Attachment C
Traffic Impact Report

Argonne Station Park and Ride Traffic Impact Report

Technical Report – Draft #2

Prepared for:
Spokane Transit Authority

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Table of Contents

Introduction **4**

Chapter 1: Background **4**

Location of Site 4

Project Planning Process 5

Project Description 5

Chapter 2: Methods **7**

Study Facilities 7

Roadway Network 7

Transportation Analysis Scenarios 9

Data Sources 10

Traffic Volume Forecasting Methodology 11

Future Infrastructure and Land Use Projects 11

Future Infrastructure Improvements 11

Planned/Funded Projects Assumed in the Future No Build Model 14

Comparative Analysis of Morning and Evening Peak Hour Link Volumes 14

Project Trip Generation Methodology 17

Trips from Bus Transit 17

Pass By and Diverted Links 18

Trips from Park and Ride 21

Project Trip Distribution 22

Performance Standards 26

Safety Analysis Methodology 27

Traffic Operations Methodology 27

Intersection Level of Service and Delay 27

Chapter 3: Existing Conditions **28**

Intersection Operations 28

Existing Traffic Conditions 28

Existing Intersection Volumes 28

Existing Traffic Operations 30

Transit Services and Non-Motorized Facilities 32

Transportation Safety 37

Chapter 4: Design and Future Year Conditions **41**

Design Year Conditions (2028) 41

Design Year (2028) No-Build Scenario 42

Design Year (2028) Build Scenario 44

Future Year Conditions (2050) 46
Horizon Year (2050) No-Build Scenario 47
Horizon Year (2050) Build Scenario 49
Design Year and Future Year Driveway Analysis 51
Signal Warrant Analysis 0
Chapter 5: Potential Impacts and Conclusion 3
Findings of Intersection Operations Analysis under "Build" Scenarios 4

Appendices

Appendix A. Traffic Counts
Appendix B. Existing Conditions Synchro Reports
Appendix C. Travel Demand Forecasting Model Link Volumes
Appendix D. 2028 and 2050 Weekday AM and PM Volumes
Appendix E. Level of Service Synchro Reports (2028) No-Build
Appendix F. Level of Service Synchro Reports (2050) No-Build
Appendix G. Trip Distributions
Appendix H. Level of Service Synchro Reports Design Year 2028 + Build Scenario
Appendix I. Level of Service Synchro Reports Horizon Year 2050 + Build Scenario
Appendix J. Driveway Analysis – Synchro Reports

List of Figures

Figure 1. Proposed Argonne Station Park and Ride Location 6
Figure 2. Study Area 9
Figure 4. Inbound and (Outbound) Trip Distribution (in Percentages) for Park & Ride and Pick Up/Drop Off 24
Figure 5. Project-only AM and PM Peak Hour Traffic Volumes 25
Figure 6 Geometric Configurations and Traffic Volumes AM and (PM) 29
Figure 7. Routes within the Argonne Corridor Area 33
Figure 8. Bicycle Networks 35
Figure 9. Pedestrian Network 36
Figure 10. Crash Analysis Heat Map 40
Figure 11. Geometric Configurations and Design (Year 2028) No-Build AM (PM) Peak Hour Traffic Volumes 43
Figure 12. Geometric Configurations and Design (Year 2028) + Build AM (PM) Peak Hour Traffic Volumes 45
Figure 13. Geometric Configurations and Future (Year 2050) No-Build AM (PM) Peak Hour Traffic Volumes 48

Figure 14. Geometric Configurations and Horizon (Year 2050) + Build AM (PM) Peak Hour Traffic Volumes 50
Figure 15. AM (PM) Peak Hour Driveway Traffic Volume Assignments 52
Figure 16. Geometric Configurations and Design (Year 2028) + Build Driveway AM (PM) Peak Hour Traffic Volumes 54
Figure 17. Geometric Configurations and Horizon (Year 2050) + Build Driveway AM (PM) Peak Hour Traffic Volumes 56
Figure 18. Signal Warrant 4C-3 - N Mullan Road and E Sinto Avenue, Design (Year 2028) + Build Scenario PM Peak Hour 1
Figure 19. Signal Warrant 4C-3 Graph - N Argonne Road and E Sinto Avenue, Horizon (Year 2050) + Build Scenario PM Peak Hour 2
Figure 20. Signal Warrant 4C-3 Graph - N Mullan Road and E Sinto Avenue, Horizon (Year 2050) + Build Scenario PM Peak Hour 3

List of Tables

Table 1. Intersections of Study 8
Table 2: Summary of Other Future Transportation Infrastructure Improvements 13
Table 3. Comparative summary of average annual growth rate – AM Peak Hour 15
Table 4. Comparative summary of average annual growth rate – PM Peak Hour 16
Table 5: Bus Trip Generation 20
Table 6. Trip Generation from Park & Ride Spaces and Pick-Up/Drop-Off 22
Table 7. Project Trip Generation Summary 22
Table 8. Level of Service 26
Table 9. Performance Metrics 26
Table 10. Traffic Operations LOS and Delay Results 30
Table 11. Spokane Transit Authority Fixed Routes 32
Table 12. Crash Rate per MEV 38
Table 13. Killed or Severe Injury (KSI) Crashes 39
Table 14. Design Year (2028) No-Build & Build - Traffic Operations LOS and Delay Results 41
Table 15. Horizon Year (2050) + Build - Traffic Operations LOS and Delay Results 46
Table 16. Design (Year 2028) Project Driveway Operation Analysis – LOS, Delay, and 95th Percentile Queuing Results 53
Table 17. Horizon (Year 2050) Project Driveway Operations Analysis - LOS, Delay, and 95th Percentile Queuing Results 55

Introduction

This report describes the potential traffic impacts of a new Spokane Transit Authority (STA) Park and Ride facility located in the city of Spokane Valley, Washington. This park and ride facility, the Argonne Station Park and Ride, will help increase connectivity, access, and system efficiency across the Interstate 90 (I-90) corridor. This transit station is planned to be in service by 2028 and will have a flyer stop, an off-street bus and passenger staging area, 40 car parking spaces, and transit priority measures.

Chapter 1 provides a background on the Argonne Station Park and Ride. This background includes an overview of the project site, the project phases, an overall description of the project's purpose, and a description of upcoming relevant infrastructure projects.

Chapter 2 establishes the data, methods, and standards used for this traffic impact analysis and an overview of the analysis scenarios. The methods described include a traffic operations analysis, traffic forecasting, trip generation, and a safety analysis. This chapter also provides additional details on project assumptions and performance metrics for intersection level of service results (LOS) under the existing year (2024), design year (2028), and horizon year (2050) for both the build and no-build scenarios.

Chapter 3 discusses existing transportation conditions, such as the site's surrounding roadway network, existing transit service, non-motorized facilities, and safety. This chapter also provides information on existing traffic conditions through an analysis of AM and PM peak hour collected traffic movement counts. Finally, this chapter provides details on the existing year (2024) traffic operations, including LOS results and delay, for the intersections of study.

Chapter 4 of this report analyzes the transportation related impact of the proposed Argonne Station Park and Ride on the design year (2028) and horizon year (2050) study area traffic operations, which include LOS results and delay. For the design year and horizon year, "No-Build" and "Build" scenario impacts were evaluated. The "Build" scenario incorporates trips generated by the proposed project. This chapter also provides a traffic operations analysis of the proposed project driveways that will be used to access the new Argonne Station Park and Ride project.

Finally, Chapter 5 summarizes the overall potential impacts of the park and ride development on the transportation network analyzed throughout this report.

Chapter 1: Background

Location of Site

The new STA Park and Ride Transit facility will be located adjacent to N Argonne Road and N Mullan Road, south of the EB off/on-ramps to the I-90 freeway. The site is currently vacant and is within the jurisdiction of the Washington State Department of Transportation (WSDOT). The planned land-use for the site is a regional transit center and park & ride facility. This area was

identified by the STA I-90/Valley High Performance Transit Corridor Development Plan[1] as seeing future increases in land use density.

Project Planning Process

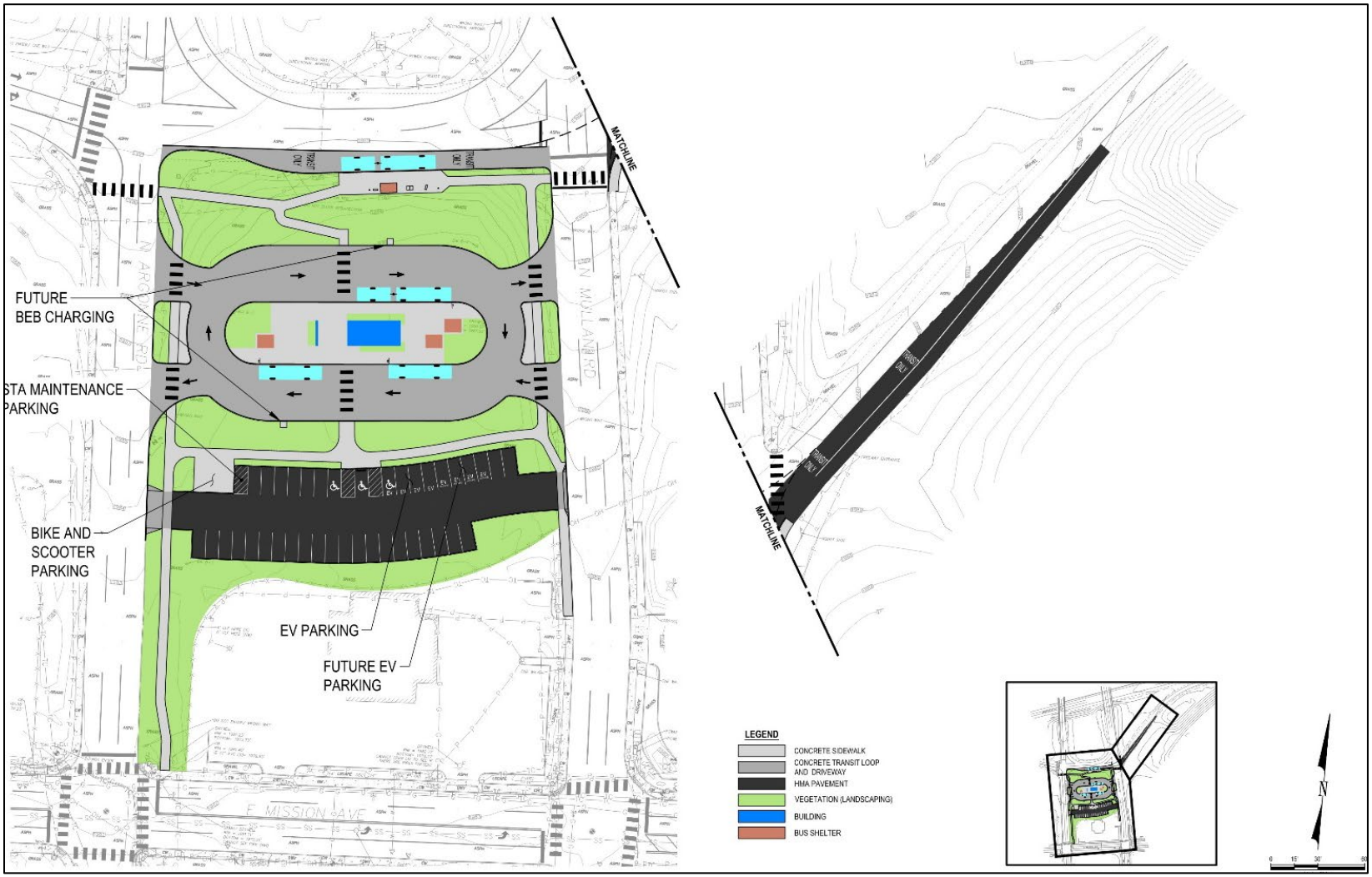
The initial planning and screening of this site was detailed in the I-90/Valley High Performance Transit Corridor Development Plan. This plan sets out to identify ways to efficiently allocate transit service throughout the I-90 corridor. It identified the construction of the Argonne Station Park and Ride as a core improvement to increase access and system efficiency. Construction is scheduled to occur in 2027 with service starting in 2028.

Project Description

The I-90/Valley High Performance Transit Corridor Development Plan, published by STA on September 28, 2022, identified a need for additional transit access and system effectiveness at Argonne Road and I-90. This plan recommended the construction of the Argonne Station Park and Ride. Current plans for the Argonne Station Park include a flyer stop, an off-street bus and passenger staging area, 40 car parking spaces, and transit priority measures on the eastbound on-ramp. The completion of this new Transit Center and Park & Ride facility would support several key objectives in STA's *Connect Spokane* comprehensive plan and the STA *Moving Forward Plan*. The Argonne Station Park and Ride will be adjacent to the I-90 frontage roads/on-ramps. Access to and from the park & ride facility will be provided along N Argonne Road and N Mullan Road. See **Figure 1** below for the proposed site location and concept plan.

[1] KPFF Consulting Engineers, (2022). *I-90/Valley High Performance Transit Corridor Development Plan,* Final(1), ES-8, https://www.spokanetransit.com/wp-content/uploads/2022/09/I-90_Valley_CDP_FINAL_20220928.pdf

Figure 1. Proposed Argonne Station Park and Ride Location



Source: KPFF Engineers, June 2025

Chapter 2: Methods

The objective of this chapter is to document the methods for this traffic impact report, including traffic analysis, safety, forecasting methods and assumptions associated with this project.

Study Facilities

Roadway Network

Provided below is a brief description of roadway infrastructure within the vicinity of the project site. Regional access to the site is provided by the I-90. **I-90** is an interstate highway which runs east/west within the study area and has a posted speed limit of 60 miles per hour (mph). There are four freeway on/off-ramps to allow access to and from I-90 from Argonne Road and Mullan Road.

Argonne Road and Mullan Road, which provide direct vehicular access to the project site, are both principal arterial roads. **Argonne Road** is a one-way southbound road with a posted speed limit of 35 mph. **Mullan Road** runs parallel to Argonne Road and is a one-way northbound road with a posted speed limit of 35 mph.

Trent Avenue (SR 290) is a state route and principal arterial located at the northern border of the City of Spokane Valley's jurisdiction. Trent Avenue has a posted speed limit of 40 mph and runs primarily east/west with 5-7 lanes and turn lanes at the Argonne Road intersection.

Montgomery Avenue is an east/west minor arterial roadway east of Argonne Road with a 30-mph speed limit. **Knox Avenue** is an east/west collector roadway west of Argonne Road with a 25-mph speed limit. **Mission Avenue** is an east/west collector roadway with a 25-mph speed limit west of Argonne Road and a minor arterial with a 35-mph speed limit east of Argonne Road. **Sinto Avenue** is an east/west local street that intersects with our study area and has a speed limit of 25 mph.

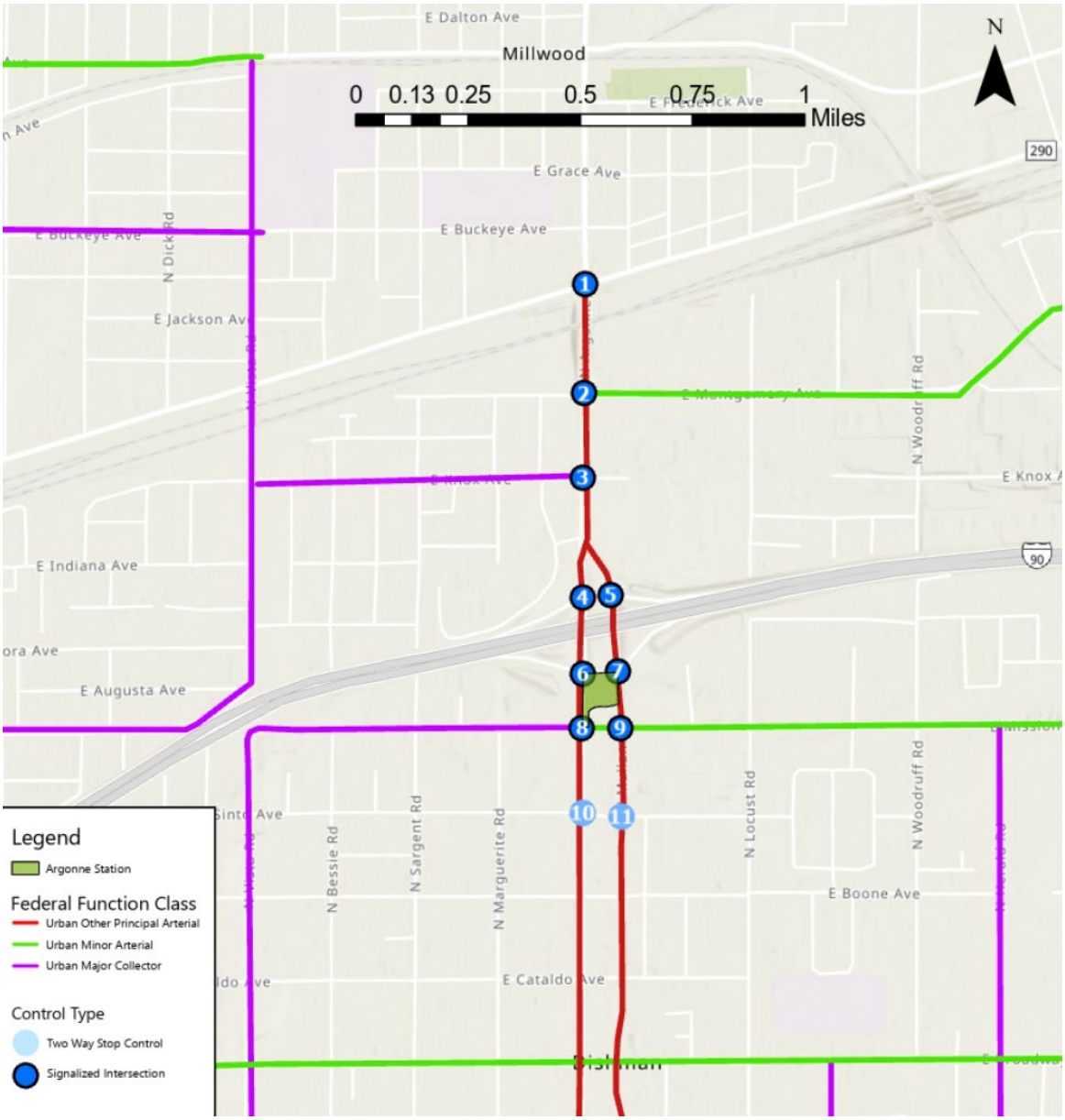
Table 1 lists the roadways and intersections that will be evaluated as part of this study. These intersections were selected by Fehr & Peers in conjunction with City of Spokane Valley and STA.

Table 1. Intersections of Study

#	Intersection Name	Control
1	N Argonne Road / E Trent Avenue	Signal
2	N Argonne Road / E Montgomery Rd	Signal
3	N Argonne Road / E Knox Avenue	Signal
4	N Argonne Road & I-90 WB on-ramp	Signal
5	N Mullan Road & I-90 WB off-ramp	Signal
6	N Argonne Road & I-90 EB off-ramp	Signal
7	N Mullan Road & I-90 EB on-ramp	Signal
8	N Argonne Road / E Mission Avenue	Signal
9	N Mullan Road / E Mission Avenue	Signal
10	N Argonne Road / E Sinto Avenue	Two-Way Stop
11	N Mullan Road / E Sinto Avenue	Two-Way Stop

Figure 2 illustrates the study area and location of the study intersections vis-a-vis the project site.

Figure 2. Study Area



Transportation Analysis Scenarios

The study conducted an analysis of the following scenarios:

- Existing year (2024)
- Design year (2028), and
- Horizon year (2050)

Weekday morning and evening peak hours were analyzed under each scenario. The horizon year was used to determine if mitigations were needed.

The model years and analysis years were estimated as follows:

- **Existing Year (2024)** – The Synchro operational model will be calibrated using current peak hour traffic counts at all intersections/interchanges and freeway segments in the study area, as shown in **Figure 2**.
- **Opening Year/Design Year (2028)** –The existing year peak hour volume counts will be grown to 2028 conditions using an annual average growth rate calculated from the travel demand model data for the years of 2024 to 2028. For this analysis, average annual growth rate for four years will be applied to the existing year turning movement volumes.
- **Horizon Year (2050)** – The annual average growth rate calculated from the travel demand model data for the years of 2024 and 2050 will be used to grow 2028 opening year/design year conditions to 2050. For this analysis, a 22-year growth rate will be applied to the design year data.

Data Sources

The following data was provided by the City's transportation planning and public works staff:

- Roadway networks, including functional classifications and speed limits
- Bicycle networks and functional classifications
- Sidewalk networks and locations of crosswalks
- Existing transit network and stop facilities

Existing Synchro network, including signal timing data, for study intersections The following data was provided by IDAX, a traffic counts vendor:

- Turning movement counts at eleven intersections within the study area, including bicycle and pedestrian counts. These counts were collected on the same weekday (Wednesday, September 18th) for all study intersections to minimize the need for volume balancing.

Information on the City of Spokane Valley, Spokane Valley policies, and upcoming infrastructure projects which may also impact the study area was obtained from the following reports:

- I-90/Valley High Performance Transit Corridor Development Plan
- Horizon 2045: Spokane Metropolitan Transportation Plan
- City of Spokane Valley 2025-2030 Six-Year Transportation Improvement Program

Information on existing transit routes, transit frequencies, and layovers were sourced from STA's current transit network. Assumptions on the transit network impacts to the site used for trip generation were reviewed with KPFF Engineers and STA.

Crash information was sourced from WSDOT's crash database, which includes information about crash locations, date/time, type of crash, severity of crash, contributing factors, and other relevant circumstances.

Traffic Volume Forecasting Methodology

The 2021 Spokane Regional Transportation Council (SRTC) regional travel demand model was used to forecast future no-project traffic volumes at all project intersections. The 2021 travel demand model has a base year of 2019 and future year of 2045. Although the 2025 model had not yet been released, its land-use data was available for the 2022 base year and 2050 future year. A 2024 land use scenario was interpolated for the existing year and used for this study.

To minimize model errors, the growth between the 2024 base year scenario and the 2050 future year scenario was added to our existing traffic volume using an industry-standard approach known as the "difference method." Under this method, a comparative analysis of base year and future year intersection link volumes from the model determined the annual background growth rate, which was then applied to existing turning movements to forecast opening year (2028) and horizon year (2050) no-project traffic volumes.

Future Infrastructure and Land Use Projects

Future Infrastructure Improvements

Alongside the construction of the Argonne Station Park and Ride, the area surrounding the site is expected to see additional infrastructure projects. These projects are likely to impact site access and travel patterns. Many of the transportation projects described below are under various stages of planning and conceptual design, meaning that information on lane configurations, signal timing, construction phases, or other traffic control changes may still be pending. Overall, these projects are within the proximity of the Argonne Station Park and Ride or are expected to shift large-scale transportation patterns in the future when they're completed. Several of these projects are also considered in the transportation model used to forecast future travel volumes, which is further discussed in **Chapter 2** and **Chapter 4**.

Freeway and Highway Improvements

NORTH SPOKANE CORRIDOR – US 395

The North Spokane Corridor (NSC) will be a 10.5-mile-long north/south Washington State Department of Transportation (WSDOT) limited access facility with a 60-mph speed limit connecting I-90 on the south end to US 2 and US 395 on the north end. It is located approximately four miles west of the proposed Argonne Station Park and Ride and is expected to draw volumes from north-south traffic across Spokane and Spokane Valley, ultimately reducing expected traffic growth along N Argonne Road and N Mullan Road. Construction is estimated to be completed by 2030.

Multi-Modal Improvements

ARGONNE ROAD BRIDGE REPLACEMENT

A proposed project to replace the two-lane Argonne Road Bridge over I-90 to add an additional travel lane and a shared-use path to improve bicycle and pedestrian safety. This project will be worked on by the City of Spokane Valley and Washington State Department of Transportation (WSDOT). Design is currently underway, but the project is not yet funded for construction.

Provided below is a summary of other infrastructure improvements projects proposed in the study area.

Table 2: Summary of Other Future Transportation Infrastructure Improvements

Project Name	Description	Projected Year	Jurisdiction	Source
Park Road/BNSF Grade Separation	Grade separation project raising Park Rd over the BNSF tracks and constructing at-grade intersection on Trent Ave (SR 290).	2030	Spokane Valley	Horizon 2045: Spokane Metropolitan Transportation Plan
Citywide Trail Improvements – Millwood Trail	Phased trail development with assumed construction in 2029 for one trail, pending available funds. Millwood Trail: Connecting Spokane Valley to Millwood and Centennial Trail	2029	City of Spokane Valley	City of Spokane Valley 2025-2030 Six-Year Transportation Improvement Program
Argonne Road Concrete Pavement – Indiana to Knox	Reconstruct with concrete and improve stormwater and signal operations.	2027	City of Spokane Valley	City of Spokane Valley 2025-2030 Six-Year Transportation Improvement Program

Source: Horizon 2045: Spokane Metropolitan Transportation Plan and City of Spokane Valley 2025-2030 Six-Year Transportation Improvement Program

Planned/Funded Projects Assumed in the Future No Build Model

Design and Horizon Year conditions will include projects identified in the SRTC Metropolitan Transportation Plan (MTP) and the Spokane Valley Transportation Improvement Program (TIP). Based on land use growth over the next twenty years balanced out by new roadway infrastructure projects in the area discussed above, volumes are expected to grow marginally at study intersections within the study area. More information on these projects is provided above.

Comparative Analysis of Morning and Evening Peak Hour Link Volumes

Year 2019 and 2050 morning and evening peak hour link volumes were compared to determine growth in traffic anticipated from change in population and employment by year 2050. The forecasts also account for changes in transportation infrastructure including potential change in capacity of roadways, transit and active transportation modes of travel. **Table 3** and

Table 4 show a comparative summary of average annual growth rate under morning and afternoon peak hours, respectively.

Table 3. Comparative summary of model volumes and average annual growth rate – AM Peak Hour

ID	Intersection	Total Approach Volumes – AM Peak Hour			
		2024	2050	Delta	Percent Change per Year
1	N Argonne Road / E Trent Avenue	4,344	4,271	-73	-0.06%
2	N Argonne Road / E Montgomery Rd	3,539	3,499	-40	-0.04%
3	N Argonne Road / E Knox Avenue	3,397	3,402	5	0.01%
4	N Argonne Road & I-90 WB on-ramp	2,261	2,237	-24	-0.04%
5	N Mullan Road & I-90 WB off-ramp	1,929	2,125	196	0.39%
6	N Argonne Road & I-90 EB off-ramp	1,816	1,874	58	0.12%
7	N Mullan Road & I-90 EB on-ramp	1,962	2,107	145	0.28%
8	N Argonne Road / E Mission Avenue	1,150	1,258	108	0.36%
9	N Mullan Road / E Mission Avenue	1,446	1,664	218	0.58%
			Average Growth Rate		**0.18%**

Table 4. Comparative summary of average model volumes and annual growth rate – PM Peak Hour

ID	Intersection	Total Approach Volumes – PM Peak Hour			
		2024	2050	Delta	Percent Change per Year
1	N Argonne Road / E Trent Avenue	4,703	4,695	-8	-0.01%
2	N Argonne Road / E Montgomery Rd	3,830	3,761	-69	-0.07%
3	N Argonne Road / E Knox Avenue	3,594	3,557	-37	-0.04%
4	N Argonne Road & I-90 WB on-ramp	2,186	2,326	140	0.25%
5	N Mullan Road & I-90 WB off-ramp	2,191	2,210	19	0.03%
6	N Argonne Road & I-90 EB off-ramp	1,982	2,220	238	0.46%
7	N Mullan Road & I-90 EB on-ramp	2,107	2,137	30	0.05%
8	N Argonne Road / E Mission Avenue	1,420	1,692	272	0.74%
9	N Mullan Road / E Mission Avenue	1,811	1,927	116	0.25%
			Average Growth Rate		**0.18%**

Exhibits showing link volumes at the study intersections are provided in **Appendix C**. As shown in **Table 3** and

Table 4, the estimated average annual growth rate for both morning and evening peak hours is 0.18% per year. In the travel demand model forecast, some intersections are expected to experience a reduction in travel volumes, which can be attributed partially to the completion of the North Spokane Corridor. The North Spokane Corridor is expected to draw vehicles traveling north of I-90, meaning a reduction in volumes for other north/south roadways.

The volumes for the future years were estimated as follows:

- **Design Year (2028)** – "No Build" volumes were calculated using the percentage growth between 2024 and 2050. The annual growth rate of 0.18% per year for a total of 0.71% for four years was applied Existing (2024) weekday morning and evening peak hour traffic volumes to estimate Design Year (2028) No Build traffic forecasts.
- **Horizon Year (2050)** –Existing (2024) weekday morning and evening peak hour traffic volumes were adjusted by the annual growth rate of 0.18% per year for a total of 4.61% for 26 years to estimate Horizon Year (2050) traffic volume forecasts.

Appendix D includes weekday morning and evening peak hour traffic volumes for both scenarios listed above.

Project Trip Generation Methodology

Figure 1 in **Chapter 1** shows the preferred project concept selected by STA for the purpose of detailed traffic analysis. As shown in the selected design, the transit center and park & ride facilities have separate vehicular access driveways along Argonne Road and Mullan Road. Both buses and passenger vehicles (for the park & ride) will have entry and exit access on each of the two roadways.

Provided below is a detailed summary of our approach and estimates of passenger car equivalent (PCE) trips generated by the project during a 24-hour period and during morning and evening peak hours.

Trips from Bus Transit

Provided below is a summary of buses travelling to and from the project site:

- **Route 32 (Trent/Montgomery):** This route operates from 5:30 am to midnight, with buses running every 30 minutes. Buses will typically enter from the Argonne Road driveway and exit on to Mullan Road. Based on the frequency and schedule, a total of 64 round trips are estimated to/from the project site on a typical day.
- **Route 94 (East Central/Millwood):** Running from 6 am to midnight, this route also has a 30-minute interval between buses. Half of the buses will enter and exit off of Mullan Road driveways, while the other half will enter and exit off of Argonne Road driveways. A total of 67 round trips are estimated during the day from this bus route.
- **Route 7 (I-90 Valley HPT):** This route operates from 5 am to midnight, with a frequency of every 15 minutes. Buses on this route will enter using Argonne Road driveway and exit on to Mullan Road driveway. A total of 76 round trips are estimated to occur during a typical day.

Routes 32 and 94 operate using 40-foot buses and Route 7 uses the large 60-foot, three-axle buses. For the purpose of estimating trips in PCEs, a PCE factor of 2.0 was applied to 40-foot buses and 3.0 for 60-foot buses.

Pass By and Diverted Links

Route 32 currently traverses through N Argonne Road / E Trent Avenue and N Argonne Road / E Montgomery Road intersections. As part of the project trip assignments, bus trips will be diverted from their current route to the new route to travel to/from the proposed project.

Route 94 currently travels through all the study intersections so all trips associated with this bus route will be considered pass-by trips for the purpose of the traffic analysis.

Table 5 provides a summary of bus trips to the proposed project.

Table 5: Bus Trip Generation

Trip Generation	24-Hour (Daily)			AM Peak (8-9 am)			PM Peak (5-6pm)		
	In	Out	Total	In	Out	Total	In	Out	Total
Routes 32 and 94 Trips	131	131	262	8	8	16	8	8	16
PCE Adjustment = 2.0	*262*	*262*	*524*	*16*	*16*	*32*	*16*	*16*	*32*
Route 94 Pass-By PCE Trip Credit	*-134*	*-134*	*-268*	*-8*	*-8*	*-16*	*-8*	*-8*	*-16*
Route 7 - HPT	76	76	152	8	8	16	8	8	16
PCE Adjustment = 3.0	*228*	*228*	*456*	*24*	*24*	*48*	*24*	*24*	*48*
Total Bus Trips (PCEs)	**356**	**356**	**712**	**32**	**32**	**64**	**32**	**32**	**64**

As shown in

Table 5, an estimated total of 712 daily PCE trips could occur from the three bus routes traveling to and from the transit center. During the morning and evening peak hours, an estimated 64 PCE trips occur during each of the two peak hours.

Trips from Park and Ride

Table 6 provides a summary of trips generated from the 40 park & ride spaces provided at the project site. It is assumed that over the course of 24-hours period, the parking spaces will have a turnover rate of 1.2 vehicles per space. It is also assumed that 35% of the arrivals will occur in the morning peak hour and 35% of departures in the evening peak hours. 5% of vehicles were assumed to depart during the morning peak hour and 5% enter during evening peak hour. The proposed project will likely generate pick-up/drop-offs of transit riders. These were assumed to be 30 trips during the course of the day, out of which 5 trips occur during the morning peak hour and 5 trips during the evening peak hour.

Table 6. Trip Generation from Park & Ride Spaces and Pick-Up/Drop-Off

Trip Generation	24-Hour (Daily)			AM Peak (8-9 am)			PM Peak (5-6pm)		
	In	Out	Total	In	Out	Total	In	Out	Total
44 Park & Ride Spaces	53	53	106	19	3	22	3	19	22
Pick Up/Drop Off	30	30	60	5	5	10	5	5	10
Total	**83**	**83**	**166**	**24**	**8**	**32**	**8**	**24**	**32**

As shown in **Table 6**, the park & ride and pick-up/drop-off activity will result in a total of 166 daily trips, out of which 32 trips could occur during each of the two peak hours analyzed.

Table 7 shows a summary of total trips estimated to be generated from the project. As shown in the table, the proposed project is estimated to generate a total of 878 daily PCE trips, out of which 86 trips will occur during the morning peak hour and 86 trips will occur during the evening peak hour.

Table 7. Project Trip Generation Summary

Trip Generation	24-Hour (Daily)			AM Peak (8-9 am)			PM Peak (5-6pm)		
	In	Out	Total	In	Out	Total	In	Out	Total
Transit Center (Buses) Trips (PCEs)	356	356	712	32	32	64	32	32	64
Park & Ride and Pick Up/Drop Off	83	83	166	24	8	32	8	24	32
Total	**439**	**439**	**878**	**56**	**40**	**86**	**40**	**56**	**86**

Project Trip Distribution

Trips associated with buses travelling to/from the project site shown in **Error! Reference source not found. 3**, were distributed based on proposed bus routes, which were determined throughout conversations with STA and KPFF engineers.

AM Peak and PM peak hour trips were used to establish trip distributions. Trips associated with park & ride and pick-up/drop-off activities were distributed across the study area based on geographic location of residential and commercial uses within the region and the roadway network including location of freeway ramps for regional trips. Typically, the park & ride trips associated with commuters were drawn from residential communities surrounding the project site. The distribution and assignment of trips considered the fact that Argonne Road runs one-way southbound and Mullan Road runs one-way northbound and that most vehicles would enter through a driveway along one of these streets and exit through the driveway along the other.

These trip allocations began with assigning 30% of the trips to/from the project site as originating from neighborhoods located north of the project site, while assigning 70% of the trips to the project site originating from neighborhood located south of the project site. From these initial assignments, the remaining distribution of these trips throughout the system across the study intersections are shown in **Figure 3**. Trip distribution and assignments at study intersections are tabulated and attached as part of **Appendix G**. **Figure 4** shows the project-only AM and PM peak hour traffic volumes associated with both Bus and Park & Ride Traffic.

Figure 3. Inbound and (Outbound) Trip Distribution (in Percentages) for Park & Ride and Pick Up/Drop Off

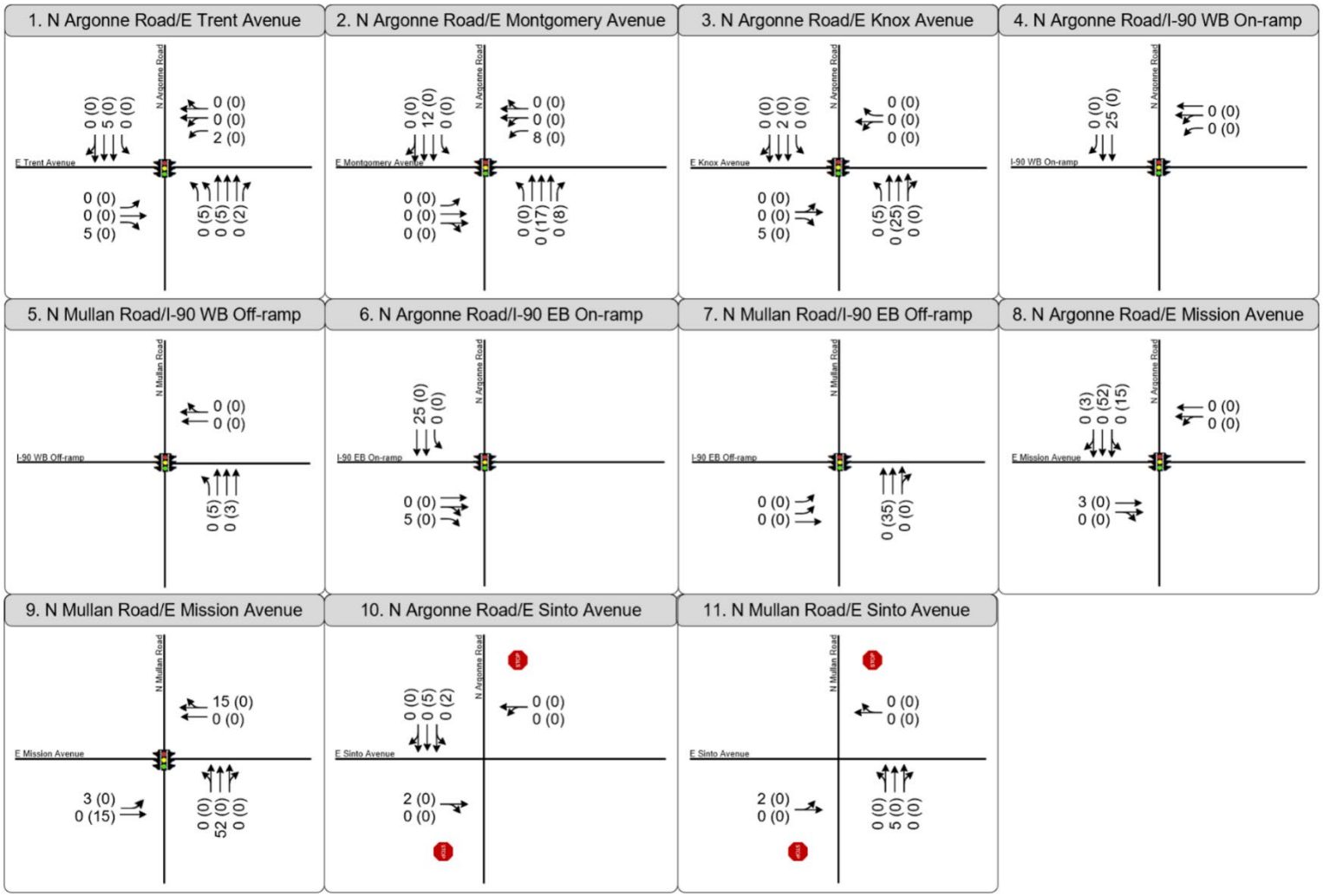
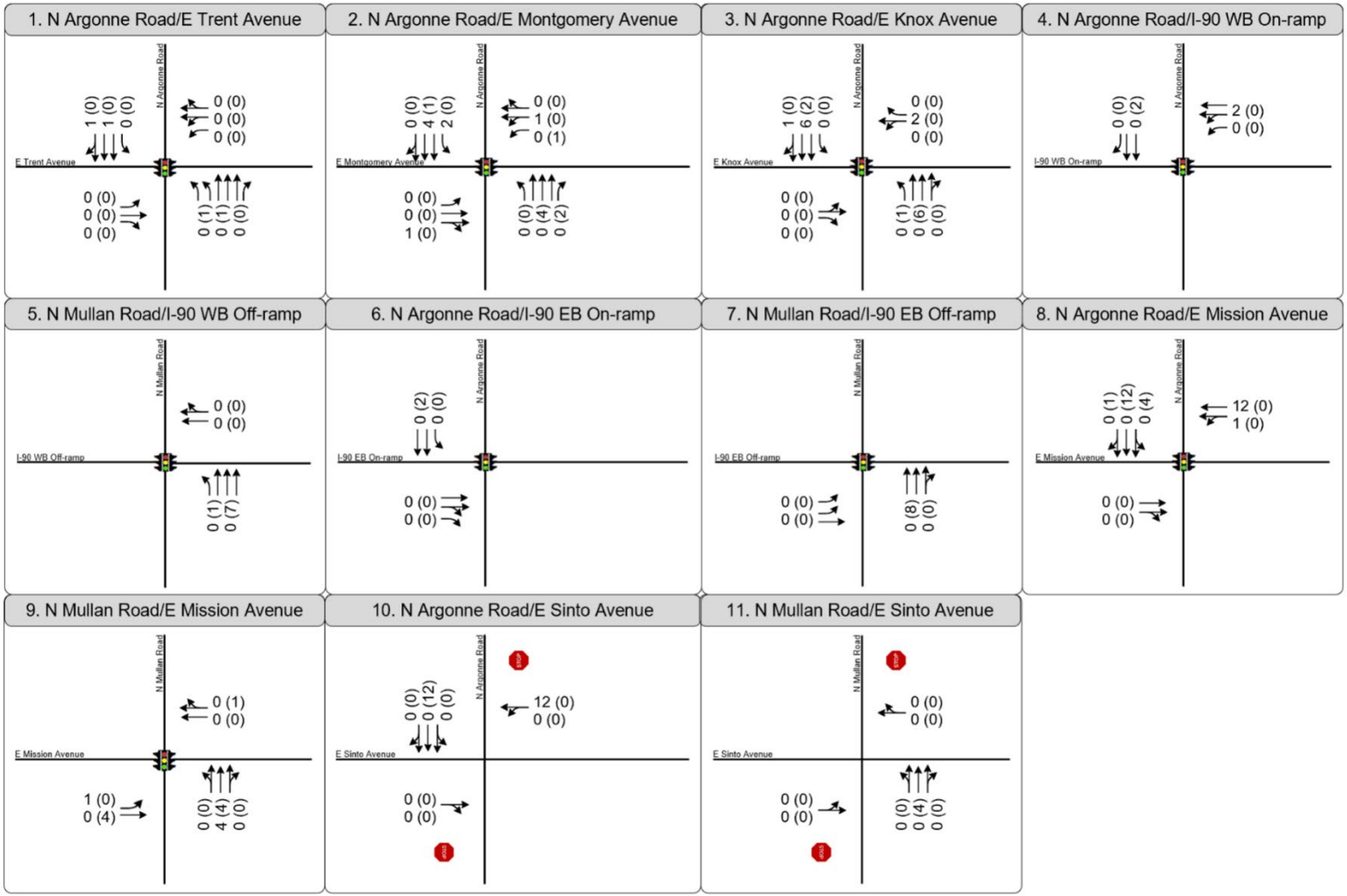


Figure 4. Project-only AM and PM Peak Hour Traffic Volumes



Performance Standards

Table 8 provides a summary of Level of Service (LOS) definitions. LOS is measured quantitatively and reported on a scale from A to F.

Table 8. Level of Service

Level of Service	Description	Signalized Intersection Delay (seconds/vehicle)	Unsignalized Intersection Delay (seconds/vehicle) [1]
A	Free-flowing Conditions	≤ 10	0–10
B	Stable Flow (slight delays)	>10–20	>10–15
C	Stable Flow (acceptable delays)	>20–35	>15–25
D	Approaching Unstable Flow (tolerable delay)	>35–55	>25–35
E	Unstable Flow (intolerable delay)	>55–80	>35–50
F	Forced Flow (congested and queues fail to clear)	>80	>50

Source: 6th Edition Highway Capacity Manual, 2016

[1] – Delay for the worst performing approach is used to determine LOS for unsignalized intersection.

Traffic operations analysis used the performance metrics in **Table 9** to guide the development of any necessary mitigation measures. Potential mitigation measures were identified for any intersections that meet the LOS standard in the future "No Build" scenario but do not meet that standard in the "Build" scenario. The 95th percentile queuing at intersections was also reviewed to determine potential delays and/or time savings provided for transit.

Table 9. Performance Metrics

Mode	Metric	Agency	Target
Vehicle	Level of Service & Delay	WSDOT Intersection	LOS D (35 - 55 seconds) during AM and PM peak hours
		City of Spokane Valley	LOS D (35 – 55 seconds) for Major Arterial Corridors
			LOS D (35 – 55 seconds) for Signalized Intersections not on Major Arterial Corridors
			LOS E (55 – 80 seconds) for Unsignalized Intersections (LOS F is acceptable if the peak hour traffic signal warrant is not met)
	Queuing	All	95th Percentile Queues do not impact downstream intersections during AM and PM peak hours

Safety Analysis Methodology

The safety evaluation conducted was set to be consistent with WSDOT's Safety Analysis Guide. This analysis included a summary of the most recent five years of crash data within the study area to document the existing conditions as well as an assessment of the safety implications of proposed project components (for the horizon year) compared to the No Build condition. The TIA followed City of Spokane Valley guidelines on safety analysis.

Traffic Operations Methodology

Using Synchro 11 and Synchro 12 software, traffic operations, including LOS and delay, at the eleven study intersections were analyzed using methodology provided in the Highway Capacity Manual (HCM) 6th edition and HCM 2000. These traffic operations analyses were done for the existing year traffic conditions, for the design year and future year no-build and build scenarios, and for the project driveways. Data inputs included traffic volumes, lane configuration, traffic control type, and signal timing plans to ultimately understand Level of Service impacts across the various study intersections.

Intersection Level of Service and Delay

Several tools to analyze future traffic operations at study intersections following protocols and requirements from WSDOT Design Manual M22-01, Chapter 320 – Traffic Analysis.[2] A Synchro network was modified from an existing City of Spokane Valley Synchro network that established current year traffic operations at study intersections, using volumes from traffic counts collected in September 2024, traffic controls noted in **Table 1**, lane geometry and signal timing plans from City of Spokane Valley. Per WSDOT Synchro & SimTraffic Protocol[3], volumes were not balanced between urban intersections due to driveways and approaches, and allowing for a reasonable variance is acceptable. For intersections with no access points in between (driveways, intersections, etc.), the volume balance was balanced to zero.

Traffic counts were collected on the same weekday in September 2024 for all study intersections which helped minimize the need to conduct volume balancing. The current year LOS was calculated to determine if intersections meet LOS standards by the jurisdiction of the intersection, as shown in **Table 9**. This created a baseline for existing traffic conditions and provided data to determine the software used for design year and horizon year scenarios by intersection, which would continue to be Synchro.

[2] WSDOT Traffic Analysis, https://wsdot.wa.gov/Design/Traffic/Analysis/default.htm,

Chapter 3: Existing Conditions

While **Chapter 1** lays out brief groundwork on the Argonne Station Park and Ride, this chapter provides additional detail on the existing transportation conditions of the site, such as the surrounding roadway network, existing transit service, and non-motorized facilities.

After assessing existing active transportation and transit access near the proposed site, this chapter then provides information on existing traffic conditions at the site through an analysis of AM and PM peak hour collected traffic movement counts. Using these traffic conditions, a traffic operations analysis based on intersection LOS and delay is conducted. The results of this operations analysis are described in this chapter. Finally, this chapter includes an analysis of five years of crash data (2017–2022) within the study area to identify areas with high crash rates.

Intersection Operations

The traffic operations analysis evaluates the vehicle demand in the network near the project site and how well the existing system serves the roadway users of Spokane Valley. Intersection operations, including LOS and delay, for the existing traffic conditions were evaluated in Synchro 11 using HCM 2000 or HCM 6th Edition methodology.

Existing Traffic Conditions

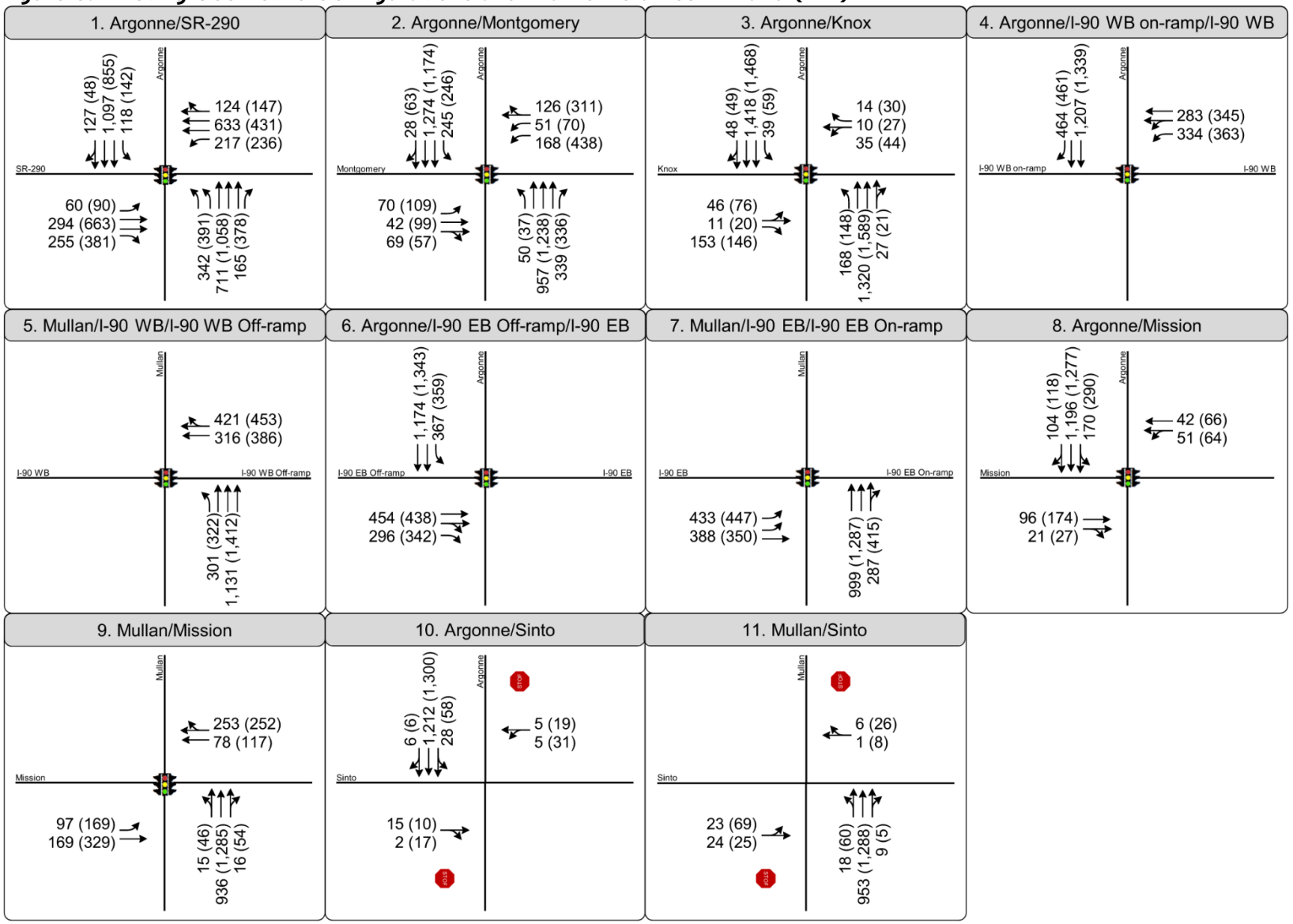
To establish baseline conditions of traffic flow in the vicinity of the project, a total of 11 intersections were selected in conjunction with the City of Spokane Valley for a detailed LOS analysis. **Figure 1** shows the locations of these study intersections, while **Table 1** provides a list of these locations along with the intersection's traffic control type.

Existing Intersection Volumes

Vehicle, pedestrian, and bicycle turning movement counts were collected during the weekday AM (6 AM – 9 AM) and PM (3 PM – 6 PM) peak periods on Wednesday, September 18th, 2024 for the intersections shown in **Table 1**. Detailed traffic count information is provided in **Appendix A.**

Error! Reference source not found.**5** shows existing afternoon peak hour traffic volumes and lane configurations used for the existing year operations analysis.

Figure 5. Existing Geometric Configurations and Traffic Volumes AM and (PM)



Existing Traffic Operations

As mentioned in the two sections above, a traffic analysis for existing conditions was completed using traffic count data collected in September 2024. Traffic volumes used in the traffic operations analysis were pulled for each intersection based on the counts measured during each intersection's AM and PM individual peak hour.

Intersection operations including LOS and delay for the two future no-build scenarios were evaluated in Synchro 12 using Highway Capacity Manual 2000 (HCM) or HCM 6th Edition methodology. There were a few intersections where HCM 2000 had to be used, including the following:

- N Argonne Road / E Trent Avenue: Non-standard phasing with double-serving left turns
- N Argonne Road / E Montgomery Road (AM Peak only): Non-standard phasing, with an addition left turn phase only present in the AM Peak
- N Argonne Road & I-90 WB on-ramp: Presence of shared thru/left turn lane
- N Argonne Road & I-90 EB off-ramp: Presence of shared thru/left turn lane
- N Argonne Road / E Mission Avenue: Presence of shared thru/left turn lane

Traffic operations results for the AM and PM peak hour are presented in **Table 10**. Most intersections meet operational standards, except for two intersections. During the PM peak, the intersection of Argonne Road / Trent Avenue, which is a state route, has LOS E with a 65.1 second delay. During the AM peak, the intersection of Argonne Road / Montgomery Avenue has a LOS E with a 61.8 second delay. The intersections at Argonne Road / Trent Avenue and Argonne Road / Montgomery Avenue each feature dual left-turn lanes—northbound at the former and westbound at the latter. While these additional lanes accommodate higher left-turn volumes during peak AM and PM periods, they also contribute to increased delays at these intersections according to HCM methodology. LOS calculation worksheets for the existing conditions Synchro analysis are provided in **Appendix B.**

Table 10. Existing Traffic Operations LOS and Delay Results

ID #	Intersection Name	Control	Scenario	LOS	Delay
1	N Argonne Road / E Trent Avenue*	Signal	AM	D	53.5
			PM	**E**	**65.1**
2	N Argonne Road / E Montgomery Road^	Signal	**AM**	**E**	**61.8**
			PM	D	47.3
3	N Argonne Road / E Knox Avenue	Signal	AM	D	43.5
			PM	D	44.5
4	N Argonne Road & I-90 WB on-ramp*	Signal	AM	D	36.2
			PM	D	36.4
5	N Mullan Road & I-90 WB off-ramp*	Signal	AM	D	45.9
			PM	C	22.1
6	N Argonne Road & I-90 EB off-ramp*	Signal	AM	C	30.4
			PM	B	17.6

7	N Mullan Road & I-90 EB on-ramp*	Signal	AM	B	13.7
			PM	B	13.9
8	N Argonne Road / E Mission Avenue*	Signal	AM	A	7.0
			PM	A	9.2
9	N Mullan Road / E Mission Avenue	Signal	AM	C	26.4
			PM	C	23.6
10	N Argonne Road / E Sinto Avenue [1]	Two-Way Stop	AM	E	40.7
			PM	E	40.2
11	N Mullan Road / E Sinto Avenue [1]	Two-Way Stop	AM	C	18.8
			PM	E	48.4
Notes:	* Denotes intersection results calculated using HCM 2000 ^ Denotes intersection results calculated using HCM 2000 (AM) and HCM 6th Edition (PM) **Bold results indicate intersection LOS exceeds City of Spokane Valley acceptance level** [1] Delay and LOS results reported for the worst approach using HCM 6th edition				

Transit Services and Non-Motorized Facilities

STA provides fixed route service, paratransit service, and rideshare to various cities within Spokane County, including Spokane Valley, as well as parts of the unincorporated county. There are various types of fixed route transit offered by Spokane Transit, such as frequent rapid transit, frequent routes, regional routes, regular routes, commuter routes, and shuttle routes. In addition, STA has two existing Park & Ride facilities within the City of Spokane Valley, one located southeast of the proposed project at Pence-Cole Valley Transit Center and a second one east of the site at Mirabeau Point. In general, the area has a moderate level of transit service, with connections primarily focused on linking commuters to Spokane and other key destinations in the region. The general direction of these routes, their key destinations, and their peak time headways are listed in **Table 11**.

Table 11. Spokane Transit Authority Fixed Routes

Route	General Direction	Destinations	Peak Headways
Route 32	East/West	Spokane Community College, Spokane Valley CSO (DSHS), West Valley High School, Argonne Village, YMCA, Mirabeau Point Park & Ride	30 minutes
Route 74	East/West	Downtown Spokane, Mirabeau Point Park & Ride, Spokane Valley Mall, Liberty Lake Park & Ride, Meadowood Technology Campus	30 minutes
Route 90	East/West	Downtown Spokane, University District Gateway Bridge, East Central, The Hive Library, Appleway/Sprague, Valley Transit Center	15 minutes
Route 94	North/South	Downtown Spokane, Liberty Park, Dr. Martin Luther King Jr. Community Center, Centennial Middle School, Spokane Valley High School, Argonne Village, Spokane Valley CSO (DSHS)	30 minutes
Route 173	East/West	Downtown Spokane, University Road, Valley Transit Center	30 minutes

Source: Spokane Transit Authority Routes and Schedule 20230717-4_SPO_Msys_FullLayout_Y230621.pdf (spokanetransit.com)

Figure 6. Routes within the Argonne Corridor Area



Source: Spokane Transit Authority System Map (the map was edited to incorporate legend of relevant transit lines).

There are currently no bicycle facilities located along Argonne Road or Mullan Road. There is a proposed shared use path planned along Argonne Road from Mission Avenue to Indiana Avenue. These proposed changes will connect to existing bicycle networks along Mission Avenue and Montgomery Avenue. These existing and planned bicycle networks are shown in Figure 7.

In addition, the Spokane Regional Transit Council (SRTC) teamed up with local jurisdictions to create an updated bicycle facilities map throughout Spokane County, quantifying segments of each corridor's Level of Traffic Stress (LTS)[3]. LTS is a method used in bicycle planning to evaluate the comfort and safety of cyclists based on the traffic conditions of a roadway. It classifies roads into four categories (LTS 1–4), reflecting how stressful they are for cyclists, particularly less experienced or vulnerable riders. LTS 1 is low stress and with each increasing level, the traffic stress level increases where LTS 4 is very high stress, which may be suitable only for experienced, highly confident cyclists who are comfortable riding in fast, high-traffic environments. The map shows that the entirety of the Argonne Road and Mission Avenue corridors within our study area are LTS 4, meaning that corridor is likely inaccessible and/or stressful for most bicycle riders.

Both Mullan Road and Argonne Road have similar levels of sidewalk coverage. There are existing sidewalks on both sides of the road from the southern end of our study area along Sinto Avenue toward the northern boundary along Trent Avenue, except for a few gaps in coverage along the freeway interchange area. Trent Avenue, or SR 290, at the northern end of our study area has several gaps in the sidewalk network, with no sidewalks on the southern side. Other streets within our study, which include Montgomery Avenue and Mission Avenue, have a few gaps in the proposed and existing sidewalk network. Sinto Avenue, however, has minimal sidewalks, with approximately 250 feet of sidewalk extending past either end of Argonne Road or Mullan Road on the north side. In the immediate area surrounding the proposed location for the new Argonne Station Park and Ride, there are no proposed or existing sidewalks along the north, east, or west sides of the location. The proposed and existing sidewalk coverage based on the City of Spokane Valley's online map is shown in **Figure 8**. While there are limitations in active transportation connections at the site currently, part of the scope of the Argonne Station Park and Ride is to provide these pedestrian connections to the proposed facility and to surrounding bicycle and pedestrian infrastructure.

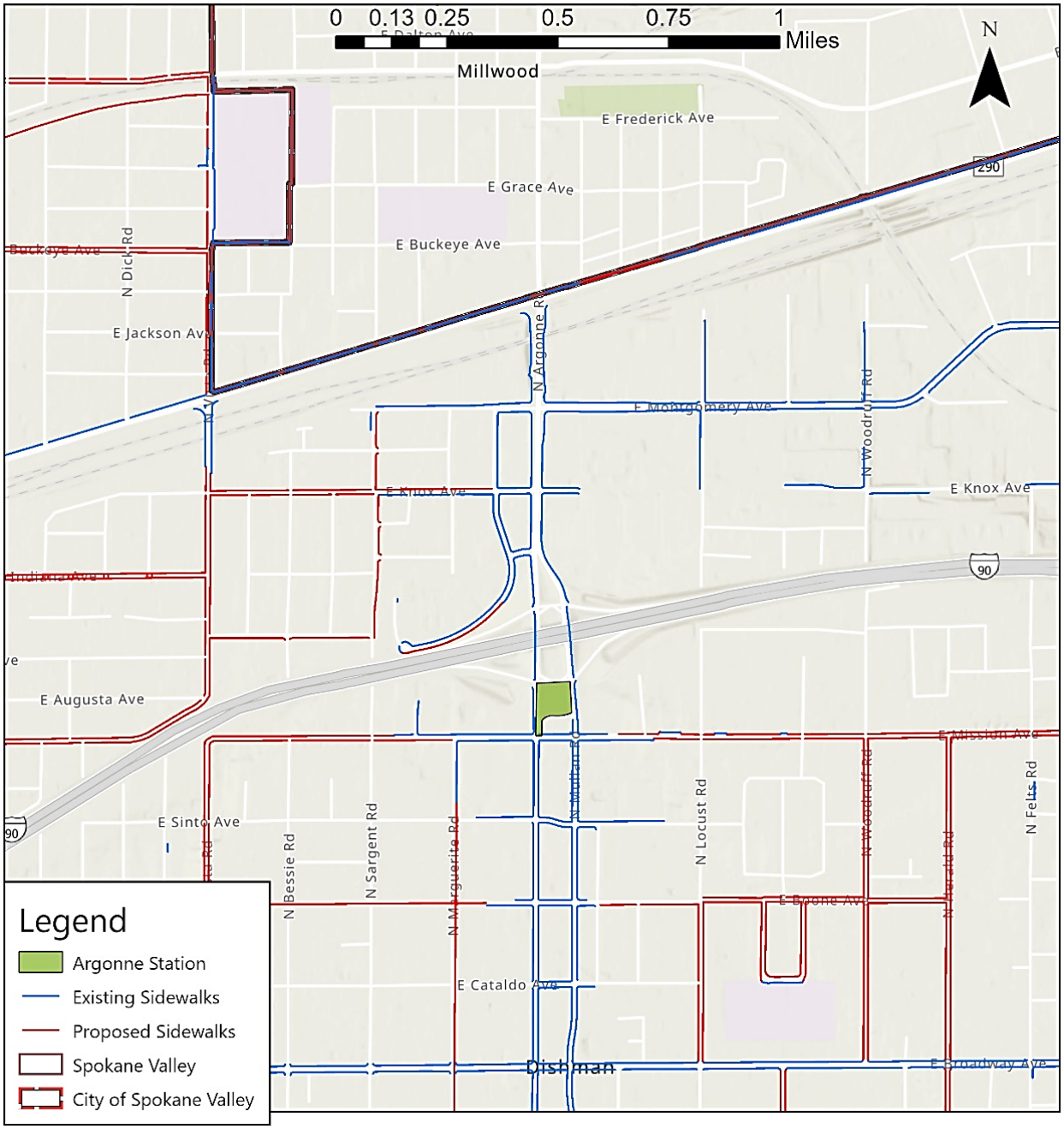
[3] City of Spokane Bicycle Level of Traffic Stress (LTS)

Figure 7. Bicycle Networks



Source: [Spokane Valley Maps]

Figure 8. Pedestrian Network



Source: Spokane Valley Maps

Transportation Safety

The Washington Department of Transportation (WSDOT) provides an extensive crash database, which includes information about crash locations, date/time, type of crash, severity of crash, contributing factors, and other relevant circumstances. An analysis of crash data from 2018–2022 was conducted to identify patterns within the study area.

There were five incidents of killed or serious injury (KSI) that occurred at the intersections of study for this report, which include the following:

- A crash took place at Mission Avenue/Mullan Road in broad daylight when a driver making a left turn crashed into a motorcyclist making a through movement leading to one severe injury.
- A crash happened at I-90 On-Ramp/Mullan Road in broad daylight when a driver operating a cell phone collided with a stopped vehicle on the on-ramp leading to a serious injury. One pedestrian was involved.
- A crash occurred early morning at Knox Avenue/Argonne Road under streetlights, where a pickup truck driver, turning left, struck a pedestrian, resulting in a serious injury.
- A crash took place near Sinto Avenue/Argonne Road in clear daylight when a motorcyclist changed lanes while a driver was turning left into a driveway resulting in one serious injury.
- Four vehicles were involved in a crash along SR 290/Argonne Road when a driver, who was under the influence of drugs and acting recklessly, collided at an angle with another vehicle resulting in three injuries.

A crash rate analysis was completed for the intersections of study to understand each intersection's relative safety by considering exposure data in the form of daily traffic volumes. Per FHWA Roadway Safety Information Analysis[4], crash rate per MEV (million entering vehicles) is calculated using the equation:

$$\mathbf{R = \frac{1{,}000{,}000 \times C}{365 \times N \times V}}$$

R= Crash rate per MEV
C= Total number of crashes
N= Number of years of data
V= Traffic volumes entering the intersection daily

Table 12 shows the crash rate per MEV for our intersections of study with crashes during 2018-2022. As shown in the table, the intersection of Argonne Road and Mission Avenue has a relatively higher crash rate of 0.77 per MEV compared to other study intersections.

The five-year crash history is summarized in **Table 13**. **Figure 9** provides a heat map of crashes within Argonne Road corridor based on the same dataset.

[4] Chapter 3 – Analyzing Data, Roadway Safety Information Analysis: A Manual for Local Rural Road Owners, Federal Highway Administration Office of Safety, December 2010.

Table 12. Crash Rate per MEV

Intersection	Total Crashes	Years of Data	Daily Traffic Volumes	Crash Rate per MEV
N Argonne Road / E Trent Avenue	59	5	58300*	0.55
N Argonne Road / E Montgomery Road	23	5	33250*	0.38
N Argonne Road / E Knox Avenue	22	5	38700*	0.31
N Argonne Road & I-90 WB on-ramp	15	5	25500^	0.32
N Mullan Road & I-90 WB off-ramp	14	5	25900^	0.30
N Argonne Road & I-90 EB off-ramp	24	5	24500^	0.54
N Mullan Road & I-90 EB on-ramp	22	5	25400^	0.47
N Argonne Road / E Mission Avenue	26	5	18400*	0.77
N Mullan Road / E Mission Avenue	21	5	22500*	0.51
N Argonne Road / E Sinto Avenue	4	5	N/A	N/A
N Mullan Road / E Sinto Avenue	7	5	N/A	N/A

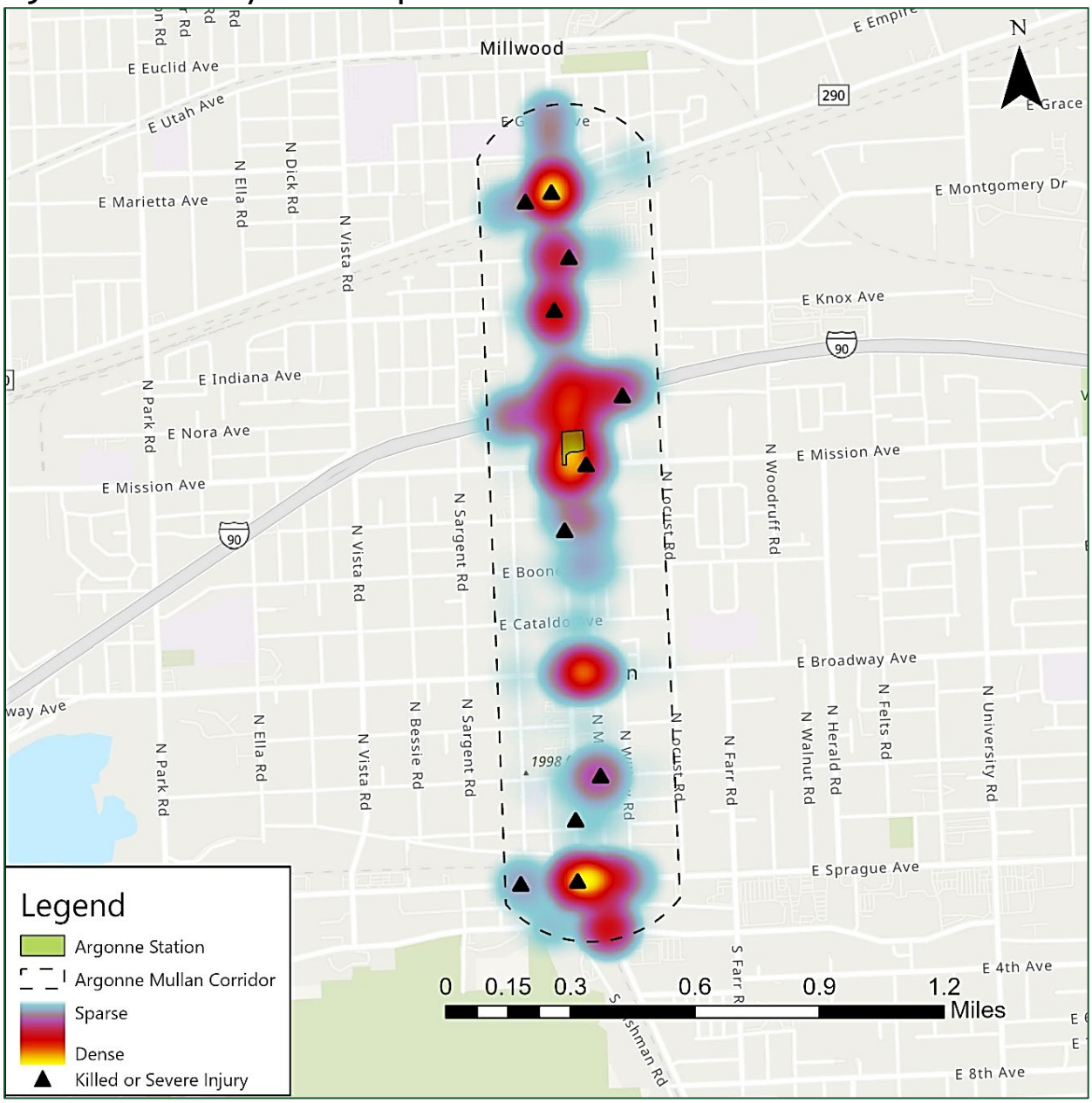
Notes: * Denotes volumes sourced from the Spokane Valley Daily Traffic Counts by Year map
^ Denotes volumes sourced from the WSDOT AADT Current Traffic Counts map

Table 13. Killed or Severe Injury (KSI) Crashes at Intersections of Study

Intersection	Date	Time	Injury Severity	# of Injuries	Vehicles Involved	Pedestrian or bike?	Weather	Lighting	Circumstance
Mission Ave/Mullan Road	06/26/2018	13:37	Serious	1	2 (Passenger car and motorcycle)	Neither	Clear	Daylight	Inattention
I-90 On-ramp/Mullan Road	02/25/2020	10:51	Serious	1	2 (Passenger cars)	Yes, one pedestrian	Clear	Daylight	Defective equipment and cell phone use
Knox Avenue/Argonne Road	01/31/2022	06:36	Serious	1	1 (Pickup, panel truck, or vanette)	Yes, one pedestrian	Overcast and Wet	Dark, with Street Lights	Vehicle did not grant right of way to pedestrian
Sinto Avenue/Argonne Road	08/21/2021	09:52	Serious	1	2 (Pickup truck and motorcycle)	Neither	Clear	Daylight	Changing lanes and left turn in same direction
SR 290/Argonne Road	11/11/2022	13:39	Serious	3	4 (Passenger cars)	Neither	Clear	Daylight	Driver under influence of drugs/acting recklessly

Source: Washington Department of Transportation, Crash Database

Figure 9. Crash Analysis Heat Map



Source: Washington Department of Transportation, Crash Database

Chapter 4: Design and Future Year Conditions

Design Year Conditions (2028)

Results of traffic operations for the no-build and build scenarios for the Argonne Station Park and Ride are presented in **Table 14**.

