0	10	38	0	0	2	18	1	0	111	0	0	2	0
5:00 PM	1	6	1	0	1	18	11	0	6	27	0	0	1	12	2	0	86	0	0	1	0
5:05 PM	1	7	0	0	4	14	14	1	5	20	0	1	1	12	2	0	80	0	0	0	0
5:10 PM	2	15	3	0	5	9	11	0	11	52	1	0	3	18	2	0	132	1	0	0	1
5:15 PM	3	10	2	1	5	13	9	0	9	36	1	0	1	14	2	0	105	0	0	3	0
5:20 PM	1	11	2	0	4	7	7	1	16	41	0	0	0	12	0	0	101	0	0	0	0
5:25 PM	1	8	1	0	4	8	9	1	10	33	1	1	4	13	0	1	92	0	0	0	0
5:30 PM	1	15	1	0	3	8	7	0	12	33	0	0	2	16	0	0	98	0	0	0	0
5:35 PM	5	8	1	0	6	11	10	0	5	24	1	1	2	14	1	0	88	0	0	0	0
5:40 PM	0	8	1	0	3	17	11	0	7	23	3	0	1	24	1	0	99	0	0	0	0
5:45 PM	0	5	0	0	1	5	13	0	5	26	0	0	1	15	1	0	72	2	1	4	1
5:50 PM	4	6	2	0	2	11	5	1	12	32	0	1	3	18	0	0	95	0	0	1	0
5:55 PM	4	5	0	1	2	13	10	0	8	30	1	0	1	18	2	0	94	3	0	1	0
Total Survey	51	221	42	6	94	261	258	4	216	771	16	7	48	396	29	1	2,403	21	5	31	3

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	6	28	10	1	12	34	28	0	28	109	2	2	8	46	0	0	311	3	0	3	0
4:15 PM	6	24	7	2	20	31	27	0	19	73	2	0	7	53	7	0	276	1	0	6	1
4:30 PM	9	30	6	1	12	23	42	0	42	119	1	0	6	51	6	0	347	8	0	7	0
4:45 PM	7	35	5	0	10	39	44	0	21	93	3	1	7	60	3	0	327	3	4	5	0
5:00 PM	4	28	4	0	10	41	36	1	22	99	1	1	5	42	6	0	298	1	0	1	1
5:15 PM	5	29	5	1	13	28	25	2	35	110	2	1	5	39	2	1	298	0	0	3	0
5:30 PM	6	31	3	0	12	36	28	0	24	80	4	1	5	54	2	0	285	0	0	0	0
5:45 PM	8	16	2	1	5	29	28	1	25	88	1	1	5	51	3	0	261	5	1	6	1
Total Survey	51	221	42	6	94	261	258	4	216	771	16	7	48	396	29	1	2,403	21	5	31	3

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	
Volume	167	161	328	2	323	259	582	3	548	364	912	3	232	486	718	1	1,270
%HV	2.4%				3.1%				3.3%				3.4%				3.1%
PHF	0.82				0.87				0.82				0.82				0.88

Pedestrians Crosswalk			
North	South	East	West
12	4	16	1

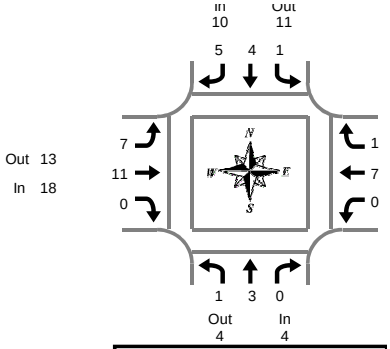
By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	25	122	20	167	45	131	147	323	120	421	7	548	23	192	17	232	1,270
%HV	4.0%	2.5%	0.0%	2.4%	2.2%	3.1%	3.4%	3.1%	5.8%	2.6%	0.0%	3.3%	0.0%	3.6%	5.9%	3.4%	3.1%
PHF	0.69	0.80	0.71	0.82	0.80	0.73	0.84	0.87	0.71	0.82	0.58	0.82	0.82	0.80	0.53	0.82	0.88

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	28	117	28	4	54	127	141	0	110	394	8	3	28	210	16	0	1,261	15	4	21	1
4:15 PM	26	117	22	3	52	134	149	1	104	384	7	2	25	206	22	0	1,248	13	4	19	2
4:30 PM	25	122	20	2	45	131	147	3	120	421	7	3	23	192	17	1	1,270	12	4	16	1
4:45 PM	22	123	17	1	45	144	133	3	102	382	10	4	22	195	13	1	1,208	4	4	9	1
5:00 PM	23	104	14	2	40	134	117	4	106	377	8	4	20	186	13	1	1,142	6	1	10	2

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



SE 32nd Ave & SE Harrison St

Tuesday, September 18, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
4:30 PM to 5:30 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	2	0	2	4
4:05 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
4:10 PM	0	0	0	0	0	0	2	2	0	3	0	3	0	0	0	0	5
4:15 PM	0	0	0	0	0	0	0	0	1	2	0	3	0	0	0	0	3
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	3	0	3	0	0	1	1	1	3	0	4	0	1	0	1	9
4:35 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
4:40 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	1	1	2	4
4:45 PM	0	0	0	0	0	2	0	2	1	3	0	4	0	0	0	0	6
4:50 PM	1	0	0	1	0	0	1	1	0	2	0	2	0	1	0	1	5
4:55 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	1	0	1	3
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
5:10 PM	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	1	1	1	1	0	2	0	0	0	0	3
5:20 PM	0	0	0	0	0	0	0	0	2	0	0	2	0	0	0	0	2
5:25 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
5:30 PM	0	0	0	0	0	0	1	1	1	1	0	2	0	1	0	1	4
5:35 PM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
5:40 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:50 PM	0	0	0	0	0	0	1	1	1	0	0	1	0	1	0	1	3
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Survey	1	3	0	4	1	4	11	16	12	21	0	33	0	13	1	14	67

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	3	3	1	5	0	6	0	2	0	2	11
4:15 PM	0	0	0	0	0	0	0	0	1	2	0	3	0	2	0	2	5
4:30 PM	0	3	0	3	0	1	2	3	1	4	0	5	0	3	1	4	15
4:45 PM	1	0	0	1	0	3	1	4	1	5	0	6	0	1	0	1	12
5:00 PM	0	0	0	0	1	0	1	2	1	1	0	2	0	2	0	2	6
5:15 PM	0	0	0	0	0	0	1	1	4	1	0	5	0	1	0	1	7
5:30 PM	0	0	0	0	0	0	2	2	1	3	0	4	0	1	0	1	7
5:45 PM	0	0	0	0	0	0	1	1	2	0	0	2	0	1	0	1	4
Total Survey	1	3	0	4	1	4	11	16	12	21	0	33	0	13	1	14	67

Heavy Vehicle Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound SE 32nd Ave			Southbound SE 32nd Ave			Eastbound SE Harrison St			Westbound SE Harrison St			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	4	4	8	10	11	21	18	13	31	8	12	20	40
PHF	0.33			0.63			0.64			0.50			0.67

By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	1	3	0	4	1	4	5	10	7	11	0	18	0	7	1	8	40
PHF	0.25	0.25	0.00	0.33	0.25	0.33	0.63	0.63	0.44	0.46	0.00	0.64	0.00	0.58	0.25	0.50	0.67

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

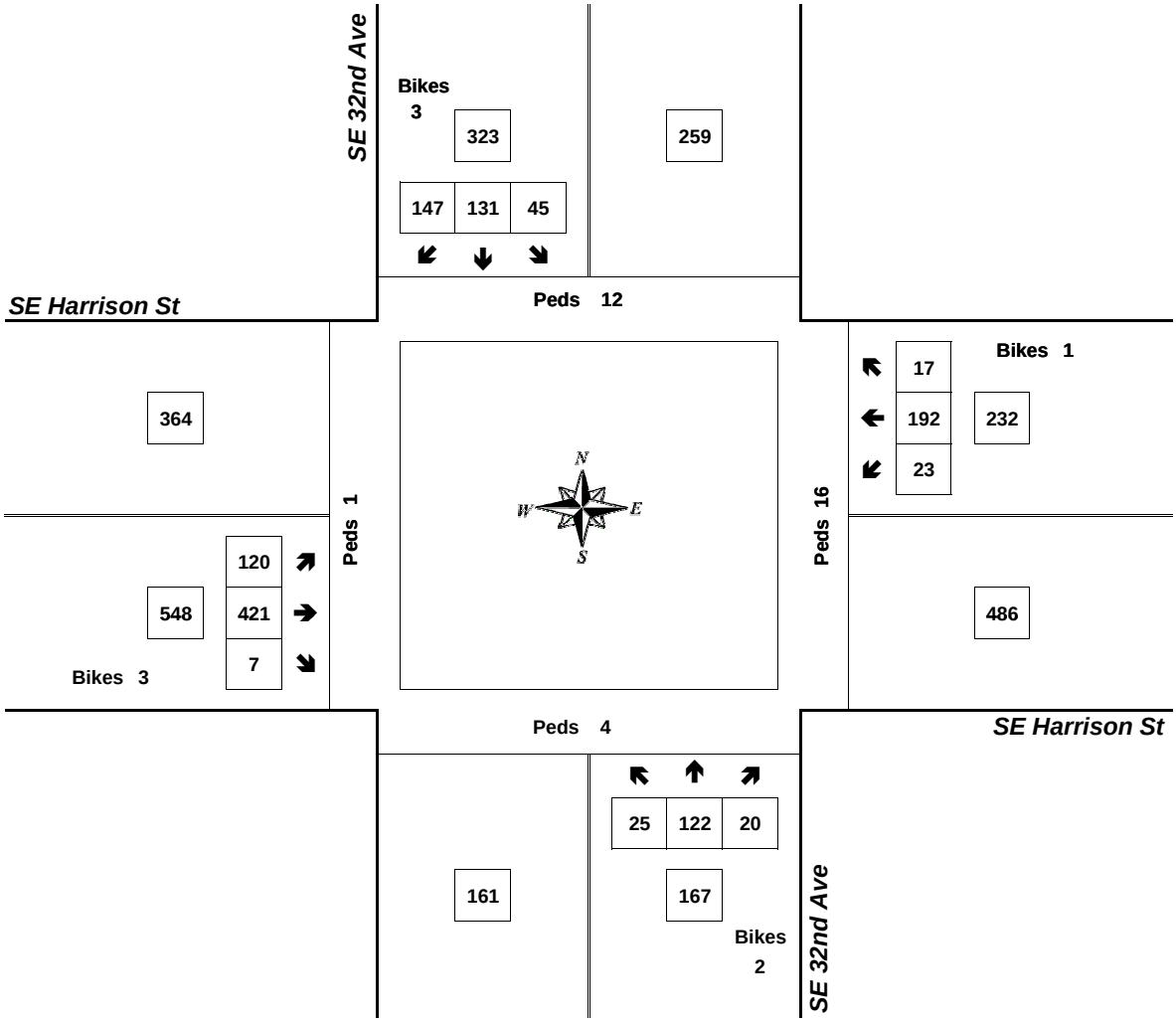
Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	1	3	0	4	0	4	6	10	4	16	0	20	0	8	1	9	43
4:15 PM	1	3	0	4	1	4	4	9	4	12	0	16	0	8	1	9	38
4:30 PM	1	3	0	4	1	4	5	10	7	11	0	18	0	7	1	8	40
4:45 PM	1	0	0	1	1	3	5	9	7	10	0	17	0	5	0	5	32
5:00 PM	0	0	0	0	1	0	5	6	8	5	0	13	0	5	0	5	24

Peak Hour Summary

Clay Carney
(503) 833-2740

SE 32nd Ave & SE Harrison St

4:30 PM to 5:30 PM
Tuesday, September 18, 2018

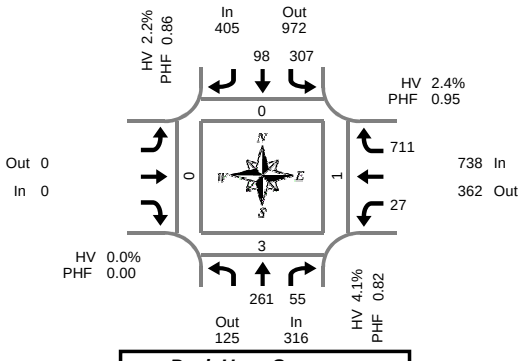


Approach	PHF	HV%	Volume
EB	0.82	3.3%	548
WB	0.82	3.4%	232
NB	0.82	2.4%	167
SB	0.87	3.1%	323
Intersection	0.88	3.1%	1,270

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



SE 32nd Ave & SE Johnson Creek Blvd

Tuesday, September 25, 2018
7:00 AM to 9:00 AM

Peak Hour Summary
7:00 AM to 8:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T		Bikes				Bikes	L		R	Bikes		North	South	East	West
7:00 AM	17	2	0		27	10		0				0	4		57	0	117	0	0	0	0
7:05 AM	30	3	0		18	7		0				0	0		60	2	118	0	0	0	0
7:10 AM	21	3	0		27	8		0				0	0		70	0	129	0	1	0	0
7:15 AM	20	2	3		24	8		0				0	2		58	4	114	0	0	0	0
7:20 AM	24	1	1		23	5		1				0	0		64	2	117	0	2	0	0
7:25 AM	25	2	2		18	6		2				0	2		54	1	107	0	0	1	0
7:30 AM	23	8	1		25	10		1				0	3		62	0	131	0	0	0	0
7:35 AM	20	4	1		32	8		1				0	2		63	1	129	0	0	0	0
7:40 AM	31	10	4		28	8		0				0	0		56	2	133	0	0	0	0
7:45 AM	17	10	2		31	11		0				0	8		45	3	122	0	0	0	0
7:50 AM	20	3	2		32	8		1				0	3		62	0	128	0	0	0	0
7:55 AM	13	7	0		22	9		0				0	3		60	5	114	0	0	0	0
8:00 AM	18	4	0		30	6		1				0	2		55	0	115	0	0	0	0
8:05 AM	18	3	2		17	7		1				0	2		42	1	89	0	0	0	0
8:10 AM	22	2	0		35	11		1				0	2		54	1	126	0	1	0	0
8:15 AM	16	3	1		20	7		0				0	4		44	0	94	0	0	0	0
8:20 AM	14	0	1		32	6		1				0	6		52	2	110	0	0	0	0
8:25 AM	20	1	3		22	8		0				0	4		59	0	114	0	1	2	0
8:30 AM	10	2	1		24	6		0				0	2		52	1	96	0	0	0	0
8:35 AM	10	4	0		38	5		0				0	2		43	2	102	0	1	1	0
8:40 AM	13	6	0		34	4		0				0	1		54	2	112	0	0	0	0
8:45 AM	10	3	0		21	4		1				0	2		35	1	75	3	0	0	0
8:50 AM	13	3	1		25	4		1				0	5		53	1	103	0	0	0	0
8:55 AM	15	6	0		18	10		0				0	3		38	3	90	0	1	0	0
Total Survey	440	92	25		623	176		12				0	62		1,292	34	2,685	3	7	4	0

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T		Bikes				Bikes	L		R	Bikes		North	South	East	West
7:00 AM	68	8	0		72	25		0				0	4		187	2	364	0	1	0	0
7:15 AM	69	5	6		65	19		3				0	4		176	7	338	0	2	1	0
7:30 AM	74	22	6		85	26		2				0	5		181	3	393	0	0	0	0
7:45 AM	50	20	4		85	28		1				0	14		167	8	364	0	0	0	0
8:00 AM	58	9	2		82	24		3				0	6		151	2	330	0	1	0	0
8:15 AM	50	4	5		74	21		1				0	14		155	2	318	0	1	2	0
8:30 AM	33	12	1		96	15		0				0	5		149	5	310	0	1	1	0
8:45 AM	38	12	1		64	18		2				0	10		126	5	268	3	1	0	0
Total Survey	440	92	25		623	176		12				0	62		1,292	34	2,685	3	7	4	0

Peak Hour Summary
7:00 AM to 8:00 AM

By Approach	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	316	125	441	16	405	972	1,377	6	0	0	0	0	738	362	1,100	20	1,459	0	3	1	0
%HV	4.1%				2.2%				0.0%				2.4%				2.7%				
PHF	0.82				0.86				0.00				0.95				0.93				

By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total
	T	R	Total		L	T		Total				Total	L		R	Total	
Volume	261	55	316		307	98		405				0	27		711	738	1,459
%HV	NA	1.5%	16.4%	4.1%	2.6%	1.0%	NA	2.2%	NA	NA	NA	0.0%	18.5%	NA	1.8%	2.4%	2.7%
PHF		0.88	0.57	0.82	0.84	0.88		0.86				0.00	0.48		0.93	0.95	0.93

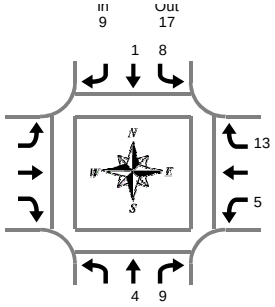
Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T		Bikes				Bikes	L		R	Bikes		North	South	East	West
7:00 AM	261	55	16		307	98		6				0	27		711	20	1,459	0	3	1	0
7:15 AM	251	56	18		317	97		9				0	29		675	20	1,425	0	3	1	0
7:30 AM	232	55	17		326	99		7				0	39		654	15	1,405	0	2	2	0
7:45 AM	191	45	12		337	88		5				0	39		622	17	1,322	0	3	3	0
8:00 AM	179	37	9		316	78		6				0	35		581	14	1,226	3	4	3	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740

Out 0
In 0



SE 32nd Ave & SE Johnson Creek Blvd

Tuesday, September 25, 2018
7:00 AM to 9:00 AM

Peak Hour Summary
7:00 AM to 8:00 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	T	R	Total		L	T		Total				Total	L		R	Total	
7:00 AM	0	1	1		0	1		1				0	1		2	3	5
7:05 AM	0	1	1		0	0		0				0	0		0	0	1
7:10 AM	0	0	0		1	0		1				0	0		1	1	2
7:15 AM	0	1	1		2	0		2				0	1		1	2	5
7:20 AM	0	0	0		0	0		0				0	0		2	2	2
7:25 AM	1	1	2		1	0		1				0	0		1	1	4
7:30 AM	0	0	0		0	0		0				0	1		1	2	2
7:35 AM	0	1	1		2	0		2				0	0		1	1	4
7:40 AM	1	0	1		0	0		0				0	0		0	0	1
7:45 AM	0	2	2		1	0		1				0	1		0	1	4
7:50 AM	1	0	1		0	0		0				0	0		2	2	3
7:55 AM	1	2	3		1	0		1				0	1		2	3	7
8:00 AM	0	0	0		0	0		0				0	0		3	3	3
8:05 AM	1	0	1		1	0		1				0	0		0	0	2
8:10 AM	0	0	0		2	0		2				0	2		3	5	7
8:15 AM	0	1	1		2	0		2				0	0		1	1	4
8:20 AM	0	0	0		1	0		1				0	1		0	1	2
8:25 AM	0	0	0		4	0		4				0	0		2	2	6
8:30 AM	0	1	1		1	0		1				0	0		1	1	3
8:35 AM	0	0	0		1	0		1				0	2		2	4	5
8:40 AM	2	0	2		1	0		1				0	0		0	0	3
8:45 AM	0	0	0		1	0		1				0	0		2	2	3
8:50 AM	0	0	0		3	0		3				0	1		5	6	9
8:55 AM	0	1	1		1	1		2				0	1		2	3	6
Total Survey	7	12	19		26	2		28				0	12		34	46	93

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	T	R	Total		L	T		Total				Total	L		R	Total	
7:00 AM	0	2	2		1	1		2				0	1		3	4	8
7:15 AM	1	2	3		3	0		3				0	1		4	5	11
7:30 AM	1	1	2		2	0		2				0	1		2	3	7
7:45 AM	2	4	6		2	0		2				0	2		4	6	14
8:00 AM	1	0	1		3	0		3				0	2		6	8	12
8:15 AM	0	1	1		7	0		7				0	1		3	4	12
8:30 AM	2	1	3		3	0		3				0	2		3	5	11
8:45 AM	0	1	1		5	1		6				0	2		9	11	18
Total Survey	7	12	19		26	2		28				0	12		34	46	93

Heavy Vehicle Peak Hour Summary
7:00 AM to 8:00 AM

By Approach	Northbound SE 32nd Ave			Southbound SE 32nd Ave			Eastbound SE Johnson Creek Blvd			Westbound SE Johnson Creek Blvd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	13	6	19	9	17	26	0	0	0	18	17	35	40
PHF	0.54			0.75			0.00			0.75			0.71

By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total
	T	R	Total		L	T		Total				Total	L		R	Total	
Volume	4	9	13		8	1		9				0	5		13	18	40
PHF	0.50	0.56	0.54		0.67	0.25		0.75				0.00	0.63		0.81	0.75	0.71

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

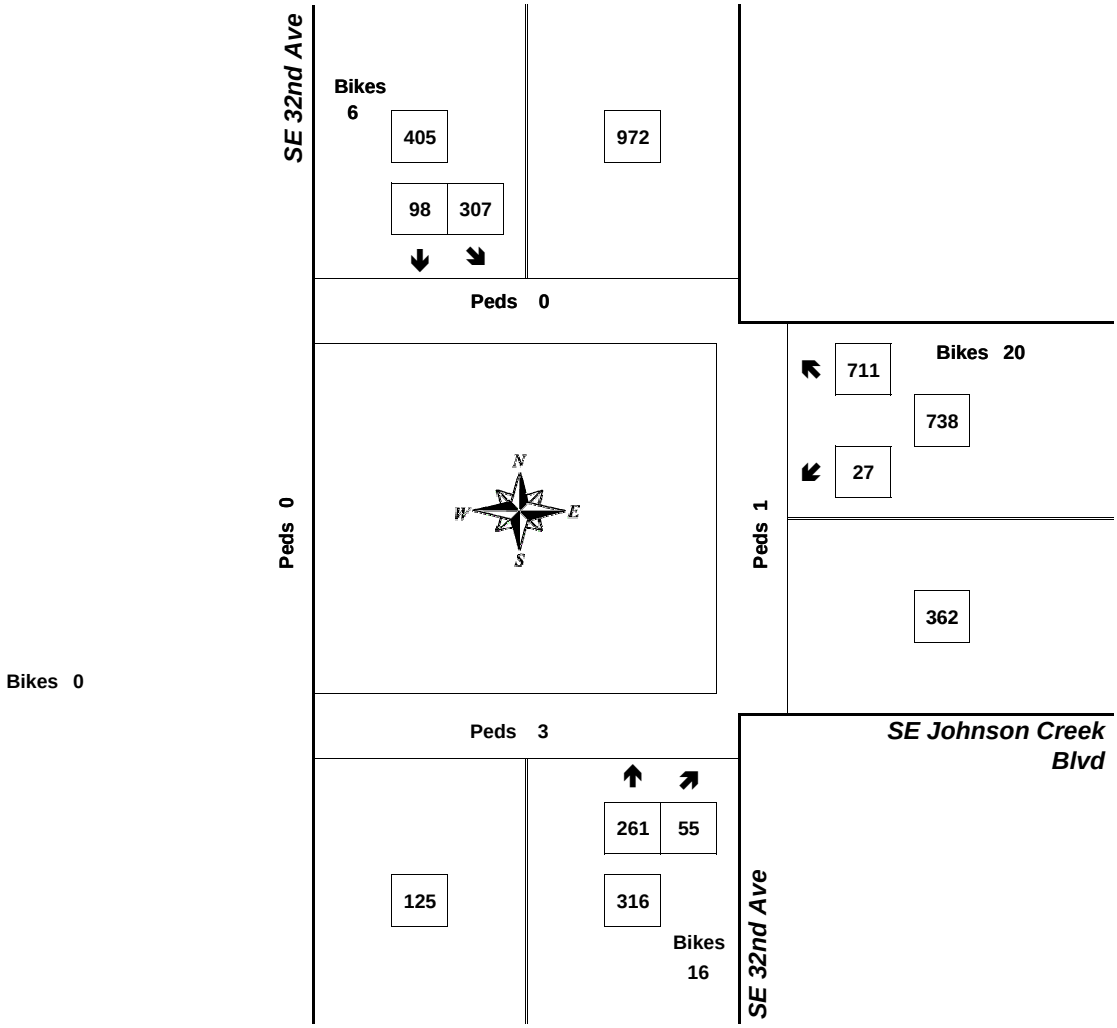
Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	T	R	Total		L	T		Total				Total	L		R	Total	
7:00 AM	4	9	13		8	1		9				0	5		13	18	40
7:15 AM	5	7	12		10	0		10				0	6		16	22	44
7:30 AM	4	6	10		14	0		14				0	6		15	21	45
7:45 AM	5	6	11		15	0		15				0	7		16	23	49
8:00 AM	3	3	6		18	1		19				0	7		21	28	53

Peak Hour Summary

Clay Carney
(503) 833-2740

SE 32nd Ave & SE Johnson Creek Blvd

7:00 AM to 8:00 AM
Tuesday, September 25, 2018

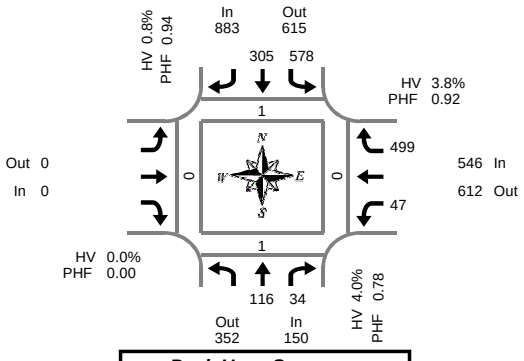


Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.95	2.4%	738
NB	0.82	4.1%	316
SB	0.86	2.2%	405
Intersection	0.93	2.7%	1,459

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:30 PM to 5:30 PM

SE 32nd Ave & SE Johnson Creek Blvd

Tuesday, September 25, 2018
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T		Bikes				Bikes	L		R	Bikes		North	South	East	West
4:00 PM	8	4	0		37	27		0				0	8		35	0	119	0	0	0	0
4:05 PM	5	5	0		33	18		1				0	9		34	0	104	0	1	0	0
4:10 PM	12	4	0		60	32		0				0	2		35	0	145	0	0	0	0
4:15 PM	3	2	0		47	26		2				0	4		38	0	120	0	1	0	0
4:20 PM	11	6	0		38	26		1				0	5		36	0	122	0	0	0	0
4:25 PM	9	3	0		40	29		0				0	5		33	2	119	0	0	1	0
4:30 PM	4	2	0		48	28		5				0	3		36	0	121	0	0	0	0
4:35 PM	15	4	0		39	25		0				0	5		33	0	121	0	0	0	0
4:40 PM	7	1	0		49	24		3				0	3		43	0	127	1	0	0	0
4:45 PM	9	1	0		54	26		0				0	2		48	0	140	0	0	0	0
4:50 PM	9	3	0		54	25		4				0	4		40	1	135	0	0	0	0
4:55 PM	10	2	0		49	22		0				0	6		42	3	131	0	0	0	0
5:00 PM	8	3	0		53	25		1				0	5		37	3	131	0	0	0	0
5:05 PM	12	3	0		55	31		1				0	3		40	0	144	0	0	0	0
5:10 PM	7	4	2		47	22		0				0	4		43	3	127	0	0	0	0
5:15 PM	18	4	0		43	31		3				0	2		46	0	144	0	0	0	0
5:20 PM	10	5	0		41	27		3				0	5		41	1	129	0	0	0	0
5:25 PM	7	2	0		46	19		3				0	5		50	1	129	0	1	0	0
5:30 PM	12	1	1		38	20		1				0	2		37	0	110	0	0	0	0
5:35 PM	10	2	0		43	18		3				0	0		38	0	111	1	0	0	0
5:40 PM	13	3	0		32	32		0				0	2		49	3	131	0	0	0	0
5:45 PM	6	3	0		48	21		0				0	4		42	1	124	0	3	0	0
5:50 PM	12	4	0		48	24		5				0	3		44	1	135	0	0	0	0
5:55 PM	8	5	0		40	30		2				0	6		31	0	120	0	0	1	0
Total Survey	225	76	3		1,082	608		38				0	97		951	19	3,039	2	6	2	0

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T		Bikes				Bikes	L		R	Bikes		North	South	East	West
4:00 PM	25	13	0		130	77		1				0	19		104	0	368	0	1	0	0
4:15 PM	23	11	0		125	81		3				0	14		107	2	361	0	1	1	0
4:30 PM	26	7	0		136	77		8				0	11		112	0	369	1	0	0	0
4:45 PM	28	6	0		157	73		4				0	12		130	4	406	0	0	0	0
5:00 PM	27	10	2		155	78		2				0	12		120	6	402	0	0	0	0
5:15 PM	35	11	0		130	77		9				0	12		137	2	402	0	1	0	0
5:30 PM	35	6	1		113	70		4				0	4		124	3	352	1	0	0	0
5:45 PM	26	12	0		136	75		7				0	13		117	2	379	0	3	1	0
Total Survey	225	76	3		1,082	608		38				0	97		951	19	3,039	2	6	2	0

Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	150	352	502	2	883	615	1,498	23	0	0	0	0	546	612	1,158	12	1,579	1	1	0	0
%HV	4.0%				0.8%				0.0%				3.8%				2.2%				
PHF	0.78				0.94				0.00				0.92				0.95				

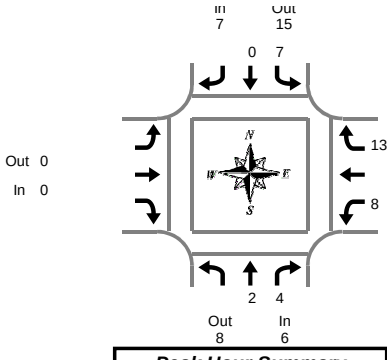
By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total
		T	R	Total	L	T		Total				Total	L		R	Total	
Volume		116	34	150	578	305		883				0	47		499	546	1,579
%HV	NA	1.7%	11.8%	4.0%	1.2%	0.0%	NA	0.8%	NA	NA	NA	0.0%	17.0%	NA	2.6%	3.8%	2.2%
PHF		0.78	0.65	0.78	0.92	0.91		0.94				0.00	0.78		0.91	0.92	0.95

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total	Pedestrians Crosswalk			
	T	R	Bikes		L	T		Bikes				Bikes	L		R	Bikes		North	South	East	West
4:00 PM	102	37	0		548	308		16				0	56		453	6	1,504	1	2	1	0
4:15 PM	104	34	2		573	309		17				0	49		469	12	1,538	1	1	1	0
4:30 PM	116	34	2		578	305		23				0	47		499	12	1,579	1	1	0	0
4:45 PM	125	33	3		555	298		19				0	40		511	15	1,562	1	1	0	0
5:00 PM	123	39	3		534	300		22				0	41		498	13	1,535	1	4	1	0

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



SE 32nd Ave & SE Johnson Creek Blvd

Tuesday, September 25, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
4:30 PM to 5:30 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	T	R	Total		L	T		Total				Total	L		R	Total	
4:00 PM	0	0	0		4	1		5				0	1		1	2	7
4:05 PM	0	1	1		2	0		2				0	1		0	1	4
4:10 PM	0	0	0		0	0		0				0	0		2	2	2
4:15 PM	0	0	0		0	0		0				0	0		0	0	0
4:20 PM	0	1	1		3	0		3				0	1		1	2	6
4:25 PM	0	0	0		0	0		0				0	0		2	2	2
4:30 PM	0	0	0		2	0		2				0	1		1	2	4
4:35 PM	0	1	1		0	0		0				0	1		2	3	4
4:40 PM	0	0	0		0	0		0				0	0		0	0	0
4:45 PM	0	0	0		0	0		0				0	1		3	4	4
4:50 PM	1	1	2		2	0		2				0	0		2	2	6
4:55 PM	0	0	0		1	0		1				0	0		0	0	1
5:00 PM	0	0	0		1	0		1				0	1		1	2	3
5:05 PM	0	0	0		0	0		0				0	2		1	3	3
5:10 PM	0	0	0		1	0		1				0	1		1	2	3
5:15 PM	0	1	1		0	0		0				0	0		0	0	1
5:20 PM	1	1	2		0	0		0				0	0		2	2	4
5:25 PM	0	0	0		0	0		0				0	1		0	1	1
5:30 PM	0	0	0		0	0		0				0	0		1	1	1
5:35 PM	0	1	1		1	0		1				0	0		2	2	4
5:40 PM	0	0	0		0	1		1				0	0		1	1	2
5:45 PM	0	0	0		2	0		2				0	0		1	1	3
5:50 PM	0	1	1		2	0		2				0	1		0	1	4
5:55 PM	0	0	0		0	0		0				0	0		1	1	1
Total Survey	2	8	10		21	2		23				0	12		25	37	70

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	T	R	Total		L	T		Total				Total	L		R	Total	
4:00 PM	0	1	1		6	1		7				0	2		3	5	13
4:15 PM	0	1	1		3	0		3				0	1		3	4	8
4:30 PM	0	1	1		2	0		2				0	2		3	5	8
4:45 PM	1	1	2		3	0		3				0	1		5	6	11
5:00 PM	0	0	0		2	0		2				0	4		3	7	9
5:15 PM	1	2	3		0	0		0				0	1		2	3	6
5:30 PM	0	1	1		1	1		2				0	0		4	4	7
5:45 PM	0	1	1		4	0		4				0	1		2	3	8
Total Survey	2	8	10		21	2		23				0	12		25	37	70

Heavy Vehicle Peak Hour Summary
4:30 PM to 5:30 PM

By Approach	Northbound SE 32nd Ave			Southbound SE 32nd Ave			Eastbound SE Johnson Creek Blvd			Westbound SE Johnson Creek Blvd			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	6	8	14	7	15	22	0	0	0	21	11	32	34
PHF	0.50			0.44			0.00			0.75			0.77

By Movement	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Total
	T	R	Total		L	T		Total				Total	L		R	Total	
Volume	2	4	6		7	0		7				0	8		13	21	34
PHF	0.50	0.50	0.50		0.44	0.00		0.44				0.00	0.50		0.65	0.75	0.77

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

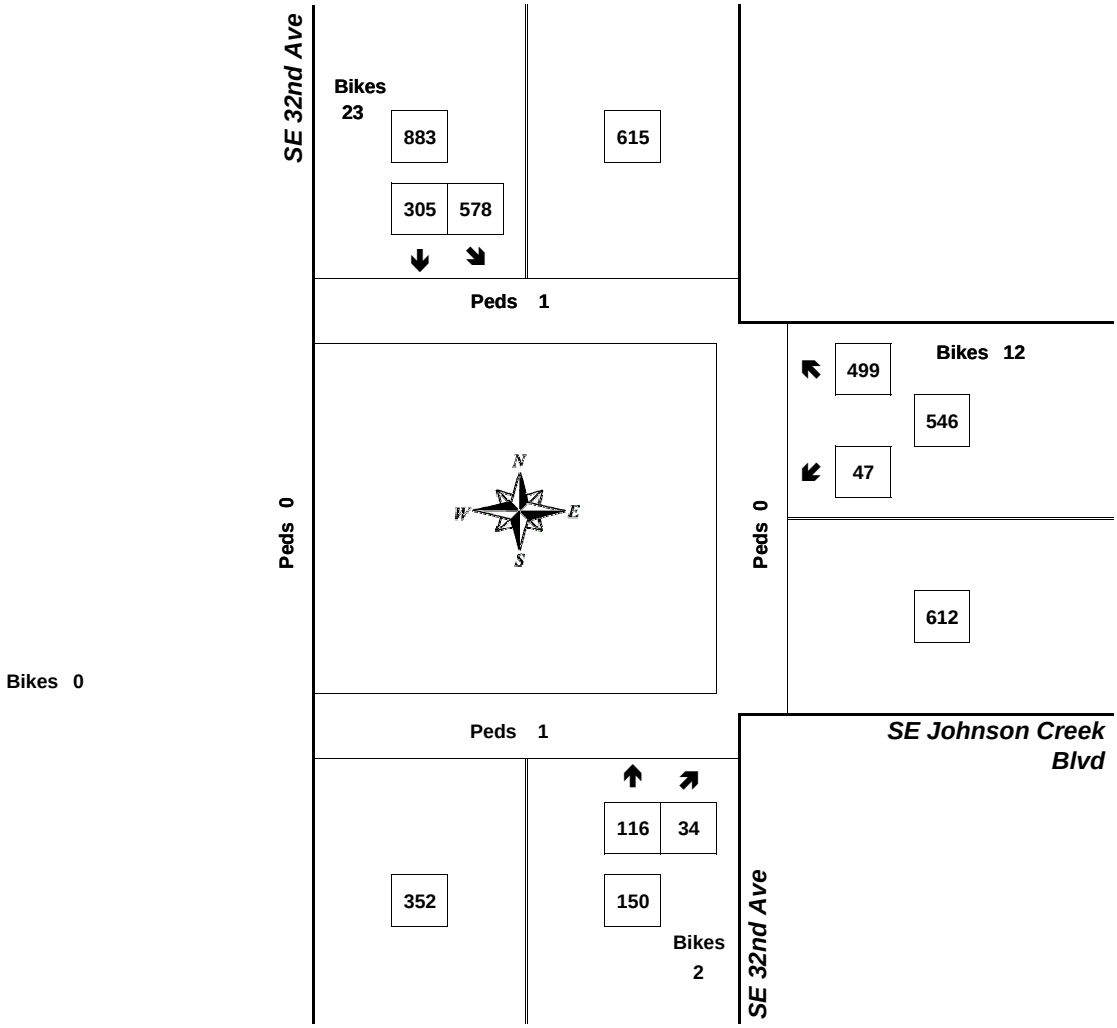
Interval Start Time	Northbound SE 32nd Ave				Southbound SE 32nd Ave				Eastbound SE Johnson Creek Blvd				Westbound SE Johnson Creek Blvd				Interval Total
	T	R	Total		L	T		Total				Total	L		R	Total	
4:00 PM	1	4	5		14	1		15				0	6		14	20	40
4:15 PM	1	3	4		10	0		10				0	8		14	22	36
4:30 PM	2	4	6		7	0		7				0	8		13	21	34
4:45 PM	2	4	6		6	1		7				0	6		14	20	33
5:00 PM	1	4	5		7	1		8				0	6		11	17	30

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

SE 32nd Ave & SE Johnson Creek Blvd

4:30 PM to 5:30 PM
Tuesday, September 25, 2018

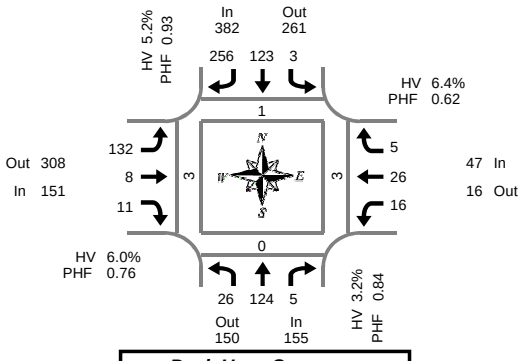


Approach	PHF	HV%	Volume
EB	0.00	0.0%	0
WB	0.92	3.8%	546
NB	0.78	4.0%	150
SB	0.94	0.8%	883
Intersection	0.95	2.2%	1,579

Count Period: 4:00 PM to 6:00 PM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
7:25 AM to 8:25 AM

SE 42nd Ave & SE Harrison St

Tuesday, September 25, 2018
7:00 AM to 9:00 AM

5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	4	6	0	0	0	2	19	0	8	0	1	0	0	2	0	0	42	0	0	1	1
7:05 AM	3	5	0	0	0	6	21	0	12	3	1	1	0	1	0	0	52	0	0	0	0
7:10 AM	4	3	0	0	0	10	23	0	5	0	0	0	0	2	0	0	47	0	0	1	0
7:15 AM	3	7	2	0	0	5	23	0	4	1	1	0	0	4	1	0	51	0	0	1	2
7:20 AM	2	6	1	0	0	10	17	0	7	0	1	0	0	1	0	0	45	1	0	0	0
7:25 AM	6	7	0	0	0	10	18	0	9	0	0	0	1	2	0	0	53	0	0	0	0
7:30 AM	2	11	1	0	0	12	29	0	8	0	1	1	0	4	0	0	68	0	0	0	0
7:35 AM	3	12	0	0	0	7	20	0	12	0	1	0	1	0	0	0	56	0	0	1	0
7:40 AM	1	15	1	0	1	7	20	0	9	1	1	0	0	3	0	0	59	0	0	0	0
7:45 AM	1	12	0	0	1	2	23	0	11	1	1	0	5	6	0	0	63	0	0	0	0
7:50 AM	4	12	0	0	0	12	30	0	8	0	0	0	1	3	0	0	70	0	0	0	1
7:55 AM	2	4	2	0	1	9	18	0	10	2	0	0	0	2	2	0	52	0	0	0	0
8:00 AM	4	9	0	0	0	13	14	0	17	0	0	0	1	2	0	0	60	0	0	0	0
8:05 AM	2	11	0	0	0	15	17	0	13	1	3	0	1	1	1	0	65	0	0	0	1
8:10 AM	1	8	1	0	0	12	28	0	14	2	0	0	4	1	1	0	72	1	0	1	1
8:15 AM	0	14	0	0	0	17	14	0	11	1	1	0	1	0	1	0	60	0	0	1	0
8:20 AM	0	9	0	0	0	7	25	0	10	0	3	0	1	2	0	0	57	0	0	0	0
8:25 AM	2	6	0	0	0	3	18	0	8	0	4	0	1	2	0	0	44	0	0	0	0
8:30 AM	3	12	0	0	0	12	14	0	8	2	0	0	0	2	0	0	53	0	1	1	0
8:35 AM	3	11	3	0	0	7	11	0	5	2	0	0	0	2	0	0	44	1	0	1	0
8:40 AM	1	9	0	0	0	11	16	0	7	0	2	0	0	1	0	0	47	0	0	1	0
8:45 AM	2	4	0	0	1	10	9	0	6	0	0	0	1	0	0	0	33	0	0	1	0
8:50 AM	1	17	0	0	0	10	17	0	12	1	0	0	1	1	0	0	60	0	0	3	0
8:55 AM	0	7	1	0	0	11	10	0	12	1	3	0	0	2	0	0	47	0	0	1	0
Total Survey	54	217	12	0	4	220	454	0	226	18	24	2	19	46	6	0	1,300	3	1	14	6

15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	11	14	0	0	0	18	63	0	25	3	2	1	0	5	0	0	141	0	0	2	1
7:15 AM	11	20	3	0	0	25	58	0	20	1	2	0	1	7	1	0	149	1	0	1	2
7:30 AM	6	38	2	0	1	26	69	0	29	1	3	1	1	7	0	0	183	0	0	1	0
7:45 AM	7	28	2	0	2	23	71	0	29	3	1	0	6	11	2	0	185	0	0	0	1
8:00 AM	7	28	1	0	0	40	59	0	44	3	3	0	6	4	2	0	197	1	0	1	2
8:15 AM	2	29	0	0	0	27	57	0	29	1	8	0	3	4	1	0	161	0	0	1	0
8:30 AM	7	32	3	0	0	30	41	0	20	4	2	0	0	5	0	0	144	1	1	3	0
8:45 AM	3	28	1	0	1	31	36	0	30	2	3	0	2	3	0	0	140	0	0	5	0
Total Survey	54	217	12	0	4	220	454	0	226	18	24	2	19	46	6	0	1,300	3	1	14	6

Peak Hour Summary
7:25 AM to 8:25 AM

By Approach	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	155	150	305	0	382	261	643	0	151	308	459	1	47	16	63	0	735	1	0	3	3
%HV	3.2%				5.2%				6.0%				6.4%				5.0%				
PHF	0.84				0.93				0.76				0.62				0.93				

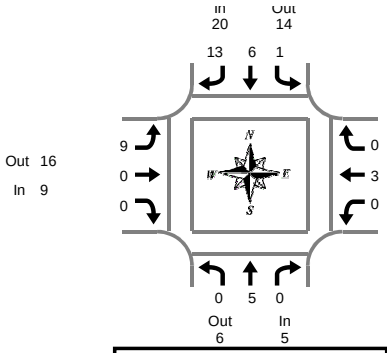
By Movement	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	26	124	5	155	3	123	256	382	132	8	11	151	16	26	5	47	735
%HV	0.0%	4.0%	0.0%	3.2%	33.3%	4.9%	5.1%	5.2%	6.8%	0.0%	0.0%	6.0%	0.0%	11.5%	0.0%	6.4%	5.0%
PHF	0.59	0.79	0.63	0.84	0.38	0.70	0.88	0.93	0.75	0.50	0.69	0.76	0.67	0.54	0.42	0.62	0.93

Rolling Hour Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
7:00 AM	35	100	7	0	3	92	261	0	103	8	8	2	8	30	3	0	658	1	0	4	4
7:15 AM	31	114	8	0	3	114	257	0	122	8	9	1	14	29	5	0	714	2	0	3	5
7:30 AM	22	123	5	0	3	116	256	0	131	8	15	1	16	26	5	0	726	1	0	3	3
7:45 AM	23	117	6	0	2	120	228	0	122	11	14	0	15	24	5	0	687	2	1	5	3
8:00 AM	19	117	5	0	1	128	193	0	123	10	16	0	11	16	3	0	642	2	1	10	2

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



SE 42nd Ave & SE Harrison St

Tuesday, September 25, 2018
7:00 AM to 9:00 AM

Peak Hour Summary
7:25 AM to 8:25 AM

Heavy Vehicle 5-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	2
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:10 AM	0	0	0	0	0	0	2	2	1	0	0	1	0	0	0	0	3
7:15 AM	0	0	1	1	0	0	1	1	1	0	0	1	0	0	0	0	3
7:20 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
7:25 AM	0	0	0	0	0	2	2	4	1	0	0	1	0	0	0	0	5
7:30 AM	0	0	0	0	0	0	2	2	1	0	0	1	0	0	0	0	3
7:35 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
7:40 AM	0	2	0	2	1	0	0	1	2	0	0	2	0	0	0	0	5
7:45 AM	0	0	0	0	0	0	3	3	0	0	0	0	0	2	0	2	5
7:50 AM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
7:55 AM	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	2
8:00 AM	0	2	0	2	0	1	0	1	2	0	0	2	0	0	0	0	5
8:05 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
8:10 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
8:15 AM	0	0	0	0	0	2	1	3	0	0	0	0	0	0	0	0	3
8:20 AM	0	0	0	0	0	0	2	2	1	0	0	1	0	1	0	1	4
8:25 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
8:35 AM	0	1	1	2	0	0	0	0	1	0	0	1	0	0	0	0	3
8:40 AM	0	1	0	1	0	0	0	0	1	0	1	2	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
8:50 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
8:55 AM	0	0	0	0	0	1	2	3	2	0	1	3	0	0	0	0	6
Total Survey	0	10	2	12	1	7	22	30	16	0	2	18	0	3	0	3	63

Heavy Vehicle 15-Minute Interval Summary
7:00 AM to 9:00 AM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	0	0	0	0	0	3	3	2	0	0	2	0	0	0	0	5
7:15 AM	0	0	1	1	0	2	4	6	2	0	0	2	0	0	0	0	9
7:30 AM	0	2	0	2	1	0	3	4	3	0	0	3	0	0	0	0	9
7:45 AM	0	1	0	1	0	1	5	6	0	0	0	0	0	2	0	2	9
8:00 AM	0	2	0	2	0	1	0	1	4	0	0	4	0	0	0	0	7
8:15 AM	0	1	0	1	0	2	3	5	1	0	0	1	0	1	0	1	8
8:30 AM	0	2	1	3	0	0	1	1	2	0	1	3	0	0	0	0	7
8:45 AM	0	2	0	2	0	1	3	4	2	0	1	3	0	0	0	0	9
Total Survey	0	10	2	12	1	7	22	30	16	0	2	18	0	3	0	3	63

Heavy Vehicle Peak Hour Summary
7:25 AM to 8:25 AM

By Approach	Northbound SE 42nd Ave			Southbound SE 42nd Ave			Eastbound SE Harrison St			Westbound SE Harrison St			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	5	6	11	20	14	34	9	16	25	3	1	4	37
PHF	0.42			0.71			0.56			0.38			0.77

By Movement	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	0	5	0	5	1	6	13	20	9	0	0	9	0	3	0	3	37
PHF	0.00	0.42	0.00	0.42	0.25	0.75	0.65	0.71	0.56	0.00	0.00	0.56	0.00	0.38	0.00	0.38	0.77

Heavy Vehicle Rolling Hour Summary
7:00 AM to 9:00 AM

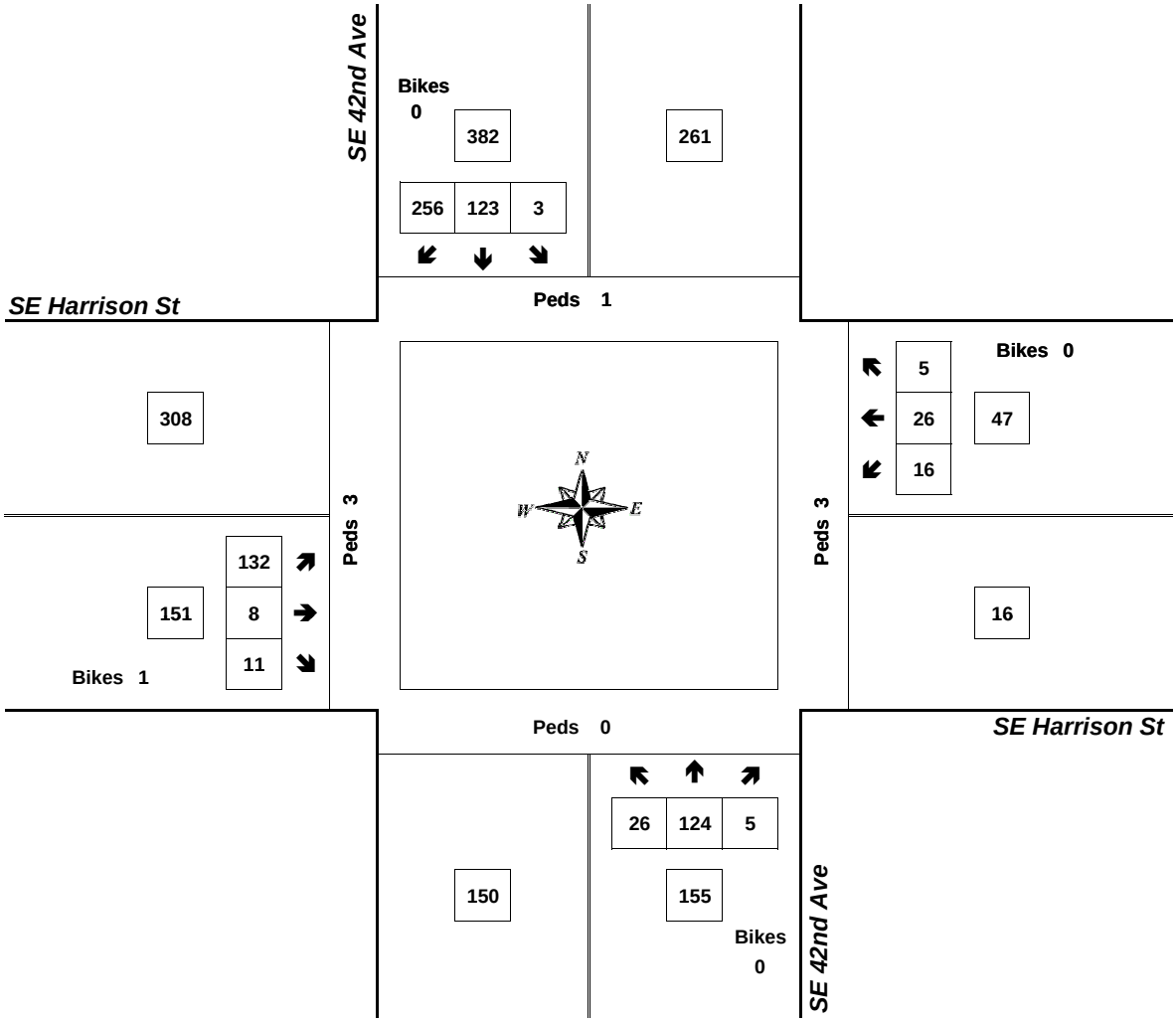
Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
7:00 AM	0	3	1	4	1	3	15	19	7	0	0	7	0	2	0	2	32
7:15 AM	0	5	1	6	1	4	12	17	9	0	0	9	0	2	0	2	34
7:30 AM	0	6	0	6	1	4	11	16	8	0	0	8	0	3	0	3	33
7:45 AM	0	6	1	7	0	4	9	13	7	0	1	8	0	3	0	3	31
8:00 AM	0	7	1	8	0	4	7	11	9	0	2	11	0	1	0	1	31

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

SE 42nd Ave & SE Harrison St

7:25 AM to 8:25 AM
Tuesday, September 25, 2018

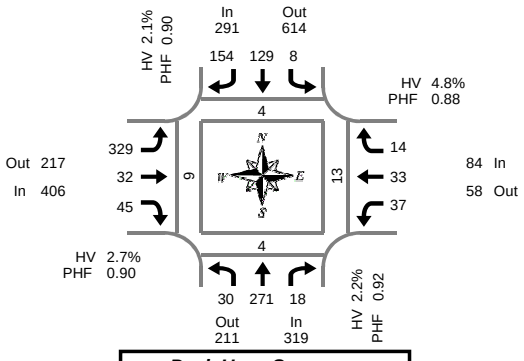


Approach	PHF	HV%	Volume
EB	0.76	6.0%	151
WB	0.62	6.4%	47
NB	0.84	3.2%	155
SB	0.93	5.2%	382
Intersection	0.93	5.0%	735

Count Period: 7:00 AM to 9:00 AM

Total Vehicle Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740



Peak Hour Summary
4:50 PM to 5:50 PM

SE 42nd Ave & SE Harrison St

Tuesday, September 25, 2018
4:00 PM to 6:00 PM

5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	2	26	0	0	0	8	9	0	21	1	1	0	0	3	2	0	73	0	0	2	3
4:05 PM	3	18	3	0	0	10	14	0	19	1	1	0	3	1	0	0	73	0	0	2	0
4:10 PM	4	28	1	0	0	7	12	0	19	1	3	0	0	6	1	0	82	0	0	1	0
4:15 PM	1	23	2	0	0	13	10	0	24	3	2	0	1	2	1	0	82	0	1	2	0
4:20 PM	2	20	1	0	0	9	5	0	23	3	6	0	3	1	0	0	73	0	0	0	0
4:25 PM	2	28	1	0	0	8	18	0	22	4	9	0	1	0	0	0	93	0	0	0	0
4:30 PM	3	18	1	0	0	8	9	0	21	3	2	0	2	4	1	0	72	1	0	0	0
4:35 PM	1	18	0	0	0	5	17	0	22	4	4	0	4	1	0	0	76	0	0	0	0
4:40 PM	1	24	3	0	0	8	11	0	26	1	3	0	0	2	0	0	79	1	0	0	0
4:45 PM	2	17	2	0	0	10	13	0	30	1	2	0	2	3	1	0	83	1	0	0	0
4:50 PM	1	27	2	0	0	16	11	0	25	3	1	0	1	3	1	0	91	0	0	0	0
4:55 PM	3	17	2	0	0	10	15	1	27	3	2	0	2	4	1	0	86	1	1	0	0
5:00 PM	0	20	3	0	1	13	15	0	30	0	3	0	2	3	3	0	93	0	0	1	3
5:05 PM	2	30	5	0	1	8	13	0	22	2	3	1	1	4	3	0	94	0	1	2	0
5:10 PM	5	20	0	0	0	7	12	0	36	5	6	0	3	4	0	0	98	0	0	0	2
5:15 PM	1	23	1	0	0	10	12	0	16	4	8	0	2	3	1	0	81	0	0	0	0
5:20 PM	5	21	2	0	2	10	13	0	31	1	3	0	7	2	2	0	99	1	1	1	2
5:25 PM	5	25	1	0	0	10	15	0	26	1	1	0	1	0	2	0	87	0	1	2	0
5:30 PM	1	22	0	0	2	11	14	0	30	3	6	0	4	4	0	0	97	0	0	2	2
5:35 PM	3	22	1	0	0	15	10	0	30	2	1	0	7	1	1	0	93	0	0	1	0
5:40 PM	4	20	1	0	0	7	12	0	30	5	6	0	2	4	0	0	91	1	0	2	0
5:45 PM	0	24	0	0	2	12	12	0	26	3	5	0	5	1	0	0	90	1	0	2	0
5:50 PM	4	10	1	0	1	13	17	0	23	5	2	0	4	4	0	0	84	0	0	1	1
5:55 PM	1	14	3	0	1	9	11	0	16	2	4	1	1	3	2	0	67	0	0	0	0
Total Survey	56	515	36	0	10	237	300	1	595	61	84	2	58	63	22	0	2,037	7	5	21	13

15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	9	72	4	0	0	25	35	0	59	3	5	0	3	10	3	0	228	0	0	5	3
4:15 PM	5	71	4	0	0	30	33	0	69	10	17	0	5	3	1	0	248	0	1	2	0
4:30 PM	5	60	4	0	0	21	37	0	69	8	9	0	6	7	1	0	227	2	0	0	0
4:45 PM	6	61	6	0	0	36	39	1	82	7	5	0	5	10	3	0	260	2	1	0	0
5:00 PM	7	70	8	0	2	28	40	0	88	7	12	1	6	11	6	0	285	0	1	3	5
5:15 PM	11	69	4	0	2	30	40	0	73	6	12	0	10	5	5	0	267	1	2	3	2
5:30 PM	8	64	2	0	2	33	36	0	90	10	13	0	13	9	1	0	281	1	0	5	2
5:45 PM	5	48	4	0	4	34	40	0	65	10	11	1	10	8	2	0	241	1	0	3	1
Total Survey	56	515	36	0	10	237	300	1	595	61	84	2	58	63	22	0	2,037	7	5	21	13

Peak Hour Summary
4:50 PM to 5:50 PM

By Approach	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total	Pedestrians Crosswalk			
	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes	In	Out	Total	Bikes		North	South	East	West
Volume	319	211	530	0	291	614	905	1	406	217	623	1	84	58	142	0	1,100	4	4	13	9
%HV	2.2%				2.1%				2.7%				4.8%				2.5%				
PHF	0.92				0.90				0.90				0.88				0.96				

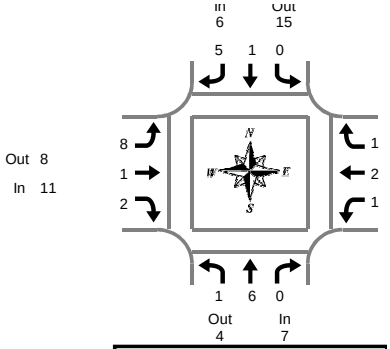
By Movement	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	30	271	18	319	8	129	154	291	329	32	45	406	37	33	14	84	1,100
%HV	3.3%	2.2%	0.0%	2.2%	0.0%	0.8%	3.2%	2.1%	2.4%	3.1%	4.4%	2.7%	2.7%	6.1%	7.1%	4.8%	2.5%
PHF	0.68	0.93	0.45	0.92	0.50	0.83	0.90	0.90	0.91	0.73	0.66	0.90	0.66	0.75	0.50	0.88	0.96

Rolling Hour Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total	Pedestrians Crosswalk			
	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes	L	T	R	Bikes		North	South	East	West
4:00 PM	25	264	18	0	0	112	144	1	279	28	36	0	19	30	8	0	963	4	2	7	3
4:15 PM	23	262	22	0	2	115	149	1	308	32	43	1	22	31	11	0	1,020	4	3	5	5
4:30 PM	29	260	22	0	4	115	156	1	312	28	38	1	27	33	15	0	1,039	5	4	6	7
4:45 PM	32	264	20	0	6	127	155	1	333	30	42	1	34	35	15	0	1,093	4	4	11	9
5:00 PM	31	251	18	0	10	125	156	0	316	33	48	2	39	33	14	0	1,074	3	3	14	10

Heavy Vehicle Summary

Clay Carney
(503) 833-2740



SE 42nd Ave & SE Harrison St

Tuesday, September 25, 2018
4:00 PM to 6:00 PM

Peak Hour Summary
4:50 PM to 5:50 PM

Heavy Vehicle 5-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
4:05 PM	0	1	0	1	0	0	1	1	0	0	0	0	0	0	0	0	2
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	1	3	0	0	3	0	0	0	0	4
4:20 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
4:25 PM	0	2	0	2	0	0	2	2	0	0	0	0	0	0	0	0	4
4:30 PM	0	1	0	1	0	0	1	1	1	0	0	1	0	0	0	0	3
4:35 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
4:40 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
4:45 PM	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	2
4:50 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	1	0	1	3
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	1	0	1	0	1	1	2	1	0	0	1	0	0	0	0	4
5:05 PM	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	3	4
5:10 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
5:15 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:20 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1
5:25 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	2	2	3	0	0	3	0	0	0	0	5
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	1	0	0	1	0	0	1	1	1	0	1	2	0	0	0	0	4
5:45 PM	0	2	0	2	0	0	0	0	1	0	0	1	0	0	0	0	3
5:50 PM	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	2
5:55 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	2
Total Survey	1	10	0	11	0	1	14	15	16	1	2	19	2	4	1	7	52

Heavy Vehicle 15-Minute Interval Summary
4:00 PM to 6:00 PM

Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	1	0	1	0	0	1	1	1	0	0	1	0	1	0	1	4
4:15 PM	0	2	0	2	0	0	4	4	3	0	0	3	0	0	0	0	9
4:30 PM	0	1	0	1	0	0	3	3	1	0	0	1	0	0	0	0	5
4:45 PM	0	1	0	1	0	0	1	1	1	1	0	2	0	1	0	1	5
5:00 PM	0	3	0	3	0	1	1	2	1	0	1	2	1	1	1	3	10
5:15 PM	0	0	0	0	0	0	1	1	2	0	0	2	0	0	0	0	3
5:30 PM	1	0	0	1	0	0	3	3	4	0	1	5	0	0	0	0	9
5:45 PM	0	2	0	2	0	0	0	0	3	0	0	3	1	1	0	2	7
Total Survey	1	10	0	11	0	1	14	15	16	1	2	19	2	4	1	7	52

Heavy Vehicle Peak Hour Summary
4:50 PM to 5:50 PM

By Approach	Northbound SE 42nd Ave			Southbound SE 42nd Ave			Eastbound SE Harrison St			Westbound SE Harrison St			Total
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total	
Volume	7	4	11	6	15	21	11	8	19	4	1	5	28
PHF	0.58			0.50			0.55			0.33			0.70

By Movement	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
Volume	1	6	0	7	0	1	5	6	8	1	2	11	1	2	1	4	28
PHF	0.25	0.50	0.00	0.58	0.00	0.25	0.42	0.50	0.50	0.25	0.50	0.55	0.25	0.50	0.25	0.33	0.70

Heavy Vehicle Rolling Hour Summary
4:00 PM to 6:00 PM

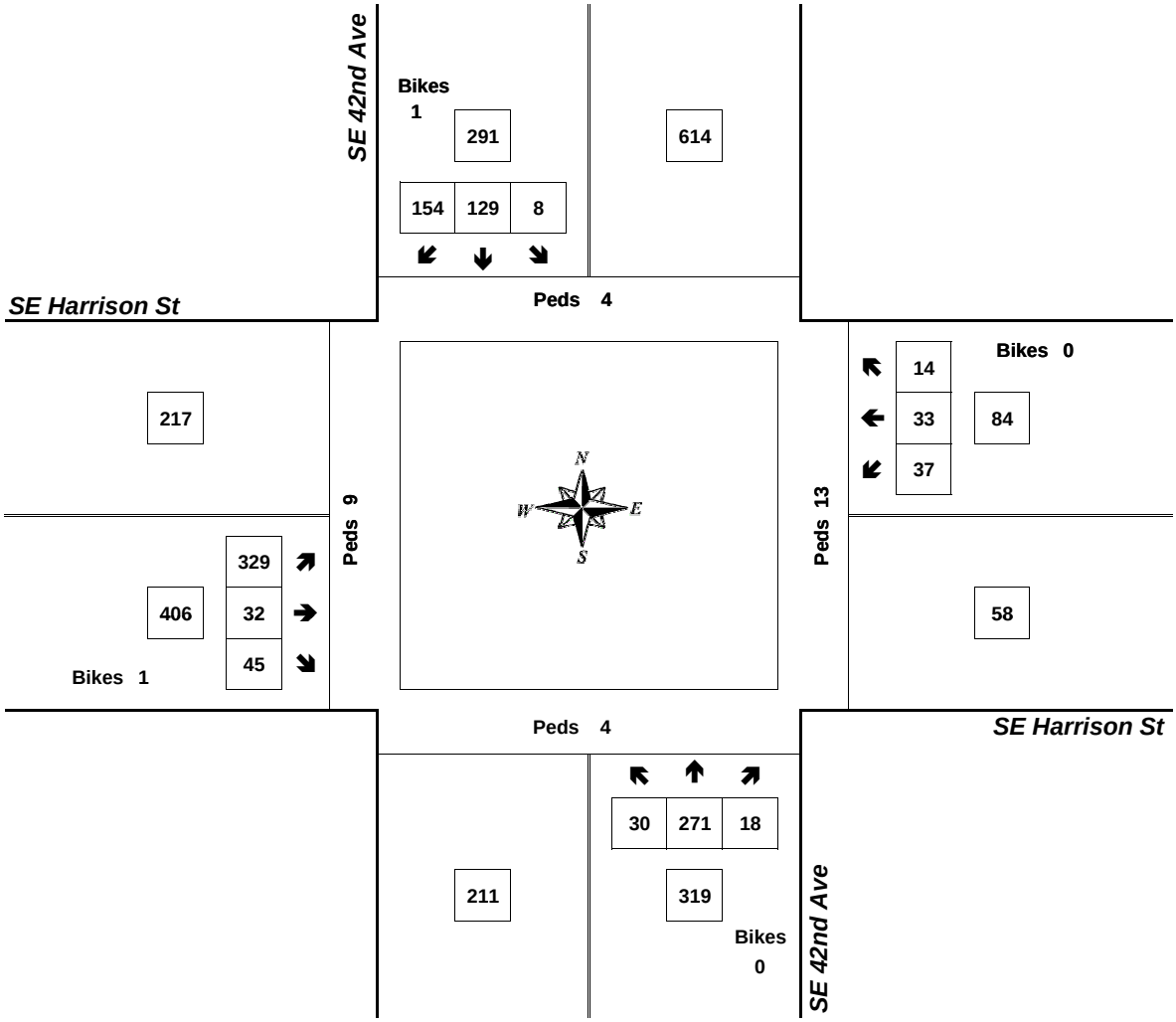
Interval Start Time	Northbound SE 42nd Ave				Southbound SE 42nd Ave				Eastbound SE Harrison St				Westbound SE Harrison St				Interval Total
	L	T	R	Total	L	T	R	Total	L	T	R	Total	L	T	R	Total	
4:00 PM	0	5	0	5	0	0	9	9	6	1	0	7	0	2	0	2	23
4:15 PM	0	7	0	7	0	1	9	10	6	1	1	8	1	2	1	4	29
4:30 PM	0	5	0	5	0	1	6	7	5	1	1	7	1	2	1	4	23
4:45 PM	1	4	0	5	0	1	6	7	8	1	2	11	1	2	1	4	27
5:00 PM	1	5	0	6	0	1	5	6	10	0	2	12	2	2	1	5	29

Peak Hour Summary

All Traffic Data Services Inc.
Clay Carney
(503) 833-2740

SE 42nd Ave & SE Harrison St

4:50 PM to 5:50 PM
Tuesday, September 25, 2018



Approach	PHF	HV%	Volume
EB	0.90	2.7%	406
WB	0.88	4.8%	84
NB	0.92	2.2%	319
SB	0.90	2.1%	291
Intersection	0.96	2.5%	1,100

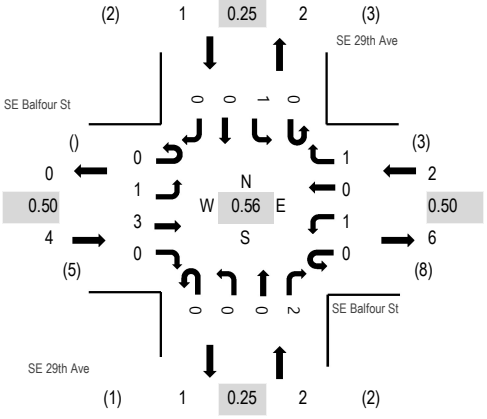
Count Period: 4:00 PM to 6:00 PM

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

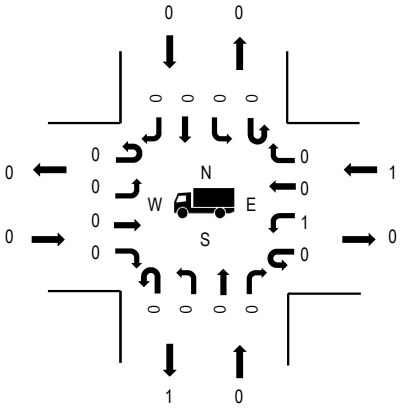
Location: SE 29th Ave & SE Balfour St AM
Date: Tuesday, July 14, 2020
Peak Hour: 07:20 AM - 08:20 AM
Peak 15-Minutes: 07:25 AM - 07:40 AM

Peak Hour

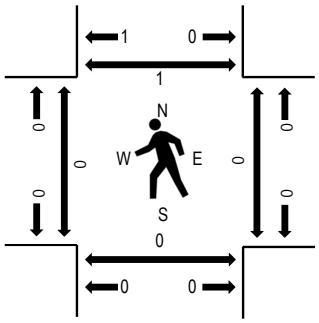
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.50
WB	50.0%	0.50
NB	0.0%	0.25
SB	0.0%	0.25
All	11.1%	0.56

Traffic Counts - Motorized Vehicles

Interval Start Time	SE Balfour St Eastbound				SE Balfour St Westbound				SE 29th Ave Northbound				SE 29th Ave Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
7:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
7:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
7:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
7:25 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	9
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
7:35 AM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	8
7:40 AM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	2	6
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
7:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
7:55 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:05 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:10 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
8:20 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:25 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
8:35 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:40 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	2	
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:50 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8:55 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Count Total	0	1	4	0	0	1	0	2	0	0	0	2	0	2	0	0	12	
Peak Hour	0	1	3	0	0	1	0	1	0	0	0	2	0	1	0	0	9	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

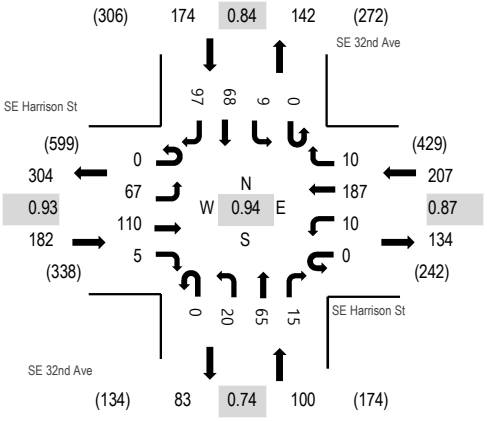
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0	7:00 AM	0	0	0	0	0
7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	1	1	7:05 AM	0	0	0	0	0
7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0	7:20 AM	0	0	0	0	0
7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0
7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0	7:35 AM	0	0	0	0	0
7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	0	0	7:45 AM	0	0	0	1	1
7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0	7:50 AM	0	0	0	0	0
7:55 AM	0	0	1	0	1	7:55 AM	0	0	0	0	0	7:55 AM	0	0	0	0	0
8:00 AM	0	0	0	0	0	8:00 AM	0	0	1	0	1	8:00 AM	0	0	0	0	0
8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0	8:05 AM	0	0	0	0	0
8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0	8:20 AM	0	0	0	0	0
8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0	8:30 AM	0	0	0	0	0
8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0	8:45 AM	0	0	0	0	0
8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0	8:50 AM	0	0	0	0	0
8:55 AM	0	0	0	0	0	8:55 AM	0	0	1	0	1	8:55 AM	0	0	0	0	0
Count Total	0	0	1	0	1	Count Total	0	0	2	1	3	Count Total	0	0	0	1	1
Peak Hour	0	0	1	0	1	Peak Hour	0	0	1	0	1	Peak Hour	0	0	0	1	1

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

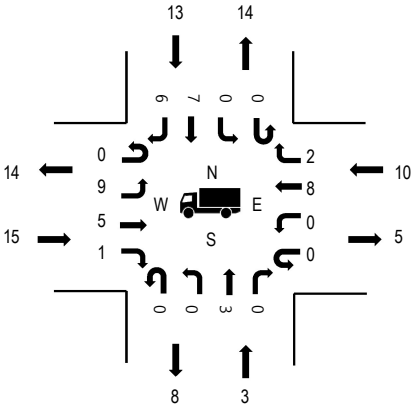
Location: SE 32nd Ave & SE Harrison St AM
Date: Tuesday, July 14, 2020
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour

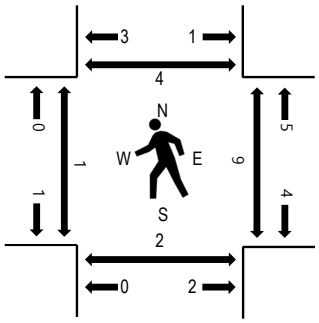
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	8.2%	0.93
WB	4.8%	0.87
NB	3.0%	0.74
SB	7.5%	0.84
All	6.2%	0.94

Traffic Counts - Motorized Vehicles

Interval Start Time	SE Harrison St Eastbound				SE Harrison St Westbound				SE 32nd Ave Northbound				SE 32nd Ave Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM	0	3	10	0	0	0	14	2	0	2	2	0	0	1	2	8	44	584
7:05 AM	0	3	6	0	0	1	17	0	0	1	3	0	0	2	1	3	37	591
7:10 AM	0	5	8	0	0	1	13	0	0	1	3	2	0	0	3	2	38	616
7:15 AM	0	4	4	0	0	0	17	1	0	0	5	0	0	1	7	6	45	624
7:20 AM	0	8	6	0	0	0	12	1	0	0	3	0	0	0	4	8	42	628
7:25 AM	0	6	8	1	0	2	12	2	0	2	6	1	0	3	1	7	51	655
7:30 AM	0	5	3	0	0	1	21	2	0	4	3	1	0	0	4	8	52	654
7:35 AM	0	7	12	0	0	0	17	0	0	1	3	1	0	2	5	10	58	653
7:40 AM	0	3	6	0	0	2	24	1	0	0	8	1	0	1	3	9	58	654
7:45 AM	0	3	9	0	0	0	19	2	0	2	8	0	0	0	7	9	59	645
7:50 AM	0	11	11	0	0	1	16	2	0	0	6	0	0	0	4	5	56	650
7:55 AM	0	5	8	1	0	0	18	1	0	2	3	0	0	1	0	5	44	652
8:00 AM	0	7	8	0	0	1	15	3	0	3	5	1	0	1	5	2	51	663
8:05 AM	0	4	15	0	0	0	20	1	0	1	7	2	0	0	4	8	62	
8:10 AM	0	6	7	0	0	2	14	0	0	0	3	0	0	0	6	8	46	
8:15 AM	0	7	11	1	0	1	9	1	0	1	1	1	0	0	8	8	49	
8:20 AM	0	5	10	1	0	0	19	2	0	5	10	0	0	2	4	11	69	
8:25 AM	0	7	7	0	0	0	17	0	0	4	3	1	0	1	7	3	50	
8:30 AM	0	4	8	1	0	0	21	0	0	0	6	0	0	0	2	9	51	
8:35 AM	0	5	11	0	0	1	18	2	0	1	4	1	0	2	4	10	59	
8:40 AM	0	7	3	0	0	0	14	1	0	0	6	1	0	1	8	8	49	
8:45 AM	0	7	11	0	0	2	17	0	0	3	6	5	0	0	5	8	64	
8:50 AM	0	4	10	2	0	1	11	0	0	1	9	3	0	2	7	8	58	
8:55 AM	0	4	9	0	0	2	12	0	0	1	5	0	0	0	8	14	55	
Count Total	0	130	201	7	0	18	387	24	0	35	118	21	0	20	109	177	1,247	
Peak Hour	0	67	110	5	0	10	187	10	0	20	65	15	0	9	68	97	663	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	0	0	1	1	7:00 AM	0	0	0	1	1	7:00 AM	0	0	0	0	0
7:05 AM	2	0	0	1	3	7:05 AM	0	0	0	0	0	7:05 AM	0	0	0	0	0
7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0	7:10 AM	0	0	0	0	0
7:15 AM	1	0	2	0	3	7:15 AM	0	0	0	0	0	7:15 AM	0	0	0	0	0
7:20 AM	2	0	3	1	6	7:20 AM	0	0	0	0	0	7:20 AM	0	2	2	1	5
7:25 AM	0	0	0	0	0	7:25 AM	0	0	0	0	0	7:25 AM	0	1	2	1	4
7:30 AM	0	0	0	0	0	7:30 AM	0	0	0	0	0	7:30 AM	0	0	2	1	3
7:35 AM	1	1	0	1	3	7:35 AM	0	0	0	0	0	7:35 AM	0	0	1	1	2
7:40 AM	0	0	1	1	2	7:40 AM	0	0	0	0	0	7:40 AM	0	0	0	0	0
7:45 AM	1	0	0	0	1	7:45 AM	0	0	0	2	2	7:45 AM	0	0	1	1	2
7:50 AM	3	0	1	2	6	7:50 AM	0	1	0	0	1	7:50 AM	0	1	0	0	1
7:55 AM	2	0	1	0	3	7:55 AM	0	0	0	0	0	7:55 AM	0	1	1	0	2
8:00 AM	2	0	2	1	5	8:00 AM	0	0	0	0	0	8:00 AM	0	1	1	0	2
8:05 AM	0	1	1	2	4	8:05 AM	0	0	0	0	0	8:05 AM	0	0	1	1	2
8:10 AM	1	1	1	1	4	8:10 AM	0	0	0	0	0	8:10 AM	0	0	0	0	0
8:15 AM	4	0	0	1	5	8:15 AM	0	0	0	0	0	8:15 AM	0	0	0	0	0
8:20 AM	1	0	1	3	5	8:20 AM	0	1	0	0	1	8:20 AM	0	0	1	0	1
8:25 AM	0	0	0	2	2	8:25 AM	0	0	0	0	0	8:25 AM	0	0	0	0	0
8:30 AM	1	0	1	0	2	8:30 AM	0	0	0	0	0	8:30 AM	1	0	0	0	1
8:35 AM	2	0	2	0	4	8:35 AM	0	0	0	0	0	8:35 AM	0	0	0	0	0
8:40 AM	0	0	0	1	1	8:40 AM	0	0	0	0	0	8:40 AM	0	0	0	0	0
8:45 AM	3	0	1	1	5	8:45 AM	0	0	0	0	0	8:45 AM	0	0	1	1	2
8:50 AM	0	0	0	1	1	8:50 AM	0	0	0	0	0	8:50 AM	0	0	1	0	1
8:55 AM	1	1	1	0	3	8:55 AM	0	0	0	0	0	8:55 AM	1	1	4	2	8
Count Total	27	4	18	20	69	Count Total	0	2	0	3	5	Count Total	2	7	18	9	36
Peak Hour	15	3	10	13	41	Peak Hour	0	1	0	0	1	Peak Hour	2	2	9	4	17

ALL TRAFFIC DATA SERVICES
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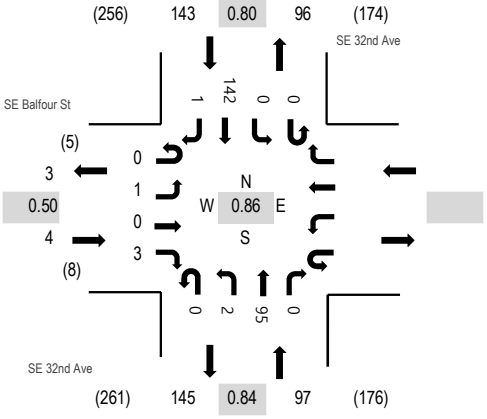
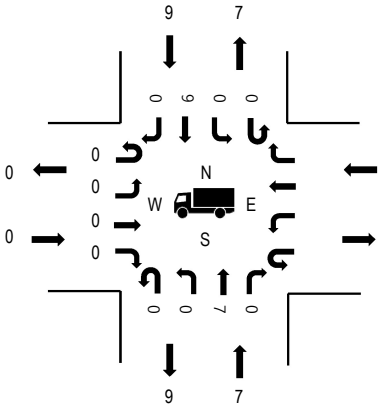
Location: SE 32nd Ave & SE Balfour St AM
Date: Tuesday, July 14, 2020
Peak Hour: 07:55 AM - 08:55 AM
Peak 15-Minutes: 08:40 AM - 08:55 AM

Peak Hour

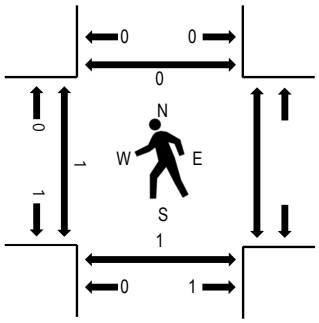
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.50
WB		
NB	7.2%	0.84
SB	6.3%	0.80
All	6.6%	0.86

Traffic Counts - Motorized Vehicles

Interval Start Time	SE Balfour St Eastbound				Westbound				SE 32nd Ave Northbound				SE 32nd Ave Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM	0	0	0	0					0	0	9	0	0	0	10	0	19	199
7:05 AM	0	0	0	0					0	0	2	0	0	0	5	0	7	197
7:10 AM	0	0	0	0					0	0	2	0	0	0	11	0	13	211
7:15 AM	0	0	0	0					0	0	10	0	0	0	9	0	19	217
7:20 AM	0	0	0	1					0	0	3	0	0	0	13	0	17	219
7:25 AM	0	0	0	0					0	0	11	0	0	0	4	0	15	218
7:30 AM	0	0	0	0					0	0	7	0	0	0	11	0	18	222
7:35 AM	0	0	0	2					0	0	6	0	0	0	14	0	22	225
7:40 AM	0	0	0	1					0	0	7	0	0	0	8	1	17	221
7:45 AM	0	0	0	0					0	0	8	0	0	0	11	0	19	225
7:50 AM	0	0	0	0					0	0	9	0	0	0	3	0	12	228
7:55 AM	0	0	0	0					0	1	11	0	0	0	9	0	21	244
8:00 AM	0	0	0	0					0	0	7	0	0	0	10	0	17	241
8:05 AM	0	0	0	0					0	0	8	0	0	0	13	0	21	
8:10 AM	0	0	0	0					0	0	5	0	0	0	14	0	19	
8:15 AM	0	1	0	1					0	0	7	0	0	0	12	0	21	
8:20 AM	0	0	0	0					0	0	6	0	0	0	10	0	16	
8:25 AM	0	0	0	0					0	1	11	0	0	0	7	0	19	
8:30 AM	0	0	0	0					0	0	9	0	0	0	12	0	21	
8:35 AM	0	0	0	1					0	0	5	0	0	0	12	0	18	
8:40 AM	0	0	0	1					0	0	9	0	0	0	11	0	21	
8:45 AM	0	0	0	0					0	0	8	0	0	0	14	0	22	
8:50 AM	0	0	0	0					0	0	9	0	0	0	18	1	28	
8:55 AM	0	0	0	0					0	1	4	0	0	0	13	0	18	
Count Total	0	1	0	7					0	3	173	0	0	0	254	2	440	
Peak Hour	0	1	0	3					0	2	95	0	0	0	142	1	244	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM	0	1		0	1	7:00 AM	0	0		0	0	7:00 AM	0	0		0	0
7:05 AM	0	0		0	0	7:05 AM	1	0		0	1	7:05 AM	0	0		0	0
7:10 AM	0	0		0	0	7:10 AM	0	0		0	0	7:10 AM	0	0		0	0
7:15 AM	0	2		0	2	7:15 AM	0	1		0	1	7:15 AM	2	0		0	2
7:20 AM	0	0		1	1	7:20 AM	0	1		0	1	7:20 AM	0	0		0	0
7:25 AM	0	0		0	0	7:25 AM	0	0		0	0	7:25 AM	0	0		0	0
7:30 AM	0	0		0	0	7:30 AM	0	0		0	0	7:30 AM	0	0		0	0
7:35 AM	0	1		2	3	7:35 AM	0	0		0	0	7:35 AM	0	0		0	0
7:40 AM	0	0		0	0	7:40 AM	0	0		1	1	7:40 AM	0	0		0	0
7:45 AM	0	1		1	2	7:45 AM	0	0		0	0	7:45 AM	0	0		0	0
7:50 AM	0	0		0	0	7:50 AM	0	0		0	0	7:50 AM	0	2		0	2
7:55 AM	0	0		0	0	7:55 AM	0	0		0	0	7:55 AM	0	0		0	0
8:00 AM	0	1		1	2	8:00 AM	0	1		0	1	8:00 AM	0	0		0	0
8:05 AM	0	1		1	2	8:05 AM	0	0		0	0	8:05 AM	0	0		0	0
8:10 AM	0	2		1	3	8:10 AM	0	0		0	0	8:10 AM	0	0		0	0
8:15 AM	0	1		1	2	8:15 AM	0	0		0	0	8:15 AM	0	0		0	0
8:20 AM	0	0		2	2	8:20 AM	0	0		1	1	8:20 AM	0	0		0	0
8:25 AM	0	1		0	1	8:25 AM	0	0		1	1	8:25 AM	0	1		0	1
8:30 AM	0	0		1	1	8:30 AM	1	0		0	1	8:30 AM	0	0		0	0
8:35 AM	0	0		1	1	8:35 AM	0	0		0	0	8:35 AM	0	0		0	0
8:40 AM	0	0		0	0	8:40 AM	0	0		0	0	8:40 AM	0	0		0	0
8:45 AM	0	1		1	2	8:45 AM	0	0		0	0	8:45 AM	0	0		0	0
8:50 AM	0	0		0	0	8:50 AM	0	1		0	1	8:50 AM	1	0		0	1
8:55 AM	0	1		0	1	8:55 AM	0	0		1	1	8:55 AM	1	0		0	1
Count Total	0	13		13	26	Count Total	2	4		4	10	Count Total	4	3		0	7
Peak Hour	0	7		9	16	Peak Hour	1	2		2	5	Peak Hour	1	1		0	2

ALL TRAFFIC DATA SERVICES
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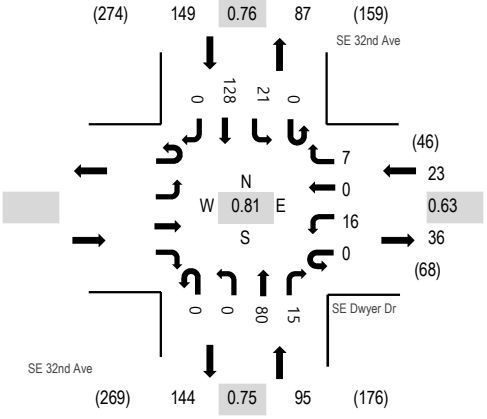
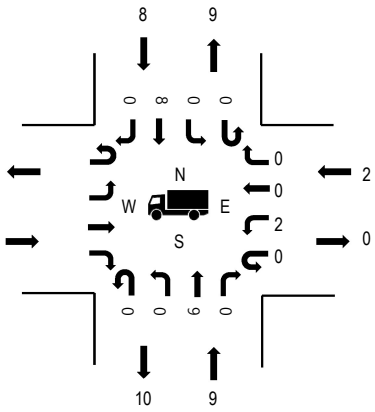
Location: SE 32nd Ave & SE Dwyer Dr AM
Date: Tuesday, July 14, 2020
Peak Hour: 08:00 AM - 09:00 AM
Peak 15-Minutes: 08:45 AM - 09:00 AM

Peak Hour

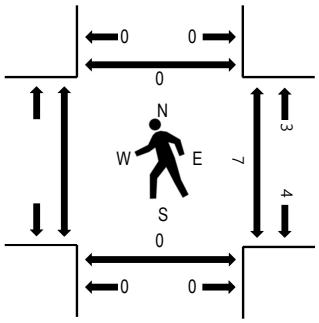
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB		
WB	8.7%	0.63
NB	9.5%	0.75
SB	5.4%	0.76
All	7.1%	0.81

Traffic Counts - Motorized Vehicles

Interval Start Time	Eastbound				SE Dwyer Dr Westbound				SE 32nd Ave Northbound				SE 32nd Ave Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
7:00 AM					0	0	0	2	0	0	3	2	0	1	14	0	22	229
7:05 AM					0	0	0	0	0	0	3	2	0	1	8	0	14	228
7:10 AM					0	0	0	0	0	0	3	2	0	1	5	0	11	237
7:15 AM					0	0	0	1	0	0	7	0	0	0	9	0	17	250
7:20 AM					0	0	0	0	0	0	5	2	0	1	14	0	22	250
7:25 AM					0	3	0	1	0	0	6	3	0	0	9	0	22	249
7:30 AM					0	3	0	4	0	0	7	1	0	0	5	0	20	246
7:35 AM					0	1	0	0	0	0	4	1	0	2	16	0	24	243
7:40 AM					0	4	0	1	0	0	3	1	0	1	11	0	21	238
7:45 AM					0	2	0	1	0	0	7	0	0	3	11	0	24	241
7:50 AM					0	0	0	0	0	0	8	4	0	1	4	0	17	241
7:55 AM					0	0	0	0	0	0	6	1	0	2	6	0	15	256
8:00 AM					0	2	0	1	0	0	8	0	0	4	6	0	21	267
8:05 AM					0	3	0	2	0	0	5	1	0	1	11	0	23	
8:10 AM					0	1	0	0	0	0	5	2	0	2	14	0	24	
8:15 AM					0	2	0	1	0	0	4	0	0	0	10	0	17	
8:20 AM					0	1	0	0	0	0	5	2	0	0	13	0	21	
8:25 AM					0	1	0	1	0	0	8	1	0	1	7	0	19	
8:30 AM					0	0	0	0	0	0	8	0	0	0	9	0	17	
8:35 AM					0	2	0	0	0	0	7	1	0	2	7	0	19	
8:40 AM					0	2	0	1	0	0	6	2	0	0	13	0	24	
8:45 AM					0	1	0	0	0	0	10	1	0	2	10	0	24	
8:50 AM					0	0	0	0	0	0	9	4	0	4	15	0	32	
8:55 AM					0	1	0	1	0	0	5	1	0	5	13	0	26	
Count Total					0	29	0	17	0	0	142	34	0	34	240	0	496	
Peak Hour					0	16	0	7	0	0	80	15	0	21	128	0	267	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

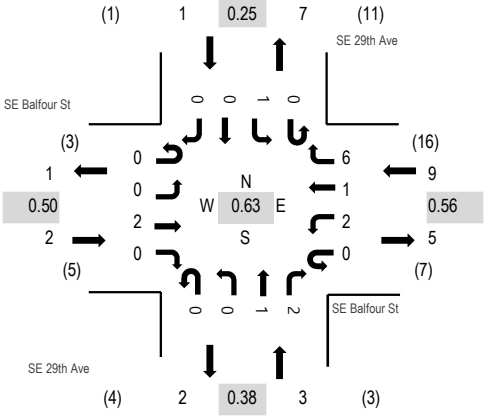
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
7:00 AM		0	0	1	1	7:00 AM		0	0	1	1	7:00 AM		0	1	0	1
7:05 AM		1	0	1	2	7:05 AM		0	0	0	0	7:05 AM		0	0	0	0
7:10 AM		0	0	1	1	7:10 AM		0	0	0	0	7:10 AM		0	0	0	0
7:15 AM		1	0	0	1	7:15 AM		0	0	0	0	7:15 AM		0	0	0	0
7:20 AM		1	0	1	2	7:20 AM		0	0	0	0	7:20 AM		0	0	0	0
7:25 AM		0	0	0	0	7:25 AM		0	0	0	0	7:25 AM		0	1	0	1
7:30 AM		0	0	0	0	7:30 AM		0	0	0	0	7:30 AM		0	1	0	1
7:35 AM		1	0	1	2	7:35 AM		0	0	0	0	7:35 AM		0	1	0	1
7:40 AM		0	0	1	1	7:40 AM		0	1	1	2	7:40 AM		0	0	0	0
7:45 AM		1	0	0	1	7:45 AM		0	0	0	0	7:45 AM		0	0	0	0
7:50 AM		1	0	1	2	7:50 AM		1	0	0	1	7:50 AM		0	0	0	0
7:55 AM		0	0	0	0	7:55 AM		0	0	0	0	7:55 AM		0	1	0	1
8:00 AM		1	1	0	2	8:00 AM		0	0	0	0	8:00 AM		0	0	0	0
8:05 AM		1	1	2	4	8:05 AM		0	0	0	0	8:05 AM		0	0	0	0
8:10 AM		1	0	0	1	8:10 AM		0	0	0	0	8:10 AM		0	1	0	1
8:15 AM		1	0	1	2	8:15 AM		0	0	0	0	8:15 AM		0	1	0	1
8:20 AM		1	0	2	3	8:20 AM		0	0	0	0	8:20 AM		0	0	0	0
8:25 AM		0	0	1	1	8:25 AM		0	0	0	0	8:25 AM		0	0	0	0
8:30 AM		1	0	0	1	8:30 AM		0	0	1	1	8:30 AM		0	0	0	0
8:35 AM		1	0	0	1	8:35 AM		0	0	0	0	8:35 AM		0	0	0	0
8:40 AM		0	0	1	1	8:40 AM		0	0	0	0	8:40 AM		0	1	0	1
8:45 AM		1	0	0	1	8:45 AM		0	0	0	0	8:45 AM		0	1	0	1
8:50 AM		0	0	1	1	8:50 AM		0	0	0	0	8:50 AM		0	2	0	2
8:55 AM		1	0	0	1	8:55 AM		0	0	0	0	8:55 AM		0	1	0	1
Count Total		15	2	15	32	Count Total		1	1	3	5	Count Total		0	12	0	12
Peak Hour		9	2	8	19	Peak Hour		0	0	1	1	Peak Hour		0	7	0	7

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

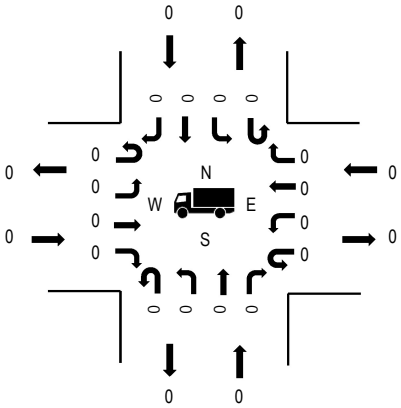
Location: SE 29th Ave & SE Balfour St PM
Date: Tuesday, July 14, 2020
Peak Hour: 05:00 PM - 06:00 PM
Peak 15-Minutes: 05:40 PM - 05:55 PM

Peak Hour

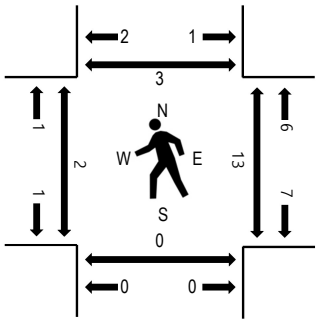
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.50
WB	0.0%	0.56
NB	0.0%	0.38
SB	0.0%	0.25
All	0.0%	0.63

Traffic Counts - Motorized Vehicles

Interval Start Time	SE Balfour St Eastbound				SE Balfour St Westbound				SE 29th Ave Northbound				SE 29th Ave Southbound				Total	Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right		
4:00 PM	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	3	10
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
4:35 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	12
4:40 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	11
4:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	13
4:50 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	12
4:55 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	14
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:10 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	3	
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:20 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	
5:35 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	
5:40 PM	0	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	3	
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
5:50 PM	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	3	
5:55 PM	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	3	
Count Total	0	1	4	0	0	4	3	9	0	0	1	2	0	1	0	0	25	
Peak Hour	0	0	2	0	0	2	1	6	0	0	1	2	0	1	0	0	15	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0	4:00 PM	0	0	0	0	0
4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0	4:10 PM	0	0	0	0	0
4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0	4:15 PM	0	0	0	0	0
4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0	4:25 PM	0	0	0	0	0
4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0	4:30 PM	0	0	0	0	0
4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0	4:35 PM	0	0	0	0	0
4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0	4:40 PM	0	0	0	0	0
4:45 PM	0	0	0	0	0	4:45 PM	0	0	1	0	1	4:45 PM	0	0	0	0	0
4:50 PM	0	0	1	0	1	4:50 PM	0	0	0	1	1	4:50 PM	0	0	0	0	0
4:55 PM	1	0	0	0	1	4:55 PM	0	0	0	0	0	4:55 PM	0	0	1	0	1
5:00 PM	0	0	0	0	0	5:00 PM	0	0	0	0	0	5:00 PM	0	0	1	1	2
5:05 PM	0	0	0	0	0	5:05 PM	0	0	0	0	0	5:05 PM	0	0	2	0	2
5:10 PM	0	0	0	0	0	5:10 PM	0	0	1	0	1	5:10 PM	0	0	4	1	5
5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0	5:15 PM	0	0	0	0	0
5:20 PM	0	0	0	0	0	5:20 PM	0	0	0	0	0	5:20 PM	0	0	2	0	2
5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0	5:25 PM	0	0	0	0	0
5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0	5:30 PM	0	0	0	0	0
5:35 PM	0	0	0	0	0	5:35 PM	0	0	0	0	0	5:35 PM	1	0	1	0	2
5:40 PM	0	0	0	0	0	5:40 PM	0	0	1	1	2	5:40 PM	0	0	1	1	2
5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	0	0	5:45 PM	0	0	2	0	2
5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	1	1	5:50 PM	0	0	0	0	0
5:55 PM	0	0	0	0	0	5:55 PM	0	0	0	0	0	5:55 PM	1	0	0	0	1
Count Total	1	0	1	0	2	Count Total	0	0	3	3	6	Count Total	2	0	14	3	19
Peak Hour	0	0	0	0	0	Peak Hour	0	0	2	2	4	Peak Hour	2	0	13	3	18

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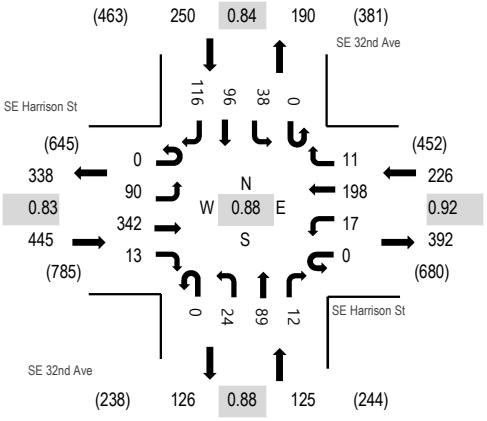
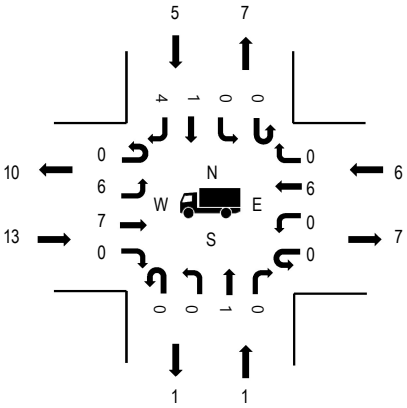
Location: SE 32nd Ave & SE Harrison St PM
Date: Tuesday, July 14, 2020
Peak Hour: 04:00 PM - 05:00 PM
Peak 15-Minutes: 04:35 PM - 04:50 PM

Peak Hour

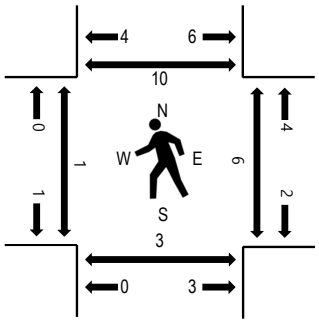
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	2.9%	0.83
WB	2.7%	0.92
NB	0.8%	0.88
SB	2.0%	0.84
All	2.4%	0.88

Traffic Counts - Motorized Vehicles

Interval Start Time	SE Harrison St Eastbound				SE Harrison St Westbound				SE 32nd Ave Northbound				SE 32nd Ave Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	8	28	2	0	0	15	0	0	3	3	0	0	3	11	13	86	1,046
4:05 PM	0	3	30	1	0	1	18	1	0	5	9	1	0	2	5	11	87	1,040
4:10 PM	0	6	31	0	0	1	15	1	0	3	5	1	0	2	11	7	83	1,033
4:15 PM	0	10	35	0	0	1	24	2	0	1	6	0	0	0	9	18	106	1,029
4:20 PM	0	9	28	1	0	3	9	1	0	3	8	1	0	3	6	8	80	1,001
4:25 PM	0	8	23	2	0	2	12	1	0	3	7	1	0	1	4	9	73	991
4:30 PM	0	1	8	0	0	1	16	1	0	0	8	0	0	10	4	9	58	996
4:35 PM	0	9	52	2	0	1	19	0	0	4	9	2	0	6	8	12	124	1,009
4:40 PM	0	8	28	2	0	2	18	1	0	1	9	2	0	4	13	10	98	969
4:45 PM	0	12	19	2	0	2	19	1	0	0	3	1	0	3	9	4	75	933
4:50 PM	0	7	33	0	0	2	14	1	0	0	11	2	0	0	14	6	90	931
4:55 PM	0	9	27	1	0	1	19	1	0	1	11	1	0	4	2	9	86	911
5:00 PM	0	6	25	0	0	0	15	0	0	1	8	0	0	0	12	13	80	898
5:05 PM	0	6	18	0	0	1	19	2	0	1	4	2	0	2	10	15	80	
5:10 PM	0	9	14	0	0	0	16	2	0	1	8	2	0	3	15	9	79	
5:15 PM	0	8	28	2	0	2	14	2	0	2	4	3	0	2	5	6	78	
5:20 PM	0	9	28	0	0	3	16	0	0	1	6	1	0	1	1	4	70	
5:25 PM	0	14	17	0	0	1	16	3	0	5	6	2	0	2	7	5	78	
5:30 PM	0	4	14	1	0	0	16	0	0	1	14	1	0	4	7	9	71	
5:35 PM	0	11	26	0	0	2	15	5	0	3	3	2	0	1	9	7	84	
5:40 PM	0	3	22	0	0	0	11	2	0	1	5	2	0	4	7	5	62	
5:45 PM	0	7	20	1	0	1	16	3	0	2	6	1	0	3	8	5	73	
5:50 PM	0	7	13	0	0	2	21	2	0	1	6	1	0	1	8	8	70	
5:55 PM	0	8	18	1	0	1	17	0	0	2	8	3	0	2	5	8	73	
Count Total	0	182	585	18	0	30	390	32	0	45	167	32	0	63	190	210	1,944	
Peak Hour	0	90	342	13	0	17	198	11	0	24	89	12	0	38	96	116	1,046	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	1	0	1	0	2	4:00 PM	0	0	0	0	0	4:00 PM	0	1	1	0	2
4:05 PM	1	0	0	0	1	4:05 PM	0	0	0	0	0	4:05 PM	0	0	0	0	0
4:10 PM	1	0	0	0	1	4:10 PM	0	0	0	0	0	4:10 PM	0	1	1	0	2
4:15 PM	1	0	1	1	3	4:15 PM	2	0	0	0	2	4:15 PM	0	1	1	0	2
4:20 PM	1	1	0	1	3	4:20 PM	0	0	0	0	0	4:20 PM	0	0	0	0	0
4:25 PM	1	0	1	0	2	4:25 PM	0	0	0	0	0	4:25 PM	0	1	0	1	2
4:30 PM	1	0	1	1	3	4:30 PM	0	0	0	0	0	4:30 PM	1	1	0	1	3
4:35 PM	1	0	0	0	1	4:35 PM	0	1	0	0	1	4:35 PM	0	0	3	1	4
4:40 PM	1	0	0	0	1	4:40 PM	0	0	1	0	1	4:40 PM	0	0	0	2	2
4:45 PM	2	0	1	1	4	4:45 PM	0	0	0	0	0	4:45 PM	0	0	2	4	6
4:50 PM	1	0	1	0	2	4:50 PM	0	1	0	1	2	4:50 PM	0	0	1	1	2
4:55 PM	1	0	0	1	2	4:55 PM	0	0	0	0	0	4:55 PM	0	0	0	0	0
5:00 PM	0	0	1	0	1	5:00 PM	0	0	1	0	1	5:00 PM	0	0	1	1	2
5:05 PM	1	0	0	0	1	5:05 PM	1	0	0	0	1	5:05 PM	0	0	0	0	0
5:10 PM	1	0	1	1	3	5:10 PM	0	0	1	0	1	5:10 PM	0	1	1	1	3
5:15 PM	0	0	2	0	2	5:15 PM	0	0	0	0	0	5:15 PM	0	1	1	1	3
5:20 PM	2	0	0	0	2	5:20 PM	0	0	0	0	0	5:20 PM	0	0	2	0	2
5:25 PM	1	0	0	1	2	5:25 PM	1	0	0	0	1	5:25 PM	0	0	1	2	3
5:30 PM	1	1	1	2	5	5:30 PM	0	0	0	0	0	5:30 PM	0	0	1	3	4
5:35 PM	3	0	0	0	3	5:35 PM	0	0	1	0	1	5:35 PM	0	0	0	0	0
5:40 PM	1	0	1	0	2	5:40 PM	0	0	0	1	1	5:40 PM	0	0	1	0	1
5:45 PM	0	0	0	1	1	5:45 PM	0	0	0	0	0	5:45 PM	0	0	0	1	1
5:50 PM	1	0	1	1	3	5:50 PM	0	0	0	0	0	5:50 PM	0	0	0	1	1
5:55 PM	1	0	0	0	1	5:55 PM	0	0	1	0	1	5:55 PM	0	0	0	0	0
Count Total	25	2	13	11	51	Count Total	4	2	5	2	13	Count Total	1	7	17	20	45
Peak Hour	13	1	6	5	25	Peak Hour	2	2	1	1	6	Peak Hour	1	5	9	10	25

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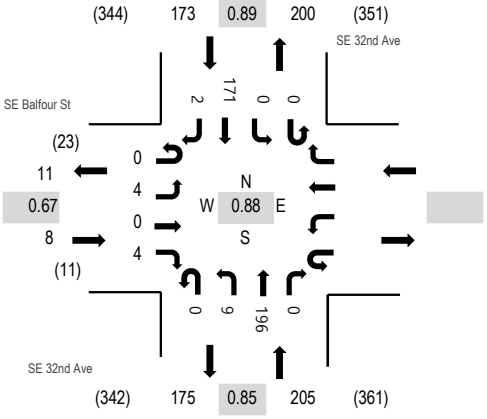
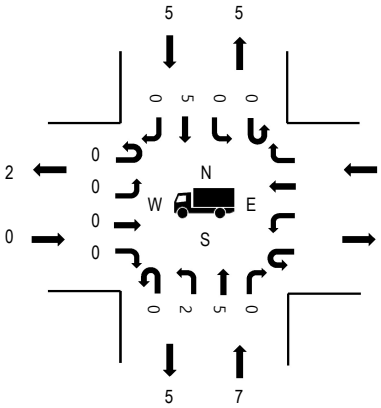
Location: SE 32nd Ave & SE Balfour St PM
Date: Tuesday, July 14, 2020
Peak Hour: 04:40 PM - 05:40 PM
Peak 15-Minutes: 05:25 PM - 05:40 PM

Peak Hour

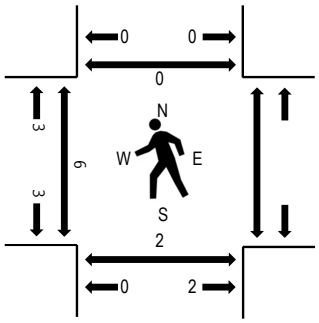
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

	HV%	PHF
EB	0.0%	0.67
WB		
NB	3.4%	0.85
SB	2.9%	0.89
All	3.1%	0.88

Traffic Counts - Motorized Vehicles

Interval Start Time	SE Balfour St Eastbound				Westbound				SE 32nd Ave Northbound				SE 32nd Ave Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM	0	0	0	0					0	1	14	0	0	0	16	0	31	359
4:05 PM	0	0	0	0					0	0	14	0	0	0	12	0	26	357
4:10 PM	0	1	0	0					0	0	9	0	0	0	17	0	27	369
4:15 PM	0	0	0	0					0	0	9	0	0	0	15	0	24	373
4:20 PM	0	0	0	0					0	1	18	0	0	0	8	0	27	372
4:25 PM	0	0	0	1					0	0	14	0	0	0	16	0	31	373
4:30 PM	0	0	0	0					0	0	14	0	0	0	20	0	34	379
4:35 PM	0	0	0	0					0	1	14	0	0	0	14	3	32	376
4:40 PM	0	0	0	1					0	0	17	0	0	0	13	0	31	386
4:45 PM	0	0	0	0					0	2	11	0	0	0	18	0	31	378
4:50 PM	0	0	0	0					0	1	18	0	0	0	14	0	33	373
4:55 PM	0	0	0	2					0	0	14	0	0	0	16	0	32	366
5:00 PM	0	0	0	0					0	0	12	0	0	0	17	0	29	357
5:05 PM	0	1	0	0					0	0	19	0	0	0	16	2	38	
5:10 PM	0	1	0	0					0	1	16	0	0	0	13	0	31	
5:15 PM	0	0	0	0					0	0	17	0	0	0	6	0	23	
5:20 PM	0	0	0	0					0	1	16	0	0	0	11	0	28	
5:25 PM	0	1	0	0					0	1	18	0	0	0	17	0	37	
5:30 PM	0	0	0	0					0	1	19	0	0	0	11	0	31	
5:35 PM	0	1	0	1					0	2	19	0	0	0	19	0	42	
5:40 PM	0	0	0	0					0	1	11	0	0	0	11	0	23	
5:45 PM	0	0	0	0					0	1	10	0	0	0	15	0	26	
5:50 PM	0	0	0	1					0	1	11	0	0	0	11	2	26	
5:55 PM	0	0	0	0					0	0	12	0	0	0	10	1	23	
Count Total	0	5	0	6					0	15	346	0	0	0	336	8	716	
Peak Hour	0	4	0	4					0	9	196	0	0	0	171	2	386	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

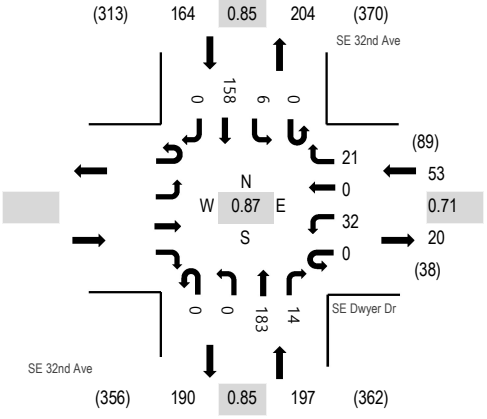
Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM	0	0		0	0	4:00 PM	0	0		0	0	4:00 PM	0	0		0	0
4:05 PM	0	1		0	1	4:05 PM	0	0		0	0	4:05 PM	0	0		0	0
4:10 PM	0	0		1	1	4:10 PM	0	0		0	0	4:10 PM	0	0		0	0
4:15 PM	0	0		0	0	4:15 PM	0	0		0	0	4:15 PM	0	0		0	0
4:20 PM	0	0		0	0	4:20 PM	0	1		0	1	4:20 PM	0	0		0	0
4:25 PM	0	1		1	2	4:25 PM	0	0		0	0	4:25 PM	1	0		0	1
4:30 PM	0	0		0	0	4:30 PM	0	0		0	0	4:30 PM	0	0		0	0
4:35 PM	0	0		0	0	4:35 PM	0	1		0	1	4:35 PM	0	0		0	0
4:40 PM	0	1		0	1	4:40 PM	0	0		1	1	4:40 PM	2	0		0	2
4:45 PM	0	1		1	2	4:45 PM	0	2		0	2	4:45 PM	0	0		0	0
4:50 PM	0	1		0	1	4:50 PM	1	0		0	1	4:50 PM	0	0		0	0
4:55 PM	0	1		1	2	4:55 PM	0	0		1	1	4:55 PM	0	0		0	0
5:00 PM	0	0		0	0	5:00 PM	0	0		0	0	5:00 PM	1	0		0	1
5:05 PM	0	1		1	2	5:05 PM	0	1		0	1	5:05 PM	0	0		0	0
5:10 PM	0	0		1	1	5:10 PM	0	0		0	0	5:10 PM	2	0		0	2
5:15 PM	0	0		0	0	5:15 PM	0	0		0	0	5:15 PM	0	0		0	0
5:20 PM	0	0		0	0	5:20 PM	0	0		0	0	5:20 PM	0	0		0	0
5:25 PM	0	1		1	2	5:25 PM	0	0		0	0	5:25 PM	1	2		0	3
5:30 PM	0	1		0	1	5:30 PM	0	0		0	0	5:30 PM	0	0		0	0
5:35 PM	0	0		0	0	5:35 PM	0	0		0	0	5:35 PM	0	0		0	0
5:40 PM	0	1		1	2	5:40 PM	0	0		0	0	5:40 PM	0	0		0	0
5:45 PM	0	0		0	0	5:45 PM	0	0		0	0	5:45 PM	2	0		0	2
5:50 PM	0	0		0	0	5:50 PM	0	0		0	0	5:50 PM	0	0		0	0
5:55 PM	0	0		0	0	5:55 PM	0	0		0	0	5:55 PM	0	0		0	0
Count Total	0	10		8	18	Count Total	1	5		2	8	Count Total	9	2		0	11
Peak Hour	0	7		5	12	Peak Hour	1	3		2	6	Peak Hour	6	2		0	8

ALL TRAFFIC DATA SERVICES
(303) 216-2439
www.alltrafficdata.net

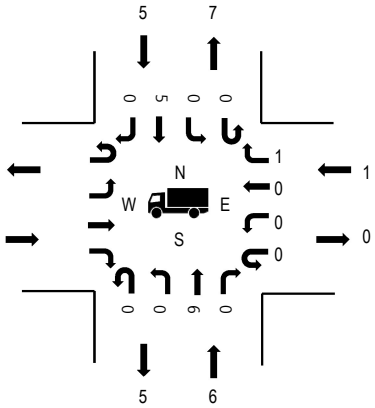
Location: SE 32nd Ave & SE Dwyer Dr PM
Date: Tuesday, July 14, 2020
Peak Hour: 04:35 PM - 05:35 PM
Peak 15-Minutes: 05:00 PM - 05:15 PM

Peak Hour

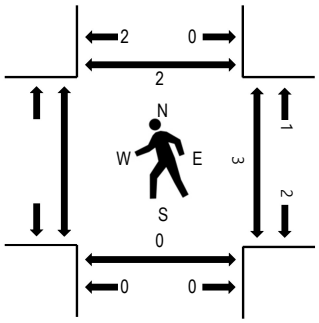
Motorized Vehicles



Heavy Vehicles



Pedestrians



Note: Total study counts contained in parentheses.