Table 14. Design Year (2028) No-Build & Build – Traffic Operations LOS and Delay Results

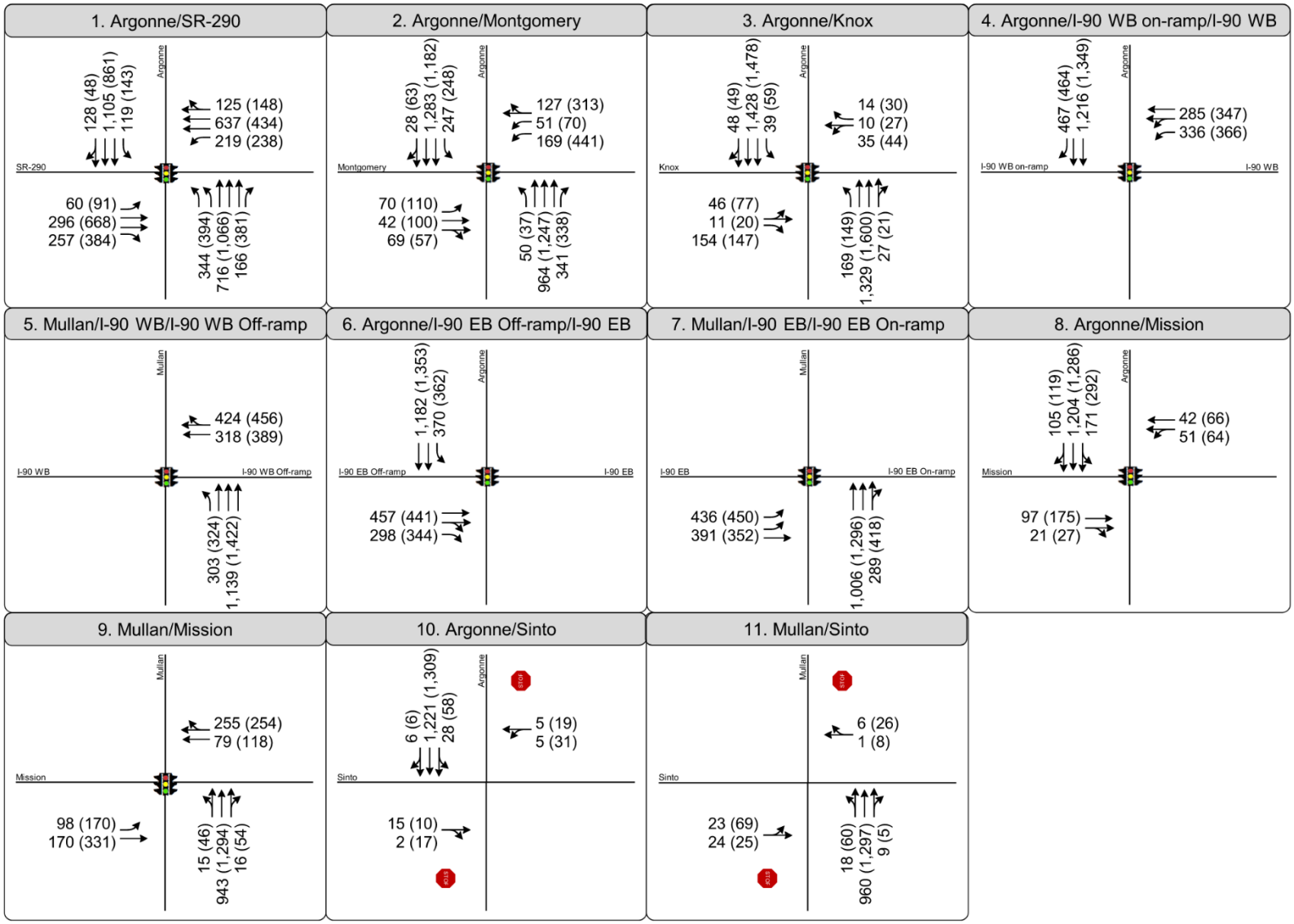
ID #	Intersection Name	Control	Scenario	LOS (No-Build)	Delay (No-Build)	LOS (Build)	Delay (Build)	Change In Delay
1	N Argonne Road / E Trent Avenue*	Signal	AM	D	53.5	D	53.5	0.0
			PM	**E**	**64.6**	**E**	**64.6**	**0.0**
2	N Argonne Road / E Montgomery Road^	Signal	AM	**E**	**61.7**	**E**	**61.4**	**1.4**
			PM	D	47.5	D	47.2	-0.3
3	N Argonne Road / E Knox Avenue	Signal	AM	D	43.6	D	43.7	0.1
			PM	D	44.8	D	44.8	0
4	N Argonne Road & I-90 WB on-ramp*	Signal	AM	D	36.4	D	36.1	-0.3
			PM	D	37.7	D	38.2	0.5
5	N Mullan Road & I-90 WB off-ramp*	Signal	AM	D	47.2	D	50.3	3.1
			PM	C	22.3	C	22.9	0.6
6	N Argonne Road & I-90 EB off-ramp*	Signal	AM	C	31.1	C	32.8	1.7
			PM	B	17.8	B	18.3	0.5
7	N Mullan Road & I-90 EB on-ramp*	Signal	AM	B	13.9	B	14.1	0.2
			PM	B	14.2	B	14.6	0.4
8	N Argonne Road / E Mission Avenue*	Signal	AM	A	7.0	A	7	0
			PM	A	9.2	A	9.1	0.1
9	N Mullan Road / E Mission Avenue	Signal	AM	C	26.6	C	26.9	0.3
			PM	C	23.8	C	23.9	0.1
10	N Argonne Road / E Sinto Avenue [1]	Two-Way Stop	AM	E	41.8	E	42.1	0.3
			PM	E	41.6	E	42.8	1.8
11			AM	C	19.0	C	19.2	0.2

	N Mullan Road / E Sinto Avenue [1]	Two-Way Stop	PM	E	50.4	**F**	**51.0**	**0.6**
Notes	* Denotes intersection results calculated using HCM 2000 ^ Denotes intersection results calculated using HCM 2000 (AM) and HCM 6th Edition (PM) **Bold result indicates intersection LOS exceeds lead agency's target.** [1] Delay and LOS results reported for the worst approach using HCM 6th edition							

Design Year (2028) No-Build Scenario

Figure 10 shows the geometric configuration of the study intersections, and the forecasting Design (Year 2028) No-Build AM and PM peak hour traffic volumes. A LOS analysis was conducted using these traffic volumes. Results of the traffic operations analysis are presented in **Table 14**. As shown in the table, most no-build intersections meet Spokane Valley's operational standards, except for two intersections. During the PM peak, the intersection of Argonne Road / Trent Avenue, which is a state route, has LOS E with a 64.6 second delay. During the AM peak, the intersection of Argonne Road / Montgomery Avenue has LOS E with a 61.7 second delay. The intersections at Argonne Road / Trent Avenue and Argonne Road / Montgomery Avenue each feature dual left-turn lanes—northbound at the former and westbound at the latter. While these additional lanes accommodate higher left-turn volumes during peak AM and PM periods, they also contribute to increased delays at these intersections according to HCM methodology. LOS calculation worksheets for the 2028 no-build Synchro analysis are provided in **Appendix E.**

Figure 10. Geometric Configurations and Design (Year 2028) No-Build AM (PM) Peak Hour Traffic Volumes



Design Year (2028) Build Scenario

Figure 11 shows geometric configuration of the study intersections and the forecasted Design (Year 2028) + Build AM and PM peak hour traffic volumes. A LOS analysis was conducted using these traffic volumes. Results of the traffic operations analysis are presented in **Table 14**.

As shown in the table, most design year build intersections meet Spokane Valley's operational standards, except for three intersections. The worst approach for the intersection of N Mullan Road / E Sinto Avenue is projected to operate at LOS F during the PM peak hour. Per City of Spokane Valley's standards for unsignalized intersections, LOS F is acceptable if the peak hour traffic signal warrant is not met. A traffic signal warrant analysis is conducted at the end of this chapter, which confirms that the peak hour traffic signal warrant is not met.

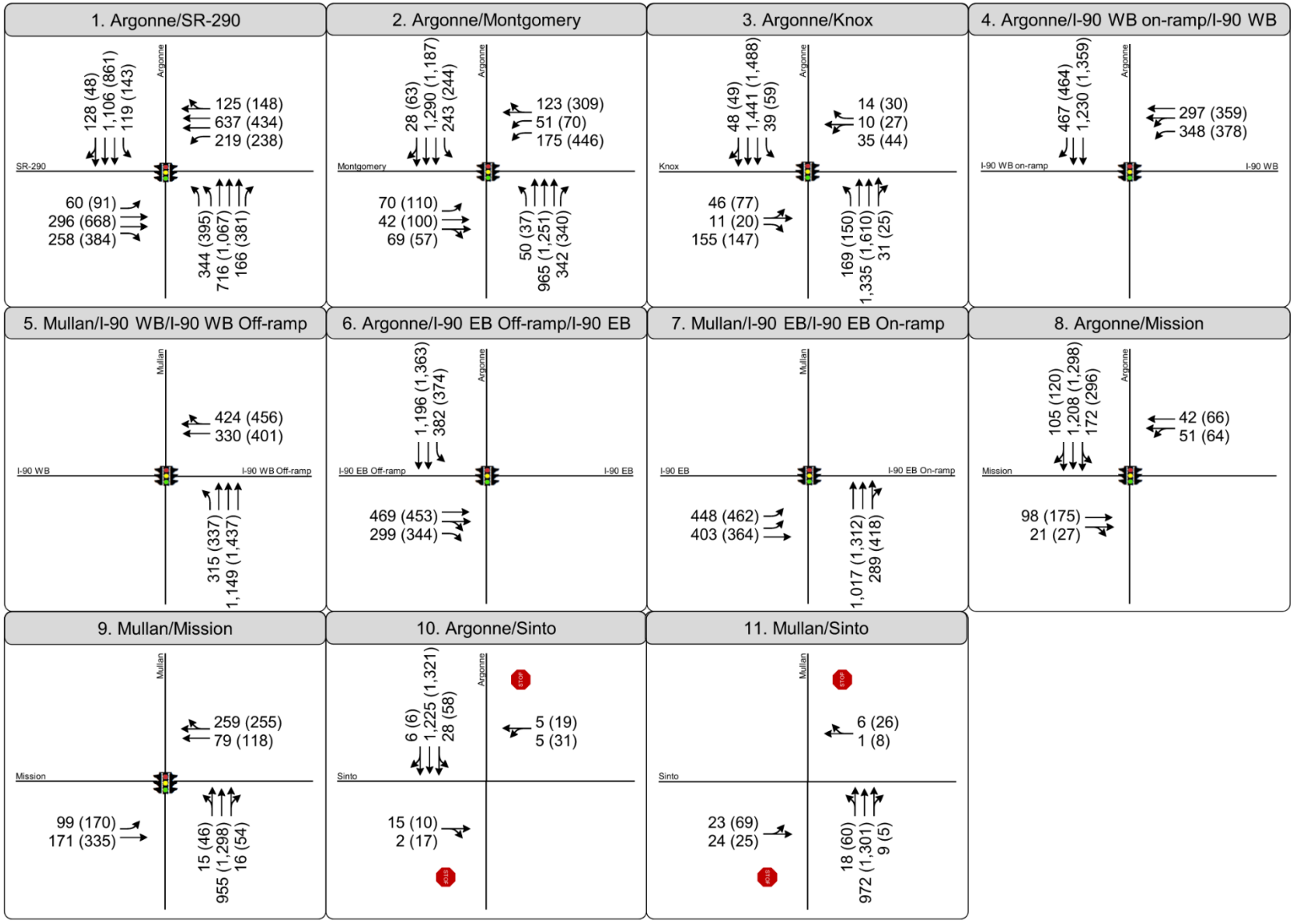
There are two other intersections not meeting Spokane Valley's operational standards for the design year build scenario. During the PM peak, the intersection of Argonne Road / Trent Avenue, which is a state route, has LOS E with 64.6 seconds of delay. During the AM peak, the intersection of Argonne Road / Montgomery Avenue has LOS E with 61.4 seconds of delay.

The intersections at Argonne Road / Trent Avenue and Argonne Road / Montgomery Avenue each feature dual left-turn lanes—northbound at the former and westbound at the latter. While these additional lanes accommodate higher left-turn volumes during peak AM and PM periods, they also contribute to increased delays at these intersections according to HCM methodology. Additionally, these intersections were at the same LOS for the no-build design year (2028) scenario.

The North Spokane Corridor (NSC), which is currently under construction, is anticipated to be completed by 2030. This project aims to enhance highway connectivity to I-90 and add highway vehicular capacity parallel to N Argonne Road and North Mullan Road. While the full benefits of this additional highway capacity and connectivity will take a few months to be realized as motorists adjust their travel routes, it is expected to significantly improve regional traffic flow. Until the project is operational, the study intersections are likely to experience a lower Level of Service (LOS) than indicated in **Table 14**.

LOS calculation worksheets for the 2028 + Build Synchro analysis are provided in **Appendix H.**

Figure 11. Geometric Configurations and Design (Year 2028) + Build AM (PM) Peak Hour Traffic Volumes



Future Year Conditions (2050)

Table 15 shows the results of traffic operations analysis under the Horizon Year (2050) No-Build and Build conditions.

Table 15. Horizon Year (2050) + Build – Traffic Operations LOS and Delay Results

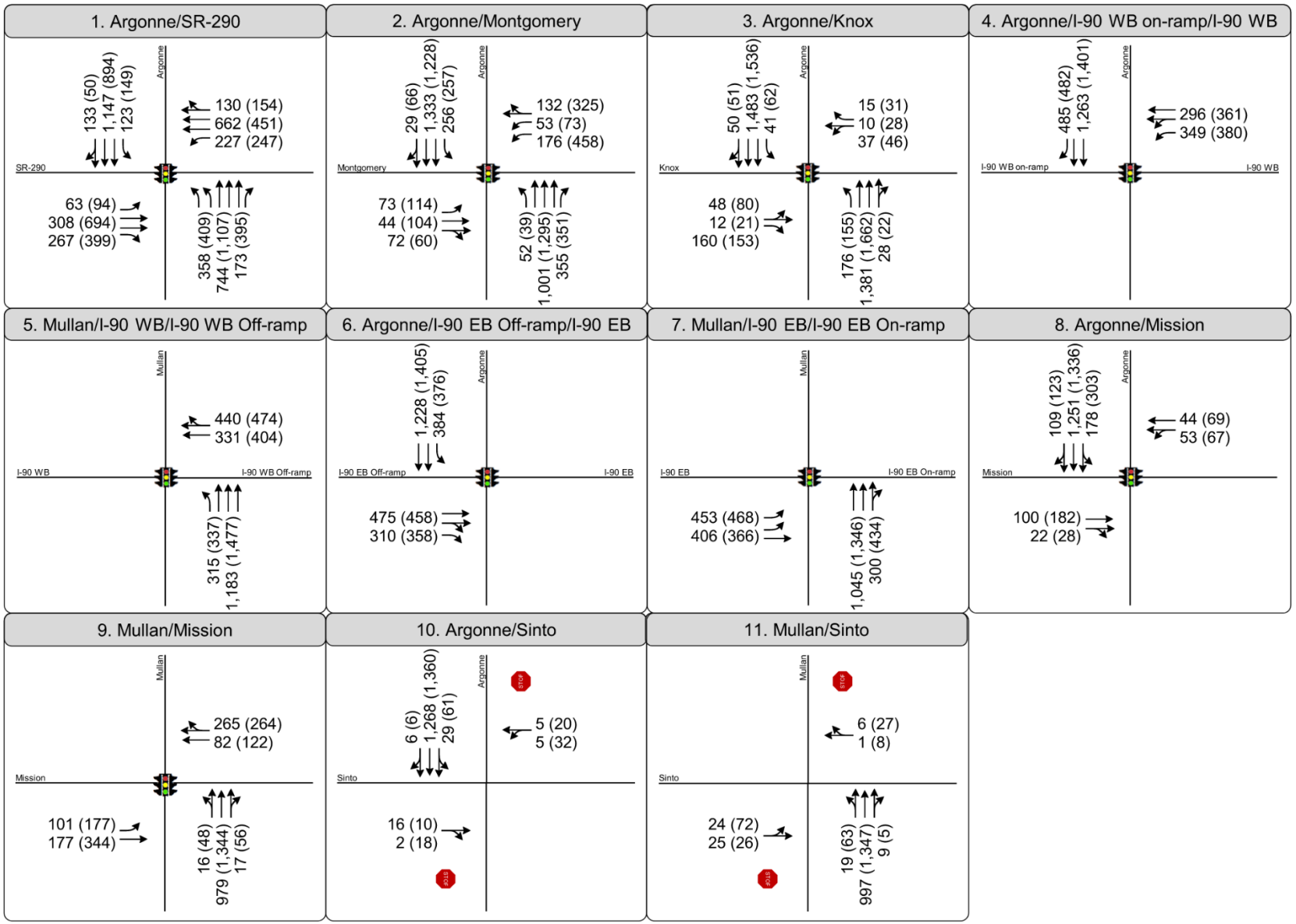
ID #	Intersection Name	Control	Scenario	LOS (No-Build)	Delay (No-Build)	LOS	Delay	Change in Delay
1	N Argonne Road / E Trent Avenue*	Signal	AM	**E**	**55.9**	**E**	**55.5**	**-0.4**
			PM	**E**	**68.0**	**E**	**68.0**	**-1.3**
2	N Argonne Road / E Montgomery Road^	Signal	AM	**E**	**59.9**	**E**	**61.4**	**1.5**
			PM	D	47.3	D	47.0	-0.3
3	N Argonne Road / E Knox Avenue	Signal	AM	D	45.4	D	45.6	0.2
			PM	D	46.9	D	46.9	0
4	N Argonne Road & I-90 WB on-ramp*	Signal	AM	D	37.3	D	37.3	0
			PM	D	44.5	D	45.7	1.2
5	N Mullan Road & I-90 WB off-ramp*	Signal	AM	**E**	**55.4**	**E**	**58.3**	**2.9**
			PM	C	24.3	C	25.3	1.0
6	N Argonne Road & I-90 EB off-ramp*	Signal	AM	D	35	D	36.8	1.8
			PM	B	19.2	C	20.1	0.9
7	N Mullan Road & I-90 EB on-ramp*	Signal	AM	B	14.6	B	14.3	-0.3
			PM	B	16.3	B	17.4	1.1
8	N Argonne Road / E Mission Avenue*	Signal	AM	A	7.0	A	6.9	-0.1
			PM	A	9.3	A	9.3	0
9	N Mullan Road / E Mission Avenue	Signal	AM	C	27.5	C	27.8	0.3
			PM	C	25.3	C	25.4	0.1
10	N Argonne Road / E Sinto Avenue [1]	Two-Way Stop	AM	E	47.4	E	47.4	0
			PM	**F**	**51.8**	**F**	**53.6**	**1.8**
11	N Mullan Road / E Sinto Avenue [1]	Two-Way Stop	AM	C	19.9	C	20.1	0.2
			PM	**F**	**67.1**	**F**	**68.0**	**0.9**
Notes	* Denotes intersection results calculated using HCM 2000 ^ Denotes intersection results calculated using HCM 2000 (AM) and HCM 6th Edition (PM) **Bold result indicates intersection LOS exceeds lead agency's target.** [1] Delay and LOS results reported for the worst approach using HCM 6th edition							

Horizon Year (2050) No-Build Scenario

Figure **12** shows geometric configuration of the study intersections and the forecasted future (Year 2050) No-Build AM and PM peak hour traffic volumes. As shown in **Table 15** above, except for the intersections of N Argonne Road / E Trent Avenue, N Argonne Road / E Montgomery Road, and N Mullan Road & I-90 WB off-ramp; all other intersections are projected to meet City's Spokane Valley's operational standards.

The worst approach for intersections of N Mullan Road / E Sinto Avenue and N Argonne Road / E Sinto Avenue are projected to operate at LOS F during the PM peak hour. Per City of Spokane Valley's standards for unsignalized intersections, LOS F is acceptable if the peak hour traffic signal warrant is

Figure 12. Geometric Configurations and Future (Year 2050) No-Build AM (PM) Peak Hour Traffic Volumes



not met. A traffic signal warrant analysis is conducted at the end of this chapter, confirming that the peak hour traffic signal warrant is not met.

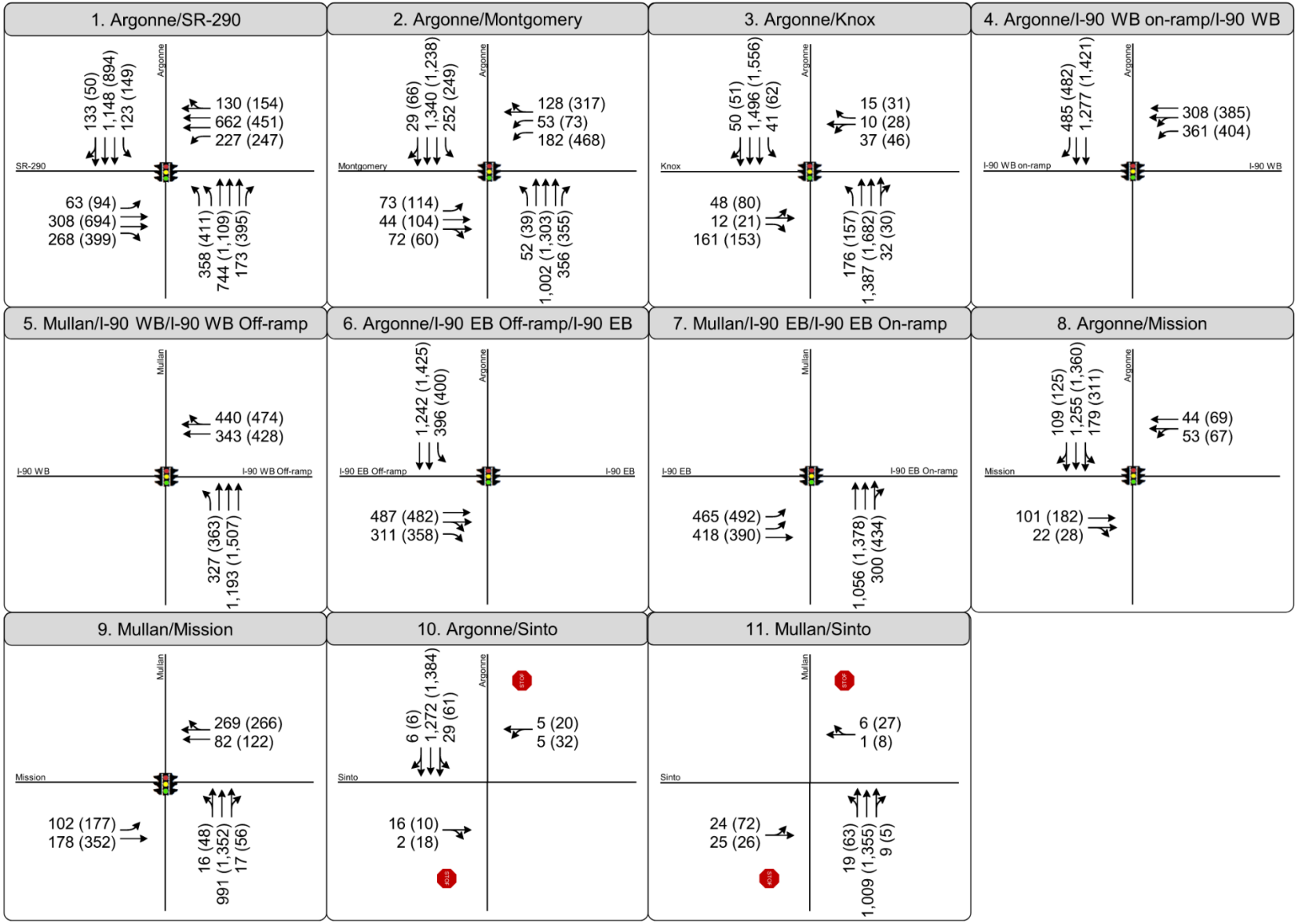
Additionally, the intersection of N Mullan Road / I-90 WB off-ramp is projected to operate at a LOS E during the morning peak hour, which exceeds WSDOT's acceptable levels at intersection with WSDOT jurisdiction. LOS calculation worksheets for the 2050 no-build Synchro analysis are provided in **Appendix F.**

Horizon Year (2050) Build Scenario

Figure **13** shows the geometric configuration of the study intersections and the Future (Year 2050) + Build AM and PM peak hour traffic volumes. A LOS analysis was conducted using the volumes shown in the figure and results of the traffic operations analysis are presented in **Table 15**.

As shown in the table below, except for the intersections of N Argonne Road / E Trent Avenue, N Argonne Road / E Montgomery Road, and N Mullan Road & I-90 WB off-ramp; all other signalized intersections are projected to meet City of Spokane Valley's operational standards. The worst approaches for the stop-controlled intersections of N Mullan Road / E Sinto Avenue and N Argonne Road / E Sinto Avenue are estimated to operate at LOS F during PM peak hours. Per City of Spokane Valley's standards for unsignalized intersections, LOS F is acceptable if the peak hour traffic signal warrant is not met. The intersection of N Mullan Road / I-90 WB off-ramp is projected to operate at a LOS E during the morning peak hour, which exceeds WSDOT's acceptable levels at intersection with WSDOT's jurisdiction. Overall, these intersections were at the same LOS for the no-build design year (2050) scenario. LOS calculation worksheets for the 2050 + Build Synchro analysis are provided in **Appendix I**.

Figure 13. Geometric Configurations and Horizon (Year 2050) + Build AM (PM) Peak Hour Traffic Volumes



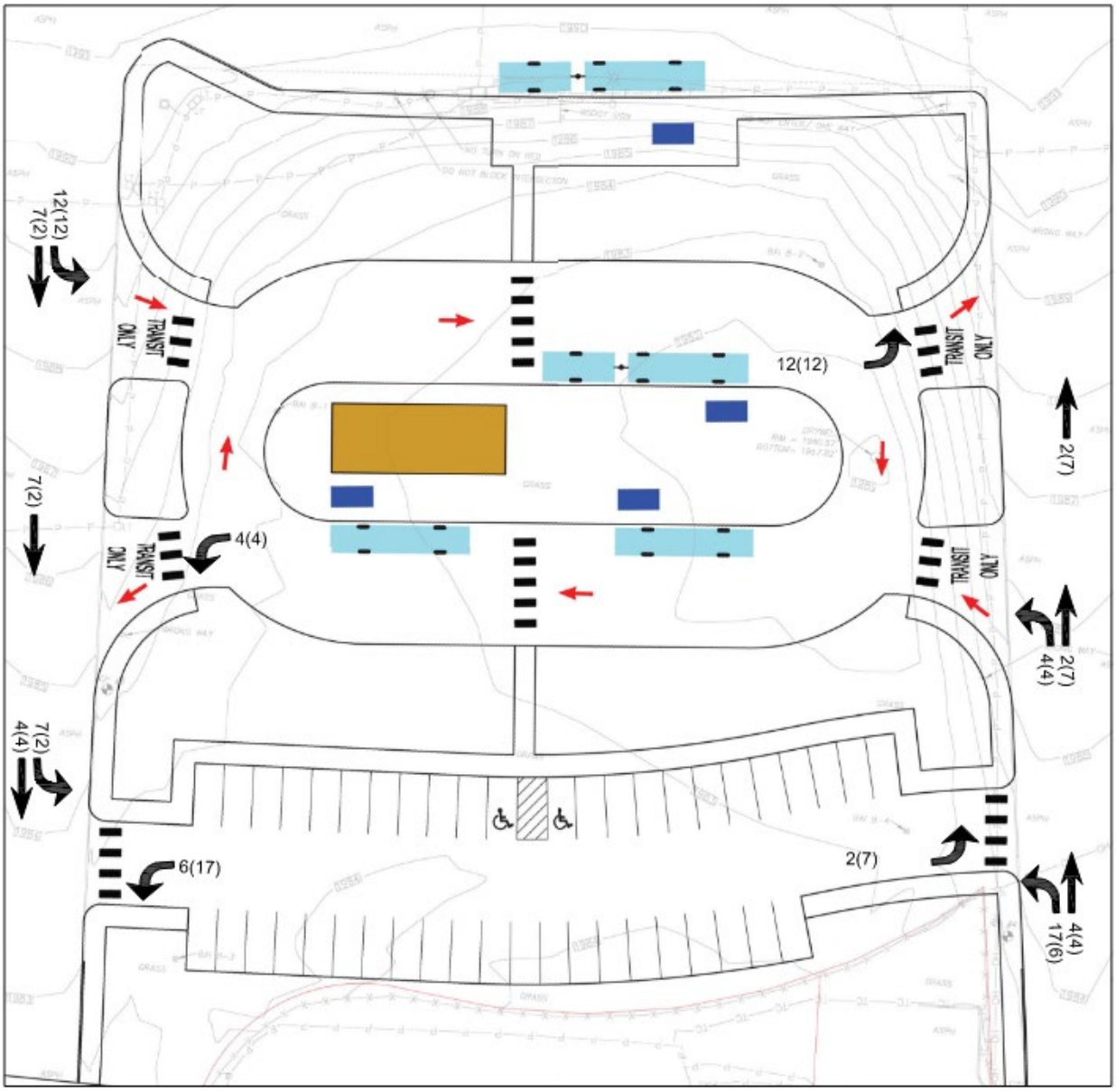
Design Year and Future Year Driveway Analysis

LOS, Delay, and the 95th percentile queuing at driveway intersections were reviewed to determine potential delays for transit, park & ride users, and pick-up/drop-off users at Argonne Station utilizing the project's proposed driveways.

Driveway trips were assigned from the project trip generation summary shown in

Table 5 and **Table 7**. Following our approach on trip distribution and assignment at study intersections, project trips were assigned to proposed driveways using methodology and assumptions described earlier in this memorandum. These trip assignments are shown in **Figure 14** below.

Figure 14. AM (PM) Peak Hour Driveway Traffic Volume Assignments



The results of this analysis are shown in Table 16 and Table 17, with figures showing the volumes in Figure 15 and Figure 16. Overall, there is minimal concern for LOS, delay, and queueing across all "Build" scenarios.

Table 16. Design (Year 2028) Project Driveway Operation Analysis – LOS, Delay, and 95th Percentile Queuing Results

ID #	Intersection Name	Control	Scenario	LOS	Delay	Queue (ft)
7	N Mullan Road & I-90 EB on-ramp	Signal	AM	B	10.3	225
			PM	B	14.5	325#
DWY 2	N Mullan Road / N Bus Driveway	Two-Way Stop	AM	B	12.2	25
			PM	B	14	25
DWY 3	N Argonne Road / S Bus Driveway	Two-Way Stop	AM	B	12.8	0
			PM	B	13.7	0
DWY 5	N Argonne Road / Park and Ride Driveway	Two-Way Stop	AM	B	13.0	0
			PM	B	14.1	25
DWY 6	N Mullan Road / Park and Ride Driveway	Two-Way Stop	AM	B	12.4	0
			PM	B	14.0	25
Notes	Delay, LOS, and queuing results reported for the worst approach using HCM 6th edition for all study driveways. HCM 2000 was used for intersection 7. Estimated 95th Percentile Queue (in vehicles) converted to feet using 25 feet per vehicle. Queue estimates were rounded up to whole number. # Denotes where 95th percentile volume exceed capacity, queue may be longer					

Figure 15. Geometric Configurations and Design (Year 2028) + Build Driveway AM (PM) Peak Hour Traffic Volumes

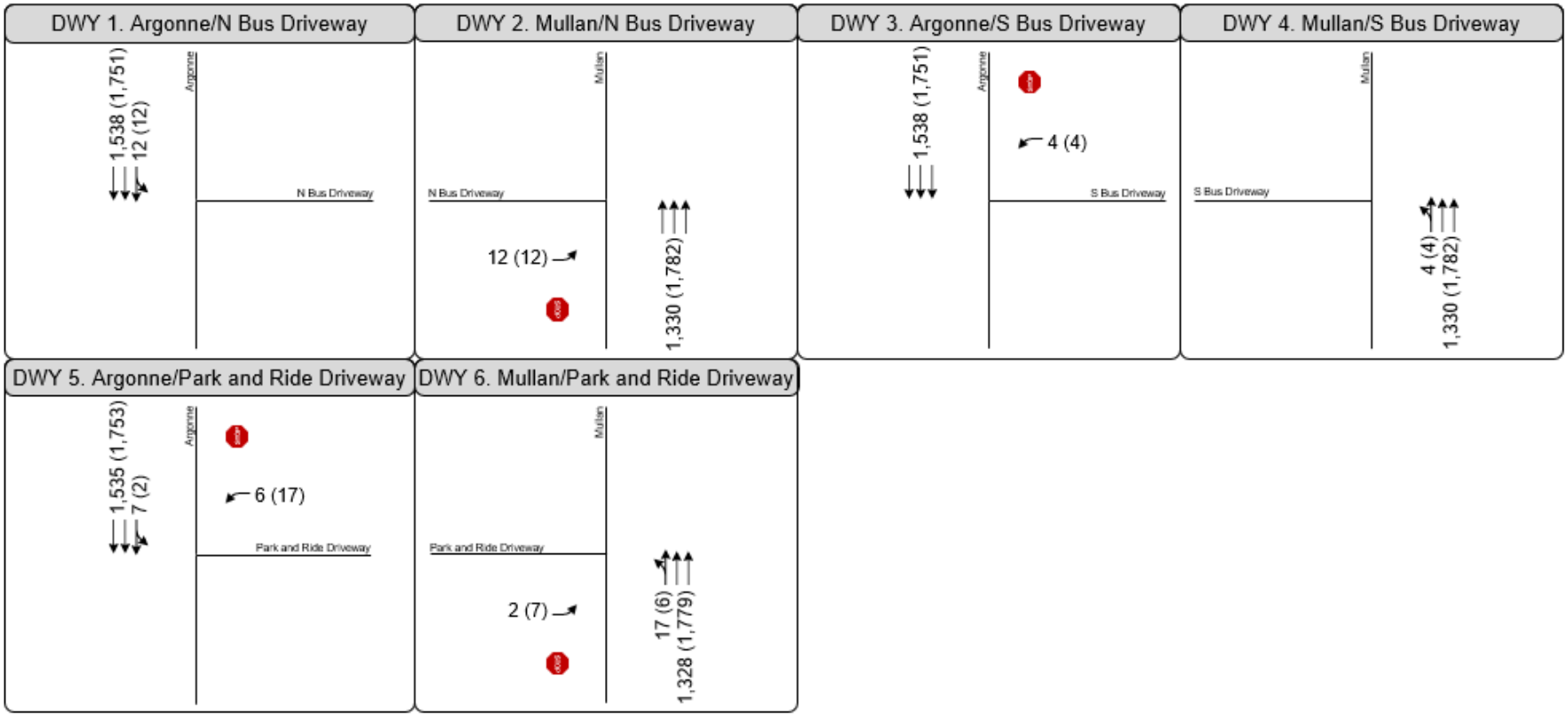
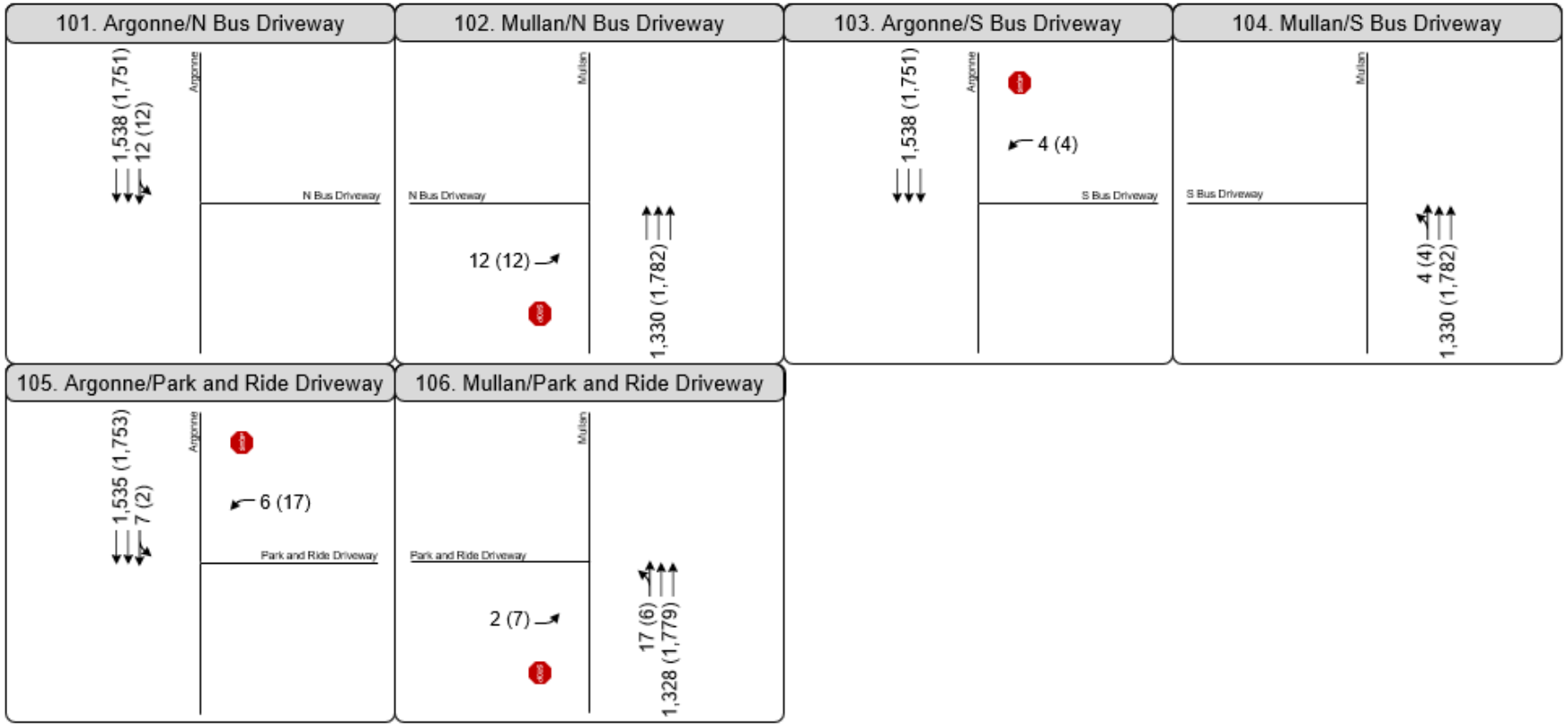


Table 17. Horizon (Year 2050) Project Driveway Operations Analysis – LOS, Delay, and 95th Percentile Queuing Results

ID #	Intersection Name	Control	Scenario	LOS	Delay	Queue (ft)
7	N Mullan Road & I-90 EB on-ramp	Signal	AM	B	10.6	250
			PM	B	16.7	400#
DWY 2	N Mullan Road / N Bus Driveway	Two-Way Stop	AM	B	12.4	25
			PM	B	14.3	25
DWY 3	N Argonne Road / S Bus Driveway	Two-Way Stop	AM	B	13.1	0
			PM	B	14.0	0
DWY5	N Argonne Road / Park and Ride Driveway	Two-Way Stop	AM	B	13.2	0
			PM	B	14.4	25
DWY6	N Mullan Road / Park and Ride Driveway	Two-Way Stop	AM	B	12.6	0
			PM	B	14.3	25
Notes	Delay, LOS, and queuing results reported for the worst approach using HCM 6th edition for all study driveways. HCM 2000 was used for intersection 7. Estimated 95th Percentile Queue (in vehicles) converted to feet using 25 feet per vehicle. Queue estimates were rounded up to whole number. # Denotes where 95th percentile volume exceed capacity, queue may be longer					

Figure 16. Geometric Configurations and Horizon (Year 2050) + Build Driveway AM (PM) Peak Hour Traffic Volumes



Signal Warrant Analysis

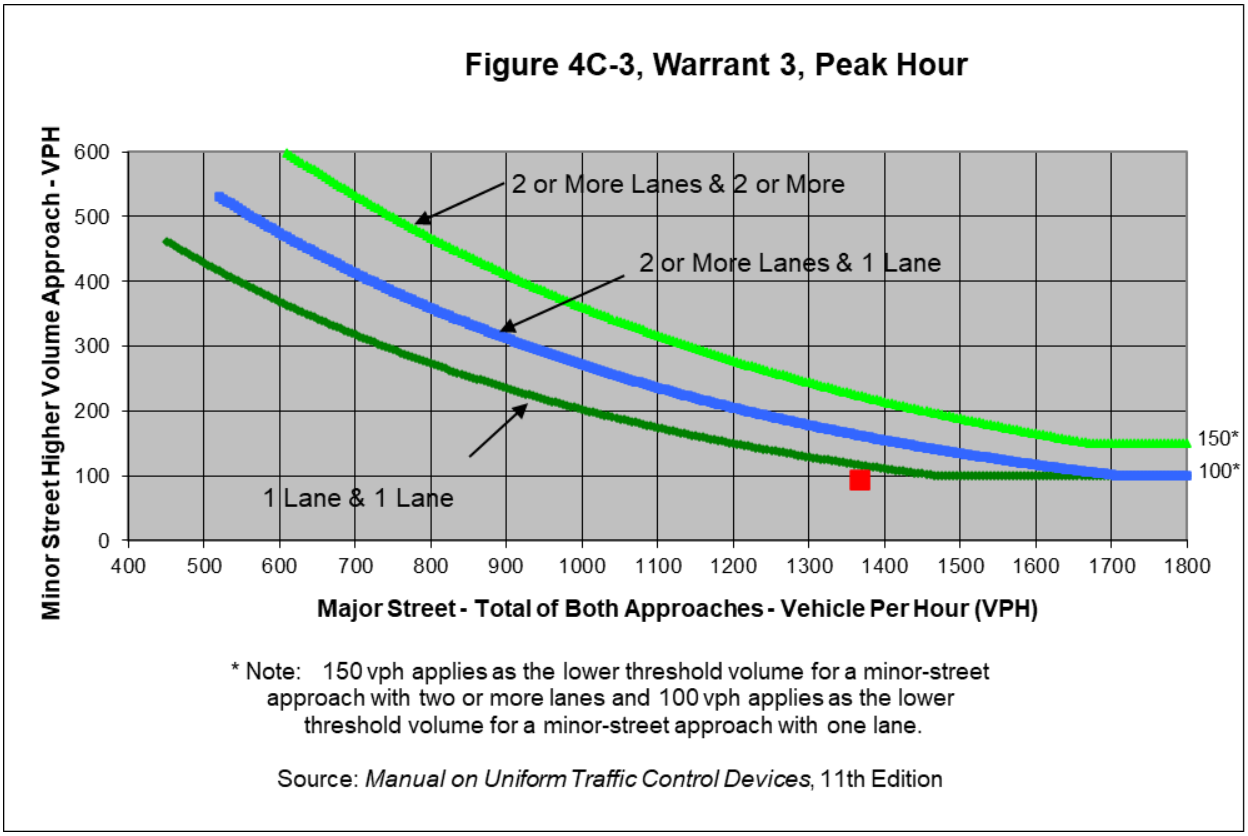
Per city of Spokane Valley, an unsignalized intersection operating at a LOS F is acceptable if the intersection does not meet peak hour traffic warrants. As shown in **Table 14**, under Design (Year 2028) + Build scenario, the intersection of N Mullan Road / E Sinto Avenue is projected to operate at LOS F during PM peak hour. As shown in **Table 15**, under the Horizon (Year 2050) + Build scenario, intersections of N Argonne Road / E Sinto Avenue and N Mullan Road / E Sinto Avenue are projected to operate at LOS F in the PM peak hour.

Consistent with the City requirements, a peak hour traffic signal warrant analysis was performed for the intersection of N Mullan Road / E Sinto Avenue under Design (Year 2028) + Build scenario and for both intersections of N Argonne Road / E Sinto Avenue and N Mullan Road / E Sinto Avenue under the Horizon (Year 2050) + Build scenario. The analysis was conducted according to guidance provided in Section 4C.04 – "Warrant 3, Peak Hour" provided in the Manual on Uniform Traffic Control Devices (MUTCD), 11th Edition, 2023.

Figure 17 shows Peak Hour Warrant 4C-3 graph for the intersection of N Mullan Road / E Sinto Avenue under Design (Year 2028) + Build scenario below. **Figure 18** shows Warrant 4C-3 graph for the intersection of N Argonne Road / E Sinto Avenue under the Horizon (Year 2050) + Build scenario. **Figure 19** shows Warrant 4C-3 graph for the intersection of N Mullan Road / E Sinto Avenue under the Horizon (Year 2050) + Build scenario.

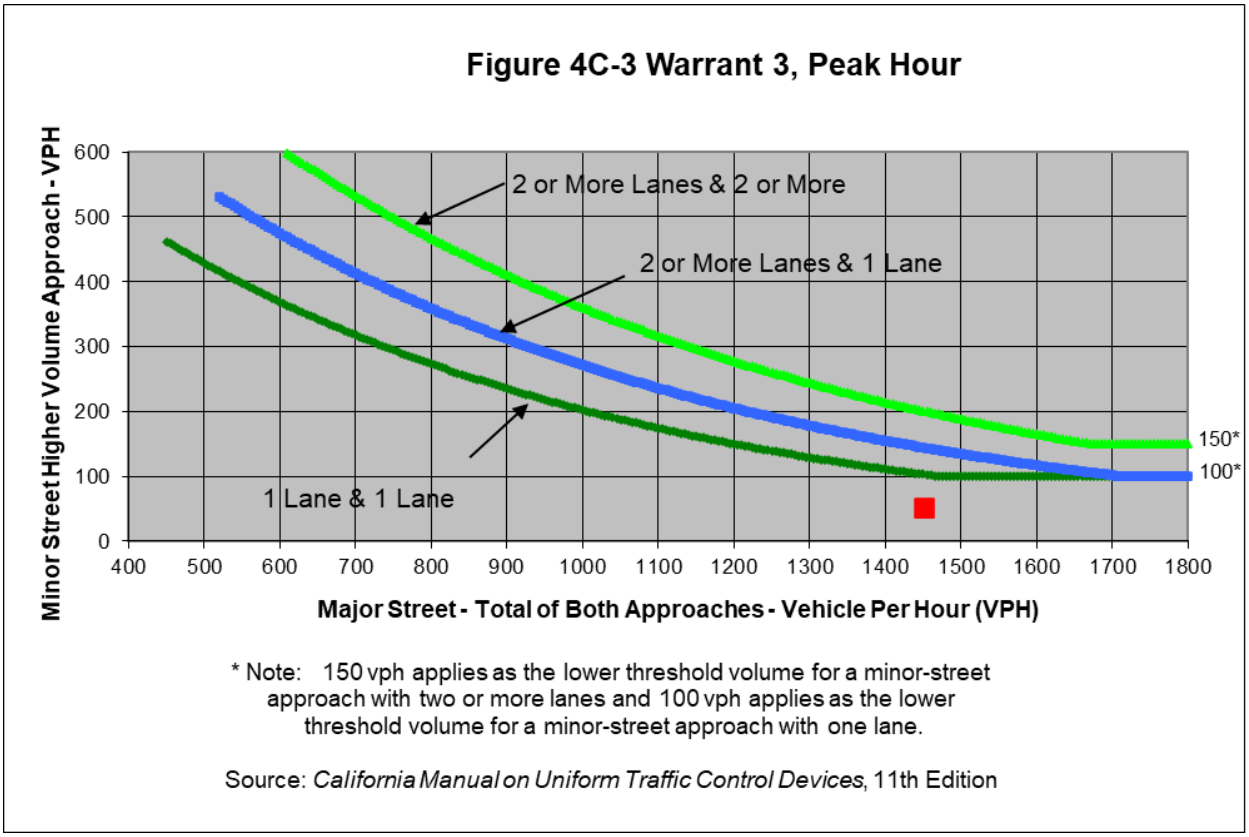
As shown in **Figure 17 -Figure 19**, the two unsignalized intersections of N Argonne Road / E Sinto Avenue and N Mullan Road / E Sinto Avenue do not meet the peak hour signal warrant analysis under analyzed scenarios. Therefore, it is determined that these two intersections will operate under acceptable standards according to City of Spokane Valley standards.

Figure 17. Signal Warrant 4C–3 – N Mullan Road and E Sinto Avenue, Design (Year 2028) + Build Scenario PM Peak Hour



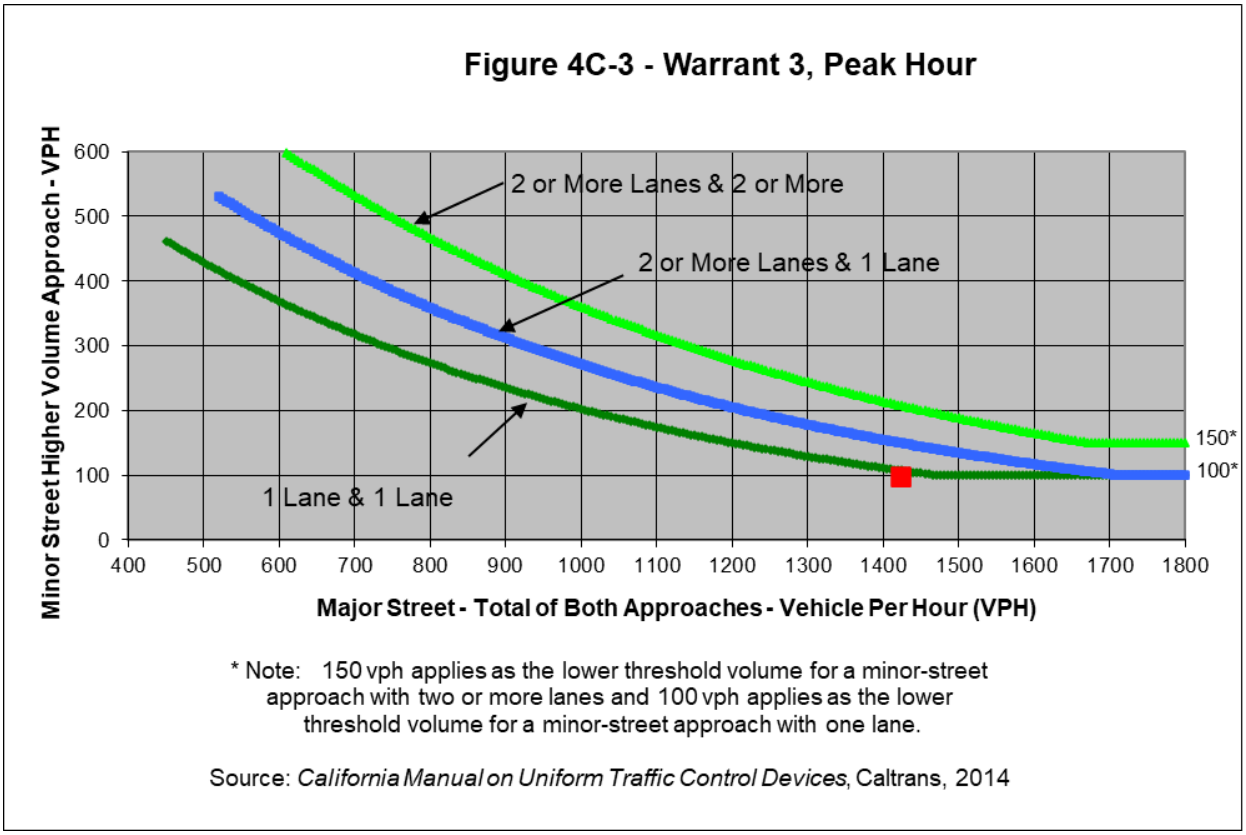
	Major Street	Minor Street	Warrant Met
	N Mullan Road	E Sinto Avenue	
Number of Approach Lanes	**3**	**1**	**NO**
Traffic Volume (VPH) *	**1,366**	**94**	
* Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			

Figure 18. Signal Warrant 4C–3 Graph – N Argonne Road and E Sinto Avenue, Horizon (Year 2050) + Build Scenario PM Peak Hour



	Major Street	Minor Street	Warrant Met
	Argonne Road	E Sinto Avenue	
Number of Approach Lanes	**3**	**1**	**NO**
Traffic Volume (VPH) *	**1,451**	**52**	
* Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			

Figure 19. Signal Warrant 4C–3 Graph – N Mullan Road and E Sinto Avenue, Horizon (Year 2050) + Build Scenario PM Peak Hour



	Major Street	Minor Street	Warrant Met
	Argonne Road	E Sinto Avenue	
Number of Approach Lanes	**3**	**1**	**NO**
Traffic Volume (VPH) *	**1,451**	**52**	
* Note: Traffic Volume for Major Street is Total Volume of Both Approches. Traffic Volume for Minor Street is the Volume of High Volume Approach.			

Chapter 5: Potential Impacts and Conclusion

This section describes potential transportation impacts of the proposed project under Design year (2028), and Future year (2050) years conditions. Impacts can be direct or indirectly caused by the project and are evaluated when considering the new transportation demand layered on top of current and future foreseeable background traffic conditions. The direct impacts caused by the proposed project were evaluated by comparing the performance of the transportation system with and without the project (the Build and No-Build analysis).

The proposed project is estimated to generate a total of 878 daily PCE trips, out of which 86 trips will occur during the morning peak hour, and 86 trips will occur during the evening peak hour.

After the construction of this project, there will be greater availability of transit service. In addition to the two new transit lines routed to this transit center, there will also be the addition of a high-performance transit line with an estimated 15-minute frequency. While the Argonne Station Park and Ride has the capacity to add more routes than analyzed for this report in the future, any routes aside from those described in **Chapter 2** are outside of the scope analyzed in this report. In the case of additional routes, a new traffic analysis will be needed to evaluate the impacts of additional transit routes at the location.

Findings of Intersection Operations Analysis under "Build" Scenarios

As shown in **Table 16** and **Table 17**, with the addition of the project trips, there is minimal change in delay when compared to "no-build" scenarios at all study intersections during both AM and PM peak hours.

In summary, the following intersections will not meet City of Spokane Valley or WSDOT intersection LOS standard:

Existing Conditions

- Int #1 - N Argonne Road / E Trent Avenue – PM peak hour
- Int #2 - N Argonne Road / E Montgomery Road – AM peak hour.

Design (Year 2028) + No-Build Conditions

- Int #1 - N Argonne Road / E Trent Avenue – PM peak hour
- Int #2 - N Argonne Road / E Montgomery Road – AM peak hour.

Horizon (Year 2050) + No-Build Conditions

- Int #1 - N Argonne Road / E Trent Avenue – Both AM and PM peak hours
- Int #2 - N Argonne Road / E Montgomery Road – AM peak hour.
- Int #5 - N Mullan Road & I-90 WB off-ramp (WSDOT Standard) – AM peak hour.

Design (Year 2028) + Build Conditions

- Int #1 - N Argonne Road / E Trent Avenue – PM peak hour
- Int #2 - N Argonne Road / E Montgomery Road – AM peak hour.

The North Spokane Corridor (NSC), which is currently under construction, is anticipated to be completed by 2030. This project aims to enhance highway connectivity to I-90 and add highway vehicular capacity parallel to N Argonne Road and North Mullan Road. While the full benefits of this additional highway capacity and connectivity will take a few months to be realized as motorists adjust their travel routes, it is expected to significantly improve regional traffic flow. Until the project is

operational, the study intersections are likely to experience a lower Level of Service (LOS) than indicated in **Table 14**.

Horizon (Year 2050) + Build Conditions

- Int #1 – N Argonne Road / E Trent Avenue – Both AM and PM peak hours
- Int #2 – N Argonne Road / E Montgomery Road – AM peak hour
- Int #5 – N Mullan Road & I-90 WB off-ramp (WSDOT Standard) – AM peak hour.

All signalized study intersections estimated to operate at unacceptable LOS under the "Build" scenarios were also found to operate at the same LOS under "No-Build" conditions. The construction of the project will not result in change to the LOS of the intersection from "No-Build" conditions.

Design Considerations for Proposed Queue-Jump Lane on I-90 Eastbound On-Ramp

The project proposes the implementation of a queue-jump lane for Route 7, a High Performance Transit (HPT) service operating along I-90 within the study area. This route runs daily from 5:00 AM to midnight, with service every 15 minutes. Eastbound buses will stop on the north side of the project area before continuing directly onto the I-90 eastbound on-ramp via the proposed queue-jump lane.

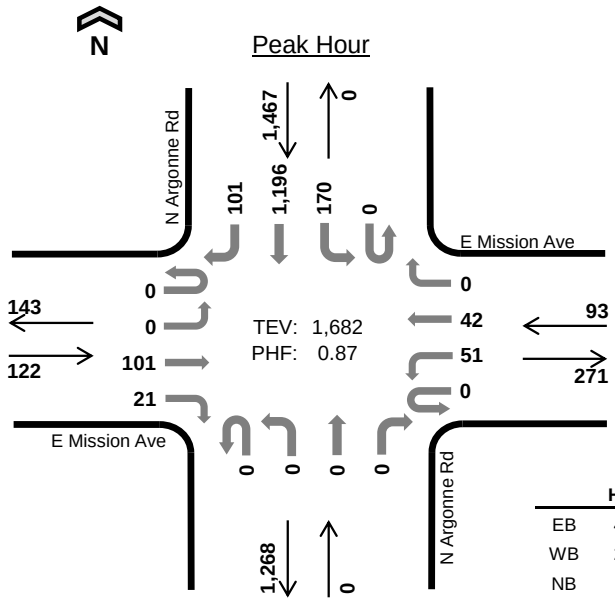
To enhance transit efficiency, it is recommended that this bus movement be prioritized over general-purpose eastbound traffic through the use of a Transit Signal Priority (TSP) phase at the intersection of N Mullan Road and I-90 Eastbound On-Ramp. This would allow buses to get a head start ahead of other traffic. The TSP phase is expected to be activated approximately four times per hour.

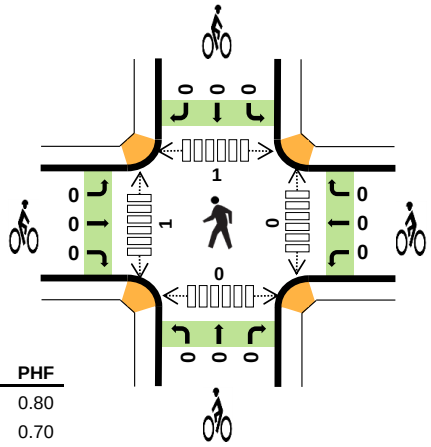
Additionally, it is advised that the design of the queue-jump lane on the I-90 eastbound on-ramp includes provisions requiring general-purpose traffic to yield to buses before merging onto the I-90 mainline. This will minimize delays and maintain the reliability of the HPT service.

Appendix A. Traffic Counts

N Argonne Rd
E Mission Ave

Date: 09/18/2024
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	4.1%	0.80
WB	2.2%	0.70
NB	-	-
SB	3.5%	0.89
TOTAL	3.5%	0.87

Three-Hour Count Summaries

Interval Start		E Mission Ave Eastbound				E Mission Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:30 AM		0	0	18	6	0	10	4	0	0	0	0	0	0	31	287	23	379	0
7:45 AM		0	0	28	10	0	12	21	0	0	0	0	0	0	56	314	40	481	0
8:00 AM		0	0	29	4	0	15	9	0	0	0	0	0	0	46	337	25	465	0
8:15 AM		0	0	26	1	0	14	8	0	0	0	0	0	0	37	258	13	357	1,682
Peak Hour	All	0	0	101	21	0	51	42	0	0	0	0	0	0	170	1,196	101	1,682	0
	HV	0	0	5	0	0	1	1	0	0	0	0	0	0	4	38	10	59	0
	HV%	-	-	5%	0%	-	2%	2%	-	-	-	-	-	-	2%	3%	10%	4%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:30 AM	0	0	0	7	*7*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	1	2	0	15	*18*	0	0	0	0	*0*	0	1	1	0	*2*
8:00 AM	3	0	0	15	*18*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	1	0	0	15	*16*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	5	2	0	52	*59*	0	0	0	0	*0*	0	1	1	0	*2*

Three-Hour Count Summaries

Interval Start	E Mission Ave Eastbound				E Mission Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	10	3	0	5	0	0	0	0	0	0	0	12	66	3	99	0
6:15 AM	0	0	23	0	0	3	3	0	0	0	0	0	0	17	101	7	154	0
6:30 AM	0	0	16	3	0	1	5	0	0	0	0	0	0	25	152	17	219	0
6:45 AM	0	0	22	3	0	3	9	0	0	0	0	0	0	22	209	32	300	772
7:00 AM	0	0	28	1	0	7	2	0	0	0	0	0	0	33	198	12	281	954
7:15 AM	0	0	18	6	0	4	5	0	0	0	0	0	0	37	213	14	297	1,097
7:30 AM	**0**	**0**	**18**	**6**	**0**	**10**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**31**	**287**	**23**	**379**	1,257
7:45 AM	**0**	**0**	**28**	**10**	**0**	**12**	**21**	**0**	**0**	**0**	**0**	**0**	**0**	**56**	**314**	**40**	**481**	1,438
8:00 AM	**0**	**0**	**29**	**4**	**0**	**15**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**46**	**337**	**25**	**465**	1,622
8:15 AM	**0**	**0**	**26**	**1**	**0**	**14**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**37**	**258**	**13**	**357**	**1,682**
8:30 AM	0	0	23	4	0	12	5	0	0	0	0	0	0	43	256	10	353	1,656
8:45 AM	0	0	27	4	0	11	13	0	0	0	0	0	0	52	276	18	401	1,576
Count Total	0	0	268	45	0	97	84	0	0	0	0	0	0	411	2,667	214	3,786	0
Peak Hour All	**0**	**0**	**101**	**21**	**0**	**51**	**42**	**0**	**0**	**0**	**0**	**0**	**0**	**170**	**1,196**	**101**	**1,682**	**0**
Peak Hour HV	**0**	**0**	**5**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**38**	**10**	**59**	**0**
Peak Hour HV%	**-**	**-**	**5%**	**0%**	**-**	**2%**	**2%**	**-**	**-**	**-**	**-**	**-**	**-**	**2%**	**3%**	**10%**	**4%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	0	1	0	5	*6*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	0	1	0	4	*5*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	4	0	0	12	*16*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	4	0	0	11	*15*	0	0	0	0	*0*	0	0	0	1	*1*
7:00 AM	2	1	0	9	*12*	0	0	0	0	*0*	0	2	0	0	*2*
7:15 AM	1	0	0	8	*9*	0	0	0	0	*0*	0	1	1	1	*3*
7:30 AM	**0**	**0**	**0**	**7**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**1**	**2**	**0**	**15**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	*2*
8:00 AM	**3**	**0**	**0**	**15**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**1**	**0**	**0**	**15**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	3	2	0	7	*12*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	1	1	0	7	*9*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	20	8	0	115	*143*	0	0	0	0	*0*	0	4	2	2	*8*
Peak Hour	**5**	**2**	**0**	**52**	***59***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	***2***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Mission Ave				E Mission Ave				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	2	3	0	6	0
6:15 AM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	4	0	5	0
6:30 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	1	11	0	16	0
6:45 AM	0	0	4	0	0	0	0	0	0	0	0	0	0	1	10	0	15	42
7:00 AM	0	0	2	0	0	1	0	0	0	0	0	0	0	0	8	1	12	48
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	6	1	9	52
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**1**	**7**	43
7:45 AM	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**10**	**4**	**18**	46
8:00 AM	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**5**	**18**	52
8:15 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**13**	**0**	**16**	**59**
8:30 AM	0	0	2	1	0	2	0	0	0	0	0	0	0	2	5	0	12	64
8:45 AM	0	0	1	0	0	1	0	0	0	0	0	0	0	2	5	0	9	55
Count Total	0	0	19	1	0	6	2	0	0	0	0	0	0	13	90	12	143	0
Peak Hour	**0**	**0**	**5**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**38**	**10**	**59**	**0**

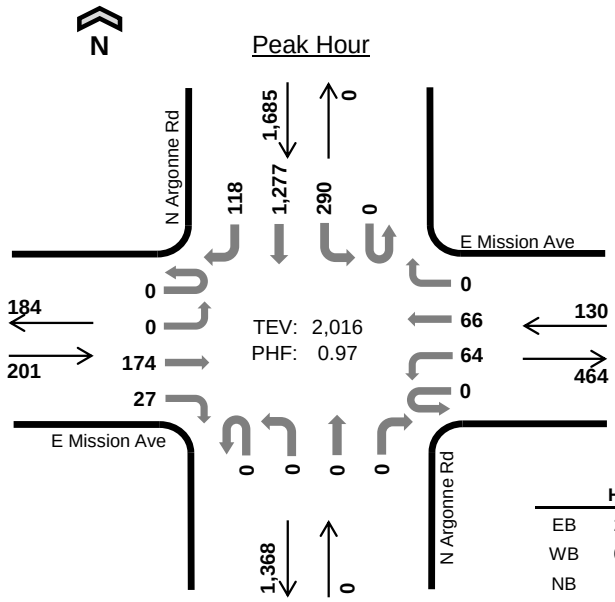
Three-Hour Count Summaries - Bikes

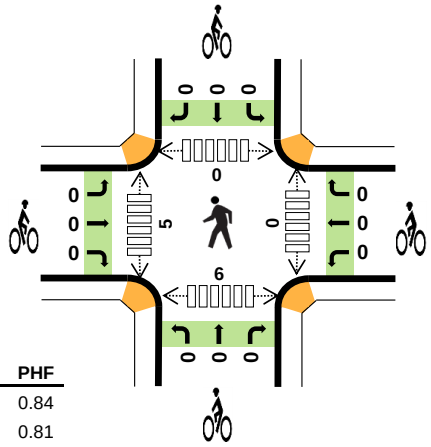
Interval Start	E Mission Ave			E Mission Ave			N Argonne Rd			N Argonne Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Argonne Rd
E Mission Ave

Date: 09/18/2024
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	2.0%	0.84
WB	0.8%	0.81
NB	-	-
SB	2.1%	0.97
TOTAL	2.0%	0.97

Three-Hour Count Summaries

Interval Start		E Mission Ave Eastbound				E Mission Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	0	37	6	0	12	17	0	0	0	0	0	0	74	327	31	504	0
4:30 PM		0	0	46	8	0	20	20	0	0	0	0	0	0	77	301	26	498	0
4:45 PM		0	0	39	5	0	21	13	0	0	0	0	0	0	71	314	30	493	0
5:00 PM		0	0	52	8	0	11	16	0	0	0	0	0	0	68	335	31	521	2,016
Peak Hour	All	0	0	174	27	0	64	66	0	0	0	0	0	0	290	1,277	118	2,016	0
	HV	0	0	4	0	0	0	1	0	0	0	0	0	0	10	24	2	41	0
	HV%	-	-	2%	0%	-	0%	2%	-	-	-	-	-	-	3%	2%	2%	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:15 PM	0	0	0	12	*12*	0	0	0	0	*0*	0	2	0	3	*5*
4:30 PM	3	1	0	7	*11*	0	0	0	0	*0*	0	0	0	3	*3*
4:45 PM	1	0	0	8	*9*	0	0	0	0	*0*	0	1	0	0	*1*
5:00 PM	0	0	0	9	*9*	0	0	0	0	*0*	0	2	0	0	*2*
Peak Hour	4	1	0	36	*41*	0	0	0	0	*0*	0	5	0	6	*11*

Three-Hour Count Summaries

Interval Start	E Mission Ave Eastbound				E Mission Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	41	2	0	16	8	0	0	0	0	0	0	55	326	27	475	0
3:15 PM	0	0	33	4	0	19	13	0	0	0	0	0	0	65	329	28	491	0
3:30 PM	0	0	39	1	0	23	15	0	0	0	0	0	0	77	297	29	481	0
3:45 PM	0	0	37	2	0	20	18	0	0	0	0	0	0	61	246	19	403	1,850
4:00 PM	0	0	32	6	0	19	8	0	0	0	0	0	0	63	230	18	376	1,751
4:15 PM	**0**	**0**	**37**	**6**	**0**	**12**	**17**	**0**	**0**	**0**	**0**	**0**	**0**	**74**	**327**	**31**	**504**	1,764
4:30 PM	**0**	**0**	**46**	**8**	**0**	**20**	**20**	**0**	**0**	**0**	**0**	**0**	**0**	**77**	**301**	**26**	**498**	1,781
4:45 PM	**0**	**0**	**39**	**5**	**0**	**21**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**71**	**314**	**30**	**493**	1,871
5:00 PM	**0**	**0**	**52**	**8**	**0**	**11**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**68**	**335**	**31**	**521**	**2,016**
5:15 PM	0	0	34	6	0	24	11	0	0	0	0	0	0	84	294	33	486	1,998
5:30 PM	0	0	48	3	0	12	8	0	0	0	0	0	0	81	288	36	476	1,976
5:45 PM	0	0	52	7	0	16	12	0	0	0	0	0	0	79	271	32	469	1,952
Count Total	0	0	490	58	0	213	159	0	0	0	0	0	0	855	3,558	340	5,673	0
Peak Hour All	**0**	**0**	**174**	**27**	**0**	**64**	**66**	**0**	**0**	**0**	**0**	**0**	**0**	**290**	**1,277**	**118**	**2,016**	**0**
Peak Hour HV	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**24**	**2**	**41**	**0**
Peak Hour HV%	**-**	**-**	**2%**	**0%**	**-**	**0%**	**2%**	**-**	**-**	**-**	**-**	**-**	**-**	**3%**	**2%**	**2%**	**2%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	1	0	0	12	*13*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 PM	1	0	0	12	*13*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	0	1	0	10	*11*	0	0	0	0	*0*	0	0	0	1	*1*
3:45 PM	2	1	0	7	*10*	0	0	0	0	*0*	0	1	0	0	*1*
4:00 PM	1	1	0	7	*9*	0	0	0	0	*0*	0	1	0	2	*3*
4:15 PM	**0**	**0**	**0**	**12**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**3**	*5*
4:30 PM	**3**	**1**	**0**	**7**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**3**	*3*
4:45 PM	**1**	**0**	**0**	**8**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
5:00 PM	**0**	**0**	**0**	**9**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	***2***
5:15 PM	1	1	0	7	*9*	0	0	0	0	*0*	0	1	1	0	*2*
5:30 PM	0	0	0	7	*7*	0	0	0	0	*0*	0	1	1	0	*2*
5:45 PM	1	0	0	9	*10*	0	0	0	0	*0*	0	0	2	0	*2*
Count Total	11	5	0	107	*123*	0	0	0	0	*0*	0	9	4	9	*22*
Peak Hour	**4**	**1**	**0**	**36**	***41***	**0**	**0**	**0**	**0**	***0***	**0**	**5**	**0**	**6**	***11***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Mission Ave				E Mission Ave				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	2	10	0	13	0
3:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	2	9	1	13	0
3:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	10	0	11	0
3:45 PM	0	0	2	0	0	1	0	0	0	0	0	0	0	2	5	0	10	47
4:00 PM	0	0	0	1	0	0	1	0	0	0	0	0	0	1	6	0	9	43
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**8**	**0**	**12**	42
4:30 PM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**4**	**0**	**11**	42
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**7**	**0**	**9**	41
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**5**	**2**	**9**	**41**
5:15 PM	0	0	1	0	0	1	0	0	0	0	0	0	0	3	4	0	9	38
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	1	7	34
5:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	1	8	0	10	35
Count Total	0	0	10	1	0	2	3	0	0	0	0	0	0	22	81	4	123	0
Peak Hour	**0**	**0**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**24**	**2**	**41**	**0**

Three-Hour Count Summaries - Bikes

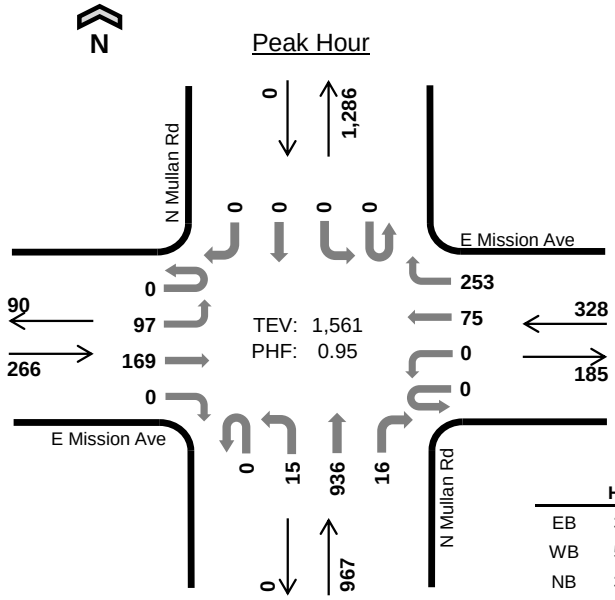
Interval Start	E Mission Ave			E Mission Ave			N Argonne Rd			N Argonne Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

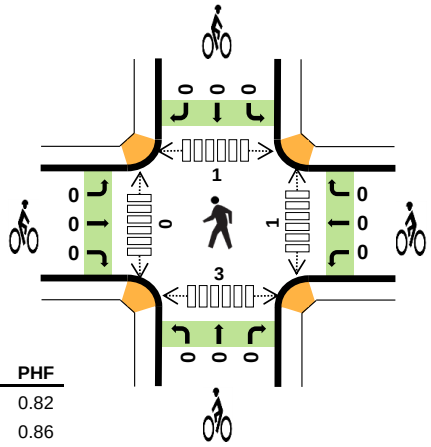
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