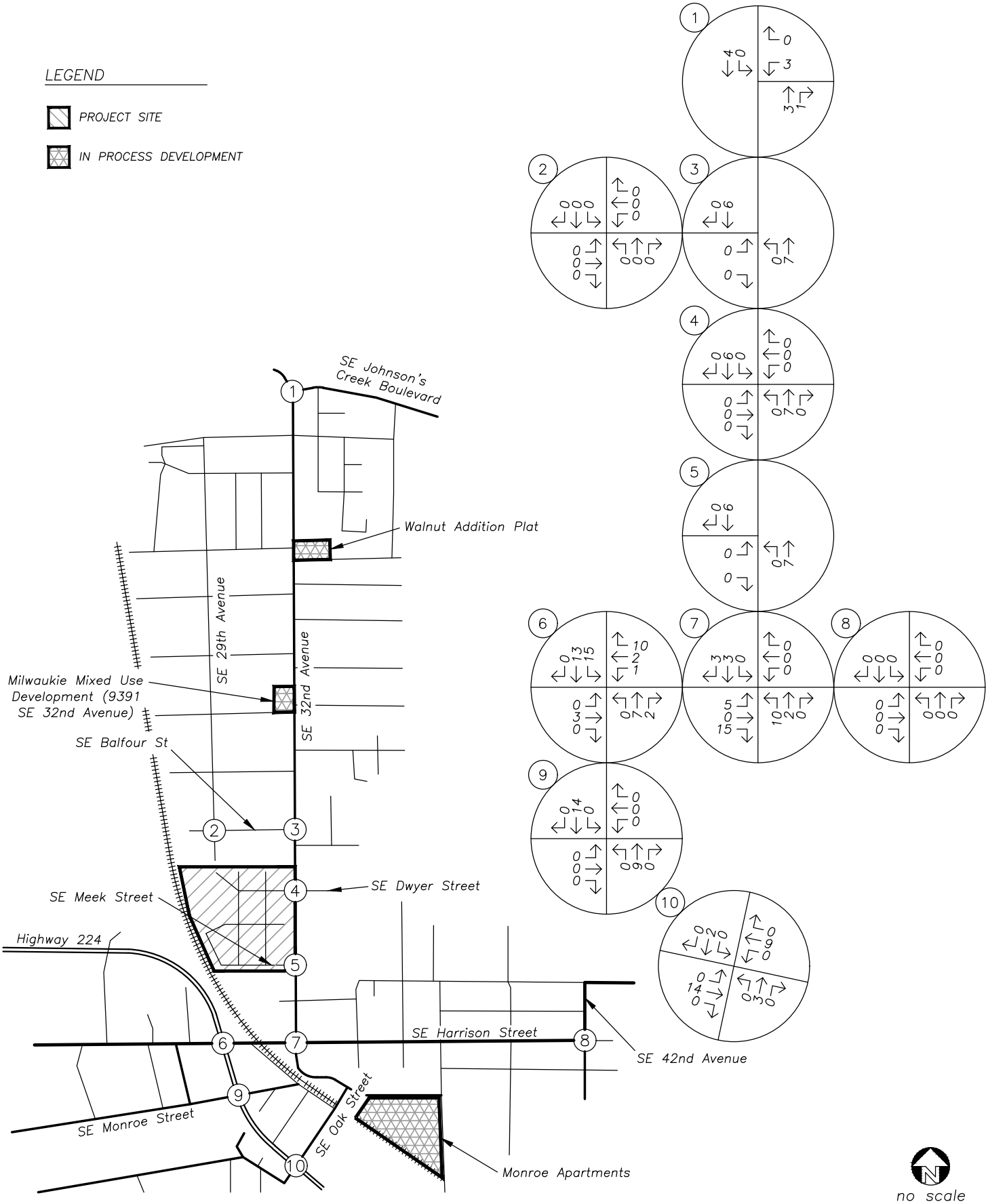
	HV%	PHF
EB		
WB	1.9%	0.71
NB	3.0%	0.85
SB	3.0%	0.85
All	2.9%	0.87

Traffic Counts - Motorized Vehicles

Interval Start Time	Eastbound				SE Dwyer Dr Westbound				SE 32nd Ave Northbound				SE 32nd Ave Southbound					Rolling Hour
	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	U-Turn	Left	Thru	Right	Total	
4:00 PM					0	2	0	1	0	0	15	1	0	2	15	0	36	364
4:05 PM					0	0	0	2	0	0	8	2	0	1	11	0	24	367
4:10 PM					0	0	0	1	0	0	12	0	0	0	12	0	25	382
4:15 PM					0	3	0	0	0	0	10	3	0	0	12	0	28	398
4:20 PM					0	3	0	0	0	0	18	1	0	0	10	0	32	399
4:25 PM					0	3	0	1	0	0	16	1	0	0	7	0	28	396
4:30 PM					0	0	0	1	0	0	6	0	0	0	19	0	26	404
4:35 PM					0	3	0	2	0	0	18	0	0	1	13	0	37	414
4:40 PM					0	5	0	2	0	0	10	1	0	0	14	0	32	412
4:45 PM					0	1	0	1	0	0	16	0	0	1	14	0	33	407
4:50 PM					0	3	0	0	0	0	15	1	0	1	13	0	33	405
4:55 PM					0	0	0	1	0	0	14	0	0	0	15	0	30	409
5:00 PM					0	3	0	2	0	0	13	3	0	0	18	0	39	400
5:05 PM					0	7	0	2	0	0	11	2	0	0	17	0	39	
5:10 PM					0	4	0	1	0	0	22	1	0	1	12	0	41	
5:15 PM					0	2	0	2	0	0	14	2	0	1	8	0	29	
5:20 PM					0	2	0	4	0	0	13	1	0	1	8	0	29	
5:25 PM					0	1	0	3	0	0	17	2	0	0	13	0	36	
5:30 PM					0	1	0	1	0	0	20	1	0	0	13	0	36	
5:35 PM					0	1	0	3	0	0	17	1	0	1	12	0	35	
5:40 PM					0	2	0	3	0	0	12	0	0	0	10	0	27	
5:45 PM					0	5	0	1	0	0	9	3	0	1	12	0	31	
5:50 PM					0	2	0	1	0	0	17	1	0	0	16	0	37	
5:55 PM					0	1	0	0	0	0	12	0	0	0	8	0	21	
Count Total					0	54	0	35	0	0	335	27	0	11	302	0	764	
Peak Hour					0	32	0	21	0	0	183	14	0	6	158	0	414	

Traffic Counts - Heavy Vehicles, Bicycles on Road, and Pedestrians/Bicycles on Crosswalk

Interval Start Time	Heavy Vehicles					Interval Start Time	Bicycles on Roadway					Interval Start Time	Pedestrians/Bicycles on Crosswalk				
	EB	NB	WB	SB	Total		EB	NB	WB	SB	Total		EB	NB	WB	SB	Total
4:00 PM		0	0	0	0	4:00 PM		0	0	0	0	4:00 PM		0	0	0	0
4:05 PM		0	0	0	0	4:05 PM		0	0	0	0	4:05 PM		0	0	0	0
4:10 PM		1	0	1	2	4:10 PM		0	0	0	0	4:10 PM		0	0	0	0
4:15 PM		0	0	0	0	4:15 PM		0	0	0	0	4:15 PM		0	0	0	0
4:20 PM		0	0	1	1	4:20 PM		0	0	0	0	4:20 PM		0	1	0	1
4:25 PM		1	0	0	1	4:25 PM		0	0	0	0	4:25 PM		0	0	0	0
4:30 PM		0	0	1	1	4:30 PM		0	0	0	0	4:30 PM		0	0	0	0
4:35 PM		0	0	0	0	4:35 PM		0	0	0	0	4:35 PM		0	0	0	0
4:40 PM		1	0	0	1	4:40 PM		0	0	1	1	4:40 PM		0	0	2	2
4:45 PM		0	0	1	1	4:45 PM		0	0	0	0	4:45 PM		0	0	0	0
4:50 PM		1	0	0	1	4:50 PM		0	1	0	1	4:50 PM		0	0	0	0
4:55 PM		1	0	1	2	4:55 PM		0	0	0	0	4:55 PM		0	3	0	3
5:00 PM		0	0	0	0	5:00 PM		0	0	0	0	5:00 PM		0	0	0	0
5:05 PM		0	0	1	1	5:05 PM		0	0	0	0	5:05 PM		0	0	0	0
5:10 PM		1	0	1	2	5:10 PM		1	0	0	1	5:10 PM		0	0	0	0
5:15 PM		0	0	0	0	5:15 PM		0	0	0	0	5:15 PM		0	0	0	0
5:20 PM		0	1	0	1	5:20 PM		0	0	0	0	5:20 PM		0	1	0	1
5:25 PM		0	0	1	1	5:25 PM		0	0	0	0	5:25 PM		0	0	0	0
5:30 PM		2	0	0	2	5:30 PM		0	0	0	0	5:30 PM		0	0	0	0
5:35 PM		0	0	0	0	5:35 PM		0	0	0	0	5:35 PM		0	0	0	0
5:40 PM		1	0	1	2	5:40 PM		0	0	0	0	5:40 PM		0	0	0	0
5:45 PM		0	0	0	0	5:45 PM		0	0	0	0	5:45 PM		0	0	0	0
5:50 PM		0	1	0	1	5:50 PM		0	0	0	0	5:50 PM		0	0	0	0
5:55 PM		0	0	0	0	5:55 PM		0	0	0	0	5:55 PM		0	0	0	0
Count Total		9	2	9	20	Count Total		1	1	1	3	Count Total		0	5	2	7
Peak Hour		6	1	5	12	Peak Hour		1	1	1	3	Peak Hour		0	4	2	6



TRAFFIC VOLUMES

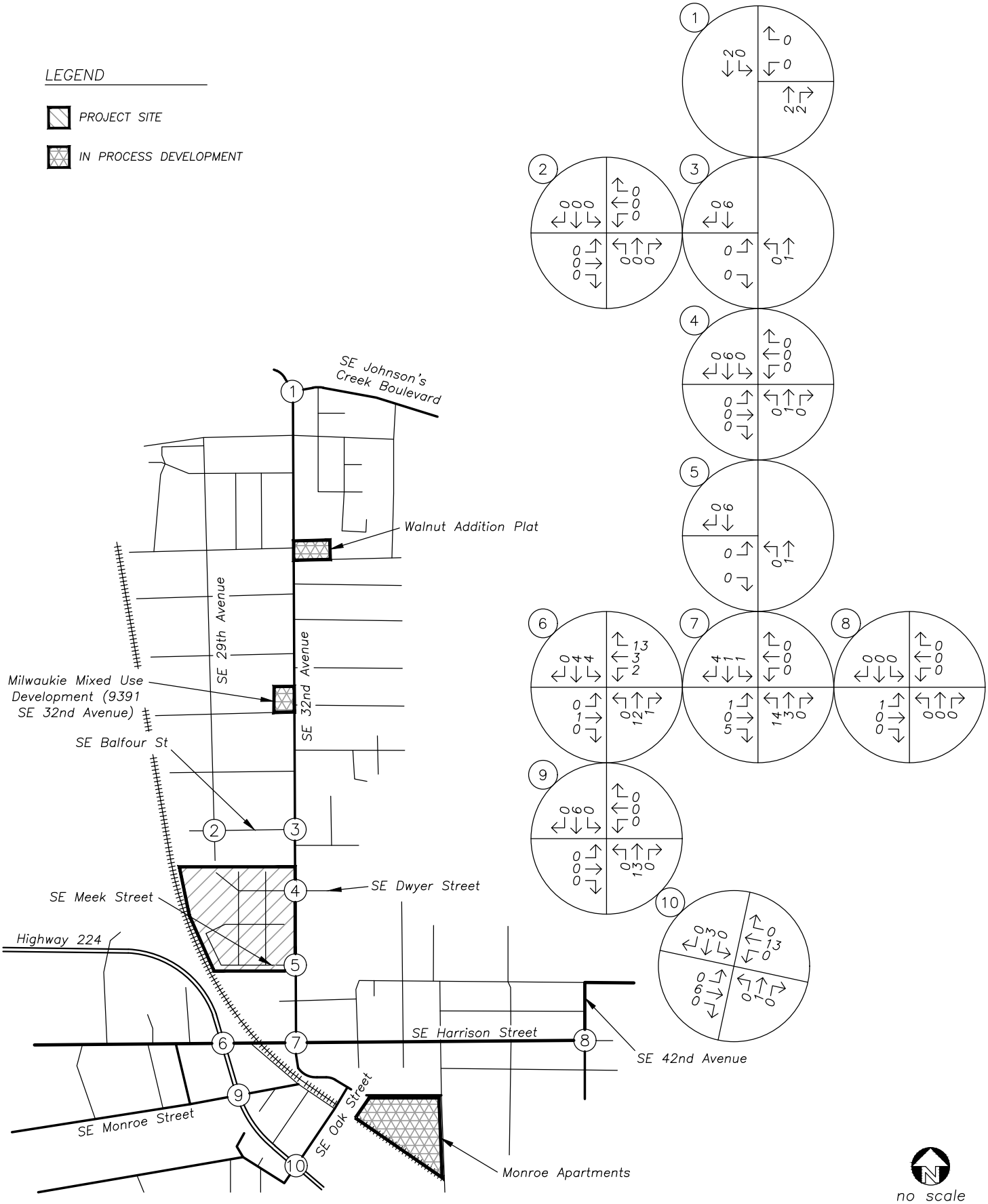
In-Process Trips

PM Peak Hour

lancaster mobley

Hillside Master Plan

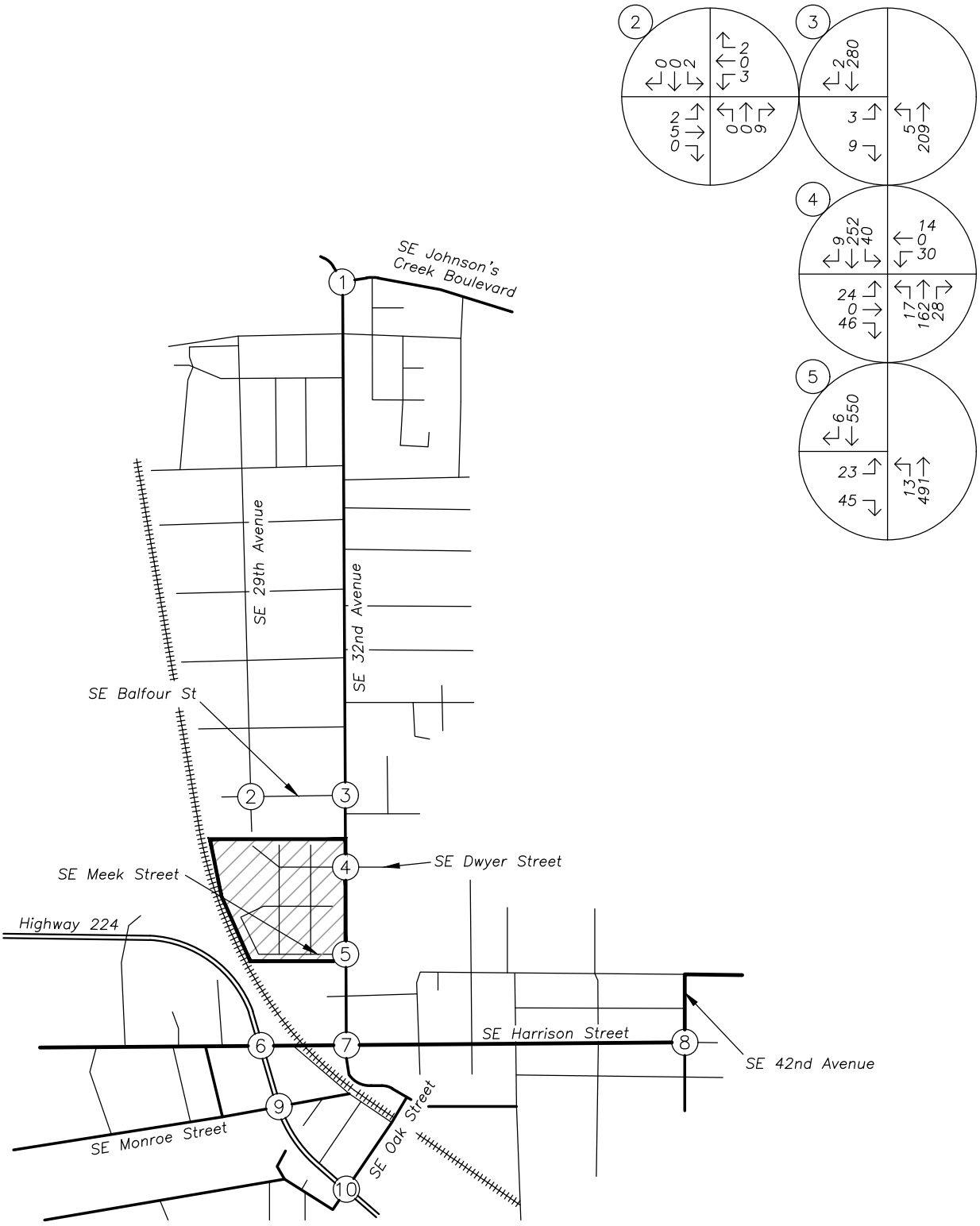
8/24/2020



TRAFFIC VOLUMES
In-Process Trips
AM Peak Hour

lancaster mobley

Hillside Master Plan
8/24/2020

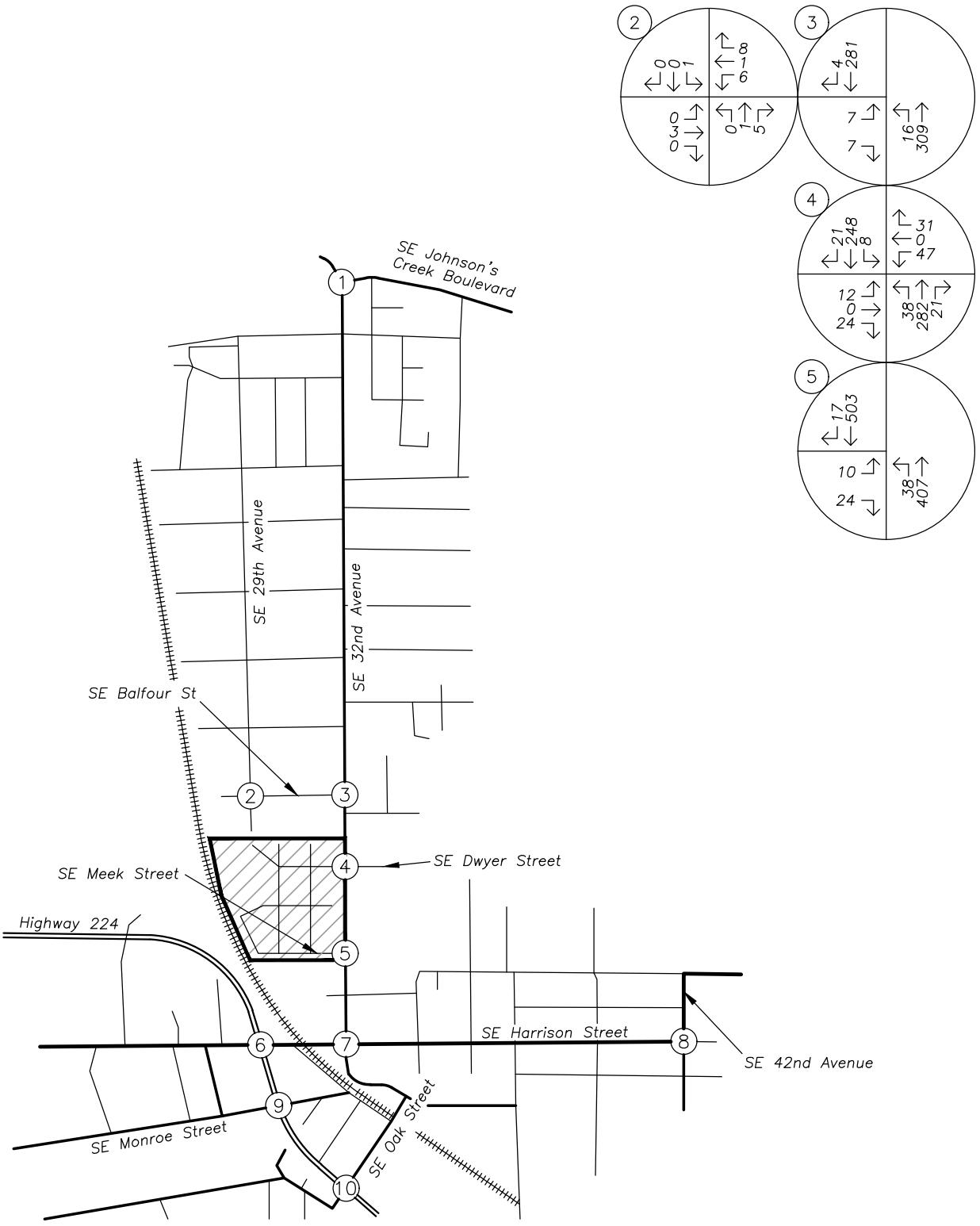


lancaster mobley

TRAFFIC VOLUMES

2026 Buildout Conditions with SE 29th Avenue Connection
AM Peak Hour

Hillside Master Plan
8/24/2020



TRAFFIC VOLUMES

2026 Buildout Conditions with SE 29th Avenue Connection
PM Peak Hour

lancaster mobley

Hillside Master Plan
8/24/2020

CITY OF PORTLAND SE, MULTNOMAH COUNTY

JOHNSON CREEK BLVD at 32ND AVE, City of Portland SE, Multnomah County, 01/01/2014 to 12/31/2018

1 - 4 of 10 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
13913	N	N	N				12/09/2015	16	SE JOHNSON CREEK BLVD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NO RPT							WE	0	SE 32ND AVE	N		TRF SIGNAL	N	WET	REAR		PRVTE	N -S									000	00
N							12P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	49	M	OR-Y		026	000	29
N							45 27 45.18	-122 37 47.45																OR<25				
																02	NONE 0	STOP										
																	PRVTE	N -S									011	00
																	PSNGR CAR		01	DRVR	INJC	37	F	OTH-Y		000	000	00
																								OR<25				
08305	N	N	N				07/18/2016	16	SE JOHNSON CREEK BLVD	INTER	3-LEG	N	N	CLR	S-STRGHT	01	NONE 0	STRGHT											29
NONE							MO	0	SE 32ND AVE	N		STOP SIGN	N	DRY	REAR		PRVTE	N -S									000	00
N							4P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	17	M	OR-Y		026	000	29
N							45 27 45.18	-122 37 47.45																OR<25				
																02	NONE 0	STRGHT										
																	PRVTE	N -S									015	00
																	PSNGR CAR		01	DRVR	INJC	26	F	OTH-Y		000	000	00
																								OR<25				
00795	N	N	N		N	N	01/31/2018	16	SE JOHNSON CREEK BLVD	INTER	3-LEG	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT											07,29
CITY							WE	0	SE 32ND AVE	N		TRF SIGNAL	N	WET	REAR		PRVTE	N -S									000	00
N							10A			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	00	M	UNK	043,026	000	07,29	
N							45 27 45.18	-122 37 47.44																UNK				
																02	NONE 0	STOP										
																	PRVTE	N -S									011	00
																	PSNGR CAR		01	DRVR	INJC	50	F	OR-Y		000	000	00
																								OR<25				
00998	N	N	N		N	N	01/12/2015	16	SE JOHNSON CREEK BLVD	INTER	3-LEG	N	N	CLR	S-1STOP	01	UNKN 9	STRGHT											07
CITY							MO	0	SE 32ND AVE	E		STOP SIGN	N	DRY	REAR		UNKN	E -W									000	00
N							6A			06	0		N	DLIT	INJ		UNKNOWN		01	DRVR	NONE	00	Unk	UNK		026	000	07
N							45 27 45.18	-122 37 47.45																UNK				
																02	NONE 0	STOP										
																	PRVTE	E -W									011	00
																	PSNGR CAR		01	DRVR	INJC	29	M	OR-Y		000	000	00
																								OR<25				
82647	N	N	N				06/12/2016	17	SE JOHNSON CREEK BLVD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE							SU	0	SE 32ND AVE	S		TRF SIGNAL	N	DRY	REAR		PRVTE	S -N									000	00
N							3P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	38	F	OR-Y		026	000	29
N							45 27 45.18	-122 37 47.45																OR<25				
																02	NONE 0	STOP										
																	PRVTE	S -N									011	00
																	PSNGR CAR		01	DRVR	INJC	44	F	OR-Y		000	000	00
																								OR<25				

CITY OF PORTLAND SE, MULTNOMAH COUNTY

JOHNSON CREEK BLVD at 32ND AVE, City of Portland SE, Multnomah County, 01/01/2014 to 12/31/2018

5 - 10 of 10 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	SPCL	USE	DAY	CLASS	CITY STREET / FIRST STREET / SECOND STREET	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	TRLR QTY / TYPE / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
												02	NONE 0	STOP											
													PRVTE	S -N									011		00
													PSNGR CAR		02	PSNG	INJC	46	M			000	000		00
85236	N N N		11/10/2016	16	SE JOHNSON CREEK BLVD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT												27
NONE			TH	0	SE 32ND AVE	S		STOP SIGN	N	DRY	REAR		N/A	N -S									000			00
N			4P			05	0		N	DUSK	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N			45 27 45.18	-122 37 47.45																UNK					
												02	NONE 9	STOP											
													N/A	N -S									011		00
													PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																				UNK					
84187	N N N		10/08/2017	16	SE JOHNSON CREEK BLVD	INTER	3-LEG	N	N	CLR	S-1STOP	01	NONE 9	STRGHT												29
NONE			SU	0	SE 32ND AVE	S		TRF SIGNAL	N	DRY	REAR		N/A	S -N									000			00
N			6P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N			45 27 45.18	-122 37 47.45																UNK					
												02	NONE 9	STOP											
													N/A	S -N									011		00
													PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																				UNK					
07532	N N N	N N	06/29/2016	16	SE JOHNSON CREEK BLVD	INTER	3-LEG	N	Y	CLD	FIX OBJ	01	NONE 0	TURN-R										055		17,08
CITY			WE	0	SE 32ND AVE	CN		TRF SIGNAL	N	DRY	FIX		PRVTE	E -N									000	055		00
N			8A			01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	71	M	OR-Y		001	028		17,08
N			45 27 45.18	-122 37 47.45																OR<25					
06838	Y N N	N N	06/27/2017	16	SE JOHNSON CREEK BLVD	INTER	3-LEG	N	N	CLR	OVERTURN	01	NONE 0	TURN-L												01
CITY			TU	0	SE 32ND AVE	CN		TRF SIGNAL	N	DRY	NCOL		PRVTE	N -E									000			00
N			2P			03	0		N	DAY	INJ		MTRCYCLE		01	DRVR	NONE	51	M	OR-Y		047,080	000		01
N			45 27 45.18	-122 37 47.45																OR<25					
												01	NONE 0	TURN-L											
													PRVTE	N -E									000			00
													MTRCYCLE		02	PSNG	INJB	53	F			000	000		00
85281	N N N		12/12/2017	16	SE JOHNSON CREEK BLVD	INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE 0	TURN-R												02
NONE			TU	0	SE 32ND AVE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	E -N									016			00
N			5P			02	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJB	68	F	OR-Y		028	000		02
N			45 27 45.18	-122 37 47.45																OR<25					
												02	NONE 0	STRGHT											
													PRVTE	S -N									000			00
													PSNGR CAR		01	DRVR	NONE	00	F	OTH-Y		000	000		00
																				OR<25					

CITY OF MILWAUKIE, CLACKAMAS COUNTY

32ND AVE at BALFOUR ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

1 - 1 of 1 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
03154	Y	N	N				08/04/2015	17	BALFOUR ST	INTER	3-LEG	N	N	CLR	ANGL-OTH	01	NONE 0	TURN-L											03,01,32
CITY							TU	0	32ND AVE	CN		STOP SIGN	N	DRY	TURN		PRVTE	W -N									000		00
N							8A			04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	24	M	OR-Y		047,052,021	000		03,01,32
N							45 27 6.41	-122 37 47.37																OR<25					
																02	NONE 0	TURN-L											
																	PRVTE	S -W									000		00
																	PSNGR CAR		01	DRVR	NONE	29	F	OR-Y		000	000		00
																								OR<25					

CITY OF MILWAUKIE, CLACKAMAS COUNTY

CLACKAMAS HY at HARRISON ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

1 - 4 of 29 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N S	S I H V	W C O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
89450	N	N	N				09/12/2014	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE							FR		HARRISON ST	N		TRF SIGNAL	N	DRY	REAR		PRVTE	N -S									000		00
N							11A			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	20	M	OR-Y		026	000		29
N							45 26 47.55	-122 37 56.24	017100100S00															OR<25					
																02	NONE 0	STOP											
																	PRVTE	N -S									011		00
																	PSNGR CAR		01	DRVR	INJB	71	F	OR-Y		000	000		00
																								OR<25					
01258	Y	Y	N		N	N	04/14/2018	12	CLACKAMAS HY	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT											01,13,29
CITY							SA		HARRISON ST	N		TRF SIGNAL	N	WET	REAR		PRVTE	N -S									000		00
N							4P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	20	M	OR-Y		047,026,045	000		01,13,29
N							45 26 47.55	-122 37 56.24	017100100S00															OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	N -S									011		00
																	PSNGR CAR		01	DRVR	INJC	68	M	OR-Y		000	000		00
																								OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	N -S									011		00
																	PSNGR CAR		02	PSNG	INJC	61	F			000	000		00
01900	N	N	N		N	N	06/03/2018	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	BIKE														110	04
CITY							SU		HARRISON ST	N		TRF SIGNAL	N	DRY	ANGL			-											
N							3P			06	0		N	DAY	INJ			STRGHT	01	BIKE	INJB	68	M		I XWLK	020	035	110	04
N							45 26 47.55	-122 37 56.23	017100100S00									E W											
																01	NONE 0	STRGHT											
																	PRVTE	N -S									000		00
																	PSNGR CAR		01	DRVR	NONE	36	M	OR-Y		000	000		00
																								OR<25					
02097	N	N	N				06/17/2018	12	CLACKAMAS HY	INTER	CROSS	N	N	UNK	BIKE	01	NONE 0	STRGHT											04,18,19
CITY							SU		HARRISON ST	N		TRF SIGNAL	N	WET	ANGL		PRVTE	N -S									000		00
N							8P			06	0		N	DUSK	INJ		PSNGR CAR		01	DRVR	NONE	76	M	OR-Y		000	000		00
N							45 26 47.55	-122 37 56.23	017100100S00															OR<25					
																		-											
																		STRGHT	01	BIKE	INJC	57	M		I XWLK	020	035		04,18,19
																		E W											

CITY OF MILWAUKIE, CLACKAMAS COUNTY

CLACKAMAS HY at HARRISON ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

5 - 7 of 29 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G	J N S	S I H V	C O R L	W K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
01148	N	N	N					04/02/2015	16	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										004	29
NONE								TH		HARRISON ST	E		TRF SIGNAL	N	DRY	REAR		PRVTE	E -W								000		00
N								10A			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	41	F	OR-Y		026	000		29
N								45 26 47.55	-122 37 56.24	0171AB100S00															OR<25				
																	02	NONE 0	STOP										
																		PRVTE	E -W									011	004	00
																		PSNGR CAR		01	DRVR	INJC	20	F	OR-Y		000	000		00
																									OR<25				
84017	N	N	N					04/18/2017	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NO RPT								TU		HARRISON ST	E		TRF SIGNAL	N	DRY	REAR		PRVTE	E -W								000		00
N								12P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	38	M	OTH-Y		026	000		29
N								45 26 47.55	-122 37 56.24	017100100S00															N-RES				
																	02	NONE 0	STOP										
																		PRVTE	E -W									011		00
																		PSNGR CAR		01	DRVR	INJC	64	M	OR-Y		000	000		00
																									OR>25				
02530	N	N	N		N	N		06/26/2017	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
CITY								MO		HARRISON ST	S		TRF SIGNAL	N	DRY	REAR		PRVTE	S -N								000		00
N								1P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	24	M	OR-Y		026	000		29
N								45 26 47.55	-122 37 56.24	017100100S00															OR<25				
																	02	NONE 0	STOP										
																		PRVTE	S -N									011		00
																		PSNGR CAR		01	DRVR	INJC	38	F	OR-Y		000	000		00
																									OR<25				
																	02	NONE 0	STOP										
																		PRVTE	S -N									011		00
																		PSNGR CAR		02	PSNG	INJC	37	M			000	000		00
04572	Y	Y	N		N	N		11/01/2017	12	CLACKAMAS HY	INTER	CROSS	N	N	CLD	S-1STOP	01	NONE 0	STRGHT											04,06,01
CITY								WE		HARRISON ST	S		TRF SIGNAL	N	DRY	SS-O		PRVTE	S -N								000		00
N								8P			06	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	38	M	SUSP		020,032,047	000		04,06,01
N								45 26 47.55	-122 37 56.24	017100100S00															OR<25				
																	02	NONE 0	STOP										
																		PRVTE	S -N									011		00
																		PSNGR CAR		01	DRVR	INJC	35	F	OR-Y		000	000		00
																									OR<25				
																	03	NONE 0	STOP										
																		PRVTE	S -N									011		00
																		PSNGR CAR		01	DRVR	NONE	25	M	OR-Y		000	000		00
																									OR<25				

CITY OF MILWAUKIE, CLACKAMAS COUNTY

CLACKAMAS HY at HARRISON ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

8 - 12 of 29 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	S I H L	C O R K	W DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
																03	NONE 0	STOP										
																	PRVTE	S -N								011		00
																	PSNGR CAR		02	PSNG	NO<5	02	M			000	000		00
02121	N	N	N	N	N		06/19/2018	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
CITY			TU						HARRISON ST	S		TRF SIGNAL	N	DRY	REAR		N/A	S -N								000		00
N			7A							06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N			45 26 47.55		-122 37 56.24				017100100S00															UNK					
																02	NONE 9	STOP										
																	N/A	S -N								011		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK					
00686	N	N	N				02/24/2015	16	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT										004	29
NO RPT			TU						HARRISON ST	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E								000		00
N			7A							06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	47	M	OR-Y		026	000		29
N			45 26 47.55		-122 37 56.24				0171AB100S00															OR<25					
																02	NONE 0	STOP										
																	PRVTE	W -E								011	004	00
																	PSNGR CAR		01	DRVR	INJC	26	F	OR-Y		000	000		00
																								OR<25					
02296	N	N	N				05/21/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 9	STRGHT											29
NONE			SA						HARRISON ST	W		TRF SIGNAL	N	WET	REAR		N/A	W -E								000		00
N			12A							06	0		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N			45 26 47.55		-122 37 56.24				017100100S00															UNK					
																02	NONE 9	STOP										
																	N/A	W -E								011		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK					
05468	N	Y	N				11/24/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	UNK	S-1STOP	01	NONE 0	STRGHT											29
CITY			TH						HARRISON ST	W		TRF SIGNAL	N	UNK	REAR		PRVTE	W -E								000		00
N			1A							06	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	26	M	OR-Y		026	000		29
N			45 26 47.55		-122 37 56.24				017100100S00															OR<25					
																01	NONE 0	STRGHT										
																	PRVTE	W -E								000		00
																	PSNGR CAR		02	PSNG	INJC	27	M			000	000		00
																02	NONE 0	STOP										
																	PRVTE	W -E								011		00
																	TRUCK		01	DRVR	NONE	49	M	OR-Y		000	000		00
																								OR<25					

CITY OF MILWAUKIE, CLACKAMAS COUNTY

CLACKAMAS HY at HARRISON ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

13 - 16 of 29 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G	J N S	S I H V	W C O R L K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT EVENT	CAUSE
02620	N	N	N				07/08/2014	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	TURN-R										29
NONE							TU		HARRISON ST	CN		TRF SIGNAL	N	DRY	REAR		PRVTE	W -S									000	00
N							6P			03	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	27	F	OR-Y		026	000	29
N							45 26 47.55	-122 37 56.24	017100100S00															OR<25				
																02	NONE 0	STOP										
																	PRVTE	W -E									011	00
																	PSNGR CAR		01	DRVR	NONE	47	M	OR-Y		000	000	00
																								OR<25				
04813	N	N	N				11/26/2014	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT										04
CITY							WE		HARRISON ST	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	N -S									000	00
N							2P			01	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	58	F	OR-Y		000	000	00
N							45 26 47.55	-122 37 56.24	017100100S00															OR<25				
																02	NONE 0	STRGHT										
																	PRVTE	E -W									000	00
																	PSNGR CAR		01	DRVR	NONE	78	F	OR-Y		020	000	04
																								OR<25				
00489	N	N	N		N	N	01/25/2015	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT										04
CITY							SU		HARRISON ST	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	N -S									000	00
N							3P			03	0		N	DAY	FAT		PSNGR CAR		01	DRVR	NONE	37	M	OR-Y		020	000	04
N							45 26 47.55	-122 37 56.24	017100100S00															OR<25				
																02	NONE 0	STRGHT										
																	PRVTE	W -E									000	00
																	MTRCYCLE		01	DRVR	KILL	42	M	OR-Y		000	000	00
																								OR<25				
01129	N	N	N		N	N	03/31/2015	12	CLACKAMAS HY	INTER	CROSS	N	N	RAIN	O-1 L-TURN	01	NONE 0	STRGHT										04
CITY							TU		HARRISON ST	CN		TRF SIGNAL	N	WET	TURN		PRVTE	S -N									000	00
N							4P			02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	84	F	OR-Y		020	000	04
N							45 26 47.55	-122 37 56.24	017100100S00															OR<25				
																01	NONE 0	STRGHT										
																	PRVTE	S -N									000	00
																	PSNGR CAR		02	PSNG	INJB	72	F			000	000	00
																02	NONE 0	TURN-L										
																	PRVTE	N -E									000	00
																	PSNGR CAR		01	DRVR	INJC	55	M	OR-Y		000	000	00
																								OR<25				
01895	N	N	N				05/18/2015	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	TURN-R									004	29
NONE							MO		HARRISON ST	CN		TRF SIGNAL	N	DRY	REAR		PRVTE	E -N									000	00
N							3P			02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	39	M	OR-Y		026	000	29
N							45 26 47.55	-122 37 56.24	017100100S00															OR<25				

CITY OF MILWAUKIE, CLACKAMAS COUNTY

CLACKAMAS HY at HARRISON ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

17 - 20 of 29 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	M R U G S	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
																02	NONE 0	STOP										
																	PRVTE	E -N								013	004	00
																	PSNGR CAR		01	DRVR	INJC	53	M	OR-Y		000	000	00
																								OR<25				
																02	NONE 0	STOP										
																	PRVTE	E -N								013	004	00
																	PSNGR CAR		02	PSNG	INJC	59	F			000	000	00
00101	N	N	N				01/09/2015	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT										02
NONE							FR		HARRISON ST	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	E -W								000		00
N							7A			02	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	48	F	OR-Y		000	000		00
N							45 26 47.55	-122 37 56.24	017100100S00															OR<25					
																02	NONE 0	TURN-L										
																	UNKN	W -N									000		00
																	UNKNOWN		01	DRVR	NONE	00	M	UNK		028,004	000		02
																								UNK				
01634	N	N	N		N	N	04/10/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT										04
CITY							SU		HARRISON ST	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	S -N								000		00
N							10P			04	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJC	23	F	OR-Y		020	000		04
N							45 26 47.55	-122 37 56.24	017100100S00															OR<25					
																02	NONE 0	TURN-L										
																	PRVTE	N -E								000		00
																	PSNGR CAR		01	DRVR	INJA	25	M	OTH-Y		000	000		00
																								N-RES				
04092	N	N	N				09/06/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT										02
CITY							TU		HARRISON ST	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	N -S								000		00
N							12P			01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	46	M	OR-Y		000	000		00
N							45 26 47.55	-122 37 56.24	017100100S00															OR<25					
																01	NONE 0	STRGHT										
																	PRVTE	N -S								000		00
																	PSNGR CAR		02	PSNG	INJC	21	F			000	000		00
																02	NONE 0	TURN-L										
																	PRVTE	S -W								000		00
																	PSNGR CAR		01	DRVR	NONE	29	F	OR-Y		028,004	000		02
																								OR<25				
05942	N	N	N				12/18/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT										02
NONE							SU		HARRISON ST	CN		TRF SIGNAL	N	ICE	TURN		PRVTE	W -E								000		00
N							6P			03	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	24	M	OR-Y		000	000		00
N							45 26 47.55	-122 37 56.24	017100100S00															OR<25					

CITY OF MILWAUKIE, CLACKAMAS COUNTY

CLACKAMAS HY at HARRISON ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

21 - 24 of 29 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	M R U G S	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED / LOC	ERROR	ACT	EVENT	CAUSE
																01	NONE 0	STRGHT										
																	PRVTE	W -E									000	00
																	PSNGR CAR		02	PSNG	INJC	45	F			000	000	00
																02	NONE 0	TURN-L										
																	PRVTE	E -S									000	00
																	PSNGR CAR		01	DRVR	NONE	19	F	OR-Y OR<25		028,004	000	02
00458	N	N	N				01/27/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1TURN	01	NONE 9	TURN-R											08
NONE							WE		HARRISON ST	CN		TRF SIGNAL	N	DRY	TURN		N/A	W -S									000	00
N							10A			03	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 26 47.55	-122 37 56.24	017100100S00															UNK				
																02	NONE 9	STRGHT										
																	N/A	W -E									000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000	00
00923	N	N	N		N	N	02/26/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	RAIN	O-1 L-TURN	01	NONE 9	TURN-L											02
CITY							FR		HARRISON ST	CN		TRF SIGNAL	N	WET	TURN		N/A	E -S									000	00
N							9P			03	0		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 26 47.55	-122 37 56.24	017100100S00															UNK				
																02	NONE 9	STRGHT										
																	N/A	W -E									000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000	00
05819	N	N	N				12/14/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 9	STRGHT										093	04
NO RPT							WE		HARRISON ST	CN		TRF SIGNAL	N	DRY	ANGL		N/A	E -W									000	00
N							8A			02	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 26 47.55	-122 37 56.24	017100100S00															UNK				
																02	NONE 9	STRGHT										
																	N/A	S -N									000	00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK UNK		000	000	00
00650	N	N	N		N	N	02/18/2017	12	CLACKAMAS HY	INTER	CROSS	N	N	RAIN	ANGL-OTH	01	NONE 0	STRGHT											04
CITY							SA		HARRISON ST	CN		TRF SIGNAL	N	WET	ANGL		PRVTE	E -W									000	00
N							8P			01	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJC	21	F	OR-Y OR<25		000	000	00
N							45 26 47.55	-122 37 56.24	017100100S00																			
																01	NONE 0	STRGHT										
																	PRVTE	E -W									000	00
																	PSNGR CAR		02	PSNG	INJC	21	M			000	000	00

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	M R G S	J U N V	S I H L	W C O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
																01	NONE 0 PRVTE PSNGR CAR	STRGHT E -W	03	PSNG	INJC	23	M			000	000		00 00
																02	NONE 0 PRVTE PSNGR CAR	STRGHT N -S	01	DRVR	NONE	35	M	OR-Y OR<25		020	000		00 04
02402 NONE N N	N	N	N				06/18/2017 SU 8A 45 26 47.55	12 -122 37 56.24	CLACKAMAS HY HARRISON ST 017100100S00	INTER CN 04	CROSS 0	N TRF SIGNAL	N N	CLR DRY DAY	ANGL-OTH ANGL PDO	01	NONE 9 N/A PSNGR CAR	STRGHT S -N	01	DRVR	NONE	00	Unk	UNK UNK		000	000		02 00 00
																02	NONE 9 N/A PSNGR CAR	STRGHT W -E	01	DRVR	NONE	00	Unk	UNK UNK		000	000		00 00
03992 NONE N N	N	N	N				09/26/2017 TU 6A 45 26 47.55	12 -122 37 56.24	CLACKAMAS HY HARRISON ST 017100100S00	INTER CN 01	CROSS 0	N TRF SIGNAL	N N	CLR DRY DAY	O-1 L-TURN TURN PDO	01	NONE 9 N/A PSNGR CAR	TURN-L W -N	01	DRVR	NONE	00	Unk	UNK UNK		000	000		02,08 00 00
																02	NONE 9 N/A PSNGR CAR	STRGHT E -W	01	DRVR	NONE	00	Unk	UNK UNK		000	000		00 00
03832 CITY N N	N	N	N	N	N		10/22/2018 MO 10A 45 26 47.55	12 -122 37 56.24	CLACKAMAS HY HARRISON ST 017100100S00	INTER CN 03	CROSS 0	N TRF SIGNAL	N N	CLR DRY DAY	ANGL-OTH ANGL INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT N -S	01	DRVR	NONE	43	M	OR-Y OR<25		020	000		04 00 04
																02	NONE 1 PRVTE PSNGR CAR	STRGHT W -E	01	DRVR	INJC	69	M	OR-Y OR<25		000	000		00 00
02869 NONE N N	N	N	N				08/16/2018 TH 6A 45 26 47.58	12 -122 37 56.25	CLACKAMAS HY HARRISON ST 017100100S00	INTER CN 02	CROSS 0	N TRF SIGNAL	N N	CLR DRY DAWN	ANGL-OTH ANGL PDO	01	NONE 9 N/A PSNGR CAR	STRGHT E -W	01	DRVR	NONE	00	Unk	UNK UNK		000	000		04 00 00
																02	NONE 9 N/A PSNGR CAR	STRGHT S -N	01	DRVR	NONE	00	Unk	UNK UNK		000	000		00 00

CITY OF MILWAUKIE, CLACKAMAS COUNTY

32ND AVE at HARRISON ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

1 - 5 of 12 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
02423	N	N	N		N	N	06/19/2015	16	HARRISON ST	INTER	CROSS	N	N	CLD	O-1 L-TURN	01	NONE 0	TURN-L											02
CITY							FR	0	32ND AVE	NE		TRF SIGNAL	N	DRY	TURN		PRVTE	N -E									000	00
N							10P			06	0		N	DLIT	PDO		PSNGR CAR		01	DRVR	NONE	34	M	OTH-Y		028	000	02
N							45 26 47.73	-122 37 46.89																N-RES				
																02	NONE 0	STRGHT										
																	PRVTE	S -N									000	00
																	PSNGR CAR		01	DRVR	NONE	18	M	OR-Y		000	000	00
																								OR<25				
00765	N	N	N				02/25/2017	16	HARRISON ST	INTER	CROSS	N	N	CLR	PED	01	NONE 0	TURN-L											02
CITY							SA	0	32ND AVE	E		TRF SIGNAL	N	DRY	PED		PRVTE	N -E									000	00
N							10A			05	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	83	M	OR-Y		029	000	02
N							45 26 47.73	-122 37 46.89																OR<25				
																		- STRGHT	01	PED	INJC	23	M		I XWLK	000	035		00
																		S N										
01009	N	N	N				03/14/2017	16	HARRISON ST	INTER	CROSS	N	Y	RAIN	FIX OBJ	01	NONE 9	TURN-L										053	08
NONE							TU	0	32ND AVE	S		TRF SIGNAL	N	WET	FIX		N/A	E -S									000	00
N							10A			05	0		N	DAY	PDO		FARM TRCTR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N							45 26 47.73	-122 37 46.89																UNK				
02153	N	N	N				06/05/2014	16	HARRISON ST	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE							TH	0	32ND AVE	W		TRF SIGNAL	N	DRY	REAR		PRVTE	W -E									000	00
N							2P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	60	M	OR-Y		026	000	29
N							45 26 47.73	-122 37 46.89																OR<25				
																02	NONE 0	STOP										
																	PRVTE	W -E									011	00
																	PSNGR CAR		01	DRVR	INJC	34	M	OR-Y		000	000	00
																								OR<25				
01294	N	N	N		N	N	04/03/2014	16	HARRISON ST	INTER	CROSS	N	N	RAIN	O-1 L-TURN	01	NONE 0	TURN-L											04
CITY							TH	0	32ND AVE	CN		TRF SIGNAL	N	WET	TURN		PRVTE	E -S									000	00
N							7P			03	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJC	22	M	OR-Y		000	000	00
N							45 26 47.7304439	-122 37 46.890228																OR<25				
																02	NONE 0	STRGHT										
																	PRVTE	W -E									000	00
																	PSNGR CAR		01	DRVR	NONE	40	F	OR-Y		020	000	04
																								OR<25				