N Mullan Rd
E Mission Ave

Date: 09/18/2024
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM

Peak Hour





	HV %:	PHF
EB	3.0%	0.82
WB	5.5%	0.86
NB	3.9%	0.97
SB	-	-
TOTAL	4.1%	0.95

Three-Hour Count Summaries

Interval Start		E Mission Ave Eastbound				E Mission Ave Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	21	38	0	0	0	8	70	0	3	234	3	0	0	0	0	377	0
7:30 AM		0	22	26	0	0	0	20	75	0	4	239	5	0	0	0	0	391	0
7:45 AM		0	24	57	0	0	0	24	56	0	6	238	4	0	0	0	0	409	0
8:00 AM		0	30	48	0	0	0	23	52	0	2	225	4	0	0	0	0	384	1,561
Peak Hour	All	0	97	169	0	0	0	75	253	0	15	936	16	0	0	0	0	1,561	0
	HV	0	3	5	0	0	0	2	16	0	0	37	1	0	0	0	0	64	0
	HV%	-	3%	3%	-	-	-	3%	6%	-	0%	4%	6%	-	-	-	-	4%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:15 AM	2	7	7	0	*16*	0	0	0	0	*0*	1	0	0	3	*4*
7:30 AM	1	4	13	0	*18*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	3	7	6	0	*16*	0	0	0	0	*0*	0	0	1	0	*1*
8:00 AM	2	0	12	0	*14*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	8	18	38	0	*64*	0	0	0	0	*0*	1	0	1	3	*5*

Three-Hour Count Summaries

Interval Start	E Mission Ave Eastbound				E Mission Ave Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	13	10	0	0	0	3	23	0	4	109	0	0	0	0	0	162	0
6:15 AM	0	27	17	0	0	0	3	55	0	2	105	3	0	0	0	0	212	0
6:30 AM	0	18	23	0	0	0	7	54	0	3	175	2	0	0	0	0	282	0
6:45 AM	0	20	24	0	0	0	6	44	0	6	180	1	0	0	0	0	281	937
7:00 AM	0	16	37	0	0	0	7	36	0	2	212	2	0	0	0	0	312	1,087
7:15 AM	**0**	**21**	**38**	**0**	**0**	**0**	**8**	**70**	**0**	**3**	**234**	**3**	**0**	**0**	**0**	**0**	**377**	1,252
7:30 AM	**0**	**22**	**26**	**0**	**0**	**0**	**20**	**75**	**0**	**4**	**239**	**5**	**0**	**0**	**0**	**0**	**391**	1,361
7:45 AM	**0**	**24**	**57**	**0**	**0**	**0**	**24**	**56**	**0**	**6**	**238**	**4**	**0**	**0**	**0**	**0**	**409**	1,489
8:00 AM	**0**	**30**	**48**	**0**	**0**	**0**	**23**	**52**	**0**	**2**	**225**	**4**	**0**	**0**	**0**	**0**	**384**	**1,561**
8:15 AM	0	27	37	0	0	0	18	48	0	7	209	12	0	0	0	0	358	1,542
8:30 AM	0	31	51	0	0	0	14	60	0	6	186	11	0	0	0	0	359	1,510
8:45 AM	0	29	55	0	0	0	16	47	0	10	223	6	0	0	0	0	386	1,487
Count Total	0	278	423	0	0	0	149	620	0	55	2,335	53	0	0	0	0	3,913	0
Peak Hour All	**0**	**97**	**169**	**0**	**0**	**0**	**75**	**253**	**0**	**15**	**936**	**16**	**0**	**0**	**0**	**0**	**1,561**	**0**
Peak Hour HV	**0**	**3**	**5**	**0**	**0**	**0**	**2**	**16**	**0**	**0**	**37**	**1**	**0**	**0**	**0**	**0**	**64**	**0**
Peak Hour HV%	**-**	**3%**	**3%**	**-**	**-**	**-**	**3%**	**6%**	**-**	**0%**	**4%**	**6%**	**-**	**-**	**-**	**-**	**4%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	1	0	5	0	*6*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	3	3	5	0	*11*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	6	0	4	0	*10*	0	0	0	0	*0*	1	0	0	0	*1*
6:45 AM	5	2	10	0	*17*	0	0	1	0	*1*	1	0	0	0	*1*
7:00 AM	3	0	9	0	*12*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**2**	**7**	**7**	**0**	***16***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**3**	*4*
7:30 AM	**1**	**4**	**13**	**0**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**3**	**7**	**6**	**0**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
8:00 AM	**2**	**0**	**12**	**0**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	4	2	5	0	*11*	0	0	0	0	*0*	0	0	0	1	*1*
8:30 AM	5	2	10	0	*17*	0	0	0	0	*0*	0	0	0	1	*1*
8:45 AM	3	2	14	0	*19*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	38	29	100	0	*167*	0	0	1	0	*1*	3	0	1	5	*9*
Peak Hour	**8**	**18**	**38**	**0**	***64***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**3**	***5***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Mission Ave				E Mission Ave				N Mullan Rd				N Mullan Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	1	0	0	0	0	0	0	1	4	0	0	0	0	0	6	0
6:15 AM	0	2	1	0	0	0	1	2	0	0	5	0	0	0	0	0	11	0
6:30 AM	0	5	1	0	0	0	0	0	0	0	3	1	0	0	0	0	10	0
6:45 AM	0	4	1	0	0	0	0	2	0	0	10	0	0	0	0	0	17	44
7:00 AM	0	0	3	0	0	0	0	0	0	1	8	0	0	0	0	0	12	50
7:15 AM	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**16**	55
7:30 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**18**	63
7:45 AM	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**5**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**16**	62
8:00 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**1**	**0**	**0**	**0**	**0**	**14**	**64**
8:15 AM	0	1	3	0	0	0	0	2	0	0	5	0	0	0	0	0	11	59
8:30 AM	0	1	4	0	0	0	1	1	0	0	9	1	0	0	0	0	17	58
8:45 AM	0	1	2	0	0	0	1	1	0	0	14	0	0	0	0	0	19	61
Count Total	0	17	21	0	0	0	5	24	0	2	95	3	0	0	0	0	167	0
Peak Hour	**0**	**3**	**5**	**0**	**0**	**0**	**2**	**16**	**0**	**0**	**37**	**1**	**0**	**0**	**0**	**0**	**64**	**0**

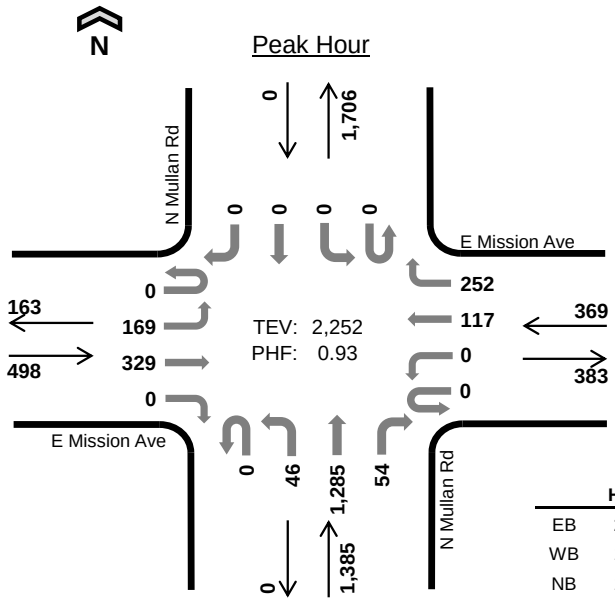
Three-Hour Count Summaries - Bikes

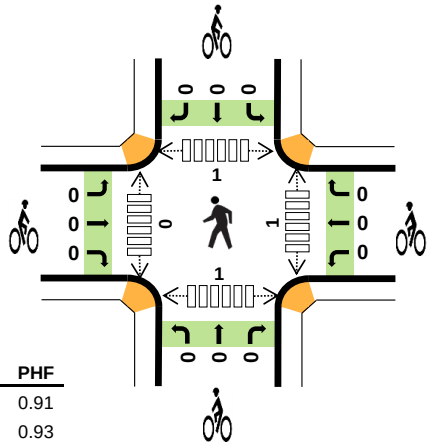
Interval Start	E Mission Ave			E Mission Ave			N Mullan Rd			N Mullan Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Mullan Rd
E Mission Ave

Date: 09/18/2024
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	2.8%	0.91
WB	1.6%	0.93
NB	1.4%	0.90
SB	-	-
TOTAL	1.7%	0.93

Three-Hour Count Summaries

Interval Start		E Mission Ave Eastbound				E Mission Ave Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	53	84	0	0	0	30	60	0	20	302	12	0	0	0	0	561	0
4:45 PM		0	39	76	0	0	0	32	67	0	14	304	15	0	0	0	0	547	0
5:00 PM		0	43	80	0	0	0	23	75	0	6	362	15	0	0	0	0	604	0
5:15 PM		0	34	89	0	0	0	32	50	0	6	317	12	0	0	0	0	540	2,252
Peak Hour	All	0	169	329	0	0	0	117	252	0	46	1,285	54	0	0	0	0	2,252	0
	HV	0	5	9	0	0	0	2	4	0	1	18	0	0	0	0	0	39	0
	HV%	-	3%	3%	-	-	-	2%	2%	-	2%	1%	0%	-	-	-	-	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:30 PM	7	1	6	0	*14*	0	0	0	0	*0*	0	0	0	1	*1*
4:45 PM	2	2	7	0	*11*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	2	0	4	0	*6*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	3	3	2	0	*8*	0	0	0	0	*0*	1	0	1	0	*2*
Peak Hour	14	6	19	0	*39*	0	0	0	0	*0*	1	0	1	1	*3*

Three-Hour Count Summaries

Interval Start	E Mission Ave Eastbound				E Mission Ave Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	42	64	0	0	0	20	54	0	7	296	15	0	0	0	0	498	0
3:15 PM	0	30	74	0	0	0	24	67	0	5	311	19	0	0	0	0	530	0
3:30 PM	0	33	83	0	0	0	27	54	0	13	341	11	0	0	0	0	562	0
3:45 PM	0	37	61	0	0	0	30	49	0	8	300	16	0	0	0	0	501	2,091
4:00 PM	0	31	67	0	0	0	20	51	0	7	317	12	0	0	0	0	505	2,098
4:15 PM	0	30	79	0	0	0	21	52	0	13	287	23	0	0	0	0	505	2,073
4:30 PM	**0**	**53**	**84**	**0**	**0**	**0**	**30**	**60**	**0**	**20**	**302**	**12**	**0**	**0**	**0**	**0**	**561**	2,072
4:45 PM	**0**	**39**	**76**	**0**	**0**	**0**	**32**	**67**	**0**	**14**	**304**	**15**	**0**	**0**	**0**	**0**	**547**	2,118
5:00 PM	**0**	**43**	**80**	**0**	**0**	**0**	**23**	**75**	**0**	**6**	**362**	**15**	**0**	**0**	**0**	**0**	**604**	2,217
5:15 PM	**0**	**34**	**89**	**0**	**0**	**0**	**32**	**50**	**0**	**6**	**317**	**12**	**0**	**0**	**0**	**0**	**540**	**2,252**
5:30 PM	0	34	85	0	0	0	16	53	0	12	286	15	0	0	0	0	501	2,192
5:45 PM	0	51	83	0	0	0	15	47	0	12	249	16	0	0	0	0	473	2,118
Count Total	0	457	925	0	0	0	290	679	0	123	3,672	181	0	0	0	0	6,327	0
Peak Hour All	**0**	**169**	**329**	**0**	**0**	**0**	**117**	**252**	**0**	**46**	**1,285**	**54**	**0**	**0**	**0**	**0**	**2,252**	**0**
Peak Hour HV	**0**	**5**	**9**	**0**	**0**	**0**	**2**	**4**	**0**	**1**	**18**	**0**	**0**	**0**	**0**	**0**	**39**	**0**
Peak Hour HV%	**-**	**3%**	**3%**	**-**	**-**	**-**	**2%**	**2%**	**-**	**2%**	**1%**	**0%**	**-**	**-**	**-**	**-**	**2%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	6	3	11	0	*20*	0	0	0	0	*0*	0	0	2	2	*4*
3:15 PM	2	2	5	0	*9*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	2	1	9	0	*12*	1	0	0	0	*1*	1	0	0	3	*4*
3:45 PM	5	2	12	0	*19*	0	0	0	0	*0*	0	1	0	0	*1*
4:00 PM	2	1	12	0	*15*	0	0	0	0	*0*	2	0	1	2	*5*
4:15 PM	4	1	4	0	*9*	0	0	0	0	*0*	1	0	1	2	*4*
4:30 PM	**7**	**1**	**6**	**0**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
4:45 PM	**2**	**2**	**7**	**0**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**2**	**0**	**4**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**3**	**3**	**2**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**0**	***2***
5:30 PM	1	0	5	0	*6*	0	0	0	0	*0*	1	0	1	0	*2*
5:45 PM	3	0	3	0	*6*	0	0	0	0	*0*	0	1	2	0	*3*
Count Total	39	16	80	0	*135*	1	0	0	0	*1*	6	2	8	10	*26*
Peak Hour	**14**	**6**	**19**	**0**	***39***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**1**	***3***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Mission Ave				E Mission Ave				N Mullan Rd				N Mullan Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	3	3	0	0	0	0	3	0	0	11	0	0	0	0	0	20	0
3:15 PM	0	0	2	0	0	0	0	2	0	0	5	0	0	0	0	0	9	0
3:30 PM	0	0	2	0	0	0	1	0	0	0	9	0	0	0	0	0	12	0
3:45 PM	0	3	2	0	0	0	1	1	0	0	11	1	0	0	0	0	19	60
4:00 PM	0	0	2	0	0	0	1	0	0	0	11	1	0	0	0	0	15	55
4:15 PM	0	0	4	0	0	0	0	1	0	0	4	0	0	0	0	0	9	55
4:30 PM	**0**	**3**	**4**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**5**	**0**	**0**	**0**	**0**	**0**	**14**	57
4:45 PM	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**11**	49
5:00 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**6**	40
5:15 PM	**0**	**1**	**2**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**8**	**39**
5:30 PM	0	0	1	0	0	0	0	0	0	0	5	0	0	0	0	0	6	31
5:45 PM	0	1	2	0	0	0	0	0	0	0	3	0	0	0	0	0	6	26
Count Total	0	12	27	0	0	0	5	11	0	1	77	2	0	0	0	0	135	0
Peak Hour	**0**	**5**	**9**	**0**	**0**	**0**	**2**	**4**	**0**	**1**	**18**	**0**	**0**	**0**	**0**	**0**	**39**	**0**

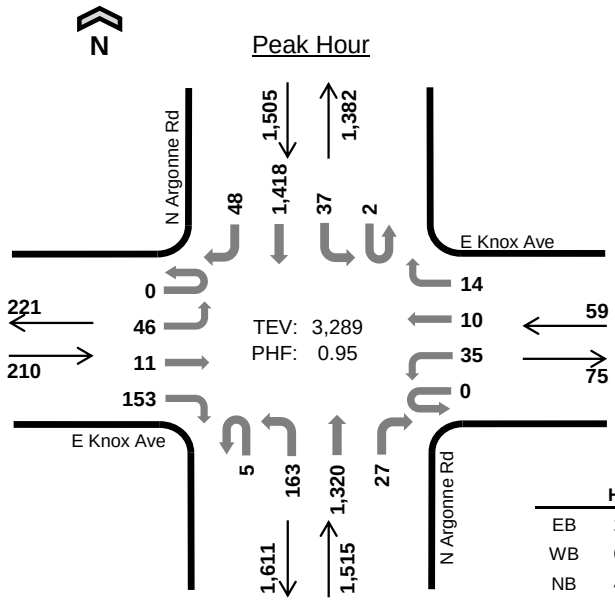
Three-Hour Count Summaries - Bikes

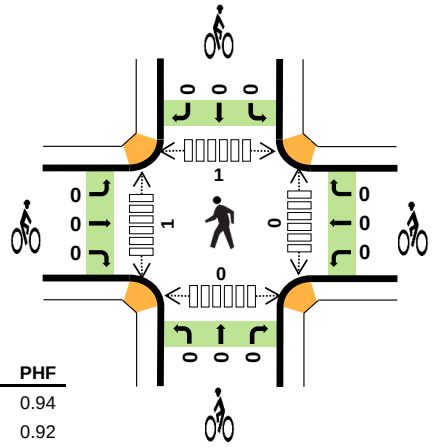
Interval Start	E Mission Ave			E Mission Ave			N Mullan Rd			N Mullan Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Argonne Rd
E Knox Ave

Date: 09/18/2024
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV %:	PHF
EB	2.9%	0.94
WB	0.0%	0.92
NB	4.3%	0.90
SB	6.6%	0.95
TOTAL	5.2%	0.95

Three-Hour Count Summaries

Interval Start		E Knox Ave Eastbound				E Knox Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	15	1	30	0	6	3	3	1	25	306	5	1	5	330	11	742	0
7:30 AM		0	9	2	45	0	11	2	2	1	46	353	5	1	10	365	12	864	0
7:45 AM		0	10	2	42	0	10	3	3	1	49	360	12	0	8	351	16	867	0
8:00 AM		0	12	6	36	0	8	2	6	2	43	301	5	0	14	372	9	816	3,289
Peak Hour	All	0	46	11	153	0	35	10	14	5	163	1,320	27	2	37	1,418	48	3,289	0
	HV	0	2	0	4	0	0	0	0	0	3	62	0	1	0	95	3	170	0
	HV%	-	4%	0%	3%	-	0%	0%	0%	0%	2%	5%	0%	50%	0%	7%	6%	5%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:15 AM	2	0	17	23	*42*	0	0	0	0	*0*	0	1	1	0	*2*
7:30 AM	0	0	17	18	*35*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	2	0	17	24	*43*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	2	0	14	34	*50*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	6	0	65	99	*170*	0	0	0	0	*0*	0	1	1	0	*2*

Three-Hour Count Summaries

Interval Start	E Knox Ave Eastbound				E Knox Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	9	3	10	0	8	1	0	0	19	147	9	0	9	159	9	383	0
6:15 AM	0	6	3	24	0	11	0	3	1	11	182	1	0	5	189	5	441	0
6:30 AM	0	6	3	27	0	5	0	1	0	25	250	8	0	5	295	8	633	0
6:45 AM	0	6	2	25	0	5	1	0	0	30	309	8	0	8	304	6	704	2,161
7:00 AM	0	10	2	20	0	14	1	2	0	32	287	7	1	5	307	11	699	2,477
7:15 AM	**0**	**15**	**1**	**30**	**0**	**6**	**3**	**3**	**1**	**25**	**306**	**5**	**1**	**5**	**330**	**11**	**742**	2,778
7:30 AM	**0**	**9**	**2**	**45**	**0**	**11**	**2**	**2**	**1**	**46**	**353**	**5**	**1**	**10**	**365**	**12**	**864**	3,009
7:45 AM	**0**	**10**	**2**	**42**	**0**	**10**	**3**	**3**	**1**	**49**	**360**	**12**	**0**	**8**	**351**	**16**	**867**	3,172
8:00 AM	**0**	**12**	**6**	**36**	**0**	**8**	**2**	**6**	**2**	**43**	**301**	**5**	**0**	**14**	**372**	**9**	**816**	**3,289**
8:15 AM	0	5	4	24	0	6	3	3	2	19	280	3	0	9	316	6	680	3,227
8:30 AM	0	11	2	26	0	17	6	3	2	23	259	8	1	14	350	10	732	3,095
8:45 AM	0	21	3	25	0	12	6	5	1	33	308	7	1	18	334	15	789	3,017
Count Total	0	120	33	334	0	113	28	31	11	355	3,342	78	5	110	3,672	118	8,350	0
Peak Hour All	**0**	**46**	**11**	**153**	**0**	**35**	**10**	**14**	**5**	**163**	**1,320**	**27**	**2**	**37**	**1,418**	**48**	**3,289**	**0**
Peak Hour HV	**0**	**2**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**3**	**62**	**0**	**1**	**0**	**95**	**3**	**170**	**0**
Peak Hour HV%	**-**	**4%**	**0%**	**3%**	**-**	**0%**	**0%**	**0%**	**0%**	**2%**	**5%**	**0%**	**50%**	**0%**	**7%**	**6%**	**5%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	1	1	9	13	*24*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	0	0	8	6	*14*	0	0	0	0	*0*	0	1	0	1	*2*
6:30 AM	1	0	9	17	*27*	0	0	0	0	*0*	0	1	0	0	*1*
6:45 AM	2	0	10	20	*32*	0	0	0	0	*0*	0	1	0	0	*1*
7:00 AM	1	1	14	18	*34*	0	0	0	0	*0*	0	1	0	0	*1*
7:15 AM	**2**	**0**	**17**	**23**	***42***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	*2*
7:30 AM	**0**	**0**	**17**	**18**	***35***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**2**	**0**	**17**	**24**	***43***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**2**	**0**	**14**	**34**	***50***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	1	0	16	26	*43*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	1	0	18	15	*34*	0	0	0	0	*0*	1	1	2	0	*4*
8:45 AM	3	3	15	18	*39*	0	0	0	0	*0*	1	0	1	0	*2*
Count Total	16	5	164	232	*417*	0	0	0	0	*0*	2	6	4	1	*13*
Peak Hour	**6**	**0**	**65**	**99**	***170***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	***2***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Knox Ave				E Knox Ave				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	1	0	0	1	0	0	0	0	9	0	0	1	12	0	24	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	6	0	14	0
6:30 AM	0	0	0	1	0	0	0	0	0	0	9	0	0	0	17	0	27	0
6:45 AM	0	0	0	2	0	0	0	0	0	0	10	0	0	0	20	0	32	97
7:00 AM	0	1	0	0	0	1	0	0	0	0	14	0	0	0	18	0	34	107
7:15 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**16**	**0**	**1**	**0**	**21**	**1**	**42**	135
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**16**	**0**	**0**	**0**	**18**	**0**	**35**	143
7:45 AM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**0**	**0**	**0**	**23**	**1**	**43**	154
8:00 AM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**13**	**0**	**0**	**0**	**33**	**1**	**50**	**170**
8:15 AM	0	0	0	1	0	0	0	0	0	0	16	0	0	0	26	0	43	171
8:30 AM	0	0	0	1	0	0	0	0	0	2	16	0	0	1	14	0	34	170
8:45 AM	0	2	0	1	0	2	0	1	0	1	14	0	0	0	17	1	39	166
Count Total	0	5	1	10	0	4	0	1	0	6	158	0	1	2	225	4	417	0
Peak Hour	**0**	**2**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**3**	**62**	**0**	**1**	**0**	**95**	**3**	**170**	**0**

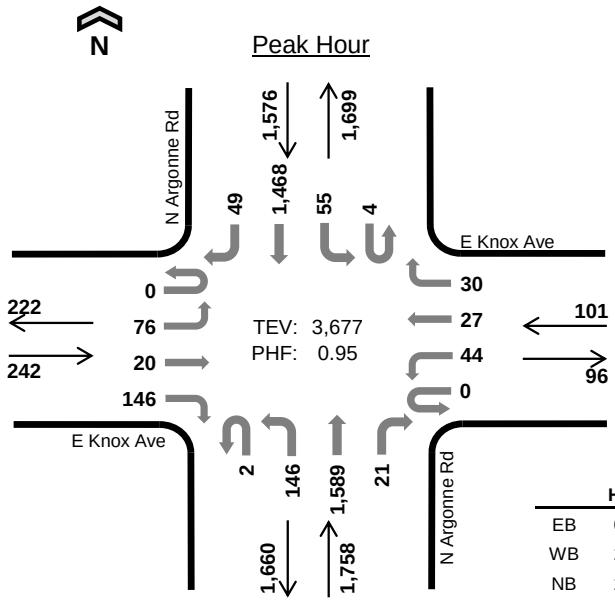
Three-Hour Count Summaries - Bikes

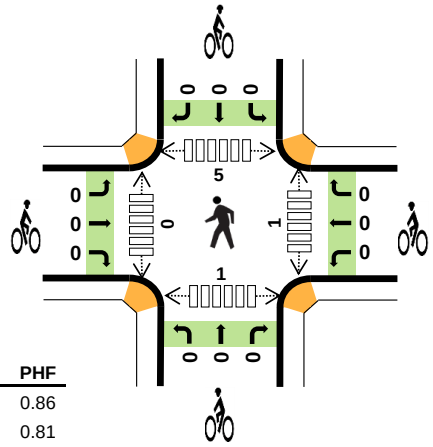
Interval Start	E Knox Ave			E Knox Ave			N Argonne Rd			N Argonne Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Argonne Rd
E Knox Ave

Date: 09/18/2024
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	0.8%	0.86
WB	2.0%	0.81
NB	2.5%	0.92
SB	2.5%	0.94
TOTAL	2.4%	0.95

Three-Hour Count Summaries

Interval Start		E Knox Ave Eastbound				E Knox Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	21	6	43	0	10	4	4	0	32	369	5	2	10	350	11	867	0
4:45 PM		0	21	3	30	0	12	7	5	2	45	422	7	1	11	355	12	933	0
5:00 PM		0	19	5	37	0	14	9	8	0	34	416	5	1	13	393	11	965	0
5:15 PM		0	15	6	36	0	8	7	13	0	35	382	4	0	21	370	15	912	3,677
Peak Hour	All	0	76	20	146	0	44	27	30	2	146	1,589	21	4	55	1,468	49	3,677	0
	HV	0	1	0	1	0	0	1	1	0	0	43	1	0	0	38	2	88	0
	HV%	-	1%	0%	1%	-	0%	4%	3%	0%	0%	3%	5%	0%	0%	3%	4%	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:30 PM	0	1	18	8	*27*	0	0	0	0	*0*	0	0	2	0	*2*
4:45 PM	1	0	14	8	*23*	0	0	0	0	*0*	1	0	1	1	*3*
5:00 PM	0	0	7	11	*18*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	1	1	5	13	*20*	0	0	0	0	*0*	0	0	2	0	*2*
Peak Hour	2	2	44	40	*88*	0	0	0	0	*0*	1	0	5	1	*7*

Three-Hour Count Summaries

Interval Start	E Knox Ave Eastbound				E Knox Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	1	20	3	48	0	14	2	4	4	34	410	10	1	10	326	15	902	0
3:15 PM	0	7	5	28	0	13	4	10	3	38	432	11	1	11	360	12	935	0
3:30 PM	0	25	6	41	0	16	1	12	1	52	396	14	2	13	344	10	933	0
3:45 PM	0	15	5	30	0	10	4	10	1	37	399	8	1	11	269	11	811	3,581
4:00 PM	0	18	9	46	0	17	5	9	3	36	406	5	1	6	206	3	770	3,449
4:15 PM	0	17	13	54	0	14	5	12	2	29	353	6	1	17	315	9	847	3,361
4:30 PM	**0**	**21**	**6**	**43**	**0**	**10**	**4**	**4**	**0**	**32**	**369**	**5**	**2**	**10**	**350**	**11**	**867**	3,295
4:45 PM	**0**	**21**	**3**	**30**	**0**	**12**	**7**	**5**	**2**	**45**	**422**	**7**	**1**	**11**	**355**	**12**	**933**	3,417
5:00 PM	**0**	**19**	**5**	**37**	**0**	**14**	**9**	**8**	**0**	**34**	**416**	**5**	**1**	**13**	**393**	**11**	**965**	3,612
5:15 PM	**0**	**15**	**6**	**36**	**0**	**8**	**7**	**13**	**0**	**35**	**382**	**4**	**0**	**21**	**370**	**15**	**912**	**3,677**
5:30 PM	0	18	4	50	0	12	7	10	1	34	339	7	2	18	332	12	846	3,656
5:45 PM	0	9	9	37	0	10	5	7	2	35	340	9	1	23	326	9	822	3,545
Count Total	1	205	74	480	0	150	60	104	19	441	4,664	91	14	164	3,946	130	10,543	0
Peak Hour All	**0**	**76**	**20**	**146**	**0**	**44**	**27**	**30**	**2**	**146**	**1,589**	**21**	**4**	**55**	**1,468**	**49**	**3,677**	**0**
Peak Hour HV	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**43**	**1**	**0**	**0**	**38**	**2**	**88**	**0**
Peak Hour HV%	**-**	**1%**	**0%**	**1%**	**-**	**0%**	**4%**	**3%**	**0%**	**0%**	**3%**	**5%**	**0%**	**0%**	**3%**	**4%**	**2%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	1	0	34	9	*44*	0	0	0	0	*0*	0	2	0	0	*2*
3:15 PM	1	2	14	13	*30*	0	0	0	0	*0*	2	2	0	1	*5*
3:30 PM	0	1	14	8	*23*	0	0	0	0	*0*	1	0	0	1	*2*
3:45 PM	0	1	10	10	*21*	0	0	0	0	*0*	2	0	1	0	*3*
4:00 PM	2	1	12	6	*21*	0	1	0	0	*1*	5	1	3	0	*9*
4:15 PM	3	0	10	12	*25*	0	0	0	0	*0*	0	0	3	0	*3*
4:30 PM	**0**	**1**	**18**	**8**	***27***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	*2*
4:45 PM	**1**	**0**	**14**	**8**	***23***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**1**	*3*
5:00 PM	**0**	**0**	**7**	**11**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**1**	**1**	**5**	**13**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	***2***
5:30 PM	0	0	11	5	*16*	0	0	0	0	*0*	2	0	0	0	*2*
5:45 PM	1	2	5	9	*17*	0	0	0	0	*0*	1	0	0	0	*1*
Count Total	10	9	154	112	*285*	0	1	0	0	*1*	14	5	12	3	*34*
Peak Hour	**2**	**2**	**44**	**40**	***88***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**5**	**1**	***7***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Knox Ave				E Knox Ave				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	1	0	0	0	0	0	0	0	1	33	0	0	0	9	0	44	0
3:15 PM	0	0	0	1	0	0	1	1	0	1	13	0	0	0	12	1	30	0
3:30 PM	0	0	0	0	0	1	0	0	0	1	13	0	0	0	8	0	23	0
3:45 PM	0	0	0	0	0	0	1	0	0	0	10	0	0	0	9	1	21	118
4:00 PM	0	1	0	1	0	0	1	0	0	0	12	0	0	0	6	0	21	95
4:15 PM	0	2	0	1	0	0	0	0	0	0	10	0	0	0	11	1	25	90
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**17**	**1**	**0**	**0**	**8**	**0**	**27**	94
4:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**8**	**0**	**23**	96
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**11**	**0**	**18**	93
5:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**11**	**2**	**20**	**88**
5:30 PM	0	0	0	0	0	0	0	0	0	1	10	0	0	0	5	0	16	77
5:45 PM	0	0	0	1	0	1	0	1	0	1	4	0	0	0	9	0	17	71
Count Total	0	5	0	5	0	2	4	3	0	5	148	1	0	0	107	5	285	0
Peak Hour	**0**	**1**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**43**	**1**	**0**	**0**	**38**	**2**	**88**	**0**

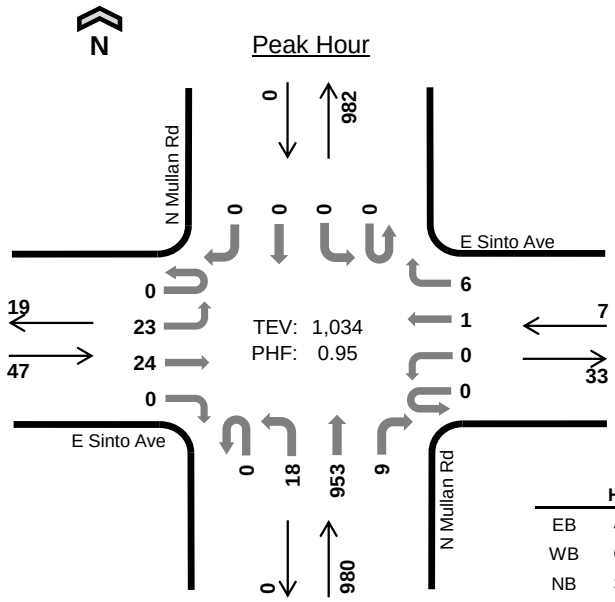
Three-Hour Count Summaries - Bikes

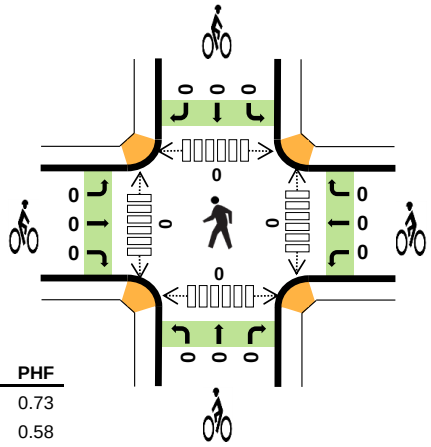
Interval Start	E Knox Ave			E Knox Ave			N Argonne Rd			N Argonne Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	1
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	1	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Mullan Rd
E Sinto Ave

Date: 09/18/2024
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	4.3%	0.73
WB	0.0%	0.58
NB	3.2%	0.95
SB	-	-
TOTAL	3.2%	0.95

Three-Hour Count Summaries

Interval Start		E Sinto Ave Eastbound				E Sinto Ave Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:30 AM		0	8	4	0	0	0	0	2	0	2	253	3	0	0	0	0	272	0
7:45 AM		0	4	7	0	0	0	1	2	0	6	244	2	0	0	0	0	266	0
8:00 AM		0	6	10	0	0	0	0	2	0	5	226	2	0	0	0	0	251	0
8:15 AM		0	5	3	0	0	0	0	0	0	5	230	2	0	0	0	0	245	1,034
Peak Hour	All	0	23	24	0	0	0	1	6	0	18	953	9	0	0	0	0	1,034	0
	HV	0	1	1	0	0	0	0	0	0	2	27	2	0	0	0	0	33	0
	HV%	-	4%	4%	-	-	-	0%	0%	-	11%	3%	22%	-	-	-	-	3%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:30 AM	1	0	9	0	*10*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	1	0	7	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	0	0	11	0	*11*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	0	0	4	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	2	0	31	0	*33*	0	0	0	0	*0*	0	0	0	0	*0*

Three-Hour Count Summaries

Interval Start	E Sinto Ave Eastbound				E Sinto Ave Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	5	0	0	0	0	0	0	0	1	111	1	0	0	0	0	118	0
6:15 AM	0	3	0	0	0	0	0	2	0	0	109	0	0	0	0	0	114	0
6:30 AM	0	2	1	0	0	0	0	0	0	2	174	0	0	0	0	0	179	0
6:45 AM	0	4	1	0	0	0	1	1	0	4	188	5	0	0	0	0	204	615
7:00 AM	0	1	3	0	0	0	0	4	0	1	219	1	0	0	0	0	229	726
7:15 AM	0	1	2	0	0	0	0	4	0	2	227	2	0	0	0	0	238	850
7:30 AM	**0**	**8**	**4**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**253**	**3**	**0**	**0**	**0**	**0**	**272**	943
7:45 AM	**0**	**4**	**7**	**0**	**0**	**0**	**1**	**2**	**0**	**6**	**244**	**2**	**0**	**0**	**0**	**0**	**266**	1,005
8:00 AM	**0**	**6**	**10**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	**226**	**2**	**0**	**0**	**0**	**0**	**251**	1,027
8:15 AM	**0**	**5**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**230**	**2**	**0**	**0**	**0**	**0**	**245**	**1,034**
8:30 AM	0	9	6	0	0	0	0	0	0	0	212	0	0	0	0	0	227	989
8:45 AM	0	8	6	0	0	0	2	6	0	6	230	2	0	0	0	0	260	983
Count Total	0	56	43	0	0	0	4	23	0	34	2,423	20	0	0	0	0	2,603	0
Peak Hour All	**0**	**23**	**24**	**0**	**0**	**0**	**1**	**6**	**0**	**18**	**953**	**9**	**0**	**0**	**0**	**0**	**1,034**	**0**
Peak Hour HV	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**27**	**2**	**0**	**0**	**0**	**0**	**33**	**0**
Peak Hour HV%	**-**	**4%**	**4%**	**-**	**-**	**-**	**0%**	**0%**	**-**	**11%**	**3%**	**22%**	**-**	**-**	**-**	**-**	**3%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	1	0	5	0	*6*	0	0	0	0	*0*	1	0	0	0	*1*
6:15 AM	0	0	4	0	*4*	0	0	0	0	*0*	1	0	0	0	*1*
6:30 AM	0	0	3	0	*3*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	0	1	8	0	*9*	0	0	0	0	*0*	1	2	0	0	*3*
7:00 AM	0	0	6	0	*6*	0	0	1	0	*1*	1	0	0	0	*1*
7:15 AM	0	0	8	0	*8*	0	0	0	0	*0*	0	0	1	0	*1*
7:30 AM	**1**	**0**	**9**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**1**	**0**	**7**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**0**	**11**	**0**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**0**	**4**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	0	0	10	0	*10*	0	0	0	0	*0*	0	0	1	0	*1*
8:45 AM	0	1	13	0	*14*	0	0	0	0	*0*	1	0	0	0	*1*
Count Total	3	2	88	0	*93*	0	0	1	0	*1*	5	2	2	0	*9*
Peak Hour	**2**	**0**	**31**	**0**	***33***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Sinto Ave				E Sinto Ave				N Mullan Rd				N Mullan Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	6	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	4	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	3	0
6:45 AM	0	0	0	0	0	0	1	0	0	0	8	0	0	0	0	0	9	22
7:00 AM	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	6	22
7:15 AM	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	8	26
7:30 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**10**	33
7:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**1**	**0**	**0**	**0**	**0**	**8**	32
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	**1**	**0**	**0**	**0**	**0**	**11**	37
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**4**	**33**
8:30 AM	0	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	10	33
8:45 AM	0	0	0	0	0	0	0	1	0	0	13	0	0	0	0	0	14	39
Count Total	0	2	1	0	0	0	1	1	0	2	84	2	0	0	0	0	93	0
Peak Hour	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**27**	**2**	**0**	**0**	**0**	**0**	**33**	**0**

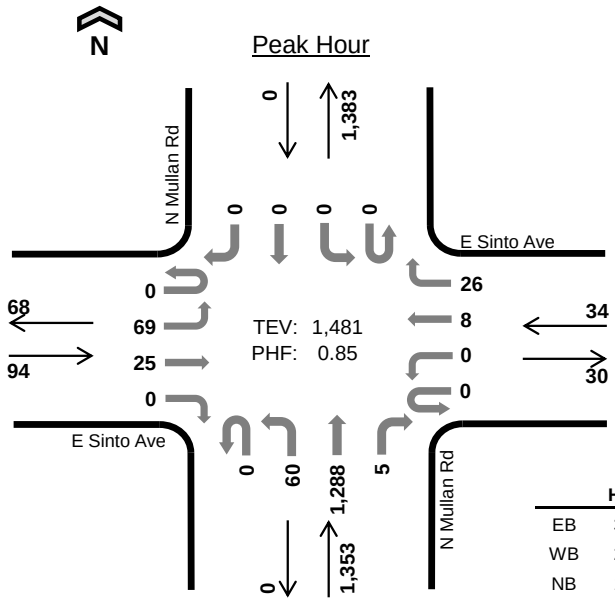
Three-Hour Count Summaries - Bikes

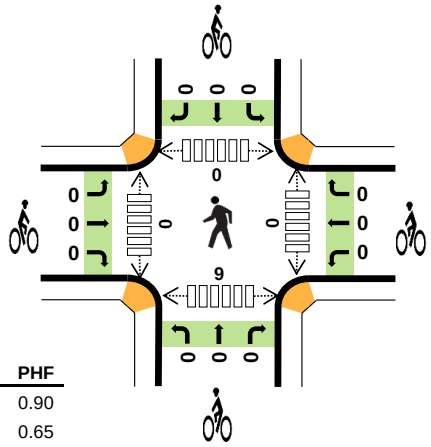
Interval Start	E Sinto Ave			E Sinto Ave			N Mullan Rd			N Mullan Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	1
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Mullan Rd
E Sinto Ave

Date: 09/18/2024
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM





	HV %:	PHF
EB	3.2%	0.90
WB	2.9%	0.65
NB	1.2%	0.85
SB	-	-
TOTAL	1.4%	0.85

Three-Hour Count Summaries

Interval Start		E Sinto Ave Eastbound				E Sinto Ave Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:15 PM		0	19	6	0	0	0	2	5	0	11	298	2	0	0	0	0	343	0
4:30 PM		0	18	8	0	0	0	1	4	0	15	309	1	0	0	0	0	356	0
4:45 PM		0	17	2	0	0	0	3	6	0	18	299	1	0	0	0	0	346	0
5:00 PM		0	15	9	0	0	0	2	11	0	16	382	1	0	0	0	0	436	1,481
Peak Hour	All	0	69	25	0	0	0	8	26	0	60	1,288	5	0	0	0	0	1,481	0
	HV	0	0	3	0	0	0	1	0	0	0	16	0	0	0	0	0	20	0
	HV%	-	0%	12%	-	-	-	13%	0%	-	0%	1%	0%	-	-	-	-	1%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:15 PM	1	0	3	0	*4*	0	0	0	0	*0*	0	0	0	3	*3*
4:30 PM	0	0	5	0	*5*	0	0	0	0	*0*	0	0	0	4	*4*
4:45 PM	1	1	5	0	*7*	0	0	0	0	*0*	0	0	0	1	*1*
5:00 PM	1	0	3	0	*4*	0	0	0	0	*0*	0	0	0	1	*1*
Peak Hour	3	1	16	0	*20*	0	0	0	0	*0*	0	0	0	9	*9*

Three-Hour Count Summaries

Interval Start	E Sinto Ave Eastbound				E Sinto Ave Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	12	2	0	0	0	2	3	0	12	305	3	0	0	0	0	339	0
3:15 PM	0	19	4	0	0	0	0	4	0	8	315	3	0	0	0	0	353	0
3:30 PM	0	18	12	0	0	0	1	7	0	9	342	3	0	0	0	0	392	0
3:45 PM	0	8	10	0	0	0	5	3	0	15	299	1	0	0	0	0	341	1,425
4:00 PM	0	14	7	0	0	0	2	3	0	13	337	2	0	0	0	0	378	1,464
4:15 PM	**0**	**19**	**6**	**0**	**0**	**0**	**2**	**5**	**0**	**11**	**298**	**2**	**0**	**0**	**0**	**0**	**343**	1,454
4:30 PM	**0**	**18**	**8**	**0**	**0**	**0**	**1**	**4**	**0**	**15**	**309**	**1**	**0**	**0**	**0**	**0**	**356**	1,418
4:45 PM	**0**	**17**	**2**	**0**	**0**	**0**	**3**	**6**	**0**	**18**	**299**	**1**	**0**	**0**	**0**	**0**	**346**	1,423
5:00 PM	**0**	**15**	**9**	**0**	**0**	**0**	**2**	**11**	**0**	**16**	**382**	**1**	**0**	**0**	**0**	**0**	**436**	**1,481**
5:15 PM	0	17	4	0	0	0	1	13	0	8	285	2	0	0	0	0	330	1,468
5:30 PM	0	18	7	0	0	0	4	3	0	9	293	2	0	0	0	0	336	1,448
5:45 PM	0	14	7	0	0	0	1	10	0	8	247	0	0	0	0	0	287	1,389
Count Total	0	189	78	0	0	0	24	72	0	142	3,711	21	0	0	0	0	4,237	0
Peak Hour All	**0**	**69**	**25**	**0**	**0**	**0**	**8**	**26**	**0**	**60**	**1,288**	**5**	**0**	**0**	**0**	**0**	**1,481**	**0**
Peak Hour HV	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**20**	**0**
Peak Hour HV%	**-**	**0%**	**12%**	**-**	**-**	**-**	**13%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**-**	**-**	**-**	**1%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	0	0	10	0	*10*	0	0	0	0	*0*	0	1	1	0	*2*
3:15 PM	2	0	2	0	*4*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	1	0	5	0	*6*	0	0	0	0	*0*	0	1	0	0	*1*
3:45 PM	1	0	10	0	*11*	0	0	0	0	*0*	0	0	0	1	*1*
4:00 PM	3	1	5	0	*9*	0	0	0	0	*0*	1	2	0	0	*3*
4:15 PM	**1**	**0**	**3**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**3**	*3*
4:30 PM	**0**	**0**	**5**	**0**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**4**	*4*
4:45 PM	**1**	**1**	**5**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
5:00 PM	**1**	**0**	**3**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
5:15 PM	0	0	1	0	*1*	0	0	0	0	*0*	0	0	0	1	*1*
5:30 PM	0	0	5	0	*5*	0	0	0	0	*0*	2	0	0	1	*3*
5:45 PM	0	0	2	0	*2*	0	0	0	0	*0*	0	2	0	0	*2*
Count Total	10	2	56	0	*68*	0	0	0	0	*0*	3	6	1	12	*22*
Peak Hour	**3**	**1**	**16**	**0**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**9**	***9***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Sinto Ave				E Sinto Ave				N Mullan Rd				N Mullan Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	1	9	0	0	0	0	0	10	0
3:15 PM	0	2	0	0	0	0	0	0	0	0	2	0	0	0	0	0	4	0
3:30 PM	0	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	6	0
3:45 PM	0	1	0	0	0	0	0	0	0	0	10	0	0	0	0	0	11	31
4:00 PM	0	2	1	0	0	0	1	0	0	0	5	0	0	0	0	0	9	30
4:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**4**	30
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**5**	29
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**7**	25
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**4**	**20**
5:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	17
5:30 PM	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	5	17
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	12
Count Total	0	6	4	0	0	0	2	0	0	1	55	0	0	0	0	0	68	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**20**	**0**

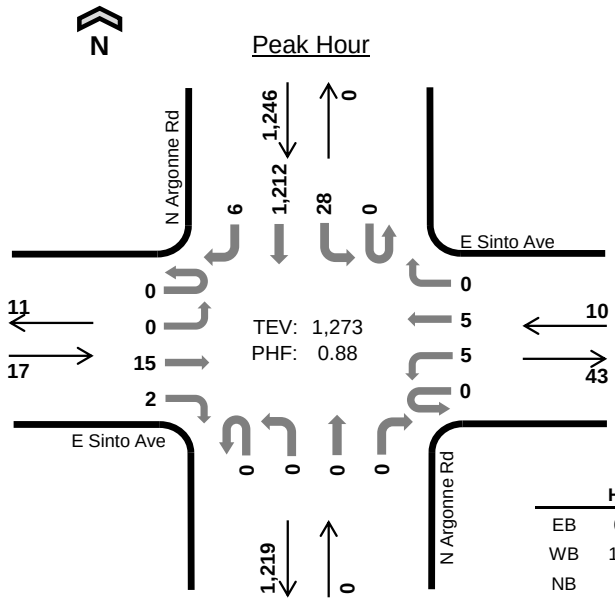
Three-Hour Count Summaries - Bikes

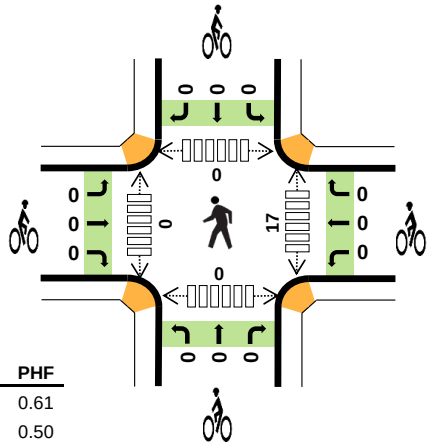
Interval Start	E Sinto Ave			E Sinto Ave			N Mullan Rd			N Mullan Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Argonne Rd
E Sinto Ave

Date: 09/18/2024
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	0.0%	0.61
WB	10.0%	0.50
NB	-	-
SB	2.2%	0.87
TOTAL	2.2%	0.88

Three-Hour Count Summaries

Interval Start		E Sinto Ave Eastbound				E Sinto Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:30 AM		0	0	7	0	0	1	1	0	0	0	0	0	0	4	287	2	302	0
7:45 AM		0	0	3	2	0	3	2	0	0	0	0	0	0	7	320	2	339	0
8:00 AM		0	0	3	0	0	0	1	0	0	0	0	0	0	11	345	1	361	0
8:15 AM		0	0	2	0	0	1	1	0	0	0	0	0	0	6	260	1	271	1,273
Peak Hour	All	0	0	15	2	0	5	5	0	0	0	0	0	0	28	1,212	6	1,273	0
	HV	0	0	0	0	0	0	1	0	0	0	0	0	0	0	27	0	28	0
	HV%	-	-	0%	0%	-	0%	20%	-	-	-	-	-	-	0%	2%	0%	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:30 AM	0	0	0	3	*3*	0	0	0	0	*0*	5	0	0	0	*5*
7:45 AM	0	1	0	7	*8*	0	0	0	0	*0*	3	0	0	0	*3*
8:00 AM	0	0	0	11	*11*	0	0	0	0	*0*	5	0	0	0	*5*
8:15 AM	0	0	0	6	*6*	0	0	0	0	*0*	4	0	0	0	*4*
Peak Hour	0	1	0	27	*28*	0	0	0	0	*0*	17	0	0	0	*17*

Three-Hour Count Summaries

Interval Start	E Sinto Ave Eastbound				E Sinto Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	2	1	0	0	1	0	0	0	0	0	0	1	67	1	73	0
6:15 AM	0	0	2	0	0	0	0	0	0	0	0	0	0	1	99	1	103	0
6:30 AM	0	0	1	2	0	1	0	0	0	0	0	0	0	1	156	1	162	0
6:45 AM	0	0	3	1	0	3	1	0	0	0	0	0	0	0	213	0	221	559
7:00 AM	0	0	0	1	0	0	1	0	0	0	0	0	0	3	201	1	207	693
7:15 AM	0	0	0	1	0	0	2	0	0	0	0	0	0	2	208	0	213	803
7:30 AM	**0**	**0**	**7**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**287**	**2**	**302**	943
7:45 AM	**0**	**0**	**3**	**2**	**0**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**320**	**2**	**339**	1,061
8:00 AM	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**345**	**1**	**361**	1,215
8:15 AM	**0**	**0**	**2**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**260**	**1**	**271**	**1,273**
8:30 AM	0	0	4	4	0	0	0	0	0	0	0	0	0	8	264	2	282	1,253
8:45 AM	0	0	2	3	0	2	2	0	0	0	0	0	0	7	274	2	292	1,206
Count Total	0	0	29	15	0	11	12	0	0	0	0	0	0	51	2,694	14	2,826	0
Peak Hour All	**0**	**0**	**15**	**2**	**0**	**5**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**28**	**1,212**	**6**	**1,273**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27**	**0**	**28**	**0**
Peak Hour HV%	**-**	**-**	**0%**	**0%**	**-**	**0%**	**20%**	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**2%**	**0%**	**2%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	0	0	0	2	*2*	0	0	0	0	*0*	5	0	0	0	*5*
6:15 AM	0	0	0	1	*1*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	1	0	0	7	*8*	0	0	0	0	*0*	1	0	0	0	*1*
6:45 AM	0	1	0	8	*9*	0	0	0	0	*0*	0	1	0	0	*1*
7:00 AM	0	0	0	6	*6*	0	0	0	0	*0*	1	2	0	0	*3*
7:15 AM	0	0	0	3	*3*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**0**	**0**	**0**	**3**	***3***	**0**	**0**	**0**	**0**	***0***	**5**	**0**	**0**	**0**	*5*
7:45 AM	**0**	**1**	**0**	**7**	***8***	**0**	**0**	**0**	**0**	***0***	**3**	**0**	**0**	**0**	*3*
8:00 AM	**0**	**0**	**0**	**11**	***11***	**0**	**0**	**0**	**0**	***0***	**5**	**0**	**0**	**0**	*5*
8:15 AM	**0**	**0**	**0**	**6**	***6***	**0**	**0**	**0**	**0**	***0***	**4**	**0**	**0**	**0**	***4***
8:30 AM	0	0	0	6	*6*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	0	0	5	*5*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	1	2	0	65	*68*	0	0	0	0	*0*	24	3	0	0	*27*
Peak Hour	**0**	**1**	**0**	**27**	***28***	**0**	**0**	**0**	**0**	***0***	**17**	**0**	**0**	**0**	***17***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Sinto Ave Eastbound				E Sinto Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
6:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	7	0	8	0
6:45 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	8	0	9	20
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	24
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	26
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	21
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**8**	20
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**11**	25
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**6**	**28**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	31
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	5	28
Count Total	0	0	0	1	0	1	1	0	0	0	0	0	0	0	65	0	68	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27**	**0**	**28**	**0**

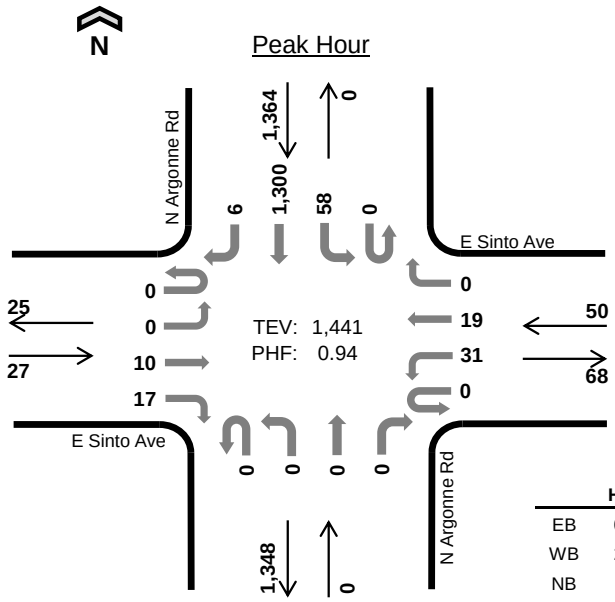
Three-Hour Count Summaries - Bikes

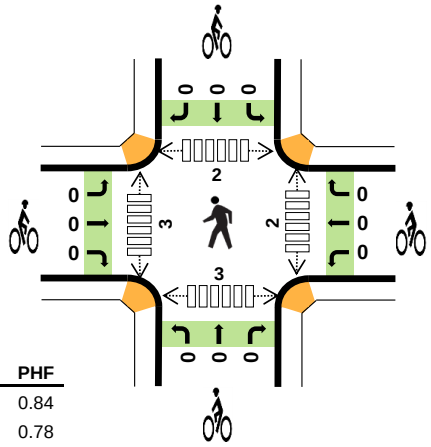
Interval Start	E Sinto Ave Eastbound			E Sinto Ave Westbound			N Argonne Rd Northbound			N Argonne Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Argonne Rd
E Sinto Ave

Date: 09/18/2024
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	0.0%	0.84
WB	2.0%	0.78
NB	-	-
SB	1.0%	0.95
TOTAL	1.0%	0.94

Three-Hour Count Summaries

Interval Start		E Sinto Ave Eastbound				E Sinto Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	0	1	5	0	9	6	0	0	0	0	0	0	21	307	1	350	0
4:45 PM		0	0	2	4	0	6	3	0	0	0	0	0	0	11	329	1	356	0
5:00 PM		0	0	2	6	0	10	6	0	0	0	0	0	0	18	340	2	384	0
5:15 PM		0	0	5	2	0	6	4	0	0	0	0	0	0	8	324	2	351	1,441
Peak Hour	All	0	0	10	17	0	31	19	0	0	0	0	0	0	58	1,300	6	1,441	0
	HV	0	0	0	0	0	1	0	0	0	0	0	0	0	1	13	0	15	0
	HV%	-	-	0%	0%	-	3%	0%	-	-	-	-	-	-	2%	1%	0%	1%	0

Note: For all three-hour count summary, see next page.

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

Three-Hour Count Summaries

Interval Start	E Sinto Ave Eastbound				E Sinto Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	2	3	0	6	5	0	0	0	0	0	0	10	316	1	343	0
3:15 PM	0	0	6	2	0	1	5	0	0	0	0	0	0	15	328	0	357	0
3:30 PM	0	0	7	0	0	3	3	0	0	0	0	0	0	19	305	4	341	0
3:45 PM	0	0	1	3	0	7	6	0	0	0	0	0	0	13	242	4	276	1,317
4:00 PM	0	0	4	1	0	5	5	0	0	0	0	0	0	15	248	1	279	1,253
4:15 PM	0	0	2	5	0	1	6	0	0	0	0	0	0	18	304	1	337	1,233
4:30 PM	**0**	**0**	**1**	**5**	**0**	**9**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	**307**	**1**	**350**	1,242
4:45 PM	**0**	**0**	**2**	**4**	**0**	**6**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**329**	**1**	**356**	1,322
5:00 PM	**0**	**0**	**2**	**6**	**0**	**10**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**340**	**2**	**384**	1,427
5:15 PM	**0**	**0**	**5**	**2**	**0**	**6**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**324**	**2**	**351**	**1,441**
5:30 PM	0	0	5	1	0	7	4	0	0	0	0	0	0	15	281	5	318	1,409
5:45 PM	0	0	5	2	0	4	5	0	0	0	0	0	0	10	283	2	311	1,364
Count Total	0	0	42	34	0	65	58	0	0	0	0	0	0	173	3,607	24	4,003	0
Peak Hour All	**0**	**0**	**10**	**17**	**0**	**31**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**58**	**1,300**	**6**	**1,441**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**13**	**0**	**15**	**0**
Peak Hour HV%	**-**	**-**	**0%**	**0%**	**-**	**3%**	**0%**	**-**	**-**	**-**	**-**	**-**	**-**	**2%**	**1%**	**0%**	**1%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	0	1	0	10	*11*	0	0	0	0	*0*	0	0	1	0	*1*
3:15 PM	0	0	0	8	*8*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	0	0	0	9	*9*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 PM	0	0	0	6	*6*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	0	0	0	6	*6*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	1	0	0	3	*4*	0	0	0	0	*0*	0	1	0	4	*5*
4:30 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**1**	**0**	**4**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**0**	**5**	***5***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**0**	**3**	*6*
5:15 PM	**0**	**0**	**0**	**4**	***4***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**2**	**0**	***4***
5:30 PM	0	1	0	4	*5*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	1	0	0	5	*6*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	2	3	0	65	*70*	0	0	0	0	*0*	2	4	3	7	*16*
Peak Hour	**0**	**1**	**0**	**14**	***15***	**0**	**0**	**0**	**0**	***0***	**2**	**3**	**2**	**3**	***10***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Sinto Ave				E Sinto Ave				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	10	0	11	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	6	0	8	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8	0	9	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	4	1	6	34
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	6	29
4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	2	1	0	4	25
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	17
4:45 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**5**	16
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**4**	**0**	**5**	15
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**4**	**15**
5:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	4	0	5	19
5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	5	0	6	20
Count Total	0	0	0	2	0	3	0	0	0	0	0	0	0	7	57	1	70	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**13**	**0**	**15**	**0**

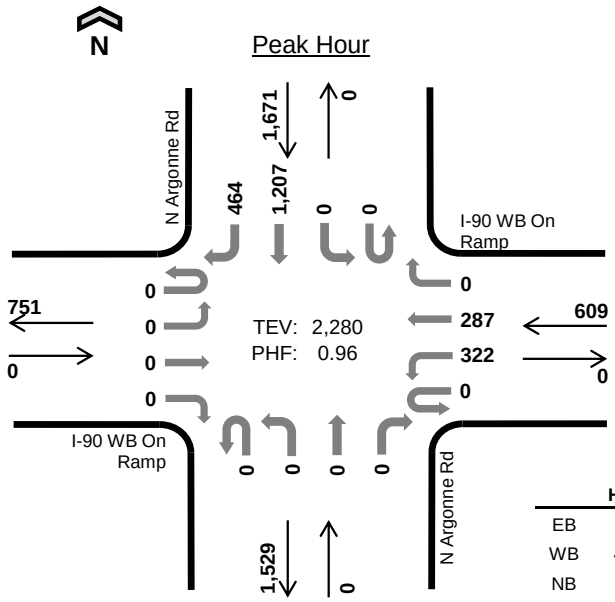
Three-Hour Count Summaries - Bikes

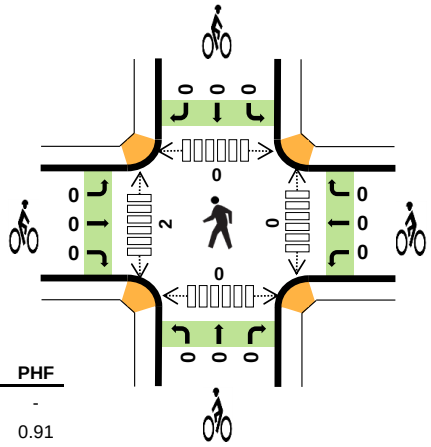
Interval Start	E Sinto Ave			E Sinto Ave			N Argonne Rd			N Argonne Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Argonne Rd
I-90 WB On Ramp

Date: 09/18/2024
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV %:	PHF
EB	-	-
WB	4.1%	0.91
NB	-	-
SB	5.6%	0.93
TOTAL	5.2%	0.96

Three-Hour Count Summaries

Interval Start		I-90 WB On Ramp Eastbound				I-90 WB On Ramp Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	0	0	0	0	44	85	0	0	0	0	0	0	0	264	123	516	0
7:30 AM		0	0	0	0	0	80	86	0	0	0	0	0	0	0	279	145	590	0
7:45 AM		0	0	0	0	0	106	62	0	0	0	0	0	0	0	321	92	581	0
8:00 AM		0	0	0	0	0	92	54	0	0	0	0	0	0	0	343	104	593	2,280
Peak Hour	All	0	0	0	0	0	322	287	0	0	0	0	0	0	0	1,207	464	2,280	0
	HV	0	0	0	0	0	7	18	0	0	0	0	0	0	0	51	43	119	0
	HV%	-	-	-	-	-	2%	6%	-	-	-	-	-	-	-	4%	9%	5%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:15 AM	0	4	0	20	*24*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	0	8	0	16	*24*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	5	0	22	*27*	0	0	0	0	*0*	0	1	0	0	*1*
8:00 AM	0	8	0	36	*44*	0	0	0	0	*0*	0	1	0	0	*1*
Peak Hour	0	25	0	94	*119*	0	0	0	0	*0*	0	2	0	0	*2*

Three-Hour Count Summaries

Interval Start	I-90 WB On Ramp				I-90 WB On Ramp				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	18	27	0	0	0	0	0	0	0	98	57	200	0
6:15 AM	0	0	0	0	0	28	48	0	0	0	0	0	0	0	140	98	314	0
6:30 AM	0	0	0	0	0	45	65	0	0	0	0	0	0	0	206	134	450	0
6:45 AM	0	0	0	0	0	59	58	0	0	0	0	0	0	0	238	96	451	1,415
7:00 AM	0	0	0	0	0	49	69	0	0	0	0	0	0	0	243	107	468	1,683
7:15 AM	**0**	**0**	**0**	**0**	**0**	**44**	**85**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**264**	**123**	**516**	1,885
7:30 AM	**0**	**0**	**0**	**0**	**0**	**80**	**86**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**279**	**145**	**590**	2,025
7:45 AM	**0**	**0**	**0**	**0**	**0**	**106**	**62**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**321**	**92**	**581**	2,155
8:00 AM	**0**	**0**	**0**	**0**	**0**	**92**	**54**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**343**	**104**	**593**	**2,280**
8:15 AM	0	0	0	0	0	68	64	0	0	0	0	0	0	0	258	111	501	2,265
8:30 AM	0	0	0	0	0	64	59	0	0	0	0	0	0	0	267	118	508	2,183
8:45 AM	0	0	0	0	0	78	62	0	0	0	0	0	0	0	296	114	550	2,152
Count Total	0	0	0	0	0	731	739	0	0	0	0	0	0	0	2,953	1,299	5,722	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**322**	**287**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,207**	**464**	**2,280**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**7**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**51**	**43**	**119**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**2%**	**6%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4%**	**9%**	**5%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	0	2	0	6	*8*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	0	4	0	6	*10*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	0	4	0	14	*18*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	0	6	0	18	*24*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 AM	0	5	0	12	*17*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**0**	**4**	**0**	**20**	***24***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:30 AM	**0**	**8**	**0**	**16**	***24***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**5**	**0**	**22**	***27***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
8:00 AM	**0**	**8**	**0**	**36**	***44***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	***1***
8:15 AM	0	6	0	24	*30*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	2	0	16	*18*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	8	0	16	*24*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	62	0	206	*268*	0	0	0	0	*0*	0	2	0	0	*2*
Peak Hour	**0**	**25**	**0**	**94**	***119***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	***2***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	I-90 WB On Ramp				I-90 WB On Ramp				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	6	0	8	0
6:15 AM	0	0	0	0	0	0	4	0	0	0	0	0	0	0	3	3	10	0
6:30 AM	0	0	0	0	0	2	2	0	0	0	0	0	0	0	10	4	18	0
6:45 AM	0	0	0	0	0	3	3	0	0	0	0	0	0	0	11	7	24	60
7:00 AM	0	0	0	0	0	4	1	0	0	0	0	0	0	0	7	5	17	69
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**8**	**24**	83
7:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**9**	**24**	89
7:45 AM	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**10**	**27**	92
8:00 AM	**0**	**0**	**0**	**0**	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**16**	**44**	**119**
8:15 AM	0	0	0	0	0	2	4	0	0	0	0	0	0	0	13	11	30	125
8:30 AM	0	0	0	0	0	1	1	0	0	0	0	0	0	0	8	8	18	119
8:45 AM	0	0	0	0	0	2	6	0	0	0	0	0	0	0	11	5	24	116
Count Total	0	0	0	0	0	22	40	0	0	0	0	0	0	0	120	86	268	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**7**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**51**	**43**	**119**	**0**

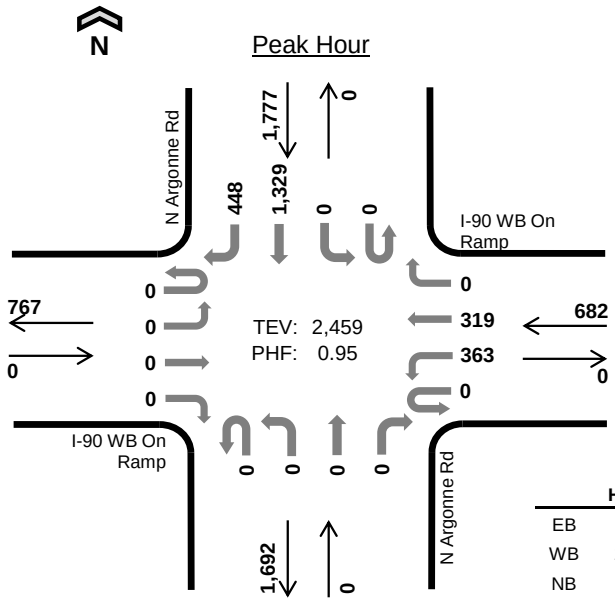
Three-Hour Count Summaries - Bikes

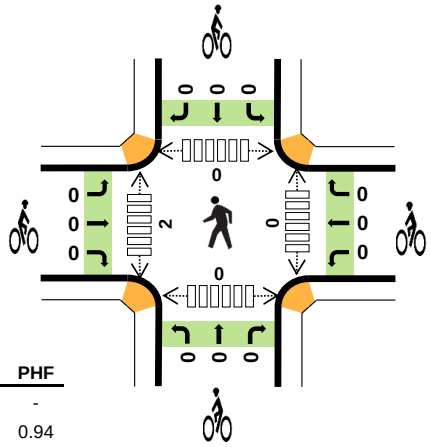
Interval Start	I-90 WB On Ramp			I-90 WB On Ramp			N Argonne Rd			N Argonne Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Argonne Rd
I-90 WB On Ramp

Date: 09/18/2024
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	-	-
WB	1.9%	0.94
NB	-	-
SB	2.5%	0.96
TOTAL	2.3%	0.95

Three-Hour Count Summaries

Interval Start		I-90 WB On Ramp Eastbound				I-90 WB On Ramp Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	0	0	0	0	93	86	0	0	0	0	0	0	0	323	110	612	0
4:45 PM		0	0	0	0	0	93	60	0	0	0	0	0	0	0	334	106	593	0
5:00 PM		0	0	0	0	0	86	96	0	0	0	0	0	0	0	338	126	646	0
5:15 PM		0	0	0	0	0	91	77	0	0	0	0	0	0	0	334	106	608	2,459
Peak Hour	All	0	0	0	0	0	363	319	0	0	0	0	0	0	0	1,329	448	2,459	0
	HV	0	0	0	0	0	6	7	0	0	0	0	0	0	0	34	10	57	0
	HV%	-	-	-	-	-	2%	2%	-	-	-	-	-	-	-	3%	2%	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:30 PM	0	4	0	13	*17*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	4	0	10	*14*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	0	3	0	10	*13*	0	0	0	0	*0*	0	2	0	0	*2*
5:15 PM	0	2	0	11	*13*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	13	0	44	*57*	0	0	0	0	*0*	0	2	0	0	*2*

Three-Hour Count Summaries

Interval Start	I-90 WB On Ramp Eastbound				I-90 WB On Ramp Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	0	0	0	96	68	0	0	0	0	0	0	0	337	93	594	0
3:15 PM	0	0	0	0	0	97	73	0	0	0	0	0	0	0	323	98	591	0
3:30 PM	0	0	0	0	0	91	79	0	0	0	0	0	0	0	316	110	596	0
3:45 PM	0	0	0	0	0	97	83	0	0	0	0	0	0	0	210	107	497	2,278
4:00 PM	0	0	0	0	0	105	88	0	0	0	0	0	0	0	192	98	483	2,167
4:15 PM	0	0	0	0	0	89	68	0	0	0	0	0	0	0	327	106	590	2,166
4:30 PM	**0**	**0**	**0**	**0**	**0**	**93**	**86**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**323**	**110**	**612**	2,182
4:45 PM	**0**	**0**	**0**	**0**	**0**	**93**	**60**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**334**	**106**	**593**	2,278
5:00 PM	**0**	**0**	**0**	**0**	**0**	**86**	**96**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**338**	**126**	**646**	2,441
5:15 PM	**0**	**0**	**0**	**0**	**0**	**91**	**77**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**334**	**106**	**608**	**2,459**
5:30 PM	0	0	0	0	0	72	71	0	0	0	0	0	0	0	341	79	563	2,410
5:45 PM	0	0	0	0	0	67	86	0	0	0	0	0	0	0	308	93	554	2,371
Count Total	0	0	0	0	0	1,077	935	0	0	0	0	0	0	0	3,683	1,232	6,927	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**363**	**319**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,329**	**448**	**2,459**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**6**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**34**	**10**	**57**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**2%**	**2%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**3%**	**2%**	**2%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	0	9	0	16	*25*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 PM	0	4	0	10	*14*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	0	3	0	11	*14*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 PM	0	7	0	9	*16*	0	0	0	0	*0*	0	0	0	0	*0*
4:00 PM	0	6	0	8	*14*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	3	0	10	*13*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**0**	**4**	**0**	**13**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**4**	**0**	**10**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**3**	**0**	**10**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	*2*
5:15 PM	**0**	**2**	**0**	**11**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	0	6	0	6	*12*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	0	3	0	9	*12*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	54	0	123	*177*	0	0	0	0	*0*	0	2	0	0	*2*
Peak Hour	**0**	**13**	**0**	**44**	***57***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	***2***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	I-90 WB On Ramp				I-90 WB On Ramp				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	0	0	0	3	6	0	0	0	0	0	0	0	12	4	25	0
3:15 PM	0	0	0	0	0	2	2	0	0	0	0	0	0	0	10	0	14	0
3:30 PM	0	0	0	0	0	2	1	0	0	0	0	0	0	0	6	5	14	0
3:45 PM	0	0	0	0	0	4	3	0	0	0	0	0	0	0	4	5	16	69
4:00 PM	0	0	0	0	0	3	3	0	0	0	0	0	0	0	8	0	14	58
4:15 PM	0	0	0	0	0	2	1	0	0	0	0	0	0	0	7	3	13	57
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**5**	**17**	60
4:45 PM	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0**	**14**	58
5:00 PM	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**2**	**13**	57
5:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**3**	**13**	**57**
5:30 PM	0	0	0	0	0	5	1	0	0	0	0	0	0	0	4	2	12	52
5:45 PM	0	0	0	0	0	1	2	0	0	0	0	0	0	0	6	3	12	50
Count Total	0	0	0	0	0	28	26	0	0	0	0	0	0	0	91	32	177	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**6**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**34**	**10**	**57**	**0**