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R G S	J N V	S H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
04096	N	N	N				10/05/2015	16	HARRISON ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	TURN-R											02
NONE							MO	0	32ND AVE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	E -N									000	00
N							10A			02	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	61	F	OR-Y		028	000	02
N							45 26 47.73	-122 37 46.89																OR<25				
																02	NONE 0	STRGHT										
																	PRVTE	S -N									000	00
																	PSNGR CAR		01	DRVR	NONE	41	F	OR-Y		000	000	00
																								OR<25				
00702	N	N	N		N	N	02/12/2016	16	HARRISON ST	INTER	CROSS	N	N	CLD	ANGL-OTH	01	NONE 0	STRGHT											04
CITY							FR	0	32ND AVE	CN		TRF SIGNAL	N	WET	ANGL		PRVTE	N -S									000	00
N							5P			01	0		N	DUSK	INJ		PSNGR CAR		01	DRVR	INJC	28	F	OR-Y		000	000	00
N							45 26 47.73	-122 37 46.89																OR<25				
																02	NONE 0	STRGHT										
																	PRVTE	E -W									000	00
																	PSNGR CAR		01	DRVR	INJC	37	M	OR-Y		020	000	04
																								OR<25				
																02	NONE 0	STRGHT										
																	PRVTE	E -W									000	00
																	PSNGR CAR		02	PSNG	INJB	29	F			000	000	00
																02	NONE 0	STRGHT										
																	PRVTE	E -W									000	00
																	PSNGR CAR		03	PSNG	INJB	09	F			000	000	00
01812	N	N	N		N	N	04/20/2016	16	HARRISON ST	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	TURN-L											02
CITY							WE	0	32ND AVE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	W -N									000	00
N							12P			02	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	17	F	OR-Y		028	000	02
N							45 26 47.73	-122 37 46.89																OR<25				
																02	NONE 0	STRGHT										
																	PRVTE	E -W									000	00
																	PSNGR CAR		01	DRVR	NONE	30	F	OR-Y		000	000	00
																								OR<25				
03255	N	N	N		N	N	07/19/2016	16	HARRISON ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											04
CITY							TU	0	32ND AVE	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	S -N									000	00
N							1P			04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	34	F	OR-Y		020	000	04
N							45 26 47.73	-122 37 46.89																OR<25				
																02	NONE 0	STRGHT										
																	PRVTE	W -E									000	00
																	PSNGR CAR		01	DRVR	INJC	88	M	OR-Y		000	000	00
																								OR<25				

CITY OF MILWAUKIE, CLACKAMAS COUNTY

32ND AVE at HARRISON ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

10 - 12 of 12 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	I H L	S C O R K	W	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
05321	Y	N	N		N	N		11/16/2016	16	HARRISON ST	INTER	CROSS	N	N	CLD	O-1 L-TURN	01	NONE 0	STRGHT										02,01,08
CITY								WE	0	32ND AVE	CN		TRF SIGNAL	N	WET	TURN		PRVTE	S -N								000		00
N								10A			04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	60	F	OR-Y		000	000		00
N								45 26 47.73	-122 37 46.89																OR<25					
																	02	NONE 0	TURN-L											
																		PRVTE	N -E									000		00
																		PSNGR CAR		01	DRVR	INJC	52	F	OR-Y		028,047,004	000		02,01,08
																									OR<25					
00181	N	N	N		N	N		01/16/2018	16	HARRISON ST	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT										013	02,08
CITY								TU	0	32ND AVE	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	N -S								000		00
N								5P			01	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJC	32	F	OR-Y		000	000		00
N								45 26 47.73	-122 37 46.89																OR<25					
																	02	NONE 0	TURN-L											
																		PRVTE	S -W									000	013	00
																		PSNGR CAR		01	DRVR	NONE	24	M	OR-Y		028,004	000		02,08
																									OR<25					
																	03	NONE 0	STOP											
																		PRVTE	S -W									022		00
																		PSNGR CAR		01	DRVR	NONE	36	F	OR-Y		000	000		00
																									OR<25					
04147	N	N	N		N	N		11/13/2018	16	HARRISON ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT										053	04
CITY								TU	0	32ND AVE	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	W -E								000		00
N								10A			04	0		N	DAY	INJ		TRUCK		01	DRVR	INJC	40	M	OR-Y		000	000		00
N								45 26 47.73	-122 37 46.89																OR<25					
																	02	NONE 0	STRGHT											
																		PRVTE	S -N									000	053	00
																		PSNGR CAR		01	DRVR	INJC	38	F	OR-Y		020	000		04
																									OR<25					

CITY OF MILWAUKIE, CLACKAMAS COUNTY

42ND AVE at HARRISON ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

1 - 3 of 3 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R J S W U I C O G N H R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
02412	N	N	N	01/11/2016	16	HARRISON ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 9	STRGHT											02
NONE				MO	0	42ND AVE	CN		STOP SIGN	N	DRY	ANGL		N/A	S -N										015	00
N				2P			04	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N				45 26 47.83	-122 37 10.33																UNK					
													02	NONE 9	STRGHT											
														N/A	W -E									015		00
														PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																					UNK					
04451	N	N	N N	10/25/2017	16	HARRISON ST	INTER	CROSS	N	N	CLD	ANGL-OTH	01	NONE 0	STRGHT											02
CITY				WE	0	42ND AVE	CN		STOP SIGN	N	DRY	ANGL		PRVTE	S -N										015	00
N				2P			04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	67	F	OR-Y		028	000		02
N				45 26 47.83	-122 37 10.33																OR<25					
													02	NONE 0	STRGHT											
														PRVTE	W -E									015		00
														PSNGR CAR		01	DRVR	NONE	50	M	OR-Y		000	000		00
																					OR<25					
04125	N	N	N	11/10/2018	16	HARRISON ST	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	TURN-L											03
NONE				SA	0	42ND AVE	CN		STOP SIGN	N	DRY	TURN		PRVTE	W -N										000	00
N				5P			03	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	76	F	OR-Y		021	000		03
N				45 26 47.83	-122 37 10.33																OR<25					
													02	NONE 0	STRGHT											
														PRVTE	N -S									015		00
														PSNGR CAR		01	DRVR	INJC	37	F	OR-Y		000	000		00
																					OR<25					

CITY OF MILWAUKIE, CLACKAMAS COUNTY

CLACKAMAS HY at MONROE ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

1 - 4 of 11 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	S I H L	C O R K	W	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
03680	N	N	N		N	N		09/19/2014	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
NONE								FR		MONROE ST	N		TRF SIGNAL	N	DRY	REAR		PRVTE	N -S									000		00
N								5P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	19	F	OR-Y		043,026	000		07
N								45 26 42.66	-122 37 54.11	017100100S00															OR<25					
																	02	NONE 0	STOP											
																		PRVTE	N -S									011		00
																		PSNGR CAR		01	DRVR	INJC	27	F	OR-Y		000	000		00
																									OR<25					
01531	N	N	N					04/07/2017	12	CLACKAMAS HY	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT											29
NONE								FR		MONROE ST	N		TRF SIGNAL	N	WET	REAR		PRVTE	N -S									000		00
N								11A			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	58	M	OR-Y		026	000		29
N								45 26 42.66	-122 37 54.11	017100100S00															OR<25					
																	02	NONE 0	STOP											
																		PRVTE	N -S									011		00
																		PSNGR CAR		01	DRVR	INJC	38	F	OR-Y		000	000		00
																									OR<25					
																	02	NONE 0	STOP											
																		PRVTE	N -S									011		00
																		PSNGR CAR		02	PSNG	INJC	43	M			000	000		00
00526	N	N	N					02/12/2018	12	CLACKAMAS HY	INTER	CROSS	N	N	CLD	S-1STOP	01	NONE 0	STRGHT											22,29
CITY								MO		MONROE ST	N		TRF SIGNAL	N	DRY	REAR		PRVTE	N -S									000		22
N								4P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	38	M	OR-Y		026	000		29
N								45 26 42.66	-122 37 54.11	017100100S00															OR<25					
																	02	NONE 0	STOP											
																		PRVTE	N -S									012		00
																		PSNGR CAR		01	DRVR	INJC	42	F	OR-Y		000	000		00
																									OR<25					
																	02	NONE 0	STOP											
																		PRVTE	N -S									012		00
																		PSNGR CAR		02	PSNG	INJC	11	F			000	000		00
00337	N	N	N		N	N		01/25/2014	17	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											07
CITY								SA		MONROE ST	E		TRF SIGNAL	N	DRY	REAR		PRVTE	E -W									000		00
N								4P			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	30	M	OR-Y		026	000		07
N								45 26 42.6596999	-122 37 54.1050599	0171AC100S00															OR<25					
																	02	NONE 0	STOP											
																		PRVTE	E -W									011		00
																		PSNGR CAR		01	DRVR	INJC	33	F	OR-Y		000	000		00
																									OR<25					

CITY OF MILWAUKIE, CLACKAMAS COUNTY

CLACKAMAS HY at MONROE ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

5 - 8 of 11 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	S H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
05472	N	N	N		N	N	12/18/2015	12	CLACKAMAS HY	INTER	CROSS	N	N	UNK	S-1STOP	01	NONE 0	STRGHT											29
CITY			FR						MONROE ST	S		TRF SIGNAL	N	WET	REAR		PRVTE	S -N									000		00
N			6P							06	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	54	F	OR-Y		026	000		29
N			45 26 42.66	-122 37 54.11	017100100S00																			OR<25					
																02	NONE 0	STOP											
																	PRVTE	S -N									011		00
																	PSNGR CAR		01	DRVR	INJC	48	F	OR-Y		000	000		00
																								OR<25					
																02	NONE 0	STOP											
																	PRVTE	S -N									011		00
																	PSNGR CAR		02	PSNG	INJC	31	F			000	000		00
00122	N	N	N				01/09/2017	12	CLACKAMAS HY	INTER	CROSS	N	N	UNK	S-1STOP	01	NONE 0	STRGHT											29
NONE			MO						MONROE ST	S		TRF SIGNAL	N	WET	REAR		PRVTE	S -N									000		00
N			1P							06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	68	M	OR-Y		026	000		29
N			45 26 42.66	-122 37 54.11	017100100S00																			OR<25					
																02	NONE 0	STOP											
																	PRVTE	S -N									011		00
																	PSNGR CAR		01	DRVR	INJC	62	M	OR-Y		000	000		00
																								OR<25					
02828	N	N	N				08/13/2018	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE			MO						MONROE ST	S		TRF SIGNAL	N	DRY	REAR		PRVTE	S -N									000		00
N			3P							06	0		N	DAY	INJ		TRUCK		01	DRVR	NONE	39	M	OR-Y		026	000		29
N			45 26 42.67	-122 37 54.12	017100100S00																			OR>25					
																02	NONE 0	STOP											
																	PRVTE	S -N									011		00
																	PSNGR CAR		01	DRVR	INJC	68	F	OR-Y		000	000		00
																								OR<25					
01678	N	N	N				05/01/2014	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											04
NONE			TH						MONROE ST	CN		TRF SIGNAL	N	DRY	ANGL		PRVTE	S -N									000		00
N			8A							04	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	70	M	OR-Y		000	000		00
N			45 26 42.6596999	-122 37 54.1050599	017100100S00																			OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	W -E									000		00
																	PSNGR CAR		01	DRVR	NONE	00	M	OR-Y		020	000		04
																								OR<25					
02411	N	N	N				06/17/2015	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1TURN	01	NONE 0	TURN-R											08
NONE			WE						MONROE ST	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	W -S									000		00
N			11A							03	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	62	F	OR-Y		006	000		08
N			45 26 42.66	-122 37 54.11	017100100S00																			OR<25					

CITY OF MILWAUKIE, CLACKAMAS COUNTY

CLACKAMAS HY at MONROE ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

9 - 11 of 11 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	S I H L	C O R K	W	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT EVENT	CAUSE
																	02	NONE 0 PRVTE PSNGR CAR	STRGHT W -E	01	DRVR	NONE	58	F	OR-Y OR<25		000	000 000	00 00
03574 NO RPT	N	N	N					09/01/2015 TU	12	CLACKAMAS HY MONROE ST	INTER CN	CROSS	N TRF SIGNAL	N N	CLR DRY	S-1STOP REAR	01	NONE 0 PRVTE	STRGHT W -E										000	29 00
N N								2P 45 26 42.66 -122 37 54.11		017100100S00	04	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	58	M	OR-Y OR<25		026	000 000	29 00
																	02	NONE 0 PRVTE PSNGR CAR	STOP W -E	01	DRVR	NONE	85	M	OR-Y OR<25		000	011 000	00 00
02887 CITY	N	N	N		N	N	N	06/27/2016 MO	12	CLACKAMAS HY MONROE ST	INTER CN	CROSS	N TRF SIGNAL	N N	CLR DRY	ANGL-OTH ANGL	01	NONE 0 PRVTE	STRGHT W -E										000	27,04 00
N N								6P 45 26 42.66 -122 37 54.11		017100100S00	04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	23	M	OR-Y OR<25		016,020	038 000	27,04 00
																	02	NONE 0 PRVTE PSNGR CAR	STRGHT S -N	01	DRVR	INJA	38	M	OR-Y OR<25		000	000 000	00 00

CITY OF MILWAUKIE, CLACKAMAS COUNTY

CLACKAMAS HY at OAK ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

1 - 4 of 25 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G	J N S	S I H V	W C O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00407	N	N	N				01/03/2017	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											29
NONE							TU		OAK ST	NE		TRF SIGNAL	N	DRY	REAR		PRVTE	NE-SW									000		00
N							7A			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	61	M	OR-Y		026	000		29
N							45 26 36.14	-122 37 47.2	017100100S00															OR<25					
																02	NONE 0	STOP											
																	PRVTE	NE-SW									011		00
																	PSNGR CAR		01	DRVR	INJC	47	F	OR-Y		000	000		00
																								OR<25					
04906	N	N	N		N	N	11/20/2017	12	CLACKAMAS HY	INTER	CROSS	N	N	CLD	S-1STOP	01	NONE 0	STRGHT											29
CITY							MO		OAK ST	NE		TRF SIGNAL	N	WET	REAR		PRVTE	NE-SW									000		00
N							11A			06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJA	60	M	OR-Y		028	000		29
N							45 26 36.14	-122 37 47.2	017100100S00															OR<25					
																01	NONE 0	STRGHT											
																	PRVTE	NE-SW									000		00
																	PSNGR CAR		02	PSNG	INJA	54	F			000	000		00
																02	NONE 0	STOP											
																	PRVTE	NE-SW									011		00
																	PSNGR CAR		01	DRVR	NONE	40	M	OR-Y		000	000		00
																								OR<25					
05477	N	N	N				12/21/2017	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 9	STRGHT											29
NONE							TH		OAK ST	NE		TRF SIGNAL	N	DRY	REAR		N/A	NE-SW									000		00
N							3P			06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
N							45 26 36.14	-122 37 47.2	017100100S00															UNK					
																02	NONE 9	STOP											
																	N/A	NE-SW									011		00
																	PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000		00
																								UNK					
01260	N	N	N		N	N	04/14/2018	12	CLACKAMAS HY	INTER	CROSS	N	N	RAIN	S-1STOP	01	NONE 0	STRGHT										013	27,29
CITY							SA		OAK ST	NE		TRF SIGNAL	N	WET	REAR		PRVTE	NE-SW									000		00
N							7P			06	0		N	DUSK	INJ		PSNGR CAR		01	DRVR	INJC	18	M	OR-Y		026	000		27,29
N							45 26 36.14	-122 37 47.2	017100100S00															OR<25					
																02	NONE 0	STOP											
																	PRVTE	NE-SW									011	013	00
																	PSNGR CAR		01	DRVR	INJC	24	F	OR-Y		000	000		00
																								OR<25					
																03	NONE 0	STOP											
																	PRVTE	NE-SW									022		00
																	PSNGR CAR		01	DRVR	NONE	31	M	OR-Y		000	000		00
																								OR<25					

CITY OF MILWAUKIE, CLACKAMAS COUNTY

CLACKAMAS HY at OAK ST, City of Milwaukie, Clackamas County, 01/01/2014 to 12/31/2018

5 - 8 of 25 Crash records shown.

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G	J I N V	S C H L	W O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
00114	N	N	N		N	N	01/09/2014	12	CLACKAMAS HY	INTER	CROSS	N	N	RAIN	BIKE	01	NONE 0	STRGHT											19,18,04
CITY			TH						OAK ST	SE		TRF SIGNAL	N	WET	ANGL		PRVTE	NW-SE									000	00
N			6P							05	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	INJB	68	F	OR-Y		000	000	00
N			45 26 36.1367879					-122 37 47.199576	017100100S00															OR<25				
																		- STRGHT SW NE	01	BIKE	INJA	32	M		I XWLK	020	035	19,18,04
00797	N	N	N		N	N	03/04/2015	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-1STOP	01	NONE 0	STRGHT											27,32
NONE			WE						OAK ST	SE		TRF SIGNAL	N	DRY	REAR		PRVTE	SE-NW									000	00
N			4P							06	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJB	27	M	OR-Y		016,026,052	000	27,32
N			45 26 36.14					-122 37 47.2	017100100S00															OR<25				
																02	NONE 0	STOP										
																	PRVTE	SE-NW									011	00
																	PSNGR CAR		01	DRVR	NONE	29	F	OR-Y		000	000	00
																								OR<25				
01260	N	N	N				04/08/2015	12	CLACKAMAS HY	INTER	CROSS	N	N	UNK	S-1STOP	01	NONE 0	STRGHT											07
NONE			WE						OAK ST	SE		TRF SIGNAL	N	UNK	REAR		PRVTE	SE-NW									000	00
N			5P							06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	28	F	SUSP		043,026	000	07
N			45 26 36.14					-122 37 47.2	017100100S00															OR<25				
																02	NONE 0	STOP										
																	PRVTE	SE-NW									011	00
																	PSNGR CAR		01	DRVR	NONE	34	M	OR-Y		000	000	00
																								OR<25				
05281	N	N	N		N	N	11/14/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	RAIN	PED	01	NONE 0	TURN-L											02,19
CITY			MO						OAK ST	SE		TRF SIGNAL	N	WET	PED		PRVTE	NE-SE									000	00
N			6P							05	0		N	DUSK	INJ		PSNGR CAR		01	DRVR	NONE	52	F	OR-Y		029	000	02
N			45 26 36.14					-122 37 47.2	017100100S00															OR<25				
																		- STRGHT NE SW	01	PED	INJC	45	M		I XWLK	000	035	19
01184	N	N	N		N	N	03/14/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	S-STRGHT	01	NONE 9	STRGHT											13
CITY			MO						OAK ST	SE		TRF SIGNAL	N	DRY	SS-O		N/A	SE-NW									000	00
N			4P							06	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N			45 26 36.14					-122 37 47.2	017100100S00															UNK				

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	S I H L	W C O R K	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT EVENT	CAUSE
																02	NONE 9 N/A PSNGR CAR	STRGHT SE-NW	01	DRVR	NONE	00	Unk	UNK UNK		000	000	00 00
81298 NONE N N	N	N	N				10/15/2015 TH 3P 45 26 36.14	12 -122 37 47.2	CLACKAMAS HY OAK ST 017100100S00	INTER NW 06	CROSS 0	N TRF SIGNAL	N N	CLR DRY DAY	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT NW-SE	01	DRVR	NONE	57	M	OR-Y OR<25		026	000	29 00 29
																02	NONE 0 PRVTE PSNGR CAR	STOP NW-SE	01	DRVR	INJC	77	M	OR-Y OR<25		000	012 000	00 00
04617 CITY N N	N	N	N		N	N	11/05/2015 TH 5P 45 26 36.14	12 -122 37 47.2	CLACKAMAS HY OAK ST 017100100S00	INTER NW 06	CROSS 0	N TRF SIGNAL	N N	RAIN WET DLIT	O-1STOP BACK INJ	01	NONE 1 PRVTE SEMI TOW	BACK SE-NW	01	DRVR	NONE	50	M	OTH-Y N-RES		011	000	10 00 10
																02	NONE 0 PRVTE PSNGR CAR	STOP NW-SE	01	DRVR	INJC	36	F	OR-Y OR<25		000	011 000	00 00
02231 NONE N N	N	N	N				05/17/2016 TU 4P 45 26 36.14	12 -122 37 47.2	CLACKAMAS HY OAK ST 017100100S00	INTER NW 06	CROSS 0	N TRF SIGNAL	N N	CLR DRY DAY	S-1STOP REAR PDO	01	NONE 9 N/A PSNGR CAR	STRGHT NW-SE	01	DRVR	NONE	00	Unk	UNK UNK		000	000 000	29 00 00
																02	NONE 9 N/A PSNGR CAR	STOP NW-SE	01	DRVR	NONE	00	Unk	UNK UNK		000	011 000	00 00
05300 CITY N N	N	N	N				12/13/2017 WE 4A 45 26 36.14	12 -122 37 47.2	CLACKAMAS HY OAK ST 017100100S00	INTER NW 06	CROSS 0	N TRF SIGNAL	N N	CLR DRY DLIT	S-1STOP REAR INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT NW-SE	01	DRVR	INJB	28	F	OR-Y OR<25		026	000 038	27,29 00 27,29
																02	NONE 0 PRVTE PSNGR CAR	STOP NW-SE	01	DRVR	NONE	32	M	OR-Y OR<25		000	012 000	00 00
00249 NONE N N	N	N	N				01/19/2014 SU 4P 45 26 36.1367879	12 -122 37 47.199576	CLACKAMAS HY OAK ST 017100100S00	INTER CN 04	CROSS 0	N TRF SIGNAL	N N	CLR DRY DAY	ANGL-OTH ANGL INJ	01	NONE 0 PRVTE PSNGR CAR	STRGHT SW-NE	01	DRVR	NONE	00	M	OR-Y UNK		020	000 000	04 00 04

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	M R G S	J U N V	S I H L	W C O R	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF-CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
																02	NONE 0	STRGHT											
																	PRVTE	NW-SE									000		00
																	PSNGR CAR		01	DRVR	INJC	59	M	OR-Y		000	000		00
																								OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	NW-SE									000		00
																	PSNGR CAR		02	PSNG	INJC	57	M			000	000		00
00913	N	N	N	N	N		03/04/2014	12	CLACKAMAS HY	INTER	CROSS	N	N	CLD	O-1 L-TURN	01	NONE 0	TURN-L											02,04
CITY							TU		OAK ST	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	NE-SE									000		00
N							6P			04	0		N	DUSK	INJ		PSNGR CAR		01	DRVR	INJC	29	M	OTH-Y		028	000		02
N							45 26 36.1367879	-122 37 47.199576	017100100S00															OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	SW-NE									000		00
																	PSNGR CAR		01	DRVR	INJC	37	M	OR-Y		020	000		04
																								OR<25					
01129	N	N	N				03/21/2014	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	STRGHT											02
NO RPT							FR		OAK ST	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	SW-NE									000		00
N							6P			04	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	41	F	OR-Y		000	000		00
N							45 26 36.1367879	-122 37 47.199576	017100100S00															OR<25					
																02	NONE 0	TURN-L											
																	PRVTE	NE-SE									000		00
																	PSNGR CAR		01	DRVR	NONE	56	F	OR-Y		028,004	000		02
																								OR<25					
04126	N	N	N	N	N		10/17/2014	12	CLACKAMAS HY	INTER	CROSS	N	N	RAIN	ANGL-OTH	01	NONE 0	STRGHT											04
CITY							FR		OAK ST	CN		TRF SIGNAL	N	WET	ANGL		PRVTE	SW-NE									000		00
N							10P			02	0		N	DLIT	INJ		PSNGR CAR		01	DRVR	NONE	77	M	OR-Y		020	000		04
N							45 26 36.14	-122 37 47.2	017100100S00															OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	SE-NW									000		00
																	PSNGR CAR		01	DRVR	INJC	27	M	OR-Y		000	000		00
																								OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	SE-NW									000		00
																	PSNGR CAR		02	PSNG	INJC	21	M			000	000		00
																02	NONE 0	STRGHT											
																	PRVTE	SE-NW									000		00
																	PSNGR CAR		03	PSNG	INJC	23	M			000	000		00

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G N V	J I H L	S C O R K	W	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC TYPE	INJ SVRTY	A G E	S E X	LICNS RES	PED LOC	ERROR	ACT	EVENT	CAUSE
04501	N	N	N				11/07/2014	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	ANGL-OTH	01	NONE 0	STRGHT											02
NO RPT							FR		OAK ST	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	NE-SW									000		00
N							9A			03	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	33	F	OR-Y		000	000		00
N							45 26 36.14	-122 37 47.2	017100100S00															OR<25					
																01	NONE 0	STRGHT											
																	PRVTE	NE-SW									000		00
																	PSNGR CAR		02	PSNG	NO<5	01	F			000	000		00
																02	NONE 0	TURN-R											
																	PRVTE	NW-SW									015		00
																	PSNGR CAR		01	DRVR	NONE	69	F	OR-Y		028	000		02
																								OR<25					
04516	N	N	N		N	N	11/08/2014	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 0	TURN-L											02
CITY							SA		OAK ST	CN		TRF SIGNAL	N	DRY	TURN		PRVTE	NE-SE									000		00
N							11A			04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	64	M	OR-Y		028	000		02
N							45 26 36.14	-122 37 47.2	017100100S00															OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	SW-NE									000		00
																	PSNGR CAR		01	DRVR	INJC	61	F	OR-Y		000	000		00
																								OR<25					
00538	N	N	N		N	N	02/01/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	CLD	ANGL-OTH	01	NONE 0	STRGHT										013	04
CITY							MO		OAK ST	CN		TRF SIGNAL	N	WET	ANGL		PRVTE	SE-NW									000		00
N							8P			02	0		N	DARK	INJ		PSNGR CAR		01	DRVR	INJC	32	F	OR-Y		020	000		04
N							45 26 36.14	-122 37 47.2	017100100S00															OR<25					
																02	NONE 0	STRGHT											
																	PRVTE	SW-NE									000	013	00
																	PSNGR CAR		01	DRVR	INJC	39	F	OR-Y		000	000		00
																								OR<25					
																03	NONE 0	STOP											
																	PRVTE	NE-SW									022		00
																	PSNGR CAR		01	DRVR	INJC	18	F	OR-Y		000	000		00
																								OR<25					
00556	N	N	N		N	N	02/03/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	RAIN	O-1 L-TURN	01	NONE 0	STRGHT											02
CITY							WE		OAK ST	CN		TRF SIGNAL	N	WET	TURN		PRVTE	NE-SW									000		00
N							3P			01	0		N	DAY	INJ		PSNGR CAR		01	DRVR	INJC	76	M	OR-Y		000	000		00
N							45 26 36.14	-122 37 47.2	017100100S00															OR<25					
																02	NONE 0	TURN-L											
																	PRVTE	SW-NW									000		00
																	PSNGR CAR		01	DRVR	NONE	20	M	OR-Y		028,004	000		02
																								OR<25					

SER# / INVEST / RD DPT / UNLOC?	S P E D	A L C	D M R U G S	J N V	I H L	S C O R K	W	DATE / DAY / TIME / LAT	CLASS / DIST / FROM / LONG	CITY STREET / FIRST STREET / SECOND STREET / LRS	RD CHAR / DIRECT / LOCTN	INT-TYPE (MEDIAN) / LEGS (#LANES)	INT-REL / TRAF- / CONTL	OFFRD / RNDBT / DRVWY	WTHR / SURF / LIGHT	CRASH / COLL / SVRTY	V#	SPCL USE / TRLR QTY / OWNER / TYPE	MOVE / FROM / TO	P#	PRTC / TYPE	INJ / SVRTY	A G E	S E X	LICNS / RES	PED LOC	ERROR	ACT	EVENT	CAUSE
04816	N	N	N		N	N		10/18/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	RAIN	ANGL-OTH	01	NONE 0	STRGHT											04
CITY								TU		OAK ST	CN		TRF SIGNAL	N	WET	ANGL		PRVTE	SW-NE									000	00
N								6P			04	0		N	DAY	INJ		PSNGR CAR		01	DRVR	NONE	45	M	OR-Y		000	000	00
N								45 26 36.14	-122 37 47.2	017100100S00															OR<25				
																	02	NONE 0	STRGHT										
																		PRVTE	NW-SE									000	00
																		PSNGR CAR		01	DRVR	INJC	27	M	OR-Y		028	000	04
																									UNK				
01981	N	N	N		N	N		05/02/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 9	TURN-L											02
CITY								MO		OAK ST	CN		TRF SIGNAL	N	DRY	TURN		N/A	NE-SE									000	00
N								12P			04	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N								45 26 36.14	-122 37 47.2	017100100S00															UNK				
																	02	NONE 9	STRGHT										
																		N/A	SW-NE									000	00
																		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																									UNK				
03380	N	N	N					07/21/2016	12	CLACKAMAS HY	INTER	CROSS	N	N	CLR	O-1 L-TURN	01	NONE 9	STRGHT											02,08
CITY								TH		OAK ST	CN		TRF SIGNAL	N	DRY	TURN		N/A	SW-NE									000	00
N								11A			04	0		N	DAY	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N								45 26 36.14	-122 37 47.2	017100100S00															UNK				
																	02	NONE 9	TURN-L										
																		N/A	NE-SE									000	00
																		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																									UNK				
04759	N	N	N					11/12/2017	12	CLACKAMAS HY	INTER		N	N	RAIN	O-1 L-TURN	01	NONE 9	STRGHT											02,08
NONE								SU		OAK ST	CN		TRF SIGNAL	N	WET	TURN		N/A	NE-SW									000	00
N								6P			01	0		N	DUSK	PDO		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
N								45 26 36.14	-122 37 47.2	017100100S00		(04)													UNK				
																	02	NONE 9	TURN-L										
																		N/A	SW-NW									000	00
																		PSNGR CAR		01	DRVR	NONE	00	Unk	UNK		000	000	00
																									UNK				

Left-Turn Lane Warrant Analysis

Project: Hillside Master Plan
Intersection: SE Dwyer Street at SE 32nd Avenue (Northbound)
Date: 8/24/2020
Scenario: 2026 Buildout Conditions - AM Peak Hour

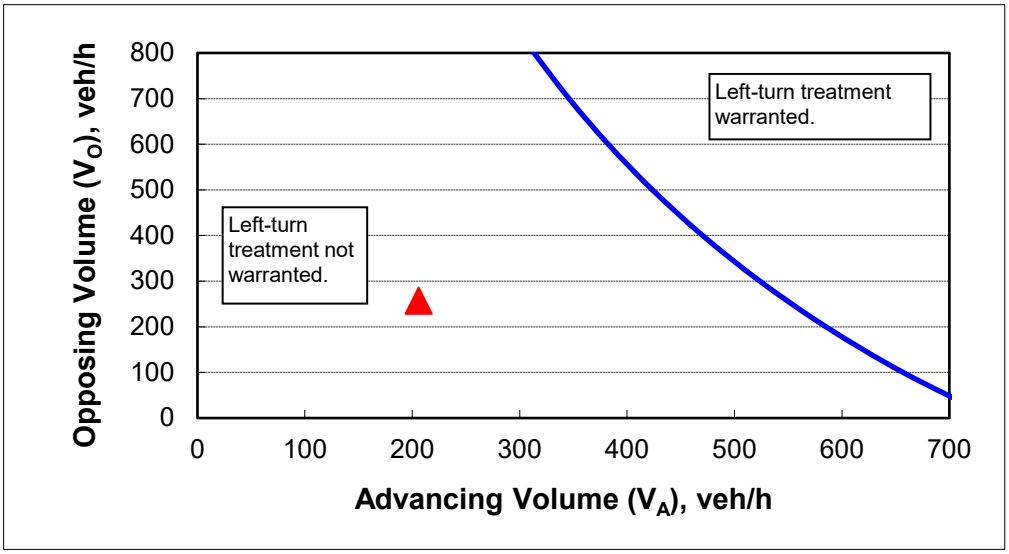
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	8%
Advancing volume (V_A), veh/h:	206
Opposing volume (V_O), veh/h:	257

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	549
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Hillside Master Plan
Intersection: SE Dwyer Street at SE 32nd Avenue (Southbound)
Date: 8/24/2020
Scenario: 2026 Buildout Conditions - AM Peak Hour

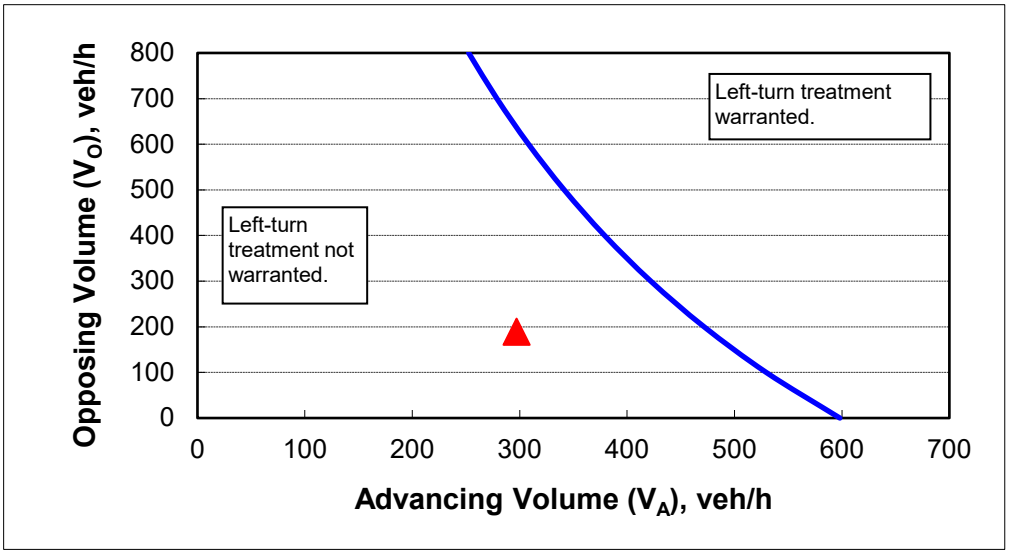
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	13%
Advancing volume (V_A), veh/h:	297
Opposing volume (V_O), veh/h:	189

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	478
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Hillside Master Plan
Intersection: SE Dwyer Street at SE 32nd Avenue (Northbound)
Date: 8/24/2020
Scenario: 2026 Buildout Conditions - PM Peak Hour

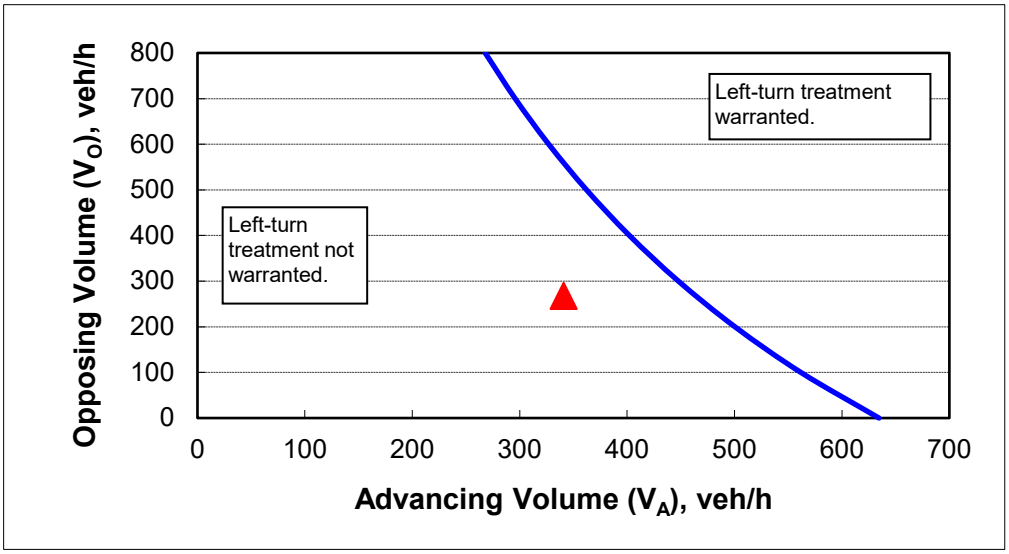
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	12%
Advancing volume (V_A), veh/h:	341
Opposing volume (V_O), veh/h:	268

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	464
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Hillside Master Plan
Intersection: SE Dwyer Street at SE 32nd Avenue (Southbound)
Date: 8/24/2020
Scenario: 2026 Buildout Conditions - PM Peak Hour

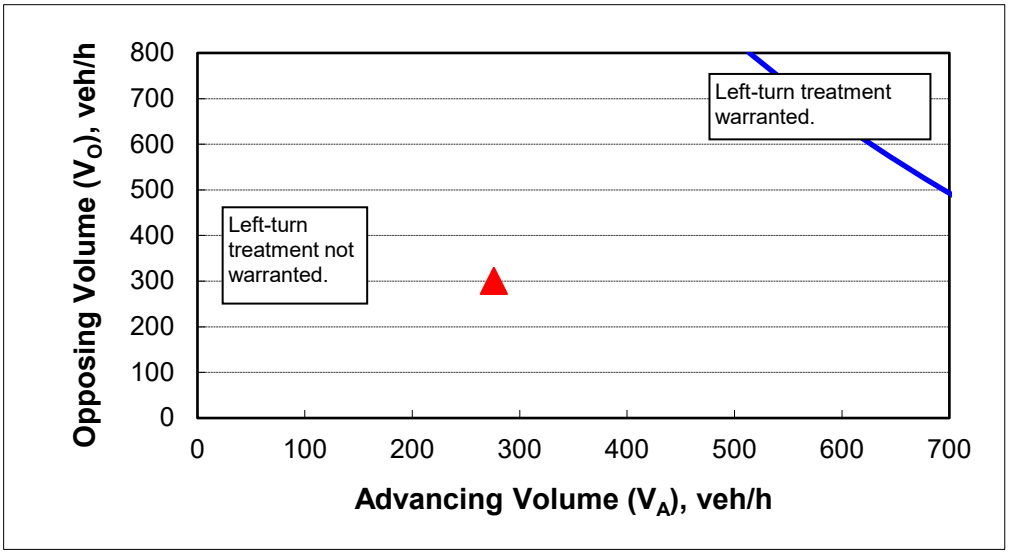
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	3%
Advancing volume (V_A), veh/h:	276
Opposing volume (V_O), veh/h:	301

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	858
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Hillside Master Plan
Intersection: SE Meek Street at SE 32nd Avenue (Northbound)
Date: 8/24/2020
Scenario: 2026 Buildout Conditions - AM Peak Hour

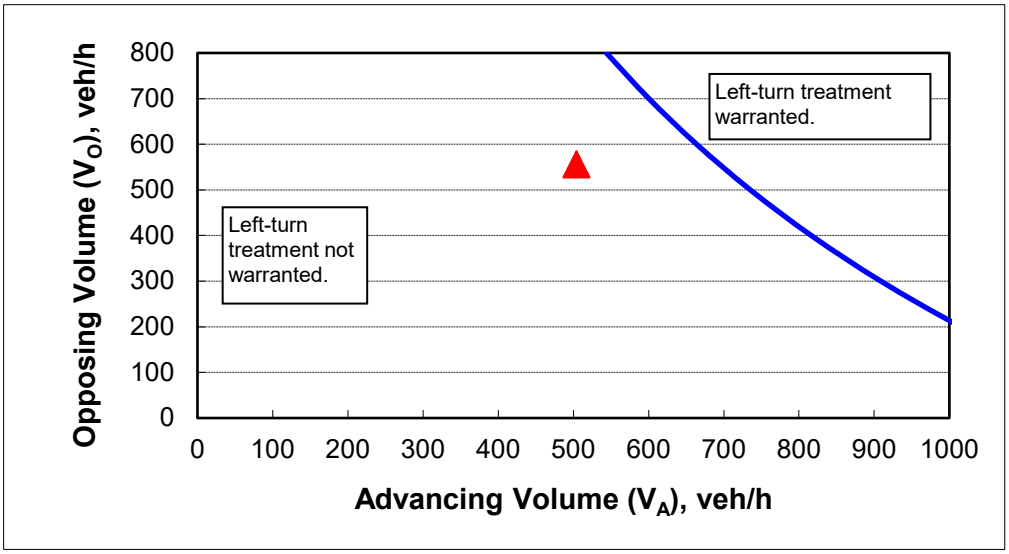
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	3%
Advancing volume (V_A), veh/h:	504
Opposing volume (V_O), veh/h:	556

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	694
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment NOT warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Left-Turn Lane Warrant Analysis

Project: Hillside Master Plan
Intersection: SE Meek Street at SE 32nd Avenue (Northbound)
Date: 8/24/2020
Scenario: 2026 Buildout Conditions - PM Peak Hour

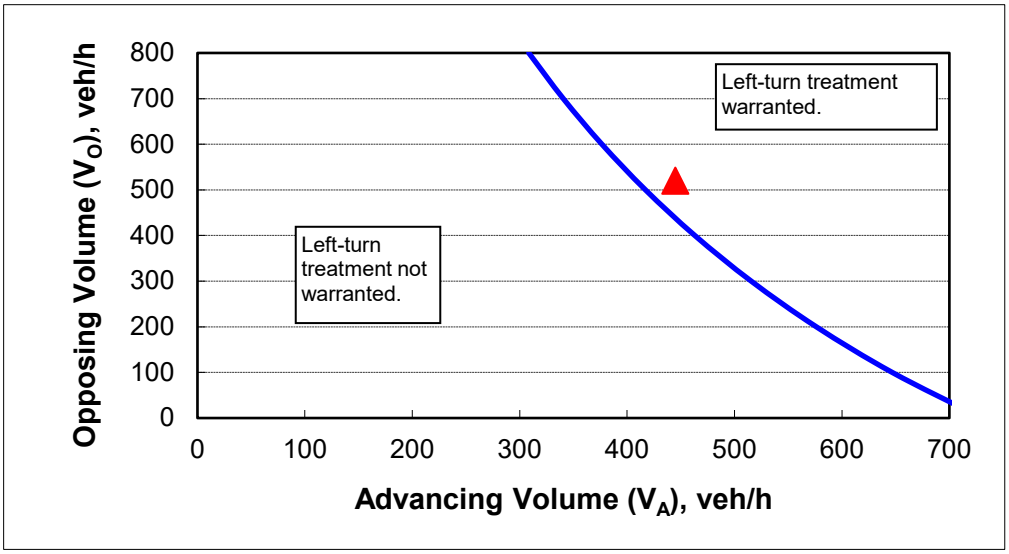
2-lane roadway (English)

INPUT

Variable	Value
85th percentile speed, mph:	25
Percent of left-turns in advancing volume (V_A), %:	9%
Advancing volume (V_A), veh/h:	445
Opposing volume (V_O), veh/h:	520

OUTPUT

Variable	Value
Limiting advancing volume (V_A), veh/h:	409
Guidance for determining the need for a major-road left-turn bay:	
Left-turn treatment warranted.	



CALIBRATION CONSTANTS

Variable	Value
Average time for making left-turn, s:	3.0
Critical headway, s:	5.0
Average time for left-turn vehicle to clear the advancing lane, s:	1.9

Traffic Signal Warrant Analysis

Project: Hillside Master Plan
Date: 7/30/2020
Scenario: 2026 Buildout Conditions

Major Street:	SE Harrison Street (EB)/ SE 42nd Avenue (SB)	Minor Street:	SE Harrison Street (WB)/ SE 42nd Avenue (NB)
Number of Lanes:	1	Number of Lanes:	1
PM Peak Hour Volumes:	760	PM Peak Hour Volumes:	402

Warrant Used:

X — 100 percent of standard warrants used

_____ — 70 percent of standard warrants used due to 85th percentile speed in excess of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
WARRANT 1, CONDITION A		100%	70%	100%	70%
Major St.	Minor St.	Warrants	Warrants	Warrants	Warrants
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
WARRANT 1, CONDITION B					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	7,600	8,850	
Minor Street*	4,020	2,650	**No**
Condition B: Interruption of Continuous Traffic			
Major Street	7,600	13,300	
Minor Street*	4,020	1,350	**No**
Combination Warrant			
Major Street	7,600	10,640	
Minor Street*	4,020	2,120	**No**

Note: Minor street right-turning traffic volumes reduced by 85% of the right-turn capacity.

Traffic Signal Warrant Analysis

Project: Hillside Master Plan
Date: 7/30/2020
Scenario: 2026 Buildout Conditions

Major Street:	SE Harrison Street	Minor Street:	SE 42nd Avenue
Number of Lanes:	1	Number of Lanes:	1
PM Peak Hour Volumes:	534	PM Peak Hour Volumes:	474

Warrant Used:

X — 100 percent of standard warrants used

_____ — 70 percent of standard warrants used due to 85th percentile speed in excess of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
WARRANT 1, CONDITION A		100%	70%	100%	70%
Major St.	Minor St.	Warrants	Warrants	Warrants	Warrants
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
WARRANT 1, CONDITION B					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	5,340	8,850	
Minor Street*	4,740	2,650	**No**
Condition B: Interruption of Continuous Traffic			
Major Street	5,340	13,300	
Minor Street*	4,740	1,350	**No**
Combination Warrant			
Major Street	5,340	10,640	
Minor Street*	4,740	2,120	**No**

Note: Minor street right-turning traffic volumes reduced by 85% of the right-turn capacity.

Traffic Signal Warrant Analysis

Project: Hillside Master Plan
Date: 7/30/2020
Scenario: 2026 Buildout Conditions

Major Street:	SE 42nd Avenue	Minor Street:	SE Harrison Street
Number of Lanes:	1	Number of Lanes:	1
PM Peak Hour Volumes:	664	PM Peak Hour Volumes:	469

Warrant Used:

X — 100 percent of standard warrants used

_____ — 70 percent of standard warrants used due to 85th percentile speed in excess of 40 mph or isolated community with population less than 10,000.

Number of Lanes for Moving Traffic on Each Approach:		ADT on Major St. (total of both approaches)		ADT on Minor St. (higher-volume approach)	
WARRANT 1, CONDITION A		100%	70%	100%	70%
Major St.	Minor St.	Warrants	Warrants	Warrants	Warrants
1	1	8,850	6,200	2,650	1,850
2 or more	1	10,600	7,400	2,650	1,850
2 or more	2 or more	10,600	7,400	3,550	2,500
1	2 or more	8,850	6,200	3,550	2,500
WARRANT 1, CONDITION B					
1	1	13,300	9,300	1,350	950
2 or more	1	15,900	11,100	1,350	950
2 or more	2 or more	15,900	11,100	1,750	1,250
1	2 or more	13,300	9,300	1,750	1,250

Note: ADT volumes assume 8th highest hour is 5.6% of the daily volume

	Approach Volumes	Minimum Volumes	Is Signal Warrant Met?
Warrant 1			
Condition A: Minimum Vehicular Volume			
Major Street	6,640	8,850	
Minor Street*	4,690	2,650	**No**
Condition B: Interruption of Continuous Traffic			
Major Street	6,640	13,300	
Minor Street*	4,690	1,350	**No**
Combination Warrant			
Major Street	6,640	10,640	
Minor Street*	4,690	2,120	**No**

Note: Minor street right-turning traffic volumes reduced by 85% of the right-turn capacity.

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	28	740	272	57	319	102
Future Volume (vph)	28	740	272	57	319	102
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.98	1.00			1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00
Frt	1.00	0.85	0.98			1.00
Flt Protected	0.95	1.00	1.00			0.96
Satd. Flow (prot)	1770	1547	1849			1795
Flt Permitted	0.95	1.00	1.00			0.96
Satd. Flow (perm)	1770	1547	1849			1795
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	30	796	292	61	343	110
RTOR Reduction (vph)	0	178	7	0	0	0
Lane Group Flow (vph)	30	618	346	0	0	453
Confl. Peds. (#/hr)	3			1	1	
Confl. Bikes (#/hr)		6				
Heavy Vehicles (%)	2%	2%	0%	0%	2%	2%
Turn Type	Prot	Perm	NA		Split	NA
Protected Phases	3		1		2	2
Permitted Phases		1 2				
Actuated Green, G (s)	1.6	49.8	20.5			25.3
Effective Green, g (s)	1.6	49.8	20.5			25.3
Actuated g/C Ratio	0.02	0.78	0.32			0.39
Clearance Time (s)	4.0		4.0			4.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	44	1201	591			708
v/s Ratio Prot	c0.02		c0.19			c0.25
v/s Ratio Perm		0.40				
v/c Ratio	0.68	0.51	0.58			0.64
Uniform Delay, d1	31.0	2.7	18.2			15.7
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	35.7	0.4	1.5			1.9
Delay (s)	66.7	3.0	19.7			17.6
Level of Service	E	A	B			B
Approach Delay (s)	5.3		19.7			17.6
Approach LOS	A		B			B

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	64.1	Sum of lost time (s)	14.0
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support exclusive ped or hold phases.

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	5	0	2	0	2	0	0	4	2	0	0
Future Vol, veh/h	2	5	0	2	0	2	0	0	4	2	0	0
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	9	0	4	0	4	0	0	7	4	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7	6.8	6.4	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	29%	50%	100%
Vol Thru, %	0%	71%	0%	0%
Vol Right, %	100%	0%	50%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	7	4	2
LT Vol	0	2	2	2
Through Vol	0	5	0	0
RT Vol	4	0	2	0
Lane Flow Rate	7	12	7	4
Geometry Grp	1	1	1	1
Degree of Util (X)	0.007	0.014	0.007	0.004
Departure Headway (Hd)	3.336	3.98	3.727	4.138
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1077	904	964	868
Service Time	1.344	1.985	1.733	2.147
HCM Lane V/C Ratio	0.006	0.013	0.007	0.005
HCM Control Delay	6.4	7	6.8	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	5	4	170	254	2
Future Vol, veh/h	2	5	4	170	254	2
Conflicting Peds, #/hr	0	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	7	7	6	6
Mvmt Flow	2	6	5	198	295	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	505	298	298	0	-	0
Stage 1	297	-	-	-	-	-
Stage 2	208	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.17	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.263	-	-	-
Pot Cap-1 Maneuver	530	746	1235	-	-	-
Stage 1	758	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	526	745	1234	-	-	-
Mov Cap-2 Maneuver	526	-	-	-	-	-
Stage 1	753	-	-	-	-	-
Stage 2	831	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.5	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1234	-	666	-	-
HCM Lane V/C Ratio	0.004	-	0.012	-	-
HCM Control Delay (s)	7.9	0	10.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	29	0	13	0	143	27	38	229	0
Future Vol, veh/h	0	0	0	29	0	13	0	143	27	38	229	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	9	9	9	10	10	10	5	5	5
Mvmt Flow	0	0	0	36	0	16	0	177	33	47	283	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	579	594	283	578	578	201	283	0	0	217	0	0
Stage 1	377	377	-	201	201	-	-	-	-	-	-	-
Stage 2	202	217	-	377	377	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.19	6.59	6.29	4.2	-	-	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.19	5.59	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.19	5.59	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.581	4.081	3.381	2.29	-	-	2.245	-	-
Pot Cap-1 Maneuver	429	421	761	417	417	822	1235	-	-	1335	-	-
Stage 1	649	619	-	785	722	-	-	-	-	-	-	-
Stage 2	805	727	-	630	604	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	407	400	761	401	397	817	1235	-	-	1326	-	-
Mov Cap-2 Maneuver	407	400	-	401	397	-	-	-	-	-	-	-
Stage 1	649	593	-	780	717	-	-	-	-	-	-	-
Stage 2	789	722	-	604	579	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	13.5	0	1.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1235	-	-	-	476	1326	-	-
HCM Lane V/C Ratio	-	-	-	-	0.109	0.035	-	-
HCM Control Delay (s)	0	-	-	0	13.5	7.8	0	-
HCM Lane LOS	A	-	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.4	0.1	-	-

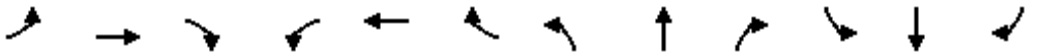
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	29	9	457	484	4
Future Vol, veh/h	13	29	9	457	484	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	16	36	11	564	598	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1187	601	603	0	-	0
Stage 1	601	-	-	-	-	-
Stage 2	586	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	210	504	984	-	-	-
Stage 1	551	-	-	-	-	-
Stage 2	560	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	207	504	984	-	-	-
Mov Cap-2 Maneuver	207	-	-	-	-	-
Stage 1	542	-	-	-	-	-
Stage 2	560	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	17.1	0.2	0
HCM LOS	C		

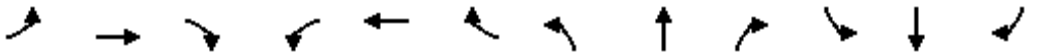
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	984	-	349	-	-
HCM Lane V/C Ratio	0.011	-	0.149	-	-
HCM Control Delay (s)	8.7	0	17.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	120	40	39	179	296	57	1762	55	90	868	13
Future Volume (vph)	18	120	40	39	179	296	57	1762	55	90	868	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.97			0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00			1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		3018			3134		1719	3438	1538	1703	3406	1524
Flt Permitted		0.73			0.91		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		2228			2860		1719	3438	1538	1703	3406	1524
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	19	129	43	42	192	318	61	1895	59	97	933	14
RTOR Reduction (vph)	0	23	0	0	131	0	0	0	20	0	0	5
Lane Group Flow (vph)	0	168	0	0	421	0	61	1895	39	97	933	9
Confl. Peds. (#/hr)	2					2						
Heavy Vehicles (%)	15%	15%	15%	4%	4%	4%	5%	5%	5%	6%	6%	6%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		21.0			21.0		7.9	72.8	72.8	10.2	75.1	75.1
Effective Green, g (s)		22.0			22.0		7.9	75.8	75.8	10.2	78.1	78.1
Actuated g/C Ratio		0.18			0.18		0.07	0.63	0.63	0.08	0.65	0.65
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		408			524		113	2171	971	144	2216	991
v/s Ratio Prot							0.04	c0.55		c0.06	0.27	
v/s Ratio Perm		0.08			c0.15				0.03			0.01
v/c Ratio		0.41			0.80		0.54	0.87	0.04	0.67	0.42	0.01
Uniform Delay, d1		43.3			46.9		54.3	18.1	8.4	53.3	10.1	7.4
Progression Factor		1.00			1.00		1.26	0.80	0.20	1.00	1.00	1.00
Incremental Delay, d2		0.7			8.7		3.5	3.8	0.1	11.8	0.6	0.0
Delay (s)		44.0			55.6		72.1	18.2	1.7	65.0	10.7	7.4
Level of Service		D			E		E	B	A	E	B	A
Approach Delay (s)		44.0			55.6			19.4			15.7	
Approach LOS		D			E			B			B	

Intersection Summary			
HCM 2000 Control Delay	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



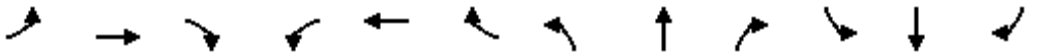
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	120	40	39	179	296	57	1762	55	90	868	13
Future Volume (veh/h)	18	120	40	39	179	296	57	1762	55	90	868	13
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1678	1678	1678	1841	1841	1841	1826	1826	1826	1811	1811	1811
Adj Flow Rate, veh/h	19	129	43	42	192	318	61	1895	59	97	933	14
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, %	15	15	15	4	4	4	5	5	5	6	6	6
Cap, veh/h	39	258	101	36	85	283	78	2187	975	120	2255	1006
Arrive On Green	0.19	0.20	0.19	0.19	0.20	0.19	0.09	1.00	1.00	0.07	0.66	0.66
Sat Flow, veh/h	2	1292	504	1	427	1416	1739	3469	1547	1725	3441	1535
Grp Volume(v), veh/h	69	0	122	234	0	318	61	1895	59	97	933	14
Grp Sat Flow(s),veh/h/ln	363	0	1435	428	0	1416	1739	1735	1547	1725	1721	1535
Q Serve(g_s), s	7.2	0.0	9.0	18.8	0.0	24.0	4.1	0.0	0.0	6.7	15.4	0.4
Cycle Q Clear(g_c), s	7.2	0.0	9.0	18.8	0.0	24.0	4.1	0.0	0.0	6.7	15.4	0.4
Prop In Lane	0.28		0.35	0.18		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	287	0	0	283	78	2187	975	120	2255	1006
V/C Ratio(X)	0.00	0.00	0.43	0.00	0.00	1.12	0.79	0.87	0.06	0.81	0.41	0.01
Avail Cap(c_a), veh/h	0	0	287	0	0	283	159	2187	975	158	2255	1006
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.79	0.00	0.79	0.64	0.64	0.64	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	42.1	0.0	0.0	48.5	54.1	0.0	0.0	55.0	9.8	7.2
Incr Delay (d2), s/veh	0.0	0.0	1.0	0.0	0.0	85.2	10.6	3.2	0.1	20.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.3	0.0	0.0	15.2	1.9	1.0	0.0	3.5	5.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	43.1	0.0	0.0	133.7	64.7	3.2	0.1	75.2	10.3	7.2
LnGrp LOS	A	A	D	A	A	F	E	A	A	E	B	A
Approach Vol, veh/h		191			552			2015			1044	
Approach Delay, s/veh		27.7			77.0			5.0			16.3	
Approach LOS		C			E			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.4	82.6		28.0	12.4	79.6		28.0				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	11.0	70.0		23.0	11.0	70.0		23.0				
Max Q Clear Time (g_c+I1), s	6.1	17.4		26.0	8.7	2.0		11.0				
Green Ext Time (p_c), s	0.0	7.8		0.0	0.0	28.6		0.8				

Intersection Summary		
HCM 6th Ctrl Delay		19.7
HCM 6th LOS		B

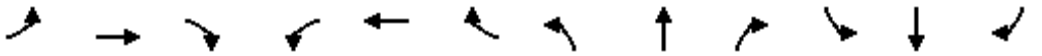
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	105	107	4	21	397	22	45	134	14	16	105	152
Future Volume (vph)	105	107	4	21	397	22	45	134	14	16	105	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.97		1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1641	1717		1748	1828			1840	1535		1779	1502
Flt Permitted	0.95	1.00		0.68	1.00			0.89	1.00		0.94	1.00
Satd. Flow (perm)	1641	1717		1257	1828			1652	1535		1686	1502
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	109	111	4	22	414	23	47	140	15	17	109	158
RTOR Reduction (vph)	0	1	0	0	2	0	0	0	12	0	0	122
Lane Group Flow (vph)	109	114	0	22	435	0	0	187	3	0	126	36
Confl. Peds. (#/hr)	3		3	3		3			5	5		
Confl. Bikes (#/hr)			2			1			2			2
Heavy Vehicles (%)	10%	10%	10%	3%	3%	3%	2%	2%	2%	6%	6%	6%
Turn Type	Prot	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases				6			8		8	4		4
Actuated Green, G (s)	7.6	26.5		22.7	20.8			12.6	12.6		12.6	12.6
Effective Green, g (s)	7.6	26.5		22.7	20.8			12.6	12.6		12.6	12.6
Actuated g/C Ratio	0.14	0.48		0.41	0.38			0.23	0.23		0.23	0.23
Clearance Time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	226	827		535	691			378	351		386	344
v/s Ratio Prot	c0.07	0.07		0.00	c0.24							
v/s Ratio Perm				0.02				c0.11	0.00		0.07	0.02
v/c Ratio	0.48	0.14		0.04	0.63			0.49	0.01		0.33	0.11
Uniform Delay, d1	21.9	7.9		9.6	14.0			18.4	16.4		17.7	16.7
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	1.6	0.1		0.0	1.8			1.0	0.0		0.5	0.1
Delay (s)	23.5	8.0		9.6	15.8			19.5	16.4		18.2	16.9
Level of Service	C	A		A	B			B	B		B	B
Approach Delay (s)		15.5			15.5			19.2			17.4	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	58.8%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	107	4	21	397	22	45	134	14	16	105	152
Future Volume (veh/h)	105	107	4	21	397	22	45	134	14	16	105	152
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1856	1856	1856	1870	1870	1870	1811	1811	1811
Adj Flow Rate, veh/h	109	111	4	22	414	23	47	140	15	17	109	158
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	10	10	10	3	3	3	2	2	2	6	6	6
Cap, veh/h	140	680	25	667	597	33	175	272	296	133	317	291
Arrive On Green	0.08	0.41	0.41	0.02	0.34	0.34	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	1668	1679	60	1767	1739	97	275	1406	1527	115	1636	1501
Grp Volume(v), veh/h	109	0	115	22	0	437	187	0	15	126	0	158
Grp Sat Flow(s),veh/h/ln	1668	0	1739	1767	0	1835	1681	0	1527	1750	0	1501
Q Serve(g_s), s	2.4	0.0	1.6	0.3	0.0	7.6	1.3	0.0	0.3	0.0	0.0	3.5
Cycle Q Clear(g_c), s	2.4	0.0	1.6	0.3	0.0	7.6	3.5	0.0	0.3	2.2	0.0	3.5
Prop In Lane	1.00		0.03	1.00		0.05	0.25		1.00	0.13		1.00
Lane Grp Cap(c), veh/h	140	0	705	667	0	630	448	0	296	450	0	291
V/C Ratio(X)	0.78	0.00	0.16	0.03	0.00	0.69	0.42	0.00	0.05	0.28	0.00	0.54
Avail Cap(c_a), veh/h	949	0	1413	1394	0	1491	1218	0	1034	1267	0	1017
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	7.0	7.5	0.0	10.5	13.4	0.0	12.1	12.9	0.0	13.4
Incr Delay (d2), s/veh	9.0	0.0	0.1	0.0	0.0	1.4	0.6	0.0	0.1	0.3	0.0	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.4	0.1	0.0	2.6	1.2	0.0	0.1	0.8	0.0	1.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	25.6	0.0	7.1	7.6	0.0	11.8	14.0	0.0	12.2	13.2	0.0	15.0
LnGrp LOS	C	A	A	A	A	B	B	A	B	B	A	B
Approach Vol, veh/h		224			459			202			284	
Approach Delay, s/veh		16.1			11.6			13.8			14.2	
Approach LOS		B			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.8	20.0		12.2	7.1	17.7		12.2				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0				
Max Green Setting (Gmax), s	16.0	30.0		25.0	21.0	30.0		25.0				
Max Q Clear Time (g_c+I1), s	2.3	3.6		5.5	4.4	9.6		5.5				
Green Ext Time (p_c), s	0.0	0.6		1.2	0.2	2.9		1.1				

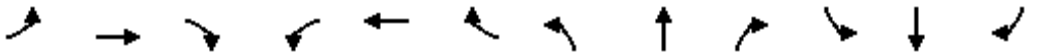
Intersection Summary			
HCM 6th Ctrl Delay		13.5	
HCM 6th LOS		B	

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	137	8	11	17	27	5	27	129	5	3	128	266
Future Vol, veh/h	137	8	11	17	27	5	27	129	5	3	128	266
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	6	6	6	6	6	6	3	3	3	5	5	5
Mvmt Flow	147	9	12	18	29	5	29	139	5	3	138	286
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	11.8	9.8	11.1	10.3
HCM LOS	B	A	B	B

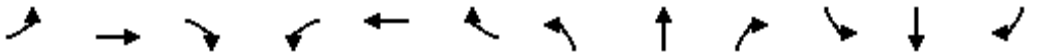
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	94%	0%	39%	0%	2%	0%
Vol Thru, %	80%	6%	0%	61%	0%	98%	0%
Vol Right, %	3%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	161	145	11	44	5	131	266
LT Vol	27	137	0	17	0	3	0
Through Vol	129	8	0	27	0	128	0
RT Vol	5	0	11	0	5	0	266
Lane Flow Rate	173	156	12	47	5	141	286
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.281	0.29	0.018	0.087	0.009	0.215	0.379
Departure Headway (Hd)	5.848	6.687	5.498	6.635	5.726	5.584	4.867
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	618	539	654	542	627	647	744
Service Time	3.848	4.398	3.209	4.351	3.442	3.284	2.567
HCM Lane V/C Ratio	0.28	0.289	0.018	0.087	0.008	0.218	0.384
HCM Control Delay	11.1	12.1	8.3	10	8.5	9.8	10.5
HCM Lane LOS	B	B	A	A	A	A	B
HCM 95th-tile Q	1.1	1.2	0.1	0.3	0	0.8	1.8



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	9	57	5	17	23	40	1825	13	5	929	15
Future Volume (vph)	31	9	57	5	17	23	40	1825	13	5	929	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.92			0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1689			1713		1719	3438	1504	1687	3374	1509
Flt Permitted		0.91			0.98		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1557			1681		1719	3438	1504	1687	3374	1509
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	33	10	61	5	18	24	43	1941	14	5	988	16
RTOR Reduction (vph)	0	43	0	0	21	0	0	0	3	0	0	4
Lane Group Flow (vph)	0	61	0	0	26	0	43	1941	11	5	988	12
Confl. Peds. (#/hr)	2		3	3		2			1	1		
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	5%	5%	5%	7%	7%	7%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		13.2			13.2		7.0	89.4	89.4	1.4	83.8	83.8
Effective Green, g (s)		14.2			14.2		7.0	92.4	92.4	1.4	86.8	86.8
Actuated g/C Ratio		0.12			0.12		0.06	0.77	0.77	0.01	0.72	0.72
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		184			198		100	2647	1158	19	2440	1091
v/s Ratio Prot							c0.03	c0.56		0.00	0.29	
v/s Ratio Perm		c0.04			0.02				0.01			0.01
v/c Ratio		0.33			0.13		0.43	0.73	0.01	0.26	0.40	0.01
Uniform Delay, d1		48.5			47.4		54.6	7.3	3.2	58.8	6.5	4.6
Progression Factor		1.00			1.00		1.26	0.36	1.00	1.14	0.57	1.00
Incremental Delay, d2		1.1			0.3		2.3	1.4	0.0	6.7	0.5	0.0
Delay (s)		49.6			47.7		71.3	4.0	3.2	73.8	4.2	4.6
Level of Service		D			D		E	A	A	E	A	A
Approach Delay (s)		49.6			47.7			5.5			4.5	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



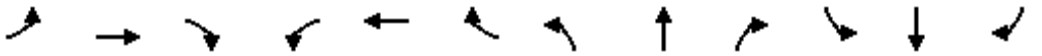
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	9	57	5	17	23	40	1825	13	5	929	15
Future Volume (veh/h)	31	9	57	5	17	23	40	1825	13	5	929	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1826	1826	1826	1796	1796	1796
Adj Flow Rate, veh/h	33	10	61	5	18	24	43	1941	14	5	988	16
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	2	2	2	5	5	5	7	7	7
Cap, veh/h	68	32	85	36	76	83	55	2779	1239	9	2644	1179
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.03	0.80	0.80	0.01	0.77	0.77
Sat Flow, veh/h	301	342	912	33	813	883	1739	3469	1546	1711	3413	1521
Grp Volume(v), veh/h	104	0	0	47	0	0	43	1941	14	5	988	16
Grp Sat Flow(s),veh/h/ln	1555	0	0	1729	0	0	1739	1735	1546	1711	1706	1521
Q Serve(g_s), s	7.6	0.0	0.0	3.1	0.0	0.0	2.9	30.3	0.2	0.3	11.0	0.3
Cycle Q Clear(g_c), s	7.6	0.0	0.0	3.1	0.0	0.0	2.9	30.3	0.2	0.3	11.0	0.3
Prop In Lane	0.32		0.59	0.11		0.51	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	0	0	0	0	55	2779	1239	9	2644	1179
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.70	0.01	0.57	0.37	0.01
Avail Cap(c_a), veh/h	0	0	0	0	0	0	145	2779	1239	143	2644	1179
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.66	0.66	0.66	0.91	0.91	0.91
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	57.7	5.4	2.4	59.6	4.3	3.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	14.8	1.0	0.0	43.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.5	7.7	0.1	0.3	3.0	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	72.5	6.4	2.4	103.4	4.7	3.1
LnGrp LOS	A	A	A	A	A	A	E	A	A	F	A	A
Approach Vol, veh/h		104			47			1998			1009	
Approach Delay, s/veh		0.0			0.0			7.8			5.1	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.8	97.0		15.2	4.6	100.1		15.2				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	10.0	79.0		15.0	10.0	79.0		15.0				
Max Q Clear Time (g_c+I1), s	4.9	13.0		5.1	2.3	32.3		9.6				
Green Ext Time (p_c), s	0.0	8.6		0.1	0.0	25.1		0.2				

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

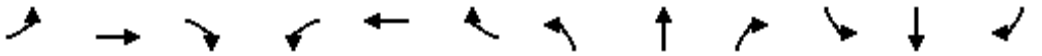
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	85	896	16	133	1606	161	47	162	84	77	264	186
Future Volume (vph)	85	896	16	133	1606	161	47	162	84	77	264	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1719	3438	1538	1703	3406	1504	1714	3438	1514	1714	3438	1510
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.42	1.00	1.00	0.60	1.00	1.00
Satd. Flow (perm)	1719	3438	1538	1703	3406	1504	766	3438	1514	1087	3438	1510
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	87	914	16	136	1639	164	48	165	86	79	269	190
RTOR Reduction (vph)	0	0	6	0	0	51	0	0	74	0	0	122
Lane Group Flow (vph)	87	914	10	136	1639	113	48	165	12	79	269	68
Confl. Peds. (#/hr)	1					1	5		4	4		5
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	5%	5%	5%	6%	6%	6%	5%	5%	5%	5%	5%	5%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8		8	4		4
Actuated Green, G (s)	10.0	73.8	73.8	13.9	77.7	77.7	16.3	16.3	16.3	16.3	16.3	16.3
Effective Green, g (s)	10.0	76.8	76.8	13.9	80.7	80.7	17.3	17.3	17.3	17.3	17.3	17.3
Actuated g/C Ratio	0.08	0.64	0.64	0.12	0.67	0.67	0.14	0.14	0.14	0.14	0.14	0.14
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	143	2200	984	197	2290	1011	110	495	218	156	495	217
v/s Ratio Prot	c0.05	0.27		0.08	c0.48			0.05			c0.08	
v/s Ratio Perm			0.01			0.07	0.06		0.01	0.07		0.04
v/c Ratio	0.61	0.42	0.01	0.69	0.72	0.11	0.44	0.33	0.06	0.51	0.54	0.31
Uniform Delay, d1	53.1	10.6	7.8	51.0	12.4	7.0	46.9	46.2	44.3	47.4	47.7	46.0
Progression Factor	0.76	0.49	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.7	0.5	0.0	10.0	1.9	0.2	2.8	0.4	0.1	2.6	1.2	0.8
Delay (s)	47.1	5.7	7.8	60.9	14.4	7.2	49.7	46.6	44.4	50.0	48.9	46.8
Level of Service	D	A	A	E	B	A	D	D	D	D	D	D
Approach Delay (s)		9.3			17.0			46.4			48.3	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	896	16	133	1606	161	47	162	84	77	264	186
Future Volume (veh/h)	85	896	16	133	1606	161	47	162	84	77	264	186
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1811	1811	1811	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	87	914	16	136	1639	164	48	165	86	79	269	190
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	5	5	5	6	6	6	5	5	5	5	5	5
Cap, veh/h	276	2216	988	162	1890	842	148	579	256	197	579	253
Arrive On Green	0.16	0.64	0.64	0.09	0.55	0.55	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1739	3469	1547	1725	3441	1534	907	3469	1533	1096	3469	1513
Grp Volume(v), veh/h	87	914	16	136	1639	164	48	165	86	79	269	190
Grp Sat Flow(s),veh/h/ln	1739	1735	1547	1725	1721	1534	907	1735	1533	1096	1735	1513
Q Serve(g_s), s	5.3	15.5	0.5	9.3	49.2	6.5	6.1	5.0	5.9	8.2	8.4	14.4
Cycle Q Clear(g_c), s	5.3	15.5	0.5	9.3	49.2	6.5	14.5	5.0	5.9	13.1	8.4	14.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	2216	988	162	1890	842	148	579	256	197	579	253
V/C Ratio(X)	0.31	0.41	0.02	0.84	0.87	0.19	0.32	0.28	0.34	0.40	0.46	0.75
Avail Cap(c_a), veh/h	276	2216	988	230	2065	920	185	723	319	243	723	315
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.7	10.6	7.9	53.4	23.3	13.7	51.7	43.7	44.1	49.5	45.1	47.6
Incr Delay (d2), s/veh	0.6	0.5	0.0	16.7	5.7	0.5	1.3	0.3	0.8	1.3	0.6	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	5.6	0.1	4.7	19.8	2.3	1.4	2.2	2.3	2.3	3.7	6.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	45.3	11.1	7.9	70.1	29.0	14.2	52.9	44.0	44.9	50.8	45.7	55.3
LnGrp LOS	D	B	A	E	C	B	D	D	D	D	D	E
Approach Vol, veh/h		1017			1939			299			538	
Approach Delay, s/veh		14.0			30.6			45.7			49.8	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.3	80.7		24.0	26.1	69.9		24.0				
Change Period (Y+Rc), s	4.0	7.0		5.0	7.0	* 7		5.0				
Max Green Setting (Gmax), s	16.0	64.0		24.0	11.0	* 69		24.0				
Max Q Clear Time (g_c+I1), s	11.3	17.5		16.4	7.3	51.2		16.5				
Green Ext Time (p_c), s	0.1	7.5		1.8	0.1	11.7		0.9				

Intersection Summary		
HCM 6th Ctrl Delay		30.1
HCM 6th LOS		C

Notes

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

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	49	519	121	35	601	317
Future Volume (vph)	49	519	121	35	601	317
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.97	0.99			1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00
Frt	1.00	0.85	0.97			1.00
Flt Protected	0.95	1.00	1.00			0.97
Satd. Flow (prot)	1736	1512	1761			1822
Flt Permitted	0.95	1.00	1.00			0.97
Satd. Flow (perm)	1736	1512	1761			1822
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	52	546	127	37	633	334
RTOR Reduction (vph)	0	120	12	0	0	0
Lane Group Flow (vph)	52	426	152	0	0	967
Confl. Peds. (#/hr)	1	1				
Confl. Bikes (#/hr)		12		2		
Heavy Vehicles (%)	4%	4%	4%	4%	1%	1%
Turn Type	Prot	Perm	NA		Split	NA
Protected Phases	3		1		2	2
Permitted Phases		1 2				
Actuated Green, G (s)	2.8	56.2	8.2			44.0
Effective Green, g (s)	2.8	56.2	8.2			44.0
Actuated g/C Ratio	0.04	0.78	0.11			0.61
Clearance Time (s)	4.0		4.0			4.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	67	1178	200			1111
v/s Ratio Prot	c0.03		c0.09			c0.53
v/s Ratio Perm		0.28				
v/c Ratio	0.78	0.36	0.76			0.87
Uniform Delay, d1	34.3	2.4	31.0			11.7
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	42.0	0.2	15.7			7.6
Delay (s)	76.3	2.6	46.7			19.3
Level of Service	E	A	D			B
Approach Delay (s)	9.0		46.7			19.3
Approach LOS	A		D			B

Intersection Summary			
HCM 2000 Control Delay	18.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	72.1	Sum of lost time (s)	14.0
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support exclusive ped or hold phases.

Intersection	
Intersection Delay, s/veh	6.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	3	0	3	1	8	0	1	3	1	0	0
Future Vol, veh/h	0	3	0	3	1	8	0	1	3	1	0	0
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	5	0	5	2	13	0	2	5	2	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7	6.6	6.5	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	25%	100%
Vol Thru, %	25%	100%	8%	0%
Vol Right, %	75%	0%	67%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	3	12	1
LT Vol	0	0	3	1
Through Vol	1	3	1	0
RT Vol	3	0	8	0
Lane Flow Rate	6	5	19	2
Geometry Grp	1	1	1	1
Degree of Util (X)	0.006	0.005	0.019	0.002
Departure Headway (Hd)	3.492	3.928	3.567	4.146
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1029	916	1009	867
Service Time	1.498	1.932	1.57	2.152
HCM Lane V/C Ratio	0.006	0.005	0.019	0.002
HCM Control Delay	6.5	7	6.6	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0.1	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	6	13	276	241	3
Future Vol, veh/h	6	6	13	276	241	3
Conflicting Peds, #/hr	0	2	6	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	3	3	3	3
Mvmt Flow	7	7	15	314	274	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	626	284	283	0	-	0
Stage 1	282	-	-	-	-	-
Stage 2	344	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	451	760	1274	-	-	-
Stage 1	770	-	-	-	-	-
Stage 2	722	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	439	754	1267	-	-	-
Mov Cap-2 Maneuver	439	-	-	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	718	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1267	-	555	-	-
HCM Lane V/C Ratio	0.012	-	0.025	-	-
HCM Control Delay (s)	7.9	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	45	0	30	0	257	20	8	222	0
Future Vol, veh/h	0	0	0	45	0	30	0	257	20	8	222	0
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	2	2	2	3	3	3	3	3	3
Mvmt Flow	0	0	0	52	0	34	0	295	23	9	255	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	599	594	255	583	583	312	255	0	0	321	0	0
Stage 1	273	273	-	310	310	-	-	-	-	-	-	-
Stage 2	326	321	-	273	273	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.12	6.52	6.22	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.518	4.018	3.318	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	416	421	789	424	424	728	1304	-	-	1233	-	-
Stage 1	737	688	-	700	659	-	-	-	-	-	-	-
Stage 2	691	655	-	733	684	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	393	416	789	420	419	725	1304	-	-	1229	-	-
Mov Cap-2 Maneuver	393	416	-	420	419	-	-	-	-	-	-	-
Stage 1	737	682	-	698	657	-	-	-	-	-	-	-
Stage 2	657	653	-	726	678	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	13.6	0	0.3
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1304	-	-	-	505	1229	-	-
HCM Lane V/C Ratio	-	-	-	-	0.171	0.007	-	-
HCM Control Delay (s)	0	-	-	0	13.6	8	0	-
HCM Lane LOS	A	-	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.6	0	-	-

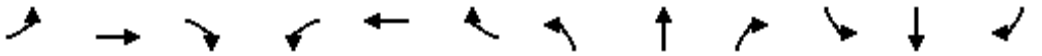
Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	14	24	356	459	10
Future Vol, veh/h	6	14	24	356	459	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	3	3	3	3
Mvmt Flow	7	16	28	409	528	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	999	534	539	0	-	0
Stage 1	534	-	-	-	-	-
Stage 2	465	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	272	550	1024	-	-	-
Stage 1	592	-	-	-	-	-
Stage 2	636	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	262	550	1024	-	-	-
Mov Cap-2 Maneuver	262	-	-	-	-	-
Stage 1	571	-	-	-	-	-
Stage 2	636	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.2	0.5	0
HCM LOS	B		

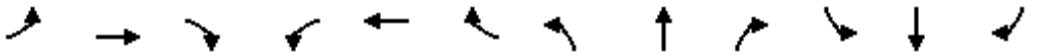
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1024	-	414	-	-
HCM Lane V/C Ratio	0.027	-	0.056	-	-
HCM Control Delay (s)	8.6	0	14.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	258	56	55	182	156	62	1439	66	285	1718	31
Future Volume (vph)	5	258	56	55	182	156	62	1439	66	285	1718	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.99		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.97			0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		3335			3217		1752	3505	1547	1752	3505	1547
Flt Permitted		0.95			0.71		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		3162			2306		1752	3505	1547	1752	3505	1547
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	5	266	58	57	188	161	64	1484	68	294	1771	32
RTOR Reduction (vph)	0	14	0	0	87	0	0	0	31	0	0	10
Lane Group Flow (vph)	0	315	0	0	319	0	64	1484	37	294	1771	22
Confl. Peds. (#/hr)	6		4	4		6	1		1	1		1
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		21.0			21.0		8.1	68.1	68.1	24.9	84.9	84.9
Effective Green, g (s)		22.0			22.0		8.1	71.1	71.1	24.9	87.9	87.9
Actuated g/C Ratio		0.17			0.17		0.06	0.55	0.55	0.19	0.68	0.68
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		535			390		109	1916	846	335	2369	1046
v/s Ratio Prot							0.04	c0.42		c0.17	0.51	
v/s Ratio Perm		0.10			c0.14				0.02			0.01
v/c Ratio		0.59			0.82		0.59	0.77	0.04	0.88	0.75	0.02
Uniform Delay, d1		49.8			52.1		59.3	23.1	13.7	51.1	13.8	6.9
Progression Factor		1.00			1.00		1.28	0.37	0.12	1.00	1.00	1.00
Incremental Delay, d2		1.7			12.5		6.5	2.6	0.1	21.8	2.2	0.0
Delay (s)		51.5			64.5		82.5	11.2	1.8	72.9	16.0	7.0
Level of Service		D			E		F	B	A	E	B	A
Approach Delay (s)		51.5			64.5			13.6			23.8	
Approach LOS		D			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



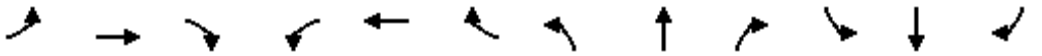
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	258	56	55	182	156	62	1439	66	285	1718	31
Future Volume (veh/h)	5	258	56	55	182	156	62	1439	66	285	1718	31
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	5	266	58	57	188	161	64	1484	68	294	1771	32
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	4	4	4	3	3	3	3	3	3
Cap, veh/h	29	428	100	37	129	192	81	1921	856	319	2396	1068
Arrive On Green	0.17	0.18	0.17	0.17	0.18	0.17	0.09	1.00	1.00	0.18	0.68	0.68
Sat Flow, veh/h	0	2347	551	2	710	1055	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	165	0	164	181	0	225	64	1484	68	294	1771	32
Grp Sat Flow(s),veh/h/ln	1342	0	1556	295	0	1473	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	10.7	0.0	12.5	16.3	0.0	19.2	4.6	0.0	0.0	21.3	42.1	0.9
Cycle Q Clear(g_c), s	10.7	0.0	12.5	16.3	0.0	19.2	4.6	0.0	0.0	21.3	42.1	0.9
Prop In Lane	0.03		0.35	0.31		0.72	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	284	0	0	268	81	1921	856	319	2396	1068
V/C Ratio(X)	0.00	0.00	0.58	0.00	0.00	0.84	0.79	0.77	0.08	0.92	0.74	0.03
Avail Cap(c_a), veh/h	0	0	311	0	0	295	150	1921	856	353	2396	1068
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.92	0.00	0.92	0.78	0.78	0.78	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	48.8	0.0	0.0	51.7	58.4	0.0	0.0	52.3	13.4	6.8
Incr Delay (d2), s/veh	0.0	0.0	2.2	0.0	0.0	16.4	12.2	2.4	0.1	27.3	2.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	5.1	0.0	0.0	8.4	2.2	0.6	0.0	11.7	15.3	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	51.0	0.0	0.0	68.1	70.6	2.4	0.1	79.6	15.5	6.9
LnGrp LOS	A	A	D	A	A	E	E	A	A	E	B	A
Approach Vol, veh/h		329			406			1616			2097	
Approach Delay, s/veh		25.4			37.7			5.0			24.4	
Approach LOS		C			D			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	92.3		27.7	27.5	74.8		27.7				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	11.0	78.0		25.0	26.0	63.0		25.0				
Max Q Clear Time (g_c+I1), s	6.6	44.1		21.2	23.3	2.0		14.5				
Green Ext Time (p_c), s	0.0	18.5		0.9	0.2	17.2		1.4				

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

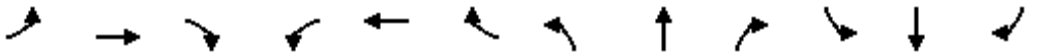
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	125	438	7	24	200	18	26	127	21	47	136	153
Future Volume (vph)	125	438	7	24	200	18	26	127	21	47	136	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.95		1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	1.00		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1752	1839		1752	1817			1847	1511		1813	1543
Flt Permitted	0.95	1.00		0.95	1.00			0.92	1.00		0.87	1.00
Satd. Flow (perm)	1752	1839		1752	1817			1704	1511		1602	1543
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	142	498	8	27	227	20	30	144	24	53	155	174
RTOR Reduction (vph)	0	1	0	0	3	0	0	0	18	0	0	130
Lane Group Flow (vph)	142	505	0	27	244	0	0	174	6	0	208	44
Confl. Peds. (#/hr)	12		4	4		12	1		16	16		1
Confl. Bikes (#/hr)			3			1			2			3
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	8.1	23.0		2.3	17.2			13.3	13.3		13.3	13.3
Effective Green, g (s)	8.1	23.0		2.3	17.2			13.3	13.3		13.3	13.3
Actuated g/C Ratio	0.15	0.44		0.04	0.33			0.25	0.25		0.25	0.25
Clearance Time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	269	804		76	594			430	382		405	390
v/s Ratio Prot	c0.08	c0.27		0.02	0.13							
v/s Ratio Perm								0.10	0.00		c0.13	0.03
v/c Ratio	0.53	0.63		0.36	0.41			0.40	0.02		0.51	0.11
Uniform Delay, d1	20.5	11.5		24.4	13.8			16.4	14.7		16.9	15.1
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	1.9	1.5		2.8	0.5			0.6	0.0		1.1	0.1
Delay (s)	22.4	13.0		27.3	14.2			17.0	14.8		18.0	15.2
Level of Service	C	B		C	B			B	B		B	B
Approach Delay (s)		15.1			15.5			16.7			16.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	15.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	52.6	Sum of lost time (s)	14.0
Intersection Capacity Utilization	63.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	438	7	24	200	18	26	127	21	47	136	153
Future Volume (veh/h)	125	438	7	24	200	18	26	127	21	47	136	153
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	142	498	8	27	227	20	30	144	24	53	155	174
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, %	3	3	3	3	3	3	2	2	2	3	3	3
Cap, veh/h	182	623	10	42	440	39	94	349	552	108	256	557
Arrive On Green	0.10	0.34	0.34	0.02	0.26	0.26	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1767	1820	29	1767	1674	147	35	958	1516	56	704	1530
Grp Volume(v), veh/h	142	0	506	27	0	247	174	0	24	208	0	174
Grp Sat Flow(s),veh/h/ln	1767	0	1849	1767	0	1821	992	0	1516	760	0	1530
Q Serve(g_s), s	4.1	0.0	12.9	0.8	0.0	6.0	1.0	0.0	0.5	1.6	0.0	4.2
Cycle Q Clear(g_c), s	4.1	0.0	12.9	0.8	0.0	6.0	17.6	0.0	0.5	17.9	0.0	4.2
Prop In Lane	1.00		0.02	1.00		0.08	0.17		1.00	0.25		1.00
Lane Grp Cap(c), veh/h	182	0	633	42	0	479	443	0	552	364	0	557
V/C Ratio(X)	0.78	0.00	0.80	0.64	0.00	0.52	0.39	0.00	0.04	0.57	0.00	0.31
Avail Cap(c_a), veh/h	715	0	1069	545	0	1053	636	0	730	555	0	737
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.7	0.0	15.5	25.1	0.0	16.3	12.4	0.0	10.7	13.1	0.0	11.8
Incr Delay (d2), s/veh	7.1	0.0	2.4	14.6	0.0	0.9	0.6	0.0	0.0	1.4	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	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	5.2	0.5	0.0	2.4	1.3	0.0	0.2	1.7	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	29.8	0.0	17.9	39.7	0.0	17.2	12.9	0.0	10.7	14.5	0.0	12.2
LnGrp LOS	C	A	B	D	A	B	B	A	B	B	A	B
Approach Vol, veh/h		648			274			198			382	
Approach Delay, s/veh		20.5			19.4			12.7			13.4	
Approach LOS		C			B			B			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	23.0		24.8	9.4	18.8		24.8				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0				
Max Green Setting (Gmax), s	16.0	30.0		25.0	21.0	30.0		25.0				
Max Q Clear Time (g_c+I1), s	2.8	14.9		19.9	6.1	8.0		19.6				
Green Ext Time (p_c), s	0.0	3.0		0.9	0.3	1.5		0.5				

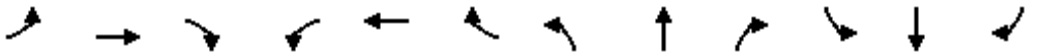
Intersection Summary			
HCM 6th Ctrl Delay		17.5	
HCM 6th LOS		B	

Intersection	
Intersection Delay, s/veh	22.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	342	33	47	38	34	15	31	282	19	8	134	160
Future Vol, veh/h	342	33	47	38	34	15	31	282	19	8	134	160
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	3	3	3	5	5	5	2	2	2	2	2	2
Mvmt Flow	356	34	49	40	35	16	32	294	20	8	140	167
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	31.4	12.2	23.9	12.6
HCM LOS	D	B	C	B

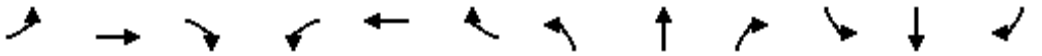
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	9%	91%	0%	53%	0%	6%	0%
Vol Thru, %	85%	9%	0%	47%	0%	94%	0%
Vol Right, %	6%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	332	375	47	72	15	142	160
LT Vol	31	342	0	38	0	8	0
Through Vol	282	33	0	34	0	134	0
RT Vol	19	0	47	0	15	0	160
Lane Flow Rate	346	391	49	75	16	148	167
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.68	0.803	0.085	0.17	0.031	0.3	0.303
Departure Headway (Hd)	7.075	7.401	6.218	8.158	7.161	7.296	6.55
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	512	488	576	439	498	493	548
Service Time	5.121	5.146	3.962	5.924	4.926	5.05	4.304
HCM Lane V/C Ratio	0.676	0.801	0.085	0.171	0.032	0.3	0.305
HCM Control Delay	23.9	34.1	9.5	12.6	10.2	13.2	12.1
HCM Lane LOS	C	D	A	B	B	B	B
HCM 95th-tile Q	5.1	7.5	0.3	0.6	0.1	1.2	1.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	28	30	82	15	19	20	32	1532	13	21	1793	23
Future Volume (vph)	28	30	82	15	19	20	32	1532	13	21	1793	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			1.00		1.00	1.00	1.00	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.92			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1667			1770		1752	3505	1568	1752	3505	1519
Flt Permitted		0.94			0.81		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1581			1451		1752	3505	1568	1752	3505	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	29	31	85	15	20	21	33	1579	13	22	1848	24
RTOR Reduction (vph)	0	41	0	0	18	0	0	0	3	0	0	6
Lane Group Flow (vph)	0	104	0	0	38	0	33	1579	10	22	1848	18
Confl. Peds. (#/hr)	1		3	3		1	4					4
Heavy Vehicles (%)	3%	3%	3%	0%	0%	0%	3%	3%	3%	3%	3%	3%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		14.3			14.3		5.4	94.8	94.8	4.9	94.3	94.3
Effective Green, g (s)		15.3			15.3		5.4	97.8	97.8	4.9	97.3	97.3
Actuated g/C Ratio		0.12			0.12		0.04	0.75	0.75	0.04	0.75	0.75
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		186			170		72	2636	1179	66	2623	1136
v/s Ratio Prot							c0.02	0.45		0.01	c0.53	
v/s Ratio Perm		c0.07			0.03				0.01			0.01
v/c Ratio		0.56			0.23		0.46	0.60	0.01	0.33	0.70	0.02
Uniform Delay, d1		54.1			52.0		60.9	7.3	4.0	61.0	8.7	4.2
Progression Factor		1.00			1.00		1.41	0.64	1.00	1.19	0.25	0.00
Incremental Delay, d2		3.6			0.7		3.0	0.7	0.0	2.0	1.1	0.0
Delay (s)		57.7			52.7		88.8	5.3	4.0	74.7	3.2	0.0
Level of Service		E			D		F	A	A	E	A	A
Approach Delay (s)		57.7			52.7			7.0			4.0	
Approach LOS		E			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



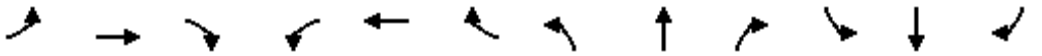
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	30	82	15	19	20	32	1532	13	21	1793	23
Future Volume (veh/h)	28	30	82	15	19	20	32	1532	13	21	1793	23
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1900	1900	1900	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	29	31	85	15	20	21	33	1579	13	22	1848	24
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	0	0	0	3	3	3	3	3	3
Cap, veh/h	55	56	110	64	83	68	42	2728	1214	30	2704	1203
Arrive On Green	0.11	0.12	0.12	0.11	0.12	0.12	0.02	0.77	0.77	0.02	0.77	0.77
Sat Flow, veh/h	182	479	937	249	712	577	1767	3526	1568	1767	3526	1568
Grp Volume(v), veh/h	145	0	0	56	0	0	33	1579	13	22	1848	24
Grp Sat Flow(s),veh/h/ln	1598	0	0	1538	0	0	1767	1763	1568	1767	1763	1568
Q Serve(g_s), s	11.2	0.0	0.0	4.0	0.0	0.0	2.4	23.9	0.2	1.6	33.4	0.5
Cycle Q Clear(g_c), s	11.2	0.0	0.0	4.0	0.0	0.0	2.4	23.9	0.2	1.6	33.4	0.5
Prop In Lane	0.20		0.59	0.27		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	0	0	0	0	42	2728	1214	30	2704	1203
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.58	0.01	0.74	0.68	0.02
Avail Cap(c_a), veh/h	0	0	0	0	0	0	136	2728	1214	136	2704	1203
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.58	0.58	0.58	0.59	0.59	0.59
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	63.1	6.0	3.4	63.6	7.4	3.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	16.9	0.5	0.0	18.7	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.3	7.1	0.1	0.9	10.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	80.0	6.6	3.4	82.3	8.3	3.6
LnGrp LOS	A	A	A	A	A	A	F	A	A	F	A	A
Approach Vol, veh/h		145			56			1625			1894	
Approach Delay, s/veh		0.0			0.0			8.0			9.1	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.1	103.7		19.2	6.2	104.6		19.2				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	10.0	83.0		20.0	10.0	84.0		20.0				
Max Q Clear Time (g_c+I1), s	4.4	35.4		6.0	3.6	25.9		13.2				
Green Ext Time (p_c), s	0.0	23.3		0.2	0.0	18.7		0.4				

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

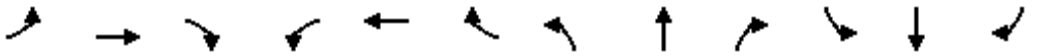
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	218	1640	51	100	1423	166	26	202	79	124	234	134
Future Volume (vph)	218	1640	51	100	1423	166	26	202	79	124	234	134
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1547	1770	3539	1556	1732	3471	1518	1739	3505	1543
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.49	1.00	1.00	0.54	1.00	1.00
Satd. Flow (perm)	1752	3505	1547	1770	3539	1556	894	3471	1518	985	3505	1543
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	234	1763	55	108	1530	178	28	217	85	133	252	144
RTOR Reduction (vph)	0	0	19	0	0	54	0	0	69	0	0	117
Lane Group Flow (vph)	234	1763	36	108	1530	124	28	217	16	133	252	27
Confl. Peds. (#/hr)	5		1	1		5	3		10	10		3
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8		8	4		4
Actuated Green, G (s)	23.0	77.5	77.5	12.8	67.3	67.3	23.7	23.7	23.7	23.7	23.7	23.7
Effective Green, g (s)	23.0	80.5	80.5	12.8	70.3	70.3	24.7	24.7	24.7	24.7	24.7	24.7
Actuated g/C Ratio	0.18	0.62	0.62	0.10	0.54	0.54	0.19	0.19	0.19	0.19	0.19	0.19
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	309	2170	957	174	1913	841	169	659	288	187	665	293
v/s Ratio Prot	0.13	c0.50		0.06	c0.43			0.06			0.07	
v/s Ratio Perm			0.02			0.08	0.03		0.01	c0.14		0.02
v/c Ratio	0.76	0.81	0.04	0.62	0.80	0.15	0.17	0.33	0.06	0.71	0.38	0.09
Uniform Delay, d1	50.8	19.0	9.6	56.3	24.2	14.9	44.0	45.5	43.1	49.3	46.0	43.4
Progression Factor	0.86	0.71	1.05	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.9	2.7	0.1	6.7	3.6	0.4	0.5	0.3	0.1	12.0	0.4	0.1
Delay (s)	51.7	16.2	10.2	63.0	27.8	15.3	44.5	45.8	43.2	61.3	46.3	43.6
Level of Service	D	B	B	E	C	B	D	D	D	E	D	D
Approach Delay (s)		20.0			28.6			45.0			49.3	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	28.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	218	1640	51	100	1423	166	26	202	79	124	234	134
Future Volume (veh/h)	218	1640	51	100	1423	166	26	202	79	124	234	134
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	234	1763	55	108	1530	178	28	217	85	133	252	144
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, %	3	3	3	2	2	2	4	4	4	3	3	3
Cap, veh/h	393	2094	932	133	1503	668	230	837	369	256	844	367
Arrive On Green	0.44	1.00	1.00	0.07	0.42	0.42	0.24	0.24	0.24	0.24	0.24	0.24
Sat Flow, veh/h	1767	3526	1569	1781	3554	1579	967	3497	1540	1061	3526	1533
Grp Volume(v), veh/h	234	1763	55	108	1530	178	28	217	85	133	252	144
Grp Sat Flow(s),veh/h/ln	1767	1763	1569	1781	1777	1579	967	1749	1540	1061	1763	1533
Q Serve(g_s), s	13.0	0.0	0.0	7.8	55.0	9.5	3.2	6.5	5.8	15.1	7.6	10.3
Cycle Q Clear(g_c), s	13.0	0.0	0.0	7.8	55.0	9.5	10.8	6.5	5.8	21.7	7.6	10.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	393	2094	932	133	1503	668	230	837	369	256	844	367
V/C Ratio(X)	0.60	0.84	0.06	0.81	1.02	0.27	0.12	0.26	0.23	0.52	0.30	0.39
Avail Cap(c_a), veh/h	393	2094	932	219	1503	668	296	1076	474	328	1085	472
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.66	0.66	0.66	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	0.0	59.3	37.5	24.4	44.9	40.1	39.8	48.9	40.5	41.5
Incr Delay (d2), s/veh	1.6	2.9	0.1	11.3	27.7	1.0	0.2	0.2	0.3	1.6	0.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.8	0.0	3.9	28.6	3.7	0.8	2.9	2.3	4.2	3.4	4.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.3	2.9	0.1	70.6	65.2	25.4	45.2	40.3	40.1	50.5	40.7	42.2
LnGrp LOS	C	A	A	E	F	C	D	D	D	D	D	D
Approach Vol, veh/h		2052			1816			330			529	
Approach Delay, s/veh		6.3			61.6			40.6			43.6	
Approach LOS		A			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	13.7	81.2		35.1	35.9	59.0		35.1				
Change Period (Y+Rc), s	4.0	7.0		5.0	7.0	* 7		5.0				
Max Green Setting (Gmax), s	16.0	59.0		39.0	23.0	* 52		39.0				
Max Q Clear Time (g_c+I1), s	9.8	2.0		23.7	15.0	57.0		12.8				
Green Ext Time (p_c), s	0.1	23.3		2.5	0.4	0.0		1.9				

Intersection Summary			
HCM 6th Ctrl Delay		34.1	
HCM 6th LOS		C	

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	29	773	286	62	333	109
Future Volume (vph)	29	773	286	62	333	109
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.98	1.00			1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00
Frt	1.00	0.85	0.98			1.00
Flt Protected	0.95	1.00	1.00			0.96
Satd. Flow (prot)	1770	1547	1847			1795
Flt Permitted	0.95	1.00	1.00			0.96
Satd. Flow (perm)	1770	1547	1847			1795
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	31	831	308	67	358	117
RTOR Reduction (vph)	0	182	8	0	0	0
Lane Group Flow (vph)	31	649	367	0	0	475
Confl. Peds. (#/hr)	3			1	1	
Confl. Bikes (#/hr)		6				
Heavy Vehicles (%)	2%	2%	0%	0%	2%	2%
Turn Type	Prot	Perm	NA		Split	NA
Protected Phases	3		1		2	2
Permitted Phases		1 2				
Actuated Green, G (s)	1.6	50.9	21.1			25.8
Effective Green, g (s)	1.6	50.9	21.1			25.8
Actuated g/C Ratio	0.02	0.78	0.32			0.40
Clearance Time (s)	4.0		4.0			4.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	43	1207	597			710
v/s Ratio Prot	c0.02		c0.20			c0.26
v/s Ratio Perm		0.42				
v/c Ratio	0.72	0.54	0.61			0.67
Uniform Delay, d1	31.6	2.7	18.6			16.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	45.2	0.5	1.9			2.4
Delay (s)	76.8	3.2	20.5			18.6
Level of Service	E	A	C			B
Approach Delay (s)	5.8		20.5			18.6
Approach LOS	A		C			B

Intersection Summary			
HCM 2000 Control Delay	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	65.2	Sum of lost time (s)	14.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support exclusive ped or hold phases.

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	2	5	0	2	0	2	0	0	4	2	0	0
Future Vol, veh/h	2	5	0	2	0	2	0	0	4	2	0	0
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	9	0	4	0	4	0	0	7	4	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7	6.8	6.4	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	29%	50%	100%
Vol Thru, %	0%	71%	0%	0%
Vol Right, %	100%	0%	50%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	7	4	2
LT Vol	0	2	2	2
Through Vol	0	5	0	0
RT Vol	4	0	2	0
Lane Flow Rate	7	12	7	4
Geometry Grp	1	1	1	1
Degree of Util (X)	0.007	0.014	0.007	0.004
Departure Headway (Hd)	3.336	3.98	3.727	4.138
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1077	904	964	868
Service Time	1.344	1.985	1.733	2.147
HCM Lane V/C Ratio	0.006	0.013	0.007	0.005
HCM Control Delay	6.4	7	6.8	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	5	4	179	271	2
Future Vol, veh/h	2	5	4	179	271	2
Conflicting Peds, #/hr	0	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	7	7	6	6
Mvmt Flow	2	6	5	208	315	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	535	318	318	0	-	0
Stage 1	317	-	-	-	-	-
Stage 2	218	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.17	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.263	-	-	-
Pot Cap-1 Maneuver	510	727	1214	-	-	-
Stage 1	743	-	-	-	-	-
Stage 2	823	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	506	726	1213	-	-	-
Mov Cap-2 Maneuver	506	-	-	-	-	-
Stage 1	739	-	-	-	-	-
Stage 2	822	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.6	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1213	-	646	-	-
HCM Lane V/C Ratio	0.004	-	0.013	-	-
HCM Control Delay (s)	8	0	10.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	30	0	14	0	150	28	40	245	0
Future Vol, veh/h	0	0	0	30	0	14	0	150	28	40	245	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	9	9	9	10	10	10	5	5	5
Mvmt Flow	0	0	0	37	0	17	0	185	35	49	302	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	611	627	302	610	610	210	302	0	0	227	0	0
Stage 1	400	400	-	210	210	-	-	-	-	-	-	-
Stage 2	211	227	-	400	400	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.19	6.59	6.29	4.2	-	-	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.19	5.59	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.19	5.59	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.581	4.081	3.381	2.29	-	-	2.245	-	-
Pot Cap-1 Maneuver	409	403	742	397	400	813	1215	-	-	1324	-	-
Stage 1	630	605	-	776	715	-	-	-	-	-	-	-
Stage 2	796	720	-	613	590	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	387	382	742	381	379	808	1215	-	-	1315	-	-
Mov Cap-2 Maneuver	387	382	-	381	379	-	-	-	-	-	-	-
Stage 1	630	578	-	771	710	-	-	-	-	-	-	-
Stage 2	779	715	-	585	563	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	13.9	0	1.1
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1215	-	-	-	458	1315	-	-
HCM Lane V/C Ratio	-	-	-	-	0.119	0.038	-	-
HCM Control Delay (s)	0	-	-	0	13.9	7.8	0	-
HCM Lane LOS	A	-	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.4	0.1	-	-

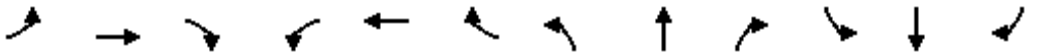
Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	14	30	9	478	511	4
Future Vol, veh/h	14	30	9	478	511	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	17	37	11	590	631	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1246	634	636	0	-	0
Stage 1	634	-	-	-	-	-
Stage 2	612	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	194	483	957	-	-	-
Stage 1	532	-	-	-	-	-
Stage 2	545	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	191	483	957	-	-	-
Mov Cap-2 Maneuver	191	-	-	-	-	-
Stage 1	523	-	-	-	-	-
Stage 2	545	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	18.3	0.2	0
HCM LOS	C		

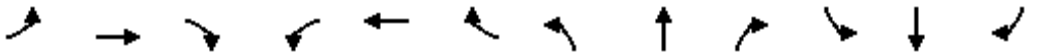
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	957	-	325	-	-
HCM Lane V/C Ratio	0.012	-	0.167	-	-
HCM Control Delay (s)	8.8	0	18.3	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.6	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	126	42	43	190	322	60	1817	58	98	893	14
Future Volume (vph)	19	126	42	43	190	322	60	1817	58	98	893	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.97			0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00			1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		3018			3131		1719	3438	1538	1703	3406	1524
Flt Permitted		0.72			0.91		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		2169			2849		1719	3438	1538	1703	3406	1524
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	20	135	45	46	204	346	65	1954	62	105	960	15
RTOR Reduction (vph)	0	23	0	0	129	0	0	0	21	0	0	5
Lane Group Flow (vph)	0	177	0	0	467	0	65	1954	41	105	960	10
Confl. Peds. (#/hr)	2					2						
Heavy Vehicles (%)	15%	15%	15%	4%	4%	4%	5%	5%	5%	6%	6%	6%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		22.0			22.0		8.0	71.6	71.6	10.4	74.0	74.0
Effective Green, g (s)		23.0			23.0		8.0	74.6	74.6	10.4	77.0	77.0
Actuated g/C Ratio		0.19			0.19		0.07	0.62	0.62	0.09	0.64	0.64
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		415			546		114	2137	956	147	2185	977
v/s Ratio Prot							0.04	c0.57		c0.06	0.28	
v/s Ratio Perm		0.08			c0.16				0.03			0.01
v/c Ratio		0.43			0.85		0.57	0.91	0.04	0.71	0.44	0.01
Uniform Delay, d1		42.7			46.9		54.3	19.9	8.8	53.4	10.7	7.8
Progression Factor		1.00			1.00		1.26	0.76	0.21	1.00	1.00	1.00
Incremental Delay, d2		0.7			12.4		4.7	5.5	0.1	15.2	0.6	0.0
Delay (s)		43.4			59.3		73.3	20.7	1.9	68.5	11.4	7.8
Level of Service		D			E		E	C	A	E	B	A
Approach Delay (s)		43.4			59.3			21.8			16.9	
Approach LOS		D			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	126	42	43	190	322	60	1817	58	98	893	14
Future Volume (veh/h)	19	126	42	43	190	322	60	1817	58	98	893	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1678	1678	1678	1841	1841	1841	1826	1826	1826	1811	1811	1811
Adj Flow Rate, veh/h	20	135	45	46	204	346	65	1954	62	105	960	15
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, %	15	15	15	4	4	4	5	5	5	6	6	6
Cap, veh/h	39	258	101	36	77	283	82	2170	968	129	2246	1002
Arrive On Green	0.19	0.20	0.19	0.19	0.20	0.19	0.09	1.00	1.00	0.07	0.65	0.65
Sat Flow, veh/h	2	1291	507	1	385	1416	1739	3469	1547	1725	3441	1535
Grp Volume(v), veh/h	73	0	127	250	0	346	65	1954	62	105	960	15
Grp Sat Flow(s),veh/h/ln	366	0	1434	386	0	1416	1739	1735	1547	1725	1721	1535
Q Serve(g_s), s	120.0	0.0	9.4	20.7	0.0	24.0	4.4	0.0	0.0	7.2	16.1	0.4
Cycle Q Clear(g_c), s	120.0	0.0	9.4	20.7	0.0	24.0	4.4	0.0	0.0	7.2	16.1	0.4
Prop In Lane	0.28		0.35	0.18		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	287	0	0	283	82	2170	968	129	2246	1002
V/C Ratio(X)	0.00	0.00	0.44	0.00	0.00	1.22	0.79	0.90	0.06	0.82	0.43	0.01
Avail Cap(c_a), veh/h	0	0	287	0	0	283	159	2170	968	158	2246	1002
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.77	0.00	0.77	0.62	0.62	0.62	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	42.3	0.0	0.0	48.5	53.7	0.0	0.0	54.7	10.0	7.3
Incr Delay (d2), s/veh	0.0	0.0	1.1	0.0	0.0	122.0	9.9	4.3	0.1	23.0	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.5	0.0	0.0	18.1	2.0	1.3	0.0	3.9	5.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	43.4	0.0	0.0	170.5	63.6	4.3	0.1	77.7	10.6	7.3
LnGrp LOS	A	A	D	A	A	F	E	A	A	E	B	A
Approach Vol, veh/h		200			596			2081			1080	
Approach Delay, s/veh		27.6			99.0			6.0			17.1	
Approach LOS		C			F			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	82.3		28.0	13.0	79.0		28.0				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	11.0	70.0		23.0	11.0	70.0		23.0				
Max Q Clear Time (g_c+I1), s	6.4	18.1		26.0	9.2	2.0		122.0				
Green Ext Time (p_c), s	0.0	8.1		0.0	0.0	30.5		0.0				

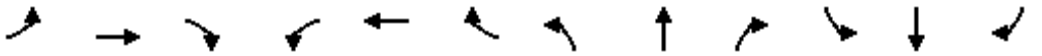
Intersection Summary		
HCM 6th Ctrl Delay	24.1	
HCM 6th LOS	C	

Notes

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

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	112	9	22	415	23	61	143	15	18	111	163
Future Volume (vph)	111	112	9	22	415	23	61	143	15	18	111	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.97		1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1641	1706		1748	1828			1835	1534		1778	1503
Flt Permitted	0.95	1.00		0.68	1.00			0.86	1.00		0.94	1.00
Satd. Flow (perm)	1641	1706		1244	1828			1600	1534		1677	1503
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	116	117	9	23	432	24	64	149	16	19	116	170
RTOR Reduction (vph)	0	3	0	0	2	0	0	0	12	0	0	129
Lane Group Flow (vph)	116	123	0	23	454	0	0	213	4	0	135	41
Confl. Peds. (#/hr)	3		3	3		3			5	5		
Confl. Bikes (#/hr)			2			1			2			2
Heavy Vehicles (%)	10%	10%	10%	3%	3%	3%	2%	2%	2%	6%	6%	6%
Turn Type	Prot	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases				6			8		8	4		4
Actuated Green, G (s)	8.0	28.1		23.9	22.0			14.1	14.1		14.1	14.1
Effective Green, g (s)	8.0	28.1		23.9	22.0			14.1	14.1		14.1	14.1
Actuated g/C Ratio	0.14	0.48		0.41	0.38			0.24	0.24		0.24	0.24
Clearance Time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	225	825		528	692			388	372		406	364
v/s Ratio Prot	c0.07	0.07		0.00	c0.25							
v/s Ratio Perm				0.02				c0.13	0.00		0.08	0.03
v/c Ratio	0.52	0.15		0.04	0.66			0.55	0.01		0.33	0.11
Uniform Delay, d1	23.3	8.3		10.2	14.9			19.2	16.7		18.1	17.1
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	2.0	0.1		0.0	2.3			1.6	0.0		0.5	0.1
Delay (s)	25.2	8.4		10.2	17.2			20.8	16.7		18.6	17.3
Level of Service	C	A		B	B			C	B		B	B
Approach Delay (s)		16.5			16.8			20.5			17.9	
Approach LOS		B			B			C			B	