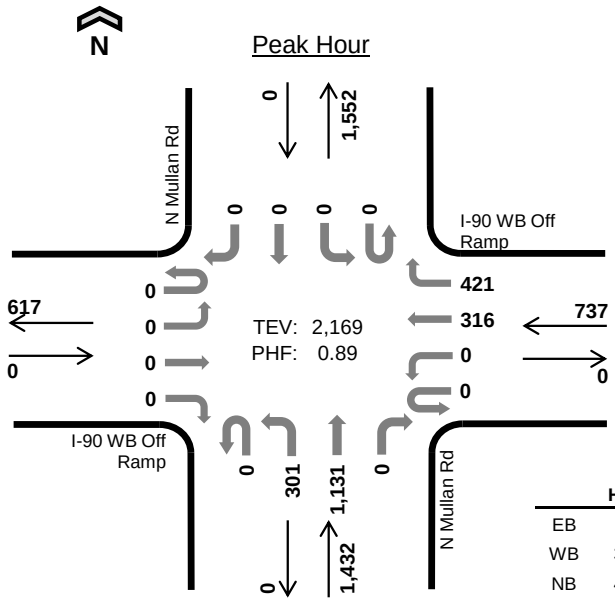
Three-Hour Count Summaries - Bikes

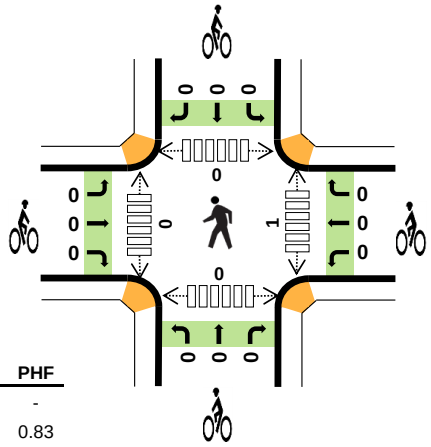
Interval Start	I-90 WB On Ramp			I-90 WB On Ramp			N Argonne Rd			N Argonne Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Mullan Rd
I-90 WB Off Ramp

Date: 09/18/2024
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV %:	PHF
EB	-	-
WB	3.1%	0.83
NB	4.5%	0.93
SB	-	-
TOTAL	4.0%	0.89

Three-Hour Count Summaries

Interval Start		I-90 WB Off Ramp Eastbound				I-90 WB Off Ramp Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	0	0	0	0	0	46	88	0	87	261	0	0	0	0	0	482	0
7:30 AM		0	0	0	0	0	0	78	120	0	92	284	0	0	0	0	0	574	0
7:45 AM		0	0	0	0	0	0	102	119	0	67	320	0	0	0	0	0	608	0
8:00 AM		0	0	0	0	0	0	90	94	0	55	266	0	0	0	0	0	505	2,169
Peak Hour	All	0	0	0	0	0	0	316	421	0	301	1,131	0	0	0	0	0	2,169	0
	HV	0	0	0	0	0	0	9	14	0	16	48	0	0	0	0	0	87	0
	HV%	-	-	-	-	-	-	3%	3%	-	5%	4%	-	-	-	-	-	4%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:15 AM	0	2	17	0	*19*	0	0	0	0	*0*	1	0	0	0	*1*
7:30 AM	0	4	18	0	*22*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	0	8	16	0	*24*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	0	9	13	0	*22*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	0	23	64	0	*87*	0	0	0	0	*0*	1	0	0	0	*1*

Three-Hour Count Summaries

Interval Start	I-90 WB Off Ramp				I-90 WB Off Ramp				N Mullan Rd				N Mullan Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	17	47	0	24	125	0	0	0	0	0	213	0
6:15 AM	0	0	0	0	0	0	27	62	0	47	144	0	0	0	0	0	280	0
6:30 AM	0	0	0	0	0	0	48	74	0	64	202	0	0	0	0	0	388	0
6:45 AM	0	0	0	0	0	0	59	103	0	57	257	0	0	0	0	0	476	1,357
7:00 AM	0	0	0	0	0	0	46	83	0	69	252	0	0	0	0	0	450	1,594
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**46**	**88**	**0**	**87**	**261**	**0**	**0**	**0**	**0**	**0**	**482**	1,796
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**78**	**120**	**0**	**92**	**284**	**0**	**0**	**0**	**0**	**0**	**574**	1,982
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**102**	**119**	**0**	**67**	**320**	**0**	**0**	**0**	**0**	**0**	**608**	2,114
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**90**	**94**	**0**	**55**	**266**	**0**	**0**	**0**	**0**	**0**	**505**	**2,169**
8:15 AM	0	0	0	0	0	0	66	77	0	67	225	0	0	0	0	0	435	2,122
8:30 AM	0	0	0	0	0	0	63	87	0	62	223	0	0	0	0	0	435	1,983
8:45 AM	0	0	0	0	0	0	77	82	0	62	261	0	0	0	0	0	482	1,857
Count Total	0	0	0	0	0	0	719	1,036	0	753	2,820	0	0	0	0	0	5,328	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**0**	**316**	**421**	**0**	**301**	**1,131**	**0**	**0**	**0**	**0**	**0**	**2,169**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**14**	**0**	**16**	**48**	**0**	**0**	**0**	**0**	**0**	**87**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**-**	**3%**	**3%**	**-**	**5%**	**4%**	**-**	**-**	**-**	**-**	**-**	**4%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	0	3	6	0	*9*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	0	3	11	0	*14*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	0	6	7	0	*13*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	0	7	10	0	*17*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 AM	0	6	11	0	*17*	0	0	0	0	*0*	1	0	0	0	*1*
7:15 AM	**0**	**2**	**17**	**0**	***19***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
7:30 AM	**0**	**4**	**18**	**0**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**8**	**16**	**0**	***24***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**9**	**13**	**0**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	0	4	19	0	*23*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	0	5	12	0	*17*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	5	16	0	*21*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	0	62	156	0	*218*	0	0	0	0	*0*	2	0	0	0	*2*
Peak Hour	**0**	**23**	**64**	**0**	***87***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	I-90 WB Off Ramp				I-90 WB Off Ramp				N Mullan Rd				N Mullan Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	2	1	0	0	6	0	0	0	0	0	9	0
6:15 AM	0	0	0	0	0	0	1	2	0	4	7	0	0	0	0	0	14	0
6:30 AM	0	0	0	0	0	0	3	3	0	1	6	0	0	0	0	0	13	0
6:45 AM	0	0	0	0	0	0	3	4	0	3	7	0	0	0	0	0	17	53
7:00 AM	0	0	0	0	0	0	4	2	0	1	10	0	0	0	0	0	17	61
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**4**	**13**	**0**	**0**	**0**	**0**	**0**	**19**	66
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**0**	**7**	**11**	**0**	**0**	**0**	**0**	**0**	**22**	75
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**5**	**0**	**2**	**14**	**0**	**0**	**0**	**0**	**0**	**24**	82
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**4**	**0**	**3**	**10**	**0**	**0**	**0**	**0**	**0**	**22**	**87**
8:15 AM	0	0	0	0	0	0	3	1	0	4	15	0	0	0	0	0	23	91
8:30 AM	0	0	0	0	0	0	1	4	0	1	11	0	0	0	0	0	17	86
8:45 AM	0	0	0	0	0	0	3	2	0	5	11	0	0	0	0	0	21	83
Count Total	0	0	0	0	0	0	29	33	0	35	121	0	0	0	0	0	218	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**14**	**0**	**16**	**48**	**0**	**0**	**0**	**0**	**0**	**87**	**0**

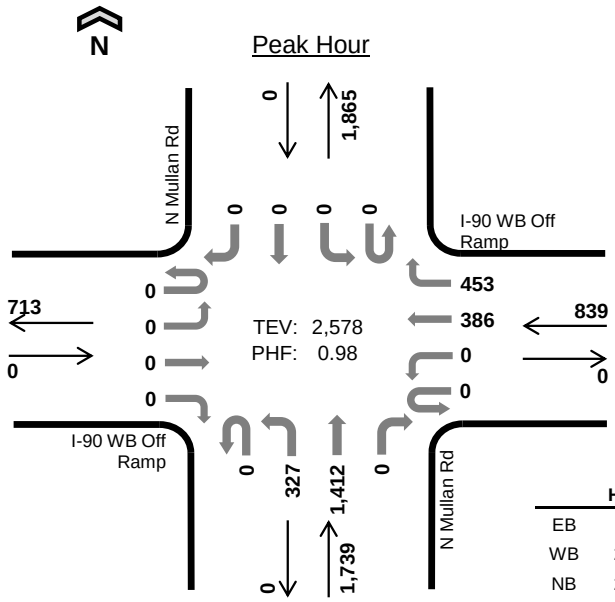
Three-Hour Count Summaries - Bikes

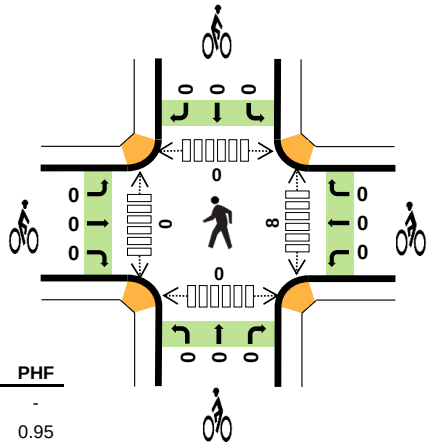
Interval Start	I-90 WB Off Ramp			I-90 WB Off Ramp			N Mullan Rd			N Mullan Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Mullan Rd
I-90 WB Off Ramp

Date: 09/18/2024
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 3:15 PM to 4:15 PM





	HV %:	PHF
EB	-	-
WB	2.9%	0.95
NB	2.8%	0.96
SB	-	-
TOTAL	2.8%	0.98

Three-Hour Count Summaries

Interval Start		I-90 WB Off Ramp Eastbound				I-90 WB Off Ramp Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:15 PM		0	0	0	0	0	0	94	116	0	74	377	0	0	0	0	0	661	0
3:30 PM		0	0	0	0	0	0	94	103	0	81	360	0	0	0	0	0	638	0
3:45 PM		0	0	0	0	0	0	95	125	0	84	325	0	0	0	0	0	629	0
4:00 PM		0	0	0	0	0	0	103	109	0	88	350	0	0	0	0	0	650	2,578
Peak Hour	All	0	0	0	0	0	0	386	453	0	327	1,412	0	0	0	0	0	2,578	0
	HV	0	0	0	0	0	0	13	11	0	7	42	0	0	0	0	0	73	0
	HV%	-	-	-	-	-	-	3%	2%	-	2%	3%	-	-	-	-	-	3%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:15 PM	0	9	7	0	*16*	0	0	0	0	*0*	3	0	0	0	*3*
3:30 PM	0	4	13	0	*17*	0	0	0	0	*0*	1	0	0	0	*1*
3:45 PM	0	5	14	0	*19*	0	0	0	0	*0*	2	0	0	0	*2*
4:00 PM	0	6	15	0	*21*	0	0	0	0	*0*	2	0	0	0	*2*
Peak Hour	0	24	49	0	*73*	0	0	0	0	*0*	8	0	0	0	*8*

Three-Hour Count Summaries

Interval Start	I-90 WB Off Ramp Eastbound				I-90 WB Off Ramp Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	93	106	0	72	322	0	0	0	0	0	593	0
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**94**	**116**	**0**	**74**	**377**	**0**	**0**	**0**	**0**	**0**	**661**	0
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**94**	**103**	**0**	**81**	**360**	**0**	**0**	**0**	**0**	**0**	**638**	0
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**95**	**125**	**0**	**84**	**325**	**0**	**0**	**0**	**0**	**0**	**629**	2,521
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**103**	**109**	**0**	**88**	**350**	**0**	**0**	**0**	**0**	**0**	**650**	**2,578**
4:15 PM	0	0	0	0	0	0	89	96	0	67	302	0	0	0	0	0	554	2,471
4:30 PM	0	0	0	0	0	0	89	81	0	86	333	0	0	0	0	0	589	2,422
4:45 PM	0	0	0	0	0	0	91	99	0	61	368	0	0	0	0	0	619	2,412
5:00 PM	0	0	0	0	0	0	87	96	0	99	371	0	0	0	0	0	653	2,415
5:15 PM	0	0	0	0	0	0	87	98	0	80	329	0	0	0	0	0	594	2,455
5:30 PM	0	0	0	0	0	0	68	96	0	78	309	0	0	0	0	0	551	2,417
5:45 PM	0	0	0	0	0	0	68	111	0	82	276	0	0	0	0	0	537	2,335
Count Total	0	0	0	0	0	0	1,058	1,236	0	952	4,022	0	0	0	0	0	7,268	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**0**	**386**	**453**	**0**	**327**	**1,412**	**0**	**0**	**0**	**0**	**0**	**2,578**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**11**	**0**	**7**	**42**	**0**	**0**	**0**	**0**	**0**	**73**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**-**	**3%**	**2%**	**-**	**2%**	**3%**	**-**	**-**	**-**	**-**	**-**	**3%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	0	8	29	0	*37*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 PM	**0**	**9**	**7**	**0**	***16***	**0**	**0**	**0**	**0**	***0***	**3**	**0**	**0**	**0**	*3*
3:30 PM	**0**	**4**	**13**	**0**	***17***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
3:45 PM	**0**	**5**	**14**	**0**	***19***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	*2*
4:00 PM	**0**	**6**	**15**	**0**	***21***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	***2***
4:15 PM	0	7	8	0	*15*	0	0	0	0	*0*	1	0	0	0	*1*
4:30 PM	0	2	17	0	*19*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	0	3	18	0	*21*	0	0	0	0	*0*	1	0	0	0	*1*
5:00 PM	0	2	8	0	*10*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	0	1	7	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*
5:30 PM	0	7	10	0	*17*	0	0	0	0	*0*	1	0	0	0	*1*
5:45 PM	0	3	8	0	*11*	0	0	0	0	*0*	2	0	0	0	*2*
Count Total	0	57	154	0	*211*	0	0	0	0	*0*	13	0	0	0	*13*
Peak Hour	**0**	**24**	**49**	**0**	***73***	**0**	**0**	**0**	**0**	***0***	**8**	**0**	**0**	**0**	***8***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	I-90 WB Off Ramp				I-90 WB Off Ramp				N Mullan Rd				N Mullan Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	6	2	0	4	25	0	0	0	0	0	37	0
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**6**	**0**	**1**	**6**	**0**	**0**	**0**	**0**	**0**	**16**	0
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**12**	**0**	**0**	**0**	**0**	**0**	**17**	0
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**0**	**3**	**11**	**0**	**0**	**0**	**0**	**0**	**19**	89
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**2**	**0**	**2**	**13**	**0**	**0**	**0**	**0**	**0**	**21**	**73**
4:15 PM	0	0	0	0	0	0	2	5	0	1	7	0	0	0	0	0	15	72
4:30 PM	0	0	0	0	0	0	0	2	0	3	14	0	0	0	0	0	19	74
4:45 PM	0	0	0	0	0	0	2	1	0	3	15	0	0	0	0	0	21	76
5:00 PM	0	0	0	0	0	0	1	1	0	2	6	0	0	0	0	0	10	65
5:15 PM	0	0	0	0	0	0	0	1	0	1	6	0	0	0	0	0	8	58
5:30 PM	0	0	0	0	0	0	5	2	0	1	9	0	0	0	0	0	17	56
5:45 PM	0	0	0	0	0	0	1	2	0	3	5	0	0	0	0	0	11	46
Count Total	0	0	0	0	0	0	30	27	0	25	129	0	0	0	0	0	211	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**13**	**11**	**0**	**7**	**42**	**0**	**0**	**0**	**0**	**0**	**73**	**0**

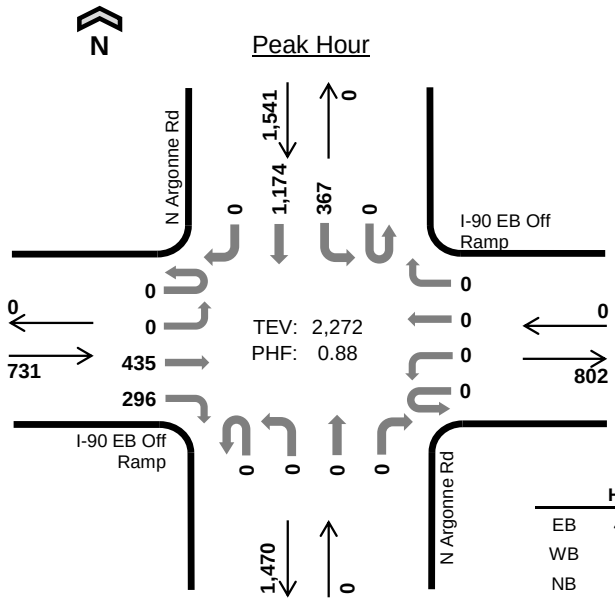
Three-Hour Count Summaries - Bikes

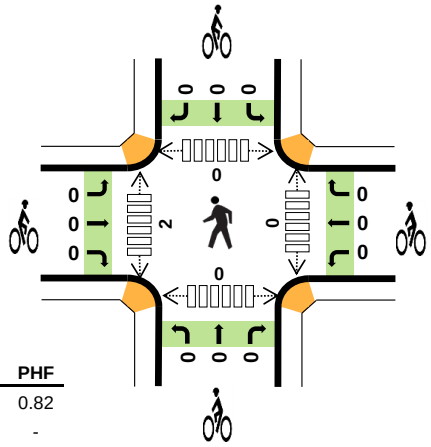
Interval Start	I-90 WB Off Ramp			I-90 WB Off Ramp			N Mullan Rd			N Mullan Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
3:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
3:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Argonne Rd
I-90 EB Off Ramp

Date: 09/18/2024
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	4.1%	0.82
WB	-	-
NB	-	-
SB	4.0%	0.85
TOTAL	4.0%	0.88

Three-Hour Count Summaries

Interval Start		I-90 EB Off Ramp Eastbound				I-90 EB Off Ramp Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:30 AM		0	0	107	68	0	0	0	0	0	0	0	0	0	80	274	0	529	0
7:45 AM		0	0	141	83	0	0	0	0	0	0	0	0	0	86	325	0	635	0
8:00 AM		0	0	111	81	0	0	0	0	0	0	0	0	0	122	330	0	644	0
8:15 AM		0	0	76	64	0	0	0	0	0	0	0	0	0	79	245	0	464	2,272
Peak Hour	All	0	0	435	296	0	0	0	0	0	0	0	0	0	367	1,174	0	2,272	0
	HV	0	0	25	5	0	0	0	0	0	0	0	0	0	14	47	0	91	0
	HV%	-	-	6%	2%	-	-	-	-	-	-	-	-	-	4%	4%	-	4%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:30 AM	2	0	0	8	*10*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	11	0	0	14	*25*	0	0	0	0	*0*	0	2	0	0	*2*
8:00 AM	4	0	0	25	*29*	0	0	0	0	*0*	0	0	0	0	*0*
8:15 AM	13	0	0	14	*27*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	30	0	0	61	*91*	0	0	0	0	*0*	0	2	0	0	*2*

Three-Hour Count Summaries

Interval Start	I-90 EB Off Ramp				I-90 EB Off Ramp				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	45	7	0	0	0	0	0	0	0	0	0	49	73	0	174	0
6:15 AM	0	0	48	18	0	0	0	0	0	0	0	0	0	59	110	0	235	0
6:30 AM	0	0	82	33	0	0	0	0	0	0	0	0	0	96	158	0	369	0
6:45 AM	0	0	120	56	0	0	0	0	0	0	0	0	0	97	207	0	480	1,258
7:00 AM	0	0	98	50	0	0	0	0	0	0	0	0	0	97	189	0	434	1,518
7:15 AM	0	0	88	53	0	0	0	0	0	0	0	0	0	97	210	0	448	1,731
7:30 AM	**0**	**0**	**107**	**68**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**80**	**274**	**0**	**529**	1,891
7:45 AM	**0**	**0**	**141**	**83**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**86**	**325**	**0**	**635**	2,046
8:00 AM	**0**	**0**	**111**	**81**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**122**	**330**	**0**	**644**	2,256
8:15 AM	**0**	**0**	**76**	**64**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**79**	**245**	**0**	**464**	**2,272**
8:30 AM	0	0	84	73	0	0	0	0	0	0	0	0	0	90	231	0	478	2,221
8:45 AM	0	0	97	72	0	0	0	0	0	0	0	0	0	102	280	0	551	2,137
Count Total	0	0	1,097	658	0	0	0	0	0	0	0	0	0	1,054	2,632	0	5,441	0
Peak Hour All	**0**	**0**	**435**	**296**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**367**	**1,174**	**0**	**2,272**	**0**
Peak Hour HV	**0**	**0**	**25**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**47**	**0**	**91**	**0**
Peak Hour HV%	**-**	**-**	**6%**	**2%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4%**	**4%**	**-**	**4%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	5	0	0	7	*12*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	7	0	0	3	*10*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	10	0	0	13	*23*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	4	0	0	14	*18*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 AM	7	0	0	9	*16*	0	0	0	0	*0*	0	2	0	0	*2*
7:15 AM	9	0	0	13	*22*	0	0	0	0	*0*	0	2	0	0	*2*
7:30 AM	**2**	**0**	**0**	**8**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**11**	**0**	**0**	**14**	***25***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	*2*
8:00 AM	**4**	**0**	**0**	**25**	***29***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**13**	**0**	**0**	**14**	***27***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	8	0	0	9	*17*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	5	0	0	13	*18*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	85	0	0	142	*227*	0	0	0	0	*0*	0	6	0	0	*6*
Peak Hour	**30**	**0**	**0**	**61**	***91***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	***2***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	I-90 EB Off Ramp				I-90 EB Off Ramp				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	4	1	0	0	0	0	0	0	0	0	0	3	4	0	12	0
6:15 AM	0	0	6	1	0	0	0	0	0	0	0	0	0	0	3	0	10	0
6:30 AM	0	0	5	5	0	0	0	0	0	0	0	0	0	7	6	0	23	0
6:45 AM	0	0	2	2	0	0	0	0	0	0	0	0	0	4	10	0	18	63
7:00 AM	0	0	5	2	0	0	0	0	0	0	0	0	0	2	7	0	16	67
7:15 AM	0	0	7	2	0	0	0	0	0	0	0	0	0	7	6	0	22	79
7:30 AM	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**6**	**0**	**10**	66
7:45 AM	**0**	**0**	**8**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**12**	**0**	**25**	73
8:00 AM	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**19**	**0**	**29**	86
8:15 AM	**0**	**0**	**12**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**10**	**0**	**27**	**91**
8:30 AM	0	0	7	1	0	0	0	0	0	0	0	0	0	3	6	0	17	98
8:45 AM	0	0	4	1	0	0	0	0	0	0	0	0	0	7	6	0	18	91
Count Total	0	0	65	20	0	0	0	0	0	0	0	0	0	47	95	0	227	0
Peak Hour	**0**	**0**	**25**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**47**	**0**	**91**	**0**

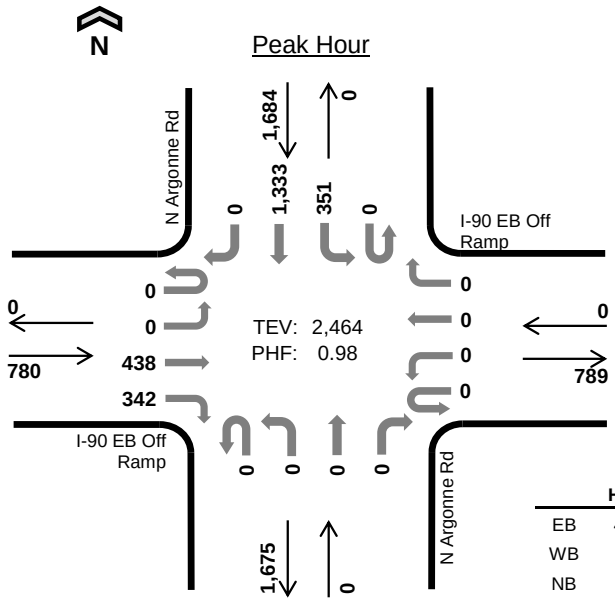
Three-Hour Count Summaries - Bikes

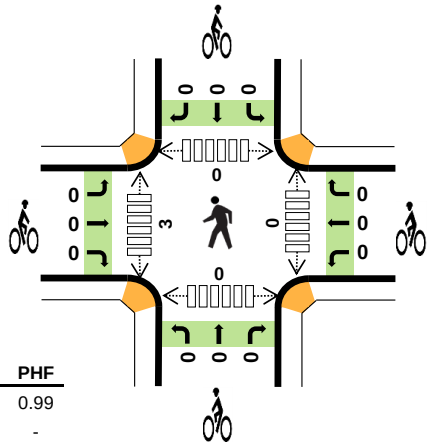
Interval Start	I-90 EB Off Ramp			I-90 EB Off Ramp			N Argonne Rd			N Argonne Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Argonne Rd
I-90 EB Off Ramp

Date: 09/18/2024
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	4.0%	0.99
WB	-	-
NB	-	-
SB	2.4%	0.98
TOTAL	2.9%	0.98

Three-Hour Count Summaries

Interval Start		I-90 EB Off Ramp Eastbound				I-90 EB Off Ramp Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	0	113	83	0	0	0	0	0	0	0	0	0	87	323	0	606	0
4:45 PM		0	0	108	82	0	0	0	0	0	0	0	0	0	97	328	0	615	0
5:00 PM		0	0	106	91	0	0	0	0	0	0	0	0	0	80	349	0	626	0
5:15 PM		0	0	111	86	0	0	0	0	0	0	0	0	0	87	333	0	617	2,464
Peak Hour	All	0	0	438	342	0	0	0	0	0	0	0	0	0	351	1,333	0	2,464	0
	HV	0	0	26	5	0	0	0	0	0	0	0	0	0	12	29	0	72	0
	HV%	-	-	6%	1%	-	-	-	-	-	-	-	-	-	3%	2%	-	3%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:30 PM	10	0	0	9	*19*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	10	0	0	13	*23*	0	0	0	0	*0*	0	1	0	0	*1*
5:00 PM	5	0	0	10	*15*	0	0	0	0	*0*	0	2	0	0	*2*
5:15 PM	6	0	0	9	*15*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	31	0	0	41	*72*	0	0	0	0	*0*	0	3	0	0	*3*

Three-Hour Count Summaries

Interval Start	I-90 EB Off Ramp				I-90 EB Off Ramp				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	108	76	0	0	0	0	0	0	0	0	0	103	330	0	617	0
3:15 PM	0	0	125	88	0	0	0	0	0	0	0	0	0	89	330	0	632	0
3:30 PM	0	0	99	91	0	0	0	0	0	0	0	0	0	94	309	0	593	0
3:45 PM	0	0	118	99	0	0	0	0	0	0	0	0	0	69	223	0	509	2,351
4:00 PM	0	0	107	88	0	0	0	0	0	0	0	0	0	61	226	0	482	2,216
4:15 PM	0	0	100	71	0	0	0	0	0	0	0	0	0	83	357	0	611	2,195
4:30 PM	**0**	**0**	**113**	**83**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**87**	**323**	**0**	**606**	2,208
4:45 PM	**0**	**0**	**108**	**82**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**97**	**328**	**0**	**615**	2,314
5:00 PM	**0**	**0**	**106**	**91**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**80**	**349**	**0**	**626**	2,458
5:15 PM	**0**	**0**	**111**	**86**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**87**	**333**	**0**	**617**	**2,464**
5:30 PM	0	0	86	76	0	0	0	0	0	0	0	0	0	88	329	0	579	2,437
5:45 PM	0	0	87	95	0	0	0	0	0	0	0	0	0	96	287	0	565	2,387
Count Total	0	0	1,268	1,026	0	0	0	0	0	0	0	0	0	1,034	3,724	0	7,052	0
Peak Hour All	**0**	**0**	**438**	**342**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**351**	**1,333**	**0**	**2,464**	**0**
Peak Hour HV	**0**	**0**	**26**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**29**	**0**	**72**	**0**
Peak Hour HV%	**-**	**-**	**6%**	**1%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**3%**	**2%**	**-**	**3%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	13	0	0	15	*28*	0	0	0	0	*0*	0	0	0	0	*0*
3:15 PM	6	0	0	12	*18*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	11	0	0	8	*19*	0	0	0	0	*0*	0	0	0	0	*0*
3:45 PM	7	0	0	7	*14*	0	0	0	0	*0*	0	1	0	0	*1*
4:00 PM	8	0	0	12	*20*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	9	0	0	9	*18*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	**10**	**0**	**0**	**9**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**10**	**0**	**0**	**13**	***23***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
5:00 PM	**5**	**0**	**0**	**10**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	*2*
5:15 PM	**6**	**0**	**0**	**9**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	6	0	0	9	*15*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	4	0	0	7	*11*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	95	0	0	120	*215*	0	0	0	0	*0*	0	4	0	0	*4*
Peak Hour	**31**	**0**	**0**	**41**	***72***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**0**	**0**	***3***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	I-90 EB Off Ramp				I-90 EB Off Ramp				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	0	12	1	0	0	0	0	0	0	0	0	0	2	13	0	28	0
3:15 PM	0	0	4	2	0	0	0	0	0	0	0	0	0	3	9	0	18	0
3:30 PM	0	0	8	3	0	0	0	0	0	0	0	0	0	4	4	0	19	0
3:45 PM	0	0	6	1	0	0	0	0	0	0	0	0	0	2	5	0	14	79
4:00 PM	0	0	7	1	0	0	0	0	0	0	0	0	0	3	9	0	20	71
4:15 PM	0	0	6	3	0	0	0	0	0	0	0	0	0	2	7	0	18	71
4:30 PM	**0**	**0**	**10**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**7**	**0**	**19**	71
4:45 PM	**0**	**0**	**9**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**6**	**0**	**23**	80
5:00 PM	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	**0**	**15**	75
5:15 PM	**0**	**0**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**7**	**0**	**15**	**72**
5:30 PM	0	0	4	2	0	0	0	0	0	0	0	0	0	2	7	0	15	68
5:45 PM	0	0	3	1	0	0	0	0	0	0	0	0	0	1	6	0	11	56
Count Total	0	0	76	19	0	0	0	0	0	0	0	0	0	31	89	0	215	0
Peak Hour	**0**	**0**	**26**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	**29**	**0**	**72**	**0**

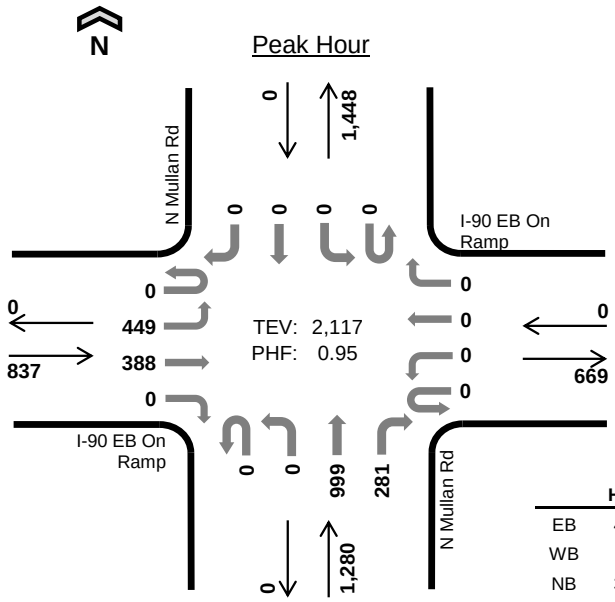
Three-Hour Count Summaries - Bikes

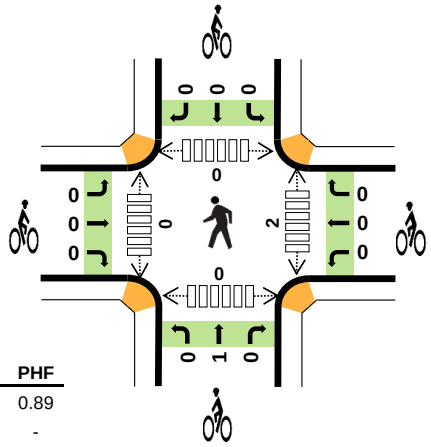
Interval Start	I-90 EB Off Ramp			I-90 EB Off Ramp			N Argonne Rd			N Argonne Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Mullan Rd
I-90 EB On Ramp

Date: 09/18/2024
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV %:	PHF
EB	4.5%	0.89
WB	-	-
NB	3.9%	0.96
SB	-	-
TOTAL	4.2%	0.95

Three-Hour Count Summaries

Interval Start		I-90 EB On Ramp Eastbound				I-90 EB On Ramp Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	86	97	0	0	0	0	0	0	0	270	61	0	0	0	0	514	0
7:30 AM		0	111	79	0	0	0	0	0	0	0	259	74	0	0	0	0	523	0
7:45 AM		0	143	92	0	0	0	0	0	0	0	251	73	0	0	0	0	559	0
8:00 AM		0	109	120	0	0	0	0	0	0	0	219	73	0	0	0	0	521	2,117
Peak Hour	All	0	449	388	0	0	0	0	0	0	0	999	281	0	0	0	0	2,117	0
	HV	0	23	15	0	0	0	0	0	0	0	41	9	0	0	0	0	88	0
	HV%	-	5%	4%	-	-	-	-	-	-	-	4%	3%	-	-	-	-	4%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:15 AM	13	0	15	0	*28*	0	0	1	0	*1*	2	0	0	0	*2*
7:30 AM	4	0	15	0	*19*	0	0	0	0	*0*	0	0	0	0	*0*
7:45 AM	13	0	9	0	*22*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	8	0	11	0	*19*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	38	0	50	0	*88*	0	0	1	0	*1*	2	0	0	0	*2*

Three-Hour Count Summaries

Interval Start	I-90 EB On Ramp				I-90 EB On Ramp				N Mullan Rd				N Mullan Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	46	51	0	0	0	0	0	0	0	105	37	0	0	0	0	239	0
6:15 AM	0	47	56	0	0	0	0	0	0	0	146	37	0	0	0	0	286	0
6:30 AM	0	80	94	0	0	0	0	0	0	0	183	63	0	0	0	0	420	0
6:45 AM	0	119	102	0	0	0	0	0	0	0	196	62	0	0	0	0	479	1,424
7:00 AM	0	94	97	0	0	0	0	0	0	0	222	54	0	0	0	0	467	1,652
7:15 AM	**0**	**86**	**97**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**270**	**61**	**0**	**0**	**0**	**0**	**514**	1,880
7:30 AM	**0**	**111**	**79**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**259**	**74**	**0**	**0**	**0**	**0**	**523**	1,983
7:45 AM	**0**	**143**	**92**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**251**	**73**	**0**	**0**	**0**	**0**	**559**	2,063
8:00 AM	**0**	**109**	**120**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**219**	**73**	**0**	**0**	**0**	**0**	**521**	**2,117**
8:15 AM	0	74	83	0	0	0	0	0	0	0	207	76	0	0	0	0	440	2,043
8:30 AM	0	80	99	0	0	0	0	0	0	0	199	63	0	0	0	0	441	1,961
8:45 AM	0	97	98	0	0	0	0	0	0	0	230	67	0	0	0	0	492	1,894
Count Total	0	1,086	1,068	0	0	0	0	0	0	0	2,487	740	0	0	0	0	5,381	0
Peak Hour All	**0**	**449**	**388**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**999**	**281**	**0**	**0**	**0**	**0**	**2,117**	**0**
Peak Hour HV	**0**	**23**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**41**	**9**	**0**	**0**	**0**	**0**	**88**	**0**
Peak Hour HV%	**-**	**5%**	**4%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4%**	**3%**	**-**	**-**	**-**	**-**	**4%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	7	0	6	0	*13*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	6	0	8	0	*14*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	12	0	6	0	*18*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	6	0	15	0	*21*	0	0	0	0	*0*	0	0	0	0	*0*
7:00 AM	7	0	9	0	*16*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**13**	**0**	**15**	**0**	***28***	**0**	**0**	**1**	**0**	***1***	**2**	**0**	**0**	**0**	*2*
7:30 AM	**4**	**0**	**15**	**0**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**13**	**0**	**9**	**0**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**8**	**0**	**11**	**0**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	16	0	9	0	*25*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	10	0	10	0	*20*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	10	0	12	0	*22*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	112	0	125	0	*237*	0	0	1	0	*1*	2	0	0	0	*2*
Peak Hour	**38**	**0**	**50**	**0**	***88***	**0**	**0**	**1**	**0**	***1***	**2**	**0**	**0**	**0**	***2***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	I-90 EB On Ramp				I-90 EB On Ramp				N Mullan Rd				N Mullan Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	4	3	0	0	0	0	0	0	0	2	4	0	0	0	0	13	0
6:15 AM	0	5	1	0	0	0	0	0	0	0	6	2	0	0	0	0	14	0
6:30 AM	0	2	10	0	0	0	0	0	0	0	4	2	0	0	0	0	18	0
6:45 AM	0	2	4	0	0	0	0	0	0	0	9	6	0	0	0	0	21	66
7:00 AM	0	5	2	0	0	0	0	0	0	0	6	3	0	0	0	0	16	69
7:15 AM	**0**	**7**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**4**	**0**	**0**	**0**	**0**	**28**	83
7:30 AM	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**0**	**0**	**0**	**19**	84
7:45 AM	**0**	**10**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**3**	**0**	**0**	**0**	**0**	**22**	85
8:00 AM	**0**	**4**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**2**	**0**	**0**	**0**	**0**	**19**	**88**
8:15 AM	0	11	5	0	0	0	0	0	0	0	8	1	0	0	0	0	25	85
8:30 AM	0	6	4	0	0	0	0	0	0	0	8	2	0	0	0	0	20	86
8:45 AM	0	4	6	0	0	0	0	0	0	0	10	2	0	0	0	0	22	86
Count Total	0	62	50	0	0	0	0	0	0	0	94	31	0	0	0	0	237	0
Peak Hour	**0**	**23**	**15**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**41**	**9**	**0**	**0**	**0**	**0**	**88**	**0**

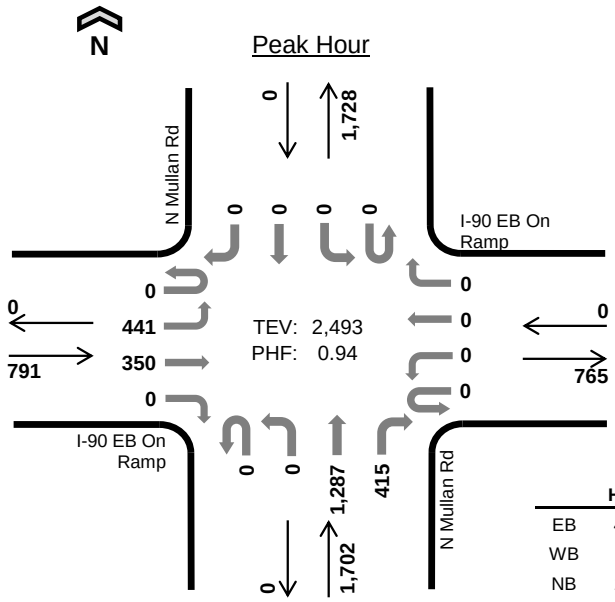
Three-Hour Count Summaries - Bikes

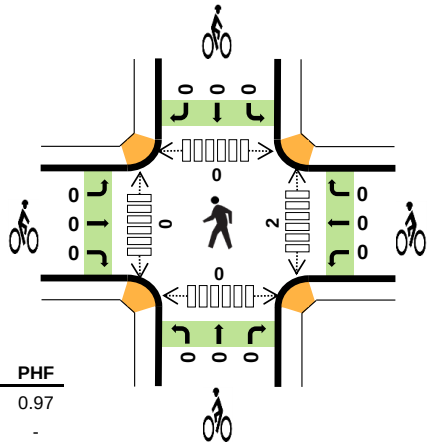
Interval Start	I-90 EB On Ramp			I-90 EB On Ramp			N Mullan Rd			N Mullan Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	1
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**

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

N Mullan Rd
I-90 EB On Ramp

Date: 09/18/2024
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	4.8%	0.97
WB	-	-
NB	1.4%	0.89
SB	-	-
TOTAL	2.4%	0.94

Three-Hour Count Summaries

Interval Start		I-90 EB On Ramp Eastbound				I-90 EB On Ramp Westbound				N Mullan Rd Northbound				N Mullan Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	115	82	0	0	0	0	0	0	0	304	95	0	0	0	0	596	0
4:45 PM		0	109	95	0	0	0	0	0	0	0	321	104	0	0	0	0	629	0
5:00 PM		0	105	84	0	0	0	0	0	0	0	364	112	0	0	0	0	665	0
5:15 PM		0	112	89	0	0	0	0	0	0	0	298	104	0	0	0	0	603	2,493
Peak Hour	All	0	441	350	0	0	0	0	0	0	0	1,287	415	0	0	0	0	2,493	0
	HV	0	30	8	0	0	0	0	0	0	0	20	3	0	0	0	0	61	0
	HV%	-	7%	2%	-	-	-	-	-	-	-	2%	1%	-	-	-	-	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:30 PM	12	0	8	0	*20*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	15	0	10	0	*25*	0	0	0	0	*0*	1	0	0	0	*1*
5:00 PM	5	0	2	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
5:15 PM	6	0	3	0	*9*	0	0	0	0	*0*	1	0	0	0	*1*
Peak Hour	38	0	23	0	*61*	0	0	0	0	*0*	2	0	0	0	*2*

Three-Hour Count Summaries

Interval Start	I-90 EB On Ramp				I-90 EB On Ramp				N Mullan Rd				N Mullan Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	109	101	0	0	0	0	0	0	0	283	112	0	0	0	0	605	0
3:15 PM	0	128	86	0	0	0	0	0	0	0	324	95	0	0	0	0	633	0
3:30 PM	0	100	91	0	0	0	0	0	0	0	342	100	0	0	0	0	633	0
3:45 PM	0	115	75	0	0	0	0	0	0	0	298	89	0	0	0	0	577	2,448
4:00 PM	0	110	62	0	0	0	0	0	0	0	324	77	0	0	0	0	573	2,416
4:15 PM	0	98	81	0	0	0	0	0	0	0	268	97	0	0	0	0	544	2,327
4:30 PM	**0**	**115**	**82**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**304**	**95**	**0**	**0**	**0**	**0**	**596**	2,290
4:45 PM	**0**	**109**	**95**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**321**	**104**	**0**	**0**	**0**	**0**	**629**	2,342
5:00 PM	**0**	**105**	**84**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**364**	**112**	**0**	**0**	**0**	**0**	**665**	2,434
5:15 PM	**0**	**112**	**89**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**298**	**104**	**0**	**0**	**0**	**0**	**603**	**2,493**
5:30 PM	0	86	92	0	0	0	0	0	0	0	297	81	0	0	0	0	556	2,453
5:45 PM	0	90	89	0	0	0	0	0	0	0	272	68	0	0	0	0	519	2,343
Count Total	0	1,277	1,027	0	0	0	0	0	0	0	3,695	1,134	0	0	0	0	7,133	0
Peak Hour All	**0**	**441**	**350**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,287**	**415**	**0**	**0**	**0**	**0**	**2,493**	**0**
Peak Hour HV	**0**	**30**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**3**	**0**	**0**	**0**	**0**	**61**	**0**
Peak Hour HV%	**-**	**7%**	**2%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**2%**	**1%**	**-**	**-**	**-**	**-**	**2%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	14	0	19	0	*33*	0	0	0	0	*0*	2	0	0	0	*2*
3:15 PM	6	0	8	0	*14*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	13	0	8	0	*21*	0	0	0	0	*0*	1	0	0	0	*1*
3:45 PM	8	0	16	0	*24*	0	0	0	0	*0*	2	0	0	0	*2*
4:00 PM	10	0	10	0	*20*	0	0	0	0	*0*	1	0	0	0	*1*
4:15 PM	8	0	4	0	*12*	0	0	0	0	*0*	2	0	0	0	*2*
4:30 PM	**12**	**0**	**8**	**0**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**15**	**0**	**10**	**0**	***25***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:00 PM	**5**	**0**	**2**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**6**	**0**	**3**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
5:30 PM	6	0	6	0	*12*	0	0	0	0	*0*	1	0	0	0	*1*
5:45 PM	4	0	5	0	*9*	0	0	0	0	*0*	1	0	0	0	*1*
Count Total	107	0	99	0	*206*	0	0	0	0	*0*	12	0	0	0	*12*
Peak Hour	**38**	**0**	**23**	**0**	***61***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**0**	***2***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	I-90 EB On Ramp				I-90 EB On Ramp				N Mullan Rd				N Mullan Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	12	2	0	0	0	0	0	0	0	16	3	0	0	0	0	33	0
3:15 PM	0	3	3	0	0	0	0	0	0	0	5	3	0	0	0	0	14	0
3:30 PM	0	9	4	0	0	0	0	0	0	0	5	3	0	0	0	0	21	0
3:45 PM	0	6	2	0	0	0	0	0	0	0	9	7	0	0	0	0	24	92
4:00 PM	0	7	3	0	0	0	0	0	0	0	9	1	0	0	0	0	20	79
4:15 PM	0	5	3	0	0	0	0	0	0	0	2	2	0	0	0	0	12	77
4:30 PM	**0**	**10**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**1**	**0**	**0**	**0**	**0**	**20**	76
4:45 PM	**0**	**12**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**2**	**0**	**0**	**0**	**0**	**25**	77
5:00 PM	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**7**	64
5:15 PM	**0**	**4**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**9**	**61**
5:30 PM	0	3	3	0	0	0	0	0	0	0	5	1	0	0	0	0	12	53
5:45 PM	0	3	1	0	0	0	0	0	0	0	5	0	0	0	0	0	9	37
Count Total	0	78	29	0	0	0	0	0	0	0	76	23	0	0	0	0	206	0
Peak Hour	**0**	**30**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**3**	**0**	**0**	**0**	**0**	**61**	**0**

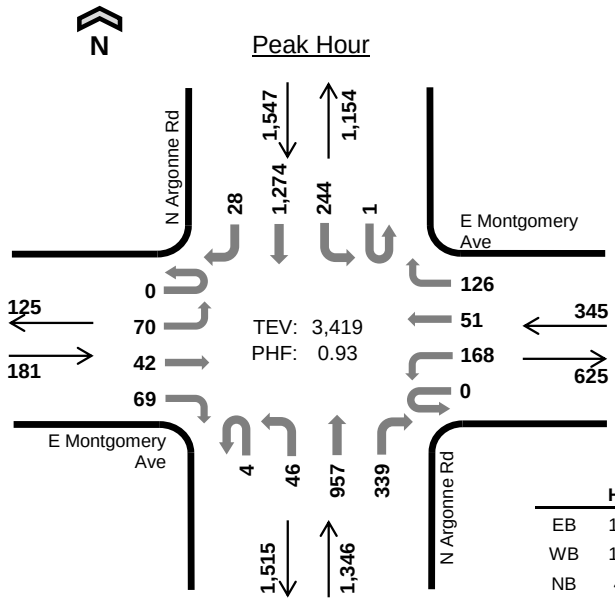
Three-Hour Count Summaries - Bikes

Interval Start	I-90 EB On Ramp			I-90 EB On Ramp			N Mullan Rd			N Mullan Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

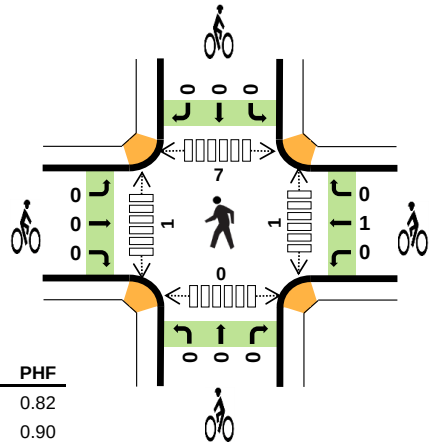
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

N Argonne Rd
E Montgomery Ave

Date: 09/18/2024
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM



	HV %:	PHF
EB	15.5%	0.82
WB	14.2%	0.90
NB	4.5%	0.87
SB	4.3%	0.94
TOTAL	5.9%	0.93



Three-Hour Count Summaries

Interval Start		E Montgomery Ave Eastbound				E Montgomery Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	21	7	7	0	34	9	33	0	12	220	73	1	56	297	12	782	0
7:30 AM		0	18	12	18	0	45	14	37	1	19	244	86	0	72	335	3	904	0
7:45 AM		0	15	16	24	0	40	16	33	2	9	269	105	0	65	319	6	919	0
8:00 AM		0	16	7	20	0	49	12	23	1	6	224	75	0	51	323	7	814	3,419
Peak Hour	All	0	70	42	69	0	168	51	126	4	46	957	339	1	244	1,274	28	3,419	0
	HV	0	12	3	13	0	24	9	16	0	5	33	22	0	15	50	1	203	0
	HV%	-	17%	7%	19%	-	14%	18%	13%	0%	11%	3%	6%	0%	6%	4%	4%	6%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:15 AM	8	7	13	17	*45*	0	0	0	0	*0*	0	0	1	0	*1*
7:30 AM	9	13	14	10	*46*	0	0	0	0	*0*	1	0	5	0	*6*
7:45 AM	6	13	18	16	*53*	0	1	0	0	*1*	0	0	0	0	*0*
8:00 AM	5	16	15	23	*59*	0	0	0	0	*0*	0	1	1	0	*2*
Peak Hour	28	49	60	66	*203*	0	1	0	0	*1*	1	1	7	0	*9*

Three-Hour Count Summaries

Interval Start	E Montgomery Ave Eastbound				E Montgomery Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	16	8	12	0	23	8	27	0	6	101	44	1	23	140	4	413	0
6:15 AM	0	25	9	17	0	19	5	10	0	13	127	35	0	44	177	4	485	0
6:30 AM	0	19	5	18	0	28	11	17	1	11	186	64	0	46	285	7	698	0
6:45 AM	0	21	11	16	0	28	6	18	0	12	189	119	0	76	270	13	779	2,375
7:00 AM	0	16	10	14	0	36	8	31	0	15	194	94	0	54	297	5	774	2,736
7:15 AM	**0**	**21**	**7**	**7**	**0**	**34**	**9**	**33**	**0**	**12**	**220**	**73**	**1**	**56**	**297**	**12**	**782**	3,033
7:30 AM	**0**	**18**	**12**	**18**	**0**	**45**	**14**	**37**	**1**	**19**	**244**	**86**	**0**	**72**	**335**	**3**	**904**	3,239
7:45 AM	**0**	**15**	**16**	**24**	**0**	**40**	**16**	**33**	**2**	**9**	**269**	**105**	**0**	**65**	**319**	**6**	**919**	3,379
8:00 AM	**0**	**16**	**7**	**20**	**0**	**49**	**12**	**23**	**1**	**6**	**224**	**75**	**0**	**51**	**323**	**7**	**814**	**3,419**
8:15 AM	0	20	7	18	0	49	12	34	0	8	200	82	0	36	282	7	755	3,392
8:30 AM	0	20	10	14	0	61	13	43	1	6	199	69	0	61	313	9	819	3,307
8:45 AM	0	12	18	8	0	49	10	55	1	13	237	79	0	58	337	5	882	3,270
Count Total	0	219	120	186	0	461	124	361	7	130	2,390	925	2	642	3,375	82	9,024	0
Peak Hour All	**0**	**70**	**42**	**69**	**0**	**168**	**51**	**126**	**4**	**46**	**957**	**339**	**1**	**244**	**1,274**	**28**	**3,419**	**0**
Peak Hour HV	**0**	**12**	**3**	**13**	**0**	**24**	**9**	**16**	**0**	**5**	**33**	**22**	**0**	**15**	**50**	**1**	**203**	**0**
Peak Hour HV%	**-**	**17%**	**7%**	**19%**	**-**	**14%**	**18%**	**13%**	**0%**	**11%**	**3%**	**6%**	**0%**	**6%**	**4%**	**4%**	**6%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	4	22	6	5	*37*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	4	2	9	7	*22*	0	0	0	0	*0*	1	1	1	0	*3*
6:30 AM	3	6	7	13	*29*	0	0	0	0	*0*	0	0	1	0	*1*
6:45 AM	5	7	9	19	*40*	0	0	0	0	*0*	1	2	2	0	*5*
7:00 AM	3	14	8	6	*31*	0	0	0	0	*0*	1	1	2	0	*4*
7:15 AM	**8**	**7**	**13**	**17**	***45***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
7:30 AM	**9**	**13**	**14**	**10**	***46***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**5**	**0**	*6*
7:45 AM	**6**	**13**	**18**	**16**	***53***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**5**	**16**	**15**	**23**	***59***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**0**	***2***
8:15 AM	4	15	15	16	*50*	0	0	0	0	*0*	0	0	0	0	*0*
8:30 AM	3	17	14	12	*46*	0	0	0	0	*0*	0	0	1	0	*1*
8:45 AM	4	13	19	21	*57*	0	0	0	0	*0*	3	0	2	0	*5*
Count Total	58	145	147	165	*515*	0	1	0	0	*1*	7	5	16	0	*28*
Peak Hour	**28**	**49**	**60**	**66**	***203***	**0**	**1**	**0**	**0**	***1***	**1**	**1**	**7**	**0**	***9***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Montgomery Ave				E Montgomery Ave				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	0	4	0	3	2	17	0	1	2	3	0	0	5	0	37	0
6:15 AM	0	2	0	2	0	0	1	1	0	1	5	3	0	2	5	0	22	0
6:30 AM	0	1	0	2	0	2	2	2	0	0	4	3	0	3	10	0	29	0
6:45 AM	0	3	0	2	0	3	0	4	0	0	5	4	0	5	14	0	40	128
7:00 AM	0	2	0	1	0	6	4	4	0	2	4	2	0	2	4	0	31	122
7:15 AM	**0**	**5**	**1**	**2**	**0**	**4**	**0**	**3**	**0**	**1**	**4**	**8**	**0**	**4**	**13**	**0**	**45**	145
7:30 AM	**0**	**3**	**1**	**5**	**0**	**5**	**2**	**6**	**0**	**3**	**8**	**3**	**0**	**4**	**6**	**0**	**46**	162
7:45 AM	**0**	**2**	**0**	**4**	**0**	**6**	**4**	**3**	**0**	**1**	**9**	**8**	**0**	**1**	**15**	**0**	**53**	175
8:00 AM	**0**	**2**	**1**	**2**	**0**	**9**	**3**	**4**	**0**	**0**	**12**	**3**	**0**	**6**	**16**	**1**	**59**	**203**
8:15 AM	0	1	0	3	0	11	1	3	0	0	5	10	0	4	12	0	50	208
8:30 AM	0	0	2	1	0	8	1	8	0	0	9	5	0	7	5	0	46	208
8:45 AM	0	1	3	0	0	5	2	6	0	0	12	7	0	8	13	0	57	212
Count Total	0	22	8	28	0	62	22	61	0	9	79	59	0	46	118	1	515	0
Peak Hour	**0**	**12**	**3**	**13**	**0**	**24**	**9**	**16**	**0**	**5**	**33**	**22**	**0**	**15**	**50**	**1**	**203**	**0**

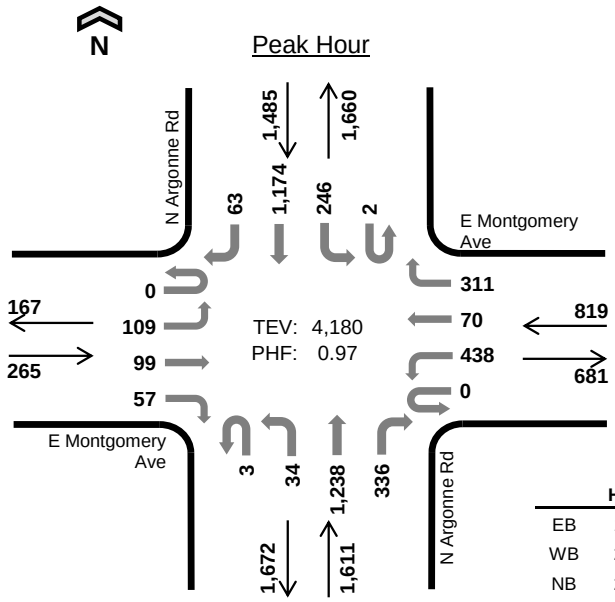
Three-Hour Count Summaries - Bikes

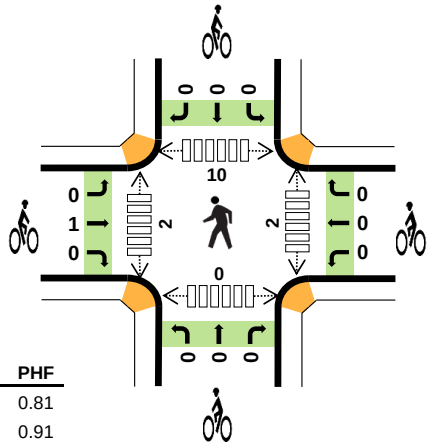
Interval Start	E Montgomery Ave			E Montgomery Ave			N Argonne Rd			N Argonne Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

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

N Argonne Rd
E Montgomery Ave

Date: 09/18/2024
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	1.1%	0.81
WB	2.2%	0.91
NB	2.9%	0.96
SB	3.6%	0.89
TOTAL	2.9%	0.97

Three-Hour Count Summaries

Interval Start		E Montgomery Ave Eastbound				E Montgomery Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	20	25	5	0	125	19	81	0	7	266	97	1	53	271	18	988	0
4:45 PM		0	35	20	17	0	111	23	77	2	12	309	95	1	52	271	14	1,039	0
5:00 PM		0	27	21	13	0	103	14	74	0	9	325	75	0	71	327	19	1,078	0
5:15 PM		0	27	33	22	0	99	14	79	1	6	338	69	0	70	305	12	1,075	4,180
Peak Hour	All	0	109	99	57	0	438	70	311	3	34	1,238	336	2	246	1,174	63	4,180	0
	HV	0	1	1	1	0	7	2	9	0	3	23	20	0	14	37	3	121	0
	HV%	-	1%	1%	2%	-	2%	3%	3%	0%	9%	2%	6%	0%	6%	3%	5%	3%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:30 PM	1	4	16	15	*36*	1	0	0	0	*1*	1	1	1	0	*3*
4:45 PM	1	4	17	10	*32*	0	0	0	0	*0*	1	0	2	0	*3*
5:00 PM	0	6	6	14	*26*	0	0	0	0	*0*	0	1	2	0	*3*
5:15 PM	1	4	7	15	*27*	0	0	0	0	*0*	0	0	5	0	*5*
Peak Hour	3	18	46	54	*121*	1	0	0	0	*1*	2	2	10	0	*14*

Three-Hour Count Summaries

Interval Start	E Montgomery Ave Eastbound				E Montgomery Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	16	15	5	0	87	11	71	3	7	319	80	1	72	273	10	970	0
3:15 PM	0	21	15	18	0	91	16	53	0	11	331	98	3	63	304	16	1,040	0
3:30 PM	0	17	12	17	0	100	15	78	0	14	328	83	0	58	291	6	1,019	0
3:45 PM	0	18	19	12	0	78	16	52	0	11	318	86	0	41	231	18	900	3,929
4:00 PM	0	25	27	5	0	90	22	72	0	8	323	94	0	45	148	14	873	3,832
4:15 PM	0	27	28	13	0	114	21	74	0	6	279	94	0	56	237	20	969	3,761
4:30 PM	**0**	**20**	**25**	**5**	**0**	**125**	**19**	**81**	**0**	**7**	**266**	**97**	**1**	**53**	**271**	**18**	**988**	3,730
4:45 PM	**0**	**35**	**20**	**17**	**0**	**111**	**23**	**77**	**2**	**12**	**309**	**95**	**1**	**52**	**271**	**14**	**1,039**	3,869
5:00 PM	**0**	**27**	**21**	**13**	**0**	**103**	**14**	**74**	**0**	**9**	**325**	**75**	**0**	**71**	**327**	**19**	**1,078**	4,074
5:15 PM	**0**	**27**	**33**	**22**	**0**	**99**	**14**	**79**	**1**	**6**	**338**	**69**	**0**	**70**	**305**	**12**	**1,075**	**4,180**
5:30 PM	0	11	17	14	0	94	14	56	3	11	305	72	0	64	280	8	949	4,141
5:45 PM	0	18	15	10	0	73	8	47	0	8	290	61	0	63	304	11	908	4,010
Count Total	0	262	247	151	0	1,165	193	814	9	110	3,731	1,004	6	708	3,242	166	11,808	0
Peak Hour All	**0**	**109**	**99**	**57**	**0**	**438**	**70**	**311**	**3**	**34**	**1,238**	**336**	**2**	**246**	**1,174**	**63**	**4,180**	**0**
Peak Hour HV	**0**	**1**	**1**	**1**	**0**	**7**	**2**	**9**	**0**	**3**	**23**	**20**	**0**	**14**	**37**	**3**	**121**	**0**
Peak Hour HV%	**-**	**1%**	**1%**	**2%**	**-**	**2%**	**3%**	**3%**	**0%**	**9%**	**2%**	**6%**	**0%**	**6%**	**3%**	**5%**	**3%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	3	5	27	17	*52*	0	0	0	0	*0*	1	0	2	0	*3*
3:15 PM	4	4	11	20	*39*	0	0	0	0	*0*	0	3	1	0	*4*
3:30 PM	0	9	15	16	*40*	0	0	0	0	*0*	1	1	0	0	*2*
3:45 PM	1	5	11	13	*30*	0	0	0	0	*0*	1	2	0	0	*3*
4:00 PM	3	7	13	10	*33*	0	0	0	0	*0*	3	1	4	0	*8*
4:15 PM	2	8	13	17	*40*	0	0	0	0	*0*	1	2	0	0	*3*
4:30 PM	**1**	**4**	**16**	**15**	***36***	**1**	**0**	**0**	**0**	***1***	**1**	**1**	**1**	**0**	*3*
4:45 PM	**1**	**4**	**17**	**10**	***32***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**2**	**0**	*3*
5:00 PM	**0**	**6**	**6**	**14**	***26***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**2**	**0**	*3*
5:15 PM	**1**	**4**	**7**	**15**	***27***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**5**	**0**	***5***
5:30 PM	1	4	9	3	*17*	0	0	0	0	*0*	3	2	2	0	*7*
5:45 PM	1	1	4	14	*20*	0	0	0	0	*0*	0	1	1	0	*2*
Count Total	18	61	149	164	*392*	1	0	0	0	*1*	12	14	20	0	*46*
Peak Hour	**3**	**18**	**46**	**54**	***121***	**1**	**0**	**0**	**0**	***1***	**2**	**2**	**10**	**0**	***14***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Montgomery Ave				E Montgomery Ave				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	1	2	0	0	2	0	3	0	0	16	11	0	9	6	2	52	0
3:15 PM	0	0	1	3	0	1	0	3	0	0	6	5	0	5	13	2	39	0
3:30 PM	0	0	0	0	0	5	1	3	0	1	7	7	0	7	8	1	40	0
3:45 PM	0	0	1	0	0	2	0	3	0	0	3	8	0	4	9	0	30	161
4:00 PM	0	1	2	0	0	3	0	4	0	0	6	7	0	6	3	1	33	142
4:15 PM	0	0	2	0	0	2	4	2	0	0	11	2	0	5	9	3	40	143
4:30 PM	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**2**	**0**	**0**	**6**	**10**	**0**	**1**	**12**	**2**	**36**	139
4:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**3**	**0**	**2**	**8**	**7**	**0**	**3**	**7**	**0**	**32**	141
5:00 PM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**0**	**0**	**5**	**1**	**0**	**4**	**9**	**1**	**26**	134
5:15 PM	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**2**	**0**	**1**	**4**	**2**	**0**	**6**	**9**	**0**	**27**	**121**
5:30 PM	0	0	1	0	0	2	1	1	0	0	6	3	0	1	2	0	17	102
5:45 PM	0	0	1	0	0	0	0	1	0	0	3	1	0	4	9	1	20	90
Count Total	0	3	11	4	0	24	8	29	0	4	81	64	0	55	96	13	392	0
Peak Hour	**0**	**1**	**1**	**1**	**0**	**7**	**2**	**9**	**0**	**3**	**23**	**20**	**0**	**14**	**37**	**3**	**121**	**0**

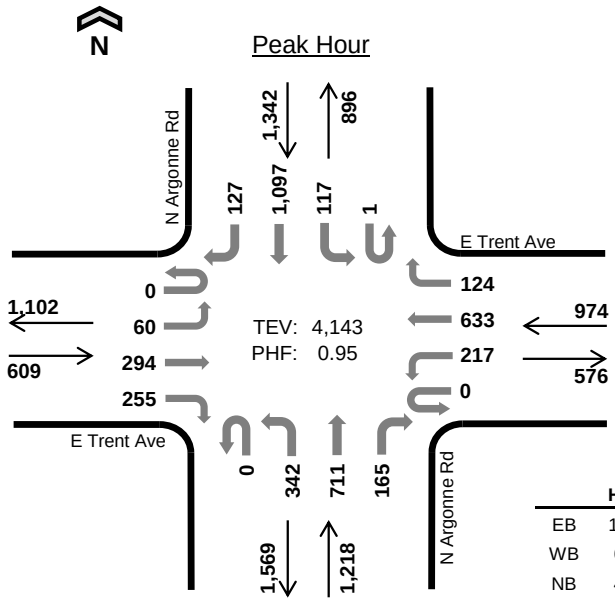
Three-Hour Count Summaries - Bikes

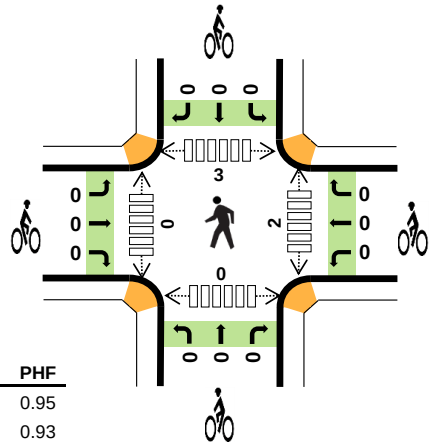
Interval Start	E Montgomery Ave			E Montgomery Ave			N Argonne Rd			N Argonne Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

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

N Argonne Rd
E Trent Ave

Date: 09/18/2024
Count Period: 6:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM





	HV %:	PHF
EB	11.2%	0.95
WB	6.8%	0.93
NB	4.9%	0.90
SB	3.5%	0.95
TOTAL	5.8%	0.95

Three-Hour Count Summaries

Interval Start		E Trent Ave Eastbound				E Trent Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:15 AM		0	10	77	57	0	58	146	37	0	82	182	39	1	25	254	32	1,000	0
7:30 AM		0	12	78	64	0	62	161	28	0	92	170	45	0	29	283	40	1,064	0
7:45 AM		0	21	71	69	0	53	183	25	0	101	193	46	0	36	272	22	1,092	0
8:00 AM		0	17	68	65	0	44	143	34	0	67	166	35	0	27	288	33	987	4,143
Peak Hour	All	0	60	294	255	0	217	633	124	0	342	711	165	1	117	1,097	127	4,143	0
	HV	0	12	37	19	0	14	38	14	0	16	34	10	0	1	37	9	241	0
	HV%	-	20%	13%	7%	-	6%	6%	11%	-	5%	5%	6%	0%	1%	3%	7%	6%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:15 AM	12	11	12	11	*46*	0	0	0	0	*0*	1	0	3	0	*4*
7:30 AM	16	13	19	6	*54*	0	0	0	0	*0*	1	0	0	0	*1*
7:45 AM	21	24	17	12	*74*	0	0	0	0	*0*	0	0	0	0	*0*
8:00 AM	19	18	12	18	*67*	0	0	0	0	*0*	0	0	0	0	*0*
Peak Hour	68	66	60	47	*241*	0	0	0	0	*0*	2	0	3	0	*5*

Three-Hour Count Summaries

Interval Start	E Trent Ave Eastbound				E Trent Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	1	37	36	0	26	69	16	0	28	112	25	0	15	134	24	523	0
6:15 AM	0	7	52	44	0	34	66	16	0	29	101	25	2	15	167	41	599	0
6:30 AM	0	3	83	55	0	40	114	14	0	38	146	32	0	32	256	36	849	0
6:45 AM	0	13	76	56	0	52	135	22	0	61	135	47	0	35	257	51	940	2,911
7:00 AM	0	10	54	70	0	40	118	24	0	53	150	39	0	24	249	42	873	3,261
7:15 AM	**0**	**10**	**77**	**57**	**0**	**58**	**146**	**37**	**0**	**82**	**182**	**39**	**1**	**25**	**254**	**32**	**1,000**	3,662
7:30 AM	**0**	**12**	**78**	**64**	**0**	**62**	**161**	**28**	**0**	**92**	**170**	**45**	**0**	**29**	**283**	**40**	**1,064**	3,877
7:45 AM	**0**	**21**	**71**	**69**	**0**	**53**	**183**	**25**	**0**	**101**	**193**	**46**	**0**	**36**	**272**	**22**	**1,092**	4,029
8:00 AM	**0**	**17**	**68**	**65**	**0**	**44**	**143**	**34**	**0**	**67**	**166**	**35**	**0**	**27**	**288**	**33**	**987**	**4,143**
8:15 AM	0	21	74	55	0	60	111	26	0	64	164	42	0	28	212	16	873	4,016
8:30 AM	0	11	76	77	0	59	91	20	0	76	155	31	0	32	242	26	896	3,848
8:45 AM	0	13	76	85	0	70	114	29	0	90	177	39	0	32	245	25	995	3,751
Count Total	0	139	822	733	0	598	1,451	291	0	781	1,851	445	3	330	2,859	388	10,691	0
Peak Hour All	**0**	**60**	**294**	**255**	**0**	**217**	**633**	**124**	**0**	**342**	**711**	**165**	**1**	**117**	**1,097**	**127**	**4,143**	**0**
Peak Hour HV	**0**	**12**	**37**	**19**	**0**	**14**	**38**	**14**	**0**	**16**	**34**	**10**	**0**	**1**	**37**	**9**	**241**	**0**
Peak Hour HV%	**-**	**20%**	**13%**	**7%**	**-**	**6%**	**6%**	**11%**	**-**	**5%**	**5%**	**6%**	**0%**	**1%**	**3%**	**7%**	**6%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
6:00 AM	5	9	21	3	*38*	0	0	0	0	*0*	0	0	0	0	*0*
6:15 AM	6	3	6	7	*22*	0	0	0	0	*0*	0	0	0	0	*0*
6:30 AM	14	2	5	12	*33*	0	0	0	0	*0*	0	0	0	0	*0*
6:45 AM	16	9	13	16	*54*	0	0	0	0	*0*	1	2	0	0	*3*
7:00 AM	9	12	9	9	*39*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	**12**	**11**	**12**	**11**	***46***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**3**	**0**	*4*
7:30 AM	**16**	**13**	**19**	**6**	***54***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
7:45 AM	**21**	**24**	**17**	**12**	***74***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**19**	**18**	**12**	**18**	***67***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:15 AM	14	19	12	7	*52*	0	0	0	0	*0*	0	0	2	0	*2*
8:30 AM	13	13	14	7	*47*	0	0	0	0	*0*	3	1	0	0	*4*
8:45 AM	18	16	13	18	*65*	0	0	0	0	*0*	1	1	1	0	*3*
Count Total	163	149	153	126	*591*	0	0	0	0	*0*	7	4	6	0	*17*
Peak Hour	**68**	**66**	**60**	**47**	***241***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**3**	**0**	***5***

Three-Hour Count Summaries - Heavy Vehicles

Interval Start	E Trent Ave				E Trent Ave				N Argonne Rd				N Argonne Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
6:00 AM	0	0	1	4	0	3	6	0	0	5	14	2	0	0	2	1	38	0
6:15 AM	0	0	6	0	0	1	2	0	0	1	5	0	0	1	6	0	22	0
6:30 AM	0	1	7	6	0	0	2	0	0	1	4	0	0	2	9	1	33	0
6:45 AM	0	3	6	7	0	5	4	0	0	3	8	2	0	3	12	1	54	147
7:00 AM	0	2	5	2	0	2	7	3	0	1	6	2	0	1	6	2	39	148
7:15 AM	**0**	**1**	**8**	**3**	**0**	**4**	**5**	**2**	**0**	**1**	**8**	**3**	**0**	**0**	**10**	**1**	**46**	172
7:30 AM	**0**	**4**	**7**	**5**	**0**	**4**	**7**	**2**	**0**	**7**	**9**	**3**	**0**	**0**	**3**	**3**	**54**	193
7:45 AM	**0**	**5**	**7**	**9**	**0**	**3**	**17**	**4**	**0**	**6**	**9**	**2**	**0**	**0**	**9**	**3**	**74**	213
8:00 AM	**0**	**2**	**15**	**2**	**0**	**3**	**9**	**6**	**0**	**2**	**8**	**2**	**0**	**1**	**15**	**2**	**67**	**241**
8:15 AM	0	3	8	3	0	5	10	4	0	1	9	2	0	0	6	1	52	247
8:30 AM	0	0	9	4	0	2	7	4	0	4	9	1	0	0	7	0	47	240
8:45 AM	0	0	10	8	0	7	8	1	0	2	9	2	0	2	12	4	65	231
Count Total	0	21	89	53	0	39	84	26	0	34	98	21	0	10	97	19	591	0
Peak Hour	**0**	**12**	**37**	**19**	**0**	**14**	**38**	**14**	**0**	**16**	**34**	**10**	**0**	**1**	**37**	**9**	**241**	**0**