Intersection Summary			
HCM 2000 Control Delay	17.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	58.1	Sum of lost time (s)	14.0
Intersection Capacity Utilization	62.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	112	9	22	415	23	61	143	15	18	111	163
Future Volume (veh/h)	111	112	9	22	415	23	61	143	15	18	111	163
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1856	1856	1856	1870	1870	1870	1811	1811	1811
Adj Flow Rate, veh/h	116	117	9	23	432	24	64	149	16	19	116	170
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	10	10	10	3	3	3	2	2	2	6	6	6
Cap, veh/h	146	585	45	517	518	29	80	149	604	68	311	592
Arrive On Green	0.09	0.36	0.36	0.02	0.30	0.30	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1668	1602	123	1767	1739	97	14	381	1540	6	794	1509
Grp Volume(v), veh/h	116	0	126	23	0	456	213	0	16	135	0	170
Grp Sat Flow(s),veh/h/ln	1668	0	1726	1767	0	1835	394	0	1540	800	0	1509
Q Serve(g_s), s	4.3	0.0	3.1	0.6	0.0	14.6	0.7	0.0	0.4	0.6	0.0	4.9
Cycle Q Clear(g_c), s	4.3	0.0	3.1	0.6	0.0	14.6	24.7	0.0	0.4	24.7	0.0	4.9
Prop In Lane	1.00		0.07	1.00		0.05	0.30		1.00	0.14		1.00
Lane Grp Cap(c), veh/h	146	0	630	517	0	547	229	0	604	379	0	592
V/C Ratio(X)	0.80	0.00	0.20	0.04	0.00	0.83	0.93	0.00	0.03	0.36	0.00	0.29
Avail Cap(c_a), veh/h	557	0	823	930	0	875	237	0	612	388	0	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.2	0.0	13.7	14.8	0.0	20.6	17.1	0.0	11.8	14.2	0.0	13.1
Incr Delay (d2), s/veh	9.5	0.0	0.2	0.0	0.0	3.9	39.1	0.0	0.0	0.6	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	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	1.2	0.2	0.0	6.4	4.4	0.0	0.1	1.2	0.0	1.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.6	0.0	13.8	14.8	0.0	24.5	56.2	0.0	11.8	14.7	0.0	13.4
LnGrp LOS	D	A	B	B	A	C	E	A	B	B	A	B
Approach Vol, veh/h		242			479			229			305	
Approach Delay, s/veh		25.2			24.1			53.1			14.0	
Approach LOS		C			C			D			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	28.2		29.8	9.6	24.0		29.8				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0				
Max Green Setting (Gmax), s	16.0	30.0		25.0	21.0	30.0		25.0				
Max Q Clear Time (g_c+I1), s	2.6	5.1		26.7	6.3	16.6		26.7				
Green Ext Time (p_c), s	0.0	0.7		0.0	0.2	2.5		0.0				

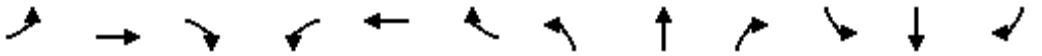
Intersection Summary			
HCM 6th Ctrl Delay		27.1	
HCM 6th LOS		C	

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	144	8	11	18	28	5	28	135	5	3	134	278
Future Vol, veh/h	144	8	11	18	28	5	28	135	5	3	134	278
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	6	6	6	6	6	6	3	3	3	5	5	5
Mvmt Flow	155	9	12	19	30	5	30	145	5	3	144	299
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	12.2	10	11.4	10.7
HCM LOS	B	A	B	B

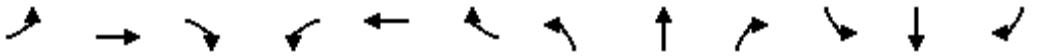
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	95%	0%	39%	0%	2%	0%
Vol Thru, %	80%	5%	0%	61%	0%	98%	0%
Vol Right, %	3%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	168	152	11	46	5	137	278
LT Vol	28	144	0	18	0	3	0
Through Vol	135	8	0	28	0	134	0
RT Vol	5	0	11	0	5	0	278
Lane Flow Rate	181	163	12	49	5	147	299
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.296	0.307	0.018	0.093	0.009	0.231	0.409
Departure Headway (Hd)	5.901	6.767	5.575	6.735	5.823	5.643	4.926
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	609	531	642	532	614	641	735
Service Time	3.932	4.5	3.308	4.473	3.56	3.343	2.626
HCM Lane V/C Ratio	0.297	0.307	0.019	0.092	0.008	0.229	0.407
HCM Control Delay	11.4	12.5	8.4	10.2	8.6	10	11
HCM Lane LOS	B	B	A	B	A	A	B
HCM 95th-tile Q	1.2	1.3	0.1	0.3	0	0.9	2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	9	60	5	18	24	42	1882	14	5	957	16
Future Volume (vph)	32	9	60	5	18	24	42	1882	14	5	957	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.92			0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1688			1711		1719	3438	1504	1687	3374	1509
Flt Permitted		0.91			0.98		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1553			1676		1719	3438	1504	1687	3374	1509
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	34	10	64	5	19	26	45	2002	15	5	1018	17
RTOR Reduction (vph)	0	45	0	0	23	0	0	0	3	0	0	5
Lane Group Flow (vph)	0	63	0	0	27	0	45	2002	12	5	1018	12
Confl. Peds. (#/hr)	2		3	3		2			1	1		
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	5%	5%	5%	7%	7%	7%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		12.1			12.1		7.1	90.5	90.5	1.4	84.8	84.8
Effective Green, g (s)		13.1			13.1		7.1	93.5	93.5	1.4	87.8	87.8
Actuated g/C Ratio		0.11			0.11		0.06	0.78	0.78	0.01	0.73	0.73
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		169			182		101	2678	1171	19	2468	1104
v/s Ratio Prot							c0.03	c0.58		0.00	0.30	
v/s Ratio Perm		c0.04			0.02				0.01			0.01
v/c Ratio		0.38			0.15		0.45	0.75	0.01	0.26	0.41	0.01
Uniform Delay, d1		49.7			48.4		54.5	7.0	2.9	58.8	6.2	4.4
Progression Factor		1.00			1.00		1.25	0.37	1.00	1.14	0.55	1.00
Incremental Delay, d2		1.4			0.4		2.3	1.5	0.0	6.6	0.5	0.0
Delay (s)		51.1			48.8		70.5	4.0	3.0	73.9	3.8	4.4
Level of Service		D			D		E	A	A	E	A	A
Approach Delay (s)		51.1			48.8			5.5			4.2	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



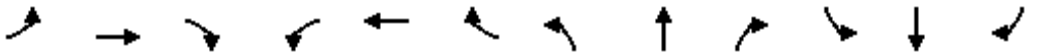
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	9	60	5	18	24	42	1882	14	5	957	16
Future Volume (veh/h)	32	9	60	5	18	24	42	1882	14	5	957	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1826	1826	1826	1796	1796	1796
Adj Flow Rate, veh/h	34	10	64	5	19	26	45	2002	15	5	1018	17
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	2	2	2	5	5	5	7	7	7
Cap, veh/h	68	31	87	36	77	87	57	2771	1235	9	2630	1172
Arrive On Green	0.09	0.10	0.10	0.09	0.10	0.10	0.03	0.80	0.80	0.01	0.77	0.77
Sat Flow, veh/h	300	322	906	35	795	900	1739	3469	1546	1711	3413	1521
Grp Volume(v), veh/h	108	0	0	50	0	0	45	2002	15	5	1018	17
Grp Sat Flow(s),veh/h/ln	1529	0	0	1730	0	0	1739	1735	1546	1711	1706	1521
Q Serve(g_s), s	7.9	0.0	0.0	3.3	0.0	0.0	3.1	33.0	0.2	0.3	11.7	0.3
Cycle Q Clear(g_c), s	7.9	0.0	0.0	3.3	0.0	0.0	3.1	33.0	0.2	0.3	11.7	0.3
Prop In Lane	0.31		0.59	0.10		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	0	0	0	0	57	2771	1235	9	2630	1172
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.72	0.01	0.57	0.39	0.01
Avail Cap(c_a), veh/h	0	0	0	0	0	0	145	2771	1235	143	2630	1172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.62	0.62	0.62	0.90	0.90	0.90
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	57.6	5.8	2.5	59.6	4.5	3.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	13.3	1.0	0.0	43.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.5	8.4	0.1	0.3	3.3	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	70.9	6.8	2.5	103.0	4.9	3.2
LnGrp LOS	A	A	A	A	A	A	E	A	A	F	A	A
Approach Vol, veh/h		108			50			2062			1040	
Approach Delay, s/veh		0.0			0.0			8.2			5.3	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	96.5		15.5	4.6	99.8		15.5				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	10.0	79.0		15.0	10.0	79.0		15.0				
Max Q Clear Time (g_c+I1), s	5.1	13.7		5.3	2.3	35.0		9.9				
Green Ext Time (p_c), s	0.0	9.0		0.1	0.0	25.6		0.2				

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

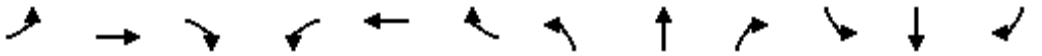
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	924	17	139	1658	168	49	170	88	80	279	194
Future Volume (vph)	89	924	17	139	1658	168	49	170	88	80	279	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1719	3438	1538	1703	3406	1504	1714	3438	1514	1714	3438	1510
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.41	1.00	1.00	0.59	1.00	1.00
Satd. Flow (perm)	1719	3438	1538	1703	3406	1504	734	3438	1514	1066	3438	1510
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	91	943	17	142	1692	171	50	173	90	82	285	198
RTOR Reduction (vph)	0	0	6	0	0	53	0	0	77	0	0	120
Lane Group Flow (vph)	91	943	11	142	1692	118	50	173	13	82	285	78
Confl. Peds. (#/hr)	1					1	5		4	4		5
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	5%	5%	5%	6%	6%	6%	5%	5%	5%	5%	5%	5%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8		8	4		4
Actuated Green, G (s)	10.1	72.9	72.9	14.2	77.0	77.0	16.9	16.9	16.9	16.9	16.9	16.9
Effective Green, g (s)	10.1	75.9	75.9	14.2	80.0	80.0	17.9	17.9	17.9	17.9	17.9	17.9
Actuated g/C Ratio	0.08	0.63	0.63	0.12	0.67	0.67	0.15	0.15	0.15	0.15	0.15	0.15
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	144	2174	972	201	2270	1002	109	512	225	159	512	225
v/s Ratio Prot	c0.05	0.27		0.08	c0.50			0.05			c0.08	
v/s Ratio Perm			0.01			0.08	0.07		0.01	0.08		0.05
v/c Ratio	0.63	0.43	0.01	0.71	0.75	0.12	0.46	0.34	0.06	0.52	0.56	0.35
Uniform Delay, d1	53.2	11.2	8.2	50.9	13.3	7.2	46.6	45.7	43.8	47.1	47.4	45.8
Progression Factor	0.77	0.51	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.2	0.6	0.0	10.8	2.3	0.2	3.0	0.4	0.1	2.8	1.3	0.9
Delay (s)	49.0	6.3	8.2	61.7	15.5	7.5	49.7	46.1	43.9	49.9	48.7	46.7
Level of Service	D	A	A	E	B	A	D	D	D	D	D	D
Approach Delay (s)		10.0			18.1			46.1			48.2	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	924	17	139	1658	168	49	170	88	80	279	194
Future Volume (veh/h)	89	924	17	139	1658	168	49	170	88	80	279	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1811	1811	1811	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	91	943	17	142	1692	171	50	173	90	82	285	198
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	5	5	5	6	6	6	5	5	5	5	5	5
Cap, veh/h	250	2189	976	169	1927	859	146	594	263	198	594	259
Arrive On Green	0.14	0.63	0.63	0.10	0.56	0.56	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1739	3469	1547	1725	3441	1534	887	3469	1534	1084	3469	1514
Grp Volume(v), veh/h	91	943	17	142	1692	171	50	173	90	82	285	198
Grp Sat Flow(s),veh/h/ln	1739	1735	1547	1725	1721	1534	887	1735	1534	1084	1735	1514
Q Serve(g_s), s	5.7	16.5	0.5	9.7	51.1	6.6	6.5	5.2	6.2	8.6	8.9	15.0
Cycle Q Clear(g_c), s	5.7	16.5	0.5	9.7	51.1	6.6	15.4	5.2	6.2	13.8	8.9	15.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	250	2189	976	169	1927	859	146	594	263	198	594	259
V/C Ratio(X)	0.36	0.43	0.02	0.84	0.88	0.20	0.34	0.29	0.34	0.41	0.48	0.76
Avail Cap(c_a), veh/h	250	2189	976	230	2065	920	179	723	320	239	723	315
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.92	0.92	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	11.2	8.3	53.2	22.9	13.1	51.8	43.4	43.8	49.4	44.9	47.4
Incr Delay (d2), s/veh	0.8	0.6	0.0	18.1	6.1	0.5	1.4	0.3	0.8	1.4	0.6	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	6.0	0.2	5.0	20.5	2.3	1.5	2.3	2.4	2.4	3.9	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.2	11.8	8.3	71.4	28.9	13.6	53.2	43.6	44.5	50.8	45.5	56.1
LnGrp LOS	D	B	A	E	C	B	D	D	D	D	D	E
Approach Vol, veh/h		1051			2005			313			565	
Approach Delay, s/veh		14.8			30.6			45.4			50.0	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	79.7		24.5	24.3	71.2		24.5				
Change Period (Y+Rc), s	4.0	7.0		5.0	7.0	* 7		5.0				
Max Green Setting (Gmax), s	16.0	64.0		24.0	11.0	* 69		24.0				
Max Q Clear Time (g_c+I1), s	11.7	18.5		17.0	7.7	53.1		17.4				
Green Ext Time (p_c), s	0.1	7.8		1.8	0.0	11.1		0.9				

Intersection Summary		
HCM 6th Ctrl Delay		30.3
HCM 6th LOS		C

Notes

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

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	54	542	129	38	628	335
Future Volume (vph)	54	542	129	38	628	335
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.97	0.99			1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00
Frt	1.00	0.85	0.97			1.00
Flt Protected	0.95	1.00	1.00			0.97
Satd. Flow (prot)	1736	1512	1760			1822
Flt Permitted	0.95	1.00	1.00			0.97
Satd. Flow (perm)	1736	1512	1760			1822
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	57	571	136	40	661	353
RTOR Reduction (vph)	0	133	12	0	0	0
Lane Group Flow (vph)	57	438	164	0	0	1014
Confl. Peds. (#/hr)	1	1				
Confl. Bikes (#/hr)		12		2		
Heavy Vehicles (%)	4%	4%	4%	4%	1%	1%
Turn Type	Prot	Perm	NA		Split	NA
Protected Phases	3		1		2	2
Permitted Phases		1 2				
Actuated Green, G (s)	3.9	56.0	8.2			43.8
Effective Green, g (s)	3.9	56.0	8.2			43.8
Actuated g/C Ratio	0.05	0.77	0.11			0.60
Clearance Time (s)	4.0		4.0			4.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	92	1159	197			1093
v/s Ratio Prot	c0.03		c0.09			c0.56
v/s Ratio Perm		0.29				
v/c Ratio	0.62	0.38	0.83			0.93
Uniform Delay, d1	33.8	2.8	31.7			13.2
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	11.8	0.2	25.1			13.1
Delay (s)	45.6	3.0	56.9			26.3
Level of Service	D	A	E			C
Approach Delay (s)	6.9		56.9			26.3
Approach LOS	A		E			C

Intersection Summary			
HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	73.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	75.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support exclusive ped or hold phases.

Intersection	
Intersection Delay, s/veh	6.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	3	0	3	1	8	0	1	3	1	0	0
Future Vol, veh/h	0	3	0	3	1	8	0	1	3	1	0	0
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	5	0	5	2	13	0	2	5	2	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7	6.6	6.5	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	25%	100%
Vol Thru, %	25%	100%	8%	0%
Vol Right, %	75%	0%	67%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	3	12	1
LT Vol	0	0	3	1
Through Vol	1	3	1	0
RT Vol	3	0	8	0
Lane Flow Rate	6	5	19	2
Geometry Grp	1	1	1	1
Degree of Util (X)	0.006	0.005	0.019	0.002
Departure Headway (Hd)	3.492	3.928	3.567	4.146
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1029	916	1009	867
Service Time	1.498	1.932	1.57	2.152
HCM Lane V/C Ratio	0.006	0.005	0.019	0.002
HCM Control Delay	6.5	7	6.6	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0.1	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	6	14	295	258	3
Future Vol, veh/h	6	6	14	295	258	3
Conflicting Peds, #/hr	0	2	6	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	3	3	3	3
Mvmt Flow	7	7	16	335	293	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	668	303	302	0	-	0
Stage 1	301	-	-	-	-	-
Stage 2	367	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	426	741	1253	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	705	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	414	735	1246	-	-	-
Mov Cap-2 Maneuver	414	-	-	-	-	-
Stage 1	738	-	-	-	-	-
Stage 2	701	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1246	-	530	-	-
HCM Lane V/C Ratio	0.013	-	0.026	-	-
HCM Control Delay (s)	7.9	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	0	0	47	0	31	0	275	21	8	238	0
Future Vol, veh/h	0	0	0	47	0	31	0	275	21	8	238	0
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	2	2	2	3	3	3	3	3	3
Mvmt Flow	0	0	0	54	0	36	0	316	24	9	274	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	640	635	274	623	623	333	274	0	0	343	0	0
Stage 1	292	292	-	331	331	-	-	-	-	-	-	-
Stage 2	348	343	-	292	292	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.12	6.52	6.22	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.518	4.018	3.318	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	391	399	770	398	402	709	1283	-	-	1210	-	-
Stage 1	720	675	-	682	645	-	-	-	-	-	-	-
Stage 2	672	641	-	716	671	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	368	394	770	394	397	706	1283	-	-	1207	-	-
Mov Cap-2 Maneuver	368	394	-	394	397	-	-	-	-	-	-	-
Stage 1	720	669	-	680	643	-	-	-	-	-	-	-
Stage 2	637	639	-	710	665	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	14.3	0	0.3
HCM LOS	A	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1283	-	-	-	478	1207	-	-
HCM Lane V/C Ratio	-	-	-	-	0.188	0.008	-	-
HCM Control Delay (s)	0	-	-	0	14.3	8	0	-
HCM Lane LOS	A	-	-	A	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	-	0.7	0	-	-

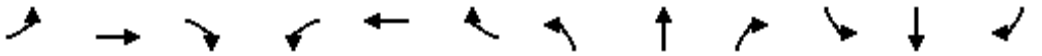
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	15	25	379	485	10
Future Vol, veh/h	6	15	25	379	485	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	3	3	3	3
Mvmt Flow	7	17	29	436	557	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1057	563	568	0	-	0
Stage 1	563	-	-	-	-	-
Stage 2	494	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	251	530	999	-	-	-
Stage 1	574	-	-	-	-	-
Stage 2	617	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	241	530	999	-	-	-
Mov Cap-2 Maneuver	241	-	-	-	-	-
Stage 1	552	-	-	-	-	-
Stage 2	617	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	14.7	0.5	0
HCM LOS	B		

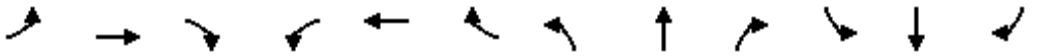
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	999	-	395	-	-
HCM Lane V/C Ratio	0.029	-	0.061	-	-
HCM Control Delay (s)	8.7	0	14.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	272	58	58	192	173	65	1481	71	313	1773	32
Future Volume (vph)	5	272	58	58	192	173	65	1481	71	313	1773	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.99		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.97			0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		3337			3211		1752	3505	1547	1752	3505	1547
Flt Permitted		0.95			0.70		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		3163			2275		1752	3505	1547	1752	3505	1547
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	5	280	60	60	198	178	67	1527	73	323	1828	33
RTOR Reduction (vph)	0	14	0	0	100	0	0	0	34	0	0	11
Lane Group Flow (vph)	0	331	0	0	336	0	67	1527	39	323	1828	22
Confl. Peds. (#/hr)	6		4	4		6	1		1	1		1
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		21.9			21.9		8.2	65.9	65.9	26.2	83.9	83.9
Effective Green, g (s)		22.9			22.9		8.2	68.9	68.9	26.2	86.9	86.9
Actuated g/C Ratio		0.18			0.18		0.06	0.53	0.53	0.20	0.67	0.67
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		557			400		110	1857	819	353	2342	1034
v/s Ratio Prot							0.04	c0.44		c0.18	0.52	
v/s Ratio Perm		0.10			c0.15				0.03			0.01
v/c Ratio		0.59			0.84		0.61	0.82	0.05	0.92	0.78	0.02
Uniform Delay, d1		49.3			51.8		59.3	25.5	14.7	50.8	14.9	7.2
Progression Factor		1.00			1.00		1.29	0.43	0.13	1.00	1.00	1.00
Incremental Delay, d2		1.7			14.7		7.4	3.4	0.1	27.4	2.7	0.0
Delay (s)		51.0			66.5		84.0	14.3	2.0	78.2	17.6	7.3
Level of Service		D			E		F	B	A	E	B	A
Approach Delay (s)		51.0			66.5			16.6			26.4	
Approach LOS		D			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	99.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



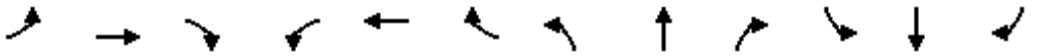
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	272	58	58	192	173	65	1481	71	313	1773	32
Future Volume (veh/h)	5	272	58	58	192	173	65	1481	71	313	1773	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	5	280	60	60	198	178	67	1527	73	323	1828	33
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	4	4	4	3	3	3	3	3	3
Cap, veh/h	29	436	103	37	119	207	85	1843	822	346	2364	1054
Arrive On Green	0.18	0.19	0.18	0.18	0.19	0.18	0.10	1.00	1.00	0.20	0.67	0.67
Sat Flow, veh/h	0	2308	543	2	632	1093	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	173	0	172	197	0	239	67	1527	73	323	1828	33
Grp Sat Flow(s),veh/h/ln	1293	0	1558	261	0	1466	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	11.3	0.0	13.1	17.7	0.0	20.5	4.8	0.0	0.0	23.4	46.1	0.9
Cycle Q Clear(g_c), s	11.3	0.0	13.1	17.7	0.0	20.5	4.8	0.0	0.0	23.4	46.1	0.9
Prop In Lane	0.03		0.35	0.30		0.75	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	295	0	0	277	85	1843	822	346	2364	1054
V/C Ratio(X)	0.00	0.00	0.58	0.00	0.00	0.86	0.79	0.83	0.09	0.93	0.77	0.03
Avail Cap(c_a), veh/h	0	0	312	0	0	293	150	1843	822	353	2364	1054
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.91	0.00	0.91	0.76	0.76	0.76	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	48.2	0.0	0.0	51.4	58.1	0.0	0.0	51.4	14.7	7.2
Incr Delay (d2), s/veh	0.0	0.0	2.5	0.0	0.0	19.8	11.6	3.4	0.2	31.0	2.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	5.4	0.0	0.0	9.2	2.3	0.9	0.0	13.1	17.1	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	50.8	0.0	0.0	71.2	69.7	3.4	0.2	82.5	17.2	7.3
LnGrp LOS	A	A	D	A	A	E	E	A	A	F	B	A
Approach Vol, veh/h		345			436			1667			2184	
Approach Delay, s/veh		25.4			39.0			6.0			26.7	
Approach LOS		C			D			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	91.2		28.6	29.5	72.0		28.6				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	11.0	78.0		25.0	26.0	63.0		25.0				
Max Q Clear Time (g_c+I1), s	6.8	48.1		22.5	25.4	2.0		15.1				
Green Ext Time (p_c), s	0.0	17.9		0.7	0.1	18.2		1.5				

Intersection Summary		
HCM 6th Ctrl Delay		20.3
HCM 6th LOS		C

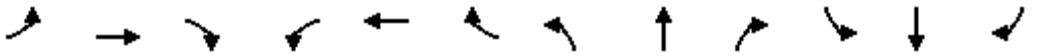
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	136	457	22	25	209	19	37	135	22	49	145	163
Future Volume (vph)	136	457	22	25	209	19	37	135	22	49	145	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.95		1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1752	1830		1752	1816			1843	1509		1813	1543
Flt Permitted	0.95	1.00		0.95	1.00			0.89	1.00		0.87	1.00
Satd. Flow (perm)	1752	1830		1752	1816			1650	1509		1591	1543
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	155	519	25	28	238	22	42	153	25	56	165	185
RTOR Reduction (vph)	0	2	0	0	4	0	0	0	19	0	0	138
Lane Group Flow (vph)	155	542	0	28	256	0	0	195	6	0	221	47
Confl. Peds. (#/hr)	12		4	4		12	1		16	16		1
Confl. Bikes (#/hr)			3			1			2			3
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	8.6	24.4		2.3	18.1			14.0	14.0		14.0	14.0
Effective Green, g (s)	8.6	24.4		2.3	18.1			14.0	14.0		14.0	14.0
Actuated g/C Ratio	0.16	0.45		0.04	0.33			0.26	0.26		0.26	0.26
Clearance Time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	275	816		73	600			422	386		407	394
v/s Ratio Prot	c0.09	c0.30		0.02	0.14							
v/s Ratio Perm								0.12	0.00		c0.14	0.03
v/c Ratio	0.56	0.66		0.38	0.43			0.46	0.02		0.54	0.12
Uniform Delay, d1	21.3	11.9		25.5	14.3			17.2	15.2		17.6	15.6
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	2.6	2.1		3.3	0.5			0.8	0.0		1.5	0.1
Delay (s)	24.0	14.0		28.8	14.7			18.0	15.2		19.1	15.8
Level of Service	C	B		C	B			B	B		B	B
Approach Delay (s)		16.2			16.1			17.7			17.6	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	54.7	Sum of lost time (s)	14.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	136	457	22	25	209	19	37	135	22	49	145	163
Future Volume (veh/h)	136	457	22	25	209	19	37	135	22	49	145	163
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	155	519	25	28	238	22	42	153	25	56	165	185
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, %	3	3	3	3	3	3	2	2	2	3	3	3
Cap, veh/h	201	613	30	43	434	40	71	209	609	73	172	614
Arrive On Green	0.11	0.35	0.35	0.02	0.26	0.26	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1767	1752	84	1767	1666	154	1	522	1519	1	429	1533
Grp Volume(v), veh/h	155	0	544	28	0	260	195	0	25	221	0	185
Grp Sat Flow(s),veh/h/ln	1767	0	1836	1767	0	1819	523	0	1519	430	0	1533
Q Serve(g_s), s	5.3	0.0	17.1	1.0	0.0	7.7	0.1	0.0	0.6	0.1	0.0	5.1
Cycle Q Clear(g_c), s	5.3	0.0	17.1	1.0	0.0	7.7	25.0	0.0	0.6	25.0	0.0	5.1
Prop In Lane	1.00		0.05	1.00		0.08	0.22		1.00	0.25		1.00
Lane Grp Cap(c), veh/h	201	0	643	43	0	475	280	0	609	245	0	614
V/C Ratio(X)	0.77	0.00	0.85	0.65	0.00	0.55	0.70	0.00	0.04	0.90	0.00	0.30
Avail Cap(c_a), veh/h	595	0	884	454	0	876	280	0	609	245	0	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.8	0.0	18.7	30.1	0.0	19.9	15.1	0.0	11.4	15.7	0.0	12.7
Incr Delay (d2), s/veh	6.1	0.0	5.7	14.9	0.0	1.0	7.4	0.0	0.0	33.0	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	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	7.7	0.6	0.0	3.2	2.3	0.0	0.2	4.2	0.0	1.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.0	0.0	24.4	45.0	0.0	20.9	22.5	0.0	11.4	48.7	0.0	13.0
LnGrp LOS	C	A	C	D	A	C	C	A	B	D	A	B
Approach Vol, veh/h		699			288			220			406	
Approach Delay, s/veh		26.3			23.2			21.2			32.4	
Approach LOS		C			C			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	26.8		30.0	11.1	21.3		30.0				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0				
Max Green Setting (Gmax), s	16.0	30.0		25.0	21.0	30.0		25.0				
Max Q Clear Time (g_c+I1), s	3.0	19.1		27.0	7.3	9.7		27.0				
Green Ext Time (p_c), s	0.0	2.8		0.0	0.3	1.5		0.0				

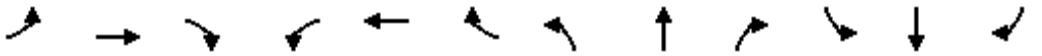
Intersection Summary			
HCM 6th Ctrl Delay		26.6	
HCM 6th LOS		C	

Intersection	
Intersection Delay, s/veh	26.2
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	357	34	49	40	36	16	32	294	20	8	140	167
Future Vol, veh/h	357	34	49	40	36	16	32	294	20	8	140	167
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	3	3	3	5	5	5	2	2	2	2	2	2
Mvmt Flow	372	35	51	42	38	17	33	306	21	8	146	174
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	37.4	12.6	27.3	13.3
HCM LOS	E	B	D	B

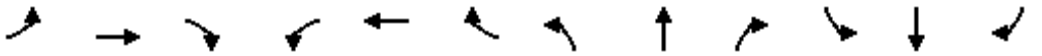
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	9%	91%	0%	53%	0%	5%	0%
Vol Thru, %	85%	9%	0%	47%	0%	95%	0%
Vol Right, %	6%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	346	391	49	76	16	148	167
LT Vol	32	357	0	40	0	8	0
Through Vol	294	34	0	36	0	140	0
RT Vol	20	0	49	0	16	0	167
Lane Flow Rate	360	407	51	79	17	154	174
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.726	0.855	0.09	0.185	0.034	0.321	0.326
Departure Headway (Hd)	7.247	7.554	6.369	8.392	7.393	7.495	6.749
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	497	481	561	426	482	478	531
Service Time	5.304	5.307	4.121	6.171	5.172	5.261	4.514
HCM Lane V/C Ratio	0.724	0.846	0.091	0.185	0.035	0.322	0.328
HCM Control Delay	27.3	40.9	9.8	13.1	10.4	13.8	12.8
HCM Lane LOS	D	E	A	B	B	B	B
HCM 95th-tile Q	5.9	8.8	0.3	0.7	0.1	1.4	1.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	31	86	16	20	21	33	1578	14	22	1850	24
Future Volume (vph)	29	31	86	16	20	21	33	1578	14	22	1850	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			1.00		1.00	1.00	1.00	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.92			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1666			1771		1752	3505	1568	1752	3505	1519
Flt Permitted		0.94			0.79		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1577			1421		1752	3505	1568	1752	3505	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	30	32	89	16	21	22	34	1627	14	23	1907	25
RTOR Reduction (vph)	0	41	0	0	18	0	0	0	3	0	0	6
Lane Group Flow (vph)	0	110	0	0	41	0	34	1627	11	23	1907	19
Confl. Peds. (#/hr)	1		3	3		1	4					4
Heavy Vehicles (%)	3%	3%	3%	0%	0%	0%	3%	3%	3%	3%	3%	3%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		14.5			14.5		5.4	94.6	94.6	4.9	94.1	94.1
Effective Green, g (s)		15.5			15.5		5.4	97.6	97.6	4.9	97.1	97.1
Actuated g/C Ratio		0.12			0.12		0.04	0.75	0.75	0.04	0.75	0.75
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		188			169		72	2631	1177	66	2617	1134
v/s Ratio Prot							c0.02	0.46		0.01	c0.54	
v/s Ratio Perm		c0.07			0.03				0.01			0.01
v/c Ratio		0.58			0.24		0.47	0.62	0.01	0.35	0.73	0.02
Uniform Delay, d1		54.2			51.9		60.9	7.5	4.1	61.0	9.1	4.2
Progression Factor		1.00			1.00		1.42	0.62	1.00	1.19	0.22	0.00
Incremental Delay, d2		4.5			0.8		3.0	0.7	0.0	2.0	1.1	0.0
Delay (s)		58.7			52.7		89.6	5.3	4.1	74.5	3.2	0.0
Level of Service		E			D		F	A	A	E	A	A
Approach Delay (s)		58.7			52.7			7.0			4.0	
Approach LOS		E			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



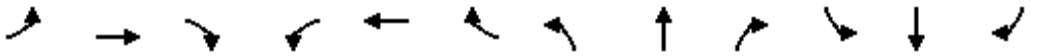
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	31	86	16	20	21	33	1578	14	22	1850	24
Future Volume (veh/h)	29	31	86	16	20	21	33	1578	14	22	1850	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1900	1900	1900	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	30	32	89	16	21	22	34	1627	14	23	1907	25
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	0	0	0	3	3	3	3	3	3
Cap, veh/h	56	56	113	66	84	68	43	2713	1207	31	2688	1196
Arrive On Green	0.11	0.12	0.12	0.11	0.12	0.12	0.02	0.77	0.77	0.02	0.76	0.76
Sat Flow, veh/h	186	464	933	252	696	564	1767	3526	1568	1767	3526	1568
Grp Volume(v), veh/h	151	0	0	59	0	0	34	1627	14	23	1907	25
Grp Sat Flow(s),veh/h/ln	1583	0	0	1513	0	0	1767	1763	1568	1767	1763	1568
Q Serve(g_s), s	11.7	0.0	0.0	4.2	0.0	0.0	2.5	25.7	0.3	1.7	36.4	0.5
Cycle Q Clear(g_c), s	11.7	0.0	0.0	4.2	0.0	0.0	2.5	25.7	0.3	1.7	36.4	0.5
Prop In Lane	0.20		0.59	0.27		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	0	0	0	0	43	2713	1207	31	2688	1196
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.60	0.01	0.75	0.71	0.02
Avail Cap(c_a), veh/h	0	0	0	0	0	0	136	2713	1207	136	2688	1196
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.53	0.53	0.53	0.54	0.54	0.54
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	63.1	6.4	3.5	63.6	8.0	3.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	15.1	0.5	0.0	17.7	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.3	7.7	0.1	0.9	11.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	78.1	6.9	3.5	81.3	8.9	3.7
LnGrp LOS	A	A	A	A	A	A	E	A	A	F	A	A
Approach Vol, veh/h		151			59			1675			1955	
Approach Delay, s/veh		0.0			0.0			8.3			9.6	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	103.1		19.7	6.3	104.1		19.7				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	10.0	83.0		20.0	10.0	84.0		20.0				
Max Q Clear Time (g_c+I1), s	4.5	38.4		6.2	3.7	27.7		13.7				
Green Ext Time (p_c), s	0.0	23.9		0.2	0.0	19.6		0.4				

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

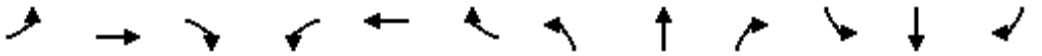
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	228	1694	53	104	1466	173	27	214	82	129	246	140
Future Volume (vph)	228	1694	53	104	1466	173	27	214	82	129	246	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1547	1770	3539	1556	1732	3471	1518	1739	3505	1543
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.48	1.00	1.00	0.53	1.00	1.00
Satd. Flow (perm)	1752	3505	1547	1770	3539	1556	874	3471	1518	961	3505	1543
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	245	1822	57	112	1576	186	29	230	88	139	265	151
RTOR Reduction (vph)	0	0	20	0	0	55	0	0	71	0	0	121
Lane Group Flow (vph)	245	1822	38	112	1576	131	29	230	17	139	265	30
Confl. Peds. (#/hr)	5		1	1		5	3		10	10		3
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8		8	4		4
Actuated Green, G (s)	23.1	76.3	76.3	13.0	66.2	66.2	24.7	24.7	24.7	24.7	24.7	24.7
Effective Green, g (s)	23.1	79.3	79.3	13.0	69.2	69.2	25.7	25.7	25.7	25.7	25.7	25.7
Actuated g/C Ratio	0.18	0.61	0.61	0.10	0.53	0.53	0.20	0.20	0.20	0.20	0.20	0.20
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	311	2138	943	177	1883	828	172	686	300	189	692	305
v/s Ratio Prot	0.14	c0.52		0.06	c0.45			0.07			0.08	
v/s Ratio Perm			0.02			0.08	0.03		0.01	c0.14		0.02
v/c Ratio	0.79	0.85	0.04	0.63	0.84	0.16	0.17	0.34	0.06	0.74	0.38	0.10
Uniform Delay, d1	51.1	20.6	10.1	56.2	25.6	15.5	43.3	44.8	42.3	49.0	45.3	42.7
Progression Factor	0.86	0.74	1.13	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.4	3.4	0.1	7.2	4.6	0.4	0.5	0.3	0.1	13.8	0.4	0.1
Delay (s)	53.6	18.6	11.5	63.4	30.3	15.9	43.7	45.1	42.4	62.8	45.6	42.8
Level of Service	D	B	B	E	C	B	D	D	D	E	D	D
Approach Delay (s)		22.4			30.8			44.3			49.1	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	30.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	1694	53	104	1466	173	27	214	82	129	246	140
Future Volume (veh/h)	228	1694	53	104	1466	173	27	214	82	129	246	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	245	1822	57	112	1576	186	29	230	88	139	265	151
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, %	3	3	3	2	2	2	4	4	4	3	3	3
Cap, veh/h	380	2060	916	137	1503	668	231	862	380	258	869	378
Arrive On Green	0.43	1.00	1.00	0.08	0.42	0.42	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1767	3526	1568	1781	3554	1579	949	3497	1541	1046	3526	1533
Grp Volume(v), veh/h	245	1822	57	112	1576	186	29	230	88	139	265	151
Grp Sat Flow(s),veh/h/ln	1767	1763	1568	1781	1777	1579	949	1749	1541	1046	1763	1533
Q Serve(g_s), s	14.2	0.0	0.0	8.1	55.0	10.0	3.3	6.9	5.9	16.1	8.0	10.7
Cycle Q Clear(g_c), s	14.2	0.0	0.0	8.1	55.0	10.0	11.3	6.9	5.9	23.0	8.0	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	380	2060	916	137	1503	668	231	862	380	258	869	378
V/C Ratio(X)	0.64	0.88	0.06	0.82	1.05	0.28	0.13	0.27	0.23	0.54	0.30	0.40
Avail Cap(c_a), veh/h	380	2060	916	219	1503	668	289	1076	474	322	1085	472
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.63	0.63	0.63	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	0.0	0.0	59.1	37.5	24.5	44.5	39.5	39.1	48.8	39.9	40.9
Incr Delay (d2), s/veh	2.4	3.9	0.1	12.1	37.0	1.0	0.2	0.2	0.3	1.8	0.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	1.1	0.0	4.0	30.5	3.9	0.8	3.0	2.3	4.4	3.5	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	3.9	0.1	71.2	74.5	25.6	44.7	39.7	39.4	50.5	40.1	41.6
LnGrp LOS	D	A	A	E	F	C	D	D	D	D	D	D
Approach Vol, veh/h		2124			1874			347			555	
Approach Delay, s/veh		7.5			69.4			40.0			43.1	
Approach LOS		A			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.0	80.0		36.1	34.9	59.0		36.1				
Change Period (Y+Rc), s	4.0	7.0		5.0	7.0	* 7		5.0				
Max Green Setting (Gmax), s	16.0	59.0		39.0	23.0	* 52		39.0				
Max Q Clear Time (g_c+I1), s	10.1	2.0		25.0	16.2	57.0		13.3				
Green Ext Time (p_c), s	0.1	24.8		2.6	0.4	0.0		2.0				

Intersection Summary			
HCM 6th Ctrl Delay		37.5	
HCM 6th LOS		D	

Notes

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	33	773	303	75	333	114
Future Volume (vph)	33	773	303	75	333	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.98	1.00			1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00
Frt	1.00	0.85	0.97			1.00
Flt Protected	0.95	1.00	1.00			0.96
Satd. Flow (prot)	1770	1547	1841			1796
Flt Permitted	0.95	1.00	1.00			0.96
Satd. Flow (perm)	1770	1547	1841			1796
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	35	831	326	81	358	123
RTOR Reduction (vph)	0	180	9	0	0	0
Lane Group Flow (vph)	35	651	398	0	0	481
Confl. Peds. (#/hr)	3			1	1	
Confl. Bikes (#/hr)		6				
Heavy Vehicles (%)	2%	2%	0%	0%	2%	2%
Turn Type	Prot	Perm	NA		Split	NA
Protected Phases	3		1		2	2
Permitted Phases		1 2				
Actuated Green, G (s)	1.6	52.1	22.1			26.0
Effective Green, g (s)	1.6	52.1	22.1			26.0
Actuated g/C Ratio	0.02	0.78	0.33			0.39
Clearance Time (s)	4.0		4.0			4.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	42	1212	611			702
v/s Ratio Prot	c0.02		c0.22			c0.27
v/s Ratio Perm		0.42				
v/c Ratio	0.83	0.54	0.65			0.69
Uniform Delay, d1	32.3	2.7	18.9			16.8
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	77.0	0.5	2.5			2.8
Delay (s)	109.3	3.2	21.4			19.6
Level of Service	F	A	C			B
Approach Delay (s)	7.4		21.4			19.6
Approach LOS	A		C			B

Intersection Summary			
HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	66.5	Sum of lost time (s)	14.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support exclusive ped or hold phases.

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	5	0	2	0	2	0	0	4	2	0	0
Future Vol, veh/h	2	5	0	2	0	2	0	0	4	2	0	0
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	9	0	4	0	4	0	0	7	4	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7	6.8	6.4	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	29%	50%	100%
Vol Thru, %	0%	71%	0%	0%
Vol Right, %	100%	0%	50%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	7	4	2
LT Vol	0	2	2	2
Through Vol	0	5	0	0
RT Vol	4	0	2	0
Lane Flow Rate	7	12	7	4
Geometry Grp	1	1	1	1
Degree of Util (X)	0.007	0.014	0.007	0.004
Departure Headway (Hd)	3.336	3.98	3.727	4.138
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1077	904	964	868
Service Time	1.344	1.985	1.733	2.147
HCM Lane V/C Ratio	0.006	0.013	0.007	0.005
HCM Control Delay	6.4	7	6.8	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	5	4	209	280	2
Future Vol, veh/h	2	5	4	209	280	2
Conflicting Peds, #/hr	0	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	7	7	6	6
Mvmt Flow	2	6	5	243	326	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	581	329	329	0	-	0
Stage 1	328	-	-	-	-	-
Stage 2	253	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.17	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.263	-	-	-
Pot Cap-1 Maneuver	479	717	1203	-	-	-
Stage 1	734	-	-	-	-	-
Stage 2	794	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	476	716	1202	-	-	-
Mov Cap-2 Maneuver	476	-	-	-	-	-
Stage 1	730	-	-	-	-	-
Stage 2	793	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1202	-	626	-	-
HCM Lane V/C Ratio	0.004	-	0.013	-	-
HCM Control Delay (s)	8	0	10.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	25	0	50	30	0	14	17	161	28	40	248	9
Future Vol, veh/h	25	0	50	30	0	14	17	161	28	40	248	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	9	9	9	10	10	10	5	5	5
Mvmt Flow	31	0	62	37	0	17	21	199	35	49	306	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	677	693	312	707	681	224	317	0	0	241	0	0
Stage 1	410	410	-	266	266	-	-	-	-	-	-	-
Stage 2	267	283	-	441	415	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.19	6.59	6.29	4.2	-	-	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.19	5.59	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.19	5.59	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.581	4.081	3.381	2.29	-	-	2.245	-	-
Pot Cap-1 Maneuver	369	369	733	341	364	798	1199	-	-	1308	-	-
Stage 1	623	599	-	724	676	-	-	-	-	-	-	-
Stage 2	743	681	-	582	581	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	343	342	733	295	338	793	1199	-	-	1299	-	-
Mov Cap-2 Maneuver	343	342	-	295	338	-	-	-	-	-	-	-
Stage 1	611	571	-	704	658	-	-	-	-	-	-	-
Stage 2	712	663	-	508	554	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	16.4	0.7	1.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1199	-	-	532	369	1299	-	-
HCM Lane V/C Ratio	0.018	-	-	0.174	0.147	0.038	-	-
HCM Control Delay (s)	8.1	0	-	13.2	16.4	7.9	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.5	0.1	-	-

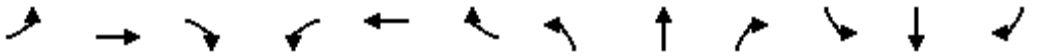
Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	45	13	491	550	6
Future Vol, veh/h	23	45	13	491	550	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	28	56	16	606	679	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1321	683	686	0	-	0
Stage 1	683	-	-	-	-	-
Stage 2	638	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	174	453	917	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	530	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	169	453	917	-	-	-
Mov Cap-2 Maneuver	169	-	-	-	-	-
Stage 1	492	-	-	-	-	-
Stage 2	530	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.5	0.2	0
HCM LOS	C		

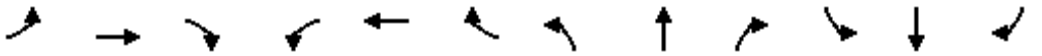
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	917	-	289	-	-
HCM Lane V/C Ratio	0.018	-	0.29	-	-
HCM Control Delay (s)	9	0	22.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	127	42	68	194	343	60	1817	66	105	893	14
Future Volume (vph)	19	127	42	68	194	343	60	1817	66	105	893	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.97			0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		3019			3133		1719	3438	1538	1703	3406	1524
Flt Permitted		0.71			0.85		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		2141			2675		1719	3438	1538	1703	3406	1524
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	20	137	45	73	209	369	65	1954	71	113	960	15
RTOR Reduction (vph)	0	22	0	0	127	0	0	0	22	0	0	6
Lane Group Flow (vph)	0	180	0	0	524	0	65	1954	49	113	960	9
Confl. Peds. (#/hr)	2					2						
Heavy Vehicles (%)	15%	15%	15%	4%	4%	4%	5%	5%	5%	6%	6%	6%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		23.5			23.5		8.0	70.0	70.0	10.5	72.5	72.5
Effective Green, g (s)		24.5			24.5		8.0	73.0	73.0	10.5	75.5	75.5
Actuated g/C Ratio		0.20			0.20		0.07	0.61	0.61	0.09	0.63	0.63
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		437			546		114	2091	935	149	2142	958
v/s Ratio Prot							0.04	c0.57		c0.07	0.28	
v/s Ratio Perm		0.08			c0.20				0.03			0.01
v/c Ratio		0.41			0.96		0.57	0.93	0.05	0.76	0.45	0.01
Uniform Delay, d1		41.5			47.3		54.3	21.3	9.5	53.5	11.5	8.3
Progression Factor		1.00			1.00		1.26	0.83	0.24	1.00	1.00	1.00
Incremental Delay, d2		0.6			28.1		4.7	6.9	0.1	19.6	0.7	0.0
Delay (s)		42.1			75.4		73.1	24.7	2.4	73.1	12.2	8.3
Level of Service		D			E		E	C	A	E	B	A
Approach Delay (s)		42.1			75.4			25.5			18.4	
Approach LOS		D			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	32.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



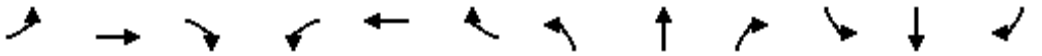
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	127	42	68	194	343	60	1817	66	105	893	14
Future Volume (veh/h)	19	127	42	68	194	343	60	1817	66	105	893	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1678	1678	1678	1841	1841	1841	1826	1826	1826	1811	1811	1811
Adj Flow Rate, veh/h	20	137	45	73	209	369	65	1954	71	113	960	15
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, %	15	15	15	4	4	4	5	5	5	6	6	6
Cap, veh/h	39	260	101	38	37	283	82	2152	960	137	2246	1002
Arrive On Green	0.19	0.20	0.19	0.19	0.20	0.19	0.09	1.00	1.00	0.08	0.65	0.65
Sat Flow, veh/h	2	1302	503	2	185	1416	1739	3469	1547	1725	3441	1535
Grp Volume(v), veh/h	74	0	128	282	0	369	65	1954	71	113	960	15
Grp Sat Flow(s),veh/h/ln	372	0	1435	187	0	1416	1739	1735	1547	1725	1721	1535
Q Serve(g_s), s	120.0	0.0	9.5	24.1	0.0	24.0	4.4	0.0	0.0	7.7	16.1	0.4
Cycle Q Clear(g_c), s	120.0	0.0	9.5	24.1	0.0	24.0	4.4	0.0	0.0	7.7	16.1	0.4
Prop In Lane	0.27		0.35	0.26		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	287	0	0	283	82	2152	960	137	2246	1002
V/C Ratio(X)	0.00	0.00	0.45	0.00	0.00	1.30	0.79	0.91	0.07	0.82	0.43	0.01
Avail Cap(c_a), veh/h	0	0	287	0	0	283	159	2152	960	158	2246	1002
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.77	0.00	0.77	0.62	0.62	0.62	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	42.3	0.0	0.0	48.5	53.7	0.0	0.0	54.4	10.0	7.3
Incr Delay (d2), s/veh	0.0	0.0	1.1	0.0	0.0	155.0	9.9	4.6	0.1	25.6	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	3.5	0.0	0.0	20.7	2.0	1.4	0.0	4.3	5.7	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	43.4	0.0	0.0	203.5	63.6	4.6	0.1	80.0	10.6	7.3
LnGrp LOS	A	A	D	A	A	F	E	A	A	E	B	A
Approach Vol, veh/h		202			651			2090			1088	
Approach Delay, s/veh		27.6			115.3			6.3			17.8	
Approach LOS		C			F			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.7	82.3		28.0	13.5	78.5		28.0				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	11.0	70.0		23.0	11.0	70.0		23.0				
Max Q Clear Time (g_c+I1), s	6.4	18.1		26.1	9.7	2.0		122.0				
Green Ext Time (p_c), s	0.0	8.1		0.0	0.0	30.6		0.0				

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

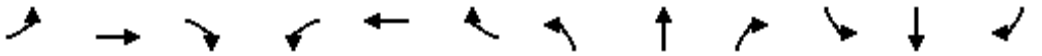
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	112	9	22	415	24	61	143	15	22	111	213
Future Volume (vph)	127	112	9	22	415	24	61	143	15	22	111	213
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.97		1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1641	1706		1748	1827			1835	1534		1776	1502
Flt Permitted	0.95	1.00		0.68	1.00			0.86	1.00		0.92	1.00
Satd. Flow (perm)	1641	1706		1244	1827			1598	1534		1653	1502
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	132	117	9	23	432	25	64	149	16	23	116	222
RTOR Reduction (vph)	0	3	0	0	2	0	0	0	12	0	0	169
Lane Group Flow (vph)	132	123	0	23	455	0	0	213	4	0	139	53
Confl. Peds. (#/hr)	3		3	3		3			5	5		
Confl. Bikes (#/hr)			2			1			2			2
Heavy Vehicles (%)	10%	10%	10%	3%	3%	3%	2%	2%	2%	6%	6%	6%
Turn Type	Prot	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases				6			8		8	4		4
Actuated Green, G (s)	8.6	29.6		24.8	22.9			14.4	14.4		14.4	14.4
Effective Green, g (s)	8.6	29.6		24.8	22.9			14.4	14.4		14.4	14.4
Actuated g/C Ratio	0.14	0.49		0.41	0.38			0.24	0.24		0.24	0.24
Clearance Time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	235	843		531	698			384	368		397	361
v/s Ratio Prot	c0.08	0.07		0.00	c0.25							
v/s Ratio Perm				0.02				c0.13	0.00		0.08	0.04
v/c Ratio	0.56	0.15		0.04	0.65			0.55	0.01		0.35	0.15
Uniform Delay, d1	23.9	8.3		10.4	15.2			19.9	17.3		18.9	17.9
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	3.1	0.1		0.0	2.2			1.7	0.0		0.5	0.2
Delay (s)	26.9	8.3		10.5	17.4			21.7	17.3		19.4	18.1
Level of Service	C	A		B	B			C	B		B	B
Approach Delay (s)		17.9			17.1			21.4			18.6	
Approach LOS		B			B			C			B	

Intersection Summary			
HCM 2000 Control Delay	18.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	59.9	Sum of lost time (s)	14.0
Intersection Capacity Utilization	64.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	112	9	22	415	24	61	143	15	22	111	213
Future Volume (veh/h)	127	112	9	22	415	24	61	143	15	22	111	213
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1856	1856	1856	1870	1870	1870	1811	1811	1811
Adj Flow Rate, veh/h	132	117	9	23	432	25	64	149	16	23	116	222
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	10	10	10	3	3	3	2	2	2	6	6	6
Cap, veh/h	166	604	46	514	516	30	77	142	593	67	264	581
Arrive On Green	0.10	0.38	0.38	0.02	0.30	0.30	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1668	1602	123	1767	1734	100	10	370	1540	5	686	1509
Grp Volume(v), veh/h	132	0	126	23	0	457	213	0	16	139	0	222
Grp Sat Flow(s),veh/h/ln	1668	0	1726	1767	0	1834	380	0	1540	692	0	1509
Q Serve(g_s), s	5.0	0.0	3.2	0.6	0.0	15.0	0.5	0.0	0.4	0.5	0.0	6.8
Cycle Q Clear(g_c), s	5.0	0.0	3.2	0.6	0.0	15.0	24.8	0.0	0.4	24.8	0.0	6.8
Prop In Lane	1.00		0.07	1.00		0.05	0.30		1.00	0.17		1.00
Lane Grp Cap(c), veh/h	166	0	650	514	0	546	219	0	593	331	0	581
V/C Ratio(X)	0.80	0.00	0.19	0.04	0.00	0.84	0.97	0.00	0.03	0.42	0.00	0.38
Avail Cap(c_a), veh/h	545	0	805	918	0	855	224	0	598	337	0	586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	13.5	15.1	0.0	21.1	18.0	0.0	12.3	15.1	0.0	14.3
Incr Delay (d2), s/veh	8.3	0.0	0.1	0.0	0.0	4.3	51.8	0.0	0.0	0.8	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	1.2	0.2	0.0	6.7	5.2	0.0	0.1	1.3	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.7	0.0	13.6	15.2	0.0	25.4	69.9	0.0	12.3	15.9	0.0	14.7
LnGrp LOS	D	A	B	B	A	C	E	A	B	B	A	B
Approach Vol, veh/h		258			480			229			361	
Approach Delay, s/veh		25.4			24.9			65.8			15.2	
Approach LOS		C			C			E			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.3	29.5		29.9	10.5	24.3		29.9				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0				
Max Green Setting (Gmax), s	16.0	30.0		25.0	21.0	30.0		25.0				
Max Q Clear Time (g_c+I1), s	2.6	5.2		26.8	7.0	17.0		26.8				
Green Ext Time (p_c), s	0.0	0.7		0.0	0.3	2.5		0.0				

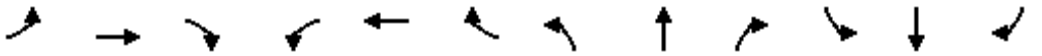
Intersection Summary			
HCM 6th Ctrl Delay		29.4	
HCM 6th LOS		C	

Intersection	
Intersection Delay, s/veh	11.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	148	8	11	18	28	5	28	135	5	3	134	279
Future Vol, veh/h	148	8	11	18	28	5	28	135	5	3	134	279
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Heavy Vehicles, %	6	6	6	6	6	6	3	3	3	5	5	5
Mvmt Flow	159	9	12	19	30	5	30	145	5	3	144	300
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	12.3	10	11.4	10.8
HCM LOS	B	A	B	B

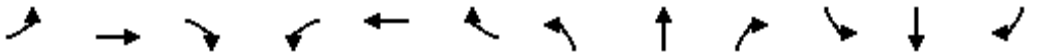
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	95%	0%	39%	0%	2%	0%
Vol Thru, %	80%	5%	0%	61%	0%	98%	0%
Vol Right, %	3%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	168	156	11	46	5	137	279
LT Vol	28	148	0	18	0	3	0
Through Vol	135	8	0	28	0	134	0
RT Vol	5	0	11	0	5	0	279
Lane Flow Rate	181	168	12	49	5	147	300
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.297	0.316	0.018	0.093	0.009	0.232	0.412
Departure Headway (Hd)	5.923	6.776	5.584	6.752	5.84	5.662	4.945
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	607	532	641	531	612	638	732
Service Time	3.954	4.508	3.316	4.491	3.579	3.362	2.645
HCM Lane V/C Ratio	0.298	0.316	0.019	0.092	0.008	0.23	0.41
HCM Control Delay	11.4	12.6	8.4	10.2	8.6	10.1	11.1
HCM Lane LOS	B	B	A	B	A	B	B
HCM 95th-tile Q	1.2	1.3	0.1	0.3	0	0.9	2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	9	60	5	18	24	42	1890	14	5	982	16
Future Volume (vph)	32	9	60	5	18	24	42	1890	14	5	982	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.92			0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1688			1711		1719	3438	1504	1687	3374	1509
Flt Permitted		0.90			0.97		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1549			1674		1719	3438	1504	1687	3374	1509
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	34	10	64	5	19	26	45	2011	15	5	1045	17
RTOR Reduction (vph)	0	45	0	0	23	0	0	0	3	0	0	5
Lane Group Flow (vph)	0	63	0	0	27	0	45	2011	12	5	1045	12
Confl. Peds. (#/hr)	2		3	3		2			1	1		
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	5%	5%	5%	7%	7%	7%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		11.8			11.8		7.1	90.8	90.8	1.4	85.1	85.1
Effective Green, g (s)		12.8			12.8		7.1	93.8	93.8	1.4	88.1	88.1
Actuated g/C Ratio		0.11			0.11		0.06	0.78	0.78	0.01	0.73	0.73
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		165			178		101	2687	1175	19	2477	1107
v/s Ratio Prot							c0.03	c0.58		0.00	0.31	
v/s Ratio Perm		c0.04			0.02				0.01			0.01
v/c Ratio		0.38			0.15		0.45	0.75	0.01	0.26	0.42	0.01
Uniform Delay, d1		49.9			48.7		54.5	6.9	2.9	58.8	6.1	4.3
Progression Factor		1.00			1.00		1.25	0.37	1.00	1.16	0.55	1.00
Incremental Delay, d2		1.5			0.4		2.3	1.5	0.0	6.5	0.5	0.0
Delay (s)		51.4			49.1		70.3	4.0	2.9	74.5	3.9	4.3
Level of Service		D			D		E	A	A	E	A	A
Approach Delay (s)		51.4			49.1			5.5			4.2	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



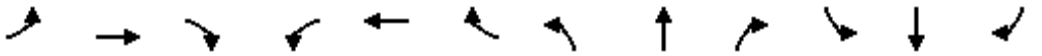
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	9	60	5	18	24	42	1890	14	5	982	16
Future Volume (veh/h)	32	9	60	5	18	24	42	1890	14	5	982	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1826	1826	1826	1796	1796	1796
Adj Flow Rate, veh/h	34	10	64	5	19	26	45	2011	15	5	1045	17
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	2	2	2	5	5	5	7	7	7
Cap, veh/h	68	31	87	36	77	87	57	2771	1235	9	2630	1172
Arrive On Green	0.09	0.10	0.10	0.09	0.10	0.10	0.03	0.80	0.80	0.01	0.77	0.77
Sat Flow, veh/h	300	322	906	35	795	900	1739	3469	1546	1711	3413	1521
Grp Volume(v), veh/h	108	0	0	50	0	0	45	2011	15	5	1045	17
Grp Sat Flow(s),veh/h/ln	1529	0	0	1730	0	0	1739	1735	1546	1711	1706	1521
Q Serve(g_s), s	7.9	0.0	0.0	3.3	0.0	0.0	3.1	33.3	0.2	0.3	12.1	0.3
Cycle Q Clear(g_c), s	7.9	0.0	0.0	3.3	0.0	0.0	3.1	33.3	0.2	0.3	12.1	0.3
Prop In Lane	0.31		0.59	0.10		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	0	0	0	0	57	2771	1235	9	2630	1172
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.73	0.01	0.57	0.40	0.01
Avail Cap(c_a), veh/h	0	0	0	0	0	0	145	2771	1235	143	2630	1172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.62	0.62	0.62	0.90	0.90	0.90
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	57.6	5.8	2.5	59.6	4.5	3.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	13.3	1.1	0.0	43.5	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.5	8.5	0.1	0.3	3.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	70.9	6.8	2.5	103.0	5.0	3.2
LnGrp LOS	A	A	A	A	A	A	E	A	A	F	A	A
Approach Vol, veh/h		108			50			2071			1067	
Approach Delay, s/veh		0.0			0.0			8.2			5.4	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	96.5		15.5	4.6	99.8		15.5				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	10.0	79.0		15.0	10.0	79.0		15.0				
Max Q Clear Time (g_c+I1), s	5.1	14.1		5.3	2.3	35.3		9.9				
Green Ext Time (p_c), s	0.0	9.3		0.1	0.0	25.6		0.2				

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

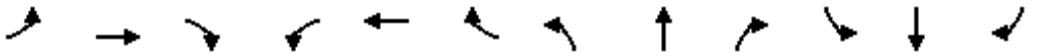
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	949	17	139	1666	168	49	170	88	80	279	194
Future Volume (vph)	89	949	17	139	1666	168	49	170	88	80	279	194
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1719	3438	1538	1703	3406	1504	1714	3438	1514	1714	3438	1510
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.41	1.00	1.00	0.59	1.00	1.00
Satd. Flow (perm)	1719	3438	1538	1703	3406	1504	734	3438	1514	1066	3438	1510
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	91	968	17	142	1700	171	50	173	90	82	285	198
RTOR Reduction (vph)	0	0	6	0	0	53	0	0	77	0	0	119
Lane Group Flow (vph)	91	968	11	142	1700	118	50	173	13	82	285	79
Confl. Peds. (#/hr)	1					1	5		4	4		5
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	5%	5%	5%	6%	6%	6%	5%	5%	5%	5%	5%	5%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8		8	4		4
Actuated Green, G (s)	10.1	72.9	72.9	14.2	77.0	77.0	16.9	16.9	16.9	16.9	16.9	16.9
Effective Green, g (s)	10.1	75.9	75.9	14.2	80.0	80.0	17.9	17.9	17.9	17.9	17.9	17.9
Actuated g/C Ratio	0.08	0.63	0.63	0.12	0.67	0.67	0.15	0.15	0.15	0.15	0.15	0.15
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	144	2174	972	201	2270	1002	109	512	225	159	512	225
v/s Ratio Prot	c0.05	0.28		0.08	c0.50			0.05			c0.08	
v/s Ratio Perm			0.01			0.08	0.07		0.01	0.08		0.05
v/c Ratio	0.63	0.45	0.01	0.71	0.75	0.12	0.46	0.34	0.06	0.52	0.56	0.35
Uniform Delay, d1	53.2	11.3	8.2	50.9	13.3	7.2	46.6	45.7	43.8	47.1	47.4	45.8
Progression Factor	0.77	0.50	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.1	0.6	0.0	10.8	2.3	0.2	3.0	0.4	0.1	2.8	1.3	0.9
Delay (s)	49.2	6.3	8.2	61.7	15.6	7.5	49.7	46.1	43.9	49.9	48.7	46.8
Level of Service	D	A	A	E	B	A	D	D	D	D	D	D
Approach Delay (s)		9.9			18.2			46.1			48.2	
Approach LOS		A			B			D			D	

Intersection Summary			
HCM 2000 Control Delay	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	949	17	139	1666	168	49	170	88	80	279	194
Future Volume (veh/h)	89	949	17	139	1666	168	49	170	88	80	279	194
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1811	1811	1811	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	91	968	17	142	1700	171	50	173	90	82	285	198
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	5	5	5	6	6	6	5	5	5	5	5	5
Cap, veh/h	247	2189	976	169	1932	861	146	594	263	198	594	259
Arrive On Green	0.14	0.63	0.63	0.10	0.56	0.56	0.17	0.17	0.17	0.17	0.17	0.17
Sat Flow, veh/h	1739	3469	1547	1725	3441	1534	887	3469	1534	1084	3469	1514
Grp Volume(v), veh/h	91	968	17	142	1700	171	50	173	90	82	285	198
Grp Sat Flow(s),veh/h/ln	1739	1735	1547	1725	1721	1534	887	1735	1534	1084	1735	1514
Q Serve(g_s), s	5.7	17.1	0.5	9.7	51.4	6.6	6.5	5.2	6.2	8.6	8.9	15.0
Cycle Q Clear(g_c), s	5.7	17.1	0.5	9.7	51.4	6.6	15.4	5.2	6.2	13.8	8.9	15.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	247	2189	976	169	1932	861	146	594	263	198	594	259
V/C Ratio(X)	0.37	0.44	0.02	0.84	0.88	0.20	0.34	0.29	0.34	0.41	0.48	0.76
Avail Cap(c_a), veh/h	247	2189	976	230	2065	920	179	723	320	239	723	315
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.91	0.91	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	11.3	8.3	53.2	22.8	13.0	51.8	43.4	43.8	49.4	44.9	47.4
Incr Delay (d2), s/veh	0.8	0.6	0.0	18.1	6.1	0.5	1.4	0.3	0.8	1.4	0.6	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	6.2	0.2	5.0	20.6	2.3	1.5	2.3	2.4	2.4	3.9	6.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	47.4	11.9	8.3	71.4	28.9	13.5	53.2	43.6	44.5	50.8	45.5	56.1
LnGrp LOS	D	B	A	E	C	B	D	D	D	D	D	E
Approach Vol, veh/h		1076			2013			313			565	
Approach Delay, s/veh		14.9			30.6			45.4			50.0	
Approach LOS		B			C			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	15.7	79.7		24.5	24.1	71.4		24.5				
Change Period (Y+Rc), s	4.0	7.0		5.0	7.0	* 7		5.0				
Max Green Setting (Gmax), s	16.0	64.0		24.0	11.0	* 69		24.0				
Max Q Clear Time (g_c+I1), s	11.7	19.1		17.0	7.7	53.4		17.4				
Green Ext Time (p_c), s	0.1	8.1		1.8	0.0	11.0		0.9				

Intersection Summary		
HCM 6th Ctrl Delay		30.3
HCM 6th LOS		C

Notes

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

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

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	5	0	3	0	2	0	0	9	2	0	0
Future Vol, veh/h	2	5	0	3	0	2	0	0	9	2	0	0
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	9	0	5	0	4	0	0	16	4	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7.1	6.9	6.4	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	29%	60%	100%
Vol Thru, %	0%	71%	0%	0%
Vol Right, %	100%	0%	40%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	9	7	5	2
LT Vol	0	2	3	2
Through Vol	0	5	0	0
RT Vol	9	0	2	0
Lane Flow Rate	16	12	9	4
Geometry Grp	1	1	1	1
Degree of Util (X)	0.015	0.014	0.009	0.004
Departure Headway (Hd)	3.339	3.997	3.822	4.149
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1076	900	940	866
Service Time	1.348	2.002	1.829	2.158
HCM Lane V/C Ratio	0.015	0.013	0.01	0.005
HCM Control Delay	6.4	7.1	6.9	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0	0

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	3	9	5	209	280	2
Future Vol, veh/h	3	9	5	209	280	2
Conflicting Peds, #/hr	0	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	7	7	6	6
Mvmt Flow	3	10	6	243	326	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	583	329	329	0	-	0
Stage 1	328	-	-	-	-	-
Stage 2	255	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.17	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.263	-	-	-
Pot Cap-1 Maneuver	478	717	1203	-	-	-
Stage 1	734	-	-	-	-	-
Stage 2	792	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	474	716	1202	-	-	-
Mov Cap-2 Maneuver	474	-	-	-	-	-
Stage 1	729	-	-	-	-	-
Stage 2	791	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1202	-	635	-	-
HCM Lane V/C Ratio	0.005	-	0.022	-	-
HCM Control Delay (s)	8	0	10.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	24	0	46	30	0	14	17	162	28	40	252	9
Future Vol, veh/h	24	0	46	30	0	14	17	162	28	40	252	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	9	9	9	10	10	10	5	5	5
Mvmt Flow	30	0	57	37	0	17	21	200	35	49	311	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	683	699	317	710	687	225	322	0	0	242	0	0
Stage 1	415	415	-	267	267	-	-	-	-	-	-	-
Stage 2	268	284	-	443	420	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.19	6.59	6.29	4.2	-	-	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.19	5.59	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.19	5.59	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.581	4.081	3.381	2.29	-	-	2.245	-	-
Pot Cap-1 Maneuver	366	366	728	339	361	797	1194	-	-	1307	-	-
Stage 1	619	596	-	723	675	-	-	-	-	-	-	-
Stage 2	742	680	-	580	578	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	340	340	728	295	335	792	1194	-	-	1298	-	-
Mov Cap-2 Maneuver	340	340	-	295	335	-	-	-	-	-	-	-
Stage 1	607	569	-	703	657	-	-	-	-	-	-	-
Stage 2	711	662	-	510	551	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	16.4	0.7	1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1194	-	-	523	369	1298	-	-
HCM Lane V/C Ratio	0.018	-	-	0.165	0.147	0.038	-	-
HCM Control Delay (s)	8.1	0	-	13.2	16.4	7.9	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.5	0.1	-	-

Intersection	
Int Delay, s/veh	1.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	45	13	491	550	6
Future Vol, veh/h	23	45	13	491	550	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	28	56	16	606	679	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1321	683	686	0	-	0
Stage 1	683	-	-	-	-	-
Stage 2	638	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	174	453	917	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	530	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	169	453	917	-	-	-
Mov Cap-2 Maneuver	169	-	-	-	-	-
Stage 1	492	-	-	-	-	-
Stage 2	530	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	22.5	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	917	-	289	-	-
HCM Lane V/C Ratio	0.018	-	0.29	-	-
HCM Control Delay (s)	9	0	22.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.2	-	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	64	542	137	44	628	348
Future Volume (vph)	64	542	137	44	628	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.97	0.99			1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00
Frt	1.00	0.85	0.97			1.00
Flt Protected	0.95	1.00	1.00			0.97
Satd. Flow (prot)	1736	1512	1756			1823
Flt Permitted	0.95	1.00	1.00			0.97
Satd. Flow (perm)	1736	1512	1756			1823
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	67	571	144	46	661	366
RTOR Reduction (vph)	0	133	12	0	0	0
Lane Group Flow (vph)	67	438	178	0	0	1027
Confl. Peds. (#/hr)	1	1				
Confl. Bikes (#/hr)		12		2		
Heavy Vehicles (%)	4%	4%	4%	4%	1%	1%
Turn Type	Prot	Perm	NA		Split	NA
Protected Phases	3		1		2	2
Permitted Phases		1 2				
Actuated Green, G (s)	3.9	56.0	8.2			43.8
Effective Green, g (s)	3.9	56.0	8.2			43.8
Actuated g/C Ratio	0.05	0.77	0.11			0.60
Clearance Time (s)	4.0		4.0			4.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	92	1159	197			1093
v/s Ratio Prot	c0.04		c0.10			c0.56
v/s Ratio Perm		0.29				
v/c Ratio	0.73	0.38	0.90			0.94
Uniform Delay, d1	34.0	2.8	32.0			13.4
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	24.8	0.2	37.9			14.7
Delay (s)	58.8	3.0	69.9			28.1
Level of Service	E	A	E			C
Approach Delay (s)	8.9		69.9			28.1
Approach LOS	A		E			C

Intersection Summary			
HCM 2000 Control Delay	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	73.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support exclusive ped or hold phases.

Intersection	
Intersection Delay, s/veh	6.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	3	0	3	1	8	0	1	3	1	0	0
Future Vol, veh/h	0	3	0	3	1	8	0	1	3	1	0	0
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	5	0	5	2	13	0	2	5	2	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7	6.6	6.5	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	25%	100%
Vol Thru, %	25%	100%	8%	0%
Vol Right, %	75%	0%	67%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	3	12	1
LT Vol	0	0	3	1
Through Vol	1	3	1	0
RT Vol	3	0	8	0
Lane Flow Rate	6	5	19	2
Geometry Grp	1	1	1	1
Degree of Util (X)	0.006	0.005	0.019	0.002
Departure Headway (Hd)	3.492	3.928	3.567	4.146
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1029	916	1009	867
Service Time	1.498	1.932	1.57	2.152
HCM Lane V/C Ratio	0.006	0.005	0.019	0.002
HCM Control Delay	6.5	7	6.6	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0.1	0

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	6	14	309	281	3
Future Vol, veh/h	6	6	14	309	281	3
Conflicting Peds, #/hr	0	2	6	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	3	3	3	3
Mvmt Flow	7	7	16	351	319	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	710	329	328	0	-	0
Stage 1	327	-	-	-	-	-
Stage 2	383	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	403	717	1226	-	-	-
Stage 1	735	-	-	-	-	-
Stage 2	694	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	392	712	1219	-	-	-
Mov Cap-2 Maneuver	392	-	-	-	-	-
Stage 1	719	-	-	-	-	-
Stage 2	690	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.3	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1219	-	506	-	-
HCM Lane V/C Ratio	0.013	-	0.027	-	-
HCM Control Delay (s)	8	0	12.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	13	0	25	47	0	31	40	280	21	8	247	21
Future Vol, veh/h	13	0	25	47	0	31	40	280	21	8	247	21
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	2	2	2	3	3	3	3	3	3
Mvmt Flow	15	0	29	54	0	36	46	322	24	9	284	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	760	755	296	758	755	339	308	0	0	349	0	0
Stage 1	314	314	-	429	429	-	-	-	-	-	-	-
Stage 2	446	441	-	329	326	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.12	6.52	6.22	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.518	4.018	3.318	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	325	340	748	324	338	703	1247	-	-	1204	-	-
Stage 1	701	660	-	604	584	-	-	-	-	-	-	-
Stage 2	595	580	-	684	648	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	295	321	748	298	319	700	1247	-	-	1201	-	-
Mov Cap-2 Maneuver	295	321	-	298	319	-	-	-	-	-	-	-
Stage 1	669	654	-	574	555	-	-	-	-	-	-	-
Stage 2	538	552	-	652	642	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.1	17.1	0.9	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1247	-	-	490	386	1201	-	-
HCM Lane V/C Ratio	0.037	-	-	0.089	0.232	0.008	-	-
HCM Control Delay (s)	8	0	-	13.1	17.1	8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.9	0	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	24	38	407	503	17
Future Vol, veh/h	10	24	38	407	503	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	3	3	3	3
Mvmt Flow	11	28	44	468	578	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1144	588	598	0	-	0
Stage 1	588	-	-	-	-	-
Stage 2	556	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	223	513	974	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	209	513	974	-	-	-
Mov Cap-2 Maneuver	209	-	-	-	-	-
Stage 1	525	-	-	-	-	-
Stage 2	578	-	-	-	-	-

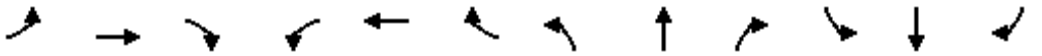
Approach	EB	NB	SB
HCM Control Delay, s	16.2	0.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	974	-	359	-	-
HCM Lane V/C Ratio	0.045	-	0.109	-	-
HCM Control Delay (s)	8.9	0	16.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	274	58	70	195	183	65	1481	91	329	1773	32
Future Volume (vph)	5	274	58	70	195	183	65	1481	91	329	1773	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		0.95			0.95		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		1.00			0.99		1.00	1.00	0.99	1.00	1.00	0.99
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.97			0.94		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		1.00			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		3337			3207		1752	3505	1547	1752	3505	1547
Flt Permitted		0.95			0.68		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		3163			2213		1752	3505	1547	1752	3505	1547
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	5	282	60	72	201	189	67	1527	94	339	1828	33
RTOR Reduction (vph)	0	14	0	0	98	0	0	0	41	0	0	11
Lane Group Flow (vph)	0	333	0	0	364	0	67	1527	53	339	1828	22
Confl. Peds. (#/hr)	6		4	4		6	1		1	1		1
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		23.2			23.2		8.2	64.1	64.1	26.7	82.6	82.6
Effective Green, g (s)		24.2			24.2		8.2	67.1	67.1	26.7	85.6	85.6
Actuated g/C Ratio		0.19			0.19		0.06	0.52	0.52	0.21	0.66	0.66
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		588			411		110	1809	798	359	2307	1018
v/s Ratio Prot							0.04	c0.44		c0.19	0.52	
v/s Ratio Perm		0.11			c0.16				0.03			0.01
v/c Ratio		0.57			0.88		0.61	0.84	0.07	0.94	0.79	0.02
Uniform Delay, d1		48.1			51.5		59.3	27.0	15.8	50.9	15.9	7.7
Progression Factor		1.00			1.00		1.31	0.49	0.16	1.00	1.00	1.00
Incremental Delay, d2		1.3			19.7		7.4	4.0	0.1	33.1	2.9	0.0
Delay (s)		49.4			71.2		84.8	17.3	2.6	84.0	18.7	7.7
Level of Service		D			E		F	B	A	F	B	A
Approach Delay (s)		49.4			71.2			19.2			28.6	
Approach LOS		D			E			B			C	

Intersection Summary			
HCM 2000 Control Delay	30.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



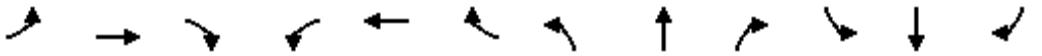
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	274	58	70	195	183	65	1481	91	329	1773	32
Future Volume (veh/h)	5	274	58	70	195	183	65	1481	91	329	1773	32
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	5	282	60	72	201	189	67	1527	94	339	1828	33
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	4	4	4	3	3	3	3	3	3
Cap, veh/h	29	444	105	38	107	213	85	1806	805	353	2342	1044
Arrive On Green	0.19	0.20	0.19	0.19	0.20	0.19	0.10	1.00	1.00	0.20	0.66	0.66
Sat Flow, veh/h	0	2273	537	2	549	1092	1767	3526	1572	1767	3526	1572
Grp Volume(v), veh/h	173	0	174	208	0	254	67	1527	94	339	1828	33
Grp Sat Flow(s),veh/h/ln	1251	0	1559	177	0	1467	1767	1763	1572	1767	1763	1572
Q Serve(g_s), s	11.3	0.0	13.2	19.5	0.0	21.9	4.8	0.0	0.0	24.7	47.0	0.9
Cycle Q Clear(g_c), s	11.3	0.0	13.2	19.5	0.0	21.9	4.8	0.0	0.0	24.7	47.0	0.9
Prop In Lane	0.03		0.34	0.35		0.74	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	305	0	0	287	85	1806	805	353	2342	1044
V/C Ratio(X)	0.00	0.00	0.57	0.00	0.00	0.89	0.79	0.85	0.12	0.96	0.78	0.03
Avail Cap(c_a), veh/h	0	0	312	0	0	293	150	1806	805	353	2342	1044
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.88	0.00	0.88	0.75	0.75	0.75	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	47.5	0.0	0.0	51.3	58.1	0.0	0.0	51.5	15.2	7.5
Incr Delay (d2), s/veh	0.0	0.0	2.4	0.0	0.0	23.2	11.5	3.9	0.2	37.1	2.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	5.4	0.0	0.0	10.0	2.3	1.0	0.0	14.3	17.5	0.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	49.9	0.0	0.0	74.5	69.6	3.9	0.2	88.6	17.9	7.5
LnGrp LOS	A	A	D	A	A	E	E	A	A	F	B	A
Approach Vol, veh/h		347			462			1688			2200	
Approach Delay, s/veh		25.1			40.9			6.3			28.6	
Approach LOS		C			D			A			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.2	90.3		29.4	30.0	70.6		29.4				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	11.0	78.0		25.0	26.0	63.0		25.0				
Max Q Clear Time (g_c+I1), s	6.8	49.0		23.9	26.7	2.0		15.2				
Green Ext Time (p_c), s	0.0	17.6		0.4	0.0	18.3		1.5				

Intersection Summary		
HCM 6th Ctrl Delay		21.5
HCM 6th LOS		C

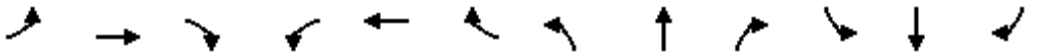
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	174	457	22	25	209	22	37	135	22	51	145	188
Future Volume (vph)	174	457	22	25	209	22	37	135	22	51	145	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.95		1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		0.99	1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1752	1830		1752	1812			1843	1506		1812	1543
Flt Permitted	0.95	1.00		0.95	1.00			0.88	1.00		0.86	1.00
Satd. Flow (perm)	1752	1830		1752	1812			1648	1506		1581	1543
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	198	519	25	28	238	25	42	153	25	58	165	214
RTOR Reduction (vph)	0	2	0	0	4	0	0	0	19	0	0	162
Lane Group Flow (vph)	198	542	0	28	259	0	0	195	6	0	223	52
Confl. Peds. (#/hr)	12		4	4		12	1		16	16		1
Confl. Bikes (#/hr)			3			1			2			3
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	12.4	28.0		2.4	18.0			14.4	14.4		14.4	14.4
Effective Green, g (s)	12.4	28.0		2.4	18.0			14.4	14.4		14.4	14.4
Actuated g/C Ratio	0.21	0.48		0.04	0.31			0.24	0.24		0.24	0.24
Clearance Time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	369	871		71	554			403	368		387	377
v/s Ratio Prot	c0.11	c0.30		0.02	0.14							
v/s Ratio Perm								0.12	0.00		c0.14	0.03
v/c Ratio	0.54	0.62		0.39	0.47			0.48	0.02		0.58	0.14
Uniform Delay, d1	20.6	11.5		27.5	16.5			19.0	16.8		19.5	17.4
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	1.5	1.4		3.6	0.6			0.9	0.0		2.1	0.2
Delay (s)	22.1	12.9		31.1	17.1			19.9	16.9		21.6	17.5
Level of Service	C	B		C	B			B	B		C	B
Approach Delay (s)		15.3			18.5			19.6			19.6	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	58.8	Sum of lost time (s)	14.0
Intersection Capacity Utilization	66.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	457	22	25	209	22	37	135	22	51	145	188
Future Volume (veh/h)	174	457	22	25	209	22	37	135	22	51	145	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	198	519	25	28	238	25	42	153	25	58	165	214
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, %	3	3	3	3	3	3	2	2	2	3	3	3
Cap, veh/h	251	614	30	44	382	40	70	208	609	73	166	614
Arrive On Green	0.14	0.35	0.35	0.02	0.23	0.23	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1767	1752	84	1767	1642	172	0	520	1519	0	413	1533
Grp Volume(v), veh/h	198	0	544	28	0	263	195	0	25	223	0	214
Grp Sat Flow(s),veh/h/ln	1767	0	1836	1767	0	1814	520	0	1519	414	0	1533
Q Serve(g_s), s	6.8	0.0	17.1	1.0	0.0	8.1	0.0	0.0	0.6	0.0	0.0	6.1
Cycle Q Clear(g_c), s	6.8	0.0	17.1	1.0	0.0	8.1	25.0	0.0	0.6	25.0	0.0	6.1
Prop In Lane	1.00		0.05	1.00		0.10	0.22		1.00	0.26		1.00
Lane Grp Cap(c), veh/h	251	0	643	44	0	422	278	0	609	238	0	614
V/C Ratio(X)	0.79	0.00	0.85	0.64	0.00	0.62	0.70	0.00	0.04	0.94	0.00	0.35
Avail Cap(c_a), veh/h	595	0	883	453	0	872	278	0	609	238	0	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.8	0.0	18.7	30.2	0.0	21.5	15.1	0.0	11.4	15.8	0.0	13.0
Incr Delay (d2), s/veh	5.4	0.0	5.6	14.8	0.0	1.5	7.6	0.0	0.0	40.9	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	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	7.7	0.6	0.0	3.4	2.3	0.0	0.2	4.7	0.0	2.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	31.3	0.0	24.4	44.9	0.0	23.0	22.7	0.0	11.4	56.6	0.0	13.4
LnGrp LOS	C	A	C	D	A	C	C	A	B	E	A	B
Approach Vol, veh/h		742			291			220			437	
Approach Delay, s/veh		26.2			25.1			21.4			35.4	
Approach LOS		C			C			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	26.9		30.0	12.9	19.5		30.0				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0				
Max Green Setting (Gmax), s	16.0	30.0		25.0	21.0	30.0		25.0				
Max Q Clear Time (g_c+I1), s	3.0	19.1		27.0	8.8	10.1		27.0				
Green Ext Time (p_c), s	0.0	2.8		0.0	0.4	1.5		0.0				

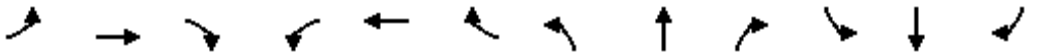
Intersection Summary												
HCM 6th Ctrl Delay			27.8									
HCM 6th LOS			C									

Intersection	
Intersection Delay, s/veh	26.5
Intersection LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	359	34	49	40	36	16	32	294	20	8	140	170
Future Vol, veh/h	359	34	49	40	36	16	32	294	20	8	140	170
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	3	3	3	5	5	5	2	2	2	2	2	2
Mvmt Flow	374	35	51	42	38	17	33	306	21	8	146	177
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay	38.1	12.6	27.4	13.3
HCM LOS	E	B	D	B

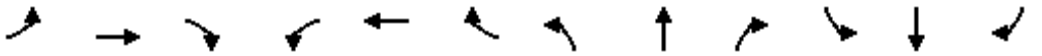
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	9%	91%	0%	53%	0%	5%	0%
Vol Thru, %	85%	9%	0%	47%	0%	95%	0%
Vol Right, %	6%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	346	393	49	76	16	148	170
LT Vol	32	359	0	40	0	8	0
Through Vol	294	34	0	36	0	140	0
RT Vol	20	0	49	0	16	0	170
Lane Flow Rate	360	409	51	79	17	154	177
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.727	0.86	0.09	0.185	0.034	0.322	0.333
Departure Headway (Hd)	7.263	7.563	6.378	8.411	7.412	7.508	6.762
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	497	479	560	425	481	478	529
Service Time	5.322	5.319	4.133	6.193	5.193	5.273	4.527
HCM Lane V/C Ratio	0.724	0.854	0.091	0.186	0.035	0.322	0.335
HCM Control Delay	27.4	41.6	9.8	13.1	10.5	13.8	12.9
HCM Lane LOS	D	E	A	B	B	B	B
HCM 95th-tile Q	5.9	8.9	0.3	0.7	0.1	1.4	1.4



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	29	31	86	16	20	21	33	1598	14	22	1862	24
Future Volume (vph)	29	31	86	16	20	21	33	1598	14	22	1862	24
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			1.00		1.00	1.00	1.00	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.92			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1666			1771		1752	3505	1568	1752	3505	1519
Flt Permitted		0.94			0.79		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1577			1421		1752	3505	1568	1752	3505	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	30	32	89	16	21	22	34	1647	14	23	1920	25
RTOR Reduction (vph)	0	41	0	0	18	0	0	0	3	0	0	6
Lane Group Flow (vph)	0	110	0	0	41	0	34	1647	11	23	1920	19
Confl. Peds. (#/hr)	1		3	3		1	4					4
Heavy Vehicles (%)	3%	3%	3%	0%	0%	0%	3%	3%	3%	3%	3%	3%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		14.5			14.5		5.4	94.6	94.6	4.9	94.1	94.1
Effective Green, g (s)		15.5			15.5		5.4	97.6	97.6	4.9	97.1	97.1
Actuated g/C Ratio		0.12			0.12		0.04	0.75	0.75	0.04	0.75	0.75
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		188			169		72	2631	1177	66	2617	1134
v/s Ratio Prot							c0.02	0.47		0.01	c0.55	
v/s Ratio Perm		c0.07			0.03				0.01			0.01
v/c Ratio		0.58			0.24		0.47	0.63	0.01	0.35	0.73	0.02
Uniform Delay, d1		54.2			51.9		60.9	7.6	4.1	61.0	9.2	4.2
Progression Factor		1.00			1.00		1.43	0.62	1.00	1.18	0.23	0.00
Incremental Delay, d2		4.5			0.8		2.9	0.7	0.0	1.9	1.1	0.0
Delay (s)		58.7			52.7		89.8	5.4	4.1	74.0	3.3	0.0
Level of Service		E			D		F	A	A	E	A	A
Approach Delay (s)		58.7			52.7			7.1			4.1	
Approach LOS		E			D			A			A	

Intersection Summary			
HCM 2000 Control Delay	8.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



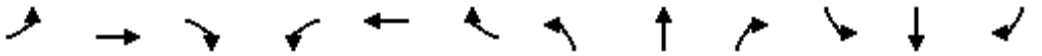
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	31	86	16	20	21	33	1598	14	22	1862	24
Future Volume (veh/h)	29	31	86	16	20	21	33	1598	14	22	1862	24
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1900	1900	1900	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	30	32	89	16	21	22	34	1647	14	23	1920	25
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	0	0	0	3	3	3	3	3	3
Cap, veh/h	56	56	113	66	84	68	43	2713	1207	31	2688	1196
Arrive On Green	0.11	0.12	0.12	0.11	0.12	0.12	0.02	0.77	0.77	0.02	0.76	0.76
Sat Flow, veh/h	186	464	933	252	696	564	1767	3526	1568	1767	3526	1568
Grp Volume(v), veh/h	151	0	0	59	0	0	34	1647	14	23	1920	25
Grp Sat Flow(s),veh/h/ln	1583	0	0	1513	0	0	1767	1763	1568	1767	1763	1568
Q Serve(g_s), s	11.7	0.0	0.0	4.2	0.0	0.0	2.5	26.3	0.3	1.7	36.9	0.5
Cycle Q Clear(g_c), s	11.7	0.0	0.0	4.2	0.0	0.0	2.5	26.3	0.3	1.7	36.9	0.5
Prop In Lane	0.20		0.59	0.27		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	0	0	0	0	43	2713	1207	31	2688	1196
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00	0.79	0.61	0.01	0.75	0.71	0.02
Avail Cap(c_a), veh/h	0	0	0	0	0	0	136	2713	1207	136	2688	1196
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.51	0.51	0.51	0.53	0.53	0.53
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	63.1	6.5	3.5	63.6	8.0	3.7
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	14.6	0.5	0.0	17.4	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.3	7.9	0.1	0.9	11.4	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	77.6	7.0	3.5	81.0	8.9	3.7
LnGrp LOS	A	A	A	A	A	A	E	A	A	F	A	A
Approach Vol, veh/h		151			59			1695			1968	
Approach Delay, s/veh		0.0			0.0			8.4			9.7	
Approach LOS		A			A			A			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.2	103.1		19.7	6.3	104.1		19.7				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	10.0	83.0		20.0	10.0	84.0		20.0				
Max Q Clear Time (g_c+I1), s	4.5	38.9		6.2	3.7	28.3		13.7				
Green Ext Time (p_c), s	0.0	24.0		0.2	0.0	20.0		0.4				

Intersection Summary	
HCM 6th Ctrl Delay	8.6
HCM 6th LOS	A

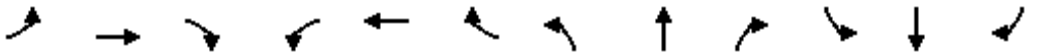
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	228	1706	53	104	1486	173	27	214	82	129	246	140
Future Volume (vph)	228	1706	53	104	1486	173	27	214	82	129	246	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1547	1770	3539	1556	1732	3471	1518	1739	3505	1543
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.48	1.00	1.00	0.53	1.00	1.00
Satd. Flow (perm)	1752	3505	1547	1770	3539	1556	874	3471	1518	961	3505	1543
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	245	1834	57	112	1598	186	29	230	88	139	265	151
RTOR Reduction (vph)	0	0	20	0	0	55	0	0	71	0	0	121
Lane Group Flow (vph)	245	1834	38	112	1598	131	29	230	17	139	265	30
Confl. Peds. (#/hr)	5		1	1		5	3		10	10		3
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8		8	4		4
Actuated Green, G (s)	23.1	76.3	76.3	13.0	66.2	66.2	24.7	24.7	24.7	24.7	24.7	24.7
Effective Green, g (s)	23.1	79.3	79.3	13.0	69.2	69.2	25.7	25.7	25.7	25.7	25.7	25.7
Actuated g/C Ratio	0.18	0.61	0.61	0.10	0.53	0.53	0.20	0.20	0.20	0.20	0.20	0.20
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	311	2138	943	177	1883	828	172	686	300	189	692	305
v/s Ratio Prot	0.14	c0.52		0.06	c0.45			0.07			0.08	
v/s Ratio Perm			0.02			0.08	0.03		0.01	c0.14		0.02
v/c Ratio	0.79	0.86	0.04	0.63	0.85	0.16	0.17	0.34	0.06	0.74	0.38	0.10
Uniform Delay, d1	51.1	20.7	10.1	56.2	25.9	15.5	43.3	44.8	42.3	49.0	45.3	42.7
Progression Factor	0.86	0.74	1.15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.4	3.5	0.1	7.2	5.0	0.4	0.5	0.3	0.1	13.8	0.4	0.1
Delay (s)	53.3	18.8	11.7	63.4	30.9	15.9	43.7	45.1	42.4	62.8	45.6	42.8
Level of Service	D	B	B	E	C	B	D	D	D	E	D	D
Approach Delay (s)		22.6			31.4			44.3			49.1	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	30.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	228	1706	53	104	1486	173	27	214	82	129	246	140
Future Volume (veh/h)	228	1706	53	104	1486	173	27	214	82	129	246	140
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.99	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	245	1834	57	112	1598	186	29	230	88	139	265	151
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, %	3	3	3	2	2	2	4	4	4	3	3	3
Cap, veh/h	380	2060	916	137	1503	668	231	862	380	258	869	378
Arrive On Green	0.43	1.00	1.00	0.08	0.42	0.42	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	1767	3526	1568	1781	3554	1579	949	3497	1541	1046	3526	1533
Grp Volume(v), veh/h	245	1834	57	112	1598	186	29	230	88	139	265	151
Grp Sat Flow(s),veh/h/ln	1767	1763	1568	1781	1777	1579	949	1749	1541	1046	1763	1533
Q Serve(g_s), s	14.2	0.0	0.0	8.1	55.0	10.0	3.3	6.9	5.9	16.1	8.0	10.7
Cycle Q Clear(g_c), s	14.2	0.0	0.0	8.1	55.0	10.0	11.3	6.9	5.9	23.0	8.0	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	380	2060	916	137	1503	668	231	862	380	258	869	378
V/C Ratio(X)	0.64	0.89	0.06	0.82	1.06	0.28	0.13	0.27	0.23	0.54	0.30	0.40
Avail Cap(c_a), veh/h	380	2060	916	219	1503	668	289	1076	474	322	1085	472
HCM Platoon Ratio	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.62	0.62	0.62	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	0.0	0.0	59.1	37.5	24.5	44.5	39.5	39.1	48.8	39.9	40.9
Incr Delay (d2), s/veh	2.3	4.1	0.1	12.1	41.9	1.0	0.2	0.2	0.3	1.8	0.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	1.2	0.0	4.0	31.5	3.9	0.8	3.0	2.3	4.4	3.5	4.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	35.5	4.1	0.1	71.2	79.4	25.6	44.7	39.7	39.4	50.5	40.1	41.6
LnGrp LOS	D	A	A	E	F	C	D	D	D	D	D	D
Approach Vol, veh/h		2136			1896			347			555	
Approach Delay, s/veh		7.6			73.7			40.0			43.1	
Approach LOS		A			E			D			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.0	80.0		36.1	34.9	59.0		36.1				
Change Period (Y+Rc), s	4.0	7.0		5.0	7.0	* 7		5.0				
Max Green Setting (Gmax), s	16.0	59.0		39.0	23.0	* 52		39.0				
Max Q Clear Time (g_c+I1), s	10.1	2.0		25.0	16.2	57.0		13.3				
Green Ext Time (p_c), s	0.1	25.1		2.6	0.4	0.0		2.0				

Intersection Summary			
HCM 6th Ctrl Delay		39.2	
HCM 6th LOS		D	

Notes

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

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	3	0	6	1	8	0	1	5	1	0	0
Future Vol, veh/h	0	3	0	6	1	8	0	1	5	1	0	0
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	5	0	10	2	13	0	2	8	2	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7	6.8	6.5	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	40%	100%
Vol Thru, %	17%	100%	7%	0%
Vol Right, %	83%	0%	53%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	6	3	15	1
LT Vol	0	0	6	1
Through Vol	1	3	1	0
RT Vol	5	0	8	0
Lane Flow Rate	10	5	24	2
Geometry Grp	1	1	1	1
Degree of Util (X)	0.009	0.005	0.024	0.002
Departure Headway (Hd)	3.45	3.935	3.681	4.156
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1041	913	977	865
Service Time	1.458	1.942	1.686	2.164
HCM Lane V/C Ratio	0.01	0.005	0.025	0.002
HCM Control Delay	6.5	7	6.8	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0.1	0

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	7	16	309	281	4
Future Vol, veh/h	7	7	16	309	281	4
Conflicting Peds, #/hr	0	2	6	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	3	3	3	3
Mvmt Flow	8	8	18	351	319	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	715	330	330	0	-	0
Stage 1	328	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	400	716	1224	-	-	-
Stage 1	734	-	-	-	-	-
Stage 2	691	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	388	711	1217	-	-	-
Mov Cap-2 Maneuver	388	-	-	-	-	-
Stage 1	716	-	-	-	-	-
Stage 2	687	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.4	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1217	-	502	-	-
HCM Lane V/C Ratio	0.015	-	0.032	-	-
HCM Control Delay (s)	8	0	12.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	12	0	24	47	0	31	38	282	21	8	248	21
Future Vol, veh/h	12	0	24	47	0	31	38	282	21	8	248	21
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	2	2	2	3	3	3	3	3	3
Mvmt Flow	14	0	28	54	0	36	44	324	24	9	285	24

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	759	754	297	756	754	341	309	0	0	351	0	0
Stage 1	315	315	-	427	427	-	-	-	-	-	-	-
Stage 2	444	439	-	329	327	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.12	6.52	6.22	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.518	4.018	3.318	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	326	341	747	325	338	701	1246	-	-	1202	-	-
Stage 1	700	659	-	606	585	-	-	-	-	-	-	-
Stage 2	597	582	-	684	648	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	296	322	747	300	319	698	1246	-	-	1199	-	-
Mov Cap-2 Maneuver	296	322	-	300	319	-	-	-	-	-	-	-
Stage 1	669	653	-	578	558	-	-	-	-	-	-	-
Stage 2	541	555	-	653	642	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	17	0.9	0.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1246	-	-	495	388	1199	-	-
HCM Lane V/C Ratio	0.035	-	-	0.084	0.231	0.008	-	-
HCM Control Delay (s)	8	0	-	12.9	17	8	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.9	0	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	24	38	407	503	17
Future Vol, veh/h	10	24	38	407	503	17
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	3	3	3	3
Mvmt Flow	11	28	44	468	578	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1144	588	598	0	-	0
Stage 1	588	-	-	-	-	-
Stage 2	556	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	223	513	974	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	578	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	209	513	974	-	-	-
Mov Cap-2 Maneuver	209	-	-	-	-	-
Stage 1	525	-	-	-	-	-
Stage 2	578	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.2	0.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	974	-	359	-	-
HCM Lane V/C Ratio	0.045	-	0.109	-	-
HCM Control Delay (s)	8.9	0	16.2	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.4	-	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	34	855	325	74	369	122
Future Volume (vph)	34	855	325	74	369	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.98	1.00			1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00
Frt	1.00	0.85	0.97			1.00
Flt Protected	0.95	1.00	1.00			0.96
Satd. Flow (prot)	1770	1547	1845			1795
Flt Permitted	0.95	1.00	1.00			0.96
Satd. Flow (perm)	1770	1547	1845			1795
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	37	919	349	80	397	131
RTOR Reduction (vph)	0	193	8	0	0	0
Lane Group Flow (vph)	37	726	421	0	0	528
Confl. Peds. (#/hr)	3			1	1	
Confl. Bikes (#/hr)		6				
Heavy Vehicles (%)	2%	2%	0%	0%	2%	2%
Turn Type	Prot	Perm	NA		Split	NA
Protected Phases	3		1		2	2
Permitted Phases		1 2				
Actuated Green, G (s)	1.7	55.0	22.8			28.2
Effective Green, g (s)	1.7	55.0	22.8			28.2
Actuated g/C Ratio	0.02	0.79	0.33			0.41
Clearance Time (s)	4.0		4.0			4.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	43	1222	604			727
v/s Ratio Prot	c0.02		c0.23			c0.29
v/s Ratio Perm		0.47				
v/c Ratio	0.86	0.59	0.70			0.73
Uniform Delay, d1	33.8	2.9	20.4			17.4
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	85.1	0.8	3.5			3.6
Delay (s)	118.9	3.7	23.9			21.1
Level of Service	F	A	C			C
Approach Delay (s)	8.1		23.9			21.1
Approach LOS	A		C			C

Intersection Summary			
HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	69.6	Sum of lost time (s)	14.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support exclusive ped or hold phases.

Intersection	
Intersection Delay, s/veh	6.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	6	0	2	0	2	0	0	5	2	0	0
Future Vol, veh/h	2	6	0	2	0	2	0	0	5	2	0	0
Peak Hour Factor	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56	0.56
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	4	11	0	4	0	4	0	0	9	4	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7	6.8	6.4	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	25%	50%	100%
Vol Thru, %	0%	75%	0%	0%
Vol Right, %	100%	0%	50%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	5	8	4	2
LT Vol	0	2	2	2
Through Vol	0	6	0	0
RT Vol	5	0	2	0
Lane Flow Rate	9	14	7	4
Geometry Grp	1	1	1	1
Degree of Util (X)	0.008	0.016	0.007	0.004
Departure Headway (Hd)	3.339	3.977	3.732	4.144
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1075	905	963	867
Service Time	1.348	1.979	1.737	2.152
HCM Lane V/C Ratio	0.008	0.015	0.007	0.005
HCM Control Delay	6.4	7	6.8	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0	0

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	6	5	212	303	2
Future Vol, veh/h	2	6	5	212	303	2
Conflicting Peds, #/hr	0	1	1	0	0	1
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	7	7	6	6
Mvmt Flow	2	7	6	247	352	2

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	613	355	355	0	-	0
Stage 1	354	-	-	-	-	-
Stage 2	259	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.17	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.263	-	-	-
Pot Cap-1 Maneuver	459	693	1176	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	789	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	455	692	1175	-	-	-
Mov Cap-2 Maneuver	455	-	-	-	-	-
Stage 1	710	-	-	-	-	-
Stage 2	788	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1175	-	612	-	-
HCM Lane V/C Ratio	0.005	-	0.015	-	-
HCM Control Delay (s)	8.1	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection	
Int Delay, s/veh	2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	0	20	34	0	15	7	173	31	44	273	5
Future Vol, veh/h	14	0	20	34	0	15	7	173	31	44	273	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	7	7	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	9	9	9	10	10	10	5	5	5
Mvmt Flow	17	0	25	42	0	19	9	214	38	54	337	6

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	709	725	340	719	709	240	343	0	0	259	0	0
Stage 1	448	448	-	258	258	-	-	-	-	-	-	-
Stage 2	261	277	-	461	451	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.19	6.59	6.29	4.2	-	-	4.15	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.19	5.59	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.19	5.59	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.581	4.081	3.381	2.29	-	-	2.245	-	-
Pot Cap-1 Maneuver	352	354	707	335	351	782	1173	-	-	1288	-	-
Stage 1	594	576	-	731	682	-	-	-	-	-	-	-
Stage 2	748	685	-	567	559	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	328	330	707	306	327	777	1173	-	-	1279	-	-
Mov Cap-2 Maneuver	328	330	-	306	327	-	-	-	-	-	-	-
Stage 1	589	546	-	719	671	-	-	-	-	-	-	-
Stage 2	724	674	-	519	530	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	13.2	16.4	0.3	1.1
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1173	-	-	479	376	1279	-	-
HCM Lane V/C Ratio	0.007	-	-	0.088	0.161	0.042	-	-
HCM Control Delay (s)	8.1	0	-	13.2	16.4	7.9	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.6	0.1	-	-

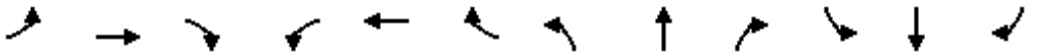
Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	52	15	532	574	6
Future Vol, veh/h	20	52	15	532	574	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	25	64	19	657	709	7

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1408	713	716	0	-	0
Stage 1	713	-	-	-	-	-
Stage 2	695	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.1	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.2	-	-	-
Pot Cap-1 Maneuver	155	435	894	-	-	-
Stage 1	489	-	-	-	-	-
Stage 2	499	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	150	435	894	-	-	-
Mov Cap-2 Maneuver	150	-	-	-	-	-
Stage 1	473	-	-	-	-	-
Stage 2	499	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	23.3	0.2	0
HCM LOS	C		

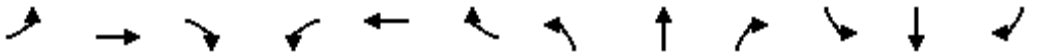
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	894	-	285	-	-
HCM Lane V/C Ratio	0.021	-	0.312	-	-
HCM Control Delay (s)	9.1	0	23.3	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	1.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	141	46	60	212	365	66	1916	69	111	942	15
Future Volume (vph)	21	141	46	60	212	365	66	1916	69	111	942	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1569	3024		1736	1827	1540	1719	3438	1538	1703	3406	1524
Flt Permitted	0.28	1.00		0.45	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	465	3024		818	1827	1540	1719	3438	1538	1703	3406	1524
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	22	148	48	63	223	384	69	2017	73	117	992	16
RTOR Reduction (vph)	0	26	0	0	0	56	0	0	29	0	0	6
Lane Group Flow (vph)	22	170	0	63	223	328	69	2017	44	117	992	10
Confl. Peds. (#/hr)	2					2						
Heavy Vehicles (%)	15%	15%	15%	4%	4%	4%	5%	5%	5%	6%	6%	6%
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4	5	1	6		5	2	
Permitted Phases	8			4		4			6			2
Actuated Green, G (s)	16.6	14.2		21.4	16.6	27.8	7.7	69.8	69.8	11.2	73.3	73.3
Effective Green, g (s)	16.6	15.2		21.4	17.6	27.8	7.7	72.8	72.8	11.2	76.3	76.3
Actuated g/C Ratio	0.14	0.13		0.18	0.15	0.23	0.06	0.61	0.61	0.09	0.64	0.64
Clearance Time (s)	4.0	5.0		4.0	5.0	4.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	86	383		182	267	356	110	2085	933	158	2165	969
v/s Ratio Prot	0.01	0.06		c0.01	0.12	c0.09	0.04	c0.59		0.07	c0.29	
v/s Ratio Perm	0.03			0.05		0.13			0.03			0.01
v/c Ratio	0.26	0.44		0.35	0.84	0.92	0.63	0.97	0.05	0.74	0.46	0.01
Uniform Delay, d1	45.5	48.5		42.1	49.8	45.0	54.8	22.5	9.6	53.0	11.2	8.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.97	0.80	2.74	1.00	1.00	1.00
Incremental Delay, d2	1.6	0.8		1.1	19.7	28.5	7.1	9.9	0.1	16.9	0.7	0.0
Delay (s)	47.0	49.3		43.3	69.5	73.6	60.0	27.9	26.3	69.9	11.9	8.0
Level of Service	D	D		D	E	E	E	C	C	E	B	A
Approach Delay (s)		49.1			69.3			28.9			17.9	
Approach LOS		D			E			C			B	

Intersection Summary			
HCM 2000 Control Delay	33.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	89.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



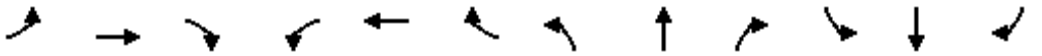
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	21	141	46	60	212	365	66	1916	69	111	942	15
Future Volume (veh/h)	21	141	46	60	212	365	66	1916	69	111	942	15
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1678	1678	1678	1841	1841	1841	1826	1826	1826	1811	1811	1811
Adj Flow Rate, veh/h	22	148	48	63	223	384	69	2017	73	117	992	16
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	15	15	15	4	4	4	5	5	5	6	6	6
Cap, veh/h	99	279	87	189	261	324	88	2195	979	129	2260	1008
Arrive On Green	0.02	0.12	0.11	0.04	0.14	0.13	0.02	0.21	0.21	0.08	0.66	0.66
Sat Flow, veh/h	1598	2386	746	1753	1841	1553	1739	3469	1547	1725	3441	1535
Grp Volume(v), veh/h	22	97	99	63	223	384	69	2017	73	117	992	16
Grp Sat Flow(s),veh/h/ln	1598	1594	1538	1753	1841	1553	1739	1735	1547	1725	1721	1535
Q Serve(g_s), s	1.5	6.9	7.3	3.8	14.2	16.0	4.7	68.3	4.6	8.1	16.7	0.4
Cycle Q Clear(g_c), s	1.5	6.9	7.3	3.8	14.2	16.0	4.7	68.3	4.6	8.1	16.7	0.4
Prop In Lane	1.00		0.49	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	99	186	180	189	261	324	88	2195	979	129	2260	1008
V/C Ratio(X)	0.22	0.52	0.55	0.33	0.86	1.19	0.78	0.92	0.07	0.90	0.44	0.02
Avail Cap(c_a), veh/h	124	199	192	203	261	324	145	2195	979	129	2260	1008
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.74	0.74	0.74	0.57	0.57	0.57	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	49.8	50.3	44.3	50.3	47.5	58.3	44.5	19.2	55.1	9.9	7.1
Incr Delay (d2), s/veh	1.1	2.3	2.9	0.8	18.2	104.3	8.3	4.7	0.1	51.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.9	3.0	1.7	7.9	19.1	2.3	33.0	1.7	5.3	5.8	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	48.2	52.1	53.1	45.1	68.5	151.8	66.6	49.2	19.3	106.2	10.5	7.2
LnGrp LOS	D	D	D	D	E	F	E	D	B	F	B	A
Approach Vol, veh/h		218			670			2159			1125	
Approach Delay, s/veh		52.2			114.0			48.7			20.4	
Approach LOS		D			F			D			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	82.8	6.1	21.0	13.0	79.9	9.1	18.0
Change Period (Y+Rc), s	4.0	7.0	4.0	5.0	4.0	7.0	4.0	5.0
Max Green Setting (Gmax), s	10.0	70.0	4.0	16.0	9.0	71.0	6.0	14.0
Max Q Clear Time (g_c+I1), s	6.7	18.7	3.5	18.0	10.1	70.3	5.8	9.3
Green Ext Time (p_c), s	0.0	8.5	0.0	0.0	0.0	0.6	0.0	0.4