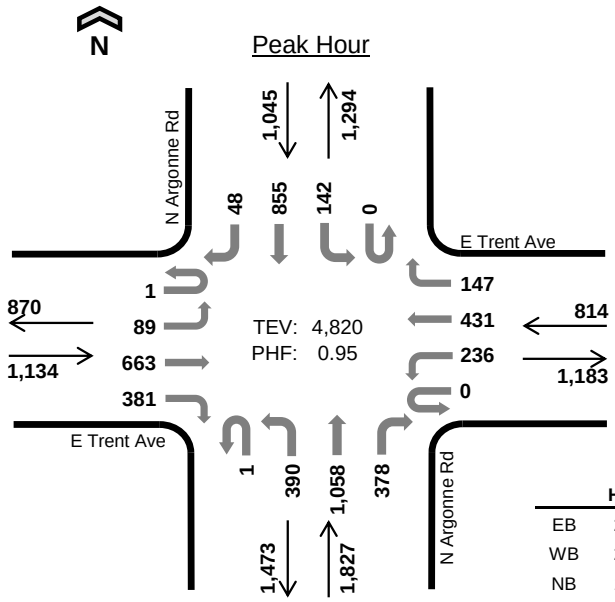
Three-Hour Count Summaries - Bikes

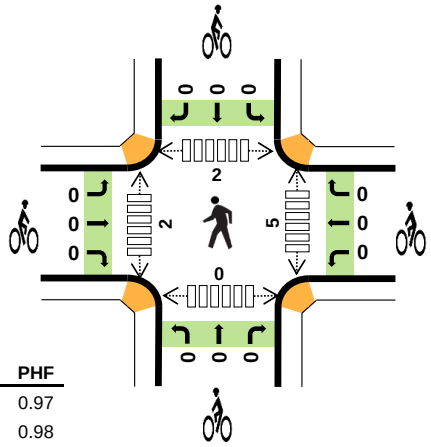
Interval Start	E Trent Ave			E Trent Ave			N Argonne Rd			N Argonne Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
6:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

N Argonne Rd
E Trent Ave

Date: 09/18/2024
Count Period: 3:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM





	HV %:	PHF
EB	2.5%	0.97
WB	2.2%	0.98
NB	1.5%	0.95
SB	4.0%	0.90
TOTAL	2.4%	0.95

Three-Hour Count Summaries

Interval Start		E Trent Ave Eastbound				E Trent Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:30 PM		0	29	181	68	0	56	111	40	1	99	232	99	0	39	229	12	1,196	0
4:45 PM		1	24	158	96	0	65	103	39	0	102	261	100	0	29	177	8	1,163	0
5:00 PM		0	16	151	124	0	62	101	32	0	96	268	88	0	28	218	14	1,198	0
5:15 PM		0	20	173	93	0	53	116	36	0	93	297	91	0	46	231	14	1,263	4,820
Peak Hour	All	1	89	663	381	0	236	431	147	1	390	1,058	378	0	142	855	48	4,820	0
	HV	0	2	19	7	0	2	15	1	0	6	13	9	0	2	39	1	116	0
	HV%	0%	2%	3%	2%	-	1%	3%	1%	0%	2%	1%	2%	-	1%	5%	2%	2%	0

Note: For all three-hour count summary, see next page.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:30 PM	6	7	5	14	*32*	0	0	0	0	*0*	0	0	1	0	*1*
4:45 PM	7	4	11	4	*26*	0	0	0	0	*0*	2	1	0	0	*3*
5:00 PM	9	3	6	10	*28*	0	0	0	0	*0*	2	1	1	0	*4*
5:15 PM	6	4	6	14	*30*	0	0	0	0	*0*	1	0	0	0	*1*
Peak Hour	28	18	28	42	*116*	0	0	0	0	*0*	5	2	2	0	*9*

Three-Hour Count Summaries

Interval Start	E Trent Ave Eastbound				E Trent Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	22	135	110	0	60	113	46	0	106	275	63	1	31	203	19	1,184	0
3:15 PM	0	39	143	85	0	58	86	42	0	90	264	67	0	26	237	20	1,157	0
3:30 PM	0	32	128	55	0	58	117	34	0	111	253	83	0	24	220	15	1,130	0
3:45 PM	0	30	171	87	1	57	130	50	0	99	261	67	0	23	197	15	1,188	4,659
4:00 PM	0	39	169	63	0	48	118	28	0	94	277	77	0	27	113	14	1,067	4,542
4:15 PM	0	33	174	102	0	54	108	28	0	87	246	69	0	39	163	4	1,107	4,492
4:30 PM	**0**	**29**	**181**	**68**	**0**	**56**	**111**	**40**	**1**	**99**	**232**	**99**	**0**	**39**	**229**	**12**	**1,196**	4,558
4:45 PM	**1**	**24**	**158**	**96**	**0**	**65**	**103**	**39**	**0**	**102**	**261**	**100**	**0**	**29**	**177**	**8**	**1,163**	4,533
5:00 PM	**0**	**16**	**151**	**124**	**0**	**62**	**101**	**32**	**0**	**96**	**268**	**88**	**0**	**28**	**218**	**14**	**1,198**	4,664
5:15 PM	**0**	**20**	**173**	**93**	**0**	**53**	**116**	**36**	**0**	**93**	**297**	**91**	**0**	**46**	**231**	**14**	**1,263**	**4,820**
5:30 PM	0	12	172	98	0	58	92	28	0	90	253	66	1	38	215	12	1,135	4,759
5:45 PM	0	27	159	91	0	66	103	30	0	62	224	69	1	30	201	12	1,075	4,671
Count Total	1	323	1,914	1,072	1	695	1,298	433	1	1,129	3,111	939	3	380	2,404	159	13,863	0
Peak Hour All	**1**	**89**	**663**	**381**	**0**	**236**	**431**	**147**	**1**	**390**	**1,058**	**378**	**0**	**142**	**855**	**48**	**4,820**	**0**
Peak Hour HV	**0**	**2**	**19**	**7**	**0**	**2**	**15**	**1**	**0**	**6**	**13**	**9**	**0**	**2**	**39**	**1**	**116**	**0**
Peak Hour HV%	**0%**	**2%**	**3%**	**2%**	**-**	**1%**	**3%**	**1%**	**0%**	**2%**	**1%**	**2%**	**-**	**1%**	**5%**	**2%**	**2%**	**0**

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

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
3:00 PM	12	14	17	11	*54*	0	0	0	0	*0*	2	1	1	0	*4*
3:15 PM	13	11	7	20	*51*	0	0	0	0	*0*	0	0	0	0	*0*
3:30 PM	6	6	9	13	*34*	0	0	0	0	*0*	2	1	3	0	*6*
3:45 PM	11	10	6	11	*38*	0	0	0	0	*0*	1	0	1	0	*2*
4:00 PM	12	9	12	5	*38*	0	0	0	0	*0*	2	3	1	0	*6*
4:15 PM	8	3	8	13	*32*	0	0	0	0	*0*	1	0	1	0	*2*
4:30 PM	**6**	**7**	**5**	**14**	***32***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
4:45 PM	**7**	**4**	**11**	**4**	***26***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**0**	**0**	*3*
5:00 PM	**9**	**3**	**6**	**10**	***28***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**1**	**0**	*4*
5:15 PM	**6**	**4**	**6**	**14**	***30***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
5:30 PM	9	5	7	7	*28*	0	0	0	0	*0*	1	0	1	0	*2*
5:45 PM	11	8	4	8	*31*	0	0	0	0	*0*	0	1	0	0	*1*
Count Total	110	84	98	130	*422*	0	0	0	0	*0*	14	8	10	0	*32*
Peak Hour	**28**	**18**	**28**	**42**	***116***	**0**	**0**	**0**	**0**	***0***	**5**	**2**	**2**	**0**	***9***

Three-Hour Count Summaries - Heavy Vehicles

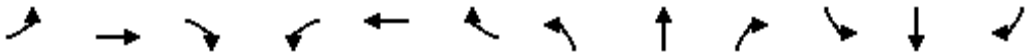
Interval Start	E Trent Ave Eastbound				E Trent Ave Westbound				N Argonne Rd Northbound				N Argonne Rd Southbound				15-min Total	Rolling One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
3:00 PM	0	1	7	4	0	2	10	2	0	3	8	6	0	3	8	0	54	0
3:15 PM	0	0	10	3	0	3	7	1	0	1	4	2	0	1	14	5	51	0
3:30 PM	0	1	3	2	0	1	4	1	0	0	5	4	0	0	12	1	34	0
3:45 PM	0	2	7	2	0	3	5	2	0	2	3	1	0	0	11	0	38	177
4:00 PM	0	3	7	2	0	1	7	1	0	3	6	3	0	0	5	0	38	161
4:15 PM	0	0	4	4	0	2	1	0	0	1	3	4	0	4	9	0	32	142
4:30 PM	**0**	**0**	**6**	**0**	**0**	**1**	**6**	**0**	**0**	**2**	**3**	**0**	**0**	**1**	**13**	**0**	**32**	140
4:45 PM	**0**	**0**	**5**	**2**	**0**	**1**	**2**	**1**	**0**	**0**	**6**	**5**	**0**	**0**	**4**	**0**	**26**	128
5:00 PM	**0**	**1**	**5**	**3**	**0**	**0**	**3**	**0**	**0**	**2**	**2**	**2**	**0**	**1**	**9**	**0**	**28**	118
5:15 PM	**0**	**1**	**3**	**2**	**0**	**0**	**4**	**0**	**0**	**2**	**2**	**2**	**0**	**0**	**13**	**1**	**30**	**116**
5:30 PM	0	0	8	1	0	0	4	1	0	1	4	2	0	2	4	1	28	112
5:45 PM	0	1	7	3	0	2	6	0	0	0	3	1	0	0	8	0	31	117
Count Total	0	10	72	28	0	16	59	9	0	17	49	32	0	12	110	8	422	0
Peak Hour	**0**	**2**	**19**	**7**	**0**	**2**	**15**	**1**	**0**	**6**	**13**	**9**	**0**	**2**	**39**	**1**	**116**	**0**

Three-Hour Count Summaries - Bikes

Interval Start	E Trent Ave Eastbound			E Trent Ave Westbound			N Argonne Rd Northbound			N Argonne Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
3:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

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

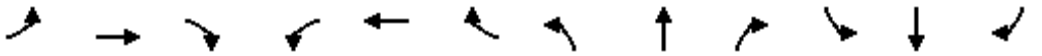
Appendix B. Existing Conditions Synchro Reports



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	294	255	217	633	124	342	711	165	118	1097	127
Future Volume (vph)	60	294	255	217	633	124	342	711	165	118	1097	127
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1391	2782	1244	1443	4033		2852	4225	1296	1484	4199	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1391	2782	1244	1443	4033		2852	4225	1296	1484	4199	
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)	63	309	268	228	666	131	360	748	174	124	1155	134
RTOR Reduction (vph)	0	0	224	0	19	0	0	0	130	0	8	0
Lane Group Flow (vph)	63	309	44	228	778	0	360	748	44	124	1281	0
Confl. Peds. (#/hr)	3					3			2	2		
Heavy Vehicles (%)	11%	11%	11%	7%	7%	7%	5%	5%	5%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	custom	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						2			
Actuated Green, G (s)	10.7	24.8	24.8	23.0	37.1		24.2	64.3	37.1	17.9	58.0	
Effective Green, g (s)	10.7	24.8	24.8	23.0	37.1		24.2	64.3	37.1	17.9	58.0	
Actuated g/C Ratio	0.07	0.17	0.17	0.15	0.25		0.16	0.43	0.25	0.12	0.39	
Clearance Time (s)	5.0	5.0	5.0	5.0	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	
Lane Grp Cap (vph)	99	459	205	221	997		460	1811	320	177	1623	
v/s Ratio Prot	0.05	0.11		c0.16	c0.19		c0.13	0.18		0.08	c0.31	
v/s Ratio Perm			0.04						0.03			
v/c Ratio	0.64	0.67	0.22	1.03	0.78		0.78	0.41	0.14	0.70	0.79	
Uniform Delay, d1	67.8	58.8	54.2	63.5	52.7		60.4	29.7	44.0	63.5	40.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.74	1.47	0.22	1.00	1.00	
Incremental Delay, d2	12.6	3.9	0.5	69.0	4.0		7.1	0.6	0.2	11.8	2.6	
Delay (s)	80.4	62.7	54.7	132.5	56.7		52.0	44.2	10.1	75.3	43.2	
Level of Service	F	E	D	F	E		D	D	B	E	D	
Approach Delay (s)		61.1			73.5			41.8			46.1	
Approach LOS		E			E			D			D	

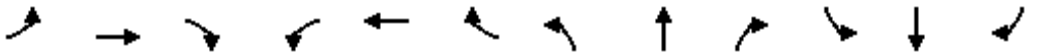
Intersection Summary			
HCM 2000 Control Delay	53.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	83.3%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	42	69	168	51	126	50	957	339	245	1274	28
Future Volume (vph)	70	42	69	168	51	126	50	957	339	245	1274	28
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	4.0	4.0		5.5	5.5		4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor	1.00	0.95		0.91	0.91		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	0.99		1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.91		1.00	0.92		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	0.99		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1331	2413		1232	2324		1470	4225	1298	1484	4251	
Flt Permitted	0.95	1.00		0.95	0.78		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1331	2413		1232	1828		1470	4225	1298	1484	4251	
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)	75	45	74	181	55	135	54	1029	365	263	1370	30
RTOR Reduction (vph)	0	69	0	0	99	0	0	0	200	0	1	0
Lane Group Flow (vph)	75	50	0	129	143	0	54	1029	165	263	1399	0
Confl. Peds. (#/hr)	7					7	1		1	1		1
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	16%	16%	16%	14%	14%	14%	5%	5%	5%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5 9	2	
Permitted Phases									6			
Actuated Green, G (s)	13.0	11.0		24.5	39.5		9.6	60.0	60.0	32.0	86.4	
Effective Green, g (s)	13.0	11.0		24.5	39.5		9.6	60.0	60.0	32.0	86.4	
Actuated g/C Ratio	0.09	0.07		0.16	0.26		0.06	0.40	0.40	0.21	0.58	
Clearance Time (s)	4.0	4.0		5.5	5.5		4.0	5.0	5.0		5.0	
Vehicle Extension (s)	3.0	3.0		4.0	4.0		3.0	4.0	4.0		4.0	
Lane Grp Cap (vph)	115	176		201	562		94	1690	519	316	2448	
v/s Ratio Prot	0.06	c0.02		c0.10	0.04		0.04	0.24		c0.18	c0.33	
v/s Ratio Perm					0.03				0.13			
v/c Ratio	0.65	0.29		0.64	0.25		0.57	0.61	0.32	0.83	0.57	
Uniform Delay, d1	66.3	65.8		58.6	43.6		68.2	35.7	30.9	56.4	20.1	
Progression Factor	1.00	1.00		1.00	1.00		0.82	1.51	5.00	1.20	1.72	
Incremental Delay, d2	12.5	0.9		14.7	1.1		7.6	1.5	1.5	10.9	0.6	
Delay (s)	78.8	66.7		73.4	44.7		63.4	55.4	156.2	78.5	35.2	
Level of Service	E	E		E	D		E	E	F	E	D	
Approach Delay (s)		71.4			54.7			81.1			42.0	
Approach LOS		E			D			F			D	

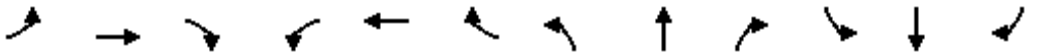
Intersection Summary			
HCM 2000 Control Delay	60.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	11	153	35	10	14	168	1320	27	39	1418	48
Future Volume (veh/h)	46	11	153	35	10	14	168	1320	27	39	1418	48
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	1587	1587	1587	1600	1600	1600	1574	1574	1574	1536	1536	1536
Adj Flow Rate, veh/h	48	12	161	37	11	15	177	1389	28	41	1493	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	2	2	2	4	4	4	7	7	7
Cap, veh/h	43	5	282	43	6	284	198	2826	57	61	2337	80
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.13	0.65	0.65	0.01	0.19	0.19
Sat Flow, veh/h	0	25	1343	0	30	1354	1499	4336	87	1463	4164	142
Grp Volume(v), veh/h	60	0	161	48	0	15	177	918	499	41	1002	542
Grp Sat Flow(s),veh/h/ln	25	0	1343	30	0	1354	1499	1433	1558	1463	1398	1511
Q Serve(g_s), s	0.0	0.0	16.1	0.0	0.0	1.3	17.4	24.6	24.6	4.2	49.7	49.7
Cycle Q Clear(g_c), s	31.5	0.0	16.1	31.5	0.0	1.3	17.4	24.6	24.6	4.2	49.7	49.7
Prop In Lane	0.80		1.00	0.77		1.00	1.00		0.06	1.00		0.09
Lane Grp Cap(c), veh/h	48	0	282	49	0	284	198	1867	1016	61	1569	848
V/C Ratio(X)	1.24	0.00	0.57	0.98	0.00	0.05	0.89	0.49	0.49	0.67	0.64	0.64
Avail Cap(c_a), veh/h	48	0	282	49	0	284	290	1867	1016	224	1569	848
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.80	0.80	0.80
Uniform Delay (d), s/veh	71.6	0.0	53.2	70.9	0.0	47.3	64.0	13.4	13.4	72.9	47.1	47.1
Incr Delay (d2), s/veh	206.8	0.0	3.4	122.3	0.0	0.1	20.7	0.9	1.7	9.8	1.6	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	5.8	3.5	0.0	0.5	7.8	7.9	8.9	1.8	19.1	20.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	278.4	0.0	56.6	193.2	0.0	47.4	84.7	14.3	15.1	82.7	48.7	50.0
LnGrp LOS	F	A	E	F	A	D	F	B	B	F	D	D
Approach Vol, veh/h		221			63			1594			1585	
Approach Delay, s/veh		116.8			158.5			22.4			50.0	
Approach LOS		F			F			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.8	89.2		37.0	10.3	102.7		37.0				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	29.0	75.0		31.5	23.0	81.0		31.5				
Max Q Clear Time (g_c+I1), s	19.4	51.7		33.5	6.2	26.6		33.5				
Green Ext Time (p_c), s	0.4	12.1		0.0	0.1	14.4		0.0				

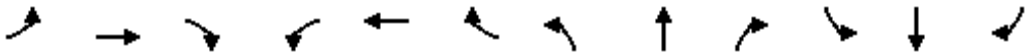
Intersection Summary			
HCM 6th Ctrl Delay		43.5	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	334	283	0	0	0	0	0	1207	464
Future Volume (vph)	0	0	0	334	283	0	0	0	0	0	1207	464
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)				5.0	5.0						5.0	5.0
Lane Util. Factor				0.91	0.91						0.95	1.00
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	0.98						1.00	1.00
Satd. Flow (prot)				1351	2799						2913	1283
Flt Permitted				0.95	0.98						1.00	1.00
Satd. Flow (perm)				1351	2799						2913	1283
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)	0	0	0	348	295	0	0	0	0	0	1257	483
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	199
Lane Group Flow (vph)	0	0	0	209	434	0	0	0	0	0	1257	284
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	2%	2%	2%	6%	6%	6%
Turn Type				Split	NA						NA	Perm
Protected Phases				6 17	6 17						8	
Permitted Phases												8
Actuated Green, G (s)				29.0	29.0						37.0	37.0
Effective Green, g (s)				29.0	29.0						37.0	37.0
Actuated g/C Ratio				0.39	0.39						0.49	0.49
Clearance Time (s)											5.0	5.0
Vehicle Extension (s)											3.0	3.0
Lane Grp Cap (vph)				522	1082						1437	632
v/s Ratio Prot				0.15	c0.16						c0.43	
v/s Ratio Perm												0.22
v/c Ratio				0.40	0.40						0.87	0.45
Uniform Delay, d1				16.7	16.7						16.9	12.4
Progression Factor				0.09	1.58						1.86	4.21
Incremental Delay, d2				0.0	0.1						6.9	2.0
Delay (s)				1.5	26.4						38.4	54.1
Level of Service				A	C						D	D
Approach Delay (s)		0.0			18.3			0.0			42.8	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	36.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	103.1%	ICU Level of Service	G
Analysis Period (min)	15		

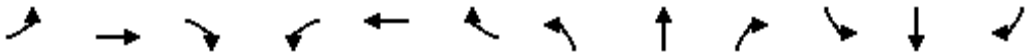
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	316	421	301	1131	0	0	0	0
Future Volume (vph)	0	0	0	0	316	421	301	1131	0	0	0	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)					5.0		5.0	5.0				
Lane Util. Factor					0.95		1.00	0.91				
Frpb, ped/bikes					1.00		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.91		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					2741		1470	4225				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					2741		1470	4225				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	0	355	473	338	1271	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	55	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	773	0	338	1271	0	0	0	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	5%	5%	5%	2%	2%	2%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					18.0		47.0	47.0				
Effective Green, g (s)					18.0		47.0	47.0				
Actuated g/C Ratio					0.24		0.63	0.63				
Clearance Time (s)					5.0		5.0	5.0				
Vehicle Extension (s)					2.0		3.0	3.0				
Lane Grp Cap (vph)					657		921	2647				
v/s Ratio Prot					c0.28			c0.30				
v/s Ratio Perm							0.23					
v/c Ratio					1.23dr		0.37	0.48				
Uniform Delay, d1					28.5		6.8	7.5				
Progression Factor					1.00		0.13	0.93				
Incremental Delay, d2					94.5		0.9	0.5				
Delay (s)					123.0		1.8	7.5				
Level of Service					F		A	A				
Approach Delay (s)		0.0			123.0			6.3			0.0	
Approach LOS		A			F			A			A	

Intersection Summary			
HCM 2000 Control Delay	45.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	96.3%	ICU Level of Service	F
Analysis Period (min)	15		

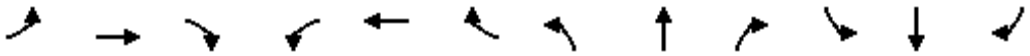
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	454	296	0	0	0	0	0	0	367	1174	0
Future Volume (vph)	0	454	296	0	0	0	0	0	0	367	1174	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)		5.0	5.0							5.0	5.0	
Lane Util. Factor		0.91	0.91							1.00	0.95	
Frpb, ped/bikes		1.00	1.00							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		2788	1209							1484	2969	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		2788	1209							1484	2969	
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)	0	516	336	0	0	0	0	0	0	417	1334	0
RTOR Reduction (vph)	0	15	70	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	578	189	0	0	0	0	0	0	417	1334	0
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type		NA	Perm							Split	NA	
Protected Phases		2								4	4	
Permitted Phases			2									
Actuated Green, G (s)		15.0	15.0							50.0	50.0	
Effective Green, g (s)		15.0	15.0							50.0	50.0	
Actuated g/C Ratio		0.20	0.20							0.67	0.67	
Clearance Time (s)		5.0	5.0							5.0	5.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		557	241							989	1979	
v/s Ratio Prot		c0.21								0.28	c0.45	
v/s Ratio Perm			0.16									
v/c Ratio		1.04	0.79							0.42	0.67	
Uniform Delay, d1		30.0	28.5							5.8	7.6	
Progression Factor		1.00	1.00							2.06	1.41	
Incremental Delay, d2		48.1	15.4							0.9	1.4	
Delay (s)		78.1	43.9							12.8	12.1	
Level of Service		E	D							B	B	
Approach Delay (s)		67.7			0.0			0.0			12.3	
Approach LOS		E			A			A			B	

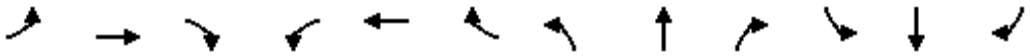
Intersection Summary			
HCM 2000 Control Delay	30.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	90.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	433	388	0	0	0	0	0	999	287	0	0	0
Future Volume (vph)	433	388	0	0	0	0	0	999	287	0	0	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.97				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	2852	1548						4100				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	2852	1548						4100				
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)	456	408	0	0	0	0	0	1052	302	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	69	0	0	0	0
Lane Group Flow (vph)	456	408	0	0	0	0	0	1285	0	0	0	0
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1292	701						1749				
v/s Ratio Prot	0.16	c0.26						c0.31				
v/s Ratio Perm												
v/c Ratio	0.35	0.58						0.73				
Uniform Delay, d1	13.3	15.2						18.0				
Progression Factor	0.05	1.08						0.81				
Incremental Delay, d2	0.0	1.2						2.5				
Delay (s)	0.7	17.5						17.0				
Level of Service	A	B						B				
Approach Delay (s)		8.6			0.0			17.0			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM 2000 Control Delay	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	98.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



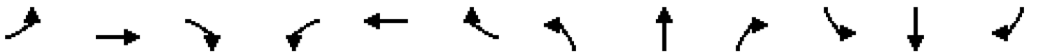
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	96	21	51	42	0	0	0	0	170	1196	104
Future Volume (vph)	0	96	21	51	42	0	0	0	0	170	1196	104
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		0.95			0.95						0.91	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.97						0.99	
Satd. Flow (prot)		2889			2946						4192	
Flt Permitted		1.00			0.76						0.99	
Satd. Flow (perm)		2889			2301						4192	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	110	24	59	48	0	0	0	0	195	1375	120
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	117	0	0	107	0	0	0	0	0	1684	0
Confl. Peds. (#/hr)	1					1	1					1
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		6			2						4	
Permitted Phases				2						4		
Actuated Green, G (s)		9.7			9.7						55.3	
Effective Green, g (s)		9.7			9.7						55.3	
Actuated g/C Ratio		0.13			0.13						0.74	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		4.0			4.0						4.0	
Lane Grp Cap (vph)		373			297						3090	
v/s Ratio Prot		0.04										
v/s Ratio Perm					c0.05						0.40	
v/c Ratio		0.31			0.36						0.55	
Uniform Delay, d1		29.6			29.8						4.3	
Progression Factor		1.00			0.72						0.87	
Incremental Delay, d2		0.7			0.9						0.5	
Delay (s)		30.3			22.4						4.2	
Level of Service		C			C						A	
Approach Delay (s)		30.3			22.4			0.0			4.2	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Signalized Intersection Summary
9: Mullan & Mission

09/25/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	169	0	0	78	253	15	936	16	0	0	0
Future Volume (veh/h)	97	169	0	0	78	253	15	936	16	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1587	1587	0	0	1549	1549	1574	1574	1574			
Adj Flow Rate, veh/h	102	178	0	0	82	266	16	985	17			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	3	3	0	0	6	6	4	4	4			
Cap, veh/h	293	656	0	0	373	332	32	2061	37			
Arrive On Green	0.21	0.83	0.00	0.00	0.25	0.25	0.15	0.15	0.15			
Sat Flow, veh/h	1511	1587	0	0	1549	1311	68	4417	79			
Grp Volume(v), veh/h	102	178	0	0	82	266	372	309	337			
Grp Sat Flow(s),veh/h/ln	1511	1587	0	0	1472	1311	1571	1433	1560			
Q Serve(g_s), s	0.0	1.9	0.0	0.0	3.3	14.3	16.3	14.7	14.7			
Cycle Q Clear(g_c), s	0.0	1.9	0.0	0.0	3.3	14.3	16.3	14.7	14.7			
Prop In Lane	1.00		0.00	0.00		1.00	0.04		0.05			
Lane Grp Cap(c), veh/h	293	656	0	0	373	332	733	669	728			
V/C Ratio(X)	0.35	0.27	0.00	0.00	0.22	0.80	0.51	0.46	0.46			
Avail Cap(c_a), veh/h	293	656	0	0	373	332	733	669	728			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.95	0.95	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	25.9	4.0	0.0	0.0	22.1	26.2	23.8	23.2	23.2			
Incr Delay (d2), s/veh	0.7	1.0	0.0	0.0	1.4	18.1	2.5	2.3	2.1			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.4	0.7	0.0	0.0	1.2	5.8	7.2	5.9	6.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.5	4.9	0.0	0.0	23.5	44.4	26.3	25.4	25.3			
LnGrp LOS	C	A			C	D	C	C	C			
Approach Vol, veh/h		280			348			1018				
Approach Delay, s/veh		12.8			39.4			25.7				
Approach LOS		B			D			C				

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.0	23.0		40.0		35.0						
Change Period (Y+Rc), s	4.0	4.0		5.0		4.0						
Max Green Setting (Gmax), s	8.0	19.0		35.0		31.0						
Max Q Clear Time (g_c+I1), s	2.0	16.3		18.3		3.9						
Green Ext Time (p_c), s	0.1	0.6		5.9		1.0						

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		26.4
HCM 6th LOS		C

Notes

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

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	15	2	5	5	0	0	0	0	28	1212	6
Future Vol, veh/h	0	15	2	5	5	0	0	0	0	28	1212	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	17	17	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	10	10	10	2	2	2	2	2	2
Mvmt Flow	0	17	2	6	6	0	0	0	0	32	1377	7

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	1462	692	640	1465	-			17	0	0
Stage 1	-	1445	-	17	17	-			-	-	-
Stage 2	-	17	-	623	1448	-			-	-	-
Critical Hdwy	-	6.54	7.14	6.6	6.7	-			5.34	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.9	5.7	-			-	-	-
Follow-up Hdwy	-	4.02	3.92	3.9	4.1	-			3.12	-	-
Pot Cap-1 Maneuver	0	128	331	396	118	0			1133	-	-
Stage 1	0	195	-	-	-	0			-	-	-
Stage 2	0	-	-	385	181	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	111	331	310	102	-			1117	-	-
Mov Cap-2 Maneuver	-	111	-	310	102	-			-	-	-
Stage 1	-	171	-	-	-	-			-	-	-
Stage 2	-	-	-	302	159	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	40.7	30.4	0.2
HCM LOS	E	D	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	120	153	1117	-	-
HCM Lane V/C Ratio	0.161	0.074	0.028	-	-
HCM Control Delay (s)	40.7	30.4	8.3	-	-
HCM Lane LOS	E	D	A	-	-
HCM 95th %tile Q(veh)	0.6	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	24	0	0	1	6	18	953	9	0	0	0
Future Vol, veh/h	23	24	0	0	1	6	18	953	9	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	1084	146688	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	2	2	2
Mvmt Flow	24	25	0	0	1	6	19	1003	9	0	0	0

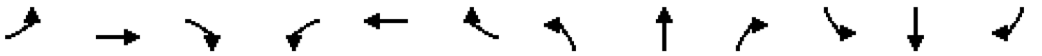
Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	440	1050	-	-	1046	506	0	0	0
Stage 1	0	0	-	-	1046	-	-	-	-
Stage 2	440	1050	-	-	0	-	-	-	-
Critical Hdwy	6.48	6.58	-	-	6.54	7.14	5.36	-	-
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-
Critical Hdwy Stg 2	6.78	5.58	-	-	-	-	-	-	-
Follow-up Hdwy	3.84	4.04	-	-	4.02	3.92	3.13	-	-
Pot Cap-1 Maneuver	532	223	0	0	227	438	-	-	-
Stage 1	-	-	0	0	304	-	-	-	-
Stage 2	513	298	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	522	223	-	-	227	438	-	-	-
Mov Cap-2 Maneuver	522	223	-	-	227	-	-	-	-
Stage 1	-	-	-	-	304	-	-	-	-
Stage 2	504	298	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	18.8	14.5	
HCM LOS	C	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	310	387
HCM Lane V/C Ratio	-	-	-	0.16	0.019
HCM Control Delay (s)	-	-	-	18.8	14.5
HCM Lane LOS	-	-	-	C	B
HCM 95th %tile Q(veh)	-	-	-	0.6	0.1

HCM 6th Signalized Intersection Summary
2: Argonne & Montgomery

09/25/2025



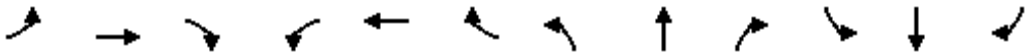
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	99	57	438	70	311	37	1238	336	246	1174	63
Future Volume (veh/h)	109	99	57	438	70	311	37	1238	336	246	1174	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		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	1723	1723	1723	1723	1723	1723	1709	1709	1709	1695	1695	1695
Adj Flow Rate, veh/h	112	102	59	452	72	321	38	1276	346	254	1210	65
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	134	220	117	690	66	295	47	1524	472	276	2108	113
Arrive On Green	0.08	0.11	0.11	0.22	0.24	0.24	0.06	0.65	0.65	0.17	0.47	0.47
Sat Flow, veh/h	1641	2031	1079	3183	272	1214	1628	4666	1444	1615	4496	241
Grp Volume(v), veh/h	112	80	81	452	0	393	38	1276	346	254	830	445
Grp Sat Flow(s),veh/h/ln	1641	1637	1474	1591	0	1486	1628	1555	1444	1615	1543	1652
Q Serve(g_s), s	10.1	6.9	7.7	19.4	0.0	36.5	3.5	31.4	23.9	23.2	29.3	29.4
Cycle Q Clear(g_c), s	10.1	6.9	7.7	19.4	0.0	36.5	3.5	31.4	23.9	23.2	29.3	29.4
Prop In Lane	1.00		0.73	1.00		0.82	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	134	177	159	690	0	362	47	1524	472	276	1446	774
V/C Ratio(X)	0.84	0.45	0.51	0.66	0.00	1.09	0.80	0.84	0.73	0.92	0.57	0.57
Avail Cap(c_a), veh/h	180	224	201	690	0	362	119	1524	472	334	1446	774
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	1.00	1.00	0.86	0.00	0.86	0.85	0.85	0.85	0.50	0.50	0.50
Uniform Delay (d), s/veh	67.9	62.7	63.1	53.6	0.0	56.8	70.2	22.9	21.7	61.1	29.0	29.0
Incr Delay (d2), s/veh	21.8	2.6	3.5	4.2	0.0	69.2	22.7	4.8	8.3	16.0	0.8	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	5.1	3.0	3.1	8.2	0.0	20.6	1.7	8.4	6.8	10.7	11.0	11.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	89.7	65.3	66.6	57.8	0.0	126.0	92.9	27.8	30.0	77.2	29.8	30.5
LnGrp LOS	F	E	E	E		F	F	C	C	E	C	C
Approach Vol, veh/h		273			845			1660			1529	
Approach Delay, s/veh		75.7			89.5			29.7			37.9	
Approach LOS		E			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	74.3	37.0	20.7	29.7	53.0	16.7	41.0
Change Period (Y+Rc), s	4.0	4.0	4.5	4.5	4.0	4.0	4.5	4.5
Max Green Setting (Gmax), s	11.0	69.0	32.5	20.5	31.0	49.0	16.5	36.5
Max Q Clear Time (g_c+I1), s	5.5	31.4	21.4	9.7	25.2	33.4	12.1	38.5
Green Ext Time (p_c), s	0.0	11.4	1.7	0.6	0.5	9.9	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	47.3
HCM 6th LOS	D

Notes

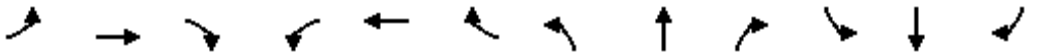
User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	20	146	44	27	30	148	1589	21	59	1468	49
Future Volume (veh/h)	76	20	146	44	27	30	148	1589	21	59	1468	49
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	1723	1723	1723	1723	1723	1723	1709	1709	1709	1709	1709	1709
Adj Flow Rate, veh/h	80	21	154	46	28	32	156	1673	22	62	1545	52
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, %	2	2	2	2	2	2	3	3	3	3	3	3
Cap, veh/h	43	6	290	39	14	290	177	3111	41	83	2771	93
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.11	0.66	0.66	0.05	0.60	0.60
Sat Flow, veh/h	0	30	1449	0	70	1449	1628	4746	62	1628	4635	156
Grp Volume(v), veh/h	101	0	154	74	0	32	156	1096	599	62	1037	560
Grp Sat Flow(s),veh/h/ln	30	0	1449	70	0	1449	1628	1555	1698	1628	1555	1681
Q Serve(g_s), s	0.0	0.0	14.3	0.0	0.0	2.7	14.2	28.1	28.1	5.6	30.2	30.2
Cycle Q Clear(g_c), s	30.0	0.0	14.3	30.0	0.0	2.7	14.2	28.1	28.1	5.6	30.2	30.2
Prop In Lane	0.79		1.00	0.62		1.00	1.00		0.04	1.00		0.09
Lane Grp Cap(c), veh/h	49	0	290	53	0	290	177	2039	1113	83	1859	1005
V/C Ratio(X)	2.06	0.00	0.53	1.40	0.00	0.11	0.88	0.54	0.54	0.74	0.56	0.56
Avail Cap(c_a), veh/h	49	0	290	53	0	290	217	2039	1113	119	1859	1005
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.73	0.73	0.73
Uniform Delay (d), s/veh	71.3	0.0	53.7	67.2	0.0	49.1	65.9	13.7	13.7	70.2	18.2	18.2
Incr Delay (d2), s/veh	539.8	0.0	2.4	261.4	0.0	0.2	27.6	1.0	1.9	10.4	0.9	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	9.3	0.0	5.5	5.9	0.0	1.0	7.2	9.8	11.0	2.6	10.8	11.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	611.2	0.0	56.2	328.7	0.0	49.3	93.4	14.8	15.6	80.6	19.1	19.8
LnGrp LOS	F	A	E	F	A	D	F	B	B	F	B	B
Approach Vol, veh/h		255			106			1851			1659	
Approach Delay, s/veh		276.0			244.3			21.7			21.6	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.3	94.7		34.0	12.7	103.3		34.0				
Change Period (Y+Rc), s	5.0	5.0		4.0	5.0	5.0		4.0				
Max Green Setting (Gmax), s	20.0	86.0		30.0	11.0	95.0		30.0				
Max Q Clear Time (g_c+I1), s	16.2	32.2		32.0	7.6	30.1		32.0				
Green Ext Time (p_c), s	0.2	17.6		0.0	0.0	20.4		0.0				

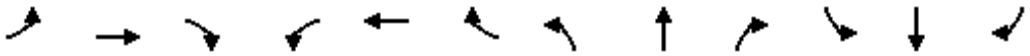
Intersection Summary												
HCM 6th Ctrl Delay			44.5									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	363	345	0	0	0	0	0	1339	461
Future Volume (vph)	0	0	0	363	345	0	0	0	0	0	1339	461
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)				5.0	5.0						5.0	5.0
Lane Util. Factor				0.91	0.91						0.95	1.00
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	0.99						1.00	1.00
Satd. Flow (prot)				1483	3080						3228	1422
Flt Permitted				0.95	0.99						1.00	1.00
Satd. Flow (perm)				1483	3080						3228	1422
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)	0	0	0	382	363	0	0	0	0	0	1409	485
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	216
Lane Group Flow (vph)	0	0	0	244	501	0	0	0	0	0	1409	269
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type				Split	NA						NA	Perm
Protected Phases				6 17	6 17						8	
Permitted Phases												8
Actuated Green, G (s)				34.0	34.0						32.0	32.0
Effective Green, g (s)				34.0	34.0						32.0	32.0
Actuated g/C Ratio				0.45	0.45						0.43	0.43
Clearance Time (s)											5.0	5.0
Vehicle Extension (s)											3.0	3.0
Lane Grp Cap (vph)				672	1396						1377	606
v/s Ratio Prot				c0.16	0.16						c0.44	
v/s Ratio Perm												0.19
v/c Ratio				0.36	0.36						1.02	0.44
Uniform Delay, d1				13.4	13.4						21.5	15.2
Progression Factor				0.05	1.67						1.01	1.59
Incremental Delay, d2				0.0	0.1						29.2	2.1
Delay (s)				0.7	22.4						51.0	26.3
Level of Service				A	C						D	C
Approach Delay (s)		0.0			15.3			0.0			44.7	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay	36.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	109.7%	ICU Level of Service	H
Analysis Period (min)	15		

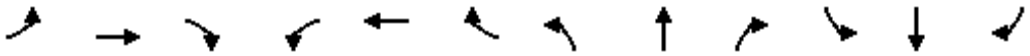
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	386	453	322	1412	0	0	0	0
Future Volume (vph)	0	0	0	0	386	453	322	1412	0	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)					5.0		5.0	5.0				
Lane Util. Factor					0.95		1.00	0.91				
Frpb, ped/bikes					1.00		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.92		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					2967		1614	4638				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					2967		1614	4638				
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)	0	0	0	0	394	462	329	1441	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	22	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	834	0	329	1441	0	0	0	0
Confl. Peds. (#/hr)									8	8		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	2%	2%	2%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					22.5		42.5	42.5				
Effective Green, g (s)					22.5		42.5	42.5				
Actuated g/C Ratio					0.30		0.57	0.57				
Clearance Time (s)					5.0		5.0	5.0				
Vehicle Extension (s)					2.0		3.0	3.0				
Lane Grp Cap (vph)					890		914	2628				
v/s Ratio Prot					c0.28			c0.31				
v/s Ratio Perm							0.20					
v/c Ratio					1.00dr		0.36	0.55				
Uniform Delay, d1					25.6		8.8	10.2				
Progression Factor					1.00		1.38	1.16				
Incremental Delay, d2					16.5		0.5	0.5				
Delay (s)					42.1		12.6	12.4				
Level of Service					D		B	B				
Approach Delay (s)		0.0			42.1			12.4			0.0	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM 2000 Control Delay	22.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	102.9%	ICU Level of Service	G
Analysis Period (min)	15		

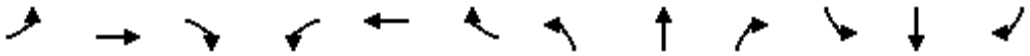
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	438	342	0	0	0	0	0	0	359	1343	0
Future Volume (vph)	0	438	342	0	0	0	0	0	0	359	1343	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		5.0	5.0							5.0	5.0	
Lane Util. Factor		0.91	0.91							1.00	0.95	
Frpb, ped/bikes		1.00	1.00							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		0.97	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		2975	1302							1630	3260	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		2975	1302							1630	3260	
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)	0	447	349	0	0	0	0	0	0	366	1370	0
RTOR Reduction (vph)	0	26	70	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	526	174	0	0	0	0	0	0	366	1370	0
Confl. Peds. (#/hr)							3					3
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type		NA	Perm							Split	NA	
Protected Phases		2								4	4	
Permitted Phases			2									
Actuated Green, G (s)		14.9	14.9							50.1	50.1	
Effective Green, g (s)		14.9	14.9							50.1	50.1	
Actuated g/C Ratio		0.20	0.20							0.67	0.67	
Clearance Time (s)		5.0	5.0							5.0	5.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		591	258							1088	2177	
v/s Ratio Prot		c0.18								0.22	c0.42	
v/s Ratio Perm			0.13									
v/c Ratio		0.89	0.68							0.34	0.63	
Uniform Delay, d1		29.3	27.8							5.3	7.1	
Progression Factor		1.00	1.00							0.92	0.88	
Incremental Delay, d2		15.5	6.8							0.1	0.7	
Delay (s)		44.8	34.6							5.0	7.0	
Level of Service		D	C							A	A	
Approach Delay (s)		41.7			0.0			0.0			6.6	
Approach LOS		D			A			A			A	

Intersection Summary				
HCM 2000 Control Delay	17.6	HCM 2000 Level of Service	B	
HCM 2000 Volume to Capacity ratio	0.73			
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0	
Intersection Capacity Utilization	98.3%	ICU Level of Service	F	
Analysis Period (min)	15			

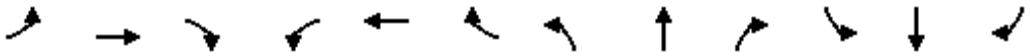
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	447	350	0	0	0	0	0	1287	415	0	0	0
Future Volume (vph)	447	350	0	0	0	0	0	1287	415	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.96				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	3072	1667						4485				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	3072	1667						4485				
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)	476	372	0	0	0	0	0	1369	441	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	77	0	0	0	0
Lane Group Flow (vph)	476	372	0	0	0	0	0	1733	0	0	0	0
Confl. Peds. (#/hr)									2			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1392	755						1913				
v/s Ratio Prot	0.15	c0.22						c0.39				
v/s Ratio Perm												
v/c Ratio	0.34	0.49						0.91				
Uniform Delay, d1	13.3	14.4						20.1				
Progression Factor	0.08	0.96						0.55				
Incremental Delay, d2	0.1	0.5						6.0				
Delay (s)	1.2	14.4						17.1				
Level of Service	A	B						B				
Approach Delay (s)		7.0			0.0			17.1			0.0	
Approach LOS		A			A			B			A	

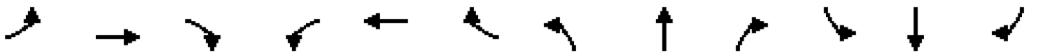
Intersection Summary			
HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	107.0%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	174	27	64	66	0	0	0	0	290	1277	118
Future Volume (vph)	0	174	27	64	66	0	0	0	0	290	1277	118
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.0			4.0						5.0	
Lane Util. Factor		0.95			0.95						0.91	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		0.98			1.00						0.99	
Flt Protected		1.00			0.98						0.99	
Satd. Flow (prot)		3186			3174						4589	
Flt Permitted		1.00			0.74						0.99	
Satd. Flow (perm)		3186			2406						4589	
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)	0	179	28	66	68	0	0	0	0	299	1316	122
RTOR Reduction (vph)	0	21	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	186	0	0	134	0	0	0	0	0	1730	0
Confl. Peds. (#/hr)			6	6			5					5
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		6			2						4	
Permitted Phases				2						4		
Actuated Green, G (s)		11.9			11.9						54.1	
Effective Green, g (s)		11.9			11.9						54.1	
Actuated g/C Ratio		0.16			0.16						0.72	
Clearance Time (s)		4.0			4.0						5.0	
Vehicle Extension (s)		4.0			4.0						4.0	
Lane Grp Cap (vph)		505			381						3310	
v/s Ratio Prot		c0.06										
v/s Ratio Perm					0.06						0.38	
v/c Ratio		0.37			0.35						0.52	
Uniform Delay, d1		28.2			28.1						4.7	
Progression Factor		1.00			0.82						1.13	
Incremental Delay, d2		0.6			0.6						0.4	
Delay (s)		28.8			23.6						5.7	
Level of Service		C			C						A	
Approach Delay (s)		28.8			23.6			0.0			5.7	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	60.9%	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)	169	329	0	0	117	252	46	1285	54	0	0	0
Future Volume (veh/h)	169	329	0	0	117	252	46	1285	54	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1709	1709	0	0	1723	1723	1723	1723	1723			
Adj Flow Rate, veh/h	182	354	0	0	126	271	49	1382	58			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	3	3	0	0	2	2	2	2	2			
Cap, veh/h	356	706	0	0	327	292	72	2154	93			
Arrive On Green	0.32	0.83	0.00	0.00	0.20	0.20	0.47	0.47	0.47			
Sat Flow, veh/h	1628	1709	0	0	1723	1458	154	4615	200			
Grp Volume(v), veh/h	182	354	0	0	126	271	546	454	489			
Grp Sat Flow(s),veh/h/ln	1628	1709	0	0	1637	1458	1715	1568	1686			
Q Serve(g_s), s	1.6	4.6	0.0	0.0	5.0	13.7	18.7	16.3	16.3			
Cycle Q Clear(g_c), s	1.6	4.6	0.0	0.0	5.0	13.7	18.7	16.3	16.3			
Prop In Lane	1.00		0.00	0.00		1.00	0.09		0.12			
Lane Grp Cap(c), veh/h	356	706	0	0	327	292	800	732	787			
V/C Ratio(X)	0.51	0.50	0.00	0.00	0.38	0.93	0.68	0.62	0.62			
Avail Cap(c_a), veh/h	356	706	0	0	327	292	800	732	787			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.93	0.93	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	21.5	4.2	0.0	0.0	26.0	29.5	15.6	15.0	15.0			
Incr Delay (d2), s/veh	1.1	2.4	0.0	0.0	3.4	37.4	4.7	3.9	3.7			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.2	1.5	0.0	0.0	2.2	7.5	7.4	5.9	6.3			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.7	6.6	0.0	0.0	29.4	66.9	20.3	19.0	18.7			
LnGrp LOS	C	A			C	E	C	B	B			
Approach Vol, veh/h		536			397			1489				
Approach Delay, s/veh		12.0			55.0			19.4				
Approach LOS		B			D			B				

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	16.0	19.0		40.0		35.0			
Change Period (Y+Rc), s	4.0	4.0		5.0		4.0			
Max Green Setting (Gmax), s	12.0	15.0		35.0		31.0			
Max Q Clear Time (g_c+I1), s	3.6	15.7		20.7		6.6			
Green Ext Time (p_c), s	0.4	0.0		8.2		2.2			

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		23.6	
HCM 6th LOS		C	

Notes

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

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	10	17	31	19	0	0	0	0	58	1300	6
Future Vol, veh/h	0	10	17	31	19	0	0	0	0	58	1300	6
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	2	2	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	18	33	20	0	0	0	0	62	1383	6

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	1515	701	688	1518	-			2	0	0
Stage 1	-	1513	-	2	2	-			-	-	-
Stage 2	-	2	-	686	1516	-			-	-	-
Critical Hdwy	-	6.54	7.14	6.44	6.54	-			5.34	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-			-	-	-
Follow-up Hdwy	-	4.02	3.92	3.82	4.02	-			3.12	-	-
Pot Cap-1 Maneuver	0	118	327	388	118	0			1151	-	-
Stage 1	0	181	-	-	-	0			-	-	-
Stage 2	0	-	-	367	180	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	90	326	273	90	-			1149	-	-
Mov Cap-2 Maneuver	-	90	-	273	90	-			-	-	-
Stage 1	-	138	-	-	-	-			-	-	-
Stage 2	-	-	-	244	137	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s	31.4	40.2	0.4
HCM LOS	D	E	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	165	154	1149	-	-
HCM Lane V/C Ratio	0.174	0.345	0.054	-	-
HCM Control Delay (s)	31.4	40.2	8.3	-	-
HCM Lane LOS	D	E	A	-	-
HCM 95th %tile Q(veh)	0.6	1.4	0.2	-	-

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	69	25	0	0	8	26	60	1288	5	0	0	0
Future Vol, veh/h	69	25	0	0	8	26	60	1288	5	0	0	0
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	2	2	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	108	4146	88 -
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	27	0	0	9	28	64	1370	5	0	0	0

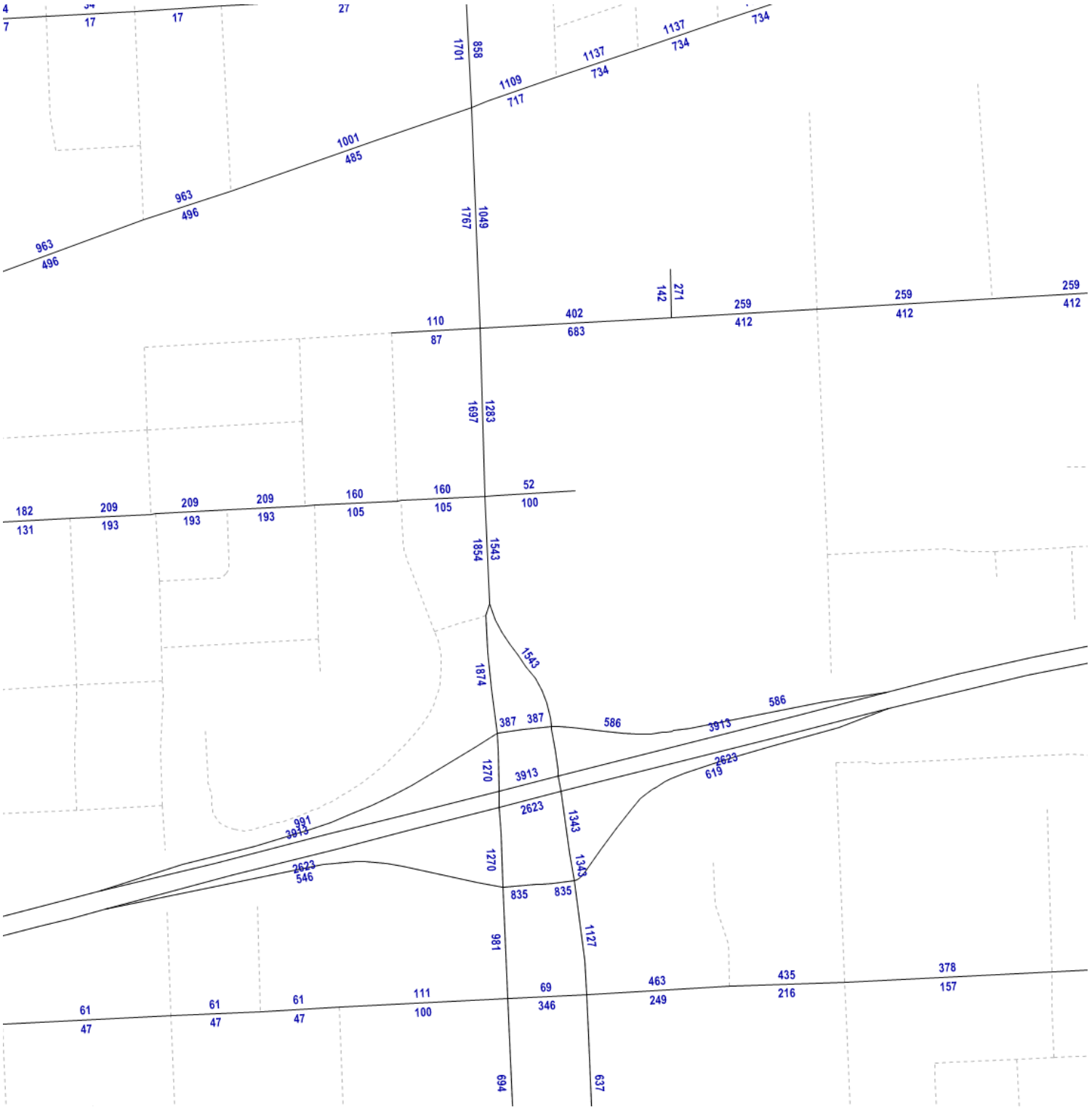
Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	686	1508	-	-	1506	692	3	0	0
Stage 1	3	3	-	-	1503	-	-	-	-
Stage 2	683	1505	-	-	3	-	-	-	-
Critical Hdwy	6.44	6.54	-	-	6.54	7.14	5.34	-	-
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	-	-	4.02	3.92	3.12	-	-
Pot Cap-1 Maneuver	389	120	0	0	120	331	1150	-	-
Stage 1	-	-	0	0	183	-	-	-	-
Stage 2	369	182	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	271	91	-	-	91	330	1147	-	-
Mov Cap-2 Maneuver	271	91	-	-	91	-	-	-	-
Stage 1	-	-	-	-	139	-	-	-	-
Stage 2	242	139	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	48.4	26.4	0.4
HCM LOS	E	D	

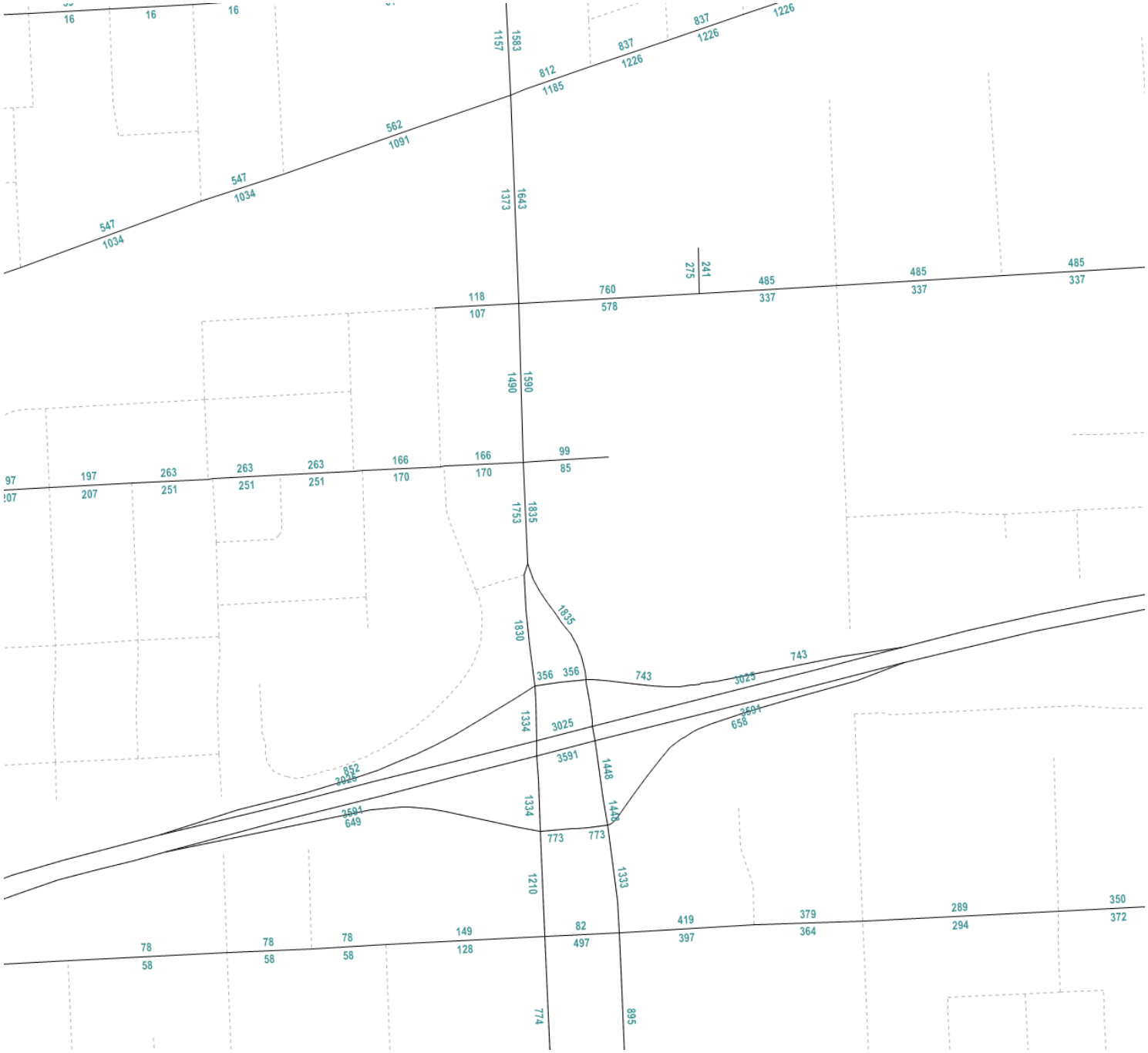
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1147	-	-	178	204
HCM Lane V/C Ratio	0.056	-	-	0.562	0.177
HCM Control Delay (s)	8.3	-	-	48.4	26.4
HCM Lane LOS	A	-	-	E	D
HCM 95th %tile Q(veh)	0.2	-	-	3	0.6

Appendix C. Travel Demand Forecasting Model Link Volumes

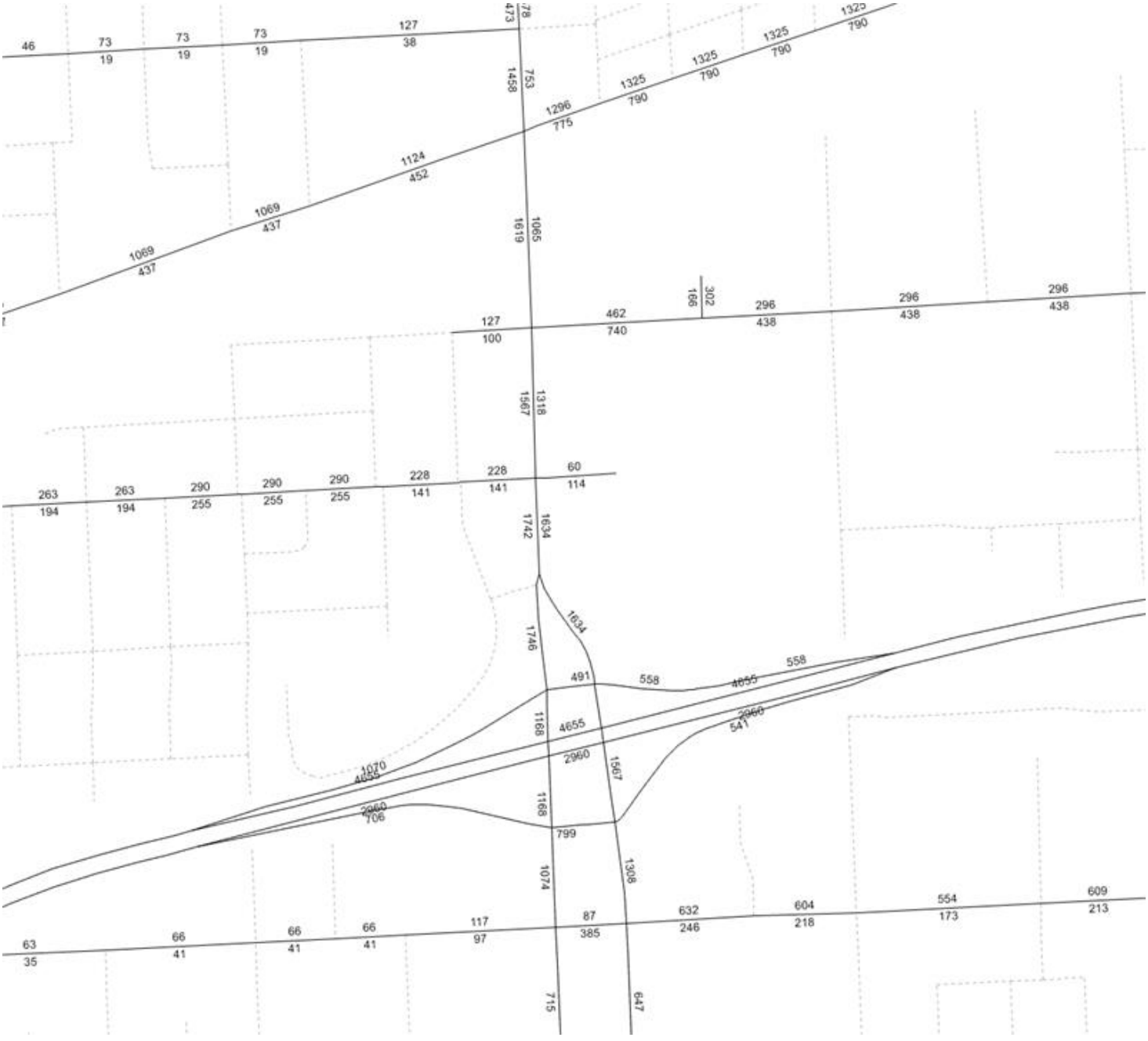
2024 AM Peak Hour



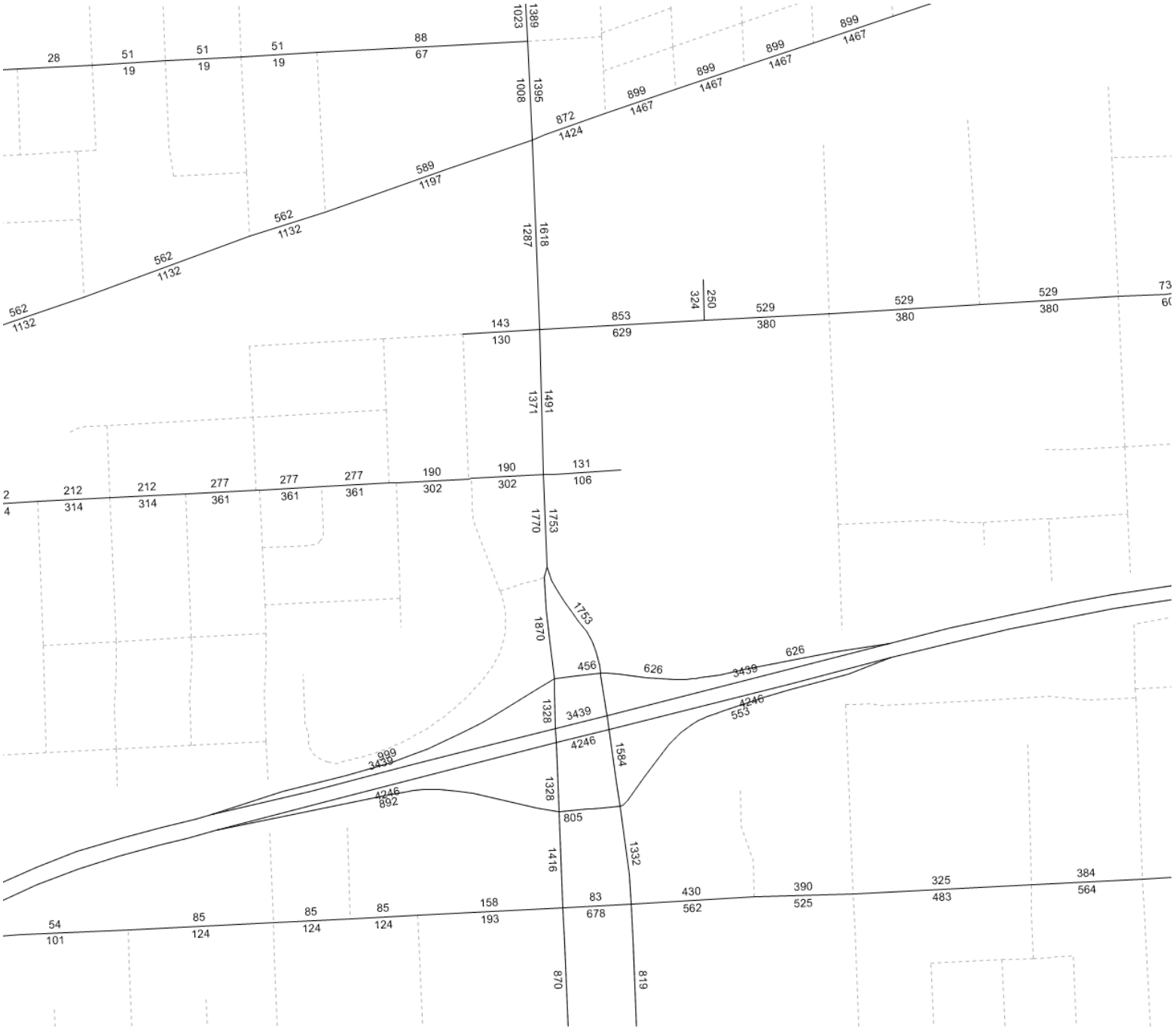
2024 PM Peak Hour



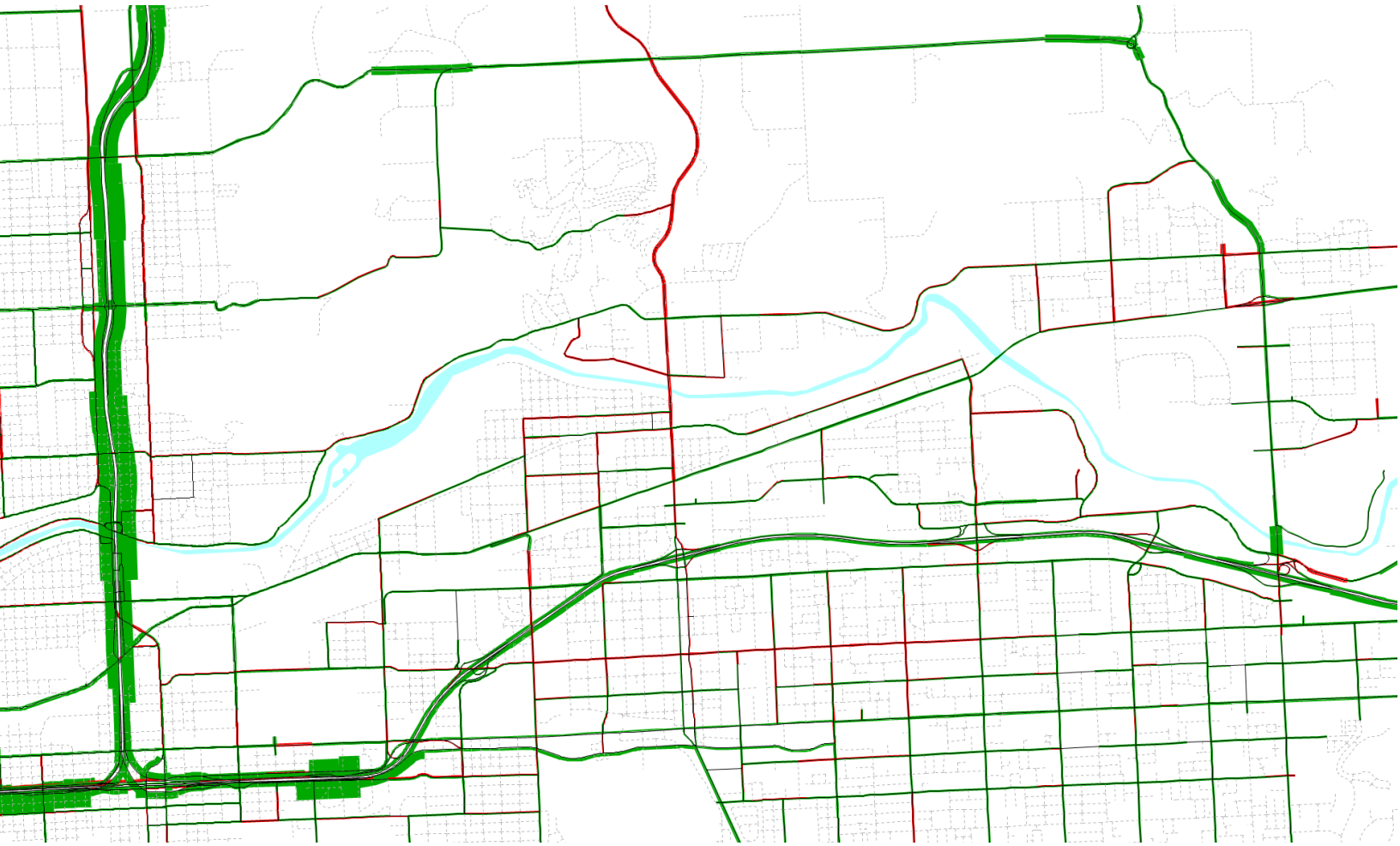
2050 AM Peak Hour



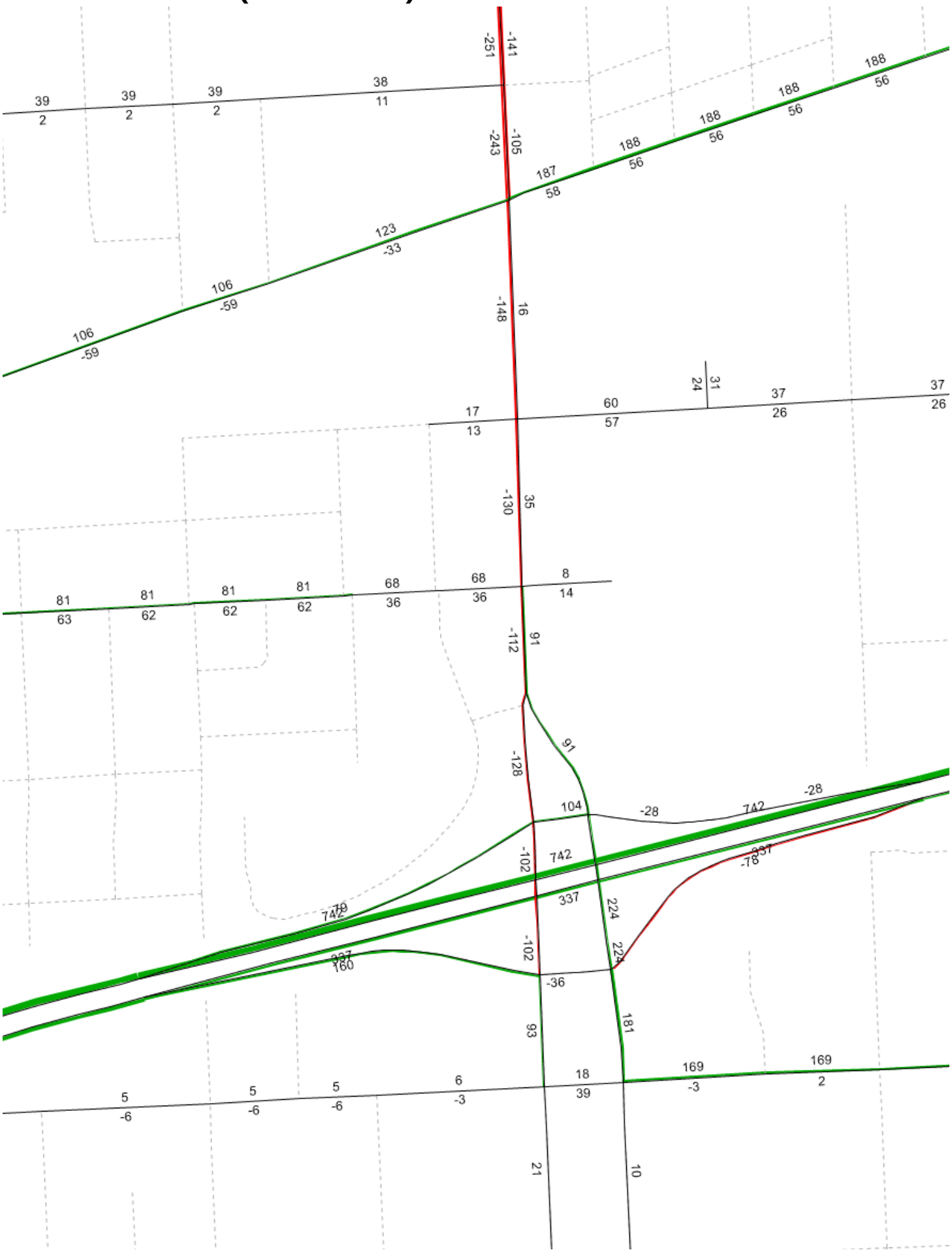
2050 PM Peak Hour



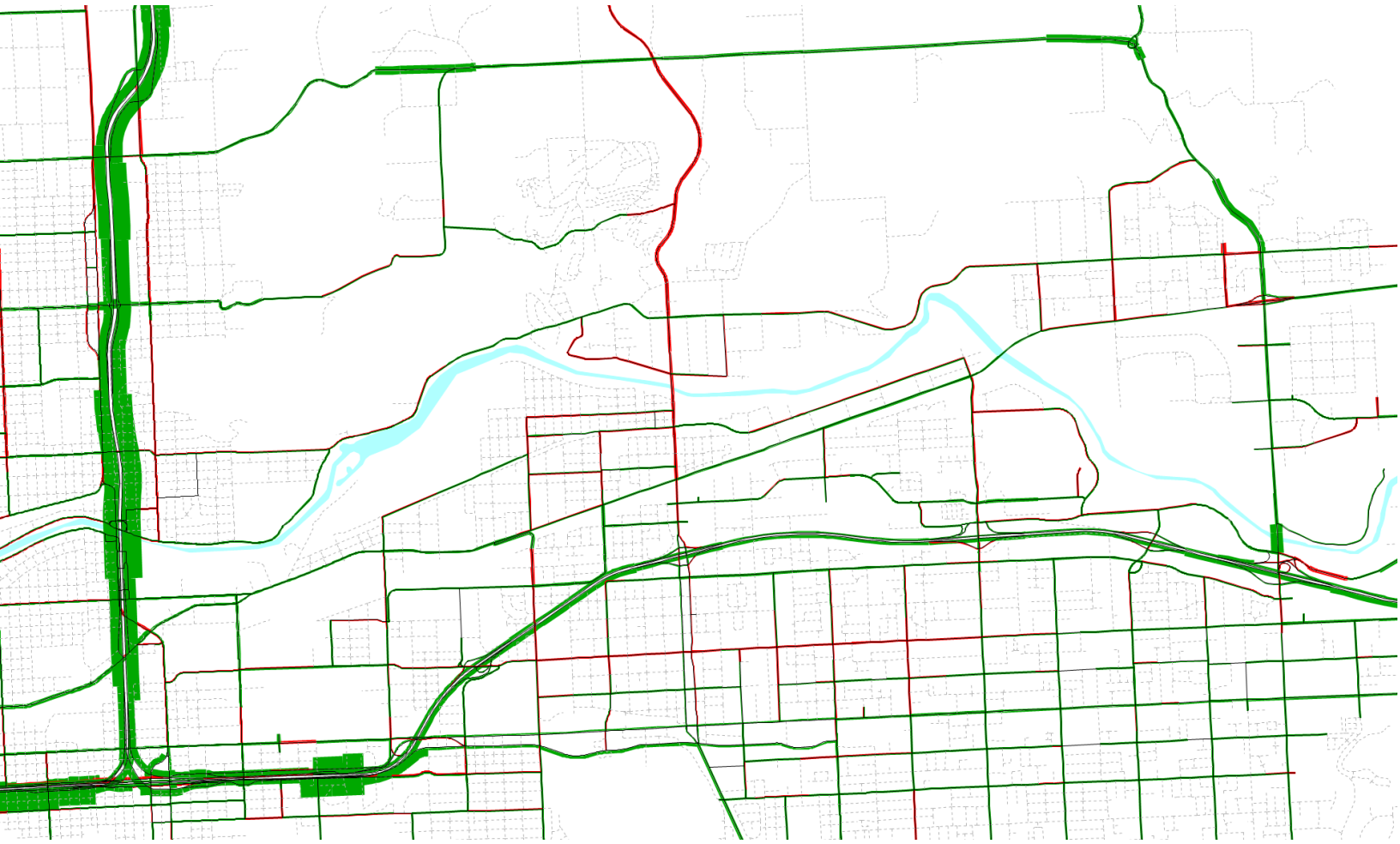
PM Difference (2050-2024)