Intersection Summary	
HCM 6th Ctrl Delay	51.8
HCM 6th LOS	D

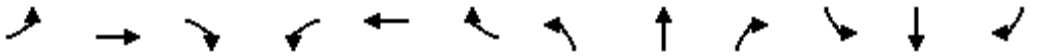
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	124	10	24	459	26	66	158	16	21	122	205
Future Volume (vph)	130	124	10	24	459	26	66	158	16	21	122	205
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.97		1.00	0.99
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1641	1705		1748	1827			1836	1533		1778	1503
Flt Permitted	0.95	1.00		0.67	1.00			0.86	1.00		0.93	1.00
Satd. Flow (perm)	1641	1705		1230	1827			1595	1533		1665	1503
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	135	129	10	25	478	27	69	165	17	22	127	214
RTOR Reduction (vph)	0	2	0	0	2	0	0	0	13	0	0	162
Lane Group Flow (vph)	135	137	0	25	503	0	0	234	4	0	149	52
Confl. Peds. (#/hr)	3		3	3		3			5	5		
Confl. Bikes (#/hr)			2			1			2			2
Heavy Vehicles (%)	10%	10%	10%	3%	3%	3%	2%	2%	2%	6%	6%	6%
Turn Type	Prot	NA		pm+pt	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases				6			8		8	4		4
Actuated Green, G (s)	8.9	32.5		27.6	25.6			15.7	15.7		15.7	15.7
Effective Green, g (s)	8.9	32.5		27.6	25.6			15.7	15.7		15.7	15.7
Actuated g/C Ratio	0.14	0.51		0.43	0.40			0.24	0.24		0.24	0.24
Clearance Time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	227	863		544	728			390	374		407	367
v/s Ratio Prot	c0.08	0.08		0.00	c0.28							
v/s Ratio Perm				0.02				c0.15	0.00		0.09	0.03
v/c Ratio	0.59	0.16		0.05	0.69			0.60	0.01		0.37	0.14
Uniform Delay, d1	26.0	8.5		10.6	16.0			21.5	18.4		20.1	19.0
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	4.1	0.1		0.0	2.8			2.5	0.0		0.6	0.2
Delay (s)	30.1	8.6		10.6	18.9			24.0	18.4		20.7	19.2
Level of Service	C	A		B	B			C	B		C	B
Approach Delay (s)		19.2			18.5			23.6			19.8	
Approach LOS		B			B			C			B	

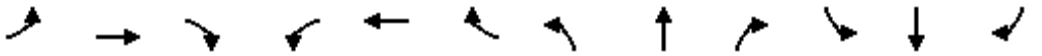
Intersection Summary			
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	64.2	Sum of lost time (s)	14.0
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	124	10	24	459	26	66	158	16	21	122	205
Future Volume (veh/h)	130	124	10	24	459	26	66	158	16	21	122	205
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1752	1752	1752	1856	1856	1856	1870	1870	1870	1811	1811	1811
Adj Flow Rate, veh/h	135	129	10	25	478	27	69	165	17	22	127	214
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	10	10	10	3	3	3	2	2	2	6	6	6
Cap, veh/h	173	648	50	544	561	32	69	130	566	61	266	554
Arrive On Green	0.10	0.40	0.40	0.02	0.32	0.32	0.37	0.37	0.37	0.37	0.37	0.37
Sat Flow, veh/h	1668	1601	124	1767	1737	98	0	353	1540	0	723	1508
Grp Volume(v), veh/h	135	0	139	25	0	505	234	0	17	149	0	214
Grp Sat Flow(s),veh/h/ln	1668	0	1726	1767	0	1835	353	0	1540	723	0	1508
Q Serve(g_s), s	5.4	0.0	3.5	0.6	0.0	17.5	0.0	0.0	0.5	0.0	0.0	7.1
Cycle Q Clear(g_c), s	5.4	0.0	3.5	0.6	0.0	17.5	25.0	0.0	0.5	25.0	0.0	7.1
Prop In Lane	1.00		0.07	1.00		0.05	0.29		1.00	0.15		1.00
Lane Grp Cap(c), veh/h	173	0	698	544	0	593	198	0	566	326	0	554
V/C Ratio(X)	0.78	0.00	0.20	0.05	0.00	0.85	1.18	0.00	0.03	0.46	0.00	0.39
Avail Cap(c_a), veh/h	515	0	761	921	0	809	198	0	566	326	0	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	13.1	14.8	0.0	21.5	19.2	0.0	13.8	16.5	0.0	15.9
Incr Delay (d2), s/veh	7.4	0.0	0.1	0.0	0.0	6.5	120.9	0.0	0.0	1.0	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	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	1.3	0.3	0.0	8.1	8.7	0.0	0.2	1.6	0.0	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	37.2	0.0	13.3	14.8	0.0	28.0	140.1	0.0	13.8	17.5	0.0	16.3
LnGrp LOS	D	A	B	B	A	C	F	A	B	B	A	B
Approach Vol, veh/h		274			530			251			363	
Approach Delay, s/veh		25.0			27.4			131.5			16.8	
Approach LOS		C			C			F			B	

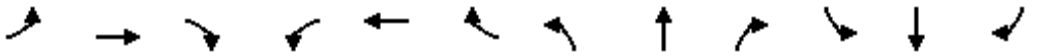
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.5	32.5		30.0	11.1	27.0		30.0				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0				
Max Green Setting (Gmax), s	16.0	30.0		25.0	21.0	30.0		25.0				
Max Q Clear Time (g_c+I1), s	2.6	5.5		27.0	7.4	19.5		27.0				
Green Ext Time (p_c), s	0.0	0.8		0.0	0.3	2.5		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		42.7	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	161	9	13	20	31	6	31	149	6	3	148	308
Future Volume (vph)	161	9	13	20	31	6	31	149	6	3	148	308
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5		4.5	4.5		4.5			4.5	4.5
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.98		1.00	0.98		1.00			1.00	0.99
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	1.00
Frt		1.00	0.85		1.00	0.85		1.00			1.00	0.85
Flt Protected		0.95	1.00		0.98	1.00		0.99			1.00	1.00
Satd. Flow (prot)		1712	1491		1757	1491		1820			1808	1521
Flt Permitted		0.95	1.00		0.98	1.00		0.93			0.99	1.00
Satd. Flow (perm)		1712	1491		1757	1491		1699			1798	1521
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	173	10	14	22	33	6	33	160	6	3	159	331
RTOR Reduction (vph)	0	0	10	0	0	5	0	1	0	0	0	145
Lane Group Flow (vph)	0	183	4	0	55	1	0	198	0	0	162	186
Confl. Peds. (#/hr)	1					1	3		3	3		3
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	3%	3%	3%	5%	5%	5%
Turn Type	Split	NA	Perm	Split	NA	Perm	Perm	NA		Perm	NA	pm+ov
Protected Phases	4	4		8	8			2			6	4
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)		11.3	11.3		3.8	3.8		10.8			10.8	22.1
Effective Green, g (s)		11.3	11.3		3.8	3.8		10.8			10.8	22.1
Actuated g/C Ratio		0.29	0.29		0.10	0.10		0.27			0.27	0.56
Clearance Time (s)		4.5	4.5		4.5	4.5		4.5			4.5	4.5
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)		491	427		169	143		465			492	1026
v/s Ratio Prot		c0.11			c0.03							0.05
v/s Ratio Perm			0.00			0.00		c0.12			0.09	0.07
v/c Ratio		0.37	0.01		0.33	0.00		0.42			0.33	0.18
Uniform Delay, d1		11.2	10.0		16.6	16.1		11.7			11.4	4.2
Progression Factor		1.00	1.00		1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2		0.5	0.0		1.1	0.0		0.6			0.4	0.1
Delay (s)		11.7	10.1		17.7	16.1		12.4			11.8	4.3
Level of Service		B	B		B	B		B			B	A
Approach Delay (s)		11.6			17.6			12.4			6.8	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay	9.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	39.4	Sum of lost time (s)	13.5
Intersection Capacity Utilization	46.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

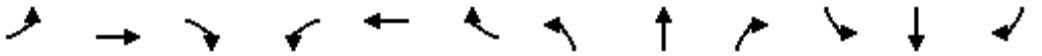


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	161	9	13	20	31	6	31	149	6	3	148	308
Future Volume (veh/h)	161	9	13	20	31	6	31	149	6	3	148	308
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1811	1811	1811	1811	1811	1811	1856	1856	1856	1826	1826	1826
Adj Flow Rate, veh/h	173	10	14	22	33	6	33	160	6	3	159	331
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, %	6	6	6	6	6	6	3	3	3	5	5	5
Cap, veh/h	270	16	247	49	74	106	187	450	15	129	543	717
Arrive On Green	0.17	0.17	0.17	0.07	0.07	0.07	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1635	95	1496	710	1065	1530	141	1503	51	10	1811	1540
Grp Volume(v), veh/h	183	0	14	55	0	6	199	0	0	162	0	331
Grp Sat Flow(s),veh/h/ln	1729	0	1496	1776	0	1530	1695	0	0	1821	0	1540
Q Serve(g_s), s	2.9	0.0	0.2	0.9	0.0	0.1	0.0	0.0	0.0	0.0	0.0	4.2
Cycle Q Clear(g_c), s	2.9	0.0	0.2	0.9	0.0	0.1	2.5	0.0	0.0	2.0	0.0	4.2
Prop In Lane	0.95		1.00	0.40		1.00	0.17		0.03	0.02		1.00
Lane Grp Cap(c), veh/h	286	0	247	123	0	106	653	0	0	672	0	717
V/C Ratio(X)	0.64	0.00	0.06	0.45	0.00	0.06	0.30	0.00	0.00	0.24	0.00	0.46
Avail Cap(c_a), veh/h	1581	0	1369	1256	0	1083	1780	0	0	1971	0	1823
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.3	0.0	10.2	13.0	0.0	12.6	8.0	0.0	0.0	7.8	0.0	5.3
Incr Delay (d2), s/veh	2.4	0.0	0.1	2.5	0.0	0.2	0.3	0.0	0.0	0.2	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.1	0.4	0.0	0.0	0.7	0.0	0.0	0.6	0.0	1.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	13.7	0.0	10.3	15.5	0.0	12.8	8.2	0.0	0.0	8.0	0.0	5.7
LnGrp LOS	B	A	B	B	A	B	A	A	A	A	A	A
Approach Vol, veh/h		197			61			199			493	
Approach Delay, s/veh		13.4			15.2			8.2			6.5	
Approach LOS		B			B			A			A	
Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		13.2		9.3		13.2		6.5				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		29.5		26.5		29.5		20.5				
Max Q Clear Time (g_c+I1), s		4.5		4.9		6.2		2.9				
Green Ext Time (p_c), s		1.3		1.1		2.2		0.2				
Intersection Summary												
HCM 6th Ctrl Delay			8.9									
HCM 6th LOS			A									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	10	66	6	20	27	46	1989	15	6	1023	17
Future Volume (vph)	36	10	66	6	20	27	46	1989	15	6	1023	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			0.99		1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.92			0.93		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1689			1711		1719	3438	1504	1687	3374	1509
Flt Permitted		0.87			0.95		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1497			1640		1719	3438	1504	1687	3374	1509
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	38	11	70	6	21	29	49	2116	16	6	1088	18
RTOR Reduction (vph)	0	44	0	0	26	0	0	0	3	0	0	5
Lane Group Flow (vph)	0	75	0	0	30	0	49	2116	13	6	1088	13
Confl. Peds. (#/hr)	2		3	3		2			1	1		
Heavy Vehicles (%)	1%	1%	1%	2%	2%	2%	5%	5%	5%	7%	7%	7%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		11.1			11.1		7.2	91.5	91.5	1.4	85.7	85.7
Effective Green, g (s)		12.1			12.1		7.2	94.5	94.5	1.4	88.7	88.7
Actuated g/C Ratio		0.10			0.10		0.06	0.79	0.79	0.01	0.74	0.74
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		150			165		103	2707	1184	19	2493	1115
v/s Ratio Prot							c0.03	c0.62		0.00	0.32	
v/s Ratio Perm		c0.05			0.02				0.01			0.01
v/c Ratio		0.50			0.18		0.48	0.78	0.01	0.32	0.44	0.01
Uniform Delay, d1		51.1			49.4		54.6	7.0	2.7	58.8	6.0	4.1
Progression Factor		1.00			1.00		0.88	2.52	1.00	0.82	2.43	1.00
Incremental Delay, d2		2.6			0.5		2.0	1.3	0.0	8.6	0.5	0.0
Delay (s)		53.7			49.9		49.9	19.1	2.7	57.0	15.1	4.1
Level of Service		D			D		D	B	A	E	B	A
Approach Delay (s)		53.7			49.9			19.6			15.2	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	19.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



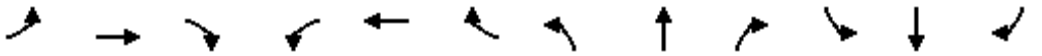
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	10	66	6	20	27	46	1989	15	6	1023	17
Future Volume (veh/h)	36	10	66	6	20	27	46	1989	15	6	1023	17
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1885	1885	1885	1870	1870	1870	1826	1826	1826	1796	1796	1796
Adj Flow Rate, veh/h	38	11	70	6	21	29	49	2116	16	6	1088	18
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	2	2	2	5	5	5	7	7	7
Cap, veh/h	71	30	88	39	81	93	63	2744	1223	10	2596	1157
Arrive On Green	0.09	0.10	0.10	0.09	0.10	0.10	0.01	0.26	0.26	0.01	0.76	0.76
Sat Flow, veh/h	309	289	853	55	787	903	1739	3469	1546	1711	3413	1521
Grp Volume(v), veh/h	119	0	0	56	0	0	49	2116	16	6	1088	18
Grp Sat Flow(s),veh/h/ln	1450	0	0	1745	0	0	1739	1735	1546	1711	1706	1521
Q Serve(g_s), s	8.8	0.0	0.0	3.7	0.0	0.0	3.4	67.7	0.9	0.4	13.4	0.3
Cycle Q Clear(g_c), s	8.8	0.0	0.0	3.7	0.0	0.0	3.4	67.7	0.9	0.4	13.4	0.3
Prop In Lane	0.32		0.59	0.11		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	0	0	0	0	63	2744	1223	10	2596	1157
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.77	0.01	0.58	0.42	0.02
Avail Cap(c_a), veh/h	0	0	0	0	0	0	145	2744	1223	143	2596	1157
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.41	0.41	0.41	0.90	0.90	0.90
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	58.8	34.3	9.6	59.5	5.0	3.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	8.2	0.9	0.0	38.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.6	31.5	0.2	0.3	3.9	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	67.0	35.2	9.6	98.3	5.5	3.5
LnGrp LOS	A	A	A	A	A	A	E	D	A	F	A	A
Approach Vol, veh/h		119			56			2181			1112	
Approach Delay, s/veh		0.0			0.0			35.7			6.0	
Approach LOS		A			A			D			A	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.3	95.3		16.4	4.7	98.9		16.4				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	10.0	79.0		15.0	10.0	79.0		15.0				
Max Q Clear Time (g_c+I1), s	5.4	15.4		5.7	2.4	69.7		10.8				
Green Ext Time (p_c), s	0.0	9.9		0.1	0.0	8.1		0.2				

Intersection Summary		
HCM 6th Ctrl Delay	24.4	
HCM 6th LOS	C	

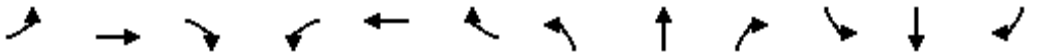
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	98	987	18	154	1752	186	54	188	97	89	308	215
Future Volume (vph)	98	987	18	154	1752	186	54	188	97	89	308	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1719	3438	1538	1703	3406	1504	1719	3438	1514	1719	3438	1510
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1719	3438	1538	1703	3406	1504	1719	3438	1514	1719	3438	1510
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	100	1007	18	157	1788	190	55	192	99	91	314	219
RTOR Reduction (vph)	0	0	8	0	0	65	0	0	89	0	0	191
Lane Group Flow (vph)	100	1007	10	157	1788	125	55	192	10	91	314	28
Confl. Peds. (#/hr)	1					1	5		4	4		5
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	5%	5%	5%	6%	6%	6%	5%	5%	5%	5%	5%	5%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6			8			4
Actuated Green, G (s)	12.3	62.9	62.9	15.6	66.2	66.2	7.1	10.6	10.6	10.9	14.4	14.4
Effective Green, g (s)	12.3	65.9	65.9	15.6	69.2	69.2	8.1	11.6	11.6	11.9	15.4	15.4
Actuated g/C Ratio	0.10	0.55	0.55	0.13	0.58	0.58	0.07	0.10	0.10	0.10	0.13	0.13
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	4.0	5.0	5.0	4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	176	1888	844	221	1964	867	116	332	146	170	441	193
v/s Ratio Prot	0.06	c0.29		0.09	c0.53		0.03	0.06		c0.05	c0.09	
v/s Ratio Perm			0.01			0.08			0.01			0.02
v/c Ratio	0.57	0.53	0.01	0.71	0.91	0.14	0.47	0.58	0.07	0.54	0.71	0.15
Uniform Delay, d1	51.3	17.2	12.3	50.0	22.6	11.7	53.9	51.9	49.3	51.4	50.2	46.5
Progression Factor	1.31	1.73	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.8	1.0	0.0	10.3	7.8	0.3	3.0	2.4	0.2	3.2	5.4	0.3
Delay (s)	70.9	30.9	12.3	60.3	30.4	12.1	56.9	54.3	49.5	54.6	55.5	46.8
Level of Service	E	C	B	E	C	B	E	D	D	D	E	D
Approach Delay (s)		34.2			31.0			53.3			52.3	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	82.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	987	18	154	1752	186	54	188	97	89	308	215
Future Volume (veh/h)	98	987	18	154	1752	186	54	188	97	89	308	215
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1811	1811	1811	1826	1826	1826	1826	1826	1826
Adj Flow Rate, veh/h	100	1007	18	157	1788	190	55	192	99	91	314	219
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	5	5	5	6	6	6	5	5	5	5	5	5
Cap, veh/h	259	2173	969	185	1924	858	72	260	114	116	347	150
Arrive On Green	0.15	0.63	0.63	0.11	0.56	0.56	0.04	0.08	0.08	0.07	0.10	0.10
Sat Flow, veh/h	1739	3469	1547	1725	3441	1534	1739	3469	1516	1739	3469	1503
Grp Volume(v), veh/h	100	1007	18	157	1788	190	55	192	99	91	314	219
Grp Sat Flow(s),veh/h/ln	1739	1735	1547	1725	1721	1534	1739	1735	1516	1739	1735	1503
Q Serve(g_s), s	6.2	18.3	0.5	10.7	57.2	4.5	3.8	6.5	7.8	6.2	10.7	8.6
Cycle Q Clear(g_c), s	6.2	18.3	0.5	10.7	57.2	4.5	3.8	6.5	7.8	6.2	10.7	8.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	2173	969	185	1924	858	72	260	114	116	347	150
V/C Ratio(X)	0.39	0.46	0.02	0.85	0.93	0.22	0.76	0.74	0.87	0.78	0.91	1.46
Avail Cap(c_a), veh/h	290	2173	969	273	1950	869	72	260	114	116	347	150
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.90	0.90	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	11.8	8.5	52.6	24.3	4.8	56.9	54.3	54.9	55.2	53.4	27.5
Incr Delay (d2), s/veh	0.8	0.6	0.0	15.0	9.5	0.6	36.5	10.5	46.9	28.9	26.1	238.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	6.7	0.2	5.3	23.7	2.6	2.4	3.2	4.5	3.7	6.0	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	46.9	12.5	8.5	67.7	33.7	5.4	93.4	64.9	101.9	84.1	79.6	266.3
LnGrp LOS	D	B	A	E	C	A	F	E	F	F	E	F
Approach Vol, veh/h		1125			2135			346			624	
Approach Delay, s/veh		15.5			33.7			80.0			145.7	
Approach LOS		B			C			E			F	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	79.1	8.0	16.0	24.9	71.1	11.0	13.0
Change Period (Y+Rc), s	4.0	7.0	4.0	5.0	7.0	* 7	4.0	5.0
Max Green Setting (Gmax), s	19.0	66.0	4.0	11.0	20.0	* 65	7.0	8.0
Max Q Clear Time (g_c+I1), s	12.7	20.3	5.8	12.7	8.2	59.2	8.2	9.8
Green Ext Time (p_c), s	0.2	8.6	0.0	0.0	0.2	4.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	49.2
HCM 6th LOS	D

Notes

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

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

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	62	600	146	43	694	373
Future Volume (vph)	62	600	146	43	694	373
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0			4.0
Lane Util. Factor	1.00	1.00	1.00			1.00
Frpb, ped/bikes	1.00	0.97	0.99			1.00
Flpb, ped/bikes	1.00	1.00	1.00			1.00
Frt	1.00	0.85	0.97			1.00
Flt Protected	0.95	1.00	1.00			0.97
Satd. Flow (prot)	1736	1512	1761			1822
Flt Permitted	0.95	1.00	1.00			0.97
Satd. Flow (perm)	1736	1512	1761			1822
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	65	632	154	45	731	393
RTOR Reduction (vph)	0	147	12	0	0	0
Lane Group Flow (vph)	65	485	187	0	0	1124
Confl. Peds. (#/hr)	1	1				
Confl. Bikes (#/hr)		12		2		
Heavy Vehicles (%)	4%	4%	4%	4%	1%	1%
Turn Type	Prot	Perm	NA		Split	NA
Protected Phases	3		1		2	2
Permitted Phases		1 2				
Actuated Green, G (s)	3.9	56.0	8.2			43.8
Effective Green, g (s)	3.9	56.0	8.2			43.8
Actuated g/C Ratio	0.05	0.77	0.11			0.60
Clearance Time (s)	4.0		4.0			4.0
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	92	1159	197			1093
v/s Ratio Prot	c0.04		c0.11			c0.62
v/s Ratio Perm		0.32				
v/c Ratio	0.71	0.42	0.95			1.03
Uniform Delay, d1	34.0	2.9	32.2			14.6
Progression Factor	1.00	1.00	1.00			1.00
Incremental Delay, d2	21.8	0.2	50.1			34.7
Delay (s)	55.8	3.2	82.3			49.3
Level of Service	E	A	F			D
Approach Delay (s)	8.1		82.3			49.3
Approach LOS	A		F			D

Intersection Summary			
HCM 2000 Control Delay	38.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	73.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	82.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

HCM 6th Edition methodology does not support exclusive ped or hold phases.

Intersection	
Intersection Delay, s/veh	6.7
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	3	0	3	1	9	0	1	3	1	0	0
Future Vol, veh/h	0	3	0	3	1	9	0	1	3	1	0	0
Peak Hour Factor	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63	0.63
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	0	5	0	5	2	14	0	2	5	2	0	0
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	7	6.6	6.5	7.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	0%	23%	100%
Vol Thru, %	25%	100%	8%	0%
Vol Right, %	75%	0%	69%	0%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	4	3	13	1
LT Vol	0	0	3	1
Through Vol	1	3	1	0
RT Vol	3	0	9	0
Lane Flow Rate	6	5	21	2
Geometry Grp	1	1	1	1
Degree of Util (X)	0.006	0.005	0.02	0.002
Departure Headway (Hd)	3.494	3.929	3.548	4.148
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	1029	916	1014	867
Service Time	1.5	1.932	1.551	2.154
HCM Lane V/C Ratio	0.006	0.005	0.021	0.002
HCM Control Delay	6.5	7	6.6	7.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	0	0	0.1	0

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	7	15	331	289	3
Future Vol, veh/h	7	7	15	331	289	3
Conflicting Peds, #/hr	0	2	6	0	0	6
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	3	3	3	3
Mvmt Flow	8	8	17	376	328	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	746	338	337	0	-	0
Stage 1	336	-	-	-	-	-
Stage 2	410	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	384	709	1217	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	674	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	372	704	1210	-	-	-
Mov Cap-2 Maneuver	372	-	-	-	-	-
Stage 1	711	-	-	-	-	-
Stage 2	670	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.6	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1210	-	487	-	-
HCM Lane V/C Ratio	0.014	-	0.033	-	-
HCM Control Delay (s)	8	0	12.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	6	0	10	52	0	35	15	307	23	9	268	7
Future Vol, veh/h	6	0	10	52	0	35	15	307	23	9	268	7
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	3	3	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	87	87	87	87	87	87	87	87	87	87	87	87
Heavy Vehicles, %	0	0	0	2	2	2	3	3	3	3	3	3
Mvmt Flow	7	0	11	60	0	40	17	353	26	10	308	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	754	748	312	741	739	371	316	0	0	382	0	0
Stage 1	332	332	-	403	403	-	-	-	-	-	-	-
Stage 2	422	416	-	338	336	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.12	6.52	6.22	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.518	4.018	3.318	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	328	343	733	332	345	675	1239	-	-	1171	-	-
Stage 1	686	648	-	624	600	-	-	-	-	-	-	-
Stage 2	613	595	-	676	642	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	301	333	733	319	335	672	1239	-	-	1168	-	-
Mov Cap-2 Maneuver	301	333	-	319	335	-	-	-	-	-	-	-
Stage 1	674	642	-	612	588	-	-	-	-	-	-	-
Stage 2	565	583	-	659	636	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	12.9	16.8	0.3	0.3
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1239	-	-	477	404	1168	-	-
HCM Lane V/C Ratio	0.014	-	-	0.039	0.248	0.009	-	-
HCM Control Delay (s)	7.9	0	-	12.9	16.8	8.1	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	1	0	-	-

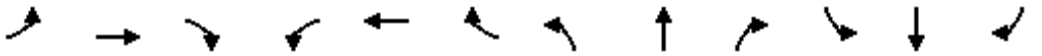
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	9	22	34	421	539	14
Future Vol, veh/h	9	22	34	421	539	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	3	3	3	3
Mvmt Flow	10	25	39	484	620	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1190	628	636	0	-	0
Stage 1	628	-	-	-	-	-
Stage 2	562	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	209	487	943	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	575	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	197	487	943	-	-	-
Mov Cap-2 Maneuver	197	-	-	-	-	-
Stage 1	505	-	-	-	-	-
Stage 2	575	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	16.8	0.7	0
HCM LOS	C		

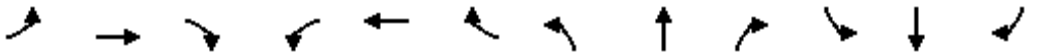
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	943	-	341	-	-
HCM Lane V/C Ratio	0.041	-	0.104	-	-
HCM Control Delay (s)	9	0	16.8	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	6	302	65	69	213	193	72	1562	82	347	1869	36
Future Volume (vph)	6	302	65	69	213	193	72	1562	82	347	1869	36
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95		1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1711	3337		1736	1827	1540	1752	3505	1547	1752	3505	1533
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1711	3337		1736	1827	1540	1752	3505	1547	1752	3505	1533
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	6	311	67	71	220	199	74	1610	85	358	1927	37
RTOR Reduction (vph)	0	14	0	0	0	40	0	0	46	0	0	14
Lane Group Flow (vph)	6	364	0	71	220	159	74	1610	39	358	1927	23
Confl. Peds. (#/hr)	6		4	4		6	1		1	1		1
Heavy Vehicles (%)	5%	5%	5%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	pm+ov	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	3	8		7	4	5	1	6		5	2	
Permitted Phases						4			6			2
Actuated Green, G (s)	0.8	18.2		6.3	23.7	52.0	7.8	57.2	57.2	28.3	77.7	77.7
Effective Green, g (s)	0.8	19.2		6.3	24.7	52.0	7.8	60.2	60.2	28.3	80.7	80.7
Actuated g/C Ratio	0.01	0.15		0.05	0.19	0.40	0.06	0.46	0.46	0.22	0.62	0.62
Clearance Time (s)	4.0	5.0		4.0	5.0	4.0	4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	10	492		84	347	616	105	1623	716	381	2175	951
v/s Ratio Prot	0.00	c0.11		c0.04	0.12	0.06	0.04	c0.46		c0.20	0.55	
v/s Ratio Perm						0.05			0.03			0.01
v/c Ratio	0.60	0.74		0.85	0.63	0.26	0.70	0.99	0.05	0.94	0.89	0.02
Uniform Delay, d1	64.4	53.0		61.4	48.5	26.1	60.0	34.7	19.2	50.0	20.8	9.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	0.94	1.38	6.99	1.00	1.00	1.00
Incremental Delay, d2	70.6	5.9		50.5	3.8	0.2	15.1	17.7	0.1	30.7	5.8	0.0
Delay (s)	135.0	58.9		111.8	52.2	26.3	71.7	65.4	134.5	80.7	26.6	9.5
Level of Service	F	E		F	D	C	E	E	F	F	C	A
Approach Delay (s)		60.1			50.4			69.0			34.6	
Approach LOS		E			D			E			C	

Intersection Summary			
HCM 2000 Control Delay	50.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	93.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



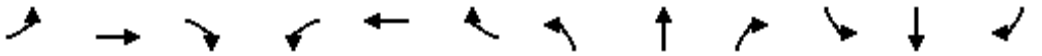
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	302	65	69	213	193	72	1562	82	347	1869	36
Future Volume (veh/h)	6	302	65	69	213	193	72	1562	82	347	1869	36
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1826	1826	1826	1841	1841	1841	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	6	311	67	71	220	199	74	1610	85	358	1927	37
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	5	5	5	4	4	4	3	3	3	3	3	3
Cap, veh/h	10	349	74	81	300	576	94	1734	773	381	2307	1028
Arrive On Green	0.01	0.12	0.12	0.05	0.16	0.16	0.02	0.16	0.16	0.22	0.65	0.65
Sat Flow, veh/h	1739	2838	602	1753	1841	1542	1767	3526	1572	1767	3526	1571
Grp Volume(v), veh/h	6	188	190	71	220	199	74	1610	85	358	1927	37
Grp Sat Flow(s),veh/h/ln	1739	1735	1706	1753	1841	1542	1767	1763	1572	1767	1763	1571
Q Serve(g_s), s	0.4	13.9	14.3	5.2	14.8	12.1	5.4	58.6	6.0	25.9	54.1	1.1
Cycle Q Clear(g_c), s	0.4	13.9	14.3	5.2	14.8	12.1	5.4	58.6	6.0	25.9	54.1	1.1
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	10	213	210	81	300	576	94	1734	773	381	2307	1028
V/C Ratio(X)	0.58	0.88	0.90	0.88	0.73	0.35	0.79	0.93	0.11	0.94	0.84	0.04
Avail Cap(c_a), veh/h	54	213	210	81	300	576	109	1734	773	394	2307	1028
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.86	0.86	0.71	0.71	0.71	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.4	56.1	56.4	61.6	51.7	29.5	63.1	52.2	30.2	50.1	17.1	7.9
Incr Delay (d2), s/veh	41.6	32.0	36.9	55.3	7.7	0.3	20.6	7.7	0.2	29.8	3.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	8.0	8.4	3.6	7.5	4.6	3.0	29.5	2.5	14.4	20.7	0.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	106.0	88.0	93.3	116.9	59.4	29.8	83.8	59.9	30.4	80.0	20.9	8.0
LnGrp LOS	F	F	F	F	E	C	F	E	C	E	C	A
Approach Vol, veh/h		384			490			1769			2322	
Approach Delay, s/veh		90.9			55.7			59.5			29.8	
Approach LOS		F			E			E			C	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	89.1	4.8	25.2	32.0	68.0	10.0	20.0
Change Period (Y+Rc), s	4.0	7.0	4.0	5.0	4.0	7.0	4.0	5.0
Max Green Setting (Gmax), s	8.0	81.0	4.0	17.0	29.0	60.0	6.0	15.0
Max Q Clear Time (g_c+I1), s	7.4	56.1	2.4	16.8	27.9	60.6	7.2	16.3
Green Ext Time (p_c), s	0.0	16.9	0.0	0.1	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	47.6
HCM 6th LOS	D

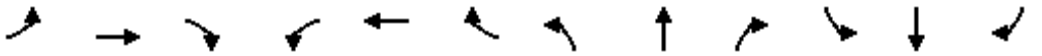
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	506	23	28	231	22	40	149	24	55	160	188
Future Volume (vph)	157	506	23	28	231	22	40	149	24	55	160	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	0.95		1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Frt	1.00	0.99		1.00	0.99			1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			0.99	1.00		0.99	1.00
Satd. Flow (prot)	1752	1830		1752	1814			1843	1506		1812	1543
Flt Permitted	0.95	1.00		0.95	1.00			0.88	1.00		0.86	1.00
Satd. Flow (perm)	1752	1830		1752	1814			1644	1506		1574	1543
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	178	575	26	32	262	25	45	169	27	62	182	214
RTOR Reduction (vph)	0	2	0	0	4	0	0	0	20	0	0	159
Lane Group Flow (vph)	178	599	0	32	284	0	0	214	7	0	245	55
Confl. Peds. (#/hr)	12		4	4		12	1		16	16		1
Confl. Bikes (#/hr)			3			1			2			3
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	2%	2%	2%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			8			4	
Permitted Phases							8		8	4		4
Actuated Green, G (s)	11.9	28.3		2.5	18.9			15.6	15.6		15.6	15.6
Effective Green, g (s)	11.9	28.3		2.5	18.9			15.6	15.6		15.6	15.6
Actuated g/C Ratio	0.20	0.47		0.04	0.31			0.26	0.26		0.26	0.26
Clearance Time (s)	4.0	5.0		4.0	5.0			5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	345	857		72	567			424	388		406	398
v/s Ratio Prot	c0.10	c0.33		0.02	0.16							
v/s Ratio Perm								0.13	0.00		c0.16	0.04
v/c Ratio	0.52	0.70		0.44	0.50			0.50	0.02		0.60	0.14
Uniform Delay, d1	21.7	12.7		28.3	16.9			19.1	16.7		19.7	17.2
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00		1.00	1.00
Incremental Delay, d2	1.3	2.5		4.3	0.7			0.9	0.0		2.5	0.2
Delay (s)	23.0	15.2		32.6	17.6			20.1	16.7		22.2	17.4
Level of Service	C	B		C	B			C	B		C	B
Approach Delay (s)		17.0			19.1			19.7			20.0	
Approach LOS		B			B			B			B	

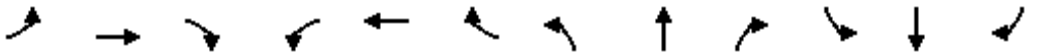
Intersection Summary			
HCM 2000 Control Delay	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	60.4	Sum of lost time (s)	14.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	506	23	28	231	22	40	149	24	55	160	188
Future Volume (veh/h)	157	506	23	28	231	22	40	149	24	55	160	188
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1856	1856	1856	1870	1870	1870	1856	1856	1856
Adj Flow Rate, veh/h	178	575	26	32	262	25	45	169	27	62	182	214
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, %	3	3	3	3	3	3	2	2	2	3	3	3
Cap, veh/h	228	659	30	48	454	43	67	204	582	69	163	587
Arrive On Green	0.13	0.37	0.37	0.03	0.27	0.27	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1767	1758	79	1767	1660	158	0	533	1518	0	425	1532
Grp Volume(v), veh/h	178	0	601	32	0	287	214	0	27	244	0	214
Grp Sat Flow(s),veh/h/ln	1767	0	1837	1767	0	1819	533	0	1518	425	0	1532
Q Serve(g_s), s	6.4	0.0	19.8	1.2	0.0	8.9	0.0	0.0	0.7	0.0	0.0	6.5
Cycle Q Clear(g_c), s	6.4	0.0	19.8	1.2	0.0	8.9	25.0	0.0	0.7	25.0	0.0	6.5
Prop In Lane	1.00		0.04	1.00		0.09	0.21		1.00	0.25		1.00
Lane Grp Cap(c), veh/h	228	0	689	48	0	497	271	0	582	232	0	587
V/C Ratio(X)	0.78	0.00	0.87	0.67	0.00	0.58	0.79	0.00	0.05	1.05	0.00	0.36
Avail Cap(c_a), veh/h	569	0	845	434	0	837	271	0	582	232	0	587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	18.9	31.4	0.0	20.5	16.5	0.0	12.6	17.1	0.0	14.4
Incr Delay (d2), s/veh	5.8	0.0	8.5	15.1	0.0	1.1	14.5	0.0	0.0	73.3	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.0	9.4	0.7	0.0	3.7	3.1	0.0	0.2	7.0	0.0	2.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	33.3	0.0	27.4	46.5	0.0	21.5	31.0	0.0	12.7	90.4	0.0	14.8
LnGrp LOS	C	A	C	D	A	C	C	A	B	F	A	B
Approach Vol, veh/h		779			319			241			458	
Approach Delay, s/veh		28.8			24.0			28.9			55.1	
Approach LOS		C			C			C			E	

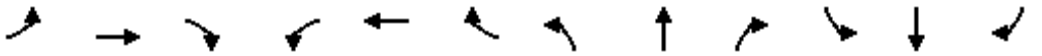
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	5.8	29.5		30.0	12.4	22.8		30.0				
Change Period (Y+Rc), s	4.0	5.0		5.0	4.0	5.0		5.0				
Max Green Setting (Gmax), s	16.0	30.0		25.0	21.0	30.0		25.0				
Max Q Clear Time (g_c+I1), s	3.2	21.8		27.0	8.4	10.9		27.0				
Green Ext Time (p_c), s	0.0	2.6		0.0	0.4	1.7		0.0				

Intersection Summary			
HCM 6th Ctrl Delay		34.7	
HCM 6th LOS		C	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	396	38	54	44	39	17	36	326	22	9	155	186
Future Volume (vph)	396	38	54	44	39	17	36	326	22	9	155	186
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.5	4.5		4.5	4.5		4.5			4.5	4.5
Lane Util. Factor		1.00	1.00		1.00	1.00		1.00			1.00	1.00
Frpb, ped/bikes		1.00	0.97		1.00	0.97		1.00			1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00			1.00	1.00
Frt		1.00	0.85		1.00	0.85		0.99			1.00	0.85
Flt Protected		0.96	1.00		0.97	1.00		1.00			1.00	1.00
Satd. Flow (prot)		1764	1524		1763	1497		1833			1857	1556
Flt Permitted		0.96	1.00		0.97	1.00		0.96			0.98	1.00
Satd. Flow (perm)		1764	1524		1763	1497		1766			1816	1556
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	412	40	56	46	41	18	38	340	23	9	161	194
RTOR Reduction (vph)	0	0	36	0	0	16	0	3	0	0	0	62
Lane Group Flow (vph)	0	453	20	0	87	2	0	398	0	0	170	132
Confl. Peds. (#/hr)	4		4	4		4	9		13	13		9
Confl. Bikes (#/hr)			1									1
Heavy Vehicles (%)	3%	3%	3%	5%	5%	5%	2%	2%	2%	2%	2%	2%
Turn Type	Split	NA	Perm	Split	NA	Perm	Perm	NA		Perm	NA	pm+ov
Protected Phases	4	4		8	8			2			6	4
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)		23.2	23.2		7.1	7.1		20.7			20.7	43.9
Effective Green, g (s)		23.2	23.2		7.1	7.1		20.7			20.7	43.9
Actuated g/C Ratio		0.36	0.36		0.11	0.11		0.32			0.32	0.68
Clearance Time (s)		4.5	4.5		4.5	4.5		4.5			4.5	4.5
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)		634	548		194	164		566			582	1167
v/s Ratio Prot		c0.26			c0.05							0.04
v/s Ratio Perm			0.01			0.00		c0.23			0.09	0.04
v/c Ratio		0.71	0.04		0.45	0.01		0.70			0.29	0.11
Uniform Delay, d1		17.8	13.4		26.9	25.6		19.2			16.4	3.6
Progression Factor		1.00	1.00		1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2		3.8	0.0		1.6	0.0		4.0			0.3	0.0
Delay (s)		21.6	13.4		28.5	25.6		23.2			16.7	3.6
Level of Service		C	B		C	C		C			B	A
Approach Delay (s)		20.7			28.0			23.2			9.7	
Approach LOS		C			C			C			A	

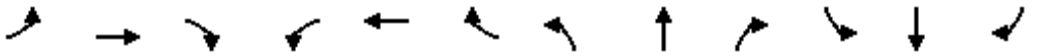
Intersection Summary			
HCM 2000 Control Delay	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	64.5	Sum of lost time (s)	13.5
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	396	38	54	44	39	17	36	326	22	9	155	186
Future Volume (veh/h)	396	38	54	44	39	17	36	326	22	9	155	186
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	0.99		0.98	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1826	1826	1826	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	412	40	56	46	41	18	38	340	23	9	161	194
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	5	5	5	2	2	2	2	2	2
Cap, veh/h	539	52	509	81	72	130	109	479	31	87	551	989
Arrive On Green	0.33	0.33	0.33	0.09	0.09	0.09	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1618	157	1530	941	838	1517	92	1578	102	30	1816	1518
Grp Volume(v), veh/h	452	0	56	87	0	18	401	0	0	170	0	194
Grp Sat Flow(s),veh/h/ln	1775	0	1530	1779	0	1517	1772	0	0	1845	0	1518
Q Serve(g_s), s	11.1	0.0	1.2	2.3	0.0	0.5	3.3	0.0	0.0	0.0	0.0	2.6
Cycle Q Clear(g_c), s	11.1	0.0	1.2	2.3	0.0	0.5	9.7	0.0	0.0	3.4	0.0	2.6
Prop In Lane	0.91		1.00	0.53		1.00	0.09		0.06	0.05		1.00
Lane Grp Cap(c), veh/h	591	0	509	153	0	130	619	0	0	638	0	989
V/C Ratio(X)	0.76	0.00	0.11	0.57	0.00	0.14	0.65	0.00	0.00	0.27	0.00	0.20
Avail Cap(c_a), veh/h	1113	0	960	658	0	562	1085	0	0	1125	0	1402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	14.5	0.0	11.2	21.4	0.0	20.6	15.1	0.0	0.0	13.0	0.0	3.7
Incr Delay (d2), s/veh	2.1	0.0	0.1	3.3	0.0	0.5	1.1	0.0	0.0	0.2	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	0.4	1.0	0.0	0.2	3.7	0.0	0.0	1.3	0.0	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	16.6	0.0	11.3	24.7	0.0	21.0	16.2	0.0	0.0	13.2	0.0	3.8
LnGrp LOS	B	A	B	C	A	C	B	A	A	B	A	A
Approach Vol, veh/h		508			105			401			364	
Approach Delay, s/veh		16.0			24.1			16.2			8.2	
Approach LOS		B			C			B			A	

Timer - Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		19.3		20.7		19.3		8.7				
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5				
Max Green Setting (Gmax), s		28.0		30.5		28.0		18.0				
Max Q Clear Time (g_c+I1), s		11.7		13.1		5.4		4.3				
Green Ext Time (p_c), s		2.4		3.1		1.7		0.4				

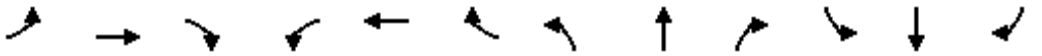
Intersection Summary												
HCM 6th Ctrl Delay			14.6									
HCM 6th LOS			B									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	32	35	95	17	22	23	37	1668	15	24	1956	27
Future Volume (vph)	32	35	95	17	22	23	37	1668	15	24	1956	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor		1.00			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes		0.99			1.00		1.00	1.00	1.00	1.00	1.00	0.97
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt		0.92			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1667			1771		1752	3505	1568	1752	3505	1519
Flt Permitted		0.93			0.76		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1569			1365		1752	3505	1568	1752	3505	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	33	36	98	18	23	24	38	1720	15	25	2016	28
RTOR Reduction (vph)	0	41	0	0	17	0	0	0	4	0	0	8
Lane Group Flow (vph)	0	126	0	0	48	0	38	1720	11	25	2016	20
Confl. Peds. (#/hr)	1		3	3		1	4					4
Heavy Vehicles (%)	3%	3%	3%	0%	0%	0%	3%	3%	3%	3%	3%	3%
Turn Type	D.Pm	NA		D.Pm	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases		8			4		1	6		5	2	
Permitted Phases	4			8					6			2
Actuated Green, G (s)		15.2			15.2		6.9	93.7	93.7	5.1	91.9	91.9
Effective Green, g (s)		16.2			16.2		6.9	96.7	96.7	5.1	94.9	94.9
Actuated g/C Ratio		0.12			0.12		0.05	0.74	0.74	0.04	0.73	0.73
Clearance Time (s)		5.0			5.0		4.0	7.0	7.0	4.0	7.0	7.0
Vehicle Extension (s)		3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		195			170		92	2607	1166	68	2558	1108
v/s Ratio Prot							c0.02	0.49		0.01	c0.58	
v/s Ratio Perm		c0.08			0.04				0.01			0.01
v/c Ratio		0.65			0.28		0.41	0.66	0.01	0.37	0.79	0.02
Uniform Delay, d1		54.2			51.6		59.6	8.4	4.3	60.9	11.2	4.8
Progression Factor		1.00			1.00		1.00	1.00	1.00	0.78	1.51	4.51
Incremental Delay, d2		7.1			0.9		3.0	1.3	0.0	1.7	1.3	0.0
Delay (s)		61.3			52.6		62.6	9.7	4.3	49.0	18.1	21.7
Level of Service		E			D		E	A	A	D	B	C
Approach Delay (s)		61.3			52.6			10.8			18.5	
Approach LOS		E			D			B			B	

Intersection Summary			
HCM 2000 Control Delay	17.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	130.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



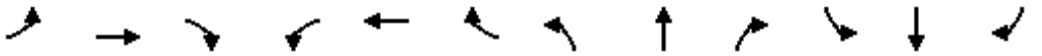
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	35	95	17	22	23	37	1668	15	24	1956	27
Future Volume (veh/h)	32	35	95	17	22	23	37	1668	15	24	1956	27
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1900	1900	1900	1856	1856	1856	1856	1856	1856
Adj Flow Rate, veh/h	33	36	98	18	23	24	38	1720	15	25	2016	28
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	0	0	0	3	3	3	3	3	3
Cap, veh/h	58	58	118	69	86	70	49	2677	1191	32	2644	1176
Arrive On Green	0.12	0.13	0.13	0.12	0.13	0.13	0.03	0.76	0.76	0.02	0.75	0.75
Sat Flow, veh/h	195	443	906	257	661	537	1767	3526	1568	1767	3526	1568
Grp Volume(v), veh/h	167	0	0	65	0	0	38	1720	15	25	2016	28
Grp Sat Flow(s),veh/h/ln	1544	0	0	1456	0	0	1767	1763	1568	1767	1763	1568
Q Serve(g_s), s	13.1	0.0	0.0	4.7	0.0	0.0	2.8	29.8	0.3	1.8	43.4	0.6
Cycle Q Clear(g_c), s	13.1	0.0	0.0	4.7	0.0	0.0	2.8	29.8	0.3	1.8	43.4	0.6
Prop In Lane	0.20		0.59	0.28		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	0	0	0	0	0	49	2677	1191	32	2644	1176
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00	0.78	0.64	0.01	0.77	0.76	0.02
Avail Cap(c_a), veh/h	0	0	0	0	0	0	136	2677	1191	136	2644	1176
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	0.41	0.41	0.41	0.41	0.41	0.41
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	62.8	7.4	3.8	63.5	9.5	4.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	10.5	0.5	0.0	14.7	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	1.4	9.2	0.1	0.9	13.7	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	73.4	7.8	3.8	78.2	10.4	4.1
LnGrp LOS	A	A	A	A	A	A	E	A	A	E	B	A
Approach Vol, veh/h		167			65			1773			2069	
Approach Delay, s/veh		0.0			0.0			9.2			11.1	
Approach LOS		A			A			A			B	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	101.5		20.9	6.4	102.7		20.9				
Change Period (Y+Rc), s	4.0	7.0		5.0	4.0	7.0		5.0				
Max Green Setting (Gmax), s	10.0	83.0		20.0	10.0	84.0		20.0				
Max Q Clear Time (g_c+I1), s	4.8	45.4		6.7	3.8	31.8		15.1				
Green Ext Time (p_c), s	0.0	23.6		0.2	0.0	21.2		0.4				

Intersection Summary		
HCM 6th Ctrl Delay	9.7	
HCM 6th LOS	A	

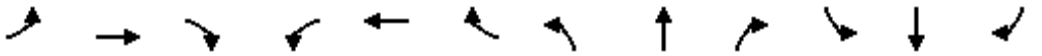
Notes

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



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	252	1790	59	116	1551	192	30	236	91	143	272	155
Future Volume (vph)	252	1790	59	116	1551	192	30	236	91	143	272	155
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	3.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	3505	1548	1770	3539	1557	1734	3471	1519	1749	3505	1543
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.57	1.00	1.00	0.31	1.00	1.00
Satd. Flow (perm)	1752	3505	1548	1770	3539	1557	1046	3471	1519	564	3505	1543
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	271	1925	63	125	1668	206	32	254	98	154	292	167
RTOR Reduction (vph)	0	0	25	0	0	80	0	0	88	0	0	142
Lane Group Flow (vph)	271	1925	38	125	1668	126	32	254	10	154	292	25
Confl. Peds. (#/hr)	5		1	1		5	3		10	10		3
Confl. Bikes (#/hr)												1
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases	5	2		1	6		3	8		7	4	
Permitted Phases			2			6	8		8	4		4
Actuated Green, G (s)	22.4	69.7	69.7	10.7	58.0	58.0	14.1	11.7	11.7	23.6	17.2	17.2
Effective Green, g (s)	22.4	72.7	72.7	10.7	61.0	61.0	16.1	12.7	12.7	24.6	18.2	18.2
Actuated g/C Ratio	0.19	0.61	0.61	0.09	0.51	0.51	0.13	0.11	0.11	0.21	0.15	0.15
Clearance Time (s)	4.0	7.0	7.0	4.0	7.0	7.0	4.0	5.0	5.0	4.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	327	2123	937	157	1798	791	159	367	160	203	531	234
v/s Ratio Prot	0.15	c0.55		0.07	c0.47		0.01	0.07		c0.06	0.08	
v/s Ratio Perm			0.02			0.08	0.02		0.01	c0.10		0.02
v/c Ratio	0.83	0.91	0.04	0.80	0.93	0.16	0.20	0.69	0.06	0.76	0.55	0.11
Uniform Delay, d1	47.0	20.7	9.6	53.6	27.4	15.8	45.8	51.8	48.3	42.1	47.1	43.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	15.7	7.1	0.1	23.7	9.9	0.4	0.6	5.6	0.2	14.9	1.2	0.2
Delay (s)	62.7	27.7	9.6	77.3	37.3	16.2	46.5	57.3	48.5	57.0	48.3	44.1
Level of Service	E	C	A	E	D	B	D	E	D	E	D	D
Approach Delay (s)		31.4			37.6			54.2			49.3	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	15.0
Intersection Capacity Utilization	91.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	252	1790	59	116	1551	192	30	236	91	143	272	155
Future Volume (veh/h)	252	1790	59	116	1551	192	30	236	91	143	272	155
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	0.99		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1841	1841	1841	1856	1856	1856
Adj Flow Rate, veh/h	271	1925	63	125	1668	206	32	254	98	154	292	167
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, %	3	3	3	2	2	2	4	4	4	3	3	3
Cap, veh/h	313	2228	992	151	1829	813	158	321	138	199	452	194
Arrive On Green	0.18	0.63	0.63	0.08	0.51	0.51	0.03	0.09	0.09	0.07	0.13	0.13
Sat Flow, veh/h	1767	3526	1569	1781	3554	1580	1753	3497	1509	1767	3526	1515
Grp Volume(v), veh/h	271	1925	63	125	1668	206	32	254	98	154	292	167
Grp Sat Flow(s),veh/h/ln	1767	1763	1569	1781	1777	1580	1753	1749	1509	1767	1763	1515
Q Serve(g_s), s	17.9	53.1	1.8	8.3	51.5	5.6	2.0	8.5	7.6	8.0	9.4	8.7
Cycle Q Clear(g_c), s	17.9	53.1	1.8	8.3	51.5	5.6	2.0	8.5	7.6	8.0	9.4	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	313	2228	992	151	1829	813	158	321	138	199	452	194
V/C Ratio(X)	0.87	0.86	0.06	0.83	0.91	0.25	0.20	0.79	0.71	0.77	0.65	0.86
Avail Cap(c_a), veh/h	339	2228	992	163	1866	830	178	321	138	199	452	194
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.53	0.53	0.53	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	17.9	8.5	54.1	26.6	6.6	47.2	53.4	52.9	46.8	49.7	23.2
Incr Delay (d2), s/veh	11.4	2.6	0.1	27.2	8.4	0.7	0.6	12.7	15.4	17.2	3.2	30.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	19.7	0.6	4.8	22.3	3.2	0.9	4.3	3.5	1.7	4.4	4.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	59.4	20.5	8.5	81.2	35.0	7.4	47.9	66.1	68.3	64.0	52.9	53.3
LnGrp LOS	E	C	A	F	D	A	D	E	E	E	D	D
Approach Vol, veh/h		2259			1999			384			613	
Approach Delay, s/veh		24.8			35.1			65.1			55.8	
Approach LOS		C			D			E			E	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	79.9	6.6	19.4	28.2	65.8	11.0	15.0
Change Period (Y+Rc), s	4.0	7.0	4.0	5.0	7.0	* 7	4.0	5.0
Max Green Setting (Gmax), s	11.0	72.0	4.0	13.0	23.0	* 60	7.0	10.0
Max Q Clear Time (g_c+I1), s	10.3	55.1	4.0	11.4	19.9	53.5	10.0	10.5
Green Ext Time (p_c), s	0.0	12.7	0.0	0.4	0.2	5.2	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	35.3
HCM 6th LOS	D

Notes

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

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