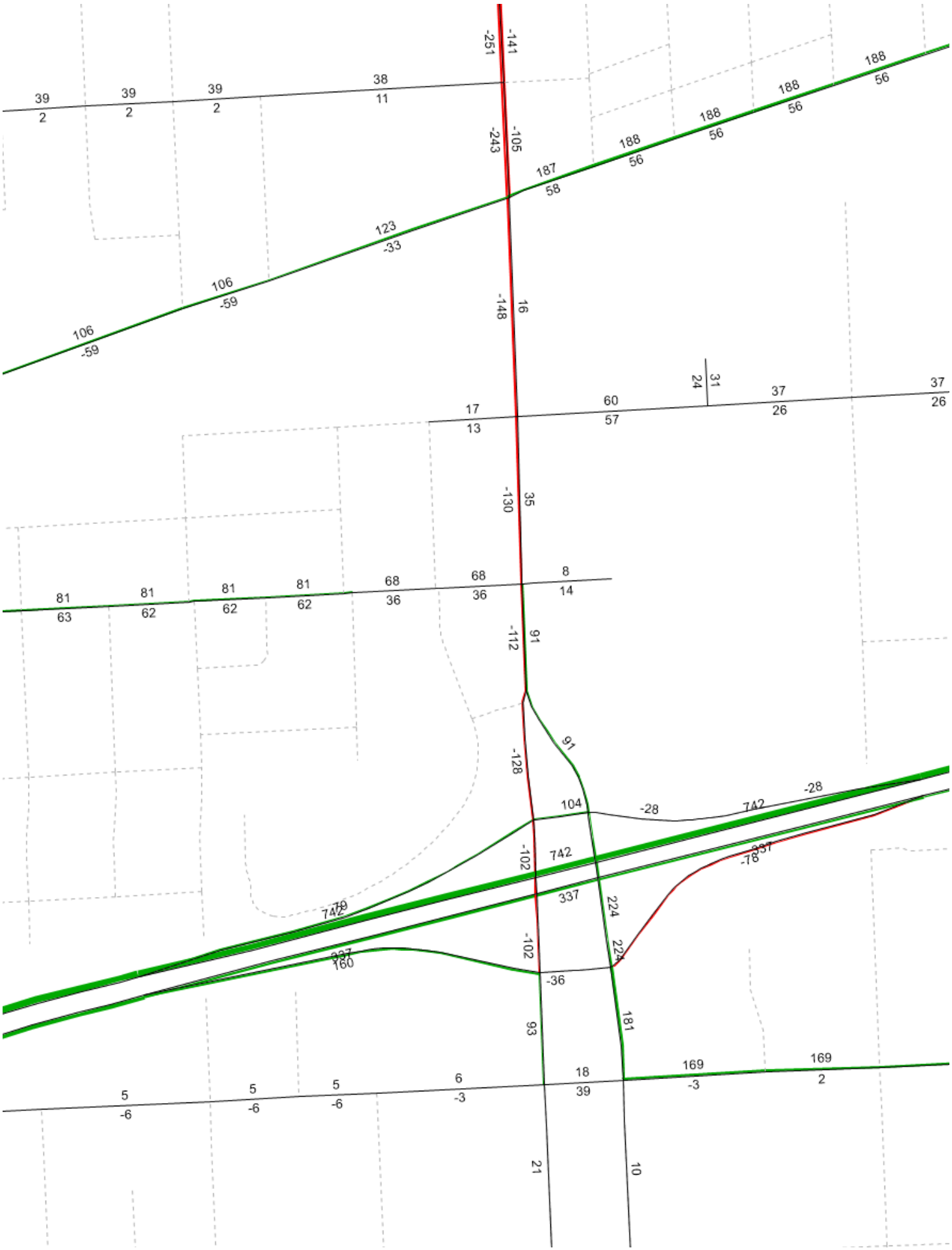
PM Difference (2050-2024)



AM Difference (2050-2024)



AM Difference (2050-2024)



Appendix D. 2028 and 2050 Weekday AM and PM Volumes

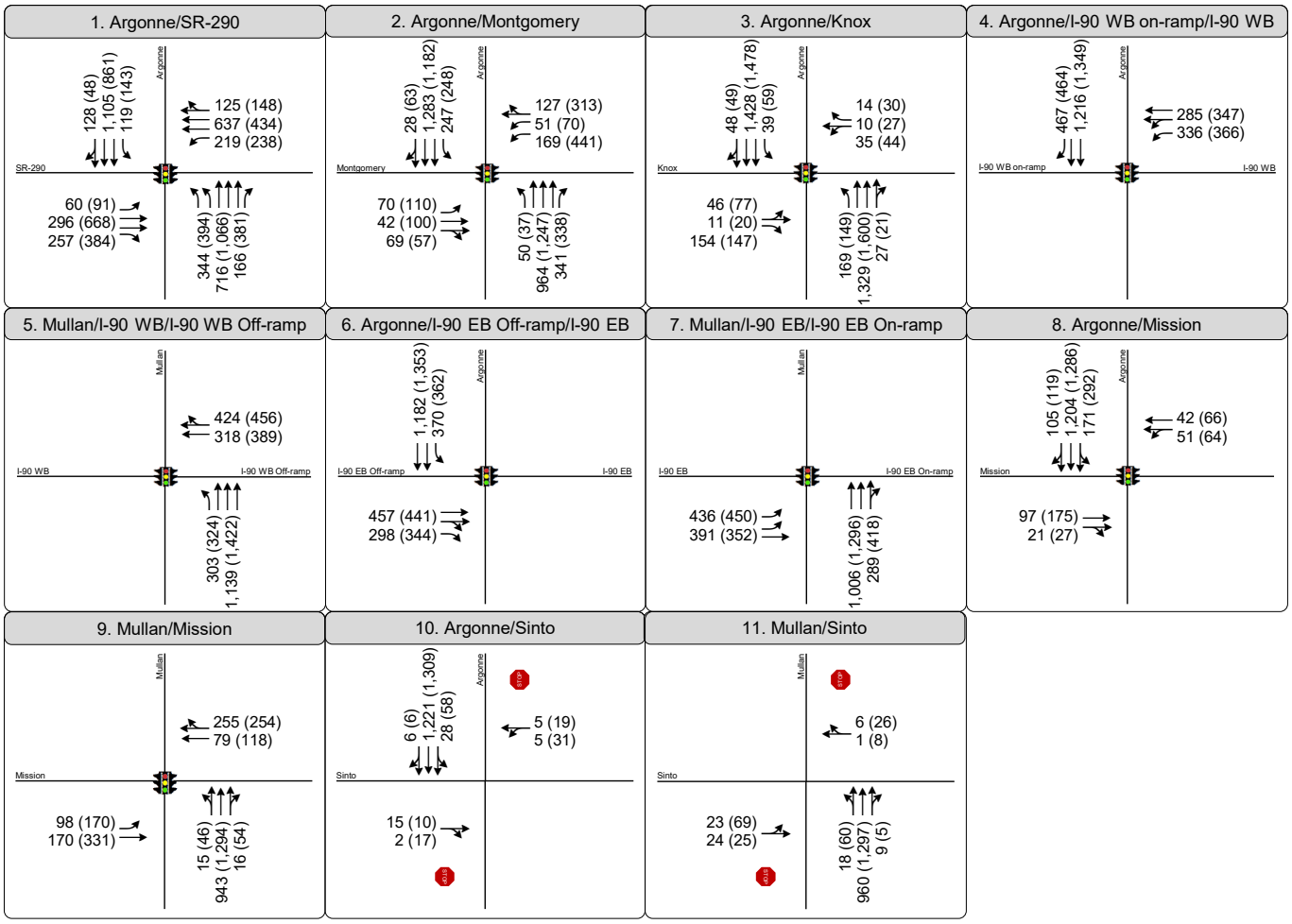


Figure 1

Peak Hour Traffic Volumes and Lane Configurations - 2028 - No Build

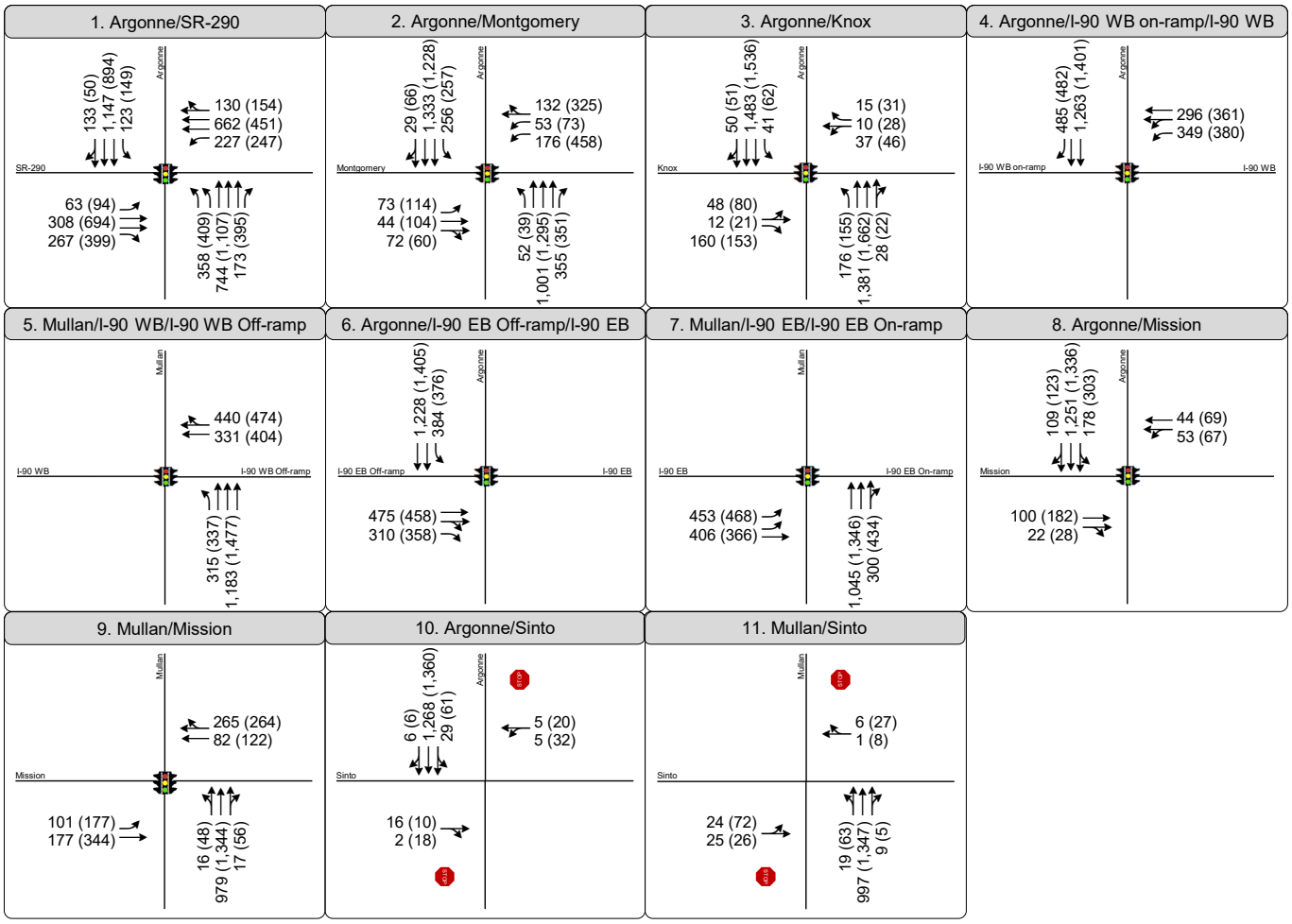
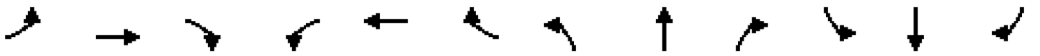


Figure 1

Peak Hour Traffic Volumes and Lane Configurations - 2050 - No Build

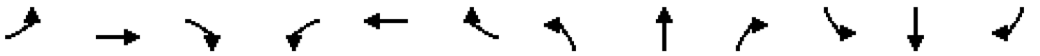
Appendix E. Level of Service Synchro Reports (2028) No-Build



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	296	257	219	637	125	344	716	166	119	1105	128
Future Volume (vph)	60	296	257	219	637	125	344	716	166	119	1105	128
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1391	2782	1244	1443	4033		2852	4225	1296	1484	4199	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1391	2782	1244	1443	4033		2852	4225	1296	1484	4199	
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)	63	312	271	231	671	132	362	754	175	125	1163	135
RTOR Reduction (vph)	0	0	226	0	19	0	0	0	130	0	8	0
Lane Group Flow (vph)	63	312	45	231	784	0	362	754	45	125	1290	0
Confl. Peds. (#/hr)	3					3			2	2		
Heavy Vehicles (%)	11%	11%	11%	7%	7%	7%	5%	5%	5%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	custom	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						2			
Actuated Green, G (s)	10.7	25.0	25.0	23.0	37.3		24.3	64.0	37.3	18.0	57.7	
Effective Green, g (s)	10.7	25.0	25.0	23.0	37.3		24.3	64.0	37.3	18.0	57.7	
Actuated g/C Ratio	0.07	0.17	0.17	0.15	0.25		0.16	0.43	0.25	0.12	0.38	
Clearance Time (s)	5.0	5.0	5.0	5.0	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	
Lane Grp Cap (vph)	99	463	207	221	1002		462	1802	322	178	1615	
v/s Ratio Prot	0.05	0.11		c0.16	c0.19		c0.13	0.18		0.08	c0.31	
v/s Ratio Perm			0.04						0.03			
v/c Ratio	0.64	0.67	0.22	1.05	0.78		0.78	0.42	0.14	0.70	0.80	
Uniform Delay, d1	67.8	58.7	54.0	63.5	52.6		60.3	30.0	43.9	63.4	41.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.73	1.43	0.14	1.00	1.00	
Incremental Delay, d2	12.6	3.9	0.5	72.9	4.0		6.8	0.6	0.2	11.8	2.9	
Delay (s)	80.4	62.5	54.6	136.4	56.6		51.1	43.5	6.3	75.3	43.8	
Level of Service	F	E	D	F	E		D	D	A	E	D	
Approach Delay (s/veh)		60.9			74.4			40.6			46.6	
Approach LOS		E			E			D			D	

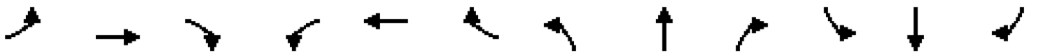
Intersection Summary			
HCM 2000 Control Delay (s/veh)	53.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	83.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	42	69	169	51	127	50	964	341	247	1283	28
Future Volume (vph)	70	42	69	169	51	127	50	964	341	247	1283	28
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	4.0	4.0		5.5	5.5		4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor	1.00	0.95		0.97	1.00		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	0.98		1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.91		1.00	0.89		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1331	2413		2627	1253		1470	4225	1298	1484	4250	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1331	2413		2627	1253		1470	4225	1298	1484	4250	
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)	75	45	74	182	55	137	54	1037	367	266	1380	30
RTOR Reduction (vph)	0	69	0	0	59	0	0	0	199	0	1	0
Lane Group Flow (vph)	75	50	0	182	133	0	54	1037	168	266	1409	0
Confl. Peds. (#/hr)	7					7	1		1	1		1
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	16%	16%	16%	14%	14%	14%	5%	5%	5%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5 9	2	
Permitted Phases									6			
Actuated Green, G (s)	13.0	11.0		24.5	22.5		9.6	60.0	60.0	32.0	86.4	
Effective Green, g (s)	13.0	11.0		24.5	22.5		9.6	60.0	60.0	32.0	86.4	
Actuated g/C Ratio	0.09	0.07		0.16	0.15		0.06	0.40	0.40	0.21	0.58	
Clearance Time (s)	4.0	4.0		5.5	5.5		4.0	5.0	5.0		5.0	
Vehicle Extension (s)	3.0	3.0		4.0	4.0		3.0	4.0	4.0		4.0	
Lane Grp Cap (vph)	115	176		429	187		94	1690	519	316	2448	
v/s Ratio Prot	c0.06	0.02		0.07	c0.11		0.04	0.25		c0.18	c0.33	
v/s Ratio Perm									0.13			
v/c Ratio	0.65	0.29		0.42	0.71		0.57	0.61	0.32	0.84	0.58	
Uniform Delay, d1	66.3	65.8		56.4	60.7		68.2	35.8	31.0	56.6	20.2	
Progression Factor	1.00	1.00		1.00	1.00		0.82	1.51	4.91	1.20	1.71	
Incremental Delay, d2	12.5	0.9		3.1	20.6		7.6	1.5	1.5	11.5	0.6	
Delay (s)	78.8	66.7		59.5	81.3		63.6	55.6	153.7	79.2	35.1	
Level of Service	E	E		E	F		E	E	F	E	D	
Approach Delay (s/veh)		71.4			70.7			80.6			42.1	
Approach LOS		E			E			F			D	

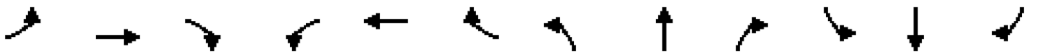
Intersection Summary			
HCM 2000 Control Delay (s/veh)	61.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	91.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	11	154	35	10	14	169	1329	27	39	1428	48
Future Volume (veh/h)	46	11	154	35	10	14	169	1329	27	39	1428	48
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	1587	1587	1587	1600	1600	1600	1574	1574	1574	1536	1536	1536
Adj Flow Rate, veh/h	48	12	162	37	11	15	178	1399	28	41	1503	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	2	2	2	4	4	4	7	7	7
Cap, veh/h	43	5	282	43	6	284	199	2826	57	61	2335	79
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.13	0.65	0.65	0.01	0.18	0.18
Sat Flow, veh/h	0	25	1343	0	30	1354	1499	4337	87	1463	4165	141
Grp Volume(v), veh/h	60	0	162	48	0	15	178	924	503	41	1009	545
Grp Sat Flow(s),veh/h/ln	25	0	1343	30	0	1354	1499	1433	1559	1463	1398	1511
Q Serve(g_s), s	0.0	0.0	16.3	0.0	0.0	1.3	17.5	24.9	24.9	4.2	50.1	50.1
Cycle Q Clear(g_c), s	31.5	0.0	16.3	31.5	0.0	1.3	17.5	24.9	24.9	4.2	50.1	50.1
Prop In Lane	0.80		1.00	0.77		1.00	1.00		0.06	1.00		0.09
Lane Grp Cap(c), veh/h	48	0	282	49	0	284	199	1867	1016	61	1567	847
V/C Ratio(X)	1.24	0.00	0.57	0.98	0.00	0.05	0.89	0.50	0.50	0.67	0.64	0.64
Avail Cap(c_a), veh/h	48	0	282	49	0	284	290	1867	1016	224	1567	847
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.81	0.81	0.81
Uniform Delay (d), s/veh	71.6	0.0	53.2	70.9	0.0	47.3	64.0	13.4	13.4	72.9	47.3	47.3
Incr Delay (d2), s/veh	206.8	0.0	3.5	122.3	0.0	0.1	20.9	0.9	1.7	9.9	1.7	3.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	5.8	3.5	0.0	0.5	7.8	8.0	8.9	1.8	19.2	21.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	278.4	0.0	56.7	193.2	0.0	47.4	84.9	14.4	15.2	82.8	48.9	50.3
LnGrp LOS	F		E	F		D	F	B	B	F	D	D
Approach Vol, veh/h		222			63			1605			1595	
Approach Delay, s/veh		116.6			158.5			22.4			50.3	
Approach LOS		F			F			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.9	89.1		37.0	10.3	102.7		37.0				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	29.0	75.0		31.5	23.0	81.0		31.5				
Max Q Clear Time (g_c+I1), s	19.5	52.1		33.5	6.2	26.9		33.5				
Green Ext Time (p_c), s	0.4	12.0		0.0	0.1	14.5		0.0				

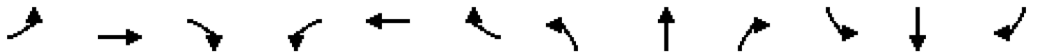
Intersection Summary			
HCM 6th Ctrl Delay, s/veh		43.6	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	336	285	0	0	0	0	0	1216	467
Future Volume (vph)	0	0	0	336	285	0	0	0	0	0	1216	467
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)				5.0	5.0						5.0	5.0
Lane Util. Factor				0.91	0.91						0.95	1.00
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	0.98						1.00	1.00
Satd. Flow (prot)				1351	2799						2913	1283
Flt Permitted				0.95	0.98						1.00	1.00
Satd. Flow (perm)				1351	2799						2913	1283
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)	0	0	0	350	297	0	0	0	0	0	1267	486
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	198
Lane Group Flow (vph)	0	0	0	210	437	0	0	0	0	0	1267	288
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	2%	2%	2%	6%	6%	6%
Turn Type				Split	NA						NA	Perm
Protected Phases				6 17	6 17						8	
Permitted Phases												8
Actuated Green, G (s)				29.0	29.0						37.0	37.0
Effective Green, g (s)				29.0	29.0						37.0	37.0
Actuated g/C Ratio				0.39	0.39						0.49	0.49
Clearance Time (s)											5.0	5.0
Vehicle Extension (s)											3.0	3.0
Lane Grp Cap (vph)				522	1082						1437	632
v/s Ratio Prot				0.16	c0.16						c0.43	
v/s Ratio Perm												0.22
v/c Ratio				0.40	0.40						0.88	0.46
Uniform Delay, d1				16.7	16.7						17.0	12.4
Progression Factor				0.08	1.57						1.87	4.14
Incremental Delay, d2				0.0	0.1						7.2	2.1
Delay (s)				1.4	26.4						39.1	53.5
Level of Service				A	C						D	D
Approach Delay (s/veh)		0.0			18.3			0.0			43.1	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	103.8%	ICU Level of Service	G
Analysis Period (min)	15		

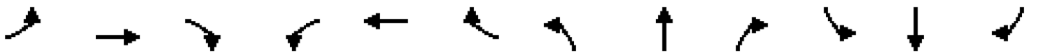
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	318	424	303	1139	0	0	0	0
Future Volume (vph)	0	0	0	0	318	424	303	1139	0	0	0	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)					5.0		5.0	5.0				
Lane Util. Factor					0.95		1.00	0.91				
Frpb, ped/bikes					1.00		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.91		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					2741		1470	4225				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					2741		1470	4225				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	0	357	476	340	1280	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	54	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	779	0	340	1280	0	0	0	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	5%	5%	5%	2%	2%	2%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					18.0		47.0	47.0				
Effective Green, g (s)					18.0		47.0	47.0				
Actuated g/C Ratio					0.24		0.63	0.63				
Clearance Time (s)					5.0		5.0	5.0				
Vehicle Extension (s)					2.0		3.0	3.0				
Lane Grp Cap (vph)					657		921	2647				
v/s Ratio Prot					c0.28			c0.30				
v/s Ratio Perm							0.23					
v/c Ratio					1.25dr		0.37	0.48				
Uniform Delay, d1					28.5		6.8	7.5				
Progression Factor					1.00		0.13	0.92				
Incremental Delay, d2					98.4		0.9	0.5				
Delay (s)					126.9		1.8	7.5				
Level of Service					F		A	A				
Approach Delay (s/veh)		0.0			126.9			6.3			0.0	
Approach LOS		A			F			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	47.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	96.9%	ICU Level of Service	F
Analysis Period (min)	15		

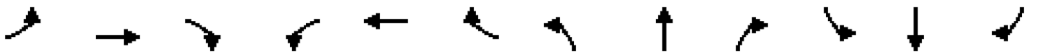
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	457	298	0	0	0	0	0	0	370	1182	0
Future Volume (vph)	0	457	298	0	0	0	0	0	0	370	1182	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)		5.0	5.0							5.0	5.0	
Lane Util. Factor		0.91	0.91							1.00	0.95	
Frpb, ped/bikes		1.00	1.00							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		2788	1209							1484	2969	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		2788	1209							1484	2969	
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)	0	519	339	0	0	0	0	0	0	420	1343	0
RTOR Reduction (vph)	0	15	70	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	582	191	0	0	0	0	0	0	420	1343	0
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type		NA	Perm							Split	NA	
Protected Phases		2								4	4	
Permitted Phases			2									
Actuated Green, G (s)		15.0	15.0							50.0	50.0	
Effective Green, g (s)		15.0	15.0							50.0	50.0	
Actuated g/C Ratio		0.20	0.20							0.67	0.67	
Clearance Time (s)		5.0	5.0							5.0	5.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		557	241							989	1979	
v/s Ratio Prot		c0.21								0.28	c0.45	
v/s Ratio Perm			0.16									
v/c Ratio		1.04	0.79							0.42	0.68	
Uniform Delay, d1		30.0	28.5							5.8	7.6	
Progression Factor		1.00	1.00							2.06	1.41	
Incremental Delay, d2		50.3	16.3							0.9	1.5	
Delay (s)		80.3	44.9							12.9	12.2	
Level of Service		F	D							B	B	
Approach Delay (s/veh)		69.5			0.0			0.0			12.4	
Approach LOS		E			A			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	90.8%	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 (vph)	436	391	0	0	0	0	0	1006	289	0	0	0
Future Volume (vph)	436	391	0	0	0	0	0	1006	289	0	0	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.97				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	2852	1548						4100				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	2852	1548						4100				
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)	459	412	0	0	0	0	0	1059	304	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	69	0	0	0	0
Lane Group Flow (vph)	459	412	0	0	0	0	0	1294	0	0	0	0
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1292	701						1749				
v/s Ratio Prot	0.16	c0.27						c0.32				
v/s Ratio Perm												
v/c Ratio	0.36	0.59						0.74				
Uniform Delay, d1	13.4	15.3						18.0				
Progression Factor	0.05	1.09						0.81				
Incremental Delay, d2	0.0	1.2						2.5				
Delay (s)	0.7	17.8						17.1				
Level of Service	A	B						B				
Approach Delay (s/veh)		8.8			0.0			17.1			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	99.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

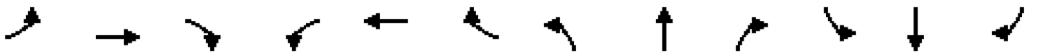
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	97	21	51	42	0	0	0	0	171	1204	105
Future Volume (vph)	0	97	21	51	42	0	0	0	0	171	1204	105
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		0.95			0.95						0.91	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.97						0.99	
Satd. Flow (prot)		2890			2946						4192	
Flt Permitted		1.00			0.76						0.99	
Satd. Flow (perm)		2890			2299						4192	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	111	24	59	48	0	0	0	0	197	1384	121
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	118	0	0	107	0	0	0	0	0	1696	0
Confl. Peds. (#/hr)	1					1	1					1
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		6			2						4	
Permitted Phases				2						4		
Actuated Green, G (s)		9.7			9.7						55.3	
Effective Green, g (s)		9.7			9.7						55.3	
Actuated g/C Ratio		0.13			0.13						0.74	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		4.0			4.0						4.0	
Lane Grp Cap (vph)		373			297						3090	
v/s Ratio Prot		0.04										
v/s Ratio Perm					c0.05						0.40	
v/c Ratio		0.32			0.36						0.55	
Uniform Delay, d1		29.6			29.8						4.3	
Progression Factor		1.00			0.71						0.86	
Incremental Delay, d2		0.7			0.9						0.5	
Delay (s)		30.3			22.1						4.2	
Level of Service		C			C						A	
Approach Delay (s/veh)		30.3			22.1			0.0			4.2	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Signalized Intersection Summary
9: Mullan & Mission

09/25/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	170	0	0	79	255	15	943	16	0	0	0
Future Volume (veh/h)	98	170	0	0	79	255	15	943	16	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1587	1587	0	0	1549	1549	1574	1574	1574			
Adj Flow Rate, veh/h	103	179	0	0	83	268	16	993	17			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	3	3	0	0	6	6	4	4	4			
Cap, veh/h	291	656	0	0	373	332	31	2062	36			
Arrive On Green	0.21	0.83	0.00	0.00	0.25	0.25	0.15	0.15	0.15			
Sat Flow, veh/h	1511	1587	0	0	1549	1311	67	4419	78			
Grp Volume(v), veh/h	103	179	0	0	83	268	375	311	339			
Grp Sat Flow(s),veh/h/ln	1511	1587	0	0	1472	1311	1571	1433	1560			
Q Serve(g_s), s	0.0	1.9	0.0	0.0	3.3	14.4	16.5	14.9	14.9			
Cycle Q Clear(g_c), s	0.0	1.9	0.0	0.0	3.3	14.4	16.5	14.9	14.9			
Prop In Lane	1.00		0.00	0.00		1.00	0.04		0.05			
Lane Grp Cap(c), veh/h	291	656	0	0	373	332	733	669	728			
V/C Ratio(X)	0.35	0.27	0.00	0.00	0.22	0.81	0.51	0.47	0.47			
Avail Cap(c_a), veh/h	291	656	0	0	373	332	733	669	728			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.95	0.95	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	25.9	4.0	0.0	0.0	22.2	26.3	23.9	23.2	23.2			
Incr Delay (d2), s/veh	0.7	1.0	0.0	0.0	1.4	18.6	2.5	2.3	2.1			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.5	0.7	0.0	0.0	1.2	5.9	7.3	6.0	6.5			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.6	5.0	0.0	0.0	23.5	44.9	26.4	25.5	25.3			
LnGrp LOS	C	A			C	D	C	C	C			
Approach Vol, veh/h		282			351			1026				
Approach Delay, s/veh		12.9			39.9			25.8				
Approach LOS		B			D			C				

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.0	23.0		40.0		35.0						
Change Period (Y+Rc), s	4.0	4.0		5.0		4.0						
Max Green Setting (Gmax), s	8.0	19.0		35.0		31.0						
Max Q Clear Time (g_c+I1), s	2.0	16.4		18.5		3.9						
Green Ext Time (p_c), s	0.1	0.5		5.9		1.0						

Intersection Summary		
HCM 6th Ctrl Delay, s/veh		26.6
HCM 6th LOS		C

Notes

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

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	15	2	5	5	0	0	0	0	28	1221	6
Future Vol, veh/h	0	15	2	5	5	0	0	0	0	28	1221	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	17	17	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	10	10	10	2	2	2	2	2	2
Mvmt Flow	0	17	2	6	6	0	0	0	0	32	1388	7

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	1473	698	645	1476	-			17	0	0
Stage 1	-	1456	-	17	17	-			-	-	-
Stage 2	-	17	-	628	1459	-			-	-	-
Critical Hdwy	-	6.54	7.14	6.6	6.7	-			5.34	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.9	5.7	-			-	-	-
Follow-up Hdwy	-	4.02	3.92	3.9	4.1	-			3.12	-	-
Pot Cap-1 Maneuver	0	126	328	393	116	0			1133	-	-
Stage 1	0	193	-	-	-	0			-	-	-
Stage 2	0	-	-	382	179	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	108	328	306	100	-			1117	-	-
Mov Cap-2 Maneuver	-	108	-	306	100	-			-	-	-
Stage 1	-	168	-	-	-	-			-	-	-
Stage 2	-	-	-	297	156	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	41.8	30.8	0.2
HCM LOS	E	D	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	117	151	1117	-	-
HCM Lane V/C Ratio	0.165	0.075	0.028	-	-
HCM Control Delay (s/veh)	41.8	30.8	8.3	-	-
HCM Lane LOS	E	D	A	-	-
HCM 95th %tile Q (veh)	0.6	0.2	0.1	-	-

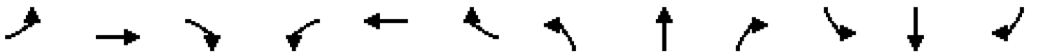
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	24	0	0	1	6	18	960	9	0	0	0
Future Vol, veh/h	23	24	0	0	1	6	18	960	9	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	2	2	2
Mvmt Flow	24	25	0	0	1	6	19	1011	9	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	443	1058	-	-	1054	510	0	0	0
Stage 1	0	0	-	-	1054	-	-	-	-
Stage 2	443	1058	-	-	0	-	-	-	-
Critical Hdwy	6.48	6.58	-	-	6.54	7.14	5.36	-	-
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-
Critical Hdwy Stg 2	6.78	5.58	-	-	-	-	-	-	-
Follow-up Hdwy	3.84	4.04	-	-	4.02	3.92	3.13	-	-
Pot Cap-1 Maneuver	530	220	0	0	225	435	-	-	-
Stage 1	-	-	0	0	301	-	-	-	-
Stage 2	511	295	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	520	220	-	-	225	435	-	-	-
Mov Cap-2 Maneuver	520	220	-	-	225	-	-	-	-
Stage 1	-	-	-	-	301	-	-	-	-
Stage 2	502	295	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	19	14.6	
HCM LOS	C	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	307	384
HCM Lane V/C Ratio	-	-	-	0.161	0.019
HCM Control Delay (s/veh)	-	-	-	19	14.6
HCM Lane LOS	-	-	-	C	B
HCM 95th %tile Q (veh)	-	-	-	0.6	0.1



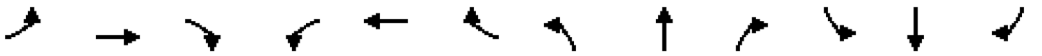
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	668	384	238	434	148	394	1066	381	143	861	48
Future Volume (vph)	91	668	384	238	434	148	394	1066	381	143	861	48
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1614	3228	1444	1630	4488		3162	4684	1432	1599	4553	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1614	3228	1444	1630	4488		3162	4684	1432	1599	4553	
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)	96	703	404	251	457	156	415	1122	401	151	906	51
RTOR Reduction (vph)	0	0	314	0	38	0	0	0	195	0	4	0
Lane Group Flow (vph)	96	703	90	251	575	0	415	1122	206	151	953	0
Confl. Peds. (#/hr)	2					2	2		5	5		2
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	custom	Prot	NA	
Protected Phases	1	6		5	2		7 9	4		3	8	
Permitted Phases			6						2			
Actuated Green, G (s)	14.2	30.0	30.0	22.0	37.8		33.9	59.9	37.8	18.1	39.1	
Effective Green, g (s)	14.2	30.0	30.0	22.0	37.8		33.9	59.9	37.8	18.1	39.1	
Actuated g/C Ratio	0.09	0.20	0.20	0.15	0.25		0.23	0.40	0.25	0.12	0.26	
Clearance Time (s)	5.0	5.0	5.0	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	
Lane Grp Cap (vph)	152	645	288	239	1130		714	1870	360	192	1186	
v/s Ratio Prot	0.06	c0.22		c0.15	0.13		0.13	c0.24		c0.09	c0.21	
v/s Ratio Perm			0.06						0.14			
v/c Ratio	0.63	1.09	0.31	1.05	0.51		0.58	0.60	0.57	0.79	0.80	
Uniform Delay, d1	65.4	60.0	51.2	64.0	48.1		51.7	35.6	49.0	64.1	51.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.90	0.97	1.34	1.00	1.00	
Incremental Delay, d2	8.3	62.4	0.6	72.0	0.4		0.9	1.0	1.5	18.8	4.0	
Delay (s)	73.7	122.4	51.8	136.0	48.5		47.5	35.4	67.3	82.9	55.9	
Level of Service	E	F	D	F	D		D	D	E	F	E	
Approach Delay (s/veh)		94.8			73.9			44.6			59.6	
Approach LOS		F			E			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	64.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Signalized Intersection Summary
2: Argonne & Montgomery

09/25/2025



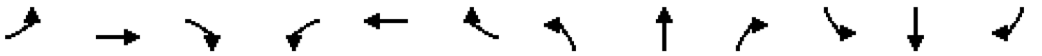
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	100	57	441	70	313	37	1247	338	248	1182	63
Future Volume (veh/h)	110	100	57	441	70	313	37	1247	338	248	1182	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		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	1723	1723	1723	1723	1723	1723	1709	1709	1709	1695	1695	1695
Adj Flow Rate, veh/h	113	103	59	455	72	323	38	1286	348	256	1219	65
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	135	222	117	690	66	296	47	1524	472	278	2114	113
Arrive On Green	0.08	0.11	0.11	0.22	0.24	0.24	0.06	0.65	0.65	0.17	0.47	0.47
Sat Flow, veh/h	1641	2038	1074	3183	271	1215	1628	4666	1444	1615	4498	240
Grp Volume(v), veh/h	113	81	81	455	0	395	38	1286	348	256	836	448
Grp Sat Flow(s),veh/h/ln	1641	1637	1475	1591	0	1486	1628	1555	1444	1615	1543	1652
Q Serve(g_s), s	10.2	7.0	7.8	19.6	0.0	36.5	3.5	31.9	24.2	23.4	29.6	29.6
Cycle Q Clear(g_c), s	10.2	7.0	7.8	19.6	0.0	36.5	3.5	31.9	24.2	23.4	29.6	29.6
Prop In Lane	1.00		0.73	1.00		0.82	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	135	178	160	690	0	362	47	1524	472	278	1450	776
V/C Ratio(X)	0.84	0.46	0.51	0.66	0.00	1.09	0.80	0.84	0.74	0.92	0.58	0.58
Avail Cap(c_a), veh/h	180	224	202	690	0	362	119	1524	472	334	1450	776
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	1.00	1.00	0.86	0.00	0.86	0.85	0.85	0.85	0.49	0.49	0.49
Uniform Delay (d), s/veh	67.9	62.7	63.0	53.7	0.0	56.8	70.2	23.0	21.7	61.1	28.9	28.9
Incr Delay (d2), s/veh	22.2	2.6	3.5	4.2	0.0	71.1	22.7	5.1	8.5	16.0	0.8	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	3.0	3.1	8.3	0.0	20.8	1.7	8.5	6.9	10.8	11.1	12.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	90.0	65.3	66.5	57.9	0.0	127.9	92.9	28.1	30.2	77.0	29.7	30.4
LnGrp LOS	F	E	E	E		F	F	C	C	E	C	C
Approach Vol, veh/h		275			850			1672			1540	
Approach Delay, s/veh		75.8			90.4			30.0			37.8	
Approach LOS		E			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	74.5	37.0	20.8	29.9	53.0	16.8	41.0
Change Period (Y+Rc), s	4.0	4.0	4.5	4.5	4.0	4.0	4.5	4.5
Max Green Setting (Gmax), s	11.0	69.0	32.5	20.5	31.0	49.0	16.5	36.5
Max Q Clear Time (g_c+I1), s	5.5	31.6	21.6	9.8	25.4	33.9	12.2	38.5
Green Ext Time (p_c), s	0.0	11.5	1.7	0.6	0.5	9.7	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	47.5
HCM 6th LOS	D

Notes

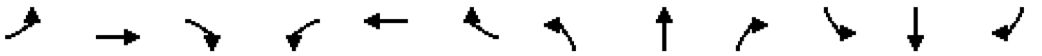
User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	20	147	44	27	30	149	1600	21	59	1478	49
Future Volume (veh/h)	77	20	147	44	27	30	149	1600	21	59	1478	49
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	1723	1723	1723	1723	1723	1723	1709	1709	1709	1709	1709	1709
Adj Flow Rate, veh/h	81	21	155	46	28	32	157	1684	22	62	1556	52
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, %	2	2	2	2	2	2	3	3	3	3	3	3
Cap, veh/h	43	6	290	39	14	290	178	3111	41	83	2769	93
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.11	0.66	0.66	0.05	0.60	0.60
Sat Flow, veh/h	0	30	1449	0	70	1449	1628	4746	62	1628	4637	155
Grp Volume(v), veh/h	102	0	155	74	0	32	157	1104	602	62	1044	564
Grp Sat Flow(s),veh/h/ln	30	0	1449	70	0	1449	1628	1555	1698	1628	1555	1681
Q Serve(g_s), s	0.0	0.0	14.4	0.0	0.0	2.7	14.3	28.4	28.4	5.6	30.5	30.5
Cycle Q Clear(g_c), s	30.0	0.0	14.4	30.0	0.0	2.7	14.3	28.4	28.4	5.6	30.5	30.5
Prop In Lane	0.79		1.00	0.62		1.00	1.00		0.04	1.00		0.09
Lane Grp Cap(c), veh/h	49	0	290	53	0	290	178	2039	1113	83	1857	1004
V/C Ratio(X)	2.08	0.00	0.53	1.40	0.00	0.11	0.88	0.54	0.54	0.74	0.56	0.56
Avail Cap(c_a), veh/h	49	0	290	53	0	290	217	2039	1113	119	1857	1004
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.77	0.77	0.77
Uniform Delay (d), s/veh	71.4	0.0	53.7	67.2	0.0	49.1	65.8	13.8	13.8	70.2	18.3	18.3
Incr Delay (d2), s/veh	549.1	0.0	2.5	261.4	0.0	0.2	27.8	1.0	1.9	10.9	1.0	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	0.0	5.5	5.9	0.0	1.0	7.3	9.9	11.1	2.6	11.0	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	620.5	0.0	56.3	328.7	0.0	49.3	93.7	14.8	15.7	81.1	19.3	20.1
LnGrp LOS	F		E	F		D	F	B	B	F	B	C
Approach Vol, veh/h		257			106			1863			1670	
Approach Delay, s/veh		280.2			244.3			21.7			21.8	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.4	94.6		34.0	12.7	103.3		34.0				
Change Period (Y+Rc), s	5.0	5.0		4.0	5.0	5.0		4.0				
Max Green Setting (Gmax), s	20.0	86.0		30.0	11.0	95.0		30.0				
Max Q Clear Time (g_c+I1), s	16.3	32.5		32.0	7.6	30.4		32.0				
Green Ext Time (p_c), s	0.2	17.8		0.0	0.0	20.6		0.0				

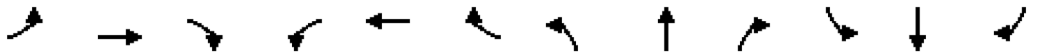
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			44.9									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	366	347	0	0	0	0	0	1349	464
Future Volume (vph)	0	0	0	366	347	0	0	0	0	0	1349	464
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)				5.0	5.0						5.0	5.0
Lane Util. Factor				0.91	0.91						0.95	1.00
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	0.99						1.00	1.00
Satd. Flow (prot)				1483	3079						3228	1422
Flt Permitted				0.95	0.99						1.00	1.00
Satd. Flow (perm)				1483	3079						3228	1422
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)	0	0	0	385	365	0	0	0	0	0	1420	488
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	214
Lane Group Flow (vph)	0	0	0	243	507	0	0	0	0	0	1420	274
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type				Split	NA						NA	Perm
Protected Phases				6 17	6 17						8	
Permitted Phases												8
Actuated Green, G (s)				34.0	34.0						32.0	32.0
Effective Green, g (s)				34.0	34.0						32.0	32.0
Actuated g/C Ratio				0.45	0.45						0.43	0.43
Clearance Time (s)											5.0	5.0
Vehicle Extension (s)											3.0	3.0
Lane Grp Cap (vph)				672	1395						1377	606
v/s Ratio Prot				0.16	c0.16						c0.44	
v/s Ratio Perm												0.19
v/c Ratio				0.36	0.36						1.03	0.45
Uniform Delay, d1				13.4	13.4						21.5	15.3
Progression Factor				0.05	1.67						0.98	1.49
Incremental Delay, d2				0.0	0.1						31.5	2.2
Delay (s)				0.7	22.5						52.5	25.0
Level of Service				A	C						D	C
Approach Delay (s/veh)		0.0			15.4			0.0			45.5	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	110.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	389	456	324	1422	0	0	0	0
Future Volume (vph)	0	0	0	0	389	456	324	1422	0	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)					5.0		5.0	5.0				
Lane Util. Factor					0.95		1.00	0.91				
Frpb, ped/bikes					1.00		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.92		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					2967		1614	4638				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					2967		1614	4638				
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)	0	0	0	0	397	465	331	1451	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	22	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	840	0	331	1451	0	0	0	0
Confl. Peds. (#/hr)									8	8		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	2%	2%	2%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					22.6		42.4	42.4				
Effective Green, g (s)					22.6		42.4	42.4				
Actuated g/C Ratio					0.30		0.57	0.57				
Clearance Time (s)					5.0		5.0	5.0				
Vehicle Extension (s)					2.0		3.0	3.0				
Lane Grp Cap (vph)					894		912	2622				
v/s Ratio Prot					c0.28			c0.31				
v/s Ratio Perm							0.21					
v/c Ratio					1.00dr		0.36	0.55				
Uniform Delay, d1					25.5		8.9	10.3				
Progression Factor					1.00		1.38	1.16				
Incremental Delay, d2					16.8		0.4	0.6				
Delay (s)					42.4		12.8	12.5				
Level of Service					D		B	B				
Approach Delay (s/veh)		0.0			42.4			12.6			0.0	
Approach LOS		A			D			B			A	

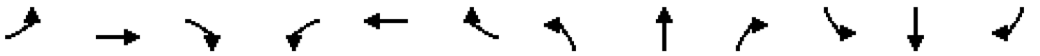
Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	103.6%	ICU Level of Service	G
Analysis Period (min)	15		

dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	441	344	0	0	0	0	0	0	362	1353	0
Future Volume (vph)	0	441	344	0	0	0	0	0	0	362	1353	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		5.0	5.0							5.0	5.0	
Lane Util. Factor		0.91	0.91							1.00	0.95	
Frpb, ped/bikes		1.00	1.00							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		0.97	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		2976	1302							1630	3260	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		2976	1302							1630	3260	
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)	0	450	351	0	0	0	0	0	0	369	1381	0
RTOR Reduction (vph)	0	26	70	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	529	176	0	0	0	0	0	0	369	1381	0
Confl. Peds. (#/hr)							3					3
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type		NA	Perm							Split	NA	
Protected Phases		2								4	4	
Permitted Phases			2									
Actuated Green, G (s)		14.9	14.9							50.1	50.1	
Effective Green, g (s)		14.9	14.9							50.1	50.1	
Actuated g/C Ratio		0.20	0.20							0.67	0.67	
Clearance Time (s)		5.0	5.0							5.0	5.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		591	258							1088	2177	
v/s Ratio Prot		c0.18								0.23	c0.42	
v/s Ratio Perm			0.14									
v/c Ratio		0.90	0.68							0.34	0.63	
Uniform Delay, d1		29.3	27.9							5.3	7.2	
Progression Factor		1.00	1.00							0.92	0.88	
Incremental Delay, d2		16.1	7.3							0.1	0.7	
Delay (s)		45.4	35.1							5.0	7.0	
Level of Service		D	D							A	A	
Approach Delay (s/veh)		42.2			0.0			0.0			6.6	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	99.0%	ICU Level of Service	F
Analysis Period (min)	15		

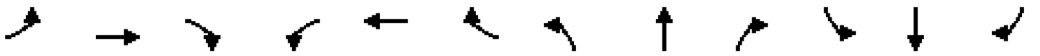
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	352	0	0	0	0	0	1296	418	0	0	0
Future Volume (vph)	450	352	0	0	0	0	0	1296	418	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.96				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	3072	1667						4485				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	3072	1667						4485				
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)	479	374	0	0	0	0	0	1379	445	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	77	0	0	0	0
Lane Group Flow (vph)	479	374	0	0	0	0	0	1747	0	0	0	0
Confl. Peds. (#/hr)									2			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1392	755						1913				
v/s Ratio Prot	0.16	c0.22						c0.39				
v/s Ratio Perm												
v/c Ratio	0.34	0.50						0.91				
Uniform Delay, d1	13.3	14.5						20.2				
Progression Factor	0.08	0.96						0.56				
Incremental Delay, d2	0.1	0.5						6.4				
Delay (s)	1.2	14.4						17.6				
Level of Service	A	B						B				
Approach Delay (s/veh)		7.0			0.0			17.6			0.0	
Approach LOS		A			A			B			A	

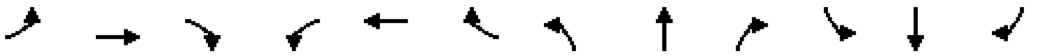
Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	107.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	175	27	64	66	0	0	0	0	292	1286	119
Future Volume (vph)	0	175	27	64	66	0	0	0	0	292	1286	119
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.0			4.0						5.0	
Lane Util. Factor		0.95			0.95						0.91	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		0.98			1.00						0.99	
Flt Protected		1.00			0.98						0.99	
Satd. Flow (prot)		3186			3174						4589	
Flt Permitted		1.00			0.74						0.99	
Satd. Flow (perm)		3186			2403						4589	
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)	0	180	28	66	68	0	0	0	0	301	1326	123
RTOR Reduction (vph)	0	21	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	187	0	0	134	0	0	0	0	0	1743	0
Confl. Peds. (#/hr)			6	6			5					5
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		6			2						4	
Permitted Phases				2						4		
Actuated Green, G (s)		11.9			11.9						54.1	
Effective Green, g (s)		11.9			11.9						54.1	
Actuated g/C Ratio		0.16			0.16						0.72	
Clearance Time (s)		4.0			4.0						5.0	
Vehicle Extension (s)		4.0			4.0						4.0	
Lane Grp Cap (vph)		505			381						3310	
v/s Ratio Prot		c0.06										
v/s Ratio Perm					0.06						0.38	
v/c Ratio		0.37			0.35						0.53	
Uniform Delay, d1		28.2			28.1						4.7	
Progression Factor		1.00			0.82						1.13	
Incremental Delay, d2		0.6			0.6						0.5	
Delay (s)		28.8			23.8						5.8	
Level of Service		C			C						A	
Approach Delay (s/veh)		28.8			23.8			0.0			5.8	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	331	0	0	118	254	46	1294	54	0	0	0
Future Volume (veh/h)	170	331	0	0	118	254	46	1294	54	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1709	1709	0	0	1723	1723	1723	1723	1723			
Adj Flow Rate, veh/h	183	356	0	0	127	273	49	1391	58			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	3	3	0	0	2	2	2	2	2			
Cap, veh/h	356	706	0	0	327	292	71	2155	93			
Arrive On Green	0.32	0.83	0.00	0.00	0.20	0.20	0.47	0.47	0.47			
Sat Flow, veh/h	1628	1709	0	0	1723	1458	153	4617	199			
Grp Volume(v), veh/h	183	356	0	0	127	273	549	457	492			
Grp Sat Flow(s),veh/h/ln	1628	1709	0	0	1637	1458	1715	1568	1687			
Q Serve(g_s), s	1.7	4.6	0.0	0.0	5.0	13.8	18.9	16.5	16.5			
Cycle Q Clear(g_c), s	1.7	4.6	0.0	0.0	5.0	13.8	18.9	16.5	16.5			
Prop In Lane	1.00		0.00	0.00		1.00	0.09		0.12			
Lane Grp Cap(c), veh/h	356	706	0	0	327	292	800	732	787			
V/C Ratio(X)	0.51	0.50	0.00	0.00	0.39	0.94	0.69	0.62	0.62			
Avail Cap(c_a), veh/h	356	706	0	0	327	292	800	732	787			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.92	0.92	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	21.6	4.2	0.0	0.0	26.0	29.5	15.7	15.1	15.1			
Incr Delay (d2), s/veh	1.2	2.4	0.0	0.0	3.4	38.7	4.8	4.0	3.7			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.3	1.5	0.0	0.0	2.2	7.7	7.5	6.0	6.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.7	6.6	0.0	0.0	29.5	68.2	20.5	19.1	18.8			
LnGrp LOS	C	A			C	E	C	B	B			
Approach Vol, veh/h		539			400			1498				
Approach Delay, s/veh		12.1			55.9			19.5				
Approach LOS		B			E			B				

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	16.0	19.0		40.0		35.0						
Change Period (Y+Rc), s	4.0	4.0		5.0		4.0						
Max Green Setting (Gmax), s	12.0	15.0		35.0		31.0						
Max Q Clear Time (g_c+I1), s	3.7	15.8		20.9		6.6						
Green Ext Time (p_c), s	0.4	0.0		8.1		2.2						

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		23.8	
HCM 6th LOS		C	

Notes

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

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	10	17	31	19	0	0	0	0	58	1309	6
Future Vol, veh/h	0	10	17	31	19	0	0	0	0	58	1309	6
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	2	2	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	18	33	20	0	0	0	0	62	1393	6

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	1525	706	692	1528	-			2	0	0
Stage 1	-	1523	-	2	2	-			-	-	-
Stage 2	-	2	-	690	1526	-			-	-	-
Critical Hdwy	-	6.54	7.14	6.44	6.54	-			5.34	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-			-	-	-
Follow-up Hdwy	-	4.02	3.92	3.82	4.02	-			3.12	-	-
Pot Cap-1 Maneuver	0	117	324	386	116	0			1151	-	-
Stage 1	0	179	-	-	-	0			-	-	-
Stage 2	0	-	-	365	178	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	88	323	269	87	-			1149	-	-
Mov Cap-2 Maneuver	-	88	-	269	87	-			-	-	-
Stage 1	-	135	-	-	-	-			-	-	-
Stage 2	-	-	-	240	134	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	32	41.6	0.4
HCM LOS	D	E	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	162	150	1149	-	-
HCM Lane V/C Ratio	0.177	0.355	0.054	-	-
HCM Control Delay (s/veh)	32	41.6	8.3	-	-
HCM Lane LOS	D	E	A	-	-
HCM 95th %tile Q (veh)	0.6	1.5	0.2	-	-

Intersection	
Int Delay, s/veh	4.2

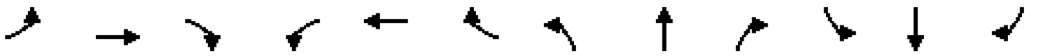
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	69	25	0	0	8	26	60	1297	5	0	0	0
Future Vol, veh/h	69	25	0	0	8	26	60	1297	5	0	0	0
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	2	2	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	27	0	0	9	28	64	1380	5	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	690	1518	-	-	1516	697	3	0	0
Stage 1	3	3	-	-	1513	-	-	-	-
Stage 2	687	1515	-	-	3	-	-	-	-
Critical Hdwy	6.44	6.54	-	-	6.54	7.14	5.34	-	-
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	-	-	4.02	3.92	3.12	-	-
Pot Cap-1 Maneuver	387	118	0	0	118	329	1150	-	-
Stage 1	-	-	0	0	181	-	-	-	-
Stage 2	367	180	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	267	89	-	-	89	328	1147	-	-
Mov Cap-2 Maneuver	267	89	-	-	89	-	-	-	-
Stage 1	-	-	-	-	137	-	-	-	-
Stage 2	239	136	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	50.4	26.8	0.4
HCM LOS	F	D	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1147	-	-	174	201
HCM Lane V/C Ratio	0.056	-	-	0.575	0.18
HCM Control Delay (s/veh)	8.3	-	-	50.4	26.8
HCM Lane LOS	A	-	-	F	D
HCM 95th %tile Q (veh)	0.2	-	-	3	0.6

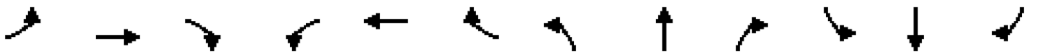
Appendix F. Level of Service Synchro Reports (2050) No-Build



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	308	267	227	662	130	358	744	173	123	1147	133
Future Volume (vph)	63	308	267	227	662	130	358	744	173	123	1147	133
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1391	2782	1244	1443	4033		2852	4225	1296	1484	4199	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1391	2782	1244	1443	4033		2852	4225	1296	1484	4199	
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)	66	324	281	239	697	137	377	783	182	129	1207	140
RTOR Reduction (vph)	0	0	232	0	19	0	0	0	129	0	8	0
Lane Group Flow (vph)	66	324	49	239	815	0	377	783	53	129	1339	0
Confl. Peds. (#/hr)	3					3			2	2		
Heavy Vehicles (%)	11%	11%	11%	7%	7%	7%	5%	5%	5%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	custom	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						2			
Actuated Green, G (s)	11.0	26.0	26.0	23.0	38.0		25.2	62.6	38.0	18.4	55.8	
Effective Green, g (s)	11.0	26.0	26.0	23.0	38.0		25.2	62.6	38.0	18.4	55.8	
Actuated g/C Ratio	0.07	0.17	0.17	0.15	0.25		0.17	0.42	0.25	0.12	0.37	
Clearance Time (s)	5.0	5.0	5.0	5.0	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	
Lane Grp Cap (vph)	102	482	215	221	1021		479	1763	328	182	1562	
v/s Ratio Prot	0.05	0.12		c0.17	c0.20		c0.13	0.19		0.09	c0.32	
v/s Ratio Perm			0.04						0.04			
v/c Ratio	0.65	0.67	0.23	1.08	0.80		0.79	0.44	0.16	0.71	0.86	
Uniform Delay, d1	67.6	58.0	53.3	63.5	52.4		59.8	31.3	43.6	63.2	43.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.73	1.42	0.16	1.00	1.00	
Incremental Delay, d2	13.3	3.7	0.5	83.9	4.4		6.6	0.6	0.2	11.9	4.9	
Delay (s)	80.9	61.7	53.9	147.4	56.9		50.1	44.9	7.0	75.1	48.3	
Level of Service	F	E	D	F	E		D	D	A	E	D	
Approach Delay (s/veh)		60.3			77.0			41.2			50.7	
Approach LOS		E			E			D			D	

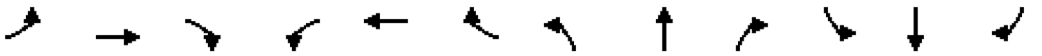
Intersection Summary			
HCM 2000 Control Delay (s/veh)	55.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	73	44	72	176	53	132	52	1001	355	256	1333	29
Future Volume (vph)	73	44	72	176	53	132	52	1001	355	256	1333	29
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	4.0	4.0		5.5	5.5		4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor	1.00	0.95		0.97	1.00		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	0.98		1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.91		1.00	0.89		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1331	2414		2627	1253		1470	4225	1298	1484	4250	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1331	2414		2627	1253		1470	4225	1298	1484	4250	
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)	78	47	77	189	57	142	56	1076	382	275	1433	31
RTOR Reduction (vph)	0	71	0	0	59	0	0	0	200	0	1	0
Lane Group Flow (vph)	78	53	0	189	140	0	56	1076	182	275	1463	0
Confl. Peds. (#/hr)	7					7	1		1	1		1
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	16%	16%	16%	14%	14%	14%	5%	5%	5%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5 9	2	
Permitted Phases									6			
Actuated Green, G (s)	13.1	11.0		24.5	22.4		9.8	60.0	60.0	32.0	86.2	
Effective Green, g (s)	13.1	11.0		24.5	22.4		9.8	60.0	60.0	32.0	86.2	
Actuated g/C Ratio	0.09	0.07		0.16	0.15		0.07	0.40	0.40	0.21	0.57	
Clearance Time (s)	4.0	4.0		5.5	5.5		4.0	5.0	5.0		5.0	
Vehicle Extension (s)	3.0	3.0		4.0	4.0		3.0	4.0	4.0		4.0	
Lane Grp Cap (vph)	116	177		429	187		96	1690	519	316	2442	
v/s Ratio Prot	c0.06	0.02		0.07	c0.11		0.04	0.25		c0.19	c0.34	
v/s Ratio Perm									0.14			
v/c Ratio	0.67	0.30		0.44	0.75		0.58	0.64	0.35	0.87	0.60	
Uniform Delay, d1	66.4	65.8		56.6	61.1		68.1	36.2	31.4	57.0	20.7	
Progression Factor	1.00	1.00		1.00	1.00		0.82	1.52	4.65	1.18	1.65	
Incremental Delay, d2	14.3	0.9		3.3	23.9		7.9	1.7	1.7	13.0	0.6	
Delay (s)	80.7	66.8		59.8	85.0		63.5	56.9	147.7	80.0	34.7	
Level of Service	F	E		E	F		E	E	F	F	C	
Approach Delay (s/veh)		72.1			72.7			80.0			41.9	
Approach LOS		E			E			F			D	

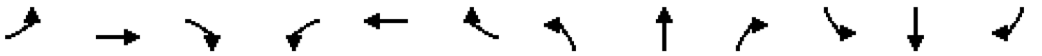
Intersection Summary			
HCM 2000 Control Delay (s/veh)	61.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	91.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	12	160	37	10	15	176	1381	28	41	1483	50
Future Volume (veh/h)	48	12	160	37	10	15	176	1381	28	41	1483	50
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	1587	1587	1587	1600	1600	1600	1574	1574	1574	1536	1536	1536
Adj Flow Rate, veh/h	51	13	168	39	11	16	185	1454	29	43	1561	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	2	2	2	4	4	4	7	7	7
Cap, veh/h	43	5	282	43	6	284	206	2820	56	63	2315	79
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.14	0.65	0.65	0.01	0.18	0.18
Sat Flow, veh/h	0	26	1343	0	29	1354	1499	4337	87	1463	4165	141
Grp Volume(v), veh/h	64	0	168	50	0	16	185	960	523	43	1048	566
Grp Sat Flow(s),veh/h/ln	26	0	1343	29	0	1354	1499	1433	1559	1463	1398	1511
Q Serve(g_s), s	0.0	0.0	16.9	0.0	0.0	1.4	18.2	26.5	26.5	4.4	52.4	52.4
Cycle Q Clear(g_c), s	31.5	0.0	16.9	31.5	0.0	1.4	18.2	26.5	26.5	4.4	52.4	52.4
Prop In Lane	0.80		1.00	0.78		1.00	1.00		0.06	1.00		0.09
Lane Grp Cap(c), veh/h	49	0	282	49	0	284	206	1863	1013	63	1554	840
V/C Ratio(X)	1.32	0.00	0.60	1.03	0.00	0.06	0.90	0.52	0.52	0.68	0.67	0.67
Avail Cap(c_a), veh/h	49	0	282	49	0	284	290	1863	1013	224	1554	840
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	71.5	0.0	53.5	71.1	0.0	47.4	63.7	13.8	13.8	72.9	48.6	48.6
Incr Delay (d2), s/veh	236.6	0.0	4.1	136.5	0.0	0.1	22.3	1.0	1.9	9.8	1.9	3.4
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	5.1	0.0	6.1	3.7	0.0	0.5	8.2	8.5	9.5	1.9	20.1	22.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	308.2	0.0	57.6	207.7	0.0	47.5	86.0	14.8	15.7	82.7	50.5	52.0
LnGrp LOS	F		E	F		D	F	B	B	F	D	D
Approach Vol, veh/h		232			66			1668			1657	
Approach Delay, s/veh		126.7			168.9			23.0			51.8	
Approach LOS		F			F			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.6	88.4		37.0	10.5	102.5		37.0				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	29.0	75.0		31.5	23.0	81.0		31.5				
Max Q Clear Time (g_c+I1), s	20.2	54.4		33.5	6.4	28.5		33.5				
Green Ext Time (p_c), s	0.4	11.8		0.0	0.1	15.4		0.0				

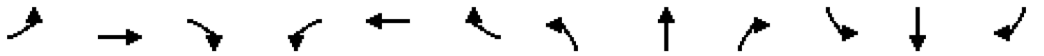
Intersection Summary			
HCM 6th Ctrl Delay, s/veh		45.5	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	349	296	0	0	0	0	0	1263	485
Future Volume (vph)	0	0	0	349	296	0	0	0	0	0	1263	485
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)				5.0	5.0						5.0	5.0
Lane Util. Factor				0.91	0.91						0.95	1.00
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	0.98						1.00	1.00
Satd. Flow (prot)				1351	2799						2913	1283
Flt Permitted				0.95	0.98						1.00	1.00
Satd. Flow (perm)				1351	2799						2913	1283
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)	0	0	0	364	308	0	0	0	0	0	1316	505
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	191
Lane Group Flow (vph)	0	0	0	218	454	0	0	0	0	0	1316	314
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	2%	2%	2%	6%	6%	6%
Turn Type				Split	NA						NA	Perm
Protected Phases				6 17	6 17						8	
Permitted Phases												8
Actuated Green, G (s)				29.0	29.0						37.0	37.0
Effective Green, g (s)				29.0	29.0						37.0	37.0
Actuated g/C Ratio				0.39	0.39						0.49	0.49
Clearance Time (s)											5.0	5.0
Vehicle Extension (s)											3.0	3.0
Lane Grp Cap (vph)				522	1082						1437	632
v/s Ratio Prot				0.16	c0.16						c0.45	
v/s Ratio Perm												0.25
v/c Ratio				0.42	0.42						0.92	0.50
Uniform Delay, d1				16.8	16.8						17.6	12.8
Progression Factor				0.08	1.55						1.88	3.72
Incremental Delay, d2				0.0	0.1						9.3	2.4
Delay (s)				1.3	26.3						42.2	49.8
Level of Service				A	C						D	D
Approach Delay (s/veh)		0.0			18.2			0.0			44.3	
Approach LOS		A			B			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	107.3%	ICU Level of Service	G
Analysis Period (min)	15		

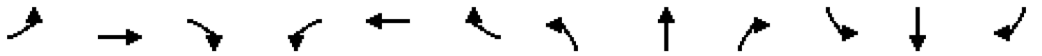
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	331	440	315	1183	0	0	0	0
Future Volume (vph)	0	0	0	0	331	440	315	1183	0	0	0	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)					5.0		5.0	5.0				
Lane Util. Factor					0.95		1.00	0.91				
Frpb, ped/bikes					1.00		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.91		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					2741		1470	4225				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					2741		1470	4225				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	0	372	494	354	1329	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	49	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	817	0	354	1329	0	0	0	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	5%	5%	5%	2%	2%	2%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					18.0		47.0	47.0				
Effective Green, g (s)					18.0		47.0	47.0				
Actuated g/C Ratio					0.24		0.63	0.63				
Clearance Time (s)					5.0		5.0	5.0				
Vehicle Extension (s)					2.0		3.0	3.0				
Lane Grp Cap (vph)					657		921	2647				
v/s Ratio Prot					c0.30			c0.31				
v/s Ratio Perm							0.24					
v/c Ratio					1.31dr		0.38	0.50				
Uniform Delay, d1					28.5		6.9	7.6				
Progression Factor					1.00		0.13	0.91				
Incremental Delay, d2					122.4		0.9	0.6				
Delay (s)					150.9		1.8	7.5				
Level of Service					F		A	A				
Approach Delay (s/veh)		0.0			150.9			6.3			0.0	
Approach LOS		A			F			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	55.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	100.5%	ICU Level of Service	G
Analysis Period (min)	15		

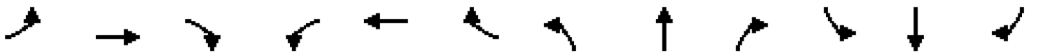
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	475	310	0	0	0	0	0	0	384	1228	0
Future Volume (vph)	0	475	310	0	0	0	0	0	0	384	1228	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)		5.0	5.0							5.0	5.0	
Lane Util. Factor		0.91	0.91							1.00	0.95	
Frpb, ped/bikes		1.00	1.00							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		2788	1209							1484	2969	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		2788	1209							1484	2969	
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)	0	540	352	0	0	0	0	0	0	436	1395	0
RTOR Reduction (vph)	0	15	70	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	606	201	0	0	0	0	0	0	436	1395	0
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type		NA	Perm							Split	NA	
Protected Phases		2								4	4	
Permitted Phases			2									
Actuated Green, G (s)		15.0	15.0							50.0	50.0	
Effective Green, g (s)		15.0	15.0							50.0	50.0	
Actuated g/C Ratio		0.20	0.20							0.67	0.67	
Clearance Time (s)		5.0	5.0							5.0	5.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		557	241							989	1979	
v/s Ratio Prot		c0.22								0.29	c0.47	
v/s Ratio Perm			0.17									
v/c Ratio		1.09	0.84							0.44	0.70	
Uniform Delay, d1		30.0	28.8							5.9	7.9	
Progression Factor		1.00	1.00							2.06	1.41	
Incremental Delay, d2		64.1	21.4							0.9	1.6	
Delay (s)		94.1	50.3							13.1	12.6	
Level of Service		F	D							B	B	
Approach Delay (s/veh)		80.8			0.0			0.0			12.8	
Approach LOS		F			A			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	94.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



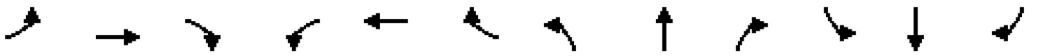
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	453	406	0	0	0	0	0	1045	300	0	0	0
Future Volume (vph)	453	406	0	0	0	0	0	1045	300	0	0	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.97				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	2852	1548						4100				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	2852	1548						4100				
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)	477	427	0	0	0	0	0	1100	316	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	69	0	0	0	0
Lane Group Flow (vph)	477	427	0	0	0	0	0	1347	0	0	0	0
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1292	701						1749				
v/s Ratio Prot	0.17	c0.28						c0.33				
v/s Ratio Perm												
v/c Ratio	0.37	0.61						0.77				
Uniform Delay, d1	13.5	15.5						18.4				
Progression Factor	0.06	1.11						0.82				
Incremental Delay, d2	0.0	1.4						2.9				
Delay (s)	0.8	18.6						18.0				
Level of Service	A	B						B				
Approach Delay (s/veh)		9.2			0.0			18.0			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	102.9%	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 (vph)	0	100	22	53	44	0	0	0	0	178	1251	109
Future Volume (vph)	0	100	22	53	44	0	0	0	0	178	1251	109
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		0.95			0.95						0.91	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.97						0.99	
Satd. Flow (prot)		2889			2947						4192	
Flt Permitted		1.00			0.76						0.99	
Satd. Flow (perm)		2889			2297						4192	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	115	25	61	51	0	0	0	0	205	1438	125
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	126	0	0	112	0	0	0	0	0	1762	0
Confl. Peds. (#/hr)	1					1	1					1
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		6			2						4	
Permitted Phases				2						4		
Actuated Green, G (s)		9.9			9.9						55.1	
Effective Green, g (s)		9.9			9.9						55.1	
Actuated g/C Ratio		0.13			0.13						0.73	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		4.0			4.0						4.0	
Lane Grp Cap (vph)		381			303						3079	
v/s Ratio Prot		0.04										
v/s Ratio Perm					c0.05						0.42	
v/c Ratio		0.33			0.37						0.57	
Uniform Delay, d1		29.5			29.7						4.6	
Progression Factor		1.00			0.69						0.82	
Incremental Delay, d2		0.7			1.0						0.5	
Delay (s)		30.2			21.4						4.3	
Level of Service		C			C						A	
Approach Delay (s/veh)		30.2			21.4			0.0			4.3	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	55.6%	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)	101	177	0	0	82	265	16	979	17	0	0	0
Future Volume (veh/h)	101	177	0	0	82	265	16	979	17	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1587	1587	0	0	1549	1549	1574	1574	1574			
Adj Flow Rate, veh/h	106	186	0	0	86	279	17	1031	18			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	3	3	0	0	6	6	4	4	4			
Cap, veh/h	281	656	0	0	373	332	32	2060	37			
Arrive On Green	0.21	0.83	0.00	0.00	0.25	0.25	0.15	0.15	0.15			
Sat Flow, veh/h	1511	1587	0	0	1549	1311	68	4415	80			
Grp Volume(v), veh/h	106	186	0	0	86	279	390	324	353			
Grp Sat Flow(s),veh/h/ln	1511	1587	0	0	1472	1311	1571	1433	1560			
Q Serve(g_s), s	0.0	2.0	0.0	0.0	3.5	15.1	17.2	15.5	15.5			
Cycle Q Clear(g_c), s	0.0	2.0	0.0	0.0	3.5	15.1	17.2	15.5	15.5			
Prop In Lane	1.00		0.00	0.00		1.00	0.04		0.05			
Lane Grp Cap(c), veh/h	281	656	0	0	373	332	733	669	728			
V/C Ratio(X)	0.38	0.28	0.00	0.00	0.23	0.84	0.53	0.48	0.48			
Avail Cap(c_a), veh/h	281	656	0	0	373	332	733	669	728			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.94	0.94	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	26.1	4.0	0.0	0.0	22.2	26.6	24.2	23.5	23.5			
Incr Delay (d2), s/veh	0.8	1.0	0.0	0.0	1.4	21.8	2.8	2.5	2.3			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.5	0.7	0.0	0.0	1.3	6.4	7.6	6.3	6.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.9	5.0	0.0	0.0	23.6	48.4	26.9	26.0	25.8			
LnGrp LOS	C	A			C	D	C	C	C			
Approach Vol, veh/h		292			365			1066				
Approach Delay, s/veh		13.0			42.6			26.3				
Approach LOS		B			D			C				

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.0	23.0		40.0		35.0						
Change Period (Y+Rc), s	4.0	4.0		5.0		4.0						
Max Green Setting (Gmax), s	8.0	19.0		35.0		31.0						
Max Q Clear Time (g_c+I1), s	2.0	17.1		19.2		4.0						
Green Ext Time (p_c), s	0.1	0.4		6.0		1.0						

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			27.5									
HCM 6th LOS			C									

Notes

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

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	16	2	5	5	0	0	0	0	29	1268	6
Future Vol, veh/h	0	16	2	5	5	0	0	0	0	29	1268	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	17	17	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	10	10	10	2	2	2	2	2	2
Mvmt Flow	0	18	2	6	6	0	0	0	0	33	1441	7

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	1528	724	668	1531	-			17	0	0
Stage 1	-	1511	-	17	17	-			-	-	-
Stage 2	-	17	-	651	1514	-			-	-	-
Critical Hdwy	-	6.54	7.14	6.6	6.7	-			5.34	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.9	5.7	-			-	-	-
Follow-up Hdwy	-	4.02	3.92	3.9	4.1	-			3.12	-	-
Pot Cap-1 Maneuver	0	116	316	381	107	0			1133	-	-
Stage 1	0	181	-	-	-	0			-	-	-
Stage 2	0	-	-	369	168	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	97	316	283	89	-			1117	-	-
Mov Cap-2 Maneuver	-	97	-	283	89	-			-	-	-
Stage 1	-	153	-	-	-	-			-	-	-
Stage 2	-	-	-	274	142	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	47.4	34.1	0.2
HCM LOS	E	D	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	105	135	1117	-	-
HCM Lane V/C Ratio	0.195	0.084	0.03	-	-
HCM Control Delay (s/veh)	47.4	34.1	8.3	-	-
HCM Lane LOS	E	D	A	-	-
HCM 95th %tile Q (veh)	0.7	0.3	0.1	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	25	0	0	1	6	19	997	9	0	0	0
Future Vol, veh/h	24	25	0	0	1	6	19	997	9	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	2	2	2
Mvmt Flow	25	26	0	0	1	6	20	1049	9	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	460	1098	-	-	1094	529	0	0	0
Stage 1	0	0	-	-	1094	-	-	-	-
Stage 2	460	1098	-	-	0	-	-	-	-
Critical Hdwy	6.48	6.58	-	-	6.54	7.14	5.36	-	-
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-
Critical Hdwy Stg 2	6.78	5.58	-	-	-	-	-	-	-
Follow-up Hdwy	3.84	4.04	-	-	4.02	3.92	3.13	-	-
Pot Cap-1 Maneuver	518	208	0	0	213	423	-	-	-
Stage 1	-	-	0	0	288	-	-	-	-
Stage 2	499	283	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	508	208	-	-	213	423	-	-	-
Mov Cap-2 Maneuver	508	208	-	-	213	-	-	-	-
Stage 1	-	-	-	-	288	-	-	-	-
Stage 2	490	283	-	-	-	-	-	-	-

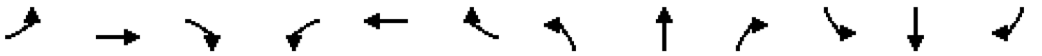
Approach	EB	WB	NB
HCM Control Delay, s/v	19.9	14.9	
HCM LOS	C	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	293	371
HCM Lane V/C Ratio	-	-	-	0.176	0.02
HCM Control Delay (s/veh)	-	-	-	19.9	14.9
HCM Lane LOS	-	-	-	C	B
HCM 95th %tile Q (veh)	-	-	-	0.6	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	694	399	247	451	154	409	1107	395	149	894	50
Future Volume (vph)	94	694	399	247	451	154	409	1107	395	149	894	50
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1614	3228	1444	1630	4489		3162	4684	1432	1599	4553	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1614	3228	1444	1630	4489		3162	4684	1432	1599	4553	
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)	99	731	420	260	475	162	431	1165	416	157	941	53
RTOR Reduction (vph)	0	0	312	0	38	0	0	0	196	0	4	0
Lane Group Flow (vph)	99	731	108	260	599	0	431	1165	220	157	990	0
Confl. Peds. (#/hr)	2					2	2		5	5		2
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	custom	Prot	NA	
Protected Phases	1	6		5	2		7 9	4		3	8	
Permitted Phases			6						2			
Actuated Green, G (s)	14.5	30.0	30.0	22.0	37.5		33.0	59.5	37.5	18.5	40.0	
Effective Green, g (s)	14.5	30.0	30.0	22.0	37.5		33.0	59.5	37.5	18.5	40.0	
Actuated g/C Ratio	0.10	0.20	0.20	0.15	0.25		0.22	0.40	0.25	0.12	0.27	
Clearance Time (s)	5.0	5.0	5.0	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	
Lane Grp Cap (vph)	156	645	288	239	1122		695	1857	358	197	1214	
v/s Ratio Prot	0.06	c0.23		c0.16	0.13		0.14	c0.25		c0.10	c0.22	
v/s Ratio Perm			0.07						0.15			
v/c Ratio	0.63	1.13	0.38	1.09	0.53		0.62	0.63	0.62	0.80	0.82	
Uniform Delay, d1	65.2	60.0	51.9	64.0	48.7		52.8	36.3	49.9	63.9	51.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.93	1.00	1.27	1.00	1.00	
Incremental Delay, d2	8.2	78.2	0.8	83.6	0.5		1.1	1.1	2.1	19.7	4.3	
Delay (s)	73.4	138.2	52.7	147.6	49.2		50.4	37.4	65.4	83.6	55.9	
Level of Service	E	F	D	F	D		D	D	E	F	E	
Approach Delay (s/veh)		104.3			77.7			45.9			59.6	
Approach LOS		F			E			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	68.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



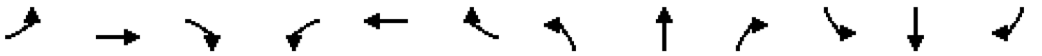
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	104	60	458	73	325	39	1295	351	257	1228	66
Future Volume (veh/h)	114	104	60	458	73	325	39	1295	351	257	1228	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		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	1723	1723	1723	1723	1723	1723	1709	1709	1709	1695	1695	1695
Adj Flow Rate, veh/h	118	107	62	472	75	335	40	1335	362	265	1266	68
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	139	227	121	690	66	295	50	1524	472	287	2130	114
Arrive On Green	0.09	0.11	0.11	0.36	0.41	0.41	0.06	0.65	0.65	0.18	0.47	0.47
Sat Flow, veh/h	1641	2029	1082	3183	272	1214	1628	4666	1444	1615	4496	241
Grp Volume(v), veh/h	118	85	84	472	0	410	40	1335	362	265	869	465
Grp Sat Flow(s),veh/h/ln	1641	1637	1474	1591	0	1486	1628	1555	1444	1615	1543	1652
Q Serve(g_s), s	10.6	7.3	8.1	18.9	0.0	36.5	3.6	34.8	26.1	24.2	30.9	31.0
Cycle Q Clear(g_c), s	10.6	7.3	8.1	18.9	0.0	36.5	3.6	34.8	26.1	24.2	30.9	31.0
Prop In Lane	1.00		0.73	1.00		0.82	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	139	183	165	690	0	362	50	1524	472	287	1462	782
V/C Ratio(X)	0.85	0.46	0.51	0.68	0.00	1.13	0.80	0.88	0.77	0.92	0.59	0.59
Avail Cap(c_a), veh/h	180	224	201	690	0	362	119	1524	472	334	1462	782
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.00	0.86	0.83	0.83	0.83	0.45	0.45	0.45
Uniform Delay (d), s/veh	67.7	62.4	62.8	43.5	0.0	44.5	70.0	23.5	22.0	60.7	28.9	28.9
Incr Delay (d2), s/veh	24.1	2.6	3.5	4.7	0.0	85.7	21.2	6.2	9.6	15.8	0.8	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	3.2	3.2	7.3	0.0	20.7	1.8	9.4	7.5	11.1	11.5	12.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	91.7	65.0	66.3	48.2	0.0	130.2	91.1	29.8	31.6	76.5	29.7	30.4
LnGrp LOS	F	E	E	D		F	F	C	C	E	C	C
Approach Vol, veh/h		287			882			1737			1599	
Approach Delay, s/veh		76.4			86.3			31.6			37.7	
Approach LOS		E			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	75.1	37.0	21.3	30.6	53.0	17.3	41.0
Change Period (Y+Rc), s	4.0	4.0	4.5	4.5	4.0	4.0	4.5	4.5
Max Green Setting (Gmax), s	11.0	69.0	32.5	20.5	31.0	49.0	16.5	36.5
Max Q Clear Time (g_c+I1), s	5.6	33.0	20.9	10.1	26.2	36.8	12.6	38.5
Green Ext Time (p_c), s	0.0	12.0	1.8	0.6	0.4	8.6	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	47.3
HCM 6th LOS	D

Notes

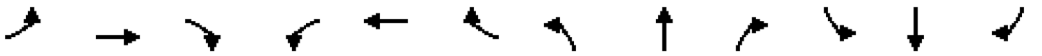
User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	21	153	46	28	31	155	1662	22	62	1536	51
Future Volume (veh/h)	80	21	153	46	28	31	155	1662	22	62	1536	51
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	1723	1723	1723	1723	1723	1723	1709	1709	1709	1709	1709	1709
Adj Flow Rate, veh/h	84	22	161	48	29	33	163	1749	23	65	1617	54
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, %	2	2	2	2	2	2	3	3	3	3	3	3
Cap, veh/h	43	6	290	39	14	290	184	3102	41	86	2752	92
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.11	0.65	0.65	0.05	0.59	0.59
Sat Flow, veh/h	0	30	1449	0	69	1449	1628	4746	62	1628	4637	155
Grp Volume(v), veh/h	106	0	161	77	0	33	163	1146	626	65	1085	586
Grp Sat Flow(s),veh/h/ln	30	0	1449	69	0	1449	1628	1555	1698	1628	1555	1681
Q Serve(g_s), s	0.0	0.0	15.0	0.0	0.0	2.8	14.8	30.3	30.3	5.9	32.6	32.7
Cycle Q Clear(g_c), s	30.0	0.0	15.0	30.0	0.0	2.8	14.8	30.3	30.3	5.9	32.6	32.7
Prop In Lane	0.79		1.00	0.62		1.00	1.00		0.04	1.00		0.09
Lane Grp Cap(c), veh/h	49	0	290	53	0	290	184	2033	1110	86	1846	998
V/C Ratio(X)	2.16	0.00	0.56	1.46	0.00	0.11	0.89	0.56	0.56	0.75	0.59	0.59
Avail Cap(c_a), veh/h	49	0	290	53	0	290	217	2033	1110	119	1846	998
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.74	0.74	0.74
Uniform Delay (d), s/veh	71.4	0.0	54.0	67.3	0.0	49.1	65.6	14.2	14.2	70.1	19.0	19.0
Incr Delay (d2), s/veh	583.9	0.0	2.9	284.3	0.0	0.2	29.4	1.1	2.1	12.2	1.0	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	0.0	5.8	6.2	0.0	1.1	7.6	10.6	11.9	2.8	11.8	13.0
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	655.3	0.0	56.9	351.6	0.0	49.4	95.0	15.4	16.3	82.3	20.0	20.9
LnGrp LOS	F		E	F		D	F	B	B	F	C	C
Approach Vol, veh/h		267			110			1935			1736	
Approach Delay, s/veh		294.5			260.9			22.4			22.7	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.0	94.0		34.0	12.9	103.1		34.0				
Change Period (Y+Rc), s	5.0	5.0		4.0	5.0	5.0		4.0				
Max Green Setting (Gmax), s	20.0	86.0		30.0	11.0	95.0		30.0				
Max Q Clear Time (g_c+I1), s	16.8	34.7		32.0	7.9	32.3		32.0				
Green Ext Time (p_c), s	0.2	18.8		0.0	0.0	22.0		0.0				

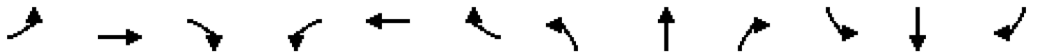
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			46.9									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	380	361	0	0	0	0	0	1401	482
Future Volume (vph)	0	0	0	380	361	0	0	0	0	0	1401	482
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)				5.0	5.0						5.0	5.0
Lane Util. Factor				0.91	0.91						0.95	1.00
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	0.99						1.00	1.00
Satd. Flow (prot)				1483	3079						3228	1422
Flt Permitted				0.95	0.99						1.00	1.00
Satd. Flow (perm)				1483	3079						3228	1422
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)	0	0	0	400	380	0	0	0	0	0	1475	507
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	205
Lane Group Flow (vph)	0	0	0	252	528	0	0	0	0	0	1475	302
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type				Split	NA						NA	Perm
Protected Phases				6 17	6 17						8	
Permitted Phases												8
Actuated Green, G (s)				34.0	34.0						32.0	32.0
Effective Green, g (s)				34.0	34.0						32.0	32.0
Actuated g/C Ratio				0.45	0.45						0.43	0.43
Clearance Time (s)											5.0	5.0
Vehicle Extension (s)											3.0	3.0
Lane Grp Cap (vph)				672	1395						1377	606
v/s Ratio Prot				0.17	c0.17						c0.46	
v/s Ratio Perm												0.21
v/c Ratio				0.38	0.38						1.07	0.50
Uniform Delay, d1				13.5	13.5						21.5	15.7
Progression Factor				0.04	1.76						1.01	1.43
Incremental Delay, d2				0.0	0.1						44.5	2.6
Delay (s)				0.6	23.8						66.1	24.9
Level of Service				A	C						E	C
Approach Delay (s/veh)		0.0			16.3			0.0			55.6	
Approach LOS		A			B			A			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	44.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	114.2%	ICU Level of Service	H
Analysis Period (min)	15		

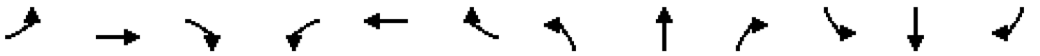
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	404	474	337	1477	0	0	0	0
Future Volume (vph)	0	0	0	0	404	474	337	1477	0	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)					5.0		5.0	5.0				
Lane Util. Factor					0.95		1.00	0.91				
Frpb, ped/bikes					1.00		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.92		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					2967		1614	4638				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					2967		1614	4638				
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)	0	0	0	0	412	484	344	1507	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	19	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	877	0	344	1507	0	0	0	0
Confl. Peds. (#/hr)									8	8		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	2%	2%	2%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					23.0		42.0	42.0				
Effective Green, g (s)					23.0		42.0	42.0				
Actuated g/C Ratio					0.31		0.56	0.56				
Clearance Time (s)					5.0		5.0	5.0				
Vehicle Extension (s)					2.0		3.0	3.0				
Lane Grp Cap (vph)					909		903	2597				
v/s Ratio Prot					c0.30			c0.32				
v/s Ratio Perm							0.21					
v/c Ratio					1.03dr		0.38	0.58				
Uniform Delay, d1					25.6		9.2	10.8				
Progression Factor					1.00		1.39	1.18				
Incremental Delay, d2					21.5		0.4	0.6				
Delay (s)					47.1		13.3	13.3				
Level of Service					D		B	B				
Approach Delay (s/veh)		0.0			47.1			13.3			0.0	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	107.4%	ICU Level of Service	G
Analysis Period (min)	15		

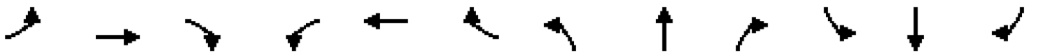
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	458	358	0	0	0	0	0	0	376	1405	0
Future Volume (vph)	0	458	358	0	0	0	0	0	0	376	1405	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		5.0	5.0							5.0	5.0	
Lane Util. Factor		0.91	0.91							1.00	0.95	
Frpb, ped/bikes		1.00	1.00							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		0.97	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		2975	1302							1630	3260	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		2975	1302							1630	3260	
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)	0	467	365	0	0	0	0	0	0	384	1434	0
RTOR Reduction (vph)	0	26	70	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	551	185	0	0	0	0	0	0	384	1434	0
Confl. Peds. (#/hr)							3					3
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type		NA	Perm							Split	NA	
Protected Phases		2								4	4	
Permitted Phases			2									
Actuated Green, G (s)		15.0	15.0							50.0	50.0	
Effective Green, g (s)		15.0	15.0							50.0	50.0	
Actuated g/C Ratio		0.20	0.20							0.67	0.67	
Clearance Time (s)		5.0	5.0							5.0	5.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		595	260							1086	2173	
v/s Ratio Prot		c0.19								0.24	c0.44	
v/s Ratio Perm			0.14									
v/c Ratio		0.93	0.71							0.35	0.66	
Uniform Delay, d1		29.5	28.0							5.5	7.4	
Progression Factor		1.00	1.00							0.94	0.89	
Incremental Delay, d2		20.6	8.9							0.1	0.7	
Delay (s)		50.0	36.9							5.2	7.3	
Level of Service		D	D							A	A	
Approach Delay (s/veh)		46.0			0.0			0.0			6.9	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	102.7%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



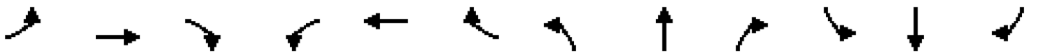
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	468	366	0	0	0	0	0	1346	434	0	0	0
Future Volume (vph)	468	366	0	0	0	0	0	1346	434	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.96				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	3072	1667						4485				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	3072	1667						4485				
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)	498	389	0	0	0	0	0	1432	462	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	77	0	0	0	0
Lane Group Flow (vph)	498	389	0	0	0	0	0	1817	0	0	0	0
Confl. Peds. (#/hr)									2			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1392	755						1913				
v/s Ratio Prot	0.16	c0.23						c0.41				
v/s Ratio Perm												
v/c Ratio	0.36	0.52						0.95				
Uniform Delay, d1	13.4	14.6						20.7				
Progression Factor	0.08	0.95						0.56				
Incremental Delay, d2	0.1	0.6						9.1				
Delay (s)	1.2	14.5						20.7				
Level of Service	A	B						C				
Approach Delay (s/veh)		7.0			0.0			20.7			0.0	
Approach LOS		A			A			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	111.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	182	28	67	69	0	0	0	0	303	1336	123
Future Volume (vph)	0	182	28	67	69	0	0	0	0	303	1336	123
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.0			4.0						5.0	
Lane Util. Factor		0.95			0.95						0.91	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		0.98			1.00						0.99	
Flt Protected		1.00			0.98						0.99	
Satd. Flow (prot)		3187			3174						4590	
Flt Permitted		1.00			0.73						0.99	
Satd. Flow (perm)		3187			2376						4590	
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)	0	188	29	69	71	0	0	0	0	312	1377	127
RTOR Reduction (vph)	0	21	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	196	0	0	140	0	0	0	0	0	1809	0
Confl. Peds. (#/hr)			6	6			5					5
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		6			2						4	
Permitted Phases				2						4		
Actuated Green, G (s)		12.1			12.1						53.9	
Effective Green, g (s)		12.1			12.1						53.9	
Actuated g/C Ratio		0.16			0.16						0.72	
Clearance Time (s)		4.0			4.0						5.0	
Vehicle Extension (s)		4.0			4.0						4.0	
Lane Grp Cap (vph)		514			383						3298	
v/s Ratio Prot		c0.06										
v/s Ratio Perm					0.06						0.39	
v/c Ratio		0.38			0.37						0.55	
Uniform Delay, d1		28.1			28.0						4.9	
Progression Factor		1.00			0.83						1.11	
Incremental Delay, d2		0.6			0.6						0.5	
Delay (s)		28.8			23.9						5.9	
Level of Service		C			C						A	
Approach Delay (s/veh)		28.8			23.9			0.0			5.9	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	344	0	0	122	264	48	1344	56	0	0	0
Future Volume (veh/h)	177	344	0	0	122	264	48	1344	56	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1709	1709	0	0	1723	1723	1723	1723	1723			
Adj Flow Rate, veh/h	190	370	0	0	131	284	52	1445	60			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	3	3	0	0	2	2	2	2	2			
Cap, veh/h	356	706	0	0	327	292	73	2154	92			
Arrive On Green	0.32	0.83	0.00	0.00	0.20	0.20	0.47	0.47	0.47			
Sat Flow, veh/h	1628	1709	0	0	1723	1458	156	4615	198			
Grp Volume(v), veh/h	190	370	0	0	131	284	571	475	511			
Grp Sat Flow(s),veh/h/ln	1628	1709	0	0	1637	1458	1715	1568	1687			
Q Serve(g_s), s	2.0	5.0	0.0	0.0	5.2	14.5	20.0	17.4	17.4			
Cycle Q Clear(g_c), s	2.0	5.0	0.0	0.0	5.2	14.5	20.0	17.4	17.4			
Prop In Lane	1.00		0.00	0.00		1.00	0.09		0.12			
Lane Grp Cap(c), veh/h	356	706	0	0	327	292	800	732	787			
V/C Ratio(X)	0.53	0.52	0.00	0.00	0.40	0.97	0.71	0.65	0.65			
Avail Cap(c_a), veh/h	356	706	0	0	327	292	800	732	787			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.92	0.92	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	21.6	4.2	0.0	0.0	26.1	29.8	16.0	15.3	15.3			
Incr Delay (d2), s/veh	1.4	2.5	0.0	0.0	3.6	46.5	5.4	4.4	4.1			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.4	1.6	0.0	0.0	2.3	8.5	8.0	6.3	6.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.0	6.8	0.0	0.0	29.7	76.3	21.4	19.7	19.4			
LnGrp LOS	C	A			C	E	C	B	B			
Approach Vol, veh/h		560			415			1557				
Approach Delay, s/veh		12.3			61.6			20.2				
Approach LOS		B			E			C				

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	16.0	19.0		40.0		35.0			
Change Period (Y+Rc), s	4.0	4.0		5.0		4.0			
Max Green Setting (Gmax), s	12.0	15.0		35.0		31.0			
Max Q Clear Time (g_c+I1), s	4.0	16.5		22.0		7.0			
Green Ext Time (p_c), s	0.4	0.0		8.0		2.3			

Intersection Summary									
HCM 6th Ctrl Delay, s/veh			25.3						
HCM 6th LOS			C						

Notes

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

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	10	18	32	20	0	0	0	0	61	1360	6
Future Vol, veh/h	0	10	18	32	20	0	0	0	0	61	1360	6
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	2	2	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	19	34	21	0	0	0	0	65	1447	6

Major/Minor	Minor2			Minor1			Major2		
Conflicting Flow All	-	1585	733	719	1588	-	2	0	0
Stage 1	-	1583	-	2	2	-	-	-	-
Stage 2	-	2	-	717	1586	-	-	-	-
Critical Hdwy	-	6.54	7.14	6.44	6.54	-	5.34	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-	-	-	-
Follow-up Hdwy	-	4.02	3.92	3.82	4.02	-	3.12	-	-
Pot Cap-1 Maneuver	0	107	312	372	107	0	1151	-	-
Stage 1	0	167	-	-	-	0	-	-	-
Stage 2	0	-	-	352	166	0	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	-	75	311	241	75	-	1149	-	-
Mov Cap-2 Maneuver	-	75	-	241	75	-	-	-	-
Stage 1	-	118	-	-	-	-	-	-	-
Stage 2	-	-	-	212	117	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	35.9	51.8	0.4
HCM LOS	E	F	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	146	130	1149	-	-
HCM Lane V/C Ratio	0.204	0.426	0.056	-	-
HCM Control Delay (s/veh)	35.9	51.8	8.3	-	-
HCM Lane LOS	E	F	A	-	-
HCM 95th %tile Q (veh)	0.7	1.9	0.2	-	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	72	26	0	0	8	27	63	1347	5	0	0	0
Future Vol, veh/h	72	26	0	0	8	27	63	1347	5	0	0	0
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	2	2	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	77	28	0	0	9	29	67	1433	5	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	717	1577	-	-	1575	723	3	0	0
Stage 1	3	3	-	-	1572	-	-	-	-
Stage 2	714	1574	-	-	3	-	-	-	-
Critical Hdwy	6.44	6.54	-	-	6.54	7.14	5.34	-	-
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	-	-	4.02	3.92	3.12	-	-
Pot Cap-1 Maneuver	373	109	0	0	109	316	1150	-	-
Stage 1	-	-	0	0	169	-	-	-	-
Stage 2	353	169	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	241	77	-	-	77	315	1147	-	-
Mov Cap-2 Maneuver	241	77	-	-	77	-	-	-	-
Stage 1	-	-	-	-	119	-	-	-	-
Stage 2	211	119	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	67.1	29.3	0.4
HCM LOS	F	D	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1147	-	-	154	185
HCM Lane V/C Ratio	0.058	-	-	0.677	0.201
HCM Control Delay (s/veh)	8.3	-	-	67.1	29.3
HCM Lane LOS	A	-	-	F	D
HCM 95th %tile Q (veh)	0.2	-	-	3.9	0.7

Appendix G. Trip Distributions

Trip distribution tables

Project only Trip Distribution and Assignment Worksheet

Total trips distribution

AM Individual Peak Hour (Unbalanced)

Intersection	INT ID	1 NBL	2 NBT	3 NBR	4 SBL	5 SBT	6 SBR	7 EBL	8 EBT	9 EBR	10 WBL	11 WBT	12 WBR	Total
Argonne & SR-210	**1**	0	0	0	0	1	0	0	0	1	0	0	0	2
Argonne & Montgomery	**2**	0	1	1	0	3	0	0	0	0	2	0	0	7
Argonne & Knox	**3**	0	2	0	0	5	0	0	0	1	0	0	0	8
Argonne & 1-90 WB on-ramp/I-90 WB	**4**	0	0	0	0	6	0	0	0	0	0	0	0	6
Mullan & I-90 WB/I-90 WB Off-ramp	**5**	0	2	0	0	0	0	0	0	0	0	0	0	2
Argonne & I-90 EB Off-ramp	**6**	0	0	0	0	6	0	0	0	1	0	0	0	7
Mullan & I-90 EB/I-90 EB On-ramp	**7**	0	3	0	0	0	0	0	0	0	0	0	0	3
Argonne & Mission	**8**	0	0	0	1	4	0	0	1	0	0	0	0	6
Mullan & Mission	**9**	0	12	0	0	0	0	1	1	0	0	0	4	18
Argonne & Sinto	**10**	0	0	0	0	4	0	0	0	0	0	0	0	4
Mullan & Sinto	**11**	0	12	0	0	0	0	0	0	0	0	0	0	12

PM Individual Peak Hour (Unbalanced)

Intersection	INT ID	1 NBL	2 NBT	3 NBR	4 SBL	5 SBT	6 SBR	7 EBL	8 EBT	9 EBR	10 WBL	11 WBT	12 WBR	Total
Argonne & SR-210	**1**	1	1	0	0	0	0	0	0	0	0	0	0	2
Argonne & Montgomery	**2**	0	4	2	0	1	0	0	0	0	1	0	0	8
Argonne & Knox	**3**	1	6	0	0	2	0	0	0	0	0	0	0	9
Argonne & 1-90 WB on-ramp/I-90 WB	**4**	0	0	0	0	2	0	0	0	0	0	0	0	2
Mullan & I-90 WB/I-90 WB Off-ramp	**5**	1	7	0	0	0	0	0	0	0	0	0	0	8
Argonne & I-90 EB Off-ramp	**6**	0	0	0	0	2	0	0	0	0	0	0	0	2
Mullan & I-90 EB/I-90 EB On-ramp	**7**	0	8	0	0	0	0	0	0	0	0	0	0	8
Argonne & Mission	**8**	0	0	0	4	12	1	0	0	0	0	0	0	17
Mullan & Mission	**9**	0	4	0	0	0	0	0	4	0	0	0	1	9
Argonne & Sinto	**10**	0	0	0	0	12	0	0	0	0	0	0	0	12
Mullan & Sinto	**11**	0	4	0	0	0	0	0	0	0	0	0	0	4

% Distribution

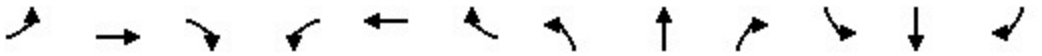
Inbound

Intersection	INT ID	1 NBL	2 NBT	3 NBR	4 SBL	5 SBT	6 SBR	7 EBL	8 EBT	9 EBR	10 WBL	11 WBT	12 WBR	Total
Argonne & SR-210	**1**	0%	0%	0%	0%	5%	0%	0%	0%	5%	2%	0%	0%	**12%**
Argonne & Montgomery	**2**	0%	0%	0%	0%	12%	0%	0%	0%	0%	8%	0%	0%	**20%**
Argonne & Knox	**3**	0%	0%	0%	0%	20%	0%	0%	0%	5%	0%	0%	0%	**25%**
Argonne & 1-90 WB on-ramp/I-90 WB	**4**	0%	0%	0%	0%	25%	0%	0%	0%	0%	0%	0%	0%	**25%**
Mullan & I-90 WB/I-90 WB Off-ramp	**5**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Argonne & I-90 EB Off-ramp	**6**	0%	0%	0%	0%	25%	0%	0%	0%	5%	0%	0%	0%	**30%**
Mullan & I-90 EB/I-90 EB On-ramp	**7**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Argonne & Mission	**8**	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%	0%	**3%**
Mullan & Mission	**9**	0%	52%	0%	0%	0%	0%	3%	0%	0%	0%	0%	15%	**70%**
Argonne & Sinto	**10**	0%	0%	0%	0%	0%	0%	0%	2%	0%	0%	0%	0%	**2%**
Mullan & Sinto	**11**	0%	50%	0%	0%	0%	0%	2%	0%	0%	0%	0%	0%	**52%**

Outbound

Intersection	INT ID	1 NBL	2 NBT	3 NBR	4 SBL	5 SBT	6 SBR	7 EBL	8 EBT	9 EBR	10 WBL	11 WBT	12 WBR	Total
Argonne & SR-210	**1**	5%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**12%**
Argonne & Montgomery	**2**	0%	17%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**25%**
Argonne & Knox	**3**	5%	25%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**30%**
Argonne & 1-90 WB on-ramp/I-90 WB	**4**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Mullan & I-90 WB/I-90 WB Off-ramp	**5**	5%	30%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**35%**
Argonne & I-90 EB Off-ramp	**6**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**
Mullan & I-90 EB/I-90 EB On-ramp	**7**	0%	35%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**35%**
Argonne & Mission	**8**	0%	0%	0%	15%	52%	3%	0%	0%	0%	0%	0%	0%	**70%**
Mullan & Mission	**9**	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%	0%	0%	**15%**
Argonne & Sinto	**10**	0%	0%	0%	2%	50%	0%	0%	0%	0%	0%	0%	0%	**52%**
Mullan & Sinto	**11**	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	**0%**

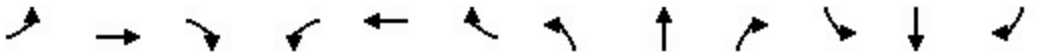
Appendix H. Level of Service Synchro Reports Design Year 2028 + Build Scenario



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	296	258	219	637	125	344	716	166	119	1106	128
Future Volume (vph)	60	296	258	219	637	125	344	716	166	119	1106	128
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1391	2782	1244	1443	4033		2852	4225	1296	1484	4199	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1391	2782	1244	1443	4033		2852	4225	1296	1484	4199	
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)	63	312	272	231	671	132	362	754	175	125	1164	135
RTOR Reduction (vph)	0	0	227	0	19	0	0	0	130	0	8	0
Lane Group Flow (vph)	63	312	45	231	784	0	362	754	45	125	1291	0
Confl. Peds. (#/hr)	3					3			2	2		
Heavy Vehicles (%)	11%	11%	11%	7%	7%	7%	5%	5%	5%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	custom	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						2			
Actuated Green, G (s)	10.7	25.0	25.0	23.0	37.3		24.3	64.0	37.3	18.0	57.7	
Effective Green, g (s)	10.7	25.0	25.0	23.0	37.3		24.3	64.0	37.3	18.0	57.7	
Actuated g/C Ratio	0.07	0.17	0.17	0.15	0.25		0.16	0.43	0.25	0.12	0.38	
Clearance Time (s)	5.0	5.0	5.0	5.0	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	
Lane Grp Cap (vph)	99	463	207	221	1002		462	1802	322	178	1615	
v/s Ratio Prot	0.05	0.11		c0.16	c0.19		c0.13	0.18		0.08	c0.31	
v/s Ratio Perm			0.04						0.03			
v/c Ratio	0.64	0.67	0.22	1.05	0.78		0.78	0.42	0.14	0.70	0.80	
Uniform Delay, d1	67.8	58.7	54.1	63.5	52.6		60.3	30.0	43.9	63.4	41.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.73	1.43	0.14	1.00	1.00	
Incremental Delay, d2	12.6	3.9	0.5	72.9	4.0		6.9	0.6	0.2	11.8	2.9	
Delay (s)	80.4	62.5	54.6	136.4	56.6		51.0	43.6	6.2	75.3	43.9	
Level of Service	F	E	D	F	E		D	D	A	E	D	
Approach Delay (s/veh)		60.9			74.4			40.6			46.6	
Approach LOS		E			E			D			D	

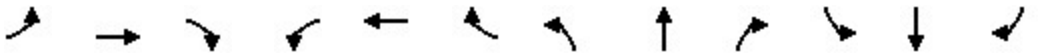
Intersection Summary			
HCM 2000 Control Delay (s/veh)	53.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	83.7%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	42	69	175	51	123	50	965	342	243	1290	28
Future Volume (vph)	70	42	69	175	51	123	50	965	342	243	1290	28
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	4.0	4.0		5.5	5.5		4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor	1.00	0.95		0.97	1.00		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	0.98		1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.91		1.00	0.89		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1331	2413		2627	1255		1470	4225	1298	1484	4250	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1331	2413		2627	1255		1470	4225	1298	1484	4250	
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)	75	45	74	188	55	132	54	1038	368	261	1387	30
RTOR Reduction (vph)	0	69	0	0	56	0	0	0	200	0	1	0
Lane Group Flow (vph)	75	50	0	188	131	0	54	1038	168	261	1416	0
Confl. Peds. (#/hr)	7					7	1		1	1		1
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	16%	16%	16%	14%	14%	14%	5%	5%	5%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5 9	2	
Permitted Phases									6			
Actuated Green, G (s)	13.0	11.0		24.5	22.5		9.6	60.0	60.0	32.0	86.4	
Effective Green, g (s)	13.0	11.0		24.5	22.5		9.6	60.0	60.0	32.0	86.4	
Actuated g/C Ratio	0.09	0.07		0.16	0.15		0.06	0.40	0.40	0.21	0.58	
Clearance Time (s)	4.0	4.0		5.5	5.5		4.0	5.0	5.0		5.0	
Vehicle Extension (s)	3.0	3.0		4.0	4.0		3.0	4.0	4.0		4.0	
Lane Grp Cap (vph)	115	176		429	188		94	1690	519	316	2448	
v/s Ratio Prot	c0.06	0.02		0.07	c0.10		0.04	0.25		c0.18	c0.33	
v/s Ratio Perm									0.13			
v/c Ratio	0.65	0.29		0.44	0.70		0.57	0.61	0.32	0.83	0.58	
Uniform Delay, d1	66.3	65.8		56.5	60.5		68.2	35.8	31.0	56.3	20.2	
Progression Factor	1.00	1.00		1.00	1.00		0.82	1.51	4.91	1.18	1.71	
Incremental Delay, d2	12.5	0.9		3.2	19.2		7.5	1.5	1.5	10.1	0.6	
Delay (s)	78.8	66.7		59.8	79.7		63.3	55.6	153.9	76.6	35.2	
Level of Service	E	E		E	E		E	E	F	E	D	
Approach Delay (s/veh)		71.4			69.7			80.7			41.6	
Approach LOS		E			E			F			D	

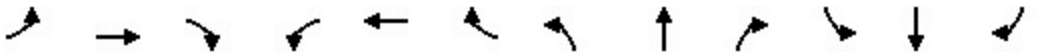
Intersection Summary			
HCM 2000 Control Delay (s/veh)	61.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	90.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	11	155	35	10	14	169	1335	31	39	1441	48
Future Volume (veh/h)	46	11	155	35	10	14	169	1335	31	39	1441	48
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	1587	1587	1587	1600	1600	1600	1574	1574	1574	1536	1536	1536
Adj Flow Rate, veh/h	48	12	163	37	11	15	178	1405	33	41	1517	51
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	2	2	2	4	4	4	7	7	7
Cap, veh/h	43	5	282	43	6	284	199	2815	66	61	2335	79
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.13	0.65	0.65	0.01	0.18	0.18
Sat Flow, veh/h	0	25	1343	0	30	1354	1499	4320	101	1463	4167	140
Grp Volume(v), veh/h	60	0	163	48	0	15	178	932	506	41	1018	550
Grp Sat Flow(s),veh/h/ln	25	0	1343	30	0	1354	1499	1433	1556	1463	1398	1511
Q Serve(g_s), s	0.0	0.0	16.4	0.0	0.0	1.3	17.5	25.2	25.2	4.2	50.6	50.6
Cycle Q Clear(g_c), s	31.5	0.0	16.4	31.5	0.0	1.3	17.5	25.2	25.2	4.2	50.6	50.6
Prop In Lane	0.80		1.00	0.77		1.00	1.00		0.07	1.00		0.09
Lane Grp Cap(c), veh/h	48	0	282	49	0	284	199	1867	1014	61	1567	847
V/C Ratio(X)	1.24	0.00	0.58	0.98	0.00	0.05	0.89	0.50	0.50	0.67	0.65	0.65
Avail Cap(c_a), veh/h	48	0	282	49	0	284	290	1867	1014	224	1567	847
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.81	0.81	0.81
Uniform Delay (d), s/veh	71.6	0.0	53.3	70.9	0.0	47.3	64.0	13.5	13.5	72.9	47.5	47.5
Incr Delay (d2), s/veh	206.8	0.0	3.6	122.3	0.0	0.1	20.9	1.0	1.8	9.9	1.7	3.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	5.9	3.5	0.0	0.5	7.8	8.1	9.1	1.8	19.4	21.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	278.4	0.0	56.8	193.2	0.0	47.4	84.9	14.4	15.2	82.8	49.2	50.6
LnGrp LOS	F		E	F		D	F	B	B	F	D	D
Approach Vol, veh/h		223			63			1616			1609	
Approach Delay, s/veh		116.4			158.5			22.5			50.5	
Approach LOS		F			F			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	23.9	89.1		37.0	10.3	102.7		37.0				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	29.0	75.0		31.5	23.0	81.0		31.5				
Max Q Clear Time (g_c+I1), s	19.5	52.6		33.5	6.2	27.2		33.5				
Green Ext Time (p_c), s	0.4	12.0		0.0	0.1	14.7		0.0				

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			43.7									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	348	297	0	0	0	0	0	1230	467
Future Volume (vph)	0	0	0	348	297	0	0	0	0	0	1230	467
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)				5.0	5.0						5.0	5.0
Lane Util. Factor				0.91	0.91						0.95	1.00
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	0.98						1.00	1.00
Satd. Flow (prot)				1351	2799						2913	1283
Flt Permitted				0.95	0.98						1.00	1.00
Satd. Flow (perm)				1351	2799						2913	1283
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)	0	0	0	362	309	0	0	0	0	0	1281	486
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	189
Lane Group Flow (vph)	0	0	0	218	454	0	0	0	0	0	1281	297
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	2%	2%	2%	6%	6%	6%
Turn Type				Split	NA						NA	Perm
Protected Phases				6 17	6 17						8	
Permitted Phases												8
Actuated Green, G (s)				29.0	29.0						37.0	37.0
Effective Green, g (s)				29.0	29.0						37.0	37.0
Actuated g/C Ratio				0.39	0.39						0.49	0.49
Clearance Time (s)											5.0	5.0
Vehicle Extension (s)											3.0	3.0
Lane Grp Cap (vph)				522	1082						1437	632
v/s Ratio Prot				0.16	c0.16						c0.44	
v/s Ratio Perm												0.23
v/c Ratio				0.42	0.42						0.89	0.47
Uniform Delay, d1				16.8	16.8						17.2	12.5
Progression Factor				0.08	1.57						1.89	3.80
Incremental Delay, d2				0.0	0.1						7.7	2.2
Delay (s)				1.4	26.6						40.3	49.7
Level of Service				A	C						D	D
Approach Delay (s/veh)		0.0			18.4			0.0			42.9	
Approach LOS		A			B			A			D	

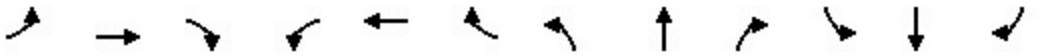
Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	104.8%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	330	424	315	1149	0	0	0	0
Future Volume (vph)	0	0	0	0	330	424	315	1149	0	0	0	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)					5.0		5.0	5.0				
Lane Util. Factor					0.95		1.00	0.91				
Frpb, ped/bikes					1.00		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.92		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					2745		1470	4225				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					2745		1470	4225				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	0	371	476	354	1291	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	52	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	795	0	354	1291	0	0	0	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	5%	5%	5%	2%	2%	2%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					18.0		47.0	47.0				
Effective Green, g (s)					18.0		47.0	47.0				
Actuated g/C Ratio					0.24		0.63	0.63				
Clearance Time (s)					5.0		5.0	5.0				
Vehicle Extension (s)					2.0		3.0	3.0				
Lane Grp Cap (vph)					658		921	2647				
v/s Ratio Prot					c0.29			c0.31				
v/s Ratio Perm							0.24					
v/c Ratio					1.25dr		0.38	0.49				
Uniform Delay, d1					28.5		6.9	7.5				
Progression Factor					1.00		0.13	0.93				
Incremental Delay, d2					107.3		0.9	0.5				
Delay (s)					135.8		1.8	7.6				
Level of Service					F		A	A				
Approach Delay (s/veh)		0.0			135.8			6.3			0.0	
Approach LOS		A			F			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	50.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	98.0%	ICU Level of Service	F
Analysis Period (min)	15		

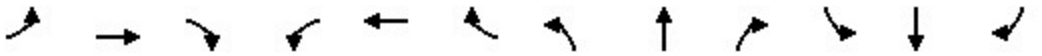
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	469	299	0	0	0	0	0	0	382	1196	0
Future Volume (vph)	0	469	299	0	0	0	0	0	0	382	1196	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)		5.0	5.0							5.0	5.0	
Lane Util. Factor		0.91	0.91							1.00	0.95	
Frpb, ped/bikes		1.00	1.00							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		2791	1209							1484	2969	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		2791	1209							1484	2969	
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)	0	533	340	0	0	0	0	0	0	434	1359	0
RTOR Reduction (vph)	0	14	70	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	594	195	0	0	0	0	0	0	434	1359	0
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type		NA	Perm							Split	NA	
Protected Phases		2								4	4	
Permitted Phases			2									
Actuated Green, G (s)		15.0	15.0							50.0	50.0	
Effective Green, g (s)		15.0	15.0							50.0	50.0	
Actuated g/C Ratio		0.20	0.20							0.67	0.67	
Clearance Time (s)		5.0	5.0							5.0	5.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		558	241							989	1979	
v/s Ratio Prot		c0.21								0.29	c0.46	
v/s Ratio Perm			0.16									
v/c Ratio		1.07	0.81							0.44	0.69	
Uniform Delay, d1		30.0	28.6							5.9	7.7	
Progression Factor		1.00	1.00							2.05	1.39	
Incremental Delay, d2		56.7	18.3							1.0	1.5	
Delay (s)		86.7	47.0							13.1	12.2	
Level of Service		F	D							B	B	
Approach Delay (s/veh)		74.6			0.0			0.0			12.4	
Approach LOS		E			A			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	91.9%	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 (vph)	448	403	0	0	0	0	0	1017	289	0	0	0
Future Volume (vph)	448	403	0	0	0	0	0	1017	289	0	0	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.97				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	2852	1548						4102				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	2852	1548						4102				
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)	472	424	0	0	0	0	0	1071	304	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	68	0	0	0	0
Lane Group Flow (vph)	472	424	0	0	0	0	0	1307	0	0	0	0
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1292	701						1750				
v/s Ratio Prot	0.17	c0.27						c0.32				
v/s Ratio Perm												
v/c Ratio	0.37	0.60						0.75				
Uniform Delay, d1	13.4	15.4						18.1				
Progression Factor	0.05	1.11						0.81				
Incremental Delay, d2	0.0	1.4						2.6				
Delay (s)	0.7	18.5						17.4				
Level of Service	A	B						B				
Approach Delay (s/veh)		9.1			0.0			17.4			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	100.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

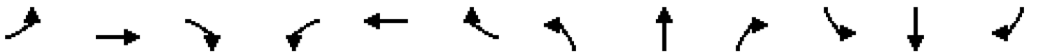
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	98	21	51	42	0	0	0	0	172	1208	105
Future Volume (vph)	0	98	21	51	42	0	0	0	0	172	1208	105
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		0.95			0.95						0.91	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.97						0.99	
Satd. Flow (prot)		2891			2946						4192	
Flt Permitted		1.00			0.76						0.99	
Satd. Flow (perm)		2891			2297						4192	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	113	24	59	48	0	0	0	0	198	1389	121
RTOR Reduction (vph)	0	17	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	120	0	0	107	0	0	0	0	0	1702	0
Confl. Peds. (#/hr)	1					1	1					1
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		6			2						4	
Permitted Phases				2						4		
Actuated Green, G (s)		9.7			9.7						55.3	
Effective Green, g (s)		9.7			9.7						55.3	
Actuated g/C Ratio		0.13			0.13						0.74	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		4.0			4.0						4.0	
Lane Grp Cap (vph)		373			297						3090	
v/s Ratio Prot		0.04										
v/s Ratio Perm					c0.05						0.41	
v/c Ratio		0.32			0.36						0.55	
Uniform Delay, d1		29.7			29.8						4.4	
Progression Factor		1.00			0.70						0.85	
Incremental Delay, d2		0.7			0.9						0.5	
Delay (s)		30.4			21.8						4.2	
Level of Service		C			C						A	
Approach Delay (s/veh)		30.4			21.8			0.0			4.2	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Signalized Intersection Summary
9: Mullan & Mission

09/25/2025



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	171	0	0	79	259	15	955	16	0	0	0
Future Volume (veh/h)	99	171	0	0	79	259	15	955	16	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1587	1587	0	0	1549	1549	1574	1574	1574			
Adj Flow Rate, veh/h	104	180	0	0	83	273	16	1005	17			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	3	3	0	0	6	6	4	4	4			
Cap, veh/h	287	656	0	0	373	332	31	2063	36			
Arrive On Green	0.21	0.83	0.00	0.00	0.25	0.25	0.15	0.15	0.15			
Sat Flow, veh/h	1511	1587	0	0	1549	1311	66	4420	77			
Grp Volume(v), veh/h	104	180	0	0	83	273	380	315	343			
Grp Sat Flow(s),veh/h/ln	1511	1587	0	0	1472	1311	1571	1433	1560			
Q Serve(g_s), s	0.0	1.9	0.0	0.0	3.3	14.7	16.7	15.0	15.1			
Cycle Q Clear(g_c), s	0.0	1.9	0.0	0.0	3.3	14.7	16.7	15.0	15.1			
Prop In Lane	1.00		0.00	0.00		1.00	0.04		0.05			
Lane Grp Cap(c), veh/h	287	656	0	0	373	332	733	669	728			
V/C Ratio(X)	0.36	0.27	0.00	0.00	0.22	0.82	0.52	0.47	0.47			
Avail Cap(c_a), veh/h	287	656	0	0	373	332	733	669	728			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.94	0.94	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	26.0	4.0	0.0	0.0	22.2	26.4	24.0	23.3	23.3			
Incr Delay (d2), s/veh	0.7	1.0	0.0	0.0	1.4	20.0	2.6	2.4	2.2			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.5	0.7	0.0	0.0	1.2	6.1	7.4	6.1	6.6			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	26.8	5.0	0.0	0.0	23.5	46.4	26.6	25.7	25.5			
LnGrp LOS	C	A			C	D	C	C	C			
Approach Vol, veh/h		284			356			1038				
Approach Delay, s/veh		12.9			41.1			25.9				
Approach LOS		B			D			C				

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.0	23.0		40.0		35.0						
Change Period (Y+Rc), s	4.0	4.0		5.0		4.0						
Max Green Setting (Gmax), s	8.0	19.0		35.0		31.0						
Max Q Clear Time (g_c+I1), s	2.0	16.7		18.7		3.9						
Green Ext Time (p_c), s	0.1	0.5		6.0		1.0						

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			26.9									
HCM 6th LOS			C									

Notes

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

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	15	2	5	5	0	0	0	0	28	1225	6
Future Vol, veh/h	0	15	2	5	5	0	0	0	0	28	1225	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	17	17	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	10	10	10	2	2	2	2	2	2
Mvmt Flow	0	17	2	6	6	0	0	0	0	32	1392	7

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	1477	700	646	1480	-			17	0	0
Stage 1	-	1460	-	17	17	-			-	-	-
Stage 2	-	17	-	629	1463	-			-	-	-
Critical Hdwy	-	6.54	7.14	6.6	6.7	-			5.34	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.9	5.7	-			-	-	-
Follow-up Hdwy	-	4.02	3.92	3.9	4.1	-			3.12	-	-
Pot Cap-1 Maneuver	0	125	327	393	116	0			1133	-	-
Stage 1	0	192	-	-	-	0			-	-	-
Stage 2	0	-	-	381	178	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	107	327	305	100	-			1117	-	-
Mov Cap-2 Maneuver	-	107	-	305	100	-			-	-	-
Stage 1	-	167	-	-	-	-			-	-	-
Stage 2	-	-	-	296	155	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	42.1	30.8	0.2
HCM LOS	E	D	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	116	151	1117	-	-
HCM Lane V/C Ratio	0.167	0.075	0.028	-	-
HCM Control Delay (s/veh)	42.1	30.8	8.3	-	-
HCM Lane LOS	E	D	A	-	-
HCM 95th %tile Q (veh)	0.6	0.2	0.1	-	-

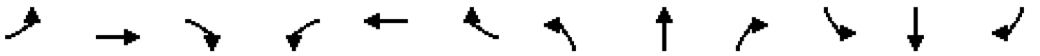
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	24	0	0	1	6	18	972	9	0	0	0
Future Vol, veh/h	23	24	0	0	1	6	18	972	9	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	2	2	2
Mvmt Flow	24	25	0	0	1	6	19	1023	9	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	448	1070	-	-	1066	516	0	0	0
Stage 1	0	0	-	-	1066	-	-	-	-
Stage 2	448	1070	-	-	0	-	-	-	-
Critical Hdwy	6.48	6.58	-	-	6.54	7.14	5.36	-	-
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-
Critical Hdwy Stg 2	6.78	5.58	-	-	-	-	-	-	-
Follow-up Hdwy	3.84	4.04	-	-	4.02	3.92	3.13	-	-
Pot Cap-1 Maneuver	527	217	0	0	221	431	-	-	-
Stage 1	-	-	0	0	297	-	-	-	-
Stage 2	507	291	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	518	217	-	-	221	431	-	-	-
Mov Cap-2 Maneuver	518	217	-	-	221	-	-	-	-
Stage 1	-	-	-	-	297	-	-	-	-
Stage 2	498	291	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	19.2	14.7	
HCM LOS	C	B	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	303	379
HCM Lane V/C Ratio	-	-	-	0.163	0.019
HCM Control Delay (s/veh)	-	-	-	19.2	14.7
HCM Lane LOS	-	-	-	C	B
HCM 95th %tile Q (veh)	-	-	-	0.6	0.1



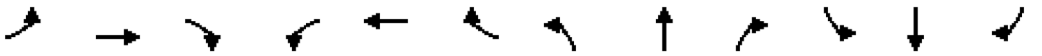
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	91	668	384	238	434	148	395	1067	381	143	861	48
Future Volume (vph)	91	668	384	238	434	148	395	1067	381	143	861	48
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1614	3228	1444	1630	4488		3162	4684	1432	1599	4553	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1614	3228	1444	1630	4488		3162	4684	1432	1599	4553	
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)	96	703	404	251	457	156	416	1123	401	151	906	51
RTOR Reduction (vph)	0	0	314	0	38	0	0	0	195	0	4	0
Lane Group Flow (vph)	96	703	90	251	575	0	416	1123	206	151	953	0
Confl. Peds. (#/hr)	2					2	2		5	5		2
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	custom	Prot	NA	
Protected Phases	1	6		5	2		7 9	4		3	8	
Permitted Phases			6						2			
Actuated Green, G (s)	14.2	30.0	30.0	22.0	37.8		33.9	59.9	37.8	18.1	39.1	
Effective Green, g (s)	14.2	30.0	30.0	22.0	37.8		33.9	59.9	37.8	18.1	39.1	
Actuated g/C Ratio	0.09	0.20	0.20	0.15	0.25		0.23	0.40	0.25	0.12	0.26	
Clearance Time (s)	5.0	5.0	5.0	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	
Lane Grp Cap (vph)	152	645	288	239	1130		714	1870	360	192	1186	
v/s Ratio Prot	0.06	c0.22		c0.15	0.13		0.13	c0.24		c0.09	c0.21	
v/s Ratio Perm			0.06						0.14			
v/c Ratio	0.63	1.09	0.31	1.05	0.51		0.58	0.60	0.57	0.79	0.80	
Uniform Delay, d1	65.4	60.0	51.2	64.0	48.1		51.7	35.6	49.0	64.1	51.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.91	0.97	1.35	1.00	1.00	
Incremental Delay, d2	8.3	62.4	0.6	72.0	0.4		0.9	1.0	1.6	18.8	4.0	
Delay (s)	73.7	122.4	51.8	136.0	48.5		47.8	35.5	67.5	82.9	55.9	
Level of Service	E	F	D	F	D		D	D	E	F	E	
Approach Delay (s/veh)		94.8			73.9			44.7			59.6	
Approach LOS		F			E			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	64.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	88.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM 6th Signalized Intersection Summary
2: Argonne & Montgomery

09/25/2025



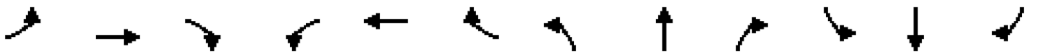
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	100	57	446	70	309	37	1251	340	244	1187	63
Future Volume (veh/h)	110	100	57	446	70	309	37	1251	340	244	1187	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		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	1723	1723	1723	1723	1723	1723	1709	1709	1709	1695	1695	1695
Adj Flow Rate, veh/h	113	103	59	460	72	319	38	1290	351	252	1224	65
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	135	222	117	690	67	295	47	1524	472	274	2104	112
Arrive On Green	0.08	0.11	0.11	0.22	0.24	0.24	0.06	0.65	0.65	0.17	0.47	0.47
Sat Flow, veh/h	1641	2038	1074	3183	274	1213	1628	4666	1444	1615	4499	239
Grp Volume(v), veh/h	113	81	81	460	0	391	38	1290	351	252	839	450
Grp Sat Flow(s),veh/h/ln	1641	1637	1475	1591	0	1487	1628	1555	1444	1615	1543	1652
Q Serve(g_s), s	10.2	7.0	7.8	19.9	0.0	36.5	3.5	32.2	24.6	23.0	29.8	29.9
Cycle Q Clear(g_c), s	10.2	7.0	7.8	19.9	0.0	36.5	3.5	32.2	24.6	23.0	29.8	29.9
Prop In Lane	1.00		0.73	1.00		0.82	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	135	178	160	690	0	362	47	1524	472	274	1443	772
V/C Ratio(X)	0.84	0.46	0.51	0.67	0.00	1.08	0.80	0.85	0.74	0.92	0.58	0.58
Avail Cap(c_a), veh/h	180	224	202	690	0	362	119	1524	472	334	1443	772
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	1.00	1.00	0.86	0.00	0.86	0.84	0.84	0.84	0.49	0.49	0.49
Uniform Delay (d), s/veh	67.9	62.7	63.0	53.8	0.0	56.8	70.2	23.1	21.8	61.2	29.2	29.2
Incr Delay (d2), s/veh	22.2	2.6	3.5	4.4	0.0	67.3	22.5	5.1	8.7	15.6	0.8	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	5.1	3.0	3.1	8.4	0.0	20.5	1.7	8.6	7.0	10.6	11.2	12.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	90.0	65.3	66.5	58.2	0.0	124.1	92.7	28.2	30.4	76.8	30.1	30.8
LnGrp LOS	F	E	E	E		F	F	C	C	E	C	C
Approach Vol, veh/h		275			851			1679			1541	
Approach Delay, s/veh		75.8			88.5			30.1			37.9	
Approach LOS		E			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	74.1	37.0	20.8	29.5	53.0	16.8	41.0
Change Period (Y+Rc), s	4.0	4.0	4.5	4.5	4.0	4.0	4.5	4.5
Max Green Setting (Gmax), s	11.0	69.0	32.5	20.5	31.0	49.0	16.5	36.5
Max Q Clear Time (g_c+I1), s	5.5	31.9	21.9	9.8	25.0	34.2	12.2	38.5
Green Ext Time (p_c), s	0.0	11.5	1.7	0.6	0.5	9.7	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	47.2
HCM 6th LOS	D

Notes

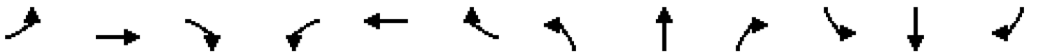
User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	77	20	147	44	27	30	150	1610	25	59	1488	49
Future Volume (veh/h)	77	20	147	44	27	30	150	1610	25	59	1488	49
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	1723	1723	1723	1723	1723	1723	1709	1709	1709	1709	1709	1709
Adj Flow Rate, veh/h	81	21	155	46	28	32	158	1695	26	62	1566	52
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, %	2	2	2	2	2	2	3	3	3	3	3	3
Cap, veh/h	43	6	290	39	14	290	179	3103	48	83	2767	92
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.11	0.66	0.66	0.05	0.60	0.60
Sat Flow, veh/h	0	30	1449	0	70	1449	1628	4734	73	1628	4638	154
Grp Volume(v), veh/h	102	0	155	74	0	32	158	1114	607	62	1050	568
Grp Sat Flow(s),veh/h/ln	30	0	1449	70	0	1449	1628	1555	1696	1628	1555	1681
Q Serve(g_s), s	0.0	0.0	14.4	0.0	0.0	2.7	14.4	28.8	28.8	5.6	30.8	30.9
Cycle Q Clear(g_c), s	30.0	0.0	14.4	30.0	0.0	2.7	14.4	28.8	28.8	5.6	30.8	30.9
Prop In Lane	0.79		1.00	0.62		1.00	1.00		0.04	1.00		0.09
Lane Grp Cap(c), veh/h	49	0	290	53	0	290	179	2039	1112	83	1856	1003
V/C Ratio(X)	2.08	0.00	0.53	1.40	0.00	0.11	0.88	0.55	0.55	0.74	0.57	0.57
Avail Cap(c_a), veh/h	49	0	290	53	0	290	217	2039	1112	119	1856	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.76	0.76	0.76
Uniform Delay (d), s/veh	71.4	0.0	53.7	67.2	0.0	49.1	65.8	13.9	13.9	70.2	18.4	18.4
Incr Delay (d2), s/veh	549.1	0.0	2.5	261.4	0.0	0.2	28.1	1.1	1.9	10.8	1.0	1.8
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	0.0	5.5	5.9	0.0	1.0	7.3	10.0	11.2	2.6	11.1	12.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	620.5	0.0	56.3	328.7	0.0	49.3	93.9	14.9	15.8	81.0	19.4	20.2
LnGrp LOS	F		E	F		D	F	B	B	F	B	C
Approach Vol, veh/h		257			106			1879			1680	
Approach Delay, s/veh		280.2			244.3			21.8			21.9	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	21.5	94.5		34.0	12.7	103.3		34.0				
Change Period (Y+Rc), s	5.0	5.0		4.0	5.0	5.0		4.0				
Max Green Setting (Gmax), s	20.0	86.0		30.0	11.0	95.0		30.0				
Max Q Clear Time (g_c+I1), s	16.4	32.9		32.0	7.6	30.8		32.0				
Green Ext Time (p_c), s	0.2	17.9		0.0	0.0	20.9		0.0				

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		44.8	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	378	359	0	0	0	0	0	1359	464
Future Volume (vph)	0	0	0	378	359	0	0	0	0	0	1359	464
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)				5.0	5.0						5.0	5.0
Lane Util. Factor				0.91	0.91						0.95	1.00
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	0.99						1.00	1.00
Satd. Flow (prot)				1483	3079						3228	1422
Flt Permitted				0.95	0.99						1.00	1.00
Satd. Flow (perm)				1483	3079						3228	1422
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)	0	0	0	398	378	0	0	0	0	0	1431	488
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	206
Lane Group Flow (vph)	0	0	0	251	525	0	0	0	0	0	1431	282
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type				Split	NA						NA	Perm
Protected Phases				6 17	6 17						8	
Permitted Phases												8
Actuated Green, G (s)				34.0	34.0						32.0	32.0
Effective Green, g (s)				34.0	34.0						32.0	32.0
Actuated g/C Ratio				0.45	0.45						0.43	0.43
Clearance Time (s)											5.0	5.0
Vehicle Extension (s)											3.0	3.0
Lane Grp Cap (vph)				672	1395						1377	606
v/s Ratio Prot				0.17	c0.17						c0.44	
v/s Ratio Perm												0.20
v/c Ratio				0.37	0.38						1.04	0.47
Uniform Delay, d1				13.5	13.5						21.5	15.4
Progression Factor				0.05	1.67						0.99	1.43
Incremental Delay, d2				0.0	0.1						33.9	2.3
Delay (s)				0.7	22.7						55.2	24.3
Level of Service				A	C						E	C
Approach Delay (s/veh)		0.0			15.6			0.0			47.3	
Approach LOS		A			B			A			D	

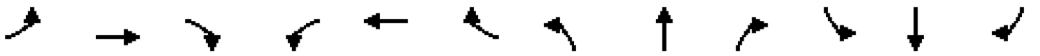
Intersection Summary			
HCM 2000 Control Delay (s/veh)	38.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	111.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	401	456	337	1437	0	0	0	0
Future Volume (vph)	0	0	0	0	401	456	337	1437	0	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)					5.0		5.0	5.0				
Lane Util. Factor					0.95		1.00	0.91				
Frpb, ped/bikes					1.00		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.92		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					2971		1614	4638				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					2971		1614	4638				
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)	0	0	0	0	409	465	344	1466	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	21	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	853	0	344	1466	0	0	0	0
Confl. Peds. (#/hr)									8	8		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	2%	2%	2%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					22.7		42.3	42.3				
Effective Green, g (s)					22.7		42.3	42.3				
Actuated g/C Ratio					0.30		0.56	0.56				
Clearance Time (s)					5.0		5.0	5.0				
Vehicle Extension (s)					2.0		3.0	3.0				
Lane Grp Cap (vph)					899		910	2615				
v/s Ratio Prot					c0.29			c0.32				
v/s Ratio Perm							0.21					
v/c Ratio					1.00dr		0.38	0.56				
Uniform Delay, d1					25.6		9.1	10.4				
Progression Factor					1.00		1.37	1.16				
Incremental Delay, d2					18.4		0.5	0.6				
Delay (s)					44.0		12.9	12.7				
Level of Service					D		B	B				
Approach Delay (s/veh)		0.0			44.0			12.7			0.0	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	104.5%	ICU Level of Service	G
Analysis Period (min)	15		

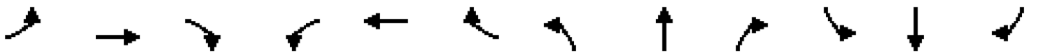
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	453	344	0	0	0	0	0	0	374	1363	0
Future Volume (vph)	0	453	344	0	0	0	0	0	0	374	1363	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		5.0	5.0							5.0	5.0	
Lane Util. Factor		0.91	0.91							1.00	0.95	
Frpb, ped/bikes		1.00	1.00							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		0.97	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		2979	1302							1630	3260	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		2979	1302							1630	3260	
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)	0	462	351	0	0	0	0	0	0	382	1391	0
RTOR Reduction (vph)	0	23	70	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	541	179	0	0	0	0	0	0	382	1391	0
Confl. Peds. (#/hr)							3					3
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type		NA	Perm							Split	NA	
Protected Phases		2								4	4	
Permitted Phases			2									
Actuated Green, G (s)		15.0	15.0							50.0	50.0	
Effective Green, g (s)		15.0	15.0							50.0	50.0	
Actuated g/C Ratio		0.20	0.20							0.67	0.67	
Clearance Time (s)		5.0	5.0							5.0	5.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		595	260							1086	2173	
v/s Ratio Prot		c0.18								0.23	c0.43	
v/s Ratio Perm			0.14									
v/c Ratio		0.91	0.69							0.35	0.64	
Uniform Delay, d1		29.3	27.8							5.4	7.3	
Progression Factor		1.00	1.00							0.92	0.89	
Incremental Delay, d2		17.7	7.7							0.1	0.7	
Delay (s)		47.0	35.5							5.1	7.1	
Level of Service		D	D							A	A	
Approach Delay (s/veh)		43.5			0.0			0.0			6.7	
Approach LOS		D			A			A			A	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	18.3	HCM 2000 Level of Service	B		
HCM 2000 Volume to Capacity ratio	0.75				
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0		
Intersection Capacity Utilization	100.0%	ICU Level of Service	G		
Analysis Period (min)	15				

c Critical Lane Group



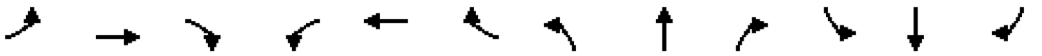
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	462	364	0	0	0	0	0	1312	418	0	0	0
Future Volume (vph)	462	364	0	0	0	0	0	1312	418	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.96				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	3072	1667						4486				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	3072	1667						4486				
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)	491	387	0	0	0	0	0	1396	445	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	77	0	0	0	0
Lane Group Flow (vph)	491	387	0	0	0	0	0	1764	0	0	0	0
Confl. Peds. (#/hr)									2			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1392	755						1914				
v/s Ratio Prot	0.16	c0.23						c0.39				
v/s Ratio Perm												
v/c Ratio	0.35	0.51						0.92				
Uniform Delay, d1	13.3	14.6						20.3				
Progression Factor	0.08	0.96						0.56				
Incremental Delay, d2	0.1	0.6						6.9				
Delay (s)	1.1	14.6						18.2				
Level of Service	A	B						B				
Approach Delay (s/veh)		7.0			0.0			18.2			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	108.7%	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 (vph)	0	175	27	64	66	0	0	0	0	296	1298	120
Future Volume (vph)	0	175	27	64	66	0	0	0	0	296	1298	120
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.0			4.0						5.0	
Lane Util. Factor		0.95			0.95						0.91	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		0.98			1.00						0.99	
Flt Protected		1.00			0.98						0.99	
Satd. Flow (prot)		3186			3174						4589	
Flt Permitted		1.00			0.74						0.99	
Satd. Flow (perm)		3186			2403						4589	
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)	0	180	28	66	68	0	0	0	0	305	1338	124
RTOR Reduction (vph)	0	21	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	187	0	0	134	0	0	0	0	0	1760	0
Confl. Peds. (#/hr)			6	6			5					5
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		6			2						4	
Permitted Phases				2						4		
Actuated Green, G (s)		11.9			11.9						54.1	
Effective Green, g (s)		11.9			11.9						54.1	
Actuated g/C Ratio		0.16			0.16						0.72	
Clearance Time (s)		4.0			4.0						5.0	
Vehicle Extension (s)		4.0			4.0						4.0	
Lane Grp Cap (vph)		505			381						3310	
v/s Ratio Prot		c0.06										
v/s Ratio Perm					0.06						0.38	
v/c Ratio		0.37			0.35						0.53	
Uniform Delay, d1		28.2			28.1						4.7	
Progression Factor		1.00			0.83						1.11	
Incremental Delay, d2		0.6			0.6						0.5	
Delay (s)		28.8			23.9						5.7	
Level of Service		C			C						A	
Approach Delay (s/veh)		28.8			23.9			0.0			5.7	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	61.5%	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)	170	335	0	0	118	255	46	1298	54	0	0	0
Future Volume (veh/h)	170	335	0	0	118	255	46	1298	54	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1709	1709	0	0	1723	1723	1723	1723	1723			
Adj Flow Rate, veh/h	183	360	0	0	127	274	49	1396	58			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	3	3	0	0	2	2	2	2	2			
Cap, veh/h	356	706	0	0	327	292	71	2155	93			
Arrive On Green	0.32	0.83	0.00	0.00	0.20	0.20	0.47	0.47	0.47			
Sat Flow, veh/h	1628	1709	0	0	1723	1458	152	4619	198			
Grp Volume(v), veh/h	183	360	0	0	127	274	551	458	493			
Grp Sat Flow(s),veh/h/ln	1628	1709	0	0	1637	1458	1715	1568	1687			
Q Serve(g_s), s	1.7	4.7	0.0	0.0	5.0	13.9	18.9	16.5	16.5			
Cycle Q Clear(g_c), s	1.7	4.7	0.0	0.0	5.0	13.9	18.9	16.5	16.5			
Prop In Lane	1.00		0.00	0.00		1.00	0.09		0.12			
Lane Grp Cap(c), veh/h	356	706	0	0	327	292	800	732	787			
V/C Ratio(X)	0.51	0.51	0.00	0.00	0.39	0.94	0.69	0.63	0.63			
Avail Cap(c_a), veh/h	356	706	0	0	327	292	800	732	787			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.92	0.92	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	21.6	4.2	0.0	0.0	26.0	29.6	15.7	15.1	15.1			
Incr Delay (d2), s/veh	1.2	2.4	0.0	0.0	3.4	39.3	4.8	4.0	3.8			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.3	1.5	0.0	0.0	2.2	7.8	7.6	6.0	6.4			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	22.7	6.6	0.0	0.0	29.5	68.9	20.5	19.1	18.8			
LnGrp LOS	C	A			C	E	C	B	B			
Approach Vol, veh/h		543			401			1503				
Approach Delay, s/veh		12.1			56.4			19.5				
Approach LOS		B			E			B				

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	16.0	19.0		40.0		35.0			
Change Period (Y+Rc), s	4.0	4.0		5.0		4.0			
Max Green Setting (Gmax), s	12.0	15.0		35.0		31.0			
Max Q Clear Time (g_c+I1), s	3.7	15.9		20.9		6.7			
Green Ext Time (p_c), s	0.4	0.0		8.1		2.2			

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		23.9	
HCM 6th LOS		C	

Notes

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

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	10	17	31	19	0	0	0	0	58	1321	6
Future Vol, veh/h	0	10	17	31	19	0	0	0	0	58	1321	6
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	2	2	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	18	33	20	0	0	0	0	62	1405	6

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	1537	712	697	1540	-			2	0	0
Stage 1	-	1535	-	2	2	-			-	-	-
Stage 2	-	2	-	695	1538	-			-	-	-
Critical Hdwy	-	6.54	7.14	6.44	6.54	-			5.34	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-			-	-	-
Follow-up Hdwy	-	4.02	3.92	3.82	4.02	-			3.12	-	-
Pot Cap-1 Maneuver	0	115	322	383	114	0			1151	-	-
Stage 1	0	176	-	-	-	0			-	-	-
Stage 2	0	-	-	363	176	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	86	321	265	85	-			1149	-	-
Mov Cap-2 Maneuver	-	86	-	265	85	-			-	-	-
Stage 1	-	132	-	-	-	-			-	-	-
Stage 2	-	-	-	236	132	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	32.4	42.8	0.3
HCM LOS	D	E	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	160	147	1149	-	-
HCM Lane V/C Ratio	0.18	0.362	0.054	-	-
HCM Control Delay (s/veh)	32.4	42.8	8.3	-	-
HCM Lane LOS	D	E	A	-	-
HCM 95th %tile Q (veh)	0.6	1.5	0.2	-	-

Intersection	
Int Delay, s/veh	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	69	25	0	0	8	26	60	1301	5	0	0	0
Future Vol, veh/h	69	25	0	0	8	26	60	1301	5	0	0	0
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	2	2	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	73	27	0	0	9	28	64	1384	5	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	691	1522	-	-	1520	699	3	0	0
Stage 1	3	3	-	-	1517	-	-	-	-
Stage 2	688	1519	-	-	3	-	-	-	-
Critical Hdwy	6.44	6.54	-	-	6.54	7.14	5.34	-	-
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	-	-	4.02	3.92	3.12	-	-
Pot Cap-1 Maneuver	386	117	0	0	118	328	1150	-	-
Stage 1	-	-	0	0	180	-	-	-	-
Stage 2	366	180	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	266	88	-	-	89	327	1147	-	-
Mov Cap-2 Maneuver	266	88	-	-	89	-	-	-	-
Stage 1	-	-	-	-	136	-	-	-	-
Stage 2	237	136	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	51	26.8	0.4
HCM LOS	F	D	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1147	-	-	173	201
HCM Lane V/C Ratio	0.056	-	-	0.578	0.18
HCM Control Delay (s/veh)	8.3	-	-	51	26.8
HCM Lane LOS	A	-	-	F	D
HCM 95th %tile Q (veh)	0.2	-	-	3.1	0.6

Appendix I. Level of Service Synchro Reports Horizon Year 2050 + Build Scenario

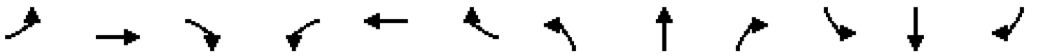
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	63	308	268	227	662	130	358	744	173	123	1148	133
Future Volume (vph)	63	308	268	227	662	130	358	744	173	123	1148	133
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1391	2782	1244	1443	4033		2852	4225	1296	1484	4199	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1391	2782	1244	1443	4033		2852	4225	1296	1484	4199	
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)	66	324	282	239	697	137	377	783	182	129	1208	140
RTOR Reduction (vph)	0	0	233	0	19	0	0	0	129	0	8	0
Lane Group Flow (vph)	66	324	49	239	815	0	377	783	53	129	1340	0
Confl. Peds. (#/hr)	3					3			2	2		
Heavy Vehicles (%)	11%	11%	11%	7%	7%	7%	5%	5%	5%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	custom	Prot	NA	
Protected Phases	1	6		5	2		7	4		3	8	
Permitted Phases			6						2			
Actuated Green, G (s)	11.0	26.0	26.0	23.0	38.0		25.2	62.6	38.0	18.4	55.8	
Effective Green, g (s)	11.0	26.0	26.0	23.0	38.0		25.2	62.6	38.0	18.4	55.8	
Actuated g/C Ratio	0.07	0.17	0.17	0.15	0.25		0.17	0.42	0.25	0.12	0.37	
Clearance Time (s)	5.0	5.0	5.0	5.0	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	
Lane Grp Cap (vph)	102	482	215	221	1021		479	1763	328	182	1562	
v/s Ratio Prot	0.05	0.12		c0.17	c0.20		c0.13	0.19		0.09	c0.32	
v/s Ratio Perm			0.04						0.04			
v/c Ratio	0.65	0.67	0.23	1.08	0.80		0.79	0.44	0.16	0.71	0.86	
Uniform Delay, d1	67.6	58.0	53.4	63.5	52.4		59.8	31.3	43.6	63.2	43.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.73	1.42	0.16	1.00	1.00	
Incremental Delay, d2	13.3	3.7	0.5	83.9	4.4		6.6	0.6	0.2	11.9	4.9	
Delay (s)	80.9	61.7	53.9	147.4	56.9		50.0	45.0	7.0	75.1	48.3	
Level of Service	F	E	D	F	E		D	D	A	E	D	
Approach Delay (s/veh)		60.3			77.0			41.3			50.7	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	55.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	85.8%	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 (vph)	73	44	72	182	53	128	52	1002	356	252	1340	29
Future Volume (vph)	73	44	72	182	53	128	52	1002	356	252	1340	29
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	4.0	4.0		5.5	5.5		4.0	5.0	5.0	4.0	5.0	
Lane Util. Factor	1.00	0.95		0.97	1.00		1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00		1.00	0.98		1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.91		1.00	0.89		1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1331	2414		2627	1254		1470	4225	1298	1484	4250	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1331	2414		2627	1254		1470	4225	1298	1484	4250	
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)	78	47	77	196	57	138	56	1077	383	271	1441	31
RTOR Reduction (vph)	0	71	0	0	57	0	0	0	200	0	1	0
Lane Group Flow (vph)	78	53	0	196	138	0	56	1077	183	271	1471	0
Confl. Peds. (#/hr)	7					7	1		1	1		1
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	16%	16%	16%	14%	14%	14%	5%	5%	5%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases	7	4		3	8		1	6		5 9	2	
Permitted Phases									6			
Actuated Green, G (s)	13.1	11.0		24.5	22.4		9.8	60.0	60.0	32.0	86.2	
Effective Green, g (s)	13.1	11.0		24.5	22.4		9.8	60.0	60.0	32.0	86.2	
Actuated g/C Ratio	0.09	0.07		0.16	0.15		0.07	0.40	0.40	0.21	0.57	
Clearance Time (s)	4.0	4.0		5.5	5.5		4.0	5.0	5.0		5.0	
Vehicle Extension (s)	3.0	3.0		4.0	4.0		3.0	4.0	4.0		4.0	
Lane Grp Cap (vph)	116	177		429	187		96	1690	519	316	2442	
v/s Ratio Prot	c0.06	0.02		0.07	c0.11		0.04	0.25		c0.18	c0.35	
v/s Ratio Perm									0.14			
v/c Ratio	0.67	0.30		0.46	0.74		0.58	0.64	0.35	0.86	0.60	
Uniform Delay, d1	66.4	65.8		56.7	61.0		68.1	36.2	31.4	56.8	20.7	
Progression Factor	1.00	1.00		1.00	1.00		0.82	1.52	4.63	1.17	1.65	
Incremental Delay, d2	14.3	0.9		3.5	22.7		7.9	1.7	1.7	11.6	0.6	
Delay (s)	80.7	66.8		60.2	83.7		63.6	56.9	147.1	77.9	34.8	
Level of Service	F	E		E	F		E	E	F	E	C	
Approach Delay (s/veh)		72.1			71.9			80.0			41.5	
Approach LOS		E			E			E			D	

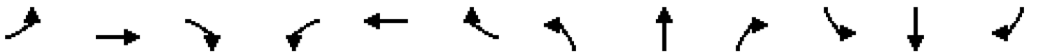
Intersection Summary			
HCM 2000 Control Delay (s/veh)	61.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	22.5
Intersection Capacity Utilization	91.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	12	161	37	10	15	176	1387	32	41	1496	50
Future Volume (veh/h)	48	12	161	37	10	15	176	1387	32	41	1496	50
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	1587	1587	1587	1600	1600	1600	1574	1574	1574	1536	1536	1536
Adj Flow Rate, veh/h	51	13	169	39	11	16	185	1460	34	43	1575	53
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	2	2	2	4	4	4	7	7	7
Cap, veh/h	43	5	282	43	6	284	206	2809	65	63	2316	78
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.14	0.65	0.65	0.01	0.18	0.18
Sat Flow, veh/h	0	26	1343	0	29	1354	1499	4321	101	1463	4167	140
Grp Volume(v), veh/h	64	0	169	50	0	16	185	968	526	43	1057	571
Grp Sat Flow(s),veh/h/ln	26	0	1343	29	0	1354	1499	1433	1556	1463	1398	1511
Q Serve(g_s), s	0.0	0.0	17.1	0.0	0.0	1.4	18.2	26.8	26.8	4.4	52.9	52.9
Cycle Q Clear(g_c), s	31.5	0.0	17.1	31.5	0.0	1.4	18.2	26.8	26.8	4.4	52.9	52.9
Prop In Lane	0.80		1.00	0.78		1.00	1.00		0.06	1.00		0.09
Lane Grp Cap(c), veh/h	49	0	282	49	0	284	206	1863	1012	63	1554	840
V/C Ratio(X)	1.32	0.00	0.60	1.03	0.00	0.06	0.90	0.52	0.52	0.68	0.68	0.68
Avail Cap(c_a), veh/h	49	0	282	49	0	284	290	1863	1012	224	1554	840
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.79	0.79	0.79
Uniform Delay (d), s/veh	71.5	0.0	53.5	71.1	0.0	47.4	63.7	13.9	13.9	72.9	48.8	48.8
Incr Delay (d2), s/veh	236.6	0.0	4.2	136.5	0.0	0.1	22.3	1.0	1.9	9.8	1.9	3.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	6.2	3.7	0.0	0.5	8.2	8.6	9.6	1.9	20.4	22.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	308.2	0.0	57.7	207.7	0.0	47.5	86.0	14.9	15.8	82.7	50.7	52.3
LnGrp LOS	F		E	F		D	F	B	B	F	D	D
Approach Vol, veh/h		233			66			1679			1671	
Approach Delay, s/veh		126.5			168.9			23.0			52.1	
Approach LOS		F			F			C			D	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	24.6	88.4		37.0	10.5	102.5		37.0				
Change Period (Y+Rc), s	4.0	5.0		5.5	4.0	5.0		5.5				
Max Green Setting (Gmax), s	29.0	75.0		31.5	23.0	81.0		31.5				
Max Q Clear Time (g_c+I1), s	20.2	54.9		33.5	6.4	28.8		33.5				
Green Ext Time (p_c), s	0.4	11.7		0.0	0.1	15.6		0.0				

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		45.6	
HCM 6th LOS		D	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	361	308	0	0	0	0	0	1277	485
Future Volume (vph)	0	0	0	361	308	0	0	0	0	0	1277	485
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)				5.0	5.0						5.0	5.0
Lane Util. Factor				0.91	0.91						0.95	1.00
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	0.98						1.00	1.00
Satd. Flow (prot)				1351	2799						2913	1283
Flt Permitted				0.95	0.98						1.00	1.00
Satd. Flow (perm)				1351	2799						2913	1283
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)	0	0	0	376	321	0	0	0	0	0	1330	505
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	182
Lane Group Flow (vph)	0	0	0	226	471	0	0	0	0	0	1330	323
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	2%	2%	2%	6%	6%	6%
Turn Type				Split	NA						NA	Perm
Protected Phases				6 17	6 17						8	
Permitted Phases												8
Actuated Green, G (s)				29.0	29.0						37.0	37.0
Effective Green, g (s)				29.0	29.0						37.0	37.0
Actuated g/C Ratio				0.39	0.39						0.49	0.49
Clearance Time (s)											5.0	5.0
Vehicle Extension (s)											3.0	3.0
Lane Grp Cap (vph)				522	1082						1437	632
v/s Ratio Prot				0.17	c0.17						c0.46	
v/s Ratio Perm												0.25
v/c Ratio				0.43	0.44						0.93	0.51
Uniform Delay, d1				16.9	17.0						17.7	12.9
Progression Factor				0.07	1.55						1.89	3.44
Incremental Delay, d2				0.0	0.1						10.0	2.5
Delay (s)				1.3	26.5						43.6	46.8
Level of Service				A	C						D	D
Approach Delay (s/veh)		0.0			18.3			0.0			44.5	
Approach LOS		A			B			A			D	

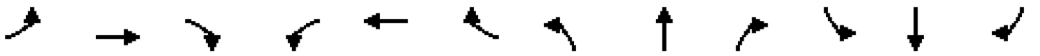
Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	108.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	343	440	327	1193	0	0	0	0
Future Volume (vph)	0	0	0	0	343	440	327	1193	0	0	0	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)					5.0		5.0	5.0				
Lane Util. Factor					0.95		1.00	0.91				
Frpb, ped/bikes					1.00		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.92		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					2745		1470	4225				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					2745		1470	4225				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	0	385	494	367	1340	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	47	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	832	0	367	1340	0	0	0	0
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	5%	5%	5%	2%	2%	2%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					18.0		47.0	47.0				
Effective Green, g (s)					18.0		47.0	47.0				
Actuated g/C Ratio					0.24		0.63	0.63				
Clearance Time (s)					5.0		5.0	5.0				
Vehicle Extension (s)					2.0		3.0	3.0				
Lane Grp Cap (vph)					658		921	2647				
v/s Ratio Prot					c0.30			c0.32				
v/s Ratio Perm							0.25					
v/c Ratio					1.32dr		0.40	0.51				
Uniform Delay, d1					28.5		7.0	7.7				
Progression Factor					1.00		0.13	0.91				
Incremental Delay, d2					130.8		1.0	0.6				
Delay (s)					159.3		1.8	7.6				
Level of Service					F		A	A				
Approach Delay (s/veh)		0.0			159.3			6.3			0.0	
Approach LOS		A			F			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	58.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	101.5%	ICU Level of Service	G
Analysis Period (min)	15		

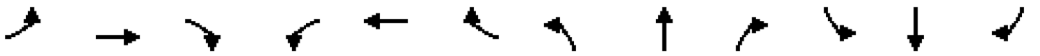
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	487	311	0	0	0	0	0	0	396	1242	0
Future Volume (vph)	0	487	311	0	0	0	0	0	0	396	1242	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)		5.0	5.0							5.0	5.0	
Lane Util. Factor		0.91	0.91							1.00	0.95	
Frpb, ped/bikes		1.00	1.00							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		0.98	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		2791	1209							1484	2969	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		2791	1209							1484	2969	
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)	0	553	353	0	0	0	0	0	0	450	1411	0
RTOR Reduction (vph)	0	14	70	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	617	205	0	0	0	0	0	0	450	1411	0
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type		NA	Perm							Split	NA	
Protected Phases		2								4	4	
Permitted Phases			2									
Actuated Green, G (s)		15.0	15.0							50.0	50.0	
Effective Green, g (s)		15.0	15.0							50.0	50.0	
Actuated g/C Ratio		0.20	0.20							0.67	0.67	
Clearance Time (s)		5.0	5.0							5.0	5.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		558	241							989	1979	
v/s Ratio Prot		c0.22								0.30	c0.48	
v/s Ratio Perm			0.17									
v/c Ratio		1.11	0.85							0.46	0.71	
Uniform Delay, d1		30.0	28.9							6.0	7.9	
Progression Factor		1.00	1.00							2.06	1.39	
Incremental Delay, d2		70.6	24.0							1.0	1.6	
Delay (s)		100.6	53.0							13.3	12.7	
Level of Service		F	D							B	B	
Approach Delay (s/veh)		86.2			0.0			0.0			12.8	
Approach LOS		F			A			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



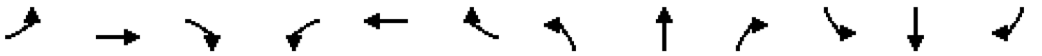
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	465	418	0	0	0	0	0	1056	300	0	0	0
Future Volume (vph)	465	418	0	0	0	0	0	1056	300	0	0	0
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.97				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	2852	1548						4102				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	2852	1548						4102				
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)	489	440	0	0	0	0	0	1112	316	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	68	0	0	0	0
Lane Group Flow (vph)	489	440	0	0	0	0	0	1360	0	0	0	0
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1292	701						1750				
v/s Ratio Prot	0.17	c0.28						c0.33				
v/s Ratio Perm												
v/c Ratio	0.38	0.63						0.78				
Uniform Delay, d1	13.5	15.7						18.4				
Progression Factor	0.06	1.12						0.78				
Incremental Delay, d2	0.0	1.6						3.0				
Delay (s)	0.8	19.2						17.5				
Level of Service	A	B						B				
Approach Delay (s/veh)		9.5			0.0			17.5			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	104.0%	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 (vph)	0	101	22	53	44	0	0	0	0	179	1255	109
Future Volume (vph)	0	101	22	53	44	0	0	0	0	179	1255	109
Ideal Flow (vphpl)	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625	1625
Total Lost time (s)		5.0			5.0						5.0	
Lane Util. Factor		0.95			0.95						0.91	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		0.97			1.00						0.99	
Flt Protected		1.00			0.97						0.99	
Satd. Flow (prot)		2890			2947						4192	
Flt Permitted		1.00			0.76						0.99	
Satd. Flow (perm)		2890			2295						4192	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	116	25	61	51	0	0	0	0	206	1443	125
RTOR Reduction (vph)	0	14	0	0	0	0	0	0	0	0	6	0
Lane Group Flow (vph)	0	127	0	0	112	0	0	0	0	0	1768	0
Confl. Peds. (#/hr)	1					1	1					1
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		6			2						4	
Permitted Phases				2						4		
Actuated Green, G (s)		9.9			9.9						55.1	
Effective Green, g (s)		9.9			9.9						55.1	
Actuated g/C Ratio		0.13			0.13						0.73	
Clearance Time (s)		5.0			5.0						5.0	
Vehicle Extension (s)		4.0			4.0						4.0	
Lane Grp Cap (vph)		381			302						3079	
v/s Ratio Prot		0.04										
v/s Ratio Perm					c0.05						0.42	
v/c Ratio		0.33			0.37						0.57	
Uniform Delay, d1		29.6			29.7						4.6	
Progression Factor		1.00			0.65						0.81	
Incremental Delay, d2		0.7			1.0						0.5	
Delay (s)		30.3			20.3						4.2	
Level of Service		C			C						A	
Approach Delay (s/veh)		30.3			20.3			0.0			4.2	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	102	178	0	0	82	269	16	991	17	0	0	0
Future Volume (veh/h)	102	178	0	0	82	269	16	991	17	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1587	1587	0	0	1549	1549	1574	1574	1574			
Adj Flow Rate, veh/h	107	187	0	0	86	283	17	1043	18			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	3	3	0	0	6	6	4	4	4			
Cap, veh/h	278	656	0	0	373	332	32	2061	37			
Arrive On Green	0.21	0.83	0.00	0.00	0.25	0.25	0.15	0.15	0.15			
Sat Flow, veh/h	1511	1587	0	0	1549	1311	68	4417	79			
Grp Volume(v), veh/h	107	187	0	0	86	283	394	327	357			
Grp Sat Flow(s),veh/h/ln	1511	1587	0	0	1472	1311	1571	1433	1560			
Q Serve(g_s), s	0.0	2.0	0.0	0.0	3.5	15.4	17.4	15.7	15.7			
Cycle Q Clear(g_c), s	0.0	2.0	0.0	0.0	3.5	15.4	17.4	15.7	15.7			
Prop In Lane	1.00		0.00	0.00		1.00	0.04		0.05			
Lane Grp Cap(c), veh/h	278	656	0	0	373	332	733	669	728			
V/C Ratio(X)	0.39	0.29	0.00	0.00	0.23	0.85	0.54	0.49	0.49			
Avail Cap(c_a), veh/h	278	656	0	0	373	332	733	669	728			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	0.33	0.33	0.33			
Upstream Filter(I)	0.94	0.94	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	26.2	4.0	0.0	0.0	22.2	26.7	24.3	23.5	23.6			
Incr Delay (d2), s/veh	0.8	1.0	0.0	0.0	1.4	23.2	2.8	2.6	2.3			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.5	0.7	0.0	0.0	1.3	6.6	7.7	6.3	6.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	27.0	5.0	0.0	0.0	23.6	49.8	27.1	26.1	25.9			
LnGrp LOS	C	A			C	D	C	C	C			
Approach Vol, veh/h		294			369			1078				
Approach Delay, s/veh		13.0			43.7			26.4				
Approach LOS		B			D			C				

Timer - Assigned Phs	1	2		4		6						
Phs Duration (G+Y+Rc), s	12.0	23.0		40.0		35.0						
Change Period (Y+Rc), s	4.0	4.0		5.0		4.0						
Max Green Setting (Gmax), s	8.0	19.0		35.0		31.0						
Max Q Clear Time (g_c+I1), s	2.0	17.4		19.4		4.0						
Green Ext Time (p_c), s	0.1	0.4		6.1		1.0						

Intersection Summary												
HCM 6th Ctrl Delay, s/veh			27.8									
HCM 6th LOS			C									

Notes

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

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	16	2	5	5	0	0	0	0	29	1272	6
Future Vol, veh/h	0	16	2	5	5	0	0	0	0	29	1272	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	17	17	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	2	2	2	10	10	10	2	2	2	2	2	2
Mvmt Flow	0	18	2	6	6	0	0	0	0	33	1445	7

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	1532	726	670	1535	-			17	0	0
Stage 1	-	1515	-	17	17	-			-	-	-
Stage 2	-	17	-	653	1518	-			-	-	-
Critical Hdwy	-	6.54	7.14	6.6	6.7	-			5.34	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.9	5.7	-			-	-	-
Follow-up Hdwy	-	4.02	3.92	3.9	4.1	-			3.12	-	-
Pot Cap-1 Maneuver	0	116	315	380	107	0			1133	-	-
Stage 1	0	180	-	-	-	0			-	-	-
Stage 2	0	-	-	368	167	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	97	315	282	89	-			1117	-	-
Mov Cap-2 Maneuver	-	97	-	282	89	-			-	-	-
Stage 1	-	152	-	-	-	-			-	-	-
Stage 2	-	-	-	272	141	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	47.4	34.1	0.2
HCM LOS	E	D	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	105	135	1117	-	-
HCM Lane V/C Ratio	0.195	0.084	0.03	-	-
HCM Control Delay (s/veh)	47.4	34.1	8.3	-	-
HCM Lane LOS	E	D	A	-	-
HCM 95th %tile Q (veh)	0.7	0.3	0.1	-	-

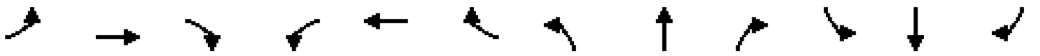
Intersection	
Int Delay, s/veh	1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	25	0	0	1	6	19	1009	9	0	0	0
Future Vol, veh/h	24	25	0	0	1	6	19	1009	9	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	4	4	4	2	2	2	3	3	3	2	2	2
Mvmt Flow	25	26	0	0	1	6	20	1062	9	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	465	1111	-	-	1107	536	0	0	0
Stage 1	0	0	-	-	1107	-	-	-	-
Stage 2	465	1111	-	-	0	-	-	-	-
Critical Hdwy	6.48	6.58	-	-	6.54	7.14	5.36	-	-
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-
Critical Hdwy Stg 2	6.78	5.58	-	-	-	-	-	-	-
Follow-up Hdwy	3.84	4.04	-	-	4.02	3.92	3.13	-	-
Pot Cap-1 Maneuver	515	205	0	0	209	419	-	-	-
Stage 1	-	-	0	0	284	-	-	-	-
Stage 2	495	279	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	505	205	-	-	209	419	-	-	-
Mov Cap-2 Maneuver	505	205	-	-	209	-	-	-	-
Stage 1	-	-	-	-	284	-	-	-	-
Stage 2	486	279	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	20.1	15	
HCM LOS	C	C	

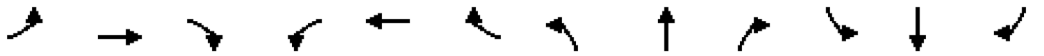
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	-	-	-	289	366
HCM Lane V/C Ratio	-	-	-	0.178	0.02
HCM Control Delay (s/veh)	-	-	-	20.1	15
HCM Lane LOS	-	-	-	C	C
HCM 95th %tile Q (veh)	-	-	-	0.6	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	694	399	247	451	154	410	1108	395	149	894	50
Future Volume (vph)	94	694	399	247	451	154	410	1108	395	149	894	50
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91		0.97	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.96		1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1614	3228	1444	1630	4489		3162	4684	1432	1599	4553	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1614	3228	1444	1630	4489		3162	4684	1432	1599	4553	
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)	99	731	420	260	475	162	432	1166	416	157	941	53
RTOR Reduction (vph)	0	0	312	0	38	0	0	0	196	0	4	0
Lane Group Flow (vph)	99	731	108	260	599	0	432	1166	220	157	990	0
Confl. Peds. (#/hr)	2					2	2		5	5		2
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	2%	2%	2%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	custom	Prot	NA	
Protected Phases	1	6		5	2		7 9	4		3	8	
Permitted Phases			6						2			
Actuated Green, G (s)	14.5	30.0	30.0	22.0	37.5		33.0	59.5	37.5	18.5	40.0	
Effective Green, g (s)	14.5	30.0	30.0	22.0	37.5		33.0	59.5	37.5	18.5	40.0	
Actuated g/C Ratio	0.10	0.20	0.20	0.15	0.25		0.22	0.40	0.25	0.12	0.27	
Clearance Time (s)	5.0	5.0	5.0	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	
Lane Grp Cap (vph)	156	645	288	239	1122		695	1857	358	197	1214	
v/s Ratio Prot	0.06	c0.23		c0.16	0.13		0.14	c0.25		c0.10	c0.22	
v/s Ratio Perm			0.07						0.15			
v/c Ratio	0.63	1.13	0.38	1.09	0.53		0.62	0.63	0.62	0.80	0.82	
Uniform Delay, d1	65.2	60.0	51.9	64.0	48.7		52.9	36.4	49.9	63.9	51.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		0.93	0.99	1.27	1.00	1.00	
Incremental Delay, d2	8.2	78.2	0.8	83.6	0.5		1.2	1.1	2.1	19.7	4.3	
Delay (s)	73.4	138.2	52.7	147.6	49.2		50.3	37.2	65.6	83.6	55.9	
Level of Service	E	F	D	F	D		D	D	E	F	E	
Approach Delay (s/veh)		104.3			77.7			45.9			59.6	
Approach LOS		F			E			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	68.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	25.0
Intersection Capacity Utilization	89.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



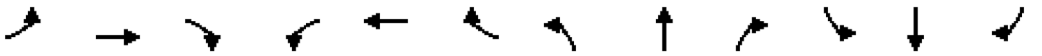
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	104	60	463	73	321	39	1299	353	253	1233	66
Future Volume (veh/h)	114	104	60	463	73	321	39	1299	353	253	1233	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		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	1723	1723	1723	1723	1723	1723	1709	1709	1709	1695	1695	1695
Adj Flow Rate, veh/h	118	107	62	477	75	331	40	1339	364	261	1271	68
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	4	4	4
Cap, veh/h	139	227	121	690	67	295	50	1524	472	283	2120	113
Arrive On Green	0.09	0.11	0.11	0.36	0.41	0.41	0.06	0.65	0.65	0.18	0.47	0.47
Sat Flow, veh/h	1641	2029	1082	3183	275	1212	1628	4666	1444	1615	4497	241
Grp Volume(v), veh/h	118	85	84	477	0	406	40	1339	364	261	872	467
Grp Sat Flow(s),veh/h/ln	1641	1637	1474	1591	0	1487	1628	1555	1444	1615	1543	1652
Q Serve(g_s), s	10.6	7.3	8.1	19.1	0.0	36.5	3.6	35.0	26.4	23.9	31.2	31.2
Cycle Q Clear(g_c), s	10.6	7.3	8.1	19.1	0.0	36.5	3.6	35.0	26.4	23.9	31.2	31.2
Prop In Lane	1.00		0.73	1.00		0.82	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	139	183	165	690	0	362	50	1524	472	283	1454	779
V/C Ratio(X)	0.85	0.46	0.51	0.69	0.00	1.12	0.80	0.88	0.77	0.92	0.60	0.60
Avail Cap(c_a), veh/h	180	224	201	690	0	362	119	1524	472	334	1454	779
HCM Platoon Ratio	1.00	1.00	1.00	1.67	1.67	1.67	2.00	2.00	2.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.86	0.00	0.86	0.83	0.83	0.83	0.45	0.45	0.45
Uniform Delay (d), s/veh	67.7	62.4	62.8	43.6	0.0	44.5	70.0	23.6	22.1	60.8	29.2	29.2
Incr Delay (d2), s/veh	24.1	2.6	3.5	4.9	0.0	81.5	21.2	6.4	9.8	15.5	0.8	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	3.2	3.2	7.4	0.0	20.3	1.8	9.5	7.6	11.0	11.7	12.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	91.7	65.0	66.3	48.5	0.0	126.1	91.1	29.9	31.9	76.3	30.0	30.8
LnGrp LOS	F	E	E	D		F	F	C	C	E	C	C
Approach Vol, veh/h		287			883			1743			1600	
Approach Delay, s/veh		76.4			84.1			31.7			37.8	
Approach LOS		E			F			C			D	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	74.7	37.0	21.3	30.3	53.0	17.3	41.0
Change Period (Y+Rc), s	4.0	4.0	4.5	4.5	4.0	4.0	4.5	4.5
Max Green Setting (Gmax), s	11.0	69.0	32.5	20.5	31.0	49.0	16.5	36.5
Max Q Clear Time (g_c+I1), s	5.6	33.2	21.1	10.1	25.9	37.0	12.6	38.5
Green Ext Time (p_c), s	0.0	12.0	1.8	0.6	0.4	8.5	0.1	0.0

Intersection Summary	
HCM 6th Ctrl Delay, s/veh	47.0
HCM 6th LOS	D

Notes

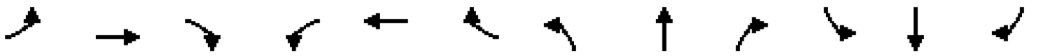
User approved pedestrian interval to be less than phase max green.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	21	153	46	28	31	156	1672	26	62	1546	51
Future Volume (veh/h)	80	21	153	46	28	31	156	1672	26	62	1546	51
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	1723	1723	1723	1723	1723	1723	1709	1709	1709	1709	1709	1709
Adj Flow Rate, veh/h	84	22	161	48	29	33	164	1760	27	65	1627	54
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, %	2	2	2	2	2	2	3	3	3	3	3	3
Cap, veh/h	43	6	290	39	14	290	185	3094	47	86	2750	91
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.11	0.65	0.65	0.05	0.59	0.59
Sat Flow, veh/h	0	30	1449	0	69	1449	1628	4734	73	1628	4638	154
Grp Volume(v), veh/h	106	0	161	77	0	33	164	1156	631	65	1091	590
Grp Sat Flow(s),veh/h/ln	30	0	1449	69	0	1449	1628	1555	1696	1628	1555	1681
Q Serve(g_s), s	0.0	0.0	15.0	0.0	0.0	2.8	14.9	30.7	30.8	5.9	33.0	33.0
Cycle Q Clear(g_c), s	30.0	0.0	15.0	30.0	0.0	2.8	14.9	30.7	30.8	5.9	33.0	33.0
Prop In Lane	0.79		1.00	0.62		1.00	1.00		0.04	1.00		0.09
Lane Grp Cap(c), veh/h	49	0	290	53	0	290	185	2033	1109	86	1845	997
V/C Ratio(X)	2.16	0.00	0.56	1.46	0.00	0.11	0.89	0.57	0.57	0.75	0.59	0.59
Avail Cap(c_a), veh/h	49	0	290	53	0	290	217	2033	1109	119	1845	997
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	0.74	0.74	0.74
Uniform Delay (d), s/veh	71.4	0.0	54.0	67.3	0.0	49.1	65.5	14.3	14.3	70.1	19.1	19.1
Incr Delay (d2), s/veh	583.9	0.0	2.9	284.3	0.0	0.2	29.7	1.2	2.1	12.2	1.0	1.9
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	0.0	5.8	6.2	0.0	1.1	7.7	10.8	12.0	2.8	11.9	13.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	655.3	0.0	56.9	351.6	0.0	49.4	95.2	15.5	16.4	82.3	20.2	21.1
LnGrp LOS	F		E	F		D	F	B	B	F	C	C
Approach Vol, veh/h		267			110			1951			1746	
Approach Delay, s/veh		294.5			260.9			22.5			22.8	
Approach LOS		F			F			C			C	

Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	22.0	94.0		34.0	12.9	103.1		34.0				
Change Period (Y+Rc), s	5.0	5.0		4.0	5.0	5.0		4.0				
Max Green Setting (Gmax), s	20.0	86.0		30.0	11.0	95.0		30.0				
Max Q Clear Time (g_c+I1), s	16.9	35.0		32.0	7.9	32.8		32.0				
Green Ext Time (p_c), s	0.2	18.9		0.0	0.0	22.3		0.0				

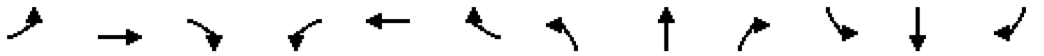
Intersection Summary												
HCM 6th Ctrl Delay, s/veh			46.9									
HCM 6th LOS			D									



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	392	373	0	0	0	0	0	1411	482
Future Volume (vph)	0	0	0	392	373	0	0	0	0	0	1411	482
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)				5.0	5.0						5.0	5.0
Lane Util. Factor				0.91	0.91						0.95	1.00
Frpb, ped/bikes				1.00	1.00						1.00	0.98
Flpb, ped/bikes				1.00	1.00						1.00	1.00
Frt				1.00	1.00						1.00	0.85
Flt Protected				0.95	0.99						1.00	1.00
Satd. Flow (prot)				1483	3080						3228	1422
Flt Permitted				0.95	0.99						1.00	1.00
Satd. Flow (perm)				1483	3080						3228	1422
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)	0	0	0	413	393	0	0	0	0	0	1485	507
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	197
Lane Group Flow (vph)	0	0	0	264	542	0	0	0	0	0	1485	310
Confl. Peds. (#/hr)							2					2
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%
Turn Type				Split	NA						NA	Perm
Protected Phases				6 17	6 17						8	
Permitted Phases												8
Actuated Green, G (s)				34.0	34.0						32.0	32.0
Effective Green, g (s)				34.0	34.0						32.0	32.0
Actuated g/C Ratio				0.45	0.45						0.43	0.43
Clearance Time (s)											5.0	5.0
Vehicle Extension (s)											3.0	3.0
Lane Grp Cap (vph)				672	1396						1377	606
v/s Ratio Prot				c0.18	0.18						c0.46	
v/s Ratio Perm												0.22
v/c Ratio				0.39	0.39						1.08	0.51
Uniform Delay, d1				13.6	13.6						21.5	15.8
Progression Factor				0.04	1.77						1.01	1.36
Incremental Delay, d2				0.0	0.1						47.1	2.7
Delay (s)				0.6	24.1						68.9	24.2
Level of Service				A	C						E	C
Approach Delay (s/veh)		0.0			16.4			0.0			57.5	
Approach LOS		A			B			A			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	45.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	115.2%	ICU Level of Service	H
Analysis Period (min)	15		

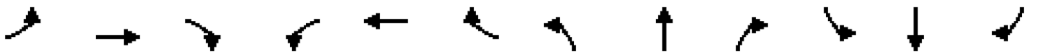
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	416	474	350	1492	0	0	0	0
Future Volume (vph)	0	0	0	0	416	474	350	1492	0	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)					5.0		5.0	5.0				
Lane Util. Factor					0.95		1.00	0.91				
Frpb, ped/bikes					1.00		1.00	1.00				
Flpb, ped/bikes					1.00		1.00	1.00				
Frt					0.92		1.00	1.00				
Flt Protected					1.00		0.95	1.00				
Satd. Flow (prot)					2970		1614	4638				
Flt Permitted					1.00		0.95	1.00				
Satd. Flow (perm)					2970		1614	4638				
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)	0	0	0	0	424	484	357	1522	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	890	0	357	1522	0	0	0	0
Confl. Peds. (#/hr)									8	8		
Heavy Vehicles (%)	2%	2%	2%	3%	3%	3%	3%	3%	3%	2%	2%	2%
Turn Type					NA		Perm	NA				
Protected Phases					2			4				
Permitted Phases							4					
Actuated Green, G (s)					23.0		42.0	42.0				
Effective Green, g (s)					23.0		42.0	42.0				
Actuated g/C Ratio					0.31		0.56	0.56				
Clearance Time (s)					5.0		5.0	5.0				
Vehicle Extension (s)					2.0		3.0	3.0				
Lane Grp Cap (vph)					910		903	2597				
v/s Ratio Prot					c0.30			c0.33				
v/s Ratio Perm							0.22					
v/c Ratio					1.03dr		0.40	0.59				
Uniform Delay, d1					25.7		9.3	10.8				
Progression Factor					1.00		1.39	1.18				
Incremental Delay, d2					24.2		0.4	0.6				
Delay (s)					49.9		13.4	13.3				
Level of Service					D		B	B				
Approach Delay (s/veh)		0.0			49.9			13.3			0.0	
Approach LOS		A			D			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	108.3%	ICU Level of Service	G
Analysis Period (min)	15		

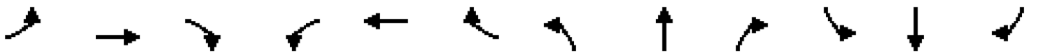
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	470	358	0	0	0	0	0	0	388	1415	0
Future Volume (vph)	0	470	358	0	0	0	0	0	0	388	1415	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		5.0	5.0							5.0	5.0	
Lane Util. Factor		0.91	0.91							1.00	0.95	
Frpb, ped/bikes		1.00	1.00							1.00	1.00	
Flpb, ped/bikes		1.00	1.00							1.00	1.00	
Frt		0.97	0.85							1.00	1.00	
Flt Protected		1.00	1.00							0.95	1.00	
Satd. Flow (prot)		2979	1302							1630	3260	
Flt Permitted		1.00	1.00							0.95	1.00	
Satd. Flow (perm)		2979	1302							1630	3260	
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)	0	480	365	0	0	0	0	0	0	396	1444	0
RTOR Reduction (vph)	0	23	70	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	563	189	0	0	0	0	0	0	396	1444	0
Confl. Peds. (#/hr)							3					3
Heavy Vehicles (%)	4%	4%	4%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type		NA	Perm							Split	NA	
Protected Phases		2								4	4	
Permitted Phases			2									
Actuated Green, G (s)		15.0	15.0							50.0	50.0	
Effective Green, g (s)		15.0	15.0							50.0	50.0	
Actuated g/C Ratio		0.20	0.20							0.67	0.67	
Clearance Time (s)		5.0	5.0							5.0	5.0	
Vehicle Extension (s)		3.0	3.0							3.0	3.0	
Lane Grp Cap (vph)		595	260							1086	2173	
v/s Ratio Prot		c0.19								0.24	c0.44	
v/s Ratio Perm			0.15									
v/c Ratio		0.95	0.73							0.36	0.66	
Uniform Delay, d1		29.6	28.1							5.5	7.5	
Progression Factor		1.00	1.00							0.94	0.90	
Incremental Delay, d2		24.0	9.8							0.1	0.7	
Delay (s)		53.6	37.9							5.3	7.4	
Level of Service		D	D							A	A	
Approach Delay (s/veh)		48.8			0.0			0.0			6.9	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	103.7%	ICU Level of Service	G
Analysis Period (min)	15		

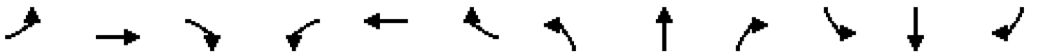
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	480	378	0	0	0	0	0	1362	434	0	0	0
Future Volume (vph)	480	378	0	0	0	0	0	1362	434	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.96				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	3072	1667						4486				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	3072	1667						4486				
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)	511	402	0	0	0	0	0	1449	462	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	77	0	0	0	0
Lane Group Flow (vph)	511	402	0	0	0	0	0	1834	0	0	0	0
Confl. Peds. (#/hr)									2			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1392	755						1914				
v/s Ratio Prot	0.17	c0.24						c0.41				
v/s Ratio Perm												
v/c Ratio	0.37	0.53						0.96				
Uniform Delay, d1	13.4	14.8						20.9				
Progression Factor	0.08	0.95						0.58				
Incremental Delay, d2	0.1	0.7						10.2				
Delay (s)	1.1	14.7						22.3				
Level of Service	A	B						C				
Approach Delay (s/veh)		7.1			0.0			22.3			0.0	
Approach LOS		A			A			C			A	

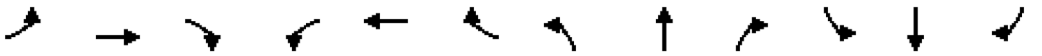
Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	112.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	182	28	67	69	0	0	0	0	307	1348	124
Future Volume (vph)	0	182	28	67	69	0	0	0	0	307	1348	124
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)		4.0			4.0						5.0	
Lane Util. Factor		0.95			0.95						0.91	
Frpb, ped/bikes		1.00			1.00						1.00	
Flpb, ped/bikes		1.00			1.00						1.00	
Frt		0.98			1.00						0.99	
Flt Protected		1.00			0.98						0.99	
Satd. Flow (prot)		3187			3174						4590	
Flt Permitted		1.00			0.73						0.99	
Satd. Flow (perm)		3187			2376						4590	
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)	0	188	29	69	71	0	0	0	0	316	1390	128
RTOR Reduction (vph)	0	21	0	0	0	0	0	0	0	0	7	0
Lane Group Flow (vph)	0	196	0	0	140	0	0	0	0	0	1827	0
Confl. Peds. (#/hr)			6	6			5					5
Turn Type		NA		Perm	NA					Perm	NA	
Protected Phases		6			2						4	
Permitted Phases				2						4		
Actuated Green, G (s)		12.1			12.1						53.9	
Effective Green, g (s)		12.1			12.1						53.9	
Actuated g/C Ratio		0.16			0.16						0.72	
Clearance Time (s)		4.0			4.0						5.0	
Vehicle Extension (s)		4.0			4.0						4.0	
Lane Grp Cap (vph)		514			383						3298	
v/s Ratio Prot		c0.06										
v/s Ratio Perm					0.06						0.40	
v/c Ratio		0.38			0.37						0.55	
Uniform Delay, d1		28.1			28.0						4.9	
Progression Factor		1.00			0.85						1.09	
Incremental Delay, d2		0.6			0.6						0.5	
Delay (s)		28.8			24.5						5.9	
Level of Service		C			C						A	
Approach Delay (s/veh)		28.8			24.5			0.0			5.9	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.3	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	9.0
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	177	348	0	0	122	265	48	1348	56	0	0	0
Future Volume (veh/h)	177	348	0	0	122	265	48	1348	56	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1709	1709	0	0	1723	1723	1723	1723	1723			
Adj Flow Rate, veh/h	190	374	0	0	131	285	52	1449	60			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	3	3	0	0	2	2	2	2	2			
Cap, veh/h	356	706	0	0	327	292	73	2154	92			
Arrive On Green	0.32	0.83	0.00	0.00	0.20	0.20	0.47	0.47	0.47			
Sat Flow, veh/h	1628	1709	0	0	1723	1458	156	4616	198			
Grp Volume(v), veh/h	190	374	0	0	131	285	572	476	512			
Grp Sat Flow(s),veh/h/ln	1628	1709	0	0	1637	1458	1715	1568	1687			
Q Serve(g_s), s	2.0	5.1	0.0	0.0	5.2	14.6	20.0	17.4	17.5			
Cycle Q Clear(g_c), s	2.0	5.1	0.0	0.0	5.2	14.6	20.0	17.4	17.5			
Prop In Lane	1.00		0.00	0.00		1.00	0.09		0.12			
Lane Grp Cap(c), veh/h	356	706	0	0	327	292	800	732	787			
V/C Ratio(X)	0.53	0.53	0.00	0.00	0.40	0.98	0.72	0.65	0.65			
Avail Cap(c_a), veh/h	356	706	0	0	327	292	800	732	787			
HCM Platoon Ratio	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.92	0.92	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	21.6	4.3	0.0	0.0	26.1	29.8	16.0	15.3	15.3			
Incr Delay (d2), s/veh	1.4	2.6	0.0	0.0	3.6	47.3	5.4	4.5	4.2			
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.4	1.6	0.0	0.0	2.3	8.6	8.1	6.4	6.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	23.0	6.9	0.0	0.0	29.7	77.1	21.4	19.8	19.5			
LnGrp LOS	C	A			C	E	C	B	B			
Approach Vol, veh/h		564			416			1561				
Approach Delay, s/veh		12.3			62.2			20.3				
Approach LOS		B			E			C				

Timer - Assigned Phs	1	2		4		6			
Phs Duration (G+Y+Rc), s	16.0	19.0		40.0		35.0			
Change Period (Y+Rc), s	4.0	4.0		5.0		4.0			
Max Green Setting (Gmax), s	12.0	15.0		35.0		31.0			
Max Q Clear Time (g_c+I1), s	4.0	16.6		22.0		7.1			
Green Ext Time (p_c), s	0.4	0.0		8.0		2.3			

Intersection Summary			
HCM 6th Ctrl Delay, s/veh		25.4	
HCM 6th LOS		C	

Notes

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

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	10	18	32	20	0	0	0	0	61	1372	6
Future Vol, veh/h	0	10	18	32	20	0	0	0	0	61	1372	6
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	2	2	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	11	19	34	21	0	0	0	0	65	1460	6

Major/Minor	Minor2			Minor1					Major2		
Conflicting Flow All	-	1598	739	725	1601	-			2	0	0
Stage 1	-	1596	-	2	2	-			-	-	-
Stage 2	-	2	-	723	1599	-			-	-	-
Critical Hdwy	-	6.54	7.14	6.44	6.54	-			5.34	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-			-	-	-
Critical Hdwy Stg 2	-	-	-	6.74	5.54	-			-	-	-
Follow-up Hdwy	-	4.02	3.92	3.82	4.02	-			3.12	-	-
Pot Cap-1 Maneuver	0	105	309	369	105	0			1151	-	-
Stage 1	0	165	-	-	-	0			-	-	-
Stage 2	0	-	-	349	164	0			-	-	-
Platoon blocked, %										-	-
Mov Cap-1 Maneuver	-	73	308	236	73	-			1149	-	-
Mov Cap-2 Maneuver	-	73	-	236	73	-			-	-	-
Stage 1	-	114	-	-	-	-			-	-	-
Stage 2	-	-	-	206	114	-			-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	36.7	53.6	0.4
HCM LOS	E	F	

Minor Lane/Major Mvmt	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	143	127	1149	-	-
HCM Lane V/C Ratio	0.208	0.436	0.056	-	-
HCM Control Delay (s/veh)	36.7	53.6	8.3	-	-
HCM Lane LOS	E	F	A	-	-
HCM 95th %tile Q (veh)	0.8	1.9	0.2	-	-

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	72	26	0	0	8	27	63	1351	5	0	0	0
Future Vol, veh/h	72	26	0	0	8	27	63	1351	5	0	0	0
Conflicting Peds, #/hr	2	0	3	3	0	2	3	0	2	2	0	3
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	77	28	0	0	9	29	67	1437	5	0	0	0

Major/Minor	Minor2			Minor1			Major1		
Conflicting Flow All	718	1581	-	-	1579	725	3	0	0
Stage 1	3	3	-	-	1576	-	-	-	-
Stage 2	715	1578	-	-	3	-	-	-	-
Critical Hdwy	6.44	6.54	-	-	6.54	7.14	5.34	-	-
Critical Hdwy Stg 1	-	-	-	-	5.54	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	-	-	4.02	3.92	3.12	-	-
Pot Cap-1 Maneuver	373	108	0	0	108	315	1150	-	-
Stage 1	-	-	0	0	168	-	-	-	-
Stage 2	353	168	0	0	-	-	-	-	-
Platoon blocked, %								-	-
Mov Cap-1 Maneuver	240	76	-	-	76	314	1147	-	-
Mov Cap-2 Maneuver	240	76	-	-	76	-	-	-	-
Stage 1	-	-	-	-	118	-	-	-	-
Stage 2	210	118	-	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	68	29.6	0.4
HCM LOS	F	D	

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1
Capacity (veh/h)	1147	-	-	153	183
HCM Lane V/C Ratio	0.058	-	-	0.681	0.203
HCM Control Delay (s/veh)	8.3	-	-	68	29.6
HCM Lane LOS	A	-	-	F	D
HCM 95th %tile Q (veh)	0.2	-	-	3.9	0.7

Appendix J. Driveway Analysis – Synchro Reports

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	0	0	1281	0	0
Future Vol, veh/h	12	0	0	1281	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	0	0	1392	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	557	-	0	0
Stage 1	0	-	-	-
Stage 2	557	-	-	-
Critical Hdwy	5.74	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	3.12	-
Pot Cap-1 Maneuver	514	0	-	-
Stage 1	-	0	-	-
Stage 2	490	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	514	-	-	-
Mov Cap-2 Maneuver	514	-	-	-
Stage 1	-	-	-	-
Stage 2	490	-	-	-

Approach	EB	NB
HCM Control Delay, s/v	12.2	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	EBLn1
Capacity (veh/h)	-	-	514
HCM Lane V/C Ratio	-	-	0.025
HCM Control Delay (s/veh)	0	-	12.2
HCM Lane LOS	A	-	B
HCM 95th %tile Q (veh)	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	0	0	0	0	1480
Future Vol, veh/h	4	0	0	0	0	1480
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	0	0	0	1609

Major/Minor	Minor1		Major2	
Conflicting Flow All	644	-	-	-
Stage 1	0	-	-	-
Stage 2	644	-	-	-
Critical Hdwy	5.74	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	-	-
Pot Cap-1 Maneuver	466	0	0	-
Stage 1	-	0	0	-
Stage 2	442	0	0	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	466	-	-	-
Mov Cap-2 Maneuver	466	-	-	-
Stage 1	-	-	-	-
Stage 2	442	-	-	-

Approach	WB	SB
HCM Control Delay, s/v	12.8	0
HCM LOS	B	

Minor Lane/Major Mvmt	WBLn1	SBT
Capacity (veh/h)	466	-
HCM Lane V/C Ratio	0.009	-
HCM Control Delay (s/veh)	12.8	-
HCM Lane LOS	B	-
HCM 95th %tile Q (veh)	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	0	0	0	7	1477
Future Vol, veh/h	6	0	0	0	7	1477
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	0	0	0	8	1605

Major/Minor	Minor1		Major2	
Conflicting Flow All	658	-	0	0
Stage 1	0	-	-	-
Stage 2	658	-	-	-
Critical Hdwy	5.74	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	3.12	-
Pot Cap-1 Maneuver	459	0	-	-
Stage 1	-	0	-	-
Stage 2	434	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	459	-	-	-
Mov Cap-2 Maneuver	459	-	-	-
Stage 1	-	-	-	-
Stage 2	434	-	-	-

Approach	WB	SB
HCM Control Delay, s/v	13	
HCM LOS	B	

Minor Lane/Major Mvmt	WBLn1	SBL	SBT
Capacity (veh/h)	459	-	-
HCM Lane V/C Ratio	0.014	-	-
HCM Control Delay (s/veh)	13	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q (veh)	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	0	17	1279	0	0
Future Vol, veh/h	2	0	17	1279	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	0	18	1390	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	592	-	0	0
Stage 1	0	-	-	-
Stage 2	592	-	-	-
Critical Hdwy	5.74	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	3.12	-
Pot Cap-1 Maneuver	494	0	-	-
Stage 1	-	0	-	-
Stage 2	470	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	494	-	-	-
Mov Cap-2 Maneuver	494	-	-	-
Stage 1	-	-	-	-
Stage 2	470	-	-	-

Approach	EB	NB
HCM Control Delay, s/v	12.3	
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	EBLn1
Capacity (veh/h)	-	-	494
HCM Lane V/C Ratio	-	-	0.004
HCM Control Delay (s/veh)	-	-	12.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	0	0	1281	0	0
Future Vol, veh/h	12	0	0	1281	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	0	0	1392	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	557	-	0	0
Stage 1	0	-	-	-
Stage 2	557	-	-	-
Critical Hdwy	5.74	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	3.12	-
Pot Cap-1 Maneuver	514	0	-	-
Stage 1	-	0	-	-
Stage 2	490	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	514	-	-	-
Mov Cap-2 Maneuver	514	-	-	-
Stage 1	-	-	-	-
Stage 2	490	-	-	-

Approach	EB	NB
HCM Control Delay, s/v	12.2	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	EBLn1
Capacity (veh/h)	-	-	514
HCM Lane V/C Ratio	-	-	0.025
HCM Control Delay (s/veh)	0	-	12.2
HCM Lane LOS	A	-	B
HCM 95th %tile Q (veh)	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	0	0	0	0	1480
Future Vol, veh/h	4	0	0	0	0	1480
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	0	0	0	1609

Major/Minor	Minor1			Major2	
Conflicting Flow All	644	-		-	-
Stage 1	0	-		-	-
Stage 2	644	-		-	-
Critical Hdwy	5.74	-		-	-
Critical Hdwy Stg 1	-	-		-	-
Critical Hdwy Stg 2	6.04	-		-	-
Follow-up Hdwy	3.82	-		-	-
Pot Cap-1 Maneuver	466	0		0	-
Stage 1	-	0		0	-
Stage 2	442	0		0	-
Platoon blocked, %					-
Mov Cap-1 Maneuver	466	-		-	-
Mov Cap-2 Maneuver	466	-		-	-
Stage 1	-	-		-	-
Stage 2	442	-		-	-

Approach	WB	SB
HCM Control Delay, s/v	12.8	0
HCM LOS	B	

Minor Lane/Major Mvmt	WBLn1	SBT
Capacity (veh/h)	466	-
HCM Lane V/C Ratio	0.009	-
HCM Control Delay (s/veh)	12.8	-
HCM Lane LOS	B	-
HCM 95th %tile Q (veh)	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	0	0	0	7	1477
Future Vol, veh/h	6	0	0	0	7	1477
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	0	0	0	8	1605

Major/Minor	Minor1		Major2	
Conflicting Flow All	658	-	0	0
Stage 1	0	-	-	-
Stage 2	658	-	-	-
Critical Hdwy	5.74	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	3.12	-
Pot Cap-1 Maneuver	459	0	-	-
Stage 1	-	0	-	-
Stage 2	434	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	459	-	-	-
Mov Cap-2 Maneuver	459	-	-	-
Stage 1	-	-	-	-
Stage 2	434	-	-	-

Approach	WB	SB
HCM Control Delay, s/v	13	
HCM LOS	B	

Minor Lane/Major Mvmt	WBLn1	SBL	SBT
Capacity (veh/h)	459	-	-
HCM Lane V/C Ratio	0.014	-	-
HCM Control Delay (s/veh)	13	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q (veh)	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	0	17	1279	0	0
Future Vol, veh/h	2	0	17	1279	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	0	18	1390	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	592	-	0	0
Stage 1	0	-	-	-
Stage 2	592	-	-	-
Critical Hdwy	5.74	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	3.12	-
Pot Cap-1 Maneuver	494	0	-	-
Stage 1	-	0	-	-
Stage 2	470	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	494	-	-	-
Mov Cap-2 Maneuver	494	-	-	-
Stage 1	-	-	-	-
Stage 2	470	-	-	-

Approach	EB	NB
HCM Control Delay, s/v	12.3	
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	EBLn1
Capacity (veh/h)	-	-	494
HCM Lane V/C Ratio	-	-	0.004
HCM Control Delay (s/veh)	-	-	12.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	0	0	1330	0	0
Future Vol, veh/h	12	0	0	1330	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	0	0	1446	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	578	-	0	0
Stage 1	0	-	-	-
Stage 2	578	-	-	-
Critical Hdwy	5.74	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	3.12	-
Pot Cap-1 Maneuver	502	0	-	-
Stage 1	-	0	-	-
Stage 2	478	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	502	-	-	-
Mov Cap-2 Maneuver	502	-	-	-
Stage 1	-	-	-	-
Stage 2	478	-	-	-

Approach	EB	NB
HCM Control Delay, s/v	12.4	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	EBLn1
Capacity (veh/h)	-	-	502
HCM Lane V/C Ratio	-	-	0.026
HCM Control Delay (s/veh)	0	-	12.4
HCM Lane LOS	A	-	B
HCM 95th %tile Q (veh)	-	-	0.1

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	0	0	0	0	1538
Future Vol, veh/h	4	0	0	0	0	1538
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	0	0	0	1672

Major/Minor	Minor1		Major2	
Conflicting Flow All	669	-	-	-
Stage 1	0	-	-	-
Stage 2	669	-	-	-
Critical Hdwy	5.74	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	-	-
Pot Cap-1 Maneuver	453	0	0	-
Stage 1	-	0	0	-
Stage 2	428	0	0	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	453	-	-	-
Mov Cap-2 Maneuver	453	-	-	-
Stage 1	-	-	-	-
Stage 2	428	-	-	-

Approach	WB	SB
HCM Control Delay, s/v	13	0
HCM LOS	B	

Minor Lane/Major Mvmt	WBLn1	SBT
Capacity (veh/h)	453	-
HCM Lane V/C Ratio	0.01	-
HCM Control Delay (s/veh)	13	-
HCM Lane LOS	B	-
HCM 95th %tile Q (veh)	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	0	0	0	7	1535
Future Vol, veh/h	6	0	0	0	7	1535
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	0	0	0	8	1668

Major/Minor	Minor1		Major2	
Conflicting Flow All	683	-	0	0
Stage 1	0	-	-	-
Stage 2	683	-	-	-
Critical Hdwy	5.74	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	3.12	-
Pot Cap-1 Maneuver	446	0	-	-
Stage 1	-	0	-	-
Stage 2	421	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	446	-	-	-
Mov Cap-2 Maneuver	446	-	-	-
Stage 1	-	-	-	-
Stage 2	421	-	-	-

Approach	WB	SB
HCM Control Delay, s/v	13.2	
HCM LOS	B	

Minor Lane/Major Mvmt	WBLn1	SBL	SBT
Capacity (veh/h)	446	-	-
HCM Lane V/C Ratio	0.015	-	-
HCM Control Delay (s/veh)	13.2	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q (veh)	0	-	-

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	0	17	1328	0	0
Future Vol, veh/h	2	0	17	1328	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	0	18	1443	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	613	-	0	0
Stage 1	0	-	-	-
Stage 2	613	-	-	-
Critical Hdwy	5.74	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	3.12	-
Pot Cap-1 Maneuver	482	0	-	-
Stage 1	-	0	-	-
Stage 2	458	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	482	-	-	-
Mov Cap-2 Maneuver	482	-	-	-
Stage 1	-	-	-	-
Stage 2	458	-	-	-

Approach	EB	NB
HCM Control Delay, s/v	12.5	
HCM LOS	B	

Minor Lane/Major Mvmt	NBL	NBT	EBLn1
Capacity (veh/h)	-	-	482
HCM Lane V/C Ratio	-	-	0.005
HCM Control Delay (s/veh)	-	-	12.5
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0

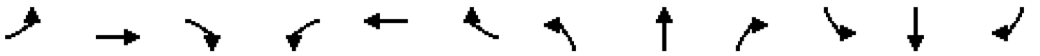
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	12	0	0	1782	0	0
Future Vol, veh/h	12	0	0	1782	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	13	0	0	1937	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	775	-	-	0
Stage 1	0	-	-	-
Stage 2	775	-	-	-
Critical Hdwy	5.74	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	-	-
Pot Cap-1 Maneuver	402	0	0	-
Stage 1	-	0	0	-
Stage 2	377	0	0	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	402	-	-	-
Mov Cap-2 Maneuver	402	-	-	-
Stage 1	-	-	-	-
Stage 2	377	-	-	-

Approach	EB	NB
HCM Control Delay, s/v	14.3	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBT	EBLn1
Capacity (veh/h)	-	402
HCM Lane V/C Ratio	-	0.032
HCM Control Delay (s/veh)	-	14.3
HCM Lane LOS	-	B
HCM 95th %tile Q (veh)	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	468	366	0	0	0	0	0	1346	434	0	0	0
Future Volume (vph)	468	366	0	0	0	0	0	1346	434	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.96				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	3072	1667						4485				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	3072	1667						4485				
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)	498	389	0	0	0	0	0	1432	462	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	77	0	0	0	0
Lane Group Flow (vph)	498	389	0	0	0	0	0	1817	0	0	0	0
Confl. Peds. (#/hr)									2			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1392	755						1913				
v/s Ratio Prot	0.16	c0.23						c0.41				
v/s Ratio Perm												
v/c Ratio	0.36	0.52						0.95				
Uniform Delay, d1	13.4	14.6						20.7				
Progression Factor	0.08	0.95						0.57				
Incremental Delay, d2	0.1	0.6						9.3				
Delay (s)	1.2	14.5						21.2				
Level of Service	A	B						C				
Approach Delay (s/veh)		7.0			0.0			21.2			0.0	
Approach LOS		A			A			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	111.4%	ICU Level of Service	H
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	0	0	0	0	1751
Future Vol, veh/h	4	0	0	0	0	1751
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	4	0	0	0	0	1903

Major/Minor	Minor1		Major2	
Conflicting Flow All	761	-	-	-
Stage 1	0	-	-	-
Stage 2	761	-	-	-
Critical Hdwy	5.74	-	-	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	-	-
Pot Cap-1 Maneuver	408	0	0	-
Stage 1	-	0	0	-
Stage 2	383	0	0	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	408	-	-	-
Mov Cap-2 Maneuver	408	-	-	-
Stage 1	-	-	-	-
Stage 2	383	-	-	-

Approach	WB	SB
HCM Control Delay, s/v	13.9	0
HCM LOS	B	

Minor Lane/Major Mvmt	WBLn1	SBT
Capacity (veh/h)	408	-
HCM Lane V/C Ratio	0.011	-
HCM Control Delay (s/veh)	13.9	-
HCM Lane LOS	B	-
HCM 95th %tile Q (veh)	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	0	0	0	2	1753
Future Vol, veh/h	17	0	0	0	2	1753
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	0	0	0	2	1905

Major/Minor	Minor1		Major2	
Conflicting Flow All	766	-	0	0
Stage 1	0	-	-	-
Stage 2	766	-	-	-
Critical Hdwy	5.74	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	3.12	-
Pot Cap-1 Maneuver	406	0	-	-
Stage 1	-	0	-	-
Stage 2	381	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	406	-	-	-
Mov Cap-2 Maneuver	406	-	-	-
Stage 1	-	-	-	-
Stage 2	381	-	-	-

Approach	WB	SB
HCM Control Delay, s/v	14.3	
HCM LOS	B	

Minor Lane/Major Mvmt	WBLn1	SBL	SBT
Capacity (veh/h)	406	-	-
HCM Lane V/C Ratio	0.046	-	-
HCM Control Delay (s/veh)	14.3	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q (veh)	0.1	-	-

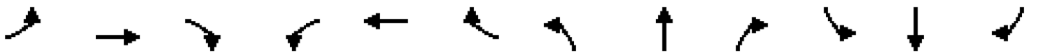
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	7	0	6	1779	0	0
Future Vol, veh/h	7	0	6	1779	0	0
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	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	0	7	1934	0	0

Major/Minor	Minor2		Major1	
Conflicting Flow All	788	-	0	0
Stage 1	0	-	-	-
Stage 2	788	-	-	-
Critical Hdwy	5.74	-	5.34	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	6.04	-	-	-
Follow-up Hdwy	3.82	-	3.12	-
Pot Cap-1 Maneuver	396	0	-	-
Stage 1	-	0	-	-
Stage 2	371	0	-	-
Platoon blocked, %				-
Mov Cap-1 Maneuver	396	-	-	-
Mov Cap-2 Maneuver	396	-	-	-
Stage 1	-	-	-	-
Stage 2	371	-	-	-

Approach	EB	NB
HCM Control Delay, s/v	14.3	
HCM LOS	B	

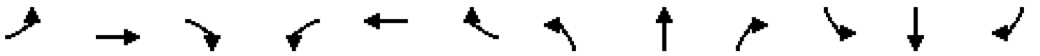
Minor Lane/Major Mvmt	NBL	NBT	EBLn1
Capacity (veh/h)	-	-	396
HCM Lane V/C Ratio	-	-	0.019
HCM Control Delay (s/veh)	-	-	14.3
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	436	391	0	0	0	0	0	1006	289	0	0	0
Future Volume (vph)	436	391	0	0	0	0	0	1006	289	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.97				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	3072	1667						4502				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	3072	1667						4502				
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)	464	416	0	0	0	0	0	1070	307	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	69	0	0	0	0
Lane Group Flow (vph)	464	416	0	0	0	0	0	1308	0	0	0	0
Confl. Peds. (#/hr)									2			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1392	755						1920				
v/s Ratio Prot	0.15	c0.25						c0.29				
v/s Ratio Perm												
v/c Ratio	0.33	0.55						0.68				
Uniform Delay, d1	13.2	14.9						17.4				
Progression Factor	0.06	0.98						0.58				
Incremental Delay, d2	0.1	0.8						1.8				
Delay (s)	0.8	15.5						11.9				
Level of Service	A	B						B				
Approach Delay (s/veh)		7.8			0.0			11.9			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	93.3%	ICU Level of Service	F
Analysis Period (min)	15		

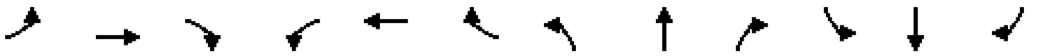
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	352	0	0	0	0	0	1296	418	0	0	0
Future Volume (vph)	450	352	0	0	0	0	0	1296	418	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.96				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	3072	1667						4485				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	3072	1667						4485				
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)	479	374	0	0	0	0	0	1379	445	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	77	0	0	0	0
Lane Group Flow (vph)	479	374	0	0	0	0	0	1747	0	0	0	0
Confl. Peds. (#/hr)									2			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1392	755						1913				
v/s Ratio Prot	0.16	c0.22						c0.39				
v/s Ratio Perm												
v/c Ratio	0.34	0.50						0.91				
Uniform Delay, d1	13.3	14.5						20.2				
Progression Factor	0.08	0.96						0.57				
Incremental Delay, d2	0.1	0.5						6.5				
Delay (s)	1.2	14.4						18.0				
Level of Service	A	B						B				
Approach Delay (s/veh)		7.0			0.0			18.0			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	107.7%	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 (vph)	453	406	0	0	0	0	0	1045	300	0	0	0
Future Volume (vph)	453	406	0	0	0	0	0	1045	300	0	0	0
Ideal Flow (vphpl)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
Total Lost time (s)	5.0	5.0						5.0				
Lane Util. Factor	0.97	1.00						0.91				
Frpb, ped/bikes	1.00	1.00						0.99				
Flpb, ped/bikes	1.00	1.00						1.00				
Frt	1.00	1.00						0.97				
Flt Protected	0.95	1.00						1.00				
Satd. Flow (prot)	3072	1667						4502				
Flt Permitted	0.95	1.00						1.00				
Satd. Flow (perm)	3072	1667						4502				
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)	482	432	0	0	0	0	0	1112	319	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	69	0	0	0	0
Lane Group Flow (vph)	482	432	0	0	0	0	0	1362	0	0	0	0
Confl. Peds. (#/hr)									2			
Heavy Vehicles (%)	5%	5%	5%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Split	NA						NA				
Protected Phases	6 7	6 7						8				
Permitted Phases												
Actuated Green, G (s)	34.0	34.0						32.0				
Effective Green, g (s)	34.0	34.0						32.0				
Actuated g/C Ratio	0.45	0.45						0.43				
Clearance Time (s)								5.0				
Vehicle Extension (s)								3.0				
Lane Grp Cap (vph)	1392	755						1920				
v/s Ratio Prot	0.16	c0.26						c0.30				
v/s Ratio Perm												
v/c Ratio	0.35	0.57						0.71				
Uniform Delay, d1	13.3	15.1						17.7				
Progression Factor	0.06	0.96						0.59				
Incremental Delay, d2	0.1	1.0						2.0				
Delay (s)	0.9	15.6						12.4				
Level of Service	A	B						B				
Approach Delay (s/veh)		7.8			0.0			12.4			0.0	
Approach LOS		A			A			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	14.0
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Lane Group	EBL	EBT	NBT
Lane Group Flow (vph)	464	416	1377
v/c Ratio	0.34	0.57	0.69
Control Delay (s/veh)	1.2	18.8	11.2
Queue Delay	0.8	14.2	0.0
Total Delay (s/veh)	2.0	33.0	11.2
Queue Length 50th (ft)	4	161	55
Queue Length 95th (ft)	m4	172	217
Internal Link Dist (ft)		186	15
Turn Bay Length (ft)	100		
Base Capacity (vph)	1317	715	1990
Starvation Cap Reductn	544	280	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.60	0.96	0.69

Intersection Summary

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



Lane Group	EBL	EBT	NBT
Lane Group Flow (vph)	482	432	1431
v/c Ratio	0.36	0.59	0.72
Control Delay (s/veh)	1.2	18.9	11.7
Queue Delay	0.8	12.2	0.0
Total Delay (s/veh)	2.0	31.1	11.7
Queue Length 50th (ft)	4	161	59
Queue Length 95th (ft)	m4	177	227
Internal Link Dist (ft)		186	15
Turn Bay Length (ft)	100		
Base Capacity (vph)	1351	733	1990
Starvation Cap Reductn	543	276	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.60	0.95	0.72

Intersection Summary

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

Queues
7: Mullan & I-90 EB/I-90 EB On-ramp

09/26/2025



Lane Group	EBL	EBT	NBT
Lane Group Flow (vph)	479	374	1824
v/c Ratio	0.35	0.51	0.92
Control Delay (s/veh)	1.6	17.3	18.2
Queue Delay	1.0	6.6	0.0
Total Delay (s/veh)	2.5	23.9	18.2
Queue Length 50th (ft)	5	146	160
Queue Length 95th (ft)	m5	183	#325
Internal Link Dist (ft)		186	15
Turn Bay Length (ft)	100		
Base Capacity (vph)	1314	713	1990
Starvation Cap Reductn	552	283	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.63	0.87	0.92

Intersection Summary

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

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

Queues
7: Mullan & I-90 EB/I-90 EB On-ramp

09/26/2025



Lane Group	EBL	EBT	NBT
Lane Group Flow (vph)	498	389	1894
v/c Ratio	0.37	0.53	0.95
Control Delay (s/veh)	1.5	17.5	21.9
Queue Delay	0.9	5.5	0.0
Total Delay (s/veh)	2.4	23.0	21.9
Queue Length 50th (ft)	5	152	252
Queue Length 95th (ft)	m5	190	#386
Internal Link Dist (ft)		186	15
Turn Bay Length (ft)	100		
Base Capacity (vph)	1351	733	1990
Starvation Cap Reductn	552	278	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.62	0.85	0.95

Intersection Summary

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

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